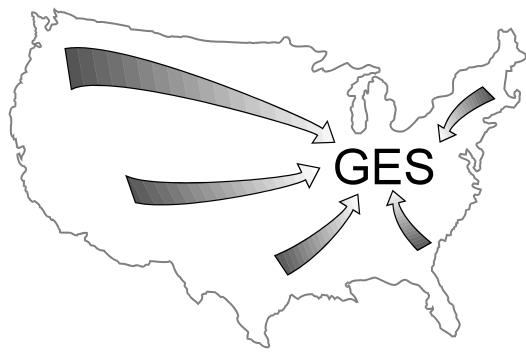




General Estimates System Coding And Editing Manual

2007





2007 VARIABLE CHANGES

D02, Violations Charged, element **Other Violation** is revised to include text which specifically describes the other violation.

D07, Driver Distracted By, elements **Other Cellular Phone Related** and **Hit & Run (And No Information)** are added. The element **While dialing cellular phone** is modified to include text messaging and dialing or text messaging on any wireless e-mail device.

P18, Person's Physical Impairment (Drivers), elements **Hit & Run (And No Information)**, **Not on PAR** and **Not Coded** are added.

P18, Person's Physical Impairment (Non-Motorists), elements **Not on PAR** and **Not Coded** are added.

Objects Set in Motion:

A07, Manner of Collision, element definition for **Not Collision With Motor Vehicle In Transport** is modified to be consistent with the coding of objects set in motion by an intransport motor vehicle.

E02/V01, Vehicle Number (This Vehicle), remarks are modified to include more detailed decision rules for coding objects set in motion by an in-transport motor vehicle.

E03/V24, Point of Impact (This Vehicle), element **Object Set in Motion** is added.

E04/V01, Vehicle Number (Other Vehicle), remarks are modified to include more detailed decision rules for coding objects set in motion by an in-transport motor vehicle.

E04/A06, Non-Collision Category or Object Contacted / Harmful Event, element definitions for **Other Non-Collision** and **Thrown or Falling Object** are modified to exclude objects set in motion by an in-transport motor vehicle.

E06, Action, remarks are modified to include more detailed decision rules for coding objects set in motion by an in-transport motor vehicle.

V22, Vehicle Role, element definition for **Non-Collision** is modified to be consistent with the coding of objects set in motion by an in-transport motor vehicle.

V23, Accident Type (Crash Type), element definition for **Other Accident Type** is modified to include crashes initiated by objects set in motion by an in-transport motor vehicle.

Personal Transporter Devices:

A24, Pedestrian/Bike Accident Type (Pedestrian, Etc. Versus Pedalcyclist), remarks are modified to exclude motorized wheelchairs.

A24, Pedestrian/Bike Accident Type (Wheelchair), element definitions for **No** and **Yes** are modified to exclude motorized wheelchairs.

E04/A06, Non-Collision Category or Object Contacted / Harmful Event, element definition of **Pedestrian** is modified to classify segways, motorized wheelchairs, etc. as personal transporter devices instead of motor vehicles. The element definition of **Other Type Non-Motorist - Ped./Bike Applicable** is modified to include motorized wheelchairs.

V05, Body Type, element definition of **Other Type Vehicle** is modified to exclude motorized wheelchairs.

PV05, Parked/Working Vehicle Body Type, element definition of **Other Type Vehicle** is modified to exclude motorized wheelchairs.

P03, Person Type (Non-Motorists), element definition of **Occupant of a Non-motor Vehicle Transport Device (Non-Motorist)** is modified to classify segways, motorized wheelchairs, etc. as personal transporter devices instead of motor vehicles.

2007 changes are identified with green text.

Table of Contents Variables/Questions are displayed in data entry order.

| | 2007 Variable Changes | . i |
|-------|---|--|
| | Variable/Question Name Index | ix |
| PAR | | |
| | A22 Police Jurisdiction A01 Date A02 Time A23 Stratum | 2 |
| PAR C | Configuration Questions | |
| | A03 Number of Motor Vehicles | 12 |
| Event | s | |
| | E01 Event Number E02/V01 Vehicle Number (This Vehicle) E03/V24 Point of Impact (This Vehicle) E06 Action E04/A06 Non-Collision Category or Object Contacted / Harmful Event E04/V01 Vehicle Number (Other Vehicle) E05/V24 Point of Impact (Other Vehicle) A07 Manner of Collision | 23 24 28 32 46 47 |
| Crash | Data Questions | |
| | A09 Relation To Junction (Specific Location) A10 Relation To Roadway A19 Light Condition A20 Atmospheric Condition | 55 57 59 61 62 76 81 |

Vehicle Data

| V03 V04 V05 V06 V13 | Vehicle Identification Number Vehicle Make Vehicle Model Vehicle Body Type Vehicle Model Year Vehicle Trailing Jackknife | 90 |
|---------------------------------|--|---|
| Environme | ntal Conditions | |
| A12 A13 A14 A15 | Trafficway Flow Number of Travel Lanes Roadway Alignment Roadway Profile Roadway Surface Condition Speed Limit | 173 175 177 179 180 182 |
| Vehicle Cha | aracteristics | |
| V08 V09 V11 V16 V18 | Hit and Run Special Use Emergency Use Travel Speed Fire Occurrence Damage Severity Manner of Leaving Scene | 184 187 191 193 195 198 199 |
| Vehicle Cra | ısh | |
| V21 V22 V23 V23 | V20A Most Harmful Event / Most Harmful Event Number Movement Prior to Critical EventPrecrash 1 Vehicle Role Accident Type (Category) Accident Type (Configuration) Accident Type (Crash Type) | 222 |
| Pedestrian | Etc./Pedalcyclist Crash Type | |
| | Pedestrian/Bike Accident Type (Pedestrian, Etc. Versus Pedalcyclist) Pedestrian/Bike Accident Type (Wheel Chair) | 264 267 |

Crash Typing for Pedestrians, Etc.

| A24 | Pedestrian/Bike Accident Type (Category 1) | 267 |
|-----------|---|-----|
| | Pedestrian/Bike Accident Type (Category 2) | 269 |
| | Pedestrian/Bike Accident Type (Category 3) | 270 |
| | Pedestrian/Bike Accident Type (Category 4) | 271 |
| | Pedestrian/Bike Accident Type (Category 5) | 273 |
| A24 | Pedestrian/Bike Accident Type (Category 6) | 275 |
| | Pedestrian/Bike Accident Type (Category 7 Versus Category 8) | 276 |
| A24 | Pedestrian/Bike Accident Type (Category 7) | 277 |
| A24 | Pedestrian/Bike Accident Type (Category 8) | 279 |
| A24 | Pedestrian/Bike Accident Type (Category 9) | 282 |
| Crash Typ | ing for Pedalcyclists | |
| A24 | Pedestrian/Bike Accident Type | |
| | (Specific CircumstancesWeird) | 283 |
| A24 | Pedestrian/Bike Accident Type | |
| | (Specific CircumstancesChildren's Vehicle) | 285 |
| A24 | Pedestrian/Bike Accident Type | |
| | (Specific CircumstancesBacking Motor Vehicle) | 286 |
| A24 | Pedestrian/Bike Accident Type | |
| | (Specific CircumstancesNot on a Roadway) | 287 |
| A24 | Pedestrian/Bike Accident Type | |
| 4.0 | (Approach PathsParallel Versus Crossing) | 288 |
| | Pedestrian/Bike Accident Type (Parallel Path Category) | 290 |
| | Pedestrian/Bike Accident Type (Crossing Path Category) | 291 |
| AZZ | Pedestrian/Bike Accident Type (Parallal/Crassing Path Catagory Crash Type) | 202 |
| | (Parallel/Crossing Path Category Crash Type) | 292 |
| One-to-Ma | any Vehicle Variables | |
| | Traffic Control Device | |
| | 2 Vehicle Contributing Factors | |
| V25 | 5 Damage Areas | 319 |
| Precrash | Data | |
| | crash Data Overview | 323 |
| | 6 Critical EventPrecrash 2 (Category) | 339 |
| V26 | Critical EventPrecrash 2 (Event) | 340 |
| V27 | Corrective Action AttemptedPrecrash 3 | 354 |
| | 3 Vehicle Control-Precrash 4 | |
| V29 | Precrash Location–Precrash 5 | 359 |

Rollover

| V30 | Rollover Type | 362 |
|--|--|--|
| National G | overnor's Association (NGA) Crash Data | |
| V32 V33 V34 V35 | Carrier's Identification Number Number of Axles on Vehicle, Including Trailers Cargo Body Type Hazardous Materials Placarded Hazardous Materials Placard Number Hazardous Materials Release | 367 369 372 374 |
| Vehicle Oc | cupants | |
| | B Number of Occupants | |
| D01 | Driver Presence | 385 |
| Occupant (| Characteristics | |
| P02 P03 P04 P06 P21 P07 P08 P09 | Vehicle Number (Occupants) Person Number (Occupants) Person Type (Occupants) Seating Position Ejection Air Bag Availability/Function Age (Occupants) Sex (Occupants) Injury Severity (Occupants) Taken to Hospital or Treatment Facility (Occupants) | 389 390 398 403 406 409 411 412 |
| Driver Data | 1 | |
| D09 D10 D11 P11 P11, P17 | Driver's Zip Code Speed Related Driver License State Driver License Number Police Reported Alcohol Involvement (Drivers) A Alcohol Test Given (Drivers) Police Reported Drug Involvement (Drivers) A Drug Test Given (Drivers) | 425 427 429 431 432 434 437 438 |

Driver/Passenger One-To-Many Variables D04 Driver's Vision Obscured By D06 Driver Maneuvered to Avoid 447 Parked/Working Vehicle Data PV03 Parked/Working Vehicle Make Parked/Working Vehicle Characteristics PV09 Parked/Working Vehicle Emergency Use 506 Parked/Working Vehicle NGA Data PV31 Parked/Working Vehicle Carrier's Identification Number 517 PV32 Parked/Working Vehicle Number of Axles, Including Trailers 519 PV34 Parked/Working Vehicle Hazardous Materials Placarded 525 PV35 Parked/Working Vehicle Hazardous Materials Placard Number 527 PV36 Parked/Working Vehicle Hazardous Materials Release 530 Parked/Working Vehicle Occupants/Persons PV10BParked/Working Vehicle Number of Occupants/Persons 532 PV10 Parked/Working Vehicle Number of Occupants/Persons Coded 535

Parked/Working Vehicle Events

| | PE01 Parked/Working Vehicle Number | 539 |
|-------|--|---|
| Non-N | Motorist Data | |
| | P01 Vehicle Number (Non-Motorists) P02 Person Number (Non-Motorists) P03 Person Type (Non-Motorists) P07 Age (Non-Motorists) P08 Sex (Non-Motorists) P09 Injury Severity (Non-Motorists) P10 Taken to Hospital or Treatment Facility (Non-Motorists) P11 Police Reported Alcohol Involvement (Non-Motorists) P12 Police Reported Drug Involvement (Non-Motorists) P13 Police Reported Drug Involvement (Non-Motorists) P14 Drug Test Given (Non-Motorists) P15 Non-Motorist Location P16 Non-Motorist Parked/Working Vehicle Number P17 Police Reported Drug Involvement (Non-Motorists) | 546 547 556 558 563 566 568 570 572 574 578 |
| Non-N | Motorist One-To-Many Variables | |
| | MB_A16 Traffic Control Device - Cyclist | 587 590 |

Variable/Question Name Index

| Variable | /Question Name | Oracle Table | Oracle Name | SAS Name | Page |
|----------|--|--------------------|-------------------|---|------|
| A01 | Date | GES.Crashdata | CrashDate | Accident.Month, Accident.Weekday, Accident.Year | 2 |
| A02 | Time | GES.Crashdata | Crashtime | Accident.Hour, Accident.Minute | 3 |
| A03 | Number of Motor Vehicles | GES.Crashdata | Numvehs | Accident.Veh_Invl | 9 |
| A03D | Number of Parked/Working Vehicles | GES.Crashdata | NumParkedVehs | Accident.PVH_InvI | 12 |
| A04 | Number of Non-Motorists | GES.Crashdata | NumNonMotorists | Accident.Non_Invl | 14 |
| A05 | Land Use | GES.Crashdata | LandUseID | Accident.Land_Use | 54 |
| A06 | Harmful Event | GES.Events | ObjecthitID | Accident.Event1 | 32 |
| A07 | Manner of collision | GES.Crashdata | CollisionMannerID | Accident.Man_Col | 51 |
| A08 | Interstate Highway | GES.Crashdata | Interstate | Accident.Int_Hwy | 59 |
| A09 | Relation To Junction (Non- Interchange Versus Interchange) | GES.Crashdata | JunctionRelID | Accident.Rel_Jct | 61 |
| A09 | Relation To Junction (Specific Location) | GES.Crashdata | JunctionRelID | Accident.Rel_Jct | 62 |
| A10 | Relation To Roadway | GES.Crashdata | RoadwayRelID | Accident.Rel_Rwy | 76 |
| A11 | Trafficway Flow | GES.Roadway | TrafficFlowID | Accident.Traf_way | 173 |
| A12 | Number of Travel Lanes | GES.Roadway | NumLanes | Accident.Num_Lan | 175 |
| A13 | Roadway Alignment | GES.Roadway | AlignmentID | Accident.Align | 177 |
| A14 | Roadway Profile | GES.Roadway | ProfileID | Accident.Profile | 179 |
| A15 | Roadway Surface Condition | GES.Roadway | SurfaceID | Accident.Sur_Cond | 180 |
| A16 | Traffic Control Device | GES.TrafficDevices | DeviceID | Accident.Traf_Con | 311 |
| A18 | Speed Limit | GES.Roadway | SpeedLimit | Accident.Spd_Lim | 182 |
| A19 | Light Condition | GES.Crashdata | LightID | Accident.Lght_Con | 81 |
| A20 | Atmospheric Condition | GES.Crashdata | AtmosphereID | Accident.Weather | 83 |
| A21 | School Bus Related | GES.Crashdata | School_Bus | Accident.Schl_Bus | 57 |
| A22 | Police Jurisdiction | NASS.PARData | Jurisdiction | Accident.PJ | 1 |
| A23 | Stratum | NASS.PARData | CategoryID | Accident.Stratum | 5 |
| A24 | Ped./Bike Accident Type (Pedestrian, Etc. Versus Pedalcyclist) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 264 |

| A24 | Ped./Bike Accident Type (Wheelchair) | GES.CrashData | Wheelchair | None | 266 |
|-----|--|---------------|--------------|-------------------|-----|
| A24 | Ped./Bike Accident Type (Category 1) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 267 |
| A24 | Ped./Bike Accident Type (Category 2) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 269 |
| A24 | Ped./Bike Accident Type (Category 3) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 270 |
| A24 | Ped./Bike Accident Type (Category 4) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 271 |
| A24 | Ped./Bike Accident Type (Category 5) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 273 |
| A24 | Ped./Bike Accident Type (Category 6) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 275 |
| A24 | Ped./Bike Accident Type (Category 7 Versus Category 8) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 276 |
| A24 | Ped./Bike Accident Type (Category 7) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 277 |
| A24 | Ped./Bike Accident Type (Category 8) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 279 |
| A24 | Ped./Bike Accident Type (Category 9) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 282 |
| A24 | Ped./Bike Accident Type (Specific Circumstances - Weird) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 283 |
| A24 | Ped./Bike Accident Type (Specific Circumstances - Children's Vehicle) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 285 |
| A24 | Ped./Bike Accident Type (Specific Circumstances - Backing Motor Vehicle) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 286 |
| A24 | Ped./Bike Accident Type (Specific Circumstances - Not on a Roadway) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 287 |
| A24 | Ped./Bike Accident Type (Approaching Paths - Parallel Versus Crossing) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 288 |
| A24 | Ped./Bike Accident Type (Parallel Path Category) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 290 |
| A24 | Ped./Bike Accident Type (Crossing Path Category) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 291 |
| A24 | Ped./Bike Accident Type (Parallel/Crossing Path Crash Type) | GES.CrashData | PedBikeID | Accident.Ped_Acc | 292 |
| A25 | Work Zone | GES.CrashData | WorkZone | Accident.Wrk_Zone | 55 |
| A27 | EMS On Scene | GES.CrashData | EMSOnSceneID | Accident.EMS | 85 |

| D01 | Driver Presence | GES.Vehicle | DriverPresenceID | Vehicle.Dr_Pres | 385 |
|------------|--|-----------------------|------------------|-------------------|-------|
| D02 | Violations Charged | GES.DriverViolation | ViolationID | Vehicle.Violatn | 440 |
| D04 | Driver's Vision Obscured By | GES.DriverVision | VisionID | Vehicle.Vis_Obsc | 443 |
| D06 | Driver Maneuvered To Avoid | GES.DriverManeuver | ManeuverID | Vehicle.Drman_Av | 447 |
| D07 | Driver Distracted By | GES.DriverDistraction | DistractionID | Vehicle.Dr_Dstrd | 451 |
| D08 | Driver's ZIP Code | GES.Driver | Zipcode | Vehicle.DZipCode | 425 |
| D09 | Speed Related | GES.Driver | SpeedRelated | Vehicle.Speedrel | 427 |
| D10 | Driver License State | GES.Driver | LicState | | 429 |
| D11 | Driver License Number | GES.Driver | LicNumber | | 431 |
| E01 | Event Number | GES.Events | EventNumber | Event.Eventnum | 16 |
| E02 | Vehicle Number (This Vehicle) | GES.Events | VehicleID | Event.Vehnum | 23 |
| E03 | Point of Impact (This Vehicle) | GES.Events | VehiclePlaneID | Event.Gad | 24 |
| E04 | Vehicle Number (Other Vehicle) or Object Contacted | GES.Events | ObjectHitID | Event.Objcont | 44,32 |
| E05 | Point of Impact (Other Vehicle) | GES.Events | ObjectPlaneID | Event.Objgad | 47 |
| E06 | Action | GES.Events | VehActionID | Event.E_Action | 28 |
| M_A16 | Traffic Control Device | GES.TrafficDevices | DeviceID | Trafcon.MTrafCon | 311 |
| M_D02 | Violations Charged | GES.DriverViolation | ViolationID | Violatn.MViolatn | 440 |
| M_D04 | Driver's Vision Obscured By | GES.DriverVision | VisionID | Vision.MVisObsc | 443 |
| M_D06 | Driver Maneuvered To Avoid | GES.DriverManeuver | ManeuverID | Maneuver.MDrmanAv | 447 |
| M_D07 | Driver Distracted By | GES.DriverDistraction | DistractionID | Distract.MDrDstrd | 451 |
| M_P18 | Person"s Physical Impairment (Drivers) | GES.Impairment | ImpairID | Impair.MImpair | 459 |
| M_P18 | Person"s Physical Impairment (Non- Motorists) | GES.Impairment | ImpairID | Impair.MImpair | 587 |
| M_P19 | Non-Motorist Action | GES.NonMotoristAction | ActionID | Nmaction.MAction | 590 |
| M_P20 | Non-Motorist Safety Equipment Use | GES.NonMotoristSafety | SafetyID | Safetyeq.MSafEqmt | 596 |
| M_V12 | Vehicle Contributing Factors | GES.Contributors | ContributorID | Factor.MFactor | 316 |
| MB_A1 6 | Traffic Control Device - Cyclist | GES.BikeTrafficDevice | DeviceID | Biketraf.BTrafCon | 583 |

| P01 | Vehicle Number (Occupants) | GES.Person GES.Vehicle | VehicleID VehicleNumber | Person.Vehno | 388 |
|------|--|---------------------------|----------------------------|-----------------|-----|
| P01 | Vehicle Number (Non- Motorists) | GES.Person | VehicleID | Person.Vehno | 545 |
| P02 | Person Number (Non- Motorists) | GES.Person | OccNumber | Person.Perno | 546 |
| P02 | Person Number (Occupants) | GES.Person | OccNumber | Person.Perno | 389 |
| P03 | Person Type (Occupants) | GES.Person | PersonTypeID | Person.Per_Type | 390 |
| P03 | Person Type (Non- Motorists) | GES.Person | PersonTypeID | Person.Per_Type | 547 |
| P04 | Seating Position | GES.Person | SeatID | Person.Seat_Pos | 398 |
| P06 | Ejection | GES.Person | EjectionID | Person.Eject | 403 |
| P07 | Age (Occupants) | GES.Person | Age | Person.Age | 409 |
| P07 | Age (Non-Motorists) | GES.Person | Age | Person.Age | 556 |
| P08 | Sex (Non-Motorists) | GES.Person | SexID | Person.Sex | 558 |
| P08 | Sex (Occupants) | GES.Person | SexID | Person.Sex | 411 |
| P09 | Injury Severity (Non- Motorists) | GES.Person | InjurySeverityID | Person.Inj_Sev | 559 |
| P09 | Injury Severity (Occupants) | GES.Person | InjurySeverityID | Person.Inj_Sev | 412 |
| P10 | Taken to Hospital or Treatment Facility (Non- Motorists) | GES.Person | Treatment | Person.Hospital | 563 |
| P10 | Taken to Hospital or Treatment Facility (Occupants) | GES.Person | Treatment | Person.Hospital | 422 |
| P11 | Police Reported Alcohol Involvement (Drivers) | GES.Person | Police_AlcoholID | Person.Per_Alch | 432 |
| P11 | Police Reported Alcohol Involvement (Non- Motorists) | GES.Person | Police_AlcoholID | Person.Per_Alch | 566 |
| P11A | Alcohol Test Given (Drivers) | GES.Person | AlcTestGiven | Person.AlchTest | 434 |
| P11A | Alcohol Test Given (Non- Motorists) | GES.Person | AlcTestGiven | Person.AlchTest | 568 |
| P13 | Non-Motorist Location | GES.NonMotorist | LocusID | Person.Locatn | 574 |
| P15 | Restraint System Use (Occupants) | GES.Restraint | RestraintID | Person.Rest_Sys | 456 |
| P17 | Police Reported Drug Involvement (Drivers) | GES.Person | Police_DrugID | Person.Per_Drug | 436 |
| P17 | Police Reported Drug Involvement (Non- Motorists) | GES.Person | Police_DrugID | Person.Per_Drug | 570 |

| P17A | Drug Test Given (Drivers) | GES.Person | DrugTestGiven | Person.DrugTest | 438 |
|------|--|-----------------------|-----------------|-------------------|-----|
| P17A | Drug Test Given | GES.Person | DrugTestGiven | Person.DrugTest | 572 |
| P18 | Person"s Physical Impairment (Drivers) | GES.Impairment | ImpairID | Person.Impairmt | 459 |
| P18 | Person"s Physical Impairment (Non- Motorists) | GES.Impairment | ImpairID | Person.Impairmt | 587 |
| P19 | Non-Motorist Action | GES.NonMotoristAction | ActionID | Person.Action | 590 |
| P20 | Non-Motorist Safety Equipment Use | GES.NonMotoristSafety | SafetyID | Person.Saf_Eqmt | 596 |
| P21 | Air Bag Availability/Function | GES.AirBag | AirbagAvailID | Person.Airbag | 406 |
| P22 | Non-Motorist Striking Vehicle Number | GES.NonMotorist | StrikeVehicleID | Person.Str_Veh | 580 |
| P23 | Non-Motorist Parked/Working Vehicle Number | GES.NonMotorist | ParkVehicleID | Person.PVehno | 578 |
| PE01 | Parked/Working Vehicle Number | GES.ParkedEvent | VehicleID | Parkevnt.PVehno | 538 |
| PE02 | Parked/Working Vehicle Event Number | GES.ParkedEvent | EventID | Parkevnt.EventNum | 539 |
| PE03 | Parked/Working Vehicle Point of Impact | GES.ParkedEvent | VehiclePlaneID | Parkevnt.PGAD | 543 |
| PV01 | Parked/Working Vehicle Number | GES.Parked | VehicleNumber | Parked.PVehno | 463 |
| PV02 | Parked/Working Vehicle Type | GES.Parked | TypeID | Parked.PType | 500 |
| PV03 | Parked/Working Vehicle Make | GES.Parked | Make | Parked.PMake | 468 |
| PV04 | Parked/Working Vehicle Model | GES.Parked | Model | Parked.PModel | 470 |
| PV05 | Parked/Working Vehicle Body Type | GES.Parked | BodytypeID | Parked.PBodytyp | 471 |
| PV06 | Parked/Working Vehicle Model Year | GES.Parked | ModelYear | Parked.PModelYr | 492 |
| PV07 | Parked/Working Vehicle Identification Number | GES.Parked | VIN | Parked.PVIN | 464 |
| PV08 | Parked/Working Vehicle Special Use | GES.Parked | SpecialUsedID | Parked.PSp_Use | 502 |
| PV09 | Parked/Working Vehicle Emergency Use | GES.Parked | EmergencyUse | Parked.PEm_Use | 506 |
| PV10 | Parked/Working Vehicle Number of Occupants/Persons Coded | GES.Parked | NumOccCoded | Parked.POcclnvl | 535 |

| PV10B | Parked/Working Vehicle Number of Occupants/Persons | GES.Parked | NumOccs | Parked.PNumOccs | 532 |
|-------|--|---------------------------|----------------------------|------------------|-----|
| PV13 | Parked/Working Vehicle Trailing | GES.Parked | Trailing | Parked.PTrailer | 494 |
| PV16 | Parked/Working Vehicle Fire Occurrence | GES.Parked | Fire | Parked.PFire | 508 |
| PV18 | Parked/Working Vehicle Damage Severity | GES.Parked | DamageSeverityID | Parked.PVeh_Sev | 509 |
| PV19 | Parked/Working Vehicle Manner of Leaving Scene | GES.Parked | MannerLeftID | Parked.PTowed | 512 |
| PV24 | Parked/Working Vehicle Initial Point of Impact | GES.Parkedevent | VehiclePlaneID | Parked.Pimpact | 543 |
| PV30 | Parked/Working Vehicle Rollover Type | GES.Parked | RolloverTypeID | Parked.PRollovr | 515 |
| PV31 | Parked/Working Vehicle Carrier's Identification Number | GES.Parked | CarrierNumber | Parked.PCarlDNo | 517 |
| PV32 | Parked/Working Vehicle Number of Axles, Including Trailers | GES.Parked | Axles | Parked.PAxles | 519 |
| PV33 | Parked/Working Vehicle Cargo Body Type | GES.Parked | CargoBodyTypeID | Parked.PCargTyp | 522 |
| PV34 | Parked/Working Vehicle Hazardous Materials Placarded | GES.Parked | HazardPlak | Parked.PHaz_Mat | 525 |
| PV35 | Parked/Working Vehicle Hazardous Materials Placard Number | GES.Parked | HazardPlakNum | Parked.PHazm_No | 527 |
| PV36 | Parked/Working Vehicle Hazardous Materials Release | GES.Parked | HazardRelease | Parked.PHazMa_R | 530 |
| PV37 | Parked/Working Vehicle Location | GES.Parked | RoadwayRelID | Parked.PRel_Rwy | 497 |
| V_A11 | Trafficway Flow | GES.Roadway | TrafficFlowID | Vehicle.VTrafWay | 173 |
| V_A12 | Number of Travel Lanes | GES.Roadway | NumLanes | Vehicle.VNum_Lan | 175 |
| V_A13 | Roadway Alignment | GES.Roadway | AlignmentID | Vehicle.VAlign | 177 |
| V_A14 | Roadway Profile | GES.Roadway | ProfileID | Vehicle.VProfile | 179 |
| V_A15 | Roadway Surface Condition | GES.Roadway | SurfaceID | Vehicle.VSurCond | 180 |
| V_A16 | Traffic Control Device | GES.TrafficDevices | DeviceID | Vehicle.Vtrafcon | 311 |
| V_A18 | Speed Limit | GES.Roadway | SpeedLimit | Vehicle.VSpd_Lim | 182 |
| V01 | Vehicle Number (This Vehicle) | GES.Events GES.Vehicle | VehicleID VehicleNumber | Vehicle.Vehno | 23 |

| V01 | Vehicle Number (Other Vehicle) | GES.Events GES.Vehicle | ObjectHitID VehicleNumber | Vehicle.Vehno | 46 |
|------|--|---------------------------|------------------------------|------------------|-----|
| V02 | Hit and Run | GES.Vehicle | HitRun | Vehicle.Hit_Run | 184 |
| V03 | Vehicle Make | GES.Vehicle | MakeID | Vehicle.Make | 90 |
| V04 | Vehicle Model | GES.Vehicle | ModelID | Vehicle.Model | 96 |
| V05 | Body Type | GES.Vehicle | BodyTypeID | Vehicle.Body_Typ | 147 |
| V06 | Vehicle Model Year | GES.Vehicle | ModelYear | Vehicle.Model_Yr | 166 |
| V07 | Vehicle Identification Number | GES.Vehicle | VIN | Vehicle.VIN | 87 |
| V08 | Special Use | GES.Vehicle | SpecialUseID | Vehicle.Spec_Use | 187 |
| V09 | Emergency Use | GES.Vehicle | EmergencyUse | Vehicle.Emcy_Use | 191 |
| V10 | Number of Occupants Coded | GES.Vehicle | NumOccCoded | Vehicle.Occ_Invl | 382 |
| V10B | Number of Occupants | GES.Vehicle | NumOccs | Vehicle.Numoccs | 379 |
| V11 | Travel Speed | GES.Vehicle | TravelSpeed | Vehicle.Speed | 193 |
| V12 | Vehicle Contributing Factors | GES.Contributors | ContributorID | Vehicle.Factor | 316 |
| V13 | Vehicle Trailing | GES.Vehicle | Trailing | Vehicle.Trailer | 169 |
| V14 | Jackknife | GES.Vehicle | Jacknife | Vehicle.Jacknife | 171 |
| V16 | Fire Occurrence | GES.Vehicle | Fire | Vehicle.Fire | 195 |
| V18 | Damage Severity | GES.Vehicle | DamageSeverityID | Vehicle.Veh_Sev | 196 |
| V19 | Manner of Leaving Scene | GES.Vehicle | MannerLeftID | Vehicle.Towed | 199 |
| V20 | Most Harmful Event | GES.Vehicle GES.Events | MostHarmfullD Objecthitid | Vehicle.V_Event | 203 |
| V20A | Most Harmful Event Number | GES.Vehicle GES.Events | MostHarmfullD ObjectHitID | Vehicle.MHENum | 203 |
| V21 | Movement Prior to Critical Event - Precrash 1 | GES.Precrash | PriorMovementID | Vehicle.P_Crash1 | 206 |
| V22 | Vehicle Role | GES.Vehicle | RoleID | Vehicle.Veh_Role | 213 |
| V23 | Accident Type (Configuration) | GES.Vehicle | CrashConfigID | None | 222 |
| V23 | Accident Type (Category) | GES.Vehicle | CrashCatID | None | 217 |
| V23 | Accident Type (Crash Type) | GES.Vehicle | CrashTypeID | Vehicle.Acc_Type | 225 |
| V24 | Point of Impact (Other Vehicle) | GES.Events | ObjectPlaneID | Vehicle.Impact | 47 |
| V24 | Point of Impact (This Vehicle) | GES.Events | VehiclePlaneID | Vehicle.Impact | 24 |
| V25 | Damage Areas | GES.DamageArea | ArealD | Vehicle.Dam_Area | 319 |

| V26 | Critical Event - Precrash 2 (Category) | GES.Precrash | CrashCatEventID | None | 339 |
|-----|---|----------------------|-----------------|------------------|-----|
| V26 | Critical Event - Precrash 2 (Event) | GES.Precrash | CriticalEventID | Vehicle.P_Crash2 | 340 |
| V27 | Corrective Action Attempted - Precrash 3 | GES.CorrectiveAction | CorrectActionID | Vehicle.P_Crash3 | 354 |
| V28 | Precrash Vehicle Control - Precrash 4 | GES.VehicleControl | ControlID | Vehicle.PCrash4 | 357 |
| V29 | Precrash Location - Precrash 5 | GES.PreCrash | LocationID | Vehicle.PCrash5 | 359 |
| V30 | Rollover Type | GES.Vehicle | RolloverTypeID | Vehicle.Rollover | 362 |
| V31 | Carrier's Identification Number | GES.NGA_Type | CarrierNumber | Vehicle.CarlDNum | 365 |
| V32 | Number of Axles on Vehicle, Including Trailers | GES.NGA_Type | Axles | Vehicle.Axles | 367 |
| V33 | Cargo Body Type | GES.NGA_Type | CargoBodyTypeID | Vehicle.Carg_Typ | 369 |
| V34 | Hazardous Materials Placarded | GES.NGA_Type | HazardPlak | Vehicle.Haz_Mat | 372 |
| V35 | Hazardous Materials Placard Number | GES.NGA_Type | HazardPlakNum | Vehicle.Hazm_No | 374 |
| V36 | Hazardous Materials Release | GES.NGA_Type | HazardRelease | Vehicle.Haz_Ma_R | 377 |

ACKNOWLEDGMENT

The production of this edition of the General Estimates System Coding and Editing Manual would not have been possible without contributions from many individuals within the U.S. Department of Transportation and the National Automotive Sampling System Quality Control Contractor.

Not Displayed On Summary Tab

A22 POLICE JURISDICTION

Screen Heading: PAR

Screen Name: Jurisdiction (none-E)

Long Name: None

SAS Name: Accident.PJ

Oracle Name: NASS.PARdata.Jurisdiction

Element Values:

Range: 1-126

Remarks:

This is the police jurisdiction from which the PAR is selected; it is written at the top of the PAR and is prefaced by the character "PJ." The police jurisdiction may also be shown as the second of three numbers separated by -'s. The first number in the set of three is the primary sampling unit; the second is the police jurisdiction; and the third is the PAR number. The jurisdiction number written on the PAR must match the number shown in the "GES Input Form" PAR/Jurisdiction field.

A01 DATE

Screen Heading: PAR

Screen Name: Crash Date (7-E)

Long Name: What is the crash date?

SAS Name: Accident.Month, Accident.Weekday, Accident.Year

Oracle Name: GES.Crashdata.CrashDate

Element Values:

Date Field (MM/DD/YYYY)

Remarks:

If the PAR indicates (usually a hit-and-run) that the crash occurred between some PM and AM time (e.g., 8:00 PM and 6:00 AM) on either a preceding or following day, code the crash as occurring on the following day. If a range of days is indicated (e.g., between Sunday and Friday), code the last date of the range (e.g., Friday). When the day is not available on the PAR use the day listed on the Stratification Record if it is available.

If the month cannot be determined from the PAR, enter the month of the Ending Contact Date from the Inventory Record.

If the crash date on the PAR does not match the crash date shown on the data entry screen and it is determined that the crash date on the PAR is correct, the crash date is corrected.

Consistency Checks:

Errors

| | IF | THEN | | | |
|-----------------|---|--|--|--|--|
| AA034A | there is a row in the ges.crashdata table | there must be a row in the nass.pardata table with a matching parid. | | | |
| <u>Warnings</u> | | | | | |
| | IF | THEN | | | |
| AA034 | DATE-MM (A01) equals 05-09 | ATMOSPHERIC CONDITION (A20) should not equal 3 or 4. | | | |
| AA035 | DATE-MM (A01) equals 05-09 | ROADWAY SURFACE CONDITION (A15) should not equal 3 or 4. | | | |

A02 TIME

Screen Heading: PAR

Screen Name: Crash Time (8-E)

Long Name: What is the crash time?

SAS Name: Accident. Hour, Accident. Minute

Oracle Name: GES.Crashdata.CrashTime

Element Values:

Time Field (HH:MM)

Remarks:

Enter time as shown on the PAR. If the hour (HH) or AM versus PM cannot be determined, then enter (Unknown).

If the PAR indicates the crash occurred during some time interval of greater than one hour (e.g., 8:00 PM to 6:00 AM, or 8:00 am to 5:00 PM), enter (Unknown). However, if the interval is one hour or less, code the midpoint of the interval (e.g., 8:00 PM to 9:00 PM), enter "2030."

When the time is available but AM versus PM is not shown on the PAR, base the time on light conditions (e.g. time is 10:00, light condition is dark. Code as 2200).

AM - Starts at 12:00 Midnight

PM - Starts at 12:00 Noon

12 AM (or 12:00 midnight) is the equivalent of 2400 in military time

12:01 AM is the equivalent of 0001 in military time

If the time on the PAR does not match the crash time shown on the data entry screen and it is determined that the crash time on the PAR is correct, the crash time is corrected.

Consistency Checks:

Errors

| | IF | THEN |
|-------|-----------------------------------|---|
| AA003 | LIGHT CONDITION (A19) equals 5 | TIME (A02) must not equal 2200-2400, 0001-1400 or 1499. |
| AA062 | LIGHT CONDITION (A19) equals 2 | TIME (A02) must not equal 1000- 1500 or 1599. |
| AA066 | LIGHT CONDITION (A19) equals 1 | TIME (A02) must not equal 2200-2400, 0001-0300 or 0399. |

| AA066A | TIME (a02) must not equal 00:00 or (colon). | null. The third character must equal: |
|--------|---|---|
| AA079 | LIGHT CONDITION (A19) equals 4 | TIME (A02) must not equal 1000- 2400, 0001-0300 or 0399. |

Warnings

| | IF | THEN |
|-------|--|---|
| AA006 | TIME (A02) equals 1000-1500 | LIGHT CONDITION (A19) should equal 1 or 9. |
| AA057 | TIME (A02) equals 2200-2400 or 0001-0300 or 0399 | LIGHT CONDITION (A19) should equal 2, 3 or 9. |
| AA068 | LIGHT CONDITION (A19) equals 3 | TIME (A02) should not equal 1000- 1500 or 1599. |
| AA074 | LIGHT CONDITION (A19) equals 1 | TIME (A02) should equal 0500- 2100, 2199 or 9999. |
| AA078 | LIGHT CONDITION (A19) equals 2 | TIME (A02) should equal 1600- 2400, 0100-0900, 0999 or 9999. |
| AA080 | LIGHT CONDITION (A19) equals 4 | TIME (A02) should equal 0400- 0900, 0999 or 9999. |
| AA082 | LIGHT CONDITION (A19) equals 5 | TIME (A02) should equal 1600- 2100, 2199 or 9999. |

A23 STRATUM

Screen Heading: PAR

Screen Name: Category (9-N)

Long Name: What is the crash category?

SAS Name: Accident.Stratum

Oracle Name: NASS.PARdata.CategoryID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------------|
| n/a | 1 | 1 | Category 1-Stratum L |
| n/a | 2 | 2 | Category 2 |
| n/a | 3 | 3 | Category 3 |
| n/a | 4 | 4 | Category 4 |
| n/a | 5 | 5 | Category 1-Stratum M |
| n/a | 6 | 6 | Category 1-Stratum N |

Remarks:

Only NASS crashes are included in the GES. See the current <u>NASS GES Researcher's</u> Manual, section 3.0 for the definition of a NASS crash.

Categories 1-Stratum L, M and N apply if the NASS crash involves at least one "passenger vehicle" (i.e., a passenger car, sport utility vehicle, van, or pickup truck) which is "towed" (i.e., towed from the crash scene due to damage). Crashes involving medium or heavy trucks are excluded from these categories.

Category 1-Stratum L is used if an occupant of a towed, passenger vehicle is killed. Stratum L also applies when the crash involves one passenger vehicle, the passenger vehicle is towed and one of the occupants receives an A injury and is transported to a medical facility for treatment -or- the crash involves two or more passenger vehicles, at least two passenger vehicles are towed and one of the occupants of the towed passenger vehicles receives an A injury and is transported to a medical facility for treatment.

Category 1-Stratum M is used if the NASS crash does not qualify for Category 1-Stratum L, but at least one occupant of a towed passenger vehicle is injured and transported to a medical facility for treatment.

Category 1-Stratum N is used if the NASS crash does not qualify for Category 1-Stratum L or Category 1-Stratum M, but a passenger vehicle is towed and no medium or heavy trucks are involved.

Category 2 applies if the NASS crash does not qualify for Category 1-Stratum L, M or N; but involves at least one medium or heavy truck and either a vehicle which is towed due to damage or at least one involved person which has a police reported injury of "K", "A", "B", or "C."

Category 3 applies if the NASS crash does not qualify for Category 1-Stratum L, M or N or Category 2; none of the vehicles involved in the crash are medium or heavy trucks and at least one person involved in the crash has a police reported injury of "K", "A", or "B."

Category 4 applies if the crash does not qualify for Category 1-Stratum L, M or N; Category 2 or Category 3. Further clarification: No one in the crash can receive a K, A or B injury. A person can receive a C injury only if there are no medium/heavy trucks involved in the crash.

Stabilization:

At times, one police report will contain more than one crash. This will happen when events constituting a crash have stabilized (*ANSI D16.1-1996*, *Section 2.4.4*) and units involved in the first sequence are subsequently involved in another crash sequence which is recorded on the same police report. If more than one crash is recorded on a police report, based on the ANSI definition of stabilized, then use the following protocol to determine which of the crashes to code.

First, identify all NASS crashes. Exclude from consideration those which are not NASS crashes.

Second, select the situation (A, B, or C below) which is applicable to the PAR under consideration and follow the protocol provided.

Situation A

If exactly one crash qualifies for Category 1-Stratum L, M or N; choose this crash to code.

Situation B

If more than one crash qualifies for Categories 1-Stratum L, M and N; follow the 2 steps below to select the crash to code. Ignore all crashes not applicable to Categories 1-Stratum L, M and N.

- (1) If more than one crash is classified as L, M or N; choose L over M, M over N.
- (2) If there are two or more crashes of the same classification (e.g., two crashes are classified in Category 1-Stratum N), then the criteria below apply:
 - (a) If injury is involved and the relative degree of injury between crashes can be determined, the crash with the highest injury severity is chosen.
 - (b) If injury is involved and the relative degree of injury between crashes is approximately equal, the first of the highest equal injury crashes is chosen.

- (c) If injury is involved and the relative degree of injury between crashes cannot be determined, the first crash is chosen.
- (d) If there are no injuries, then the first crash is chosen.

Situation C

If no crash qualifies for Category 1-Stratum L, M or N and there is more than one crash applicable to Categories 2, 3 or 4; follow the criteria in Situation B, step 2 above to select the crash to code.

Consistency Checks:

Post Entry

| | IF | THEN |
|--------|---|-------------------------------|
| PV188A | no BODY TYPE (V05) equals 60- 79 and INJURY SEVERITY (P09) equals 4 for at least one occupant of a vehicle where BODY TYPE (V05) equals 1-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 1. |
| PV188B | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |

| PV188K | no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 5. |
|--------|---|-------------------------------|
| PV188P | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L or category 1 stratum M and there is at least one vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 6. |
| PV188R | at least one BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L, category 1 stratum M or category 1 stratum N and there is at least one vehicle where MANNER OF LEAVING SCENE (V19) equals 2 or one person where INJURY SEVERITY (P09) equals 1-5 | STRATUM (A23) should equal 2. |
| PV188S | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L, category 1 stratum M, category 1 stratum N or category 2 and there is at least one person where INJURY SEVERITY (P09) equals 2-4 | STRATUM (A23) should equal 3. |
| PV188T | the crash does not qualify for category 1 stratum L, category 1 stratum N, category 1 stratum N, category 2 or category 3 | STRATUM (A23) should equal 4. |

A03 NUMBER OF MOTOR VEHICLES

Screen Heading: PAR Configuration Questions

Screen Name: Number of In-Transport Motor Vehicles (10-R)

Long Name: How many in-transport motor vehicles are in the crash?

SAS Name: Accident.Veh_Invl

Oracle Name: GES.Crashdata.Numvehs

Element Values:

Range: 1 to 100

Remarks:

Each crash must have at least one in-transport motor vehicle involved. The value entered must equal the total number of in-transport motor vehicles involved in the crash. Vehicles not in transport are not included in this variable's count.

In order for a vehicle to be considered in transport, the motor vehicle must be either (1) on the roadway or (2) in motion. This includes driverless vehicles.

When one motor vehicle is towing another, the number of motor vehicles entered depends on the type of linkage between the vehicles. A fixed linkage is defined as one which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground. A nonfixed linkage (such as a rope or a chain) requires the towed unit to be manually controlled.

If the PAR indicates (probably in the narrative section) the linkage between the units is fixed, consider the towed unit as cargo throughout the entire crash sequence, regardless of subsequent events/impacts sustained by the towed unit. In other words, a vehicle towed by a fixed linkage: (1) is never considered as an in-transport vehicle, and (2) will be considered as cargo associated with the power unit.

If the linkage between the units is nonfixed, each vehicle is considered to be in-transport, and only the vehicle(s) involved in the crash sequence can be counted. If no information is available regarding type of linkage, assume fixed linkage.

Hit-and-run crashes may cause some confusion on this variable. The count is increased for each in-transport motor vehicle involved in the crash independent of the amount of information collected on the vehicles by the police.

A vehicle stopped off the roadway, its door open over a roadway, is not in transport.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|---|
| AA014 | HARMFUL EVENT (A06) equals 25 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| AA014A | ACTION (E06) equals 4 or 5 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| AA086 | MANNER OF COLLISION (A07) does not equal 0 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| AV197 | NUMBER OF MOTOR VEHICLES (A03) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2 | the other vehicle's VEHICLE ROLE (V22) must not equal 2. |
| AV213 | NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13 | VEHICLE ROLE (V22) must equal 1 or 3. |
| PA201 | PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01. |
| VA001 | HARMFUL EVENT (A06) equals 25 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| VA093 | VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 31-46, 58 or 59. |
| VA096 | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) is not equal to 15 | HARMFUL EVENT (A06) must equal 01-10. |
| VA096A | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) equals 15 | HARMFUL EVENT (A06) must not equal 01-10. |

Warnings

| | IF | THEN |
|-------|---|--|
| AV184 | NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 01 | CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12, 13 or 14. |

Post Entry

| AV019 NUMBER OF MOTOR VEHICLES there should be at least one vehicl (A03) is greater than 01 with TRAVEL SPEED (V11) > 00 continuous unknown. RELATION TO ROADWAY (A10) ACCIDENT TYPE (V23) should equals 3 and NUMBER OF equal 06-10, 98 or 99. MOTOR VEHICLES (A03) equals 01 PA200 NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal one VEHICLE NUMBER (V01) in the crash unless it is equal to 99. VA014 ACCIDENT TYPE (V23) equals (A03) should equal 1. | | IF | THEN |
|--|-------|---|---|
| (A03) is greater than 01 with TRAVEL SPEED (V11) > 00 contents of the contents | AP015 | | at least one PERSON TYPE (P03) should equal 1, 2 or 9. |
| equals 3 and NUMBER OF equal 06-10, 98 or 99. MOTOR VEHICLES (A03) equals 01 PA200 NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal one VEHICLE NUMBER (V01) in the crash unless it is equal to 99. VA014 ACCIDENT TYPE (V23) equals NUMBER OF MOTOR VEHICLES 01-16 (A03) should equal 1. VA015 ACCIDENT TYPE (V23) equals NUMBER OF MOTOR VEHICLES 20-91 (A03) must be greater than 01. VA120 Only ACCIDENT TYPE (V23) codes 01-16, 92, 98, 99, 00 can be used when the crash involves a single vehicle-NUMBER OF MOTOR | AV019 | | there should be at least one vehicle with TRAVEL SPEED (V11) > 00 or unknown. |
| VEHICLE NUMBER (V01) in the crash unless it is equal to 99. VA014 ACCIDENT TYPE (V23) equals 01-16 NUMBER OF MOTOR VEHICLES (A03) should equal 1. VA015 ACCIDENT TYPE (V23) equals 20-91 NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. VA120 Only ACCIDENT TYPE (V23) codes 01-16, 92, 98, 99, 00 can be used when the crash involves a single vehicle-NUMBER OF MOTOR | AV097 | equals 3 and NUMBER OF MOTOR VEHICLES (A03) equals | |
| VA015 ACCIDENT TYPE (V23) equals 20-91 NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. VA120 Only ACCIDENT TYPE (V23) codes 01-16, 92, 98, 99, 00 can be used when the crash involves a single vehicle-NUMBER OF MOTOR | PA200 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal one VEHICLE NUMBER (V01) in the crash unless it is equal to 99. | |
| VA120 Only ACCIDENT TYPE (V23) codes 01-16, 92, 98, 99, 00 can be used when the crash involves a single vehicle-NUMBER OF MOTOR | VA014 | ` , . | NUMBER OF MOTOR VEHICLES (A03) should equal 1. |
| when the crash involves a single vehicle-NUMBER OF MOTOR | VA015 | ` , . | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| | VA120 | when the crash involves a single vehicle-NUMBER OF MOTOR | |

A03D NUMBER OF PARKED/WORKING VEHICLES

Screen Heading: PAR Configuration Questions

Screen Name: Number of Parked/Working Vehicles (12-R)

Long Name: How many parked and working vehicles are in the crash?

SAS Name: Accident.PVH_Invl

Oracle Name: GES.Crashdata.NumParkedVehs

Element Values:

Range: 0 to 30

Remarks:

Enter the number of parked and working vehicles in the crash.

A parked vehicle is a motor vehicle which is stopped off the roadway, i.e., parked off the roadway.

A motor vehicle stopped off the roadway, its door open over a roadway, is not in transport and is counted as a parked vehicle.

Working vehicles are transport devices being used as equipment which would be classified under ANSI D16.1-1996 as motor vehicles, if not being used as equipment (e.g., a tow truck while using its winch, a pickup truck while being used to power a saw, a truck with cherry picker being used to repair or maintain a traffic signal or a concrete truck while discharging its load). The applicable sections of ANSI D16.1-1996 are 2.1.3, 2.1.4, 2.1.7,2.2.6, 2.2.7 and 2.2.34. Examples of "working vehicles" are shown in ANSID16.1-1996 on page 3 under transport vehicle exclusions. These examples are as follows:

- Pickup truck while being used to power a saw
- Dump truck while spreading its load
- Tow truck while using its winch
- Jeep while pulling a device picking up golf balls
- Transit-mix concrete truck while discharging its load
- Dump truck while plowing snow
- And others

If there is a motor vehicle which appears to meet the definition of a working vehicle but is not included in the above examples, please contact NHTSA for a ruling.

Police, emergency vehicles and taxi cabs are not working vehicles.

If the PAR is unclear whether a motor vehicle is actually in the act of performing work at the time of the crash, then the motor vehicle is considered as not working.

When one parked/working vehicle is linked to another parked/working vehicle, the number of parked/working vehicles entered depends on the type of linkage. Fixed linkage is defined as one which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground. Nonfixed linkage (such as a rope or a chain) requires the towed unit to be manually controlled. If the PAR indicates (probably in the narrative section) the linkage between the parked/working vehicles is fixed, consider the trailing parked/working vehicle as a towed unit. If the linkage is nonfixed, then count the trailing unit as another parked/working vehicle. If no information is available regarding type of linkage, assume fixed linkage.

Consistency Checks:

Errors

IF THEN

AA014P

The NUMBER OF PARKED/WORKING VEHICLES (A03D) must equal the number of parked plus working vehicles coded for the crash.

A04 NUMBER OF NON-MOTORISTS

Screen Heading: PAR Configuration Questions

Screen Name: Number of Non-Motorists (15-R)

Long Name: How many non-motorists are involved in the crash?

SAS Name: Accident.Non_Invl

Oracle Name: GES.Crashdata.NumNonMotorists

Element Values:

Range: 0-98

Remarks:

The value entered must equal the number of non-motorists involved in the crash.

Non-Motorists are generally listed in the vehicle section on the PAR.

Non-Motorists include: occupants of a vehicle not in-transport, pedestrians, bicyclists, other cyclists, as well as other non-motorists.

"Occupant of vehicle not in transport" represents those persons in or on a motor vehicle which is not in transport when struck.

A "non-motorist conveyance" is defined as any human-powered device by which a non-motorist may move, or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. This includes those persons in a non-motorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

A "pedestrian" is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

A "bicyclist" refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion. "Other cyclist" refers to all other pedalcyclists such as persons on tricycles or unicycles. This includes those pedalcyclists who hold onto a motor vehicle in motion.

"Other non-motorist" includes any other person not included under the above definitions of a pedestrian, bicyclist, other cyclist, or occupant of a motor vehicle not in-transport. Persons riding on an animal or in an animal powered conveyance are one example. Any person outside a trafficway or outside a sidewalk or path contiguous with a trafficway is another.

The maximum number of non-motorists that can be coded is 98. If more than 98 non-motorists are involved code only the first 98.

Consistency Checks:

Errors

| | IF | THEN | | | | |
|-----------------|---|--|--|--|--|--|
| AA033 | HARMFUL EVENT (A06) equals 21, 22 or 27 | NUMBER OF NON-MOTORISTS (A04) must not equal 00. | | | | |
| AA070 | NUMBER OF NON-MOTORISTS (A04) equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000. | | | | |
| <u>Warnings</u> | | | | | | |
| | | | | | | |
| | IF | THEN | | | | |

Post Entry

| | IF | THEN |
|--------|--|--|
| AP135 | RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON-MOTORISTS (A04) is greater than 00 | NON-MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09. |
| AP135A | The PERSON NUMBERS (P02) of the non-motorists within a crash must be consecutively numbered. The number of non-motorists coded for a crash must equal NUMBER OF NON-MOTORISTS (A04). | |

Events Event Information

E01 EVENT NUMBER

Screen Heading: Events

Screen Name: Event Number (N)

Long Name: None

SAS Name: Event. Eventnum

Oracle Name: GES.Events.EventNumber

Element Values:

Range: 1-98

Remarks:

This is a computer assigned number beginning with 1.

A "crash" is the total set of "harmful events" (one or more) resulting from an unstabilized situation. The "crash" is concluded in time when all harmful events which originate from the unstabilized situation are stabilized.

A harmful event is an occurrence of injury or damage involving an in-transport motor vehicle. It can result from an impact or non-collision event. An impact is defined as any vehicle to vehicle or vehicle to object (fixed or nonfixed, stationary or nonstationary) contact which results in damage or injury. Noncollision events such as fire/explosion, occupant fell from vehicle, occupant injury without vehicle impact, etc., involving an in-transport motor vehicle are harmful events if damage or injury result.

The NASS GES is only interested in harmful events that involve **in-transport** motor vehicles. Events that involve **only** not in-transport motor vehicles and/or pedestrians and/or non-motorists are not included in the coded crash sequence. Below are some examples of nonqualifying events.

Not in-transport vehicle impacts pedestrian, pedalcyclist, or other non-motorist

Not in-transport vehicle impacts an object (fixed or nonfixed)

Not in-transport vehicle impacts another not in-transport vehicle

Pedestrian (pedalcyclist, other non-motorist) impacts an object

Pedestrian (pedalcyclist, other non-motorist) impacts another not in-transport vehicle

Pedestrian, pedalcyclist, or other non-motorist inter-impact.

The crash events variables are designed to provide a coded description of all qualifying events which occurred in the crash sequence. Events are encoded in chronological sequence. Two groups of variables are provided for each event. The first (or left) group always describes the in-transport motor vehicle with the lower vehicle number in the event. The second group describes either the other in-transport vehicle, the object involved in the event or the noncollision event associated with the in-transport motor vehicle described by the left group.

With this coded chronological sequence of qualified crash events on the GES database, analysts can review the entire series of events involving in-transport motor vehicles. Various areas of concern to the highway safety community will be easily assessed using these variables. For instance, the injury severity in accidents can be assessed relative to the number and type of impacts involved.

Likewise, certain collision configurations may create a greater hazardous condition for the occupants. A possible area of analysis would be the mix of vehicles sizes or the types of objects the different classes of vehicles impact.

Complete these variables based upon a reconstruction of the vehicular dynamics involved in the crash as described in the PAR. All of the injury or damage producing qualifying events or circumstances for the in-transport motor vehicle(s) are coded.

An example of a properly coded crash sequence is shown below.

Vehicle 1 (a compact passenger car) went out of control on a wet roadway and struck a median guardrail with its front. The vehicle was redirected by the guardrail and reentered the roadway, where it struck vehicle 2 (a large pickup truck) in the left side with its front. Vehicle 1 spun to a stop in the roadway, and the driver, due to the spinning, hit his head on the door pillar breaking his neck. Vehicle 2, out-of-control, ran off the roadway, struck a pedestrian with its front and rolled over.

| E01 Event Number | E02 Vehicle Number (This Vehicle) | E03 Point of Impact (This Vehicle) | E06 Action | E04 Vehicle Number (Other Vehicle) or Object Contacted | E05 Point of Impact (Other Vehicle) | A07 Manner of Collision |
|---------------------|---|--|------------------------------------|---|-------------------------------------|--|
| 1 | 1 | Front | Collision With Fixed Object | Guardrail | - | Not Collision With Motor Vehicle in transport |
| 2 | 1 | Front | Strike Another Vehicle | 2 | Left Side | - |
| 3 | 2 | Front | Collision With Object Not Fixed | Pedestrian | - | - |
| 4 | 2 | Non-Collision | Non-Collision | Rollover or Overturn | - | - |

Note: For the driver of vehicle 1, breaking his neck is not a separate codeable event. Rather, this injury, and almost all occupant injuries resulting from occupant interior contact, is a result

of a collision event. Also, A07, Manner of Collision, applies only to the first harmful event in the crash.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|---|
| AA009 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59 | MANNER OF COLLISION (A07) must not equal 1-6. |
| AA010 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) is not equal to 15 | MANNER OF COLLISION (A07) must not equal 0. |
| AA010A | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) equals 15 | MANNER OF COLLISION (A07) must equal 0. |
| AA011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23 | TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98. |
| AA012 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA039 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| AA051 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA088 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| AV022 | HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97. |
| AV073 | MANNER OF COLLISION (A7) equals 2 | POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1. |

| AV074 | MANNER OF COLLISION (A7) equals 3 | † POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1. |
|--------|--|--|
| AV075 | MANNER OF COLLISION (A7) equals 1 | one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04. |
| AV132 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09 | ACCIDENT TYPE (V23) must equal 00. |
| AV215 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10 | ACCIDENT TYPE (V23) must not equal 20-91. |
| PA127 | NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| PVE700 | PARKED VEHICLE TYPE (PV02) EQUALS 1 and PARKED VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 126. |
| PVE701 | PARKED/WORKING VEHICLE TYPE (PV02) EQUALS 2 and PARKED/WORKING VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 128. |
| VA081 | ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 21, 22, 24 or 27. |
| VA086 | ACCIDENT TYPE (V23) equals 01-16 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 25. |
| VA093 | VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59. |
| VA096 | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) is not equal to 15 | HARMFUL EVENT (A06) must equal 01-10. |

| VA096A | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) equals 15 | HARMFUL EVENT (A06) must not equal 01-10. |
|--------|---|--|
| VA137 | ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09. |
| VA219 | ACCIDENT TYPE (V23) equals 20-91 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 25. |
| VV099A | ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14. |
| VV100A | ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13. |

<u>Warnings</u>

| | IF | THEN |
|-------|---|---|
| AA023 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99 | MANNER OF COLLISION (A07) should not equal 0-6. |
| AA024 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| AA025 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23 | RELATION TO JUNCTION (A09) should equal 5. |
| AV070 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99. |
| AV071 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13 | ACCIDENT TYPE (V23) should equal 13. |
| AV072 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1 or 9 | ACCIDENT TYPE (V23) should equal 12 or 15. |

| AV137A | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04 or 06 | ACCIDENT TYPE (V23) should equal 00. |
|--------|--|--|
| AV137B | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 08 or 09 | ACCIDENT TYPE (V23) should equal 00. |
| AV223 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01 | ACCIDENT TYPE (V23) should equal 1-10, 98 or 99. |
| VA087 | ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 99. |
| VA198 | POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 01-10. |
| VA211 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10 | RELATION TO ROADWAY (A10) should equal 1 or 9. |

Post Entry

| | IF | THEN |
|-------|--|--|
| AP001 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99. |
| AP002 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP003 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP004 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 09, 19 or 99. |
| AV011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28 | TRAVEL SPEED (V11) should not equal 00. |

| AV011A | HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1 | TRAVEL SPEED (V11) should not equal 00 for both vehicles. |
|--------|--|---|
| PA049 | at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110- 0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920. |
| PA058 | at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001- 0041, 0048, 0049, 0055, 0097, 0098 or 0099. |
| VA093 | VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 31-46, 58 or 59. |

E02/V01 VEHICLE NUMBER (THIS VEHICLE)

Screen Heading: Events

Screen Name: Vehicle (100-R)

Long Name: What is the number of the "lower numbered" in-transport motor vehicle

involved in this event?

SAS Name: Event. Vehnum, Vehicle. Vehno

Oracle Name: GES.Events.VehicleID, GES.Vehicle.VehicleNumber

Element Values:

Range: 1-30

Remarks:

The in-transport motor vehicles within a crash are numbered sequentially beginning with 1; no numbers are skipped. In-transport motor vehicles are assigned the PAR's vehicle number unless a number is skipped. The vehicle number entered is for the in-transport motor vehicle involved in this event with the <u>lower</u> vehicle number. However, if the event is an impact between a vehicle and an object set in motion by another vehicle, the number of the vehicle which set the object in motion is entered, even if it is the higher number.

Consistency Checks:

Errors

IF THEN

PP048A PERSON TYPE (P03) equals 3, 4, VEHICLE NUMBER (V01) must

5, 6, 7 or 8 equal null.

EV215 All in-transport motor vehicles must be involved in at least one event.

Warnings

IF THEN

AV215A The lower vehicle number should be entered first when entering the event

information.

E03/V24 POINT OF IMPACT (THIS VEHICLE)

Screen Heading: Events

Screen Name: Point of Impact - This Vehicle (102-R)

Long Name: What is the point of impact for this vehicle?

SAS Name: Event.Gad, Vehicle.Impact

Oracle Name: GES.Events.VehiclePlaneID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------------|
| 1 | 26859 | 0 | Non-Collision |
| 2 | 26860 | 1 | Front |
| 3 | 26861 | 2 | Right Side |
| 4 | 26862 | 3 | Left Side |
| 5 | 26863 | 4 | Back |
| 6 | 26864 | 5 | Тор |
| 7 | 26865 | 6 | Undercarriage |
| 8 | 26866 | 11 | Front Right Corner |
| 9 | 26867 | 12 | Front Left Corner |
| 10 | 26868 | 13 | Back Right Corner |
| 11 | 26869 | 14 | Back Left Corner |
| 12 | 26870 | 99 | Point of Impact Unknown |
| 13 | 26871 | 15 | Object Set in Motion |

Remarks:

For this event, code the impact point that produced property damage or personal injury. The impact point is for the vehicle coded in variable E02/V01, Vehicle Number (This Vehicle).

If the event is a fixed/non-fixed object or vehicle impact with an object set in motion by a vehicle, then the number of the vehicle which set the object in motion is coded under E02/V01, Vehicle Number (This Vehicle), and E03/V24, Point of Impact (This Vehicle), is coded **Object Set in Motion**. The fixed/non-fixed object or vehicle impacted by the object set in motion is coded under E04, ... Object Contacted / Vehicle Number... The act of setting the object in motion and the impact with the object set in motion must be part of the same unstabilized situation, a set of events not under human control which originates when control is lost (e.g., an object is set in motion) and terminates when control is regained or, in the absence of persons who are able to regain control, when all persons and property are at rest.

Non-collision applies when the event involves rollover, fire, non-collision injury etc.

Front is used when it can be determined that the point of impact for this vehicle is the front plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for both is front, A07, Manner of Collision, must be entered as head-on.

Right Side applies when the point of impact for this vehicle is known to be the right plane.

Left side applies when the point of impact for this vehicle is known to be the left plane.

Back is used when the point of impact for this vehicle is known to be the back plane.

Front Right Corner applies when the point of impact for this vehicle is either the front plane or right plane, but the plane can not be determined. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front right corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

Front Left Corner is selected when the point of impact for this vehicle is either the front plane or left plane, but the plane can not be determined. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front left corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

Back Right Corner applies when the point of impact for this vehicle is either the back plane or the right plane, but it is unknown if the point of impact is to the back or right plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back right corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

Back Left Corner is used when the point of impact for this vehicle is either the back or left plane, but it is unknown if the point of impact is to the back or left plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back left corner; A07, Manner of Collision, must not be entered as rear-end rear-to-rear.

Unknown is selected when the lack of information prohibits the coding of any of the other element values.

Object Set in Motion is selected when the event involves an impact between a fixed/non-fixed object or vehicle and an object set in motion by a vehicle. The act of setting the object in motion and the impact with the object set in motion must be part of the same unstabilized situation.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--|
| AA010 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) is not equal to 15 | MANNER OF COLLISION (A07) must not equal 0. |
| AA010A | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) equals 15 | MANNER OF COLLISION (A07) must equal 0. |
| AV069 | HARMFUL EVENT (A06) equals 1-6, 8 or 9 | POINT OF IMPACT (V24) must equal 00. |
| AV073 | MANNER OF COLLISION (A07) equals 2 | POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1. |
| AV074 | MANNER OF COLLISION (A07) equals 3 | POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1. |
| AV075 | MANNER OF COLLISION (A07) equals 1 | one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04. |
| AV076 | MANNER OF COLLISION (A07) equals 1 | at least one vehicle must have POINT OF IMPACT (V24) equal to 04. |
| AV232 | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) is not equal to 15 | VEHICLE ROLE (V22) must not equal 0. |
| AV232A | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) equals 15 | VEHICLE ROLE (V22) must equal 0. |
| VA096 | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) is not equal to 15 | HARMFUL EVENT (A06) must equal 01-10. |

| VA096A | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) equals 15 | HARMFUL EVENT (A06) must not equal 01-10. |
|--------|---|--|
| VV057 | POINT OF IMPACT (V24) equals 11, 12, 13 or 14 | DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0. |
| VV057B | This edit check applies to vehicles in | nvolved in one and only one event. |
| VV057B | If POINT OF IMPACT (V24) equals 1 | at least one DAMAGE AREAS (V25) must equal 0, 1, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 2 | at least one DAMAGE AREAS (V25) must equal 0, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 3 | at least one DAMAGE AREAS (V25) must equal 0, 3, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 4 | at least one DAMAGE AREAS (V25) must equal 0, 4, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 5 | at least one DAMAGE AREAS (V25) must equal 0, 5, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 6 | at least one DAMAGE AREAS (V25) must equal 0, 6, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 11 | at least one DAMAGE AREAS (V25) must equal 0, 1, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 12 | at least one DAMAGE AREAS (V25) must equal 0, 1, 3, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 13 | at least one DAMAGE AREAS (V25) must equal 0, 4, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 14 | at least one DAMAGE AREAS (V25) must equal 0, 4, 3, 7 or 9. |
| VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92 | POINT OF IMPACT (V24) must not equal 01. |
| VV065 | ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60 | POINT OF IMPACT (V24) must equal 01. |
| VV066 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41 | POINT OF IMPACT (V24) must equal 04. |
| VV099A | ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14. |

ACCIDENT TYPE (V23) equals 89

and EVENT NUMBER (E01)

equals 1

| <u>Warnings</u> | | |
|-----------------|---|---|
| | IF | THEN |
| VA198 | POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 01-10. |
| VV058E | POINT OF IMPACT (V24) equals 11 | DAMAGE AREAS (V25) should equal one of the following combinations:/values (1, 2), (7) or (0). |
| VV097 | ACCIDENT TYPE (V23) equals 87 | POINT OF IMPACT (V24) should equal 02. |
| VV098 | ACCIDENT TYPE (V23) equals 89 | POINT OF IMPACT (V24) should equal 03. |
| VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2 | POINT OF IMPACT (V24) should not equal 03. |
| VV177 | POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) should not equal 2. |
| VV178 | POINT OF IMPACT (V24) equals 11 | DAMAGE AREAS (V25) should equal 7 or include values 1 and 2. |
| VV179 | POINT OF IMPACT (V24) equals 12 | DAMAGE AREAS (V25) should equal 7 or include values 1 and 3. |
| VV180 | POINT OF IMPACT (V24) equals 13 | DAMAGE AREAS (V25) should equal 7 or include values 2 and 4. |
| VV181 | POINT OF IMPACT (V24) equals 14 | DAMAGE AREAS (V25) should equal 7 or include values 3 and 4. |
| VV224 | CRITICAL EVENT (V26) equals 53 | POINT OF IMPACT (V24) should not equal 01. |
| VV225 | CRITICAL EVENT (V26) equals 51 or 52 | POINT OF IMPACT (V24) should not equal 04. |

VV100A

POINT OF IMPACT (V24) must not

equal 0, 1, 2, 4, 5, 6, 11 or 13.

E06 ACTION

Screen Heading: Events

Screen Name: Action (105-R)

Long Name: What is the action for this event?

SAS Name: Event.E_Action

Oracle Name: GES.Events.VehActionID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 10228 | 1 | Non-Collision |
| 2 | 10229 | 2 | Collision With Object Not Fixed |
| 3 | 10230 | 3 | Collision With Fixed Object |
| 4 | 10231 | 4 | Strike Another In-Transport Motor Vehicle |
| 5 | 10232 | 5 | Struck By An In-Transport Motor Vehicle |

Remarks:

The attributes for this variable are the five major categories of A06, Harmful Event. The A06, Harmful Event, subcategories for each are listed below. The definitions of the subcategories are shown under variable A06, Harmful Event.

Example 1: If the event is a rollover involving an in-transport motor vehicle; E06, Action, is coded **Non-Collision** and A06, Harmful Event, is coded **Rollover/Overturn**.

Example 2: If the event involves an impact between an in-transport motor vehicle and a pedestrian or an object set in motion by an in-transport motor vehicle and a pedestrian; E06, Action, is coded **Collision With Object Not Fixed** and A06, Harmful Event, is coded **Pedestrian**.

Example 3: If the event involves an impact between two in-transport motor vehicles, where vehicle 1 strikes vehicle 2; E06, Action, is coded **Strike Another In-transport Motor Vehicle** and A06, Harmful Event, is coded **2** (vehicle 2).

Example 4: If the event involves an impact between an in-transport motor vehicle and an object set in motion by an in-transport motor vehicle, where the object set in motion by vehicle 1 impacts vehicle 2 (which is stopped); E06, Action, is coded Strike Another Intransport Motor Vehicle and A06, Harmful Event, is coded 2 (vehicle 2).

Non-Collision

Rollover/Overturn

Fire/Explosion

Immersion

Gas Inhalation

Jackknife

Non-Collision Injury (Injured In or Fell From Vehicle)

Pavement Surface Irregularity (ruts, potholes, grates, etc.)

Other Non-Collision

Non-Collision - No Details

Thrown Or Falling Object

Collision With Object Not Fixed

Pedestrian

Cycle Or Cyclist (Pedalcycle/Pedalcyclist)

Railway train

Animal

Motor Vehicle In Transport

Motor Vehicle Not In Transport

Other Type Non-Motorist

Other Object Not Fixed

Object Not Fixed - No Details

Collision with Fixed Object

Ground

Building

Impact Attenuator/Crash Cushion

Bridge Structure

Guardrail

Concrete Traffic Barrier Or Other Longitudinal Barrier Type

Sign Post, Utility Pole, Or Other Support

Culvert Or Ditch

Curb

Embankment

Fence

Wall

Fire Hydrant

Shrubbery Or Bush

Tree

Boulder

Other Fixed Object

Fixed Object - No Details

Unknown

Strike Another In-transport Motor Vehicle

Vehicle Number of the struck in-transport motor vehicle

Struck By An In-Transport Motor Vehicle

Vehicle Number of the striking in-transport motor vehicle.

Consistency Checks:

Errors

| | IF | THEN |
|--------|----------------------------|--|
| AA014A | ACTION (E06) equals 4 or 5 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 1. |

E04/A06 Non-Collision Category or Object Contacted / Harmful Event

Screen Heading: **Events**

Screen Name: Vehicle/Other (115-R)

Long Name: What non-collision category or object (non-fixed or fixed) applies to this

event?

Event.Objcont, Accident.Event1 SAS Name:

GES.Events.ObjecthitID **Oracle Name:**

Element Values:

SAS (Event.Objcont/Accident.Event1) Screen Oracle

Non-Collision

| 1 | 10231 101/1 | Rollover/Overturn |
|----|-------------|--|
| 2 | 10232 102/2 | Fire/Explosion |
| 3 | 10233 103/3 | Immersion |
| 4 | 19433 104/4 | Gas Inhalation |
| 5 | 10234 105/5 | Jackknife |
| 6 | 10235 106/6 | Non-Collision Injury (Injured In or Fell From Vehicle) |
| 7 | 19434 107/7 | Pavement Surface Irregularity (ruts, potholes, grates, etc.) |
| 8 | 10236 108/8 | Other Non-Collision |
| 9 | 10237 109/9 | Non-Collision - No Details |
| 10 | 10238110/10 | Thrown Or Falling Object |

Collision With Object Not Fixed

| 1 | 10239121/21 | Pedestrian |
|----|--------------|--|
| 2 | 10240 122/22 | Cycle Or Cyclist (Pedalcycle/Pedalcyclist) |
| 3 | 10241 123/23 | Railway train |
| 4 | 10242124/24 | Animal |
| 5 | * */25 | Motor Vehicle In Transport |
| 6 | 10244126/26 | Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) |
| 7 | 10245 127/27 | Other Type Non-Motorist |
| 8 | 10246128/28 | Other Object Not Fixed |
| 9 | 10247 129/29 | Object Not Fixed - No Details |
| 10 | 10270127/27 | Other Type Non-Motorist - Ped./Bike Applicable |
| | | |

Collision with Fixed Object

| 1 | 10248131/31 | Ground |
|---|-------------|---------------------------------|
| 2 | 10249132/32 | Building |
| 3 | 10250133/33 | Impact Attenuator/Crash Cushion |
| 4 | 10251134/34 | Bridge Structure |

| 5 | 10252135/35 | Guardrail |
|----|--------------|---|
| 6 | 10253136/36 | Concrete Traffic Barrier Or Other Longitudinal Barrier Type |
| 7 | 10254137/37 | Sign Post, Utility Pole, Or Other Support |
| 8 | 10255 138/38 | Culvert Or Ditch |
| 9 | 10256139/39 | Curb |
| 10 | 10257140/40 | Embankment |
| 11 | 10258 141/41 | Fence |
| 12 | 10259142/42 | Wall |
| 13 | 10260143/43 | Fire Hydrant |
| 14 | 10261 144/44 | Shrubbery Or Bush |
| 15 | 10262145/45 | Tree |
| 16 | 10263146/46 | Boulder |
| 17 | 10265 158/58 | Other Fixed Object |
| 18 | 10266 159/59 | Fixed Object - No Details |
| 19 | 10267999/99 | Unknown |

^{*} The Oracle value equals GES.Vehicle.VehicleID for the other in-transport motor vehicle involved in the event. The SAS value equals the other vehicle number.

Remarks:

Enter **Rollover/Overturn** when a motor vehicle rotates (rollover) at least one quarter turn in any nonhorizontal direction. This response does not apply if a trailing unit rolls over but the power unit does not. Use this code when an uncontrolled motorcycle first contacts the ground or pavement surface. All motor vehicles may rollover/overturn, with the exception of motorcycles, which can overturn but not roll over.

Gas Inhalation includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

Enter **Immersion** whenever an in-transport motor vehicle enters a body of water resulting in injury or damage.

Enter **Jackknife** whenever there is sufficient rotation (articulation) between a vehicle/trailing unit combination such that they contact each other. Jackknife applies to all articulated vehicle combinations. This category includes jackknife for light vehicles (e.g., light utility vehicle/trailing unit combination).

Enter **Non-Collision Injury (Injured In or Fell From Vehicle)** when a person falls from or is injured inside the vehicle. This includes persons jumping or stepping from moving vehicles, persons falling from pickup beds, and persons colliding with the interior of a vehicle during a sudden stop. This attribute applies only to the first harmful event for this vehicle. If a vehicle becomes mired and results in injury, select this attribute.

Enter **Other Non-Collision** when there is a harmful event involving damage to a vehicle from it's own dislodged cargo. a vehicle sets an object in motion that strikes or is struck by a vehicle before the object stabilizes. Examples include dislodged cargo, spewed gravel, etc. It may be used in other situations as well.

Non-Collision - No Details when it is known that the event is a non-collision, but the details are unknown.

Enter **Thrown Or Falling Object** when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. However, objects set in motion by an in-transport vehicle are to be coded Other Non-Collision. If a tree limb falls from a tree and is contacted by a car, enter **Thrown Or Falling Object**. If a tree limb falls from a tree trimming truck and is struck, enter Other Non-Collision. If a child maliciously throws a tree limb off an overpass into traffic below, enter this **Thrown Or Falling Object**.

Enter **Pedestrian** when any person who is involved in a harmful event is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. A non-motorist conveyance is defined as any human-powered or personal transporter (e.g., segway, motorized wheelchair) device by which a non-motorist may move, or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, segway, motorized wheelchair, wheelchair, rickshaw, etc. Excluded are pedalcyclists.

Enter Cycle or Cyclist (Pedalcycle/Pedalcyclist) when any occupant of a pedalcycle was involved in the harmful event.

Railway Train refers to any railway train, moving or not moving.

Animal is used for collisions with animals (domestic or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device.

Motor Vehicle In Transport is computer generated. If the event involves an impact between 2 in-transport motor vehicles, the data entry system prompts for the vehicle number of the other in-transport motor vehicle and sets A06, Harmful Event (Non-Collision/Object), equal to the vehicle ID (see * above) of the other in-transport motor vehicle. The event involves an impact between 2 in-transport motor vehicles if variable E02, Action, is coded Strike Another In-transport Motor Vehicle or Struck By An In-Transport Motor Vehicle.

Enter Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in transport.

Enter **Other Type Non-Motorist** when the person impacted is not a pedestrian or a pedalcyclist <u>and</u> the person does not qualify for ped./bike typing. [NOTE: If the harmful event occurs with a motor vehicle not in-transport which contains a non-motorist (e.g., Occupant of vehicle not in-transport), enter **Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)**.

Enter **Other Object Not Fixed** when the impact is between a motor vehicle in-transport and any other object that is moving or not anchored prior to the accident. This response applies when the object contacted is any person who is an occupant of a motor vehicle in-transport.

For Example, use this response for an occupant who falls from a vehicle and is subsequently run over before stabilization occurs. In addition, use this response for any motorcyclist who separates from his/her motorcycle during an impact and is subsequently involved in another impact before stabilization occurs.

Enter Other Type Non-Motorist - Ped./Bike Applicable when the person impacted is not a pedestrian or a pedalcyclist <u>and</u> the person qualifies for ped./bike typing. Other type non-motorists who qualify for ped./bike typing are persons who are in or on the following non-motorist conveyances: ice skates, roller skates, roller blades, scooters, skateboards, non-motorized wheelchairs or play vehicles (e.g., wagons and sleds) or persons who are not on a trafficway or sidewalk or path contiguous with a trafficway; but are in a parking lot, driveway, private road, gas station, alley, yard, garage, ball field, etc. [NOTE: If the harmful event occurs with a motor vehicle not in-transport which contains a non-motorist (e.g., Occupant of vehicle not in-transport), enter Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport).

Enter **Ground** when the impact is with the ground. This response is also used when the impact is with a pavement surface irregularity (e.g. ruts, potholes, grates) not on a roadway. If the pavement surface irregularity is on a roadway, the Non-Collision response **Pavement Surface Irregularity (ruts, potholes, grates, etc.)** applies. **Ground** is not to be entered when the harmful event is "Rollover/Overturn."

Building is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.

Enter **Impact Attenuator/Crash Cushion** when the harmful event is with any device described on the PAR as an impact attenuator or crash cushion.

Enter **Bridge Structure** when the contact is with any part of a bridge structure. This includes:

support structure overpass structure (not "front face") bridge rail bridge-pier abutment parapet end

For contact to the "front face" of an overpass structure (e.g., the top of the cargo area of a truck strikes the front of a bridge with a low clearance) enter **Other Fixed Object**. Included within the meaning of bridge structure are supports for railway underpasses, including those for mass transit type trains.

If the impact is with an impact attenuator protecting a bridge support, then enter **Impact Attenuator/Crash Cushion**. Contact with the underside of the bridge deck is coded **Other Fixed Object**.

Variable attributes **Guardrail** and **Concrete Traffic Barrier Or Other Longitudinal Barrier Type** are chosen based upon design and composition. Location is not considered when choosing a value.

Enter **Guardrail** whenever the impact occurs with any longitudinal barrier described on the PAR as a guardrail, regardless of its location.

Enter Concrete Traffic Barrier Or Other Longitudinal Barrier Type whenever the impact described on the PAR occurs with a concrete barrier (commonly referred to as a GM or Jersey barrier), regardless of its location. Enter this value for temporary (e.g., construction sites) and permanent installations. Concrete traffic barriers located on a bridge with a closed median are not considered **Bridge Structure**. Concrete traffic barriers located on the outer road edges of a bridge are considered **Bridge Structure**.

Enter **Sign Post, Utility Pole, or Other Support** when the impact occurs to: (1) a support for a highway or traffic sign, (2) anything that supports a sign under which vehicles travel, (3) a street light, (4) a support for utility lines, (5) a traffic signal pole, (6) any non-highway or non-traffic sign (e.g., a private sign), (7) a mail box post, (8) a delineator post, or (9) any other type post, pole, or support. This value should not be used when the impact was with any supporting structure of a bridge (see variable attribute **Bridge Structure**).

Enter **Culvert or Ditch** when the impact occurs with a culvert or ditch. A culvert is a man-made structure that allows passage over a drainage area and is that part of the structure which is intended to channel flow through the structure and maintain the stability/integrity of the road bed. If the structure has a portion above the road surface which is of sufficient height to engage above the wheels of an errant passenger vehicle and redirect it, that part of the structure is considered a **Bridge Structure**. A ditch is a man made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert.

Curb is used when the impact is with a concrete or asphalt structure up tp 12 inches in height which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical.

An **Embankment** is a raised structure to hold back water, to carry a roadway, or the result of excavation or washout (including erosion) which may be faced with earth or rock (sometimes called berm), stone or concrete. An embarkment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions: such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

Fence includes the fence posts. A Fence can be made of wood, chain link, stone, etc.

A **Wall** is a primarily vertical (+15 degrees from vertical) structure comprise of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also not included as walls are wing-walls which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls are coded as **Bridge Structure**.

Fire Hydrant refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fireplugs or fire standpipes in some areas.

Enter **Tree** when the impact is with a tree. This includes impacts with overhanging branches. Do not use this code if the tree is not standing. Trees which have fallen and are struck should be coded **Other Object Not Fixed** for small trees or **Other Fixed Object** for large trees.

Enter **Boulder** when an in-transport motor vehicle contacts any large (not defined but at least larger than gravel) stationary rock.

Enter **Other Fixed Object** when the PAR describes the impact to any fixed object which is anchored and not moving and not specifically mentioned above. Collisions which may be classified using this code include (but are not limited to): (1) vehicles which sustain undercarriage damage by straddling the pavement and shoulder and impacting a prominent pavement lip, (2) free falls or vaults from the road surface to the ground or pavement without being listed on the PAR as rolling over or overturning, or (3) impacts with guy wires supporting utility pole, etc.

If the PAR indicates the impact was in a median, determine if the impact was with a longitudinal barrier (guardrail, concrete, or other). If a barrier was contacted, enter **Guardrail** or **Concrete Traffic Barrier or Other Longitudinal Barrier Type** based on the PAR description. If no longitudinal barrier was initially contacted but contact occurred to a nonraised paved surface, gravel, or grass, then enter **Ground**. If the PAR indicates that the harmful event is with a raised, paved area (concrete or asphalt), then enter **Curb**. This is true even if a barrier is anchored in the raised, paved area. If the median is depressed, select the element which best fits the PAR's impact description and enter **Ground**, **Embankment**, **Shrubbery Or Bush**, **Tree**, **Boulder**, **Other Fixed Object**, etc. whichever is most appropriate.

Tunnels are handled according to the following rules. If the PAR describes the impact as external (i.e., the impact is to the hill or mountainside), enter **Embankment**. If the impact is to the tunnel entrance (i.e., not protected by guardrails or bridge rails that lead into a tunnel or impact attenuators), then enter **Other Fixed Object**. Enter **Wall** if the plane of the tunnel is broad or wide enough that the tunnel entrance functions as a wall and contact is made with this wall. External impacts to impact attenuators are entered **Impact Attenuator/Crash Cushion**.

Internal or external impacts to: [a] median barriers should be entered **Guardrail** or **Concrete Traffic Barrier Or Other Longitudinal Barrier Type**; [b] curbs (raised, paved medians) or walks should be entered **Curb**; or [c] the tunnel wall should be entered **Wall**. If contact is made with a bridge that leads into a tunnel, then enter **Bridge Structure**.

Fixed Object - No Details is used when it is known the impact is with a fixed object, but the specific type of object is unknown.

Enter **Unknown** when there is not enough information to determine the type of harmful event.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--|
| AA009 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59 | MANNER OF COLLISION (A07) must not equal 1-6. |
| AA010 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) is not equal to 15 | MANNER OF COLLISION (A07) must not equal 0. |
| AA010A | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) equals 15 | MANNER OF COLLISION (A07) must equal 0. |
| AA011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23 | TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98. |
| AA012 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA014 | HARMFUL EVENT (A06) equals 25 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| AA033 | HARMFUL EVENT (A06) equals 21, 22 or 27 | NUMBER OF NON-MOTORISTS (A04) must not equal 00. |
| AA037 | HARMFUL EVENT (A06) equals 21 or 22 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |
| AA039 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| AA042 | the first HARMFUL EVENT (A06) involving a non-motorist equals 22 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 001-0099. |
| AA051 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA088 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7 | RELATION TO ROADWAY (A10) must equal 1 or 9. |

| AV022 | HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97. |
|--------|--|---|
| AV057A | all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6 | DAMAGE AREAS (V25) must equal 0. |
| AV062A | all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6 | MANNER OF LEAVING SCENE (V19) must not equal 2. |
| AV069 | HARMFUL EVENT (A06) equals 1-6, 8 or 9 | POINT OF IMPACT (V24) must equal 00. |
| AV105 | HARMFUL EVENT (A06) equals 05 | JACKKNIFE (V14) for the involved vehicle must equal 1. |
| AV106 | HARMFUL EVENT (A06) equals 05 | VEHICLE TRAILING (V13) for the involved vehicle must not equal 1. |
| AV131 | the first HARMFUL EVENT (A06) for the vehicle equals 1-9 | VEHICLE ROLE (V22) must equal 0. |
| AV132 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09 | ACCIDENT TYPE (V23) must equal 00. |
| AV149 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) not equal to 80-89 | ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99. |
| AV149A | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equals 80-89 | ROLLOVER TYPE (V30) must equal 00. |
| AV215 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10 | ACCIDENT TYPE (V23) must not equal 20-91. |
| AV232 | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) is not equal to 15 | VEHICLE ROLE (V22) must not equal 0. |
| AV232A | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) equals 15 | VEHICLE ROLE (V22) must equal 0. |
| PA127 | NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |

| PVE700 | PARKED VEHICLE TYPE (PV02) EQUALS 1 and PARKED VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 126. |
|--------|--|--|
| PVE701 | PARKED/WORKING VEHICLE TYPE (PV02) EQUALS 2 and PARKED/WORKING VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 128. |
| PVE704 | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) equals 126 | there must be a corresponding parked vehicle event. |
| VA001 | HARMFUL EVENT (A06) equals 25 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| VA081 | ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 21, 22, 24 or 27. |
| VA086 | ACCIDENT TYPE (V23) equals 01-16 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 25. |
| VA093 | VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59. |
| VA096 | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) is not equal to 15 | HARMFUL EVENT (A06) must equal 01-10. |
| VA096A | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) equals 15 | HARMFUL EVENT (A06) must not equal 01-10. |
| VA137 | ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09. |
| VA191 | HARMFUL EVENT (A06) equals 2 or 4 for all events involving this vehicle | CRITICAL EVENT (V26) must equal 98 |
| VA219 | ACCIDENT TYPE (V23) equals 20-91 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 25. |

| VA219A | The Oracle value for HARMFUL EVENT (A06) must not equal 10243. | |
|--------|--|---|
| VV091 | HARMFUL EVENT (A06) equals 05 | VEHICLE TRAILING (V13) must not equal 1 or 6. |
| VV116 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89 | ROLLOVER TYPE (V30) must not equal 00. |

Warnings

| | IF | THEN |
|-------|--|---|
| AA023 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99 | MANNER OF COLLISION (A07) should not equal 0-6. |
| AA024 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| AA025 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23 | RELATION TO JUNCTION (A09) should equal 5. |
| AA030 | HARMFUL EVENT (A06) equals 2, 4, 6, 7 or 33 | it is unlikely. |
| AV062 | at least one HARMFUL EVENT (A06) for a vehicle equals 21, 22 or 27 and all other HARMFUL EVENTS (A06) for the vehicle equal 2, 3, 4, 6, 21, 22 or 27 | MANNER OF LEAVING SCENE (V19) should not equal 2. |
| AV070 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99. |
| AV071 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13 | ACCIDENT TYPE (V23) should equal 13. |
| AV072 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1 or 9 | ACCIDENT TYPE (V23) should equal 12 or 15. |
| AV214 | HARMFUL EVENT (A06) equals 38 | ROLLOVER TYPE (V30) should equal 00 or 22. |
| AV223 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01 | ACCIDENT TYPE (V23) should equal 1-10, 98 or 99. |

| PA065 | HARMFUL EVENT (A06) equals 22, NUMBER OF NON- MOTORISTS (A04) equals 01 and NON-MOTORIST'S ACTION (P19) equals 07 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099. |
|--------|--|--|
| VA003 | HARMFUL EVENT (A06) equals 23 | INTERSTATE HIGHWAY (A08) should not equal 1. |
| VA004 | HARMFUL EVENT (A06) equals 23 | RELATION TO JUNCTION (A09) should equal 05. |
| VA005 | HARMFUL EVENT (A06) equals 23 | TRAFFIC CONTROL DEVICE (A16) should not equal 01-51. |
| VA087 | ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 99. |
| VA198 | POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 01-10. |
| VA211 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VV057C | this vehicle is involved in one and only one event and NON-COLLISION CATEGORY, OBJECT or VEHICLE NUMBER CONTACTED (E04) is not equal to 101, 102 or 104 | DAMAGE AREAS (V25) should not equal 7. |
| VV081 | HARMFUL EVENT (A06) equals 01 | DAMAGE AREAS (V25) should not equal 0. |

Post Entry

| | IF | THEN |
|-------|---|--|
| AP001 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99. |
| AP002 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |

| AP003 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
|--------|---|--|
| AP004 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 09, 19 or 99. |
| AP005 | HARMFUL EVENT (A06) equals 21 | at least one person must have PERSON TYPE (P03) equal to 5. |
| AP006 | HARMFUL EVENT (A06) equals 22 | at least one person must have PERSON TYPE (P03) equal to 6 or 8. |
| AP006A | There is a row in the ges.person table for a non-motorist | there must be a corresponding row in the ges.nonmotorist table. Otherwise, there is no recorded striking vehicle number or non-motorist location for the non-motorist. |
| AP008 | HARMFUL EVENT (A06) equals 6 | at least one PERSON TYPE (P03) equal to 1, 2 or 9 must have INJURY SEVERITY (P09) equal to 1-5. |
| AP128 | HARMFUL EVENT (A06) equals 27 | at least one person must have PERSON TYPE (P03) equal 4 or 8. |
| AV009 | a vehicle is involved in an event where HARMFUL EVENT (A06) equals 2 | FIRE OCCURRENCE (V16) must equal 1. |
| AV009A | FIRE OCCURRENCE (V16) equals 1 | at least one HARMFUL EVENT (A06) must equal 2. |
| AV011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28 | TRAVEL SPEED (V11) should not equal 00. |
| AV011A | HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1 | TRAVEL SPEED (V11) should not be 00 for both vehicles. |
| PA049 | at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920. |

| PA058 | at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099. |
|--------|--|---|
| PP082A | PERSON TYPE (P03) equals 3 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26. |
| PP082A | PERSON TYPE (P03) equals 4 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
| PP082A | PERSON TYPE (P03) equals 5 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21. |
| PP082A | PERSON TYPE (P03) equals 6 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22. |
| PP082A | PERSON TYPE (P03) equals 8 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
| VP010 | HARMFUL EVENT (A06) equals 21 | at least one PERSON TYPE (P03) must be equal 5. |
| VP010A | at least one PERSON TYPE (P03) equals 5 | at least one HARMFUL EVENT (A06) must equal 21. |
| VP011 | HARMFUL EVENT (A06) equals 22 | at least one PERSON TYPE (P03) must be equal to 6. |
| VP011A | at least one PERSON TYPE (P03) equals 6 | at least one HARMFUL EVENT (A06) must equal 22. |
| VP012 | HARMFUL EVENT (A06) equals 27 | at least one PERSON TYPE (P03) must equal 4 or 8. |
| VP012A | at least one PERSON TYPE (P03) equals 4 or 8 | at least one HARMFUL EVENT (A06) must equal 27. |
| VP012B | at least one PERSON TYPE (P03) equals 3 | at least one HARMFUL EVENT (A06) must equal 26. |
| VP013 | HARMFUL EVENT (A06) equals 06 | at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5. |

VV116A

ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89

at least one HARMFUL EVENT (A06) must equal 01.

E04/V01 VEHICLE NUMBER (OTHER VEHICLE)

Screen Heading: Events

Screen Name: Vehicle/Other (118-R)

Long Name: What is the number of the "higher numbered" in-transport motor vehicle

involved in this event?

SAS Name: Event.Objcont, Vehicle.Vehno

Oracle Name: GES.Events.ObjecthitID, GES.Vehicle.VehicleNumber

Element Values:

Range: 1-30

Remarks:

The in-transport motor vehicles within a crash are numbered sequentially beginning with 1; no numbers are skipped. In-transport motor vehicles are assigned the PAR's vehicle number unless a number is skipped. The vehicle number entered is for the in-transport motor vehicle involved in this event with the https://distriction.org/linearing-number. However, If the event is an impact between a vehicle and an object set in motion by another vehicle, the number of the vehicle involved in the impact with the object set in motion is entered, even if it is the lower vehicle number.

Consistency Checks:

Errors

IF THEN

PP048A PERSON TYPE (P03) equals 3, 4, VEHICLE NUMBER (V01) must

5, 6, 7 or 8 equal null.

EV215 All in-transport motor vehicles must be involved in at least one event.

Warnings

IF THEN

AV215A The lower vehicle number should be entered first when entering the event

information.

E05/V24 POINT OF IMPACT (OTHER VEHICLE)

Screen Heading: Events

Screen Name: Point of Impact - Other Vehicle (120-R)

Long Name: What is the point of impact for the other vehicle?

SAS Name: Vehicle.Impact, Event.Objgad

Oracle Name: GES.Events.ObjectPlaneID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------------------------|
| n/a | null | 98 | Not a Motor Vehicle in Transport |
| 1 | 26859 | n/a | Non-Collision |
| 2 | 26860 | 1 | Front |
| 3 | 26861 | 2 | Right Side |
| 4 | 26862 | 3 | Left Side |
| 5 | 26863 | 4 | Back |
| 6 | 26864 | 5 | Тор |
| 7 | 26865 | 6 | Undercarriage |
| 8 | 26866 | 11 | Front Right Corner |
| 9 | 26867 | 12 | Front Left Corner |
| 10 | 26868 | 13 | Back Right Corner |
| 11 | 26869 | 14 | Back Left Corner |
| 12 | 26870 | 99 | Point of Impact Unknown |

Remarks:

For this event, code the impact point that produced property damage or personal injury. The impact point is for the vehicle coded in variable E04/V01, Vehicle Number (Other Vehicle).

Non-collision is not used. The other vehicle, it is always involved in a collision event.

Front is used when it can be determined that the point of impact for this vehicle is the front plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for both is front, A07, Manner of Collision, must be entered as head-on.

Right Side applies when the point of impact for this vehicle is known to be the right plane.

Left side applies when the point of impact for this vehicle is known to be the left plane.

Back is used when the point of impact for this vehicle is known to be the back plane.

Front Right Corner applies when the point of impact for this vehicle is either the front plane or right plane, but the plane can not be determined. In crashes where two vehicles are

involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front right corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

Front Left Corner is selected when the point of impact for this vehicle is either the front plane or left plane, but the plane can not be determined. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front left corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

Back Right Corner applies when the point of impact for this vehicle is either the back plane or the right plane, but it is unknown if the point of impact is to the back or right plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back right corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

Back Left Corner is used when the point of impact for this vehicle is either the back or left plane, but it is unknown if the point of impact is to the back or left plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back left corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

Unknown is selected when the lack of information prohibits the coding of any of the other element values.

Consistency Checks:

Errors

| | | IF | THEN |
|---|-------|---|--|
| Α | V069 | HARMFUL EVENT (A06) equals 1-6, 8 or 9 | POINT OF IMPACT (V24) must equal 00. |
| Δ | V073 | MANNER OF COLLISION (A7) equals 2 | POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1. |
| Δ | V074 | MANNER OF COLLISION (A7) equals 3 | POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1. |
| Δ | AV075 | MANNER OF COLLISION (A7) equals 1 | one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04. |
| Д | AV076 | MANNER OF COLLISION (A7) equals 1 | at least one vehicle must have POINT OF IMPACT (V24) equal to 04. |
| ٧ | /V057 | POINT OF IMPACT (V24) equals 11, 12, 13 or 14 | DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0. |

| VV057B | This edit check applies to vehicles in | nvolved in one and only one event. |
|--------|---|--|
| VV057B | If POINT OF IMPACT (V24) equals 1 | at least one DAMAGE AREAS (V25) must equal 0, 1, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 2 | at least one DAMAGE AREAS (V25) must equal 0, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 3 | at least one DAMAGE AREAS (V25) must equal 0, 3, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 4 | at least one DAMAGE AREAS (V25) must equal 0, 4, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 5 | at least one DAMAGE AREAS (V25) must equal 0, 5, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 6 | at least one DAMAGE AREAS (V25) must equal 0, 6, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 11 | at least one DAMAGE AREAS (V25) must equal 0, 1, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 12 | at least one DAMAGE AREAS (V25) must equal 0, 1, 3, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 13 | at least one DAMAGE AREAS (V25) must equal 0, 4, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 14 | at least one DAMAGE AREAS (V25) must equal 0, 4, 3, 7 or 9. |
| VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92 | POINT OF IMPACT (V24) must not equal 01. |
| VV065 | ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60 | POINT OF IMPACT (V24) must equal 01. |
| VV066 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41 | POINT OF IMPACT (V24) must equal 04. |
| VV099A | ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14. |
| VV100A | ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13. |

<u>Warnings</u>

| | IF | THEN |
|--------|---|---|
| VA198 | POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 01-10. |
| VV058E | POINT OF IMPACT (V24) equals 11 | DAMAGE AREAS (V25) should equal one of the following combinations:/values (1, 2), (7) or (0). |
| VV097 | ACCIDENT TYPE (V23) equals 87 | POINT OF IMPACT (V24) should equal 02. |
| VV098 | ACCIDENT TYPE (V23) equals 89 | POINT OF IMPACT (V24) should equal 03. |
| VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2 | POINT OF IMPACT (V24) should not equal 03. |
| VV177 | POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) should not equal 2. |
| VV178 | POINT OF IMPACT (V24) equals 11 | DAMAGE AREAS (V25) should equal 7 or include values 1 and 2. |
| VV179 | POINT OF IMPACT (V24) equals 12 | DAMAGE AREAS (V25) should equal 7 include values 1 and 3. |
| VV180 | POINT OF IMPACT (V24) equals 13 | DAMAGE AREAS (V25) should equal 7 or include values 2 and 4. |
| VV181 | POINT OF IMPACT (V24) equals 14 | DAMAGE AREAS (V25) should equal 7 or include values 3 and 4. |
| VV224 | CRITICAL EVENT (V26) equals 53 | POINT OF IMPACT (V24) should not equal 01. |
| VV225 | CRITICAL EVENT (V26) equals 51or 52 | POINT OF IMPACT (V24) should not equal 04. |

A07 MANNER OF COLLISION

Screen Heading: Events

Screen Name: Manner (60-R)

Long Name: What is the manner of collision for this event?

SAS Name: Accident.Man_Col

Oracle Name: GES.CrashData.CollisionMannerID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 26660 | 0 | Not Collision With Motor Vehicle In Transport |
| 2 | 26661 | 1 | Rear-End |
| 3 | 26662 | 2 | Head-On |
| 4 | 26663 | 3 | Rear-To-Rear |
| 5 | 26664 | 4 | Angle |
| 6 | 26665 | 5 | Sideswipe, Same Direction |
| 7 | 26666 | 6 | Sideswipe, Opposite Direction |
| 8 | 26668 | 9 | Unknown |

Remarks:

Enter the manner of collision associated with the first harmful event.

Enter **Not Collision With Motor Vehicle In Transport** when the first harmful event is not coded **Motor Vehicle In Transport**. an impact between two in-transport motor vehicles.

Enter **Rear-End** when a collision occurs between the rear of one vehicle and the front of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must be front to back (e.g., front right/left or back left/right corners are not allowed).

Enter **Head-On** when a collision occurs between the front end of one vehicle and the front end of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must both be front (e.g., front right/left corner is not allowed).

Enter **Rear-To-Rear** when a collision occurs between the rear of one vehicle and the rear of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must both be back (e.g., back right/left corner is not allowed).

Enter **Angle** when the impact configuration is known but cannot be classified with any other element. Included here, also, are endswipes. If this attribute is selected, the points of impact

for the vehicles involved in the first harmful event must not be front to front, front to back or back to back.

Enter **Sideswipe**, **Same Direction** when the PAR reports that a sideswipe occurred while the two vehicles were traveling in the same direction.

Enter **Sideswipe**, **Opposite Direction** when the PAR reports that a sideswipe occurred while the two vehicles were traveling in opposite directions.

Consistency Checks:

Errors

| | IF | THEN |
|--------|---|--|
| AA009 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59 | MANNER OF COLLISION (A07) must not equal 1-6. |
| AA010 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) is not equal to 15 | MANNER OF COLLISION (A07) must not equal 0. |
| AA010A | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25 and POINT OF IMPACT (V24) equals 15 | MANNER OF COLLISION (A07) must equal 0. |
| AA086 | MANNER OF COLLISION (A07) does not equal 0 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 01. |
| AV073 | MANNER OF COLLISION (A07) equals 2 | POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1. |
| AV074 | MANNER OF COLLISION (A07) equals 3 | POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1. |
| AV075 | MANNER OF COLLISION (A07) equals 1 | one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04. |
| AV133 | MANNER OF COLLISION (A07) equals 3 | at least one ACCIDENT TYPE (V23) must equal 92 or 98. |
| | | |

| , | AV213 | NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13 | VEHICLE ROLE (V22) must equal 1 or 3. |
|-----------------|-------|--|--|
| , | AV225 | MANNER OF COLLISION (A07) equals 2 | ACCIDENT TYPE (V23) must not equal 64-67. |
| , | AV226 | MANNER OF COLLISION (A07) equals 4 | ACCIDENT TYPE (V23) must not equal 20-43 or 50-53. |
| <u>Warnings</u> | | | |
| | | IF | THEN |
| , | AA023 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99 | MANNER OF COLLISION (A07) should not equal 0-6. |
| , | AA031 | UNLIKELY: MANNER OF COLLISIO | N (A07) is equal to 3. |
| F | AV014 | MANNER OF COLLISION (A07) equals 2 | VEHICLE ROLE (V22) should equal 1 or 3. |
| , | AV203 | MANNER OF COLLISION (A07) equals 5 | ACCIDENT TYPE (V23) should not equal 20-33. |
| , | AV204 | MANNER OF COLLISION (A07) equals 5 | ACCIDENT TYPE (V23) should equal 44-49, 98 or 99 |
| , | AV205 | MANNER OF COLLISION (A07) equals 6 | ACCIDENT TYPE (V23) should not equal 50-53 ACCIDENT. |
| , | AV206 | MANNER OF COLLISION (A07) equals 6 | ACCIDENT TYPE (V23) should equal 64-67, 98 or 99. |
| , | AV243 | MANNER OF COLLISION (A07) equals 1 | ACCIDENT TYPE (V23) should not equal 44-49. |
| Post Entry | | | |
| | | IF | THEN |
| , | AV244 | MANNER OF COLLISION (A07) equals 2 and TRAFFICWAY FLOW (All) equals 3 | for at least one vehicle, MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 00 or 97. |

A05 LAND USE

Screen Heading: Crash Data Questions

Screen Name: Population Area (30-N)

Long Name: Within what population area is this crash located?

SAS Name: Accident.Land_Use

Oracle Name: GES.CrashData.LandUseID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26463 | 1 | Within area of population 25,000 - 50,000 |
| 2 | 26464 | 2 | Within area of population 50,000 - 100,000 |
| 3 | 26465 | 3 | Within area of population 100,000+ |
| 4 | 26644 | 8 | Other area |
| 5 | 26645 | 9 | Unknown |

Remarks:

The element value for this variable is computer generated. The attribute selected is based on the PSU and police jurisdiction from which the crash is selected. For example, if the crash is selected from PSU72, jurisdiction 1; the attribute selected by the computer is **Within area of population 100,000+**.

A25 WORK ZONE

Screen Heading: Crash Data Questions

Screen Name: Work Zone (35-E)

Long Name: Is the first harmful event in or related to a work or construction zone?

SAS Name: Accident.Wrk Zone

Oracle Name: GES.CrashData.WorkZone

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|---|
| n/a | n/a | n/a | No |
| | II/a | II/a | NO |
| n/a | n/a | n/a | Yes |
| 3 | 3 | 3 | No |
| 4 | 4 | 4 | Yes, First Harmful Event in Work or Construction Zone |
| 5 | 5 | 5 | Yes, First Harmful Event Related to, But Not in, Work or |
| | | | Construction Zone |
| 6 | 6 | 6 | Yes, Unknown if the First Harmful Event is in or Related to a |
| | | | Work or Construction Zone |
| 7 | 9 | 9 | Unknown |

Remarks:

Enter **No** when the first harmful event is not in or related to a work or construction zone, an area associated with the building or repair of 1) the trafficway; 2) trafficway-related features like overhead signs and signals or 3) facilities within the trafficway such as telephone, electrical, water or sewer.

Enter **Yes, First Harmful Event in Work or Construction Zone** when the PAR indicates that the first harmful event occurs within a work or construction zone. A specific block for work/construction zone may be available on the PAR. The narrative or diagram may also indicate the presence of a work/construction zone. The beginning and end of a work/construction zone can often be identified by the presence of warning signs, traffic cones, barricades or flagmen.

Enter Yes, First Harmful Event Related to, But Not in, Work or Construction Zone when the PAR indicates that the first harmful event is related to the presence of, but does not occur within, a work or construction zone.

Enter Yes, Unknown if the First Harmful Event is in or Related to a Work or Construction Zone when the PAR indicates that the first harmful event is either related to the presence of, or occurs within, a work or construction zone; but it cannot be determined which applies.

Enter **Unknown** when the PAR specifically states unknown or when there is no work/construction zone information on the PAR (the work zone block does not exist or is not completed and there is no information elsewhere on the PAR).

Consistency Checks:

Errors

| | IF | THEN |
|-------|----------------------------|------------------|
| RANGE | WORK ZONE (A25) must equal | 3, 4, 5, 6 or 9. |

Warnings

| | IF | THEN |
|-------|--|--|
| AA097 | WORK ZONE (A25) equals 4, 5 or 6 | TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98. |
| AA098 | TRAFFIC CONTROL DEVICE (A16) equals 42 | WORK ZONE (A25) should equal 4, 5 or 6. |

A21 SCHOOL BUS RELATED

Screen Heading: Crash Data Questions

Screen Name: School Bus (50-E)

Long Name: Was a school bus involved in the crash?

SAS Name: Accident.Schl_Bus

Oracle Name: GES.CrashData.School_Bus

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-----|
| 1 | 0 | 0 | No |
| 2 | 1 | 1 | Yes |

Remarks:

This variable applies to crashes in which a school bus is directly or indirectly involved, such as a crash involving children exiting from a school bus. The school bus does not have to be involved in the crash. If it cannot be determined that a school bus is involved, enter **No**.

For the purpose of this variable, a school bus refers to a motor vehicle defined by the police on the PAR as such.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--|
| VA002 | SPECIAL USE (V08) for any vehicle equals 02 | SCHOOL BUS RELATED (A21) must equal 1. |
| VA002P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) for any parked/working vehicle equals 02 | SCHOOL BUS RELATED (A21) must equal 1. |
| RANGE | SCHOOL BUS RELATED (A21) mu | st equal 0 or 1 and must not equal |

<u>Warnings</u>

| | IF | THEN |
|--------|--|---|
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120. |
| AP027 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5 | SCHOOL BUS RELATED (A21) should equal 1. |
| VA102 | BODY TYPE (V05) equals 24 or 50 | SCHOOL BUS RELATED (A21) should equal 1. |
| VA102P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 24 or 50 | SCHOOL BUS RELATED (A21) should equal 1. |

Post Entry

| | IF | THEN |
|-------|-----------------------------------|--|
| AV210 | SCHOOL BUS RELATED (A21) equals 1 | at least one SPECIAL USE (V08) should equal 02. |
| AV236 | SCHOOL BUS RELATED (A21) equals 1 | at least one BODY TYPE (V05) or PARKED/WORKING VEHICLE BODY TYPE (PV05) should equal 24 or 50. |

A08 INTERSTATE HIGHWAY

Screen Heading: Crash Data Questions

Screen Name: Interstate Highway (140-E)

Long Name: Is the first harmful event associated with an interstate highway?

SAS Name: Accident.Int_Hwy

Oracle Name: GES.CrashData.Interstate

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 3 | 9 | Unknown |

Remarks:

Crashes which occur in association with a roadway (or one of its lanes) that is unopen are not NASS crashes unless they occur in the junction of a roadway that is open and upon which an involved vehicle was traveling. If the roadway is being built or under construction (repair or maintenance), then the first harmful event must have been associated with that portion of the roadway designated as open. If the maintenance agency has designated the roadway as open then the condition (paved, gravel, etc.) of the road surface is not considered. If the roadway is being built, enter the roadway according to its eventual classification.

The Interstate Highway System includes those trafficways that are within the national system for interstate transport and defense purposes. Interstates typically have limited access and multiple lanes of travel.

Crashes which occur on ramps leading to or away from an Interstate should be coded Yes.

Enter **No** when the PAR indicates that the crash occurred on any of the following: US Highway, State Highway, County Road, Township Road or Municipal Road.

Enter **Yes** when the PAR indicates the crash occurred on an interstate highway. Some PARs use a specific block to indicate interstate. Interstate can also be identified by the prefix "I" used in the roadway name.

Consistency Checks:

Errors

| | IF | THEN |
|-------|----------------------------------|--|
| RANGE | INTERSTATE HIGHWAY (A08) m null. | nust equal 0,1 or 9 and must not equal |

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA018 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA019 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | TRAFFICWAY FLOW (A11) should not equal 3. |
| AA020 | INTERSTATE HIGHWAY (A08) equals 1 | RELATION TO JUNCTION (A09) should not equal 01-05, 07, 08, 09, 13 or 17. |
| AA021 | INTERSTATE HIGHWAY (A08) equals 1 | TRAFFIC CONTROL DEVICE (A16) should not equal 01, 21, 23 or 61-97. |
| AA022 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | SPEED LIMIT (A18) should not equal 01-40. |
| VA003 | HARMFUL EVENT (A06) equals 23 | INTERSTATE HIGHWAY (A08) should not equal 1. |

Post Entry

| | IF | THEN |
|-------|--|--|
| AA071 | NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | INTERSTATE HIGHWAY (A08) should not equal 1. |
| AA092 | RELATION TO JUNCTION (A09) equals 01-03, 05 or 11-13 | INTERSTATE HIGHWAY (A08) should not equal 1. |

A09 RELATION TO JUNCTION (NON-INTERCHANGE VERSUS INTERCHANGE)

Screen Heading: Crash Data Questions

Screen Name: Interchange Area (150-R)

Long Name: Is the first harmful event located in an interchange or non-interchange

area?

SAS Name: Accident.Rel_Jct

Oracle Name: GES.CrashData.JunctionRelID

Element Values:

Screen Oracle SAS

1 n/a n/a Non-Interchange
2 n/a n/a Interchange
3 26559 99 Unknown If Interchange

Remarks:

The element value selected is based on the location of the first harmful event. If the location of the first harmful event is within the boundaries of an interchange then select **Interchange**. If it occurs outside of the boundaries of an interchange, then select **Non-Interchange**.

Unknown If Interchange applies if it cannot be determined if the first harmful event is located in an interchange or non-interchange area.

See remarks under A09, Relation To Junction (Specific Location).

A09 RELATION TO JUNCTION (SPECIFIC LOCATION)

Screen Heading: Crash Data Questions

Screen Name: Relation To Junction (155-R)

Long Name: Select the attribute which describes the location of the first harmful

event.

SAS Name: Accident.Rel_Jct

Oracle Name: GES.CrashData.JunctionRelID

Element Values:

Screen Oracle SAS

Non-Interchange Area

| 1 | 26542 | 0 | Non-Junction |
|----|-------|---|-----------------------------|
| 2 | 26543 | 1 | Intersection |
| 3 | 26544 | 2 | Intersection Related |
| 4 | 26545 | 3 | Driveway, Alley Access, Etc |
| 5 | 26546 | 4 | Entrance/Exit Ramp |
| 6 | 26547 | 5 | Rail Grade Crossing |
| 7 | 26548 | 6 | On A Bridge |
| 8 | 19435 | 7 | Crossover Related |
| 9 | 26549 | 8 | Other, Non-Interchange |
| 10 | 26550 | 9 | Unknown, Non-Interchange |

Interchange Area

| 1 | 26551 | 10 | Non-Junction |
|---|-------|----|-------------------------------|
| 2 | 26552 | 11 | Intersection |
| 3 | 26553 | 12 | Intersection Related |
| 4 | 26554 | 13 | Driveway, Alley Access, Etc. |
| 5 | 26555 | 14 | Entrance/Exit Ramp |
| 6 | 26556 | 16 | On A Bridge |
| 7 | 19436 | 17 | Crossover Related |
| 8 | 26557 | 18 | Other Location in Interchange |
| 9 | 26558 | 19 | Unknown, Interchange Area |

Unknown If Interchange or Non-Interchange

10 26559 99 Unknown if Interchange

Remarks:

The element value selected is based on the location of the first harmful event. If the location

of the first harmful event is within the boundaries of an interchange then use the interchange codes. If it occurs outside of the boundaries of an interchange, then use the non-interchange codes.

If the first harmful event occurs off the roadway, refer to the section at the point of departure to code this variable. In those off-roadway instances where the departure occurs from within a junction, enter either **Non-Junction** or **Intersection Related**. The latter element is used if the junction is also an intersection (see definition below).

DEFINITIONS

Alley Access

An Alley Access is generally an unnamed roadway providing access, in general, to the rear of houses or buildings, some of which may be further served by a driveway access.

Crossover

A Crossover is a designated opening within a median used primarily for "U-turns". To be considered a crossover, the nearest lateral boundary line of the crossover must be greater than 10 meters from the nearest lateral boundary line of any roadway (highway, street, ramp, driveway or alley) which intersects with either side of the roadways which the median divides.

Driveway Access

A Driveway Access is a roadway providing access to property adjacent to a trafficway.

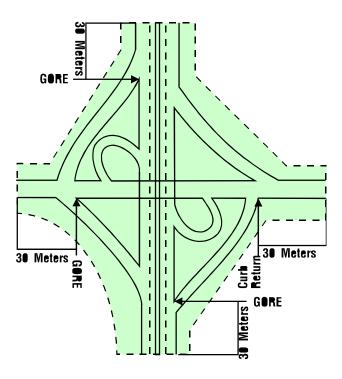
Entrance or Exit Ramp

An Entrance or Exit Ramp is a transition roadway: (1) which connects two roadways; (2) is used for entering or exiting through- traffic lanes; and (3) begins and ends at a gore or curb return. A ramp can connect two roadways which cross (either at-grade or with a grade separation) or two which do not cross (e.g., frontage roads). A ramp can form an intersection with a roadway as well as diverge from or merge into one. A ramp can form a channeled intersection. A ramp can also split into two ramps.

Interchange Area

The Interchange Area is the area around a grade separation which involves at least two trafficways. Included within its boundaries are: (1) all ramps which connect the roadways and (2) each roadway entering or leaving the interchange to a point 30 meters beyond the gore or curb return at the outermost ramp connection for the roadway. One may find included within an interchange area intersections, driveway accesses, and, of course, roadway sections which are non-junctions.

Figure A-1: Interchange Area



Intersection

An intersection is a type of junction which: (1) contains a crossing or connection of two or more roadways not classified as a driveway access or alley access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection. See the examples of intersections on the following pages.

Figure A-2: 3-Leg Intersections

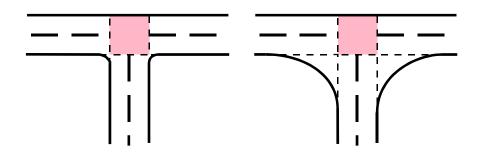


Figure A-3: 3-Leg Intersections

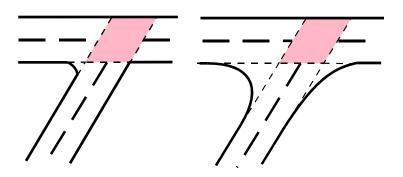


Figure A-4: 'Y' Intersection

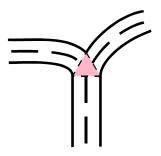


Figure A-5: 4-Leg Intersections

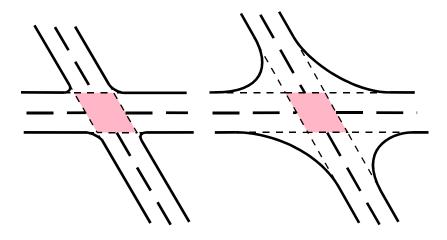


Figure A-6: 4-Leg Intersections

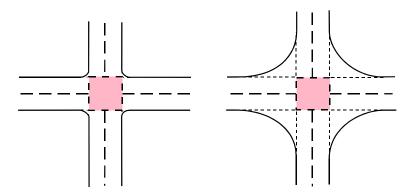


Figure A-7: 4-Leg Intersection

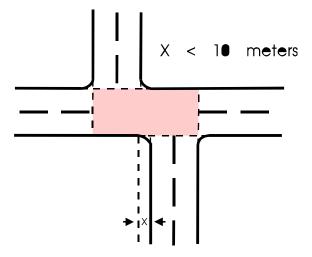
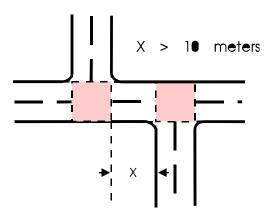


Figure A-8: Two 3-Leg Intersections



Intersection Related

Intersection Related means that the first harmful event: (1) occurs on an approach to or exit from an intersection, and (2) results from an activity, behavior or control related to the movement of traffic units through the intersection.

Junction

A Junction, in general, is the area formed by the connection of two roadways. It includes: (1) all at-grade intersections, (2) connections between a driveway access or alley access and a roadway which is not a driveway access or an alley access, (3) connections between two alley accesses or driveway accesses or (4) a connection between a driveway access and an alley access.

Traffic Circle

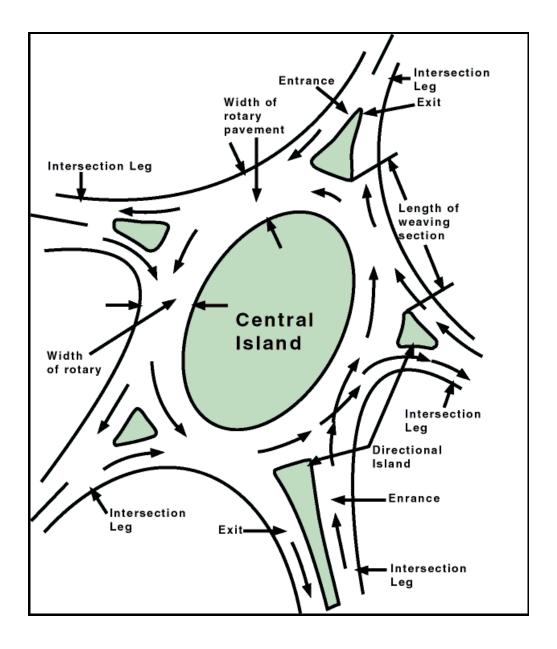
A rotary or traffic circle is a specialized form of at-grade intersection. It is one through which traffic passes by entering and leaving a one-way roadway connecting all intersection approach legs and running continuously around a central island. Rotary intersections are commonly called traffic circles, but proper design can result in central islands of various rounded shapes.

Traffic Units

Traffic Units, as referred to in **Intersection Related**, means any traffic unit (involved or not involved in the accident).

Enter **Intersection** when the first harmful event occurs within the area formed by the prolongation of curb or edge lines of the approach legs of the intersection, enter **Intersection** regardless of whether or not the collision was in any way related to an intersection.

Figure A-9: Traffic Circle



Intersection includes any two leg intersection, rotary intersection or traffic circle. To qualify for inclusion as a two-leg intersection, at least one of the two legs must be controlled by a regulatory sign (see A16, Traffic Control Device) or traffic signal; otherwise, treat the area as a sharp curve.

Use **Intersection** if the first harmful event occurs in the rotary roadway, but **Intersection Related** if the first harmful event occurs in the central island or any directional islands which serve the rotary intersection.

Enter Intersection Related if the first harmful event occurs outside but near an intersection and involves a vehicle which was engaged or should have been engaged in making an intersection related maneuver such as turning. However, if the loss of control is unrelated to the intersection, enter **Non-Junction**.

If a crash meets the criteria of Intersection Related but also meets the criteria for Driveway, Alley Access, Etc., Entrance or Exit Ramp or Rail Grade Crossing, then Driveway, Alley Access, Etc., Entrance or Exit Ramp or Rail Grade Crossing takes precedence. Remember, for Driveway, Alley Access, Etc. and Entrance or Exit Ramp, and Rail Grade Crossing to apply, a pedestrian, other non-motorist associated with a non-motorist conveyance or road vehicle must have been entering or exiting the appropriate area.

Enter **Driveway**, **Alley Access**, **Etc.** when the first harmful event occurs on a NASS roadway which approaches or exits from the driveway or alley access junction and at least one involved pedestrian, other non-motorist associated with a non-motorist conveyance, or road vehicle was entering or exiting from the driveway or alley. Included are exits/entrances of parking lots. Do not use this element if the accident was precipitated by the actions of a noncontact road vehicle or person.

Driveway, Alley Access, Etc. is also used when the first harmful event occurs outside but near a driveway, alley access and involves a vehicle which was engaged or should have been engaged in making a junction related maneuver such as turning (i.e., driveway, alley access related). If the loss of control is unrelated to the junction, enter **Non-Junction**.

When a controlled driveway/alley access junction overlaps (inside-to-inside of lateral boundary lines is less than or equal to 10 meters) a three leg intersection, enter **Intersection**.

When an uncontrolled driveway/alley access junction is within the prolongation of a three-leg intersection and the crash would meet the criteria of driveway, alley access related, enter **Intersection** if the first harmful event was within the intersection junction or **Intersection Related** if it was not.

For an uncontrolled driveway/alley access junction within ten (10) meters of a three or four leg intersection (inside-to-inside of lateral boundary lines), enter **Driveway**, **Alley Access**, **Etc.** only if the criteria above are met and the location of the first harmful event is not within the intersection.

Enter **Entrance/Exit Ramp** if the PAR has a specific element entitled similarly. If no specific PAR element matches, then use this element if according to the PAR diagram/sketch or

narrative, the first harmful event occurred while going into, within or coming out of an entrance or exit ramp.

Enter **Rail Grade Crossing** when (1) the first harmful event occurred in the area formed by the at-grade connection of a railroad bed and a roadway or (2) an involved pedestrian, other non-motorist associated with a non-motorist conveyance or road vehicle was on an approach to or exit from the railroad grade crossing. Do not use this code if the crash was precipitated by the actions of a noncontact road vehicle or person.

Enter **On a Bridge** when the first harmful event occurs on a bridge. If the crash meets the criteria for **Intersection Related** and also meets the criteria for **On a Bridge**, then the **On a Bridge** takes precedence.

Use **Crossover Related** when the first harmful event occurred (1) in the junction of a crossover and a roadway, (2) on any leg of the roads which approach or exit from the crossover and which are just outside of the crossover junction itself (and subject to the provision below) or (3) in the crossover itself, and at least one conveyance or road vehicle was entering, in or exiting from the crossover. Do not use this code if the crash was precipitated by the actions of a noncontact road vehicle or person.

Median cuts which are directly across from or within 10 meters of the nearest lateral boundary line of any roadway (highway, street, ramp, driveway or alley) are considered extensions of the roadway. The area between the roadways which the median cut serves is considered part of the junction unless the roadways belong to separate trafficways. In this rare latter case, consider the area as a separate road segment. If the location of the first harmful event is in the median cut, enter the appropriate response: **Intersection** or **Driveway, Alley Access, Etc.**).

Enter **Other**, **Non-interchange** if the first harmful event occurs (1) while going into, within or coming out of a channel or (2) on a traffic island (when the PAR indicates the vehicle entered or struck the island from within the channel). A channel refers to any traffic lane that is directed into a path different than the through lanes by a traffic island. An island is defined as a raised or painted paved surface. The channel begins and ends at the extension of the island's lateral boundaries unless the channel is preceded or followed by a merge area or divergence. See figures A-10 to A-13 for examples. A channelized intersection is an at-grade intersection in which traffic is diverted into definite paths by raised or painted traffic islands.

Figure A-10: Channel

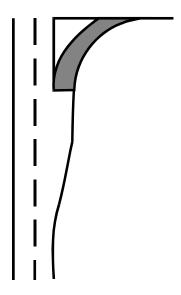


Figure A-11: Channel

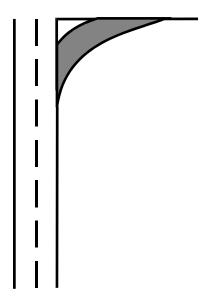


Figure A-12: Channel

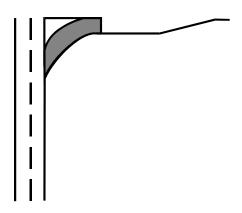
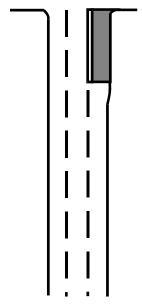


Figure A-13: Channel



Consistency Checks:

Errors

| | IF | THEN |
|-----------------|--|---|
| AA015 | TRAFFIC CONTROL DEVICE (A16) equals 01 | RELATION TO JUNCTION (A09) must not equal 00 or 10. |
| AA038 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0810, 0821, 0822, 0829, 0830, 0840 or 0890 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| AA043 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002 or 0008 | RELATION TO JUNCTION (A09) must equal 03 or 13. |
| AA044 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0010, 0012, 0025, 0048, 0049 or 0055 | RELATION TO JUNCTION (A09) must equal 01, 02, 04, 08, 11, 12, 14 or 18. |
| AA087A | RELATION TO JUNCTION (A09) equals 1 or 11 | RELATION TO ROADWAY (A10) must equal 1 |
| AA090 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0009 | RELATION TO JUNCTION (A09) must not equal 00. |
| PA127 | NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| VA139 | ACCIDENT TYPE (V23) equals 14 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| <u>Warnings</u> | | |
| | IF | THEN |
| AA018 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA019 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | TRAFFICWAY FLOW (A11) should not equal 3. |

INTERSTATE HIGHWAY (A08)

equals 1

AA020

13 or 17.

RELATION TO JUNCTION (A09)

should not equal 01-05, 07, 08, 09,

| AA022 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | SPEED LIMIT (A18) should not equal 01-40. |
|-------|--|---|
| AA025 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23 | RELATION TO JUNCTION (A09) should equal 05. |
| AA026 | RELATION TO JUNCTION (A09) equals 05 | TRAFFIC CONTROL DEVICE (A16) should equal 61 or 62. |
| AA050 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019, 0021, 0022, 0023 or 0024 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| AA071 | NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | INTERSTATE HIGHWAY (A08) should not equal 1. |
| AA085 | TRAFFIC CONTROL DEVICE (A16) equals 21 or 22 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| AA087 | RELATION TO ROADWAY (A10) equals 4 or 8 | RELATION TO JUNCTION (A09) should not equal 01 or 11. |
| AA091 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0009, 0010, 0012, 0025, 0049 or 0055 | RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12. |
| AA092 | RELATION TO JUNCTION (A09) equals 01-03, 05 or 11-13 | INTERSTATE HIGHWAY (A08) should not equal 1. |
| AA096 | If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62 | RELATION TO JUNCTION (A09) should equal 05. |
| PA130 | NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 | RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12. |
| VA004 | HARMFUL EVENT (A06) equals 23 | RELATION TO JUNCTION (A09) should equal 05. |
| VA082 | ACCIDENT TYPE (V23) equals 68-91 | RELATION TO JUNCTION (A09) should not equal 00. |
| VA140 | ACCIDENT TYPE (V23) equals 14 | RELATION TO JUNCTION (A09) should equal 00, 02, 10 or 12. |
| VA189 | CRITICAL EVENT (V26) equals 65-68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| VA190 | CRITICAL EVENT (V26) equals 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) should equal 03 or 13. |

| VA242 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 or 11 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
|-------|--|---|
| | 0 | |

Post Entry

| | IF | THEN |
|-------|---|---|
| AP023 | RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890 |
| AP039 | RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) for the first non-motorist equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
| AP135 | RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON MOTORISTS (A04) is greater than 00 | NON MOTORIST LOCATION (P13) should equal 01, 02, 08 or 09 |
| AV134 | RELATION TO JUNCTION (A09) equals 03 or 13 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) for the vehicles involved in the first harmful event should equal 10, 11, 13 or 97. |

A10 RELATION TO ROADWAY

Screen Heading: Crash Data Questions

Screen Name: Roadway Relation (160-R)

Long Name: Select the attribute which best describes the location of the first harmful

event.

SAS Name: Accident.Rel_Rwy

Oracle Name: GES.CrashData.RoadwayRellD

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------------|
| 1 | 10190 | 1 | On Roadway |
| 2 | 10191 | 2 | On Shoulder |
| 3 | 10192 | 3 | On Median |
| 4 | 10193 | 4 | On Roadside |
| 5 | 10194 | 5 | Outside Trafficway |
| 6 | 10195 | 6 | Off Roadway - Location Unknown |
| 7 | 19437 | 7 | In Parking Lane |
| 8 | 19438 | 8 | Gore |
| 9 | 19439 | 10 | Separator |
| 10 | 19440 | 99 | Unknown |
| 11 | 19441 | 9 | Continuous Left Turn Lane |

Remarks:

This element is coded as to the location of the First Harmful Event.

On Roadway - The roadway is that part of a trafficway designed, improved and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. The roadway and any shoulder alongside the roadway together make up the road.

A **Shoulder** is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles and for lateral support of the roadway structure.

A **Median** is defined as that area of a divided trafficway between parallel roads separating the travelways for traffic in opposite directions. The principal functions of a median are to provide the desired freedom from interference of opposing traffic, to provide a recovery area for out-of-control vehicles, to provide a stopping area in case of emergencies, and to minimize headlight glare. Medians may be depressed, raised or flush. Flush medians can be as little as 4-feet wide between roadway edgelines. Painted roadway edgelines four (4) or more feet

wide denote medians. Medians of lesser width must have a barrier to be considered a median.

On Roadside refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway which lay between the outer property line or other barrier and the edge of the first road encountered in the trafficway. Use this element if the first harmful event occurs in a raised or painted island (directional or channeling).

Outside Trafficway is used when the first harmful event is outside the right-of-way.

Off Roadway - Location Unknown refers to a location off the roadway, but its relationship to the right-of-way is not known.

In Parking Lane refers to a strip of road located on the roadway or next to the roadway, on which parking is permitted. This includes curb-side and edge-of-roadway parking (for example, legal residential parking, city street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should not be used during hours when parking is NOT permitted.

Gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes SHOULDERS or marked pavement if any, between the roadways. The third side is 60 meters (approximately 200 feet) from the point of divergence or convergence or, if any other road is within 70 meters (230 feet) of that point, a line 10 meters (33 feet) from the nearest edge of such road.

Gore Inclusions:

- Areas at rest area or exit ramps
- Areas at truck weight station entry or exit ramps
- Areas where two main roadways diverge or converge
- Areas where a ramp and another roadway or two ramps, diverge or converge
- Areas where a frontage road and another roadway or two frontage roads diverge or converge
- And others.

Gore Exclusions:

- Islands for channelizing of vehicle movements
- Islands for pedestrian refuge
- And others.

A **Separator** is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road from other roads. A Separator may be a physical barrier or a depressed, raised, flush or vegetated area between roads.

A **Continuous Left Turn Lane** is a two-way left turn lane positioned between opposing straight-through travel lanes.

Consistency Checks:

Errors

| | IF | THEN |
|-----------|--|--|
| AA008 | RELATION TO ROADWAY (A10) equals 3 and the FHE involves 2 in-transport motor vehicles | TRAFFICWAY FLOW (A11) must equal 2 for at least one vehicle involved in the first harmful event. |
| AA008A | RELATION TO ROADWAY (A10) equals 9 | TRAFFICWAY FLOW (A11) must equal 0 for at least one vehicle involved in the first harmful event. |
| AA012 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA039 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| AA051 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610 or 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA087A | RELATION TO JUNCTION (A09) equals 1 or 11 | RELATION TO ROADWAY (A10) must equal 1 |
| AA088 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| <u>gs</u> | | |
| | | |

Warnings

| | IF | THEN |
|--------|---|---|
| AA008B | RELATION TO ROADWAY (A10) equals 3 and the FHE involves 1 and only 1 in-transport motor vehicle | TRAFFICWAY FLOW (A11) should equal 2. |
| AA024 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| AA087 | RELATION TO ROADWAY (A10) equals 4 or 8 | RELATION TO JUNCTION (A09) should not equal 01 or 11. |

| AV072 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1 or 9 | ACCIDENT TYPE (V23) should equal 12 or 15. |
|-------|--|---|
| AV097 | RELATION TO ROADWAY (A10) equals 3 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | ACCIDENT TYPE (V23) should equal 06-10, 98 or 99. |
| AV184 | NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 01 | CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12-14 or 19. |
| AV186 | RELATION TO ROADWAY (A10) equals 4, 5, 6 or 8 | PRECRASH LOCATION (V29) of the vehicle(s) involved in the first harmful event should equal 00, 04, 05 or 99. |
| VA094 | ACCIDENT TYPE (V23) equals 01-11or 14 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| VA138 | ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2 | RELATION TO ROADWAY (A10) should equal 3. |
| VA181 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 04 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| VA182 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 01, 02 or 03 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VA211 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VA216 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 05 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| VA217 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 06 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VA243 | ACCIDENT TYPE (V23) equals 12 | RELATION TO ROADWAY (A10) should equal 1 or 9. |

Post Entry

| | IF | THEN |
|-------|---|---|
| AP001 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 01-09, 11,12, 19, 20 or 99. |
| AP002 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP003 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP004 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 09, 19 or 99. |
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920. |

A19 LIGHT CONDITION

Screen Heading: Crash Data Questions

Screen Name: Light (260-E)

Long Name: What are the light conditions at the time of the crash?

SAS Name: Accident.Lght_Con

Oracle Name: GES.CrashData.LightID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------|
| 1 | 26646 | 1 | Daylight |
| 2 | 26647 | 2 | Dark |
| 3 | 26648 | 3 | Dark, But Lighted |
| 4 | 26649 | 4 | Dawn |
| 5 | 26650 | 5 | Dusk |
| 6 | 26652 | 9 | Unknown |

Remarks:

If the police report contains more than one coded, shaded or checked response for light conditions (e.g., "dark" and "dusk"), then enter **Unknown**.

When dawn and dusk are both marked on the PAR, use the time of day to select either **dawn** or **dusk**.

Default to **Dark** if it cannot be determined if **Dark** or **Dark**, **But Lighted** applies.

Consistency Checks:

Errors

| | IF | THEN |
|-------|-----------------------------------|---|
| AA003 | LIGHT CONDITION (A19) equals 5 | TIME (A02) must not equal 2200-2400, 0001-1400 or 1499. |
| AA062 | LIGHT CONDITION (A19) equals 2 | TIME (A02) must not equal 1000- 1500 or 1599. |
| AA066 | LIGHT CONDITION (A19) equals 1 | TIME (A02) must not equal 2200-2400, 0001-0300 or 0399. |
| AA079 | LIGHT CONDITION (A19) equals 4 | TIME (A02) must not equal 1000- 2400, 0001-0300 or 0399. |

<u>Warnings</u>

| | IF | THEN |
|-------|---|---|
| AA006 | TIME (A02) equals 1000-1500 | LIGHT CONDITION (A19) should equal 1 or 9. |
| AA057 | TIME (A02) equals 2200-2400, 0001- 0300 or 0399 | LIGHT CONDITION (A19) should equal 2, 3 or 9. |
| AA068 | LIGHT CONDITION (A19) equals 3 | TIME (A02) should not equal 1000- 1500 or 1599. |
| AA074 | LIGHT CONDITION (A19) equals 1 | TIME (A02) should equal 0500- 2100, 2199 or 9999. |
| AA078 | LIGHT CONDITION (A19) equals 2 | TIME (A02) should equal 1600- 2400, 0100-0900, 0999 or 9999. |
| AA080 | LIGHT CONDITION (A19) equals 4 | TIME (A02) should equal 0400- 0900, 0999 or 9999. |
| AA082 | LIGHT CONDITION (A19) equals 5 | TIME (A02) should equal 1600- 2100, 2199 or 9999. |

A20 ATMOSPHERIC CONDITION

Screen Heading: Crash Data Questions

Screen Name: Atmospheric (270-E)

Long Name: What are the atmospheric conditions at the time of the crash?

SAS Name: Accident.Weather

Oracle Name: GES.CrashData.AtmosphereID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26466 | 1 | No Adverse Atmospheric Conditions |
| 2 | 26467 | 2 | Rain |
| 3 | 26653 | 3 | Sleet |
| 4 | 26654 | 4 | Snow |
| 5 | 26655 | 5 | Fog |
| 6 | 26656 | 6 | Rain and Fog |
| 7 | 26657 | 7 | Sleet and Fog |
| 8 | 26658 | 8 | Other: Smoke, Blowing Sand/Snow/Dust/, Crosswind, Hail, Etc. |
| 9 | 26659 | 9 | Unknown |

Remarks:

Enter Other: Smog, Smoke, Blowing Sand/Snow/ Dust, Crosswind, Hail, Etc. when precipitation or particle dispersion has affected the driver's visual ability or the vehicle's controllability.

Enter **Rain** when the PAR indicates it is raining during the crash. This includes freezing rain.

Enter **Unknown** when the police report does not indicate an atmospheric condition or indicates the atmospheric condition is unknown.

Consistency Checks:

<u>Errors</u>

| | IF | THEN |
|-------|-----------------------|-----------------------------|
| AD150 | ATMOSPHERIC CONDITION | DRIVER'S VISION OBSCURED BY |
| | (A20) equals 1 | (D04) must not equal 15. |

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA028 | ATMOSPHERIC CONDITION (A20) equals 2-4 or 6-7 | ROADWAY SURFACE CONDITION (A15) should not equal 1, 5, 8 or 9. |
| AA034 | DATE-MM (A01) equals 05-09 | ATMOSPHERIC CONDITION (A20) should not equal 3 or 4. |
| AA084 | ROADWAY SURFACE CONDITION (A15) equals 1 | ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6 or 7. |
| DA124 | DRIVER'S VISION OBSCURED BY (D04) equals 01 | ATMOSPHERIC CONDITION (A20) should not equal 1. |
| DA159 | DRIVER'S VISION OBSCURED BY (D04) equals 15 | ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7 or 9. |

A27 EMS ON SCENE

Screen Heading: Crash Data Questions

Screen Name: EMS on Scene (280-E)

Long Name: Is there an EMS unit present at the scene of the crash?

SAS Name: Accident.EMS

Oracle Name: GES.Crashdata.EMSOnSceneID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|------------|
| 1 | 0 | 0 | No |
| 2 | 1 | 1 | Yes |
| 3 | 6 | 6 | Not on PAR |
| 4 | 7 | 7 | Not Coded |
| 5 | 9 | 9 | Unknown |

Remarks:

No indicates that no EMS unit is at the scene of the crash.

Yes is used when the PAR indicates that there is an EMS unit at the scene of the crash. Indications include: narrative states an EMS unit was at the scene or injured transported by ambulance/any means of transport; EMS unit number provided; EMS notification/arrival/departure times noted; and EMS check box.

Enter **Not on PAR** if no block exists on the PAR for reporting EMS information and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for EMS information, the investigating officer fails to make either a positive or negative assessment and no other information is available.

Enter **Unknown** if EMS presence at the crash scene is specifically indicated on the PAR as unknown.

Consistency Checks:

Errors

IF THEN

RANGE EMS ON SCENE (A27) must equal 0, 1, 6, 7 or 9.

V07 VEHICLE IDENTIFICATION NUMBER

Screen Heading: Vehicle Data

Screen Name: VIN (365-E)

Long Name: What is the vehicle identification number?

SAS Name: Vehicle.VIN

Oracle Name: GES. Vehicle. VIN

Element Values:

Oracle values:

Enter the entire VIN. Left justify.

000000000000000 No VIN 999999999999 Unknown

SAS values:

The first 11 characters of the VIN. Left Justify.

0000000000 No VIN 999999999 Unknown

Remarks:

Code the entire VIN; leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave the column any such character would ordinarily occupy "Blank." In the special case where the first 11 columns of the VIN are blank, but part or all of columns 12 through 17 contain information, code unknown instead of the partial information contained in columns 12 through 17 of the VIN.

Use * (**Unknown**) when the entire VIN is unknown or missing. Use this element if the PAR does not provide the VIN.

Enter "0000000000000000" (**No VIN**) if the vehicle is a type which has no VIN (e.g., go-cart).

If the vehicle is a motor home or school bus, enter the vehicle chassis VIN; the secondary manufacturer's number must not be encoded. If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script, "f", the "f" is not entered. Proceed to the next character, as in the example below.

VIN: f 3U62S100932 f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E.3076421 ENTER: SME3076421

Vehicles manufactured after September 1980 conform to Federal Motor Vehicle Safety Standard 115. This standard requires that each VIN have 17 characters, not contain the letters "I", "O" or "Q", and pass a mathematical test.

If the information from PC VINA or VINASSIST and the PAR are inconsistent, use the following guidelines.

Make and model on the PAR takes precedence over the make and model indicated by the VIN.

Model year - Use model year as indicated by VIN if the Vin Make and Model matches the make and model shown on the PAR.

Body type - Use body type indicated by the VIN if the VIN Make and Model matches the make and model shown on the PAR.

If the information about make and model on the PAR is inconsistent, model takes precedence over the make.

Trailer VINs are not coded. Code **Unknown** if the power unit VIN is not available.

Consistency Checks:

Errors

| | IF | THEN | |
|--------|---|--|--|
| VV003A | MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 th and 5 th characters of the VIN (V07) equal ZN, ZP, ZR or ZY | BODY TYPE (V05) must equal 17. | |
| VV300A | VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present | the VEHICLE MODEL YEAR (V06) must match the 10 th character of the VIN (V07). | |
| VV300B | VIN (V07) for 1981 and newer vehicles must not contain the characters I, O, or Q. | | |
| VV300C | An unknown VIN (V07) must be coded 99999999999999999999999999999999999 | | |

| Gan | oral/G | ienera | I Va | hicla | Data |
|-------|---------|-----------|------|---|---------|
| (7011 | -141/13 | IEI IEI A | , ve | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | · IJAIA |

| | • | | | | |
|----|----------|---|----|----|----|
| `\ | Δ | n | ic | 10 | 20 |
| v | C | | 16 | | |

| VV300F | VIN (V07) passes the check digit test | BODY TYPE (V05) must be consistent with the VIN (V07) body type. |
|--------|---------------------------------------|--|
| VV300G | VIN (V07) passes the check digit test | VEHICLE MODEL YEAR (V06) must be greater than or equal to 1981. |
| VV300T | Columns 1 through 11 of the VIN (V | /07) must not all be blank. |
| RANGE | VIN (V07) must not equal null. | |

<u>Warnings</u>

| | IF | THEN |
|--------|---|--|
| VV300A | VEHICLE MODEL YEAR (V06) is greater than 1980 | the VEHICLE MODEL YEAR (V06) should match the 10 th character of the VIN (V07). |
| VV300D | VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present | VIN (V07) should pass the check digit test. |
| VV300E | VIN (V07) passes the check digit test | MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known. |
| VV300R | VEHICLE MODEL YEAR (V06) is greater than 1980 | VIN (V07) should contain 17 characters. |

V03 VEHICLE MAKE

Screen Heading: Vehicle Data

Screen Name: Make (370-E)

Long Name: What is the vehicle make?

SAS Name: Vehicle.Make

Oracle Name: GES.Vehicle.MakeID

Element Values:

| Screen | Oracle | SAS |
|---|--|--|
| Passenger Vehicles/Light Trucks | | |
| ACURA ALFA ROMEO AM GENERAL AMC ASTON MARTIN AUDI AUSTIN / AUSTIN HEALEY AVANTI | 54 31 3 1 6901 32 33 2902 | 54 31 3 1 69 32 33 29 |
| BERTONE BMW BRICKLIN BUICK | 6918 34 6902 18 | 69 34 69 18 |
| CADILLAC CHECKER CHEVROLET CHRYSLER CITREON CONSULIER | 19 2903 20 6 6903 2909 | 19 29 20 6 69 29 |
| DAEWOO DAIHATSU DELOREAN DESOTO DESTA DODGE | 20212 60 6904 2904 6916 7 | 64 60 69 29 69 7 |
| EAGLE EXCALIBER | 10 2905 | 10 29 |
| FERRARI | 6905 | 69 |

| Vehicles | General/ | General Vehicle Data |
|---|--|--|
| FIAT | 36 | 36 |
| FORD | 12 | 12 |
| GMC | 23 | 23 |
| GRUMMAN | 25 | 25 |
| HILLMAN | 6906 | 69 |
| HONDA | 37 | 37 |
| HUDSON | 2907 | 29 |
| HYUNDAI | 55 | 55 |
| IMPERIAL | 8 | 8 |
| INFINITI | 58 | 58 |
| ISUZU | 38 | 38 |
| JAGUAR | 39 | 39 |
| JEEP / KAISER-JEEP | 2 | 2 |
| JENSEN | 6907 | 69 |
| KIA | 63 | 63 |
| LADA LAMBORGHINI LANCIA LAND ROVER LEXUS LINCOLN LOTUS | 6919 6908 40 62 59 13 6909 | 69 69 40 62 59 13 69 |
| MASERATI MAZDA MERCEDES BENZ MERCURY MERKUR MG MINI MITSUBISHI MORGAN MORRIS | 6910 41 42 14 56 43 143055 52 6920 6911 | 69 41 42 14 56 43 65 52 69 |
| NISSAN / DATSUN | 35 | 35 |
| OLDSMOBILE OTHER DOMESTIC MANUFACTURER (light vehicles) OTHER FOREIGN MANUFACTURER (light vehicles) | 21 29 69 | 21 29 69 |
| PACKARD | 2908 | 29 |
| PEUGEOT | 44 | 44 |
| PLYMOUTH | 9 | 9 |
| PONTIAC | 22 | 22 |

| Vehicles | General/ | General Vehicle Data |
|---|---|--|
| PORSCHE | 45 | 45 |
| RELIANT RENAULT/AMC ROLLS ROYCE/BENTLEY | 6917 46 6912 | 69 46 69 |
| SAAB SATURN SIMCA SINGER STERLING STUDEBAKER STUTZ SUBARU SUNBEAM SUZUKI | 47 24 6913 6921 61 2901 2906 48 6914 53 | 47 24 69 69 61 29 29 48 69 53 |
| TOYOTA TRIUMPH TVR | 49 50 6915 | 49 50 69 |
| UNKNOWN DOMESTIC MANUFACTURER UNKNOWN FOREIGN MANUFACTURER | 2999 6999 | 99 99 |
| VOLKSWAGON VOLVO | 30 51 | 30 51 |
| YUGO | 57 | 57 |
| Motored Cycle/ATC/ATV | | |
| BSA BUELL DUCATI HARLEY-DAVIDSON INDIAN KAWASAKI MOTO-GUZZI NORTON OTHER MAKE MOPED OTHER MAKE MOTORED CYCLE YAMAHA | 70 104476 71 72 67602 73 74 75 78 79 76 | 70 79 71 72 79 73 74 75 78 79 |
| Also See: | | |
| BMW HONDA PEUGEOT TRIUMPH SUZUKI | 34 37 44 50 53 | 34 37 44 50 53 |

| Trucks and Buses | | |
|---|-----------------------|----------------|
| AUTO-UNION-DKW AUTOCAR | 9802 9801 | 98 98 |
| BROCKWAY | 80 | 80 |
| DIAMOND REO/REO DIVCO | 81 9803 | 81 98 |
| FREIGHTLINER/WHITE FWD | 82 83 | 82 83 |
| HINO | 9806 | 98 |
| INTERNATIONAL HARVESTER/NAVISTAR IVECO/MAGIRUS | 84 88 | 84 88 |
| KENWORTH | 85 | 85 |
| MACK MARMON | 86 9808 | 86 98 |
| NEOPLAN | 9810 | 98 |
| OSHKOSH OTHER MAKE (med./heavy truck/bus or "other") | 9805 15691 | 98 98 |
| PETERBILT | 87 | 87 |
| SCANIA STERLING TRUCKS | 9807 24428 | 98 98 |
| UNKNOWN MEDIUM/HEAVY TRUCKS AND BUSES | 9899 | 99 |
| WARD LAFRANCE WESTERN STAR WINNEBAGO | 9809 9804 30189 | 98 98 98 |
| Truck Based Motor Home (Model=850) Bus Based Motor Home (Model=950) Other Bus (Model=988) Unknown Bus (Model=989) | n/a n/a n/a | 98 98 98 |
| Other Vehicle, e.g., Farm Vehicle, Go-Cart (Model=998) | n/a | 98 |
| See Also: | | |
| AM GENERAL | 3 | 3 |

| Vehicles | General/General Vehicle Data | | |
|-----------------|------------------------------|----|--|
| DODGE | 7 | 7 | |
| FORD | 12 | 12 | |
| CHEVROLET | 20 | 20 | |
| GMC | 23 | 23 | |
| GRUMMAN | 25 | 25 | |
| NISSAN / DATSUN | 35 | 35 | |
| FIAT | 36 | 36 | |
| ISUZU | 38 | 38 | |
| MERCEDES BENZ | 42 | 42 | |
| VOLVO | 51 | 51 | |
| MITSUBISHI | 52 | 52 | |
| Unknown | | | |

Remarks:

UNKNOWN MANUFACTURER

Note that for both V03, Vehicle Make, and V04, Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

99

99

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, V03, Vehicle Make, is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, V03, Vehicle Make, is coded **Unknown Manufacturer** and V04, Vehicle Model, is coded **Unknown Bus Type**.

Unknown Manufacturer is used for a "hit-and-run" vehicle unless reliable evidence indicates the vehicle's make.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--------------------------------|
| VV003A | MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 th and 5 th characters of the VIN (V07) equal ZN, ZP, ZR or ZY | BODY TYPE (V05) must equal 17. |
| RANGE | MAKE (V03) and MODEL (V04) must combinations specified in the Oracle | |

<u>Warnings</u>

| | IF | THEN |
|--------|---------------------------------------|--|
| VV300E | VIN (V07) passes the check digit test | MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known. |

V04 VEHICLE MODEL

Screen Heading: Vehicle Data

Screen Name: Model (380-E)

Long Name: What is the vehicle model?

SAS Name: Vehicle.Model

Oracle Name: GES.Vehicle.ModelID

Element Values:

Note that for both V03, Vehicle Make, and V04, Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, V03, Vehicle Make, is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, V03, Vehicle Make, is coded **Unknown Manufacturer** and V04, Vehicle Model, is coded **Unknown Bus Type**.

If a vehicle make or vehicle model is encountered which is not listed, headquarters is notified.

54 ACURA

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|---|---|---|---|
| INTEGRA LEGEND RL NSX VIGOR CL TL RSX TSX OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SLX RDX MDX OTHER LIGHT TRUCK UNKNOWN TYPE LIGHT TRUCK UNKNOWN VEHICLE | RS, LS, GS NTX-T Coupe | YEAR 1986-1998 1986-1995 1996-2000 1991-2000 1992-1994 1996-1998 1996-1998 | 435 19571 437 440 476 6849 19947 45074 158101 477 478 | 31 32 32 33 34 35 35 38 39 401 402 421 498 499 |
| 31 ALFA ROMEO MODEL | INCLUDES | YEAR | ORACLE | SAS |
| SPIDER SPORTS SEDAN SPRINT SPECIAL GTV-6 164 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE | All roadsters, Veloce, 1750/2000 roadsters All 4 door sedans; Giulia, Super, Berlina, Alfetta, Milano, 1750/2000 sedans All 2-door coupes; Alfetta GT, 1750/2000 sedans | 1933-1994 1933-1989 1933-1980 1981-1986 1990-1995 | 6776 786 6779 | 31 32 33 34 35 398 399 999 |
| 3 AM GENERAL MODEL | INCLUDES | YEAR | ORACLE | SAS |
| DISPATCHER HUMMER H3 HUMMER H1/H2 DISPATCHER OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK MEDIUM/HEAVY TRUCK | Post Office (Jeep) DJ series Post Office Van Military off-road | 1965-1994 1965-1991 1965-1994 | 233078 6197 6199 139 140 | 401 402 421 466 498 499 884 |
| OTHER MEDIUM/HEAVY TRUCK UNK TYPE TRUCK (LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY TRUCK | Military On-Toau | 1905-1994 | 147 27266 148 | 898 899 899 |
| BUS - REAR ENGINE/FLAT FRONT OTHER BUS UNKNOWN BUS TYPE | Transit | 1965-1994 | 152 153 154 | 983 988 989 |

UNKNOWN VEHICLE 155 999

1 AMC/AMERICAN MOTORS

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--------------------|---|------------------------|------------|----------|
| RAMBLER/AMERICAN | Rogue, Scambler, 220, 440 | 1954-1969 | 5821 | 1 |
| REBEL/MATADOR | Barcelona, Classic, Brougham, 550, 660, 770, Marlin: WB=114" | 1900-1998 | | 2 |
| REBEL/MATADOR | Barcelona, Classic, Brougham, 550, 660, 770, Marlin: WB=115" | 1964-1978 | 6148 | 2 |
| REBEL/MATADOR | Matador: WB=115" | 1900-1978 | 6148 | 2 |
| REBEL/MATADOR | Matador: WB=114" | 1958-1974 | 6148 | 2 |
| AMBASSADOR | Brougham, DPL, SST, DL, Limited, 880. 990 | 1900-1998 | 6153 | 3 |
| PACER | Limited, DL | 1975-1980 | 131 | 4 |
| AMX | 2-seater only | 1968-1970 | 6156 | 5 |
| JAVELIN | SST | 1900-1998 | 6158 | 6 |
| JAVELIN | AMX | 1971-1974 | 6158 | 6 |
| HORNET/CONCORD | Sportabout, limited, DL, SC-360, SST | 1900-1998 | 6161 | 7 |
| HORNET/CONCORD | AMX | 1975-1978 | 6161 | 7 |
| SPIRIT/GREMLIN | Limited, DL. Custom,. X | 1900-1998 | 132 | 8 |
| SPIRIT/GREMLIN | GT | 1983-1998 | | 8 |
| SPIRIT/GREMLIN | AMX | 1979-1998 | | 8 |
| EAGLE | Concord based | 1980-1987 | | 9 |
| EAGLE SX-4 | Spirit/Gremilin based | 1981-1984 | | 10 |
| OTHER AUTOMOBILE | | | 133 | 398 |
| UNKNOWN AUTOMOBILE | | | 134 | 399 |
| UNKNOWN VEHICLE | | | 135 | 999 |
| 6901 ASTON MARTIN | | | | |
| | | V=45 | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| LAGONDA | | 1968-2000 | 9595 | 31 |
| OTHER AUTOMOBILE | | | 239 | 31 |
| SALOON | | 1968-2000 | 9601 | 31 |
| UNKNOWN AUTOMOBILE | | | 240 | 31 |
| VANTAGE | | 1968-2000 | 9597 | 31 |
| VOLANTE | | 1968-2000 | 9599 | 31 |
| | | | | |
| 32 AUDI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| SUPER 90 | | 1970-1972 | 6795 | 31 |
| 100/A6 | S, LS, GL | 1970-1977 | | 32 |
| 100/A6 | A6 | 1995-1998 | | 32 |
| 100/A6 | Quattro | 1989-1994 | | 32 |
| FOX | | 1974-1979 | 6797 | 33 |
| 4000 | Quattro, Coupe GT, CS, S | 1980-1988 | 803 | 34 |
| 5000 | Quattro, CS, S, Turbo | 1978-1988 | 16507 | 35 |
| 80/90 | Quattro-90 | 1988-1995 | 809 | 36 |
| 80/90 | Quattro-80 | 1988-1992 | 809 | 36 |
| 200 | addiii o oo | | | |
| 200 | Quattro | 1989-1992 | 802 | 37 |
| V8 QUATTRO | | | | 37 38 |
| | | 1989-1992 | 817 | |
| V8 QUATTRO | | 1989-1992 1990-1994 | 817 814 | 38 |

| S4/S6 | S6 | 1995-1998 | 816 | 40 |
|---------------------|-----------|-----------|--------|-----|
| CABRIOLET | | 1994-1998 | 6799 | 41 |
| A4 | | 1996-1998 | 6801 | 42 |
| A3 | | 1996-1998 | 6803 | 43 |
| A8 | | 1996-1998 | 6805 | 44 |
| TT | | 2000-2000 | 20200 | 45 |
| S8 | | | 39816 | 46 |
| ALLROAD | | | 44656 | 47 |
| A5 | | | 232940 | 49 |
| R8 | | | 232942 | 50 |
| OTHER AUTOMOBILE | | | 818 | 398 |
| UNKNOWN AUTOMOBILE | | | 819 | 399 |
| Q7 | | | 210233 | 401 |
| Q5 | | | 232948 | 402 |
| OTHER LIGHT TRUCK | | | 210235 | 498 |
| UNKNOWN LIGHT TRUCK | | | 210237 | 499 |
| UNKNOWN VEHICLE | | | 820 | 999 |
| | | | | |
| 33 AUSTIN/AUST | IN HEALEY | | | |
| MODEL | INCLUDES | YEAR C | DRACLE | SAS |
| MARINA | GT | 1900-1998 | 6807 | 31 |
| AMERICA | | 1900-1998 | 6809 | 32 |
| HEALEY SPRITE | | 1900-1998 | 6811 | 33 |
| HEALY 3000 | Healy 100 | 1900-1998 | 6813 | 34 |
| MINI | • | 1900-1998 | 6815 | 35 |
| OTHER AUTOMOBILE | | | 821 | 398 |
| UNKNOWN AUTOMOBILE | | | 822 | 399 |
| UNKNOWN VEHICLE | | | 823 | 999 |
| 9802 AUTO-UNION- | -DKW | | | |
| MODEL | INCLUDES | YEAR C | DRACLE | SAS |

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|----------|------|--------------|------------|
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9753 9757 | 802 802 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 9755 | 802 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | | 32532 | 802 |
| MEDIUM/HEAVY - OTHER | | | 9758 | 802 |
| MEDIUM/HEAVY - UNKNOWN ENGINE | | | 9756 | 802 |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9752 | 802 |

9801 AUTOCAR

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|----------|------|--------------|------------|
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/I | ENTRY | | 9745 9750 | 801 801 |
| POSITION MEDIUM/HEAVY - COE/I ENTRY | HIGH | | 9748 | 801 |

| MEDIUM/HEAVY - COE/LOW ENTRY | | | 9746 | 801 |
|--|---|------------------------|------------------|------------|
| MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKOWN ENGINE LOCATION | | | 9751 9749 | 801 801 |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9744 | 801 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | | 9754 | 802 |
| 2902 AVANTI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 9546 9547 | 1 1 |
| 6918 BERTONE | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 284 285 | 52 52 |
| 34 BMW | MOLLIBEO | \/FAD | 004015 | 040 |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 1600, 2002 COUPE | Tii, 1800i, 200CS 2800CS, 3.0CS | 1900-1976 1969-1976 | | 31 32 |
| BAVARIA SEDAN | 2500, 2800 | 1969-1974 | | 33 |
| 3 SERIES | 318i, 318ti, 320i, 325e, 325es, 325i, 328, M3 | 1977-1998 | | 34 |
| 5 SERIES | 524i, 258i, 530i, 533i, 535i, TD | 1975-1998 | 826 | 35 |
| 5 SERIES | 525i (wagon), M5, 540iA, 540i | 1993-1998 | 826 | 35 |
| 6 SERIES | 630, 633, 635, csi, M6 | 1977-1998 | 829 | 36 |
| 7 SERIES | 733i, 435i, L7, 740i, 750iL | 1978-1998 | 830 | 37 |
| 8 SERIES | 850, 840ci | 1990-1997 | | 38 |
| Z3 | M coupe (Brickland) | 1996-1998 | | 39 |
| Z8 | | | 45076 | 40 |
| V5 Z4 | | | 232954 146512 | 41 42 |
| OTHER AUTOMOBILE | | | 831 | 398 |
| UNKNOWN AUTOMOBILE | | | 832 | 399 |
| X5 | 4WD | | 37074 | 401 |
| X3 | | | 158103 | 402 |
| OTHER LIGHT TRUCK | | | 37076 | 498 |
| UNKNOWN LIGHT TRUCK | | | 37077 | 499 |
| MOTORCYCLE (000-050CC) | | | 833 | 701 |
| MOTORCYCLE (051-124CC) | | | 834 | 702 |
| MOTORCYCLE (125-349CC) | | | 835 | 703 |
| MOTORCYCLE (350-449CC) | | | 836 | 704 |
| MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) | | | 837 838 | 705 706 |
| MOTORCYCLE (UNKNOWN | | | 839 | 709 |
| CC) UNKNOWN MOTORED CYCLE | | | 840 | 799 |

| UNKNOWN VEHICLE | | | 841 | 999 |
|---|-----------|-------------------------------------|--|---|
| 6902 BRICKLIN | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 241 242 | 32 32 |
| 80 BROCKWAY MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MODEL | INCLUDED. | 12/11 | OTOTOLL | 0/10 |
| MEDIUM/HEAVY TRUCK BASED MOTORHOME MEDIUM/HEAVY - CBE MEDIUM/HEAVE - COE/LOW ENTRY | | 1900-1998 1900-1998 1900-1998 | 9678 | 850 881 882 |
| MEDIUM/HEAVY - COE HIGH | | 1900-1998 | 9682 | 883 |
| ENTRY MEDIUM/HEAVY - UNKNOWN ENGINE | • | 1900-1998 | 9685 | 884 |
| MEDIUM/HEAVY - COE/ENTRY POSITION | • | 1900-1998 | 9687 | 890 |
| MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK | | 1900-1998 | 9689 32524 | 898 899 |
| 70 BSA | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 306 307 308 309 310 311 312 313 314 | 701 702 703 704 705 706 709 798 799 |
| 104476 BUELL | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MOTORCYCLE (000-051CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC OR GREATER) MOTORCYCLE (UNKNOWN CC) OTHER MOTORED CYCLE | | | 104478 104479 104480 104481 104482 104483 104484 | 701 702 703 704 705 706 709 |

UNKNOWN MOTORED CYCLE

104486 799

18 BUICK

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|--|-----------|--------|-----|
| SPECIAL/SKYLARK (thru 1972) | GS, GS-350, GS-400, GS-455, GS California, Sport wagon, Custom | 1900-1972 | 6512 | 1 |
| LESABRE/CENTURION/WILDC | Т-Туре | 1986-1998 | 1140 | 2 |
| LESABRE/CENTURION/WILDC | Wagon, Luxus, Invicta, Custom, Limited | 1900-1976 | 1140 | 2 |
| LESABRE/CENTURION/WILDC | Wagon, Luxus, Invicta, Custom, Limited | 1977-1985 | 1140 | 2 |
| ELECTRA/ELECTRA 225/PARK AVENUE (91-ON) | Llmited, Park Avenue, Ultra | 1985-1998 | 1145 | 3 |
| ELECTRA/ELECTRA 225/PARK AVENUE (91-ON) | Limited, Park Avenue, Ultra | 1977-1984 | 1145 | 3 |
| ELECTRA/ELECTRA 225/PARK AVENUE (91-ON) | Limited, Park Avenue, Ultra | 1900-1976 | 1145 | 3 |
| ROADMASTER | Estate Wagon, Limited | 1991-1996 | 1163 | 4 |
| RIVIERA | S-Type, T-Type | 1963-1965 | 1161 | 5 |
| RIVIERA | S-Type, T-Type | 1966-1976 | 1161 | 5 |
| RIVIERA | S-Type, T-Type | 1977-1985 | 1161 | 5 |
| RIVIERA | S-Type, T-Type | 1994-1998 | 1161 | 5 |
| RIVIERA | S-Type, T-Type | 1986-1993 | 1161 | 5 |
| CENTURY | Luxus, Custom | 1900-1977 | 1135 | 7 |
| CENTURY | Custom, FWD | 1982-1998 | 1135 | 7 |
| CENTURY | Luxus, Regal | 1972-1977 | 1135 | 7 |
| CENTURY | Custom | 1978-1981 | 1135 | 7 |
| APOLLO/SKYLARK (73-76) | Skylark (75), S/R | 1973-1976 | 27310 | 8 |
| REGAL | Turbo, Luxux, Gran National, GNX, T-Type | 1978-1988 | 1153 | 10 |
| SKYHAWK | S-Type, Roadhawk, T-Type, GT | 1975-1981 | 1166 | 12 |
| SKYHAWK | | 1982-1998 | 1166 | 12 |
| SKYLARK (76-85) | S/R, S, Limited, Sprot, T-Type | 1976-1979 | 1168 | 15 |
| SKYLARK (76-85) | S/R, S, Limited, Sport, T-Type | 1980-1985 | 1168 | 15 |
| SOMERSET(85- 87)/SKYLARK(86-ON) | Somerset, GS Regal, Custom, Limited, T-Type | 1985-1987 | 1169 | 18 |
| SOMERSET(85- 87)/SKYLARK(86-ON) | Skylark ('86-on) | 1986-1999 | 1169 | 18 |
| REGAL (FWD) | Limited | 1988-1998 | 1154 | 20 |
| REATTA | | 1988-1991 | 1152 | 21 |
| LACROSSE | | | 174884 | 22 |
| LUCERNE | | | 210239 | 23 |
| ENCLAVE | | | 232958 | 24 |
| OPEL KADETT | | 1900-1975 | 6514 | 31 |
| OPEL MANTA | 1900, Luxus, Rallye, Sports Coupe | 1900-1975 | 6516 | 32 |
| OPEL GT | | 1900-1975 | 6518 | 33 |
| OPEL ISUZU | Deluxe, Sport | 1976-1979 | 6521 | 34 |
| OTHER AUTOMOBILE | | | 1175 | 398 |
| UNKNOWN AUTOMOBILE | | | 1176 | 399 |
| RENDEZVOUS | | | 40757 | 401 |
| RAINIER | | | 158105 | 402 |
| TERRAZA | | | 174886 | 441 |
| OTHER LIGHT TRUCK | | | 40760 | 498 |
| UNKNOWN LIGHT TRUCK | | | 40761 | 499 |
| UNKNOWN VEHICLE | | | 1177 | 999 |

19 CADILLAC

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|-----------------------|---|-----------|--------|------|
| DEVILLE/FLEETWOOD | Coupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance | 1900-1976 | 1195 | 3 |
| DEVILLE/FLEETWOOD | FWD d'Elegance | 1985-1998 | 1195 | 3 |
| DEVILLE/FLEETWOOD | Concourse | 1994-1998 | 1195 | 3 |
| DEVILLE/FLEETWOOD | RWDCoupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance | 1977-1996 | 1195 | 3 |
| LIMOUSINE | Fleetwood 75, Formal, DeVille-Based | 1900-1998 | 1183 | 4 |
| ELDORADO | Biarritz, El-doro, Touring Coupe | 1979-1985 | 1187 | 5 |
| ELDORADO | Biarritz, El-doro, Touring Coupe | 1900-1978 | 1187 | 5 |
| ELDORADO | Biarritz, El-doro, Touring Coupe | 1986-1998 | 1187 | 5 |
| COMMERCIAL SERIES | Ambulance/Hearse | 1900-1998 | 6537 | 6 |
| ALLANTE | | 1987-1998 | 1178 | 9 |
| SEVILLE | STS | 1986-1998 | 1197 | 14 |
| SEVILLE | Elegante | 1976-1985 | 1197 | 14 |
| CIMARRON | D'oro | 1982-1988 | 1180 | 16 |
| CATERA | RWD | 1997-1998 | 6539 | 17 |
| CTS | | | 45079 | 18 |
| XLR | | | 146514 | 19 |
| SRX | | | 158107 | 20 |
| STS | | | 174888 | 21 |
| DTS | | | 210241 | 22 |
| OTHER AUTOMOBILE | | | 972 | 398 |
| UNKNOWN AUTOMOBILE | | | 973 | 399 |
| ESCALADE | | | 20207 | 421 |
| ESCALADE ESV | | | 146516 | 431 |
| ESCALADE EXT | | | 146518 | 481 |
| OTHER LIGHT TRUCK | | | 45154 | 498 |
| UNKNOWN LIGHT TRUCK | | | 45155 | 498 |
| UNKNOWN VEHICLE | | | 974 | 999 |
| 2903 CHECKER | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| AEROBUS | | 1900-1982 | 9566 | 2 |
| MARATHON | | 1900-1982 | 9548 | 2 |
| OTHER AUTOMOBILE | | 1900-1982 | 9569 | 2 |
| SUPERBA | | 1900-1982 | 9562 | 2 |
| TAXI | | 1900-1982 | 9564 | 2 |
| UNKNOWN AUTOMOBILE | | 1900-1982 | 9570 | 2 |
| 20 CHEVROLET | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | 242 |
| WODEL | INCLUDES | ILAN | ONACLL | 0/10 |
| CHEVELLE/MALIBU (83-) | Classic, Concours, S-3, Laguna, Nomad, 300, Greenbriar, Estate, Deluxe, SS 396/454 | 1964-1977 | 1024 | 1 |
| CHEVELLE/MALIBU (83-) | Classic, Concours, S-3, Laguna, Nomad, 300, Greenbriar, Estate, Deluxe, SS 396/454 | 1978-1983 | 1024 | 1 |
| IMPALA/CAPRICE | Biscayne, Belair, Super sport, Classic Classic Brougham, Townsman | 1900-1976 | 1017 | 2 |
| IMPALA/CAPRICE | St. Wgn. Biscayne, Belair, Super sport, Classic Classic Brougham, Townsman | 1900-1976 | 1017 | 2 |
| | | | | |

| IMPALA/CAPRICE | Brookwood, Kingswood | 1977-1998 | 1017 | 2 |
|-------------------------------------|--|-----------|--------|-----|
| CORVETTE | Stingray | 1953-1962 | 1001 | 4 |
| CORVETTE | Stingray | 1963-1998 | 1001 | 4 |
| CORVAIR | Monza, Corsa, 500, Yenko | 1960-1969 | 6574 | 6 |
| EL CAMINO | Royal Knight, SS | 1959-1960 | 6545 | 7 |
| EL CAMINO | Royal Knight, SS | 1964-1977 | 6545 | 7 |
| EL CAMINO | Royal Knight, SS | 1978-1998 | 6545 | 7 |
| NOVA (-79) | Chevy II, LN, LE, Concours SS-350/396, Rally | 1962-1979 | 6576 | 8 |
| CAMARO | SS, RS, LT, Berlinetta, IROC-Z, Z28 | 1967-1998 | 979 | 9 |
| MONTE CARLO ('70-'88) (RWD ONLY) | LS, SS, Aerocoupe, Landau | 1970-1977 | 1025 | 10 |
| MONTE CARLO ('70-'88) (RWD ONLY) | LS, SS, Aerocoupe, Landau | 1978-1988 | 1025 | 10 |
| VEGA | GT, Cosworth | 1971-1977 | 6578 | 11 |
| MONZA | Spyder, 2+2, Towne Coupe | 1975-1980 | 1030 | 12 |
| CHEVETTE | S, Scooter, CS2 door | 1976-1987 | 996 | 13 |
| CHEVETTE | S, Scooter, CS-4 door | 1976-1987 | 996 | 13 |
| CITATION | X-11, Citation II | 1980-1985 | 997 | 15 |
| CAVALIER | CS, RS, Z24, LS | 1982-1998 | 989 | 16 |
| CELEBRITY | CS, Eurosport, VR | 1982-1998 | 994 | 17 |
| BERETTA/CORSICA | GT | 1988-1998 | 998 | 19 |
| LUMINA | Z-34, Euro | 1990-1998 | 1019 | 20 |
| COBALT | | | 174890 | 22 |
| HHR | | | 210243 | 23 |
| SPECTRUM | | 1985-1998 | 1032 | 31 |
| NOVA/GEO PRIZM | CL, NUMMI-built vehicle | 1985-1998 | 1007 | 32 |
| SPRINT/GEO SPRINT | | 1985-1998 | 1010 | 33 |
| GEO METRO | LSi, Xfi | 1989-1998 | 1004 | 34 |
| GEO STORM | Gsi | 1985-1998 | 1012 | 35 |
| MONTE CARLO (1995+) (FWD | Z34 | 1995-1998 | 6580 | 36 |
| ONLY) | | | | |
| MALIBU (1997+) | | 1997-1998 | 6582 | 37 |
| SSR | | | 157958 | 38 |
| AVEO | | | 158109 | 39 |
| OTHER AUTOMOBILE | | | 1036 | 398 |
| UNKNOWN AUTOMOBILE | | | 1037 | 399 |
| S-10 BLAZER, BLAZER | S-10 p/u baseed (100.5" WB) | 1983-1994 | 6584 | 401 |
| S-10 BLAZER, BLAZER | Blazer | 1995-1998 | 6584 | 401 |
| GEO TRACKER | Lsi | 1989-1998 | 1014 | 402 |
| TRAILBLAZER (2002 and later) | | | 133074 | 403 |
| EQUINOX | | | 158113 | 404 |
| FULLSIZE BLAZER (K, Tahoe) | K-series, fullsized p/u based | 1969-1994 | 6587 | 421 |
| FULLSIZE BLAZER (K, Tahoe) | Tahoe | 1995-1998 | 6587 | 421 |
| SUBURBAN | | 1900-1998 | 6590 | 431 |
| ASTRO VAN | Minivan | 1985-1998 | 6592 | 441 |
| LUMINA APV/VENTURE | Venture, | 1990-1998 | 6594 | 442 |
| UPLANDER | · | | 174892 | 444 |
| G-SERIES VAN | Beauville, Chevy Van, Sport Van, G10-G30, Express | 1900-1998 | 6599 | 461 |
| P-SERIES VAN | | 1900-1998 | 6601 | 466 |
| VAN DERIVATIVE | Hi-cube, Parcel Van | 1900-1998 | 6603 | 470 |
| S-10/T-10 | 4 X 4 | 1982-1998 | 6605 | 471 |
| LUV | Imported pickup | 1900-1998 | 6607 | 472 |
| COLORADO | . , , | | 158111 | 473 |
| C, K, R, V-SERIES PICKUP | C10-C30, K10-K30, R10-R30, V10-V30, Silverado, C-K 1500, | 1900-1998 | 6609 | 481 |
| | 2500, 3500 | | | |

| AVALANCHE OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK | | | 44657 1038 1039 | 482 498 499 |
|---|--|-----------|-----------------------|-------------------|
| MEDIUM/HEAVY CBE | C50/60/65; M60/65; H70/80/90; J70/80/90; Bison 90; all other CBE | 1900-1998 | 6611 | 881 |
| MEDIUM/HEAVY COE LOW ENTRY | T60/65 - all other COE low entry | 1900-1998 | 6613 | 882 |
| MEDIUM/HEAVY COE HIGH ENTRY | Titan 90, all other COE hight entry | 1900-1998 | 6615 | 883 |
| MEDIUM/HEAVY; UNKNOWN ENGINE LOCATION | | | 6617 | 884 |
| MEDIUM/HEAVY; UNKNOWN ENGINE LOCATION | MKIII, 1500 | 1900-1979 | 6619 | 890 |
| OTHER MEDIUM/HEAVY TRUCK | | | 1040 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27267 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 1041 | 899 |
| BUS | S-60 series | 1900-1998 | 1042 | 981 |
| OTHER BUS | | | 1043 | 988 |
| UNKNOWN BUS TYPE | | | 6620 | 989 |
| OTHER VEHICLE | | | 1044 | 998 |
| UNKNOWN VEHICLE | | | 1045 | 999 |

6 CHRYSLER

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|---|---|-----------|------------|---------|
| CORDOBA NEW YORKER FIFTH AVENUE ('89) | Crown, 300, LS | 1975-1983 | 159 175 | 9 10 |
| NEWPORT | | | 179 | 10 |
| RAMPAGE 2.2 (CAR BASED PICKUP) | GT, Sport | 1982-1984 | 6274 | 13 |
| NEW YORKER ('83-'90) | | | 173 | 14 |
| NEW YORKER SALON | | | 177 | 14 |
| NEW YORKER/E CLASS/IMPERIAL/5TH | FWD vehicles, Turbo | 1983-1993 | 163 | 14 |
| NEW YORKER/E CLASS/IMPERIAL/5TH | Imperial | 1990-1993 | 163 | 14 |
| RWD ONLY-NEW YORKER/NEWPORT/5TH | Custom, Royal, Brougham, Town and Country | 1979-1981 | 160 | 14 |
| RWD ONLY-NEW YORKER/NEWPORT/5TH | Custom, Royal, Brougham, Town and Country | 1982-1989 | 160 | 14 |
| RWD ONLY-NEW YORKER/NEWPORT/5TH | Custom, Royal, Brougham, Town and Country | 1900-1978 | 160 | 14 |
| RWD ONLY-NEW YORKER/NEWPORT/5TH | 300 | 1900-1971 | 160 | 14 |
| LASER | Turbo, XE, XT | 1984-1986 | 164 | 15 |
| LEBARON | Medallion, Salon (RWD), Landau, LX | 1977-1981 | 165 | 16 |
| LEBARON | FWD except GTS or GTC Sport Coupe | 1982-1998 | 165 | 16 |
| LEBARON GTS/GTC | GTS-Turbo | 1985-1998 | 166 | 17 |
| LEBARON GTS/GTC | GTC-Sport Coupe | 1987-1998 | 166 | 17 |
| INTREPID (CANADIAN) | | | 44198 | 18 |
| NEON (EXPORT) | | | 149626 | 19 |
| TC (MASERATI SPORT) | Turbo Convertible | 1988-1991 | 181 | 31 |
| CONQUEST | TSI, Turbo | 1987-1989 | 158 | 35 |
| CONCORDE | | 1993-1998 | 157 | 41 |
| LHS | New Yorker | 1994-1998 | 171 | 42 |

| SEBRING | | | 180 43 |
|-------------------------------------|----------|----------------------|--------------------|
| CIRRUS | | | 156 44 |
| 300/300M/300C PT CRUISER | | 1999-2000 202 361 | |
| PROWLER | | 2001-2002 1465 | |
| PACIFICA | | 1465 | |
| CROSSFIRE | | 1581 | 115 55 |
| OTHER AUTOMOBILE | | | 185 398 |
| UNKNOWN AUTOMOBILE ASPEN | | 2329 | 186 399 963 421 |
| TOWN AND COUNTRY | Minivan | | 183 441 |
| VOYAGER | | 384 | |
| OTHER LIGHT TRUCK | | | 187 498 |
| UNKNOWN LIGHT TRUCK | | | 188 499 |
| UNKNOWN VEHICLE | | ' | 189 999 |
| 6903 CITROEN | | | |
| MODEL | INCLUDES | YEAR ORAC | LE SAS |
| OTHER AUTOMOBILE | | | 243 33 |
| UNKNOWN AUTOMOBILE | | | 244 33 |
| | | | |
| 2909 CONSULIER | | | |
| MODEL | INCLUDES | YEAR ORAC | LE SAS |
| OTHER AUTOMOBILE | | 1900-1998 95 | 589 398 |
| UNKNOWN AUTOMOBILE | | | 591 398 |
| | | | |
| 20212 DAEWOO | | | |
| MODEL | INCLUDES | YEAR ORAC | LE SAS |
| LANOS | | 1999-2000 202 | 213 31 |
| NUBIRA | | 202 | 215 32 |
| LEGANZA | | 1999-2000 202 | |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 313 313 | |
| UNKNOWN VEHICLE | | 313 | |
| | | | |
| 60 DAIHATSU | | | |
| MODEL | INCLUDES | YEAR ORAC | LE SAS |
| CHARADE | | 1990-1992 | 158 31 |
| OTHER AUTOMOBILE | | 4 | 160 398 |
| UNKNOWN AUTOMOBILE | | | 161 399 |
| ROCKY OTHER LIGHT TRUCK | | | 159 401 162 498 |
| UNKNOWN LIGHT TRUCK | | | 163 499 |
| UNKNOWN VEHICLE | | | 164 999 |
| 6904 DELOREAN | | | |
| MODEL | INCLUDES | YEAR ORAC | LE SAS |
| | | | |

| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 245 246 | 34 34 |
|--|--|------------------------|------------|------------|
| 2904 DESOTO | WOULDED | \/ F | 004015 | 0.1.0 |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 1900-1998 | | 398 398 |
| 6916 DESTA | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 280 281 | 48 48 |
| 81 DIAMOND REO/REO | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY TRUCK | | 1900-1998 | 3 9655 | 850 |
| BASED MOTORHOME MEDIUM/HEAVY - CBE | | 1900-1998 | 3 9657 | 881 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | 1900-1998 | | 882 |
| MEDIUM/HEAVY - COE/HIGH | | 1900-1998 | 9668 | 883 |
| ENTRY MEDIUM/HEAVY - UNKNOWN | | 1900-1998 | 9670 | 884 |
| ENGINE MEDIUM/HEAVY - COE/ENTRY | | | 9672 | 890 |
| POSITION MEDIUM/HEAVY - OTHER | | 1900-1998 | 9673 | 898 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 32525 | 899 |
| 9803 DIVCO | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY - CBE | | | 9760 | 803 |
| MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9764 | 803 |
| MEDIUM/HEAVY - COE/HIGH | | | 9762 | 803 |
| ENTRY MEDIUM/HEAVY - COE/LOW | | | 9761 | 803 |
| ENTRY MEDIUM/HEAVY - OTHER | | | 9765 | 803 |
| MEDIUM/HEAVY - UNKNOWN ENGINE | | | 9763 | 803 |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9759 | 803 |
| 7 DODGE | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| DART | Custom, Swinger, Sport, GT, Demon, Special, Special Edition, 170, 270, 340, 360: WB=111" | 1962-1976 | 6 6259 | 1 |

| DART | Custom, Swinger, Sport, GT, Demon, Special, Special Edition, | 1962-1976 | 6259 | 1 |
|---|---|---|--|---|
| | 170, 270, 340, 360: WB=108" | | | |
| CORONET/CHARGER/MAGNU | Charger | 1900-1978 | 226 | 2 |
| M | | | | |
| CORONET/CHARGER/MAGNU | Brougham, Custom, Superbee, Crestwood, Deluxe, XE, R/t, | 1900-1979 | 226 | 2 |
| M | SE 440, 500, Police | | | _ |
| POLARA/MONACO/ROYAL | Custom, Special, Crestwood, Brougham, Police Taxi | 1977-1978 | 6264 | 3 |
| MONACO | | | | _ |
| POLARA/MONACO/ROYAL | Custom, Special, Crestwood, Brougham, Police Taxi | 1900-1976 | 6264 | 3 |
| MONACO | DT/40_0T0 | 1000 1000 | 0000 | |
| VIPER | RT/10, GTS | 1992-1998 | 6268 | 4 |
| CHALLENGER | R/T, T/A, Rallye | 1970-1974 | 6270 | 5 |
| ASPEN | Custom, Special Edition, Police, R/T, Sport: WB=113" | 1976-1980 | 195 | 6 |
| ASPEN | Custom, Special Edition, Police, R/T, Sport: WB=109" | 1976-1980 | 195 | 6 |
| DIPLOMAT | Medallion, Salon, S | 1977-1989 | 215 | 7 |
| OMNI/CHARGER | O24, DeTomaso, Miser, GLH, GLHS, Shelby, America, Expo | 1978-1990 | 124 | 8 |
| | | | | |
| OMNI/CHARGER | Charger 2.2 | 1983-1990 | 124 | 8 |
| MIRADA | | 1980-1983 | 227 | 9 |
| ST REGIS | Police, Taxi | 1979-1981 | 9 | 10 |
| ARIES (K) | Custom, SE, LE | 1981-1989 | 192 | 11 |
| 400 | LS | 1983-1983 | 6272 | 12 |
| RAMPAGE 2.2, GT, SPORT | | | 25735 | 13 |
| 600 | ES, Turbo | 1983-1988 | 191 | 14 |
| DAYTONA | Turbo Z, Shelby Z, Pacifica, C/S Competition, IROC R/T | 1984-1994 | 208 | 15 |
| LANCER | Pacifica, Turbo, ES, Shelby | 1985-1989 | 223 | 16 |
| | | 1987-1998 | _ | |
| SHADOW | ES, Turbo | | 6276 | 17 |
| DYNASTY | 50 O. II. D.T. | 1988-1998 | 216 | 18 |
| SPIRIT | ES, Shelby, R/T | 1989-1994 | 5 | 19 |
| NEON | Expresso | 1994-1998 | 230 | 20 |
| | | | | |
| MAGNUM | | | 174894 | 21 |
| MAGNUM CHARGER (2006+) | | | 174894 174896 | 21 24 |
| | | | | |
| CHARGER (2006+) | | | 174896 | 24 |
| CHARGER (2006+) CALIBER | all imported | 1978-1983 | 174896 210245 | 24 25 |
| CHARGER (2006+) CALIBER AVENGER | all imported | 1978-1983 | 174896 210245 232965 | 24 25 26 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL | all imported RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, | 1978-1983 1974-1976 | 174896 210245 232965 | 24 25 26 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) | | | 174896 210245 232965 200 | 24 25 26 33 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, | | 174896 210245 232965 200 | 24 25 26 33 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT | 1974-1976 | 174896 210245 232965 200 203 | 24 25 26 33 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, | 1974-1976 | 174896 210245 232965 200 203 | 24 25 26 33 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT | 1974-1976 1980-1994 1977-1980 | 174896 210245 232965 200 203 203 203 | 24 25 26 33 34 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT | 1974-1976 1980-1994 | 174896 210245 232965 200 203 203 | 24 25 26 33 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 | 174896 210245 232965 200 203 203 203 203 | 24 25 26 33 34 34 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 | 174896 210245 232965 200 203 203 203 203 206 | 24 25 26 33 34 34 34 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 | 174896 210245 232965 200 203 203 203 203 206 10 | 24 25 26 33 34 34 34 34 35 39 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 | 174896 210245 232965 200 203 203 203 203 206 10 228 | 24 25 26 33 34 34 34 34 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 | 174896 210245 232965 200 203 203 203 203 206 10 | 24 25 26 33 34 34 34 34 35 39 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 | 174896 210245 232965 200 203 203 203 203 206 10 228 | 24 25 26 33 34 34 34 34 35 39 40 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 | 24 25 26 33 34 34 34 35 39 40 41 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 | 24 25 26 33 34 34 34 35 39 40 41 42 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 | 24 25 26 33 34 34 34 35 39 40 41 42 43 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER NITRO | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 1995-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 232967 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 403 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER NITRO RAMCHARGER | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 1995-1998 1986-1998 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 232967 6278 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 403 421 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER NITRO RAMCHARGER DURANGO | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 1995-1998 1996-1998 1900-1998 1998-2000 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 232967 6278 18847 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 403 421 422 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER NITRO RAMCHARGER DURANGO VISTA | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 1995-1998 1995-1998 1998-2000 1984-1991 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 232967 6278 18847 204 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 403 421 422 441 |
| CHARGER (2006+) CALIBER AVENGER CHALLENGER (ALL IMPORTED) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) COLT (EXCLUDES VISTA) CONQUEST STEALTH MONACO INTREPID AVENGER STRATUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE RAIDER NITRO RAMCHARGER DURANGO | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93" Turbo | 1974-1976 1980-1994 1977-1980 1977-1980 1984-1986 1991-1998 1990-1992 1993-1998 1995-1998 1995-1998 1996-1998 1900-1998 1998-2000 | 174896 210245 232965 200 203 203 203 203 206 10 228 221 196 11 14 15 127 232967 6278 18847 | 24 25 26 33 34 34 34 35 39 40 41 42 43 398 399 401 403 421 422 |

| B-SERIES VANS | Sportsman, Royal, Maxiwagon, Ram, B150-B350, Tradesman | 1900-1998 | 6280 | 461 |
|------------------------------|--|-----------|----------|-----|
| SPRINTER | | | 158117 | 462 |
| VAN DERIVATIVE | Kary Van | 1900-1998 | 6282 | 470 |
| D50, COLT P/U, RAM 50/RAM | D50, Colt P/U | 1900-1982 | 126 | 471 |
| 100 | | | | |
| D50, COLT P/U, RAM 50/RAM | Ram 50/Ram 100 | 1983-1998 | 126 | 471 |
| 100 DAKOTA | WB=112" | 1987-1998 | 6284 | 472 |
| DAKOTA | WB=124" | 1987-1998 | 6284 | 472 |
| D, W-SERIES PICKUP, W100- | Ram, Custom, Royal, Miser, D100-D350 | 1900-1998 | 6287 | 481 |
| W350 | , | .000 .000 | 020. | |
| RAM | 1500/2500/3500, P/U | 1994-1998 | 6289 | 482 |
| OTHER LIGHT TRUCK | | | 16 | 498 |
| UNKNOWN LIGHT TRUCK | | | 17 | 499 |
| MEDIUM/HEAVY: CBE | | | 6291 | 881 |
| MEDIUM/HEAVY: COE LOW | | | 6293 | 882 |
| ENGRY MEDIUM/HEAVY: COE HIGH | | | 6294 | 883 |
| ENTRY | | | 0294 | 003 |
| MEDIUM/HEAVY: UNKNOWN | | | 6295 | 884 |
| ENGINE | | | | |
| MEDIUM/HEAVY: COE ENTRY | | | 6296 | 890 |
| POSITION | | | 40 | 000 |
| OTHER MEDIUM/HEAVY TRUCK | | | 18 | 898 |
| UNK TYPE TRUCK | | | 27268 | 899 |
| (LIGHT/MED/HEAVY) | | | | |
| UNKNOWN MEDIUM/HEAVY | | | 19 | 899 |
| TRUCK | | | | |
| MEDIUM BUS | not van based | 1900-1998 | 20 | 981 |
| OTHER BUS | | | 21 | 988 |
| UNKNOWN BUS TYPE | | | 6258 | 989 |
| OTHER VEHICLE | | | 22 23 | 998 |
| UNKNOWN VEHICLE | | | 23 | 999 |
| 71 DUCATI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| WODEL | INOLOBEO | ILAN | OKAOLL | OAO |
| MOTORCYCLE (000-050CC) | | | 315 | 701 |
| MOTORCYCLE (051-124CC) | | | 316 | 702 |
| MOTORCYCLE (125-349CC) | | | 317 | 703 |
| MOTORCYCLE (350-449CC) | | | 318 | 704 |
| MOTORCYCLE (450-749CC) | | | 319 | 705 |
| MOTORCYCLE (750CC-OVER) | | | 320 | 706 |
| MOTORCYCLE (UNKNOWN | | | 321 | 709 |
| CC) | | | | |
| OTHER MOTORED CYCLE | | | 322 | 798 |
| UNKNOWN MOTORED CYCLE | | | 323 | 799 |
| | | | | |
| 10 EAGLE | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| | | | | J |
| SUMMIT | DL, LX, ES | 1989-1998 | 65 | 34 |
| TALON | TSI | 1990-1998 | 67 | 37 |
| | | | | |

| PREMIER VISION MEDALLION OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SUMMIT WAGON OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | LX, ES DL, LX WB=99.2" | 1988-1992 1993-1998 1988-1990 1992-1998 | 8 68 0 62 70 72 | 40 41 44 398 399 441 498 499 |
|---|---|--|---|--|
| 2905 EXCALIBER | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 1900-1998 | | 398 398 |
| 6905 FERRARI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE SUPERAMERICA UNKNOWN AUTOMOBILE 36 FIAT | | | 247 210247 248 | 35 35 35 |
| | INCLUDES | VEAD | ODACLE | CAC |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 124 (COUPE/SEDAN) 124 SPIDER/RACER BRAVA - 131 850 (COUPE/SPYDER) 128 X-1/9 STRADA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE MEDIUM/HEAVY COE LOW ENTRY MEDIUM/HEAVY COE HIGH ENTRY MEDIUM/HEAVY COE ENTRY POSITION OTHER MEDIUM/HEAVY TRUCK UNKNOWN MEDIUM/HEAVY TRUCK UNKNOWN VEHICLE | Sport Spider 2000/1500 | 1967-1975 1968-1985 1975-1985 1967-1975 1972-1975 1975-1985 | 766 765 3 6489 9 6491 3 768 | 31 32 33 34 35 36 37 398 399 882 883 890 898 |
| 12 FORD | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| FALCON FAIRLANE MUSTANG/MUSTANG II MUSTANG/MUSTANG II | Sprint, GT, Futura Torino Ghia, SVO, GT, LX, Shelby Mach, Boss, Granada, Cobra | 1900-1970 1900-1970 1974-1998 1965-1973 | 0 6379 8 100 | 1 2 3 3 |

| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1955-1957 | 118 | 4 |
|------------------------------------|--|------------------------|-----------------|------------|
| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1958-1971 | 118 | 4 |
| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1980-1988 | 118 | 4 |
| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1989-1998 | 118 | 4 |
| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1977-1979 | 118 | 4 |
| THUNDERBIRD (ALL SIZES) | Landau, Heritage, Turbo coupe, Elan, Fila | 1972-1976 | 118 | 4 |
| LTD II | S, Squire, Brougham | 1977-1979 | 98 | 5 |
| LTD/CUSTOM/GALAXIE (ALL SIZES) | XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT | 1900-1977 | 94 | 6 |
| LTD/CUSTOM/GALAXIE (ALL SIZES) | XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT | 1978-1982 | 94 | 6 |
| LTD/CUSTOM/GALAXIE (ALL SIZES) | XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT | 1983-1986 | 94 | 6 |
| RANCHERO | Flacon/Fairlane based | 1900-1971 | 6381 | 7 |
| RANCHERO | Torino/LTD II based | 1972-1979 | 6381 | 7 |
| MAVERICK | Grabber | 1970-1977 | 6384 | 8 |
| PINTO | Pony, MPG, ESS | 1971-1980 | 105 | 9 |
| TORINO/GRAN TORINO/ELITE | GT, Cobra, Sport, Squire, Brougham | 1971-1976 | 6386 | 10 |
| GRANADA | ESS, Ghia | 1975-1982 | 6388 | 11 |
| FAIRMONT | Futura, Sport Coupe | 1978-1983 | 87 | 12 |
| ESCORT/EXP | L, GL, GLX, SS, GT, LX, ZX2 | 1981-1991 | 80 | 13 |
| TEMPO | L, GL, GLX, Sport, 4X4 | 1992-1999 | 115 | 15 |
| CROWN VICTORIA | | 1981-1989 | 79 | 16 |
| TAURUS | Mt-5, L, GL, LX, SHO | 1986-1989 | 110 | 17 |
| PROBE | GL, LX, GT | 1988-1998 | 6390 | 18 |
| FIVE HUNDRED | | | 174898 | 21 |
| FREESTYLE | | | 174900 | 22 |
| FUSION | | | 210249 | 23 |
| EDGE | | | 232969 | 24 |
| ENGLISH FORD | Cortina | 1900-1998 | 6392 | 31 |
| FIESTA | Sport, Ghia | 1978-1980 | 92 | 32 |
| FESTIVA | | 1988-1993 | 88 | 33 |
| LASER | | 1900-1998 | 6394 | 34 |
| CONTOUR | | 1994-1998 | 77 76 | 35 |
| ASPIRE FOCUS | | 1994-1998 | 76 | 36 37 |
| GT | | | 28553 158122 | 38 |
| OTHER AUTOMOBILE | | | 1084 | 398 |
| UNKNOWN AUTOMOBILE | | | 1085 | 399 |
| EXPLORER/BRONCO | Bronco | 1900-1977 | 6396 | 401 |
| ii/BRONCO (-77) | | | | |
| EXPLORER/BRONCO ii/BRONCO (-77) | Bronco IIEddie Bauer, XL, XLT, Limited | 1983-1989 | 6396 | 401 |
| EXPLORER/BRONCO ii/BRONCO (-77) | Explorer | 1990-1998 | 6396 | 401 |
| ESCAPE | | | 37748 | 402 |
| BRONCO-FULLSIZE | Eddie Bauer, Custom, XL, XLT | 1978-1998 | 6400 | 421 |
| EXPEDITION | | 1997-1998 | 6402 | 422 |
| EXCURSION | W.T.O. W | 4004 4000 | 37078 | 431 |
| AEROSTAR | XLT, Cargo Van | 1984-1998 | 6404 | 441 |
| WINDSTAR | | 1994-1998 | 6406 | 442 |
| FREESTAR E SERIES VANS | Foonalina Clubwagan Chatago F450 5250 | 4000 4000 | 158120 | 443 |
| E-SERIES VANS | Econoline, Clubwagon, Chateau, E150-E350 | 1900-1998 | 6408 | 461 470 |
| VAN DERIVATIVE | Parcel van | 1900-1998 | 6411 | 470 471 |
| RANGER RANGER | Supercab, 4X4, STX, Splash: WB=108" Supercab, 4X4, STX, Splash: WB=108" | 1982-1998 1982-1998 | 6413 6413 | 471 471 |
| COURIER | Imported pickup | 1900-1998 | 6416 | 471 |
| GOGINEN | ітропса ріскар | 1300-1390 | 0410 | 712 |

| SPORT TRAC | | | 44658 | 473 |
|-------------------------------------|--------------------------------------|-----------|-------|-----|
| F-SERIES PICKUP | F100-F350 | 1900-1998 | 6418 | 481 |
| OTHER LIGHT TRUCK | | | 1086 | 498 |
| UNKNOWN LIGHT TRUCK | | | 1087 | 499 |
| F450/550 PICKUP >4536 GVWR | | | 39465 | 880 |
| MEDIUM/HEAVY CBE | F-5 through F-8, L-series, FT-series | 1900-1998 | 6420 | 881 |
| MEDIUM/HEAVY COE LOW ENGRY | C/Ct series | 1900-1998 | 6422 | 882 |
| MEDIUM/HEAVY COE HIGH ENTRY | C/CLT series | 1900-1998 | 6424 | 883 |
| MEDIUM/HEAVY: UNKNOWN ENGINE | | | 6426 | 884 |
| MEDIUM/HEAVY: COE ENTRY POSITION | | | 6427 | 890 |
| OTHER MEDIUM/HEAVY TRUCK | | | 1088 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27269 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 1089 | 899 |
| MEDIUM BUS | B-series (not van based) | 1900-1998 | 1090 | 981 |
| OTHER BUS | | | 1091 | 988 |
| UNKNOWN BUS TYPE | | | 6428 | 989 |
| OTHER VEHICLE | | | 1092 | 998 |
| UNKNOWN VEHICLE | | | 1093 | 999 |

82 FREIGHTLINER/WHITE

| MODEL | INCLUDES YEAR | ORACLE | SAS |
|---------------------------------------|---------------|--------|-----|
| CDDINTED/ADVANTAGE | | 404504 | 404 |
| SPRINTER/ADVANTAGE | | 104594 | 461 |
| M-LINE WALK IN VAN | | 27457 | 470 |
| OTHER LIGHT TRUCK | | 27455 | 498 |
| UNKNOWN LIGHT TRUCK | | 27456 | 499 |
| MEDIUM/HEAVY TRUCK BASED MOTORHOME | 1900-1998 | 9691 | 850 |
| MEDIUM/HEAVY - CBE | 1900-1998 | 9693 | 881 |
| | | | |
| MEDIUM/HEAVY - COE/LOW ENTRY | 1900-1998 | 9695 | 882 |
| MEDIUM/HEAVY - COE/HIGH | 1900-1998 | 9697 | 883 |
| ENTRY | | | |
| MEDIUM/HEAVY - UNKNOWN | 1900-1998 | 9699 | 884 |
| ENGINE | | | |
| MEDIUM/HEAVY - COE/ENTRY | 1900-1998 | 9701 | 890 |
| POSITION | 4000 4000 | 0700 | 000 |
| MEDIUM/HEAVY - OTHER | 1900-1998 | | 898 |
| UNKNOWN LIGHT/MEDIUM/HEAVY | | 27458 | 899 |
| BUS CONVENTIONAL ENGINE | | 39977 | 981 |
| OUT FRONT | | 33311 | 301 |
| BUS FRONT ENGINE/FLAT | | 39978 | 982 |
| FRONT | | | |
| BUS REAR ENGINE/FLAT | | 39979 | 983 |
| FRONT | | | |
| OTHER BUS | | 39980 | 988 |
| UNKNOWN BUS TYPE | | 39981 | 989 |
| UNKNOWN VEHICLE | | 45156 | 999 |
| | | | |

83 FWD

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|-------------------------------------|--|-----------|--------|-----|
| MEIDUM/HEAVY TRUCK | | | 9705 | 850 |
| BASED MOTORHOME | | | 3103 | 030 |
| MEDIUM/HEAVY - CBE | | | 9706 | 881 |
| MEDIUM/HEAVY - COE/LOW | | | 9707 | 882 |
| ENTRY MEDIUM/HEAVY - COE/HIGH | | | 9708 | 883 |
| ENTRY MEDIUM/HEAVY - UNKNOWN | | | 9709 | 884 |
| ENGINE MEDIUM/HEAVY - COE/ENTRY | | | 9710 | 898 |
| POSITION MEDIUM/HEAVY - OTHER | | | 9711 | 898 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 32526 | 899 |
| 23 GMC | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| CABALLERO/SPRINT | Sierra Madre del Sur, SP | 1900-1977 | 6687 | 7 |
| CABALLERO/SPRINT | Sierra Madre del Sur, SP | 1978-1998 | 6687 | 7 |
| ARCADIA | Sierra Maare der Sar, Sr | 1070 1000 | 232971 | 8 |
| OTHER AUTOMOBILE | | | 914 | 398 |
| UNKNOWN AUTOMOBILE | | | 915 | 399 |
| JIMMY/TYPHOON/ENVOY | S15 based (100.5" WB) | 1983-1998 | 6690 | 401 |
| FULLSIZE JIMMY/YUKON | fullsize pikup based | 1900-1998 | 6692 | 421 |
| SUBURBAN | all models | 1900-1998 | 6694 | 431 |
| | all models | | | 441 |
| SAFARI (MINIVAN) | Bally Van Vandura C1E C2E | 1986-1998 | 6696 | |
| G-SERIES VAN | Rally Van, Vandura, G15-G35 | 1900-1998 | 6698 | 461 |
| P-SERIES VAN | | 1900-1998 | 6700 | 466 |
| VAN DERIVATIVE | AVA Cuplana | 1987-1987 | 6702 | 470 |
| S15/T15/SONOMA | 4X4, Cyclone | 1982-1998 | 6704 | 471 |
| CANYON | 045 005 1445 1405 D45 D05 1445 1405 015DD4 | 4000 4000 | 158124 | 472 |
| C, K, R, V-SERIES PICKUP | C15-C35, K15-K35, R15-R35, V15-V35, SIERRA | 1900-1998 | 6706 | 481 |
| OTHER LIGHT TRUCK | | | 916 | 498 |
| UNKNOWN LIGHT TRUCK | | | 917 | 499 |
| MEDIUM/HEAVY CBE | W5000/6000/7000 series, Brigadier/General models | 1900-1998 | 6709 | 881 |
| MEDIUM/HDAVY COE LOW ENTRY | W6000/W7000, all other COE, low entry | 1900-1998 | 6711 | 882 |
| MEDIUM/HEAVY COE HIGH ENTRY | Astro 95, all other COE, high entry | 1900-1998 | 6713 | 883 |
| MEDIUM/HEAVY: UNKNOWN ENGINE | | 1900-1998 | 6715 | |
| MEDIUM/HEAVY: COE ENTRY POSITION | | | 6717 | 890 |
| OTHER MEDIUM/HEAVY TRUCK | | | 918 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27270 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 919 | 899 |
| MEDIUM BUS | B6000 | 1900-1998 | 920 | 981 |
| OTHER BUS | | | 921 | 988 |
| UNKNOWN BUS TYPE | | | 6718 | 989 |
| UNKNOWN VEHICLE | | | 922 | 999 |
| | | | | |

25 GRUMMAN

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---|---|------------------------|--|---|
| LLV STEP-IN VAN OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK MEDIUM/HEAVY TRUCK - CBE | Postal vehicles (see Chevrolet for VIN) Multi-stop, step van | 1900-1998 1900-1998 | | 441 442 498 499 881 |
| MEDIUM/HEAVY TRUCK - COE LOW ENTRY | | | 6732 | 882 |
| MEDIUM/HEAVY TRUCK - COE HIGH ENTRY | | | 6733 | 883 |
| MEDIUM/HEAVY TRUCK UNKNOWN ENGINE | | | 6734 | 884 |
| MEDIUM/HEAVY TRUCK ENTRY POSITION OTHER MEDIUM/HEAVY | | | 6735 928 | 890 898 |
| TRUCK UNK TYPE TRUCK | | | 27271 | 899 |
| (LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY | | | 929 | 899 |
| TRUCK BUS-FLAT FRONT, REAR ENGINE | Transit | 1900-1998 | 3 6736 | 983 |
| OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE | | | 930 6738 931 | 988 989 999 |
| 72 HARLEY-DAVIDSON | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) | | | 324 325 326 327 328 329 | 701 702 703 704 705 706 709 |
| OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 331 332 | 798 799 |
| 6906 HILLMAN | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 249 250 | 36 36 |
| 9806 HINO | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |

| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | 9781 9785 | 806 806 |
|--|--------------|------------|
| MEDIUM/HEAVY - COE/HIGH ENTRY | 9783 | 806 |
| MEDIUM/HEAVY - COE/LOW ENTRY | 9782 | 806 |
| MEDIUM/HEAVY - OTHER | 9786 | 806 |
| MEDIUM/HEAVY - UNKNOWN ENGINE | 9784 | 806 |
| MEDIUM/HEAVY BASED MOTORHOME | 9780 | 806 |

37 HONDA

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---|---|-----------|------------|------------|
| CIVIC/CRX/DEL SOL | 1300, 1500, CVCC, DX, EX, VX, CRX, S, Si, HF, 4WD Wagon | 1900-1998 | 775 | 31 |
| CIVIC/CRX/DEL SOL | del Sol | 1993-1998 | 775 | 31 |
| ACCORD | LX, CVCC, SE-i, LX-i, EX, EX wagon | 1900-1981 | 774 | 32 |
| ACCORD | LX, CVCC, SE-i, LX-i, EX, EX wagon, 6 cylinder LX/EX | 1987-1998 | 774 | 32 |
| ACCORD | LX, CVCC, SE-i, LX-i, EX, EX wagon | 1982-1986 | 774 | 32 |
| PRELUDE | Si | 1980-1983 | 651 | 33 |
| PRELUDE | Si | 1984-1998 | 651 | 33 |
| 600 | Coupe, Sedan | 1900-1998 | 6504 | 34 |
| S2000 | | | 31630 | 35 |
| INSIGHT | | | 37080 | 37 |
| FCX | | | 158126 | 38 |
| FIT | | | 210251 | 39 |
| OTHER AUTOMOBILE | | | 653 | 398 |
| UNKNOWN AUTOMOBILE | | | 654 | 399 |
| PASSPORT | | 1994-1998 | 6506 | 401 |
| CR-V | | 1997-2000 | | 402 |
| ELEMENT | | | 146526 | 403 |
| PILOT | | | 146528 | 421 |
| ODYSSEY | | 1995-1998 | 650 | 441 |
| RIDGELINE | | | 174902 | 471 |
| OTHER LIGHT TRUCK | | | 655 | 498 |
| UNKNOWN LIGHT TRUCK | | | 656 | 499 |
| MOTORCYCLE (000-050CC) | | | 657 | 701 |
| MOTORCYCLE (051-124CC) | | | 658 | 702 |
| MOTORCYCLE (125-349CC) | | | 659 | 703 |
| MOTORCYCLE (350-449CC) | | | 660 661 | 704 705 |
| MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) | | | 662 | 705 706 |
| MOTORCTCLE (750CC-OVER) | | | 002 | 700 |
| MOTORCYCLE (UNKNOWN CC) | | | 663 | 709 |
| ATC/ATV (000-050CC) | | | 664 | 731 |
| ATC/ATV (051-124CC) | | | 665 | 732 |
| ATC/ATV (125-349CC) | | | 666 | 733 |
| ATC/ATV (350CC-OVER) | | | 667 | 734 |
| ATC/ATV (UNKNOWN CC) | | | 668 | 739 |
| OTHER MOTORED CYCLE | | | 46435 | 798 |
| UNKNOWN VEHICLE | | | 670 | 999 |
| | | | | |

| 2907 | н | IDS | ON |
|------|---|-----|----|
| | | | |

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|--|--|--|---|---|
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 1900-1998 | 9577 9587 | 398 398 |
| 232974 HYOSUNG | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 232996 233002 | 798 799 |
| 55 HYUNDAI | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| PONY EXCEL SONATA SCOUPE ELANTRA ACCENT TIBURON XG300/350 AZERA EQUUS OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SANTA FE TUCSON VERACRUZ ENTOURAGE OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | GL, GLS | 1984-1988 1984-1994 1989-1998 1991-1995 1992-1998 1995-1998 | 7878 480 482 7880 7882 7884 7886 44659 210253 233005 481 484 31626 174904 233007 233013 31628 31629 485 | 31 32 33 34 35 36 37 38 39 40 401 402 403 441 498 499 999 |
| 8 IMPERIAL | | | | |
| MODEL IMPERIAL IMPERIAL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 67602 INDIAN | INCLUDES Lebaron Mark Croww, Frank Sinatra editions | YEAR (1900-1976) 1981-1983 | 6297 6297 24 25 26 | 10 10 398 399 999 |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) | | | 104455 104456 104457 104458 | 701 702 703 704 |

| MOTORCYCLE (450-749CC) MOTORCYCLE (750CC OR GREATER) | 104459 104460 | 705 706 |
|--|------------------|------------|
| MOTORCYCLE (UNKNOWN CC) | 104466 | 709 |
| OTHER MOTORED CYCLE | 104467 | 798 |
| UNKNOWN MOTORED CYCLE | 104471 | 799 |

58 INFINITI

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|---------------------|----------|-----------|--------|------|
| Maa | | 4000 4000 | 444 | - 24 |
| M30 | | 1990-1992 | 444 | 31 |
| Q45 | | 1990-1998 | 445 | 32 |
| G20 | | 1991-1996 | 442 | 33 |
| G20 | | 1999-2000 | 442 | 33 |
| J30 | | 1993-1998 | 443 | 34 |
| 130 | | 1996-1998 | 7896 | 35 |
| 135 | | | 146530 | 36 |
| G35 | | | 146532 | 37 |
| M45 | | | 146534 | 38 |
| FX35/45 | | | 146536 | 39 |
| OTHER AUTOMOBILE | | | 446 | 398 |
| UNKNOWN AUTOMOBILE | | | 447 | 399 |
| QX4 | | 1997-1998 | 7898 | 401 |
| QX56 | | | 158128 | 421 |
| OTHER LIGHT TRUCK | | | 7900 | 498 |
| UNKNOWN LIGHT TRUCK | | | 7901 | 499 |
| UNKNOWN VEHICLE | | | 448 | 999 |

84 INTERNATIONAL HARVESTER/NAVISTAR

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---------------------------------------|---|-----------|--------|-----|
| SCOUT | Scout II, Utility pu, SS-2, Roadstar, 800 series, Traveler, Terra Traveltop | 1900-1998 | 9632 | 421 |
| TRAVELALL | 1010-1210, 100-200 | 1900-1998 | 9634 | 431 |
| MULTISTOP VAN | Metro RM, 120-160, MS 1210, MS 1510 | 1900-1998 | 9636 | 466 |
| PICKUP | R-100-500, 900A-1500C/D, 1010-1510 | 1900-1998 | 9638 | 481 |
| OTHER LIGHT TRUCK | | | 301 | 498 |
| UNKNOWN LIGHT TRUCK | | | 302 | 499 |
| TRUCK BASED MOTORHOME | | | 303 | 850 |
| MEDIUM HEAVY - CBE | Loadstar/Fleetstar, Paystar, CBE Transtar, 4200, S-series Mixer | 1900-1998 | 9641 | 881 |
| MEDIUM/HEAVY - COE LOW ENTRY | CO, VCO, DCO, 190-1950, Cargostar, LFM, 5370 (Garbage) | 1900-1998 | 9643 | 882 |
| MEDIUM/HEAVY - COE HIGH ENTRY | DCO, DCOT, UCO, VCOT, 405-series, COE Transtar, Unistar, Conco 707B, 9600 | 1900-1998 | 9645 | 883 |
| MEDIUM/HEAVY: UNKNOWN ENGINE LOCATION | | | 9647 | 884 |
| MEDIUM/HEAVY: COE ENTRY POSITION | | | 9648 | 890 |
| OTHER MEDIUM/HEAVY TRUCK | Fire Truck - R140-R306, CO 8190- | 1900-1998 | 231 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27275 | 899 |

| UNKNOWN MEDIUM/HEAVY TRUCK | | | 232 | 899 |
|---------------------------------|---------------------------------|-----------|-------|-----|
| BUS BASED MOTOHOME | | | 25907 | 950 |
| CONVENTIONAL BUS | R153-1853 - Loadstar, 1603-1853 | 1900-1998 | 9649 | 981 |
| BUS-FLAT FRONT, FRONT ENGINE | 173FC, 183FC | 1900-1998 | 9651 | 982 |
| BUS-FLAT FRONT, REAR ENGINE | 183RE, 193RD-transit | 1900-1998 | 9653 | 983 |
| OTHER BUS | | | 234 | 988 |
| UNKNOWN BUS TYPE | | | 32531 | 989 |
| OTHER VEHICLE | | | 235 | 998 |
| UNKNOWN VEHICLE | | | 236 | 999 |

38 ISUZU

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|--|---------------------------|-------------------------------------|----------------------------|--------------------------|
| I-MARK IMPULSE STYLUS | S, RS, Turbo Turbo, RS | 1985-1989 1984-1998 1990-1998 | 672 673 677 | 31 32 33 |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE TROOPER/TROOPER II | Dolumo I C | 4004 4000 | 680 681 678 | 398 399 401 |
| RODEO AMIGO | Deluxe, LS | 1984-1998 1991-1998 1989-1994 | 676 671 | 401 402 403 |
| VEHICROSS AXIOM | | 1303-1334 | 37454 44662 | 404 405 |
| ASCENDER OASIS | | 1996-1998 | 146538 674 | 421 441 |
| P'UP (PICKUP) HOMBRE P'UP (PICKUP) HOMBRE | 4x4 Hombre | 1900-1995 1996-1998 | 675 675 | 471 471 |
| i-280 i-350 OTHER LIGHT TRUCK | | | 210258 210260 682 | 473 474 498 |
| UNKNOWN LIGHT TRUCK MEDIUM/HEAVY - CBE | | | 683 6517 | 499 881 |
| MEDIUM/HEAVY COE LOW ENTRY | | | 6540 | 882 |
| MEDIUM/HEAVY COE HIGH ENTRY MEDIUM/HEAVY UNKNOWN | | | 6519 6523 | 883 884 |
| ENGINE LOCATION MEDIUM/HEAVY COE ENTRY | | | 6524 | 890 |
| POSITION OTHER MEDIUM/HEAVY TRUCK | | | 684 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27272 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK CONVENTIONAL FRONT | | | 685 6525 | 899 981 |
| ENGINE FRONT ENGINE/FLAT FRONT | | | 6526 | 982 |
| REAR ENGINE/FLAT FRONT OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE | | | 6527 686 6528 687 | 983 988 989 999 |

88 IVECO/MAGIRUS

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|----------|------|--------|-----|
| MEDIUM/HEAVY BASED MOTORHOME | | | 9736 | 850 |
| MEDIUM/HEAVY - CBE | | | 9737 | 881 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | | 9738 | 882 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 9739 | 883 |
| MEDIUM/HEAVY - UNKOWN ENGINE LOCATION | | | 9740 | 884 |
| MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9742 | 890 |
| MEDIUM/HEAVY - OTHER | | | 9743 | 898 |
| UNKNOWN MEDIUM/HEAVY | | | 32530 | 899 |
| TRUCK | | | | |
| 39 JAGUAR | | | | |

| MODEL | INCLUDES | YEAR (| DRACLE | SAS |
|---------------------------|-------------------------|------------------------|--------------|----------|
| XJ-S COUPE VANDEN PLAS | | 1976-1998 1999-2000 | 688 20220 | 31 32 |
| XJ6/12 SEDAN/COUPE/XJ8/ | L, XJ, C, 340/420 Sedan | 1900-1998 | 691 | 32 |
| XKE | V12, Roadster, 120 | 1900-1998 | 6531 | 33 |
| XKE | 2+2 | 1900-1998 | 6531 | 33 |
| S-TYPE | | | 40034 | 34 |
| X100 | | 1997-1998 | 6534 | 34 |
| X-TYPE | | | 44661 | 35 |
| OTHER AUTOMOBILE | | | 693 | 398 |
| UNKNOWN AUTOMOBILE | | | 694 | 399 |
| UNKNOWN VEHICLE | | | 695 | 999 |

2 JEEP / KAISER-JEEP

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|------------------------|---|-----------|--------|-----|
| COMPASS | | | 233015 | 1 |
| OTHER AUTOMOBILE | | | 233017 | 398 |
| UNKNOWN AUTOMOBILE | | | 233018 | 399 |
| CJ-2/CJ-3/CJ-4 | Military: WB=81" | 1900-1966 | 6169 | 401 |
| CJ-2/CJ-3/CJ-4 | Military: WB=101" | 1900-1966 | 6169 | 401 |
| CJ-5/CJ-6/CH-7/CH-8 | Scrambler, Bolde Eagle, Renegade, Laredo, Wrangler: WB=104" | 1967-1998 | 6174 | 402 |
| CJ-5/CJ-6/CH-7/CH-8 | Scrambler, Bolde Eagle, Renegade, Laredo, Wrangler: WB=84" | 1967-1998 | 6174 | 402 |
| YJ-SERIES | Wrangler | 1986-1998 | 6178 | 403 |
| CHEROKEE (1984 ON) | Limited, Loredo, Pioneer, Briarwood | 1984-1998 | 6180 | 404 |
| CHEROKEE (1984 ON) | Grand | 1992-1998 | 6180 | 404 |
| LIBERTY | | | 45081 | 405 |
| COMMANDER | | | 210262 | 406 |
| PATRIOT | | | 233019 | 407 |
| CHEROKEE (1963 - 1983) | Wide Track, Chief, Commando, Jeepster | 1963-1983 | 6183 | 421 |
| GRAND WAGONEER | Custom, Bougham Limited | 1971-1991 | 6186 | 431 |
| GRAND WAGONEER | Wagoneer | 1971-1991 | 6186 | 431 |
| PICKUP | J-10, J-20, Honcho | 1900-1998 | 6189 | 481 |

| COMANCHE COMANCHE OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | Chief: WB=111" Chief: WB=119" | 1986-1 1986-1 | | 482 482 498 499 999 |
|--|----------------------------------|------------------|--|---------------------------------|
| 6907 JENSEN | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| HEALY OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1 | 998 9603 251 252 | 37 37 37 |
| 73 KAWASAKI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) ATC/ATV (000-050CC) ATC/ATV (051-124CC) ATC/ATV (125-349CC) ATC/ATV (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 333 334 335 336 337 338 339 340 341 342 343 344 345 346 | - |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY TRUCK BASED MOTORHOME MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK | | | 9712 9713 9714 9718 9719 9720 9721 32527 | 881 882 883 884 890 |

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---|----------|----------------------------------|---|--|
| SEPHIA SPECTRA RIO/RIO 5 OPTIMA AMANTI RONDO OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SPORTAGE SORRENTO SEDONA OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | | 1900-199 | 38480 38482 38484 158130 233021 473 474 | 31 32 33 34 35 36 398 399 401 402 441 498 499 999 |
| 232985 KTM MODEL | INCLUDES | YEAR | ORACLE | 242 |
| OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | . = | 233003 233004 | 798 799 |
| 6919 LADA | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 286 287 | 53 53 |
| 6908 LAMBORGHINI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| COUNTACH 5000S JALPA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 40 LANCIA | | 1900-199 1900-199 | | 38 38 38 38 |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| BETA SEDAN-HPE BETA COUPE - ZAGATO SCORPION OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 62 LAND ROVER | | 1900-198 1900-198 1900-197 | 2 697 | 31 32 33 398 399 999 |
| MODEL MODEL | INCLUDES | YEAR | ORACLE | SAS |
| DISCOVERY (LR) | | 1994-199 | | 401 |

| COUNTY LWB (RR) / COUNT CLASSIC (RR) | County LWB (RR) | 1900-1994 | 7918 | 421 |
|---|--------------------|-----------|--------|-----|
| COUNTY LWB (RR) / COUNT CLASSIC (RR) | Count Classic (RR) | 1994-1998 | 7918 | 421 |
| 4.0 SE (RR) | | 1995-1998 | 7922 | 422 |
| DEFENDER 90 (LR) | | 1994-1998 | 7916 | 422 |
| FREELANDER | | | 146542 | 422 |
| LR3 | | | 174906 | 423 |
| LR2 | | | 233023 | 424 |
| OTHER LIGHT TRUCK | | | 468 | 498 |
| UNKNOWN LIGHT TRUCK | | | 469 | 499 |
| UNKNOWN VEHICLE | | | 470 | 999 |
| | | | | |

59 LEXUS

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---------------------|--------------|-----------|--------|-----|
| ES-250/300/330/350 | | 1990-1998 | 449 | 31 |
| LS400 | | 1990-1998 | 452 | 32 |
| SC-300/SC-400 | 2-door Coupe | 1992-1998 | 453 | 33 |
| GS300/GS400 | | 1994-1998 | 451 | 34 |
| IS-250/300/350/500 | | | 37082 | 35 |
| SC 430 | | | 133514 | 36 |
| OTHER AUTOMOBILE | | | 455 | 398 |
| UNKNOWN AUTOMOBILE | | | 456 | 399 |
| RX300 | | 1999-2000 | 20801 | 401 |
| GX470 | | | 146552 | 402 |
| LX 450/470 | | | 7906 | 421 |
| OTHER LIGHT TRUCK | | | 7908 | 498 |
| UNKNOWN LIGHT TRUCK | | | 7909 | 499 |
| UNKNOWN VEHICLE | | | 457 | 999 |
| IS 500 | | | 233025 | |

13 LINCOLN

| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
|------------------------|------------------------------------|-----------|--------|-----|
| CONTINENTAL /TOWAL CAR | Ocaffacatel | 1000 1070 | 4000 | |
| CONTINENTAL/TOWN CAR | Continental | 1900-1979 | 1099 | 1 |
| CONTINENTAL/TOWN CAR | Continental | 1980-1981 | 1099 | 1 |
| CONTINENTAL/TOWN CAR | Town Car | 1982-1998 | 1099 | 1 |
| MARK | VI | 1980-1983 | 1096 | 2 |
| MARK | LSC, all Signature/Designer Series | 1971-1980 | 1096 | 2 |
| MARK | I, II, III, IV, V | 1900-1970 | 1096 | 2 |
| MARK | VII | 1984-1998 | 1096 | 2 |
| MARK | VII | 1993-1998 | 1096 | 2 |
| CONTINENTAL (82-ON) | All Signature/Designer Series | 1982-1987 | 6438 | 5 |
| CONTINENTAL (82-ON) | All Signature/Designer Series | 1988-1998 | 6438 | 5 |
| VERSAILLES | | 1977-1980 | 1100 | 11 |
| LS | | 2000-2000 | 20803 | 12 |
| ZEPHYR | | | 210264 | 13 |
| MKX | | | 233036 | 14 |
| MKS | | | 233038 | 15 |
| OTHER AUTOMOBILE | | | 1101 | 398 |
| UNKNOWN AUTOMOBILE | | | 1102 | 399 |
| AVIATOR | | | 146554 | 401 |
| NAVIGATOR | | 1997-1998 | 6441 | 421 |
| BLACKWOOD | | | 44663 | 481 |

| MARK LT OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | | | 174909 6443 6444 1103 | 482 498 499 999 |
|--|----------|------------------------|--------------------------------|----------------------------|
| 6909 LOTUS | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| ELISE ESPRIT EUROPE OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 1900-1998 | | 39 39 39 39 39 |
| 86 MACK | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9722 | 850 |
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/LOW ENTRY | | | 9723 9724 | 881 882 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 9725 | 883 |
| MEDIUM/HEAVY - UNKNOWN ENGINE | | | 9726 | 884 |
| MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9727 | 890 |
| MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK | | | 9728 32528 | 898 899 |
| 9808 MARMON | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9795 9799 | 898 898 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 9797 | 898 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | | 9796 | 898 |
| MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE | | | 9800 9798 | 898 898 |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9794 | 898 |
| 6910 MASERATI | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| BITURBO OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 | 8 9613 257 258 | 40 40 40 |

41 MAZDA

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|---|-----------|--------|-----|
| RX2 | | 1972-1974 | 6553 | 31 |
| RX3 | | 1972-1978 | 6555 | 32 |
| RX4 | | 1974-1978 | 6557 | 33 |
| RX7 | S, GS, GSL, SE | 1979-1998 | 714 | 34 |
| GLC/PROTEGE/323 | DX | 1977-1998 | 701 | 35 |
| GLC/PROTEGE/323 | Protege | 1990-1998 | | 35 |
| GLC/PROTEGE/323 | 323 | 1977-1994 | 701 | 35 |
| COSMO | | 1976-1978 | 6559 | 36 |
| 626 | GT, GS, GSL, SE | 1979-1998 | | 37 |
| 808 | | 1972-1977 | 6563 | 38 |
| MIZER | | 1976-1976 | 6565 | 39 |
| R-100 | | 1900-1972 | | 40 |
| 616/618 | | 1900-1972 | 6569 | 41 |
| 1800 | | 1900-1972 | | 42 |
| 929 | | 1988-1996 | 703 | 43 |
| MX-6 | Turbo | 1988-1998 | 712 | 44 |
| MIATA | | 1990-1998 | | 45 |
| MX-3 | GS | 1992-1998 | 710 | 46 |
| MILLENIA | | 1995-1998 | 708 | 47 |
| MP3 | | | 45085 | 48 |
| RX-8 | | | 146556 | 49 |
| MAZDA 6 | | | 146558 | 50 |
| MAZDA3 | | | 158132 | 51 |
| MAZDA 5 | | | 210266 | 52 |
| CX-7 | | | 210268 | 53 |
| CX9 | | | 233040 | 54 |
| OTHER AUTOMOBILE | | | 715 | 398 |
| UNKNOWN AUTOMOBILE | | | 716 | 399 |
| NAVAJO | | 1991-1998 | | 401 |
| TRIBUTE | | | 31624 | 402 |
| MPV | | 1989-1998 | | 441 |
| MAZDA PICKUP | Cab Plus, B-4000 | 1994-1998 | 704 | 471 |
| MAZDA PICKUP | B-2000, B-2200, B-2600, SE-5, LX | 1900-1998 | 704 | 471 |
| OTHER LIGHT TRUCK | | | 717 | 498 |
| UNKNOWN LIGHT TRUCK | | | 718 | 499 |
| UNKNOWN VEHICLE | | | 719 | 999 |
| | | | | |
| 42 MERCEDES BENZ | | | | |
| 42 MEROLDES BLIVE | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 200/220/230/240/250/260/280/3 00/320 SE,CD,D,SD,E | Sedan and 5 passenger "C" only, SE, CD, D, SD, TD, TE, CE, E, (DOES NOT include 280 SE) (75 on) | 1900-1998 | 725 | 31 |
| 230/280 SL | 2 seater only | 1900-1998 | 6588 | 32 |
| 300/350/380/450/500SL/560SL | 2 seater only | 1900-1994 | | 33 |
| 300/350/380/450/500SL/560SL | 300/500 SL | 1990-1994 | | 33 |
| 350/380/420/450/560/ SLC | 000,000 02 | 1900-1998 | | 34 |
| 280/300SEL | | 1900-1998 | | 35 |
| 380/420/450/500/560SEL/500SE | | 1900-1998 | | 36 |
| C/560SEC/350SDL/300S | | .000 1000 | 001 | 00 |
| 300 SE/380/450 SE | 280 S, 300 SD Sedan/350 SD | 1900-1998 | 621 | 37 |
| 300 SE/380/450 SE | 280 SE | 1975-1998 | | 37 |
| 600, 6.9 SEDAB | Pullman | 1900-1998 | 633 | 38 |
| | | | | |

| 190 | D, E, 2.3, 2,5 | 1900-1998 | 720 | 39 |
|--|----------------|-----------|--------|-----|
| 300 | CE Cabriolet | 1993-1998 | 727 | 40 |
| 400/500 E | SE | 1992-1998 | 641 | 41 |
| 220/280/320 C | | 1994-1900 | 636 | 42 |
| S CLASS | | | 22152 | 43 |
| SL CLASS | | | 22154 | 44 |
| SLK | | | 22156 | 45 |
| CL | | | 22158 | 46 |
| CLK | | | 22160 | 47 |
| E | | | 22163 | 48 |
| SLR MCLAREN | | | 174911 | 49 |
| R-CLASS | | | 210270 | 50 |
| CLS CLASS | | | 210272 | 51 |
| OTHER AUTOMOBILE | | | 639 | 398 |
| UNKNOWN AUTOMOBILE | | | 495 | 399 |
| M | | 1997-2000 | 6597 | 401 |
| G CLASS | | | 45087 | 402 |
| VAN DERIVATIVE | Kurbstar | 1982-1998 | 6600 | 470 |
| OTHER LIGHT TRUCK | | | 496 | 498 |
| UNKNOWN LIGHT TRUCK | | | 497 | 499 |
| MEDIUM/HEAVE - CBE | | | 6602 | 881 |
| MEDIUM/HEAVY - COE LOW ENTRY | | | 6604 | 882 |
| MEDIUM/HEAVY - COE HIGH ENTRY | | | 6606 | 883 |
| MEDIUM/HEAVY; UNKNOWN ENGINE LOCATION | | | 6610 | 884 |
| MEDIUM/HEAVY: COE ENTRY POSITION | | | 6612 | 890 |
| OTHER MEDIUM/HEAVY TRUCK | | | 498 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27273 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 499 | 899 |
| MEDIUM BUS | | | 500 | 981 |
| OTHER BUS | | | 501 | 988 |
| UNKNOWN BUS TYPE | | | 6618 | 989 |
| UNKNOWN VEHICLE | | | 502 | 999 |
| OINTINOVIN VEHICLE | | | 233042 | ฮฮฮ |
| | | | 233042 | |

14 MERCURY

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|------------------|---|-----------|--------|-----|
| CYCLONE | GT, CJ, Spoiler | 1900-1971 | 6467 | 2 |
| CAPRI-DOMESTIC | RS, Turbo, GS, Black Magic | 1979-1986 | 1105 | 3 |
| COUGAR/XR7 | XR-7, RS, LS, GS, Eliminator, Brougham, Villager, (includes all body styles) | 1967-1976 | 1109 | 4 |
| COUGAR/XR7 | XR-7, RS, LS, GS, Eliminator, Brougham, Villager, (includes all body styles) | 1989-1998 | 1109 | 4 |
| COUGAR/XR7 | XR-7, RS, LS, GS, Eliminator, Brougham, Villager, (includes all body styles): WB=114" | 1977-1979 | 1109 | 4 |
| COUGAR/XR7 | XR-7, RS, LS, GS, Eliminator, Brougham, Villager, (includes all body styles): WB=118" | 1977-1979 | 1109 | 4 |
| COUGAR/XR7 | XR-7, RS, LS, GS, Eliminator, Brougham, Villager, (includes all body styles) | 1980-1988 | 1109 | 4 |
| MARQUIS/MONTEREY | Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=121" | 1900-1978 | 1108 | 6 |

| MARQUIS/MONTEREY | Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=124" | 1900-1978 | 1108 | 6 |
|---------------------|--|-----------|---------------|----------|
| MARQUIS/MONTEREY | Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=106" | 1982-1998 | 1108 | 6 |
| MARQUIS/MONTEREY | Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=114" | 1982-1998 | 1108 | 6 |
| MARQUIS/MONTEREY | Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis | 1979-1982 | 1108 | 6 |
| COMET | Caliente, GT, Voyager, 202 | 1962-1967 | 6469 | 8 |
| COMET | Capri | 1966-1967 | 6469 | 8 |
| COMET | Caliente, GT, Voyager, 202 | 1971-1977 | 6469 | 8 |
| BOBCAT | Runabout, Villager | 1975-1980 | 1104 | 9 |
| MONTEGO | Comet | 1968-1970 | 6473 | 10 |
| MONTEGO | GT, MX, Villager, Brougham: WB=114" | 1972-1976 | 6473 | 10 |
| MONTEGO | GT, MX, Villager, Brougham | 1968-1973 | 6473 | 10 |
| MONTEGO | GT, MX, Villager, Brougham: WB=114" | 1972-1976 | 6473 | 10 |
| MONARCH | Ghia | 1975-1980 | 1119 | 11 |
| ZEPHYR | GS, Z-7 | 1978-1983 | 1131 | 12 |
| LYNX/LN-7 (82-83) | L, LS, GS, RS, XR-3 | 1981-1987 | | 13 |
| TOPAZ | L, LS, GS, 4 X 4 | 1984-1998 | 1124 | 15 |
| SABLE | LS, GS | 1986-1998 | 1121 | 17 |
| MONTEGO (2005+) | | | 174913 | 20 |
| MILAN | 0 ''' | 4070 4077 | 210274 | 21 |
| CAPRI-FOREIGN | Capri II | 1970-1977 | 1106 | 31 |
| CAPRI-FOREIGN | 2 + 2 deTomaso | 1989-1994 | 1106 | 31 |
| PANTERA | | 1972-1974 | 6478 | 33 |
| TRACER | L, GL | 1994-1998 | 1129 | 36 |
| MYSTIQUE COUGAR | | 1994-1998 | 1120 22165 | 37 38 |
| MARAUDER | | | 146560 | 39 |
| OTHER AUTOMOBILE | | | 1132 | 398 |
| UNKNOWN AUTOMOBILE | | | 1133 | 399 |
| MOUNTAINEER | | 1996-1998 | 6480 | 401 |
| MARINER | | 1990-1990 | 174915 | 402 |
| VILLAGER | LS, GS | 1993-1998 | 6482 | 443 |
| MONTEREY (2004+) | 20, 00 | 1000 1000 | 158134 | 444 |
| OTHER LIGHT TRUCK | | | 6484 | 498 |
| UNKNOWN LIGHT TRUCK | | | 6485 | 499 |
| UNKNOWN VEHICLE | | | 1134 | 999 |
| O | | | | 000 |
| 56 MERKUR | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| XR4Ti | Turbo | 1985-1989 | 487 | 31 |
| SCORPIO | Turbo | 1987-1990 | 486 | 32 |
| OTHER AUTOMOBILE | 14150 | 1001 1000 | 488 | 398 |
| UNKNOWN AUTOMOBILE | | | 489 | 399 |
| UNKNOWN VEHICLE | | | 490 | 999 |
| | | | | |
| 43 MG | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| MIDGET | | | 6542 | 31 |
| MGB ('76-'79) | | 1976-1979 | 6621 | 32 |
| MGB ('67-'75) | GT | 1967-1975 | 6623 | 33 |
| | ÷. | 1007 1070 | 3020 | 30 |
| | | | | |

| MGA TA/TC/TD/TF MGC OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE | GT | 1900-1998 1900-1998 1900-1969 | 6625 6627 6629 503 504 505 | 34 35 36 398 399 999 |
|---|------------------------|-------------------------------------|---|-------------------------------------|
| 143055 MINI | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| COOPER,COOPER S | | | 143056 | 31 |
| 52 MITSUBISHI | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| STARION | 2+2, LE, Turbo | 1983-1990 | 391 | 31 |
| TREDIA | L, LS, Turbo | 1983-1988 | 393 | 32 |
| CORDIA | L, Turbo | 1983-1988 | 382 | 33 |
| GALANT | ECS | 1985-1998 | 384 | 34 |
| GALANT | Sigma | 1985-1988 | 384 | 34 |
| MIRAGE | L, Turbo | 1985-1998 | 385 | 35 |
| PRECIS | | | 6817 | 36 |
| ECLIPSE | | 1990-1998 | 383 | 37 |
| SIGMA | | 1989-1990 | 390 | 38 |
| 3000GT | Spyder, VR-4 | 1991-1998 | 381 | 39 |
| DIAMANTE | | 1992-1998 | 6819 | 40 |
| LANCER | | | 46434 | 46 |
| OTHER AUTOMOBILE | | | 397 | 398 |
| UNKNOWN AUTOMOBILE | | | 398 | 399 |
| MONTERO | Sport | 1985-1998 | 386 | 401 |
| OUTLANDER | | | 146562 | 402 |
| ENDEAVOR | | | 158136 | 403 |
| MINIVAN | LS | 1987-1998 | 395 | 441 |
| EXPO WAGON | LRV, Sport WB=99.2" | 1992-1995 | 396 | 442 |
| EXPO WAGON | LRV, Sport WB=107.1" | 1992-1995 | 396 | 442 |
| PICKUP | Mighty Max, SPX, 4 X 4 | 1900-1998 | 389 | 471 |
| RAIDER/DUROCROSS | | | 233043 | 472 |
| OTHER LIGHT TRUCK | | | 399 | 498 |
| UNKNOWN LIGHT TRUCK | | | 400 | 499 |
| MEDIUM/HEAVY - COE LOW ENTRY | FUSO FE | 1900-1998 | 6821 | 882 |
| OTHER MEDIUM/HEAVY TRUCK | | | 401 | 898 |
| UNK TYPE TRUCK (LIGHT/MED/HEAVY) | | | 27274 | 899 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 402 | 899 |
| CONVENTIONAL FRONT ENGINE | | | 6823 | 981 |
| FRONT ENGINE/FLAT FRONT | | | 6825 | 982 |
| REAR ENGINE/FLAT FRONT | | | 6827 | 983 |
| OTHER BUS | | | 403 | 988 |
| UNKNOWN TYPE BUS | | | 6829 | 989 |
| UNKNOWN VEHICLE | | | 6831 | 999 |

6911 MORRIS

| MODEL | INCLUDES | YEAR ORACL | E SAS |
|---|---|--|--|
| MINOR OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-1998 961 25 26 | 9 41 |
| 74 MOTO-GUZZI | | | |
| MODEL | INCLUDES | YEAR ORACL | SAS |
| MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) | | 34 34 34 35 35 35 | 8 702 9 703 0 704 1 705 |
| MOTORCYCLE (UNKNOWN | | 35 | 3 709 |
| CC) ATC/ATV (000-050CC) ATC/ATV (051-124CC) ATC/ATV (125-349CC) ATC/ATV (350CC-OVER) ATC/ATV (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | 35 35 35 35 35 35 36 | 5 732 6 733 7 734 8 739 9 798 |
| 9810 NEOPLAN | | | |
| MODEL | INCLUDES | YEAR ORACL | SAS |
| BUS - CONVENTIONAL FRONT ENGINE BUS - FRONT ENGINE/FLAT | | 981 981 | |
| FRONT BUS - REAR ENGINE/FLAT | | 981 | 2 902 |
| FRONT BUS BASED MOTORHOME OTHER BUS | | 980 981 | |
| 35 NISSAN / DATSUN | | | |
| MODEL | INCLUDES | YEAR ORACL | E SAS |
| F10 200/240 SX 200/240 SX 1200/210/B210 Z-CAR, ZX Z-CAR, ZX Z-CAR, ZX 310 510 510 610 | Honeybee 240/260/280Z, 300 ZX, Turbo 2+2 2+2 PL PL PL | 1977-1978 685 1974-1983 84 1984-1998 84 1971-1982 84 1970-1998 84 1979-1998 84 1975-1978 84 1979-1982 84 1968-1973 84 1978-1981 84 1973-1976 685 | 6 32 6 32 2 33 9 34 9 34 9 34 3 35 4 36 4 36 |

| 710 | MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|-------------------------|--------------------------------------|-----------|--------|-----|
| 810MAXIMA ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1977-1996 6861 40 40 40 40 40 40 40 4 | | | | | |
| 810MAXIMA | UNKNOWN MOTORED CYCLE | | | 369 | 799 |
| 810MAXIMA | OTHER MOTORED CYCLE | | | 368 | 798 |
| 810MAXIMA | | | | 367 | 709 |
| B10MAXIMA | MOTORCYCLE (750CC-OVER) | | | 366 | 706 |
| 810MAXIMA | MOTORCYCLE (450-749CC) | | | 365 | 705 |
| 810/MAXIMA | MOTORCYCLE (350-449CC) | | | 364 | 704 |
| 810MAXIMA | • | | | | |
| 810/MAXIMA | | | | | |
| 810/MAXIMA | MOTORCYCLE (000-050CC) | | | 361 | 701 |
| 810/MAXIMA | MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| 810/MAXIMA | 75 NORTON | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 722 47 350Z 158140 49 VERSA 1986-1998 742 46 VERSA 1986-1998 759 399 UNKNOWN AUTOMOBILE 759 399 VATHERINDER AUTOMOBILE 1986-1998 6867 401 XTERRA 1986-1998 6867 401 XTERRA 1986-1998 759 399 PATHEINDER ARMADA 1988-1998 757 441 AXXESS 1 | UNKNOWN VEHICLE | | | 764 | 999 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1970 6861 41 STANZA XE 1992-1992 756 42 SENTRA 1983-1999 745 44 PULSAR NX 1983-1999 745 44 MICRA 1986-1999 745 44 MICRA 1986-1999 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158140 49 WERSA 1986-1998 758 39 OTHER AUTOMOBILE 1986-1998 759 39 PATHFINDER 1986-1999 6867 45 XEERA 1986-1999 757 43 XYEERA 1986-1999 759 49 PATHFINDER ARMADA | | | | 763 | 899 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1970 6861 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1999 750 43 PULSAR NX 1983-1999 745 44 MICRA 1986-1909 745 44 MICRA 1986-1999 745 44 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158140 49 WERSA 1993-1999 12227 47 350Z 158140 49 VERSA 1986-1998 755 39 VERSA 1986-1998 759 398 PATHFINDER 1986-1998 8667 40 XTERRA 1986-1998 757 44 AXX 1993-1999 6833 | ` | | | 762 | 900 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1999 722 47 350Z 158140 49 WURNO 158140 49 VERSA 158140 49 VERSA 1986-1998 758 398 UNKNOWN AUTOMOBILE 1986-1998 8667 40 XTERRA 1986-1998 867 40 XTERRA 1986-1998 750 41 VAN XE, GXE 1988-1999 782 41 VAY XE, GXE | TRUCK | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1998 6865 45 NX 1600/2000 EXA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 1227 47 350Z 158138 48 MURANO 158140 49 VERSA 158140 49 VERSA 158140 49 VERSA 1986-1998 6867 758 39 PATHFINDER 1986-1998 6867 40 XTERRA 1986-1998 6867 40 XAYESS 1988-1998 767 44 VAN XE, GXE 1993-1998 7 | ENTRY | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 750 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1999 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1993-1999 742 46 ALTIMA 1993-1999 72227 47 350Z 158138 48 MURANO 1993-1999 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 1986-1998 686 40 NIKNOWN AUTOMOBILE 1986-1998 686 40 XTERRA 1986-1998 687 40 XYERRA 1988-1998 757 43 YAN <td< td=""><td></td><td></td><td></td><td></td><td></td></td<> | | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1998 6865 45 NX 1600/2000 1997-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 59 759 399 PATHFINDER 1986-1998 6867 401 XTERRA 1986-1998 6867 401 XTERRA 1988-1998 757 444 VAN XE, GXE 1988-1998 757 444 AXXESS 1993-1998 747 443 DATSUN/NISSAN PL620, King Cab, Hardbody | | Patrol (1960) | 1900-1998 | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 42 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 758 398 UNKNOWN AUTOMOBILE 759 399 PATHFINDER 1986-1998 6867 401 XTERRA 1986-1998 6867 401 XVAN XE, GXE 1989-1990 683 42 VAN XE, GXE 1989-1990 683 44 | | | | 158144 | 481 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1999 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1986-1990 745 44 NX 1600/2000 1992-1998 6865 45 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158138 48 VERSA 158138 48 UNKNOWN AUTOMOBILE 758 398 VATHFINDER 1986-1998 6867 401 XTERRA 1986-1998 6867 401 YAN XE, GXE 1988-1998 757 441 AXXESS 1989-1990 6833 442 QUEST 1993-1998 747 <td></td> <td>PL620, King Cab, Hardbody</td> <td>1973-1998</td> <td>743</td> <td>471</td> | | PL620, King Cab, Hardbody | 1973-1998 | 743 | 471 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1998 6865 44 MICRA 1987-1998 6865 45 NX 1600/2000 1993-1999 742 46 ALTIMA 1993-1999 742 46 ALTIMA 1993-1999 742 46 MURANO 158138 48 WERSA 158140 49 VERSA 758 398 UNKNOWN AUTOMOBILE 758 398 UNKNOWN AUTOMOBILE 1986-1998 6867 401 XTERRA 1986-1998 6867 401 YAN XE, GXE 1988-1999 757 441 AXXESS 1989-1999 68 | | | | | _ |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1999 745 44 PULSAR EXA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 1227 47 350Z 15813 48 MURANO 158140 49 VERSA 158140 49 UNKNOWN AUTOMOBILE 759 39 PATHFINDER 1986-1998 6867 401 XTERRA 1986-1998 6867 401 YAN XE, GXE 1988-1998 757 441 | | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158140 49 WURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 758 398 UNKNOWN AUTOMOBILE 759 399 PATHFINDER 1986-1998 6867 401 XTERRA 158142 421 PATHFINDER ARMADA 158142 421 | | XE, GXE | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1999 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 759 398 UNKNOWN AUTOMOBILE 759 399 PATHFINDER 1986-1998 6867 401 XTERRA 31619 402 | | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 758 398 UNKNOWN AUTOMOBILE 759 399 | | | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 OTHER AUTOMOBILE 758 398 | PATHFINDER | | 1986-1998 | 6867 | 401 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 VERSA 210276 50 | UNKNOWN AUTOMOBILE | | | 759 | 399 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 MURANO 158140 49 | OTHER AUTOMOBILE | | | 758 | 398 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 350Z 158138 48 | VERSA | | | 210276 | 50 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 ALTIMA 1993-1999 12227 47 | MURANO | | | 158140 | 49 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 NX 1600/2000 1992-1998 742 46 | 350Z | | | 158138 | 48 |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 MICRA 1987-1998 6865 45 | | | | 12227 | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 PULSAR EXA 1986-1990 745 44 | | | | | _ |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 PULSAR NX 1983-1990 745 44 | | 2701 | | - | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 SENTRA 1983-1998 750 43 | | | | _ | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 STANZA XE 1982-1992 756 42 | | NX | | | _ |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 PL411, RL411 1900-1967 6863 41 | | XE. | | | |
| 810/MAXIMA 1977-1998 738 39 ROADSTER SPL 311, SRL 311, 1600, 2000, convertible 1900-1970 6861 40 | • | VE | | | |
| 810/MAXIMA 1977-1998 738 39 | | SPL 311, SRL 311, 1600, 2000, conver | | | _ |
| | | 001 011 001 011 1000 | | | |
| | | PL | 1974-1977 | 6859 | 38 |

| CUTLASS (RWD-ONLY) | F85 | 1900-1972 | 1052 | 1 |
|---------------------|--|-----------|--------|-----|
| CUTLASS (RWD-ONLY) | Supreme, S, LS, Salon, Brougham, Vista Cruiser, Rallye 350, Hurst Olds, 442, Calais | 1900-1977 | 1052 | 1 |
| CUTLASS (RWD-ONLY) | Classic | 1988-1988 | 1052 | 1 |
| CUTLASS (RWD-ONLY) | Supreme, S, LS, Salon, Brougham, Vista Cruiser, Rallye 350, Hurst Olds, 442, Calais | 1978-1988 | 1052 | 1 |
| DELTA 88 | Starfire | 1900-1966 | 1051 | 2 |
| DELTA 88 | Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser | 1985-1998 | 1051 | 2 |
| DELTA 88 | Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser | 1977-1985 | 1051 | 2 |
| DELTA 88 | Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser | 1900-1976 | 1051 | 2 |
| NINETY-EIGHT | Regency, Luxury | 1900-1976 | 1071 | 3 |
| NINETY-EIGHT | Regency, Luxury | 1977-1984 | 1071 | 3 |
| NINETY-EIGHT | Regency, Luxury | 1986-1998 | 1071 | 3 |
| TORONADO-TROFEO | XSR, Trofeo, Brougham, Custom | 1966-1978 | 1079 | 5 |
| TORONADO-TROFEO | XSR, Trofeo, Brougham, Custom | 1986-1992 | 1079 | 5 |
| TORONADO-TROFEO | XSR, Trofeo, Brougham, Custom | 1979-1985 | 1079 | 5 |
| COMMERCIAL SERIES | Ambulance/Hearse | 1900-1998 | 6646 | 6 |
| STARFIRE | SX, GT | 1975-1980 | 1078 | 12 |
| OMEGA | RWD | 1975-1979 | 1076 | 15 |
| OMEGA | X-body type FWD | 1980-1985 | 1076 | 15 |
| FIRENZA | S, LS, SX, Cruiser, GT | 1982-1988 | 1069 | 16 |
| CIERA | Cutlass Ciera, Brougham, ES | 1982-1998 | 1054 | 17 |
| CALAIS | GT, ES, 500 | 1985-1991 | 1050 | 18 |
| CUTLASS (FWD) | Supreme | 1988-1998 | 1060 | 20 |
| ACHIEVA | SC | 1992-1998 | 1046 | 21 |
| AURORA | | 1994-1998 | 1049 | 22 |
| INTRIGUE | | | 22167 | 23 |
| ALERO | | | 22169 | 24 |
| OTHER AUTOMOBILE | | | 1081 | 398 |
| UNKNOWN AUTOMOBILE | | | 1082 | 399 |
| BRAVADA | | 1991-1994 | 22171 | 401 |
| SILHOUETTE | | 1990-1998 | 1077 | 441 |
| OTHER LIGHT TRUCK | | | 1083 | 498 |
| UNKNOWN LIGHT TRUCK | | | 853 | 499 |
| OTHER VEHICLE | | | 854 | 998 |
| UNKNOWN VEHICLE | | | 855 | 999 |
| 9805 OSHKOSH | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---|----------|------|--------------|------------|
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/EN POSITION | TRY | | 9774 9778 | 805 805 |
| MEDIUM/HEAVY - COE/HIG ENTRY | 3H | | 9776 | 805 |
| MEDIUM/HEAVY - COE/LO ENTRY | W | | 9775 | 805 |
| MEDIUM/HEAVY - OTHER | | | 9779 | 805 |
| MEDIUM/HEAVY - UNKNO ENGINE | WN | | 9777 | 805 |
| MEDIUM/HEAVY BASED MOTORHOME | | | 9773 | 805 |

29 OTHER DOMESTIC MANUFACTURER (light

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|--------------------------------|--|---------------------------------------|---------------------------------|
| OTHER MAKE UNKNOWN MAKE OTHER LIGHT TRUCK OTHER MEDIUM/HEAVY TRUCK | | | 932 933 12917 12919 | 398 399 498 898 |
| OTHER BUS OTHER VEHICLE | | | 12921 12923 | 988 998 |
| 69 OTHER FOREIGN M | ANUFACTURER (light vehicles) | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER MAKE UNKOWN MAKE OTHER LIGHT TRUCK OTHER MEDIUM/HEAVY TRUCK | | | 12916 32533 12918 12920 | 398 399 498 898 |
| OTHER BUS OTHER VEHICLE | | | 12922 12924 | 988 998 |
| 15691 OTHER MAKE (me | ed/heavy truck/bus or "other") | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE OTHER LIGHT TRUCK TRUCK BASED MOTORHOME | | | 12911 12913 26126 | 398 498 850 |
| OTHER MEDIUM/HEAVY TRUCK BUS BASED MOTORHOME | | | 12914 25908 | 898 950 |
| OTHER BUS OTHER VEHICLE | | | 12912 12915 | 988 998 |
| 78 OTHER MAKE MOPI | ED | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 0-50cc 51-124cc UNKNOWN cc OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 32508 32509 32510 299 300 | 701 702 709 798 799 |
| 79 OTHER MAKE MOTO | ORED CYCLE | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 0-50cc 51-124cc 125-349cc 350-449cc 450-749cc | | 1900-199 1900-199 1900-199 1900-199 | 98 9626 98 9627 98 9628 | 701 702 703 704 705 |
| | | | | |

| 750c or greater Unknown cc ATC/ATV 0-50cc ATC/ATV 51-124cc ATC/ATV 125-349cc ATC/ATV 350cc OR GREATER | 1900-1998 1900-1998 | 9630 9631 32511 32512 32513 32514 | 706 709 731 732 733 734 |
|---|------------------------|--|--|
| ATV/ATC UNKNOWN cc | | 32515 | 739 |
| OTHER MOTORED CYCLE | | 32516 | 798 |
| UNKNOWN MOTORED CYCLE | | 32517 | 799 |

87 PETERBILT

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|-----------------------------------|----------|------|--------|-----|
| MEDIUM/HEAVY BASED MOTORHOME | | | 9729 | 850 |
| MEDIUM/HEAVY - CBE | | | 9730 | 881 |
| MEDIUM/HEAVY - COE/LOW ENTRY | | | 9731 | 882 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 9732 | 883 |
| MEDIUM/HEAVY - UNKNOWN ENGINE | | | 9733 | 884 |
| MEDIUM/HEAVY - COE/ENTRY POSITION | | | 9734 | 890 |
| MEDIUM/HEAVY - OTHER | | | 9735 | 898 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 32529 | 899 |

44 PEUGEOT

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|---|--|---|--|--|
| 304 403 404 404 504/505 504/505 604 405 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (UNKNOWN CC) UNKNOWN MOTORED CYCLE UNKNOWN VEHICLE | Station Wagon Station Wagon STI, STX, Turbo, S, GL GLS, Liberte SL, D | 1971-1973 1900-1967 1900-1970 1900-1970 1970-1991 1977-1984 1989-1991 | 6637 6639 6639 6642 6642 6645 | 31 32 33 33 34 34 35 36 398 399 701 702 709 799 |
| 9 PLYMOUTH MODEL | INCLUDES | YEAR | ORACLE | SAS |
| VALIANT/DUSTER/SCAMP | 100, 200, Brougham, Signet, Custom, Special, 340/360, Twister: WB=108" | 1900-1976 | 6320 | 1 |

| VALIANT/DUSTER/SCAMP | 100, 200, Brougham, Signet, Custom, Special, 340/360, Twister: WB=111" | 1900-1976 | 6320 | 1 |
|-----------------------------|--|-----------|-------|-----|
| SATELLITE/BELVEDERE | Belveder I/II, GTX, Roadrunner, Sebring, Sebring Plus, Superbird, Brougham | 1900-1974 | 6323 | 2 |
| FURY | Roadrunner | 1975-1975 | 6325 | 3 |
| FURY | 1, 11, 111 | 1900-1974 | 6325 | 3 |
| FURY | Salon, VIP, Sport, Suburban | 1975-1978 | 6325 | 3 |
| GRAN FURY | Sedan, Brougham, Custom Sport, Suburban | 1975-1981 | 36 | 4 |
| GRAN FURY | Sedan, Brougham, Custom Sport, Suburban | 1982-1989 | 36 | 4 |
| BARRACUDA | Formula, S, 340, AAR, 'Cuda, Gran Coupe | 1965-1973 | 6329 | 5 |
| VOLARE | Custom, Premier, Roadrunner, Police: WB=109" | 1976-1980 | 53 | 6 |
| VOLARE | Custom, Premier, Roadrunner, Police: WB=113" | 1976-1980 | 53 | 6 |
| CARAVELLE | Turbo, SE | 1985-1989 | 29 | 7 |
| HORIZON | TC-3, Miser, Turismo 2.2, Custom, SE, America Expo | 1978-1990 | 40 | 8 |
| HORIZON | Duster | 1985-1990 | 40 | 8 |
| RELIANT (K) | SE, LE | 1981-1989 | 44 | 11 |
| SCAMP (CAR BASED PICKUP) | GT, 2.2 | 1982-1984 | 6331 | 13 |
| , | • | | | |
| SUNDANCE | Turbo | 1987-1998 | 47 | 17 |
| ACCLAIM | LX, LE | 1989-1998 | 27 | 19 |
| NEON | Expresso | 1994-1998 | 42 | 20 |
| CRICKET | | 1971-1972 | 32518 | 31 |
| ARROW | Fire Arrow, GS, GT | 1976-1980 | 28 | 32 |
| SAPPORO | all imported | 1978-1983 | 46 | 33 |
| CHAMP/COLT (EXCLUDES VISTA) | Turbo, Custom | 1979-1994 | 30 | 34 |
| CHAMP/COLT (EXCLUDES VISTA) | Station Wagon (WB=103") | 1984-1994 | 30 | 34 |
| CONQUEST | TSI | 1984-1989 | 34 | 35 |
| LASER | RS, Turbo | 1989-1998 | 41 | 37 |
| BREEZE | | 1996-1998 | 6333 | 38 |
| PROWLER | | | 6335 | 39 |
| OTHER AUTOMOBILE | | | 57 | 398 |
| UNKNOWN AUTOMOBILE | | | 58 | 399 |
| TRAILDUSTER | | 1900-1998 | 6337 | 421 |
| COLT VISTA | 4 X 4 | 1987-1998 | 32 | 441 |
| VOYAGER (MINIVAN) | SE, LX: WB=112" | 1984-1998 | 37 | 442 |
| VOYAGER (MINIVAN) | SE, LX: WB=119" | 1984-1998 | 37 | 442 |
| VAN-FULLSIZE (B-SERIES) | Includes Voyager, Sport, Premier | 1965-1995 | 32520 | 461 |
| ARROW PICKUP (FOREIGN) | | 1900-1998 | 6341 | 471 |
| OTHER LIGHT TRUCK | | | 59 | 498 |
| UNKNOWN LIGHT TRUCK | | | 60 | 499 |
| UNKNOWN VEHICLE | | | 61 | 999 |
| | | | | |

22 PONTIAC

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|------------------------------------|---|-----------|--------|-----|
| | | | | |
| LEMANS/TEMPEST (THRU 79) | Safari, T-37, Luxury, Grad Sport, GTO, GT-37, Sprint, Grand Lemans | 1900-1973 | 893 | 1 |
| LEMANS/TEMPEST (THRU 79) | Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Grand Lemans | 1978-1979 | 893 | 1 |
| LEMANS/TEMPEST (THRU 79) | Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Judge Grand AM, Grand Lemans | 1973-1975 | 893 | 1 |
| LEMANS/TEMPEST (THRU 79) | Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Grand Lemans | 1976-1977 | 7 893 | 1 |
| BONNEVILLE/CATALINA/PARI SIENNE | Brougham, Gand Safari, Safari, Granville, 2+2 Executive, Starchief | 1900-1968 | 895 | 2 |

| BONNEVILLE/CATALINA/PARI SIENNE | Brougham, Gand Safari, Safari, Granville, 2+2 Executive, Starchief | 1982-1984 | 895 | 2 |
|------------------------------------|---|-----------|--------|-----|
| BONNEVILLE/CATALINA/PARI SIENNE | SE, SSE, SSEi | 1987-1998 | 895 | 2 |
| BONNEVILLE/CATALINA/PARI SIENNE | Parisienne | 1983-1984 | 895 | 2 |
| BONNEVILLE/CATALINA/PARI SIENNE | Brougham, Gand Safari, Safari, Granville, 2+2 Executive, Starchief | 1977-1981 | 895 | 2 |
| BONNEVILLE/CATALINA/PARI SIENNE | Brougham, Gand Safari, Safari, Granville, 2+2 Executive, Starchief | 1969-1976 | 895 | 2 |
| FIERO | 2M4, 2M6, GT, SE | 1984-1988 | 873 | 5 |
| VENTURA | II, SJ, Sprint, Custom | 1971-1977 | 6681 | 8 |
| VENTURA | GTO | 1974-1977 | 6681 | 8 |
| FIREBIRD/TRANS AM | Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE | 1967-1981 | 875 | 9 |
| FIREBIRD/TRANS AM | Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE | 1982-1998 | 875 | 9 |
| GRAND PRIX (RWD) | J, LJ, SJ, Brougham, 2+2 | 1978-1987 | 885 | 10 |
| GRAND PRIX (RWD) | J, LJ, SJ, Brougham, 2+2 | 1973-1977 | 885 | 10 |
| GRAND PRIX (RWD) | J, LJ, SJ, Brougham, 2+2 | 1963-1972 | 885 | 10 |
| ASTRE | Safari, SJ, Custom | 1975-1977 | 6684 | 11 |
| SUNBIRD (THRU 80) | Safari, Sport, Formula | 1976-1980 | 897 | 12 |
| T1000/1000 | 2 door | 1981-1987 | 905 | 13 |
| T1000/1000 | 4 door | 1981-1987 | 905 | 13 |
| PHOENIX | LJ, SJ | 1977-1979 | 896 | 15 |
| PHOENIX | LJ, SJ | 1980-1984 | 896 | 15 |
| J2000/SUNBIRD/SUNFIRE | Le, Se, GT, Convertible | 1982-1994 | 901 | 16 |
| J2000/SUNBIRD/SUNFIRE | Sunbird | 1984-1994 | 901 | 16 |
| J2000/SUNBIRD/SUNFIRE | Sunfire-GT/SE | 1995-1998 | 901 | 16 |
| 6000 | STE, SE, LE | 1982-1998 | 858 | 17 |
| GRAND AM | | | 881 | |
| | SE, LE | 1980-1980 | | 18 |
| GRAND AM | SE, LE | 1985-1998 | 881 | 18 |
| G5 | CE Malares Turks CED | 4000 4000 | 233045 | 19 |
| GRAND PRIX (FWD) | SE, McLaren Turbo, GTP | 1988-1998 | 886 | 20 |
| G6 | | | 174917 | 22 |
| SOLSTICE | 07 T (0 II) | | 210278 | 23 |
| LEMANS (88-on) | SE, Tempest (Canadian) | 1988-1998 | 894 | 31 |
| OTHER AUTOMOBILE | | | 909 | 398 |
| UNKNOWN AUTOMOBILE | | | 910 | 399 |
| AZTEK | | | 40755 | 401 |
| VIBE | | | 45089 | 402 |
| TORRENT | | | 210280 | 403 |
| TRANS SPORT/MONTANA | | 1990-1998 | 906 | 441 |
| OTHER LIGHT TRUCK | | | 911 | 498 |
| UNKNOWN LIGHT TRUCK | | | 912 | 499 |
| UNKNOWN VEHICLE | | | 913 | 999 |
| OTHER LIGHT | | | 40759 | |

45 PORSCHE

| MODEL | INCLUDES | YEAR C | RACLE | SAS |
|-------|---|-----------|-------|-----|
| 911 | L, S, E, T, SC, Carrera, Slopenose, Speedstar | 1900-1998 | 516 | 31 |
| 911 | Panorama | 1996-1998 | 516 | 31 |
| 912 | E, T | 1900-1969 | 6654 | 32 |
| 914 | S, 1.8, 2.0, 914/6 | 1970-1976 | 6656 | 33 |
| 924 | Turbo, S | 1977-1988 | 513 | 34 |
| 928 | S | 1978-1998 | 514 | 35 |
| 930 | Turbo | 1989-1994 | 6658 | 36 |

| 944 959 968 986 BOXSTER CAYMAN OTHER AUTOMOBILE UNKNOWN AUTOMOBILE CAYENNE UNKNOWN VEHICLE | Turbo, S Spyder, Speedster, 356 | 1983-1992 1989-1994 1992-1995 1900-1998 | 6661 6663 22173 210282 | 37 38 39 40 41 398 399 421 999 |
|--|---|--|--|---|
| 6917 RELIANT | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | | 282 283 | 49 49 |
| 46 RENAULT/AMC | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| LECAR DAUPHINE/10/R-8/CARAVELLE | 5 | 1976-1983 1900-1971 | | 31 32 |
| 12 15 16 17 R18I FUEGO ALLIANCE/ENCORE/GTA, CONVERTIBLE ALPINE MEDALLION PREMIER OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 6912 ROLLS ROYCE/BEI MODEL CLOUD/SHADOW SERIES OTHER AUTOMOBILE | R12L, R12TL R14TL R16 R17, Gordini Coupe, R17TL Sportwagon TL, TS, GTL, GTS, Turbo L, DL, Limited, X-37 GT DL, LX | 1972-1977 1973-1976 1969-1972 1973-1980 1981-1998 1983-1998 1987-1987 1987-1987 | 6674 6676 6678 6680 8 522 5 525 8 6682 7 526 7 6685 527 528 529 | 33 34 35 36 37 38 39 41 44 45 398 399 999 |
| UNKNOWN AUTOMOBILE 47 SAAB | | | 273 | 42 |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| 99/99E/900 SONNETT 95/96/97 9000, CS 9000, CS 9 - 3 | S, Turbo, Cabriolet II, III, V-4 S, Trubo CS | 1900-1998 1968-1974 1900-1973 1985-1998 1993-1998 | 530 6707 6710 531 | 31 32 33 34 34 35 |

22177 36

9 - 5

| SL SL1, SL2, SL3 199 SC SC1, SC2 199 SC includes 3 door coupe 199 SW SW1, SW2 199 EV EV1 (electric vehicle) 199 LS/LS1/ LS2/L100/L200/L300 LW/LW1/ LW2/ LW200/300 ION SKY AURA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE VUE RELAY OTHER LIGHT TRUCK UNKNOWN VEHICLE 9807 SCANIA MODEL INCLUDES YE MEDIUM/HEAVY - CDE/HIGH ENTRY MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | 174919 533 534 174921 174923 174924 535 | 36 37 398 399 401 498 499 999 |
|---|--|---|---|
| SL SL1, SL2, SL3 199 SC SC1, SC2 199 SC includes 3 door coupe 199 SW SW1, SW2 199 EV EV1 (electric vehicle) 199 LS/ LS1/ LS2/L100/L200/L300 LW/LW1/ LW2/ LW200/300 ION SKY AURA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE VUE RELAY OTHER LIGHT TRUCK UNKNOWN VEHICLE 9807 SCANIA MODEL INCLUDES YE MEDIUM/HEAVY - CDE/HIGH ENTRY MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | | |
| SC SC1, SC2 199 SC includes 3 door coupe 199 SW SW1, SW2 199 EV EV EV1 (electric vehicle) 199 LS/LS1/LS2/L100/L200/L300 LW/LW1/LW2/LW200/300 ION SKY AURA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE VUE RELAY OTHER LIGHT TRUCK UNKNOWN VEHICLE 9807 SCANIA MODEL INCLUDES YE MEDIUM/HEAVY - CDE/HIGH ENTRY MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME | YEAR | ORACLE | SAS |
| MODEL INCLUDES MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME | 1991-1998 1991-2000 1993-1998 1997-1998 | 6721 6721 6723 | 1 2 2 3 4 5 6 7 8 9 398 399 401 441 498 499 999 |
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME | YEAR (| ORACLE | 242 |
| MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | TEAR | ORACLE | SAS |
| MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | 9788 9792 | 807 807 |
| ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | 9790 | 807 |
| MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | 9789 | 807 |
| MEDIUM/HEAVY BASED MOTORHOME 6913 SIMCA | | 9793 9791 | 807 807 |
| | | 9787 | 807 |
| MODEL INCLUDES YE | | | |
| | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 61 STERLING | | 274 275 | 44 44 |

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|--|--------------------------------------|--|---------------------------|-------------------------|
| 827S OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE | Li | 1986-199 | 7912 465 466 467 | 31 398 399 999 |
| 24428 STERLING TRUCK | (S | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | | | 24429 24437 | 808 808 |
| MEDIUM/HEAVY - COE/HIGH ENTRY | | | 24433 | 808 |
| MEDIUM/HEAVY - COE/LOW | | | 24431 | 808 |
| ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE | | | 24439 24435 | 808 808 |
| 2901 STUDEBAKER | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| CRUISER GRAN TURISMO HAWK LARK OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 1900-196 1900-196 1900-196 1900-196 | 9538 66 9540 | 1 1 1 1 1 |
| 2906 STUTZ MODEL | INCLUDES | YEAR | ORACLE | SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | INOLODES | 1900-199 1900-199 | 9575 | 398 398 |
| 48 SUBARU | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| DL/FE/G/GF/GL/GLF/STD/LOYA LE | 4 wheel drive, Turbo | 1972-198 | 39 543 | 31 |
| DL/FE/G/GF/GL/GLF/STD/LOYA | Loyale | 1990-199 | 94 543 | 31 |
| LE STAR | | 1970-197 | 71 6720 | 32 |
| 360 | | 1969-197 | | 33 |
| LEGACY | Brighton, Outback, Outback II | 1989-199 | | 34 |
| XT/XT6 JUSTY | 4WD Turbo, convertible, DL DL, GL | 1986-199 1987-199 | | 35 36 |
| SVX | <i>D</i> L, <i>G</i> L | 1992-199 | | 37 |
| IMPREZA | Outback, Outback II | 1993-199 | | 38 |
| BRAT DL, GL | • | 1978-199 | | 43 |
| BAJA | | | 158148 | 44 |
| OUTBACK | | | 158150 | 45 |
| | | | | |

| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE FORESTER B9 TRIBECA OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE | | | 550 551 22179 210288 32522 32523 552 | 398 399 401 402 498 499 999 |
|--|-----------------|----------------------------------|---|---|
| 6914 SUNBEAM MODEL | INCLUDES | YEAR | ORACLE | 242 |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | INOLOBEO | TEAK | 276 277 | 45 45 |
| 53 SUZUKI MODEL | INCLUDES | YEAR | ORACLE | SAS |
| SA310 SWIFT ESTEEM AERIO FORENZA VERONA RENO SX4 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SAMURAI SIDEKICK/GRAND VITARA X-90/VITARA GRAND VITARA XL7 OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) | GLX GTi, GTX | 1986-199 1989-199 1995-199 | 88 411 88 405 147792 158152 158156 174927 233047 416 417 45 406 407 415 158154 418 419 420 421 422 423 424 425 | 31 34 35 36 37 38 39 40 398 399 401 402 403 404 405 498 499 701 702 703 704 705 706 |
| MOTORCYCLE (UNKNOWN CC) ATC/ATV (000-050CC) ATC/ATV (051-124CC) ATC/ATV (125-349CC) ATC/ATV (350CC-OVER) ATC/ATV (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE UNKNOWN VEHICLE | | | 426 427 428 429 430 431 175434 432 | 709 731 732 733 734 739 798 799 |

| MODEL | INCLUDES | YEAR | ORACLE | SAS |
|----------------------|---|------------------------|------------------|----------|
| CORONA | Mark II, Custom, 1900, 2000, Deluxe | 1900-1982 | 561 | 31 |
| COROLLA | 1100, 1200, 1600, SR-5, LE, Deluxe, Custom | 1969-1985 | 560 | 32 |
| COROLLA | FX-16 | 1986-1998 | 560 | 32 |
| CELICA | 1900, 2000, GT, ST | 1972-1998 | 556 | 33 |
| CELICA | GTS | 1972-1993 | 556 | 33 |
| SUPRA | Celica Supra, Soarer | 1979-1998 | 559 | 34 |
| CRESSIDA | | 1978-1992 | 562 | 35 |
| CROWN | 2300, 2600 | 1900-1971 | 6746 | 36 |
| CARINA | 2000 | 1972-1973 | 6748 | 37 |
| TERCEL | Corolla Tercel, 4WD Wagon | 1980-1998 | 571 | 38 |
| STARLET | | 1981-1984 | 568 | 39 |
| CAMRY | LE, Deluxe, XLE, Coupe | 1983-1998 | 555 | 40 |
| MR-2 | | 1985-1995 | 564 | 41 |
| PASEO | | 1992-1998 | 565 | 42 |
| AVALON | | 1995-1998 | 554 | 43 |
| SOLARA | | | 22182 | 44 |
| ECHO | | | 31612 44664 | 45 |
| PRIUS SCION XA | | | | 46 |
| SCION XA SCION XB | | | 158160 158162 | 48 49 |
| SCION TC | | | 174929 | 50 |
| YARIS | | | 210292 | 51 |
| OTHER AUTOMOBILE | | | 608 | 398 |
| UNKNOWN AUTOMOBILE | | | 607 | 399 |
| 4-RUNNER | | 1985-1998 | 553 | 401 |
| RAV-4 | | 1996-1998 | 6750 | 402 |
| HIGHLANDER | | | 44666 | 403 |
| MATRIX | | | 45093 | 404 |
| FJ CRUISER | | | 210290 | 405 |
| LANDCRUISER | | 1976-1998 | 563 | 421 |
| SEQUOIA | | | 40895 | 422 |
| MINVAN/PREVIA | LE, Cargo | 1984-1990 | 567 | 441 |
| MINVAN/PREVIA | Previea | 1991-1998 | 567 | 441 |
| SIENNA | | | 22184 | 442 |
| PICKUP | SR-5, Extra Cab, Sport, LN44, Chinook, Wonder Wagon | 1974-1998 | 566 | 471 |
| TACOMA | | | 6752 | 472 |
| T-100 | | 1993-1998 | 570 | 481 |
| TUNDRA | | | 31615 | 482 |
| OTHER LIGHT TRUCK | | | 610 | 498 |
| UNKNOWN LIGHT TRUCK | | | 611 | 499 |
| UNKNOWN VEHICLE | | | 612 | 999 |
| 50 TRIUMPH | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| SPITFIRE | | 1000 1001 | 6754 | 24 |
| GT-6 | I, II, III, IV, 1500 MK3 | 1900-1981 1967-1973 | 6754 6756 | 31 32 |
| TR4 | TR2, TR3, TR4A | 1900-1968 | 6758 | 33 |
| TR6 | 1112, 1113, 11147 | 1969-1976 | 6760 | 34 |
| TR7/8 | | 1975-1981 | 6762 | 35 |
| HERALD | Vitesse | 1900-1998 | 6764 | 36 |
| STAG | | 1971-1973 | 6766 | 37 |
| OTHER AUTOMOBILE | 2000, 1200 series | 1900-1998 | 572 | 398 |
| - | | | | |

| UNKNOWN AUTOMOBILE MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN | | 57 57 57 57 57 57 | 74 701 75 702 76 703 77 704 78 705 79 706 |
|--|------------------|----------------------------------|--|
| CC) UNKNOWN MOTORED CYCLE | | 58 | 31 799 |
| UNKNOWN VEHICLE | | 58 | |
| 6915 TVR | | | |
| MODEL | INCLUDES | YEAR ORACL | E SAS |
| OTHER AUTOMOBILE UNKNOWN AUTOMOBILE | | 27 27 | |
| 2999 UNKNOWN DOMES | TIC MANUFACTURER | | |
| MODEL | INCLUDES | YEAR ORACL | E SAS |
| UNKNOWN AUTOMOBILE UNKNOWN LIGHT TRUCK UNKNOWN MOTORED CYCLE | | 2451 73 72 | 32 499 |
| UNKNOWN MEDIUM/HEAVY | | 73 | 84 899 |
| TRUCK UNKNOWN BUS TYPE UNKNOWN VEHICLE | | 73 73 | |
| 6999 UNKNOWN FOREIG | N MANUFACTURER | | |
| MODEL | INCLUDES | YEAR ORACL | E SAS |
| UNKNOWN AUTOMOBILE UNKNOWN LIGHT TRUCK UNKNOWN MOTORED CYCLE | | 29 73 72 | 33 499 |
| UNKNOWN MEDIUM/HEAVY | | 1993-1998 73 | 85 899 |
| TRUCK UNKNOWN BUS TYPE UNKNOWN VEHICLE | | 73 73 | |
| 99 UNKNOWN MANUFA | CTURER | | |
| MODEL | INCLUDES | YEAR ORACL | E SAS |
| UNKNOWN AUTOMOBILE UNKNOWN LIGHT TRUCK UNKNOWN MOTORED CYCLE | | 1035 62 23 | 24 499 |
| UNK TYPE TRUCK | | 2727 | 7 899 |
| (LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY TRUCK | | 62 | 26 899 |

623 989

UNKNOWN BUS TYPE

| UNKNOWN VEHICLE | | | 623 | 989 |
|--|--|------------------------|----------------|------------|
| | JM/HEAVY TRUCKS AND BUSES | VEAD | | CAC |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| Unknown medium/heavy truck Unknown bus type | | 1900-1999 1900-1999 | 12908 12910 | 899 988 |
| 30 VOLKSWAGEN | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| KARMANN GHIA | | 1900-1974 | 6759 | 31 |
| BEETLE 1300/1500 | flat windshield, 94.5" WB | 1900-1977 | 6761 | 32 |
| SUPER BEETLE | Distinguished by curved windshield, 95.3" WB | 1971-1980 | 5820 | 33 |
| 411/412 | Squareback/Fastback | 1971-1974 | 6763 | 34 |
| SQUAREBACK/FASTBACK | Type 3, 1600 | 1900-1974 | 6765 | 35 |
| RABBIT | L, GTI, Sport, LS, Custom, DL, Deluxe | 1975-1984 | 964 | 36 |
| DASHER | E, OTI, Oport, EO, Oustoni, DE, Delaxe | 1974-1981 | 6767 | 37 |
| SCIROCCO | 16V | 1975-1988 | 965 | 38 |
| JETTA | GL, GLI | 1981-1992 | 950 | 40 |
| QUANTUM | • | | 961 | 41 |
| | Synco | 1982-1988 | | |
| GOLF/CABRIOLET/GTI | Synco, GTI, Cabriolet, GT, GL | 1985-1992 | 934 | 42 |
| RABBIT PICKUP FOX | car/based pickup GL | 1980-1983 | 6769 | 43 |
| | GL | 1987-1998 | 941 | 44 |
| CORRADO | | 1989-1998 | 937 | 45 |
| PASSAT | | 1990-1998 | 958 | 46 |
| JETTA III | | 1993-1998 | 957 | 47 |
| GOLF III | | 1993-1998 | 946 | 48 |
| NEW BEETLE | | | 22187 | 49 |
| PHAETON | | | 158164 | 50 |
| EOS | | | 210294 | 51 |
| OTHER AUTOMOBILE | | | 968 | 398 |
| UNKNOWN AUTOMOBILE | | | 969 | 399 |
| THE THING (181) | | 1973-1975 | 6771 | 401 |
| TIGUAN | | | 233049 | 402 |
| TOUAREG | | | 158166 | 421 |
| VANAGON/CAMPER | Bus, Kombi, Van | 1900-1998 | 935 | 441 |
| EUROVAN | | 1992-1998 | 940 | 442 |
| OTHER LIGHT TRUCK | | | 781 | 498 |
| UNKNOWN LIGHT TRUCK | | | 782 | 499 |
| OTHER VEHICLE | | | 783 | 998 |
| UNKNOWN VEHICLE | | | 784 | 999 |
| 51 VOLVO | | | | |
| MODEL | INCLUDES | YEAR (| ORACLE | SAS |
| | | | | |
| 122 | \$ | 1900-1968 | 6774 | 31 |
| 142/144/145 | S, E, GL, GLS, Deluxe | 1900-1974 | 6777 | 32 |
| 164 | S, E | 1969-1975 | 6780 | 33 |
| 240/242/244/245 | DL. GL, GLE, GLT, Deluxe | 1975-1998 | 583 | 34 |
| 262/264/265 | GL | 1976-1982 | 587 | 35 |
| 1800 | E, S, ES | 1900-1973 | 6782 | 36 |
| | | | | |

| 760/780 | GLE, Turbo | 1983-1990 | 596 | 38 |
|--|--------------------|-----------|--|---|
| 760/780 | GLE, Turbo | 1987-1992 | 596 | 38 |
| 740 | GLE, GT, Turbo, GL | 1986-1992 | 590 | 39 |
| 940 | GLE, Turbo, SE | 1991-1998 | 6784 | 40 |
| 960 | | 1992-1998 | 6786 | 41 |
| 850 | GLT, Wagon | 1993-1998 | 6788 | 42 |
| 70 SERIES | | 24 | 4066 | 43 |
| 90 SERIES | | 24 | 4068 | 44 |
| 80 SERIES | S80 | 31 | 1610 | 45 |
| 40 SERIES | Includes S40, V40 | 31 | 1608 | 46 |
| 60 SERIES | , | 44 | 4667 | 47 |
| V50 | | 174 | 4931 | 48 |
| OTHER AUTOMOBILE | | | 600 | 398 |
| UNKNOWN AUTOMOBILE | | | 601 | 399 |
| XC90 | | 148 | 8083 | 401 |
| MEDIUM/HEAVY CBE | | | 6790 | 881 |
| MEDIUM/HEAVY COE LOW | | | 6791 | 882 |
| ENTRY | | | 0751 | 002 |
| MEDIUM/HEAVY COE HIGH | | 6 | 6792 | 883 |
| ENTRY | | | | |
| MEDIUM/HEAVY - UNKNOWN | | 6 | 6793 | 884 |
| ENGINE | | | | |
| MEDIUM/HEAVY: COE ENTRY | | 6 | 6794 | 890 |
| POSITION | | | | |
| OTHER MEDIUM/HEAVY | | | 602 | 898 |
| TRUCK | | | 000 | 000 |
| UNKNOWN MEDIUM/HEAVY TRUCK | | | 603 | 899 |
| MEDIUM BUS | | | 604 | 981 |
| OTHER BUS | | | 379 | 988 |
| OTHER BUS | | | | |
| | | 4 | | |
| UNKNOWN TYPE BUS | | | 6796 | 989 |
| | | | | |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE | | | 6796 | 989 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE | INCLLIDES | 6 | 6796 6798 | 989 999 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE | INCLUDES | 6 | 6796 | 989 999 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL | INCLUDES | YEAR ORA | 6796 6798 ACLE | 989 999 SAS |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 | 989 999 SAS 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY | INCLUDES | YEAR ORA | 6796 6798 ACLE | 989 999 SAS |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 | 989 999 SAS 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 | 989 999 SAS 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 | 989 999 SAS 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 | 989 999 SAS 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 | 989 999 SAS 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 | 989 999 SAS 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 | 989 999 SAS 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 | 989 999 SAS 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 | 989 999 SAS 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 | 989 999 SAS 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 | 989 999 SAS 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME | INCLUDES | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 | 989 999 SAS 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL MEDIUM/HEAVY - CBE | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 |
| UNKNOWN TYPE BUS UNKNOWN VEHICLE 9809 WARD LAFRANCE MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE MEDIUM/HEAVY BASED MOTORHOME 9804 WESTERN STAR MODEL MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION MEDIUM/HEAVY - COE/HIGH | | YEAR ORA | 6796 6798 ACLE 9802 9806 9804 9803 9807 9805 9801 | 989 999 SAS 898 898 898 898 898 898 898 898 |

| MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER | | | 9768 9772 | 804 804 |
|---|----------------|-----------|---------------------------|-------------------------|
| MEDIUM/HEAVY - UNKNOWN | | | 9770 | 804 |
| ENGINE MEDIUM/HEAVY BASED MOTORHOME | | | 9766 | 804 |
| 30189 WINNEBAGO | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| VAN BASED MOTORHOME LIGHT TRUCK BASED MOTORHOME | | | 30250 30251 | 470 498 |
| UNKNOWN TYPE LIGHT MOTORHOME | | | 30252 | 499 |
| MOTOR HOME MEDIUM / HEAVY OTHER | | | 30195 | 850 |
| MEDIUM / HEAVY UNKNOWN | | | 30198 30199 | 898 899 |
| UNKNOWN VEHICLE | | | 45160 | 999 |
| 76 YAMAHA | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| MOTORCYCLE (000-050CC) | | | 370 | 701 |
| MOTORCYCLE (051-124CC) | | | 371 | 702 |
| MOTORCYCLE (125-349CC) | | | 372 | 703 |
| MOTORCYCLE (350-449CC) | | | 373 | 704 |
| MOTORCYCLE (450-749CC) | | | 374 | 705 |
| MOTORCYCLE (750CC-OVER) | | | 375 | 706 |
| MOTORCYCLE (UNKNOWN CC) | | | 376 | 709 |
| ATC/ATV (000-050CC) | | | 377 | 731 |
| ATC/ATV (051-124CC) | | | 378 | 732 |
| ATC/ATV (125-349CC) | | | 294 | 733 |
| ATC/ATV (350CC-OVER) | | | 295 | 734 |
| ATC/ATV (UNKNOWN CC) | | | 296 | 739 |
| OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE | | | 297 | 798 700 |
| | | | 298 | 799 |
| OTHER VEHICLE | | | 46436 | 998 |
| 57 YUGO | | | | |
| MODEL | INCLUDES | YEAR | ORACLE | SAS |
| GV OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE | GVX, Cabriolet | 1986-1992 | 7890 491 492 441 | 31 398 399 999 |

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|---|
| VV003A | MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 th and 5 th characters of the VIN (V07) equal ZN, ZP, ZR or ZY | BODY TYPE (V05) must equal 17. |
| VV601 | BODY TYPE (V05) equals 1-13, 17 | MODEL (V04) must equal 1-399. |
| VV602 | MODEL (V04) equals 1-399 | BODY TYPE (V05) must equal 1-13 or 17. |
| VV603 | BODY TYPE (V05) equals 14 | MODEL (V04) must equal 401-420, 498 or 499. |
| VV604 | BODY TYPE (V05) equals 15 | MODEL (V04) must equal 421-430, 498 or 499. |
| VV605 | BODY TYPE (V05) equals 16 | MODEL (V04) must equal 431-440, 498 or 499. |
| VV606 | BODY TYPE (V05) equals 19 | MODEL (V04) must equal 498 or 499. |
| VV607 | BODY TYPE (V05) equals 20 | MODEL (V04) must equal 441-460, 498 or 499. |
| VV608 | BODY TYPE (V05) equals 21 | MODEL (V04) must equal 461-470, 498 or 499. |
| VV609 | BODY TYPE (V05) equals 22-29 | MODEL (V04) must equal 441-470, 498 or 499. |
| VV611 | BODY TYPE (V05) equals 30 | MODEL (V04) must equal 471-480, 498 or 499. |
| VV612 | BODY TYPE (V05) equals 31 | MODEL (V04) must equal 481-490, 498 or 499. |
| VV613 | BODY TYPE (V05) equals 32, 33 or 39 | MODEL (V04) must equal 471-490, 498 or 499. |
| VV615 | BODY TYPE (V05) equals 40-42 or 45 | MODEL (V04) must equal 498. |
| VV616 | BODY TYPE (V05) equals 48 | MODEL (V04) must equal 499. |
| VV617 | BODY TYPE (V05) equals 49 | MODEL (V04) must equal 999. |
| VV618 | BODY TYPE (V05) equals 50 or 59 | MODEL (V04) must equal 902, 981-983, 988 or 989. |
| VV619 | BODY TYPE (V05) equals 58 | MODEL (V04) must equal 902, 950, 981-983, 988 or 989. |
| VV620 | BODY TYPE (V05) equals 60, 64 or 66 | MODEL (V04) must equal 801-808, 881-890, 898 or 899. |

| | VV621 | BODY TYPE (V05) equals 65 | MODEL (V04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787. |
|------|-------|------------------------------------|---|
| | VV622 | BODY TYPE (V05) equals 78 | MODEL (V04) must equal 801-808, 881-890, 898 or 899. |
| | VV623 | BODY TYPE (V05) equals 79 | MODEL (V04) must equal 899. |
| | VV624 | BODY TYPE (V05) equals 80-82 or 89 | MODEL (V04) must equal 701-706, 709 or 799. |
| | VV625 | BODY TYPE (V05) equals 88 | MODEL (V04) must equal 798. |
| | VV627 | BODY TYPE (V05) equals 90 | MODEL (V04) must equal 731-734, 739 or 799. |
| | VV628 | BODY TYPE (V05) equals 91-93 or 97 | MODEL (V04) must equal 998. |
| | VV629 | BODY TYPE (V05) equals 99 | MODEL (V04) must equal 999. |
| | RANGE | MAKE (V03) equals 29 or 69 | MODEL, (V04) must not equal 498, 898, 988 or 998. |
| | RANGE | MAKE (V03) equals 98 | MODEL (v04) must not equal 398 or 498 |
| | RANGE | MODEL (V04) must not equal null. | |
| nina | 10 | | |

<u>Warnings</u>

| IF | THEN |
|---------------------------------------|--|
| VIN (V07) passes the check digit test | MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known. |

Notify NHTSA

VV300E

IF **THEN**

Please notify NHTSA of the specific make and model when "other" make/model is selected. **NOTIFY NHTSA**

V05 BODY TYPE

Screen Heading: Vehicle Data

Screen Name: Body Type (395-E)

Long Name: What is the vehicle body type?

SAS Name: Vehicle.Body_Typ

Oracle Name: GES.Vehicle.BodyTypeID

Element Values:

Screen Oracle SAS

AUTOMOBIL ES

| AUTOMOBILES | | | |
|-------------|--|--|--|
| * | 1 2 3 4 5 6 7 17 8 | 01 02 03 04 05 06 07 17 08 09 | Convertible (excludes sun-roof, t-bar) 2-Door Sedan, Hardtop, Coupe 3-Door/2-Door Hatchback 4-Door Sedan, Hardtop 5-Door/4-Door Hatchback Station Wagon (excluding van and truck based) Hatchback, Number of Doors Unknown 3-Door Coupe Other Automobile Type Unknown Automobile Type |
| | | | AUTOMOBILE DERIVATIVES |
| | 10 | 10 | Auto Based Pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit Pickup) |
| | 11 | 11 | Auto Based Panel (Cargo Station Wagon, auto based Ambulance/Hearse) |
| | 12 | 12 | Large Limousine (More than four side doors or stretched chassis) |
| | 13 | 13 | Three Wheel Automobile or Automobile Derivative |
| | | | UTILITY VEHICLES |
| | 14 | 14 | Compact Utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky) |
| | 15 | 15 | Large Utility (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full size (78 and after), full size Blazer, full |
| | 16 | 16 | size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon) Utility Station Wagon (Chevrolet Suburban, GMC Suburba, Travelall, Grand Wagoneer; also includes suburban limousine) |
| | 19 | 19 | Utility Vehicle, Unknown Body Type |

VAN BASED LIGHT TRUCKS (<= 4,536 KG GVWR)

- 20 Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Windstar, Villager, Lumina APV, Silhouette, Trans Sport, Astro, Safari, Vanagon/Camper, Toyota Van and Minivan, Previa, Nissan Minivan, Quest, Expo Wagon, and Mitsubishi Minivan)
- 21 Large Van (B150-350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, and Vandura)
- 22 Step Van or Walk-in Van (<= 4,536 kg GVWR)
- 23 Van Based Motorhome
- 24 Van Based School Bus
- 25 25 Van Based Other Bus
- 28 28 Other Van Type (Hi-Cube, Kary)
- 29 29 Unknown Van Type

LIGHT CONVENTIONAL TRUCKS (pickup style cab <= 4,536 kg GVWR)

- 30 30 Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- 31 Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- 32 Pickup With Slide-In Camper
- 33 Convertible Pickup
- 39 Unknown (Pickup Style) Light Conventional Truck

OTHER LIGHT TRUCKS (<= 4,536 kg GVWR)

- 40 40 Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
- 41 41 Truck Based Panel
- 42 42 Light Truck Based Motorhome (Chassis Mounted)
- 45 45 Other Light Truck Type
- 48 48 Unknown Light Truck Type (Utility, Van, Pickup or Other Light Truck)
- 49 49 Unknown Light Vehicle Type (Automobile, Utility, Van or Light Truck)

BUSES

| 50 | 50 | School Bus (designed to carry students, not cross country or transit) | |
|--------------------------------------|----|---|--|
| 58 | 58 | Other Bus Type (transit, intercity, bus based motorhome) | |
| 59 | 59 | Unknown Bus Type | |
| MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR) | | | |

| 60 | 60 | Step Van |
|----|----|---|
| 64 | 64 | Single Unit Straight Truck |
| 65 | 65 | Medium/Heavy Truck Based Motorhome |
| 66 | 66 | Truck-Tractor (Cab only or with any number of trailing units) |
| 78 | 78 | Unknown Medium/Heavy Truck Type |
| 79 | 79 | Unknown Truck Type (light/medium/heavy) |

MOTORED CYCLES (does not include all-terrain vehicle/cycles)

| 80 81 82 88 89 | 80 81 82 88 89 | Motorcycle Moped (motorized bicycle) Three Wheeled Motorcycle or Moped Other Motored Cycle Type (minibike, motorscooter) Unknown Motored Cycle Type |
|----------------------------|----------------------------|---|
| | | OTHER VEHICLES |
| 90 91 | 90 91 | ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) Snowmobile |

| ~ ~ | | The training and the training of the training |
|-----|----|---|
| 91 | 91 | Snowmobile |
| 92 | 92 | Farm Equipment Other Than Trucks |
| 93 | 93 | Construction Equipment Other Than Trucks (includes graders) |
| 97 | 97 | Other Type Vehicle (includes go-cart, fork lift, city street |
| | | sweeper , motorized wheelchairs) |
| 99 | 99 | Unknown Body Type |
| | | |

^{*} The screen values displayed are determined by the make and model of vehicle selected. For example, if the make/model selected is Cadillac/Catera, only AUTOMOBILE body types are displayed. The screen values for the body types displayed are sequential numbers beginning with one (1).

Remarks:

AUTOMOBILES

These attributes are used to classify different types of passenger cars. These type of light vehicles, referred to as automobiles, are designed primarily to transport passengers.

Convertible (excludes sun-roof and t-bar) refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over 2-door or 4-door codes.

2-door sedan, hardtop, coupe refers to a passenger car equipped with two doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

3-door/2-door hatchback refers to a passenger car equipped with two doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

3-door coupe refers to a passenger car equipped with three doors for ingress/egress in which 2 of the doors are located on the driver's side and a separate trunk area for cargo(i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

4-door sedan, hardtop refers to a passenger car equipped with four doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

5-door/4-door hatchback refers to a passenger car equipped with four doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

Station wagon (excluding van and truck based) refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).

Hatchback, number of doors unknown refers to a passenger car with an unknown number of doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

Other Automobile Type refers to any passenger car that cannot be described by other automobile codes.

Unknown Automobile Type is used when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type.

AUTOMOBILE DERIVATIVES

This describes certain passenger cars that have been modified to perform cargo-related tasks.

Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup) refers to a passenger car based, pickup type vehicle. The roof area (and side glass) rearward of the front seats on a station wagon have been removed and converted into a pickup-type cargo box.

Auto based panel (cargo station wagon, auto based ambulance/hearse) refers to an automotive station wagon that may have sheet metal rearward of the B-pillar rather than class.

Large Limousine - more than four side doors or stretched chassis refers to an automobile that has sections added within its wheelbase to increase length and passenger/cargo carrying capacity.

Three-wheel automobile or automobile derivative refers to three-wheel vehicles with an enclosed passenger compartment.

UTILITY VEHICLES (<= 4,536 kg GVWR)

Multi-purpose vehicles (MPV) are designed to have off-road capabilities. These vehicles are: generally four wheel drive (4 x 4), have increased ground clearance, and are equipped with a strong frame. Four wheel drive automobiles are not considered MPVs.

Compact Utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky) refers to a short wheelbase and narrow tracked multi-purpose vehicle designed to operate in rugged terrain.

Large Utility (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full size (78 and after), full size Blazer, full size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon) refers to fullsize multi-purpose vehicles primarily designed around a shortened pickup truck chassis. Generally a station wagon style body, some model are equipped with a removable top.

Utility Station Wagon (Chevrolet Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine) refers primarily to a pickup truck based chassis enlarged to a station wagon.

Utility Vehicle, Unknown Body Type is used when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

VAN BASED LIGHT TRUCKS (<= 4,536 kg GVWR)

Light trucks (<= 4,536 kg GVWR) are designed to maximize cargo/passenger area versus overall length. Basically a "box on wheels", these vehicles are identifiable by their enclosed cargo/passenger area and relatively short (or non-existent) hood.

Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper) refers to down-sized cargo or passenger vans.

Large Van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura) refers to a standard cargo or passenger van. These vans will generally have a larger capacity in both volume and GVWR.

Step Van or Walk-In Van (<= 4,536 kg GVWR) refers to a multi-stop delivery vehicle with a GVWR less than or equal to 4,536 kilograms. Examples are the Grumman LLV used by the US Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.

Van Based Motorhome (<= 4,536 kg GVWR) refers to a van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in attributes minivans, large van, step van; however, a frame mounted recreational unit is added behind the driver/cab area. This code takes priority over attributes minivan and large van.

Van Based School Bus (<= 4,536 kg GVWR) is a passenger van designed to carry students (passengers) to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. Van based school buses converted for other uses (e.g., church bus) also use this code.

Van Based Other Bus (<= 4,536 kg GVWR) is a van derivative (e.g., taxi, small local transit) designed to carry passengers for low occupancy functions or purposes. Van based school buses do not use this code.

Other Van Type (Hi-Cube Van, Kary) refers to a cargo or delivery van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in Minivans or Large Vans with a frame mounted cargo area unit added behind the driver/cab area or if the van cannot be described as a Minivan, Large Van, Step-van or a Van-based motorhome. Annotate the van type when using this code. This code takes priority over Minivans and Large Vans.

Unknown Van Type is used when it is known that this vehicle is a light van, but its specific type cannot be determined.

LIGHT CONVENTIONAL TRUCKS (Pickup Style Cab, <= 4,536 kg GVWR)

Light Conventional Trucks are used to describe vehicles commonly referred to as pickup trucks and some of their derivatives. These light trucks are characteristically designed with a small cab containing a single row of seats (extended cabs with additional seats are available for some models), a large hood covering a conventional engine placement, and a separate open box area (approximately 180 to 240 centimeters long) for cargo.

Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup) is used to describe a pickup truck having a width of 178 centimeters or less.

Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100) is used to describe a pickup truck having a width of greater than 178 centimeters.

Pickup with Slide-in Camper is used to describe any pickup truck that is equipped with a slide-in camper. A slide-in camper is a unit that mounts within a pickup bed. Pickup bed caps, tonneau covers or frame mounted campers are not applicable for this code.

Convertible Pickup refers to a pickup truck equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over compact and large pickups.

Unknown Pickup Style Light Conventional Truck is used when this vehicle is a Light Conventional Truck, but there is insufficient data to determine the specific code.

OTHER LIGHT TRUCKS (<= 4,536 kg GVWR)

Other Light Trucks are used to describe vehicles that are based upon a conventional light pickup frame, but a commercial or recreational body has been affixed to the frame rather than a pickup box.

Cab Chassis Based (includes rescue vehicles, light stake, dump and tow truck) is used to describe a light vehicle with a pickup style cab and a commercial (non-pickup) body attached to the frame. Included are pickup based ambulances and tow trucks.

Truck Based Panel is used to describe a truck based station wagon that has sheet metal rather than glass above the beltline rearward of the B-pillars.

Light Truck Based Motorhome (chassis mounted) is used to describe a frame mounted recreational unit attached to a light van or conventional chassis.

Other Light Conventional Truck Type is used for light conventional trucks that cannot be described elsewhere.

Unknown Light Truck Type is used when it is known that the vehicle is a light truck chassis based vehicle but insufficient data exist to specify utility, van, pickup or other light vehicle.

Unknown Light Vehicle Type (automobile, utility, van or light truck) is used when it is known that the vehicle is a light vehicle, but insufficient data exists to specify what type of light vehicle it is.

BUSES (Excludes Van Based)

Buses are defined as any medium/heavy motor vehicle designed primarily to transport large groups of passengers.

School Bus (designed to carry students, not cross country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.

Other Bus Type (e.g., transit, intercity, bus based motorhome) is a transport device designed to carry passengers for longer periods of time. These vehicle may be classified as over-the-road, transit, intercity, bus related motorhome (other than school bus based) or other.

Unknown Bus Type is used when it is known the transport device is a bus but there is insufficient data to choose between attributes School Bus or Other Bus Type.

MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR)

Medium/Heavy Trucks describe a single unit truck specifically designed for carrying cargo on the same chassis as the cab.

They pertain to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

Step Van (>4,536 kg GVWR) defines a single unit enclosed body with a GVWR greater than 4,536 kilograms and an integral driver's compartment and cargo area. Step vans are generally equipped with a folding driver seat mounted on a pedestal and a sliding door for easy ingress/egress.

Single Unit Straight Truck describes a non-articulated truck designed to carry cargo. The gross vehicle weight rating of the vehicle must exceed 4,536 kilograms. Ford F-450 and Ford F-550 super duty series are coded **Single Unit Straight Truck**.

Medium/Heavy Truck Based Motorhome describes a recreational vehicle mounted on a single unit medium/heavy truck chassis.

Truck-Tractor (Cab only or with any number of trailing units) describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration.

Unknown Medium/Heavy Truck Type is used when it is unknown whether the medium/heavy truck is a single unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium or heavy truck with GVWR >4,536 kilograms. **Unknown Truck Type** (light/medium/heavy) is used when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

MOTORED CYCLES (Does Not Include All Terrain Vehicles/Cycles)

Motorcycle is used when the vehicle is a two-wheeled open (i.e., no enclosed body) vehicle propelled by an internal combustion engine. Motorcycles equipped with a side car also use this code.

Moped (motorized bicycle) is used when the vehicle is a motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

Three-Wheeled Motorcycle or Moped is used when the vehicle is a three-wheeled open vehicle propelled by an internal combustion engine or a three-wheeled motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

Other Motored Cycle (minibike, motor scooter) is used when the vehicle in question does not qualify for attributes motorcycle, moped, three-wheeled motorcycle or moped (e.g., motor scooter).

Unknown Motored Cycle Type is used when it is known that the vehicle is a motored cycle, but no further data is available.

OTHER VEHICLES

Other Vehicles describes all motored vehicles that are designed primarily for off-road use.

ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) is used for off-road recreational vehicles which cannot be licensed for use on public roadways. ATVs have 4 or more wheels and ATCs have 2 or 3 wheels. Generally, the tires have low pressure and wide profile (i.e., flotation/balloon).

Snowmobile refers to a vehicle designed to be operated over snow propelled by an internal combustion engine.

Farm Equipment Other Than Trucks refers to farming implements other than trucks propelled by an internal combustion engine (e.g., farm tractors, combines, etc.).

Construction Equipment Other Than Trucks refers to construction equipment other than trucks propelled by an internal combustion engine (e.g., bulldozer, roadgrader, etc.).

Other Vehicle Type is used when the motorized vehicle in question does not qualify for Construction equipment other than trucks, Farm equipment other than trucks, Snowmobile, ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) (e.g., go-kart, dune buggy, "kit"car, motorized wheelchair, etc.).

Unknown Body Type is used when there is no available information regarding the type of vehicle. This lack of information prohibits the accurate classification of this vehicle within one of the preceding codes.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--|
| AV149 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equal to 80-89 | at least one ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99. |
| PP074A | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) is between 50 and 97 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074B | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074C | SEATING POSITION (P04) equals 21, 23, 31 or 33 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 1 or 9. |
| PP076A | SEATING POSITION (P04) equals 28, 29, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 9. |
| PP080 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and (BODY TYPE (V05) is between 50 and 97 or (BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998)) | SEATING POSITION (P04) must equal 11 or 13. |
| PP080A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11, 13, 21, 23, 31 or 33. |
| PP080B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 2 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11 or 13. |
| PV001 | PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 00, 12-53 or 99. |
| PV005 | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 13-19 or 22-53. |
| PV007 | PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 11-49, 50, 52 or 99. |
| PV010 | PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 12-50 or 52. |

| PV011 | PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08 | BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93. |
|--------|--|--|
| PV066 | RESTRAINT SYSTEM USE (P15) equals 1-3 or 6 | BODY TYPE (V05) must not equal 80-89 or 90. |
| PV125 | EJECTION (P06) equals 1or 2 | BODY TYPE (V05) must not equal 80-89, 90 or 91. |
| PV172 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 | BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993]. |
| PV196A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49 | MODEL YEAR (V06) must be greater than 1971. |
| PV196B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48 | MODEL YEAR (V06) must be greater than 1990. |
| PV196C | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39 | MODEL YEAR (V06) must be greater than 1992. |
| VP002 | PERSON TYPE (P03) equals 2 or 9 and SEATING POSITION (P04) equals 50 | BODY TYPE (V05) must equal 64, 66 or 78. |
| VP002A | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-31, 90 or 91 | SEATING POSITION (P04) must not equal 51. |
| VP207 | If BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | EJECTION (P06) must equal 8. |
| VP207A | If BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS (V10B) is greater than 00 | EJECTION (P06) must equal 8. |
| VP208 | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) must equal 0. |
| VV003 | SPECIAL USE (V08) equals 01 | BODY TYPE (V05) must equal 02-09, 12, 17, 20-29 or 49. |
| VV003A | MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 th and 5 th characters of the VIN (V07) equal ZN, ZP, ZR or ZY | BODY TYPE (V05) must equal 17. |
| VV006 | SPECIAL USE (V08) equals 02 | BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59. |
| | | |

| VV010 | SPECIAL USE (V08) equals 03 | BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99. |
|--------|--|---|
| VV012 | BODY TYPE (V05) equals 01-05, 07-09 or 17 | NUMBER OF OCCUPANTS CODED (V10) must not be greater than 15. |
| VV012A | BODY TYPE (V05) equals 01-05, 07-09 or 17 | NUMBER OF OCCUPANTS (V10B) must not be greater than 15. |
| VV013 | BODY TYPE (V05) equals 06, 11, 14 or 15 | NUMBER OF OCCUPANTS CODED (V10) must not be greater than 22. |
| VV013A | BODY TYPE (V05) equals 06, 11, 14 or 15 | NUMBER OF OCCUPANTS (V10B) must not be greater than 22. |
| VV015 | BODY TYPE (V05) equals 80-89 | NUMBER OF OCCUPANTS CODED (V10) must not be > 5. |
| VV015A | BODY TYPE (V05) equals 80-89 | NUMBER OF OCCUPANTS (V10B) must not be greater than 5. |
| VV025 | SPECIAL USE (V08) equals 06 | BODY TYPE (V05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99. |
| VV085 | BODY TYPE (V05) equals 25 or 58 | SPECIAL USE (V08) must not equal 00 or 02. |
| VV086 | BODY TYPE (V05) equals 59 | SPECIAL USE (V08) must = 99. |
| VV101 | BODY TYPE (V05) equals 92 | SPECIAL USE (V08) must equal 11. |
| VV102 | SPECIAL USE (V08) equals 11 | BODY TYPE (V05) must equal 92. |
| VV110 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 000000. |
| VV110A | BODY TYPE (V05) equals 50-64, 66-79 or 99 | the NGA variables must not equal null. |
| VV110B | BODY TYPE (V05) does not equal 50-64, 66-79 or 99 | the NGA variable must not equal null. |
| VV111 | BODY TYPE (V05) equals 80-89 | ROLLOVER TYPE (V30) must equal 00. |
| VV112 | BODY TYPE (V05) equals 93 | SPECIAL USE (V08) must equal 12. |
| VV113 | SPECIAL USE (V08) equals 12 | BODY TYPE (V05) must equal 93. |
| VV115 | VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79 | NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) must not equal 00. |
| VV116 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89 | ROLLOVER TYPE (V30) must not equal 00. |
| VV145 | CARGO BODY TYPE (V33) equals 01 | BODY TYPE (V05) must equal 50, 58 or 59. |

| VV153 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
|-------|--|---|
| VV154 | BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99 | HAZARDOUS MATERIALS RELEASE (V36) must equal 0. |
| VV155 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS RELEASE (V36) must equal 9. |
| VV156 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS RELEASE (V36) must equal 0. |
| VV157 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 9. |
| VV160 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV161 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999. |
| VV162 | BODY TYPE (V05) is not equal to 60,64, 66-79 or 99 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
| VV163 | BODY TYPE (V05) equals 99 | CARGO BODY TYPE (V33) must equal 99. |
| VV164 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | CARGO BODY TYPE (V33) must equal 00. |
| VV165 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (V32) must equal 00. |
| VV166 | BODY TYPE (V05) equals 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (V32) must equal 99. |
| VV167 | BODY TYPE (V05) equals 99 | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 9999999999. |
| VV169 | BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV174 | VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66 | CARGO BODY TYPE (V33) must equal 98. |
| VV219 | BODY TYPE (V05) equals 50, 59-64, 66-79 or 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| VV220 | BODY TYPE (V05) equals 50, 59-64, 66-79 or 99 | CARGO BODY TYPE (V33) must not equal 00. |
| VV221 | BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07 | CARGO BODY TYPE (V33) must equal 98. |

| VV223 | CARRIER'S IDENTIFICATION NUMBER (V31) does not equal 000000 or 99999999 | BODY TYPE (V05) must equal 50-64, 66-79 or 99. |
|-------|---|---|
| VV248 | BODY TYPE (V05) equals 50 or 59 | CARGO BODY TYPE (V33) must equal 01. |
| VV249 | BODY TYPE (V05) equals 58 | CARGO BODY TYPE (V33) must equal 01 or 98. |
| VV601 | BODY TYPE (V05) equals 1- 13, 17 | MODEL (V04) must equal 1-399. |
| VV602 | MODEL (V04) equals 1-399 | BODY TYPE (V05) must equal 1-13 or 17. |
| VV603 | BODY TYPE (V05) equals 14 | MODEL (V04) must equal 401-420, 498 or 499. |
| VV604 | BODY TYPE (V05) equals 15 | MODEL (V04) must equal 421-430, 498 or 499. |
| VV605 | BODY TYPE (V05) equals 16 | MODEL (V04) must equal 431-440, 498 or 499. |
| VV606 | BODY TYPE (V05) equals 19 | MODEL (V04) must equal 498 or 499. |
| VV607 | BODY TYPE (V05) equals 20 | MODEL (V04) must equal 441-460, 498 or 499. |
| VV608 | BODY TYPE (V05) equals 21 | MODEL (V04) must equal 461-470, 498 or 499. |
| VV609 | BODY TYPE (V05) equals 22-29 | MODEL (V04) must equal 441-470, 498 or 499. |
| VV611 | BODY TYPE (V05) equals 30 | MODEL (V04) must equal 471-480, 498 or 499. |
| VV612 | BODY TYPE (V05) equals 31 | MODEL (V04) must equal 481-490, 498 or 499. |
| VV613 | BODY TYPE (V05) equals 32, 33 or 39 | MODEL (V04) must equal 471-490, 498 or 499. |
| VV615 | BODY TYPE (V05) equals 40-42 or 45 | MODEL (V04) must equal 498. |
| VV616 | BODY TYPE (V05) equals 48 | MODEL (V04) must equal 499. |
| VV617 | BODY TYPE (V05) equals 49 | MODEL (V04) must equal 999. |
| VV618 | BODY TYPE (V05) equals 50 or 59 | MODEL (V04) must equal 902, 981- 983, 988 or 989. |
| VV619 | BODY TYPE (V05) equals 58 | MODEL (V04) must equal 902, 950, 981-983, 988 or 989. |
| VV620 | BODY TYPE (V05) equals 60, 64 or 66 | MODEL (V04) must equal 801-808, 880-890, 898 or 899. |
| VV621 | BODY TYPE (V05) equals 65 | MODEL (V04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787. |

| VV622 | BODY TYPE (V05) equals 78 | MODEL (V04) must equal 801-808, 881-890, 898 or 899. |
|-------|------------------------------------|--|
| VV623 | BODY TYPE (V05) equals 79 | MODEL (V04) must equal 899. |
| VV624 | BODY TYPE (V05) equals 80-82 or 89 | MODEL (V04) must equal 701-706, 709 or 799. |
| VV625 | BODY TYPE (V05) equals 88 | MODEL (V04) must equal 798. |
| VV627 | BODY TYPE (V05) equals 90 | MODEL (V04) must equal 731-734, 739 or 799. |
| VV628 | BODY TYPE (V05) equals 91-93 or 97 | MODEL (V04) must equal 998. |
| VV629 | BODY TYPE (V05) equals 99 | MODEL (V04) must equal 999. |
| RANGE | BODY TYPE (V05) must not be null. | |

<u>Warnings</u>

| | IF | THEN |
|--------|--|--|
| PP045 | PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) should equal 0. |
| PV068 | RESTRAINT SYSTEM USE (P15) equals 5 | BODY TYPE (V05) should equal 80-90. |
| PV166 | SEATING POSITION (P04) equals 31-49 | BODY TYPE (V05) should not equal 01, 02, 03, 04 or 05. |
| PV172A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996 | BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99. |
| VA102 | BODY TYPE (V05) equals 24 or 50 | SCHOOL BUS RELATED (A21) should equal 1. |
| VP173 | BODY TYPE (V05) equals 40-45 or 50-97 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 0. |
| VP174D | BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9. |
| VP192 | SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01,06 or 30-39 | EJECTION (P06) should equal 0. |
| VV030 | VEHICLE TRAILING (V13) equals 2 | BODY TYPE (V05) should not equal 50-58, 80-89, 90 or 91. |
| VV032 | BODY TYPE (V05) equals 01-05, 07-09, 17 or 97 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 8. |
| VV032A | BODY TYPE (V05) equals 01-05, 07-09, 17 or 97 | NUMBER OF OCCUPANTS (V10B) should not be greater than 8. |
| VV033 | BODY TYPE (V05) equals 12 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 15. |
| VV033A | BODY TYPE (V05) equals 12 | NUMBER OF OCCUPANTS (V10B) should not be > 15. |
| VV034 | BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 12. |
| VV034A | BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79 | NUMBER OF OCCUPANTS (V10B) should not be > 12. |
| VV036 | BODY TYPE (V05) equals 80-89 or 91 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 2. |

| VV036A | BODY TYPE (V05) equals 80-89 or 91 | NUMBER OF OCCUPANTS (V10B) should not be > 2. |
|--------|---|--|
| VV037 | BODY TYPE (V05) equals 90 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 6. |
| VV037A | BODY TYPE (V05) equals 90 | NUMBER OF OCCUPANTS (V10B) should not be greater than 6. |
| VV076 | BODY TYPE (V05) equals 66 | VEHICLE TRAILING (V13) should not equal 1. |
| VV084 | BODY TYPE (V05) equals 24 or 50 | SPECIAL USE (V08) should equal 02. |
| VV109 | BODY TYPE (V05) equals 50-64 or 66-79 | CARRIER'S IDENTIFICATION NUMBER (V31) should not equal 000000. |
| VV114 | SPECIAL USE (V08) equals 10 | BODY TYPE (V05) should = 11. |
| VV185 | CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V05) equals 66 | VEHICLE TRAILING (V13) should equal 1. |
| VV244 | BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1 | NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) should equal 2, 3 or 99. |
| VV300E | VIN (V07) passes the check digit test | MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known. |

Post Entry

| | IF | THEN |
|--------|---|--|
| AV236 | SCHOOL BUS RELATED (A21) equals 1 | at least one BODY TYPE (V05) or PARKED/WORKING VEHICLE BODY TYPE (PV05) should equal 24 or 50. |
| PV188A | no BODY TYPE (V05) equals 60- 79 and INJURY SEVERITY (P09) equals 4 for at least one occupant of a vehicle where BODY TYPE (V05) equals 1-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 1. |
| PV188B | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |
| PV188K | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 5. |
| PV188P | no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L or category 1 stratum M and there is at least one vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 6. |

| PV188R | at least one BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L, category 1 stratum M or category 1 stratum N and there is at least one vehicle where MANNER OF LEAVING SCENE (V19) equals 2 or one person where INJURY SEVERITY (P09) equals 1-5 | STRATUM (A23) should equal 2. |
|--------|--|--|
| PV188S | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L, category 1 stratum M, category 1 stratum N or category 2 and there is at least one person where INJURY SEVERITY (P09) equals 2-4 | STRATUM (A23) should equal 3. |
| VP224 | BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2 | RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9. |
| VV116A | ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89 | at least one HARMFUL EVENT (A06) must equal 01. |

V06 VEHICLE MODEL YEAR

Screen Heading: Vehicle Data

Screen Name: Year (400-E)

Long Name: What is the vehicle model year?

SAS Name: Vehicle.Model_Yr

Oracle Name: GES.Vehicle.ModelYear

Element Values:

Screen Oracle SAS

xxxx xxxx Four Digit Model Year

* -9999 9999 Unknown

Remarks:

Enter the 4 digit model year.

Consistency Checks:

| | IF | THEN |
|--------|--|---|
| PP074B | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074C | SEATING POSITION (P04) equals 21, 23, 31 or 33 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 1 or 9. |
| PP076A | SEATING POSITION (P04) equals 28, 29, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 9. |
| PP080 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and (BODY TYPE (V05) is between 50 and 97 or (BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998)) | SEATING POSITION (P04) must equal 11 or 13. |
| PP080A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11, 13, 21, 23, 31 or 33. |

| PP080B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 2 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11 or 13. |
|--------|---|--|
| PV172 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 | BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993]. |
| PV196A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49 | MODEL YEAR (V06) must be greater than 1971. |
| PV196B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48 | MODEL YEAR (V06) must be greater than 1990. |
| PV196C | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39 | MODEL YEAR (V06) must be greater than 1992. |
| VV300A | VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present | the VEHICLE MODEL YEAR (V06) must match the 10 th character of the VIN (V07). |
| VV300G | VIN (V07) passes the check digit test | VEHICLE MODEL YEAR (V06) must be greater than or equal to 1981. |
| RANGE | VEHICLE MODEL YEAR (V06) must must not be greater than the crash y | |

<u>Warnings</u>

| | IF | THEN |
|--------|---|--|
| PV172A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996 | BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99. |
| VP174D | BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9. |
| VV300A | VEHICLE MODEL YEAR (V06) is greater than 1980 | the VEHICLE MODEL YEAR (V06) should match the 10 th character of the VIN (V07). |
| VV300D | VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present | VIN (V07) should pass the check digit test. |
| VV300E | VIN (V07) passes the check digit test | MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known. |

V13 VEHICLE TRAILING

Screen Heading: Vehicle Data

Screen Name: Trailing Unit (460-E)

Long Name: Was this vehicle towing trailing units?

SAS Name: Vehicle.Trailer

Oracle Name: GES. Vehicle. Trailing

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|--------|---|
| 1 2 | 1 2 | 1 2 | No Trailing Units One Trailing Unit |
| 3 4 | 3 4 | 3 4 | Two Trailing Units Three or More Trailing Units |
| 5 | 5 | 5 | Yes, Number of Units Unknown |
| 6 | 6 | 6 | Unknown |

Remarks:

Any unit that trails behind a power unit is a trailing unit. Examples of trailing units include: horse trailers, fifth wheel trailers, travel trailers, camper trailers, boat trailers, truck trailers (semi, full, log, tanker, etc), towed motor vehicles or any other trailer.

This variable is attempting to determine if the vehicle was towing a trailing unit. If the linkage is fixed, then the trailing unit is considered a towed unit. If the linkage is not fixed (e.g., one vehicle is pulling another using a rope), then each vehicle is considered to be separate.

Enter **No Trailing Units** when this vehicle was not towing a wheeled unit.

Enter **One Trailing Unit** when one unit was being towed by this vehicle.

Enter **Two Trailing Units** when this vehicle was towing two units.

Enter Three or More Trailing Units when this vehicle was towing three or more units.

Enter **Yes, Number of Units Unknown** when it is known that there was a towed unit but the number can not be determined.

Enter **Unknown** when it can not be determined from any information on the PAR if a unit was being towed.

Consistency Checks:

Errors

| | IF | THEN |
|------------|--|--|
| AV106 | HARMFUL EVENT (A06) equals 05 | VEHICLE TRAILING (V13) for the involved vehicle must not equal 1. |
| PV006 | SEATING POSITION (P04) equals 52 | VEHICLE TRAILING (V13) must not equal 1. |
| VV005 | JACKKNIFE (V14) equals 1 | VEHICLE TRAILING (V13) must not equal 1 or 6. |
| VV115 | VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| VV091 | HARMFUL EVENT (A06) equals 05 | VEHICLE TRAILING (V13) must not equal 1 or 6. |
| VV153 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
| VV156 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS RELEASE (V36) must equal 0. |
| VV160 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV174 | VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66 | CARGO BODY TYPE (V33) must equal 98. |
| <u>ngs</u> | | |
| | IF | THEN |
| VV030 | VEHICLE TRAILING (V13) equals 2 | BODY TYPE (V05) should not equal 50-58, 80-89, 90 or 91. |

Warnings

| | IF | THEN |
|-------|---|---|
| VV030 | VEHICLE TRAILING (V13) equals 2 | BODY TYPE (V05) should not equal 50-58, 80-89, 90 or 91. |
| VV076 | BODY TYPE (V05) equals 66 | VEHICLE TRAILING (V13) should not equal 1. |
| VV185 | CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V05) equals 66 | VEHICLE TRAILING (V13) should equal 1. |
| VV244 | BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1 | NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) should equal 02, 03 or 99. |

V14 JACKKNIFE

Screen Heading: Vehicle Data

Screen Name: Jackknife (470-R)

Long Name: Did a jackknife situation occur?

SAS Name: Vehicle.Jacknife

Oracle Name: GES. Vehicle. Jacknife

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------------------|
| 1 | 0 | 0 | No Jackknife Noted on the PAR |
| 2 | 1 | 1 | Jackknife Occurred |

Remarks:

Jackknife can occur at any time during the crash sequence. This variable includes jackknife for all vehicle/trailing unit combinations (e.g., light utility vehicle/trailing unit combination).

Uncontrolled Articulation (jackknife) occurs when the trailing unit does not follow directly behind the power unit (tracking), and the driver did not initiate the "non-tracking" situation.

Turning and backing are examples of driver initiated "non-tracking" controlled articulation and are not coded as a jackknife.

Enter **No Jackknife Noted on the PAR** when no uncontrolled articulation was reported between a vehicle and trailing unit. In addition, enter "No" when it is unknown if an uncontrolled articulation occurred.

Enter **Jackknife Occurred** when an uncontrolled articulation between a vehicle and trailing unit occurred during the crash. The uncontrolled articulation (Jackknife) can occur at any time during the crash sequence.

Consistency Checks:

| | IF | THEN |
|-------|--------------------------|---|
| VV005 | JACKKNIFE (V14) equals 1 | VEHICLE TRAILING (V13) must not equal 1 or 6. |
| VV008 | JACKKNIFE (V14) equals 1 | TRAVEL SPEED (V11) must not equal 0. |
| VV026 | JACKKNIFE (V14) equals 1 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 4-5, 7-9 or 13. |
| VV193 | JACKKNIFE (V14) equals 1 | DRIVER PRESENCE (D01) must not equal 0. |

Post Entry

| | IF | THEN |
|-------|-------------------------------|--|
| AV105 | HARMFUL EVENT (A06) equals 05 | JACKKNIFE (V14) for the involved vehicle must equal 1. |

A11 TRAFFICWAY FLOW

Screen Heading: Environmental Conditions

Screen Name: Traffic Flow (170-E)

Long Name: What is the trafficway flow for this vehicle's trafficway?

SAS Name: A11-Accident.Traf_Way, V_A11-Vehicle.VTrafWay

Oracle Name: GES.Roadway.TrafficFlowID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 1 | 1 | Not Physically Divided (two way traffic) |
| 2 | 2 | 2 | Divided Trafficway (Median Strip, Barrier, Etc.) |
| 3 | 4 | 3 | One way traffic |
| 4 | 5 | 9 | Unknown |
| 5 | 0 | 0 | Not Physically Divided (Center 2-way Left Turn Lane) |

Remarks:

Enter the value indicated on the PAR which best represents the trafficway flow just prior to this vehicle's critical precrash event. The trafficway selected for classification is the one this vehicle departed if it is off the trafficway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the trafficway selected for classification is the one it is on before entering the junction.

Enter **Not Physically Divided (Two Way Trafficway)** when the PAR indicates that the trafficway was not divided and traffic travels in opposing directions.

Although gores separate roadways and traffic islands (associated with channels) separate travel lanes, neither is involved in the determination of trafficway flow.

Enter **Divided Highway**, (**Median Strip**, **Barrier**, **Etc.**) whenever a trafficway division is reported. It is presumed that the traffic travels in but one direction on this vehicle's roadway.

Enter **One Way Trafficway** whenever the trafficway is undivided and traffic flows in but one direction (e.g., one-way streets). However, this code can also be used where a division is present so long as all the traffic on the trafficway goes in the same direction. An example occurs where the opposing roadway of the same named trafficway had to be split by such a distance that the right-of-way divides to accommodate other property.

Use this code for entrance/exit ramps where traffic is permitted to flow in only one direction.

Not Physically Divided (Center 2-way Left Turn Lane) is used whenever the trafficway is physically divided by a two-way left turn lane which is designed to allow left turns to driveways, shopping centers, businesses, etc., while at the same time providing a separation of opposing straight-through travel lanes.

Vehicles

Consistency Checks:

| | IF | THEN |
|-----------------|---|--|
| AA008 | RELATION TO ROADWAY (A10) equals 3 and the FHE involves 2 in-transport motor vehicles | TRAFFICWAY FLOW (A11) must equal 2 for at least one vehicle involved in the first harmful event. |
| AA008A | RELATION TO ROADWAY (A10) equals 9 | TRAFFICWAY FLOW (A11) must equal 0 for at least one vehicle involved in the first harmful event. |
| RANGE | TRAFFICWAY FLOW (A11) must equ | ual 0, 1, 2, 3 or 9. |
| <u>Warnings</u> | | |
| | IF | THEN |
| AA008B | RELATION TO ROADWAY (A10) equals 3 and the FHE involves 1 and only 1 in-transport motor vehicle | TRAFFICWAY FLOW (A11) must equal 2. |
| AA019 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | TRAFFICWAY FLOW (A11) should not equal 3. |
| AA027 | TRAFFICWAY FLOW (A11) equals 1 or 2 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA102 | NUMBER OF TRAVEL LANES (A12) equals 7 | TRAFFICWAY FLOW (A11) should not equal 2. |
| VA138 | ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2 | RELATION TO ROADWAY (A10) should equal 3. |
| Post Entry | | |
| | IF | THEN |
| AV244 | MANNER OF COLLISION (A07) equals 2 and TRAFFICWAY FLOW (All) equals 3 | for at least one vehicle, MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 00 or 97. |

A12 NUMBER OF TRAVEL LANES

Screen Heading: Environmental Conditions

Screen Name: Number Travel Lanes (180-E)

Long Name: What is the number of travel lanes for this vehicle's roadway?

SAS Name: A12-Accident.Num Lan, V A12-Vehicle.VNum Lan

Oracle Name: GES.Roadway.NumLanes

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------|
| 1 | 1 | 1 | One Lane |
| 2 | 2 | 2 | Two Lanes |
| 3 | 3 | 3 | Three Lanes |
| 4 | 4 | 4 | Four Lanes |
| 5 | 5 | 5 | Five Lanes |
| 6 | 6 | 6 | Six Lanes |
| 7 | 7 | 7 | Seven or More Lanes |
| 8 | 8 | 9 | Unknown |

Remarks:

Enter the value indicated on the PAR which best represents the number of lanes just prior to this vehicle's critical precrash event. The roadway selected for classification is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

If traffic flows in both directions and is undivided, code the total number of lanes in both directions. If the trafficway is divided into two or more roadways, code only the number of lanes for the roadway on which this vehicle was traveling. Be aware that the PAR may indicate the total number of lanes on the divided trafficway.

The number of lanes counted does not include any which are rendered unusable by restriction of the right-of-way (e.g., closed due to construction).

Enter **Unknown** when the PAR contains no information regarding the number of travel lanes.

Consistency Checks:

<u>Errors</u>

IF THEN

RANGE NUMBER OF TRAVEL LANES (A12) must equal 1, 2, 3, 4, 5, 6, 7 or 9.

Vehicles

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA018 | INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA027 | TRAFFICWAY FLOW (A11) equals 1 or 2 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA071 | NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 | INTERSTATE HIGHWAY (A08) should not equal 1. |
| AA102 | NUMBER OF TRAVEL LANES (A12) equals 7 | TRAFFICWAY FLOW (A11) should not equal 2. |
| VA183 | PRECRASH LOCATION (V29) equals 02 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |

A13 ROADWAY ALIGNMENT

Screen Heading: Environmental Conditions

Screen Name: Alignment (190-E)

Long Name: What is the roadway alignment for this vehicle's roadway?

SAS Name: A13-Accident.Align, V_A13-Vehicle.VAlign

Oracle Name: GES.Roadway.AlignmentID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------|
| 1 | 1 | 1 | Straight |
| 2 | 2 | 2 | Curve |
| 3 | 3 | 9 | Unknown |

Remarks:

Enter the value indicated on the PAR which best represents the roadway alignment just prior to this vehicle's critical precrash event. The roadway selected for classification is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

The PAR information is prioritized as follows:

- 1) Narrative
- 2) If a curved roadway section is shown in the diagram, code curved.
- 3) If the roadway section shown in the diagram is straight, but only a small roadway section is depicted, use check-box if it is filled out. If the check box is not filled out or does not exist, code straight.
- 4) If the roadway section on the diagram is straight and a large roadway section is depicted, code straight.
- 5) If the roadway is not described in the narrative or shown in the diagram, use the check-box information.

Enter **Straight** if the PAR indicates this vehicle's roadway is straight.

Enter **Curve** if the PAR indicates this vehicle's roadway is curved or there is any curvature discernable on the diagram.

Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

Consistency Checks:

Errors

IF THEN

MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 14 ROADWAY ALIGNMENT (A13) must equal 2. VA090

ROADWAY ALIGNMENT (A13) must equal 1, 2 or 9. **RANGE**

A14 ROADWAY PROFILE

Screen Heading: Environmental Conditions

Screen Name: Profile (200-E)

Long Name: What is the roadway profile for this vehicle's roadway?

SAS Name: A14-Accident.Profile, V_A13-Vehicle.VProfile

Oracle Name: GES.Roadway.ProfileID

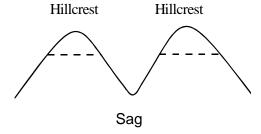
Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-----------|
| 1 | 1 | 1 | Level |
| 2 | 2 | 2 | Grade |
| 3 | 3 | 3 | Hillcrest |
| 4 | 8 | 8 | Sag |
| 5 | 9 | 9 | Unknown |

Remarks:

Enter the value indicated on the PAR which best represents the roadway profile just prior to this vehicle's critical precrash event. The roadway selected for classification is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

Hillcrest refers to the area of transition between an upgrade and a downgrade as in the following example:



Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

Consistency Checks:

Errors

IF THEN

RANGE ROADWAY PROFILE (A14) must equal 1, 2, 3, 8 or 9.

A15 ROADWAY SURFACE CONDITION

Screen Heading: Environmental Conditions

Screen Name: Condition (210-E)

Long Name: What is the roadway surface condition for this vehicle's roadway?

SAS Name: A15-Accident.Sur Cond, V A15-Vehicle.VSurCond

Oracle Name: GES.Roadway.SurfaceID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------|
| 1 | 1 | 1 | Dry |
| 2 | 2 | 2 | Wet |
| 3 | 3 | 3 | Snow or Slush |
| 4 | 4 | 4 | Ice |
| 5 | 5 | 5 | Sand, dirt or oil |
| 6 | 6 | 8 | Other |
| 7 | 7 | 9 | Unknown |

Remarks:

Enter the value indicated on the PAR which best represents the roadway surface condition just prior to this vehicle's critical precrash event. The roadway selected for classification is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

A road made of sand or dirt would be coded Dry under normal conditions, not Sand, Dirt, Oil.

Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

Consistency Checks:

Errors

IF THEN

RANGE ROADWAY SURFACE CONDITION (A15) must equal 1, 2, 3, 4, 5, 8 or

9.

Vehicles

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA028 | ATMOSPHERIC CONDITION (A20) equals 2-4, 6 or 7 | ROADWAY SURFACE CONDITION (A15) should not equal 1, 5, 8 or 9. |
| AA035 | MONTH (A01) equals 05-09 | ROADWAY SURFACE CONDITION (A15) should not equal 3 or 4. |
| AA084 | ROADWAY SURFACE CONDITION (A15) equals 1 | ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6 or 7. |
| AD091 | ROADWAY SURFACE CONDITION (A15) equals 1 | DRIVER'S VISION OBSCURED BY (D04) should not equal 08. |

A18 SPEED LIMIT

Screen Heading: Environmental Conditions

Screen Name: Speed Limit (250-E)

Long Name: What is the legal speed limit for this vehicle's roadway?

SAS Name: A18-Accident.Spd Lim, V A18-Vehicle.VSpd Lim

Oracle Name: GES.Roadway.SpeedLimit

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|---|
| 0 | 0 | 0 | No Statutory Limit |
| 5-75 | 5-75 | 5-75 | Actual Speed Limit (MPH-in increments of 5) |
| * | -9999 | 99 | Unknown |

Remarks:

Enter the value indicated on the PAR which best represents the speed limit just prior to this vehicle's critical precrash event. The roadway selected for classification is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

Disregard advisory or other speed signs which do not indicate the legal speed limit.

Furthermore, do not confuse advisory signs on entrance/exit ramps or near intersections with the actual legal maximum speed limit.

If a state has a statute that uniformly reduces the maximum allowable speed within or near a construction zone, then code the indicated reduced limit.

Enter **No Statutory Limit** on roadways which have no statutory limit (e.g., parking lot roadways or entrance/exits, service station entrance/exits or driveways, etc.).

Consistency Checks:

Errors

IF **THEN**

SPEED LIMIT (A18) must equal 0-75 or 99 and be in 5 mile per hour increments. VA245A

RANGE SPEED LIMIT (A18) must not equal Oracle values -1 or null.

Warnings

IF **THEN**

SPEED LIMIT (A18) should not equal 01-40. AA022

INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to

14

V02 HIT AND RUN

Screen Heading: Vehicle Characteristics

Screen Name: Hit and Run (360-E)

Long Name: Is this a hit-and-run vehicle?

SAS Name: Vehicle.Hit_Run

Oracle Name: GES. Vehicle. HitRun

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|--------|--|
| 1 2 | 1 2 | 0 1 | No, Did Not Leave Scene Yes, Driver or Car & Driver Left Scene Unknown |

Remarks:

A hit-and-run may occur when a motor vehicle in-transport has contact with: (a) another motor vehicle in-transport, (b) a motor vehicle not in-transport, (c) a motor vehicle not in-transport which contains a non-motorist, (d) a pedestrian, (e) pedalcyclist, (f) another non-motorist or (g) an object. Hit-and-run is only considered when a motor vehicle in-transport or its driver, departs from the scene; therefore, fleeing pedestrians and motor vehicles not in-transport are excluded.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicle(s) is (are) the one(s) that "departed prior to investigation by the police," or that vehicle which is "abandoned" at the scene "when its occupant(s) fled" from the area (see exceptions below). If the police report indicates that the vehicle was involved in a collision which was investigated, but there is no information on that vehicle or the driver/owner because of departure prior to police arrival on-scene, then hit-and-run is indicated.

Exceptions to the "departed prior to investigation by the police" rule exist. The first exception occurs if occupants of a vehicle are taken or go directly from the scene to a medical treatment facility or physician. If doubt exists concerning the departure for treatment, assume hit-and-run. A second exception involves a driver who leaves the scene but furnishes name, address, vehicle make, model, and model year such that it is recorded on the PAR and the PAR does not indicate hit-and-run. A third exception involves vehicles which set an object in motion such that (a) the object is contacted, before it stabilizes, by another in-transport motor vehicle, and (b) the vehicle which set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (c) the PAR does not indicate hit-and-run.

No, Did Not Leave Scene indicates the driver of the motor vehicle in-transport did not leave the scene of the crash after the crash occurred. This element also includes exceptions (2) and (3).

Yes, Driver or Car & Driver Left Scene applies when it has been determined that a hit-and-run has occurred. This response is also used under the following conditions unless exceptions 1, 2 or 3 above apply:

A. The PAR reports the driver of the hit & run vehicle is unaware of a harmful event and hit & run is indicated.

- B. The PAR reports the driver of the hit & run vehicle is unaware of a harmful event, hit & run is not indicated, and there is no driver or vehicle information provided.
- C. The PAR provides vehicle information, but driver information is unavailable and hit & run is not indicated.

When the presence of a hit-and- run vehicle is indicated and the PAR does not state the number of occupants, the number of occupants coded must equal 1 (the driver). If the PAR indicates that a hit-and -run vehicle contained a known number of occupants at the time of its involvement, then all the occupants are coded even though most of the variables will be unknown.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| VP208 | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) must equal 0. |
| VP234 | HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0. |
| VV073 | VEHICLE CONTRIBUTING FACTORS (V12) equals 50 | HIT-AND-RUN (V02) must equal 1. |
| VV083 | HIT-AND-RUN (V02) equals 1 | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99. |
| VV197 | VIOLATIONS CHARGED (D02) equals 50 | HIT-AND-RUN (V02) must equal 1. |
| VV198 | DRIVER PRESENCE (D01) equals 2 | HIT-AND-RUN (V02) must equal 1. |
| VV199 | DRIVER'S VISION OBSCURED BY (D04) equals 50 | HIT-AND-RUN (V02) must equal 1. |
| VV200 | DRIVER MANEUVERED TO AVOID (D06) equals 50 | HIT-AND-RUN (V02) must equal 1. |
| VV202 | HIT-AND-RUN (V02) equals 1 | DRIVER PRESENCE (D01) must equal 2. |
| VV203 | HIT-AND-RUN (V02) equals 1 | VIOLATIONS CHARGED (D02) must not equal 96 or 99. |
| VV204 | HIT-AND-RUN (V02) equals 1 | DRIVER'S VISION OBSCURED BY (D04) must not equal 93, 94 or 99. |
| VV205 | HIT-AND-RUN (V02) equals 1 | DRIVER MANEUVERED TO AVOID (D06) must not equal 93, 94 or 99. |
| VV260 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 50 | HIT AND RUN (V02) must equal 1. |

| VV265 | HIT AND RUN (V02) equals 1 | PERSON'S PHYSICAL IMPAIRMENT (P18) must not equal 93, 94 or 99. |
|-------|--------------------------------------|---|
| VV290 | DRIVER DISTRACTED BY (D07) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV295 | HIT AND RUN (V02) equals 1 | DRIVER DISTRACTED BY (D07) must not equal 93, 94 or 99. |
| RANGE | HIT AND RUN (V02) must equal 0, | 1 or 9. |

<u>Warnings</u>

| | IF | THEN |
|--------|---|--|
| VV073A | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 | VEHICLE CONTRIBUTING FACTORS (V12) should not equal 0. |

V08 SPECIAL USE

Screen Heading: Vehicle Characteristics

Screen Name: Special Use (420-E)

Long Name: What special use category applies to this vehicle?

SAS Name: Vehicle.Spec_Use

Oracle Name: GES. Vehicle. Special UseID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------------------|
| 1 | 26875 | 0 | No special use |
| 2 | 26876 | 1 | Taxi |
| 3 | 26877 | 2 | Vehicle used as School Bus |
| 4 | 26878 | 3 | Vehicle used as Other Bus |
| 5 | 26879 | 4 | Military |
| 6 | 26880 | 5 | Police |
| 7 | 26881 | 6 | Ambulance |
| 8 | 26882 | 7 | Fire Truck and Car |
| 9 | 26883 | 10 | Hearse |
| 10 | 26884 | 11 | Farm Equipment |
| 11 | 26885 | 12 | Construction Equipment |
| 12 | 26886 | 99 | Unknown |

Remarks:

No Special Use is used when the PAR does not indicate or imply that this vehicle was applicable to any of the special uses listed above.

Taxi is used when this vehicle was being used during this trip (at the time of the crash) on a "fee-for-hire" basis to transport persons. Most of these vehicles will be marked and formally registered as taxis; however, vehicles which are used as taxis, even though they are not registered (e.g., "Gypsy Cabs"), are included here. <u>Taxis and drivers which are off-duty</u> at the time of the crash <u>are not included</u>. If it is unknown whether or not the taxi is on-duty, use this code.

Vehicle used as School Bus is used if this motor vehicle satisfies all of the following criteria:

- externally identifiable to other traffic units as a school/pupil transport vehicle; the vehicle may be equipped with flashing lights and/or a sway stop arm, and traffic may be required to stop for the vehicle when occupants enter or exit,
- operated, leased, owned or contracted by a public or private school-type institution;
- whose occupants, if any, are associated with the institution; and
- the vehicle is in operation at the time of the crash to and from the school or on a school-sponsored activity or trip.

In most cases, the decision to use this code will be based on a reference to the vehicle as a school bus on the PAR. In this situation, assume the criteria are met unless it is otherwise stated on the PAR.

Vehicle used as Other Bus is used when a motor vehicle is designed for transporting more than ten persons and does not satisfy the above "school bus" criteria.

Military is used for any vehicle which is owned by any of the Armed Forces regardless of body type. This code includes:

- military police vehicles;
- military ambulances;
- military hearses; and
- military fire vehicles.

Police is used for any readily identifiable (lights or markings) vehicle which is owned by any local, county, state or federal police agency. Vehicles not owned by the agency or not readily identifiable which are used by officers or agents (e.g., undercover) are excluded.

Ambulance is used for any readily identifiable (lights or markings) vehicles: (1) whose sole purpose is to provide ambulance service or (2) who serve the dual purposes of a hearse – used for funeral services, and an ambulance – used for emergency services. For these dual purpose vehicles (ambulance/hearse), use this code only when the vehicle is used as an ambulance.

Fire Truck and Car is used for any readily identifiable (lights or markings) vehicle which is owned by any government (typically local) or cooperative agency for the purpose of fire protection. For volunteer fire companies, fire fighting apparatus and other vehicles owned by the company or government qualify for this code. Privately owned vehicles, which are not in authorized use, even if equipped with lights, do not qualify (i.e., the volunteer firemen's vehicle).

Hearse is used when the vehicle is (at the time of the crash) being used to transport a dead body and is identified as a hearse.

Farm Equipment is used when the body type of the vehicle equals "Farm Equipment other than Trucks". Examples of Farm Equipment include: balers, reapers, combines, and farm tractors.

Construction Equipment is used when the body type of the vehicle equals "Construction Equipment Other Than Trucks". Examples of Construction Equipment include: bulldozers, steamrollers, forklifts, etc.

Unknown is used when no information is available on the vehicle's special use for this trip (i.e., hit-and-run vehicle).

Consistency Checks:

| | IF | THEN |
|-------|-----------------------------|---|
| VV003 | SPECIAL USE (V08) equals 01 | BODY TYPE (V05) must equal 02-09, 12, 17, 20-29 or 49. |
| VV006 | SPECIAL USE (V08) equals 02 | BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59. |

Vehicles General/Travel Data

| VV009 | BODY TYPE (V05) equals 80-89 | SPECIAL USE (V08) must not equal 01-03, 06, 07, 10, 11 or 12. |
|-------|--|---|
| VV010 | SPECIAL USE (V08) equals 03 | BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99. |
| VV025 | SPECIAL USE (V08) equals 06 | BODY TYPE (V05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99. |
| VV085 | BODY TYPE (V05) equals 25 or 58 | SPECIAL USE (V08) must not equal 00 or 02. |
| VV086 | BODY TYPE (V05) equals 59 | SPECIAL USE (V08) must equal 99. |
| VV087 | EMERGENCY USE (V09) equals 1 or 9 | SPECIAL USE (V08) must equal 04-07. |
| VV101 | BODY TYPE (V05) equals 92 | SPECIAL USE (V08) must equal 11. |
| VV102 | SPECIAL USE (V08) equals 11 | BODY TYPE (V05) must equal 92. |
| VV112 | BODY TYPE (V05) equals 93 | SPECIAL USE (V08) must equal 12. |
| VV113 | SPECIAL USE (V08) equals 12 | BODY TYPE (V05) must equal 93. |
| VV221 | BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07 | CARGO BODY TYPE (V33) must equal 98. |

<u>Warnings</u>

| | IF | THEN | |
|------------|---|--|--|
| VV048 | UNLIKELY: SPECIAL USE (V08) is 6 | equal to 02, 03, 04 or 06. | |
| VV084 | BODY TYPE (V05) equals 24 or 50 | SPECIAL USE (V08) should equal 02. | |
| VV114 | SPECIAL USE (V08) equals 10 | BODY TYPE (V05) should equal 11. | |
| VV241 | SPECIAL USE (V08) equals 01 | NUMBER OF OCCUPANTS CODED (V10) should be greater than 01. | |
| VV241A | SPECIAL USE (V08) equals 01 | NUMBER OF OCCUPANTS (V10B) should be greater than 01. | |
| Post Entry | | | |
| | IF | THEN | |
| AV210 | SCHOOL BUS RELATED (A21) equals 1 | at least one SPECIAL USE (V08) should equal 02. | |
| VA002 | SPECIAL USE (V08) for any vehicle equals 02 | SCHOOL BUS RELATED (A21) must equal 1. | |

V09 EMERGENCY USE

Screen Heading: Vehicle Characteristics

Screen Name: Emergency Use (430-E)

Long Name: Was this vehicle on an emergency run at the time of the crash?

SAS Name: Vehicle.Emcy_Use

Oracle Name: GES. Vehicle. Emergency Use

Element Values:

| Screen | Oracle | SAS | |
|--------|--------------|-----|-----------|
| 1 2 | -1,0, 1 2 | 0 | No Yes |
| 3 | 3 | ġ | Unknown |

Remarks:

If the vehicle is a police vehicle, ambulance, fire truck or military vehicle (i.e., Special Use equals "Military", "Police", "Ambulance" or "Fire Truck and Car"), then refer to the narrative section of the PAR to determine if the vehicle was on an emergency run (i.e., "red lights flashing", "siren sounding", "on route to hospital", etc.) at the time of the crash. Police vehicle, ambulance, fire truck, and military vehicle are considered applicable vehicles for purposes of this variable.

No is used when the applicable vehicle is <u>not</u> on an emergency run or this vehicle is not one of the applicable vehicles.

Yes is used when the applicable vehicle is on an emergency run.

Unknown is used when this vehicle is an applicable vehicle but the PAR is unclear as to whether it was on an emergency run. This code also applies if it is unknown whether the vehicle is an applicable vehicle.

Consistency Checks:

| | IF | THEN |
|-------|-----------------------------------|-------------------------------------|
| VV087 | EMERGENCY USE (V09) equals 1 or 9 | SPECIAL USE (V08) must equal 04-07. |
| RANGE | EMERGENCY USE (V09) must equ | ıal 0. 1 or 9. |

Post Entry

IF **THEN**

AV041 PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0230

at least one EMERGENCY USE (V09) should equal 1.

V11 TRAVEL SPEED

Screen Heading: Vehicle Data

Screen Name: Travel Speed (440-E)

Long Name: What is this vehicle's travel speed (MPH)?

SAS Name: Vehicle.Speed

Oracle Name: GES. Vehicle. Travel Speed

Element Values:

| Screen | Oracle | SAS | |
|--------------|-------------|-------|----------------------------------|
| 0 | 0 | 0 | Stopped Vehicle |
| 1-998 | 1-998 | 1-998 | Reported Speed in Miles Per Hour |
| * Remarks | -9999 s: | 999 | Unknown |

Code the travel speed for this vehicle; do not enter the "Speed Limit". Do not use estimates by other drivers or witnesses reported in the "narrative" section of the PAR.

Code the nearest mph for this vehicle as reported on the PAR. If the travel speed is reported as a range, then code the average. Examples:

Stopped Vehicle is used when this vehicle is stopped or traveling less than 0.5 mph.

Unknown is used when the estimated travel speed is indicated unknown or not provided on the PAR.

Consistency Checks:

| | IF | THEN |
|-------|--|---------------------------------------|
| RANGE | TRAVEL SPEED (V11) must equal 0 | -140 or 999. |
| AV213 | NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) <> 13 | VEHICLE ROLE (V22) must equal 1 or 3. |
| VV008 | JACKKNIFE (V14) equals 1 | TRAVEL SPEED (V11) must not equal 0. |
| VV051 | ACCIDENT TYPE (V23) equals 21, 22 or 23 | TRAVEL SPEED (V11) must equal 0. |

| VV255 | TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0 | SPEED RELATED (D09) must equal 0. |
|-----------------|--|---|
| <u>Warnings</u> | | |
| | IF | THEN |
| VV031 | TRAVEL SPEED (V11) equals 00 | VEHICLE ROLE (V22) should not equal 1. |
| VV118 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07 | TRAVEL SPEED (V11) should equal 00. |
| VV177 | POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) should not equal 2. |
| Post Entry | | |
| | IF | THEN |
| AV011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28 | TRAVEL SPEED (V11) should not equal 00. |
| AV011A | HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1 | TRAVEL SPEED (V11) should not equal 00 for both vehicles. |
| AV019 | NUMBER OF MOTOR VEHICLES (A03) is greater than 01 | there should be at least one vehicle with TRAVEL SPEED (V11) > 00 or unknown. |

V16 FIRE OCCURRENCE

Screen Heading: Vehicle Characteristics

Screen Name: Fire (480-E)

Long Name: Does this vehicle sustain fire damage?

SAS Name: Vehicle.Fire

Oracle Name: GES. Vehicle. Fire

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------|
| 1 | 0 | Ο | No Eir |

1 0 0 No Fire Noted on the PAR 2 1 1 Fired Occurred in the Vehicle

Remarks:

No Fire Noted on the PAR is used when there is no mention made on the PAR of a fire to this vehicle.

This code also includes those vehicles with smoke damage but sustained no fire.

Fire Occurred In the Vehicle is used when the PAR indicates this vehicle sustained fire damage. For the purposes of this variable, "vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

Consistency Checks:

Post Entry

| | IF | THEN |
|--------|--|--|
| AV009 | a vehicle is involved in an event where HARMFUL EVENT (A06) equals 2 | FIRE OCCURRENCE (V16) must equal 1. |
| AV009A | FIRE OCCURRENCE (V16) equals 1 | at least one HARMFUL EVENT (A06) must equal 2. |
| RANGE | FIRE OCCURRENCE (V16) must equal 0 or 1. | |

V18 DAMAGE SEVERITY

Screen Heading: Vehicle Characteristics

Screen Name: Damage Severity (490-E)

Long Name: What is the damage severity for this vehicle?

SAS Name: Vehicle.Veh_Sev

Oracle Name: GES. Vehicle. Damage Severity ID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------|
| 1 | 26831 | 0 | None |
| 2 | 26832 | 1 | Minor |
| 3 | 26833 | 2 | Moderate |
| 4 | 26834 | 3 | Severe |
| 5 | 26835 | 9 | Unknown |

Remarks:

None is used when there is no damage indicated on the PAR for this vehicle.

Minor is used when this attribute is indicated on the PAR <u>and</u> the vehicle is not towed due to damage. Examples of minor damage include:

dented or bent fenders,

bumpers,

grills,

body panels, and

destroyed hubcaps.

Minor applies only when V19, MANNER OF LEAVING SCENE, is Driven Away, Towed Not Due to Damage, Abandoned or Unknown if Towed.

Moderate is used when the PAR specifically indicates the damage is moderate. Examples of moderate damage include:

doors, windows, hood, and trunk lids which will not operate properly; broken glass which obscures vision;

damage which would prevent the motor vehicle from passing an official motor vehicle inspection;

tire damage even though the tire may be changed at the scene;

bumpers which are loose;

damage which can be remedied temporarily at the scene without special tools or parts other than tires;

tire disablement without other damage, even if no spare tire is available;

headlamp or taillight damage which would make night driving hazardous but would not affect daytime driving; and

damage to turn signals, horn or windshield wipers which makes them inoperative.

Severe is used when the PAR specifically indicates severe. This response is also used when the damage is of greater magnitude than Moderate, e.g., major, extensive or totaled.

Unknown is used when the PAR specifically indicated the damage severity to be unknown or the information on the PAR is inadequate to determine the level of severity. If the PAR is blank or not reported, use this code unless the narrative states otherwise or a State specific rule applies.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| VV061 | MANNER OF LEAVING SCENE (V19) equals 2 | DAMAGE SEVERITY (V18) must not equal 0 or 1. |
| VV088 | DAMAGE SEVERITY (V18) equals 0 | DAMAGE AREAS (V25) must equal 00000. |
| VV089 | DAMAGE SEVERITY (V18) equals 3 | MANNER OF LEAVING SCENE (V19) must not equal 3. |
| VV222 | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0 | DAMAGE SEVERITY (V18) must equal 0. |

<u>Warnings</u>

| | IF | THEN |
|-------|-------------------------------------|---|
| VV059 | DAMAGE SEVERITY (V18) equals 3 | MANNER OF LEAVING SCENE (V19) should equal 2. |
| VV060 | DAMAGE SEVERITY (V18) is equal to 3 | MANNER OF LEAVING SCENE (V19) should not equal 1. |

V19 MANNER OF LEAVING SCENE

Screen Heading: Vehicle Characteristics

Screen Name: Leave Scene (500-E)

Long Name: What is the disposition of this vehicle at the crash scene?

SAS Name: Vehicle.Towed

Oracle Name: GES. Vehicle. Manner Left ID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------------|
| 1 | 26836 | 1 | Driven Away |
| 2 | 26837 | 2 | Towed Due to Damage |
| 3 | 26838 | 3 | Towed Not Due to Damage |
| 4 | 26839 | 4 | Abandoned |
| 5 | 26840 | 9 | Unknown if Towed |

Remarks:

The mode in which the vehicle or power unit of an articulated combination left the scene of the crash:

Driven Away is used when the vehicle was driven from the scene of the crash. A vehicle which is reported by the police as towed out of a ditch or snowbank and subsequently driven away is coded here. In addition, this attribute is used if a vehicle was driven from the scene and subsequently disabled. Do not use this attribute if this vehicle was abandoned.

Towed Due to Damage is used for any towing which is due to disabling damage caused by this crash which prohibits vehicle movement under its own power. Towed due to damage includes any towing, when the reason for towing is unknown. In other words, if a vehicle is reported on the PAR as towed but it cannot be determined whether it was due to damage or for other reasons, then the default assumption is that this vehicle was towed due to damage.

If a vehicle was pushed by hand or by another vehicle after the crash because it was not driveable, then code this vehicle as **Towed Due to Damage**.

Rules for Medium/Heavy Trucks (Power Unit Only):

Medium/Heavy Truck (power unit only) is towed due to damage if:

The PAR indicates a tow facility; or

The PAR indicates a tow facility and moderate damage; or

The PAR indicates disabling, extensive, severe or total damage; or

The PAR indicates towed (block or narrative) and tow status is not due to driver negligence (alcohol/other drugs), illness or inappropriate actions.

Medium/Heavy Truck (power unit only) is not towed due to damage if:

The PAR indicates minor damage (excludes jackknife) or

The PAR indicates that only the trailer was towed.

NOTE: The PAR narrative may be used to supercede and/or clarify the above information.

Towed Not Due to Damage is used when the vehicle has been towed but the towing results from other than damage (e.g., mired vehicles, driver arrested, injured driver, etc.).

Abandoned is used when it is specifically indicated on the PAR or when the preponderance of the information available indicates that the vehicle remained at the scene. Do not use this attribute if the vehicle was left at the scene because this location was the vehicle's destination at the time of the accident.

Unknown is used when the PAR does not indicate the manner in which the vehicle left the scene of the crash.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|---|
| AV062A | all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6 | MANNER OF LEAVING SCENE (V19) must not equal 2. |
| VV061 | MANNER OF LEAVING SCENE (V19) equals 2 | DAMAGE SEVERITY (V18) must not equal 0 or 1. |
| VP208 | HIT-AND-RUN (V2) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) not equal to 80-89 | EJECTION (P06) must equal 0. |
| VV089 | DAMAGE SEVERITY (V18) equals 3 | MANNER OF LEAVING SCENE (V19) must not equal 3. |

Warnings

| | IF | THEN |
|--------|--|--|
| AV062 | at least one HARMFUL EVENT (A06) for a vehicle equals 21, 22 or 27 and all other HARMFUL EVENTS (A06) for the vehicle equal 2, 3, 4, 6, 21, 22 or 27 | MANNER OF LEAVING SCENE (V19) should not equal 2. |
| VV058 | DAMAGE AREAS (V25) equals 7 | MANNER OF LEAVING SCENE (V19) should equal 2. |
| VV059 | DAMAGE SEVERITY (V18) equals 3 | MANNER OF LEAVING SCENE (V19) should equal 2. |
| VV060 | DAMAGE SEVERITY (V18) is equal to 3 | MANNER OF LEAVING SCENE (V19) should not equal 1. |
| VV073A | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 | VEHICLE CONTRIBUTING FACTORS (V12) should not equal 0. |
| VV074 | MANNER OF LEAVING SCENE (V19) equals 2 | DAMAGE AREAS (V25) should be greater than 00000. |

VV080

DAMAGE AREAS (V25) equals 00000 and MOST HARMFUL EVENT (V20) does not equal 1-6 or 8-10

MANNER OF LEAVING SCENE (V19) should not equal 2.

Post Entry

| | IF | THEN |
|--------|---|-------------------------------|
| PV188A | no BODY TYPE (V05) equals 60-79 and INJURY SEVERITY (P09) equals 4 for at least one occupant of a vehicle where BODY TYPE (V05) equals 1-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 1. |
| PV188B | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |
| PV188K | no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 5. |

PV188P no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L or category 1 stratum M and there is at least one

category 1 stratum L or category 1 stratum M and there is at least one vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2

PV188R at least one BODY TYPE (V05) STRATUM (A23) should equal 2.

equals 60-79, the crash does not qualify for category 1 stratum L, category 1 stratum M or category 1 stratum N and there is at least one vehicle where MANNER OF LEAVING SCENE (V19) equals 2 or one person where INJURY SEVERITY (P09) equals 1-5

V20/V20A MOST HARMFUL EVENT / MOST HARMFUL EVENT NUMBER

Screen Heading: Vehicle Crash

Screen Name: Most Harmful Event (510-E)

Long Name: What is the most harmful event for this vehicle?

SAS Name: Vehicle.V_Event, Vehicle.MHENum

Oracle Name: GES. Vehicle. MostHarmfullD, GES. Events. ObjectHitlD,

GES.Events.EventNumber

Element Values:

Screen Oracle* SAS*

Non-Collision

| n/a n/a n/a n/a n/a n/a n/a n/a | 10231 10232 10233 19433 10234 10235 19434 10236 10237 | 1 2 3 4 5 6 7 8 9 | Rollover/Overturn Fire/Explosion Immersion Gas Inhalation Jackknife Non-Collision Injury (Injured In or Fell From Vehicle) Pavement Surface Irregularity (ruts, potholes, grates, etc.) Other Non-Collision Non-Collision - No Details |
|--|---|---|--|
| n/a | 10237 | 9 | Non-Collision - No Details |
| n/a | 10238 | 10 | Thrown Or Falling Object |

Collision With Object Not Fixed

| n/a | 10239 | 21 | Pedestrian |
|-----|-------|----|--|
| n/a | 10240 | 22 | Cycle Or Cyclist (Pedalcycle/Pedalcyclist) |
| n/a | 10241 | 23 | Railway train |
| n/a | 10242 | 24 | Animal |
| n/a | ** | 25 | Motor Vehicle In Transport |
| n/a | 10244 | 26 | Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) |
| n/a | 10245 | 27 | Other Type Non-Motorist |
| n/a | 10246 | 28 | Other Object Not Fixed |
| n/a | 10247 | 29 | Object Not Fixed - No Details |

Collision with Fixed Object

| n/a | 10248 | 31 | Ground |
|-----|-------|----|---|
| n/a | 10249 | 32 | Building |
| n/a | 10250 | 33 | Impact Attenuator/Crash Cushion |
| n/a | 10251 | 34 | Bridge Structure |
| n/a | 10252 | 35 | Guardrail |
| n/a | 10253 | 36 | Concrete Traffic Barrier Or Other Longitudinal Barrier Type |
| n/a | 10254 | 37 | Sign Post, Utility Pole or Other Support |
| n/a | 10255 | 38 | Culvert Or Ditch |
| n/a | 10256 | 39 | Curb |
| n/a | 10257 | 40 | Embankment |
| n/a | 10258 | 41 | Fence |
| n/a | 10259 | 42 | Wall |
| n/a | 10260 | 43 | Fire Hydrant |

| n/a | 10261 | 44 | Shrubbery Or Bush |
|-----|-------|----|---------------------------|
| n/a | 10262 | 45 | Tree |
| n/a | 10263 | 46 | Boulder |
| n/a | 10265 | 58 | Other Fixed Object |
| n/a | 10266 | 59 | Fixed Object - No Details |
| n/a | 10267 | 99 | Unknown |

* The most harmful event identifier (GES.Events.EventID) is stored in GES.Vehicle.MostHarmfulID. This identifier indicates which event is the most harmful one for the vehicle. To obtain the most harmful event Oracle value shown above, the GES.Vehicle and GES.Events tables are joined "where ges.vehicle.parid=ges.events.parid and GES.Vehicle.MostHarmfulID = GES.Events.EventID"; the Oracle value for the most harmful event is stored in GES.Events.ObjectHitID of this table join.

The SAS Values listed are for SAS variable V20, Most Harmful Event (vehicle. V Event).

The SAS variable V20A, Most Harmful Event Number (Vehicle.MHENum) is the number of the event which produced the most severe injury or property damage for the vehicle. To obtain the most harmful event number associated with the vehicle, the Oracle events and vehicle tables are joined "where ges.vehicle.parid=ges.events.parid and GES.Vehicle.MostHarmfulID = GES.Events.EventID"; the Oracle value for the most harmful event number is stored in GES.Events.Eventnumber of this table join.

** The Oracle value is set equal to the value of GES.Vehicle.VehicleID for the other intransport motor vehicle involved in the event.

Remarks:

The event number for this vehicle's most harmful event is entered. When a vehicle is involved in multiple harmful events, select the event which, for this vehicle, produced the most severe injury or property damage.

See A06, Harmful Event, for response definitions.

Consistency Checks:

PV103

RANGE

Errors

F

EJECTION (P06) equals 1 or 2

this person's vehicle's MOST
HARMFUL EVENT (V20) must not
equal 06.

there must be an event involving this vehicle where MOST HARMFUL

EVENT NUMBER (V20A) equals EVENT NUMBER (E01).

Warnings

IF THEN

VV080 DAMAGE AREAS (V25) equals

00000 and MOST HARMFUL EVENT (V20) does not equal 1-6

or 8-10

MANNER OF LEAVING SCENE (V19) should not equal 2.

V21 MOVEMENT PRIOR TO CRITICAL EVENT (PRECRASH 1)

Screen Heading: Vehicle Crash

Screen Name: Pre Movement (520-E)

Long Name: What is this vehicle's movement prior to the critical event?

SAS Name: Vehicle.P_Crash1

Oracle Name: GES.PreCrash.PriorMovementID

Element Values:

| Screen | Oracle | SAS | |
|--------|-------------|--------|--|
| 1 2 | 0 | 0 1 | No driver present Going straight |
| 2 3 | 2 | 2 | Decelerating in traffic lane |
| 4 | 2 3 | 2 3 | Accelerating in traffic lane |
| 4 5 | | 4 | Starting in traffic lane |
| 6 7 | 4 5 6 | 5 | Stopped in traffic lane |
| 7 | 6 | 6 | Passing or overtaking another vehicle |
| 8 9 | 7 | 7 | Disabled or parked in travel lane |
| 9 | 8 9 | 8 | Leaving a parking position |
| 10 | | 9 | Entering a parking position |
| 11 | 10 | 10 | Turning right |
| 12 | 11 | 11 | Turning left |
| 13 | 12 | 12 | Making a U-turn |
| 14 | 13 | 13 | Backing up (other than for parking position) |
| 15 | 14 | 14 | Negotiating a curve |
| 16 | 15 | 15 | Changing lanes |
| 17 | 16 | 16 | Merging |
| 18 | 17 | 17 | Successful avoidance maneuver to a previous critical event |
| 19 | 18 | 97 | Other |
| 20 | 19 | 99 | Unknown |

Remarks:

Enter the attribute which best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt any evasive maneuvers.

NOTE: Actions taken by the driver, of this vehicle, after realization of an impending danger are coded in Corrective Actions.

No driver present applies if no driver was in this vehicle when the accident occurred.

Enter **Going straight** when this vehicle's path was straight ahead on a straight stretch of roadway. The length need not be very long. For example, vehicles going straight in a left or right turn lane can be entered as "going straight".

Enter **Decelerating in traffic lane** when this vehicle was traveling straight ahead within the travel lane and was decelerating (slowing). If the driver was also involved in any other action (e.g., passing or overtaking, changing lanes etc) enter the appropriate movement.

Enter **Accelerating in traffic lane** When this vehicle was traveling straight ahead within the travel lane and was accelerating. If the driver was involved in any other action (e.g., starting in traffic, passing etc) enter the appropriate movement.

Enter **Starting in traffic lane** when this vehicle was in the process of starting forward from a stopped position within the traffic lane (e.g., start up from traffic signal).

Enter **Stopped in traffic lane** when this vehicle was stopped momentarily, with the motor running within the traffic lane (e.g., stopped for traffic signal).

Enter **Passing or overtaking another vehicle** when this vehicle was traveling straight ahead and was in the process of passing or overtaking another vehicle on the left or right.

Enter **Disabled or parked in travel lane** when this vehicle was parked in a travel lane with a driver present in the vehicle. If the driver was not in the vehicle when the accident occurred, enter **No driver present**.

Enter **Leaving a parking position** when this vehicle was entering the travel lane from a parking area (parallel or diagonal) adjacent to the traffic lanes. If the vehicle, leaving the parked position, is impacted while the driver is in the process of changing from reverse to forward gears, then enter this element value.

Enter **Entering a parking position** when this vehicle was leaving the travel lane to a parking area (parallel or diagonal) adjacent to the traffic lanes (i.e., in the process of parking). The vehicle can be in forward or reverse gear. If the driver is decelerating for the purpose of parking, enter this element value instead of "Decelerating in traffic lane".

Enter **Turning right** when this vehicle was moving forward and the driver turned right, changing from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection).

Enter **Turning left** when this vehicle was moving forward and the driver turned left, changing from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection).

Enter **Making a U-turn** when this vehicle was making a U-turn (i.e., 180 degree directional change, opposite the original direction of travel) on the roadway.

Enter **Backing up [other than for parking position]** when this vehicle was traveling backwards within the trafficway and the backing was not to enter or leave a parking position.

Enter **Negotiating a curve** when this vehicle was continuing along a roadway that curved to the right or left.

Enter **Changing lanes** when this vehicle was traveling straight ahead and changed travel lanes to the right or left while on the same roadway.

Enter **Merging** when this vehicle was moving forward and merging from the left or right into a traffic lane (e.g., roadway narrows exit/entrance ramps).

Enter **Successful avoidance maneuver to a previous critical event** when this vehicle responded to a previous critical event and successfully avoided an impact. However, this precipitated a subsequent critical crash envelope which resulted in an impact for this vehicle.

Enter **Other** when this vehicle's pre-event movement is known but none of the specified elements are applicable (e.g., A vehicle travels the wrong way on a one-way trafficway or A vehicle is pushed by another vehicle or pedestrian etc).

Enter **Unknown** when this vehicle's movement was unknown prior to its involvement in the crash. Also, enter unknown if the information is inadequate to determine which applicable element applies.

Consistency Checks:

Errors

| | IF | THEN |
|--------|---|--|
| AV022 | HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97. |
| AV213 | NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13 | VEHICLE ROLE (V22) must equal 1 or 3. |
| VA090 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 14 | ROADWAY ALIGNMENT (A13) must equal 2. |
| VV026 | JACKKNIFE (V14) equals 1 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 4-5, 7-9 or 13. |
| VV094 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 | ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91 or 92. |
| VV095 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 | ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91 or 92. |
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99 | VEHICLE ROLE (V22) must equal 1 or 3. |
| VV213 | DRIVER MANEUVERED TO AVOID (D06) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 17. |
| VV231 | DRIVER PRESENCE (D01) equals 0 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV232 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00. |
| VV232A | CORRECTIVE ACTION ATTEMPTED (V27) equals 00. | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV233 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | PRECRASH VEHICLE CONTROL (V28) must equal 00. |
| VV233A | PRECRASH VEHICLE CONTROL (V28) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00 |

| VV235 | PRECRASH LOCATION (V29) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
|--------|---|---|
| VV235A | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| VV236 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | DRIVER PRESENCE (D01) must equal 0. |
| VV243A | ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01. |
| VV250 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 0 | SPEED RELATED (D09) must equal 8. |

<u>Warnings</u>

| | IF | THEN |
|-------|--|---|
| AV071 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13 | ACCIDENT TYPE (V23) should equal 13. |
| VA242 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 or 11 | RELATED TO JUNCTION (A09) should not equal 00 or 10. |
| VV049 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07 | VEHICLE ROLE (V22) should not equal 1. |
| VV053 | ACCIDENT TYPE (V23) equals 68, 72, 76 or 82 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 97. |
| VV054 | ACCIDENT TYPE (V23) equals 70, 78 or 80 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 97. |
| VV055 | ACCIDENT TYPE (V23) equals 29, 30 or 31 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02. |
| VV063 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 12 | ACCIDENT TYPE (V23) should equal 98. |
| VV070 | ACCIDENT TYPE (V23) equals 46 or 47 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 06, 15 or 16. |
| VV071 | ACCIDENT TYPE (V23) equals 92 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 08, 09, 13, 97 or 99. |
| VV078 | ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30 or 31 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 05 or 07. |
| VV096 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 | ACCIDENT TYPE (V23) should equal 92 or 98. |
| VV118 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07 | TRAVEL SPEED (V11) should equal 00. |
| VV243 | ACCIDENT TYPE (V23) equals 46 or 47 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 01. |

Post Entry

| | IF | THEN |
|-------|---|--|
| AV030 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0011 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97. |
| AV031 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0035 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8 or 9. |
| AV032 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0022, 0023 or 0033 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 11 or 17. |
| AV033 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0010, 0024 or 0034 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10 or 17. |
| AV042 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0720 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, 12, 16, 97 or 99. |
| AV055 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019 or 0021 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01. |
| AV134 | RELATION TO JUNCTION (A09) equals 03 or 13 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) for the vehicles involved in the first harmful event should equal 10, 11, 13 or 97. |
| AV244 | MANNER OF COLLISION (A07) equals 2 and TRAFFICWAY FLOW (All) equals 3 | for at least one vehicle, MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 00 or 97. |
| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for that person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210. |
| VP046 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220. |
| VP047 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720. |
| VP056 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049. |

| VP057 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011. |
|-------|---|---|
| VP136 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049. |

V22 VEHICLE ROLE

Screen Heading: Vehicle Crash

Screen Name: Vehicle Role (530-E)

Long Name: What is the vehicle's role in the crash?

SAS Name: Vehicle. Veh Role

Oracle Name: GES.Vehicle.RoleID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------|
| 1 | 26845 | 0 | Non-collision |
| 2 | 26846 | 1 | Striking |
| 3 | 26847 | 2 | Struck |
| 4 | 26848 | 3 | Both |
| 5 | 26849 | 9 | Unknown |

Remarks:

Non-collision is used only when the non-collision occurred first, even if subsequent impacts occurred. Non-collision includes rollover/overturn (which includes overturning motorcycles), fire/explosion, jackknifed or immersion.

A vehicle that sets an object in motion (e.g., cargo, spewed gravel, etc.), striking another vehicle or object, receives this attribute. If another in-transport vehicle is struck by the object set in motion it would be coded as "Striking" unless it is stationary, in which case it is coded as "Struck", irrespective of the wording in the narrative.

Striking is used if a vehicle in motion contacts another vehicle, pedestrian, non-motorist or object with its leading end and/or side. A vehicle must be in motion to be a striking vehicle.

It is possible for both vehicles to be considered striking. This occurs in the cases of head-on collisions, and for sideswiping vehicles (including front or rear endswipes).

Struck is used if a vehicle is moving forward and is not in rotation and contacts another vehicle, pedestrian or non-motorist with other than its front. A vehicle not in motion is struck unless subsequent impacts result in which the vehicle is striking (use Both in these situations).

Both is used when a vehicle is both striking and struck. The two impacts can not occur with the same vehicle, object or person. For example, if the crash involves two events where event 1 is the front of moving vehicle (V1) impacting the side of stopped vehicle (V2) and event two is the side of V1 impacting the side of V2, V1 is coded **STRIKING** and V2 is coded **STRUCK**. The classic example of a vehicle which is both striking and struck is the chain reaction rear-end where the vehicle which is striking and struck is located within the chain.

The decision should be based on the above stated rules and not necessarily the wording in the narrative. The decision may; therefore, contradict the narrative in some cases (e.g., the narrative describes V1 as striking V2 yet the damage indicates that V2 was striking and V1 was struck).

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|---|
| AV131 | the first HARMFUL EVENT (A06) for the vehicle equals 1-9 | VEHICLE ROLE (V22) must equal 0. |
| AV213 | NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13 | VEHICLE ROLE (V22) must equal 1 or 3. |
| AV232 | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) is not equal to 15 | VEHICLE ROLE (V22) must not equal 0. |
| AV232A | HARMFUL EVENT (A06) equals 21-99 and POINT OF IMPACT (V24) equals 15 | VEHICLE ROLE (V22) must equal 0. |
| VA093 | VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59. |
| VA096 | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) is not equal to 15 | HARMFUL EVENT (A06) must equal 01-10. |
| VA096A | VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1 and POINT OF IMPACT (V24) equals 15 | HARMFUL EVENT (A06) must not equal 01-10. |
| VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92 | POINT OF IMPACT (V24) must not equal 01. |
| VV067 | ACCIDENT TYPE (V23) equals 86 or 88 | VEHICLE ROLE (V22) must not equal 2. |
| VV068 | ACCIDENT TYPE (V23) equals 87 or 89 | VEHICLE ROLE (V22) must not equal 1. |
| VV075 | ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38 or 40 | VEHICLE ROLE (V22) must not equal 2. |
| VV079 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30 or 31 | VEHICLE ROLE (V22) must not equal 1. |
| VV082 | ACCIDENT TYPE (V23) equals 0 | VEHICLE ROLE (V22) must equal 0. |

| VV | | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99 | VEHICLE ROLE (V22) must equal 1 or 3. |
|-----------------|------|---|---------------------------------------|
| VV | | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0 | DAMAGE SEVERITY (V18) must equal 0. |
| VV | /227 | CRITICAL EVENT (V26) equals 53 | VEHICLE ROLE (V22) must not equal 1. |
| <u>Varnings</u> | | | |

W

| | IF | THEN |
|-------|---|---|
| AV014 | MANNER OF COLLISION (A07) equals 2 | VEHICLE ROLE (V22) should equal 1 or 3. |
| AV232 | HARMFUL EVENT (A06) equals 21-99 | no VEHICLE ROLE (V22) must not equal 0. |
| VV028 | UNLIKELY: VEHICLE ROLE (V22) is | equal to 9. |
| VV031 | TRAVEL SPEED (V11) equals 00 | VEHICLE ROLE (V22) should not equal 1. |
| VV049 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07 | VEHICLE ROLE (V22) should not equal 1. |
| VV072 | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53 | VEHICLE ROLE (V22) should equal 1. |
| VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2 | POINT OF IMPACT (V24) should not equal 03. |
| VV177 | POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) should not equal 2. |
| VV190 | DRIVER PRESENCE (D01) equals 0 | VEHICLE ROLE (V22) should not equal 0 or 9. |
| VV228 | CRITICAL EVENT (V26) equals 51 or 52 | VEHICLE ROLE (V22) should not equal 2. |
| | | |

Post Entry

| | IF | THEN |
|-------|--|--|
| AV089 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0840 | at least one VEHICLE ROLE (V22) must equal 2. |
| AV197 | NUMBER OF MOTOR VEHICLES (A03) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2 | the other vehicle's VEHICLE ROLE (V22) must not equal 2. |

V23 ACCIDENT TYPE (CATEGORY)

Screen Heading: Vehicle Crash

Screen Name: Category (540-E)

Long Name: What is the crash type category for the first harmful event?

SAS Name: none

Oracle Name: GES.Vehicle.CrashCatID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 27790 | n/a | Category I. Single Driver Category II. Same Trafficway, Same Direction Category III. Same Trafficway, Opposite Direction Category IV. Changing Trafficway, Vehicle Turning Category V. Intersecting Paths (Vehicle Damage) Category VI. Miscellaneous |
| 2 | 27791 | n/a | |
| 3 | 27792 | n/a | |
| 4 | 27793 | n/a | |
| 5 | 27794 | n/a | |
| 6 | 27795 | n/a | |

Remarks:

Variables V23, Accident Type (Category); V23, Accident Type (Configuration); and V23, Accident Type (Crash Type), are used for categorizing the collisions of drivers involved in crashes. A collision is defined here as the first harmful event in a crash between a vehicle and some object, accompanied by property damage or human injury. The object may be another vehicle, a person, an animal, a fixed object, the road surface or the ground. The first harmful event may also involve plowing into soft ground, if severe vehicle deceleration results in damage or injury. A road departure without damage or injury is not defined as a collision.

A summary of the crash types is shown in figure 1.

To determine the proper crash type, refer to the three step decision process outlined below:

- Step 1 Determine the appropriate category-V23, Accident Type (Category).
- Step 2 Determine the appropriate configuration-V23, Accident Type (Configuration).
- Step 3 Determine the specific crash type-V23, Accident Type (Crash Type).

The attributes for this variable are the categories. The configuration and specific crash type attributes are further discussed under variables V23, Accident Type (Configuration), and V23, Accident Type (Crash Type).

Figure 1

| Cate- gory | Configur- ation | ACCIDENT TYPES (Includes Intent) | | | |
|---|--------------------------------------|--|-----------------------------------|-------------------------------------|--|
| 3r | A. Right Roadside Departure | DRIVE OFF CONTROL/ ROAD TRACTION LOSS WITH VEH., PED., ANIM. | 04 SPECIFICS OTHER | 05 SPECIFICS UNKNOWN | |
| I. Single Driver | B. Left Roadside Departure | DRIVE OFF CONTROL/ ROAD TRACTION LOSS WITH VEH., PED., ANIM. | 09 SPECIFICS OTHER | 10 SPECIFICS UNKNOWN | |
| | C. Forward Impact | PARKED VEHICLE OBJECT ANIMAL DEPARTURE | 15 SPECIFICS OTHER | 16 SPECIFICS UNKNOWN | |
| sway ion | D. Rear-End | 20 22 24 26 28 (** 30 29 27 27 27 27 27 27 27 27 27 27 27 27 27 | (EACH - 32) SPECIFICS OTHER | (EACH - 33) SPECIFICS UNKNOWN | |
| . Same Trafficway Same Direction | E. Forward Impact | 34 35 36 37 38 39 40 41 CONTROL/ CONTROL/ AVOID COLLISION WITH VEHICLE WITH OBJECT | (EACH - 42) SPECIFICS OTHER | (EACH - 43) SPECIFICS UNKNOWN | |
| III. | F. Sideswipe Angle | 44 45 46 45 47 | (EACH - 48) SPECIFICS OTHER | (EACH - 49) SPECIFICS UNKNOWN | |
| , on | G. Head-On | 51 LATERAL MOVE | (EACH - 52) SPECIFICS OTHER | (EACH - 53) SPECIFICS UNKNOWN | |
| Same Trafficway Opposite Direction | H. Forward Impact | 54 55 55 57 58 59 60 61 CONTROL/ CONTROL/ AVOID COLLISION WITH VEHICLE WITH OBJECT | (EACH - 62) SPECIFICS OTHER | (EACH - 63) SPECIFICS UNKNOWN | |
| Ш. | I. Sideswipe/ Angle | 64 65 LATERAL MOVE | (EACH - 66) SPECIFICS OTHER | (EACH - 67) SPECIFICS UNKNOWN | |
| Change Trafficway Vehicle Turning | J. Turn Across Path | 68 70 73 72 INITIAL OPPOSITE DIRECTIONS INITIAL SAME DIRECTION | (EACH - 74) SPECIFICS OTHER | (EACH - 75) SPECIFICS UNKNOWN | |
| Σ. | K. Turn Into Path | 77 79 80 81 82 TURN INTO SAME DIRECTION TURN INTO OPPOSITE DIRECTIONS | (EACH - 84) SPECIFICS OTHER | (EACH - 85) SPECIFICS UNKNOWN | |
| v. mersecung Paths (Vehicle Damage) | L. Straight Paths | 87 88 88 89 | (EACH - 90) SPECIFICS OTHER | (EACH - 91) SPECIFICS UNKNOWN | |
| VI. Miscellaneous | M. Backing Etc. | 92 93 OTHER VEHICLE 98 OTHER ACCIDENT TYPE OR OBJECT 99 UNKNOWN ACCIDENT TYPE BACKING VEHICLE 00 NO IMPACT | | | |

Questions to ask before selecting a category

<u>General</u>

- How many in-transport vehicles were involved in the first Harmful Event (A06)?
- Were the in-transport vehicles on the same trafficway?
- In what direction were the vehicles headed, relative to each other?
- · Was a vehicle backing?

Category I: Single Driver

- · Did the vehicle leave the roadway, and on what side?
- Is there insufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

Right & Left Roadside Departure

- · Was there a control or traction loss?
- · Was there a successful avoidance maneuver?

Forward Impact

- · What was the object that was struck?
- · Did the vehicle depart off the end of the roadway?

Category II: Same Trafficway, Same Direction

- · What was the plane of contact for each vehicle?
- · Did a successful avoidance maneuver take place?
- Is there insufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

Rear End

- · What was the plane of contact for each vehicle?
- Was the struck vehicle stopped, going slower, slowing?
- Which vehicle was the striking vehicle?

Forward Impact

- · What was the plane of contact for each vehicle?
- What was the object avoiding?
- · Was there control or traction loss?
- · Which vehicle was the striking vehicle?

Sideswipe/Angle

- · Did either vehicle intentionally change lanes, if so which one(s)?
- · What side was each vehicle on, relative to the other vehicle?

Category III: Same Trafficway, Opposite Direction

- · What was the plane of contact for each vehicle?
- · Did a successful avoidance maneuver take place?
- Is there insufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

Head-On

· Which vehicle moved into the other vehicle's lane?

Forward Impact

- · Was there control or traction loss?
- · What was the object avoiding?
- · Which vehicle made the avoidance maneuver?

Sideswipe/Angle

· Which vehicle moved into the other vehicle's lane?

Category IV: Changing Trafficway, Vehicle Turning

- · Which way did the vehicle turn, relative to the other vehicle?
- · Is there sufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

Turn Across Path

- · What was each vehicle's direction of travel, relative to the other vehicle?
- In what direction was the turning vehicle turning?
- · Which vehicle was turning?

Category V: Intersecting Paths

Straight Paths

- · What was the plane of contact for both vehicles?
- Which vehicle was the striking vehicle?
- Is there sufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

Category VI: Miscellaneous

Backing/Miscellaneous

- · Which vehicle, if any, was backing?
- Is there sufficient information to choose between categories? If so, see remarks under V23. Accident Type (Configuration) Category VI. Miscellaneous.

The definitions of each of the six categories are as follows:

Category I. Single Driver - The first harmful event involves a collision between an in-transport vehicle and an object or an off roadway rollover. A harmful event involving two in-transport vehicles is excluded from this category. Note, the impact location on the vehicle is not a consideration for crash types in this category.

Category II. Same Trafficway, Same Direction - The first harmful event occurred while both vehicles were traveling in the same direction on the same trafficway.

Category III. Same Trafficway, Opposite Direction - The first harmful event occurred while both vehicles were traveling in opposite directions on the same trafficway.

Category IV. Change Trafficway, Vehicle Turning - The first harmful event occurred when the vehicle is either turning or merging while attempting to change from one trafficway to another trafficway. Trafficway for this variable is loosely defined to include driveways, alleys and parking lots when a vehicle is either entering or exiting a trafficway.

Category V. Intersecting Paths (Vehicle Damage) - The first harmful event involves situations where vehicle trajectories intersect. It is important to note the location of damage to each vehicle for crash typing.

Category VI. Miscellaneous - The first harmful event involves a crash type which cannot be described in Categories I-V and thus is included in this category. Select this category, if there is insufficient information to choose between categories.

Each category is subdivided into crash configuration(s). The configurations are described under V23, Accident Type (Configuration).

V23 ACCIDENT TYPE (CONFIGURATION)

Screen Heading: Vehicle Crash

Screen Name: Configuration (545-E)

Long Name: What is the crash type configuration?

SAS Name: none

Oracle Name: GES. Vehicle. Crash ConfigID

Element Values:

Screen Oracle SAS

Category I. Single Driver

| 1 | 27796 | n/a | Configuration A. Right Roadside Departure |
|---|-------|-----|---|
| 2 | 27797 | n/a | Configuration B. Left Roadside Departure |
| 2 | 27700 | / - | Cantian C Famuard Impact |

3 27798 n/a Configuration C. Forward Impact

Category II. Same Trafficway, Same Direction

| 1 | 27799 | n/a | Configuration D. Rear-End |
|---|-------|-----|----------------------------------|
| 2 | 27800 | n/a | Configuration E. Forward Impact |
| 3 | 27801 | n/a | Configuration F. Sideswipe/Angle |

Category III. Changing Trafficway, Vehicle Turning

| 1 | 27802 | n/a | Configuration G. Head-On |
|---|-------|-----|----------------------------------|
| 2 | 27803 | n/a | Configuration H. Forward Impact |
| 3 | 27804 | n/a | Configuration I. Sideswipe/Angle |

Category IV. Same Trafficway, Opposite Direction

| 1 | 27805 | n/a | Configuration J. Turn Across Path |
|---|-------|-----|-----------------------------------|
| 2 | 27806 | n/a | Configuration K. Turn Into Path |

Category V. Intersecting Paths (Vehicle Damage)

1 27807 n/a Configuration L. Straight Paths

Category VI. Miscellaneous

1 27808 n/a Configuration M. Backing, Etc.

Remarks:

Category I. Single Driver

Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

Configuration B. Left Roadside Departure

The vehicle departed the left side of the road with the first harmful event occurring off the road.

Configuration C. Forward Impact

The vehicle struck an object on the road or off the end of a trafficway while moving forward.

Category II. Same Trafficway, Same Direction

Configuration D. Rear-End

The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV).

Configuration E. Forward Impact

The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

Category III. Same Trafficway, Opposite Direction

Configuration G. Head-On

The frontal area of one vehicle impacted the frontal area of another.

Configuration H. Forward Impact

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

Configuration I. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

Category IV. Changing Trafficway, Vehicle Turning

Configuration J. Turn Across Path

The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle.

Note, the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

Category V. Intersecting Paths (Vehicle Damage)

Configuration L. Straight Paths

The two vehicles were proceeding (or attempting to proceed) straight ahead.

Category VI. Miscellaneous

Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

Any crash configuration which cannot be described in Category I. through V. is included here.

If there is insufficient information to determine the category or configuration, choose configuration M.

Each configuration is subdivided into crash type(s). The crash types are described under V23, Accident Type (Crash Type).

V23 ACCIDENT TYPE (CRASH TYPE)

Screen Heading: Vehicle Crash

Screen Name: Crash Type (547-E)

Long Name: What is the most adequate description of the crash type for the first

harmful event?

SAS Name: Vehicle.Acc_Type

Oracle Name: GES.Vehicle.CrashTypeID

Element Values:

Screen Oracle SAS

Category I. Single Driver

Configuration A. Right Roadside Departure

| 1 | 1 | 01 | Drive Off Road |
|---|---|----|--|
| 2 | 2 | 02 | Control/Traction Loss |
| 3 | 3 | 03 | Avoid Collision with Vehicle, Pedestrian, Animal |
| 4 | 4 | 04 | Specifics Other |
| 5 | 5 | 05 | Specifics Unknown |

Configuration B. Left Roadside Departure

| 6 | 6 | 06 | Drive Off Road |
|----|----|----|--|
| 7 | 7 | 07 | Control/Traction Loss |
| 8 | 8 | 80 | Avoid Collision With Vehicle, Pedestrian, Animal |
| 9 | 9 | 09 | Specifics Other |
| 10 | 10 | 10 | Specifics Unknown |

Configuration C. Forward Impact

| 11 | 11 | 11 | Parked Vehicle |
|----|----|----|-------------------|
| 12 | 12 | 12 | Stationary Object |
| 13 | 13 | 13 | Pedestrian/Animal |
| 14 | 14 | 14 | End Departure |
| 15 | 15 | 15 | Specifics Other |
| 16 | 16 | 16 | Specifics Unknown |
| | | | |

Category II. Same Trafficway, Same Direction

Configuration D. Rear-End

| 20 | 20 | 20 | Stopped |
|--|--|--|---|
| 21 22 23 24 25 26 27 | 21 22 23 24 25 26 27 | 21 22 23 24 25 26 27 | Stopped, Straight Stopped, Left Stopped, Right Slower Slower, Going Straight Slower, Going Left Slower, Going Right |
| | | | |

| 28 29 30 31 32 33 | 28 29 30 31 32 33 | 28 29 30 31 32 33 | Decelerating (Slowing) Decelerating (Slowing), Going Straight Decelerating (Slowing), Going Left Decelerating (Slowing), Going Right Specifics Other Specifics Unknown |
|--|--|--|---|
| | Configu | ration E | . Forward Impact |
| 34 35 36 37 38 39 40 41 42 43 | 34 35 36 37 38 39 40 41 42 43 | 34 35 36 37 38 39 40 41 42 43 | This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle Specifics Other Specifics Unknown |
| | Configu | ration F | . Sideswipe/Angle |
| 44 45 46 47 48 49 | 44 45 46 47 48 49 | 44 45 46 47 48 49 | Straight Ahead on Left Straight Ahead on Left/Right Changing Lanes to the Right Changing Lanes to the Left Specifics Other Specifics Unknown |
| Category | III. Same | Traffic | way, Opposite Direction |
| | Configu | ration G | S. Head-On |
| 50 51 52 53 | 50 51 52 53 | 50 51 52 53 | Lateral Move (Left/Right) Lateral Move (Going Straight) Specifics Other Specifics Unknown |
| | Configu | ration H | I. Forward Impact |
| 54 55 56 57 58 59 60 61 62 63 | 54 55 56 57 58 59 60 61 62 63 | 54 55 56 57 58 59 60 61 62 63 | This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle Specifics Other Specifics Unknown |
| | Configu | ration I. | Sideswipe/Angle |
| 64 | 64 | 64 | Lateral Move (left/Right) |

Category IV. Changing Trafficway, Vehicle Turning

Configuration J. Turn Across Path

| 68 | 68 | 68 | Initial Opposite Directions (Left/Right) |
|----|----|----|--|
| 69 | 69 | 69 | Initial Opposite Directions (Going Straight) |
| 70 | 70 | 70 | Initial Same Directions (Turning Right) |
| 71 | 71 | 71 | Initial Same Directions (Going Straight) |
| 72 | 72 | 72 | Initial Same Directions (Turning Left) |
| 73 | 73 | 73 | Initial Same Directions (Going Straight) |
| 74 | 74 | 74 | Specifics Other |
| 75 | 75 | 75 | Specifics Unknown |

Configuration K. Turn Into Path

| 76 77 78 79 80 81 82 83 84 | 76 77 78 79 80 81 82 83 | 76 77 78 79 80 81 82 83 84 | Turn Into Same Direction (Turning Left) Turn Into Same Direction (Going Straight) Turn Into Same Direction (Turning Right) Turn Into Same Direction (Going Straight) Turn Into Opposite Directions (Turning Right) Turn Into Opposite Directions (Going Straight) Turn Into Opposite Directions (Turning Left) Turn Into Opposite Directions (Going Straight) Specifics Other Specifics Unknown |
|--|--|--|---|
| 85 | 85 | 85 | Specifics Unknown |

Category V. Intersecting Paths (Vehicle Damage)

Configuration L. Straight Paths

| 86 | 86 | Striking from the Right |
|----|----------------------|----------------------------------|
| 87 | 87 | Struck on the Right |
| 88 | 88 | Striking from the Left |
| 89 | 89 | Struck on the Left |
| 90 | 90 | Specifics Other |
| 91 | 91 | Specifics Unknown |
| | 87 88 89 90 | 87 87 88 88 89 89 90 90 |

Category VI. Miscellaneous

Configuration M. Backing, Etc.

| 92 | 92 | 92 | Backing Vehicle |
|----|----|----|-------------------------|
| 92 | 92 | 92 | |
| 93 | 93 | 93 | Other Vehicle or Object |
| 98 | 98 | 98 | Other Crash Type |
| 99 | 99 | 99 | Unknown Crash Type |
| 00 | 00 | 00 | No Impact |

Remarks:

This variable specifies the crash types for each category/configuration.

The crash types in Category I. (Single Driver) involve an impact between a vehicle and an object. Categories II. through VI. identify specific collision combinations which must be coded in specified pairs (i.e., the pair code defines the crash type). As an example, the combination "20" (Rear-end, stopped) and "32" (Rear-end, specifics other) or "20" (Rear-end, stopped) and "25" (Slower, straight ahead) are not valid since "20" (Rear-end, stopped) only has meaning when linked to codes "21"-"23" (Stopped,).

A crash involving a vehicle impacting a "driverless in-transport vehicle" is coded "..., specifics other" in the appropriate configuration-category. For example, a vehicle which impacts the rear of a driverless in-transport vehicle is encoded "32" (Rear-end, specifics other) and "32".

In crashes involving more than two vehicles or in collision sequences involving a combination of vehicle-to-object- to-vehicle impacts, code the crash type for the vehicle(s) involved in the first harmful event. All other vehicles are coded "98" (Other crash type).

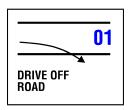
Keep in mind that intended actions play an important role in the coding scheme. For example, crash type "26" (Slower, turning left) is selected over type "25" (Slower, straight ahead) if the subject vehicle was traveling slower with the intention of turning left. Note, the turning action need not have occurred prior to the collision. The driver's intent to turn is the key.

Category I. Single Driver

Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

01 Right Roadside Departure: Drive Off Road



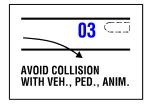
Enter "01" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.

02 Right Roadside Departure: Control/Traction Loss



Enter "02" when there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, code "01" (Right Roadside Departure, Drive Off Road).

03 Right Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "03" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorist's are included here.

04 Right Roadside Departure: Specifics Other



Enter "04" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.

05 Right Roadside Departure: Specifics Unknown



Enter "05" if the vehicle departed the right side of the road for unknown reasons.

Configuration B. Left Roadside Departure

06 Left Roadside Departure: Drive Off Road



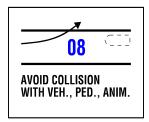
Enter "06" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.)

07 Left Roadside Departure: Control/Traction Loss



Enter "07" if there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions.) If doubt exists, code "06" (Left Roadside Departure, Drive Off Road).

08 Left Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "08" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.

09 Left Roadside Departure: Specifics Other



Enter "09" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also, use "specifics Other" for crashes involving a driverless in-transport vehicle.

10 Left Roadside Departure: Specifics Unknown



Enter "10" if the vehicle departed the left side of the road for unknown reasons.

Configuration C. Forward Impact

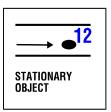
The vehicle struck an object on the road or off the end of a trafficway while moving forward.

11 Forward Impact: Parked Vehicle



Enter "11" if the crash involves impact with a parked vehicle on either side of the road.

12 Forward Impact: Stationary Object



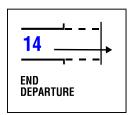
Enter "12" if the crash involves impact with a stationary object on either side of the road.

13 Forward Impact: Pedestrian/Animal



Enter "13" if the first harmful event involves impact with a pedestrian or animal on either side of the road. Pedestrians, bicyclists, and other cyclists and non-motorists are included here. Vehicle plane of contact is NOT a consideration.

14 Forward Impact: End Departure



Enter "14" when the vehicle ran off the end of the road and crashed into something.

15 Forward Impact: Specifics Other



Enter "15" for impacted (striking or struck) trains and nonstationary objects on the road. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.

Forward Impact: Specifics Unknown



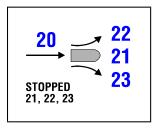
Enter "16" when the PAR indicates a single driver was involved in a forward impact collision, but no further classification is possible.

Category II. Same Trafficway, Same Direction

Configuration D. Rear-End

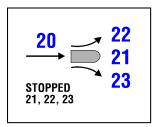
The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV - Change in Trafficway, Vehicle Turning).

20 Rear-End: Stopped



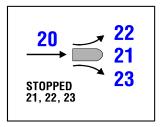
Enter "20" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was stopped in the trafficway.

21 Rear-End: Stopped, Straight



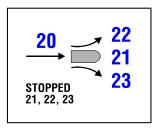
Enter "21" for a rear-impacted vehicle that was stopped in the trafficway, and was intending to proceed straight ahead.

22 Rear-End: Stopped, Left



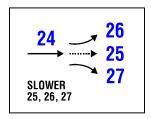
Enter "22" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a left turn.

23 Rear-End: Stopped, Right



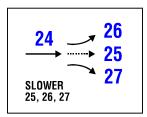
Enter "23" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a right turn.

24 Rear-End: Slower



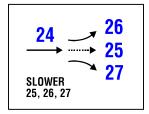
Enter "24" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was going slower than the striking vehicle.

25 Rear-End: Slower, Going Straight



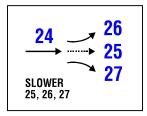
Enter "25" for a rear-impacted vehicle that was going slower than the other vehicle while proceeding straight ahead.

26 Rear-End: Slower, Going Left



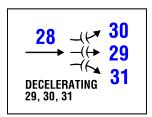
Enter "26" for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn left.

27 Rear-End: Slower, Going Right



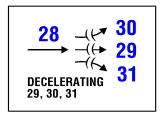
Enter "27" for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn right.

28 Rear-End: Decelerating (Slowing)



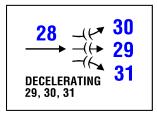
Enter "28" for a vehicle which impacts another vehicle from the rear when the impacted vehicle was slowing down.

29 Rear-End: Decelerating (Slowing), Going Straight



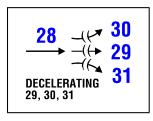
Enter "29" for a rear-impacted vehicle that was slowing down while proceeding straight ahead.

30 Rear-End: Decelerating (Slowing), Going Left



Enter "30" for a rear-impacted vehicle that was slowing down while intending to turn left.

31 Rear-End: Decelerating (Slowing), Going Right



Enter "31" for a rear-impacted vehicle that was slowing down while intending to turn right.

32 Rear-End: Specifics Other

EACH: 32
SPECIFICS
OTHER

Enter "32" for rear-end collisions which cannot be described in "20"-"31." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

33 Rear-End: Specifics Unknown

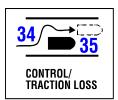
EACH: 33 SPECIFICS UNKNOWN

Enter "33" when the PAR indicates a rear-end collision occurred, but no further classification is possible.

Configuration E. Forward Impact

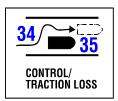
The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

34 Forward Impact: Control/Traction Loss



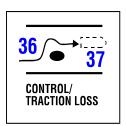
Enter "34" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

35 Forward Impact: Control/Traction Loss



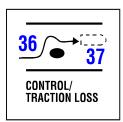
Enter "35" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

36 Forward Impact: Control/Traction Loss



Enter "36" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.

37 Forward Impact: Control/Traction Loss



Enter "37" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.

38 Forward Impact: Avoid Collision with Vehicle



Enter "38" for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

39 Forward Impact: Avoid Collision with Vehicle



Enter "39" for a vehicle that was impacted by the frontal area of another vehicle which was maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

40 Forward Impact: Avoid Collision with Object



Enter "40" for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

41 Forward Impact: Avoid Collision with Object



Enter "41" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid a collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

42 Forward Impact: Specifics Other



Enter "42" (for both vehicles) for a forward impact collision which occurred while both vehicles were traveling on the same trafficway, in the same direction, and the striking vehicle was attempting to avoid a vehicle or an object which cannot be described by "34" - "40."

Also, use this code for crashes involving a driverless in-transport vehicle which would otherwise qualify for this configuration.

43 Forward Impact: Specifics Unknown



Enter "43" when the PAR indicates that a forward impact collision occurred while both vehicles were traveling on the same trafficway and in the same direction, but no further classification was possible.

Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

The following four codes, "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), "47" (Sideswipe/Angle, changing lanes to the left), identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- 1. "44" and "45"
- "46" and "45" 2.
- 3.
- "45" and "47" "46" and "47".

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane;
- the vehicle on the left (code "46") was changing lanes to the right, and the 2. vehicle on the right (code "45") was not intending to change its lane; the vehicle on the left (code "45") was not intending to change its lane, and the
- 3. vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the 4. vehicle on the right (code "47") was changing lanes to the left.

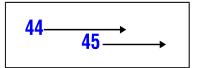
In addition, when:

- 1. the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right or
- 2. the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

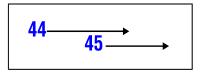
- their positions (i.e., left versus right) and 1.
- the intended lane of travel (straight ahead versus changing lanes) of their 2. drivers.

44 Sideswipe/Angle: Straight Ahead on Left



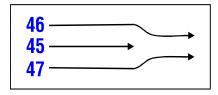
See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

45 Sideswipe/Angle: Straight Ahead on Left/Right



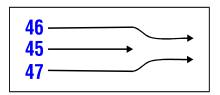
See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

46 Sideswipe/Angle: Changing Lanes to the Right



See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

47 Sideswipe/Angle: Changing Lanes to the Left



See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

48 Sideswipe/Angle: Specifics Other

EACH: 48
SPECIFICS
OTHER

Enter "48" if one vehicle was behind the other prior to a sideswipe/angle collision occurring while both vehicles were traveling on the same trafficway and in the same direction.

For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other crash type).

Use this code for crashes involving a driverless in-transport vehicle.

49 Sideswipe/Angle: Specifics Unknown



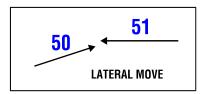
Enter "49" for sideswipe/angle collisions that occur while both vehicles are traveling on the same trafficway and in the same direction, when no further classification is possible.

Category III. Same Trafficway, Opposite Direction

Configuration G. Head-On

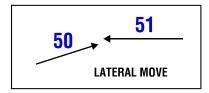
The frontal area of one vehicle impacted the frontal area of another.

50 Head-On: Lateral Move (Left/Right)



Enter "50" for a vehicle that LEAVES ITS LANE [moves laterally (sideways)] immediately before colliding head-on with another vehicle, when the vehicles are traveling on the same trafficway in opposite directions.

51 Head-On: Lateral Move (Going Straight)



Enter "51 " for a vehicle that collides head-on with another vehicle which has IMMEDIATELY LEFT ITS LANE (moved laterally), when the vehicles are traveling on the same trafficway in opposite directions.

52 Head-On: Specifics Other



Enter "52" for a head-on collision that cannot be described by "50"-"51", when the vehicles are traveling on the same trafficway in opposite directions. Clarification: Enter "52" for both vehicles involved in a head-on collision when one is traveling the wrong way on a one way roadway.

Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

53 Head-On: Specifics Unknown

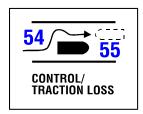


Enter "53" when the PAR indicates a head-on collision occurred between two vehicles traveling on the same trafficway in opposite directions, when no further classification is possible.

Configuration H. Forward Impact

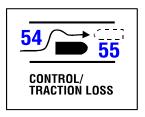
The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

54 Forward Impact: Control/Traction Loss



Enter "54" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

55 Forward Impact: Control/Traction Loss



Enter "55" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

56 Forward Impact: Control/Traction Loss



Enter "56" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

57 Forward Impact: Control/Traction Loss



Enter "57" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

58 Forward Impact: Avoid Collision with Vehicle



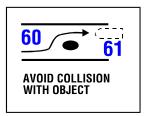
Enter "58" for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

59 Forward Impact: Avoid Collision with Vehicle



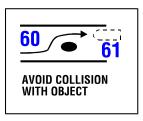
Enter "59" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

60 Forward Impact: Avoid Collision with Object



Enter "60" for a vehicle that struck the front of another vehicle with the frontal plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

61 Forward Impact: Avoid Collision with Object



Enter "61" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

62 Forward Impact: Specifics Other



Enter "62" for forward impact collisions occurring while the vehicles were traveling on the same trafficway in opposite directions which cannot be described by "54"-"61". Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle."

63 Forward Impact: Specifics Unknown

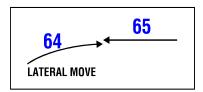


Enter "63" when the PAR indicates a forward impact collision occurred while the vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

Configuration I. Sideswipe/Angle

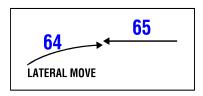
The two vehicles are involved in an impact involving the side of one or both vehicles.

64 Sideswipe/Angle: Lateral Move (Left/Right)



Code "64" identifies the vehicle which infringed upon the other vehicle (code "65") in a Category III, Configuration I collision; i.e., enter "64" for the vehicle which left its lane (moved laterally) leading to the collision.

65 Sideswipe/Angle: Lateral Move (Going Straight)



Enter "65" for the vehicle which was infringed upon by the other vehicle (code "64") in a Category III, Configuration I collision.

66 Sideswipe/Angle: Specifics Other



Enter "66" for sideswipe/angle collisions occurring while both vehicles were traveling on the same trafficway in opposite directions which cannot be described by "64"-"65". Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle."

67 Sideswipe/Angle: Specifics Unknown



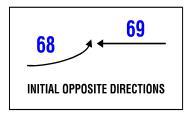
Enter "67" when the PAR indicates a sideswipe/angle collision occurred while both vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

Category IV. Changing Trafficway, Vehicle Turning

Configuration J. Turn Across Path

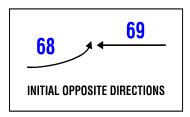
The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

68 Turn Across Path: Initial Opposite Directions (Left/Right)



Code "68" identifies the vehicle which turned across the path of another vehicle (code) in a Category IV, Configuration J collision, in which the vehicles were initially traveling in opposite directions.

69 Turn Across Path: Initial Opposite Directions (Going Straight)



Enter "69" for a vehicle involved in a collision in which another vehicle (code "68" across its Path, and in which the vehicles were initially traveling in opposite directions.

70 Turn Across Path: Initial Same Directions (Turning Right)



Enter "70" for a vehicle which turned right, across the path of another vehicle (code "71"), when both vehicles were initially traveling in the same direction.

71 Turn Across Path: Initial Same Directions (Going Straight)



Enter "71" for a vehicle whose path was crossed by a vehicle turning right (code "70"), when both vehicles were initially traveling in the same direction.

72 Turn Across Path: Initial Same Directions (Turning Left)



Enter "72" for a vehicle which turned left, across the path of another vehicle (code "73"), when both vehicles were initially traveling in the same direction.

73 Turn Across Path: Initial Same Directions (Going Straight)



Enter "73" for a vehicle whose path was crossed by a vehicle turning left (code "72"), when both vehicles were initially traveling in the same direction.

74 Turn Across Path: Specifics Other



Enter "74" for collisions in which one vehicle turned across another's path, which cannot be described by "68"-"72". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

75 Turn Across Path: Specifics Unknown

EACH: 75
SPECIFICS
UNKNOWN

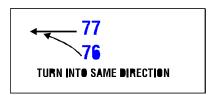
Enter "75" when the PAR indicates one vehicle turned across another's path, causing a collision, but no further classification is possible.

Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle.

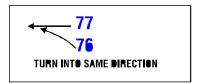
Note, the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

76 Turn Into Same Direction (Turning Left)



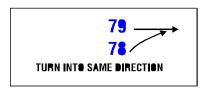
Enter "76" for a vehicle which turned left, into the path of another vehicle (code "77"), so that both vehicles were traveling in the same direction at the time of the collision.

77 Turn Into Same Direction (Going Straight)



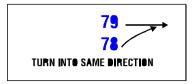
Enter "77" for a vehicle involved in a collision in which another vehicle (code "76") turned left, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

78 Turn Into Same Direction (Turning Right)



Enter "78" for a vehicle which turned right, into the path of another vehicle (code "79"), so that both vehicles were traveling in the same direction at the time of the collision.

79 Turn Into Same Direction (Going Straight)



Enter "79" for a vehicle involved in a collision in which another vehicle (code "78") turned right, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

80 Turn Into Opposite Directions (Turning Right)



Enter "80" for a vehicle which turned right, into the path of another vehicle (code "81"), so that the vehicles were traveling in opposite directions at the time of the collision.

81 Turn Into Opposite Directions (Going Straight)



Enter "81" for a vehicle involved in a collision in which another vehicle (code "80") turned right, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

82 Turn Into Opposite Directions (Turning Left)



Enter "82" for a vehicle which turned left, into the path of another vehicle (code "83"), so that the vehicles were traveling in opposite directions at the time of the collision.

Code "82" is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with "Configuration L - Straight Paths." The driver's intended path is the prime concern.

83 Turn Into Opposite Directions (Going Straight)



Enter "83" for a vehicle involved in a collision in which another vehicle (code "82") turned left, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

84 Turn Into Path: Specifics Other



Enter "84" for collisions in which one vehicle turned across another's path, which cannot be described by "76"-"83". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

85 Turn Into Path: Specifics Unknown



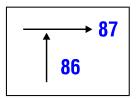
Enter "85" when the PAR indicates one vehicle turned into another's path, causing a collision, but no further classification is possible.

Category V. Intersecting Paths (Vehicle Damage)

Configuration L. Straight Paths

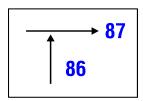
The two vehicles were proceeding (or attempting to proceed) straight ahead.

86 Straight Paths: Striking from the Right



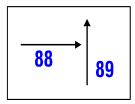
Enter "86" for a vehicle which strikes the right side of another vehicle (code "87") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

87 Straight Paths: Struck on the Right



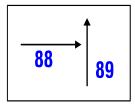
Enter "87" for a vehicle which is struck on the right side by another vehicle (code "86") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

88 Straight Paths: Striking from the Left



Enter "88" for a vehicle which strikes another vehicle (code "89") from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

89 Straight Paths: Struck on the Left



Enter "89" for a vehicle which is struck on the left side by another vehicle (code "88") from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

90 Straight Paths: Specifics Other



Enter "90" for collisions in which two vehicles, both going straight, collide when their paths intersect, which cannot be described by "86"-"89". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

91 Straight Paths: Specifics Unknown



Enter "91" when the PAR indicates two vehicles, both going straight, collided when their paths intersected, but no further classification is possible.

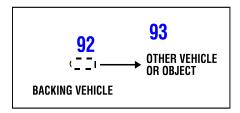
Category VI. Miscellaneous

Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

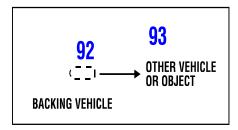
Any crash configuration which cannot be described in Category I. through V. is included here.

92 Backing, Etc.: Backing Vehicle



Enter "92" for a backing vehicle which was involved with another vehicle (code 93) or object.

93 Backing, Etc.: Other Vehicle or Object



Enter "93" for the vehicle which was involved with the backing vehicle (code 92).

98 Backing, Etc.: Other Crash Type

- 98 OTHER ACCIDENT TYPE
- 99 UNKNOWN ACCIDENT TYPE
- 00 NO IMPACT

Code "98" is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; crashes initiated by objects set in motion by an in-transport motor vehicle; third or subsequent vehicles involved in a crash; or the second involved vehicle, when the first harmful event involves a vehicle-to-object collision or a non-collision.

99 Backing, Etc.: Unknown Crash Type

- 98 OTHER ACCIDENT TYPE
- 99 UNKNOWN ACCIDENT TYPE
- 00 NO IMPACT

Code "99" when the crash category or configuration is unknown.

00 Backing, Etc.: No Impact

- 98 OTHER ACCIDENT TYPE
- 99 UNKNOWN ACCIDENT TYPE
- 00 NO IMPACT

Code "00" identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision or non-collision - no details). Rollovers on the road should be coded "98" (Other Crash Type).

The following crash types require clarification:

Code "00" (**No impact**) identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision or non-collision - no details). Rollovers on the road should be coded "98" (**Other crash type**).

Codes "01" (Right roadside departure, drive off road) and "06" (Left roadside departure, drive off road) are used when the vehicle departed the road under a controlled situation (i.e., the driver was distracted, fell asleep, intentionally departed, etc.).

Codes "02" (Right roadside departure, control/traction loss) and "07" (Left roadside departure, control/traction loss) are used if there is some evidence that the vehicle lost traction or in some other manner "got away" from the driver (i.e., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, code "01" (Right roadside departure, drive off road) or "06" (Left roadside departure, drive off road) respectively.

Codes "03" (Right roadside departure; avoid collision with vehicle, pedestrian, animal) and "08" (Left roadside departure; avoid collision with vehicle, pedestrian, animal) are used when the vehicle departed the road as a result of avoiding something in the road. "Phantom" situations are included here.

Codes "04" (Right roadside departure, specifics other) and "09" (Left roadside departure, specifics other) are used for any other stationary or nonstationary objects if the avoidance characteristics of codes "03" or "08" are present.

Codes "11" (Forward impact, parked vehicle), "12" (Forward impact, stationary object), and "13" (Forward impact, pedestrian/animal) involve an impact with an object which can be located on either side of the road.

Code "12" (**Forward impact, stationary object**) includes a hole in the road, an overhead object (e.g., overpass) or an object projecting over the road edge (e.g., support column of elevated railway).

Code "13" (**Forward impact, pedestrian/animal**) is used when a pedestrian, non-motorist or animal is involved with the first harmful event. Vehicle plane of contact is not a consideration.

Code "15" (**Forward impact, specifics other**) is used for impacted (striking or struck) trains and nonstationary objects on the road.

Codes "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), and "47" (Sideswipe/Angle, changing lanes to the left) identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- 1. "44" and "45".
- 2. "46" and "45".
- 3. "45" and "47", and
- 4. "46" and "47".

When used as a combination these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane; the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- 2. the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- 3. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

In addition, when:

- 1. the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right or
- 2. the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left; select the appropriate combination ("44"-"45", "46"-"45", "45"-"47" or "46"-"47") depending upon:
- 3. their positions (i.e., left versus right) and
- 4. the intended lane of travel (straight ahead versus changing lanes) of their drivers.

Code "48" (**Sideswipe/Angle**, **specifics other**) is used if one vehicle was behind the other prior to their Category II, Configuration F collision. For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other crash type).

Code "64" (**Sideswipe/Angle, lateral move--infringing vehicle**) identifies the vehicle which infringed upon the other (code "65") in a Category III, Configuration I collision.

Codes "68" through "85" (**Turn Across Path and Turn Into Path**) are used in Configurations J and K where the vehicle's action is the controlling factor, and the plane of contact is irrelevant.

Code "82" (**Left Turn Into Opposite Direction**) is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with Configuration L. Straight Paths. The driver's intended path is the prime concern.

Codes "86" through "89" (**Straight Paths**) must not be confused with crash types in Configuration K. Turn Into Path. For these codes the vehicles are proceeding (or attempting to proceed) straight ahead, usually at a junction.

Code "98" (Other Crash Type) is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; crashes initiated by objects set in motion by an in-transport motor vehicle; third or subsequent vehicles involved in a crash; or the second involved vehicle when the first harmful event involved a vehicle-to-object collision.

Consistency Checks:

Errors

| | IF | THEN | |
|--------|---|--|--|
| AV020 | The combination of ACCIDENT TYPE (V23) codes is incorrect. | | |
| AV020A | All Vehicles <u>not</u> involved in the FHE | must be coded "98." | |
| AV132 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09 | ACCIDENT TYPE (V23) must equal 00. | |
| AV133 | MANNER OF COLLISION (A07) equals 3 | at least one ACCIDENT TYPE (V23) must equal 92 or 98. | |
| AV215 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10 | ACCIDENT TYPE (V23) must not equal 20-91. | |
| AV225 | MANNER OF COLLISION (A07) equals 2 | ACCIDENT TYPE (V23) must not equal 64-67. | |
| AV226 | MANNER OF COLLISION (A07) equals 4 | ACCIDENT TYPE (V23) must not equal 20-43 or 50-53. | |
| VA015 | ACCIDENT TYPE (V23) equals 20-91 | NUMBER OF MOTOR VEHICLES (A03) must be greater than 1. | |
| VA081 | ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 21, 22, 24 or 27. | |
| VA086 | ACCIDENT TYPE (V23) equals 01-16 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must not equal 25. | |
| VA120 | Only ACCIDENT TYPE CODES 01-when the crash involves a single veh | | |
| VA137 | ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09. | |
| VA139 | ACCIDENT TYPE (V23) equals 14 | RELATION TO JUNCTION (A09) must not equal 01 or 11. | |
| VA219 | ACCIDENT TYPE (V23) equals 20-91and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) must equal 25. | |
| VV051 | ACCIDENT TYPE (V23) equals 21, 22 or 23 | TRAVEL SPEED (V11) must equal 0. | |
| VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92 | POINT OF IMPACT (V24) must not equal 01. | |
| VV065 | ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60 | POINT OF IMPACT (V24) must equal 01. | |

| VV066 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41 | POINT OF IMPACT (V24) must equal 04. |
|--------|---|--|
| VV067 | ACCIDENT TYPE (V23) equals 86 or 88 | VEHICLE ROLE (V22) must not equal 2. |
| VV068 | ACCIDENT TYPE (V23) equals 87 or 89 | VEHICLE ROLE (V22) must not equal 1. |
| VV075 | ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38 or 40 | VEHICLE ROLE (V22) must not equal 2. |
| VV079 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30 or 31 | VEHICLE ROLE (V22) must not equal 1. |
| VV082 | ACCIDENT TYPE (V23) equals 00 | VEHICLE ROLE (V22) must equal 0. |
| VV094 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 | ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91 or 92. |
| VV095 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 | ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91 or 92. |
| VV099A | ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14. |
| VV100A | ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1 | POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13. |
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99 | VEHICLE ROLE (V22) must equal 1 or 3. |
| VV122 | ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58 or 60 | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00 or 1. |
| VV182 | CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1 | ACCIDENT TYPE (V23) must equal 14. |
| VV191 | DRIVER PRESENCE (D01) equals 0 | ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 92, 93 or 98. |
| VV195 | ACCIDENT TYPE (V23) equals 34, 36, 38, 40, 54, 56, 58 or 60 | DRIVER MANEUVERED TO AVOID (D06) must not equal 00. |
| VV226 | ROLLOVER TYPE (V30) equals 10 and the first HARMFUL EVENT (A06) equals 1 | ACCIDENT TYPE (V23) must equal 1-10, 14, 15 or 98. |

| VV243A | ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01. |
|-----------------|--|---|
| VV245 | ACCIDENT TYPE (V23) equals 01 or 06 | PRECRASH CONTROL (V28) must not equal 02, 03, 04 or 07. |
| <u>Warnings</u> | | |
| | IF | THEN |
| AV070 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26 | ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99. |
| AV071 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13 | ACCIDENT TYPE (V23) should equal 13. |
| AV072 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1 or 9 | ACCIDENT TYPE (V23) should equal 12 or 15. |
| AV097 | RELATION TO ROADWAY (A10) equals 4 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | ACCIDENT TYPE (V23) should equal 06-10, 98 or 99. |
| AV203 | MANNER OF COLLISION (A07) equals 5 | ACCIDENT TYPE (V23) should not equal 20-33. |
| AV204 | MANNER OF COLLISION (A07) equals 5 | ACCIDENT TYPE (V23) should equal 44-49, 98 or 99. |
| AV205 | MANNER OF COLLISION (A07) equals 6 | ACCIDENT TYPE (V23) should not equal 50-53. |
| AV206 | MANNER OF COLLISION (A07) equals 6 | ACCIDENT TYPE (V23) should equal 64-67, 98 or 99. |
| AV223 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01 | ACCIDENT TYPE (V23) should equal 01-10, 98 or 99. |
| AV243 | MANNER OF COLLISION (A07) equals 1 | ACCIDENT TYPE (V23) should not equal 44-49. |
| VA014 | ACCIDENT TYPE (V23) equals 01-16 | NUMBER OF MOTOR VEHICLES (A03) should equal 1. |
| VA082 | ACCIDENT TYPE (V23) equals 68-91 | RELATION TO JUNCTION (A09) should not equal 00. |
| VA087 | ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1 | HARMFUL EVENT (A06) should equal 99. |

| VA094 | ACCIDENT TYPE (V23) equals 01-11 or 14 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
|-------|---|---|
| VA138 | ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2 | RELATION TO ROADWAY (A10) should equal 3. |
| VA140 | ACCIDENT TYPE (V23) equals 14 | RELATION TO JUNCTION (A09) should equal 00, 02, 10 or 12. |
| VA243 | ACCIDENT TYPE (V23) equals 12 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VV053 | ACCIDENT TYPE (V23) equals 68, 72, 76 or 82 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 97. |
| VV054 | ACCIDENT TYPE (V23) equals 70, 78 or 80 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 97. |
| VV055 | ACCIDENT TYPE (V23) equals 29, 30 or 31 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02. |
| VV063 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 12 | ACCIDENT TYPE (V23) should equal 98. |
| VV070 | ACCIDENT TYPE (V23) equals 46 or 47 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 06, 15 or 16. |
| VV071 | ACCIDENT TYPE (V23) equals 92 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 07, 08, 13, 98 or 99. |
| VV072 | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53 | VEHICLE ROLE (V22) should equal 1. |
| VV078 | ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30 or 31 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 04 or 06. |
| VV096 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 | ACCIDENT TYPE (V23) should equal 92 or 98. |
| VV097 | ACCIDENT TYPE (V23) equals 87 | POINT OF IMPACT (V24) should equal 02. |
| VV098 | ACCIDENT TYPE (V23) equals 89 | POINT OF IMPACT (V24) should equal 03. |
| VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2 | POINT OF IMPACT (V24) should not equal 03. |
| VV175 | ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80-85. |
| VV176 | ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92. |
| VV237 | CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | ACCIDENT TYPE (V23) should equal 15. |
| | | |

| VV238 | CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 01 and the vehicle is involved in the first harmful event | ACCIDENT TYPE (V23) should equal 12 or 15. |
|-------|--|--|
| VV240 | ACCIDENT TYPE (V23) equals 00 | CRITICAL EVENT (V26) should equal 98. |
| VV242 | PRECRASH CONTROL (V28) equals 01 | ACCIDENT TYPE (V23) should not equal 02, 07, 34, 36, 54 or 56. |
| VV243 | ACCIDENT TYPE (V23) equals 46 or 47 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 01. |
| VV247 | ROLLOVER TYPE (V30) equals 10 | ACCIDENT TYPE (V23) should equal 01-10, 14, 98 or 99. |

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PEDESTRIAN, ETC. VERSUS PEDALCYCLIST)

Screen Heading: "Ped./Bike" Crash Typing

Screen Name: Qualifying Non-Motorist Type (290-N)

Long Name: What Is the first qualifying non-motorist type involved in the crash?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS | |
|-----------------|---------------------|--------------------|---|
| n/a 1 | 27475 n/a | 0000 n/a | Not Applicable Pedestrian or Qualifying Other Non-Motorist |
| 2 | n/a | n/a | Pedalcyclist |
| 3 | 10333 | 9999 | First Qualifying Non-Motorist is an Unknown Person Type |

Remarks:

Qualifying non-motorists are either pedestrians, qualifying <u>other</u> non-motorists or pedalcyclists. See the discussion below under attribute **Pedestrian or Qualifying Other Non-Motorist** for the definition of qualifying <u>other</u> non-motorist.

If there are multiple qualifying non-motorists in the crash, code the first one involved.

Persons in motorized wheelchairs are motorists and do not qualify for "ped./bike typing."

Not Applicable applies if there are no qualifying non-motorists involved in the crash.

Select **Pedestrian or Qualifying Other Non-Motorist** if the first qualifying non-motorist in the crash is a pedestrian or qualifying other non-motorist.

A pedestrian is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance (A06, Harmful Event, equals Pedestrian). This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.



<u>Qualifying other non-motorists</u> are defined as persons who are in or on the following non-motorist conveyances: ice skates, roller skates, roller blades, scooters, skateboards, non-motorized wheelchairs or play vehicles (e.g., wagons and sleds) or persons who are not on a trafficway or sidewalk or path contiguous with a trafficway; but are in a parking lot, driveway, private road, gas station, alley, yard, garage, ball field, etc.

[&]quot;Ped./BikeTyping" is completed only for qualifying non-motorists.

Not Displayed on Summary Tab

Select **Pedalcyclist** if the first qualifying non-motorist is a pedalcyclist.

Pedalcyclists are bicyclists or other cyclists.

A bicyclist refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion.



Other cyclist refers to all other pedalcyclists (tricyclist, unicyclist, etc.). This includes those pedalcyclists who hold onto a motor vehicle in motion. A "Big Wheel" should be treated as a tricycle.

Select **First Qualifying Non-Motorist Involved is an Unknown Person Type** if P03, Person Type, for the first qualifying non-motorist is Unknown.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (WHEELCHAIR)

Screen Heading: "Ped./Bike" Crash Typing

Screen Name: WheelChair (292-E)

Long Name: Is the person in a non-motorized wheelchair?

SAS Name: None

Oracle Name: GES.CrashData.Wheelchair

Element Values:

| Screen | Oracle | SAS | |
|------------|--------|-----|---|
| 1 | 0 | n/a | No |
| 2 | 1 | | Yes |
| n/a | -1 | | Not Pedestrian or Qualifying Other Non-Motorist |

Remarks:

Enter **No** if the person is <u>not</u> in a non-motorized wheelchair.

Enter **Yes** if the person is in a non-motorized wheelchair.

Not Pedestrian or Qualifying Other Non-Motorist applies if the person is a not a pedestrian or qualifying other non-motorist (i.e. the person is a pedalcyclist).

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 1)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 1 (294-E)

Long Name: Does the motorist strike a pedestrian or qualifying other non-motorist

going to/from or crossing near: a bus or bus stop, ice cream vendor, residential mail/newspaper box or exiting/entering a stopped or parked

vehicle?

SAS Name: Accident.Ped Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|-----------------------------------|
| 1 | 27539 | | Commercial Bus-Related |
| 2 | 27540 | 0120 | School Bus-Related |
| 3 | 27602 | 0130 | Vendor/Ice Cream Truck |
| 4 | 27603 | 0140 | Mail Box-Related |
| 5 | 27604 | 0150 | Exiting/Entering |
| 6 | 47545 | n/a | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while crossing in front of a commercial bus stopped at a marked bus stop, is in a wheelchair; the SAS value 1110 is assigned; 0110, otherwise.

Remarks:

In Category 1, the motorist strikes a pedestrian or qualifying other non-motorist going to/from or crossing near a bus or bus stop; ice cream vendor; rural residential mailbox; exiting/entering a stopped or parked vehicle.

Enter **Commercial Bus-Related** if the person is struck while crossing in front of a commercial bus which is stopped at a marked bus stop.

• Includes only buses that stop periodically at marked or unmarked bus stops. Does not include church, YMCA or other buses not stopping at marked stops.

Enter **School Bus-Related** if the person is struck going to/from a school bus or school bus stop

- This type includes the crash in which the person is struck by a school bus.
- The bus does not have to be present if the person was noted to have been crossing to, from or was at a school bus stop.
- Includes the person being at or near a school bus or school bus stop.

Select **Vendor/Ice Cream Truck** if the person is struck while going to/from an ice cream vendor and striking vehicle was on same street as vendor

A truck (not a pushcart or trailer) vending from curb or roadside.

Enter **Mail Box-Related** if the person is struck while going to/from a private residence mail/newspaper box

- Includes the pedestrian being at the box.
- "Private residence mailbox" does not include a US mail box in which letters are dropped to be mailed.

Enter **Exiting/Entering** if the person is in the process of exiting/entering a parked or stopped vehicle, and is struck in the traffic lane next to stopped/parked vehicle.

The following 3 conditions must apply.

- A pedestrian is only in the process of exiting/entering while in contact with vehicle or within 2-3 steps of the door.
- Pedestrian was struck in the roadway (e.g., not on sidewalk, in parking lot, etc.).
- The pedestrian was struck when entering or exiting the parked or stopped vehicle on the side of the vehicle that was adjacent to traffic.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 2)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 2 (295-E)

Long Name: Is the striking motor vehicle: driverless, backing, in pursuit, being

pursued or a responding emergency vehicle?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|-----------------------------------|
| 1 | 27538 | 0210 | Driverless Vehicle |
| 2 | 27605 | 0220 | Backing Vehicle |
| 3 | 27606 | 0230 | Hot Pursuit |
| 4 | 47547 | n/a | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck by a vehicle that is backing up, is in a wheelchair; the SAS value 1220 is assigned; 0220, otherwise.

Remarks:

In Category 2, the vehicle which impacts the pedestrian or qualifying other non-motorist is: driverless; backing; in pursuit; being pursued; or an emergency vehicle.

Driverless Vehicle applies if the person is struck by a vehicle that is moving without a driver at the controls or is set into motion by the actions of a child.

Does not include vehicles set in motion as a result of a vehicle-vehicle collision.

Backing Vehicle applies if the person is struck by a vehicle that was backing up.

Hot Pursuit applies if the person is struck by a vehicle on an emergency/police mission or by a vehicle being pursued.

- Police or fire department car, ambulance or aid car or fire truck (but not a tow truck) that is responding to an emergency, official business or a disabled vehicle.
- Does not include a pedestrian who is pursuing or being pursued.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 3)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 3 (296-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck by a motorist

while walking to/from or while near/next to: a disabled vehicle, an active

police/emergency vehicle?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|-------------------------------------|
| 1 | 27608 | 0320 | Walking To or From Disabled Vehicle |
| 2 | 27609 | | Disabled Vehicle-Related |
| 3 | 27610 | | Emergency/Police Vehicle-Related |
| 4 | 47548 | | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while walking to or from a disabled vehicle (e.g., to get help, gas, etc.), is in a wheelchair; the SAS value 1310 is assigned; 0310, otherwise.

Remarks:

In Category 3, the pedestrian or qualifying other non-motorist is struck by a motorist while walking to/from or while near/next to: a disabled vehicle, an active police/emergency vehicle.

Use **Walking To or From Disabled Vehicle** if the person is struck while walking to or from a disabled vehicle (e.g., to get help, gas, etc.)

• The pedestrian is not in immediate proximity of the disabled vehicle.

Select **Disabled Vehicle-Related** if the person is struck while working on or standing near a disabled vehicle in or along the roadway. (No emergency vehicle present.)

- In this type, "pedestrian or qualifying other non-motorist" does not include on-duty police or emergency personnel, but does include tow truck operators.
- A disabled vehicle is any vehicle stopped with a problem preventing normal driving. It doesn't necessarily have to be "broken down" but could have been in a crash.

Select **Emergency/Police Vehicle Related** if the person is struck while near an active emergency or police vehicle.

• Police or fire department car, ambulance or aid car or fire truck (but not a tow truck) that is responding to an emergency, official business or a disabled vehicle.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 4)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 4 (297-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck while working or

playing in the roadway (prior to motorist's appearance) or on a play

vehicle?

SAS Name: Accident.Ped Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|-----------------------------------|
| 1 | 27611 | 0410 | Working on Roadway |
| 2 | 27612 | 0420 | Play Vehicle-Related |
| 3 | 27613 | 0430 | Playing in Roadway |
| 4 | 47551 | n/a | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while working on, in, over or under the roadway, is in a wheelchair; the SAS value 1410 is assigned; 0410, otherwise.

Remarks:

In Category 4, the pedestrian or qualifying other non-motorist is struck while working or playing in the roadway or on a play vehicle.

Enter **Working on Roadway** if the person (e.g., police/emergency personnel, flagman, traffic guard or member of a roadway/construction maintenance crew) is struck while working on, in, over or under the roadway.

- Person was present in the roadway because of the requirements of his or her job. Includes garbage collectors, construction crews, etc., but not people who are in the street voluntarily (e.g., a civilian directing traffic at the scene of a crash).
- That part of the road including through lanes, turn lanes, and parking lanes, but not including the shoulder.
- Alleys and driveways which are controlled by a traffic signal, are considered roadways.

Use **Play Vehicle-Related** if the person is struck while riding a play vehicle (e.g., wagon, sled, skateboard; NOT bicycle, "Big Wheel" type vehicle or tricycle).

 A play toy which may be ridden but is not a normal mode of transportation (such as wagons, sleds, scooters, roller skates, roller blades, and skateboards).
 Skateboards, while used by some people as a form of transportation, are to be considered play vehicles. Tricycles, "Big Wheel" type vehicles, and bicycles are not included as play vehicles for the purposes of pedestrian crash typing. • The person does not need to be in the trafficway on the play vehicle for this type to apply, e.g., crashes occurring on the sidewalk, driveway or playground may be included.

Select **Playing in Roadway** if the person is struck while playing on foot in roadway. Pedestrian is playing in roadway prior to vehicle's appearance.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 5)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 5 (298-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck while:

hitchhiking; crossing limited access expressway; walking or running

along a road without sidewalks?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|--------------------------------------|
| 1 | 27614 | 0510 | Hitchhiking |
| 2 | 27615 | 0520 | Expressway Crossing |
| 3 | 27616 | 0531 | Walking Along Road - With Traffic |
| 4 | 27617 | 0532 | Walking Along Road - Against Traffic |
| 5 | 27618 | 0539 | Walking Along Road - Can't Specify |
| 6 | 47553 | n/a | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while hitchhiking, is in a wheelchair; the SAS value 1510 is assigned; 0510, otherwise.

Remarks:

In Category 5, the pedestrian or qualifying other non-motorist is struck while: hitchhiking; crossing limited access expressway; walking or running along a road without sidewalks.

Select **Hitchhiking** if the person is was struck while hitchhiking.

Enter **Expressway Crossing** if the person is struck while attempting to cross a limited access expressway.

 A major thoroughfare without intersecting cross streets, having specific entrance and exit ramps. Includes superhighways, interstates, freeways, turnpikes, and parkways. Entrance and exit ramps are considered part of an expressway.

Enter **Walking Along Road - With Traffic** if the person is walking or running along a road in the same direction as traffic.

• The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

Enter **Walking Along Road - Against Traffic** if the person is walking or running along a road facing traffic (i.e., against traffic).

• The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

Enter Walking Along Road - Can't Specify if the person is walking or running along a road--direction with respect to traffic not specified.

• The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 6)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 6 (299-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck: on/near curb or

roadway edge; on sidewalk; or on other nonroadway location?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|--|
| 1 | 27619 | 0620 | Pedestrian Waiting to Cross At/Near Curb |
| 2 | 27620 | | Pedestrian Not In Roadway |
| 3 | 47555 | | None of the Above Scenarios Apply |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while WAITING to cross a roadway or standing at or near a curb, is in a wheelchair; the SAS value 1610 is assigned; 0610, otherwise.

Remarks:

In Category 6, the pedestrian or qualifying other non-motorist is struck: on/near a curb or roadway edge; on sidewalk; or on other nonroadway location.

Enter **Pedestrian Waiting to Cross At/Near Curb** if the person is struck while WAITING to cross roadway, standing at or near curb.

Enter **Pedestrian Not In Roadway** if the person is struck when not in/near a roadway (e.g., in parking lot, driveway, private road, gas station, alley, sidewalk, yard, garage, ball field).

 Includes standing off the roadway, but near the edge of the roadway, as well as on the curb. For instance, standing on the shoulder or on the curb waiting to cross the roadway.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 7 VERSUS CATEGORY 8)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 7 Versus Category 8 (300-E)

Long Name: Does the crash occur at or within 50 feet of an intersection?

SAS Name: None

Oracle Name: None

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | n/a | n/a | No |
| 2 | n/a | | Yes |
| 3 | n/a | | Unknown or Categories 7 and 8 Do Not Apply |

Remarks:

Select **No** if the crash does not occur at or within 50 feet of an intersection.

Select **YES** if the crash occurs at or within 50 feet of an intersection.

Select **Unknown or Categories 7 and 8 Do Not Apply** if there is insufficient information to determine if the crash occurs at or within 50 feet of an intersection or the crash types for categories 7 and 8 do not apply.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 7)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 7 (302-E)

Long Name: Select the applicable category 7 crash type.

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|--------|--------|------|---|
| 1 | 27621 | 0710 | Multiple Threat - At Intersection |
| 2 | 27622 | 0720 | Vehicle Turn/Merge |
| 3 | 27623 | 0730 | Intersection Dash |
| 4 | 27624 | 0740 | Trapped |
| 5 | 27625 | 0750 | Pedestrian Walks Into Vehicle - At Intersection |
| 6 | 27626 | 0760 | Intersection - Driver Violation |
| 7 | 27627 | 0790 | Intersection - Other |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, entering the roadway in front of standing/stopped traffic and struck by a vehicle heading in the same direction as stopped traffic, is in a wheelchair; the SAS value 1710 is assigned; 0710, otherwise.

Remarks:

In Category 7, the crash occurs at or within 50 feet of an intersection.

Enter **Multiple Threat - At Intersection** if the person enters the roadway in front of standing/stopped traffic, and is struck by a vehicle heading in the same direction as stopped traffic.

- A stopped vehicle has the engine running and a driver at the controls; it is not an empty parked vehicle.
- This type covers a crash in which the person enters the roadway in front of a vehicle that is stopped to allow the person to cross.
- The person crosses in front of the stopped vehicle, and then is struck by another vehicle traveling in the same direction as the stopped vehicle. The second vehicle is not aware that the person is crossing in front of the stopped vehicle.
- This type does not cover a person entering the roadway in front of stalled traffic or a disabled vehicle (see type under SAS value 0320).
- If the traffic light changes while the person is crossing, continue down to the "Trapped" type (SAS code 0740).

Enter **Vehicle Turn/Merge** if the person and vehicle collided while the vehicle is in the process of turning/merging, is preparing to turn/merge or just completes a turning/merging maneuver.

Enter **Intersection Dash** if the motorist's view of the person is blocked until an instant before impact and/or the person is running.

- The driver's view of the person is blocked by some obstruction until immediately before impact. The obstruction is documented in some part of the report as having impaired the driver's vision.
- Assume walking if the only indication of the person's speed is "crossing" or "staggering." Take the narrative literally (i.e., assume that the person is running if the report has a statement such as "The person ran in front of me.")

Enter **Trapped** if, at a signalized intersection, a person in the process of crossing is struck when the light changes and traffic starts moving.

Enter **Pedestrian Walks Into Vehicle - At Intersection** if the person walks into (i.e., struck) the vehicle.

Person is walking, not running, and strikes the vehicle.

Enter Intersection - Driver Violation if the person is struck by a driver who is proceeding straight ahead and the report indicates that the driver committed one or more of the following violations: careless driving, failed to yield right-of-way, signal/sign violation, speeding/too fast for conditions, DWI/DUI.

Report Indicates

- Must be reported by policeman
 - 1. in narrative or
 - 2. in boxes or
 - in charges, citations or arrests.

Careless Driving

Is the same as "without due regard."

Enter **Intersection - Other** if the crash occurs at an intersection but is not covered by any of the above or there is insufficient information to code any of the above.

 The roadway up to and including 50 feet from the corner. Alleys and driveways are only considered intersections when they are controlled by a traffic signal. Assume intersection if no information is given other than an intersection drawn in the report.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 8)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 8 (304-E)

Long Name: Select the applicable category 8 crash type.

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS* | |
|----------------------------|--|--|---|
| 1 2 3 4 5 6 | 27628 27629 27630 27631 27632 27633 | 0810 0821 0822 0829 0830 0840 | Multiple Threat - At Midblock Dart-Out - First Half Dart-Out - Second Half Dart-Out - Can't Specify Midblock Dash Pedestrian Walks Into Vehicle - Midblock |
| 7 | 27634 | 0890 | Midblock - Other |

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, entering the roadway in front of standing/stopped traffic and struck by a vehicle heading in the same direction as standing traffic (driver's vision is blocked by standing traffic), is in a wheelchair; the SAS value 1810 is assigned; 0810, otherwise.

Remarks:

In Category 8, the crash occurs midblock (i.e., more than 50 feet from an intersection). Use the following codes for the corresponding situations.

Enter **Multiple Threat - At Midblock** if the person enters the roadway in front of standing/stopped traffic, and is struck by a vehicle heading in same direction as standing traffic; driver's vision is blocked by standing traffic.

- A stopped vehicle has the engine running and driver at the controls; it is not an empty parked vehicle.
- This type covers a crash in which the person enters the roadway in front of a
 vehicle that is stopped to allow the person to cross. The person crosses in front of
 the stopped vehicle, and then is struck by another vehicle traveling in the same
 direction as the stopped vehicle. The second vehicle is not aware that the person
 is crossing in front of the stopped vehicle.
- This type does not cover a person entering the roadway in front of stalled traffic or a disabled vehicle.

Enter **Dart-Out - First Half** if the person is struck before crossing half of the roadway (in first half of roadway) and the motorist's view of the person is blocked until an instant before impact.

- Person is struck before reaching the center-line of the roadway.
- A dart-out (SAS codes 0821, 0822 or 0829) can only occur if there is some documented visual obstruction. If there is any indication in the report that a

physical object, such as a bus, stopped or parked vehicle or building, is present (for example: "She came out from between two parked cars."), assume this object is an obstruction, unless the driver specifically mentions that the person is visible heading towards the roadway before the crash.

- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentions that the driver's view is impaired because of these factors.

Enter **Dart-out - Second Half** if the person is struck after crossing over half of the roadway (in second half of roadway) and the motorist's view of the person is blocked until an instant before impact.

- The person crosses one-half of the roadway and is struck at the centerline or after having crossed the centerline.
- A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the person is visible heading towards the roadway before the crash.
- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentioned that the driver's view was impaired because of these factors.

Enter **Dart-out - Can't Specify** if the person is struck after entering the roadway and the motorist's view of the person is blocked until an instant before impact (first or second half of roadway not specified).

- A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the person had been visible heading towards the roadway before the crash.
- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentioned that the driver's view was impaired because of these factors.

Enter **Midblock Dash** if the person is running and the motorist's view of the person is not obstructed.

• Assume walking if the only indication of the person's speed is "crossing" or "staggering." Take the narrative literally (i.e., assume that the person is running if the report has a statement such as "The person ran in front of me").

 No obstructions indicated in the report or driver indicates that there is no obstruction.

Enter **Pedestrian Walks Into Vehicle - Midblock** if the person walks into (i.e., struck) the vehicle.

• Person is walking, not running, and struck the vehicle.

Enter **Midblock - Other** if the crash occurs midblock but is not covered by any of the above or insufficient information is given to code any of the above.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 9)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 9 (306-E)

Long Name: Select the applicable category 9 crash type.

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

Screen Oracle SAS*

1 27635 0910 Other - Weird

2 27636 0920 Inadequate Information

Remarks:

In Category 9, the crash is other type or has inadequate information. Use the following codes for the corresponding situations.

Enter **Other - Weird** if the crash situation is not covered by any of the types listed in categories 1-8.

Enter **Inadequate Information** if insufficient information is available to specify the crash type.

^{*} The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if insufficient information is available to specify the crash type and the person is in a wheelchair; the SAS value 1920 is assigned; 0920, otherwise.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - WEIRD)

Screen Heading: Pedalcyclist Crashes

Screen Name: Specific Circumstances - Weird (310-E)

Long Name: The crash is weird because:

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|--|
| n/a | n/a | 0036 | Weird |
| 1 | 27471 | 0036 | The Motorist or Cyclist Intentionally Causes the Crash |
| 2 | 27582 | 0036 | The Officer Indicates No Crash Actually Occurs |
| 3 | 27583 | 0036 | The Crash Does Not Involve a Cyclist |
| 4 | 27584 | 0036 | The Cyclist Is Struck by Falling Cargo |
| 5 | 47629 | n/a | None of These Crash Descriptions Apply |

Remarks:

Overall Procedure for Classifying Pedalcycle Crashes

Use the procedures described below when the first qualifying non-motorist involved in the crash is a Pedalcyclist [P03, Person Type equals Non-occupant / Cyclist (Pedalcyclist)].

Code each police report as follows:

- 1. Read the police report carefully and completely:
 - First, read the narrative. In case of conflicting stories, give first priority to officer's conclusion, then the witness statement, and finally the pedalcyclist or driver statement.
 - Next, review the information in the specific information categories (i.e., the "check off" boxes), such as time, day, violations, weather, pedalcyclist's age, driver's age and roadway information.
 - Finally, examine the diagram. Remember that diagrams are seldom drawn to scale.
 Although a diagram might appear to show a crash occurs at an intersection, for example, check the report form for the actual measurement of the point of impact from the nearest intersection.
- 2. Read each of the four Specific Circumstances crash types in order. The four Specific Circumstances are:
 - The crash is weird because:
 - The cyclist is riding a child's vehicle, such as a "Big Wheel" type tricycle, other tricycle or a bicycle with training wheels. (But not an adult tricycle.)
 - The crash involves a motor vehicle which is backing.
 - The crash occurs in: a parking lot, etc.

- 3. If none of the Special Circumstances apply, determine whether the initial approach paths of the motorist and pedalcyclist are parallel or crossing.
- 4. Review each parallel or crossing path type <u>in order</u> and select the <u>first</u> one that applies.
- 5. Within the first parallel or crossing path type which applies, review each crash type description in order and select the first one that applies.
- 6. If no crash type description applies, continue with the next parallel or crossing path heading and repeat steps 4 and 5.
- 7. If you reach the Insufficient Information heading without finding a type that applies, enter Parallel Paths Unknown or Crossing Paths Unknown (SAS codes 0098 or 0099). Before using an Insufficient Information code, review the report to assure that you have not missed any information that would lead you to select another crash type.

As you code, refer to the diagram and label accompanying each crash for additional information. Remember that the diagrams are examples only, and do not represent all possible situations to which the type can be applied.

If more than one pedalcyclist is involved in a crash, the first pedalcyclist struck defines the crash. Consider only the circumstances surrounding the collision with the first pedalcyclist in determining the type.

Procedures for This Question, the First of Four Specific Circumstances

Read each crash description below. If none apply, select **None of These Crash Descriptions Apply**.

The crash is weird because:

- The Motorist or Cyclist Intentionally Causes the Crash.
- The Officer Indicates No Crash Actually Occurred.
- The Crash Does Not Involve a Cyclist.
- The Cyclist Is Struck by Falling Cargo.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - CHILDREN'S VEHICLE)

Screen Heading: Pedalcyclist Crashes

Screen Name: Specific Circumstances - Vehicle (312-E)

Long Name: Is the pedalcyclist riding a children's vehicle?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

Screen Oracle SAS

1 **n/a n/a** No 2 27472 0040 Yes

Remarks:

Enter **Yes** if the cyclist is riding a child's vehicle, such as a "Big Wheel" type tricycle, other tricycle or a bicycle with training wheels (but not an adult tricycle); **No**, otherwise.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - BACKING MOTOR VEHICLE)

Screen Heading: Pedalcyclist Crashes

Screen Name: Specific Circumstances - Backing (314-E)

Long Name: Does the crash involve a motor vehicle which is backing?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

Screen Oracle SAS

1 **n/a n/a** No 2 27473 0011 Yes

Remarks:

Enter **Yes** if the crash involves a motor vehicle which is backing; **No**, otherwise.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - NOT ON A ROADWAY)

Screen Heading: Pedalcyclist Crashes

Screen Name: Specific Circumstances - Non-Roadway (316-E)

Long Name: Does the crash occur in...?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS | |
|------------|------------|------------|--|
| n/a | n/a | 0029 | Parking Lot, Open Area or Another Non-Roadway Location |
| 1 | 27474 | 0029 | A Parking Lot or Open Area |
| 2 | 27585 | 0029 | Another Non-Roadway Location, Such as a Gas Station |
| 3 | 47630 | n/a | None of These Items Describe the Crash Events |

Remarks:

Enter **Yes** if the crash occurs in a parking lot or open area or another non-roadway location, such as a gas station, alley, lot, etc.; **No**, otherwise.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (APPROACH PATHS--PARALLEL **VERSUS CROSSING)**

Screen Heading: Pedalcyclist Crashes

Screen Name: Initial Approach Paths (318-E)

Long Name: What are the initial approach paths of the motorist and cyclist?

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

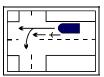
Element Values:

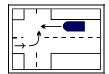
| Screen | Oracle | SAS | |
|--------|------------|-----|----------|
| 1 | n/a | n/a | Parallel |
| 2 | n/a | | Crossing |
| 3 | 10332 | | Unknown |

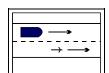
Remarks:

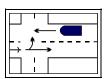
Specify the initial approach paths (i.e., before any turns which cause the crash or turns to avoid it).

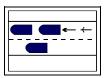
Enter Parallel if the cyclist and motor vehicle are approaching each other on parallel paths, heading either in the same direction or in opposing directions.



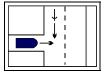


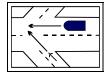


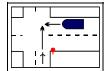


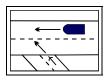


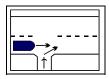
Enter Crossing if the cyclist and motor vehicle are on intersecting paths











Enter **Unknown** if there is no way of knowing whether the vehicles' initial approach paths are parallel or crossing.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PARALLEL PATH CATEGORY)

Screen Heading: Pedalcyclist Crashes

Screen Name: Parallel Paths (320-E)

Long Name: Choose the first parallel path which applies.

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|---|
| 1 | n/a | n/a | Parallel Path 1 (Motorist Turns or Merges into the Path of the Cyclist) |
| 2 | n/a | n/a | Parallel Path 2 (Cyclist Turns or Merges into the Path of the Motorist) |
| 3 | n/a | n/a | Parallel Path 3 (Operator Is on the Wrong Side of the Street) |
| 4 | n/a | n/a | Parallel Path 4 (Motorist Is Overtaking the Cyclist) |
| 5 | n/a | n/a | Parallel Path 5 (Cyclist Is Overtaking a Motor Vehicle) |
| 6 | n/a | n/a | Parallel Path 6 (Operator Loses Control and Inadvertently |
| 7 | 27554 | 0098 | Swerves into the Path of the Other Vehicle Because of:) Parallel Path 7 (There Is No Way of Knowing Which of the above Is True) |

Remarks:

Choose the first parallel path that applies.

Select Parallel Path 1 if the motorist turns or merges into the path of the cyclist.

Select Parallel Path 2 If the cyclist turns or merges into the path of the motorist.

Select **Parallel Path 3** If the operator (motorist or cyclist) is on the wrong side of the street.

Select Parallel Path 4 if the motorist is overtaking the cyclist.

Select Parallel Path 5 f the cyclist is overtaking a motor vehicle.

Select **Parallel Path 6** If the operator (motorist or cyclist) loses control and inadvertently swerves into the path of the other vehicle because of:

- mechanical failure, such as brakes, steering, tires or other vehicle problems
- road conditions, such as ice, potholes, mud, sand or other surface conditions.
- prior collision with moving or stationary object(s).
- operator impairment due to drugs or alcohol.
- operator error due to oversteering or improper braking.

Select Parallel Path 7 If there is no way of knowing which of the above scenarios is true.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CROSSING PATH CATEGORY)

Screen Heading: Pedalcyclist Crashes

Screen Name: Crossing Paths (322-E)

Long Name: Choose the first crossing path which applies.

SAS Name: Accident.Ped_Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|--|
| 1 | n/a | n/a | Crossing Path 1 (Cyclist Does Not Clear Intersection Before Light Turns Green for Cross Traffic) |
| 2 | n/a | n/a | Crossing Path 2 (Motorist Fails to Yield to the Cyclist) |
| 3 | n/a | n/a | Crossing Path 3 (Cyclist Fails to Yield to the Motorist, Midblock) |
| 4 | n/a | n/a | Crossing Path 4 (Cyclist Fails to Yield to the Motorist at an Intersection) |
| 5 | n/a | n/a | Crossing Path 5 (Motorist Is Turning) |
| 6 | n/a | n/a | Crossing Path 6 (Cyclist Is Turning) |
| 7 | n/a | n/a | Crossing Path 7 (Crash Occurs at an Intersection) |
| 8 | 27601 | 0099 | Crossing Path 8 (There Is No Way of Knowing Which of the above Is True) |

Remarks:

Choose the first crossing path that applies.

Select Crossing Path 1 if the cyclist does not clear intersection before light turns green for cross traffic.

Select Crossing Path 2 if the motorist fails to yield to the cyclist.

Select **Crossing Path 3** if the cyclist fails to yield to the motorist, midblock.

Select **Crossing Path 4** if the cyclist fails to yield to the motorist at an intersection.

Select Crossing Path 5 if the motorist is turning.

Select Crossing Path 6 if the cyclist is turning.

Select **Crossing Path 7** if the crash occurs at an intersection.

Select Crossing Path 8 If there is no way of knowing which of the "Crossing Paths" is true.

A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PARALLEL/CROSSING PATH **CATEGORY CRASH TYPE)**

Screen Heading: Pedalcyclist Crashes

Screen Name: Specific Circumstances (330-E)

Long Name: Choose the first crash type which applies.

SAS Name: Accident.Ped Acc

Oracle Name: GES.CrashData.PedBikeID

Element Values:

Screen Oracle SAS

Parallel Path 1 (Motorist Turns or Merges into the Path of the Cyclist)

| * | 27476 | 0035 | Drive out - on Street Parking |
|---|-------|------|---|
| | 27477 | 0022 | Motorist Left Turn in Front of Cyclist |
| | 27534 | 0023 | Motorist Left Turn Facing Cyclist |
| | 27535 | 0024 | Motorist Right Turn in Front of Cyclist |

Parallel Path 2 (Cyclist Turns or Merges into the Path of the Motorist)

| 27536 | 0003 | Ride-out from Sidewalk |
|-------|------|---|
| 27537 | 0018 | Cyclist Left Turn, in Front of Traffic |
| 27541 | 0019 | Cyclist Left Turn, Facing Traffic |
| 27542 | 0021 | Cyclist Right Turn, from Wrong Side of Street |

Parallel Path 3 (Operator Is on the Wrong Side of the Street)

| 27543 | 0030 | Head-on, Counteractive Evasive Actions |
|-------|------|--|
| 27544 | 0028 | Wrong Way Motorist |
| 27545 | 0026 | Wrong Way Cyclist |

Parallel Path 4 (Motorist Is Overtaking the Cyclist)

| 27546 0013 | Motorist Overtakes Undetected Cyclist |
|------------|--|
| 27547 0015 | Motorist Overtaking, Counteractive Evasive Actions |
| 27548 0016 | Motorist Overtaking, Misjudges Passing Space |
| 27549 0017 | Motorist Overtaking Cyclist, Path Obstructed |
| 27550 0039 | Motorist Overtaking |
| | <u> </u> |

Parallel Path 5 (Cyclist Is Overtaking a Motor Vehicle)

| 27551 | 0027 | Cyclist Overtaking |
|-------|------|--------------------------------|
| 27552 | 0041 | Cyclist Strikes Parked Vehicle |

Parallel Path 6 (Operator Loses Control and Inadvertently Swerves into the Path of the Other Vehicle Because of:)

```
27553 0014 Motorist Lost Contro
10349 0020 Cyclist Lost Control
                         Motorist Lost Control
```

Crossing Path 1 (Cyclist Does Not Clear Intersection Before Light Turns Green for Cross Traffic)

27555 0006 Trapped 27556 0007 Multiple Threat

Crossing Path 2 (Motorist Fails to Yield to the Cyclist)

 27557
 0008
 Drive Out, Driveway/Alley

 27586
 0012
 Drive Through

 27587
 0009
 Drive Out, Stop Sign

 27588
 0010
 Right on Red

 27589
 0048
 Drive Out, Intersection

Crossing Path 3 (Cyclist Fails to Yield to the Motorist, Midblock)

27590 0001 Ride Out, Residential Driveway 27591 0002 Ride Out, Commercial Driveway 27592 0004 Ride Out, Midblock

Crossing Path 4 (Cyclist Fails to Yield to the Motorist at an Intersection)

27593 0005 Ride Out, Stop Sign 27594 0049 Ride Out, Intersection

Crossing Path 5 (Motorist Is Turning)

27595 0033 Motorist Cuts Corner 27596 0034 Motorist Swings Wide

Crossing Path 6 (Cyclist Is Turning)

27597 0031 Cyclist Cuts Corner 27598 0032 Cyclist Swings Wide

Crossing Path 7 (Crash Occurs at an Intersection)

27599 0055 Controlled Intersection, Other 27600 0025 Uncontrolled Intersection, Other

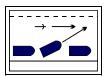
^{*} Diagrams with labels describing the crash type are shown on the data entry screen.

Remarks:

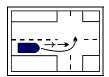
Parallel Path 1

The motorist turns or merges into the path of the cyclist.

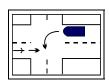
Select **Drive out - on Street Parking** if the motorist is exiting or entering on-street parking.



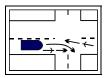
Select **Motorist Left Turn in Front of Cyclist** if the motorist is turning left and going in the same direction as cyclist.



Select **Motorist Left Turn Facing Cyclist** if the motorist is turning left and the motorist and cyclist are facing each other as they approach.

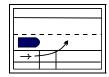


Select **Motorist Right Turn in Front of Cyclist** if the motorist is turning right and the motorist and cyclist are going in either the same direction or opposite directions.

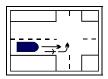


The cyclist turns or merges into the path of the motorist.

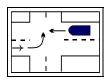
Select **Ride-out from Sidewalk** if the cyclist turns or merges onto the street from a residential driveway or alley. Cyclist coming from sidewalk.



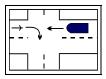
Select Cyclist Left Turn, in Front of Traffic Left if the cyclist turns or merges onto the street and is going the same direction as the motorist.



Select Cyclist Left Turn, Facing Traffic Left if the cyclist turns or merges onto the street and the cyclist and motorist are facing each other as they approach.

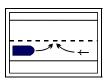


Select Cyclist Right Turn, from Wrong Side of Street Right if the cyclist turns or merges onto the street and the cyclist is riding on the wrong side of the street.

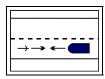


The operator is on the wrong side of the street.

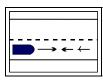
Select **Head-on, Counteractive Evasive Actions** if either the cyclist or motorist are going the wrong way, the approach is head-on, and the evasive actions are counteractive.



Select Wrong Way Motorist if the motorist is going the wrong way.

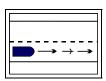


Select Wrong Way Cyclist if the cyclist is going the wrong way.

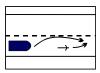


The motorist is overtaking the cyclist.

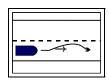
Select **Motorist Overtakes Undetected Cyclist** if the motorist fails to detect the cyclist.



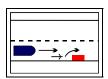
Select **Motorist Overtaking, Counteractive Evasive Actions** if the evasive actions are counteractive.



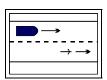
Select **Motorist Overtaking, Misjudges Passing Space** if the motorist misjudges the space, length or width required to pass the cyclist.



Select **Motorist Overtaking Cyclist**, **Path Obstructed** if the cyclist's path is obstructed. Cyclist strikes obstruction or overtaking motorist.

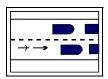


Select **Motorist Overtaking** for other situations involving a motorist overtaking a cyclist.

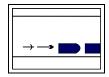


The cyclist is overtaking a motor vehicle.

Select **Cyclist Overtaking** if the cyclist strikes a slow or stopped vehicle in a traffic lane.



Select Cyclist Strikes Parked Vehicle if the cyclist strikes a vehicle in parking lane.

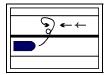


Parallel Path 6

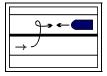
The operator loses control and inadvertently swerves into the path of the other vehicle because of any of the following reasons:

- mechanical failure, such as brakes, steering, tires or other vehicle problems
- road conditions, such as ice, potholes, mud, sand or other surface conditions
- prior collision with moving or stationary objects
- operator impairment due to drugs or alcohol
- operator error due to oversteering or improper braking

Select Motorist Lost Control if the motorist loses control.

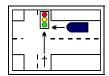


Select Cyclist Lost Control if the cyclist loses control.

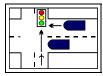


The cyclist does not clear intersection before light turns green for cross traffic.

Select **Trapped** if the cyclist does not clear the intersection before the light turns green for cross traffic and the motorist's view of the cyclist is not obstructed.

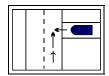


Select **Multiple Threat** if the cyclist does not clear the intersection before the light turns green for cross traffic and the motorist's view of the cyclist is obstructed by standing traffic.

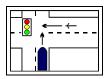


The motorist fails to yield to the cyclist.

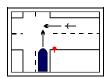
Select **Drive Out, Driveway/Alley** if the motorist fails to yield to the cyclist at a driveway, alley or other midblock location.



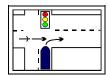
Select **Drive Through** if the crash occurs at a controlled intersection and the motorist runs a sign or signal.



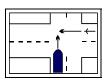
Select **Drive Out, Stop Sign** if, at an intersection controlled by a stop sign or flashing light, the motorist obeys the sign but fails to yield to the cyclist.



Select **Right on Red** if, at an intersection controlled by a signal, the motorist obeys the signal but fails to yield to the cyclist when making a right turn when the signal is red.

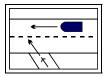


Select **Drive Out**, **Intersection** if the crash occurs at an intersection and the situation is not covered above.

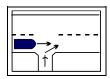


The cyclist fails to yield to the motorist, midblock.

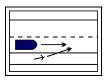
Select **Ride Out, Residential Driveway** if the cyclist fails to yield to the motorist at a residential driveway or alley.



Select **Ride Out, Commercial Driveway** if the cyclist fails to yield to the motorist at a commercial driveway.

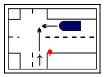


Select **Ride Out, Midblock** if the cyclist fails to yield to the motorist at a shoulder or curb -- midblock location. (Cyclist not using driveway.)

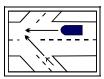


The cyclist fails to yield to the motorist at an intersection.

Select **Ride Out**, **Stop Sign** if the cyclist fails to yield to the motorist at an intersection controlled by a stop sign or flashing red signal.

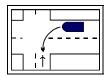


Select **Ride Out, Intersection** if the cyclist fails to yield to the motorist at an intersection and the situation is not covered above.

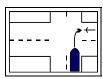


The motorist is turning.

Select Motorist Cuts Corner if the motorist is turning left and cuts the corner.

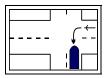


Select Motorist Swings Wide if the motorist is turning right and swings out too wide.

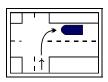


The cyclist is turning.

Select **Cyclist Cuts Corner** if the cyclist is turning left and cuts the corner.



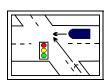
Select Cyclist Swings Wide if the cyclist is turning right and swings out too wide.



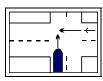
Crossing Path 7

The crash occurs at an intersection.

Select **Controlled Intersection, Other** if the intersection is controlled by stop signs or signals.



Select **Uncontrolled Intersection**, **Other** if the intersection has no signs or signals.



Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| AA037 | HARMFUL EVENT (A06) equals 21 or 22 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |
| AA038 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0810, 0821, 0822, 0829, 0830, 0840 or 0890 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| AA039 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO ROADWAY (A10) must equal 1 or 9. |
| AA040 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740 | TRAFFIC CONTROL DEVICE (A16) must not equal 00. |
| AA042 | the HARMFUL EVENT (A06) involving a non-motorist equals 22 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 001-0099. |
| AA043 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002 or 0008 | RELATION TO JUNCTION (A09) must equal 03 or 13. |
| AA044 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0010, 0012, 0025, 0048, 0049 or 0055 | RELATION TO JUNCTION (A09) must equal 01, 02, 04, 08, 11, 12, 14 or 18. |
| AA045 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0009, 0010, 0012 or 0055 | TRAFFIC CONTROL DEVICE (A16) must not equal 00. |
| AA046 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006, 0007 or 0010 | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08 or 09. |
| AA047 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005 | TRAFFIC CONTROL DEVICE (A16) must equal 04 or 21. |
| AA048 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0012 or 0055 | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28 or 29. |
| AA051 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21 | RELATION TO ROADWAY (A10) must not equal 1 or 9. |
| AA070 | NUMBER OF NON-MOTORISTS (A04) equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000. |
| AA090 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0009 | RELATION TO JUNCTION (A09) must not equal 00. |
| AP021 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000 | PERSON TYPE (P03) must not equal 5, 6 or 8. |

| AP061 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P03) equals 5 | NON-MOTORIST'S ACTION (P19) must equal 21 or 22. |
|-------|---|--|
| AP062 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049 and PERSON TYPE (P03) equals 6 | at least one NON-MOTORIST'S ACTION (P19) must equal 07. |
| AP129 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0750 or 0840 | NON-MOTORIST'S ACTION (P19) must not equal 21. |
| AV022 | HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97. |
| PA064 | NON-MOTORIST'S ACTION (P19) equals 29 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620. |
| PA083 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
| PA096 | PERSON TYPE (P03) equals 5 or 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |
| RANGE | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0 or null | PEDESTRIAN/BIKE ACCIDENT TYPE - WHEELCHAIR (A24) must equal -1. |

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA041 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740 | TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09 or 99. |
| AA049 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0025 | TRAFFIC CONTROL DEVICE (A16) should equal 00. |
| AA050 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019, 0021, 0022, 0023 or 0024 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| AA091 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0009, 0010, 0012, 0025, 0049 or 0055 | RELATION TO JUNCTION (A09) should not equal 01, 02, 11 or 12. |
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120. |
| AP027 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5 | SCHOOL BUS RELATED (A21) should equal 1. |
| AP063 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0830 | at least one NON-MOTORIST'S ACTION (P19) should equal 21. |
| PA051 | PERSON TYPE (P03) equals 5 and NON-MOTORIST LOCATION (P13) equals 08, 18 or 98 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620. |
| PA053 | NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
| PA065 | HARMFUL EVENT (A06) equals 22, NUMBER OF NON- MOTORISTS (A04) equals 01, and NON-MOTORIST's ACTION (P19) equals 07 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099. |
| PA168 | NON-MOTORIST'S ACTION (P19) equals 27 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531. |
| PA169 | NON-MOTORIST'S ACTION (P19) equals 28 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532. |
| PA170 | NON-MOTORIST'S ACTION (P19) equals 25 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531, 0532 or 0539. |

Post Entry

| | IF | THEN |
|-------|--|---|
| AD026 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0210 | at least one DRIVER PRESENCE (D01) must equal 0. |
| AD034 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0007 | at least one DRIVER'S VISION OBSCURED BY (D04) must equal 07 or 11. |
| AD043 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0760 | at least one VIOLATIONS CHARGED (D02) should not equal 00. |
| AD088 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0821, 0822 or 0829 | at least one DRIVER'S VISION OBSCURED BY (D04) must not equal 00. |
| AD154 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006 | at least one DRIVER'S VISION OBSCURED BY (D04) must equal 00. |
| AP023 | RELATION TO JUNCTION (A09) equals 01 or 11 and at least one PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890. |
| AP039 | RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12, and at least one PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920. |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055. |
| AP077 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420 | at least one PERSON TYPE (P03) must equal 4. |
| AP155 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999 | at least one PERSON TYPE (P03) must equal 8. |
| AP156 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430 | at least one NON-MOTORIST'S ACTION (P19) must equal 29. |
| AP157 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0531 | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 27. |
| AP158 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0532 | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 28. |
| AP235 | First character of PED/BIKE ACCIDENT TYPE (A24) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04. |
| AV030 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0011 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 08, 09, 13 or 97. |

| AV031 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0035 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 08 or 09. |
|--------|---|---|
| AV032 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0022, 0023 or 0033 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 11 or 17. |
| AV033 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0010, 0024 or 0034 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10 or 17. |
| AV041 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0230 | at least one EMERGENCY USE (V09) should equal 1. |
| AV042 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0720 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, 12, 16, 97 or 99. |
| AV055 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019 or 0021 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01. |
| AV089 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0840 | at least one VEHICLE ROLE (V22) must equal 2. |
| PA049 | at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110- 0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920. |
| PA058 | at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099. |
| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210. |
| VP045 | at least one # OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP045A | at least one # OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP046 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220. |
| VP047 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720. |

| VP056 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049. |
|-------|---|---|
| VP057 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011. |
| VP136 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024 or 0034, 0048 or 0049. |

A16 TRAFFIC CONTROL DEVICE

Screen Heading: Regarding Vehicle # ____

Screen Name: Traffic Control Devices (245-E)

Long Name: What traffic control devices are applicable to this vehicle?

SAS Name: A16-Accident.Traf_Con, V_A16-Vehicle.VtrafCon, M_A16-

Trafcon.MTrafCon

Oracle Name: GES.TrafficDevices.DeviceID

Element Values:

Screen Oracle SAS

No Controls n/a 26623 00

NOT AT RAILROAD GRADE CROSSING

TRAFFICWAY TRAFFIC SIGNALS

| 1 | 26624 | 01 | Traffic Control Signal (on colors) |) |
|---|-------|----|------------------------------------|---|
|---|-------|----|------------------------------------|---|

2 04 Flashing Traffic Control Signal or Flashing Beacon 26625

3 26626 80 Other Traffic Signal

4 Unknown Traffic Signal 26627 09

REGULATORY, SCHOOL ZONE SIGNS

1 26628 21 Stop Sign

Yield Sign 22 26629

23 School Zone Related Sign 26630

2 3 4 26631 28 Other Sign

5 26632 29 Unknown Sign

WARNING SIGNS

40 Advisory Speed Sign 1 26633

2 Warning Sign for Road Conditions (Hill, Steep Grade, etc.) 26634 41

3 Warning Sign for Road Construction 26635 42

Warning Sign for Environment/Traffic (Fog ahead, Wind, Crash 4 26636 43

5 26637 49 Unknown Type Warning Sign

MISCELLANEOUS NOT AT RAILROAD CROSSING

1 51 Officer, Crossing Guard, Flagman, etc. 26638

AT RAILROAD GRADE CROSSING

| 1 | 26639 | 61 | Active Device at RR Crossing (e.g., Gates, Flashing Lights, | |
|---|-------|----|---|--|
| | | | Traffic Signal) | |

i raffic Signal)

Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks) 2 26640 62

OTHER

| 1 | 26641 | 97 | Traffic Control Present - No Details |
|---|-------|----|---|
| 2 | 26642 | 98 | Other Traffic Control (Whether or not at RR Grade Crossing) |
| 3 | 26643 | 99 | Unknown |

Remarks:

This variable measures controls which regulate vehicular traffic. Excluded are any controls which solely regulate pedestrians (e.g., Walk/Wait signals).

Pavement markings are used to supplement the regulations or warnings of other devices such as traffic signs or signals. In other instances, they are used alone and produce results that can not be obtained by the use of any other device. Pavements markings can convey warnings or information to the driver without diverting his attention from the roadway. However, pavement markings are not considered as traffic control devices for the purposes of this variable and are not entered.

Guide signs do not constitute traffic controls.

Code the attribute indicated on the PAR if it directly matches.

Code **No Controls** is used if at the time of the crash there was no intent to control (regulate or warn) vehicle traffic. Use this attribute if statutory controls apply (e.g., state law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

Traffic Control Signal (on Colors) is used if the PAR indicates a signal which processes through the green, amber, and red cycles. The source of actuation is of no concern.

Flashing Traffic Control Signal or Flashing Beacon is used if (1) the signal has green, amber, and red cycle capability but is being used to flash amber/red only or (2) the device is capable of only flashing amber/red signals.

School Zone Related Sign is used when the first harmful event occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether or not children were present.

Other Sign includes speed limit signs, movement signs (e.g., NO TURN, LEFT TURN ONLY, DO NOT PASS, PASS WITH CARE, KEEP RIGHT, DO NOT ENTER, WRONG WAY, ONE WAY), parking signs (e.g., NO PARKING, EMERGENCY PARKING ONLY), and other miscellaneous signs (e.g., STOP HERE ON RED, NO TURN ON RED, ROAD CLOSED TO THRU TRAFFIC, WEIGHT LIMIT..., TRUCK ROUTE). There must be specific mention of the sign on the PAR.

Warning Signs include any black on orange diamond shaped sign or any black on yellow diamond shaped sign. Some black on yellow horizontal rectangular or vertical rectangular signs are also included.

At Railroad Grade Crossing should only be used when the first harmful event occurs in the area of a roadway and a railroad bed (i.e., Relation to Junction equals Railroad Grade Crossing). Attributes referring to Trafficway Traffic Signals, Regulatory School Zone Signs, and Warning Signs should be used when the first harmful event occurs anywhere else.

Active Device at RR Crossing (e.g., Gates, Flashing Lights, Traffic Control Signal) is used when the PAR reports that the railroad crossing was guarded by a gate, a flashing light, a traffic control signal, a bell or any combination thereof.

Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks, etc.) is used when the PAR indicates that no train activated devices were present. Cross bucks are a large "X", with the words RAILROAD CROSSING spelled out on the "X". A railroad advance warning sign is a circle with a black "X" on a yellow background.

Other Traffic Control (Whether or Not At RR Grade Crossing) includes: (1) a school bus with flashers activated where vehicles are required to stop or (2) any other device which (a) functions as a traffic control device which is not listed as an attribute of this variable and (b) is not excluded by the manual and (c) is related to the crash. Some examples are: barricades, cones, drums, and object markers.

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the crash, code **No Controls**. A traffic control that has just been installed and not yet activated is also coded **No Controls**. However, a traffic control that is out (e.g., due to a power failure) and was reported as such on the PAR is coded, unless a temporary control (e.g., stop sign, police officer, etc.) has been inserted, in which case the temporary control should be coded.

Unknown is used if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other attributes.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|--|--|
| AA011 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23 | TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98. |
| AA015 | TRAFFIC CONTROL DEVICE (A16) equals 01 | RELATION TO JUNCTION (A09) must not equal 00 or 10. |
| AA040 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740 | TRAFFIC CONTROL DEVICE (A16) must not equal 00. |
| AA045 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0009, 0010, 0012 or 0055 | TRAFFIC CONTROL DEVICE (A16) and TRAFFIC CONTROL DEVICE - CYCLIST (A16C) must not both equal 00. |
| AA046 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006, 0007 or 0010 | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08 or 09. |
| AA048 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0012 or 0055 | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28 or 29. |
| MULTIPLE RESPONSE | TRAFFIC CONTROL DEVICE (A16) equals 00 or 99 | there must be only one traffic control device coded. |

| RANGE | TRAFFIC CONTROL DEVICE (A16) must equal 00, 01, 04, 08, 09, 21, 22, 23, 28, 29, 40, 41, 42, 43, 49, 51, 61, 62, 97, 98 or 99 and must not |
|-------|---|
| | equal null. |

<u>Warnings</u>

| | IF | THEN |
|-------|--|--|
| AA021 | INTERSTATE HIGHWAY (A08) equals 1 | TRAFFIC CONTROL DEVICE (A16) should not equal 01, 21, 23 or 61-97. |
| AA026 | RELATION TO JUNCTION (A09) equals 05 | TRAFFIC CONTROL DEVICE (A16) should equal 61 or 62. |
| AA041 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740 | TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09 or 99. |
| AA049 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0025 | TRAFFIC CONTROL DEVICE (A16) should equal 00. |
| AA085 | TRAFFIC CONTROL DEVICE (A16) equals 21 or 22 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| AA096 | If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62 | RELATION TO JUNCTION (A09) should equal 05. |
| AA097 | WORK ZONE (A25) equals 4, 5 or 6 | TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98. |
| AA098 | TRAFFIC CONTROL DEVICE (A16) equals 42 | WORK ZONE (A25) should equal 4, 5 or 6. |
| VA005 | HARMFUL EVENT (A06) equals 23 | TRAFFIC CONTROL DEVICE (A16) should not equal 01-51. |

Post Entry

| | IF | THEN |
|-------|--|--|
| DA123 | VIOLATIONS CHARGED (D02) equals 07 | at least one TRAFFIC CONTROL DEVICE (A16) must equal 1-9, 21, 97, 98 or 99. |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005-0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055. |

V12 VEHICLE CONTRIBUTING FACTORS

Screen Heading: Regarding Vehicle # ____

Screen Name: Vehicle Contributing Factors (450-E)

Long Name: Enter all contributing factors for this vehicle.

SAS Name: V12-Vehicle.Factor, M_V12-Factor.MFactor

Oracle Name: GES.Contributors.ContributorID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 26802 | 00 | None |
| 2 3 | 26803 | 01 | Tires |
| 3 | 26804 | 02 | Brake System |
| 4 5 | 26805 | 03 | Steering System - Tie Rod, Kingpin, Ball Joint, etc. |
| 5 | 26806 | 04 | Suspension - Springs, Shock Absorbers, MachPherson Struts, Control Arms, etc. |
| 6 | 26807 | 05 | Power Train - Universal Joint, Drive Shaft, Transmission, etc. |
| 7 | 26808 | 06 | Exhaust System |
| 8 | 26809 | 07 | Headlights |
| 8 9 | 26810 | 80 | Signal Lights |
| 10 | 26811 | 09 | Other Lights |
| 11 | 26812 | 10 | Wipers |
| 12 | 26813 | 11 | Wheels |
| 13 | 26814 | 12 | Mirrors |
| 14 | 26815 | 13 | Driver Seating & Control |
| 15 | 26816 | 14 | Body, Doors |
| 16 | 26817 | 15 | Trailer Hitch |
| 17 | 26818 | 50 | Hit-and-Run Vehicle |
| 18 | 26819 | 97 | Vehicle Contributing Factors - No Details |
| 19 | 26820 | 98 | Other Vehicle Contributing Factors |
| 20 | 26821 | 99 | Unknown if Contributing Factors |

Remarks:

Vehicle Contributing Factors are mechanical flaws that may have contributed to the cause of a crash. These factors can appear anywhere on the PAR - in the narrative section, in the space for violations, in a column entitled "Contributing Factors" or "Vehicle Defects", etc. It is not necessary that the PAR indicate this "factor" as a cause of the crash.

If more than one factor is indicated on the PAR, select all the responses which apply.

Code **None** is used if no vehicle defect or factor was indicated by the investigating officer.

Code **Tires** includes any defect of a tire. If the contributing factor is of the wheel (e.g., a lug nut comes off), then use code "**Wheels**."

Code Brake System includes parking brakes.

Code **Power Train (Universal Joint, Drive Shaft, Transmission, etc.)** includes engine and differential. Stuck throttle is coded here.

Code **Exhaust System** includes exhaust manifold(s), headers, muffler, catalytic converter, tailpipe, etc.

Code Wheels includes loss of lug nuts.

Code **Body**, **Doors** includes trunk, hood, tailgate, rear doors of cargo vans, etc.

Code **Trailer Hitch** applies to a defective trailer hitch or an improper trailer hitch. If the PAR cites this attribute, then code it.

Code **Hit-and-Run Vehicle** is used for a hit-and-run vehicle unless the PAR indicates the presence of a "defect."

Code **Vehicle Contributing Factors - No Details** is used if a vehicle "factor" or "defect" is indicated on the PAR but no information is given concerning the nature of the "factor."

Code Other Vehicle Contributing Factors is used if a defect is cited but is not listed above.

Code **Unknown If Contributing Factors** is used only if the PAR specifically indicates an "unknown defect" or "unknown contributing factor."

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|---|--|
| VV073 | VEHICLE CONTRIBUTING FACTORS (V12) equals 50 | HIT-AND-RUN (V02) must equal 1. |
| VV083 | HIT-AND-RUN (V02) equals 1 | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99. |
| VV124 | CRITICAL EVENT (V26) equals 1, 2, 3 or 4 | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00. |
| MULTIPLE RESPONSE | VEHICLE CONTRIBUTING FACTORS (V12) equals 00 | no other vehicle contributing factor must be coded for this driver |
| MULTIPLE RESPONSE | VEHICLE CONTRIBUTING FACTORS (V12) equals 97 | no other vehicle contributing factor must be coded for this driver |
| MULTIPLE RESPONSE | VEHICLE CONTRIBUTING FACTORS (V12) equals 99 | no other vehicle contributing factor must be coded for this driver |
| MULTIPLE RESPONSE | each VEHICLE CONTRIBUTING For the coded only once per driver. | ACTORS (V12) element value must |
| RANGE | VEHICLE CONTRIBUTING FACTOR | RS (V12) must not equal null. |

V25 DAMAGE AREAS

Screen Heading: Regarding Vehicle # ____

Screen Name: Damage Areas (560-E)

Long Name: What specific areas of this vehicle are damaged?

SAS Name: Vehicle.Dam_Area

Oracle Name: GES.DamageArea.ArealD

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------------|
| 1 | 26822 | 0 | No Damage |
| 2 | 26823 | 1 | Front |
| 3 | 26824 | 2 | Right Side |
| 4 | 26825 | 3 | Left Side |
| 5 | 26826 | 4 | Back |
| 6 | 26827 | 5 | Top |
| 7 | 26828 | 6 | Undercarriage |
| 8 | 26829 | 7 | All Areas Damaged |
| 9 | 26830 | 9 | Damage Areas Ŭnknown |

Remarks:

This variable reports this vehicle's specific areas damaged due to impact. The totality of the damage is used when determining the specific areas.

"Vehicle" as used in this variable includes the power unit plus all trailers connected by means of a fixed linkage at the time of impact. The six planes (front, right side, left side, back, top, and undercarriage) are measured with respect to the entire vehicle (capsule). In contrast, any trailer disconnected prior to impact is treated as an object.

Enter all areas of the vehicle which are damaged.

Example: A single vehicle crash involving a head-on impact with a brick wall results in damage to the vehicle's left side, front and right side. The correct coding for this is **Front**, **Left**, and **Right**. If this same impact had resulted in damage to the front and left side only, the correct coding would be **Front** and **Left**.

No Damage is used when the vehicle sustains no impact but is part of the crash due to a non-collision event such as: fire or explosion, immersion, gas inhalation, an occupant's fall from the vehicle, an injured occupant without an external impact or other non-impacts except most jackknife situations.

Front, Right Side, Left Side, Back, Top or Undercarriage are used whenever the PAR indicates that one or more (but not all) planes are damage in the crash.

All Damaged Areas is used whenever the PAR indicates that all planes received damage in the crash. This includes both the top and undercarriage planes. In order for **All Damage Areas** to be involved, the vehicle will usually have to have rolled over or sustained numerous impacts.

Damage Areas Unknown is used whenever the PAR does not indicate which area or areas received damage or when the information on the PAR is confusing or inadequate for the purposes of this determination. When some or all of the damage areas are unknown apply the following guidelines:

- a. Code **Damage Areas Unknown** when the vehicle is damaged but no specific area is known.
- b. When some damaged areas are known but uncertainty exists regarding possible damage to other areas, code all known damage areas in addition to entering **Damage Areas Unknown**.

Summary of Steps to Determine Code:

First Identify all known damaged areas.

Second Determine if any other areas may have been damaged but are not known with

certainty because the PAR information is incomplete, contradictory, etc.

Third Code all known areas.

Fourth If no unknown areas exist do not enter **Damage Areas Unknown**. If one or more

other areas are unknown, enter **Damage Areas Unknown**.

Fifth If all areas are unknown, enter **Damage Areas Unknown**.

Consistency Checks:

Errors

| | IF | THEN |
|--------|---|--|
| AV057A | all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6 | DAMAGE AREAS (V25) must equal 0. |
| VV057 | POINT OF IMPACT (V24) equals 11, 12, 13 or 14 | DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0. |
| VV057B | This edit check applies to vehicles in | nvolved in one and only one event. |
| VV057B | If POINT OF IMPACT (V24) equals 1 | at least one DAMAGE AREAS (V25) must equal 0, 1, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 2 | at least one DAMAGE AREAS (V25) must equal 0, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 3 | at least one DAMAGE AREAS (V25) must equal 0, 3, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 4 | at least one DAMAGE AREAS (V25) must equal 0, 4, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 5 | at least one DAMAGE AREAS (V25) must equal 0, 5, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 6 | at least one DAMAGE AREAS (V25) must equal 0, 6, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 11 | at least one DAMAGE AREAS (V25) must equal 0, 1, 2, 7 or 9. |

| VV057B | If POINT OF IMPACT (V24) equals 12 | at least one DAMAGE AREAS (V25) must equal 0, 1, 3, 7 or 9. |
|--------|--------------------------------------|--|
| VV057B | If POINT OF IMPACT (V24) equals 13 | at least one DAMAGE AREAS (V25) must equal 0, 4, 2, 7 or 9. |
| VV057B | If POINT OF IMPACT (V24) equals 14 | at least one DAMAGE AREAS (V25) must equal 0, 4, 3, 7 or 9. |
| VV058A | all areas of the vehicle are damaged | DAMAGE AREAS (V25) must be coded 7, not the combination 1, 2, 3, 4, 5 and 6. |
| VV058B | DAMAGE AREAS (V25) equals 7 | no other DAMAGE AREAS (V25) must be coded for this vehicle. |
| VV058C | No DAMAGE AREAS (V25) respons | e must be selected more than once. |
| VV058D | DAMAGE AREAS (V25) equals 0 | no other DAMAGE AREAS (V25) must be coded for this vehicle. |
| VV088 | DAMAGE SEVERITY (V18) equals 0 | DAMAGE AREAS (V25) must equal 00000. |
| RANGE | DAMAGE SEVERITY (V18) must e | qual 0-7 or 9. |

<u>Warnings</u>

| | IF | THEN |
|--------|--|--|
| VV057C | this vehicle is involved in one and only one event and NON-COLLISION CATEGORY, OBJECT or VEHICLE NUMBER CONTACTED (E04) is not equal to 101, 102 or 104 | DAMAGE AREAS (V25) should not equal 7. |
| VV058 | DAMAGE AREAS (V25) equals 7 | MANNER OF LEAVING SCENE (V19) should equal 2 or 3. |
| VV073A | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 | VEHICLE CONTRIBUTING FACTORS (V12) should not equal 0. |
| VV074 | MANNER OF LEAVING SCENE (V19) equals 2 | DAMAGE AREAS (V25) should be greater than 00000. |
| VV080 | DAMAGE AREAS (V25) equals 00000 and MOST HARMFUL EVENT (V20) does not equal 1-6 or 8-10 | MANNER OF LEAVING SCENE (V19) should not equal 2. |
| VV081 | HARMFUL EVENT (A06) equals 01 | DAMAGE AREAS (V25) should not equal 0. |
| VV138 | ROLLOVER TYPE (V30) is not equal to 00 | DAMAGE AREAS (V25) should have more than one value other than 0. |
| VV178 | POINT OF IMPACT (V24) equals 11 | DAMAGE AREAS (V25) should equal 7 or include values 1 and 2. |

| VV179 | POINT OF IMPACT (V24) equals 12 | DAMAGE AREAS (V25) should equal 7 or include values 1 and 3. |
|-------|--|--|
| VV180 | POINT OF IMPACT (V24) equals 13 | DAMAGE AREAS (V25) should equal 7 or include values 2 and 4. |
| VV181 | POINT OF IMPACT (V24) equals 14 | DAMAGE AREAS (V25) should equal 7 or include values 3 and 4. |
| VV222 | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0 | DAMAGE SEVERITY (V18) must equal 0. |

Coding of the precrash variables is completed for <u>each</u> in-transport motor vehicle in the crash. This means that the entire crash is first coded from the perspective of one vehicle, then coded from the perspective of the second vehicle, if any, and so forth. The precrash variables are:

D07, Driver Distracted By

V21. Movement Prior to Critical Event–Precrash 1

V26, Critical Event - Precrash 2 (Category)

V26, Critical Event - Precrash 2 (Event)

V27, Corrective Action Attempted - Precrash 3

V28, Vehicle Control - Precrash 4

V29, Precrash Location - Precrash 5

The precrash variables are designed to identify the following:

- what was this vehicle/driver doing just prior to the critical event.
- what made this vehicle's situation critical.
- what was the corrective action attempted, if any, to this critical situation, and
- what was the movement of the vehicle just prior to impact?

The most important determination that must be made for each in-transport motor vehicle is: what was this vehicle's Critical Event, (i.e., what action by this vehicle, another vehicle, person, animal or non-fixed object was critical to this vehicle's crash?). Once this determination is made, then determine the driver's corrective action to the event which made this vehicle's involvement critical.

Corrective Action Attempted, is defined as avoidance maneuver(s) taken by the driver, within a **critical crash envelope**, in response to a Critical Event.

Do not consider culpability as a factor for determining precrash data. Many crash scenarios will suggest fault, but this is considered coincidental rather than by design.

Critical Crash Envelope

The critical crash envelope begins at the point where:

(1) the driver recognizes an impending danger (e.g.,.deer runs into the roadway) or

(2) the vehicle is in an imminent path of collision with another vehicle, pedestrian, pedalcyclist, other non-motorist, object or animal.

The critical crash envelope ends when:

- (1) (a) the driver has made a successful avoidance maneuver
 - (b) has full steering control, and
 - (c) the vehicle is tracking; or
- (2) the driver's vehicle impacts another vehicle, pedestrian, pedalcyclist, other non-motorist, object or animal.

Simple Single Critical Crash Envelope

Most crashes involve only a single critical crash envelope in which the object contacted is captured under the Critical Event. An example: A vehicle traveling on a roadway strikes a deer that runs into the roadway. This crash type and similar ones are very straightforward and will not present many coding problems.

Complex Single Critical Crash Envelope

However, some single critical crash envelopes are more complex.

Example A: A driver avoids one obstacle and **immediately** impacts another vehicle, person, object or animal. Because **immediate** is defined as not having an opportunity or sufficient time to take any additional avoidance actions, the Critical Event is coded to the vehicle, person, object or animal which the driver successfully avoided instead of the vehicle's first harmful event (i.e., its first impact).

Example B: The driver avoids an obstacle only to (a) lose steering control and/or (b) have the vehicle stop tracking, and the vehicle subsequently impacts another vehicle, person, object or animal. Regardless of whether the driver attempted to regain steering control, caused the vehicle to resume a tracking posture or attempted to avoided the impacted vehicle, person, object or animal; the Critical Event is similarly coded to the vehicle, person, object or animal which the driver successfully avoided because the driver's critical crash envelope was never stabilized.

In both examples above, the Corrective Action Attempted records the successful action taken to avoid the Critical Event.

The coding order for a single critical crash envelope is illustrated below.

Typical Order of a Single Critical Crash Envelope

| D07 | V21 | V26 | V27 | V28 | V29 | A06 | |
|------------|----------|----------|------------|----------|----------|------------------|--|
| Driver | Movement | Critical | Corrective | Precrash | Precrash | First | |
| Distracted | Prior To | Event | Action | Vehicle | Location | Harmful | |
| Ву | Critical | | Attempted | Control | | Event | |
| - | Event | | • | | | | |

Multiple Critical Crash Envelopes

Multiple critical crash envelopes are defined as events (i.e., at least two) which occur prior to impact where the driver has successfully avoided the impending danger, regained control of the vehicle, and subsequently encountered another impending danger. When a crash scenario involves multiple critical crash envelopes, code only the final critical crash envelope. The previous successfully avoided critical crash envelopes are captured under the variable Pre-event Movement where the attribute "successfully avoidance maneuver to a previous critical event "should be selected. The final critical crash envelope which resulted in this vehicle's first harmful event (i.e., its impact) should be coded under the appropriate variables as shown in the following illustration.

Typical Order of Multiple Critical Crash Envelopes

| F | Prior Critical Crash Envelope | | | | | Final | Critica | l Crash | Envelo | pe | | |
|---------------------------------|---|-------------------|-----------------------------------|--------------------------------|--------------------------------|---------------------------------|---|-------------------|-----------------------------------|-------|-----|--------------------------------------|
| D07 | V21 | V26 | V27 | V28 | V29 | D07 | V21 | V26 | V27 | V28 | V29 | A06 |
| Driver Distrac- ted By | Move- ment Prior To Critical Event | Critical Event | Corrective Action Attempted | Precrash Vehicle Control | Pre- Crash Loca- tion | Driver Distrac- ted By | Move- ment Prior To Critical Event | Critical Event | Corrective Action Attempted | Crash | | First Harmful Event |

When there is doubt as to whether this vehicle had experienced multiple critical crash envelopes (i.e. unknown if the driver successfully avoided and regained control of the vehicle), default to a complex single critical crash envelope when coding the Critical Event.

The pages which follow contain a flowchart, method protocol, precrash general rules, and seven examples to aid in explaining the proper method for coding precrash data.

DO NOT CODE

CODE

Selection Method Flowchart Police Report **Determine Critical Event** What action by this vehicle, another vehicle, person, animal, or object was critical to this vehicle's accident? Use the "But For"* Test! Yes This vehicle Loss-of-control made it critical? (Select elements within this category) Yes No This vehicle travel position in environment made it critical? (Select elements within this category) Yes The other vehicle "in" this vehicle's lane made it critical? (Select elements within this category) Yes The other vehicle encroaching into this vehicle's lane made it critical? (Select elements within this category) No A pedestrian, pedalcyclist, or other nonmotorist in Yes the environment made it critical? (Select elements within this category) Yes An object or animal in the environment made it critical? (Select elements within this category) No Yes Some other or Unknown event made it critial? Yes Determine Corrective Action Attempted Determine Precrash Vehicle Control and Precrash Location based on your determination of Corrective Action Attempted.

* FOR EXAMPLE:

"But for" Vehicle # going left-of-center, this vehicle would not have been involved in this accident.
"But for" having entered into the intersection, this vehicle would not have been involved in this accident.

Determine Movement Prior To Critical Event

Determine D07 and V21

What was the vehicle doing when the driver had control just prior to the vehicle's entrance into the critical crash envelope?

Method Protocol

Review the entire Police Report for pre-impact information (e.g., written statements, encoded data, scene diagrams, etc) as inputs to your precrash decision making process.

1. Determine Critical Event - Precrash 2 (Event)

What reported action by this vehicle, another vehicle, person, animal or object was critical to this driver becoming involved in the crash (i.e., use the "BUT FOR" test)?

Ask yourself questions (a) through (f) below. Proceed through each question that applies to the crash you are researching. **When the answer to the question is "Yes"- Stop**,. This is the Critical Event - Precrash 2 (Category). Now you must determine the appropriate attribute within the category.

- (a) But for this vehicle's loss-of-control, would the crash have occurred?
- (b) But for this vehicle's travel position in the environment would the crash have occurred?
- (c) But for another vehicle <u>in</u> this vehicle's lane, would the crash have occurred?
- (d) But for another vehicle <u>encroaching</u> into this vehicle's lane, would the crash have occurred?
- (e) But for a pedestrian, pedalcyclist or other non-motorist in or approaching this vehicle's path, would the crash have occurred?
- (f) But for an animal in or approaching this vehicle's path or an object in this vehicle's path, would the crash have occurred?
- 2. Determine Corrective Action Attempted Precrash 3.

What does the PAR indicate the driver tried to do to avoid the crash?

3. Determine Vehicle Control - Precrash 4

What does the PAR indicate the vehicle was doing just prior to impact?

4. Determine the Precrash Location - Precrash 5

Where does the PAR indicate the vehicle was located just prior to impact?

5. Determine "Driver Distracted By."

Does the PAR indicate the driver was distracted or inattentive?

6. Determine Movement Prior to Critical Event-Precrash 1

What does the PAR indicate this vehicle was doing just prior to impact?

Precrash General Rules

- 7. Corrective Action Attempted Precrash 3 assesses what the vehicle did rather than what the PAR stated the driver tried to do.
- 8. A traffic control signal/sign can never make the situation critical when coding Critical Event Precrash 2 (Event).
- 9. When you know what sub-group of the "Critical Event Precrash 2 (Event)" applies but are unable to select a specific element within that group, default to "other" or "unknown " in that sub-group rather than using "Other Critical Precrash event" or "Unknown".
- 10. If control loss is due to driver illness such as heart attacks, diabetic comas, etc., then the Critical Event Precrash 2 (Event) category and element value are: "This Vehicle Loss of Control" Due to "Other cause of control loss".
- 11. In coding Critical Event Precrash 2 (Event), loss of control must have occurred prior to the driver attempting any avoidance maneuver. If the driver attempts a maneuver (i.e., brakes, steers, etc) as a result of the driver's perception of a vehicle, object, pedestrian or non-motorist, then code the vehicle, object, pedestrian or non-motorist as what made it critical. If the vehicle is in a yaw prior to the driver taking an avoidance action, then loss-of-control is what made it critical (e.g., critical; curve scuff, hydroplaning, etc.).
- 12. When it cannot be determined from the PAR which driver had the right-of-way at a controlled or uncontrolled intersection, then use the following guidelines for coding Critical Event Precrash 2 (Event):
 - a. If the junction is controlled by a 3-way/4-way stop sign or is uncontrolled, then use the common rule that the vehicle on the right has the right-of-way for determining encroachment.
 - b. If the junction is controlled by an on-colors traffic control device, and both drivers claim green light, then code both vehicles as being in an environmentally dangerous position, Critical Event Precrash 2 (Category/Event) category/event element value is:" This Vehicle Traveling/Crossing Over (Passing Through) Intersection".
- 13. For vehicles executing a left turn with the right-of-way, use **From opposite direction-over left lane line** or **From opposite direction-over right lane line**.
- 14. "Fixed" objects can not be in the roadway.
- 15. If a motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle, then Critical Precrash Event for the vehicle struck by the ricocheting vehicle is **Other motor vehicle in lane** or **Other motor vehicle encroaching into lane**.

| 16. | If there are no skid marks present at the scene and the PAR doesn't indicate skidding and the vehicle did not rotate 30 degrees or more (either clockwise or counterclockwise), then Pre-Impact Stability should equal Tracking . |
|-----|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Example 1

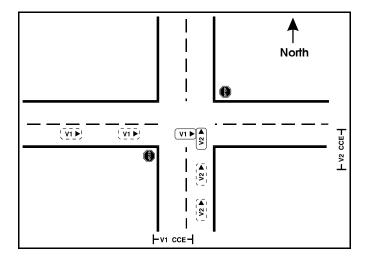
Vehicle 2 is northbound and passing through an intersection on a roadway without traffic control. The driver of vehicle 1 is dialing on a cellular phone. Vehicle 1 is eastbound on a crossing roadway with a stop sign but did not stop or slow down. Vehicle 1 crashes into the side of vehicle 2. The driver of vehicle 2 was attentive, but did not see vehicle 1 approaching. Vehicle 1 braked (leaving skid marks) just prior to impact, without any steering.

| Vehicle 1 | Vehicle 2 |
|---|---------------------------------------|
| D07 (06) (Distracted) while dialing cellular phone | (02) Looked but did not see |
| V21 (01) Going straight | (01) Going straight |
| V26 (17) Crossing Over (passing through) intersection | (66) From crossing street across path |
| V27 (03) Braking (lockup) | (01) No avoidance maneuver |
| V28 (2) Skidding longitudinally - rotation less than 30 degrees | (1) Tracking |
| V29 (1) Stayed in original travel lane | (1) Stayed in original travel lane |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has one **critical crash envelope** (V₁CCE), which begins at the point where driver 1 recognizes that vehicle 1 is in an imminent collision path with vehicle 2. Vehicle 1's critical crash envelope ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** (V_2 CCE). Although the driver of vehicle 2 did not recognize the danger, vehicle 2's critical crash envelope begins at the point where vehicle 2 is in an imminent path of collision with vehicle 1. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.



Example 2

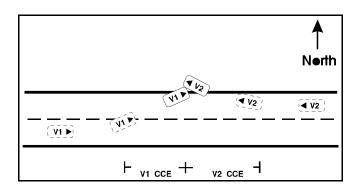
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 falls asleep and crosses over the center line into the travel lane of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right onto the shoulder and accelerating. Vehicle 1 impacted vehicle 2 in the side.

| Vehicle 1 | Vehicle 2 |
|--|--|
| D07 (10)* Sleepy or fell asleep | (01) Attentive or not distracted |
| V21 (01) Going straight | (01) Going straight |
| V26 (10) Over the lane line on left side of travel lane | (62) From opposite direction over left lane line |
| V27 (01) No avoidance maneuver | (12) Accelerating and steering right |
| V28 (1) Tracking | (1) Tracking |
| V29 (2) Stayed on roadway, but left original travel lane | (4) Departed roadway |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has one **critical crash envelope** (V₁CCE) which begins at the point where vehicle 1 crosses over the lane line and ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** (V₂CCE) which begins at the poinr where driver 2 recognizes vehicle 1 encroaching into his/her travel lane. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.



Example 3

Vehicle 1 is eastbound and passing through an intersection on a roadway without traffic control. The noncontact vehicle (NCV) is northbound and stopped at the intersection on a crossing roadway with a stop sign. The noncontact vehicle turns right into the travel path of Vehicle 1. Vehicle 1 braked (without lockup) and steered left to avoid the noncontact vehicle. The driver of vehicle 1 successfully avoided the noncontact vehicle, maintained full control of vehicle 1, but consequently put vehicle 1 in the travel path of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with lockup). Vehicle 1 and vehicle 2 crashed front left corner to front left corner.

| Vehicle 1 | Vehicle 2 |
|---|---|
| D07 (01)* Attentive or not distracted | (01) Attentive or not distracted |
| V21 (17) Successful avoidance maneuver to a previous critical event | (01) Going straight |
| V26 (10) Over the lane line on left side of travel lane | (54) Traveling in opposite direction |
| V27 (09) Braking and steering right | (09) Braking and steering right |
| V28 (2) Skidding longitudinally - rotation less than 30 degrees | (2) Skidding longitudinally - rotation less than 30 degrees |
| V29 (1) Stayed in original travel lane | (1) Stayed in original travel lane |

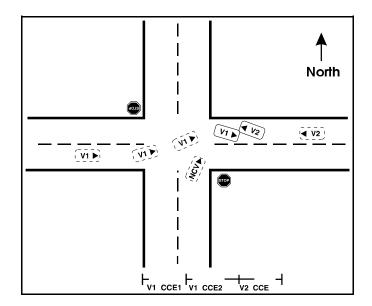
^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has two critical crash envelopes (V_1CCE_1 and V_1CCE_2). Vehicle 1's first **critical crash envelope** (V_1CCE_1) ends at the point where the driver of vehicle 1 made a successful corrective action and maintained full control of the vehicle. Vehicle 1's second **critical crash envelope** (V_1CCE_2) begins immediately following the successful corrective action and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact (V_1CCE_2).

Vehicle 2 has one **critical crash envelope** (V₂CCE) which begins at the point where driver 2 recognizes vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.

The noncontact vehicle was not involved in an impact with a another vehicle, person, animal or object in the sequence of accident events and is therefore not included in the General Estimates System.

See diagram, below.



Example 4

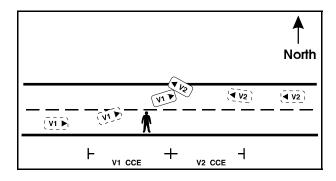
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 brakes (without lockup) and steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line into the travel path of vehicle 2. The driver of vehicle 2 was talking with a passenger and not paying close attention to driving and at the last second attempted to avoid vehicle 1 by braking and steering right onto the shoulder. Vehicle 2 skids and rotates clockwise about 45 degrees before it is impacted in the side by vehicle 1.

| Vehicle 1 | Vehicle 2 |
|--|--|
| D07 (01)* Attentive or not distracted | (03) (Distracted) by other occupant |
| V21 (01) Going straight | (01) Going straight |
| V26 (80) Pedestrian in roadway | (62) From opposite direction over left lane line |
| V27 (08) Braking and steering left | (09) Braking and steering right |
| V28 (1) Tracking | (3) Skidding laterally - clockwise rotation |
| V29 (2) Stayed on roadway, but left original travel lane | (1) Stayed in original travel lane |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has one critical crash envelope (V_1CCE). Vehicle 1's critical crash envelope involved a successful avoidance of a pedestrian [i.e., V26 (Critical Event) equals 2007 SAS value "80"] which resulted in an **immediate** impact to vehicle 2. Therefore, the pedestrian is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the pedestrian.

Vehicle 2 has one critical crash envelope (V₂CCE) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.



Example 5

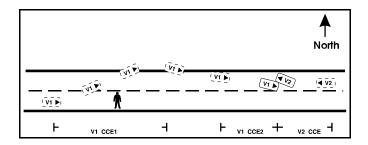
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line and the adjacent travel lane, departing the roadway. Then driver 1 re-enters the roadway, in full control of the vehicle but traveling in the lane of opposing traffic. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with skidding and clockwise rotation greater than 30 degrees). Vehicle 1 attempted to avoid vehicle 2 by steering right without braking. Vehicle 1 impacted vehicle 2 in the side.

| Vehicle 1 | Vehicle 2 |
|---|---|
| D07 (01)* Attentive or not distracted | (01) Attentive or not distracted |
| V21 (17) Successful avoidance maneuver to a previous critical event | (01) Going straight |
| V26 (10) Over lane line on left side of travel lane | (54) Traveling in opposite direction |
| V27 (07) Steering right | (09) Braking and steering right |
| V28 (1) Tracking | (3) Skidding laterally - clockwise rotation |
| V29 (1) Stayed in original travel lane | (1) Stayed in original travel lane |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has two critical crash envelopes (V_1CCE_1 and V_1CCE_2). Vehicle 1's first **critical crash envelope** (V_1CCE_1) begins at the point where driver 1 recognizes the pedestrian coming into his/her travel path and ends at the point where the driver of vehicle 1, having made a successful corrective action, regains full control of the vehicle. Vehicle 1's second **critical crash envelope** (V_1CCE_2) begins when driver 1, in full control of vehicle 1, re-enters the roadway in the travel lane of opposing traffic and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact (V_1CCE_2).

Vehicle 2 has one critical crash envelope (V₂CCE) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.



Example 6

Vehicle 1 and vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). While the driver of vehicle 1 was using a razor, the vehicle has a blow out, driver 1 loses control, crosses the left lane line and impacts the right rear of vehicle 2. Vehicle 2 is redirected across the painted median, skidding and rotating clockwise, and subsequently impacts vehicle 3. Vehicle 3 attempted to avoid vehicle 2 by steering right and accelerating.

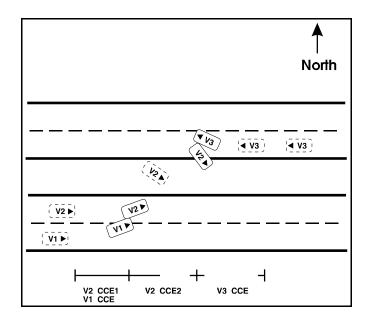
| Vehicle 1 | Vehicle 2 |
|---|---|
| D07 (09)* (Distracted) while using other device/object in vehicle | (01) Attentive or not distracted |
| V21 (01) Going straight | (01) Going straight |
| V26 (01) Blow out or flat tire | (61) [Other motor vehicle] From adjacent lane (same direction) - over right lane line |
| V27 (01) No avoidance maneuver | (01) No avoidance maneuver |
| V28 (1) Tracking | (1) Tracking |
| V29 (2) Stayed on roadway, but left original travel lane | (1) Stayed in original travel lane |
| Vehicle 3 | |
| D07 (01) Attentive or not distracted | |
| V21 (01) Going Straight | |
| V26 (62) From opposite direction - over left lane line | |
| V27 (12) Accelerating and steering right | |
| V28 (1) Tracking | |
| V29 (1) Stayed in original travel lane | |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has one critical crash envelope (V₁CCE) which begins with control loss due to the blow out and ends at the point of impact with vehicle 2. The blow out is coded as the critical event (V26 equals 2007 SAS value 01).

Vehicle 2 has 2 critical crash envelopes (V_2CCE_1 and V_2CCE_2). Vehicle 2's first critical crash envelope (V_2CCE_1) begins when vehicle 1 enters vehicle 2's travel lane and ends at the point of impact with vehicle 1. Vehicle 2's second critical crash envelope (V_2CCE_2) begins immediately after the first impact and ends at the point of impact with vehicle 3. Code only the critical crash envelope which resulted in vehicle 2's first impact (V_2CCE_1), because the GES is only interested in coding the critical crash envelope which leads to a vehicle's first harmful event. Discussion continued on next page.

Vehicle 3 has one critical crash envelope (V₃CCE) which begins when driver 3 recognizes and reacts to vehicle 2 which is in an imminent path of collision with vehicle 3 and ends at the point of impact with vehicle 2.



Example 7

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. A noncontact vehicle is parked in front of a noncontact truck-tractor (with a trailer) on the road shoulder and suddenly enters the roadway into vehicle 1's travel lane. The driver of vehicle 1 instantly brakes (with lockup) and steers left (with counterclockwise rotation) to avoid the noncontact vehicle. Vehicle 1 crosses over the center line and immediately impacts vehicle 2. Vehicle 2 had no corrective actions.

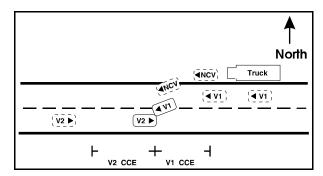
| Vehicle 1 | Vehicle 2 |
|--|--|
| D07 (01)* Attentive or not distracted | (01) Attentive or not distracted |
| V21 (01) Going Straight | (01) Going straight |
| V26 (64) From parking lane | (62) From opposite direction over left lane line |
| V27 (08) Braking and steering left | (01) No avoidance actions |
| V28 (4) Skidding laterally - counterclockwise rotation | (1) Tracking |
| V29 (2) Stayed on roadway, but left original travel lane | (1) Stayed in original travel lane |

^{*} Element Values are 2007 SAS codes.

In this example, vehicle 1 has one critical crash envelope (V_1CCE). Vehicle 1's critical crash envelope involved a successful avoidance of a noncontact vehicle and resulted in an **immediate** impact to vehicle 2. Vehicle 1's critical crash envelope was initiated by the noncontact vehicle, afterwards there was no opportunity for subsequent avoidance actions. Therefore, the encroachment of the noncontact vehicle into vehicle 1's travel lane is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the noncontact vehicle.

Vehicle 2 has one **critical crash envelope** (V₂CCE) which begins at the point where vehicle 1 is in an imminent path of collision with vehicle 2 and ends at the point of impact with vehicle 1.

The noncontact vehicle and the noncontact truck were not involved in an impact in the sequence of accident events and are therefore not coded in the General Estimates System.



V26 CRITICAL EVENT - PRECRASH 2 (CATEGORY)

Screen Heading: Precrash Events

Screen Name: Critical Category (570-E)

Long Name: What is the critical event category for this vehicle's first impact?

SAS Name: none

Oracle Name: GES.Precrash.CrashCatEventID

Element Values:

| Screen | Oracle | SAS | |
|-------------|-------------|-------------------|--|
| 1 2 3 | 1 2 3 | n/a n/a n/a | This Vehicle Loss of Control Due To This Vehicle Traveling Other Motor Vehicle in Lane |
| 4 | 4 | n/a | Other Motor Vehicle Encroaching into Lane |
| 5 | 5 | n/a | Pedestrian, Pedalcyclist or Other Non-motorist |
| 6 | 6 | n/a | Object or Animal |
| 7 | 7 | n/a | Other |
| 8 | 8 | n/a | Unknown |

Remarks:

See Precrash Data Overview and remarks under variable V26, Critical Event - Precrash 2 (Event), for coding procedures.

V26 CRITICAL EVENT - PRECRASH 2 (EVENT)

Screen Heading: Precrash Events

Screen Name: Critical Event (575-E)

Long Name: Enter the critical event for this vehicle's first impact.

SAS Name: Vehicle.P_Crash2

Oracle Name: GES.Precrash.CriticalEventID

Element Values:

Screen Oracle SAS

THIS VEHICLE LOSS OF CONTROL DUE TO:

| 10390 | 1 | Blow out or flat tire |
|-------|--|---|
| 10391 | 2 | Stalled Engine |
| 10392 | 3 | Disabling vehicle failure (e.g., wheel fell off) |
| 10393 | 4 | Non-disabling vehicle problem (e.g., hood flew up) |
| 10394 | 5 | Poor road conditions (puddle, pothole, ice, etc.) |
| 10395 | 6 | Traveling too fast for conditions |
| 10396 | 8 | Other cause of control loss |
| 17547 | 9 | Unknown cause of control loss |
| | 10391 10392 10393 10394 10395 10396 | 10391 2 10392 3 10393 4 10394 5 10395 6 10396 8 |

THIS VEHICLE TRAVELING

| 1 | 10397 | 10 | Over the lane line on left side of travel lane |
|----|-------|----|---|
| 2 | 10398 | 11 | Over the lane line on right side of travel lane |
| 3 | 10399 | 12 | Off the edge of the road on the left side |
| 4 | 10400 | 13 | Off the edge of the road on the right side |
| 5 | 10425 | 14 | End departure |
| 6 | 10426 | 15 | Turning left at intersection |
| 7 | 10427 | 16 | Turning right at intersection |
| 8 | 10428 | 17 | Crossing over (passing through) intersection |
| 9 | 10429 | 18 | This vehicle decelerating |
| 10 | 10430 | 19 | Unknown travel direction |

OTHER MOTOR VEHICLE IN LANE

| 1 | 10401 | 50 | Other vehicle stopped |
|---|-------|----|--|
| 2 | 10402 | 51 | Traveling in same direction with lower steady speed |
| 3 | 10403 | 52 | Traveling in same direction while decelerating |
| 4 | 10404 | 53 | Traveling in same direction with higher speed |
| 5 | 10405 | 54 | Traveling in opposite direction |
| 6 | 10406 | 55 | In crossover |
| 7 | 10422 | 56 | Backing |
| 8 | 10423 | 59 | Unknown travel direction of the other motor vehicle in lan |

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

1 10407 60 From adjacent lane (same direction) over left lane line

| \/ | L : | _ | les |
|-----------|------------|---|-----|
| VO | nı | C | 20 |
| | | | |

| 2 3 4 | 10408 10409 10410 | 61 62 63 | From adjacent lane (same direction) over right lane line From opposite direction over left lane line From opposite direction over right lane line |
|-------------|-------------------------|----------------|---|
| 5 | 10411 | 64 | From parking lane |
| 6 | 10412 | 65 | From crossing street, turning into same direction |
| 7 | 10413 | 66 | From crossing street, across path |
| 8 | 10414 | 67 | From crossing street, turning into opposite direction |
| 9 | 10415 | 68 | From crossing street, intended path not known |
| 10 | 10416 | 70 | From driveway, turning into same direction |
| 11 | 10417 | 71 | From driveway, across path |
| 12 | 10418 | 72 | From driveway, turning into opposite direction |
| 13 | 10419 | 73 | From driveway, intended path not known |
| 14 | 10420 | 74 | From entrance to limited access highway |
| 15 | 10421 | 78 | Encroachment by other vehicle details unknown |

PEDESTRIAN, PEDALCYCLIST OR OTHER NON-MOTORIST

| 1 | 10447 | 80 | Pedestrian in roadway |
|---|-------|----|--|
| 2 | 10448 | 81 | Pedestrian approaching roadway |
| 3 | 10438 | 82 | Pedestrian unknown location |
| 4 | 10449 | 83 | Pedalcyclist or other non-motorist in roadway |
| 5 | 10450 | 84 | Pedalcyclist or other non-motorist approaching roadway |
| 6 | 10451 | 85 | Pedalcyclist or other non-motorist unknown location |
| | | | , |

OBJECT OR ANIMAL

| 1 | 10452 | 87 | Animal in roadway |
|---|-------|----|----------------------------|
| 2 | 10453 | 88 | Animal approaching roadway |
| 3 | 10454 | 89 | Animal unknown location |
| 4 | 10455 | 90 | Object in roadway |
| 5 | 10456 | 91 | Object approaching roadway |
| 6 | 10457 | 92 | Object unknown location |
| | | | |

<u>OTHER</u>

7 10445/58 98 Other critical event/No collision

<u>UNKNOWN</u>

8 10446 99 Unknown critical event

Remarks:

This variable identifies the critical event which made the crash imminent (i.e., something occurred which made the collision possible). Responsive actions to this situation, if any, are coded under Attempted Avoidance Maneuver.

A precrash event is coded for each vehicle and identifies the circumstances leading to this vehicle's first impact in the accident.

Responses are grouped into six major categories and are prioritized as follows:

- This Vehicle Loss of Control Due to
- This Vehicle Traveling
- Other Motor Vehicle In Lane
- Other Motor Vehicle Encroaching Into Lane
- Pedestrian or Pedalcyclist or Other Non-motorist
- Object or Animal

Do not refer to culpability when determining the critical crash event. Many accident scenarios will suggest fault, but this should be coincidental rather than by design. As an example, Vehicle A was traveling too fast for conditions when Vehicle B crossed Vehicle A's path from a driveway. The event which made the situation critical was Vehicle B's movement across Vehicle A's path and not Vehicle A's speed. In this scenario, the proper code would be (Other motor vehicle encroaching into lane - from driveway across path).

This Vehicle Loss of Control Due To:

These attributes identify situations where the critical factor leading to the collision involved control loss of this vehicle. Control loss can be related to either mechanical failure or environmentally induced vehicle instability. When more than one condition applies and it cannot be determined which one had a greater effect, choose the attribute mentioned first in the list below (i.e., **Blow Out or Flat Tire** takes priority over **Stalled Engine**).

<u>Use the But for Test: - But for</u> this vehicle's loss of control, the Critical Precrash Event would not have occurred.

Enter **Blow Out or Flat Tire** when a vehicle in motion loses control as the result of a tire "air out".

Enter **Stalled Engine** when a vehicle in motion loses engine power. A stalled engine situation must precipitate a collision to be coded in this variable. Do not use this code if a vehicle is stopped as the result of an engine malfunction (review codes under "Other Vehicle in Lane" and "Other Vehicle Encroaching in Lane").

Enter **Disabling Vehicle Failure (e.g., Wheel Fell Off)** when a mechanical malfunction, such as a component of the vehicle suspension or steering system leads to the critical reason for the collision.

Enter **Non-disabling Vehicle Problem (e.g., Hood Flew Up)** when some mechanical abnormality occurred to this vehicle which leads to the critical reason for the collision. The abnormality must not be disabling damage.

Enter **Poor Road Conditions (Puddle, Pot Hole, Ice, Etc.)** when control loss was due to environmental conditions of the roadway. These conditions must have initiated the precrash event which resulted in the collision. Additionally, this code identifies conditions which were

suddenly encountered by the driver and were not on-going prior to the critical precrash event. These conditions would include; a puddle; a defect in the roadway surface (pothole); a patch of ice (especially "black" ice or ice covered bridges); etc.

Conditions which were on-going prior to the critical precrash event such as a snow/ice covered roadway, wet roadway surface or a roadway under construction and were attributed to the cause of the precrash event should be encoded under Code 6 "Traveling too fast for conditions".

Enter **Traveling Too Fast For Conditions** when this vehicles subsequent loss of control relative to its surroundings lead to the collision. An example is a roadway departure on a curve where the driver failed to negotiate and departed the roadway resulting in an impact. If the driver merely steered straight while in a curve and departed the roadway, then "This Vehicle Traveling" category codes "1" - "3" may apply.

On-going precrash weather conditions which contributed to the critical precrash event should be coded here. As an example, a vehicle which loses control on a snow covered roadway should be coded as "Traveling too fast for conditions".

Enter **Unknown Cause of Control Loss** when it is known control loss made the situation critical, but it is not known whether the vehicle or the environment caused the control loss.

Enter **Other Cause of Control Loss** when it was determined that this vehicle's loss of control was the primary reason which made the event critical and codes "1" - "6" do not adequately identify the control loss condition.

This Vehicle Traveling

These attributes identify situations where the critical factor leading to the collision involved the travel path of this vehicle.

<u>Use the But for Test:</u> - <u>But for</u> this vehicle's traveling path in the environment, the Critical Event would not have occurred.

Enter **Over the Lane Line on Left Side of Travel Lane** when this vehicle departs its lane to the left and is entering or had entered the adjoining lane or shoulder.

To use this code, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's left and is struck by a vehicle traveling within its travel lane in the opposite direction. The correct code for this vehicle would be "1" (Over the lane line on left side of travel lane).

By modifying the scenario slightly, however, the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the left of the lead vehicle. If an animal runs into the roadway and is struck by this vehicle, then the correct choice would be "Object or Animal category" (Animal in roadway - code "1").

Enter **Over the Lane Line on Right Side of Travel Lane** is used when this vehicle departs its lane to the right and is entering or had entered the adjoining lane or shoulder.

To use this code, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's right and is struck in the rear by a vehicle traveling in the adjacent travel lane.

Over the Lane Line on Right Side of Travel Lane would be the correct code for this situation.

By modifying the scenario slightly, however the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the right of the lead vehicle. An animal runs into the roadway and is struck by this vehicle, the correct choice would be "Object or Animal" category (Animal in roadway).

Enter **Off the Edge of the Road on the Left Side** for situations where the initial precrash event occurred beyond the left side shoulder area. This also includes departure into a median.

Enter **Off the Edge of the Road on the Right Side** for situations where the initial precrash event occurred beyond the right side shoulder area.

Enter **End Departure** when the vehicle departs the end of the roadway (e.g., "T" intersection).

Enter **Turning Left at Intersection** when this vehicle attempts a left turn from its roadway to another roadway, driveway or ramp.

Enter **Turning Right at Intersection** when this vehicle attempts a right turn from its roadway to another roadway, driveway or ramp.

Enter **Crossing Over (Passing Through) Intersection** when this vehicle is proceeding through an intersection without any planned turning.

Enter **This Vehicle Decelerating** when the vehicle is decelerating or has just stopped and was immediately struck.

Enter **Unknown Travel Direction** for those occasions where this vehicle's travel made the situation critical, but it is unknown which travel direction this vehicle was moving.

Other Motor Vehicle In Lane

These attributes identify situations where the critical factor leading to the collision involved the travel of the other vehicle in the same lane as this vehicle.

<u>Use the But for Test:</u> - <u>But for</u> the other motor vehicle in this vehicle's lane the Critical Event would not have occurred.

Enter **Other Vehicle Stopped** when the other vehicle is not in motion (i.e., stopped, parked, disabled) and in this vehicle's travel lane. Do not use this code if the other vehicle just stopped and was immediately struck. See "This Vehicle Traveling" Category - "This Vehicle Decelerating."

Enter **Traveling in Same Direction with Lower Steady Speed** when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than this vehicle.

Enter **Traveling in Same Direction While Decelerating** when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was decelerating.

Enter **Traveling in Same Direction With Higher Speed** when the speed of the other vehicle was higher than this vehicle or accelerating. The other vehicle must be overtaking this vehicle.

Enter **Traveling in Opposite Direction** when the other vehicle was in this vehicle's travel lane and traveling head-on in the opposite direction of this vehicle.

Enter **In Crossover** when the other vehicle enters a crossover already occupied by this vehicle. A crossover is defined as a designated opening within a median used primarily for "U-turns".

Enter **Backing** when the other vehicle was in the process of backing up while in this vehicle's travel lane.

Enter **Unknown travel direction of other motor vehicle in lane** for situations where the other vehicle's activity (while in the same lane as this vehicle) precipitated the precrash event, but the travel direction and/or speed could not be determined.

Other Motor Vehicle Encroaching Into Lane

These attributes identify situations where the critical factor leading to the collision involves the other vehicle's movement into or across this vehicle's travel lane from another lane, intersection, driveway or ramp.

<u>Use the But for Test:</u> - <u>But for</u> the other motor vehicle encroaching into this vehicle's lane the Critical Event would not have occurred.

Enter From Adjacent Lane (Same Direction) — Over Left Lane Line when the other vehicle was traveling in the same direction as this vehicle and crossed the left lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its right lane line).

Enter From Adjacent Lane (Same Direction) — Over Right Lane Line when the other vehicle was traveling in the same direction as this vehicle and crosses the right lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its left lane line).

Enter From Opposite Direction — Over Left Lane Line when the other vehicle crosses the left lane line while traveling in the opposite direction from this vehicle.

Enter From Opposite Direction — Over Right Lane Line when the other vehicle crosses the right lane line while traveling in the opposite direction from this vehicle.

Enter **From Parking Lane** when the other vehicle was departing a parking lane and entering the travel lane of this vehicle.

Enter From Crossing Street, Turning Into Same Direction when the other vehicle was turning from another roadway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle. Use this code for entrance ramps leading onto limited access highways.

Enter From Crossing Street, Across Path when the other vehicle was continuing straight through the intersection and attempted to cross over this vehicle's roadway.

Enter From Crossing Street, Turning Into Opposite Direction when the other vehicle was entering an intersection from another roadway and was turning or attempting to turn onto this vehicle's roadway in the opposite travel direction of this vehicle.

Enter From Crossing Street, Intended Path Not Known when the other vehicle's entrance into the intersection was the critical factor which led to the collision, however, the other vehicle's

travel direction could not be determined.

Enter **From Driveway, Turning Into Same Direction** when the other vehicle was turning from a driveway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.

Enter **From Driveway**, **Across Path** when the other vehicle was entering this vehicle's roadway form a driveway and was continuing straight across to another driveway or roadway.

Enter **From Driveway, Turning Into Opposite Direction** when the other vehicle was entering this vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of this vehicle.

Enter **From Driveway**, **Intended Path Not Known** to identify driveway related precrash events where details surrounding the other vehicle's intended path are not known.

Enter From Entrance to Limited Access Highway for entrance ramp situations where the other vehicle was attempting to enter (merge) onto the limited access highway which was being traveled by this vehicle.

Enter **Encroachment by Other Vehicle** — **Details Unknown** for situations where the other vehicle initiated the critical event, but circumstances surrounding the other vehicle's encroachment are not known.

Pedestrian or Pedalcyclist or Non-motorist

These attributes identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist or other non-motorist. A pedalcyclist is defined as a person riding a pedal power conveyance (e.g., bicycle, tricycle, etc.). A non-motorist is defined as person riding on or in a conveyance which is not motorized or propelled by pedaling (e.g., baby carriage, skateboard, roller blades, etc.).

<u>Use the But for Test:</u> - <u>But for</u> a pedestrian, pedalcyclist or other non-motorist in the environment the Critical Event would not have occurred.

Enter **Pedestrian in Roadway** when a pedestrian was present (e.g., sitting, standing, walking or running, etc.) in the roadway.

Enter **Pedestrian Approaching Roadway** for situations where a pedestrian was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Enter **Pedestrian** — **Unknown Location** when it was determined the presence or action of a pedestrian was the critical factor which lead to this vehicle's collision, but the location or action of the pedestrian was not known.

Enter **Pedalcyclist or Other Non-motorist in Roadway** when a pedalcyclist or other non-motorist was present in the roadway (irrespective of relative motion).

Enter **Pedalcyclist or Other Non-motorist Approaching Roadway** for situations where the pedalcyclist was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Enter **Pedalcyclist or Other Non-motorist** — **Unknown Location** when it was determined the presence or action of a pedalcyclist or other non-motorist was the critical factor which led to this vehicle's collision, but the action of the pedalcyclist or other non-motorist was not known.

Object or Animal

These attributes identify situations where the critical factor leading to the collision for this vehicle involved an object or animal.

<u>Use the But for Test:</u> - <u>But for</u> an object or animal in the environment the Critical Precrash Event would not have occurred.

Enter **Animal in Roadway** when an animal was present (i.e., stationary or moving) in the roadway.

Enter **Animal Approaching Roadway** for situations where an animal was within the trafficway and moving toward the roadway or attempting to enter the roadway, but not on the roadway.

Enter **Animal - Unknown Location** when it was determined the presence or action of an animal was the critical factor which led to this vehicle's collision, but the action of the animal was not known.

Enter **Object in Roadway** when an object was present in the roadway. An object is defined as being either fixed or nonfixed.

Enter **Object Approaching Roadway** for situations where an object was within the trafficway and moving toward the roadway, but not on the roadway.

Enter **Object** — **Unknown Location** when it was determined the presence or movement of an object was the critical factor which led to this vehicle's collision, but details surrounding the location of the object were not known.

Other

Enter **Other critical event/No collision** when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as other critical precrash events.

Use this code if the critical event developed from this vehicle's departure from a driveway.

This code is also used if the only events involved for this vehicle are fire/explosion or gas inhalation.

Unknown

Enter **Unknown Critical Event** when the critical event which resulted in the collision is not known.

CODING MOVEMENT PRIOR TO CRITICAL EVENT AND CRITICAL EVENT FOR DIFFERENT REAR END COLLISION SITUATIONS

Two Vehicle Collisions

| | | Trailing Vehicle | Leading Vehicle |
|----|--|---|---|
| 1) | Both vehicles in motion. | V21 Movement Prior to Critical Event | Movement Prior to Critical Event |
| | Leading vehicle traveling at steady speed is struck from | (Going Straight-01) | (Going straight) |
| | behind by trailing vehicle. | V26 Critical Event | Critical Event |
| | | (Other Motor Vehicle in Lane - Other vehicle same direction with lower steady speed-51) | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53) |
| 2) | Both vehicles traveling at | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | same speed. Lead vehicle decelerates and trailing vehicle continues at initial | (Going Straight) | (Going straight) |
| | speed. Trailing vehicle eventually applies brakes | Critical Event | Critical Event |
| | before striking the lead vehicle | (Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52) | (This Vehicle Traveling - This vehicle decelerating-18) |
| 3) | Both vehicles traveling at | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | same speed. Lead vehicle stops and is immediately | (Going Straight) | (Going straight) |
| | struck by trailing vehicle. | Critical Event | Critical Event |
| | | (Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52) | (Other vehicle same direction with higher speed-53) |
| 4) | Lead vehicle is stopped on roadway and is struck by a | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | trailing vehicle. | (Going Straight) | (Stopped in traffic-05) |
| | | Critical Event | Critical Event |
| | | (Other Motor Vehicle in Lane - Other vehicle is stopped in lane-50) | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53) |
| 5) | Lead and trailing vehicle | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | stopped on roadway. Lead vehicle backs into trailing vehicle. | (Stopped in traffic lane-05) | (Stopped in traffic lane-05) |
| | | Critical Event | Critical Event |
| | | (Other Motor Vehicle in Lane - Other vehicle in lane backing-56) | (Other Motor Vehicle in Lane - Other vehicle stopped-50) |

CODING MOVEMENT PRIOR TO CRITICAL EVENT AND CRITICAL EVENT FOR DIFFERENT REAR END COLLISION SITUATIONS (Cont'd.)

Three Vehicle Collisions

| | | Trailing Vehicle | Middle Vehicle | Leading Vehicle |
|----|---|--|---|---|
| 6) | Two vehicles stopped in traffic, | Movement Prior to Critical Event | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | struck by decelerating | (Decelerating-02) | (Stopped in traffic-05) | (Stopped in traffic-05) |
| | trailing vehicle. | Critical Event | Critical Event | Critical Event |
| | | (Other Motor Vehicle in Lane - Other vehicle stopped in lane- 50) | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53) | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53} |
| 7) | Lead vehicle stopped in traffic, middle vehicle | Movement Prior to Critical Event | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | decelerating, | (Going Straight) | (Decelerating-02) | (Stopped in traffic-05) |
| | trailing vehicle strikes middle vehicle which | Critical Event | Critical Event | Critical Event |
| | strikes lead vehicle. | (Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52) | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53} | (Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53} |
| 8) | Lead vehicle suddenly stops behind a line of | Movement Prior to Critical Event | Movement Prior to Critical Event | Movement Prior to Critical Event |
| | traffic, middle | (Going Straight) | (Going Straight) | (Going Straight) |
| | decelerates, trailing vehicle | Critical Event | Critical Event | Critical Event |
| | strikes middle vehicle which strikes lead vehicle. | (Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52) | (This Vehicle Traveling - This vehicle decelerating-18) | (This Vehicle Traveling - This vehicle decelerating-18) |

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| VA191 | HARMFUL EVENT (A06) equals 02 or 04 for all events involving this vehicle | CRITICAL EVENT (V26) must equal 98. |
| VV124 | CRITICAL EVENT (V26) equals 1, 2, 3 or 4 | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00. |
| VV182 | CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1 | ACCIDENT TYPE (V23) must equal 14. |
| VV227 | CRITICAL EVENT (V26) equals 53 | VEHICLE ROLE (V22) must not equal 1. |
| RANGE | CRITICAL EVENT (V26) must equal 19, 50-56, 59-68, 70-74, 78, 80-85, 8 (V26) must not equal null. | one of the following values: 1-6, 8- 37-92, 98 or 99. CRITICAL EVENT |

<u>Warnings</u>

| | IF | THEN |
|-------|---|---|
| AV184 | NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12, 13 or 14. |
| VA189 | CRITICAL EVENT (V26) equals 65-68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) Should not equal 00 or 10. |
| VA190 | CRITICAL EVENT (V26) equals 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) should equal 03 or 13. |
| VV175 | ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80-85. |
| VV176 | ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92. |
| VV211 | DRIVER MANEUVERED TO AVOID (D06) equals 03 | CRITICAL EVENT (V26) should equal 87-89. |
| VV212 | DRIVER MANEUVERED TO AVOID (D06) equals 05 | CRITICAL EVENT (V26) should equal 80-85. |
| VV214 | DRIVER MANEUVERED TO AVOID (D06) equals 04 | CRITICAL EVENT (V26) should equal 50-56, 59-68, 70-74 or 78. |
| VV215 | DRIVER MANEUVERED TO AVOID (D06) equals 01 | CRITICAL EVENT (V26) should equal 90-92. |

| VV224 | CRITICAL EVENT (V26) equals 53 | POINT OF IMPACT (V24) should not equal 01. |
|-------|--|--|
| VV225 | CRITICAL EVENT (V26) equals 51 OR 52 | POINT OF IMPACT (V24) should not equal 04. |
| VV228 | CRITICAL EVENT (V26) equals 51 or 52 | VEHICLE ROLE (V22) should not equal 2. |
| VV237 | CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | ACCIDENT TYPE (V23) should equal 15. |
| VV238 | CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 01 and the vehicle is involved in the first harmful event | ACCIDENT TYPE (V23) should equal 12 or 15. |
| VV240 | ACCIDENT TYPE (V23) equals 00 | CRITICAL EVENT (V26) should equal 98. |
| VV251 | CRITICAL EVENT (V26) equals 6 | SPEED RELATED (D09) should equal 1. |

V27 CORRECTIVE ACTION ATTEMPTED - PRECRASH 3

Screen Heading: Precrash Events

Screen Name: Corrective Action (585-E)

Long Name: What corrective action(s) are attempted by this driver?

SAS Name: Vehicle.P_Crash3

Oracle Name: GES.CorrectiveAction.CorrectActionID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 17132 | 00 | No driver present |
| 2 | 26375 | 01 | No avoidance maneuver |
| 2 3 | 26376 | 02 | Braking (no lockup) |
| 4 | 26383 | 03 | Braking (lockup) |
| 4 5 | 17127 | 04 | Braking (lockup unknown) |
| 6 | 17128 | 05 | Releasing brakes |
| 7 | 26380 | 06 | Steering left |
| 8 | 26381 | 07 | Steering right |
| 8 9 | 26406 | 80 | Braking and steering left |
| 10 | 26620 | 09 | Braking and steering right |
| 11 | 26382 | 10 | Accelerating |
| 12 | 17130 | 11 | Accelerating and steering left |
| 13 | 17131 | 12 | Accelerating and steering right |
| 14 | 26621 | 98 | Other actions |
| 15 | 26622 | 99 | Unknown if driver attempted avoidance maneuver |

Remarks:

Corrective actions attempted are movements/actions taken by the driver, within a critical crash envelope, in response to a Critical Event. Corrective actions attempted occur after the driver has realization of an impending danger but before the impact.

This variable assesses what the vehicle's action(s) were in response to the driver's realization.

Code the element which best describes the actions taken by the driver's vehicle in response to the Critical Event, within the Critical crash envelope that occurred just prior to this vehicle's impact. When there was a known action (e.g., braking), but you cannot determine whether there was more than one action (e.g., braking and steering left), default to the known action (e.g., braking).

Enter **No driver present** when no driver was in the vehicle when the accident occurred.

Enter **No avoidance maneuver** whenever the driver did not attempt any evasive (pre-impact) maneuvers. Use this code if the narrative states the driver did not have time to avoid the crash or never saw the other vehicle or object.

Enter **Unknown if driver attempted avoidance maneuver** when it can not be determined from any section of the PAR if the driver attempted an avoidance maneuver.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|---|---|
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99 | VEHICLE ROLE (V22) must equal 1 or 3. |
| VV122 | ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58 or 60 | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00 or 1. |
| VV134 | PRECRASH LOCATION (V29) equals 00 | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00. |
| VV134A | CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| VV182 | CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1 | ACCIDENT TYPE (V23) must equal 14. |
| VV232 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00. |
| VV232A | CORRECTIVE ACTION ATTEMPTED (V27) equals 00. | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV243A | ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01. |
| RANGE | CORRECTIVE ACTION ATTEMPTE code 26407) or null. | ED (V27) must not equal 94 (Oracle |
| MULTIPLE RESPONSE | No more than one response per vehi ACTION ATTEMPTED (V27) | cle must be coded for CORRECTIVE |

<u>Warnings</u>

| | IF | THEN |
|-------|---|---|
| AV184 | NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12-14 or 19. |
| VA189 | CRITICAL EVENT (V26) equals 65-68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) should not equal 00 or 10. |
| VA190 | CRITICAL EVENT (V26) equals 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | RELATION TO JUNCTION (A09) should equal 03 or 13. |
| VV175 | ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80-85. |
| VV176 | ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92. |
| VV218 | CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | DRIVER MANEUVERED TO AVOID (D06) should equal 00, 50 or 95. |
| VV237 | CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | ACCIDENT TYPE (V23) should equal 15. |
| VV238 | CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 01 and the vehicle is involved in the first harmful event | ACCIDENT TYPE (V23) should equal 12 or 15. |
| | | |

V28 VEHICLE CONTROL - PRECRASH 4

Screen Heading: Regarding Vehicle # ____

Screen Name: Vehicle Control (590-E)

Long Name: What is the pre-impact stability of this vehicle?

SAS Name: Vehicle.PCrash4

Oracle Name: GES. Vehicle Control ID

Element Values:

| Screen | Oracle | SAS | |
|-----------------------|---|----------------------------|---|
| 1 2 3 4 5 | 10207 10208 10209 10210 10211 | 00 01 02 03 04 | No Driver Present Tracking Skidding longitudinally — rotation less than 30 degrees Skidding laterally — clockwise rotation Skidding laterally — counterclockwise rotation |
| <u>6</u> | 10215 | 07 | Other vehicle loss-of-control (specify) |
| 7 | 10216 | 09 | Precrash stability unknown |

Remarks:

The purpose of this variable is to assess the stability of the vehicle just prior to impact. Thus, this variable focuses upon this vehicle's dynamics just prior to impact.

Enter **No driver present** when no driver was present in the vehicle at the time it was involved in the accident.

Enter **Tracking** whenever vehicle continued along its intended path without rotation. Stopped, slowing, turning, constant speed, and backing are examples of tracking.

Enter **Skidding longitudinally – rotation less than 30 degrees** whenever the vehicle rotates less than 30 degrees clockwise or counterclockwise just prior to impact. If there is information about vehicle rotation but degree of rotation is unknown, then use this code.

Enter **Skidding laterally – clockwise rotation** whenever the vehicle rotates clockwise 30 degrees or more just prior to impact.

Enter **Skidding laterally – counterclockwise rotation** whenever the vehicle rotates counterclockwise 30 degrees or more just prior to impact.

Code **Other vehicle loss-of-control** is rarely used. Consult GES Supervisor before using this code. This code is used when the driver loses control of a vehicle prior to the critical event.

Enter **Precrash stability unknown** whenever the stability of the vehicle cannot be determined.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|--|---|
| VV170 | PRECRASH VEHICLE CONTROL (V28) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| VV172 | PRECRASH VEHICLE CONTROL (V28) is not equal to 00 | PRECRASH LOCATION (V29) must not equal 00. |
| VV233 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | PRECRASH VEHICLE CONTROL (V28) must equal 00. |
| VV233A | PRECRASH VEHICLE CONTROL (V28) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00 |
| VV245 | ACCIDENT TYPE (V23) equals 01 or 06 | PRECRASH CONTROL (V28) must not equal 02, 03, 04 or 07. |
| RANGE | PRECRASH CONTROL (V28) must CONTROL (V28) must not equal nul | equal 00-04, 07, 09. PRECRASH I. |
| MULTIPLE RESPONSE | multiple responses must not be selective. (V28). | cted for PRECRASH CONTROL |

Warnings

| | IF | THEN |
|-------|-----------------------------------|--|
| VV135 | PRECRASH LOCATION (V29) equals 01 | PRECRASH VEHICLE CONTROL (V28) should equal 01 or 02. |
| VV242 | PRECRASH CONTROL (V28) equals 01 | ACCIDENT TYPE (V23) should not equal 02, 07, 34, 36, 54 or 56. |

V29 PRECRASH LOCATION - PRECRASH 5

Screen Heading: Regarding Vehicle # ____

Screen Name: Vehicle Location (600-E)

Long Name: What is the pre-impact location of this vehicle?

SAS Name: Vehicle.PCrash5

Oracle Name: GES.PreCrash.LocationID

Element Values:

| Screen | Oracle | SAS | |
|--------------------------------------|--------------------------------------|--------------------------------------|---|
| 1 2 3 4 5 6 7 8 | 1 2 3 4 5 6 7 8 | 0 1 2 3 4 5 6 7 | No driver present Stayed in original travel lane Stayed on roadway, but left original travel lane Stayed on roadway, not known if left original travel lane Departed roadway Remained off roadway Returned to roadway Entered roadway |
| 9 | 9 | 99 | Unknown |

Remarks:

This variable reports the location of the vehicle just prior to impact.

Enter **No driver present** when no driver was present in the vehicle at the time it was involved in the accident.

Enter **Stayed in original travel lane** whenever the vehicle remained within the boundaries of its initial lane. The perimeter of the vehicle is to be considered when determining the vehicle's status within its travel lane.

Enter **Stayed on roadway but left original travel lane** whenever the "majority" of the vehicle departed its initial travel lane; however, the "majority" of the vehicle remained within the boundaries of the roadway (travel lanes). The perimeter of the vehicle is to be considered when determining the vehicle's status within the roadway.

Enter **Stayed on roadway, not known if left original travel lane** whenever it cannot be ascertained whether the "majority" of the vehicle remained within its initial travel lane. To use this code, the "majority" of the vehicle must have remained within the boundaries of the roadway.

Enter **Departed roadway** whenever the "majority" of the vehicle departed the roadway just prior to impact.

Enter **Remained off roadway** whenever the pre-impact motion of the vehicle occurred outside the boundaries of the roadway and remained outside the boundaries at impact. This includes traveling on the shoulders, within the median, on the roadside or off the trafficway.

Enter **Returned to roadway** whenever the "majority" of the vehicle was on the roadway, went off the roadway and then returned to the same roadway during precrash motion.

Select **Entered roadway** whenever the vehicle was not previously on the roadway and then the majority of the vehicle enters the roadway during precrash motion.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|---|---|
| VV134 | PRECRASH LOCATION (V29) equals 00 | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00. |
| VV134A | CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| VV170 | PRECRASH VEHICLE CONTROL (V28) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| VV172 | PRECRASH VEHICLE CONTROL (V28) is not equal to 00 | PRECRASH LOCATION (V29) must not equal 00. |
| VV235 | PRECRASH LOCATION (V29) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV235A | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | PRECRASH LOCATION (V29) must equal 00. |
| RANGE | PRECRASH LOCATION (V29) must | equal 0, 1, 2, 3, 4, 5, 6, 7 or 99. |
| MULTIPLE RESPONSE | multiple responses must not be selective (V29). | cted for PRECRASH LOCATION |

<u>Warnings</u>

| | IF | THEN |
|-------|--|---|
| AV186 | RELATION TO ROADWAY (A10) equals 4, 5, 6 or 8 | PRECRASH LOCATION (V29) of the vehicle(s) involved in the first harmful event should equal 00, 04, 05 or 99. |
| VA181 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 04 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| VA182 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 01, 02 or 03 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VA183 | PRECRASH LOCATION (V29) equals 02 | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| VA216 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 05 | RELATION TO ROADWAY (A10) should not equal 1 or 9. |
| VA217 | PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 06 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VV135 | PRECRASH LOCATION (V29) equals 01 | PRECRASH VEHICLE CONTROL (V28) should equal 01 or 02. |

V30 ROLLOVER TYPE

Screen Heading: Regarding Vehicle # 1 ____

Screen Name: Rollover (610-R)

Long Name: What is the rollover type for this vehicle?

SAS Name: Vehicle.Rollover

Oracle Name: GES.Vehicle.RolloverTypeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26850 | 00 | No Rollover Untripped Rollover Tripped Rollover - By Curb Tripped Rollover - By Guardrail Tripped Rollover - By Ditch Tripped Rollover - By Soft Soil Tripped Rollover - Other Tripped Rollover - Unknown Mechanism Rollover, Unknown Whether Untripped Or Tripped |
| 2 | 26851 | 10 | |
| 3 | 26852 | 20 | |
| 4 | 26853 | 21 | |
| 5 | 26854 | 22 | |
| 6 | 26855 | 23 | |
| 7 | 26856 | 28 | |
| 8 | 26857 | 29 | |
| 9 | 26858 | 99 | |

Remarks:

Enter **No Rollover** if uncertainty exists concerning whether or not this vehicle rolled over. In addition, use this code if a trailing unit rolls over but the power unit itself does not. Further, this element includes vehicles whose Body Type (V5) is Motored Cycle independent of their accident configuration. When these vehicles rotate sufficiently to contact the ground it is considered an "overturn" rather than a rollover.

Enter **Untripped Rollover** when a rollover occurs but it is not the result of a collision but rather vehicle instability (e.g., centrifugal force).

Rollovers primarily about the lateral axis (end-over-end) should be coded using **Tripped Rollover - Other**. The tripped rollover categories are used when the rollover is primarily about the longitudinal axis.

Enter **Tripped Rollover - By Ditch** when there is contact with a ditch prior to the rollover or the PAR states that a vehicle entered a ditch prior to the rollover. Also, use this code whenever "ditch" is referenced in relation to the rollover and no further information is available.

Enter **Tripped Rollover - Other** when the rollover is a tripped rollover and the tripping mechanism is not curb, guardrail, ditch or soft soil. Use this response when an impact with another vehicle causes the rollover. The rollover must be the immediate result of the impact between the vehicles (e.g., intersection crashes where a vehicle is struck in the side and the momentum of the struck vehicle results in the rollover, or offset end-to-end type crashes when one vehicle vaults over the tapered end of another vehicle resulting in a rollover).

Enter **Tripped Rollover - Unknown Mechanism** when the rollover is initiated by a tripping mechanism but the specific mechanism is unknown.

Enter Rollover, Unknown Whether Tripped or Untripped when it is known that the vehicle rolled over but it is not known whether it was a tripped or untripped rollover.

Consistency Checks:

Errors

| | IF | THEN |
|----------------|--|---|
| AV149 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) not equal to 80-89 | ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99. |
| AV149A | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equals 80-89 | ROLLOVER TYPE (V30) must equal 00. |
| VV111 | BODY TYPE (V05) equals 80-89 | ROLLOVER TYPE (V30) must equal 00. |
| VV116 | HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89 | ROLLOVER TYPE (V30) must not equal 00. |
| VV226 | ROLLOVER TYPE (V30) equals 10 and the first HARMFUL EVENT (A06) equals 1 | ACCIDENT TYPE (V23) must equal 1-10, 14, 15 or 98. |
| <u>arnings</u> | | |
| | IF | THEN |
| AV214 | HARMFUL EVENT (A06) equals | ROLLOVER TYPE (V30) should equal 00 or 22 |

Wa

| | IF | THEN |
|-------|--|--|
| AV214 | HARMFUL EVENT (A06) equals 38 | ROLLOVER TYPE (V30) should equal 00 or 22. |
| VA211 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10 | RELATION TO ROADWAY (A10) should equal 1 or 9. |
| VV138 | ROLLOVER TYPE (V30) is not equal to 00 | DAMAGE AREAS (V25) should have more than one value other than 0. |
| VV247 | ROLLOVER TYPE (V30) equals 10 | ACCIDENT TYPE (V23) should equal 01-10, 14, 98 or 99. |

Post Entry

IF **THEN**

ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89 VV116A

at least one HARMFUL EVENT (A06) must equal 01.

V31 CARRIER'S IDENTIFICATION NUMBER

Screen Heading: NGA Crash Data

Screen Name: Carrier ID (620-E)

Long Name: What is the carrier's identification number for this vehicle?

SAS Name: Vehicle.CarlDNum

Oracle Name: GES.NGA_Type.CarrierNumber (Character)

Element Values:

Screen Oracle SAS

000000 000000, Blank 00000000 Not applicable 1-9999998 1-9999998 US DOT Number

Remarks:

National Governors Association (NGA) Accident Data

In 1987 the nation's Governors adopted a comprehensive motor carrier safety policy which stated that a necessary first step toward improved motor carrier safety would be the uniform collection of information on truck and bus accidents. The NGA surveyed fifty states to assemble the latest police accident reports, and conducted case study field visits to four states to get a better understanding of data collection and reporting. After reviewing state truck and bus accident data collection efforts, the NGA drafted a set of uniform data elements. These data elements were pilot tested in several states and finalized.

The final recommended data elements can be divided into two groups. The first group contains elements which pertain specifically to accidents involving trucks and buses. These elements provide essential information required to analyze motor carrier crashes, only.

The next six variables include that portion of the NGA data elements which pertain specifically to accidents involving trucks and busses.

The NGA variables are only applicable when the vehicle body type is a medium/heavy truck or bus.

The Carrier's ID is the unique number assigned to the Carrier by the United States Department of Transportation.

The number will be found only on vehicles of interstate for-hire or private carriers in the transportation business.

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. This code should also be used when the vehicle is a medium/heavy truck or a bus but the vehicle is not an interstate for-hire or private carrier.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus but the Carrier ID is not known. Also, this code is used when the body type of the vehicle is unknown.

Consistency Checks:

Errors

| | IF | THEN |
|-----------------|---|--|
| VV110 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 0. |
| VV140 | CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 0 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| VV167 | BODY TYPE (V05) equals 99 | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 999999999. |
| VV223 | CARRIER'S IDENTIFICATION NUMBER (V31) does not equal 0 or 99999999 | BODY TYPE (V05) must equal 50-64, 66-79 or 99. |
| RANGE | CARRIER'S IDENTIFICATION NUM digits in length (including leading zer or strings of 9's or 0's (except 00000 | IBER (V31) must not be more than 9 ros) and must not contain letters, nulls 0000). |
| <u>Warnings</u> | | |
| | ie. | THEN |

| | IF. | IHEN |
|-------|---------------------------------------|---|
| VV109 | BODY TYPE (V05) equals 50-64 or 66-79 | CARRIER'S IDENTIFICATION NUMBER (V31) should not equal 0. |

V32 NUMBER OF AXLES ON VEHICLE, INCLUDING TRAILERS

Screen Heading: NGA Crash Data

Screen Name: Number of Axles (630-E)

Long Name: How many axles, including power unit and trailer(s), does this vehicle

have?

SAS Name: Vehicle.Axles

Oracle Name: GES.NGA_Type.Axles

Element Values:

| Screen | Oracle | SAS | |
|--------|-------------|-------------|--|
| 00 | 00 02-20 | 00 02-20 | Not Applicable Actual Number Of Axles |
| * | 99 | 99 | Unknown Number Of Axles |

Remarks:

Refer to Truck and/or Bus supplement or Truck/Bus section on the PAR to obtain axle data.

Not Applicable will be pre-coded if this vehicle is not a medium/heavy truck or bus.

Enter **Unknown Number of Axles** when this vehicle is a medium/heavy truck or bus and there is no truck or bus supplement or the data was not recorded in the Truck/Bus section of the PAR.

States with known Truck/Bus supplements or Truck/Bus section on PAR.

Alabama

Colorado

Florida

Illinois Indiana

Massachusetts

Michigan

Nebraska

New Mexico

New York

Pennsylvania

Tennessee

Texas Wisconsin

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|--|
| VV115 | VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| VV140 | CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 000000 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| VV141 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) equals 00 | CARGO BODY TYPE (V33) must equal 00. |
| VV142 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) is not equal to 00 | CARGO BODY TYPE (V33) must not equal 00. |
| VV165 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must equal 00. |
| VV166 | BODY TYPE (V05) equals 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must equal 99. |
| VV219 | BODY TYPE (V05) equals 50, 59-64, 66-79 or 99 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00. |
| RANGE | NUMBER OF AXLES ON VEHICLE, 00, 02-20, 99. | INCL TRAILERS (V32) must equal |
| ngs | | |
| | | |

Warnings

| | IF | THEN |
|-------|---|--|
| VV244 | BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) should equal 02, 03 or 99. |

V33 CARGO BODY TYPE

Screen Heading: NGA Crash Data

Screen Name: Cargo Body Type (640-E)

Long Name: What is the cargo body type for this vehicle?

SAS Name: Vehicle.Carg_Typ

Oracle Name: GES.NGA_Type.CargoBodyTypeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------|
| 1 | 10217 | 00 | Not Applicable (NA) |
| 2 | 10218 | 01 | Bus |
| 3 | 10219 | 02 | Van/Enclosed Box |
| 4 | 10220 | 03 | Cargo Tank |
| 5 | 10221 | 04 | Flatbed |
| 6 | 10222 | 05 | Dump |
| 7 | 10223 | 06 | Concrete Mixer |
| 8 | 10224 | 07 | Auto Transporter |
| 9 | 10225 | 80 | Garbage/Refuse |
| 10 | 10226 | 98 | Other |
| * | 10227 | 99 | Unknown |

Remarks:

Code **Not Applicable (NA)** will be precoded when the body type is not a medium/heavy truck.

Code **Bus** will be precoded when the vehicle data identifies the vehicle as a bus.

Enter **Van/Enclosed Box** when the cargo body is fully enclosed or designed with high closed sides and ends with an open top.

Enter **Cargo Tank** when the cargo body is designed for the transport of bulk liquids or dry commodities such as petroleum, oil or grain.

Enter **Flatbed** when the cargo body has a floor without sides or a roof with or without removable stakes.

Enter **Dump** when the cargo body is a low side open box designed primarily to transport bulk dry commodities which can be tilted or otherwise manipulated to discharge its load by gravity.

Enter **Concrete Mixer** when the cargo body is designed and equipped to mix or agitate concrete.

Enter **Auto Transporter** when the cargo body is designed for the transportation of other transport vehicles.

Enter **Garbage/Refuse** when the cargo body is designed to primarily for the collection of garbage and refuse.

Enter **Other** when the cargo body type is known but is one other than those described. Also, use this code when the medium/heavy truck is a bobtail (i.e. Chassis/truck, tractor only with no trailer attached).

Enter **Unknown** when the vehicle is a medium/heavy truck but the specific cargo body type is not known.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|--|
| VV141 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) equals 00 | CARGO BODY TYPE (V33) must equal 00. |
| VV142 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) is not equal to 00 | CARGO BODY TYPE (V33) must not equal 00. |
| VV143 | CARGO BODY TYPE (V33) equals 00 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV145 | CARGO BODY TYPE (V33) equals 01 | BODY TYPE (V05) must equal 50, 58 or 59. |
| VV163 | BODY TYPE (V05) equals 99 | CARGO BODY TYPE (V33) must equal 99. |
| VV164 | BODY TYPE (V05) is not equal to 50-64, 66-79 or 99 | CARGO BODY TYPE (V33) must equal 00. |
| VV174 | VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66 | CARGO BODY TYPE (V33) must equal 98. |
| VV220 | BODY TYPE (V05) equals 50, 59-64, 66-79 or 99 | CARGO BODY TYPE (V33) must not equal 00. |
| VV221 | BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07 | CARGO BODY TYPE (V33) must equal 98. |
| VV248 | BODY TYPE (V05) equals 50 or 59 | CARGO BODY TYPE (V33) must equal 01. |
| VV249 | BODY TYPE (V05) equals 58 | CARGO BODY TYPE (V33) must equal 01 or 98. |

<u>Warnings</u>

IF **THEN**

CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V05) equals 66 VV185

VEHICLE TRAILING (V13) should equal 1.

V34 HAZARDOUS MATERIALS PLACARDED

Screen Heading: NGA Crash Data

Screen Name: Hazardous Materials (650-E)

Long Name: Was this vehicle carrying hazardous materials and was it placarded?

SAS Name: Vehicle.Haz_Mat

Oracle Name: GES.NGA_Type.HazardPlak

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 3 | 3 | 0 | Not Applicable |
| 1 | 1 | 1 | Yes |
| 2 | 2 | 2 | No |
| 4 | 4 | 9 | Unknown |

Remarks:

Enter **Not Applicable** when the vehicle is not a medium/heavy truck or a bus. Also, use this code when the vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that hazardous materials are not being transported by this vehicle (e.g. an empty truck).

Enter **Yes** when the vehicle is a medium/heavy truck or a bus, and the PAR indicates that hazardous materials were being transported by this vehicle, and this vehicle is displaying a HazMat Placard.

Enter **No** when the vehicle is a medium/heavy truck or a bus, and the PAR indicates that hazardous materials are being transported by this vehicle, and this vehicle is not displaying a HazMat Placard.

Enter **Unknown** when the vehicle is a medium/heavy truck or a bus, and the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default) OR the PAR indicates hazardous materials are being transported by this vehicle, but does not indicate whether a HazMat Placard is displayed or the hazardous materials related block has been left blank.

Also, enter this code when the body type is unknown.

Consistency Checks:

Errors

| | IF | THEN |
|-------|---|---|
| VV143 | CARGO BODY TYPE (V33) equals 00 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV146 | HAZARDOUS MATERIALS PLACARDED (V34) equals 0 or 2 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
| VV152 | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 | HAZARDOUS MATERIALS RELEASE (V36) must not equal 0. |
| VV157 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 9. |
| VV158 | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000. |
| VV159 | HAZARDOUS MATERIALS PLACARDED (V34) equals 9 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999. |
| VV160 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV168 | HAZARDOUS MATERIALS RELEASE (V36) equals 0 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| VV169 | BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |

V35 HAZARDOUS MATERIALS PLACARD NUMBER

Screen Heading: NGA Crash Data

Screen Name: Placard Number (660-E)

Long Name: What is the hazardous materials placard number?

SAS Name: Vehicle.Hazm_No

Oracle Name: GES.NGA_Type.HazardPlakNum

Element Values:

Range with spreads included:

```
0004, 0222, 0223, 0331, 0402, 1001-1003, 1005, 1006, 1008-1018, 1020-1023, 1026-1030,
1032, 1033, 1035-1041, 1043-1046, 1048-1053, 1055-1058, 1060-1067, 1069-1073, 1075-
1083, 1085-1093, 1098-1100, 1104-1115, 1118, 1120, 1123, 1125-1131, 1133-1137, 1139,
1142-1150, 1152-1173, 1175-1185, 1188-1199, 1201, 1202-1204, 1206-1208, 1210, 1212-
1214, 1216, 1218-1224, 1226, 1228-1235, 1237-1239, 1242-1251, 1255-1257, 1259, 1261-1268, 1270-1272, 1274-1282, 1286-1289, 1292-1310, 1312-1314, 1318, 1320-1328, 1330-
1334, 1336-1341, 1343-1350, 1352-1358, 1360-1366, 1369, 1370, 1372-1374, 1376, 1378-
1386, 1389-1398, 1400-1415, 1417-1423, 1426-1428, 1431-1433, 1435-1439, 1442, 1444-
1459, 1461-1463, 1465-1467, 1469-1477, 1479, 1481-1496, 1498-1500, 1502-1517, 1541,
1544-1551, 1553-1562, 1564, 1567, 1569-1575, 1577-1608, 1610-1614, 1616-1618, 1620-
1631, 1633, 1634, 1636-1665, 1669-1674, 1677-1680, 1683-1695, 1697-1705, 1707-1719,
1722-1733, 1736-1771, 1773-1784, 1786-1794, 1796, 1798-1819, 1821, 1823-1841, 1843,
1845-1849, 1851, 1854, 1855, 1858-1860, 1862-1873, 1884-1889, 1891, 1892, 1894, 1895,
1897, 1898, 1902, 1903, 1903, 1905-1908, 1910-1923, 1928, 1929, 1931, 1932, 1935, 1938-
1942, 1944, 1945, 1950-1984,1986-1994, 1999-2006, 2008-2038, 2044-2059, 2067-2085,
2087-2108, 2110-2116, 2118-2126, 2128-2219, 2222, 2224-2229, 2232-2267, 2269-2291,
2293-2313, 2315-2348, 2350-2354, 2356-2364, 2366-2414, 2416-2422, 2424, 2426-2449,
2451-2475, 2477, 2478, 2480-2491, 2493, 2495-2498, 2501-2509, 2511-2518, 2520-2522, 2524-2531, 2533-2536, 2538, 2541, 2542, 2545-2548, 2550-2558, 2560-2562, 2564, 2565,
2567, 2570-2574, 2576-2612, 2614-2624, 2626-2630, 2642, 2643, 2644-2651, 2653, 2655-
2662, 2664, 2666-2674, 2676-2693, 2698, 2699, 2707-2711, 2713-2717, 2719-2730, 2732-
2735, 2738-2790, 2793-2803, 2805-2807, 2809-2815, 2817-2823, 2826, 2829-2831, 2834,
2835, 2837-2842, 2844-2846, 2849-2865, 2869-2876, 2878-2881, 2883-2907, 2909-2913,
2918, 2920-2931, 2933-2938, 2940-2943, 2945-2956, 2965-3028, 3030-3043, 3048-3057,
3064-3066, 3070-3073, 3076, 3077-3080, 3082-3172, 3174-3176, 3178-3192, 3194, 3200,
3203, 3205-3358, 9011, 9018, 9026,
9035, 9037, 9069, 9083, 9084, 9088, 9136, 9180, 9183, 9187-9195, 9199, 9200, 9202, 9206,
9259, 9260, 9263, 9264, 9269, 9274-9278
```

| Screen | Oracle | SAS | |
|--------|--------|------|---|
| 0 | 0 | 0000 | |
| XXXX | XXXX | XXXX | Code Actual Hazardous Material Placard Number |
| * | 9999 | 9999 | Unknown |

Range is a compilation of the 1993 Emergency Response Guidebook.

Remarks:

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. Also, this code is used when the vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that Hazardous Materials are not being transported by this vehicle (e.g., an empty truck).

Code the actual number when given on the PAR. This vehicle must be a medium/heavy truck or a bus.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus, the PAR does not have a Hazardous Material related block, and the narrative does not mention any such materials (default).

This code is used when the vehicle is a medium/heavy truck or a bus and a placard is indicated but the placard number is not given OR it is unknown if a placard is present OR the Hazardous Materials related block has been left blank.

Also, this code is used when the body type of the vehicle is unknown.

Consistency Checks:

Errors

| | IF | THEN |
|-------|---|---|
| VV146 | HAZARDOUS MATERIALS PLACARDED (V34) equals 0 or 2 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
| VV149 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) is not equal to 0000 | HAZARDOUS MATERIALS RELEASE (V36) must not equal 0. |
| VV153 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000. |
| VV158 | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000. |
| VV159 | HAZARDOUS MATERIALS PLACARDED (V34) equals 9 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999. |
| VV161 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999. |

BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99 VV162

HAZARDOUS MATERIALS PLACARD NUMBER (V35) must

equal 0000.

HAZARDOUS MATERIALS PLACARD NUMBER (V35) must be within **RANGE**

the range specified under the element values section, above.

Warnings

IF **THEN**

VV148 HAZARDOUS MATERIALS HAZARDOUS MATERIALS PLACARD NUMBER (V35) equals RELEASE (V36) should equal 0.

0000

V36 HAZARDOUS MATERIALS RELEASE

Screen Heading: NGA Crash Data

Screen Name: Hazardous Release (670-E)

Long Name: Was an hazardous cargo released from the vehicle cargo tank or

compartment?

SAS Name: Vehicle.Haz_Ma_R

Oracle Name: GES.NGA_Type.HazardRelease

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 3 | 3 | 0 | Not Applicable |
| 1 | 1 | 1 | Yes |
| 2 | 2 | 2 | No |
| 4 | 4 | 9 | Unknown |

Remarks:

This variable indicates whether or not any hazardous cargo was released from the vehicle cargo tank or compartment.

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. Also, this code is used when the vehicle is a medium/heavy truck or bus, the PAR has a hazardous materials related block, and 'None' is indicated OR the PAR indicates that hazardous materials were not being transported by this vehicle.

Code **Yes** is used when the vehicle is a medium/heavy truck or a bus, the PAR indicates that hazardous materials were being transported by this vehicle, and a release (spill) from the vehicle is indicated.

NOTE: Spilled gasoline from a fuel tank is not considered a hazardous materials release.

Code **No** is used when the vehicle is a medium/heavy truck or a bus and the PAR indicates a cargo of hazardous materials but does not indicate a release or spill.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus, the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default).

This code is used when the PAR indicates that a release or spill occurred but it is unknown if the material was hazardous.

Also, use this code when the body type of the vehicle is unknown.

Consistency Checks:

| | IF | THEN |
|-----------------|---|--|
| VV149 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) is not equal to 0000 | HAZARDOUS MATERIALS RELEASE (V36) must not equal 0. |
| VV152 | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 | HAZARDOUS MATERIALS RELEASE (V36) must not equal 0. |
| VV154 | BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99 | HAZARDOUS MATERIALS RELEASE (V36) must equal 0. |
| VV155 | BODY TYPE (V05) equals 99 | HAZARDOUS MATERIALS RELEASE (V36) must equal 9. |
| VV156 | BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1 | HAZARDOUS MATERIALS RELEASE (V36) must equal 0. |
| VV168 | HAZARDOUS MATERIALS RELEASE (V36) equals 0 | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0. |
| <u>Warnings</u> | | |
| | IF | THEN |
| VV148 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) equals 0000 | HAZARDOUS MATERIALS RELEASE (V36) should equal 0. |

V10B NUMBER OF OCCUPANTS

Screen Heading: Vehicle Occupants

Screen Name: Number Occupants (20-E)

Long Name: How many occupants are in vehicle #?

SAS Name: Vehicle.NumOccs

Oracle Name: GES.Vehicle.NumOccs

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| | 1, | 1, | Zero Persons Total Number of Occupants in this Vehicle Unknown |

Remarks:

Enter **Zero Persons** when this vehicle is in transport and unoccupied.

Count and enter the total number of occupants (injured and uninjured) associated with this vehicle.

In bus crashes, the total number of occupants must be entered.

Enter **Unknown** when the PAR does not indicate the total number of occupants for the vehicle.

Enter **Unknown** if this is a "hit-and-run" vehicle, unless evidence clearly establishes the number of occupants present.

Consistency Checks:

| | IF | THEN |
|--------|--|---|
| VP207A | BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS (V10B) is greater than 00 | EJECTION (P06) must equal 8. |
| VV012A | BODY TYPE (V05) equals 01-05, 07-09 or 17 | NUMBER OF OCCUPANTS (V10B) must not be greater than 15. |
| VV013A | BODY TYPE (V05) equals 06, 11, 14 or 15 | NUMBER OF OCCUPANTS (V10B) must not be greater than 22. |
| VV015A | BODY TYPE (V05) equals 80-89 | NUMBER OF OCCUPANTS (V10B) must not be greater than 5. |
| VV192A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER PRESENCE (D01) must equal 0. |

Vehicles General/Travel Data

| VV196A | DRIVER DISTRACTED BY (D07) equals 3 | NUMBER OF OCCUPANTS (V10B) must be greater than 01. |
|------------------|---|--|
| VV207A | NUMBER OF OCCUPANTS (V10B) equals 00 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV208A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| VV209A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV210A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER DISTRACTED BY (D07) must equal 95. |
| VV216C | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER'S ZIP CODE (D08) must equal 99998. |
| <u>Warnings</u> | | |
| | | |
| | IF | THEN |
| VV032A | IF BODY TYPE (V05) equals 01-05, 07-09 or 97 | THEN NUMBER OF OCCUPANTS (V10B) should not be greater than 8. |
| VV032A VV033A | BODY TYPE (V05) equals 01-05, | NUMBER OF OCCUPANTS (V10B) |
| | BODY TYPE (V05) equals 01-05, 07-09 or 97 | NUMBER OF OCCUPANTS (V10B) should not be greater than 8. NUMBER OF OCCUPANTS (V10B) |
| VV033A | BODY TYPE (V05) equals 01-05, 07-09 or 97 BODY TYPE (V05) equals 12 BODY TYPE (V05) equals 06, | NUMBER OF OCCUPANTS (V10B) should not be greater than 8. NUMBER OF OCCUPANTS (V10B) should not be greater than 15. NUMBER OF OCCUPANTS (V10B) |
| VV033A VV034A | BODY TYPE (V05) equals 01-05, 07-09 or 97 BODY TYPE (V05) equals 12 BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79 BODY TYPE (V05) equals 80-89 | NUMBER OF OCCUPANTS (V10B) should not be greater than 8. NUMBER OF OCCUPANTS (V10B) should not be greater than 15. NUMBER OF OCCUPANTS (V10B) should not be greater than 12. NUMBER OF OCCUPANTS (V10B) |

Post Entry

| | IF | THEN |
|--------|--|--|
| VP045A | at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP199A | NUMBER OF OCCUPANTS (V10B) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |

V10 NUMBER OF OCCUPANTS CODED

Screen Heading: Vehicle Occupants

Screen Name: Coded Occupants (25-R)

Long Name: How many coded occupants in vehicle #?

SAS Name: Vehicle.Occ_Invl

Oracle Name: GES.Vehicle.NumOccCoded

Element Values:

Screen Oracle SAS

0 0 Zero Persons Coded

1,... 1,... Number of Occupants Coded for This vehicle

Remarks:

Note: Some State PARs only list injured occupants.

However, additional data will be coded for injured bus occupants only.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| VP207 | BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | EJECTION (P06) must equal 8. |
| VV012 | BODY TYPE (V05) equals 01-05, 07-09 or 17 | NUMBER OF OCCUPANTS CODED (V10) must not be greater than 15. |
| VV013 | BODY TYPE (V05) equals 06, 11, 14 or 15 | NUMBER OF OCCUPANTS CODED (V10) must not be greater than 22. |
| VV015 | BODY TYPE (V05) equals 80-89 | NUMBER OF OCCUPANTS CODED (V10) must not be greater than 5. |
| VV192 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER PRESENCE (D01) must equal 0. |
| VV207 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV208 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| VV209 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV210 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER DISTRACTED BY (D07) must equal 95. |

| VV216 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER'S ZIP CODE (D08) must equal 99998. |
|-----------------|--|--|
| VV301A | NUMBER OF OCCUPANTS CODE | D (V10) must be known. |
| VV301B | NUMBER OF OCCUPANTS CODED (V10) must equal the number of occupants coded for this vehicle. | |
| <u>Warnings</u> | | |
| | IF | THEN |
| VV032 | BODY TYPE (V05) equals 01-05, 07-09 or 97 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 8. |
| VV033 | BODY TYPE (V05) equals 12 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 15. |
| VV034 | BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 12. |
| VV036 | BODY TYPE (V05) equals 80-89 or 91 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 2. |
| VV037 | BODY TYPE (V05) equals 90 | NUMBER OF OCCUPANTS CODED (V10) should not be greater than 6. |
| VV241 | SPECIAL USE (V08) equals 01 | NUMBER OF OCCUPANTS CODED (V10) should be greater than 01. |

Post Entry

| | IF | THEN |
|-------|---|--|
| VP045 | at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP199 | NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |

D01 DRIVER PRESENCE

Screen Heading: Vehicle Occupants

Screen Name: Driver Presence (680-R)

Long Name: Was a Driver Present in the vehicle at the Time of the Crash?

SAS Name: Vehicle.dr_pres

Oracle Name: GES.Vehicle.DriverPresenceID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26871 | 0 | Unattended Vehicle (No Driver Involved) |
| 2 | 26872 | 1 | Driver Operated Vehicle |
| 3 | 26873 | 2 | Hit and Run (Vehicle and/or Driver Left Scene) |
| 4 | 26874 | 9 | Unknown Driver Presence |

Remarks:

This variable serves as a flag to identify driverless, in-transport motor vehicles.

Unattended Vehicle (No Driver Involved) indicates no driver was physically in the intransport vehicle at the time that it was involved in the crash. A child sitting in the driver's seat does not automatically indicate that the child was operating the vehicle (see discussion under **Driver Operated Vehicle**, below).

Driver Operated Vehicle applies when the PAR indicates there is a driver. Do not automatically code **Driver Operated Vehicle** when a child is sitting in the driver's seat. The PAR must indicate that the child was controlling the vehicle in some manner to consider the child a driver.

Hit and Run (Vehicle and/or Driver Left Scene) applies when this motor vehicle was a "hit-and-run" vehicle. [i.e., Hit & Run (V02), is encoded (Yes, Driver Or Car & Driver Left Scene)]. If it is known that the driver operated the vehicle but the PAR is unclear or inadequate regarding the issue of hit-and-run, then default to **Driver Operated Vehicle**.

Unknown Driver Presence is coded when it is unknown if there was a driver present in the vehicle. This element includes instances when a person was present in the in-transport vehicle, but it is unknown if the person was the driver.

Consistency Checks:

| | IF | THEN |
|--------|---|--|
| PP062 | A previous occupant has been identified as the driver. | This occupant cannot be coded as the driver. |
| VV186 | DRIVER PRESENCE (D01) equals 0 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| VV187 | DRIVER PRESENCE (D01) equals 0 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV188 | DRIVER PRESENCE (D01) equals 0 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV189 | DRIVER PRESENCE (D01) equals 0 | DRIVER DISTRACTED BY (D07) must equal 95. |
| VV189A | DRIVER PRESENCE (D01) equals 1 or 2 | DRIVER DISTRACTED BY (D07) must not equal 95 or null. |
| VV191 | DRIVER PRESENCE (D01) equals 0 | ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 92, 93 or 98. |
| VV192 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER PRESENCE (D01) must equal 0. |
| VV192A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER PRESENCE (D01) must equal 0. |
| VV193 | JACKKNIFE (V14) equals 1 | DRIVER PRESENCE (D01) must not equal 0. |
| VV198 | DRIVER PRESENCE (D01) equals 2 | HIT-AND-RUN (V02) must equal 1. |
| VV202 | HIT-AND-RUN (V02) equals 1 | DRIVER PRESENCE (D01) must equal 2. |
| VV216B | DRIVER PRESENCE (D01) equals 0 | DRIVER'S ZIP CODE (D08) must equal 99998. |
| VV231 | DRIVER PRESENCE (D01) equals 0 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV236 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | DRIVER PRESENCE (D01) must equal 0. |
| VV255 | TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0 | SPEED RELATED (D09) must equal 0. |

| | IF | THEN |
|------------|--------------------------------|---|
| VV190 | DRIVER PRESENCE (D01) equals 0 | VEHICLE ROLE (V22) should not equal 0 or 9. |
| Post Entry | | |

| | IF | THEN |
|-------|--|---|
| AD026 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0210 | at least one DRIVER PRESENCE (D01) must equal 0. |
| DP001 | DRIVER PRESENCE (D01) equals 0 or 9 | there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |
| DP004 | DRIVER PRESENCE (D01) equals 1 | there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |
| DP141 | DRIVER PRESENCE (D01) equals 9 | at least one PERSON TYPE (P03) must equal 9. |

P01 VEHICLE NUMBER (OCCUPANTS)

Screen Heading: Regarding Vehicle # __ Occupant # __

Screen Name: None (N)

Long Name: None

SAS Name: Person.Vehno

Oracle Name: GES.Person.VehicleID, GES.Vehicle.VehicleNumber

Element Values:

Screen Oracle SAS

1-30 1-30 Computer Assigned Number

Remarks:

The in-transport motor vehicles within a crash are numbered sequentially by the computer beginning with 1; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped.

P02 PERSON NUMBER (OCCUPANTS)

Screen Heading: Regarding Vehicle # __ Occupant # __

Screen Name: None (N)

Long Name: None

SAS Name: Person.Perno

Oracle Name: GES.Person.OccNumber

Element Values:

Screen Oracle SAS

1, ... 1, ... Computer Assigned Number

Remarks:

Occupants of each in-transport motor vehicle are numbered sequentially by the computer, beginning with "1"; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped. In most cases the numbering will follow the seat position, starting with the left front and moving left to right and front to back.

Persons appended to vehicle for motion (e.g., bicyclist holding onto vehicle) are non-motorists; they are not occupants.

Drivers do not have to be coded "1" (e.g., right hand drive vehicles containing left front occupant). However, code the assumed driver of a hit-and-run vehicle as "1." Assume only one occupant is in a hit-and-run vehicle (unless reliable evidence to the contrary exists), and assume this person is the driver.

P03 PERSON TYPE (OCCUPANTS)

Screen Heading: Vehicle Occupants

Screen Name: Person Type (760-R)

Long Name: What is the person type of this occupant?

SAS Name: Person.Per_type

Oracle Name: GES.Person.PersonTypeID

Element Values:

| Screen | Oracle | SAS | |
|---------------|------------------|--------------|--|
| 1 | 26704 | 1 | Driver Of A Motor Vehicle In-Transport (Occupant) |
| 2 | 26705 | 2 | Passenger Of A Motor Vehicle In-Transport (Occupant) |
| -3 | 26706 | 3 | Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist) |
| 4 | 26707 | 4 | Occupant Of A Non-motor Vehicle Transport Device |
| | | | (Non-Motorist) |
| 5 | 26708 | 5 | Nonoccupant - Pedestrian (Non-Motorist) |
| 6 | 26709 | 6 | Nonoccupant - Cyclist/Pedalcyclist (Non-Motorist) |
| 7 | 26712 | 7 | Nonoccupant / Person in or on Working Vehicle (Non-Motorist) |
| 8 | 26710 | 8 | Nonoccupant - Other Or Unknown (Non-Motorist) |
| 9 | 26711 | 9 | Unknown Occupant Type In A Motor Vehicle In-Transport (Occupant) |

Remarks:

Hit-and-run vehicles are assumed to have only one occupant (unless reliable evidence to the contrary exists), and that person is assumed to be the driver. All other persons riding in or on the vehicle are considered to be passengers.

Enter **Unknown Occupant Type In A Motor Vehicle In-Transport** when it is unknown whether this occupant was a driver or passenger.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| AP021 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000 | PERSON TYPE (P03) must not equal 5, 6 or 8. |
| AP061 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P3) equals 5 | NON MOTORIST'S ACTION (P19) must equal 21 or 22. |

| AP062 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049 and PERSON TYPE (P03) equals 6 | at least one NON-MOTORIST'S ACTION (P19) must equal 07. |
|--------|---|--|
| PA083 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
| PA096 | PERSON TYPE (P03) equals 5 or 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |
| PA201 | PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01. |
| PP002 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) must not equal 21-53. |
| PP002A | PERSON TYPE (P03) equals 1 | there must not be another occupant of the same vehicle where PERSON TYPE (P03) equals 9. |
| PP012 | PERSON TYPE (P03) equals 1 | AGE (P07) must not be less than 02. |
| PP034 | PERSON TYPE (P03) equals 1 | RESTRAINT SYSTEM USE (P15) must not equal 6. |
| PP040 | PERSON TYPE (P03) equals 4 or 6 | NON-MOTORIST'S ACTION (P19) must not equal 21-29. |
| PP041 | PERSON TYPE (P03) equals 5, 7 or 8 | NON MOTORIST'S ACTION (P19) must not equal 01-10. |
| PP045A | PERSON TYPE (P03) equals 1, 2 or 9 and INJURY SEVERITY (P09) equals 0 | EJECTION (P06) must not equal 5 or 6. |
| PP046A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | SEATING POSITION (P04) must equal 0 and EJECTION (P06) must equal 8. |
| PP047 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| PP048 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |

| PP048A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | VEHICLE NUMBER (V01) must equal null. |
|--------|---|---|
| PP068 | PERSON TYPE (P03) equals 3 | NON MOTORIST'S ACTION (P19) must equal 00. |
| PP072 | PERSON TYPE (P03) equals 1, 2 or 9 | NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP073 | PERSON TYPE (P3) equals 3 | NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP082 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null | PERSON TYPE (P03) must not equal 3-8. |
| PP083 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is equal to 01-30 or 99 | PERSON TYPE (P3) must not equal 1, 2 or 9. |
| PV001 | PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 00, 12-53 or 99. |
| PV005 | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 13-19 or 22-53. |
| PV007 | PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 11-39, 50, 52 or 99. |
| PV010 | PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 12-50 or 52. |
| PV011 | PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08 | BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93. |
| VP002 | PERSON TYPE (P03) equals 2 or 9 and SEATING POSITION (P04) equals 50 | BODY TYPE (V05) must equal 64, 66 or 78. |
| VP002A | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-31, 90 or 91 | SEATING POSITION (P04) must not equal 51. |
| VP234 | HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0. |

| | IF | THEN |
|-------|--|---|
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120. |
| AP027 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5 | SCHOOL BUS RELATED (A21) should equal 1. |
| PA051 | PERSON TYPE (P03) equals 5 and NON MOTORIST LOCATION (P13) equals 08, 18 or 98 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620. |
| PA053 | NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
| PP009 | PERSON TYPE (P03) equals 2 or 9 | SEATING POSITION (P04) should not equal 11. |
| PP018 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) should not equal 12-19. |
| PP045 | PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) should equal 0. |
| PP061 | NON MOTORIST SAFETY EQUIPMENT USE (P20) equals 2 | PERSON TYPE (P03) should equal 6. |
| PP081 | PERSON TYPE (P03) equals 3 | NON MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12. |
| PP085 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07 | PERSON TYPE (P03) should not equal 1. |

Post Entry

| | IF | THEN |
|-------|---|---|
| AP005 | HARMFUL EVENT (A06) equals 21 | at least one person must have PERSON TYPE (P03) equal to 5. |
| AP006 | HARMFUL EVENT (A06) equals 22 | at least one person must have PERSON TYPE (P03) equal to 6 or 8. |
| AP008 | HARMFUL EVENT (A06) equals 6 | at least one PERSON TYPE (P03) equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5. |
| AP015 | NUMBER OF MOTOR VEHICLES (A03) is greater than 00 | at least one PERSON TYPE (P03) should equal 1, 2 or 9. |
| AP023 | RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890. |
| AP039 | RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920. |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055. |
| AP077 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420 | at least one PERSON TYPE (P03) must equal 4. |
| AP128 | HARMFUL EVENT (A06) equals 27 | at least one person mus have PERSON TYPE (P03) equal 4 or 8. |
| AP155 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999 | at least one person must have PERSON TYPE (P03) equal 4 or 8 (P03) must equal 8. |
| DP001 | DRIVER PRESENCE (D01) equals 0 or 9 | there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |

| DP004 | DRIVER PRESENCE (D01) equals 1 | there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |
|--------|--|---|
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |
| DP141 | DRIVER PRESENCE (D01) equals 9 | at least one PERSON TYPE (P03) must equal 9. |
| PA049 | at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920. |
| PA058 | at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099. |
| PP062 | A previous occupant has been identican be coded (P03 = 1) as the driver | ified as the driver. Only one occupant r. |
| PP082A | PERSON TYPE (P03) equals 3 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26. |
| PP082A | PERSON TYPE (P03) equals 4 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 8. |
| PP082A | PERSON TYPE (P03) equals 5 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21. |
| PP082A | PERSON TYPE (P03) equals 6 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22. |

| PP082A | PERSON TYPE (P03) equals 8 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
|----------|---|--|
| PP082AP | PERSON TYPE (P03) equals 3 | PARKED/WORKING VEHICLE TYPE (PV02) must equal 1. |
| PP082AP2 | PARKED/WORKING VEHICLE TYPE (PV02) equals 1 | PERSON TYPE (P03) must equal 3 |
| PP082AP1 | PERSON TYPE (P03) equals 7 | PARKED/WORKING VEHICLE TYPE (PV02) must equal 2. |
| PP082AP3 | PARKED/WORKING VEHICLE TYPE (PV02) equals 2 | PERSON TYPE (P03) must equal 7 |
| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P03) equals 5, and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210. |
| VP010 | HARMFUL EVENT (A06) equals 21 | at least one PERSON TYPE (P03) must be equal 5. |
| VP010A | at least one PERSON TYPE (P03) equals 5 | at least one HARMFUL EVENT (A06) must equal 21. |
| VP011 | HARMFUL EVENT (A06) equals 22 | at least one PERSON TYPE (P03) must be equal to 6. |
| VP011A | at least one PERSON TYPE (P03) equals 6 | at least one HARMFUL EVENT (A06) must equal 22. |
| VP012 | HARMFUL EVENT (A06) equals 27 | at least one PERSON TYPE (P03) must equal 4 or 8. |
| VP012A | at least one PERSON TYPE (P03) equals 4 or 8 | at least one HARMFUL EVENT (A06) must equal 27. |
| VP012B | at least one PERSON TYPE (P03) equals 3 | at least one HARMFUL EVENT (A06) must equal 26. |
| VP013 | HARMFUL EVENT (A06) equals 06 | at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5. |

| VP045 | at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
|--------|--|---|
| VP045A | at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP046 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220. |
| VP047 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720. |
| VP056 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049. |
| VP057 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011. |
| VP136 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049. |
| VP199 | NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |
| VP199A | NUMBER OF OCCUPANTS (V10B) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |
| VP224 | BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2 | RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9. |

P04 SEATING POSITION

Screen Heading: Occupant Characteristics

Screen Name: Seat Position (770-R)

Long Name: What Is This Occupant's Seating Position?

SAS Name: Person.Seat_pos

Oracle Name: GES.Person.SeatID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| n/a | null | 0 | Non-Motorist |
| 1 | 26726 | 11 | Front Seat, Left Side |
| 2 | 26727 | 12 | Front Seat, Middle |
| 3 | 26728 | 13 | Front Seat, Right Side |
| 4 | 26729 | 18 | Front Seat, Other |
| 5 | 26730 | 19 | Front Seat, Unknown |
| 6 | 26731 | 21 | Second Seat, Left Side |
| 7 | 26732 | 22 | Second Seat, Middle |
| 8 | 26733 | 23 | Second Seat, Right Side |
| 9 | 26734 | 28 | Second Seat, Other |
| 10 | 26735 | 29 | Second Seat, Unknown |
| 11 | 26736 | 31 | Third Seat, Left Side |
| 12 | 26737 | 32 | Third Seat, Middle |
| 13 | 26738 | 33 | Third Seat, Right Side |
| 14 | 26739 | 38 | Third Seat, Other |
| 15 | 26740 | 39 | Third Seat, Unknown |
| 16 | 26741 | 50 | Sleeper Section of Cab (Truck) |
| 17 | 26742 | 51 | Other Passenger in Passenger or Cargo Area |
| 18 | 26743 | 52 | Trailing Unit |
| 19 | 26744 | 53 | Riding on Exterior of Vehicle |
| 20 | 26745 | 99 | Unknown |
| 21 | 26746 | 41 | Fourth Seat, Left Side |
| 22 | 26747 | 42 | Fourth Seat, Middle |
| 23 | 26748 | 43 | Fourth Seat, Right Side |
| 24 | 26749 | 48 | Fourth Seat, Other |
| 25 | 26750 | 49 | Fourth Seat, Unknown |

Remarks:

Seat position is coded by the location of the occupant in relation to the seat row and the forward longitudinal axis of the vehicle.

More than one person may be assigned the same seating position; however, this is allowed only when a person is sitting on someone's lap (e.g., child on or in mother's lap).

If the PAR does not specifically state that one person was on the lap of another, then see the discussion below under elements Front Seat, Other; Second Seat, Other; Third Seat, Other and Fourth Seat, Other.

In seat rows designated for only two passengers, enter elements Front Seat, Left Side; Front Seat, Right Side; Second Seat, Left Side; Second Seat, Right Side; Third Seat, Left Side; Fourth Seat, Right Side or Other Passenger in Passenger or Cargo Area.

Enter **Front Seat**, **Left Side** if there is an assumed driver of a hit-and-run vehicle unless evidence indicates a different position for the person or persons.

Front Seat, Other; Second Seat, Other; Third Seat, Other and Fourth Seat, Other are used to record the position of someone sitting on the floor or lying across the seat. In addition, enter these elements when two or more persons are sitting abreast of one another in the same seating location (as opposed to on or in someone's lap), since only one occupant can be assigned the seat's position. If the PAR provides enough specific information, then assign the seat position to the person using the restraint; if no restraint was used, then assign the seat position to the older person.

Enter **Front Seat, Other** if the only seat in the front seating area is a driver's seat (e.g., bucket, pedestal, etc.), and the occupant was in the area but not in the seat. This situation could occur because of vehicle design or seat removal. The same logic applies to other seat areas. Enter **Other Passenger In Passenger Or Cargo Area** when a person is in the fifth or higher seat row but not in a seat.

Enter **Sleeper Section of Cab (Truck)** if the occupant's vehicle is a medium or heavy truck and has a cab sleeper, and this occupant is in the sleeper section at the time of the crash.

Enter Other Passenger in Passenger or Cargo Area when an occupant is in the fifth or higher numbered seat area, in an enclosed area where no defined seating exists or using a fold-down type seat in its folded down position. Use, also, for bus passengers (not driver).

If seating in the vehicle is longitudinal rather than lateral, use the basic idea of a vehicle interior being divided laterally into roughly equal thirds and visualize lateral rows of seats to determine what seat position is the best descriptor.

For rearward facing seats use the basic idea described above in the previous paragraph to describe the occupant's seat position.

If a seat row has more than three designated seat positions, the occupants should have their positions assigned as usual for the left and right positions, while the two center positions would be encoded as Other (i.e., Front Seat, Other; Second Seat, Other; Third Seat, Other; Fourth Seat, Other or Other Passenger in Passenger or Cargo Area) depending upon the seat row.

Persons appended to the vehicle for motion are not considered to be occupants of the vehicle.

For motorcycles, code the driver **Front Seat, Left**; sidecar passenger **Front Seat, Right**; passenger behind the driver **Second Seat, Left** and passenger on the lap of the driver (in front of) **Front Seat, Left**.

Enter **Trailing Unit** when an occupant is in or on a trailing unit {i.e., Vehicle Trailing (V13), for this occupant's vehicle must be coded >= "1", one or more trailing units)}.

Enter **Riding on Vehicle Exterior of Vehicle** when an occupant is riding on a fender, the boot of a convertible, the open cargo box of a light truck, etc.

Consistency Checks:

| | IF | THEN | |
|--------|---|--|--|
| PP002 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) must not equal 21-53. | |
| PP046A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | SEATING POSITION (P04) must equal 0 and EJECTION (P06) must equal 8. | |
| PP074 | SEATING POSITION (P04) equals 12, 22, 32 or 41-53 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. | |
| PP074A | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) is between 50 and 97 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. | |
| PP074B | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. | |
| PP074C | SEATING POSITION (P04) equals 21, 23, 31 or 33 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 1 or 9. | |
| PP075 | SEATING POSITION (P04) equals 22, 23 or 31-53 | RESTRAINT SYSTEM USE (P15) must not equal 5. | |
| PP076 | SEATING POSITION (P04) equals 18, 19 or 99 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0 or 9. | |

| PP076A | SEATING POSITION (P04) equals 28, 29, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 9. |
|--------|--|---|
| PP077 | For Occupants, the value "00" must POSITION (P04). | not be coded for SEATING |
| PP080 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and (BODY TYPE (V05) is between 50 and 97 or (BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998)) | SEATING POSITION (P04) must equal 11 or 13. |
| PP080A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11, 13, 21, 23, 31 or 33. |
| PP080B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 2 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11 or 13. |
| PP084 | SEATING POSITION (P04) equals 50 or 53 | RESTRAINT SYSTEM USE (P15) must equal 7. |
| PV001 | PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 00, 12-53 or 99. |
| PV005 | PERSON TYPE (P03) equals 2 or 9, and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 13-19 or 22-53. |
| PV006 | SEATING POSITION (P04) equals 52 | VEHICLE TRAILING (V13) must not equal 1. |
| PV007 | PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50- 59 | SEATING POSITION (P04) must not equal 11-49, 50, 52 or 99. |
| PV010 | PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 12-50 or 52. |
| VP002 | PERSON TYPE (P03) equals 2 or 9 and SEATING POSITION (P04) equals 50 | BODY TYPE (V05) must equal 64, 66 or 78. |

| VP002A | PERSON TYPE (P03) equals 2 or | SEATING POSITION (P04) must | |
|--------|--------------------------------|-----------------------------|--|
| | 9 and BODY TYPE (V05) equals | not equal 51. | |
| | 01-02, 04, 10, 30-31, 90 or 91 | | |

| | IF | THEN |
|--------|---|--|
| PP009 | PERSON TYPE (P03) equals 2 or 9 | SEATING POSITION (P04) should not equal 11. |
| PP018 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) should not equal 12-19. |
| PP033 | RESTRAINT SYSTEM USE (P15) equals 1 | SEATING POSITION (P04) should not equal 12, 22, 32, 42 or 50-53. |
| PV166 | SEATING POSITION (P04) equals 31-49 | BODY TYPE (V05) should not equal 01, 02, 03, 04 or 05. |
| VP174D | BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9. |
| VP192 | If SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01, 06 or 30-39 | EJECTION (P06) should equal 0. |

P06 EJECTION

Screen Heading: Occupant Characteristics

Screen Name: Ejection (780-E)

Long Name: Was the occupant totally or partially thrown from the vehicle as a result

of the crash?

SAS Name: Person.Eject

Oracle Name: GES.Person.EjectionID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------|
| 1 | 26754 | 0 | Not Ejected |
| 2 | 26755 | 1 | Totally Ejected |
| 3 | 26756 | 2 | Partially Ejected |
| 4 | 26758 | 9 | Unknown |
| 5 | 26757 | 7 | Ejected - Unknown Degree |
| 6 | 26759 | 8 | Not Applicable |
| 7 | 26760 | 5 | Not on PAR |
| 8 | 26761 | 6 | Not Coded |

Remarks:

Ejection refers to occupants being totally or partially thrown from the vehicle (including the bed of pickup trucks) during the course of the crash. This includes occupants of jeeps, go carts, snowmobiles, and three or four-wheel ATVs.

Partial ejection refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment. Although it would not seem to be a problem it can be fatal if the part outside is the occupant's head. Because of the dynamics of the vehicle and the kinematics of the occupants during an ejection sequence, it is often the occupant's own vehicle which causes the injury as it rolls onto the occupant.

Enter **Not Ejected** if the PAR specifically so states for a given occupant. Enter **Not Ejected** for occupants of a hit-and-run vehicle, unless the PAR specifically indicates that ejection occurred. If the PAR does not show the ejection status of uninjured drivers or passengers and there is no other information about ejection, e.g., in the narrative/diagram; then enter **Not Ejected**.

Enter **Totally Ejected** when the occupant's body is entirely outside the vehicle but may be in contact with the vehicle.

Enter **Partially Ejected** when part of the occupant's body remains in the vehicle. This does not apply to occupants who are not initially in the seating compartment of the vehicle (e.g.,

pickup beds, boot of a convertible, and persons riding on open tailgates), since any ejection for them is coded as **Totally Ejected**.

Enter **Unknown** when the PAR specifically indicates unknown.

Enter **Ejected - Unknown Degree** when the PAR indicates that an occupant is ejected but fails to discriminate between total and partial ejection.

Not Applicable is used for persons who are riding on the exterior of a vehicle, motorcycle occupants or non-motorists. Exterior of the vehicle includes running boards, roof, fenders and bumpers; but not the bed of pickup trucks, open tail gate or boot of a convertible.

Enter **Not on PAR** If no block exists on the PAR for reporting ejection and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of ejection but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

| | IF | THEN |
|--------|--|---|
| PV103 | EJECTION (P06) equals 1, 2 or 7 | this person's vehicle's MOST HARMFUL EVENT (V20) must not equal 06. |
| PV125 | EJECTION (P06) equals 1, 2 or 7 | BODY TYPE (V05) must not equal 80-89. |
| PP045A | PERSON TYPE (P03) equals 1, 2 or 9 and INJURY SEVERITY (P09) equals 0 | EJECTION (P06) must not equal 5 or 6. |
| PP046A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | SEATING POSITION (P04) must equal 0 and EJECTION (P06) must equal 8. |
| PP070 | EJECTION (P06) equals 1, 2 or 7 | RESTRAINT SYSTEM USE (P15) must not equal 5. |
| VP207 | BODY TYPE (V05) equals 80-89 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | EJECTION (P06) must equal 8. |
| VP207A | BODY TYPE (V05) equals 80-89 and NUMBER OF OCCUPANTS (V10B) is greater than 00 | EJECTION (P06) must equal 8. |

| VP208 | HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) not equal to 80-89 | EJECTION (P06) must equal 0. |
|-------|---|------------------------------|
| RANGE | EJECTION (P06) must equal 0, 1, 2, | , 5, 6, 7, 8 or 9. |

| | IF | THEN |
|-------|--|--|
| PP037 | EJECTION (P06) equals 1, 2 or 7 | RESTRAINT SYSTEM USE (P15) should equal 0, 7 or 9. |
| PP045 | PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) should equal 0. |
| PP069 | EJECTION (P06) equals 1, 2 or 7 | INJURY SEVERITY (P09) should not equal 0. |
| VP192 | SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01, 06 or 30-39 | EJECTION (P06) should equal 0. |

P21 AIR BAG AVAILABILITY/FUNCTION

Screen Heading: Occupant Characteristics

Screen Name: Bag Available (870-E)

Long Name: What is the air bag availability/function in the seat position of this

occupant?

SAS Name: Person.Airbag

Oracle Name: GES.AirBag.AirbagavailID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------------------------|
| 1 | 1 | 0 | No air bag available |
| 2 | 2 | 1 | Deployed |
| 3 | 3 | 2 | Non-deployed |
| n/a | null | 8 | Not applicable |
| 4 | 9 | 9 | Unknown if available or deployed |

Remarks:

This variable seeks to capture whether the vehicle was equipped with an air bag (in the seat position of this occupant) and, if so; did it deploy.

No Air Bag Available is used for all seating positions which are not equipped with air bags. Also use this code for every seating position in vehicles which do not come equipped with air bags in any position (e.g., motorcycles, early-model passenger cars, etc.). This code applies in situations where the air bag is switched off.

Enter **Deployed** when the PAR indicates that an air bag deployed for the seat position occupied by this person.

Enter **Non-deployed** when the PAR indicates that an air bag existed at this occupants seat position but it did not deploy.

Enter **Unknown** if available or deployed when it is not known whether an air bag is available in the seat position of this occupant or an air bag was available but it is not known whether it deployed.

Not applicable applies if the person type is non-motorist (i.e., P03, person type, equals SAS values 3, 4, 5, 6 or 8).

Consistency Checks:

| | IF | THEN |
|--------|--|---|
| PP074 | SEATING POSITION (P04) equals 12, 22, 32 or 41-53 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074A | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) is between 50 and 97 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074B | SEATING POSITION (P04) equals 21, 23, 28, 29, 31, 33, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0. |
| PP074C | SEATING POSITION (P04) equals 21, 23, 31 or 33 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 1 or 9. |
| PP076 | SEATING POSITION (P04) equals 18, 19 or 99 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0 or 9. |
| PP076A | SEATING POSITION (P04) equals 28, 29, 38 or 39 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 9. |
| PP080 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and (BODY TYPE (V05) is between 50 and 97 or (BODY TYPE (V05) <= 49 and MODEL YEAR (V06) < 1998)) | SEATING POSITION (P04) must equal 11 or 13. |
| PP080A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11, 13, 21, 23, 31 or 33. |
| PP080B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 2 and BODY TYPE (V05) <= 49 and MODEL YEAR (V06) equals 1998 or newer | SEATING POSITION (P04) must equal 11 or 13. |

| PV172 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 | BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993]. |
|-------------------|---|--|
| PV196A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49 | MODEL YEAR (V06) must be greater than 1971. |
| PV196B | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48 | MODEL YEAR (V06) must be greater than 1990. |
| PV196C | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39 | MODEL YEAR (V06) must be greater than 1992. |
| RANGE | PERSON TYPE (P03) equals 1, 2 or 9 | AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0, 1, 2 or 9 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 3, 4 5, 6 or 8 | AIR BAG AVAILABILITY/ FUNCTION (P21) must not equal 0, 1, 2 or 9. |
| MULTIPLE RESPONSE | There must only one response per o FUNCTION (P21) | ccupant for AIR BAG AVAILABILITY/ |

| | IF | THEN |
|--------|---|--|
| PV172A | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996 | BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99. |
| VP173 | BODY TYPE (V05) equals 40-45 or 50-97 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 0. |
| VP174D | BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11 | AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9. |

P07 AGE (OCCUPANTS)

Screen Heading: Occupant Characteristics

Screen Name: Age (790-E)

Long Name: Enter the person's age.

SAS Name: Person.Age

Oracle Name: GES.Person.Age

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|------------------------|
| 0 | 0 | 0 | Less Than One Year Old |
| XXX | xxx | xxx | Person's Age |
| * | -9999 | 999 | Unknown |

Remarks:

The person's age at the time of the crash is recorded with respect to the person's last birthday. Age is recorded in years.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| PP012 | PERSON TYPE (P03) equals 1 | AGE (P07) must not be less than 02. |
| PV011 | PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08 | BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93. |
| PP013A | AGE (P07) must equal 0-105 or 999 | and must not equal null. |

| | IF | THEN |
|-------|-------------------------------------|--------------------------------------|
| PP013 | UNLIKELY: AGE (P07) is greater that | an 92 and not equal to 999. |
| PP036 | RESTRAINT SYSTEM USE (P15) equals 6 | AGE (P07) should equal 00-10 or 999. |

P08 SEX (OCCUPANTS)

Screen Heading: Occupant Characteristics

Screen Name: Sex (800-E)

Long Name: What is the person's sex?

SAS Name: Person.Sex

Oracle Name: GES.Person.SexID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------|
| 1 | 26712 | 1 | Male |
| 2 | 26713 | 2 | Female |
| 3 | 26714 | 9 | Unknown |

Remarks:

Self-explanatory

P09 INJURY SEVERITY (OCCUPANTS)

Screen Heading: Occupant Characteristics

Screen Name: Injury Severity (810-E)

Long Name: What is the police reported injury severity for this occupant?

SAS Name: Person.lnj_Sev

Oracle Name: GES.Person.InjurySeverityID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------------------|
| 1 | 26746 | 0 | No Injury (O) |
| 2 | 26747 | 1 | Possible Injury (C) |
| 3 | 26748 | 2 | Nonincapacitating Evident Injury (B) |
| 4 | 26749 | 3 | Incapacitating Injury (A) |
| 5 | 26750 | 4 | Fatal Injury (K) |
| 6 | 26751 | 5 | Injured, Severity Unknown |
| 7 | 26752 | 6 | Died Prior To Crash |
| 8 | 26753 | 9 | Unknown |

Remarks:

Enter the police reported injury severity for this person (i.e., occupant, pedestrian or non-motorist). Most jurisdictions use the KABCO injury coding scheme.

K = Killed

A = Incapacitating Injury

B = Nonincapacitating Injury

C = Possible Injury

O = No Injury

If the police report contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries which are considered to be of an incapacitating nature are classified as "A", Nonincapacitating-evident injuries are classified as "B", and possible injuries are "C". Property damage only (i.e., no injury) is classified as "O".

Enter **Injured**, **Severity Unknown** if the police report indicates a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter **Died Prior to Crash** only if the police explicitly states the person died prior to the crash. This code is also used if the police report indicates the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning. This code does not apply if the police report specifically states that the cause of death is a result of

crash-related injury or that on-set occurred after the crash. Further clarification: this code applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, but is silent about the time of on-set and if on-set is the result of injuries sustained in the crash.

As a general rule, if the PAR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter **No Injury (O)**. If the PAR is "blank" and the person was not present during the police investigation, enter **Unknown**. The following states use the KABCO injury coding scheme: Illinois (incl. Chicago), Michigan, New Mexico, North Carolina, Texas (incl. Dallas), Wisconsin, and the city of Los Angeles. Not all states use the KABCO scheme. Listed below, by state, are alternative schemes; a mapping to the GES scheme is provided.

| State | PAR Co | de/Definition | NASS |
|------------|--------|--|----------------|
| | | ***** | Scheme/ Code |
| Alabama | K | = Killed | K - 4 |
| | | V: '11 | A 2 |
| | A B | Visible or carried from sceneBruise/abrasion/swelling | A - 3 B - 2 |
| | C | = Not visible - has pain/faint | C - 1 |
| | Blank | = No documentation of driver or | Blank - 0 |
| | | occupant injury | |
| | | = No set unknown code | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Arizona | 5 | = Fatal Injury | K - 4 |
| | | | |
| | 4 | = Incapacitating injury | A - 3 |
| | 3 2 | = Non-incapacitating Evident | B - 2 C - 1 |
| | 1 | = Possible Injury= No injury | O - 0 |
| | 6 | = Unknown | U - 9 |
| | | | - |
| | | | |
| | | | |
| | | | |
| | | | |
| California | 1 | = Fatal | K - 4 |
| | • | 2 | |
| | 2 | = Severe injury | A - 3 |
| | 3 | = Other visible injury | B - 2 |
| | | • • | |

| 4 | = Complaint of pain | C - 1 |
|-------|------------------------|-------|
| Blank | = Occupant present | O - 0 |
| Blank | = Occupant not present | - 9 |

| Colorado* | 5 | = Fatal | K - 4 |
|-----------|---|--------------------------------|-------|
| | 4 | = Evident - incapacitating | A - 3 |
| | 3 | = Evident - non-incapacitating | B - 2 |
| | 2 | = Possible injury | C - 1 |
| | 1 | = No injury | O - 0 |

*There is a box at the top of the PAR indicating number of persons injured. If this box is marked 0 and the injury code is left "blank", assume "No injury". If the box is marked 1 (or more) pertaining to the vehicle occupants in question and the injury code is "blank", assume "Injured, severity unknown". If "blanks" are present in both the persons injured box and the injury code box, assume "Unknown".

| Florida | 5 | = Fatal (within 90 days) injury | K - 4 |
|---------|---|---------------------------------|-------|
| | 4 | = Incapacitating | A - 3 |
| | 3 | = Non-Incapacitating | B - 2 |
| | 2 | = Possible | C - 1 |
| | 1 | = None | O - 0 |
| | | = No set unknown code | - 9 |
| | 6 | = Non-traffic fatality | - 9 |

Indiana

| Nature of Most Severe Injury | Location of Most Severe Injury | Victim's Inj | jury Status |
|---|-----------------------------------|--|-------------|
| 1-11 Any Entry | 1-12 Any Entry | 6 Dead | K-4 |
| 1-11 Any Entry | 1-12 Any Entry | 2 Semiconscious 3 Incoherent 4 Unconscious | A-3 |
| 1 Severed 2 Internal 4 Severe Burn 7 Severe Bleed (Arterial) 8 Fracture/Dislocation | 1-12 Any Entry | 1 Conscious 5 Shock 7 Refused Med | A-3 |
| 3 Minor Burn 6 Minor Bleed 10 Complaint 11 None Visible | 1-2, 4-12 Eye | 1 Conscious 5 Shock 7 Refused Med | A-3 |
| 3 Minor Burn 6 Minor Bleed | 1-2, 4-12 Any EXCEPT eye) | 1 Conscious 5 Shock 7 Refused Med | B-2 |
| 5 Abrasion 9 Contusion/Bruise | 1-12 Any Entry | 1 Conscious 5 Shock 7 Refused Med | B-2 |
| 10 Compliant of Pain 11 None Visible | 1-2, 4-12 (Any EXCEPT eye) | 1 Conscious 5 Shock 7 Refused Med | C-1 |
| 11 None Visible | Blank or Slashed | 1 Conscious | 0-0 |
| Blank or Slashed | Blank or Slashed | Blank or Slashed | 0-0 |
| Unknown | Unknown | Unknown | U-9 |

| State | PAR Co | ode/Definition | NASS Scheme/ Code |
|----------|---|--|--|
| lowa | | | |
| | 1 2 3 4 0 Blank | = Fatal Injury = Major (incapacitating) = Minor (bruises and abrasions) = Possible (complaint of pain) = Unknown = No documentation of driver or occupants on back of PAR | K - 4 A - 3 B - 2 C - 1 U - 9 O - 0 |
| Kentucky | 1 2 3 4 5 | = Fatal = Incapacitating = Non-Incapacitating = Possible Injury = None Detected | K - 4 A - 3 B - 2 C - 1 O - 0 |
| Maryland | 05 04 03 02 01 01 Blank | = Fatal = Disabled (Incapacitated) = Injured - not Incapacitated = Possible injury = Not Injured (& present) = Not Known (if left scene) = No documentation of driver or | K - 4 A - 3 B - 2 C - 1 O - 0 - 9 |
| | | | |

Massachusetts

| 1 | = Killed | K - 4 |
|-------|---------------------------------------|-------|
| 2 | = Serious Visible Injury | A - 3 |
| 3 | = Minor Visible Injury | B - 2 |
| 4 | = No visible injury but complaints of | C - 1 |
| | pain | |
| Blank | = No documentation of driver or | O - 0 |
| | occupants on front of PAR | |
| | = No set unknown code | - 9 |

Missouri

| 1 | = Fatal | K - 4 |
|---|-------------------------|--------|
| 2 | = Disabling | A - 3 |
| 3 | = Evident-Not Disabling | B - 2 |
| 4 | = Probable-Not Apparent | C - 1 |
| 5 | = None Apparent | O - 0 |
| 6 | – Unknown | 11 - 9 |

Nebraska

| 1 | = Killed | K - 4 |
|-------|---|-------|
| 2 | = Disabling - cannot leave scene without assistance | A - 3 |
| 3 | = Visible but not disabling | B - 2 |
| 4 | = Possible but not visible | C - 1 |
| Blank | = Occupant present | O - 0 |
| Blank | = Occupant not present | - 9 |

New Jersey

| Location of Injury | Type of Injury | Victim's (| Condition |
|--------------------------------|--|-----------------------------------|------------|
| Any Entry | Any Entry | Killed | K-4 |
| Any Entry | Any Entry | Incapacitated | A-3 |
| Any Entry | amputation, concussion, internal, fracture/dislocation | Moderate injury complaint of pain | A-3 |
| Eye | burn, bleeding, complaint of pain | Moderate injury complaint of pain | A-3 |
| Any Entry | bleeding, contusion bruise, abrasion | Moderate Injury | B-2 |
| Any Entry (EXCEPT Eye) - | complaint of pain | complaint of pain | C-1 0-0 |
| U | U | U | U |

New York

| Location of Injury | Type of Injury | Victim's (| Condition |
|--------------------|--|--|------------|
| Any Entry | Any Entry | Apparent Death | K-4 |
| Any Entry | Any Entry | Unconscious, Semi- Conscious, Incoherent | A-3 |
| Any Entry | amputation, concussion, internal, severe burn, moderate burn, fracture/dislocation | Shock, Normal | A-3 |
| Eye | minor bleeding, minor burn, complaint of pain | Shock, Normal | A-3 |
| All but eye | minor bleeding minor burn | Shock, Normal | B-2 |
| Any Entry | contusions-bruise abrasion | Shock, Normal | B-2 |
| All but eye | complaint of pain | Shock, Normal | C-1 0-0 |
| Χ | Х | X | X |

Consistency Checks:

| | IF | THEN |
|-----------------|---|---------------------------------------|
| PP045A | PERSON TYPE (P03) equal or 9 and INJURY SEVERIT equals 0 | · · · · · · · · · · · · · · · · · · · |
| <u>Warnings</u> | | |
| | IF | THEN |
| PP011 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P equals 1 | , |

PP015 UNLIKELY: INJURY SEVERITY (P09) is equal to 6.

PP069 EJECTION (P06) equals 1or 2 INJURY SEVERITY (P09) should

not equal 0.

Post Entry

| | IF | THEN |
|--------|---|--|
| AP008 | HARMFUL EVENT (A06) equals 06 | at least one PERSON TYPE (P03) equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5. |
| PV188A | no BODY TYPE (V05) equals 60- 79 and INJURY SEVERITY (P09) equals 4 for at least one occupant of a vehicle where BODY TYPE (V05) equals 1-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 1. |
| PV188B | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60- 79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |

| PV188K | no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 5. |
|--------|---|---|
| PV188R | at least one BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L, category 1 stratum M or category 1 stratum N and there is at least one vehicle where MANNER OF LEAVING SCENE (V19) equals 2 or one person where INJURY SEVERITY (P09) equals 1-5 | STRATUM (A23) should equal 2. |
| PV188S | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L, category 1 stratum M, category 1 stratum N or category 2 and there is at least one person where INJURY SEVERITY (P09) equals 2-4 | STRATUM (A23) should equal 3. |
| VP013 | HARMFUL EVENT (A06) equals 06 | at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5. |

P10 TAKEN TO HOSPITAL OR TREATMENT FACILITY (OCCUPANTS)

Screen Heading: Occupant Characteristics

Screen Name: Transported (820-E)

Long Name: Is this person transported to a hospital or another treatment facility?

SAS Name: Person. Hospital

Oracle Name: GES.Person.Treatment

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 3 | 9 | Unknown |

Remarks:

This variable addresses transportation directly from the scene to a treatment facility. The means of transportation is not a consideration.

Enter **No** when the person is not transported directly from the scene to a hospital. Use this element when the person is pronounced dead-at-the-scene and is transported to a funeral home. Neither Injury severity nor treatment at the scene are a consideration.

Enter **Yes** when the PAR indicates that the person is transported directly from the scene to a hospital or treatment facility (hospital, clinic, doctor's office, etc.). The person need not have been injured. The means of transportation is not a consideration. If the person died on route to a hospital or medical facility or was pronounced dead-on-arrival at a hospital or medical facility, enter **Yes**.

Enter **Unknown** if it cannot be determined if the person is transported directly from the scene to a medical facility. Use this attribute if the police report indicates the person will "seek own medical treatment" and it cannot be determined if the person goes directly to a medical facility.

Consistency Checks:

Errors

| | IF | THEN |
|------------|---|---|
| VP234 | HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0. |
| Post Entry | | |

Post Entry

| | IF | THEN |
|--------|--|---|
| PP011 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 | INJURY SEVERITY (P09) should not be blank, 0 or 9 |
| PV188B | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |

PV188K

no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2

STRATUM (A23) should equal 5.

D08 DRIVER'S ZIP CODE

Screen Heading: Driver Data

Screen Name: Zip Code (730-E)

Long Name: What is the driver's zip code?

SAS Name: Vehicle.DZipCode

Oracle Name: GES.Driver.Zipcode

Element Values:

| Screen xxxxx | Oracle SAS xxxxx xxxxx | Code actual 5-digit zip code |
|-----------------|------------------------|-----------------------------------|
| 00000 | 00000 00000 | Not resident of US or Territories |
| 99998 | 99998 99998 | No driver present |
| * | 99999 99999 | Unknown |

Range¹ (first, second, and third characters):

000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-398, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850, 852-853, 855-857, 859-860, 863-865, 870-875, 877-884, 889-891, 893-895, 897-898, 900-928, 930-961, 963, 966-986, 988-999

1. Range is a compilation of Section 6 of the 1997 National Five Digit Zip Code & Post Office Directory with updates

Remarks:

For the purposes of this variable, a driver is considered to reside at the address listed on the police crash report. This address was most likely taken from the driver's license given to the police officer and/or from the licensing state's drivers license file.

If the driver's address is present and the ZIP code is missing or not available, then determine the correct ZIP code by using the two volume National Five Digit Zip Code & Post Office Directory.

Code **Not resident of US or Territories** is used when the address found on the PAR indicates that the driver resides at an address which has not been assigned a ZIP code by the US Post Office.

No driver present is used when there is no driver in this vehicle.

Code **Unknown** is used whenever the ZIP cannot be determined. For example, use this code when no information is provided on the PAR about the driver (e.g., hit and run). In addition, use this code if the driver, licensed or not, has no permanent address. For example, the driver could be living out of his/her vehicle (camper, motor home, etc.) or the driver could be "homeless."

If a ZIP CODE is listed on the PAR but it is not a valid number use this code.

Consistency Checks:

| | IF | THEN | |
|--------|---|---|--|
| VV216 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER'S ZIP CODE (D08) must equal 99998. | |
| VV216A | DRIVER'S ZIP CODE (D08) must be values section, above. | e in the range specified in the element | |
| VV216B | DRIVER PRESENCE (D01) equals 0 | DRIVER'S ZIP CODE (D08) must equal 99998. | |
| VV216C | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER'S ZIP CODE (D08) must equal 99998. | |
| RANGE | DRIVER'S ZIP CODE (D08)equals 99998 | DRIVER PRESENCE (D01) must equal 0 | |
| RANGE | The first character of DRIVER'S ZIP CODE (D08) must not be blank. | | |
| RANGE | DRIVER'S ZIP CODE (D08) must not equal null based on a right outer join of the ges.vehicle and ges.driver tables. | | |
| RANGE | DRIVER'S ZIP CODE (D08) must be 5 characters in length. | | |

D09 SPEED RELATED

Screen Heading: Driver Data

Screen Name: Speed Related (725-E)

Long Name: Is the driver's speed a factor in the crash?

SAS Name: Vehicle.SpeedRel

Oracle Name: GES.Driver.SpeedRelated

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 3 | 9 | Unknown |
| 4 | 8 | 8 | No driver present |

Remarks:

This variable captures when speed is a contributing factor.

Enter **No** when there is no indication that this driver's speed was a factor.

Enter **Yes** when excessive speed (this includes too fast for conditions) by this driver is noted as a contributing factor or a speeding violation has been issued to this driver. Note: Do not use this value if the violation or contributing factor is "too slow" or an equivalent.

Enter **Unknown** if the driver is a hit-and-run driver and no information is available about speed as a contributing factor.

No driver present is used when there is no driver in this vehicle.

Consistency Checks:

<u>Errors</u>

| | IF | THEN |
|-------|---|-----------------------------------|
| VV250 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 | SPEED RELATED (D09) must equal 8. |
| VV253 | VIOLATIONS CHARGED (D02) equals 03 | SPEED RELATED (D09) must equal 1. |

| VV255 | TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0 | SPEED RELATED (D09) must equal 0. |
|-----------------|---|-------------------------------------|
| RANGE | SPEED RELATED (D09) equals 8 | DRIVER PRESENCE (D01) must equal 0. |
| RANGE | DRIVER PRESENCE (D01) equals 0. | SPEED RELATED (D09) must equal 8. |
| <u>Warnings</u> | | |
| | IF | THEN |
| VV251 | CRITICAL EVENT (V26) equals 6 | SPEED RELATED (D09) should equal 1. |

D10 DRIVER LICENSE STATE

Screen Heading: Driver Data

Screen Name: Driver License State (822-E)

Long Name: What is the driver license State?

SAS Name: Vehicle.DLState

Oracle Name: GES.Driver.LicState

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------------------|
| XX | XX | n/a | Use standard two-letter abbreviation |
| 94 | 94 | n/a | Military |
| 95 | 95 | n/a | Canada |
| 96 | 96 | n/a | Mexico |
| 97 | 97 | n/a | Other foreign country |
| 98 | 98 | n/a | No driver present |
| * | 99 | n/a | Unknown |

Remarks:

If the driver is not licensed or no license is required, code the residence State.

AL-ALABAMA MT-MONTANA AK-ALASKA NE-NEBRASKA AZ-ARIZONA NV-NEVADA

AR-ARKANSAS NH-NEW HAMPSHIRE
CA-CALIFORNIA NJ-NEW JERSEY
CO-COLORADO NM-NEW MEXICO
CT-CONNECTICUT NY-NEW YORK

DE-DELAWARE NC-NORTH CAROLINA DC-DISTRICT OF COLUMBIA ND-NORTH DAKOTA

FL-FLORIDA OH-OHIO
GA-GEORGIA OK-OKLAHOMA
GU-GUAM OR-OREGON

HI-HAWAII PA-PENNSYLVANIA
ID-IDAHO PR-PUERTO RICO
IL-ILLINOIS RI-RHODE ISLAND
IN-INDIANA SC-SOUTH CAROLINA
IA-IOWA SD-SOUTH DAKOTA
KS-KANSAS TN-TENNESSEE

KY-KENTUCKY TX-TEXAS
LA-LOUISIANA UT-UTAH
ME-MAINE VT-VERMONT

MD-MARYLAND VI-VIRGIN ISLANDS

Vehicles

MA-MASSACHUSETTS MI-MICHIGAN MN-MINNESOTA MS-MISSISSIPPI MO-MISSOURI VA-VIRGINIA WA-WASHINGTON WV-WEST VIRGINIA WI-WISCONSIN WY-WYOMING

Consistency Checks:

Errors

IF THEN

RANGE DRIVER LICENSE STATE (D10) must not equal null based on a right

outer join of the ges.vehicle and ges.driver tables.

RANGE DRIVER LICENSE STATE (D10) must equal AL-WY, 94-99.

D11 DRIVER LICENSE NUMBER

Screen Heading: Driver Data

Screen Name: Driver License Number (825-E)

Long Name: What is the driver license number (DLN)?

SAS Name: Vehicle.DLNumber

Oracle Name: GES.Driver.LicNumber

Element Values:

Screen Oracle SAS

0 Twenty 0's n/a No License

DLN xxxxxxxxx... n/a Driver License Number (DLN)

98 9 + Nineteen 8's n/a No driver present

* Twenty 9's n/a Unknown

Remarks:

Enter the driver license number.

Consistency Checks:

Errors

IF THEN

RANGE DRIVER LICENSE NUMBER (D11) must not equal null based on a right

outer join of the ges.vehicle and ges.driver tables.

P11 POLICE REPORTED ALCOHOL INVOLVEMENT (DRIVERS)

Screen Heading: Driver Data

Screen Name: Alcohol (830-E)

Long Name: Did the police report alcohol presence or involvement for this driver?

SAS Name: Person.Per Alch

Oracle Name: GES.Person.Police_AlcoholID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------------|
| 1 | 26720 | 0 | Not Applicable |
| 2 | 19431 | 1 | Alcohol Not Involved |
| 3 | 26721 | 2 | Alcohol Involved |
| 4 | n/a | n/a | Not Reported |
| 5 | 26724 | 9 | Unknown (Police Reported) |
| 6 | 26725 | 6 | Not on PAR |
| 7 | 26726 | 7 | Not Coded |

Remarks:

The phrase "alcohol involved" means that alcohol is present in the person (drivers of in-transport motor vehicles and non-motorists only). Involvement is not an indication that alcohol was in any way a cause of the crash, even though it may have been. If the PAR indicates that opened or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all occupants of in-transport motor vehicles who are not drivers.

Alcohol Not Involved applies if the investigating officer's assessment is that alcohol is not present in the driver.

Alcohol Involved is coded if the police indicate alcohol presence in the driver via: (1) a specific data element on the police report form, (2) the police charge the driver with DUIL, (3) the police mention in the narrative section of the report that the person had been drinking (or alcohol was present or involved) or (4) the police report has a positive BAC test result (BAC >.00).

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is present. If the police report indicates that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Unknown (Police Reported)** if alcohol involvement is specifically indicated on the PAR as unknown. In general, police reports have blocks to check either positive or negative alcohol involvement. However, if a police report has provision for the investigating officer to respond "unknown involvement", then enter this element. In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

Enter **Not on PAR** If no block exists on the PAR for reporting alcohol presence and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of alcohol but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| PP047 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0. |
| RANGE | PERSON TYPE (P03) equals 9 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| RANGE | POLICE REPORTED ALCOHOL IN 2, 6, 7 or 9 and must not equal null. | VOLVEMENT (P11) must equal 0, 1, |

Post Entry

| | IF | THEN |
|-------|--|---|
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |

P11A ALCOHOL TEST GIVEN (DRIVERS)

Screen Heading: Driver Data

Screen Name: Alcohol Test Given (832-E)

Long Name: Did the police report indicate an alcohol test was given to this driver?

SAS Name: Person.AlchTest

Oracle Name: GES.Person.AlcTestGiven

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 6 | 6 | Not on PAR |
| 4 | 7 | 7 | Not Coded |
| 5 | 8 | 8 | Not Applicable |
| 6 | 3 | 9 | Unknown |

Remarks:

Enter **No** If the police report indicates an alcohol test was not given to the driver.

Enter Yes If the police report indicates an alcohol test was given to the driver.

Enter **Not on PAR** If no block exists on the PAR for reporting alcohol test given and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for reporting alcohol test given, but the investigating officer fails to make either a positive or negative assessment and no other information is available.

Not Applicable is used for all occupants of in-transport motor vehicles who are not drivers.

Enter **Unknown** if alcohol test given is specifically indicated on the PAR as unknown.

Consistency Checks:

| | IF | THEN |
|-------|------------------------------------|---|
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | ALCOHOL TEST GIVEN (P11A) must not equal 8. |
| RANGE | PERSON TYPE (P03) equals 2, 3 or 9 | ALCOHOL TEST GIVEN (P11A) must equal 8. |

P17 POLICE REPORTED DRUG INVOLVEMENT (DRIVERS)

Screen Heading: Driver Data

Screen Name: Drugs (835-E)

Long Name: Did the police report drug presence or involvement for this driver?

SAS Name: Person.Per_Drug

Oracle Name: GES.Person.Police_DrugID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------------|
| 1 | 19432 | 0 | Not Applicable |
| 2 | 26715 | 1 | Drugs Not Involved |
| 3 | 26716 | 2 | Drugs Involved |
| 4 | n/a | n/a | Not Reported |
| 5 | 26719 | 9 | Unknown (Police Reported) |
| 6 | 26720 | 6 | Not on PAR |
| 7 | 26721 | 7 | Not Coded |

Remarks:

The phrase "other drug involvement" includes prescription and "over-the-counter" medications as well as "illicit" substances (e.g., in most cases, marijuana, cocaine, heroin, etc. where usage has not been prescribed by a doctor). Also, "other drug involvement" means that an other drug is present in the person (drivers of in-transport motor vehicles and non-motorists only). It is not an indication that the drug usage was in any way a cause of the crash, even though it may have been. If the PAR indicates that other drugs were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all occupants of motor vehicles in-transport who are not drivers.

Drugs Not Involved applies if the investigating officer's assessment is that no other drugs were present in the person.

Drugs Involved is coded if the police indicate that other drugs are present in the person via: (1) a specific data element on the police report form or (2) the police mention in the narrative section of the report that other drugs are present in the person.

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is used. If the police report indicates that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Unknown (Police Reported)** if other drug presence is specifically indicated on the PAR as unknown. A growing number of police reports have blocks to check either positive or negative other drug presence. However, if a police report has provision for the investigating officer to respond "unknown presence", then enter this element. In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

Enter **Not on PAR** If no block exists on the PAR for reporting other drugs and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of other drug presence but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|--|
| PP048 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0. |
| RANGE | PERSON TYPE (P03) equals 9 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |
| RANGE | POLICE REPORTED DRUG INVOL 7, 9 and must not equal null. | VEMENT (P17) must equal 0, 1, 2, 6, |

Post Entry

| | IF | THEN |
|-------|--|---|
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |

P17A DRUG TEST GIVEN (DRIVERS)

Screen Heading: Driver Data

Screen Name: Drug Test Given (837-E)

Long Name: Did the police report indicate a drug test was given to this driver?

SAS Name: Person.DrugTest

Oracle Name: GES.Person.DrugTestGiven

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 6 | 6 | Not on PAR |
| 4 | 7 | 7 | Not Coded |
| 5 | 8 | 8 | Not Applicable |
| 6 | 3 | 9 | Unknown |

Remarks:

Enter **No** If the police report indicates a drug test was not given to the driver.

Enter **Yes** If the police report indicates a drug test was given to the driver.

Enter **Not on PAR** If no block exists on the PAR for reporting drug test given and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for reporting drug test given, but the investigating officer fails to make either a positive or negative assessment and no other information is available.

Not Applicable is used for all occupants of in-transport motor vehicles who are not drivers.

Enter **Unknown** if drug test given is specifically indicated on the PAR as unknown.

Consistency Checks:

| | IF | THEN |
|-------|------------------------------------|--|
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | DRUG TEST GIVEN (P17A) must not equal 8. |
| RANGE | PERSON TYPE (P03) equals 2, 3 or 9 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 8. |

Vehicles Driver/Violations

D02 VIOLATIONS CHARGED

Screen Heading: Driver violations

Screen Name: Driver Violations (690-E)

Long Name: What driver violations are charged by the police?

SAS Name: D02-Vehicle.Violatn, M_D02-Violatn.MViolatn

Oracle Name: GES.DriverViolation.ViolationID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 26247 | 0 | None |
| 2 | 26250 | 1 | Alcohol |
| 3 | 26251 | 2 | Drugs |
| 4 | 26252 | 3 | Speeding |
| 5 | 26696 | 4 | Reckless Driving |
| 6 | 26697 | 5 | Driving with a Suspended or Revoked License |
| 7 | 26698 | 6 | Failure to Yield Right-of-Way |
| 8 | 26699 | 7 | Running a Traffic Signal or Stop Sign |
| 9 | 26700 | 50 | Hit & Run (And No Information) |
| 10 | 19428 | 96 | Not Reported |
| 11 | 26701 | 97 | Violation Charged - No Details |
| 12 | 26702 | 98 | Other Violation (Specify): |
| 13 | 26703 | 99 | Unknown if Charged |
| 14 | 26704 | 95 | No driver present |

Remarks:

Enter **None** when there are no charges, the applicable section is blank or crossed out on the PAR or charges are "pending."

Enter **Speeding** if the driver is cited for any violation which lists speed as a factor (i.e., "x" amount over the limit, too fast for conditions, etc.)

Enter **Reckless Driving** if the driver is charged with reckless driving or driving to endanger. It should be recognized that careless driving and reckless driving are not the same. If the PAR indicates "careless driving" and does not indicate driving to endanger, reckless driving should not be coded.

Enter **Failure To Yield** if this driver is charged with: "failure to yield" (in any of its multitudinous forms).

Enter **Hit and Run (No Information)** when the driver and/or vehicle left the scene and there is no indication on the PAR that any violations were charged.

Vehicles Driver/Violations

Enter **Not Reported** if there is a specific location on the police report for assessment of violations charged but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting violations charged and no other information is available.

Enter **Violation Charged - No Details** when a violation has been charged but there is a lack of information regarding the specific nature of the violation. For example, a violation number cannot be matched, a violation number is not legible or the PAR indicates that two violations were charged but there is no other information.

Enter **Other Violation** (Specify): if this driver is charged with: "following too closely or failure to keep proper distance" or any other violation designated by the State as a moving violation. In addition, use when the PAR indicates a violation was charged that can be identified but cannot be classified in screen element values "2" through "8" above.

Enter **Unknown If Charged** when the PAR specifically indicates unknown or is unclear concerning whether or not a violation was issued. Clarification: If the applicable section on the PAR indicates the charges are "pending", element **None** applies.

No driver present is used when there is no driver in this vehicle.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV188 | If DRIVER PRESENCE (D01) equals 0 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV197 | VIOLATIONS CHARGED (D02) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV203 | HIT-AND-RUN (V02) equals 1 | VIOLATIONS CHARGED (D02) must not equal 96 or 99. |
| VV207 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV207A | NUMBER OF OCCUPANTS (V10B) equals 00 | VIOLATIONS CHARGED (D02) must equal 95. |
| VV253 | VIOLATIONS CHARGED (D02) equals 03 | SPEED RELATED (D09) must equal 1. |
| RANGE | VIOLATIONS CHARGED (D02) mus 96, 97, 98, 99. | t equal 0, 1, 2, 3, 4, 5, 6, 7, 50, 95, |
| RANGE | DRIVER PRESENCE (D01) equals 0 | VIOLATIONS CHARGED (D02) must equal 95. |

Vehicles Driver/Violations

| RANGE | DRIVER PRESENCE (D01) equals 1 or 2 | VIOLATIONS CHARGED (D02) must not equal null. |
|-------------------|---|---|
| MULTIPLE RESPONSE | VIOLATIONS CHARGED (D02) equals 0 | no other violations must be coded for this driver |
| MULTIPLE RESPONSE | VIOLATIONS CHARGED (D02) equals 95 | no other violations must be coded for this driver |
| MULTIPLE RESPONSE | VIOLATIONS CHARGED (D02) equals 96 | no other violations must be coded for this driver |
| MULTIPLE RESPONSE | VIOLATIONS CHARGED (D02) equals 50 | no other violations must be coded for this driver |
| MULTIPLE RESPONSE | VIOLATIONS CHARGED (D02) equals 99 | no other violations must be coded for this driver |
| MULTIPLE RESPONSE | each VIOLATIONS CHARGED (D02 once per driver. | 2) element value must be coded only |

<u>Warnings</u>

| | IF | THEN |
|--------|-----------------------------------|--|
| PP046B | VIOLATIONS CHARGED (D02) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98. |

Post Entry

| | IF | THEN |
|-------|--|---|
| AD043 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0760 | at least one VIOLATIONS CHARGED (D02) should not equal 00. |
| DA123 | VIOLATIONS CHARGED (D02) equals 07 | at least one TRAFFIC CONTROL DEVICE (A16) must equal 1-9, 21, 97, 98 or 99. |
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |

D04 DRIVER'S VISION OBSCURED BY

Screen Heading: Visual Obstructions

Screen Name: Visual Obstructions (700-E)

Long Name: What visual obstructions may contribute to the crash?

SAS Name: D04-Vehicle.Vis_Obsc, M_D04-Vision.MVisObsc

Oracle Name: GES.DriverVision.VisionID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 1 | 00 | No Obstruction |
| 2 | 2 | 01 | Rain, Snow, Smoke, Sand, Dust |
| 3 | 3 | 02 | Reflected Glare, Bright Sunlight, Headlights |
| 4 | 4 | 03 | Curve Or Hill |
| 5 | 5 | 04 | Building, Billboard or Other Design Features (Includes Signs, Embankment) |
| 6 | 6 | 05 | Trees, Crops, Vegetation |
| 7 | 7 | 06 | Moving Vehicle (Including Load) |
| 8 | 8 | 07 | Parked Vehicle |
| 9 | 9 | 80 | Splash Or Spray Of Passing Vehicle |
| 10 | 10 | 09 | Inadequate Defrost Or Defog System |
| 11 | 11 | 10 | Inadequate Lighting System |
| 12 | 12 | 11 | Obstruction Interior To The Vehicle |
| 13 | 13 | 12 | External Mirrors |
| 14 | 14 | 13 | Head Restraints |
| 15 | 15 | 14 | Broken Or Improperly Cleaned Windshield |
| 16 | 16 | 15 | Fog |
| 17 | 26190 | 50 | Hit-And-Run (And No Information) |
| 18 | n/a | n/a | Not Reported |
| 19 | 26460 | 97 | Vision Obscured - No Details |
| 20 | 26669 | 98 | Other Obstruction |
| 21 | 26670 | 99 | Unknown Whether Vision Was Obscured |
| 22 | 26671 | 95 | No driver present |
| 23 | 26672 | 93 | Not on PAR |
| 24 | 26673 | 94 | Not Coded |

Remarks:

This variable attempts to identify visual circumstances that may have contributed to the cause of the crash. These circumstances ("visual obstructions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

Enter **No Obstruction** when the PAR indicates that there were no visual obstructions for this driver.

Screen element values "2" through "16" are selected if indicated on the PAR.

Enter Moving Vehicle (Including Load) if the vehicle was in motion (on a trafficway).

Enter **Parked Vehicle** if the vehicle was not in motion (i.e., in-transport or not in-transport).

Enter **Inadequate Defrost or Defog System** when the presence of frost or fog on the windshield was due to an inadequate system. The PAR must state specifically that the system was not operating properly. The presence of frost or fog alone on the windshield should be coded **Broken or Improperly Cleaned Windshield**.

Enter **Inadequate Lighting System** when the PAR indicates this driver's vision was impaired because the exterior lighting system (including head-lights, fog-lights, etc.) of the driver's vehicle was either turned off or not operating properly. This response should not be used to describe inadequate lighting systems of other vehicles (e.g., oncoming motor vehicles).

Enter **Fog** when the ongoing weather condition was described as "fog". Do not use this code when only the vehicle windshield is described as "fogged". The choice of code **Inadequate Defrost or Defog System** or **Broken or Improperly Cleaned Windshield** will then depend upon whether the defrost/defog system is noted as not functioning.

Enter **Hit and Run (And No Information)** if Driver Presence (D01) is coded [Hit & Run (Vehicle and/or Driver Left Scene)] and either 1) the PAR specifically indicates unknown in a section that concerns driver vision obstructions, 2) no block exists on the PAR for reporting driver vision obstructions and no other information is available or 3) there is a specific location on the police report for assessment of vision obstructions but the investigating officer fails to make either a positive or negative assessment. However, if the PAR reports a vision impediment (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering **No Obstruction** if so indicated on the PAR.

Enter **Vision Obscured - No Details** when the PAR indicates that "some" vision impediment exists but does not clearly indicate the nature of the impediment.

Enter **Other Obstruction** when the PAR indicates a vision impediment that cannot be attributed to one of the other elements above (screen element values "02" through "16").

Enter **Unknown Whether Vision Was Obscured** when the PAR indicates that the driver's field of view (visual field) at the time of the crash is unknown <u>and</u> the driver did not leave the scene.

No driver present is used when there is no driver in this vehicle.

Enter **Not on PAR** if no block exists on the PAR for reporting driver vision obstructions and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of driver vision obstructions but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

| | IF | THEN |
|-------------------|--|--|
| AD150 | ATMOSPHERIC CONDITION (A20) equals 1 | DRIVER'S VISION OBSCURED BY (D04) must not equal 15. |
| VV186 | DRIVER PRESENCE (D01) equals 0 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| VV186A | DRIVER'S VISION OBSCURED BY (D04) equals 95. | DRIVER PRESENCE (D01) must equal 0 |
| VV199 | DRIVER'S VISION OBSCURED BY (D04) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV204 | HIT AND RUN (V02) equals 1 | DRIVER'S VISION OBSCURED BY (D04) must not equal 93, 94 or 99. |
| VV208 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| VV208A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER'S VISION OBSCURED BY (D04) must equal 95. |
| RANGE | DRIVER'S VISION OBSCURED BY 05, 06, 07, 08, 09, 10, 11, 12, 13, 14 null. | |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 00 | no other visual obstruction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 50 | no other visual obstruction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 95 | no other visual obstruction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 93 | no other visual obstruction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 94 | no other visual obstruction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER'S VISION OBSCURED BY (D04) equals 99 | no other visual obstruction must be coded for this driver |

MULTIPLE RESPONSE

each DRIVER'S VISION OBSCURED BY (D04) element value must not

be coded more than once per driver.

Warnings

| | IF | THEN |
|-------|--|--|
| AD091 | ROADWAY SURFACE CONDITION (A15) equals 1 | DRIVER'S VISION OBSCURED BY (D04) should not equal 08. |
| DA124 | DRIVER'S VISION OBSCURED BY (D04) equals 01 | ATMOSPHERIC CONDITION (A20) should not equal 1. |
| DA159 | DRIVER'S VISION OBSCURED BY (D04) equals 15 | ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7 or 9. |
| | | |

Post Entry

| | IF | THEN |
|-------|---|---|
| AD034 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0007 | at least one DRIVER'S VISION OBSCURED BY (D04) must equal 07 or 11. |
| AD088 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0821, 0822 or 0829 | at least one DRIVER'S VISION OBSCURED BY (D04) must not equal 00. |
| AD154 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006 | at least one DRIVER'S VISION OBSCURED BY (D04) must equal 00. |

D06 DRIVER MANEUVERED TO AVOID

Screen Heading: What the Driver Maneuvered to Avoid

Screen Name: What the Driver Maneuvered to Avoid (710-E)

Long Name: Encode the attribute(s) which indicate what the driver attempted to

avoid.

SAS Name: D06-Vehicle.Drman_Av, M_D06-Maneuver.MDrmanAv

Oracle Name: GES.DriverManveuver.ManeuverID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26240 | 00 | Driver Did Not Maneuver To Avoid |
| 2 | 26241 | 01 | Object In Road |
| 3 | 26242 | 02 | Poor Road Conditions (Puddle, Ice, Pothole, Etc.) |
| 4 | 26405 | 03 | Animal In Road |
| 5 | 26685 | 04 | Vehicle In Road |
| 6 | 26686 | 05 | Pedestrian, Pedalcyclist or Other Non-Motorist In Road |
| 7 | 26687 | 50 | Hit & Run (And No Information) |
| 8 | n/a | n/a | Not Reported |
| 9 | 26688 | 97 | Avoidance Maneuver - No Details |
| 10 | 26689 | 99 | Unknown If Driver Maneuvered To Avoid |
| 11 | 26690 | 95 | No driver present |
| 12 | 26691 | 93 | Not on PAR |
| 13 | 26692 | 94 | Not Coded |
| 14 | 26693 | 92 | Phantom Vehicle |

Remarks:

This variable identifies the thing(s) the driver attempted to avoid. The maneuver may have subsequently contributed to the cause of the crash. Code the thing(s) the driver tried to avoid whether the maneuver was successful or not (i.e., whether or not the driver was able to avoid the object, poor road condition, animal, vehicle or non-motorist).

If the person or object is off the road when the maneuver takes place, then this action should not be coded here (a driver who leaves the road and swerves to avoid a pedestrian on the sidewalk would be coded as **Driver Did Not Maneuver To Avoid**).

Do not consider driver or witness statements (except an avoidance maneuver associated with a phantom vehicle) unless verified by the investigating police officer.

Enter **Driver Did Not Maneuver To Avoid** when the preponderance of the information on the PAR indicates that there were no avoidance type maneuvers made by the driver prior to the First Harmful Event. Use this code if (all) the thing(s) the driver tried to avoid are off the road.

Screen Element values "02" through "06" and "14" are selected if indicated on the PAR.

Enter **Poor Road Conditions (Puddle, Ice, Pothole, etc.)** when the driver maneuvered to avoid the location of a road condition. Treat the condition as if it were an object. Do not use this code if the driver lost control while traveling on/over the road condition but made no maneuver to avoid it.

Enter **Hit-And-Run** (**No Information**) if the PAR specifically indicates unknown in this driver's vehicle or environmental related section and the driver is coded [Hit & Run (Vehicle and/or Driver Left Scene)] for variable Driver Presence (D01). However, if the PAR reports a maneuver to avoid (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering **Driver Did Not Maneuver To Avoid** if the preponderance of the evidence on the PAR so indicates.

Enter **Avoidance Maneuver - No Details** when the PAR indicates that some action was taken by the driver to avoid something or someone in the road but does not clearly indicate what this person or thing was.

Enter **Unknown If Driver Maneuvered To Avoid** when the PAR indicates it is unknown whether or not a nonvisual environmentally related problem existed at the time of the crash <u>and</u> the driver did not leave the scene [i.e., Driver Presence (D01) encoded other than (Driver Left Scene)].

No Driver Present is used when there is no driver in this vehicle.

Enter **Not on PAR** if no block exists on the PAR for reporting what the driver maneuvered to avoid and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of what the driver maneuvered to avoid but the investigating officer fails to make either a positive or negative assessment.

Enter **Phantom Vehicle** when the driver alleges there is an avoidance maneuver associated with an involved vehicle which the reporting officer cannot substantiate.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV187 | DRIVER PRESENCE (D01) equals 0 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV187A | DRIVER MANEUVERED TO AVOID (D06) equals 95 | DRIVER PRESENCE (D01) must equal 0. |

| VV195 | ACCIDENT TYPE (V23) equals 34, 36, 38, 40, 54, 56, 58 or 60 | DRIVER MANEUVERED TO AVOID (D06) must not equal 00. |
|-------------------|---|---|
| VV200 | DRIVER MANEUVERED TO AVOID (D06) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV205 | HIT AND RUN (V02) equals 1 | DRIVER MANEUVERED TO AVOID (D06) must not equal 93, 94 or 99. |
| VV209 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV209A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER MANEUVERED TO AVOID (D06) must equal 95. |
| VV213 | DRIVER MANEUVERED TO AVOID (D06) equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 17. |
| RANGE | DRIVER MANEUVERED TO AVOID 05, 50, 92, 93, 94, 95, 97, 99 or null. | (D06) must equal 00, 01, 02, 03, 04, |
| RANGE1 | PSU equals 29, 30, 31, 47, 48, 64, 72, 73, 74, 75, 76, 77, 78, 91, 92, 93, 94, 95 | DRIVER MANEUVERED TO AVOID (D06) must not equal 93. |
| RANGE2 | PSU equals 49, 50, 51, 62, 63, 71, 79, 80, 81, 82, 96, 97 | DRIVER MANEUVERED TO AVOID (D06) must not equal 94. |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 00 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 50 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 93 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 94 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 95 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER MANEUVERED TO AVOID (D06) equals 99 | no other D06 response must be coded for this driver |
| MULTIPLE RESPONSE | each DRIVER MANEUVERED TO A coded only once per driver. | VOID (D06) element value must be |

<u>Warnings</u>

| | IF | THEN |
|-------|---|---|
| VV211 | DRIVER MANEUVERED TO AVOID (D06) equals 03 | CRITICAL EVENT (V26) should equal 87-89. |
| VV212 | DRIVER MANEUVERED TO AVOID (D06) equals 05 | CRITICAL EVENT (V26) should equal 80-85. |
| VV214 | DRIVER MANEUVERED TO AVOID (D06) equals 04 | CRITICAL EVENT (V26) should equal 50-56, 59-68, 70-74 or 78. |
| VV215 | DRIVER MANEUVERED TO AVOID (D06) equals 01 | CRITICAL EVENT (V26) should equal 90-92. |
| VV218 | CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1 | DRIVER MANEUVERED TO AVOID (D06) should equal 00, 50 or 95. |

D07 DRIVER DISTRACTED BY

Screen Heading: Driver Distractions

Screen Name: Driver Distractions (720-E)

Long Name: Encode the driver distraction(s).

SAS Name: D07-Vehicle.Dr_Dstrd, M_D07-Distract.MDrDstrd

Oracle Name: GES.DriverDistraction.DistractionID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26268 | 0 | Not Distracted |
| 2 | 17133 | 1 | Looked But Did Not See |
| 3 | 26270 | 3 | By Other Occupant(s) |
| 4 | 26271 | 4 | By moving object in vehicle |
| 5 | 26398 | 5 | While talking or listening to cellular phone |
| 6 | 26690 | 6 | While dialing cellular phone |
| 7 | 26691 | 7 | While adjusting climate controls |
| 8 | 26692 | 8 | While adjusting radio, cassette, CD |
| 9 | 26693 | 9 | While using other device/controls integral to vehicle |
| 10 | 26694 | 10 | While using or reaching for device/object brought into vehicle |
| 11 | 16911 | 11 | Sleepy or fell asleep |
| 12 | 16912 | 12 | Distracted by outside person, object or event |
| 13 | 16913 | 13 | Eating or drinking |
| 14 | 16914 | 14 | Smoking related |
| 15 | n/a | n/a | Not Reported |
| 16 | 16910 | 97 | Inattentive or lost in thought |
| 17 | 16915 | 98 | Other distraction |
| 18 | 26695 | 99 | Unknown if distracted |
| 19 | 26696 | 95 | No driver present |
| 20 | 26697 | 93 | Not on PAR |
| 21 | 26698 | 94 | Not Coded |
| 22 | 26699 | 92 | Distraction/Inattention, Details Unknown |
| 23 | 26700 | 15 | Other Cellular Phone Related |
| 24 | 26701 | 50 | Hit & Run (And No Information) |

Remarks:

Record the attribute(s) which best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. If this driver's vehicle has two critical crash envelopes, record the attribute(s) which best describe the driver's attention prior to the first Critical Precrash Event (i.e., prior to realization of the impending danger which the driver successfully avoided). Intoxication is not considered a distraction.

Not distracted is used when the driver is known to have been completely attentive to driving prior to realization of impending danger.

Looked but did not see is used when the driver is paying attention to driving, but does not see the relevant vehicle, object, etc. This code should be used when a driver has an opportunity to take some action prior to impact, but the driver takes no action and no other distractions apply. This situation frequently occurs when an overtaking vehicle is in the driver's "blind spot" or at intersections when a crossing vehicle is not noticed. If the driver sees the vehicle, object, etc., but does not consider it a danger, and no other distractions apply then code **Not distracted**.

By other occupant(s) is used when the driver was distracted by another occupant in this driver's vehicle prior to realization of impending danger. Examples of other occupant distraction include conversing with or looking at another occupant.

By moving object in vehicle is used when the driver was distracted by a moving object in this driver's vehicle prior to realization of impending danger. Examples included a dropped object, a moving pet, insect or cargo.

While talking or listening to cellular phone is used when the driver is talking or listening on a cellular phone.

While dialing cellular phone is used when the driver is dialing or text messaging (texting) a cellular phone. This includes dialing or text messaging on any wireless e-mail device.

While adjusting climate controls is used when someone is distracted from the driving task while adjusting the air conditioner heater, etc.

While adjusting radio, cassette, CD is used when someone is distracted from the driving task while adjusting or using the radio, cassette, CD which are mounted in the vehicle.

While using other device/controls integral to vehicle is used when the driver is distracted while using a device in the vehicle including adjusting windows (power or manual) adjusting door locks (power or manual, adjusting side view mirrors (power or manual), adjusting rear view manual, adjusting seat (power or manual), adjusting steering wheel, and adjusting seat belt, etc. (OEM equipment).

While using or reaching for device/object brought into vehicle is used when the driver is distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razors, portable CD player, headphones, cigarette lighter, etc. The use of another device to light a cigarette other than the vehicle's cigarette lighter should be coded **smoking related**.

Sleepy or fell asleep is used when the driver was sleeping or dozing prior to realization of impending danger or just prior to impact if realization did not occur.

Distracted by outside person, object or event is used when the driver was distracted by an outside person, object or event prior to realization of impending danger. Examples include animals on the roadside or a previous crash. Do not use this code for a person, object or

event which the driver has recognized and for which the driver has taken some action (e.g. avoiding a pedestrian on the roadway)

Eating or drinking is used when the driver is eating or drinking or involved in an activity related to these actions (i.e. picking food from carton placed on passenger seat, reaching to throw out used food wrapper, etc.)

Smoking related is used when the driver is smoking or involved in an activity related to smoking, such as lighting his cigarette, putting his ashes in the ash tray, etc. The act of using the cigarette lighter of the vehicle, is coded **While using other device/object in vehicle**. Any other method of lighting the cigarette would be coded **Smoking related**.

Inattentive or lost in thought is used when the driver is thinking about items other than the driving task (daydreaming).

Other distraction is used when details regarding this driver's distraction are known but none of the specified codes are applicable (e.g., incapacitating illness).

Unknown if distracted is used when the PAR specifically indicates unknown and the narrative provides no information regarding driver distractions. Also use this response when hit and run drivers are involved, unless the PAR provides information about driver distraction/inattention.

No driver present is used when there is no driver in this vehicle.

Enter **Not on PAR** if no block exists on the PAR for reporting driver distraction/inattention and no other information is available.

Enter **Not coded** if there is a specific location on the police report for assessment of driver distraction/inattention but the investigating officer fails to make either a positive or negative assessment.

Distraction/inattention, details unknown is used when distraction and/or inattention are noted on the PAR, but the specifics are unknown.

Other Cellular Phone Related is used when the Police Report indicates the driver is distracted from the driving task due to cellular phone involvement, but none of the specified codes are applicable (e.g., reaching for cellular phone, etc.). This code is also applied when specific details regarding cellular phone distraction / usage are not provided.

Enter **Hit and Run (And No Information**) when the driver and/or vehicle left the scene and there is no information about driver attention.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|--|---|
| VV189 | DRIVER PRESENCE (D01) equals 0 | DRIVER DISTRACTED BY (D07) must equal 95. |
| VV189A | DRIVER PRESENCE (D01) equals 1 or 2 | DRIVER DISTRACTED BY (D07) must not equal 95 or null. |
| VV189B | DRIVER DISTRACTED BY (D07) equals 95 | DRIVER PRESENCE (D01) must equal 0. |
| VV196A | DRIVER DISTRACTED BY (D07) equals 3 | NUMBER OF OCCUPANTS (V10B) must be greater than 01. |
| VV210 | NUMBER OF OCCUPANTS CODED (V10) equals 00 | DRIVER DISTRACTED BY (D07) must equal 95. |
| VV210A | NUMBER OF OCCUPANTS (V10B) equals 00 | DRIVER DISTRACTED BY (D07) must equal 95. |
| VV290 | DRIVER DISTRACTED BY (D07) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV295 | HIT AND RUN (V02) equals 1 | DRIVER DISTRACTED BY (D07) must not equal 93, 94 or 99. |
| RANGE | DRIVER DISTRACTED BY (D07) m 11, 12, 13, 14, 92, 93, 94, 95, 97, 98 | • |
| RANGE | DRIVER DISTRACTED BY (D07) equals 95 | DRIVER PRESENCE (D01) must equal 0. |
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 00 | no other driver distraction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 1 | no other driver distraction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 50 | no other driver distraction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 93 | no other driver distraction must be coded for this driver |
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 94 | no other driver distraction must be coded for this driver |

| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 95 | no other driver distraction must be coded for this driver | |
|-------------------|---|---|--|
| MULTIPLE RESPONSE | DRIVER DISTRACTED BY (D07) equals 99 | no other driver distraction must be coded for this driver | |
| MULTIPLE RESPONSE | each DRIVER DISTRACTED BY (D07) element value must be coded only once per driver. | | |

P15 RESTRAINT SYSTEM USE (OCCUPANTS)

Screen Heading: Restraints Used

Screen Name: Restraints Used (845-E)

Long Name: What restraints are being used by this occupant immediately prior to the

crash?

SAS Name: Person.Rest Sys

Oracle Name: GES.Restraint.RestraintID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 10313 | 0 | None Used or N/A |
| 2 | 10319 | 5 | Motorcycle Helmet |
| 3 | 10328 | 7 | None Available |
| 4 | 10327 | 9 | Unknown If Used |
| 5 | 10316 | 1 | Lap/Shoulder Belt |
| 6 | 10317 | 2 | Lap Belt |
| 7 | 10318 | 3 | Shoulder Belt |
| 8 | 10323 | 6 | Child Safety Seat |
| 9 | 10324 | 8 | Restraint Used - Specifics Unknown or Other |

Remarks:

This variable encodes what was documented on the PAR regarding occupant use of available vehicle restraints (i.e., belts, child safety seat or helmet). There is no differentiation here regarding the type of restraint (i.e. manual or automatic).

Enter **None Used** when the PAR indicates that the occupant did not use a restraint. In order to code this value, the PAR first has to indicate that there was a restraint available and that the occupant of that seat position did not use the available restraint. **N/A** applies when the person type is non-motorist.

Enter **Lap/Shoulder Belt** when the PAR indicates that both a lap and a shoulder belt were used. Also, use this code if the PAR has a block which identifies Lap or Shoulder separately and "Lap/Shoulder" is checked.

Enter **Child Safety Seat** if a child restraint is used in conjunction with shoulder and/or lap belts.

Enter **None Available** when the PAR indicates that no restraint was available in the seat position of this occupant. Use this code for persons who are riding in the sleeper section of the cab of a truck and persons who are riding on the exterior of the vehicle--Seating Position (P04) coded [Sleeper Section of Cab (Truck)] or [Riding on Exterior of Vehicle].

Enter Restraint Used - Specifics Unknown or Other if the PAR indicates that some type of restraint was in use but the type of restraint is not clear.

Enter Unknown If Used if there is no area on the PAR for the officer to report restraint use or the information on the PAR is inadequate to determine restraint use.

Note: The presence of an air bag system does not mean that there are no active belts present. In fact, most if not all air bag equipped vehicles also have some belt restraint system installed in the seat positions protected by the air bags.

Persons such as children who are held by another person are not considered to be restrained, nor to have restraints available.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|---|---|
| PP034 | PERSON TYPE (P03) equals 1 | RESTRAINT SYSTEM USE (P15) must not equal 6. |
| PP070 | EJECTION (P06) equals 1 or 2 | RESTRAINT SYSTEM USE (P15) must not equal 5. |
| PP075 | SEATING POSITION (P04) equals 22, 23 or 31-53 | RESTRAINT SYSTEM USE (P15) must not equal 5. |
| PP084 | SEATING POSITION (P04) equals 50 or 53 | RESTRAINT SYSTEM USE (P15) must equal 7. |
| PV066 | RESTRAINT SYSTEM USE (P15) equals 1-3 or 6 | BODY TYPE (V05) must not equal 80-89 or 90. |
| RANGE | PERSON TYPE (P03) equals 1, 2 or 9 | RESTRAINT SYSTEM USE (P15) must equal 0, 1, 2, 3, 5, 6, 7, 8 or 9 and must not be null. |
| RANGE | PERSON TYPE (P03) equals 3, 4, 5, 6, 8 or 9 | RESTRAINT SYSTEM USE (P15) must equal null. |
| MULTIPLE RESPONSE | Only one element value must be code (P15) per occupant. | ed for RESTRAINT SYSTEM USE |

Warnings

| | IF | IHEN |
|-------|-------------------------------------|--|
| PP033 | RESTRAINT SYSTEM USE (P15) equals 1 | SEATING POSITION (P04) should not equal 12, 22, 32, 42, 50-53. |

| PP036 | RESTRAINT SYSTEM USE (P15) equals 6 | AGE (P07) should equal 00-10 or 999. |
|--------------|--|--|
| PP037 | EJECTION (P06) equals 1or 2 | RESTRAINT SYSTEM USE (P15) should equal 0, 7 or 9. |
| PP045 | PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) should equal 0. |
| PP049 | RESTRAINT SYSTEM USE (P15) equals 3 | RESTRAINT TYPE (P16) should not equal 2. |
| PV068 | RESTRAINT SYSTEM USE (P15) equals 5 | BODY TYPE (V05) should equal 80-90. |
| Deat Forture | | |

Post Entry

| | IF | THEN |
|-------|--|--|
| VP224 | BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2 | RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9. |

P18 PERSON'S PHYSICAL IMPAIRMENT (DRIVERS)

Screen Heading: Physical Impairments

Screen Name: Physical Impairments (860-E)

Long Name: Did the police identify any contributory physical impairments?

SAS Name: P18-Person.Impairmt, M_P18-Impair.MImpair

Oracle Name: GES.Impairment.ImpairID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26791 | 00 | None |
| • | | | |
| 2 | 26792 | 01 | III, Blackout |
| 3 | 26793 | 02 | Drowsy, Sleepy, Fell Asleep, Fatigued |
| 4 | 26794 | 03 | Requires Cane Or Crutches |
| 5 | 26795 | 04 | Paraplegic Or Restricted To Wheelchair |
| 6 | 26796 | 05 | Impaired Due To Previous Injury |
| 7 | 26797 | 06 | Deaf |
| 8 | 26798 | 07 | Blind |
| 9 | 26799 | 97 | Physical Impairment-No Details |
| 10 | 26800 | 98 | Other Physical Impairment |
| 11 | 26801 | 99 | Unknown If Physically Impaired |
| 12 | 26820 | 50 | Hit & Run (And No Information) |
| 13 | 26821 | 93 | Not on PAR |
| 14 | 26822 | 94 | Not Coded |

Remarks:

This question attempts to identify physical impairments of drivers which may have contributed to the cause of the crash. These impairments can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, non-motorist or witness statements unless verified by the investigating police officer.

Enter **None** when the PAR indicates that there were no physical impairments for this person. Also use this code if physical impairment is not reported on the PAR.

Enter **III**, **Blackout** when indicated on the PAR. Enter this element even if the source of the illness or loss of consciousness is alcohol or drug related.

Enter **Drowsy**, **Sleepy**, **Fell Asleep**, **Fatigued** when indicated on the PAR. Alcohol or other drugs may be the source of this impairment.

Enter Requires Cane Or Crutches when indicated on the PAR.

Enter **Paraplegic or Restricted to Wheelchair** if this person has to use a wheelchair or is paraplegic (may or may not have used a wheelchair).

Enter **Impaired Due To Previous Injury** if the PAR specifically indicates this condition (e.g., pedestrian is involved in this crash subsequent to his/her involvement in a previous crash in which the pedestrian was injured). This element should be extremely rare.

Enter **Deaf** when indicated on the PAR.

Enter **Blind** when indicated on the PAR.

Enter **Physical Impairment - No Details** when the PAR indicates that "some" physical impairment exists but does not clearly indicate the nature of the impairment.

Enter **Other Physical Impairment** when the PAR indicates a physical impairment that cannot be attributed to one of the other elements above (Screen element values "2" through "8"), e.g., the driver is charged with DUIL.

Enter **Unknown If Physically Impaired** when the PAR indicates that the person's physical condition at the time of the crash is unknown.

Enter **Hit and Run (And No Information**) when the driver and/or vehicle left the scene and there is no information about driver impairment.

Enter **Not on PAR** if no block exists on the PAR for reporting physical impairment information and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for physical impairment information, the investigating officer fails to make either a positive or negative assessment and no other information is available.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| PA083 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
| RANGE | PERSON TYPE (P03) equals 1 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 50, 93, 94, 97, 98 or 99 and must not equal null. |

| RANGE | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 93, 94, 97, 98 or 99 and must not equal null. |
|-------------------|---|---|
| RANGE | PERSON TYPE (P03) equals 2 or 9 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal null. |
| VV260 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 50 | HIT AND RUN (V02) must equal 1. |
| VV265 | HIT AND RUN (V02) equals 1 | PERSON'S PHYSICAL IMPAIRMENT (P18) must not equal 93, 94 or 99. |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 00 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 50 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 93 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 94 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 97 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 99 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | each PERSON'S PHYSICAL IMPAIR coded only once per driver. | RMENT (P18) element value must be |

<u>Warnings</u>

| | IF | IHEN |
|--------|---|--|
| PP085 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07 | PERSON TYPE (P03) should not equal 1. |
| PP046B | VIOLATIONS CHARGED (D02) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98. |

Post Entry

| | IF | THEN |
|-------|---|--|
| AP235 | First character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04. |

PV01 PARKED/WORKING VEHICLE NUMBER

Screen Heading: Parked/Working Vehicle Number

Screen Name: None (N)

Long Name: None

SAS Name: Parked.PVehno

Oracle Name: GES.Parked.VehicleID, GES.Parked.VehicleNumber

Element Values:

Screen Oracle SAS

1-30 1-30 Computer Assigned Number

Remarks:

Parked/Working vehicles within a crash are numbered sequentially by the computer beginning with 1; no numbers are skipped.

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

PV07 PARKED/WORKING VEHICLE IDENTIFICATION NUMBER

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle VIN (1260-E)

Long Name: What is the vehicle identification number of this parked/working vehicle?

SAS Name: Parked.PVIN

Oracle Name: GES.Parked.VIN

Element Values:

Oracle values:

Enter the entire VIN of the parked/working vehicle. Left justify.

000000000000000 No VIN 9999999999999 Unknown

SAS values:

The first 11 characters of the VIN. Left Justify.

0000000000 No VIN 999999999 Unknown

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Code the entire VIN; leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave the column any such character would ordinarily occupy "Blank." In the special case where the first 11 columns of the VIN are blank, but part or all of columns 12 through 17 contain information, code unknown instead of the partial information contained in columns 12 through 17 of the VIN.

Use * (**Unknown**) when the entire VIN is unknown or missing. Use this element if the PAR does not provide the VIN.

Enter "0000000000000000" (**No VIN**) if the vehicle is a type which has no VIN (e.g., go-cart).

If the parked/working vehicle is a motor home or school bus, enter the vehicle chassis VIN; the secondary manufacturer's number must not be encoded. If the parked/working vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script, "f", the "f" is not entered. Proceed to the next character, as in the example below.

VIN: f 3U62S100932 f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E.3076421 ENTER: SME3076421

Parked/working vehicles manufactured after September 1980 conform to Federal Motor Vehicle Safety Standard 115. This standard requires that each VIN have 17 characters, not contain the letters "I", "O" or "Q", and pass a mathematical test.

If the information from PC VINA or VINASSIST and the PAR are inconsistent, use the following guidelines.

Make and model on the PAR takes precedence over the make and model indicated by the VIN.

Model year - Use model year as indicated by VIN if the Vin Make and Model matches the make and model shown on the PAR.

Body type - Use body type indicated by the VIN if the VIN Make and Model matches the make and model shown on the PAR.

If the information about make and model on the PAR is inconsistent, model takes precedence over the make.

Parked/working vehicle trailer VINs are not coded. Code **Unknown** if the parked/working vehicle power unit VIN is not available.

Consistency Checks:

Errors

| | IF | THEN |
|---------|---|--|
| VV003AP | PARKED/WORKING MAKE (PV03) equals 24 and PARKED/WORKING MODEL (PV04) equals 2 and the 4 th and 5 th characters of the PARKED/WORKING VIN (PV07) equal ZN, ZP, ZR or ZY | PARKED/WORKING BODY TYPE (PV05) must equal 17. |
| VV300AP | PARKED/WORKING MODEL YEAR (PV06) is greater than 1980 and all 17 characters of the PARKED/WORKING VIN (PV07) are present | the PARKED/WORKING MODEL YEAR (PV06) must match the 10 th character of the PARKED/WORKING VIN (PV07). |
| VV300BP | PARKED/WORKING VIN (PV07) for 1981 and newer vehicles must not contain the characters I, O, or Q. | |
| VV300CP | An unknown PARKED/WORKING VIN (PV07) must be coded 99999999999999. There must be no unusual characters [., -, `, (, **, d* or =] which are part of the PARKED/WORKING VIN (PV07). Parked trailer VIN's are not allowed. | |
| VV300FP | PARKED/WORKING VIN (PV07) passes the check digit test | PARKED/WORKING BODY TYPE (PV05) must be consistent with the PARKED/WORKING VIN (PV07) body type. |
| VV300TP | Columns 1 through 11 of the PAI must not all be blank. | RKED/WORKING VIN (PV07) |

<u>Warnings</u>

| | IF | THEN |
|---------|--|---|
| VV300AP | PARKED/WORKING MODEL YEAR (PV06) is greater than 1980 | the PARKED/WORKING MODEL YEAR (PV06) should match the 10 th character of the PARKED/WORKING VIN (PV07). |
| VV300DP | PARKED/WORKING MODEL YEAR (PV06) is greater than 1980 and all 17 characters of the PARKED/WORKING VIN (PV07) are present | PARKED/WORKING VIN (PV07) should pass the check digit test. |

| VV300EP | PARKED/WORKING VIN (PV07) passes the check digit test | PARKED/WORKING MAKE (PV03),PARKED/WORKING Model (PV04), PARKED/WORKING BODY TYPE (PV05) and PARKED/WORKING Model Year (PV06) should be known. |
|---------|--|---|
| VV300RP | PARKED/WORKING MODEL YEAR (PV06) is greater than 1980 | PARKED/WORKING VIN (PV07) should contain 17 characters. |

PV03 PARKED/WORKING VEHICLE MAKE

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle Make (1220-E)

Long Name: What is the make of the parked/working vehicle?

SAS Name: Parked.PMake

Oracle Name: GES.Parked.Make

Element Values:

See element values section under V03, Vehicle Make.

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Note that for both PV03, Parked/Working Vehicle Make, and PV04, Parked/Working Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

Selection of the proper "other" or "unknown" code can only be made with consideration of the parked/working vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, PV03, Parked/Working Vehicle Make, is coded **OTHER MAKE** (med/heavy truck/bus or "other") and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, PV03,Parked/Working Vehicle Make, is coded **Unknown Manufacturer** and PV04, Parked/Working Vehicle Model, is coded **Unknown Bus Type**.

Consistency Checks:

Errors

| | IF | THEN |
|---------|---|---|
| VV003AP | PARKED/WORKING VEHICLE MAKE (PV03) equals 24 and PARKED/WORKING VEHICLE MODEL (PV04) equals 2 and the 4 th and 5 th characters of the PARKED/WORKING VEHICLE VIN (PV07) equal ZN, ZP, ZR or ZY | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 17. |
| RANGE | PARKED/WORKING VEHICLE MAKEVEHICLE MODEL (PV04) must be a specified in the Oracle nass.modello | one of the make/model combinations |

<u>Warnings</u>

| | IF | THEN |
|---------|---|---|
| VV300EP | PARKED/WORKING VEHICLE VIN (PV07) passes the check digit test | PARKED/WORKING VEHICLE MAKE (PV03), PARKED/WORKING VEHICLE Model (PV04), PARKED/WORKING VEHICLE BODY TYPE (PV05) and PARKED/WORKING VEHICLE MODEL YEAR (PV06) should be known. |

PV04 PARKED/WORKING VEHICLE MODEL

Screen Heading: Parked/working Vehicle Data

Screen Name: Parked/Working Vehicle Model (1230-E)

Long Name: What is the model of the parked/working vehicle?

SAS Name: Parked.PModel

Oracle Name: GES.Parked.Model

Element Values:

See element values section under V04, Vehicle Model.

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Note that for both PV03, Parked/Working Vehicle Make, and PV04, Parked/Working Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

Selection of the proper "other" or "unknown" code can only be made with consideration of the parked/working vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, PV03, Parked/Working Vehicle Make, is coded **OTHER MAKE** (med/heavy truck/bus or "other") and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, PV03, Parked/Working Vehicle Make, is coded **Unknown Manufacturer** and PV04, Parked/Working Vehicle Model, is coded **Unknown Bus Type**.

If a parked/working vehicle make or parked/working vehicle model is encountered which is not listed, headquarters is notified.

Consistency Checks:

Errors

| | IF | THEN |
|---------|---|---|
| VV003AP | PARKED/WORKING VEHICLE MAKE (PV03) equals 24 and PARKED/WORKING VEHICLE MODEL (PV04) equals 2 and the 4 th and 5 th characters of the PARKED/WORKING VEHICLE VIN (PV07) equal ZN, ZP, ZR or ZY | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 17. |
| VV601P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 1-13, 17 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 1-399. |
| VV603P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 14 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 401-420, 498 or 499. |
| VV604P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 15 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 421-430, 498 or 499. |
| VV605P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 16 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 431-440, 498 or 499. |
| VV606P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 19 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 498 or 499. |
| VV607P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 20 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 441-460, 498 or 499. |
| VV608P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 21 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 461-470, 498 or 499. |
| VV609P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 22-29 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 441-470, 498 or 499. |
| VV611P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 30 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 471-480, 498 or 499. |

| VV612P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 31 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 481-490, 498 or 499. |
|--------|---|---|
| VV613P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 32, 33 or 39 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 471-490, 498 or 499. |
| VV615P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 40-42 or 45 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 498. |
| VV616P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 48 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 499. |
| VV617P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 49 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 999. |
| VV618P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50 or 59 | PARKED/WORKING VEHICLE MODEL (PV04 must equal 902, 981-983, 988 or 989. |
| VV619P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 58 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 902, 950, 981-983, 988 or 989. |
| VV620P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 60, 64 or 66 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 801- 808, 881-890, 898 or 899. |
| VV621P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 65 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787. |
| VV622P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 78 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 801- 808, 881-890, 898 or 899. |
| VV623P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 79 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 899. |
| VV624P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-82 or 89 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 701- 706, 709 or 799. |
| VV625P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 88 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 798. |

| VV627P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 731- 734, 739 or 799. |
|---------|--|---|
| VV628PP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 91-93 or 97 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 998. |
| VV629P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 999. |
| RANGE | PARKED/WORKING VEHICLE MAKE (PV03) equals 29 or 69 | PARKED/WORKING VEHICLE MODEL, (PV04) must not equal 498, 898, 988 or 998. |
| RANGE | PARKED/WORKING VEHICLE MAKE (PV03) equals 98 | PARKED/WORKING VEHICLE MODEL (PV04) must not equal 398 or 498 |
| RANGE | PARKED/WORKING VEHICLE MOI | DEL (PV04) must not equal null. |

<u>Warnings</u>

| | IF | THEN |
|---------|---|--|
| VV300EP | PARKED/WORKING VEHICLE VIN (PV07) passes the check digit test | PARKED/WORKING VEHICLE MAKE (PV03), PARKED/WORKING VEHICLE Model (PV04), PARKED/WORKING VEHICLE BODY TYPE (PV05) and PARKED/WORKING VEHICLE Model Year (PV06) should be known. |

Notify NHTSA

| | IF | THEN |
|--------------|--|------|
| NOTIFY NHTSA | Please notify NHTSA of the specific model when "other" make/model is s | |

PV05 PARKED/WORKING VEHICLE BODY TYPE

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle Body Type (1240-E)

What is the body type of this parked/working vehicle? Long Name:

SAS Name: Parked.PBodyTyp

Oracle Name: GES.Parked.BodyTypeID

Element Values:

Oracle SAS Screen

AUTOMOBILES

| * | 1 | 01 | Convertible (excludes sun-roof, t-bar) |
|---|----|----|---|
| | 2 | 02 | 2-Door Sedan, Hardtop, Coupe |
| | 3 | 03 | 3-Door/2-Door Hatchback |
| | 4 | 04 | 4-Door Sedan, Hardtop |
| | 5 | 05 | 5-Door/4-Door Hatchback |
| | 6 | 06 | Station Wagon (excluding van and truck based) |
| | 7 | 07 | Hatchback, Number of Doors Unknown |
| | 17 | 17 | 3-Door Coupe |
| | 8 | 80 | Other Automobile Type |
| | 9 | 09 | Unknown Automobile Type |
| | | | AUTOMOBILE DERIVATIVES |

| 10 | 10 | Auto Based Pickup (includes El Camino, Caballero, Ranchero, |
|----|----|---|
| | | Brat, and Rabbit Pickup) |
| 11 | 11 | Auto Based Panel (Cargo Station Wagon, auto based |
| | | Ambulance/Hearse) |
| 12 | 12 | Large Limousine (More than four side doors or stretched |
| | | chassis) |
| 13 | 13 | Three Wheel Automobile or Automobile Derivative |

UTILITY VEHICLES

Compact Utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, 14 14 Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky)

| 15 | 15 | Large Utility (Jeep Cherokee (83 and before), Ramcharger, |
|----|----|--|
| | | Trailduster, Bronco-full size (78 and after), full size Blazer, full |
| | | size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon) |
| 16 | 16 | Utility Station Wagon (Chevrolet Suburban, GMC Suburba, |
| | | Travelall, Grand Wagoneer; also includes suburban limousine) |
| 19 | 19 | Utility Vehicle, Unknown Body Type |

VAN BASED LIGHT TRUCKS (<= 4,536 KG GVWR)

- 20 Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Windstar, Villager, Lumina APV, Silhouette, Trans Sport, Astro, Safari, Vanagon/Camper, Toyota Van and Minivan, Previa, Nissan Minivan, Quest, Expo Wagon, and Mitsubishi Minivan)
- 21 Large Van (B150-350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, and Vandura)
- 22 Step Van or Walk-in Van (<= 4,536 kg GVWR)
- 23 Van Based Motorhome
- 24 24 Van Based School Bus
- 25 Van Based Other Bus
- 28 28 Other Van Type (Hi-Cube, Kary)
- 29 29 Unknown Van Type

LIGHT CONVENTIONAL TRUCKS (pickup style cab <= 4,536 kg GVWR)

- 30 Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- 31 Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- 32 Pickup With Slide-In Camper
- 33 Convertible Pickup
- 39 Unknown (Pickup Style) Light Conventional Truck

OTHER LIGHT TRUCKS (<= 4,536 kg GVWR)

- 40 40 Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
- 41 41 Truck Based Panel
- 42 42 Light Truck Based Motorhome (Chassis Mounted)
- 45 45 Other Light Truck Type
- 48 48 Unknown Light Truck Type (Utility, Van, Pickup or Other Light Truck)

| 49 | 49 | Unknown Light Vehicle Type (Automobile, Utility, Van or Light Truck) | |
|--------------------------------------|----------|---|--|
| | | BUSES | |
| 50 | 50 | School Bus (designed to carry students, not cross country or transit) | |
| 58 59 | 58 59 | Other Bus Type (transit, intercity, bus based motorhome) Unknown Bus Type | |
| MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR) | | | |
| 60 64 | 60 64 | Step Van Single Unit Straight Truck | |

Medium/Heavy Truck Based Motorhome 65 65

Truck-Tractor (Cab only or with any number of trailing units) 66 66

Unknown Medium/Heavy Truck Type 78 78

Unknown Truck Type (light/medium/heavy) 79 79

MOTORED CYCLES (does not include all-terrain vehicle/cycles)

| 80 | 80 | Motorcycle |
|----|----|---|
| 81 | 81 | Moped (motorized bicycle) |
| 82 | 82 | Three Wheeled Motorcycle or Moped |
| 88 | 88 | Other Motored Cycle Type (minibike, motorscooter) |
| 89 | 89 | Unknown Motored Cycle Type |

OTHER VEHICLES

| 90 | 90 | ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) |
|----|----|--|
| 91 | 91 | Snowmobile |
| 92 | 92 | Farm Equipment Other Than Trucks |
| 93 | 93 | Construction Equipment Other Than Trucks (includes graders) |
| 97 | 97 | Other Type Vehicle (includes go-cart, fork lift, city street |
| | | sweeper , motorized wheelchairs) |
| 99 | 99 | Unknown Body Type |

^{*} The screen values displayed are determined by the make and model of vehicle selected. For example, if the make/model selected is Cadillac/Catera, only AUTOMOBILE body types are displayed. The screen values for the body types displayed are sequential numbers beginning with one (1).

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

AUTOMOBILES

These attributes are used to classify different types of passenger cars. These type of light vehicles, referred to as automobiles, are designed primarily to transport passengers.

Convertible (excludes sun-roof and t-bar) refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over 2-door or 4-door codes.

2-door sedan, hardtop, coupe refers to a passenger car equipped with two doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

3-door/2-door hatchback refers to a passenger car equipped with two doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

3-door coupe refers to a passenger car equipped with three doors for ingress/egress in which 2 of the doors are located on the driver's side and a separate trunk area for cargo(i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

4-door sedan, hardtop refers to a passenger car equipped with four doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

5-door/4-door hatchback refers to a passenger car equipped with four doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

Station wagon (excluding van and truck based) refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).

Hatchback, number of doors unknown refers to a passenger car with an unknown number of doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

Other Automobile Type refers to any passenger car that cannot be described by other automobile codes.

Unknown Automobile Type is used when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type.

AUTOMOBILE DERIVATIVES

This describes certain passenger cars that have been modified to perform cargo-related tasks.

Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup) refers to a passenger car based, pickup type vehicle. The roof area (and side glass) rearward of the front seats on a station wagon have been removed and converted into a pickup-type cargo box.

Auto based panel (cargo station wagon, auto based ambulance/hearse) refers to an automotive station wagon that may have sheet metal rearward of the B-pillar rather than glass.

Large Limousine - more than four side doors or stretched chassis refers to an automobile that has sections added within its wheelbase to increase length and passenger/cargo carrying capacity.

Three-wheel automobile or automobile derivative refers to three-wheel vehicles with an enclosed passenger compartment.

UTILITY VEHICLES (<= 4,536 kg GVWR)

Multi-purpose vehicles (MPV) are designed to have off-road capabilities. These vehicles are: generally four wheel drive (4 x 4), have increased ground clearance, and are equipped with a strong frame. Four wheel drive automobiles are not considered MPVs.

Compact Utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky) refers to a short wheelbase and narrow tracked multi-purpose vehicle designed to operate in rugged terrain.

Large Utility (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full size (78 and after), full size Blazer, full size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon) refers to fullsize multi-purpose vehicles primarily designed around a shortened pickup truck chassis. Generally a station wagon style body, some model are equipped with a removable top.

Utility Station Wagon (Chevrolet Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine) refers primarily to a pickup truck based chassis enlarged to a station wagon.

Utility Vehicle, Unknown Body Type is used when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

VAN BASED LIGHT TRUCKS (<= 4,536 kg GVWR)

Light trucks (<= 4,536 kg GVWR) are designed to maximize cargo/passenger area versus overall length. Basically a "box on wheels", these vehicles are identifiable by their enclosed cargo/passenger area and relatively short (or non-existent) hood.

Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper) refers to down-sized cargo or passenger vans.

Large Van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura) refers to a standard cargo or passenger van. These vans will generally have a larger capacity in both volume and GVWR.

Step Van or Walk-In Van (<= 4,536 kg GVWR) refers to a multi-stop delivery vehicle with a GVWR less than or equal to 4,536 kilograms. Examples are the Grumman LLV used by the US Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.

Van Based Motorhome (<= 4,536 kg GVWR) refers to a van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in attributes minivans, large van, step van; however, a frame mounted recreational unit is added behind the driver/cab area. This code takes priority over attributes minivan and large van.

Van Based School Bus (<= 4,536 kg GVWR) is a passenger van designed to carry students (passengers) to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. Van based school buses converted for other uses (e.g., church bus) also use this code.

Van Based Other Bus (<= 4,536 kg GVWR) is a van derivative (e.g., taxi, small local transit) designed to carry passengers for low occupancy functions or purposes. Van based school buses do not use this code.

Other Van Type (Hi-Cube Van, Kary) refers to a cargo or delivery van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in Minivans or Large Vans with a frame mounted cargo area unit added behind the driver/cab area or if the van cannot be described as a Minivan, Large Van, Step-van or a Van-based motorhome. Annotate the van type when using this code. This code takes priority over Minivans and Large Vans.

Unknown Van Type is used when it is known that this vehicle is a light van, but its specific type cannot be determined.

LIGHT CONVENTIONAL TRUCKS (Pickup Style Cab, <= 4,536 kg GVWR)

Light Conventional Trucks are used to describe vehicles commonly referred to as pickup trucks and some of their derivatives. These light trucks are characteristically designed with a small cab containing a single row of seats (extended cabs with additional seats are available for some models), a large hood covering a conventional engine placement, and a separate open box area (approximately 180 to 240 centimeters long) for cargo.

Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup) is used to describe a pickup truck having a width of 178 centimeters or less.

Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100) is used to describe a pickup truck having a width of greater than 178 centimeters.

Pickup with Slide-in Camper is used to describe any pickup truck that is equipped with a slide-in camper. A slide-in camper is a unit that mounts within a pickup bed. Pickup bed caps, tonneau covers or frame mounted campers are not applicable for this code.

Convertible Pickup refers to a pickup truck equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over compact and large pickups.

Unknown Pickup Style Light Conventional Truck is used when this vehicle is a Light Conventional Truck, but there is insufficient data to determine the specific code.

OTHER LIGHT TRUCKS (<= 4,536 kg GVWR)

Other Light Trucks are used to describe vehicles that are based upon a conventional light pickup frame, but a commercial or recreational body has been affixed to the frame rather than a pickup box.

Cab Chassis Based (includes rescue vehicles, light stake, dump and tow truck) is used to describe a light vehicle with a pickup style cab and a commercial (non-pickup) body attached to the frame. Included are pickup based ambulances and tow trucks.

Truck Based Panel is used to describe a truck based station wagon that has sheet metal rather than glass above the beltline rearward of the B-pillars.

Light Truck Based Motorhome (chassis mounted) is used to describe a frame mounted recreational unit attached to a light van or conventional chassis.

Other Light Conventional Truck Type is used for light conventional trucks that cannot be described elsewhere.

Unknown Light Truck Type is used when it is known that the vehicle is a light truck chassis based vehicle but insufficient data exist to specify utility, van, pickup or other light vehicle.

Unknown Light Vehicle Type (automobile, utility, van or light truck) is used when it is known that the vehicle is a light vehicle, but insufficient data exists to specify what type of light vehicle it is.

BUSES (Excludes Van Based)

Buses are defined as any medium/heavy motor vehicle designed primarily to transport large groups of passengers.

School Bus (designed to carry students, not cross country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.

Other Bus Type (e.g., transit, intercity, bus based motorhome) is a transport device designed to carry passengers for longer periods of time. These vehicle may be classified as over-the-road, transit, intercity, bus related motorhome (other than school bus based) or other.

Unknown Bus Type is used when it is known the transport device is a bus but there is insufficient data to choose between attributes School Bus or Other Bus Type.

MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR)

Medium/Heavy Trucks describe a single unit truck specifically designed for carrying cargo on the same chassis as the cab.

They pertain to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

Step Van (>4,536 kg GVWR) defines a single unit enclosed body with a GVWR greater than 4,536 kilograms and an integral driver's compartment and cargo area. Step vans are generally equipped with a folding driver seat mounted on a pedestal and a sliding door for easy ingress/egress.

Single Unit Straight Truck describes a non-articulated truck designed to carry cargo. The gross vehicle weight rating of the vehicle must exceed 4,536 kilograms. Ford F-450 and Ford F-550 super duty series are coded **Single Unit Straight Truck**.

Medium/Heavy Truck Based Motorhome describes a recreational vehicle mounted on a single unit medium/heavy truck chassis.

Truck-Tractor (Cab only or with any number of trailing units) describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration.

Unknown Medium/Heavy Truck Type is used when it is unknown whether the medium/heavy truck is a single unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium or heavy truck with GVWR >4,536 kilograms. **Unknown Truck Type** (light/medium/heavy) is used when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

MOTORED CYCLES (Does Not Include All Terrain Vehicles/Cycles)

Motorcycle is used when the vehicle is a two-wheeled open (i.e., no enclosed body) vehicle propelled by an internal combustion engine. Motorcycles equipped with a side car also use this code.

Moped (motorized bicycle) is used when the vehicle is a motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

Three-Wheeled Motorcycle or Moped is used when the vehicle is a three-wheeled open vehicle propelled by an internal combustion engine or a three-wheeled motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

Other Motored Cycle (minibike, motor scooter) is used when the vehicle in question does not qualify for attributes motorcycle, moped, three-wheeled motorcycle or moped (e.g., motor scooter).

Unknown Motored Cycle Type is used when it is known that the vehicle is a motored cycle, but no further data is available.

OTHER VEHICLES

Other Vehicles describes all motored vehicles that are designed primarily for off-road use.

ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) is used for off-road recreational vehicles which cannot be licensed for use on public roadways. ATVs have 4 or more wheels and ATCs have 2 or 3 wheels. Generally, the tires have low pressure and wide profile (i.e., flotation/balloon).

Snowmobile refers to a vehicle designed to be operated over snow propelled by an internal combustion engine.

Farm Equipment Other Than Trucks refers to farming implements other than trucks propelled by an internal combustion engine (e.g., farm tractors, combines, etc.).

Construction Equipment Other Than Trucks refers to construction equipment other than trucks propelled by an internal combustion engine (e.g., bulldozer, roadgrader, etc.).

Other Vehicle Type is used when the motorized vehicle in question does not qualify for Construction equipment other than trucks, Farm equipment other than trucks, Snowmobile, ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) (e.g., go-kart, dune buggy, "kit"car, motorized wheelchair, etc.).

Unknown Body Type is used when there is no available information regarding the type of parked/working vehicle. This lack of information prohibits the accurate classification of this parked/working vehicle within one of the preceding codes.

Consistency Checks:

Errors

| | IF | THEN |
|---------|---|---|
| VV003P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 02-09, 12, 17, 20-29 or 49. |
| VV003AP | PARKED/WORKING VEHICLE MAKE (PV03) equals 24 and PARKED/WORKING VEHICLE MODEL (PV04) equals 2 and the 4 th and 5 th characters of the PARKED/WORKING VEHICLE VIN (PV07) equal ZN, ZP, ZR or ZY | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 17. |
| VV006P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 02 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59. |
| VV009P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must not equal 01-03, 06, 07, 10, 11 or 12. |
| VV010P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 03 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99. |
| VV012P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 17 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) must not be greater than 15. |
| VV012AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 17 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) must not be greater than 15. |
| VV013P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 11, 14 or 15 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) must not be greater than 22. |

| VV013AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 11, 14 or 15 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) must not be greater than 22. |
|---------|---|--|
| VV015P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) must not be > 5. |
| VV015AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) must not be greater than 5. |
| VV025P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 06 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99. |
| VV085P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 25 or 58 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must not equal 00 or 02. |
| VV086P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 59 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must = 99. |
| VV101P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 92 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 11. |
| VV102P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 11 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 92. |
| VV110AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50-64, 66-79 or 99 | the NGA variables must not equal null or Oracle -1. |
| VV110BP | PARKED/WORKING VEHICLE BODY TYPE (PV05) does not equal 50-64, 66-79 or 99 | the NGA variables must equal null or Oracle -1. |
| VV111P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE ROLLOVER TYPE (PV30) must equal 00. |
| VV112P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 93 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 12. |
| VV113P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 12 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 93. |

| VV115P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 5 or 6 and BODY TYPE (PV05) equals 50, 59-64 or 66-79 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILER (PV32) must not equal 00. |
|--------|---|--|
| VV145P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 01 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 50, 58 or 59. |
| VV153P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |
| VV154P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60, 64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 0. |
| VV155P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 9. |
| VV156P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 0. |
| VV157P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 9. |
| VV160P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV161P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 9999. |
| VV162P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60,64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |

| VV163P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 99. |
|--------|--|---|
| VV164P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 50-64, 66-79 or 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 00. |
| VV165P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 50-64, 66-79 or 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (PV32) must equal 00. |
| VV166P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (PV32) must equal 99. |
| VV167P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) must equal 9999999999. |
| VV169P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60, 64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV174P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |
| VV219P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50, 59-64, 66-79 or 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. |
| VV220P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50, 59-64, 66-79 or 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must not equal 00. |
| VV221P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 60, 64 or 66-79 and PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 07 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |
| VV248P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50 or 59 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 01. |

| VV249P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 58 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 01 or 98. |
|---------|---|--|
| VV300FP | PARKED/WORKING VEHICLE VIN (PV07) passes the check digit test | PARKED/WORKING VEHICLE BODY TYPE (PV05) must be consistent with the PARKED/WORKING VEHICLE VIN (PV07) body type. |
| VV601P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 1-13, 17 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 1-399. |
| VV603P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 14 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 401-420, 498 or 499. |
| VV604P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 15 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 421-430, 498 or 499. |
| VV605P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 16 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 431-440, 498 or 499. |
| VV606P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 19 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 498 or 499. |
| VV607P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 20 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 441-460, 498 or 499. |
| VV608P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 21 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 461-470, 498 or 499. |
| VV609P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 22-29 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 441-470, 498 or 499. |
| VV611P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 30 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 471-480, 498 or 499. |
| VV612P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 31 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 481-490, 498 or 499. |
| | | |

| VV613P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 32, 33 or 39 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 471-490, 498 or 499. |
|--------|---|---|
| VV615P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 40-42 or 45 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 498. |
| VV616P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 48 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 499. |
| VV617P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 49 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 999. |
| VV618P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50 or 59 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 902, 981-983, 988 or 989. |
| VV619P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 58 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 902, 950, 981-983, 988 or 989. |
| VV620P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 60, 64 or 66 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 801- 808, 880-890, 898 or 899. |
| VV621P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 65 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787. |
| VV622P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 78 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 801- 808, 881-890, 898 or 899. |
| VV623P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 79 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 899. |
| VV624P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-82 or 89 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 701- 706, 709 or 799. |
| VV625P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 88 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 798. |
| VV627P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 731- 734, 739 or 799. |

| VV628P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 91-93 or 97 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 998. | |
|--------|--|---|--|
| VV629P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE MODEL (PV04) must equal 999. | |
| RANGE | PARKED/WORKING VEHICLE BOD | OY TYPE (PV05) must not be null. | |

| | IF | THEN | |
|---------|---|---|--|
| VA102P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 24 or 50 | SCHOOL BUS RELATED (A21) should equal 1. | |
| VV030P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 2 | PARKED/WORKING VEHICLE BODY TYPE (PV05) should not equal 50-58, 80-89, 90 or 91. | |
| VV032P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09, 17 or 97 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should not be greater than 8. | |
| VV032AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09, 17 or 97 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should not be greater than 8. | |
| VV033P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 12 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should not be greater than 15. | |
| VV033AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 12 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should not be > 15. | |
| VV034P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 14-15, 23, 42 or 60-79 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should not be greater than 12. | |
| VV034AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 14-15, 23, 42 or 60-79 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should not be > 12. | |

| VV036P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 or 91 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should not be greater than 2. |
|---------|---|--|
| VV036AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 or 91 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should not be > 2. |
| VV037P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should not be greater than 6. |
| VV037AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should not be greater than 6. |
| VV076P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE VEHICLE TRAILING (PV13) should not equal 1. |
| VV084P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 24 or 50 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) should equal 02. |
| VV109P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50-64 or 66-79 | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) should not equal 000000. |
| VV114P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 10 | PARKED/WORKING VEHICLE BODY TYPE (PV05) should equal 11. |
| VV185P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 98 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE TRAILING (PV13) should equal 1. |
| VV244P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 or 78 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILER (PV32) should equal 2, 3 or 99. |

| VV300EP | PARKED/WORKING VEHICLE VIN (PV07) passes the check digit test | PARKED/WORKING VEHICLE MAKE (PV03), PARKED/WORKING VEHICLE Model (PV04), PARKED/WORKING VEHICLE BODY TYPE (PV05) and PARKED/WORKING VEHICLE Model Year (PV06) should be |
|---------|---|---|
| | | known. |

Post Entry

| | IF | THEN |
|-------|-----------------------------------|--|
| AV236 | SCHOOL BUS RELATED (A21) equals 1 | at least one BODY TYPE (V05) or at least one PARKED/WORKING VEHICLE BODY TYPE (PV05) should equal 24 or 50. |

PV06 PARKED/WORKING VEHICLE MODEL YEAR

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle Model Year (1250-E)

Long Name: What is the parked/working vehicle model year?

SAS Name: Parked.PModelYr

Oracle Name: GES.Parked.ModelYear

Element Values:

Screen Oracle SAS

xxxx xxxx Four Digit Model Year

* -9999 9999 Unknown

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Enter the 4 digit model year of the parked/working vehicle.

Consistency Checks:

| | IF | THEN |
|---------|--|--|
| VV300AP | PARKED/WORKING VEHICLE MODEL YEAR (PV06) is greater than 1980 and all 17 characters of the PARKED/WORKING VEHICLE VIN (PV07) are present | the PARKED/WORKING VEHICLE MODEL YEAR (PV06) must match the 10 th character of the PARKED/WORKING VEHICLE VIN (PV07). |
| | | |

| | IF | THEN | |
|---------|--|--|--|
| VV300AP | PARKED/WORKING VEHICLE MODEL YEAR (PV06) is greater than 1980 | the PARKED/WORKING VEHICLE MODEL YEAR (PV06) should match the 10 th character of the VIN (PV07). | |
| VV300DP | PARKED/WORKING VEHICLE MODEL YEAR (PV06) is greater than 1980 and all 17 characters of the PARKED/WORKING VEHICLE VIN (PV07) are present | PARKED/WORKING VEHICLE VIN (PV07) should pass the check digit test. | |
| VV300EP | PARKED/WORKING VEHICLE VIN (PV07) passes the check digit test | PARKED/WORKING VEHICLE MAKE (PV03), PARKED/WORKING VEHICLE Model (PV04), PARKED/WORKING VEHICLE BODY TYPE (PV05) and PARKED/WORKING VEHICLE Model Year (PV06) should be known. | |
| VV300RP | PARKED/WORKING VEHICLE MODEL YEAR (PV06) is greater than 1980 | PARKED/WORKING VEHICLE VIN (PV07) should contain 17 characters. | |

PV13 PARKED/WORKING VEHICLE TRAILING

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle Trailing Units (1310-E)

Long Name: Did this parked/working vehicle have trailing units?

SAS Name: Parked.PTrailer

Oracle Name: GES.Parked.Trailing

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|------------------------------|
| 1 | 1 | 1 | No Trailing Units |
| 2 | 2 | 2 | One Trailing Unit |
| 3 | 3 | 3 | Two Trailing Units |
| 4 | 4 | 4 | Three or More Trailing Units |
| 5 | 5 | 5 | Yes, Number of Units Unknown |
| 6 | 6 | 6 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Any unit that trails behind a power unit is a trailing unit. Examples of trailing units include: horse trailers, fifth wheel trailers, travel trailers, camper trailers, boat trailers, truck trailers (semi, full, log, tanker, etc), towed motor vehicles or any other trailer.

This variable is attempting to determine if the parked/working vehicle has a trailing unit. If the linkage is fixed, then there is a trailing unit. If the linkage is not fixed (e.g., one parked/working vehicle is attached to another using a rope), then each is considered a parked/working vehicle. If the type of linkage is not on the PAR, then fixed linkage is assumed.

Enter **No Trailing Units** when there are no trailing units attached to this parked/working vehicle.

Enter One Trailing Unit when this parked/working vehicle has one attached trailing unit.

Enter Two Trailing Units when this parked/working vehicle has two attached trailing units.

Enter **Three or More Trailing Units** when this parked/working vehicle has three or more attached trailing units.

Enter **Yes, Number of Units Unknown** when it is known that there were trailing units, but the number can not be determined.

Enter **Unknown** when it can not be determined from any information on the PAR if there are trailing units.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV115P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 5 or 6 and BODY TYPE (PV05) equals 50, 59-64 or 66-79 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. |
| VV153P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |
| VV156P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 0. |
| VV160P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV174P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |

| | IF | THEN |
|--------|---|--|
| VV030P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 2 | PARKED/WORKING VEHICLE BODY TYPE (PV05) should not equal 50-58, 80-89, 90 or 91. |
| VV076P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE TRAILING (PV13) should not equal 1. |
| VV185P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 98 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE TRAILING (PV13) should equal 1. |
| VV244P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 or 78 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILER (PV32) should equal 02, 03 or 99. |

PV37 PARKED/WORKING VEHICLE LOCATION

Screen Heading: Parked/Working Vehicle Data

Screen Name: Parked/Working Vehicle Location (1420-E)

Long Name: Select the attribute which best describes the location of the

parked/working vehicle.

SAS Name: Parked.PRel_Rwy

Oracle Name: GES.Parked.RoadwayRelID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------------|
| 1 | 10190 | 1 | On Roadway |
| 2 | 10191 | 2 | On Shoulder |
| 3 | 10192 | 3 | On Median |
| 4 | 10193 | 4 | On Roadside |
| 5 | 10194 | 5 | Outside Trafficway |
| 6 | 10195 | 6 | Off Roadway - Location Unknown |
| 7 | 19437 | 7 | In Parking Lane |
| 8 | 19438 | 8 | Gore |
| 9 | 19439 | 10 | Separator |
| 10 | 19440 | 99 | Unknown |
| 11 | 19441 | 9 | Continuous Left Turn Lane |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

This element is coded as to the location of the parked/working vehicle.

On Roadway - The roadway is that part of a trafficway designed, improved and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. The roadway and any shoulder alongside the roadway together make up the road.

A **Shoulder** is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles and for lateral support of the roadway structure.

A **Median** is defined as that area of a divided trafficway between parallel roads separating the travelways for traffic in opposite directions. The principal functions of a median are to provide the desired freedom from interference of opposing traffic, to provide a recovery area for out-of-control vehicles, to provide a stopping area in case of emergencies, and to minimize headlight glare. Medians may be depressed, raised or flush. Flush medians can be as little as 4-feet wide between roadway edgelines. Painted roadway edgelines four (4) or more feet wide denote medians. Medians of lesser width must have a barrier to be considered a median.

On Roadside refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway which lay between the outer property line or other barrier and the edge of the first road encountered in the trafficway. Use this element if the parked/working vehicle is in a raised or painted island (directional or channeling).

Outside Trafficway is used when the parked/working vehicle is outside the right-of-way.

Off Roadway - Location Unknown refers to a location off the roadway, but its relationship to the right-of-way is not known.

In Parking Lane refers to a strip of road located on the roadway or next to the roadway, on which parking is permitted. This includes curb-side and edge-of-roadway parking (for example, legal residential parking, city street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should not be used during hours when parking is NOT permitted.

Gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes SHOULDERS or marked pavement if any, between the roadways. The third side is 60 meters (approximately 200 feet) from the point of divergence or convergence or, if any other road is within 70 meters (230 feet) of that point, a line 10 meters (33 feet) from the nearest edge of such road.

Gore Inclusions:

- Areas at rest area or exit ramps
- Areas at truck weight station entry or exit ramps
- Areas where two main roadways diverge or converge
- Areas where a ramp and another roadway or two ramps, diverge or converge
- Areas where a frontage road and another roadway or two frontage roads diverge or converge
- And others.

Gore Exclusions:

- Islands for channelizing of vehicle movements
- Islands for pedestrian refuge
- And others.

A **Separator** is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road from other roads. A Separator may be a physical barrier or a depressed, raised, flush or vegetated area between roads.

A **Continuous Left Turn Lane** is a two-way left turn lane positioned between opposing straight-through travel lanes.

Consistency Checks:

| | IF | THEN |
|-----------|---|--|
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 1 or 9 | NON-MOTORIST LOCATION (P13) MUST equal 02 or 12 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 2 or 7 | NON-MOTORIST LOCATION (P13) MUST equal 18 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 3, 5, 8 or 10 | NON-MOTORIST LOCATION (P13) MUST equal 98 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 4 | NON-MOTORIST LOCATION (P13) MUST equal 8, 18 or 98 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 6 | NON-MOTORIST LOCATION (P13) MUST equal 09 or 19 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 99 | NON-MOTORIST LOCATION (P13) MUST equal 9, 19 or 99 |
| PV350 | PARKED/WORKING VEHICLE TYPE (PV02) equals 1 | PARKED/WORKING VEHICLE LOCATION (PV37) must not equal 1 or 9 |
| RANGE | PARKED/WORKING VEHICLE LOC | CATION (PV37) must equal 1-10, 99 |

PV02 PARKED/WORKING VEHICLE TYPE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Type (1210-E)

Long Name: What is the type of the parked/working vehicle?

SAS Name: Parked.PType

Oracle Name: GES.Parked.TypeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-----------------|
| 1 | 1 | 1 | Parked Vehicle |
| 2 | 2 | 2 | Working Vehicle |

Remarks:

Parked Vehicle is used when a motor vehicle is stopped off the roadway. A motor vehicle stopped off the roadway, its door open over a roadway, is classified as a parked vehicle.

A **Working Vehicle** is a transport device being used as equipment which would be classified under ANSI D16.1-1996 as a motor vehicle, if not being used as equipment (e.g., a tow truck while using its winch, a pickup truck while being used to power a saw, a truck with cherry picker being used to repair or maintain a traffic signal or a concrete truck while discharging its load). The applicable sections of ANSI D16.1-1996 are 2.1.3, 2.1.4, 2.1.7,2.2.6, 2.2.7 and 2.2.34. Examples of "working vehicles" are shown in ANSID16.1-1996 on page 3 under transport vehicle exclusions. These examples are as follows:

- Pickup truck while being used to power a saw
- Dump truck while spreading its load
- Tow truck while using its winch
- Jeep while pulling a device picking up golf balls
- Transit-mix concrete truck while discharging its load
- Dump truck while plowing snow
- And others

If there is a motor vehicle which appears to meet the ANSI definition but is not on the above list, please contact NHTSA for a ruling.

Police, emergency vehicles and taxi cabs are not working vehicles.

If the PAR is unclear whether a motor vehicle is actually in the act of performing work at the time of the crash, then the motor vehicle is considered as not working.

Consistency Checks:

Post Entry

| | IF | THEN |
|----------|--|--|
| PP082AP | PERSON TYPE (P03) equals 3 | PARKED VEHICLE TYPE (PV02) must equal 1. |
| PP082AP1 | PERSON TYPE (P03) equals 7 | PARKED VEHICLE TYPE (PV02) must equal 2. |
| PP082AP2 | PARKED VEHICLE TYPE (PV02) equals 1 | PERSON TYPE (P03) must equal 3 |
| PP082AP3 | PARKED VEHICLE TYPE (PV02) equals 2 | PERSON TYPE (P03) must equal 7 |
| PV350 | PARKED/WORKING VEHICLE TYPE (PV02) equals 1 | PARKED/WORKING VEHICLE LOCATION (PV37) must not equal 1 or 9 |
| PVE700 | PARKED VEHICLE TYPE (PV02) EQUALS 1 and PARKED VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 126. |
| PVE701 | PARKED VEHICLE TYPE (PV02) EQUALS 2 and PARKED VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 128. |

PV08 PARKED/WORKING VEHICLE SPECIAL USE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Special Use (1270-E)

Long Name: What special use category applies to this parked/working vehicle?

SAS Name: Parked.PSp_Use

Oracle Name: GES.Parked.SpecialUseID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|------------------------|
| 1 | 26875 | 0 | No special use |
| 2 | 26876 | 1 | Taxi |
| 3 | 26877 | 2 | School Bus |
| 4 | 26878 | 3 | Other Bus |
| 5 | 26879 | 4 | Military |
| 6 | 26880 | 5 | Police |
| 7 | 26881 | 6 | Ambulance |
| 8 | 26882 | 7 | Fire Truck and Car |
| 9 | 26883 | 10 | Hearse |
| 10 | 26884 | 11 | Farm Equipment |
| 11 | 26885 | 12 | Construction Equipment |
| 12 | 26886 | 99 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

No Special Use is used when the PAR does not indicate or imply that the parked/working vehicle was applicable to any of the special uses.

Taxi is used when the PAR indicates the parked vehicle is a taxi.

School Bus is used when the PAR indicates the parked/working vehicle is a school bus.

Other Bus is used when the PAR indicates the parked/working vehicle is designed for transporting more than ten persons and is not a school bus.

Military is used for any parked/working vehicle which is owned by any of the Armed Forces regardless of body type. This code includes:

- military police vehicles;
- military ambulances;
- military hearses; and
- military fire vehicles.

Police is used for any readily identifiable (lights or markings) parked vehicle which is owned by any local, county, state or federal police agency. Vehicles not owned by the agency or not readily identifiable which are used by officers or agents (e.g., undercover) are excluded.

Ambulance is used for any readily identifiable (lights or markings) parked/working vehicle: (1) whose sole purpose is to provide ambulance service or (2) who serve the dual purposes of a hearse – used for funeral services, and an ambulance – used for emergency services. For these dual purpose vehicles (ambulance/hearse), use this code only when the parked vehicle is used as an ambulance.

Fire Truck and Car is used for any readily identifiable (lights or markings) parked/working vehicle which is owned by any government (typically local) or cooperative agency for the purpose of fire protection. For volunteer fire companies, fire fighting apparatus and other vehicles owned by the company or government qualify for this code. Privately owned vehicles, which are not in authorized use, even if equipped with lights, do not qualify (i.e., the volunteer firemen's vehicle).

Hearse is used when the parked vehicle is identified on the PAR as a hearse.

Farm Equipment is used when the body type of the parked/working vehicle equals "Farm Equipment other than Trucks". Examples of Farm Equipment include: balers, reapers, combines, and farm tractors.

Construction Equipment is used when the body type of the parked/working vehicle equals "Construction Equipment Other Than Trucks". Examples of Construction Equipment include: bulldozers, steamrollers, forklifts, etc.

Unknown is used when the PAR specifically indicates that the special use applicable to the parked/working vehicle is unknown.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| VV003P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 02-09, 12, 17, 20-29 or 49. |

| VV006P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 02 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59. |
|--------|--|--|
| VV009P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must not equal 01-03, 06, 07, 10, 11 or 12. |
| VV010P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 03 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99. |
| VV025P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 06 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99. |
| VV085P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 25 or 58 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must not equal 00 or 02. |
| VV086P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 59 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 99. |
| VV087P | PARKED/WORKING VEHICLE EMERGENCY USE (PV09) equals 1 or 9 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 04-07. |
| VV101P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 92 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 11. |
| VV102P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 11 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 92. |
| VV112P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 93 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 12. |
| VV113P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 12 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 93. |
| VV221P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 60, 64 or 66-79 and SPECIAL USE (PV08) equals 07 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |

| | IF | THEN |
|---------|---|---|
| VV048P | UNLIKELY: PARKED/WORKING VE equal to 02, 03, 04 or 06. | HICLE SPECIAL USE (PV08) is |
| VV084P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 24 or 50 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) should equal 02. |
| VV114P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 10 | PARKED/WORKING VEHICLE BODY TYPE (PV05) should equal 11. |
| VV241P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS CODED (PV10) should be greater than 01. |
| VV241AP | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should be greater than 01. |
| ntry | | |

Post Entry

| | IF | IHEN |
|--------|--|--|
| VA002P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) for any parked/working vehicle equals 02 | SCHOOL BUS RELATED (A21) must equal 1. |

PV09 PARKED/WORKING VEHICLE EMERGENCY USE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Emergency Use (1280-E)

Long Name: Was this parked/working vehicle on an emergency run at the time of the

crash?

SAS Name: Parked.PEm Use

Oracle Name: GES.Parked.EmergencyUse

Element Values:

| Screen | Oracle | SAS | |
|--------|---------|-----|---------|
| 1 | -1,0, 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 3 | 9 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

If the parked/working vehicle is a police vehicle, ambulance, fire truck or military vehicle (i.e., Special Use equals "Military", "Police", "Ambulance" or "Fire Truck and Car"), then refer to the narrative section of the PAR to determine if the vehicle was on an emergency run (i.e., "red lights flashing") at the time of the crash. Police vehicle, ambulance, fire truck, and military vehicle are considered applicable vehicles for purposes of this variable.

No is used when the parked/working vehicle is <u>not</u> on an emergency run or this parked/working vehicle is not one of the applicable vehicles.

Yes is used when the parked/working vehicle is on an emergency run.

Unknown is used when this parked/working vehicle is an applicable vehicle but the PAR is unclear as to whether it was on an emergency run. This code also applies if it is unknown whether the parked/working vehicle is an applicable vehicle.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV087P | PARKED/WORKING VEHICLE EMERGENCY USE (PV09) equals 1 or 9 | PARKED/WORKING VEHICLE SPECIAL USE (PV08) must equal 04-07. |
| RANGE | PARKED/WORKING VEHICLE EMERGENCY USE (PV09) must equal 1 or 9. | |

PV16 PARKED/WORKING VEHICLE FIRE OCCURRENCE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Fire (1320-E)

Long Name: Does this parked/working vehicle sustain fire damage?

SAS Name: Parked.PFire

Oracle Name: GES.Parked.Fire

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 0 | 0 | No Fire Noted on the PAR |
| 2 | 1 | 1 | Fired Occurred in the Parked/Working Vehicle |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

No Fire Noted on the PAR is used when there is no mention made on the PAR of a fire to this parked/working vehicle.

This code also includes those parked/working vehicles with smoke damage but sustained no fire.

Fire Occurred In the Parked/Working Vehicle is used when the PAR indicates this parked/working vehicle sustained fire damage. For the purposes of this variable, "parked/working vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

Consistency Checks:

Errors

| | 71151 |
|----|-------|
| IF | THEN |

RANGE PARKED/WORKING VEHICLE FIRE OCCURRENCE (PV16) must equal

0 or 1.

PV18 PARKED/WORKING VEHICLE DAMAGE SEVERITY

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Damage Severity (1330-E)

Long Name: What is the damage severity for this parked/working vehicle?

SAS Name: Parked.PVeh_Sev

Oracle Name: GES.Parked.DamageSeverityID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------|
| 1 | 26831 | 0 | None |
| 2 | 26832 | 1 | Minor |
| 3 | 26833 | 2 | Moderate |
| 4 | 26834 | 3 | Severe |
| 5 | 26835 | 9 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

None is used when there is no damage indicated on the PAR for this parked/working vehicle.

Minor is used when this attribute is indicated on the PAR <u>and</u> the parked/working vehicle is not towed due to damage. Examples of minor damage include:

dented or bent fenders,

bumpers,

grills,

body panels, and

destroyed hubcaps.

Minor applies only when PV19, Parked/Working Vehicle Manner of Leaving Scene, is Driven Away, Towed Not Due to Damage, Abandoned or Unknown if Towed.

Moderate is used when the PAR specifically indicates the damage is moderate. Examples of moderate damage include:

doors, windows, hood, and trunk lids which will not operate properly; broken glass which obscures vision;

damage which would prevent the parked/working vehicle from passing an official motor vehicle inspection;

tire damage even though the tire may be changed at the scene;

bumpers which are loose;

damage which can be remedied temporarily at the scene without special tools or parts other than tires;

tire disablement without other damage, even if no spare tire is available;

headlamp or taillight damage which would make night driving hazardous but would not affect daytime driving; and

damage to turn signals, horn or windshield wipers which makes them inoperative.

Severe is used when the PAR specifically indicates severe. This response is also used when the damage is of greater magnitude than Moderate, e.g., major, extensive or totaled.

Unknown is used when the PAR specifically indicates the damage severity to be unknown or the information on the PAR is inadequate to determine the level of severity. If the PAR is blank or not reported, use this code unless the narrative states otherwise or a State specific rule applies.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| VV061P | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) equals 2 | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) must not equal 0 or 1. |
| VV089P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) equals 3 | MANNER OF LEAVING SCENE (PV19) must not equal 3. |
| RANGE | PARKED/WORKING VEHICLE DA 0, 1, 2, 3 or 9. | AMAGE SEVERITY (PV18) must equal |

| | IF | THEN |
|--------|---|---|
| VV059P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) equals 3 | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) should equal 2. |
| VV060P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) is equal to 3 | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) should not equal 1. |

PV19 PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Leave Scene (1340-E)

Long Name: What is the disposition of this parked/working vehicle at the crash

scene?

SAS Name: Parked.PTowed

Oracle Name: GES.Parked.MannerLeftID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|-------------------------|
| 1 | 26836 | 1 | Driven Away |
| 2 | 26837 | 2 | Towed Due to Damage |
| 3 | 26838 | 3 | Towed Not Due to Damage |
| 4 | 26839 | 4 | Abandoned |
| 5 | 26840 | 9 | Unknown if Towed |

Remarks:

The mode in which the parked/working vehicle or power unit of a parked/working vehicle articulated combination left the scene of the crash:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Driven Away is used when the parked/working vehicle could have been or was driven from the scene of the crash. A parked/working vehicle which is reported by the police as towed out of a ditch or snowbank and could have been or was subsequently driven away is coded here. In addition, this attribute is used if a parked/working vehicle was driven from the scene and subsequently disabled. Do not use this attribute if this parked/working vehicle was abandoned.

Towed Due to Damage is used for any towing which is due to disabling damage caused by this crash which prohibits vehicle movement under its own power. Towed due to damage includes any towing, when the reason for towing is unknown. In other words, if a parked/working vehicle is reported on the PAR as towed but it cannot be determined whether it was due to damage or for other reasons, then the <u>default assumption</u> is that this parked/working vehicle was towed due to damage.

If a parked/working vehicle was pushed by hand or by another vehicle after the crash because it was not driveable, then code this vehicle as **Towed Due to Damage**.

Rules for Parked Medium/Heavy Trucks (Power Unit Only):

Medium/Heavy Truck (power unit only) is towed due to damage if:

The PAR indicates a tow facility; or

The PAR indicates a tow facility and moderate damage; or

The PAR indicates disabling, extensive, severe or total damage; or

The PAR indicates towed (block or narrative) and tow status is not due to driver negligence (alcohol/other drugs), illness or inappropriate actions.

Parked Medium/Heavy Truck (power unit only) is not towed due to damage if:

The PAR indicates minor damage (excludes jackknife) or

The PAR indicates that only the trailer was towed.

NOTE: The PAR narrative may be used to supercede and/or clarify the above information.

Towed Not Due to Damage is used when the parked/working vehicle has been towed but the towing results from other than damage (e.g., mired vehicles, etc.).

Abandoned is used when it is specifically indicated on the PAR or when the preponderance of the information available indicates that the parked/working vehicle remained at the scene. Do not use this attribute if the parked/working vehicle was left at the scene because this location was the parked/working vehicle's destination at the time of the accident.

Unknown is used when the PAR does not indicate the manner in which the vehicle left the scene of the crash.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV061P | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) equals 2 | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) must not equal 0 or 1. |
| VV089P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) equals 3 | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) must not equal 3. |
| RANGE | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) must equal 1, 2, 3, 4 or 9 and must not equal null. | |

| | IF | THEN |
|--------|--|---|
| VV059P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) equals 3 | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) should equal 2. |
| VV060P | PARKED/WORKING VEHICLE DAMAGE SEVERITY (PV18) is equal to 3 | PARKED/WORKING VEHICLE MANNER OF LEAVING SCENE (PV19) should not equal 1. |

PV30 PARKED/WORKING VEHICLE ROLLOVER TYPE

Screen Heading: Parked/Working Vehicle Characteristics

Screen Name: Parked/Working Vehicle Rollover (1350-R)

Long Name: What is the rollover type for this parked/working vehicle?

SAS Name: Parked.PRollovr

Oracle Name: GES.Parked.RolloverTypeID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 1 | 26850 | 00 | No Rollover |
| 2 | 26851 | 10 | Untripped Rollover |
| 3 | 26852 | 20 | Tripped Rollover - By Curb |
| 4 | 26853 | 21 | Tripped Rollover - By Guardrail |
| 5 | 26854 | 22 | Tripped Rollover - By Ditch |
| 6 | 26855 | 23 | Tripped Rollover - By Soft Soil |
| 7 | 26856 | 28 | Tripped Rollover - Other |
| 8 | 26857 | 29 | Tripped Rollover - Unknown Mechanism |
| 9 | 26858 | 99 | Rollover, Unknown Whether Untripped Or Tripped |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Enter **No Rollover** if uncertainty exists concerning whether or not this parked/working vehicle rolled over. In addition, use this code if a trailing unit rolls over but the power unit itself does not. Further, this element includes parked/working vehicles whose Parked/Working Vehicle Body Type (PV05) is Motored Cycle independent of the accident configuration. When these parked/working vehicles rotate sufficiently to contact the ground it is considered an "overturn" rather than a rollover.

Enter **Untripped Rollover** when a rollover occurs but it is not the result of a collision but rather vehicle instability (e.g., centrifugal force).

Rollovers primarily about the lateral axis (end-over-end) should be coded using **Tripped Rollover - Other**. The tripped rollover categories are used when the rollover is primarily about the longitudinal axis.

Enter **Tripped Rollover - By Ditch** when there is contact with a ditch prior to the rollover or the PAR states that a parked/working vehicle entered a ditch prior to the rollover. Also, use this code whenever "ditch" is referenced in relation to the rollover and no further information is available.

Enter **Tripped Rollover - Other** when the rollover is a tripped rollover and the tripping mechanism is not curb, guardrail, ditch or soft soil. Use this response when an impact with another vehicle causes the rollover. The rollover must be the immediate result of the impact between the vehicles.

Enter **Tripped Rollover - Unknown Mechanism** when the rollover is initiated by a tripping mechanism but the specific mechanism is unknown.

Enter Rollover, Unknown Whether Tripped or Untripped when it is known that the vehicle rolled over but it is not known whether it was a tripped or untripped rollover.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| VV111P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE ROLLOVER TYPE (PV30) must equal 00. |
| RANGE | PARKED/WORKING VEHICLE ROLLOVER TYPE (PV30) must equal 00 20, 21, 22, 23, 28, 29 or 99 | |

PV31 PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER

Screen Heading: Parked/Working Vehicle NGA Crash Data

Screen Name: Parked/Working Vehicle Carrier ID (620-E)

Long Name: What is the carrier's identification number for this parked/working

vehicle?

SAS Name: Parked.PCarlDNo

Oracle Name: GES.Parked.CarrierNumber (Character)

Element Values:

Screen Oracle SAS

000000 000000, Blank 00000000 Not applicable 1-9999998 1-9999998 US DOT Number

99999999 99999999 Unknown

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

National Governors Association (NGA) Accident Data

In 1987 the nation's Governors adopted a comprehensive motor carrier safety policy which stated that a necessary first step toward improved motor carrier safety would be the uniform collection of information on truck and bus accidents. The NGA surveyed fifty states to assemble the latest police accident reports, and conducted case study field visits to four states to get a better understanding of data collection and reporting. After reviewing state truck and bus accident data collection efforts, the NGA drafted a set of uniform data elements. These data elements were pilot tested in several states and finalized.

The final recommended data elements can be divided into two groups. The first group contains elements which pertain specifically to accidents involving trucks and buses. These elements provide essential information required to analyze motor carrier crashes, only.

The next six variables include that portion of the NGA data elements which pertain specifically to accidents involving trucks and buses.

The NGA variables are only applicable when the parked/working vehicle body type is a medium/heavy truck or bus.

The Carrier's ID is the unique number assigned to the Carrier by the United States Department of Transportation.

The number will be found only on parked/working vehicles of interstate for-hire or private carriers in the transportation business.

Code **Not Applicable** is used when the parked/working vehicle is not a medium/heavy truck or a bus. This code should also be used when the parked/working vehicle is a medium/heavy truck or a bus but the parked/working vehicle is not an interstate for-hire or private carrier.

Code **Unknown** is used when the parked/working vehicle is a medium/heavy truck or a bus but the Carrier ID is not known. Also, this code is used when the body type of the parked/working vehicle is unknown.

Consistency Checks:

Errors

| | IF | THEN |
|--------|--|--|
| VV140P | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) is not equal to 000000000 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. |
| VV167P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) must equal 999999999999999999999999999999999999 |
| RANGE | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) must not be more than 9 digits in length (including leading zeros) and must not contain letters, nulls or strings of 9's or 0's (except 999999999 or 000000000). | |

Warnings

| | IF | THEN |
|--------|-------------------------------|--------------------------------|
| VV109P | PARKED/WORKING VEHICLE | PARKED/WORKING VEHICLE |
| | BODY TYPE (PV05) equals 50-64 | CARRIER'S IDENTIFICATION |
| | or 66-79 | NUMBER (PV31) should not equal |
| | | 0. |

PV32 PARKED/WORKING VEHICLE NUMBER OF AXLES, INCLUDING TRAILERS

Screen Heading: Parked/Working Vehicle NGA Crash Data

Screen Name: Parked/Working Vehicle Number of Axles (630-E)

Long Name: How many axles, including power unit and trailer(s), does this

parked/working vehicle have?

SAS Name: Parked.PAxles

Oracle Name: GES.Parked.Axles

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-------|-------------------------|
| 0 | 0, -1 | 00 | Not Applicable |
| | 02-20 | 02-20 | Actual Number Of Axles |
| * | 99 | 99 | Unknown Number Of Axles |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Refer to Truck and/or Bus supplement or Truck/Bus section on the PAR to obtain axle data.

Not Applicable will be pre-coded if this parked/working vehicle is not a medium/heavy truck or bus.

Enter **Unknown Number of Axles** when this parked/working vehicle is a medium/heavy truck or bus and there is no truck or bus supplement or the data was not recorded in the Truck/Bus section of the PAR.

States with known Truck/Bus supplements or Truck/Bus section on PAR.

Alabama

Colorado

Florida

Illinois

Indiana

Massachusetts

Michigan

Nebraska

New Mexico New York Pennsylvania Tennessee Texas Wisconsin

Consistency Checks:

| | IF | THEN | |
|--------|--|---|--|
| VV115P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 5 or 6 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50, 59-64 or 66-79 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. | |
| VV140P | PARKED/WORKING VEHICLE CARRIER'S IDENTIFICATION NUMBER (PV31) is not equal to 000000 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. | |
| VV141P | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) equals 00 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 00. | |
| VV142P | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) is not equal to 00 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must not equal 00. | |
| VV165P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 50-64, 66-79 or 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must equal 00. | |
| VV166P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must equal 99. | |
| VV219P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50, 59-64, 66-79 or 99 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must not equal 00. | |
| RANGE | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) must equal 00, 02-20, 99. | | |

<u>Warnings</u>

| | IF | THEN |
|--------|---|---|
| VV244P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 or 78 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) should equal 02, 03 or 99. |
| VV244P | BODY TYPE (PV05) equals 66 or 78 and PARKED/WORKING VEHICLE TRAILING (PV13) | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (P |

PV33 PARKED/WORKING VEHICLE CARGO BODY TYPE

Screen Heading: Parked/Working Vehicle NGA Crash Data

Screen Name: Parked/Working Vehicle Cargo Body Type (640-E)

Long Name: What is the cargo body type for this parked/working vehicle?

SAS Name: Parked.PCargTyp

Oracle Name: GES.Parked.CargoBodyTypeID

Element Values:

| Screen | Oracle | SAS | |
|--------|-----------|-----|---------------------|
| 1 | 10217, -1 | 00 | Not Applicable (NA) |
| 2 | 10218 | 01 | Bus |
| 3 | 10219 | 02 | Van/Enclosed Box |
| 4 | 10220 | 03 | Cargo Tank |
| 5 | 10221 | 04 | Flatbed |
| 6 | 10222 | 05 | Dump |
| 7 | 10223 | 06 | Concrete Mixer |
| 8 | 10224 | 07 | Auto Transporter |
| 9 | 10225 | 80 | Garbage/Refuse |
| 10 | 10226 | 98 | Other |
| * | 10227 | 99 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Code **Not Applicable (NA)** will be precoded when the body type is not a medium/heavy truck.

Code **Bus** will be precoded when the parked/working vehicle data identifies the parked/working vehicle as a bus.

Enter **Van/Enclosed Box** when the cargo body is fully enclosed or designed with high closed sides and ends with an open top.

Enter **Cargo Tank** when the cargo body is designed for the transport of bulk liquids or dry commodities such as petroleum, oil or grain.

Enter **Flatbed** when the cargo body has a floor without sides or a roof with or without removable stakes.

Enter **Dump** when the cargo body is a low side open box designed primarily to transport bulk dry commodities which can be tilted or otherwise manipulated to discharge its load by gravity.

Enter **Concrete Mixer** when the cargo body is designed and equipped to mix or agitate concrete.

Enter **Auto Transporter** when the cargo body is designed for the transportation of other transport vehicles.

Enter **Garbage/Refuse** when the cargo body is designed to primarily for the collection of garbage and refuse.

Enter **Other** when the cargo body type is known but is one other than those described. Also, use this code when the parked/working medium/heavy truck is a bobtail (i.e. Chassis/truck, tractor only with no trailer attached).

Enter **Unknown** when the vehicle is a parked/working medium/heavy truck but the specific cargo body type is not known.

Consistency Checks:

| | IF | THEN |
|--------|---|---|
| VV141P | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) equals 00 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 00. |
| VV142P | PARKED/WORKING VEHICLE NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (PV32) is not equal to 00 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must not equal 00. |
| VV143P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 00 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV145P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 01 | PARKED/WORKING VEHICLE BODY TYPE (PV05) must equal 50, 58 or 59. |
| VV163P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 99. |

| VV164P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 50-64, 66-79 or 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 00. |
|-----------------|--|--|
| VV174P | PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 and BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |
| VV220P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50, 59-64, 66-79 or 99 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must not equal 00. |
| VV221P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 60, 64 or 66-79 and PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 07 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 98. |
| VV248P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 50 or 59 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 01. |
| VV249P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 58 | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) must equal 01 or 98. |
| <u>Warnings</u> | | |
| | IF | THEN |
| VV185P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 98 and PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 | PARKED/WORKING VEHICLE TRAILING (PV13) should equal 1. |

PV34 PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED

Screen Heading: Parked/Working Vehicle NGA Crash Data

Parked/Working Vehicle Hazardous Materials (650-E) Screen Name:

Long Name: Was this parked/working vehicle loaded with hazardous materials and

was it placarded?

SAS Name: Parked.PHaz Mat

Oracle Name: GES.Parked.HazardPlak

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 3 | 3, -1 | 0 | Not Applicable |
| 1 | 1 | 1 | Yes |
| 2 | 2 | 2 | No |
| 4 | 4 | 9 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Enter **Not Applicable** when the parked/working vehicle is not a medium/heavy truck or a bus. Also, use this code when the parked/working vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that this parked/working vehicle is not loaded with hazardous materials (e.g. an empty parked truck).

Enter Yes when the parked/working vehicle is a medium/heavy truck or a bus, and the PAR indicates that this parked/working vehicle is loaded with hazardous materials, and this parked/working vehicle is displaying a HazMat Placard.

Enter **No** when the parked/working vehicle is a medium/heavy truck or a bus, and the PAR indicates that this parked/working vehicle is loaded with hazardous materials, and this parked/working vehicle is not displaying a HazMat Placard.

Enter **Unknown** when the parked/working vehicle is a medium/heavy truck or a bus, and the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default) OR the PAR indicates that this parked/working vehicle is loaded with hazardous materials, but does not indicate whether a HazMat Placard is displayed or the hazardous materials related block has been left blank.

Also, enter this code when the parked/working vehicle body type is unknown.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| VV143P | PARKED/WORKING VEHICLE CARGO BODY TYPE (PV33) equals 00 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV146P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 0 or 2 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |
| VV152P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must not equal 0. |
| VV157P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 9. |
| VV158P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 1 or 9 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must not equal 0000. |
| VV159P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 9 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 9999. |
| VV160P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLETRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV168P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) equals 0 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| VV169P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60, 64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |

PV35 PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER

Screen Heading: Parked/Working Vehicle NGA Crash Data

Screen Name: Parked/Working Vehicle Placard Number (660-E)

Long Name: What is the hazardous materials placard number for this parked/working

vehicle?

SAS Name: Parked.PHazm_No

Oracle Name: GES.Parked.HazardPlakNum

Element Values:

Range with spreads included:

```
0004, 0222, 0223, 0331, 0402, 1001-1003, 1005, 1006, 1008-1018, 1020-1023, 1026-1030,
1032, 1033, 1035-1041, 1043-1046, 1048-1053, 1055-1058, 1060-1067, 1069-1073, 1075-
1083, 1085-1093, 1098-1100, 1104-1115, 1118, 1120, 1123, 1125-1131, 1133-1137, 1139,
1142-1150, 1152-1173, 1175-1185, 1188-1199, 1201, 1202-1204, 1206-1208, 1210, 1212-
1214, 1216, 1218-1224, 1226, 1228-1235, 1237-1239, 1242-1251, 1255-1257, 1259, 1261-
1268, 1270-1272, 1274-1282, 1286-1289, 1292-1310, 1312-1314, 1318, 1320-1328, 1330-
1334, 1336-1341, 1343-1350, 1352-1358, 1360-1366, 1369, 1370, 1372-1374, 1376, 1378-
1386, 1389-1398, 1400-1415, 1417-1423, 1426-1428, 1431-1433, 1435-1439, 1442, 1444-
1459, 1461-1463, 1465-1467, 1469-1477, 1479, 1481-1496, 1498-1500, 1502-1517, 1541,
1544-1551, 1553-1562, 1564, 1567, 1569-1575, 1577-1608, 1610-1614, 1616-1618, 1620-
1631, 1633, 1634, 1636-1665, 1669-1674, 1677-1680, 1683-1695, 1697-1705, 1707-1719,
1722-1733, 1736-1771, 1773-1784, 1786-1794, 1796, 1798-1819, 1821, 1823-1841, 1843,
1845-1849, 1851, 1854, 1855, 1858-1860, 1862-1873, 1884-1889, 1891, 1892, 1894, 1895,
1897, 1898, 1902, 1903, 1903, 1905-1908, 1910-1923, 1928, 1929, 1931, 1932, 1935, 1938-
1942, 1944, 1945, 1950-1984,1986-1994, 1999-2006, 2008-2038, 2044-2059, 2067-2085,
2087-2108, 2110-2116, 2118-2126, 2128-2219, 2222, 2224-2229, 2232-2267, 2269-2291,
2293-2313, 2315-2348, 2350-2354, 2356-2364, 2366-2414, 2416-2422, 2424, 2426-2449,
2451-2475, 2477, 2478, 2480-2491, 2493, 2495-2498, 2501-2509, 2511-2518, 2520-2522,
2524-2531, 2533-2536, 2538, 2541, 2542, 2545-2548, 2550-2558, 2560-2562, 2564, 2565,
2567, 2570-2574, 2576-2612, 2614-2624, 2626-2630, 2642, 2643, 2644-2651, 2653, 2655-
2662, 2664, 2666-2674, 2676-2693, 2698, 2699, 2707-2711, 2713-2717, 2719-2730, 2732-
2735, 2738-2790, 2793-2803, 2805-2807, 2809-2815, 2817-2823, 2826, 2829-2831, 2834,
2835, 2837-2842, 2844-2846, 2849-2865, 2869-2876, 2878-2881, 2883-2907, 2909-2913,
2918, 2920-2931, 2933-2938, 2940-2943, 2945-2956, 2965-3028, 3030-3043, 3048-3057,
3064-3066, 3070-3073, 3076, 3077-3080, 3082-3172, 3174-3176, 3178-3192, 3194, 3200,
3203, 3205-3301, 9011, 9018, 9026,
9035, 9037, 9069, 9083, 9084, 9088, 9136, 9180, 9183, 9187-9195, 9199, 9200, 9202, 9206,
9259, 9260, 9263, 9264, 9269, 9274-9278
```

| Screen | Oracle | SAS | |
|--------|--------|------|---|
| 0 | 0, -1 | 0000 | Not Applicable |
| XXXX | XXXX | XXXX | Code Actual Hazardous Material Placard Number |
| * | 9999 | 9999 | Unknown |

Range is a compilation of the 1993 Emergency Response Guidebook.

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Code **Not Applicable** is used when the parked/working vehicle is not a medium/heavy truck or a bus. Also, this code is used when the parked/working vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that this parked/working vehicle is not loaded with Hazardous Materials (e.g., an empty truck).

Code the actual number when given on the PAR. This parked/working vehicle must be a medium/heavy truck or a bus.

Code **Unknown** is used when the parked/working vehicle is a medium/heavy truck or a bus, the PAR does not have a Hazardous Material related block, and the narrative does not mention any such materials (default).

This code is used when the parked/working vehicle is a medium/heavy truck or a bus and a placard is indicated but the placard number is not given OR it is unknown if a placard is present OR the Hazardous Materials related block has been left blank.

Also, this code is used when the body type of the parked/working vehicle is unknown.

Consistency Checks:

| | IF | THEN |
|--------|------------------------------|----------------------------|
| VV146P | PARKED/WORKING VEHICLE | PARKED/WORKING VEHICLE |
| | HAZARDOUS MATERIALS | HAZARDOUS MATERIALS |
| | PLACARDED (PV34) equals 0 or | PLACARD NUMBER (PV35) must |
| | 2 | equal 0000. |

| VV149P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) is not equal to 0000 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must not equal 0. |
|--------|---|--|
| VV153P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and PARKED/WORKING VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |
| VV158P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 1 or 9 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must not equal 0000. |
| VV159P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 9 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 9999. |
| VV161P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 9999. |
| VV162P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60, 64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) must equal 0000. |
| RANGE | PARKED/WORKING VEHICLE HAZ NUMBER (PV35) must be within the values section, above. | |

<u>Warnings</u>

| | IF | THEN |
|--------|------------------------|--------------------------------|
| VV148P | PARKED/WORKING VEHICLE | PARKED/WORKING VEHICLE |
| | HAZARDOUS MATERIALS | HAZARDOUS MATERIALS |
| | PLACARD NUMBER (PV35) | RELEASE (PV36) should equal 0. |
| | equals 0000 | |

PV36 PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE

Screen Heading: Parked/Working Vehicle NGA Crash Data

Screen Name: Parked/Working Vehicle Hazardous Release (670-E)

Long Name: Was an hazardous cargo released from the parked/working vehicle

cargo tank or compartment?

SAS Name: Parked.PHazMa R

Oracle Name: GES.Parked.HazardRelease

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 3 | 3, -1 | 0 | Not Applicable |
| 1 | 1 | 1 | Yes |
| 2 | 2 | 2 | No |
| 4 | 4 | 9 | Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

This variable indicates whether or not any hazardous cargo was released from the parked/working vehicle cargo tank or compartment.

Code **Not Applicable** is used when the parked/working vehicle is not a medium/heavy truck or a bus. Also, this code is used when the parked/working vehicle is a medium/heavy truck or bus, the PAR has a hazardous materials related block, and 'None' is indicated OR the PAR indicates that this parked/working vehicle was not loaded with hazardous materials.

Code **Yes** is used when the parked/working vehicle is a medium/heavy truck or a bus, the PAR indicates that this parked/working vehicle was loaded with hazardous materials, and a release (spill) from the parked/working vehicle is indicated.

NOTE: Spilled gasoline from a fuel tank is not considered a hazardous materials release.

Code **No** is used when the parked/working vehicle is a medium/heavy truck or a bus and the PAR indicates a cargo of hazardous materials but does not indicate a release or spill.

Code **Unknown** is used when the parked/working vehicle is a medium/heavy truck or a bus, the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default).

This code is used when the PAR indicates that a release or spill occurred but it is unknown if the material was hazardous.

Also, use this code when the body type of the parked/working vehicle is unknown.

Consistency Checks:

| | IF | THEN |
|-----------------|---|---|
| VV149P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) is not equal to 0000 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must not equal 0. |
| VV152P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must not equal 0. |
| VV154P | PARKED/WORKING VEHICLE BODY TYPE (PV05) is not equal to 60, 64, 66-79 or 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 0. |
| VV155P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 99 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 9. |
| VV156P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 66 and VEHICLE TRAILING (PV13) equals 1 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) must equal 0. |
| VV168P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) equals 0 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARDED (PV34) must equal 0. |
| <u>Warnings</u> | | |
| | IF | THEN |
| VV148P | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS PLACARD NUMBER (PV35) equals 0000 | PARKED/WORKING VEHICLE HAZARDOUS MATERIALS RELEASE (PV36) should equal 0. |

PV10B PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS

Screen Heading: Parked/Working Vehicle Occupants/Persons

Screen Name: Parked/Working Vehicle Number of Occupants/Persons (1290-E)

Long Name: How many occupants/persons are associated with parked/working

vehicle #?

SAS Name: Parked.PNumOccs

Oracle Name: GES.Parked.NumOccs

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| 0 | 0 | 0 | Zero Persons |
| 1, | 1, | 1, | Total Number of Occupants/Persons Associated With This |
| * | -9999 | 999 | Parked/Working Vehicle Unknown |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Enter **Zero Persons** when the parked/working vehicle is unoccupied or when there are no people in or on the working vehicle at the time of the crash.

Count and enter the total number of occupants (injured and uninjured) associated with this parked/working vehicle.

For parked buses, the total number of occupants (injured and uninjured) must be entered.

Enter **Unknown** when the PAR does not indicate the total number of occupants/persons associated with the parked/working vehicle.

Consistency Checks:

Errors

| | IF | THEN |
|---------|---|--|
| VV012AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 17 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) must not be greater than 15. |
| VV013AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 11, 14 or 15 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) must not be greater than 22. |
| VV015AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) must not be greater than 5. |

<u>Warnings</u>

| | IF | THEN |
|---------|---|--|
| VV032AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 97 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) should not be greater than 8. |
| VV033AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 12 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) should not be greater than 15. |
| VV034AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 14-15, 23, 42 or 60-79 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) should not be greater than 12. |
| VV036AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 or 91 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) should not be greater than 2. |
| VV037AP | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS (PV10B) should not be greater than 6. |

VV241AP

PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01

PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS (PV10B) should be greater than 01.

PV10 PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED

Screen Heading: Parked/Working Vehicle Occupants/Persons

Screen Name: Coded Parked/Working Vehicle Occupants/Persons (1300-R)

Long Name: How many coded occupants/persons are associated with

parked/working vehicle #?

SAS Name: Parked.POcclnvl

Oracle Name: GES.Parked.NumOccCoded

Element Values:

Screen Oracle SAS

0 0 Zero Persons Coded

1,... 1,... 1,... Number of Occupants/Persons Coded for This Parked/Working

Vehicle

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

Enter **Zero Persons** when the parked/working vehicle is unoccupied or when there are no people in or on the working vehicle.

Count and enter the total number of coded occupants/persons associated with this parked/working vehicle.

Some State PARs only list drivers and injured passengers of parked/working vehicles. For these States code only the drivers and injured passengers unless there is information elsewhere on the PAR, e.g., the narrative.

For parked buses, only the driver and injured passengers are coded.

Consistency Checks:

Errors

| | IF | THEN | |
|---------|---|---|--|
| VV012P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 17 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) must not be greater than 15. | |
| VV013P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 11, 14 or 15 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) must not be greater than 22. | |
| VV015P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) must not be greater than 5. | |
| VV301AP | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) must be known. | | |
| VV301BP | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) must equal the number of persons coded for this parked/working vehicle. | | |

<u>Warnings</u>

| | IF | THEN |
|--------|---|--|
| VV032P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 01-05, 07-09 or 97 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should not be greater than 8. |
| VV033P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 12 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should not be greater than 15. |
| VV034P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 06, 14-15, 23, 42 or 60-79 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should not be greater than 12. |

| VV036P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 80-89 or 91 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should not be greater than 2. |
|--------|--|---|
| VV037P | PARKED/WORKING VEHICLE BODY TYPE (PV05) equals 90 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should not be greater than 6. |
| VV241P | PARKED/WORKING VEHICLE SPECIAL USE (PV08) equals 01 | PARKED/WORKING VEHICLE NUMBER OF OCCUPANTS/PERSONS CODED (PV10) should be greater than 01. |

PE01 PARKED/WORKING VEHICLE NUMBER

Screen Heading: Parked/Working Vehicle Number

Screen Name: Parked/Working Vehicle Number (1425-R)

Long Name: Which parked/working vehicle is associate with the event?

SAS Name: Parkevnt.PVehno

Oracle Name: GES.Parkedevent.VehicleID

Element Values:

Screen Oracle SAS

1-30 1-30 Computer Assigned Number

Remarks:

Parked/working vehicles within a crash are numbered sequentially by the computer beginning with 1; no numbers are skipped.

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

PE02 PARKED/WORKING VEHICLE EVENT NUMBER

Screen Heading: Parked/Working Vehicle Events

Screen Name: Parked/Working Vehicle Event Number (1430-R)

Long Name: What is(are) the event(s) associated with this parked/working vehicle?

SAS Name: Parkevnt.EventNum

Oracle Name: GES.Parkedevent.EventID

Element Values:

The events involving an in-transport motor vehicle and a parked/working vehicle are displayed. The event(s) in which this parked/working vehicle is involved is/are entered.

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

A "crash" is the total set of "harmful events" (one or more) resulting from an unstabilized situation. The "crash" is concluded in time when all harmful events which originate from the unstabilized situation are stabilized.

A harmful event is an occurrence of injury or damage involving an in-transport motor vehicle. It can result from an impact or non-collision event. An impact is defined as any vehicle to vehicle or vehicle to object (fixed or nonfixed, stationary or nonstationary) contact which results in damage or injury. Noncollision events such as fire/explosion, occupant fell from vehicle, occupant injury without vehicle impact, etc., involving an in-transport motor vehicle are harmful events if damage or injury result.

The NASS GES is only interested in harmful events that involve **in-transport** motor vehicles. Events that involve **only** not in-transport motor vehicles and/or pedestrians and/or non-motorists are not included in the coded crash sequence. Below are some examples of non-qualifying events.

Not in-transport vehicle impacts pedestrian, pedalcyclist, or other non-motorist (e.g., in-transport motor vehicle impacts a parked vehicle and then the parked vehicle impacts a pedestrian). The parked vehicle/pedestrian impact is a non-qualifying event.

Not in-transport vehicle impacts an object (fixed, e.g., tree, or nonfixed, e.g., parked/working vehicle)

Not in-transport vehicle impacts another not in-transport vehicle

Pedestrian (pedalcyclist, other non-motorist) impacts an object

Pedestrian (pedalcyclist, other non-motorist) impacts a not in-transport vehicle

Pedestrian, pedalcyclist, or other non-motorist inter-impact.

The crash events variables are designed to provide a coded description of all qualifying events which occurred in the crash sequence. Events are encoded in chronological sequence. Two groups of variables are provided for each event. The first (or left) group always describes the in-transport motor vehicle with the lower vehicle number in the event. The second group describes either the other in-transport vehicle, the object involved in the event or the noncollision event associated with the in-transport motor vehicle described by the left group.

With this coded chronological sequence of qualified crash events on the GES database, analysts can review the entire series of events involving in-transport motor vehicles. Various areas of concern to the highway safety community will be easily assessed using these variables. For instance, the injury severity in accidents can be assessed relative to the number and type of impacts involved.

Likewise, certain collision configurations may create a greater hazardous condition for the occupants. A possible area of analysis would be the mix of vehicles sizes or the types of objects the different classes of vehicles impact.

Complete these variables based upon a reconstruction of the vehicular dynamics involved in the crash as described in the PAR. All of the injury or damage producing qualifying events or circumstances for the in-transport motor vehicle(s) are coded.

An example of a properly coded crash sequence is shown below.

Vehicle 1 (a compact passenger car) went out of control on a wet roadway and struck a not in-transport motor vehicle with its front. The vehicle was redirected by the guardrail and reentered the roadway, where it struck vehicle 2 (a large pickup truck) in the left side with its front. Vehicle 1 spun to a stop in the roadway, and the driver, due to the spinning, hit his head on the door pillar breaking his neck. Vehicle 2, out-of-control, ran off the roadway, struck a pedestrian with its front and rolled over.

| E01 Event Number | E02 Vehicle Number (This Vehicle) | E03 Point of Impact (This Vehicle) | E06 Action | E04 Vehicle Number (Other Vehicle) or Object Contacted | E05 Point of Impact (Other Vehicle) | A07 Manner of Collision |
|---------------------|---|------------------------------------|------------------------------------|---|-------------------------------------|--|
| 1 | 1 | Front | Collision With Object Not Fixed | Motor Vehicle Not in Transport | - | Not Collision With Motor Vehicle in transport |
| 2 | 1 | Front | Strike Another Vehicle | 2 | Left Side | - |
| 3 | 2 | Front | Collision With Object Not Fixed | Pedestrian | - | - |
| 4 | 2 | Non-Collision | Non-Collision | Rollover or Overturn | - | - |

Note: For the driver of vehicle 1, breaking his neck is not a separate codeable event. Rather, this injury, and almost all occupant injuries resulting from occupant interior contact, is a result of a collision event. Also, A07, Manner of Collision, applies only to the first harmful event in the crash.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| PVE700 | PARKED VEHICLE TYPE (PV02) EQUALS 1 and PARKED VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 126. |
| PVE701 | PARKED/WORKING VEHICLE TYPE (PV02) EQUALS 2 and PARKED/WORKING VEHICLE EVENT NUMBER (PE02) equals EVENT NUMBER (E01) | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) must equal 128. |
| PVE702 | Parked/working vehicles must be inv | volved in at least one event. |
| PVE703 | Parked/working vehicle events must | include an in-transport motor vehicle. |
| PVE704 | NON-COLLISION CATEGORY OR OBJECT CONTACTED (E04) equals 126 | there must be a corresponding Parked/working vehicle event. |

PVE704A There must be at most one parked vehicle involved in an event.

PVE705 There is a row in the Oracle

ges.parkedevent table

there must exist a corresponding parked/working vehicle row in the

Oracle ges.parked table.

PE03/PV24 PARKED/WORKING VEHICLE POINT OF IMPACT/INITIAL POINT OF IMPACT

Screen Heading: Parked/Working Vehicle Events

Screen Name: Parked/Working Vehicle Point of Impact (1440-E)

Long Name: What is the point of impact for this parked/working vehicle?

SAS Name: Parkevnt.PGad, Parked.PImpact

Oracle Name: GES.Parkedevent.VehiclePlaneID

Element Values:

| Screen | Oracle | SAS | |
|--------|------------------|----------------|-------------------------|
| | | | |
| | 26859 | 0 - | Non-Collision |
| 2 | 26860 | 1 | Front |
| 3 | 26861 | 2 | Right Side |
| 4 | 26862 | 3 | Left Side |
| 5 | 26863 | 4 | Back |
| 6 | 26864 | 5 | Тор |
| 7 | 26865 | 6 | Undercarriage |
| 8 | 26866 | 11 | Front Right Corner |
| 9 | 26867 | 12 | Front Left Corner |
| 10 | 26868 | 13 | Back Right Corner |
| 11 | 26869 | 14 | Back Left Corner |
| 12 | 26870 | 99 | Point of Impact Unknown |
| | | | |

Remarks:

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw. dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

For this event involving a parked/working vehicle, code the parked/working vehicle impact point that produced property damage or personal injury. The impact point is for the parked/working vehicle coded in variable PE01, Parked/Working Vehicle Number, and the event coded in PE02, Parked/Working Vehicle Event Number.

Non-collision applies when the event involves rollover, fire, non-collision injury etc.

Front is used when it can be determined that the point of impact for this parked/working vehicle is the front plane.

Right Side applies when the point of impact for this parked/working vehicle is known to be the right plane.

Left side applies when the point of impact for this parked/working vehicle is known to be the left plane.

Back is used when the point of impact for this parked/working vehicle is known to be the back plane.

Front Right Corner applies when the point of impact for this parked/working vehicle is either the front plane or right plane, but the plane can not be determined.

Front Left Corner is selected when the point of impact for this parked/working vehicle is either the front plane or left plane, but the plane can not be determined.

Back Right Corner applies when the point of impact for this parked/working vehicle is either the back plane or the right plane, but it is unknown if the point of impact is to the back or right plane.

Back Left Corner is used when the point of impact for this parked/working vehicle is either the back or left plane, but it is unknown if the point of impact is to the back or left plane.

Unknown is selected when the lack of information prohibits the coding of any of the other element values.

Consistency Checks:

Errors

IF THEN

RANGE PARKED/WORKING VEHICLE POINT OF IMPACT (PE03) must equal 1-

6, 11-14 or 99.

Not Displayed On Summary Tab

P01 VEHICLE NUMBER (NON-MOTORISTS)

Screen Heading: Regarding Vehicle # __ Occupant # __

Screen Name: None (N)

Long Name: None

SAS Name: Person.Vehno

Oracle Name: GES.Person.VehicleID

Element Values:

Screen Oracle SAS

n/a -1 0 Non-Motorist

Remarks:

All Non-Motorists are assigned SAS element value 0 and Oracle element value -1. GES.Person.VehicleID is set to -1 for all non-motorists.

P02 PERSON NUMBER (NON-MOTORISTS)

Screen Heading: Regarding Non-Motorist # ___

Screen Name: None(N)

Long Name: None

SAS Name: Person.Perno

Oracle Name: GES.Person.OccNumber

Element Values:

Screen Oracle SAS

1, ... 1, ... Computer Assigned Number

Remarks:

Non-motorists are numbered sequentially by the computer, beginning with "1"; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped.

Persons appended to vehicle for motion (e.g., bicyclist holding onto vehicle) are non-motorists; they are not occupants.

Vehicle Number (P01 - Non-motorists) is assigned the value -1 by the computer for all non-motorists.

Consistency Checks:

Post Entry

IF THEN

AP135A The PERSON NUMBERS (P02) of the non-motorists within a crash must

be consecutively numbered. The number of non-motorists coded for a

crash must equal NUMBER OF NON-MOTORISTS (A04).

P03 PERSON TYPE (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Person Type (890-R)

Long Name: What is the person type of this non-motorist?

SAS Name: Person.Per type

Oracle Name: GES.Person.PersonTypeID

Element Values:

| Screen | Oracle | SAS | |
|--------------|--------|--------------|--|
| | 26704 | 1 | Driver Of A Motor Vehicle In-Transport (Occupant) |
| 2 | 26705 | 2 | Passenger Of A Motor Vehicle In-Transport (Occupant) |
| 3 | 26706 | 3 | Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist) |
| 4 | 26707 | 4 | Occupant Of A Non-motor Vehicle Transport Device |
| | | | (Non-Motorist) |
| 5 | 26708 | 5 | Nonoccupant / Pedestrian (Non-Motorist) |
| 6 | 26709 | 6 | Nonoccupant / Cyclist/Pedalcyclist (Non-Motorist) |
| 7 | 26710 | 8 | Nonoccupant / Other Or Unknown (Non-Motorist) |
| 8 | 26712 | 7 | Nonoccupant / Person in or on Working Vehicle (Non-Motorist) |
| 9 | 26711 | 9 | Unknown Occupant Type In A Motor Vehicle In-Transport |
| | | | (Occupant) |

Remarks:

Enter Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist) when a person is in or on a motor vehicle which is not in-transport when struck.

Enter Occupant of a Non-motor Vehicle Transport Device (Non-Motorist) when a person is associated with either (1) an animal or (2) a non-motorist conveyance. Association with an animal means that the non-motorist was either riding on an animal or in an animal powered conveyance.

A non-motorist conveyance is defined as any human-powered or personal transporter (e.g., segway, motorized wheelchair) device by which a non-motorist may move or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, segway, motorized wheelchair, wheelchair, rickshaw, etc. This includes those persons in a non-motorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

Enter **Non-occupant / Pedestrian (Non-Motorist)** when the non-motorist is a pedestrian. A Pedestrian is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. This

includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

Enter Non-occupant / Cyclist/Pedalcyclist (Non-Motorist) when the non-motorist is a bicyclist or other cyclist (generically a pedalcyclist). A bicyclist refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion. Other cyclist refers to all other pedalcyclists (tricyclist, unicyclist, etc.). This includes those pedalcyclists who hold onto a motor vehicle in motion. A "Big Wheel" should be treated as a tricycle.

Enter **Nonoccupant / Person in or on Working Vehicle (Non-Motorist)** when the person is in or on a working vehicle. Working vehicles are transport devices being used as equipment which would be classified under ANSI as motor vehicles, if not being used as equipment (e.g., a tow truck while using its winch, a pickup truck while being used to power a saw, a truck with cherry picker being used to repair or maintain a traffic signal or a concrete truck while discharging its load).

Enter **Non-occupant / Other Or Unknown (Non-Motorist)** when the non-motorist is any other person not included under the above definitions. For example, enter this value for any person outside a trafficway or outside sidewalk or path contiguous with a trafficway.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| AP021 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000 | PERSON TYPE (P03) must not equal 5, 6 or 8. |
| AP061 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P3) equals 5 | NON MOTORIST'S ACTION (P19) must equal 21 or 22. |
| AP062 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049 and PERSON TYPE (P03) equals 6 | at least one NON-MOTORIST'S ACTION (P19) must equal 07. |
| PA083 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
| PA096 | PERSON TYPE (P03) equals 5 or 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |
| PA201 | PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01. |

| PP002 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) must not equal 21-53. |
|--------|---|--|
| PP002A | PERSON TYPE (P03) equals 1 | there must not be another occupant of the same vehicle where PERSON TYPE (P03) equals 9. |
| PP012 | PERSON TYPE (P03) equals 1 | AGE (P07) must not be less than 02. |
| PP034 | PERSON TYPE (P03) equals 1 | RESTRAINT SYSTEM USE (P15) must not equal 6. |
| PP040 | PERSON TYPE (P03) equals 4 or 6 | NON-MOTORIST'S ACTION (P19) must not equal 21-29. |
| PP041 | PERSON TYPE (P03) equals 5, 7 or 8 | NON MOTORIST'S ACTION (P19) must not equal 01-10. |
| PP045A | PERSON TYPE (P03) equals 1, 2 or 9 and INJURY SEVERITY (P09) equals 0 | EJECTION (P06) must not equal 5 or 6. |
| PP046A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | SEATING POSITION (P04) must equal 0 and EJECTION (P06) must equal 8. |
| PP047 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| PP048A | PERSON TYPE (P03) equals 3, 4, 5, 6, 7 or 8 | VEHICLE NUMBER (V01) must equal null. |
| PP048 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |
| PP068 | PERSON TYPE (P03) equals 3 | NON MOTORIST'S ACTION (P19) must equal 00. |
| PP072 | PERSON TYPE (P03) equals 1, 2 or 9 | NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP073 | PERSON TYPE (P3) equals 3 | NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP082 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null | PERSON TYPE (P3) must not equal 3-8. |

| PP083 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is equal to 01-30 or 99 | PERSON TYPE (P3) must not equal 1, 2 or 9. |
|--------|---|---|
| PV001 | PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 00, 12-53 or 99. |
| PV005 | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 80-89 | SEATING POSITION (P04) must not equal 13-19 or 22-53. |
| PV007 | PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 11-39, 50, 52 or 99. |
| PV010 | PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59 | SEATING POSITION (P04) must not equal 12-50 or 52. |
| PV011 | PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08 | BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93. |
| VP002 | PERSON TYPE (P03) equals 2 or 9 and SEATING POSITION (P04) equals 50 | BODY TYPE (V05) must equal 64, 66 or 78. |
| VP002A | PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-31, 90 or 91 | SEATING POSITION (P04) must not equal 51. |
| VP234 | HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0. |

Warnings

| | IF | THEN |
|-------|--|--|
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120. |
| AP027 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5 | SCHOOL BUS RELATED (A21) should equal 1. |
| PA051 | PERSON TYPE (P03) equals 5 and NON MOTORIST LOCATION (P13) equals 08, 18 or 98 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620. |

| PA053 | NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
|-------|--|---|
| PP009 | PERSON TYPE (P03) equals 2 or 9 | SEATING POSITION (P04) should not equal 11. |
| PP018 | PERSON TYPE (P03) equals 1 | SEATING POSITION (P04) should not equal 12-19. |
| PP045 | PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89 | EJECTION (P06) should equal 0. |
| PP061 | NON MOTORIST SAFETY EQUIPMENT USE (P20) equals 2 | PERSON TYPE (P03) should equal 6. |
| PP081 | PERSON TYPE (P03) equals 3 | NON MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12. |
| PP085 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07 | PERSON TYPE (P03) should not equal 1. |

Post Entry

| | IF | THEN |
|-------|--|---|
| AP005 | HARMFUL EVENT (A06) equals 21 | at least one person must have PERSON TYPE (P03) equal to 5. |
| AP006 | HARMFUL EVENT (A06) equals 22 | at least one person must have PERSON TYPE (P03) equal to 6 or 8. |
| AP008 | HARMFUL EVENT (A06) equals 6 | at least one PERSON TYPE (P03) equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5. |
| AP015 | NUMBER OF MOTOR VEHICLES (A03) is greater than 00 | at least one PERSON TYPE (P03) should equal 1, 2 or 9. |
| AP023 | RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890. |

| AP039 | RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) equals 5 for the first non-motorist | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
|-------|---|---|
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920. |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055. |
| AP077 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420 | at least one PERSON TYPE (P03) must equal 4. |
| AP128 | HARMFUL EVENT (A06) equals 27 | at least one person mus have PERSON TYPE (P03) equal 4 or 8. |
| AP155 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999 | at least one person must have PERSON TYPE (P03) equal 4 or 8 (P03) must equal 8. |
| DP001 | DRIVER PRESENCE (D01) equals 0 or 9 | there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |
| DP004 | DRIVER PRESENCE (D01) equals 1 | there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1. |
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |
| DP141 | DRIVER PRESENCE (D01) equals 9 | at least one PERSON TYPE (P03) must equal 9. |
| PA049 | at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920. |

| PA058 | at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099. |
|----------|--|---|
| PP062 | A previous occupant has been identican be coded (P03 = 1) as the driver | fied as the driver. Only one occupant |
| PP082A | PERSON TYPE (P03) equals 3 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26. |
| PP082A | PERSON TYPE (P03) equals 4 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
| PP082A | PERSON TYPE (P03) equals 5 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21. |
| PP082A | PERSON TYPE (P03) equals 6 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22. |
| PP082A | PERSON TYPE (P03) equals 8 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
| PP082AP | PERSON TYPE (P03) equals 3 | PARKED/WORKING VEHICLE TYPE (PV02) must equal 1. |
| PP082AP2 | PARKED/WORKING VEHICLE TYPE (PV02) equals 1 | PERSON TYPE (P03) must equal 3 |
| PP082AP1 | PERSON TYPE (P03) equals 7 | PARKED/WORKING VEHICLE TYPE (PV02) must equal 2. |
| PP082AP3 | PARKED/WORKING VEHICLE TYPE (PV02) equals 2 | PERSON TYPE (P03) must equal 7 |

| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P03) equals 5, and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210. |
|--------|--|--|
| VP010 | HARMFUL EVENT (A06) equals 21 | at least one PERSON TYPE (P03) must be equal 5. |
| VP010A | at least one PERSON TYPE (P03) equals 5 | at least one HARMFUL EVENT (A06) must equal 21. |
| VP011 | HARMFUL EVENT (A06) equals 22 | at least one PERSON TYPE (P03) must be equal to 6. |
| VP011A | at least one PERSON TYPE (P03) equals 6 | at least one HARMFUL EVENT (A06) must equal 22. |
| VP012 | HARMFUL EVENT (A06) equals 27 | at least one PERSON TYPE (P03) must equal 4 or 8. |
| VP012A | at least one PERSON TYPE (P03) equals 4 or 8 | at least one HARMFUL EVENT (A06) must equal 27. |
| VP012B | at least one PERSON TYPE (P03) equals 3 | at least one HARMFUL EVENT (A06) must equal 26. |
| VP013 | HARMFUL EVENT (A06) equals 06 | at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5. |
| VP045 | at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP045A | at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP046 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220. |

| VP047 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720. |
|--------|--|---|
| VP056 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049. |
| VP057 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011. |
| VP136 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049. |
| VP199 | NUMBER OF OCCUPANTS CODED (V10) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |
| VP199A | NUMBER OF OCCUPANTS (V10B) is greater than 00 | there must be only one occupant coded as the driver (P03=1). |
| VP224 | BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2 | RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9. |

P07 AGE (NON-MOTORISTS)

Screen Heading: Non-motorist Data

Screen Name: Age (900-E)

Long Name: Enter the person's age.

SAS Name: Person.Age

Oracle Name: GES.Person.Age

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|------------------------|
| 0 | 0 | 0 | Less Than One Year Old |
| XXX | xxx | xxx | Person's Age |
| * | -9999 | 999 | Unknown |

Remarks:

The person's age at the time of the crash is recorded with respect to the person's last birthday. Age is recorded in years.

Consistency Checks:

| | IF | THEN |
|--------|--|--|
| PP012 | PERSON TYPE (P03) equals 1 | AGE (P07) must not be less than 02. |
| PV011 | PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08 | BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93. |
| PP013A | AGE (P07) must equal 0-105 or 999 | and must not equal null. |

<u>Warnings</u>

| | IF | THEN |
|-------|-------------------------------------|--------------------------------------|
| PP013 | UNLIKELY: AGE (P07) is greater that | an 92 and not equal to 999. |
| PP036 | RESTRAINT SYSTEM USE (P15) equals 6 | AGE (P07) should equal 00-10 or 999. |

P08 SEX (NON-MOTORISTS)

Screen Heading: Non-motorist Data

Screen Name: Sex (910-E)

Long Name: What is the person's sex?

SAS Name: Person.sex

Oracle Name: GES.Person.SexID

Element Values:

Screen Oracle SAS
1 26712 1 Male
2 26713 2 Female
3 26714 9 Unknown

Remarks:

Self-explanatory

P09 INJURY SEVERITY (NON-MOTORISTS)

Screen Heading: Non-motorist Data

Screen Name: Injury Severity (920-E)

Long Name: What is the police reported injury severity for this person?

SAS Name: Person.Inj Sev

Oracle Name: GES.Person.InjurySeverityID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--------------------------------------|
| 1 | 26746 | 0 | No Injury (O) |
| 2 | 26747 | 1 | Possible Injury (C) |
| 3 | 26748 | 2 | Nonincapacitating Evident Injury (B) |
| 4 | 26749 | 3 | Incapacitating Injury (A) |
| 5 | 26750 | 4 | Fatal Injury (K) |
| 6 | 26751 | 5 | Injured, Severity Unknown |
| 7 | 26752 | 6 | Died Prior To Crash |
| 8 | 26753 | 9 | Unknown |

Remarks:

Enter the police reported injury severity for this person (i.e., occupant, pedestrian or non-motorist). Most jurisdictions use the KABCO injury coding scheme.

K = Killed

A = Incapacitating Injury

B = Nonincapacitating Injury

C = Possible Injury

O = No Injury

If the police report contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries which are considered to be of an incapacitating nature are classified as "A", Nonincapacitating-evident injuries are classified as "B", and possible injuries are "C". Property damage only (i.e., no injury) is classified as "O".

Enter **Injured**, **Severity Unknown** if the police report indicates a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter **Died Prior to Crash** only if the police explicitly states the person died prior to the crash. This code also applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning. This code does not apply if the police report specifically states that the cause of death is a result of

crash-related injury or that on-set occurred after the crash. Further clarification: this code applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, but is silent about the time of on-set and if on-set is the result of injuries sustained in the crash.

As a general rule, if the PAR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter **No Injury (O)**. If the PAR is "blank" and the person was not present during the police investigation, enter **Unknown**. The following states use the KABCO injury coding scheme: Illinois (incl. Chicago), Michigan, New Mexico, North Carolina, Texas (incl. Dallas), Wisconsin, and the city of Los Angeles. Not all states use the KABCO scheme. Listed below, by state, are alternative schemes; a mapping to the GES scheme is provided.

See State PAR Translation Tables Under P09 INJURY SEVERITY (OCCUPANTS).

Consistency Checks:

Errors

| | IF | THEN |
|--------|---|---------------------------------------|
| PP045A | PERSON TYPE (P03) equals 1, 2 or 9 and INJURY SEVERITY (P09) equals 0 | EJECTION (P06) must not equal 5 or 6. |

Warnings

| | IF | THEN |
|-------|--|--|
| PP011 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 | INJURY SEVERITY (P09) should not be blank, 0 or 9. |
| PP015 | UNLIKELY: INJURY SEVERITY (PO | 9) is equal to 6. |
| PP069 | EJECTION (P6) equals 1 or 2 | INJURY SEVERITY (P09) should not equal 0. |

Post Entry

| | IF | THEN |
|--------|--|--|
| AP008 | HARMFUL EVENT (A06) equals 06 | at least one PERSON TYPE (P03) equal to 1-2, 9 must have INJURY SEVERITY (P09) equal to 1-5. |
| PV188A | no BODY TYPE (V05) equals 60- 79 and INJURY SEVERITY (P09) equals 4 for at least one occupant of a vehicle where BODY TYPE (V05) equals 1-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 1. |
| PV188B | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| PV188C | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed passenger vehicles | STRATUM (A23) should equal 1. |

| PV188K | no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 | STRATUM (A23) should equal 5. |
|--------|---|---|
| PV188R | at least one BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L, category 1 stratum M or category 1 stratum N and there is at least one vehicle where MANNER OF LEAVING SCENE (V19) equals 2 or one person where INJURY SEVERITY (P09) equals 1-5 | STRATUM (A23) should equal 2. |
| PV188S | no BODY TYPE (V05) equals 60- 79, the crash does not qualify for category 1 stratum L, category 1 stratum M, category 1 stratum N or category 2 and there is at least one person where INJURY SEVERITY (P09) equals 2-4 | STRATUM (A23) should equal 3. |
| VP013 | HARMFUL EVENT (A06) equals 06 | at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5. |
| | | |

P10 TAKEN TO HOSPITAL OR TREATMENT FACILITY (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Transported (930-E)

Long Name: Is this person transported to a hospital or another treatment facility?

SAS Name: Person. Hospital

Oracle Name: GES.Person.Treatment

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 3 | 9 | Unknown |

Remarks:

This variable addresses transportation directly from the scene to a treatment facility. The means of transportation is not a consideration.

Enter **No** when the person is not transported directly from the scene to a hospital or treatment facility. Use this element when the person is pronounced dead-at-the-scene and is transported to a funeral home. Neither Injury severity nor treatment at the scene are a consideration.

Enter **Yes** when the PAR indicates that the person is transported directly from the scene to a hospital or treatment facility (hospital, clinic, doctor's office, etc.). The person need not have been injured. The means of transportation is not a consideration. If the person died on route to a hospital or medical facility or was pronounced dead-on-arrival at a hospital or medical facility, enter **Yes**.

Enter **Unknown** if it cannot be determined if the person is transported directly from the scene to a medical facility. Use this attribute if the police report indicates the person will "seek own medical treatment" and it cannot be determined if the person goes directly to a medical facility.

Consistency Checks:

Errors

| | IF | IHEN |
|-------|---|---|
| VP234 | HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0. |

<u>Warnings</u>

| | IF | THEN |
|--------|--|--|
| PP011 | TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 | INJURY SEVERITY (P09) should not be blank, 0 or 9. |
| PV188B | no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 for one and only one vehicle, MANNER OF LEAVING SCENE (V19) equals 2 for this vehicle, INJURY SEVERITY (P09) does not equal 4 for any occupants of this vehicle, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of this vehicle | STRATUM (A23) should equal 1. |
| | | |

PV188C

no BODY TYPE (V05) equals 60-79, BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2 for at least 2 vehicles, INJURY SEVERITY (P09) does not equal 4 for any occupant of the towed passenger vehicles, INJURY SEVERITY (P09) equals 3 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of the towed

passenger vehicles

STRATUM (A23) should equal 1.

PV188K

no BODY TYPE (V05) equals 60-79, the crash does not qualify for category 1 stratum L and INJURY SEVERITY (P09) equals 1-5 and TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1 for at least one occupant of a vehicle where BODY TYPE (V05) equals 01-49 and MANNER OF LEAVING SCENE (V19) equals 2

STRATUM (A23) should equal 5.

P11 POLICE REPORTED ALCOHOL INVOLVEMENT (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Alcohol (940-E)

Long Name: Did the police report alcohol presence or involvement for this person?

SAS Name: Person.Per Alch

Oracle Name: GES.Person.Police_AlcoholID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------------|
| 1 | 26720 | 0 | Not Applicable |
| 2 | 19431 | 1 | Alcohol Not Involved |
| 3 | 26721 | 2 | Alcohol Involved |
| 4 | n/a | n/a | Not Reported |
| 5 | 26724 | 9 | Unknown (Police Reported) |
| 6 | 26725 | 6 | Not on PAR |
| 7 | 26726 | 7 | Not Coded |

Remarks:

The phrase "alcohol involved" means that alcohol is present in the person (drivers of in-transport motor vehicles and non-motorists only). Involvement is not an indication that alcohol was in any way a cause of the crash, even though it may have been. If the PAR indicates that opened or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for non-motorists who are occupants of vehicles which are not in transport.

Alcohol Not Involved applies if the investigating officer's assessment is that alcohol is not present in the non-motorist.

Alcohol Involved is coded if the police indicate alcohol presence in the non-motorist via: (1) a specific data element on the police report form, (2) the police charge the driver with DUIL, (3) the police mention in the narrative section of the report that the person had been drinking (or alcohol was present or involved) or (4) the police report has a positive BAC test result (BAC >.00).

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is present. If the police report indicates that a non-motorist was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if

the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Unknown (Police Reported)** if alcohol involvement is specifically indicated on the PAR as unknown. In general, police reports have blocks to check either positive or negative alcohol involvement. However, if a police report has provision for the investigating officer to respond "unknown involvement", then enter this element.

Enter **Not on PAR** if no block exists on the PAR for reporting what the driver maneuvered to avoid and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of what the driver maneuvered to avoid but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

Errors

| | IF | THEN |
|-------|--|---|
| PP047 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0. |
| RANGE | PERSON TYPE (P03) equals 9 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0. |
| RANGE | POLICE REPORTED ALCOHOL IN 2, 6, 7 or 9 and must not equal null. | VOLVEMENT (P11) must equal 0, 1, |

Post Entry

| | IF | THEN |
|-------|--|---|
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |

P11A ALCOHOL TEST GIVEN (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Alcohol Test Given (942-E)

Long Name: Did the police report indicate an alcohol test was given to this person?

SAS Name: Person.AlchTest

Oracle Name: GES.Person.AlcTestGiven

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 6 | 6 | Not on PAR |
| 4 | 7 | 7 | Not Coded |
| 5 | 8 | 8 | Not Applicable |
| 6 | 3 | 9 | Unknown |

Remarks:

Enter **No** If the police report indicates an alcohol test was not given to the non-motorist.

Enter **Yes** If the police report indicates an alcohol test was given to the non-motorist.

Enter **Not on PAR** If no block exists on the PAR for reporting alcohol test given and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for reporting alcohol test given, but the investigating officer fails to make either a positive or negative assessment and no other information is available.

Not Applicable is used for all non-motorists who are occupants of vehicles which are not in transport.

Enter **Unknown** if alcohol test given is specifically indicated on the PAR as unknown.

Consistency Checks:

| | | IF | THEN |
|---|-------|------------------------------------|---|
| F | RANGE | PERSON TYPE (P03) equals 1 or 4-8 | ALCOHOL TEST GIVEN (P11A) must not equal 8. |
| F | RANGE | PERSON TYPE (P03) equals 2, 3 or 9 | ALCOHOL TEST GIVEN (P11A) must equal 8. |

P17 POLICE REPORTED DRUG INVOLVEMENT (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Drugs (945-E)

Long Name: Did the police report drug presence or involvement for this person?

SAS Name: Person.Per_Drug

Oracle Name: GES.Person.Police_DrugID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---------------------------|
| 1 | 19432 | 0 | Not Applicable |
| 2 | 26715 | 1 | Drugs Not Involved |
| 3 | 26716 | 2 | Drugs Involved |
| 4 | n/a | n/a | Not Reported |
| 5 | 26719 | 9 | Unknown (Police Reported) |
| 6 | 26720 | 6 | Not on PAR |
| 7 | 26721 | 7 | Not Coded |

Remarks:

The phrase "other drug involvement" includes prescription and "over-the-counter" medications as well as "illicit" substances (e.g., in most cases, marijuana, cocaine, heroin, etc. where usage has not been prescribed by a doctor). Also, "other drug involvement" means that an other drug is present in the person (drivers of in-transport motor vehicles and non-motorists only). It is not an indication that the drug usage was in any way a cause of the crash, even though it may have been. If the PAR indicates that other drugs were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all non-motorists who are occupants of vehicles which are not in transport.

Drugs Not Involved applies if the investigating officer's assessment is that no other drugs were present in the person.

Drugs Involved is coded if the police indicate that other drugs are present in the person via: (1) a specific data element on the police report form or (2) the police mention in the narrative section of the report that other drugs are present in the person.

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is used. If the police report indicates that a non-motorist was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if

the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Unknown (Police Reported)** if other drug presence is specifically indicated on the PAR as unknown. A growing number of police reports have blocks to check either positive or negative other drug presence. However, if a police report has provision for the investigating officer to respond "unknown presence", then enter this element.

Enter **Not on PAR** If no block exists on the PAR for reporting other drugs and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for assessment of other drug presence but the investigating officer fails to make either a positive or negative assessment.

Consistency Checks:

Errors

| | IF | THEN |
|-------|-----------------------------------|--|
| PP048 | PERSON TYPE (P03) equals 2 or 3 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0. |
| RANGE | PERSON TYPE (P03) equals 9 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0. |
| RANGE | POLICE REPORTED DRUG INVOLV | VEMENT (P17) must equal 0, 1, 2, 6, |

Post Entry

| | IF | THEN |
|-------|--|---|
| DP095 | VIOLATIONS CHARGED (D02) equals 1 and PERSON TYPE (P03) equals 1 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 2. |
| DP095 | VIOLATIONS CHARGED (D02) equals 2 and PERSON TYPE (P03) equals 1 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2. |

P17A DRUG TEST GIVEN (NON-MOTORISTS)

Screen Heading: Non-Motorist Data

Screen Name: Drug Test Given (947-E)

Long Name: Did the police report indicate a drug test was given to this person?

SAS Name: Person.DrugTest

Oracle Name: GES.Person.DrugTestGiven

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|----------------|
| 1 | 1 | 0 | No |
| 2 | 2 | 1 | Yes |
| 3 | 6 | 6 | Not on PAR |
| 4 | 7 | 7 | Not Coded |
| 5 | 8 | 8 | Not Applicable |
| 6 | 3 | 9 | Unknown |

Remarks:

Enter **No** If the police report indicates a drug test was not given to the non-motorist.

Enter **Yes** If the police report indicates a drug test was given to the non-motorist.

Enter **Not on PAR** If no block exists on the PAR for reporting drug test given and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for reporting drug test given, but the investigating officer fails to make either a positive or negative assessment and no other information is available.

Not Applicable is used for all non-motorists who are occupants of vehicles which are not in transport.

Enter **Unknown** if drug test given is specifically indicated on the PAR as unknown.

Consistency Checks:

| | IF | THEN |
|-------|------------------------------------|--|
| RANGE | PERSON TYPE (P03) equals 1 or 4-8 | DRUG TEST GIVEN (P17A) must not equal 8. |
| RANGE | PERSON TYPE (P03) equals 2, 3 or 9 | POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 8. |

P13 NON-MOTORIST LOCATION

Screen Heading: Non-motorist Data

Screen Name: Location (950-E)

Long Name: What is the person's location at the time of the impact?

SAS Name: Person.Locatn

Oracle Name: GES.NonMotorist.LocusID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|--|
| n/a | null | 00 | Motorist (P03=SAS 1, 2 or 9) |
| 1 | 10196 | 01 | Intersection - In Crosswalk |
| 2 | 10197 | 02 | Intersection - On Roadway |
| 3 | 10198 | 80 | Intersection - Other |
| 4 | 10199 | 09 | Intersection - Unknown Location |
| 5 | 10200 | 11 | Nonintersection - In Crosswalk |
| 6 | 10201 | 12 | Nonintersection - On Roadway |
| 7 | 10202 | 18 | Nonintersection - Other |
| 8 | 10203 | 19 | Nonintersection - Unknown Location |
| 9 | 10204 | 20 | In Crosswalk - Unknown If Intersection |
| 10 | 10205 | 98 | Other Location |
| 11 | 10206 | 99 | Unknown Location |

Remarks:

Select the value which best represents the location of the person (i.e., pedestrian or non-motorist) at the time of impact.

In order to use the "Intersection" elements (screen values "1", "2", "3", and "4") the pedestrian or non-motorist must have been struck in the area formed by the junction of two or more trafficways.

Enter **Intersection - In Crosswalk** if the PAR indicates that the person was in a designated crosswalk. A crosswalk is defined as a marked area (generally delineated by solid white lines) used by persons when crossing a roadway.

Enter **Intersection - On Roadway** if the person was struck in the intersection (of the roadways) or within the junction of the two trafficways outside the intersection of the two roadways but on one of the roadways. Use this element, for example, if no crosswalk is present.

Enter **Intersection - Other** if the person is on a sidewalk or island within the junction of the trafficways. Sidewalk is defined as any improved surface primarily constructed for the use of pedestrians.

Enter **Intersection - Unknown** if the person is within the junction of two trafficways but their exact location is unknown.

Screen elements values "5", "6", "7", and "8" are applicable to crashes occurring in a non-intersection area (i.e., not within the junction of two or more named trafficways but on the "road" of a named trafficway). The junction of a driveway/alley access and a named trafficway is a Non-intersection area.

Enter **Non-intersection - In Crosswalk** if the person is in a crosswalk not associated with the junction of two named trafficways (e.g., a mid-block crosswalk or a crosswalk across a named trafficway which connects a driveway).

Enter **Non-intersection - On Roadway** when the PAR indicates that the person is on a roadway and not in a crosswalk and not in the junction of two named trafficways.

Enter **Non-intersection - Other** when the person is struck on the "road" of a named trafficway but not on the roadway (i.e., in or out of a crosswalk). This element includes person-location areas commonly referred to as islands, shoulders or parking lanes. This element may also include some bicycle lanes if these lanes are adjacent to the travel lanes (i.e., the roadway).

Enter **Non-intersection - Unknown** if the person is not struck in the junction of two named trafficways nor on a roadway (in or out of a crosswalk).

Enter **In Crosswalk - Unknown If Intersection** when it is known that the person is in a crosswalk but it is unknown if the crosswalk is associated with the junction of two named trafficways.

Enter **Other Location** if the person is not struck in the junction of two named trafficways nor on the "road" of a trafficway. This element includes person-location areas commonly referred to as medians, sidewalks or "roadside" (i.e., within the trafficway but not on the "road" and not within the junction of two or more named trafficways).

Non-Motorists who are occupants of a motor vehicle not in transport are coded with respect to the location of the vehicle.

Consistency Checks:

| | IF | THEN |
|-----------------|--|---|
| PA127 | NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; and EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 | RELATION TO JUNCTION (A09) must not equal 01 or 11. |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 1 or 9 | NON-MOTORIST LOCATION (P13) MUST equal 02 or 12 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 2 or 7 | NON-MOTORIST LOCATION (P13) MUST equal 18 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 3, 5, 8 or 10 | NON-MOTORIST LOCATION (P13) MUST equal 98 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 4 | NON-MOTORIST LOCATION (P13) MUST equal 8, 18 or 98 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 6 | NON-MOTORIST LOCATION (P13) MUST equal 09 or 19 |
| PV082CP-1 | PARKED/WORKING VEHICLE LOCATION (PV37) equals 99 | NON-MOTORIST LOCATION (P13) MUST equal 9, 19 or 99 |
| RANGE | PERSON TYPE (P03) equals 3, 4, 5, 6 or 8 | NON-MOTORIST'S LOCATION (P13) must equal 01, 02, 08, 09, 11, 12, 18, 19, 20, 98 or 99 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 1, 2 or 9 | NON-MOTORIST'S LOCATION (P13) must equal null. |
| <u>Warnings</u> | | |
| | IF | THEN |
| AP135 | RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON-MOTORISTS (A4) is greater than 00 | NON-MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09. |
| PA051 | PERSON TYPE (P03) equals 5 and NON-MOTORIST LOCATION (P13) equals 08, 18 or 98 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620. |

| PA053 | NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790. |
|-------|--|---|
| PA130 | NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 | RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12. |
| PP081 | PERSON TYPE (P03) equals 3 | NON-MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12. |

Post Entry

| | IF | THEN |
|-------|--|--|
| AP001 | EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99. |
| AP002 | EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27, and RELATION TO ROADWAY (A10) equals 2 or 7 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP003 | EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99. |
| AP004 | EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99 | there must be at least one NON-MOTORIST LOCATION (P13) equal to 09, 19 or 99. |

P23 NON-MOTORIST PARKED/WORKING VEHICLE NUMBER

Screen Heading: Non-Motorist Data

Screen Name: Parked/Working Vehicle # (895-R)

Long Name: Enter the non-motorist's parked/working vehicle number.

SAS Name: Person.PVehno

Oracle Name: GES.NonMotorist.ParkVehicleid, GES.Parked.VehicleNumber

Element Values:

Screen Oracle SAS

n/a n/a 00 Not Applicable

1-30 * 1-30 Parked/Working Vehicle Number

Remarks:

This variable applies to non-motorists where P03, Person Type, equals "Occupant Of A Motor Vehicle Not In Transport" or "Person in or on Working Vehicle."

Parked vehicles are motor vehicles stopped off the roadway. Working vehicles are transport devices being used as equipment, e.g., pickup truck while being used to power a saw, dump truck while spreading its load, tow truck while using its winch, jeep while pulling a device picking up golf balls, transit-mix concrete truck while discharging its load, dump truck while plowing snow.

This variable is the number of the parked/working vehicle this person is a part of.

Not Applicable applies when P03, Person Type, equals 1) Driver Of A Motor Vehicle In-Transport (Occupant), 2) Passenger Of A Motor Vehicle In-Transport (Occupant), 4) Occupant Of A Non-motor Vehicle Transport Device (Non-Motorist), 5) Nonoccupant / Pedestrian (Non-Motorist), 6) Nonoccupant / Cyclist/Pedalcyclist (Non-Motorist), 8) Nonoccupant / Other Or Unknown (Non-Motorist) or 9) Unknown Occupant Type In A Motor Vehicle In-Transport (Occupant).

^{*} The Oracle value is set equal to the value of GES.Parked.PVehicleID for the parked/working vehicle the non-motorist is associated with.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| RANGE | PERSON TYPE (P03) equals 3 or 7 | NON-MOTORIST PARKED/WORKING VEHICLE NUMBER (P23) must be greater than 0 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 1, 2,4, 5, 6, 8 or 9 | NON-MOTORIST PARKED/WORKING VEHICLE NUMBER (P23) must equal -1 or null. |

P22 NON-MOTORIST STRIKING VEHICLE NUMBER

Screen Heading: Non-Motorist Data

Screen Name: Harming Vehicle # (1000-E?)

Long Name: Enter the non-motorist's striking vehicle number.

SAS Name: Person.Str_Veh

Oracle Name: GES.NonMotorist.StrikeVehicleID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|------|-----------------------------------|
| n/a | n/a | 00 | Not Applicable - Vehicle Occupant |
| 1-30 | * | 1-30 | Assigned Vehicle Number |
| ? | ? | 99 | Unknown |

^{*} The Oracle value is set equal to the value of GES. Vehicle. Vehicle ID for the in-transport motor vehicle which comes in contact with the non-motorist.

Remarks:

This variable captures the vehicle which made contact with the non-motorist being coded. The value entered must match the vehicle number of the striking vehicle.

If the non-motorist made contact with more than one vehicle, code the number of the vehicle that caused the most significant injury. If it is not possible to determine which vehicle caused the most significant injury, code the number of the vehicle which made contact first.

Code **Unknown** is used when it cannot be determined which vehicle made contact.

Consistency Checks:

| | IF | THEN |
|-------|---|---|
| PA201 | PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01. |
| PP082 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null | PERSON TYPE (P03) must not equal 3-8. |

| PP083 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is equal to 01-30 or 99 | PERSON TYPE (P03) must not equal 1, 2 or 9. |
|------------|--|---|
| RANGE | PERSON TYPE (P03) equals 3, 4, 5, 6 or 8 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must be greater than 0 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 1, 2 or 9 | NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal null. |
| Post Entry | | |
| | IF | THEN |
| PA200 | NON-MOTORIST STRIKING VEHIC of the NUMBER OF MOTOR VEHIC equal to 99. | , , |
| PP082A | PERSON TYPE (P03) equals 3 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26. |
| PP082A | PERSON TYPE (P03) equals 4 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |
| PP082A | PERSON TYPE (P03) equals 5 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21. |
| PP082A | PERSON TYPE (P03) equals 6 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22. |
| PP082A | PERSON TYPE (P03) equals 8 | the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27. |

VA218

MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.

MB_A16 TRAFFIC CONTROL DEVICE - CYCLIST

Screen Heading: Non-Motorist Data - Cyclists

Screen Name: Cyclist Traffic Control Devices (960-E)

Long Name: What traffic control devices are applicable to this cyclist?

SAS Name: Biketraf.BTrafCon

Oracle Name: GES.BiketrafficDevice.DeviceID

Element Values:

Screen Oracle SAS

n/a 26623 00 No Controls

NOT AT RAILROAD GRADE CROSSING

TRAFFICWAY TRAFFIC SIGNALS

| 4 | 26624 | 01 | Troffic Control Cianal (on colors) |
|---|-------|----|------------------------------------|
| 1 | 26624 | 01 | Traffic Control Signal (on colors) |

2 26625 04 Flashing Traffic Control Signal or Flashing Beacon

3 26626 08 Other Traffic Signal

4 26627 09 Unknown Traffic Signal

REGULATORY, SCHOOL ZONE SIGNS

| 1 | 26628 | 21 | Stop Sign |
|---|-------|----|-----------|
|---|-------|----|-----------|

2 26629 22 Yield Sign

3 26630 23 School Zone Related Sign

4 26631 28 Other Sign

5 26632 29 Unknown Sign

WARNING SIGNS

| 1 | 26633 | 40 | Advisory Speed Sign |
|---|-------|----|---------------------|
| | | | , , , |

2 26634 41 Warning Sign for Road Conditions (Hill, Steep Grade, etc.)

3 26635 42 Warning Sign for Road Construction

4 26636 43 Warning Sign for Environment/Traffic (Fog ahead, Wind, Crash

ahead)

5 26637 49 Unknown Type Warning Sign

MISCELLANEOUS NOT AT RAILROAD CROSSING

1 26638 51 Officer, Crossing Guard, Flagman, etc.

AT RAILROAD GRADE CROSSING

| 1 | 26639 | 61 | Active Device at RR Crossing (e.g., Gates, Flashing Lights, Traffic Signal) |
|--------------|-------|----|---|
| 2 | 26640 | 62 | Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks) |
| <u>OTHER</u> | | | |
| 1 | 26641 | 97 | Traffic Control Present - No Details |
| 2 | 26642 | 98 | Other Traffic Control (Whether or not at RR Grade Crossing) |
| 3 | 26643 | 99 | Unknown |

Remarks:

This variable measures controls which regulate vehicular traffic. Excluded are any controls which solely regulate pedestrians (e.g., Walk/Wait signals).

Pavement markings are used to supplement the regulations or warnings of other devices such as traffic signs or signals. In other instances, they are used alone and produce results that can not be obtained by the use of any other device. Pavements markings can convey warnings or information to the driver without diverting his attention from the roadway. However, pavement markings are not considered as traffic control devices for the purposes of this variable and are not entered.

Guide signs do not constitute traffic controls.

Code the attribute indicated on the PAR if it directly matches.

Code **No Controls** is used if at the time of the crash there was no intent to control (regulate or warn) vehicle traffic. Use this attribute if statutory controls apply (e.g., state law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

Traffic Control Signal (on Colors) is used if the PAR indicates a signal which processes through the green, amber, and red cycles. The source of actuation is of no concern.

Flashing Traffic Control Signal or Flashing Beacon is used if (1) the signal has green, amber, and red cycle capability but is being used to flash amber/red only or (2) the device is capable of only flashing amber/red signals.

School Zone Related Sign is used when the first harmful event occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether or not children were present.

Other Sign includes speed limit signs, movement signs (e.g., NO TURN, LEFT TURN ONLY, DO NOT PASS, PASS WITH CARE, KEEP RIGHT, DO NOT ENTER, WRONG WAY, ONE WAY), parking signs (e.g., NO PARKING, EMERGENCY PARKING ONLY), and other miscellaneous signs (e.g., STOP HERE ON RED, NO TURN ON RED, ROAD CLOSED TO

THRU TRAFFIC, WEIGHT LIMIT..., TRUCK ROUTE). There must be specific mention of the sign on the PAR.

Warning Signs include any black on orange diamond shaped sign or any black on yellow diamond shaped sign. Some black on yellow horizontal rectangular or vertical rectangular signs are also included.

At Railroad Grade Crossing should only be used when the first harmful event occurs in the area of a roadway and a railroad bed (i.e., Relation to Junction equals Railroad Grade Crossing). Attributes referring to **Trafficway Traffic Signals**, **Regulatory School Zone Signs**, and **Warning Signs** should be used when the first harmful event occurs anywhere else.

Active Device at RR Crossing (e.g., Gates, Flashing Lights, Traffic Control Signal) is used when the PAR reports that the railroad crossing was guarded by a gate, a flashing light, a traffic control signal, a bell or any combination thereof.

Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks, etc.) is used when the PAR indicates that no train activated devices were present. Cross bucks are a large "X", with the words RAILROAD CROSSING spelled out on the "X". A railroad advance warning sign is a circle with a black "X" on a yellow background.

Other Traffic Control (Whether or Not At RR Grade Crossing) includes: (1) a school bus with flashers activated where vehicles are required to stop or (2) any other device which (a) functions as a traffic control device which is not listed as an attribute of this variable and (b) is not excluded by the manual and (c) is related to the crash. Some examples are: barricades, cones, drums, and object markers.

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the crash, code **No Controls**. A traffic control that has just been installed and not yet activated is also coded **No Controls**. However, a traffic control that is out (e.g., due to a power failure) and was reported as such on the PAR is coded, unless a temporary control (e.g., stop sign, police officer, etc.) has been inserted, in which case the temporary control should be coded.

Unknown is used if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other attributes.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| AA045 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0009, 0010, 0012 or 0055 | TRAFFIC CONTROL DEVICE (A16) and TRAFFIC CONTROL DEVICE - CYCLIST (A16C) must not both equal 00. |

| AA047 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005 | at least one TRAFFIC CONTROL DEVICE - CYCLIST (A16C) must equal 04 or 21. |
|-------------------|---|--|
| MULTIPLE RESPONSE | TRAFFIC CONTROL DEVICE - CYCLIST (A16C) equals 00 or 99 | there must be only one traffic control device coded. |
| RANGE | TRAFFIC CONTROL DEVICE - CYCLIST (A16C) equals 00, 01, 04, 08, 09, 21, 22, 23, 28, 29, 40, 41, 42, 43, 49, 51, 61, 62, 97, 98 or 99 | PERSON TYPE (P03) must equal 6. |
| RANGE_A | PERSON TYPE (P03) equals 6 | TRAFFIC CONTROL DEVICE - CYCLIST (A16C) must equal 00, 01, 04, 08, 09, 21, 22, 23, 28, 29, 40, 41, 42, 43, 49, 51, 61, 62, 97, 98 or 99 and must not equal null. |

P18 PERSON'S PHYSICAL IMPAIRMENT (NON-MOTORISTS)

Screen Heading: Physical Impairments

Screen Name: Physical Impairments (970-E)

Long Name: Did the police identify any contributory physical impairments?

SAS Name: P18-Person.Impairmt, M_P18-Impair.MImpair

Oracle Name: GES.Impairment.ImpairID

Element Values:

| Oracle | SAS | |
|------------------|---|--|
| 26791 | 00 | None |
| 26792 | 01 | III, Blackout |
| 26793 | 02 | Drowsy, Sleepy, Fell Asleep, Fatigued |
| 26794 | 03 | Requires Cane Or Crutches |
| 26795 | 04 | Paraplegic Or Restricted To Wheelchair |
| 26796 | 05 | Impaired Due To Previous Injury |
| 26797 | 06 | Deaf |
| 26798 | 07 | Blind |
| 26799 | 97 | Physical Impairment-No Details |
| 26800 | 98 | Other Physical Impairment |
| 26801 | 99 | Unknown If Physically Impaired |
| 26820 | 50 | Hit & Run (And No Information) |
| 26821 | 93 | Not on PAR |
| 26822 | 94 | Not Coded |
| | 26791 26792 26793 26794 26795 26796 26797 26798 26799 26800 26801 26820 26821 | 26791 00 26792 01 26793 02 26794 03 26795 04 26796 05 26797 06 26798 07 26799 97 26800 98 26801 99 26820 50 26821 93 |

Remarks:

This question attempts to identify physical impairments of non-motorists which may have contributed to the cause of the crash. These impairments can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, non-motorist or witness statements unless verified by the investigating police officer.

Enter **None** when the PAR indicates that there were no physical impairments for this person. Also use this code if physical impairment is not reported on the PAR.

Enter **III**, **Blackout** when indicated on the PAR. Enter this element even if the source of the illness or loss of consciousness is alcohol or drug related.

Enter **Drowsy**, **Sleepy**, **Fell Asleep**, **Fatigued** when indicated on the PAR. Alcohol or other drugs may be the source of this impairment.

Enter Requires Cane Or Crutches when indicated on the PAR.

Enter **Paraplegic or Restricted to Wheelchair** if this person has to use a wheelchair or is paraplegic (may or may not have used a wheelchair).

Enter **Impaired Due To Previous Injury** if the PAR specifically indicates this condition (e.g., pedestrian is involved in this crash subsequent to his/her involvement in a previous crash in which the pedestrian was injured). This element should be extremely rare.

Enter **Deaf** when indicated on the PAR.

Enter **Blind** when indicated on the PAR.

Enter **Physical Impairment - No Details** when the PAR indicates that "some" physical impairment exists but does not clearly indicate the nature of the impairment.

Enter **Other Physical Impairment** when the PAR indicates a physical impairment that cannot be attributed to one of the other elements above (screen element values "2" through "8").

Enter **Unknown If Physically Impaired** when the PAR indicates that the person's physical condition at the time of the crash is unknown.

Enter **Not on PAR** if no block exists on the PAR for reporting physical impairment information and no other information is available.

Enter **Not Coded** if there is a specific location on the police report for physical impairment information, the investigating officer fails to make either a positive or negative assessment and no other information is available

Consistency Checks:

| | IF | THEN |
|-------|--|---|
| PA083 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
| RANGE | PERSON TYPE (P03) equals 1 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 50, 93, 94, 97, 98 or 99 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 1, 3, 4, 5, 6 or 8 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 93, 94, 97, 98 or 99 and must not equal null. |

| RANGE | PERSON TYPE (P03) equals 2 or 9 | PERSON'S PHYSICAL IMPAIRMENT (P18) must equal null. |
|-------------------|---|---|
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 00 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 93 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 94 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 97 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 99 | no other physical impairments must be coded for this driver |
| MULTIPLE RESPONSE | each PERSON'S PHYSICAL IMPAI coded at most once per driver. | RMENT (P18) element value must be |

<u>Warnings</u>

| | IF | THEN |
|--------|---|--|
| PP085 | PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07 | PERSON TYPE (P03) should not equal 1. |
| PP046B | VIOLATIONS CHARGED (D02) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98. |

Post Entry

| | IF | THEN |
|-------|---|--|
| AP235 | First character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 1 | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04. |

P19 NON-MOTORIST ACTION

Screen Heading: Non-Motorists Actions

Screen Name: Non-Motorists Actions (980-E)

Long Name: What are the non-motorist's actions at the moment prior to the crash?

SAS Name: P19-Person.Action, M_P19-Nmaction.MAction

Oracle Name: GES.NonMotoristAction.ActionID

Element Values:

Screen Oracle SAS

Non-Motorist - Pedalcyclist/Operator

| 1 | 26765 | 00 | No Action |
|----|-------|----|---|
| 2 | 26766 | 01 | Failing To Have Lights On When Required |
| 3 | 26767 | 02 | Operating Without Required Equipment |
| 4 | 26768 | 03 | Improper Or Erratic Lane Changing |
| 5 | 26769 | 04 | Failure To Keep In Proper Lane Or Running Off Road |
| 6 | 26770 | 05 | Making Improper Entry To Or Exit From Trafficway |
| 7 | 26771 | 06 | Operating The Vehicle In Other Erratic, Reckless, Careless Or |
| | | | Negligent Manner |
| 8 | 26772 | 07 | Failure To Yield Right Of Way |
| 9 | 26773 | 80 | Failure To Obey Traffic Signs, Traffic Control Devices Or Traffic |
| | | | Officers, Failure To Obey Safety Zone |
| 10 | 26774 | 09 | Making Other Improper Turn |
| 11 | 26775 | 10 | Driving On Wrong Side Of Road |
| 12 | 26776 | 98 | Other Action |
| 13 | 26777 | 99 | Unknown Action |

Other Non-Motorist

| 1 | 26779 | 00 | No Action |
|----|-------|----|---|
| 2 | 26780 | 21 | Darting Or Running Into Road |
| 3 | 26781 | 22 | Improper Crossing Of Roadway Or Intersection (Jaywalking) |
| 4 | 26782 | 24 | Inattentive (Talking, Eating, Etc.) |
| 5 | 26783 | 25 | Jogging |
| 6 | 26784 | 26 | Non-Motorist Pushing A Vehicle |
| 7 | 26785 | 27 | Walking With Traffic |
| 8 | 26786 | 28 | Walking Against Traffic |
| 9 | 26787 | 29 | Playing, Working, Sitting, Lying, Standing, etc. In Roadway |
| 10 | 26788 | 98 | Other Action |
| 11 | 26789 | 99 | Unknown Action |

Remarks:

This variable attempts to identify circumstances that may have contributed to the cause of the crash. These circumstances ("actions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

Enter **No Action** if the PAR does not indicate (either specifically or by implication) that one of the elements listed below applies to this non-motorist. Also, use this code when Person Type (P03) = (Occupant Of A Motor Vehicle Not In-Transport) for this non-motorist or when Person Type = (Occupant of a Non-Motor Vehicle Transport Device) and this non-motorist is not the vehicle operator.

Non-Motorist - Pedalcyclist/Operator

SAS element values "01" through "10" and "98" apply to pedalcyclists and operators (as opposed to passengers) of non-motor vehicle transport devices--see P03, Person Type, SAS element values "4" (Occupant Of A Non-motor Vehicle Transport Device) and "6" [Non-Occupant - Cyclist (Pedalcyclist)]. Occupants Of Non-motor Vehicle Transport Devices who are passengers should be coded "00" (No Action).

Enter Failing To Have Lights On When Required if the PAR indicates that the pedalcycle or non-motor vehicle transport device was equipped with lights but failed to have them on when required.

Enter **Operating Without Required Equipment** if the PAR indicates that this non-motorist operated the pedalcycle or non-motor vehicle transport device, for example, without installation of the proper light equipment (e.g., headlights, taillights, etc.).

Enter **Other Action** if the PAR indicates that some "other action" (other than one of those listed in SAS elements "01" through "10" above), associated with the operation of the pedalcycle or non-motor vehicle transport device, applies to this person.

SAS elements "21" through "29" and "98" apply to pedestrians or other non-motorists--see Person Type (P03), (Non-Occupant - Pedestrian), and (Non-Occupant - Other Or Unknown).

The intent of the non-motorist is crucial to the selection of the proper element. Determine the person's intent based upon the evidence available on the PAR.

Other Non-Motorist

Enter **Darting or Running Into Road** when the person's activity just prior to impact can best be described as a sudden or impulsive dart, run, hurry, etc. movement across (as opposed to along) a road. For example, if a person's activity prior to the crash could best be described as jogging or running [see SAS element "25" (Jogging)], but just prior to the impact the non-motorist darted into the roadway, then enter this value.

Classic examples of this element include (1) children playing who suddenly run into the road to retrieve an object associated with their play (e.g. a ball), and (2) children who dash out from behind a parked car to cross the street.

Enter Improper Crossing Of Roadway Or Intersection (Jaywalking) if the person is engaged in crossing a road and was not in the continuation of jogging/running or did not engage in a "sudden or impulsive" dart, run, etc. Generally the crossing will be by walking; however crawling is included.

Enter **Inattentive (Talking, Eating, Etc.)** if a person is standing, sitting or lying, and perhaps waiting (e.g., chatting), but not a person walking, playing, working or jogging, and the PAR specifically indicates that the person was inattentive.

Enter **Jogging** if the person was engaged in running, jogging or moving quickly (hurrying) just prior to collision.

Enter **Walking With Traffic** is used if a person is on or over the road and is moving at a walking pace in the same direction as traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter **Walking Against Traffic** is used if a person is on or over the road and is moving at a walking pace in the opposite direction of traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter **Playing, Working, Sitting, Lying, Standing, etc. in Roadway** is used if a person is on or over the road and is:

Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, for example. Playing in the road includes ball games, fighting, grabbing hold of cars or playing "chicken" with vehicles;

Present in the road because of the requirement of his/her job. This includes police, emergency personnel, flagmen, traffic guards, roadway construction or maintenance crew, garbage men, etc., but not people who are in the street voluntarily, such as a civilian directing traffic at the scene of an crash; or

Standing, sitting, lying, etc. (but not moving) and the action does not fit in SAS element "24" [Inattentive (Talking, Eating, etc.)]

Joggers/runners can walk for a brief spell; walkers can run for short distances. When distinguishing joggers/runners (SAS element "25") from walkers (SAS elements "27" and "28") focus on the intent of the person's activity prior to their involvement in the crash.

Enter **Other Action** if the PAR indicates that an "action"--other than one which would "best fit" in the elements specifically described above, applies to this person. For example, use this element if a person is waiting to cross a road, loitering or waiting for a bus. The person can

be anywhere off a road (e.g., sidewalk, median, traffic island, roadside, etc.). This element is also used when the person is in or on a working vehicle.

Enter **Unknown Action** if the PAR indicates that some "action" is noted for this non-motorist, but the information on the PAR is insufficient or unclear to determine what action (element) to code.

Consistency Checks:

| | IF | THEN |
|-------|---|--|
| AP061 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P03) equals 5 | NON-MOTORIST'S ACTION (P19) must equal 21 or 22. |
| AP062 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049 and PERSON TYPE (P03) equals 6 | at least one NON-MOTORIST'S ACTION (P19) must equal 07. |
| AP129 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0750 or 0840 | NON-MOTORIST'S ACTION (P19) must not equal 21. |
| PA064 | NON-MOTORIST'S ACTION (P19) equals 29 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620. |
| PP040 | PERSON TYPE (P03) equals 4 or 6 | NON-MOTORIST'S ACTION (P19) must not equal 21-29. |
| PP041 | PERSON TYPE (P03) equals 5, 7 or 8 | NON-MOTORIST'S ACTION (P19) must not equal 01-10. |
| PP068 | PERSON TYPE (P03) equals 3 | NON-MOTORIST'S ACTION (P19) must equal 00. |
| RANGE | PERSON TYPE (P03) equals 6 | NON-MOTORIST'S ACTION (P19) must equal one of the following non-motorist - vehicle operator responses: 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 98 or 99 and must not be null. |
| RANGE | PERSON TYPE (P03) equals 4 | NON-MOTORIST'S ACTION (P19) must equal one of the following non-motorist - vehicle operator responses: 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 98, 99; the other non-motorist response 00 or null. |

| RANGE | PERSON TYPE (P03) equals 5 or 8 | NON-MOTORIST'S ACTION (P19) must equal one of the following other non-motorist responses: 00, 21, 22, 24, 25, 26, 27, 28, 29, 98 or 99 and must not be null. |
|-------------------------------|--|--|
| RANGE | PERSON TYPE (P03) equals 7 | NON-MOTORIST'S ACTION (P19) must other non-motorist response 98 and must not be null. |
| RANGE | PERSON TYPE (P03) equals 1 | NON-MOTORIST'S ACTION (P19) must equal the <u>non-motorist</u> - <u>vehicle operator</u> response 00 or null. |
| RANGE | PERSON TYPE (P03) equals 2 | NON-MOTORIST'S ACTION (P19) must equal the other non-motorist response 00 or null. |
| RANGE | PERSON TYPE (P03) equals 3 or 9 | NON-MOTORIST'S ACTION (P19) must equal the <u>non-motorist</u> - <u>vehicle operator</u> response 00, <u>other non-motorist</u> response 00 or null. |
| MULTIPLE RESPONSE | NON-MOTORIST'S ACTION (P19) equals 00 | no other non-motorist action must be coded for this non-motorist-vehicle operator. |
| Non-Motorist-Vehicle Operator | NON-MOTORIST'S ACTION (P19) equals 99 | no other non-motorist action must be coded for this non-motorist-vehicle operator. |
| MULTIPLE RESPONSE | NON-MOTORIST'S ACTION (P19) equals 00 | no other non-motorist action must be coded for this other non-motorist. |
| Other Non-Motorist | NON-MOTORIST'S ACTION (P19) equals 99 | no other non-motorist action must be coded for this other non-motorist. |
| <u>Warnings</u> | | |
| | IF | THEN |
| AP063 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0830 | at least one NON-MOTORIST'S ACTION (P19) should equal 21. |

| PA065 | NON-MOTORIST'S ACTION (P19) equals 07, NUMBER OF NON-MOTORISTS (A04) equals 01 and HARMFUL EVENT (A06) equals 22 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099. |
|-------|--|--|
| PA168 | NON-MOTORIST'S ACTION (P19) equals 27 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531. |
| PA169 | NON-MOTORIST'S ACTION (P19) equals 28 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532. |
| PA170 | NON-MOTORIST'S ACTION (P19) equals 25 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531, 0532 or 0539. |

Post Entry

| | IF | THEN |
|-------|--|---|
| AP156 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430 | at least one NON-MOTORIST'S ACTION (P19) must equal 29. |
| AP157 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0531 | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 27. |
| AP158 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0532 | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 28. |

P20 NON-MOTORIST SAFETY EQUIPMENT USED

Screen Heading: Non-Motorist Safety Equipment

Screen Name: Non-Motorist Safety Equipment (990-E)

Long Name: What safety equipment did this non-motorist use?

SAS Name: P20-Person.Saf_Eqmt, M_P20-Safetyeq.MSafEqmt

Oracle Name: GES.NonMotoristSafety.SafetyID

Element Values:

| Screen | Oracle | SAS | |
|--------|--------|-----|---|
| 1 | 26759 | 0 | Not Applicable |
| 2 | 19430 | 1 | None Used |
| 3 | 26760 | 2 | Bicycle Helmet |
| 4 | 26761 | 3 | Reflective Equipment |
| n/a | n/a | 4 | Bicycle Helmet and Reflective Equipment |
| 5 | 26763 | 8 | Other Safety Equipment |
| 6 | 26764 | 9 | Unknown If Used |

Remarks:

This variable attempts to identify safety equipment worn or carried by the non-motorist [Person Type (P03) = (Occupant Of A Non-Motor Vehicle Transport Device), (Pedestrian), (Cyclist), (Person in or on Working Vehicle) or (Other or Unknown)].

Enter **None Used** when the PAR specifically states that the non-motorist was not wearing or carrying any type of safety equipment.

N/A is used when the non-motorist is not one of the Person Types: (Occupant Of A Non-Motor Vehicle Transport Device), (Pedestrian), (Cyclist), (Person in or on Working Vehicle) or (Other or Unknown).

Enter **Bicycle Helmet** when the PAR indicates that the non-motorist was wearing a bicycle safety helmet. The non-motorist does not have to be riding a bicycle at the time of the crash to use this code.

Enter **Reflective Equipment** when the PAR indicates that the non-motorist was wearing or carrying some type of reflective equipment. The emphasis is on the reflective property of the equipment and does not include devices which give off light under their own power (e.g. flashlights). The equipment can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device which is worn or a reflective device which is carried. It can be made by the non-motorist and does not have to be specially designed as a safety device.

Enter Other Safety Equipment when the PAR indicates that the non-motorist was using safety equipment and it does not fit into elements: Bicycle Helmet or Reflective Equipment.

Any device that produces a visual signal but is not reflective (e.g. flashlight) or any clothing that is non-reflective but considered to be safety equipment (hi-glo orange clothing) should be coded using this element.

Enter **Unknown If Used** if specifically stated on the PAR or there is no information on the PAR that the non-motorist was using safety equipment or clothing.

Consistency Checks:

Errors

| | IF | THEN |
|-------------------|--|--|
| PP072 | PERSON TYPE (P03) equals 1, 2 or 9 | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP073 | PERSON TYPE (P03) equals 3 | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| RANGE | PERSON TYPE (P03) equals 4, 5, 6, 7 or 8 | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 1, 2, 3, 8 or 9 and must not equal null. |
| RANGE | PERSON TYPE (P03) equals 1, 2, 3 or 9 | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0 or null. |
| MULTIPLE RESPONSE | NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 0 | no other safety equipment must be coded for this non-motorist |
| MULTIPLE RESPONSE | NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 1 | no other safety equipment must be coded for this non-motorist |
| MULTIPLE RESPONSE | NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 9 | no other safety equipment must be coded for this non-motorist |
| MULTIPLE RESPONSE | each NON-MOTORIST SAFETY EC must be coded only once per non-motorial per no-motorial per non-motorial per no-motorial per no-mot | QUIPMENT USE (P20) element value otorist. |

Warnings

| | IF | THEN |
|-------|---|-----------------------------------|
| PP061 | NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 2 | PERSON TYPE (P03) should equal 6. |