

U.S. Department of Transportation National Highway Traffic Safety Administration

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Safety Rating Program for Child Restraint Systems



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Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act

Requires that, by November 2001, a notice be issued to establish a child restraint rating consumer information program (Section 14g)



Rating Ease of Use in Four Categories

- **Assembly**
- **Evaluation of labels/ instructions**
- **Securing the child**
- **Installation in vehicle**



Assembly

- All functional parts including seat pad or cover, attached and ready to use
- Tether attached to child restraint
- Owner's manual easy to find
- Obvious storage pocket for manual



Evaluation of Labels/ Instructions

- Clear indication of child's seat range
- All modes of use clearly indicated (e.g., rear-facing only or forward and rear-facing if convertible)
- Air bag warning in written instructions
- Shows harness slots OK to use for occupant size
- Instructions for routing for both lap belt and lap/ shoulder belt in all modes
- Visibility of seat belt routing
- Visibility of tether use
- Information in written instructions and on labels match
- Durability of labels



Securing the Child

- Buckle can be secured in reverse (harness strap buckle)
- Harness adjustment easy to tighten and loosen when child restraint installed
- Number of harness slots/ usable slots
- Ease of attaching/ removing base
- Ease of conversion rear-facing to forward-facing to booster and back again
- Visibility of harness slots
- Ease of changing harness slot position
- Ease of reassembly if pad/ cover removed for cleaning
- Ease of adjusting/ removing shield



Installation in Vehicle

- Separation of vehicle belt path
- Ease of vehicle belt routing (hand clearance)
- Ease of seat belt routing (boosters)
- Ease of use of any belt-positioning hardware on CRS including lock-off
- Tether easy to tighten and release
- Belt-positioning device allowing slack to occur



Proposed Weighting of Features

- Each ease of use feature is rated as A, B, or C, with A being the highest rating and C the lowest (A=3 points, B=2 points, and C= 1 point)

Also

- Each ease of use feature is assigned a numerical scale of 1-3 points, with features having the highest relationship to safety receiving 3 points

Rating for the category =

- Numerical value of the rating for each feature
X
Numerical value of the feature's ranking



PROPOSED RATING PROGRAM FOR EASE OF USE

Sample From Appendix C of Notice

Appendix C NHTSA Ease of Use Rating Sample

Evaluation Category	Feature	Possible Points for Feature	Example Rating	Example Rating: Points for Each Feature	Feature Weight	Example Rating: Weighted Points for Each Feature	Category Point Range for C Rating	Category Point Range for B Rating	Category Point Range for A Rating	Example Rating: Result for this Category
Assembly										
	All functional parts including seat pad or cover attached and ready to use	1, 3	C	1	2	2				
	Tether attached to child restraint	1, 3	C	1	2	2				
	Owner's manual easy to find	1, 2, 3	A	3	1	3				
	Obvious storage (pocket) for manual	1, 2, 3	C	1	2	2				
	Total					9	7 to 11	12 to 16	17 to 21	C



Overall Ease of Use Rating

- NHTSA is planning to combine the planned child restraint ease of use rating into a summary ease of use rating
- Proposal for combined rating is majority rule for the four categories, with two qualifiers
 - A seat cannot receive a B rating if more than one out of the four categories is a C
 - A seat cannot receive an A rating if more than one out of the four categories is other than an A



Ease of Use Rating Protocol

- Two person teams will evaluate each child restraint
- Prior to evaluation, teams will have a day of training
- Child restraints will be installed using current FMVSS 213 bench (if and when 213 is updated, the updated test bench will be used)
- No dummy will be used



Notice Comment Period

- **Comment period closed January 7, 2002**
- **Nineteen commenters replied**
- **Commenters included**
 - **Child restraint and vehicle manufacturers**
 - **Independent researchers**
 - **Insurance association**
 - **Advocacy organizations**
 - **Consumer safety group**



Summary of Comments

- **Over half of the comments received were in favor of rating child restraints based on ease of use**
- **Several commenters suggested that lower cost seats would be forced from the market**
- **Many commenters suggested separate rating forms for each type of child restraint**



Summary of Comments (cont.)

- Several commenters stated that the proposed rating program was lacking a rating on LATCH
- Several commenters made specific recommendations for modifications to the feature categories and ease of use features within the categories
- Those commenters that did not support the ease of use rating program suggested that ease of use is not objective



NHTSA's Next Steps

- Refine criteria as appropriate
- Test new criteria for repeatability to see if there is a correlation between cost and ratings
- Conduct focus group testing
- Publish final notice by November 2002

