

# NHTSA's CRS Ease of Use Rating Program



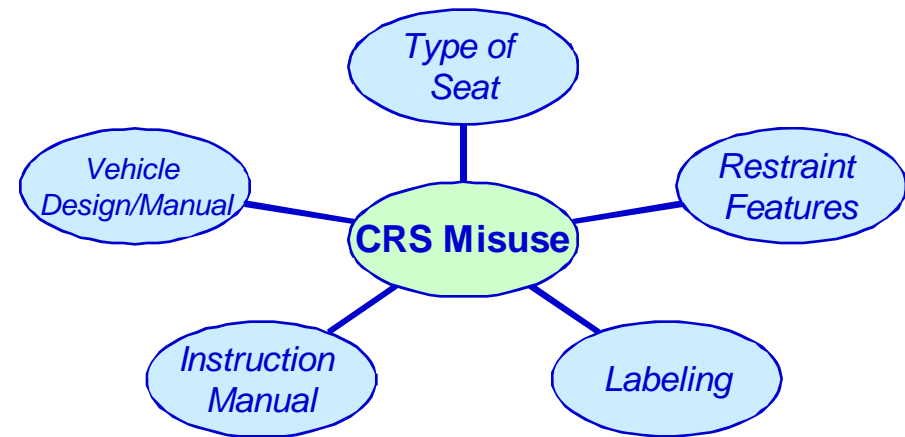
**2009 SAE Government/Industry Meeting**  
Consumer Information Session  
February 5<sup>th</sup>, 2009

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*on contract to NHTSA*



# Why do we need EOU Ratings?

- Child restraints can be difficult to install correctly.
  - ≡ Anecdotal evidence suggests that child seat misuse is still an issue.
  - ≡ Many factors can confuse caregivers.
- 1999 - TREAD Act
  - ≡ Section 14(g) required the creation of a child restraint consumer program.
  - ≡ NHTSA felt a usability program would be most valuable.



# EOU Program Goals

- Offer U.S. consumers more information to make an informed purchase.
  - ⌘ Perks: Consumers are given guidance on what technology exists.
  
- Raise awareness of the importance of proper installation of child restraints.
  - ⌘ Perks: Consumers are aware of the consequences of improper installation and what constitutes it.
  
- Motivate CRS manufacturers to continuously improve the usability of child restraints.
  - ⌘ Perks: CRS manufacturers have the opportunity to promote their products; Consumers receive improved CRS.



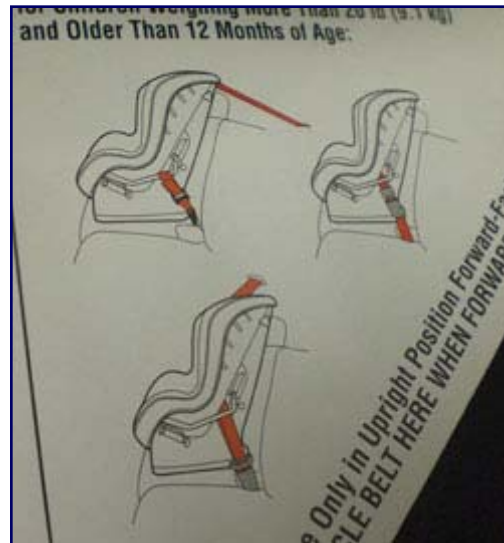
# EOU Details



- Ratings are not related to dynamic assessment of CRS.
  - ≡ All CRS must pass FMVSS No. 213
- Ratings are given for rear-facing, forward-facing, and booster “modes”.
  - ≡ Ratings are given for each restraint configuration.
  - ≡ Four categories are assessed in addition to an overall rating for each mode.
- Various rating forms have been developed by NHTSA.
- Two teams of 2 CPS Technicians each rate a restraint and then compare answers.

# Labels are assessed for their clarity and content.

Raters look for information above and beyond what is required by FMVSS No. 213.




# The instruction manual is assessed for content and clarity.

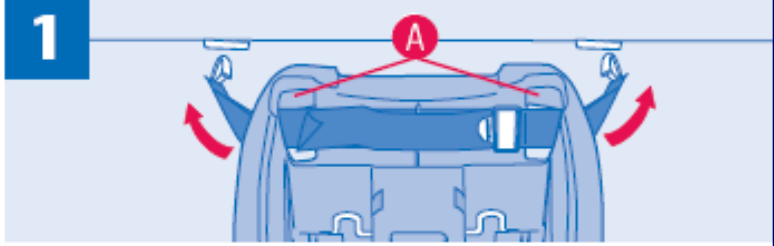


**1 ONLY** use this child restraint if the child meets all of the following requirements:

- Weight between 4 and 30 pounds (2 and 13.5 kg).
- Height is less than 30 inches (76 cm).
- Top of head is at least 1 inch below top of carrier.



**1**




Route LATCH harness and hook through LATCH harness openings **A**.

**2**



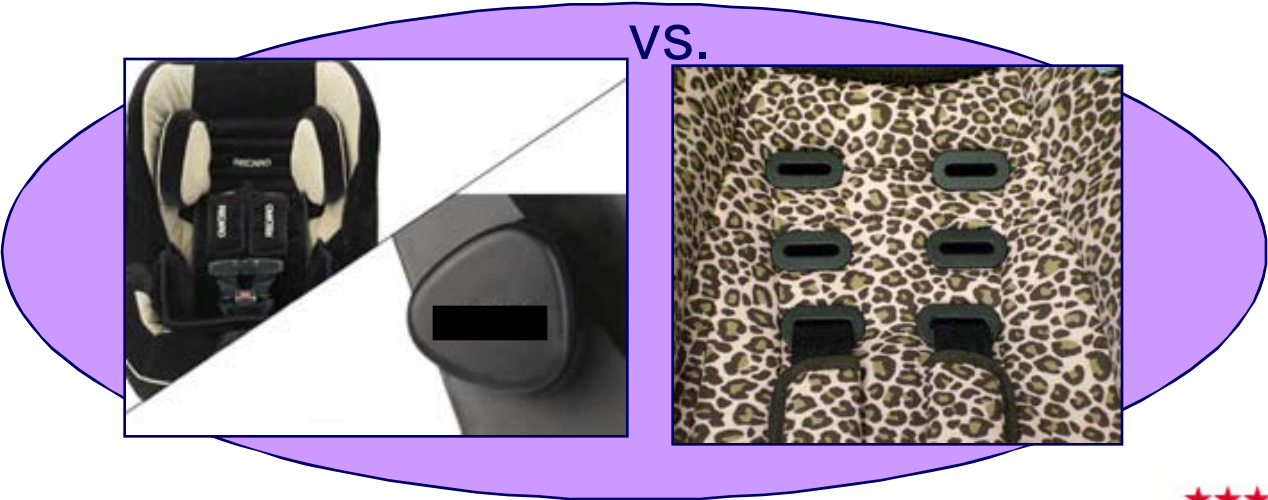
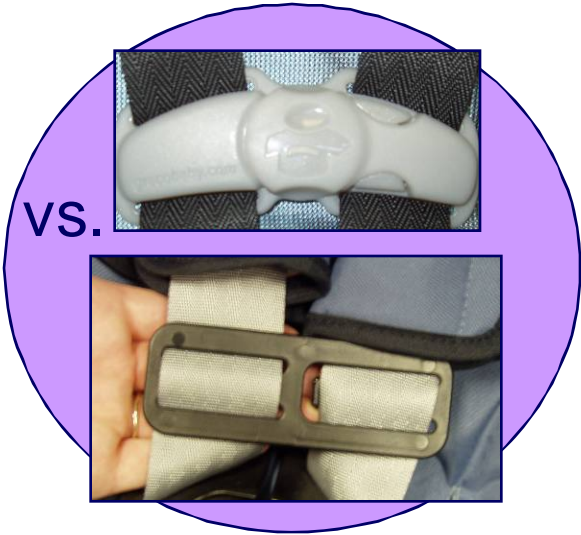
Refer to your owner's manual to locate the lower anchors on your vehicle seat. Attach the right hook **B** to the right anchor **C**, and the left hook to the left anchor. **DOUBLE CHECK** that the hooks are fully engaged by pulling hard on the LATCH harness.

**3**

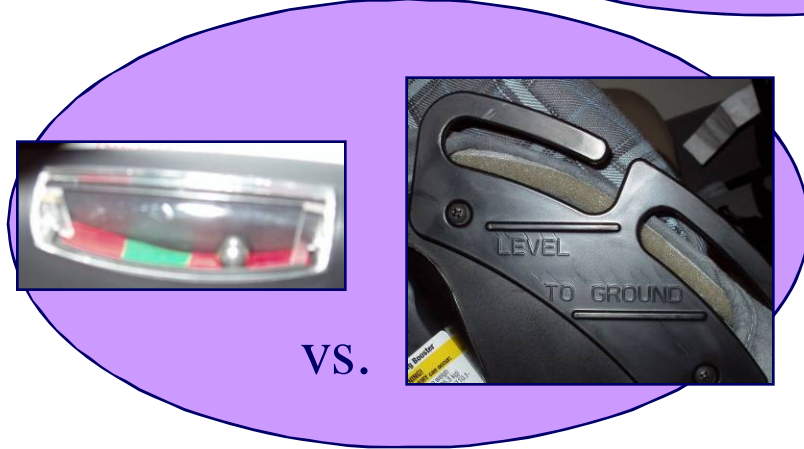
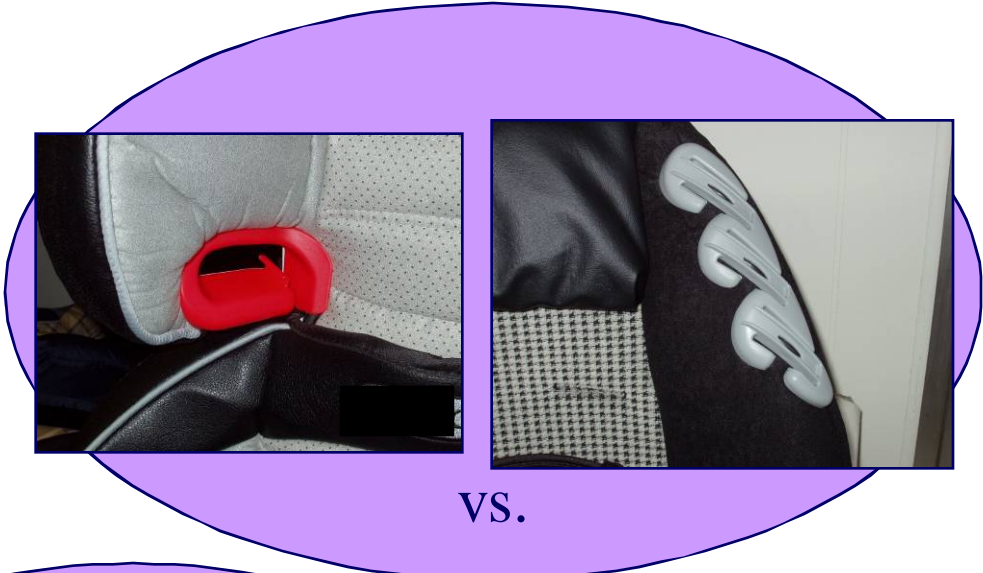
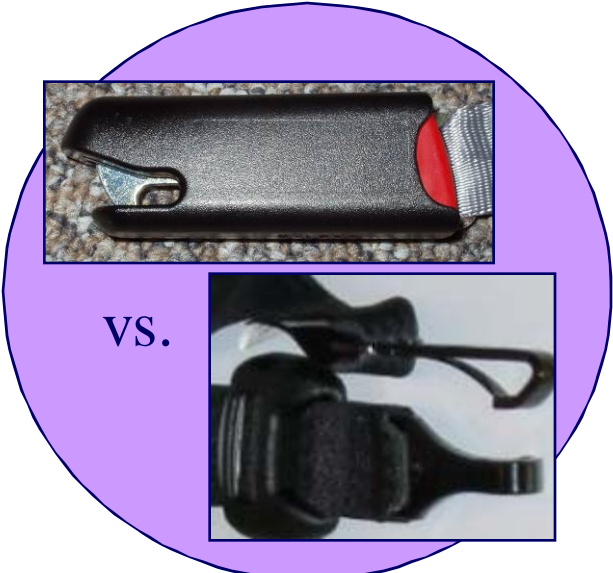


Using your full weight, push the child restraint firmly into the vehicle seat while pulling up on the LATCH harness.

# Features related to securing the child are assessed.



# Finally, features related to installation in the vehicle are assessed.





# EOU Rating Form Example

NHTSA Ease of Use Rating Form - 2008				
Infant Only Restraints, Convertible RF Mode, or 3-in-1 RF Mode				
Make & Model	0		Model #	0
Evaluation of Labels				
	A	B	C	Notes
Clear indication of child's size range for this mode. Is there additional information on the CRS about how the child should fit in it?	Separate, clear, complete height and weight information directly next to the illustration. Additional size information included as a picture. <input checked="" type="checkbox"/>	Separate, clear, complete height and weight information directly next to the illustration. Additional size information included as short, simple text. <input type="checkbox"/>	Incomplete text as indicated, text independent of illustration, or no illustration, and/or no mention of additional sizing information. <input type="checkbox"/>	<input type="checkbox"/> No picture of child in seat. <input type="checkbox"/> No additional sizing information. <input type="checkbox"/> Additional sizing info missing. <input type="checkbox"/> Not in vehicle seat.
All methods of installing the seat in this mode are clearly indicated, including with lower anchors, lap belt only, and lap/shoulder belt, with and without the base as necessary.	Illustrated clearly with CR in vehicle seat. <b>No need</b> to read text although illustrations should be labeled for each method of installation. <input checked="" type="checkbox"/>		Method missing, partially illustrated, or no illustrations at all. CRS may be shown without any vehicle seat at all. <b>Must</b> read text. <input type="checkbox"/>	<input type="checkbox"/> No overview of modes of use.
Does the CRS indicate the correct	Yes, there is a	Yes, there is text	No indication of	

# EOU Rating Form Example (Cont'd)

RF MODE - MAKE AND MODEL			MODEL #	Date of Manufacture
0			0	12/16/06
Feature				
Value	Evaluation of Labels	Score	Weighted Score	Weights
2	Clear indication of child's size range.	3	6	2
2	Are all modes of use clearly indicated?	3	6	2
2	Are the correct harness slots for this mode indicated?	1	2	2
2	Seat belt & lower attachment routing path clarity.	2	4	2
2	Shows how to prepare & use lower attachments.	3	6	2
1	Durability of labels. (n/a if not youngest mode)	3	3	1
		<b>Total</b>	<b>27</b>	<b>11</b>
		<b>Weighted Ave</b>	<b>2.45</b>	
		<b>Star Rating</b>	<b>4</b>	

- Features are **weighted** according to risk of injury if misused (3, 2, or 1).
- Seats are given **scores** according to form responses (A=3, B=2, C=1).
- **Weight x Score = Weighted Score**
- **Sum of Weighted Scores / Sum of Weights = Weighted Average**
- **Weighted Average** corresponds to a **Star Rating**

# Why Upgrade?

- In 2007, 81% of child restraints received the top rating of "A".
  - ⌘ In 2002, only 57% received this rating.
  - ⌘ This was good for child passenger safety, but it rendered the program ineffective for comparison shoppers.
- Full inclusion of LATCH occurred after the original program was put into action.
  - ⌘ Other innovative features have since appeared on the market as well.
- In 2008, the first major upgrade of the program occurred.

# Major Changes Made for 2008

- Dissolved the “Assembly” category.
  - Some features were retained to keep manufacturers from “backsliding”.
- Added assessments for LATCH and other innovative features.
- Increased the ratings bands from 3 (A,B,C) to 5 (star system).
- Adjusted weights of some features.

# 2008 Rating Results

- Many changes have been made to child restraints since the update was announced.
  - ⌘ Labeled chest clips
  - ⌘ No-rethread harness systems
  - ⌘ Improved belt path labeling
  - ⌘ Improved content in instruction manuals
- Only 5% of child restraint ratings are 5 stars overall (the top score)
  - ⌘ Most receive 2 or 3 stars

**Conclusion: The 2008 upgrade already has and will continue to stimulate positive changes in the CRS market.**

# Access to EOU Star Ratings

Home | National Highway Traffic Safety Administration(NHTSA) | U.S. Department of Transportation - Microsoft Internet Explorer

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[Report Summary](#)

**New Data Showing Record Low Highway Fatalities**  
Traffic fatalities on U.S. highways fell to a record low of 28,000 in 2014, according to a new report from the National Highway Traffic Safety Administration. The report also shows that 10,000 people were killed in traffic deaths in 2014, down from 11,000 in 2013. This is the first time since 1992 that the number of people killed in traffic deaths has fallen below one of the 100,000 mark.

# Questions?

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