

actions subject to 23 U.S.C. 139(l)(1). A claim seeking judicial review of the Federal agency actions on the highway project will be barred unless the claim is filed on or before May 21, 2008. If the Federal law that authorizes judicial review of a claim provides a time period of less than 180 days for filing such claim, then that shorter time period still applies.

**FOR FURTHER INFORMATION CONTACT:** Mr. Salvador Deocampo, District Engineer, Federal Highway Administration, 300 E. 8th Street, Rm. 826, Austin, Texas 78701; telephone: (512) 536-5950; e-mail [salvador.deocampo@fhwa.dot.gov](mailto:salvador.deocampo@fhwa.dot.gov). The FHWA Texas Division Office's normal business hours are 7:45 a.m. to 4:15 p.m. You may also contact Ms. Dianna Noble, Texas Department of Transportation, 125 E. 11th Street, Austin, Texas 78701; telephone: (512) 416-2734.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the FHWA and other Federal agencies have taken final agency actions by issuing licenses, permits, and approvals for the following highway project in the State of Texas: United States Highway 281 (US 281), beginning at Farm-to-Market Road 311 (FM 311) and heading north to FM 306 in Comal County in the State of Texas. The project will be an approximately 6.8 mile long, four-lane divided roadway with intersection improvements at four (4) major intersecting roadways and temporary crossovers at six (6) locations. The proposed highway will generally follow the existing US 281 alignment. The actions by the Federal agencies, and the laws under which such actions were taken, are described in the Environmental Assessment (EA) for the project, dated August 2007, in the FHWA Finding of No Significant Impact (FONSI) issued on October 30, 2007, and in other documents in the FHWA project records. The EA, FONSI, and other documents in the FHWA project records file are available by contacting the FHWA or the Texas Department of Transportation at the addresses provided above. This notice applies to all Federal agency decisions as of the issuance date of this notice and all laws under which such actions were taken, including but not limited to:

1. *General:* National Environmental Policy Act (NEPA) [42 U.S.C. 4321-4351]; Federal-Aid Highway Act [23 U.S.C. 109].
2. *Air:* Clean Air Act, 42 U.S.C. 7401-7671(q).
3. *Land:* Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303].

4. *Wildlife:* Endangered Species Act [16 U.S.C. 1531-1544 and Section 1536], Migratory Bird Treaty Act [16 U.S.C. 703-712].

5. *Historic and Cultural Resources:* Section 106 of the National Historic Preservation Act of 1966, as amended [16 U.S.C. 470(f) *et seq.*]; Archeological Resources Protection Act of 1977 [16 U.S.C. 470(aa)-11]; Archeological and Historic Preservation Act [16 U.S.C. 469-469(c)].

6. *Social and Economic:* Civil Rights Act of 1964 [42 U.S.C. 2000(d)-2000(d)(1)]; Farmland Protection Policy Act (FPPA) [7 U.S.C. 4201-4209].

7. *Wetlands and Water Resources:* Clean Water Act, 33 U.S.C. 1251-1377 (Section 404, Section 401, Section 319).

8. *Executive Orders:* E.O. 11990 Protection of Wetlands; E.O. 11988 Floodplain Management; E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations; E.O. 11593 Protection and Enhancement of Cultural Resources; E.O. 13175 Consultation and Coordination with Indian Tribal Government; E.O. 11514 Protection and Enhancement of Environmental Quality; E.O. 13112 Invasive Species.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

**Authority:** 23 U.S.C. 139(l)(1).

Issued on: November 13, 2007.

**Salvador Deocampo,**  
District Engineer, Austin, Texas.  
[FR Doc. 07-5795 Filed 11-21-07; 8:45 am]  
**BILLING CODE 4910-RY-M**

## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

[Docket NHTSA-2006-25344]

### Consumer Information; Rating Program for Child Restraint Systems

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Notice, request for comments.

**SUMMARY:** In response to Section 14(g) of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, the National Highway Traffic Safety Administration established a child restraint consumer information rating program. This

program conducts a yearly assessment on the ease of using add-on child restraints and provides these ratings to the public. The program has been successful in encouraging child restraint manufacturers to improve their harness designs, labels, and manuals such that most now receive the top rating. However, some recent research, as well as a February 2007 public meeting held by the agency on the Lower Anchors and Tethers for Children (LATCH) system has indicated that some features that make child restraints easier to use are not being captured by the current program. Additionally, the agency wants to make sure that the program continues to provide useful information to the public. In an effort to further enhance the program and provide consumers with updated information we are proposing some new features and new rating criteria, and to adjust the scoring system. The agency anticipates that these program changes will result in more child restraints being used correctly by continuing to encourage manufacturers to install more features that help make the restraints easier to use.

**DATES:** You should submit your comments early enough to ensure that the Docket receives them not later than December 24, 2007.

**ADDRESSES:** Comments should refer to the docket number and be submitted by any of the following methods:

- Federal Rulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Web Site: <http://www.regulations.gov>. Follow the instructions for submitting comments on the electronic docket site. Please note, if you are submitting petitions electronically as a PDF (Adobe) file, we ask that the documents submitted be scanned using an Optical Character Recognition (OCR) process, thus allowing the agency to search and copy certain portions of your submissions.

- Fax: 1-202-493-0402
- Mail: Docket Management; U.S. Department of Transportation, 1200 New Jersey Ave., SE., Room W12-140, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, 1200 New Jersey Ave., SE., Room W12-140, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For technical issues related to the Ease of Use rating program, you may call Nathaniel Beuse of the Office of Crash Avoidance Standards, at (202) 366-4931. For legal issues, call Deirdre Fujita of the Office of Chief Counsel, at

(202) 366-2992. You may send mail to these officials at the National Highway Traffic Safety Administration, 1200 New Jersey Ave., SE., Washington, DC 20590.

#### SUPPLEMENTARY INFORMATION:

- I. Introduction
  - II. The Unrestrained Child
  - III. Child Restraint EOU Programs Worldwide
    - A. Australia
    - B. Consumers Union
    - C. EuroNCAP
    - D. Japan NCAP
  - IV. Overview of the Current Ease of Use Rating Program
  - V. Enhancing the Ease of Use Program
    - A. LATCH Misuse Survey
    - B. LATCH Public Meeting
      - 1. Labeling and Instructions
      - 2. Lower Attachment Design
      - 3. Other Comments
    - C. Comprehensive Study of the Ease of Use Program
    - D. Feedback from Current Ease of Use Raters
  - VI. Analysis and Agency Decision on Suggested Program Changes
    - A. Rating Categories and Their Associated Features
      - 1. Assembly
      - 2. Evaluation of Labels
      - 3. Evaluation of Instructions
      - 4. Securing the Child
      - 5. Vehicle Installation Features
    - B. Rating System
    - C. Other Issues
  - VII. Rating Vehicles Based on Child Restraint Installation Features
  - VIII. Conclusion, Star-System, and Effective Date
  - IX. Public Comment
- Appendices  
 Appendix A: Ease of Use Rating Forms  
 Appendix B: Ease of Use Score Forms  
 Appendix C: Ease of Use Star Rating System

#### I. Introduction

Through the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Congress directed the National Highway Traffic Safety Administration (NHTSA) to establish a child restraint safety rating system that was practicable and understandable (Section 14 (g) of the TREAD Act, November 1, 2000, Pub. L. 106-414, 114 Stat. 1800) and that would help consumers to make informed decisions when purchasing child restraints. In response to the TREAD Act, the agency issued a final rule<sup>1</sup> on November 5, 2002 establishing a program to rate child restraint ease of use features.

NHTSA's Ease of Use (EOU) program is modeled after a program which, at that time, was being used by the Insurance Corporation of British Columbia (ICBC) to evaluate child restraints sold in Canada. NHTSA's program uses similar rating categories, features, and criteria as ICBC's did.

Shortly after NHTSA established its EOU program, ICBC chose to abandon their in-house program and instead began directing their consumers to the NHTSA ratings Web site. They continue to provide information specific to Canadian consumers by publishing the equivalent Canadian model numbers of U.S. child restraints that NHTSA rates.

To date, NHTSA's EOU program has been very successful in encouraging child restraint manufacturers to improve child restraint harness designs, labels, and manuals such that most now receive the top rating. However, some recent research, as well as the public hearing conducted by the agency on LATCH, has indicated that some features intended to make child restraints easier to use are not captured by the current program.

NHTSA held a public meeting on February 8, 2007<sup>2</sup> that brought together child restraint and vehicle manufacturers, retailers, technicians, researchers, and consumer groups to explore possible ways to improve the design and increase the use of the Lower Anchors and Tethers for Children (LATCH) system. At the meeting, four panels were held, which focused specifically on: Improving in-vehicle LATCH design, improving child restraint LATCH design, child side-impact safety, and educating the public about seat belts and LATCH. At the child restraint LATCH design panel session, NHTSA presented some approaches that the agency was considering in making improvements to its EOU program. NHTSA requested that all attendees and participants submit formal comments to the Docket<sup>3</sup> highlighting concerns they may or may not have expressed during the session. The agency wanted to use this input to make sure that the program continues to provide valuable information to the public as well as continuing to encourage manufacturers to further improve their designs.

#### II. The Unrestrained Child

Child restraints are the most effective vehicle safety measure available for children. Research on the effectiveness of child restraints has found them to reduce fatal injury by 71 percent for infants (less than 1 year old) and by 54 percent for toddlers (1-4 years old) in passenger cars.<sup>4</sup> For infants and toddlers

in light trucks, the corresponding reductions are 58 and 59 percent, respectively.

The agency, along with manufacturers, local governments, and consumer groups, has established a consistent message for the public to put children in age-appropriate restraints in the rear seat of vehicles. This educational effort is working: Over the past decade the percentage of unrestrained child fatalities has decreased significantly. Among child fatalities for the 14 and under age group, 46 percent were unrestrained in 2005; in 1995 this percentage was 65 percent.<sup>5</sup> In February of 2005, NHTSA conducted a National Occupant Protection Use Survey (NOPUS) to provide more detailed information about child restraint use. As a part of NOPUS, the Controlled Intersection Study found that 82 percent of children were properly restrained. Other findings were that 98 percent of children under 1 and 93 percent of children from 1 to 3 were restrained.<sup>6</sup>

Tragically, in 2005, there were 361 passenger vehicle occupant fatalities among children under 4 years of age.<sup>7</sup> Restraint use was known for 344 of these 361 fatalities, and 110 (~30 percent) of those children were unrestrained. In contrast, in 2005, 420 lives are estimated to have been saved by child restraint use. Of these 420 lives saved, 382 were associated with the use of child restraints and 38 with the use of adult seat belts. At 100 percent child restraint use for children under 5, an estimated 98 additional lives, for a total of 518 children, could have been saved in 2005.

The agency and all its safety partners must continue their efforts to get more children in age-appropriate restraints and to educate the public about their proper use and installation. Our belief is that the EOU rating program helps provide much needed guidance to consumers about certain child restraint features. We believe this guidance helps caregivers choose appropriate restraints for their child. The agency believes that an easy-to-use child restraint can result in more children being properly restrained.

<sup>5</sup> *Traffic Safety Facts 1995: Children*, DOT 95F2, National Center for Statistics and Analysis, 1200 New Jersey Ave., SE., Washington, DC 20590.

<sup>6</sup> *Traffic Safety Facts 2005: Children*, DOT HS 810 618, National Center for Statistics and Analysis, 1200 New Jersey Ave., SE., Washington, DC 20590.

<sup>7</sup> *Traffic Safety Facts 2005: Occupant Protection*, DOT HS 810 621, National Center for Statistics and Analysis, 1200 New Jersey Ave., SE., Washington, DC 20590.

<sup>2</sup> 72 FR 3103, January 24, 2007. Full transcript can be found in Docket Number NHTSA-2007-26833-23.

<sup>3</sup> See Docket Number: NHTSA-2007-26833.

<sup>4</sup> *Traffic Safety Facts 2005: Occupant Protection*, DOT HS 810 621, National Center for Statistics and Analysis, 1200 New Jersey Ave., SE., Washington, DC 20590.

<sup>1</sup> 67 FR 67448, Docket 2001-10053.

### III. Child Restraint EOU Programs Worldwide

#### A. Australia

The New South Wales Roads and Traffic Authority joined with the National Roads and Motorists Association and the Royal Automobile Club of Victoria to establish a joint program to assess both the relative performance and the ease of using child restraints available in Australia. The resulting program is known as CREP, or the Child Restraints Evaluation Program. In addition to frontal and side impact sled testing, the program covers installation and compatibility with vehicles and features specific to the child restraint itself.

The Australian program uses child restraint evaluation criteria very similar to the program conducted by NHTSA under its EOU program. The CREP criteria assess how easily the child restraints can be installed as well as how easily a child can be secured. The criteria also include an evaluation of the information included in the instructions, the clarity and quality of labeling and packaging, and compatibility by securing the restraint in a vehicle.

The child restraints are classified into three groups: infant restraints, child seats, and booster seats. They are rated on a letter scale that ranges from the best, or "A," to the worst, which is a "D," for both the dynamic rating and the EOU ratings. The scores are presented to consumers separately; that is, the dynamic and EOU ratings are not combined. The highest scoring child restraint in each of the three classes is highlighted on the Web site and in CREP's annual brochure as the "best performer in class."

#### B. Consumers Union

Consumers Union (CU), publisher of *Consumer Reports* magazine, is a nonprofit membership organization that evaluates child restraints in dynamic tests, assesses their ease of use, and evaluates compatibility with vehicles. CU rates child restraints for EOU by evaluating installation features, harness features, placing the child in the restraint, and removing the child from the restraint. All of the items are evaluated on a five part scale using the following rankings: "Excellent," "Very good," "Good," "Fair," and "Poor." The crash protection, EOU, and installation ratings are all combined into an overall rating.

#### C. EuroNCAP

The European New Car Assessment Program, or EuroNCAP, provides

consumers with safety ratings for vehicles sold in Europe. The program is funded by European governments and private motoring clubs. Under EuroNCAP, vehicle manufacturers recommend child restraints suitable for installation in their vehicles for subsequent dynamic testing. Each vehicle's rear seat is fitted with two restraints: one suitable for a 3-year-old child and another suitable for an 18-month-old infant. Technicians provide an evaluation of the ease of installation in the vehicle when setting up the full-scale crash test. They also rate the quality of labeling information on the child restraint. This evaluation is included as a small part of an overall child protection rating that is determined by using points and then converted to a 5-star scale. This overall child protection rating is related more to the vehicle rather than the restraints themselves. For example, each restraint's ease of use and fitment assessment in the vehicle can contribute only 6 points out of 49 possible points to the child protection rating. The remaining points are calculated from each child restraint's dynamic results and specific vehicle features such as air bag warning labels.

#### D. Japan NCAP

The Japanese Ministry of Land, Infrastructure and Transport, in cooperation with the National Organization for Automotive Safety & Victims' Aid, tests and evaluates the safety of automobiles as part of its New Car Assessment Program (JNCAP). In 2002, the JNCAP began rating child restraints in both dynamic testing and child restraint usability. The results of these tests are released in print media and on the Internet.

JNCAP rates child restraints on their usability in five categories. These categories are very similar to NHTSA's: The instruction manual, product markings (labels), the ease of using the restraint's features, the ease of installation in the vehicle,<sup>8</sup> and the ease of securing the child in the restraint are evaluated. Each category contains a number of features for evaluation; these are very similar to the structure used in NHTSA's EOU program.

The specialists in this program rate each feature on a scale of 1 to 5, with "3" representing an "average" feature. The ratings given by all five specialists are averaged, and then all the features

within each category are averaged as well. No overall rating is provided.

### IV. Overview of the Current Ease of Use Rating Program

NHTSA rates each child restraint under every mode of its correct use. This requires the agency to use three separate forms: rear-facing (RF), forward-facing (FF), and booster. Each of these forms is tailored to the mode of use and organized according to five categories:<sup>9</sup> Assembly, Evaluation of Labels, Evaluation of Instructions, Securing the Child, and Installing in Vehicle. In addition to an overall letter grade for the child restraint, a letter grade is also assigned to each of these five categories and displayed on NHTSA's Web site. The **Federal Register** notice of November 5, 2002 included, as its Appendix C,<sup>10</sup> the EOU rating forms used by the agency to evaluate each child restraint in every applicable mode of use. For example, a convertible restraint that can accommodate a child in both the rear-facing (RF) and forward-facing (FF) modes would be evaluated using both the rear- and forward-facing forms; it would also be awarded two separate EOU ratings.

Each form contains features for rating the child restraint that are organized into five categories. Each feature is assessed on up to three criteria using an "A" ("good," worth 3 points), "B" ("acceptable," worth 2 points), or "C" ("poor," worth 1 point). In some cases, a feature may only be assessed on two criteria, "A" ("good," worth 3 points), or "C" ("poor," worth 1 point). If a feature does not pertain to the restraint in question, it is assigned a "not applicable," or "n/a," which essentially eliminates it from the overall calculation so that it does not affect the restraint negatively or positively. An example of a situation where this is used would be for the overhead shield criteria. These devices are not very common, but if a child restraint manufacturer chooses to employ one the agency feels it is important to rate how easy it is to adjust. On the other hand, restraints that do not have this feature should not be subject to a penalty for their absence.

Each feature also has an associated weighting value that corresponds to its potential risk of injury if misused. A feature with the highest weighting factor has a numerical value of "3", which

<sup>9</sup> ICBC's ratings system was based on seven categories; NHTSA chose to adopt the same criteria for its ratings program but organized them into five categories.

<sup>10</sup> 67 FR 214, page 67472. See Docket NHTSA-2001-10053-66.

<sup>8</sup> It should be noted that vehicles and child restraints in Japan are not required to come LATCH-equipped, so their installation features are based on the ease of routing and using vehicle belts.

means that its gross misuse could lead to severe injury. Items whose gross misuse was determined less likely to lead to severe injury are assigned a numerical value of "2." Similarly, the features whose misuse was least likely to cause severe injury are assigned a weighting factor of 1. It should be noted that in the current rating system NHTSA does not have any features weighted "1."

NHTSA displays both the overall letter rating and letter ratings for each of the five categories. NHTSA calculates the category letter ratings by taking the numerical value of the feature and multiplying it by the fixed weighting value for that feature. Then, the sum of these weighted feature ratings is divided by the sum of the applicable fixed weighting factors. The numerical category weighted average that results is assigned a letter grade according to the following scale:

- "A" = Category Weighted Average  $\geq$  2.40.
- "B" =  $1.70 \leq$  Category Weighted Average  $<$  2.40.
- "C" = Category Weighted Average  $<$  1.70.

Point ranges for assigning both the category and overall "A," "B," and "C" ratings were determined by dividing the range of possible overall scores into three sections. The minimum category or overall numerical score for any child restraint is 1.00; this is if all features were rated "C". The maximum category or overall numerical score for any child restraint is a 3.00; this is if all features are rated an "A".

To calculate the overall rating for the child restraint, the sum of the weighted feature ratings from all five categories is divided by the sum of all the possible weighted scores for that category. The score ranges for assigning a letter score to the overall rating are similar to those for the individual categories:

- "A" = Overall Weighted Average  $\geq$  2.40.
- "B" =  $1.70 \leq$  Overall Weighted Average  $<$  2.40.
- "C" = Overall Weighted Average  $<$  1.70.

Consumers are presented EOU information on the NHTSA Web site in letter format only. However, the agency's practice has been to display the letter scores for each of the categories alongside the overall letter score.

#### V. Enhancing the Ease of Use Program

As previously stated, manufacturers have responded positively to the EOU program; currently, an overwhelming majority of child restraints are rated an "A". For model year (MY) 2007, approximately 81% of the child

restraints received an overall "A" rating.<sup>11</sup> This can be compared to approximately 57% when the program first began. This tremendous improvement in a short time has indeed led to improved child restraint designs. However, the homogeneity in scores makes it difficult for parents and caregivers to discern between products for purchase and more difficult for manufacturers to distinguish themselves thereby reducing the incentive to bring to market more innovative, easy to use child restraints and features.

The current forms, their features, and their criteria were designed prior to NHTSA's requirement of the LATCH hardware. As a result, the program does not fully discern between the different types of hardware that are now required equipment on child restraints and many of the rating criteria assume that LATCH is an optional piece of equipment on the child restraint. In addition, the criteria that are present were based only on the technology that was available at the time. Finally, the agency feels that some of the criteria need to be improved to reflect the ease of preparing and using different types of LATCH equipment that rear- and forward-facing child restraints must have.

In deciding what changes to propose for the EOU program, NHTSA evaluated a recent survey it conducted on LATCH, reviewed comments submitted in response to the public meeting held on LATCH, and conducted an additional study designed to specifically evaluate the EOU program. NHTSA also considered feedback provided by actual EOU raters.

#### A. LATCH Misuse Survey

The agency published a survey<sup>12</sup> on December 22, 2006 that served as its first major review of the LATCH system since it was required on vehicles and child restraints in 2002. The results were encouraging but it also proved that the system was not recognized by as many caregivers as we had anticipated. It is consequently not being used as often as we had hoped. In addition, it has not solved as many installation problems as we originally suspected.

The survey highlighted some misuses that could be addressed by the EOU program. For example, it showed that nearly 10% of the child restraints in the study were installed with the lower attachments upside down. Other statistics highlighted misuses such as

twisted upper tether and lower attachment straps, misrouted lower anchor straps, and loose installation. The survey also showed that a number of rear-facing child restraints (over 20%) were installed at an incorrect angle. Additionally, one of the findings found that approximately 45% of parents were not using their top tethers either because they were unaware it was available or unsure of how it was supposed to be used.

The survey also highlighted that a number of people were not using the LATCH system at all. Participants indicated a variety of reasons for this, including the fact that they were simply not aware that the system existed or that it was present in their vehicle. Though this is primarily an education issue, the agency believes there are ways the EOU program can be used to help increase LATCH awareness.

#### B. LATCH Public Meeting

NHTSA held a public meeting on February 8, 2007<sup>13</sup> that brought child restraint and vehicle manufacturers, retailers, technicians, researchers and consumer groups together to explore ways to improve and increase the use of the LATCH system. At the meeting, four panels were held specifically focusing on: vehicle LATCH design, child restraint LATCH ease of use, child side-impact safety, and educating the public about seat belts and LATCH. Participants were asked to submit written comments to the Docket highlighting issues they may or may not have expressed during the meeting.

Comments from the LATCH public meeting specific to NHTSA's EOU program were received from: General Motors (GM), Honda Motor Company (Honda), American Academy of Pediatrics (AAP), Advocates for Highway and Auto Safety (Advocates), Columbia Medical, Car-Safety.Org, Safe Ride News Publications (SRN Publications), SafetyBeltSafe USA, Cohort 22 of the Florida International University BBA+ Weekend Program (Cohort 22), UVA RN-BSN students (UVA), and several child passenger safety technicians (CPSTs). The comments can be grouped by labeling and instructions, lower anchor design, and other general observations.

#### 1. Labeling and Instructions

Though many commenters agreed with NHTSA that child restraint labels and instructions have been much improved since the beginning of the

<sup>11</sup> <http://www.nhtsa.dot.gov/CPS/CSSRating/Index.cfm>.

<sup>12</sup> Decina, Lawrence E., Lococo, Kathy H., and Doyle, Charlene T. *Child Restraint Use Survey: LATCH Use and Misuse*. DOT HS 810 679. December 22, 2006.

<sup>13</sup> For a transcript of the meeting and all comments submitted please see Docket NHTSA-2007-26833.

EOU rating program, some commenters provided additional suggestions. Cohort 22 and the UVA suggested that either a DVD or a Web site link be included in instruction manuals for an installation video. UVA believes that poor instructional illustrations cause confusion during installation and should be replaced with actual photographs. SRN Publications believes that manuals should explicitly encourage the use of LATCH, rather than simply listing it as an option for installation. A CPST believed that clearer instructions are needed.

GM, UVA, Advocates, AAP, and SRN Publication, suggested that tether and lower anchors in the vehicle could be better labeled,<sup>14</sup> perhaps by using ISO-style symbols. While NHTSA's EOU program does not currently evaluate in-vehicle features, GM made the additional suggestion that symbols could also be included on the lower attachments and tether hooks on the child restraint. GM felt that by seeing the symbols in both places the consumer would be encouraged to use them more often.

## 2. Lower Attachment Design

Some commenters suggested that the agency evaluate and subsequently encourage a single technology for lower attachment. Honda and AAP commented that the agency conduct research on the ease of using various lower attachment hardware and possibly require the design that emerges as the most user-friendly. Some of the CPSTs suggested that all LATCH systems be identical in appearance so that the system is intuitive and installation is easy. They also suggested an audible confirmation of attachment. With regards to design, one CPST stated that the "mini connector" style lower attachments were the most user-friendly. SRN Publications encouraged restraint manufacturers and NHTSA to weigh the economic benefits of implementing only the most user-friendly design in lower anchor designs. They suggested that the agency encourage rigid attachments over flexible straps, and that all flexible systems, when used, should have adjustment mechanisms on each side of the restraint. SafetyBeltSafe USA recommended that a system be developed to prevent parents from using the wrong configuration for the lower attachments on convertible child restraints (i.e., routing the lower attachments through the RF path while

trying to use the child restraint in the FF mode). Cohort 22 recommended an investigation into a more universal LATCH system for both the vehicle and the child restraint, stating that parents who purchase child restraints with LATCH attachments that are not easily compatible with their vehicles will likely just use seat belts instead.

## 3. Other Comments

Comments to the docket from a few of the CPSTs indicated that the program should include criteria for lower attachment and tether storage systems. Many of the participants, including Honda, GM, SRN Publications, AAP, SafetyBeltSafe USA, Car-Safety.Org, and some of the CPSTs supported a variety of changes that could be made to vehicle designs rather than the child restraints themselves.

### C. Comprehensive Study of the Ease of Use Program

The agency commissioned a study<sup>15</sup> by RONA Kinetics and Associates, a research firm that reviewed the current program and identified areas where improvements could be made. This study combined the expertise of RONA Kinetics with input from CPS technicians from the U.S. and Canada.

One of the suggested program enhancements made in the RONA report was the incorporation of additional criteria that would pertain to the lower anchor and tether storage. The report also suggested that the ratings include a further evaluation of the child restraint instructions and that their storage system be accessible in all modes of the restraint's use. Further, it was suggested that the agency include more LATCH features, especially pertaining to flexible lower anchors. In addition, the report suggested that the agency consider changes to its method of calculating a restraint's score.

### D. Feedback From Current Ease of Use Raters

The agency also used input from its own child restraint raters as another source of information. One suggestion was to incorporate a feature that evaluated the recline capabilities of RF child restraints. Raters believed that such a feature could help aid the ability of parents to secure these child restraints without a "pool noodle" or other positioning device. It was also suggested that a number of the existing criteria could be changed to better reflect current and emerging designs. In some cases this could be achieved by combining related criteria into one. In

other cases, deletions were suggested. For example, features that were anticipated but never realized in the actual market, like lower anchors that could be used in multiple orientations and harness buckles that could not be used in reverse, were suggested deletions. It was also felt that a reduction in the weighting factors assigned to many criteria could be adjusted to better convey which features were more critical to correct installation.

## VI. Analysis and Agency Decision on Suggested Program Changes

After a review of the comments received to the Docket from the public hearing, NHTSA's own review of the EOU program, and a review of consumers experience with LATCH, the agency has decided to propose several fundamental changes to the EOU program. The proposed changes outlined here serve to better reflect the current spectrum of features seen in the child restraint market. It is the agency's belief that through this upgrade, manufacturers will be encouraged to implement more widespread incorporation of features that will make it easier and more intuitive to install child restraints.

The agency does not plan to change the scope of the EOU rating program. That is, we will continue to apply this program only to add-on child restraints and not built-in child restraints.<sup>16</sup> Similarly, as before, the agency will continue to use three sets of forms to evaluate child restraints. One set will still be used to rate infant-only restraints, convertible restraints, and 3-in-1 restraints in their rear-facing configuration. Another set will rate convertible restraints, forward facing only restraints, combination forward facing/booster restraints, and 3-in-1 restraints in their forward-facing configuration. The third set will be used to rate high- and low-back booster seats, combination forward facing/booster seats, and 3-in-1 restraints in their belt-positioning booster configurations. Each child restraint selected for rating will be evaluated in each configuration that pertains to its proper use. For example, a convertible restraint would be evaluated and assigned a rating using both the rear-facing and forward-facing forms since it may be used in both configurations. A combination forward facing/booster restraint would be evaluated and assigned a rating for both the forward-facing and booster modes.

<sup>14</sup> Federal Standard No. 225, "Child restraint anchorage systems," only requires symbols when the lower vehicle anchors are hidden.

<sup>15</sup> See Docket NHTSA-2006-25344.

<sup>16</sup> For MY 2007, only 7 of the estimated 381 makes and model had the option of purchasing a built-in child restraint.

Additionally, 3-in-1 restraints that may be used rear-facing, forward-facing, and booster seat mode would be evaluated and rated for all three modes.

To ensure the most comprehensive revisions to the rating system, the agency examined all aspects of the current program. This required a thorough examination of the rating categories, features, criteria, weighting factors, the numerical ranges used to assign ratings, and the way the ratings themselves are conveyed.

#### A. Rating Categories and Their Associated Features

The specific changes to the EOU categories are organized by rating category and feature. With regards to changes made to the features, we first wanted to incorporate concepts that were not included in the original program. Secondly, we wanted to strengthen some existing features by reducing their criteria from three levels to two. For example, a feature that had "A", "B", and "C" criteria could now only have "A" and "C" criteria. Thirdly, we evaluated some related features that could be combined in order to make the highest rating of the new feature more difficult to achieve. The agency also found a need to delete some features altogether. If a feature or its associated criteria is removed from a rating system, there is always concern that "backsliding" could occur. That is, since manufacturers are no longer rated for a feature, they may revert to a previous (and likely less user-friendly) version of that feature due to cost or other considerations. The agency does not believe that is the case with the criteria we have chosen to eliminate. In some cases, a feature was removed because nearly every child restraint since the program was created has always been awarded an "A" for the feature. In other cases, a feature was removed because it has been incorporated into nearly all child restraint systems.

The agency's proposed changes and the corresponding rationale are explained below. It should be noted that features are incorporated into the rating forms only as needed; for example, there are no LATCH features assessed on the booster rating forms since they are not required to have LATCH.

#### 1. Assembly

The agency is proposing to eliminate the "Assembly" rating category and distribute the features from this category among the "Evaluation of Instructions" and "Securing the Child" categories. The "Assembly" category assessed three features on the RF and Booster forms

and four on the FF forms (the additional feature encouraged that the tether arrive attached to the child restraint). A review of the current program revealed that most of the features in the current "Assembly" category should only be assessed under one mode of a multi-mode child restraint to avoid grade inflation. Assessing these features under only one mode of use would then, in effect, require that feature to be marked "n/a" for its remaining modes. Therefore, for some child restraint modes, the entire "Assembly" category could be assigned a rating based on one feature. For these reasons, the agency is proposing to distribute the former "Assembly" category features among the four remaining categories. Additionally, many of the past "out-of-the-box" issues covered by the "Assembly" category, such as child restraints that require tools to assemble, have disappeared from the market, further encouraging this proposal.

#### 2. Evaluation of Labels

Under this category, the labels from the child restraint itself are assessed for accuracy and completeness. The proposed upgraded rating forms, located in Appendix A, include the following features in the "Evaluation of Labels" category. The forms that each are applied to are included in the parenthesis:

- a. Clear indication of child's size range. (RF, FF, Booster)
- b. Are all methods of installation for this mode of use clearly indicated? (RF, FF, Booster)
- c. Are the correct harness slots for this mode indicated? (RF, FF)
- d. Label warning against using a lap belt only. (Booster)
- e. Seat belt use and routing path clarity. (RF, FF, Booster)
- f. Shows how to prepare and use lower attachments. (RF, FF)
- g. Shows how to prepare and use tether. (FF)
- h. Durability of labels. (RF, FF, Booster)
- a. Clear indication of child's size range. (RF, FF, Booster)

The agency would like to expand this feature to assess whether or not the child restraint labels contain additional sizing information beyond the required height and weight limits of Federal Standard No. 213,<sup>17</sup> "Child Restraint Systems". Parents and caregivers could benefit from visual indicators that help describe how an appropriately sized child should fit in the restraint. For example, the label could use a picture

to show that the child's head must be more than 1 inch from the top of the restraint, or that the top of his or her ears must be below the top of the restraint. A limited number of child restraints provide this information now and we believe that this information is useful for parents and caregivers in achieving an appropriate fit for a child. Additionally, such information could reduce the number of children who are placed in child restraints not appropriate for their age.

- b. Are all methods of installation for this mode of use clearly indicated? (RF, FF, Booster)

The agency feels that the current feature for assessing the proper methods of installation is sufficient. However, we would like to clarify the criteria to include that for the FF mode, the tether must be labeled with every configuration. Currently, the criteria only evaluates whether or not the tether is pictured but does not necessarily require it be labeled. The agency feels that having the top tether labeled could help to reinforce the use of the tether with FF child restraints.

- c. Are the correct harness slots for this mode indicated? (RF, FF)

The agency proposes to strengthen this feature to include criteria that evaluate harness slot labels under both the RF and FF modes of use. Previously, if there was nothing on the restraint indicating which harness slots were appropriate for each mode of use, the raters would search the manual for additional information. If it was determined from the manual that all the harness slots were able to be used in the forward-facing mode, the restraint was assigned an "n/a." Now, child restraints can be encouraged to have harness slots that are labeled for both the rear-facing and forward-facing mode. The agency believes that consultation with the manual should not be necessary to properly use this feature. It is critical to the child's safety that the harness slots are used appropriately, as most often these are reinforced for strength; especially in the FF mode. Using RF harness slots for a FF child can lead to a very dangerous misuse, and in light of this, the agency wants to encourage harness slots that are labeled with a graphic or contrasting text to receive the highest rating for this feature.

Additionally, the agency feels that all child restraints should contain some indication to help achieve the correct harness slot height for the child. This includes single mode child restraints and child restraints with no-thread harness adjustments. For example, a RF

<sup>17</sup> See 49 CFR 571.213.

child restraint may state or illustrate that the proper harness slots to use would be at or below the child's shoulder height. A FF child restraint could state or illustrate that the proper harness slot height to use would be at or above the child's shoulder height. In addition, restraints should illustrate this visual to better allow parents and caregivers the ability to assess the child's fit with respect to the harness.

d. Label warning against using a lap belt only. (Booster)

The agency created a new feature for the booster rating forms. We are proposing that child restraints should be evaluated on the presence of an illustrative warning against the use of a lap belt only. The agency is not aware of any booster seats on the market that may be used without a three-point belt. As of model year 2008,<sup>18</sup> all rear seating positions in passenger vehicles must come equipped with three point lap and shoulder belts. The agency feels that the presence of an illustration can reinforce that these devices must be used with a three-point belt. Boosters are arguably the simplest type of child restraints to use correctly and encouraging an extremely clear illustration to avoid a potentially dangerous situation is in the best interest of child safety.

e. Seat belt use and routing path clarity. (RF, FF, Booster)

The agency would like to maintain this feature, which examines how obvious the seat belt and flexible lower attachment routing path is. However, we feel that its robustness could be improved. We propose that the criteria evaluate the restraints on whether or not the belt path is labeled on both sides of the restraint. This ensures that despite the user's point of installation, the belt and lower anchor path can easily be seen.

f. Shows how to prepare and use lower attachments. (RF, FF)

There are currently two features that assess the content of lower attachment-related labels. One examines the labels pertaining to the preparation of the lower attachments and the other examines the instructions for their use. It has been the agency's experience that having these two separate features is unnecessary; it is sometimes difficult for raters to ascertain which operations should specifically constitute "preparation" and which should specifically constitute "use." In order to reduce this confusion, the agency is proposing that these two features now

be combined. In effect, there will now be one complete feature to evaluate whether the labels clearly depict all steps of preparation and use.

g. Shows how to prepare and use tether. (FF)

In an effort to encourage more widespread tether use, the agency proposes to evaluate child restraints on whether their proper use and preparation is sufficiently explained by illustrations and concise text on the child restraint labels.

h. Durability of labels. (RF, FF, Booster)

The agency is proposing to modify this feature so that it better assesses the durability of the labels on the child restraint. The current forms require that the label durability be assessed in every mode of use. For child restraints with more than one mode of use, this tended to inflate the overall score since the same labels are evaluated each time. The agency is revising its forms so that restraints with more than one mode of use will now be assessed only once, under its youngest mode of use (configured to accommodate youngest child recommended for the restraint). The agency believes this will improve the robustness of the label category score and overall rating.

### 3. Evaluation of Instructions

The most significant changes proposed in this category, which evaluates the restraint's instruction manual, is a reduction in weight for the majority of the criteria. Under the current program, most of the features rated under the "Evaluation of Labels" category are also carried through to the "Evaluation of Instructions" category. Essentially, the same information is encouraged in both places. Though the agency feels it is important to have pertinent information duplicated on the instructions and the labels, we also know that it is much easier for manufacturers to include complete information in an instruction manual than it is to convey the same information on the restraint labels. The agency certainly believes that a restraint's instruction manual must be carefully considered prior to using the restraint. However, NHTSA believes that the pertinent information required for correct daily use can be communicated on the child restraint labels themselves. The labels should reduce the need to consult the instructions.

The upgraded rating forms, located in Appendix A, include the following "Evaluation of Instructions" features.

The forms that each are applied to are included in the parenthesis:

a. Owner's manual easy to find? (RF, FF, Booster)

b. Evaluate the manual storage system access in this mode. (RF, FF, Booster)

c. Clear indication of child's size range. (RF, FF, Booster)

d. Are all methods of installation for this mode of use clearly indicated? (RF, FF, Booster)

e. Airbag/rear seat warning? (RF, FF, Booster)

f. Instructions for routing seat belt. (RF, FF, Booster)

g. Shows how to prepare & use lower attachments. (RF, FF)

h. Information in written instructions and on labels match? (RF, FF, Booster)

a. Owner's manual easy to find? (RF, FF, Booster)

The agency feels that if an instruction manual is attached to the child restraint in an obvious location, it has a greater likelihood of being seen and read. As a result, we are proposing to modify the criteria that examine whether the manual is easy to find when the child restraint is taken out of the box. Three levels of evaluation criteria for this feature will be reduced to two. It should be noted that this feature was previously assessed under the "Assembly" category; it was felt that moving the feature to the "Evaluation of Instructions" category was a better location. Also, this feature will now be assessed only once, when the child restraint is being evaluated in its youngest mode of use, to reduce grade inflation.

b. Evaluate the manual storage system access in this mode. (RF, FF, Booster)

In addition to easily finding the child restraint instructions, the agency also feels that an obvious, accessible storage system can help caregivers continue to consult the instructions when needed. Previously, this feature was also assessed under the "Assembly" section.

In the Final Rule establishing the EOU program, NHTSA shared its concerns about the accessibility and visibility of the manual when the child restraint was installed. NHTSA decided at that time that the storage system criteria would be sufficient to encourage easy access to the manual when the child restraint was installed. Instead, the criteria and our ratings focused on whether the storage mechanism is literally difficult to use, rather than difficult to access. There are some products on the market that receive the top rating for the storage system even though the manual cannot be easily accessed when the restraint is installed or when the child is seated.

<sup>18</sup> 69 FR 70904. See Docket NHTSA-2004-18726.

Therefore, the agency is proposing that the feature be updated so that manufacturers are encouraged to design storage systems that are accessible regardless of mode of use, and whether or not the child is sitting in the child restraint. NHTSA believes a manual should be easily stored, and the user should be able to retrieve it while the child restraint is installed and the child is in the restraint.

c. Clear indication of child's size range. (RF, FF, Booster)

Similar to the updated label feature, the agency is proposing to expand these criteria to include whether the child restraint instructions contain additional sizing information beyond the height and weight limits. As previously discussed, such information should decrease the number of children in child restraints not appropriate for their age. Along with the evaluations for clear height and weight limits, the instructions should contain a picture and text indicating additional child sizing information as discussed previously in the "Evaluation of Labels" section.

d. Are all methods of installation for this mode of use clearly indicated? (RF, FF, Booster)

The agency feels that the current evaluation for illustrating the proper methods of installation is sufficient. As a result, the feature has been clarified only to include that for the FF mode; the tether must be labeled and pictured in every configuration. The agency feels that this will help to reinforce the use of the tether with FF child restraints.

e. Airbag/rear seat warning? (RF, FF, Booster)

The agency is proposing to change the airbag warning criteria. Currently, all three forms contain a feature that encourages an airbag/rear-facing restraint interaction warning. Instead of encouraging the same warning for each type of child restraint, the agency proposes encouraging FF and booster seat instructions to contain warnings about the rear seat being the safest place for children, since this is more consistent with child passenger safety recommendations. Child restraints evaluated under the RF forms will also have to convey this information in addition to the current airbag warning requirements for a separate, obvious, illustrated warning.

f. Instructions for routing seat belt. (RF, FF, Booster)

The agency is proposing to enhance its requirements for seat belt routing instructions. In addition to looking for

a diagram showing a clear, contrasting belt path, manufacturers should be encouraged to include information on different seat belt styles, retractor types, and latch plate types and how each should be used with the child restraint in question. In this, the agency hopes to continue reducing loose and incorrect installations due to seat belt misuse.

g. Shows how to prepare and use lower attachments and tether. (RF, FF)

As in the "Evaluation of Labels" section, the features for "preparing" and "using" the lower attachments should be combined. The agency also proposes to remove the separate feature that looks for a diagram depicting the correct orientation of the lower attachments. Instead, the correct orientation criteria should be included within this feature. The criteria for this feature is similar to those for the labels: Lower attachment instructions must clearly depict all steps of preparation and use, including routing flexible lower attachments properly for that mode and making certain the user is prompted to tighten the straps. FF child restraints must also have complete tether directions included to satisfy this feature.

h. Information in written instructions and on labels match? (RF, FF, Booster)

The current rating forms assess whether the height and weight information on the labels matches. Prior to the EOU program, it was common to see confusing and even incorrect sizing information between the instructions and labels. Though it is much less common now, the agency proposes to maintain and strengthen this feature since we still see instances where there is conflicting information between the manual and the labels. In some cases, for example, the child restraint labels do not show the same style base or lower attachments as is found in the instructions. In addition to satisfying the current criteria, all pictures on the labels must convey the same information as in the manual. In addition to this, the child restraint model name should be found directly on the product as well as in the manual. The agency feels it is confusing to receive a manual where the purchased product's model name cannot be found.

#### 4. Securing the Child

This category, which examines the child restraint features that help secure the child in the restraint, has the most proposed changes. The rating forms, located in Appendix A, include the following "Securing the Child" features. The forms that each are applied to are included in the parentheses:

a. Is the restraint assembled and ready to use? (RF, FF, Booster)

b. Does harness clip require threading? Is it labeled? (RF, FF)

c. Evaluate the harness buckle style. (RF, FF)

d. Access to and use of harness adjustment system. (RF, FF)

e. Number and adjustability of harness slots in shell and pad. (RF, FF)

f. Visibility & alignment of harness slots. (RF, FF)

g. Ease of conversion to this mode from all other possible modes of use. (RF, FF, Booster)

h. Ease of conversion from high back to no back. (Booster)

i. Ease of adjusting the harness for child's growth.

j. Ease of reassembly after cleaning. (RF, FF, Booster)

k. Ease of adjusting/removing shield. (RF, FF)

a. Is the restraint assembled & ready to use? (RF, FF, Booster)

One feature that has been very successful in influencing the child restraint market has been our encouragement that child restraints arrive completely ready to use when taken out of the box. As a result of the current rating program, virtually every child restraint on the market today does, in fact, arrive fully assembled. The agency considered but ultimately determined not to propose removing the feature from the rating system. Hopefully this will maintain the incentive for child restraints to continue arriving fully assembled when purchased by consumers. This feature was originally located in the "Assembly" category. Since that category is being dissolved it was decided that "Securing the Child" was the next logical location. The agency also proposes to reduce these three levels of criteria to two. Now, to receive the highest rating for this feature, a child restraint cannot require any assembly, regardless of whether it needs tools. Also, this feature would only be evaluated once, when the child restraint is rated under its youngest mode of use, in order to reduce grade inflation.

b. Does harness clip require threading? Is it labeled? (RF, FF)

Previously, there was no EOU feature to evaluate the harness clip on a restraint. The agency has decided to propose one so as to encourage harness clips that do not require threading. In addition, NHTSA would like to encourage them to be labeled with simple text or a graphic that can provide some indication of where they should



be positioned on the properly restrained child. The agency feels that this will increase the correct usage of these devices.

c. Evaluate the harness buckle style. (RF, FF)

In the current rating system, a child restraint is assessed on whether the harness buckle may be secured (and released easily) if it is buckled in reverse. The agency anticipated that parents may find reversing the buckle a sufficient deterrent for children who attempt to release the harness system on their own. The agency has no evidence, anecdotal or otherwise, that this technique is widely used. As a result, we are proposing to remove this feature from the rating program, as nearly all child restraint buckles already receive the top rating.

However, there is no current feature that evaluates the ease of using one type of harness buckle over another. Some buckles allow the user to insert each side of the buckle independently. Other styles require the user to hold the two shoulder portions of the buckle together and insert them at the same time, commonly referred to as a "puzzle buckle" style. Some manufacturers use these "puzzle buckles" to prevent either side from being incorrectly latched, which could lead to a dangerous misuse. However, according to many CPSTs, they are also more difficult for the user. Restraints with shoulder strap buckles that may be inserted independently of one another are ideal from an ease of use perspective, while buckles requiring both shoulder strap pieces to be inserted at together are not. Some "puzzle buckles" are more forgiving than others and have an intermediate method of keeping the two pieces together prior to their insertion into the buckle. For example, some use a small magnet or hook to hold the two separate pieces together, which can ease the process. As such, we are proposing to modify the criteria based on the presence of such features.

d. Access to and use of harness adjustment system. (RF, FF)

The agency proposes to combine the features that evaluate both access to and use of the harness tightening system. It is critical that there is access to the mechanism used to tighten the harness system regardless of the installation mode. A restraint cannot be used correctly if the harness system cannot be tightened onto the child. The condition for access will be assessed using the FMVSS 213 bench by installing the child restraint with both the lower attachments and seat belt (as necessary).

We will also continue encouraging harness systems that may be adjusted with a single action. However, the agency proposes reducing the number of levels this new feature is evaluated on from three to two. For example, in order to receive the highest rating for this feature, there must be access to the harness adjustment system in that mode of installation and the mechanism for adjusting the system must be simple to use.

e. Number and adjustability of harness slots in shell and pad. (RF, FF)

The agency is proposing to combine some related harness slot criteria from this section. The current rating program separately evaluates the number of harness slots and whether the number of harness slots in the shell and padding matches. The agency feels that differing numbers of slots in the shell and pad can easily lead to misrouting the harness straps when they are adjusted. However, these are examples of features that almost always receive the top rating. As a result, the agency would like to combine these features so that no backsliding can occur. This feature will apply to both re-threadable and fully adjustable harness systems. Rather than encouraging a certain number of harness slots for adjustable systems, the agency will encourage that they be adjustable to a minimum of three heights.

f. Visibility & alignment of harness slots. (RF, FF)

The agency maintains its position that having obvious, clear harness slots in the shell and pad helps to reinforce their proper use and avoids misrouting issues. We will continue assessing the alignment of the harness slots in the seat pad with the child restraint shell. The criteria have been re-written for clarity but their requirements are unchanged. Under the new rating system, however, we propose that child restraints with "no-thread" harness systems receive an "n/a" for this feature since its purpose is to help facilitate rethreading.

g. Ease of conversion to this mode from all other possible modes of use. (RF, FF, Booster)

The agency is proposing to restructure the features that assess the ease of converting a child restraint. Previously, the criteria were written in a way that did not fully evaluate the relative complexity of converting a child restraint between its different modes, especially for those equipped with flexible lower anchor systems that need to be re-routed to change to another mode. In addition to this, a number of needs specific to 3-in-1 child restraint

systems were not being reflected. For example, the complexity of removing and replacing the harness when a child restraint is converted from and to its booster mode was not reflected.

Child restraints would now be evaluated on the difficulty a user would experience converting the restraint back to the mode in question from any other mode it could be used in. The agency recognizes that multi-mode child restraints, especially 3-in-1 child restraints, will have difficulty achieving the top rating for this feature. Additionally, the agency recognizes that the process of converting a child restraint is normally an infrequent occurrence. However, given the relative difficulty of converting child restraints between modes, as well as the potential to introduce gross misuse and misplace critical pieces, NHTSA feels it is important to include such a feature in the new ratings.

h. Ease of conversion from high back to no back. (Booster)

The agency is proposing to add a separate feature to assess the difficulty of converting high back boosters to backless boosters. It was felt that the relative ease of converting a high back to a low back booster versus, for example, converting a 3-in-1 child restraint between its modes, warranted its own feature. In the upgraded ratings, a schematic should be found on the child restraint showing the conversion process; in addition, the process must be simple to perform.

i. Ease of adjusting the harness for child's growth.

Though the harness system usually needs to be adjusted when converting the child restraint to another mode, it must also be adjusted as the child grows. The agency is proposing to upgrade its evaluation of harness adjustment systems. The agency is now encouraging child restraints to have fully adjustable or "no-thread" systems that are both easy to understand and simple to use. Any restraint that must be rethreaded to adjust or that still has the possibility of misrouting (some no-thread systems can still be misrouted) will not receive the top rating for this feature.

j. Ease of reassembly after cleaning. (RF, FF, Booster)

Removing the child restraint cover in order to launder it can introduce potential misuse. Similar to the conversion process, harnesses may have to be removed and loose pieces that are generated during the disassembly can be misplaced. Some restraints still require

tools to remove the padding. The current RF and FF forms evaluate this feature by assessing whether loose parts will result from removing the cover and whether the harness system could be routed incorrectly. The agency is proposing to maintain this feature but is clarifying the three rating criteria. Child restraints will continue to be evaluated on whether the harness requires rethreading, if loose critical parts are generated during disassembly, and whether the cover can be easily removed and replaced.

The agency is proposing to add a similar feature to the booster forms, as they did not contain any criteria for this before. Since boosters do not have harnesses that require rethreading, however, there will be no "B" option for this feature on the booster rating forms. The child restraint will receive the highest rating if there are no loose parts and if the pad is easy to remove.

k. Ease of adjusting/removing shield. (RF, FF)

The agency has not made any significant changes to the criteria for this feature. However, the criteria have been clarified to require that the instructions for its use should be found on the child restraint itself.

##### 5. Vehicle Installation Features

The title of this section has been reworded in order to better clarify its scope. This category examines child restraint features that help to ensure correct installation. It does not necessarily assess the difficulty of installing the child restraint in a given vehicle.

The rating forms, located in Appendix A, include the following features under the "Vehicle Installation Features" category. The forms that each are applied to are included in the parenthesis:

a. Ease of routing vehicle belt or flexible lower attachments in this mode. (RF, FF)

b. Can vehicle belt or LATCH attachments interfere with harness? (RF, FF)

c. Evaluate the tether adjustment. (FF)

d. Ease of attaching/removing infant carrier from its base. (RF)

e. Ease of use of any belt positioning devices. (RF, FF, Booster)

f. Does the belt positioning device allow slack? Can the belt slip? (Booster)

g. Evaluate child restraint's angle feedback device and recline capabilities on the carrier and base. (RF)

h. Do the lower attachments require twisting to remove from vehicle? (RF, FF)

i. Storage for the LATCH system when not in use? (RF, FF)

j. Indication on the child restraint for where to put the carrier handle? (RF)

a. Ease of routing vehicle belt or flexible lower attachments in this mode. (RF, FF)

The agency is proposing to update the feature that examines the ease of routing the seat belt through the child restraint belt path. It will now reflect that flexible lower attachments are usually routed through the same path. Previously, there were two separate features, which lead to unnecessary grade inflation. Combining these two features into one will increase the robustness of the rating system.

b. Can vehicle belt or LATCH attachments interfere with harness? (RF, FF)

The agency is proposing to restructure the feature that focuses on interactions between the harness system (including crotch strap) and the seat belt or flexible lower attachments. Interference with any part of the harness system can create an unsafe condition. Hidden slack may be introduced into the system if it becomes tangled with the vehicle belt. In this situation, there is a possibility that neither the harness nor the belt could be tightened enough.

The current FF form separates this idea into two features: One evaluates possible interaction from the seat belt and the other evaluates the possible interaction from the flexible lower attachments. The current RF form contains separate criteria similar to the FF form but in addition, raters are required to evaluate the base and carrier separately for a total of four criteria. There is an element of redundancy in keeping these ideas separate since the flexible lower attachments often share the same routing path as the seat belt. In addition, the design of most child restraints that may be used rear-facing, especially those with add-on bases, is such that interaction with the seat belt or flexible lower attachments is impossible. As a result, the agency has combined the separate features on each form into one comprehensive feature for each mode. This will help avoid grade inflation.

c. Evaluate the tether adjustment. (FF)

The agency already evaluates tether adjustment hardware but is proposing to strengthen the criteria. There will now be two rather than three criteria available to rate this feature. The agency hopes that by continuing to encourage simple tether adjustment mechanisms, more parents will opt to use them, and use them correctly.

d. Ease of attaching/removing infant carrier from its base. (RF)

The agency is proposing to strengthen the feature that evaluates attaching and removing an infant carrier from its base. In addition to maintaining the previous criteria that it be simple to attach and release, there will be a secondary criteria that there be no way to mistake that the carrier is secured to the base. Some designs lend themselves to a dangerous misuse in which the user can mistakenly believe he or she has achieved positive attachment. In this case, the infant carrier may in fact be completely free and not attached to the base. The agency does not believe there should be any indication that the carrier can appear secured to the base if it is not. In order to encourage designs that do not allow for this, the agency proposes including this feature.

e. Ease of use of any belt positioning devices. (RF, FF, Booster)

NHTSA proposes strengthening the feature that evaluates the belt-positioning and lock-off devices<sup>19</sup> for seat belts. Rather than evaluate the belt positioning device based on the number of hands it requires to use, the agency would encourage that the device be "simple to use" and have its instructions for use located on the restraint itself. The agency feels this can encourage more widespread, correct use of these devices.

f. Does the belt positioning device allow slack? Can the belt slip? (Booster)

On the current booster forms, this feature examines whether the shoulder belt positioning device can inadvertently create slack in the belt. The agency has decided to propose an additional criterion for this feature after examining the differences in devices seen in the market. Under the upgraded rating system, the belt positioning device will still have to avoid introducing slack into the shoulder belt, but in addition, it must not allow the shoulder portion of the belt to easily slip out of the device in order to receive the highest rating.

g. Evaluate child restraint's angle feedback device and recline capabilities on the carrier and base. (RF)

The current feature evaluates the presence of a feedback device on the carrier and the base. The agency feels there is a need to improve this feature,

<sup>19</sup> A lock-off is a device that locks the seat belt webbing in place, thereby preventing movement of the child restraint relative to the seat belt webbing. It is often found on belt-positioning boosters but may also be found on RF and FF child restraints.

especially since the LATCH survey showed that 20 percent of infant child restraints were not installed at the correct recline level<sup>20</sup>. Many child restraints, especially infant carriers, provide users with an obvious, separate device for determining whether the child restraint is at the proper angle for rear-facing infants. Many others, however, simply print an indication line on a label or the shell itself that must be kept “level to ground.” The agency feels that dedicated devices that provide the user feedback about the child restraint angle are more helpful to consumers and should be rated accordingly. In addition, the agency felt that this feature could be expanded to encourage more child restraints to provide adjustable systems for achieving the proper angle in the vehicle.

In the RF mode, the agency proposes to evaluate convertible and 3-in-1 child restraints separately from infant carriers with separate bases. Convertibles and 3-in-1 child restraints will be evaluated on whether they have one obvious, separate, recline device and three levels of recline. Infant carriers with separate bases will also undergo this evaluation; however, they will also be evaluated on whether they provide an additional feedback indicator for whichever piece of the system does not have a “separate” device. For example, if the manufacturer decides to place their “separate” feedback device on the child restraint base, they must also provide feedback on the carrier since the consumer may choose to install that on its own. The agency believes that this can increase the consumer’s ability to achieve the proper angle during installation.

h. Do the lower attachments require twisting to remove from vehicle? (RF, FF)

In NHTSA’s experience, as well as in other organizations’ such as Transport Canada<sup>21</sup>, certain styles of lower attachments are proving to be more user-friendly. Participants at the LATCH Public meeting and commenters to the Docket, as discussed above, also indicate this. While the ease of attaching the lower attachments to the vehicle may be similar regardless of type, removing the connectors is a different challenge. There is a feature in the current rating system that attempts to discern between different connectors, but the agency feels that it needs to be rewritten in order to be more effective. The current feature assesses whether the

lower attachments can “be installed in reverse.” The way the feature is written requires the raters to assess whether the attachments can physically be installed upside-down without being considered a misuse. At the time this feature was developed, the agency’s experience with LATCH was limited. It was written to accommodate lower attachments that would still be used correctly if they were installed upside-down on the vehicle anchors. The agency is not aware of any system that actually allows the lower attachments to be installed upside-down, and as a result, proposes to restructure the feature and its criteria. In order to capture the relative difference between using different types of connectors, the agency reworded this feature to encourage attachments that do not require twisting to remove from the vehicle anchors. The agency proposes to encourage lower attachments that retract on their own and attachments that may be released from the anchors without having to twist them from the vehicle anchors.

i. Storage for the LATCH system when not in use? (RF, FF)

Many participants at the LATCH public meeting, as well as commenters to the accompanying Docket<sup>22</sup>, expressed their desire for the agency to begin rating LATCH component storage systems. In response to this, the agency proposes adding a feature to rate storage systems for the lower attachments and tether (FF only) when they are not being used. Separate, obvious storage systems with clear labeling will be encouraged. Lower attachment systems that fully retract when not in use would also be encouraged.

j. Indication on the child restraint for where to put the carrier handle? (RF)

The agency is proposing to add a new RF rating feature to encourage the manufacturer to specify where to place the infant carrier handle during driving conditions. It has been the agency’s experience that this information is often hard to find in the manual; it can also be very ambiguous. Identifying the correct carrier handle position directly on the child restraint is the most effective way of ensuring proper installation.

### B. Rating System

NHTSA is proposing changes to the rating structure of the program as well as the way in which it conveys those ratings to consumers. The individual feature and criteria changes can be seen in Appendix B, which contains the

upgraded EOU scoring forms. We reassigned many of the feature weightings and made changes to the numerical ranges used to assign both category and overall EOU letter grades. These two changes have the net effect of improving the robustness of the rating system. Previously, there were no features assigned a “1” (once equal to a “C”) weighting. This would not be true of the upgraded program. Features have been re-weighted according to the following, which is similar to the original ICBC methodology but has since been re-visited because of additional criteria and experience gained in the program.

- “3” weighted feature—Misuse of this feature would correspond to the greatest risk of severe injury.
- “2” weighted feature—Misuse of this feature would correspond to a lower risk of severe injury.
- “1” weighted feature—Misuse of this feature would correspond to a low risk of severe injury.

NHTSA will continue providing consumers with ratings for each of the four categories as well as the restraint’s overall rating. However, rather than displaying the scores as letters, the agency is proposing to present the ratings in terms of stars. These star ratings, which can be seen in Appendix C, will be used on NHTSA’s Web site and in its brochures for displaying category and overall ratings. Figures 1 through 5 of Appendix C will be used to represent the range of ratings from “1 star” to “5 star,” respectively. In this, a “1 star” will now be used to convey the lowest category and overall rating, while a “5 star” will now be the highest rating a child restraint will receive.

Raters will continue to assess each feature using the letters “A”, “B”, and “C”; in addition, the numerical values of these letters will continue being “3”, “2”, and “1”, respectively. The agency is also maintaining its current method for calculating feature ratings by taking the feature’s rated value (i.e., the numerical equivalent of the letter rating given for that feature) and multiplying it by the fixed weighted value of that feature. Then, the sum of these weighted feature ratings is divided by the sum of the applicable fixed weighting factors. The numerical category weighted average that results is assigned a star rating according to the following scale:

- “5 stars” = Category Weighted Average  $\geq 2.60$ .
- “4 stars” =  $2.30 \leq$  Category Weighted Average  $< 2.60$ .
- “3 stars” =  $2.00 \leq$  Category Weighted Average  $< 2.30$ .
- “2 stars” =  $1.70 \leq$  Category Weighted Average  $< 2.00$ .

<sup>20</sup> Decina, Lawrence E., Lococo, Kathy H., and Doyle, Charlene T. *Child Restraint Use Survey: LATCH Use and Misuse*. DOT HS 810 679. December 22, 2006.

<sup>21</sup> See Docket NHTSA–2007–26833–24.

<sup>22</sup> See Docket NHTSA–2007–26833.

- “1 star” = Category Weighted Average < 1.70.

In the original rating system, point ranges for assigning both the category and overall ratings were determined by dividing the range of possible overall scores into three nearly equal parts. The minimum category or overall score for any child restraint is 1.00; this is if all features are rated “C”. The maximum category or overall score for any child restraint is a 3.00; this is if all features are rated an “A”. These updated ranges have been set so that the numerical score needed to receive the middle “3 star” rating is a 2.00, which is the score a restraint would receive if every feature was awarded a “B.” Previously, the numerical weighted average of a category could be less than an average of “B” but the child restraint could still receive a “B” rating for that category. Under the proposed system, the restraint must receive an average of a “B” for all the features in that category to receive a “3 star” for the category. In the original rating program, a numerical value of 1.70 was the break point for a “C”. In order to maintain some continuity, 1.70 will be maintained as the cutoff point for a “1 star” under the new rating system. In establishing the remaining break points, the agency created relatively equal numerical ranges while also taking into consideration realistically achievable ratings.

To calculate the overall rating for the child restraint, the sum of the weighted feature ratings from all four categories is divided by the sum of all the possible weighted scores for that category. The score ranges for assigning an overall star rating to the restraint are structured so that they are similar to those for the individual categories:

- “5 stars” = Overall Weighted Average  $\geq 2.60$ .
- “4 stars” =  $2.30 \leq$  Overall Weighted Average < 2.60.
- “3 stars” =  $2.00 \leq$  Overall Weighted Average < 2.30.
- “2 stars” =  $1.70 \leq$  Overall Weighted Average < 2.00.
- “1 star” = Overall Weighted Average < 1.70.

It should be noted that the same method was used to establish the break points for the overall star rating as was used for the category star ratings.

The agency feels that displaying EOU category and overall ratings in terms of stars rather than letters will have an overall positive effect on the program. The five levels of ratings that are proposed allow for more discrimination between child restraints, and will likely better assist consumers in their purchasing decisions. The agency also

feels that stars could allow the child restraint manufacturers to promote product ratings more effectively than the current system, as they may also be more recognizable to consumers than letter grades. In conclusion, the agency feels these changes will create greater delineation between child restraints and improve the robustness of this rating program.

### C. Other Issues

The following serves to address the comments from the LATCH Public Meeting as well as responses to the corresponding Docket that have not otherwise been previously discussed.

The agency does not plan to incorporate SRN Publications’ suggestion that manuals should explicitly encourage the use of LATCH, rather than simply listing it as an option for installation. For one, there is still a considerable portion of the vehicle fleet that is not LATCH-equipped. NHTSA feels that encouraging LATCH over vehicle seat belts could be misleading for those caregivers who have to use their vehicle belts for child restraint installation. The agency maintains its position that child restraints installed tightly and correctly with vehicle seat belts and the top tether are as safe as an installation that uses the LATCH system correctly. There are some seating positions in which the LATCH system is not available, such as in the third row of some minivans and sport utility vehicles. The agency would never want to discourage caregivers from installing child restraints with vehicle seat belts in these positions.

UVA suggested that the agency include a DVD feature in the ratings program as well as begin encouraging real photographs (as opposed to diagrams) into owner’s manuals. NHTSA has decided not to propose such an evaluation in the EOU program. The agency does not discourage manufacturers from electing to provide these features but we believe that including these criteria in the EOU program would be overly burdensome with little to no impact on the ability of caregivers to correctly install child restraints into their vehicles. Raters would have to objectively assess the validity of its information, which would require that we could continuously monitor the content and develop new objective criteria. The agency has also decided not to propose UVA’s suggestion to replace diagrams in manuals with photographs. The upgraded EOU program, like the current one, has an extensive section to evaluate the manual’s graphic instructions. In the agency’s experience, having

photographs in the manual does not guarantee the information will be clear and concise. In fact, the agency has seen that some ideas and instructions may be better conveyed through graphics. Many diagrams found in child restraint manuals already do an excellent job of conveying clear instructions.

Honda, AAP, some CPSTs, SRN Publications, SafetyBeltSafe and Cohort 22 suggested making certain lower connector types a requirement.<sup>23</sup> Others asked that the agency mandate rigid systems for child restraints, or specify that two adjustment mechanisms be present on flexible lower anchors. Others asked that the agency mandate a single system for lower anchors or require they have an audible confirmation of attachment. The agency has proposed additional criteria into the EOU program to highlight those lower attachment styles that are easier to use. The agency will consider these comments in the context of possible future changes to its safety standard rather than in this update to the EOU program.

GM, UVA, Advocates, AAP, and SRN Publications suggested that the agency rate child restraints for the presence of ISO-style symbols on the lower attachments and tether hook connectors. These commenters indicated that if child restraints and vehicles were equipped with these symbols it might encourage a more widespread use of LATCH. Currently the use of ISO symbols in vehicles is not well documented and at this time, it is unknown whether or not manufacturers would include these for all applicable seating positions in all future vehicle designs. Furthermore, the effectiveness and benefit of using symbols to identify LATCH seating positions are also unknown. In consideration of these issues and because the perceived benefit of the suggestion assumes that these symbols would also be present in the vehicle, we have decided not to include this suggestion in our proposed upgrade. However, the possibility exists to incorporate something similar in the future, especially if a corresponding vehicle symbol is either encouraged through a ratings program or required as part of a regulation.

The agency will not propose a feature in the new rating system that encourages flexible lower anchor straps that can be adjusted from both sides, which was suggested by SRN Publications. After reviewing the available technologies in the child

<sup>23</sup> Federal Standard No. 213, “Child Restraint Systems,” requires a standard type of tether hook connector.

restraint market the agency did not determine that having an adjuster on either side of the child restraint would necessarily make installing the child restraint easier. In addition, the agency could not find objective, repeatable criteria with which to evaluate this feature. Regardless of the number of adjusters on the lower straps, (except when the flexible lower anchors are self-tightening) the user must still be reminded to tighten the attachments on the child restraint through updated labeling and instruction requirements.

In response to AAP's suggestion that information on the type of lower attachment device on each child restraint be included in the ratings, the agency will investigate the feasibility of including this additional information on the EOU Web site and whether or not consumers would find this additional information helpful in purchasing a child restraint. In addition, the agency welcomes the opportunity to collaborate with AAP on their publication, and is partnering with them not only on our existing brochure but theirs as well.

#### **VII. Rating Vehicles Based on Child Restraint Installation Features**

The agency believes that a vehicle rating program is a natural element in reducing the incompatibility between child restraints and vehicles. The agency agrees with the commenters to the LATCH public meeting that the ease of installing a child restraint is not solely dependant on features specific to the restraint and that the vehicle's features play a vital role in determining whether a child restraint can achieve a correct and secure installation. The agency recognizes that even the child restraint rated highest for EOU may do little good if the user attempts installation in a vehicle or a seating position that is not ideal.

However, the agency has concluded that developing a ratings program to address the issue of child restraint and vehicle interaction is premature at this time and is best explored as a separate activity. Therefore it is not part of this proposed upgrade. We are currently evaluating several approaches from around the world in order to develop a vehicle rating that would help address the incompatibility between vehicles and child restraints. The agency will likely publish its intentions by the end of next year.

#### **VIII. Conclusion, Star-System, and Effective Date**

Therefore, in consideration of recent surveys conducted on LATCH and the EOU program itself, as well as NHTSA's public meeting on LATCH, NHTSA is

proposing to update the features and criteria it uses for its child restraint EOU ratings program, along with the method in which we display the ratings to consumers. The changes will not only recognize easier to install features, specifically for the LATCH hardware, but it will also provide an incentive for manufacturers to continue to design child restraints with features that are intuitive and easier to use. The agency feels this approach provides additional incentives to manufacturers while at the same time providing consumers with useful information. Similarly, novel design features and products that have entered the market will be recognized by these enhancements to the program. Furthermore, our changes to the numerical break points that determine a child restraint's category and overall ratings will make the top rating harder to achieve. In addition to making the ratings harder to achieve, the agency is also proposing to change the way it conveys these ratings to the public. Rather than using a letter grading system with three levels, EOU ratings would now be presented to consumers using a star rating system containing five levels. The agency feels that the additional levels of discrimination could further aid consumers in their purchasing decisions and continue to add to the robustness of the rating system.

We believe that this consumer information program must undergo the changes outlined in this document to continue encouraging child restraint manufacturers to develop and maintain features that make it easier for consumers to use and install child restraints. The agency believes that the presence of easier to use features on child restraints leads to an increase in their correct use, which thereby results in increased safety for child passengers. NHTSA believes that these changes should be implemented as soon as possible and as such, these program enhancements are proposed for inclusion in the 2008 ratings program, which will begin after we issue a notice of final decision.

#### **IX. Public Comment**

Comments are sought on the proposed requirements discussed herein. To facilitate analysis of the comments, it is requested that responses be organized by the requirements listed above. NHTSA will consider all comments and suggestions in deciding what changes, if any, should be made to program described here.

#### *How do I prepare and submit comments?*

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number of this document in your comments.

Your comments must be no longer than 15 pages long (49 CFR 553.21). We establish this limit to encourage the preparation of comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit to the length of the attachments.

#### *How do I submit confidential business information?*

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given under **FOR FURTHER INFORMATION CONTACT**. This submission must include the information that you are claiming to be private; that is, confidential business information. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under **ADDRESSES**. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation (49 CFR part 512).

#### *Will the agency consider late comments?*

We will consider all comments that are received by Docket Management before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date. If Docket Management receives a comment too late for us to consider in developing a proposal concerning this label, we will consider that comment as an informal suggestion for future rulemaking action.

#### *How can I read comments submitted by other people?*

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act



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 alongside a picture. <input 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"/>	
All methods of installing the seat in this mode are clearly indicated, including with lower attachments, lap belt only, and lap/shoulder belt, with and without the base as necessary.	Illustrated clearly with CR in vehicle seat. Illustrations should be labeled for each method of installation. <input type="checkbox"/>		Method missing, partially illustrated, or no illustrations at all. CRS may be shown without any vehicle seat at all. Illustrations may not be completely labeled for each method of installation. <input type="checkbox"/>	
Does the CRS indicate the correct harness slot height for this mode? Is there additional information on the CRS about how the shoulder straps should fit for this mode?	Yes, there is a graphic or contrasting text indicating the correct harness slots to use for this mode. Additional harness adjustment information is included alongside a picture. <input type="checkbox"/>	Yes, there is text indicating the correct harness slots to use for this mode but they may be the same color as the shell. Additional harness adjustment information is included but may be text only. <input type="checkbox"/>	No indication of correct slots to use for this mode (for applicable multi-mode CRS) and/or no mention of additional sizing information. <input type="checkbox"/>	
Instructions for routing both lap belt and lap/shoulder belt for this mode, including details about different vehicle seatbelt types and locking mechanisms how this CRS should be installed with each of them.	Illustrated clearly with no need to read text in order to route seatbelts. Label is directly next to the corresponding belt path on both sides of CRS. <input type="checkbox"/>	Belt routing path is only labeled on one side but would otherwise fulfill "A" criteria. <input type="checkbox"/>	Belt routing label not next to corresponding path. Belt routing path is only labeled on one side. Routing requires reading text or is otherwise not obvious from illustration. May also be obscured by seat pad. <input type="checkbox"/>	
Shows how to prepare and use lower attachments.	Clear illustrations show how to route and attach lower anchors to vehicle for using the CRS in this mode. One or two words per idea are OK for clarification. <input type="checkbox"/>	Illustrations plus written instructions provided. <b>Need</b> to read text to perform entire operation. <input type="checkbox"/>	Text-heavy instructions only provided or no instructions at all provided. Partial instructions; some steps missing. <input type="checkbox"/>	
Durability of labels.	Sticky label(s) or other method of technology label not peeling. <input type="checkbox"/>		Sticky label(s) are already peeling when restraint removed from box. <input type="checkbox"/>	

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 Instructions				
	A	B	C	Notes
Is the owner's manual easy to find when the CRS is taken out of the box?	Attached to the child restraint in a clearly visible location. <input type="checkbox"/>		Attached to the child restraint in a hard-to-find location or not attached to the seat at all. <input type="checkbox"/>	
Evaluate the storage system for accessing the manual in this mode.	It is obvious and easy to use. The manual can be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	It is obvious and easy to use, but the manual cannot be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	The designated storage system isn't obvious or it is difficult to use regardless of mode of use. <input type="checkbox"/>	
Clear indication of child's size range. Is there additional information on the CRS about how the child should fit?	Separate, clear, complete height and weight information directly next to the illustration. Additional size information included alongside a picture. <input 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"/>	
All methods of installing the seat in this mode are clearly indicated, including with lower attachments, lap belt only, and lap/shoulder belt, and with and without the base as necessary.	Illustrated clearly with CRS in vehicle seat. No need to read text although illustrations should be labeled for each method of installation. <input type="checkbox"/>		Method missing, partially illustrated, or no illustrations at all. CRS may be shown without a vehicle seat. <input type="checkbox"/>	
Warning to avoid placing a rear-facing child restraint in front of an active airbag .	Separate from unrelated warnings and illustrated; has its own page or other very clear demarcation. Also remarks that the safest place for children is in the rear. <input type="checkbox"/>	Illustrated but buried within other unrelated warnings, for example, in a bulleted list. Must still contain a warning that the safest place for children is in the rear AND specifically mention the dangers of RF CRS and airbags. <input type="checkbox"/>	Buried among other text, incomplete warning, or no warning at all. <input type="checkbox"/>	
Instructions for routing both lap belt and lap/shoulder belt for this mode, including details about different vehicle seatbelt types and locking mechanisms how this CRS should be installed with each of them.	Illustrated clearly. No need to read text in order to route seatbelt; should be obvious from diagrams. Includes instructions for working with different vehicle seatbelt types. <input type="checkbox"/>	Illustrated clearly. No need to read text in order to route seatbelt; should be obvious from diagrams. Instructions for working with different vehicle seatbelt types are present but may be incomplete. <input type="checkbox"/>	Unclear instructions that require reading text. No mention of how to work with different vehicle seatbelt types correctly. <input type="checkbox"/>	
Shows how to prepare and use lower attachments.	Clear illustrations show how to route and affix lower attachments to vehicle for using the CRS in this mode. One or two words per idea are OK for clarification. <input type="checkbox"/>	Illustrations plus written instructions provided. Need to read text to perform entire operation. <input type="checkbox"/>	Text-heavy instructions only provided or no instructions at all provided. Partial instructions; some steps missing. <input type="checkbox"/>	
For this mode, information in written instructions and on labels match.	Yes. <input type="checkbox"/>		No. Please describe the conflict under notes. <input type="checkbox"/>	



NHTSA Ease of Use Rating Form - 2008				
Infant Only Restraints, Convertible RF Mode, or 3-in-1 RF Mode				
Make & Model _____ 0 _____	Model # _____ 0 _____			
Securing the Child				
	A	B	C	Notes
All functional parts (i.e., required for correct use as per instructions) including seat pad or cover attached and ready to use, harness slots and crotch strap in their lowest settings.	Yes.  <input type="checkbox"/>		No, not ready to use regardless of how difficult the assembly may be. May direct user to manual or is otherwise difficult. Tools may be required. Please describe under notes.  <input type="checkbox"/>	
Visibility & alignment of harness slots for systems that must be re-threaded.	Can see through all harness slots. All slots in pad are aligned with slots in shell.  <input type="checkbox"/>	Cannot see through all harness slots because they are small or are misaligned with the shell.  <input type="checkbox"/>	Cannot see all harness slots because there is something in way for this mode, e.g. an insert, a head hugger, or body pillow.  <input type="checkbox"/>	<input type="checkbox"/> n/a, system does not require re-thread
Evaluate the number and adjustability of the harness slots in the shell and the pad.	The number of slots in the pad & shell match, and there are at least 3 OR the system is adjustable to at least 3 heights.  <input type="checkbox"/>		Does not meet "A" criteria. Please describe under notes.  <input type="checkbox"/>	
Ease of adjusting the harness for child's growth.	No need to rethread system. Simple, obvious operation of the harness adjustment system. No mandatory pieces exist that may become loose when adjusting system.  <input type="checkbox"/>	No need to rethread system, but may be otherwise difficult to adjust.  <input type="checkbox"/>	Harness must be rethread to adjust. Loose mandatory pieces may be present. Could misroute or incorrectly resecure harness, even for a no-thread system.  <input type="checkbox"/>	
Does the harness clip require threading to secure properly? Is it labeled to indicate its proper positioning on the child?	No, and harness clip is labeled.  <input type="checkbox"/>	No, but harness clip is not labeled.  <input type="checkbox"/>	Yes.  <input type="checkbox"/>	
Evaluate the ease of inserting the shoulder portions of the harness buckle for this seat.	Each upper portion of the shoulder harness may be inserted separately.  <input type="checkbox"/>	"Puzzle" buckle with an intermediate method of holding the shoulder portions together.  <input type="checkbox"/>	"Puzzle" buckle with no intermediate method of holding the shoulder portions together  <input type="checkbox"/>	
Access to & use of harness adjustment system.	Can access harness system when installed, one hand to tighten (one pull system). Possible 2 hands to loosen (i.e., one to depress button and one to loosen the harness).  <input type="checkbox"/>		Does not meet "A" criteria. Please describe under notes.  <input type="checkbox"/>	
Ease of conversion to RF from all other possible modes of use.	Simple operation with only a single or dual action. Illustrations and instructions on seat showing mode change.  <input type="checkbox"/>	Simple operation but multiple actions are required. Illustrations may be missing from the label, requiring the user to read the manual.  <input type="checkbox"/>	Operation is difficult, requiring many complicated steps that must be followed in the manual.  <input type="checkbox"/>	<input type="checkbox"/> n/a, single mode CRS
Ease of re-assembly if pad/cover removed for cleaning.	No loose parts. Easy to remove and reattach the padding. No rethreading required.  <input type="checkbox"/>	Harness system may need to be rethreaded to re-assemble, but it is a very simple system. No loose parts exist.  <input type="checkbox"/>	Loose parts may exist, including the harness system. Harness system may need to be rethreaded to re-assemble. May even need hand tool(s).  <input type="checkbox"/>	
Ease of adjusting/removing shield.	Clear illustration on CRS, simple action, shield marked.  <input type="checkbox"/>	Need to read text, simple action, shield not marked.  <input type="checkbox"/>	Other tool(s) required.  <input type="checkbox"/>	<input type="checkbox"/> n/a, no shield <input type="checkbox"/> n/a, shield not adjustable

NHTSA Ease of Use Rating Form - 2008				
Infant Only Restraints, Convertible RF Mode, or 3-in-1 RF Mode				
Make & Model _____ 0		Model # _____ 0		
Vehicle Installation Features				
	A	B	C	Notes
Ease of routing vehicle belt or lower attachment straps (if flexible) for installation in this mode, with and without base if separate.	A 95th percentile male hand can route the seatbelt easily and comfortably. The padding does not need to be moved in order to route the belt. <input type="checkbox"/>		The belt path does not accommodate a 95th percentile male hand, or has to be routed under the CRS padding for one or more modes of RF installation. <input type="checkbox"/>	
Can vehicle belt or lower attachment straps (if flexible) interfere with harness (including crotch strap) or be routed incorrectly with respect to other elements such as padding?	No contact or interference possible. <input type="checkbox"/>		Possible contact or misrouting. Please describe this potential under <b>notes</b> . <input type="checkbox"/>	
Ease of attaching/removing infant seat from base.	Simple to attach, difficult to mistakenly secure carrier to base. One step release mechanism easy to reach. <input type="checkbox"/>		Difficult to attach carrier securely to base. Easy to <i>mistakenly</i> secure carrier to base. Release mechanism may be difficult to reach. Carrier has the potential to appear correctly installed when it is not. <input type="checkbox"/>	<input type="checkbox"/> n/a, no separate base
Ease of use of any RF belt positioning feature on CRS such as a lock-off.	Simple to use with instruction on CRS. <input type="checkbox"/>	Simple to use but must refer to manual. <input type="checkbox"/>	Multiple steps, confusing to use even with manual. <input type="checkbox"/>	<input type="checkbox"/> n/a, no belt positioning feature
Evaluate the seat's angle feedback device and the recline capabilities of the base (if separate).	<b>Convertible, 3-in-1</b>	Obvious, separate recline feedback device. Adjustable to at least three levels of recline for this mode. <input type="checkbox"/>	Indication on a label or text in the same color as the CRS shell used as the recline feedback device. Adjustable to at least three levels of recline for this mode. <input type="checkbox"/>	No recline feedback device on CRS, or does not have three levels of recline for this mode. <input type="checkbox"/>
	<b>Carrier with separate base</b>	Obvious, separate recline feedback device on at least one of the components. Base is adjustable so that it allows for at least three levels of recline for this mode. <input type="checkbox"/>	Base is adjustable so that it allows for at least three levels of recline for this mode. However, does not meet "A" criteria for separate recline feedback device. <input type="checkbox"/>	Base does not have three levels of recline for this mode. <input type="checkbox"/>
Do the lower attachments require twisting to remove from the vehicle?	Lower attachments fully retract from vehicle anchors with release mechanism. <input type="checkbox"/>	No twisting required but secondary action required to remove lower attachments from seat bight. <input type="checkbox"/>	User must twist lower attachments to remove from vehicle. <input type="checkbox"/>	<input type="checkbox"/> n/a, no lower attachments
Evaluate the storage system for the lower attachments when not in use.	Simple, obvious, dedicated, labeled storage system. Or, lower attachments that completely retract when not in use. <input type="checkbox"/>	Storage system exists but may easily overlooked. <input type="checkbox"/>	No separate storage system exists, or user is directed to hook lower attachments together when not in use. <input type="checkbox"/>	<input type="checkbox"/> n/a, no lower attachments
Is there an indication on the carrier itself indicating where to put the handle when installed in vehicle?	Yes. <input type="checkbox"/>		No. <input type="checkbox"/>	<input type="checkbox"/> n/a, no separate carrier



NHTSA Ease of Use Rating Form - 2008				
Forward Facing Only, Convertible FF Mode, Combination FF Mode, or 3-in-1 FF Mode				
Make & Model _____ 0 _____		Seat # (on tag) _____ 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 alongside a picture. <input 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"/>	
All methods of installing the seat in this mode are clearly indicated, including with lower attachments, lap belt only, and lap/shoulder belt.	Illustrated clearly with CRS in vehicle seat. Illustrations should be labeled for each method of installation, must include label on each mode that indicates tether should be used. <input type="checkbox"/>		Method missing, partially illustrated, or no illustrations at all. CRS may be shown without a vehicle seat. Illustrations may not be completely labeled for each method of installation, for example, may not be labeled indicating that tether should be in use for all FF installations. <input type="checkbox"/>	
Does the CRS indicate the correct harness slot height for this mode? Is there additional information on the CRS about how the shoulder straps should fit for this mode?	Yes, there is a graphic or contrasting text indicating the correct harness slots to use for this mode. Additional harness adjustment information is included alongside a picture. <input type="checkbox"/>	Yes, there is text indicating the correct harness slots to use for this mode but they may be the same color as the shell. Additional harness adjustment information is included but may be text only. <input type="checkbox"/>	No indication of correct slots to use for this mode (for applicable multi-mode CRS) and/or no mention of additional sizing information. <input type="checkbox"/>	
Instructions for routing both lap belt and lap/shoulder belt for this mode, including details about different vehicle seatbelt types and locking mechanisms how this CRS should be installed with each of them.	Illustrated clearly with no need to read text in order to route seatbelts. Label is directly next to the corresponding belt path on both sides of CRS. <input type="checkbox"/>	Belt routing path is only labeled on one side but would otherwise fulfill "A" criteria. <input type="checkbox"/>	Belt routing label not next to corresponding path. Belt routing path is only labeled on one side. Routing requires reading text or is otherwise not obvious from illustration. May also be obscured by seat pad. <input type="checkbox"/>	
Shows how to prepare and use lower attachments.	Clear illustrations show how to route and affix lower attachments to vehicle for using the CRS in this mode. One or two words per idea are OK for clarification. <input type="checkbox"/>	Illustrations plus written instructions provided. Need to read text. <input type="checkbox"/>	Text-heavy instructions only provided or no instructions at all provided. Partial instructions; some step missing. <input type="checkbox"/>	
Shows how to prepare and use the tether.	Clear illustrations show how to route and attach tether to vehicle for using the CRS in this mode. One or two words per idea are OK for clarification. <input type="checkbox"/>	Illustrations plus written instructions provided. Need to read text. <input type="checkbox"/>	Text-heavy instructions only provided or no instructions at all provided. Partial instructions; some step missing. <input type="checkbox"/>	
Durability of labels.	Sticky label(s) or other method of technology label not peeling. <input type="checkbox"/>		Sticky label(s) are already peeling when restraint removed from box. <input type="checkbox"/>	<input type="checkbox"/> n/a not youngest mode for this CRS

NHTSA Ease of Use Rating Form - 2008				
Forward Facing Only, Convertible FF Mode, Combination FF Mode, or 3-in-1 FF Mode				
Make & Model _____ 0 _____		Seat # (on tag) _____ 0 _____		
Evaluation of Instructions				
	A	B	C	Notes
Is the owner's manual easy to find when the CRS is taken out of the box?	Attached to the child restraint in a clearly visible location. <input type="checkbox"/>		Attached to the child restraint in a hard-to-find location or not attached to the seat at all. <input type="checkbox"/> <input type="checkbox"/> n/a not youngest mode for this CRS	
Evaluate the storage system for accessing the manual in this mode.	It is obvious and easy to use. The manual can be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	It is obvious and easy to use, but the manual cannot be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	The designated storage system isn't obvious or it is difficult to use regardless of mode of use. <input type="checkbox"/>	
Clear indication of child's size range. Is there additional information on the CRS about how the child should fit?	Separate, clear, complete height and weight information directly next to the illustration. Additional size information included alongside a picture. <input 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 mention of additional sizing information. <input type="checkbox"/>	
All methods of installing the seat in this mode are clearly indicated, including with lower attachments, lap belt only, and lap/shoulder belt, and with and without the base as necessary.	Illustrated clearly with CRS in vehicle seat. No need to read text although illustrations should be labeled for each method of installation. <input type="checkbox"/>		Method missing, partially illustrated, or no illustrations at all. CRS may be shown without a vehicle seat, or tether may not be labeled. <input type="checkbox"/>	
Indication that the safest place in a vehicle for children is the rear seat.	Separate from unrelated warnings and illustrated; has its own page or other very clear demarcation. <input type="checkbox"/>	Buried within other warnings, for example, in a bulleted list. <input type="checkbox"/>	Buried among other text or no warning at all. <input type="checkbox"/>	
Instructions for routing both lap belt and lap/shoulder belt for this mode, including details about different vehicle seatbelt types and locking mechanisms how this CRS should be installed with each of them.	Illustrated clearly. No need to read text in order to route seatbelt; should be obvious from diagrams. Includes instructions for working with different vehicle seatbelt types. <input type="checkbox"/>	Illustrated clearly. No need to read text in order to route seatbelt; should be obvious from diagrams. Instructions for working with different vehicle seatbelt types are present but may be incomplete. <input type="checkbox"/>	Unclear instructions that require reading text. No mention of how to work with different vehicle seatbelt types correctly. <input type="checkbox"/>	
Shows how to prepare and use lower attachments & tether.	Clear illustrations show how to route and affix lower attachments and tether to vehicle for using the CRS in this mode. One or two words per idea are OK for clarification. <input type="checkbox"/>	Illustrations plus written instructions provided. Need to read text to perform entire operation. <input type="checkbox"/>	Text-heavy instructions only provided or no instructions at all provided. <input type="checkbox"/>	
For this mode, information in written instructions and on labels match.	Yes. <input type="checkbox"/>		No. Please describe the conflict under notes. <input type="checkbox"/>	

NHTSA Ease of Use Rating Form - 2008				
Forward Facing Only, Convertible FF Mode, Combination FF Mode, or 3-in-1 FF Mode				
Make & Model _____ 0 _____		Seat # (on tag) _____ 0 _____		
Securing the Child				
	A	B	C	Notes
All functional parts (i.e., required for correct use as per instructions) including seat pad or cover attached and ready to use, harness slots and crotch strap in their lowest settings. Tether must also come attached to CRS.	Yes. <input type="checkbox"/>		No, not ready to use regardless of how simple the assembly may be. May direct user to manual or is otherwise difficult. Tools may be required. Please describe under notes. <input type="checkbox"/> <input type="checkbox"/> n/a not youngest mode for this CRS	
Visibility & alignment of harness slots for systems that must be re-threaded.	Can see through all harness slots. All slots in pad are aligned with slots in shell. <input type="checkbox"/>	Cannot see through all harness slots because they are small or are misaligned with the shell. <input type="checkbox"/>	Cannot see all harness slots because there is something in way for this mode, e.g. an insert, a head hugger, or body pillow. <input type="checkbox"/> <input type="checkbox"/> n/a, system does not require re-thread	
Evaluate the number and adjustability of the harness slots in the shell and the pad.	The number of slots in the pad & shell match, and there are at least 3 OR the system is adjustable to at least 3 heights. <input type="checkbox"/>		Does not meet "A" criteria. <input type="checkbox"/>	
Ease of adjusting the harness for child's growth.	No need to rethread system. Simple, obvious operation of the harness adjustment system. No mandatory pieces exist that may become loose when adjusting system. <input type="checkbox"/>	No need to rethread system, but may be otherwise difficult to adjust. <input type="checkbox"/>	Harness must be rethread to adjust. Loose mandatory pieces may be present. Could misroute or incorrectly resecure harness, even for a no-thread system. <input type="checkbox"/>	
Does the harness clip require threading to secure properly? Is it labeled to indicate its proper positioning on the child?	No, and harness clip is labeled. <input type="checkbox"/>	No, but harness clip is not labeled. <input type="checkbox"/>	Yes. <input type="checkbox"/>	
Evaluate the ease of inserting the shoulder portions of the harness buckle for this seat.	Each upper portion of the shoulder harness may be inserted separately. <input type="checkbox"/>	"Puzzle" buckle with an intermediate method of holding the shoulder portions together. <input type="checkbox"/>	"Puzzle" buckle with no intermediate method of holding the shoulder portions together <input type="checkbox"/>	
Access to & use of harness adjustment system.	Can access harness system when installed, one hand to tighten (one pull system). Possible 2 hands to loosen (i.e., one to depress button and one to loosen the harness). <input type="checkbox"/>		Does not meet "A" criteria. Please describe under notes. <input type="checkbox"/>	
Ease of conversion to FF from all other possible modes of use.	Simple operation with only a single or dual action. Illustrations and instructions on seat showing mode change. <input type="checkbox"/>	Simple operation but multiple actions are required. Illustrations may be missing from the label, requiring the user to read the manual. <input type="checkbox"/>	Operation is difficult, requiring many complicated steps that must be followed in the manual. <input type="checkbox"/> <input type="checkbox"/> n/a, single mode CRS	
Ease of re-assembly if pad/cover removed for cleaning.	No loose parts. Easy to remove and reattach the padding. No rethreading required. <input type="checkbox"/>	Harness system may need to be rethreaded to re-assemble, but it is a very simple system. No loose parts exist. <input type="checkbox"/>	Loose parts may exist, including the harness system. Harness system may need to be rethreaded to re-assemble. May even need hand tool(s). <input type="checkbox"/>	
Ease of adjusting/removing shield.	Clear illustration on CRS, simple action, shield marked. <input type="checkbox"/>	Need to read text, simple action, shield not marked. <input type="checkbox"/>	Other tool(s) required. <input type="checkbox"/> <input type="checkbox"/> n/a, no shield <input type="checkbox"/> <input type="checkbox"/> n/a, shield not adjustable	

NHTSA Ease of Use Rating Form - 2008				
Forward Facing Only, Convertible FF Mode, Combination FF Mode, or 3-in-1 FF Mode				
Make & Model _____ 0 _____		Seat # (on tag) _____ 0 _____		
<b>Vehicle Installation Features</b>				
	A	B	C	Notes
Ease of routing vehicle belt or LATCH lower attachment straps (if flexible) for installation in this mode.	A 95th percentile male hand can route the seatbelt easily and comfortably. The padding does NOT need to be moved in order to route the belt. <input type="checkbox"/>		The belt path does not accommodate a 95th percentile male hand, or has to be routed under the CRS padding for one or more modes of FF installation. <input type="checkbox"/>	
Can vehicle belt or lower LATCH straps (if flexible) interfere with harness (including crotch strap) or be routed incorrectly with respect to other elements such as padding?	No contact or interference possible. <input type="checkbox"/>		Possible contact or misrouting. Please describe this potential under <b>notes</b> . <input type="checkbox"/>	
Ease of use of any FF belt positioning feature on CRS such as a lock-off.	Simple to use with instruction on CRS. <input type="checkbox"/>	Simple to use but must refer to manual. <input type="checkbox"/>	Multiple steps, confusing to use even with manual. <input type="checkbox"/>	<input type="checkbox"/> n/a, no belt positioning feature
Vehicle belt use & vehicle belt/flexible lower anchor path labeling.	Only one hand required to tighten and release the tether. <input type="checkbox"/>		Does not meet "A" criteria. <input type="checkbox"/>	<input type="checkbox"/> no tether
Do the lower attachments require twisting to remove from the vehicle?	Lower attachments fully retract from vehicle anchors with release mechanism. <input type="checkbox"/>	No twisting required but secondary action required to remove lower attachments from seat bight. <input type="checkbox"/>	User must twist lower attachments to remove from vehicle. <input type="checkbox"/>	<input type="checkbox"/> n/a, no lower attachments
Evaluate the storage system for the lower attachments & tether when not in use.	Simple, obvious, dedicated, labeled storage system. Or, lower attachments and tether completely retract when not in use. <input type="checkbox"/>	Storage system exists but may be easily overlooked. <input type="checkbox"/>	No separate storage mentioned or user is directed to hook lower attachments together or with tether when not in use. <input type="checkbox"/>	<input type="checkbox"/> n/a, no lower attachments or tether

NHTSA Ease of Use Rating Form - 2008									
Booster, Combination Seat in BPB Mode, or 3-in-1 in BPB Mode									
Date of Evaluation: _____					Evaluated by: _____				
Manufacturer <input type="text"/>			Make & Model: _____						
Model #: _____					Date of Manufacture: _____				
Style: <input type="checkbox"/> Low-Back <input type="checkbox"/> High-Back <input type="checkbox"/> High-Back/Low-Back <input type="checkbox"/> Combination (FF/Booster) <input type="checkbox"/> 3-in-1 (RF, FF, & Booster) <input type="checkbox"/> Other _____									
<b>Seat Characteristics &amp; Measurements</b>									
Child size range given in owner's manual: _____							Date on manual: _____		
Booster Size Range	Weight				Height				
	Minimum		Maximum		Minimum		Maximum		
	kg	lb	kg	lb	cm	in	cm	in	

<b>NHTSA Ease of Use Rating Form - 2008</b>				
<b>Booster, Combination Seat in BPB Mode, or 3-in-1 in BPB Mode</b>				
Make & Model _____ 0 _____		Model # _____ 0 _____		
<b>Evaluation of Labels</b>				
	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 alongside a picture. <input 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"/>	
All method(s) of installing this CRS correctly are indicated (high back and/or low back).	Illustrated clearly with CR in vehicle seat. No need to read text although illustrations should be labeled for each method of installation. <input type="checkbox"/>		No illustrations at all or a method of installation is missing, or may be difficult to tell one method of installation from another. <input type="checkbox"/>	
Vehicle belt use & vehicle belt path labeling.	Illustrated clearly with no need to read text in order to route seatbelts. Label is directly next to the corresponding belt path or positioning device on both sides of CRS. <input type="checkbox"/>	Belt routing path or device is only labeled on one side but would otherwise fulfill "A" criteria. <input type="checkbox"/>	Belt routing label not next to corresponding path. Belt routing path or device is only labeled on one side. Routing requires reading text or is otherwise not obvious from illustration. May also be obscured by seat pad. <input type="checkbox"/>	
Label warning against using a lap belt only.	Illustration included warning user against using the CRS with the lap belt only for this mode. <input type="checkbox"/>	Text warning the user not to use the lap belt only in this mode. <input type="checkbox"/>	No written or illustrated warning. <input type="checkbox"/>	<input type="checkbox"/> n/a, may be used with lap belt
Durability of labels.	Sticky label(s) or other method of technology label not peeling. <input type="checkbox"/>		Sticky label(s) are already peeling when restraint removed from box. <input type="checkbox"/>	<input type="checkbox"/> n/a not youngest mode for this CRS



<b>NHTSA Ease of Use Rating Form - 2008</b>				
<b>Booster, Combination Seat in BPB Mode, or 3-in-1 in BPB Mode</b>				
Make & Model _____ 0 _____		Model # _____ 0 _____		
<b>Evaluation of Instructions</b>				
	A	B	C	Notes
Is the owner's manual easy to find when the CRS is taken out of the box?	Attached to the child restraint in a clearly visible location. Finding it in a very obvious storage system is acceptable. <input type="checkbox"/>		Attached to the child restraint in a hard-to-find location or not attached to the seat at all. This includes when it is found in an obscured storage system. <input type="checkbox"/> <input type="checkbox"/> n/a not youngest mode for this CRS	
Evaluate the storage system for accessing the manual in this mode.	It is obvious and easy to use. The manual can be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	It is obvious and easy to use, but the manual cannot be accessed when the CRS is installed in this mode of use. <input type="checkbox"/>	The designated storage system isn't obvious or it is difficult to use regardless of mode of use. <input type="checkbox"/>	
Clear indication of child's size range. Is there additional information somewhere in the manual about how the child should fit?	Separate, clear, complete height and weight information directly next to the illustration. Additional size information included alongside a picture. <input 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"/>	
All methods of installing this seat with a lap/shoulder belt including low back and high back modes if they exist.	Illustrated clearly with CR in vehicle seat. No need to read text although illustrations should be labeled for each method of installation. <input type="checkbox"/>		No illustration, text only. May be illustrated, but not all modes shown. <input type="checkbox"/>	
Indication that the safest place in a vehicle for children is the rear seat.	Separate from unrelated warnings and illustrated; has its own page or other very clear demarcation. <input type="checkbox"/>	Buried within other warnings, for example, in a bulleted list. <input type="checkbox"/>	Buried among other text or no warning at all. <input type="checkbox"/>	
Instructions for routing lap/shoulder belt alongside a picture warning against using a lap belt only.	Illustrated clearly with CR on vehicle seat. No need to read text in order to route seatbelt. Diagram warning against using a lap belt only is included in this section of the manual unless seat may be used correctly with one. <input type="checkbox"/>	Illustrated, outlined, but may not be pictured on a vehicle seat. Text warning not to use with a lap belt (only if it is a misuse) included in this section of the manual. <input type="checkbox"/>	Unclear instructions that require reading text. Fails to caution against the use of lap belt only in this section of the manual (if this is a misuse). <input type="checkbox"/>	
For this mode, information in written instructions and on labels match.	Yes. <input type="checkbox"/>		No. Please describe the conflict under notes. <input type="checkbox"/>	

NHTSA Ease of Use Rating Form - 2008				
Booster, Combination Seat in BPB Mode, or 3-in-1 in BPB Mode				
Make & Model _____ 0 _____		Model # _____ 0 _____		
<b>Securing the Child</b>				
	A	B	C	Notes
All functional parts (i.e., required for correct use as per instructions) including seat pad or cover attached and ready to use, harness slots and crotch strap in their lowest settings.	Yes.  <input type="checkbox"/>		No, not ready to use regardless of how difficult the assembly may be. May direct user to manual or is otherwise difficult. Tools may be required. Please describe under notes.  <input type="checkbox"/>	<input type="checkbox"/> n/a not youngest mode for this CRS
Ease of conversion from any other mode of use to a booster.	Simple operation with only a single or dual action. Illustrations on seat showing mode change.  <input type="checkbox"/>	Simple operation but multiple actions are required. Illustrations may be missing from the label, requiring the user to read text which must be present on CRS.  <input type="checkbox"/>	Operation is difficult, requiring many complicated steps. The instructions may be confusing, or missing altogether.  <input type="checkbox"/>	<input type="checkbox"/> n/a, booster only
Ease of conversion from high back to low back booster.	Simple action. Illustration provided on seat showing mode change.  <input type="checkbox"/>	Simple action but no specific illustration is provided on seat. Text may be present.  <input type="checkbox"/>	Action difficult or need additional instructions not found on CRS labels. Tools may be required.  <input type="checkbox"/>	<input type="checkbox"/> n/a, combination or 3-in-1 <input type="checkbox"/> n/a, booster may not be converted
Ease of re-assembly if pad/cover removed for cleaning.	No loose parts. Easy to remove and reattach the padding.  <input type="checkbox"/>		Loose parts. May even need hand tool(s).  <input type="checkbox"/>	
<b>Vehicle Installation Features</b>				
	A	B	C	Notes
Ease of use of any separate shoulder belt positioning or guide hardware on CRS.	Very simple action requiring one hand to use.  <input type="checkbox"/>	Two hands to use but action is simple.  <input type="checkbox"/>	Multiple steps to position belt, most likely need to read instructions for clarification.  <input type="checkbox"/>	<input type="checkbox"/> n/a, no separate device
Does belt-positioning guide or device allow slack to occur? Does it also prevent the shoulder portion from slipping accidentally?	No. The shoulder belt can move freely through its positioning device. In addition, the shoulder belt cannot slip out of the device accidentally.  <input type="checkbox"/>	No. The shoulder belt can move freely through its positioning device. However, the shoulder belt could slip out of the device accidentally.  <input type="checkbox"/>	Yes. The shoulder belt movement is restricted by the belt-positioning device.  <input type="checkbox"/>	<input type="checkbox"/> n/a, no separate device

Appendix B: Ease of Use Score Forms

RF MODE		MODEL #		
0		0		
<b>Feature</b>				
Value	Evaluation of Labels	Score	Weighted Score	Weighted Ave.
2	Clear indication of child's size range.	0	0	0
2	Are all modes of use clearly indicated?	0	0	0
2	Are the correct harness slots for this mode indicated?	0	0	0
2	Seat belt & lower attachment routing path clarity.	0	0	0
2	Shows how to prepare & use lower attachments.	0	0	0
1	Durability of labels. (n/a if not youngest mode)	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Evaluation of Instructions</b>				
2	Owner's manual easy to find?	0	0	0
1	Evaluate the access to the manual's storage system in this mode.	0	0	0
1	Clear indication of child's size range.	0	0	0
1	Are all modes of use clearly indicated?	0	0	0
1	Rear-facing airbag warning?	0	0	0
1	Instructions for routing seatbelt.	0	0	0
1	Shows how to prepare & use lower attachments.	0	0	0
2	Information in written instructions and on labels match?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Securing the Child</b>				
3	Is the seat assembled & ready to use?	0	0	0
1	Visibility & alignment of harness slots.	0	0	0
1	Number and adjustability of harness slots in shell and pad.	0	0	0
3	Ease of adjusting the harness for child's growth.	0	0	0
3	Does harness clip require threading? Is it labeled?	0	0	0
2	Evaluate the harness buckle style.	0	0	0
3	Access to and use of harness adjustment system.	0	0	0
3	Ease of conversion to RF from all other possible modes of use.	0	0	0
2	Ease of reassembly after cleaning.	0	0	0
2	Ease of adjusting/removing shield.	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Vehicle Installation Features</b>				
3	Ease of routing vehicle belt or flexible lower attachments in this mode.	0	0	0
3	Can vehicle belt or lower attachments interfere with harness?	0	0	0
3	Ease of attaching/removing infant seat from base.	0	0	0
3	Ease of use of any belt positioning features.	0	0	0
Evaluate seat's angle feedback device and recline capabilities.				
2	CRS only	0	0	0
2	Separate carrier and base	0	0	0
2	Do the lower attachments require twisting to remove?	0	0	0
2	Storage system for the lower attachments when not in use?	0	0	0
2	Handle placement instructions for the carrier?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Overall Score</b>	<b>n/a</b>	

FF MODE		MODEL #		
0		0		
<b>Feature</b>				
Value	Evaluation of Labels	Score	Weighted Score	Weighted Ave.
2	Is there a clear indication of proper child size?	0	0	0
2	Are all modes of use clearly indicated?	0	0	2
2	Are the correct harness slots for this mode indicated?	0	0	2
2	Seat belt & lower attachment routing path clarity.	0	0	2
2	Shows how to prepare & use lower attachments.	0	0	2
2	Shows how to prepare & use tether.	0	0	2
1	Durability of labels. (n/a if not youngest mode)	0	0	1
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Evaluation of Instructions</b>				
2	Owner's manual easy to find? (n/a if not youngest mode)	0	0	0
1	Evaluate the access to the manual's storage system in this mode.	0	0	0
1	Is there a clear indication of proper child size?	0	0	0
1	Are all modes of use clearly indicated?	0	0	0
1	Rear seat warning in written instructions.	0	0	0
1	Instructions for routing seatbelt.	0	0	0
1	Shows how to prepare & use lower attachments & tether.	0	0	0
2	Information in written instructions and on labels match?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Securing the Child</b>				
3	Is the seat assembled & ready to use?	0	0	0
3	Does harness clip require threading? Is it labeled?	0	0	0
2	Evaluate the harness buckle style.	0	0	0
3	Access to and use of harness adjustment system.	0	0	0
1	Number and adjustability of harness slots in shell and pad.	0	0	0
1	Visibility & alignment of harness slots.	0	0	0
3	Ease of conversion to FF from all other possible modes of use.	0	0	0
3	Ease of adjusting the harness for child's growth.	0	0	0
2	Ease of reassembly after cleaning.	0	0	0
2	Ease of adjusting/removing shield.	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Installation in vehicle</b>				
3	Ease of routing vehicle belt and flexible lower attachments in this mode.	0	0	0
3	Can vehicle belt or lower attachments interfere with harness?	0	0	0
3	Ease of use of any belt positioning features.	0	0	0
3	Evaluate the tether adjustment.	0	0	0
2	Do the lower attachments require twisting to remove?	0	0	0
2	Storage system for the lower attachments & tether when not in use?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Overall Score</b>	<b>n/a</b>	

BOOSTER MODE		MODEL #		
0		0		
<b>Feature</b>				
Value	Evaluation of Labels	Score	Weighted Score	Weighted Ave.
2	Is there a clear indication of proper child size?	0	0	0
2	Are all modes of use clearly indicated?	0	0	0
2	Seat belt use & routing path clarity.	0	0	0
2	Label warning against using a lap belt only.	0	0	0
1	Durability of labels. (n/a if not youngest mode)	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Evaluation of Instructions</b>				
2	Owner's manual easy to find? (n/a if not youngest mode)	0	0	0
1	Evaluate the access to the manual's storage system in this mode.	0	0	0
1	Is there a clear indication of proper child size?	0	0	0
1	Are all modes of use clearly indicated?	0	0	0
1	Rear seat warning in written instructions.	0	0	0
1	Instructions for routing seatbelt.	0	0	0
2	Information in written instructions and on labels match?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Securing the Child</b>				
3	Is the seat assembled & ready to use? (n/a if not youngest mode)	0	0	0
3	Ease of conversion to booster from another mode.	0	0	0
2	Ease of conversion from high back to low back booster.	0	0	0
2	Ease of reassembly after cleaning.	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
<b>Installation in Vehicle</b>				
3	Ease of use of any belt positioning features.	0	0	0
3	Does the belt positioning device allow slack? Can the belt slip?	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Score</b>	<b>n/a</b>	
		<b>TOTAL</b>	<b>0</b>	<b>0</b>
		<b>Weighted Ave</b>	<b>n/a</b>	
		<b>Overall Score</b>	<b>n/a</b>	

## Appendix C : Ease of Use Star Rating System

Figure 1

*Sample graphic for a "1 star" rating*

Figure 2

*Sample graphic for a "2 star" rating*

Figure 3

*Sample graphic for a "3 star" rating*

Figure 4

*Sample graphic for a "4 star" rating*

Figure 5

*Sample graphic for a "5 star" rating*

Issued on: November 15, 2007.

Nicole R. Nason,  
Administrator.

[FR Doc. E7-22912 Filed 11-21-07; 8:45 am]

BILLING CODE 4910-59-C

**DEPARTMENT OF TRANSPORTATION****National Highway Traffic Safety  
Administration**

[Docket No. NHTSA-2007-0036]

**Notice of Receipt of Petition for  
Decision That Nonconforming 1992  
Alfa Romeo Spyder Passenger Cars  
Are Eligible for Importation**

**AGENCY:** National Highway Traffic  
Safety Administration, DOT.

**ACTION:** Notice of receipt of petition for  
decision that nonconforming 1992 Alfa

Romeo Spyder passenger cars are  
eligible for importation.

**SUMMARY:** This document announces receipt by the National Highway Traffic Safety Administration (NHTSA) of a petition for a decision that 1992 Alfa Romeo Spyder passenger cars that were not originally manufactured to comply with all applicable Federal motor vehicle safety standards (FMVSS) are eligible for importation into the United States because (1) they are substantially similar to vehicles that were originally manufactured for sale in the United