

**LATCH Educational Messages**  
***SafetyBeltSafe* U.S.A. Response to NHTSA Proposal**

NHTSA has asked for comments by August 30 (those submitted later also will be considered) on educational messages regarding LATCH. We are concerned with the direction of the NHTSA plan. We have submitted the message below to the Docket Management System and have sent a copy to Nicole Nason, NHTSA Administrator. We invite you to consider our ideas and, if you choose, to send support for these concepts. (See submission instructions after the comments.)

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August 25, 2007

To: Docket Management System

From: Stephanie M. Tombrello, LCSW  
Executive Director, SafetyBeltSafe U.S.A.

Re: Docket No. NHTSA-2007-28934  
Educational Messages To Improve Use of Child Restraint Systems

SafetyBeltSafe U.S.A. has been involved deeply in the problem of incorrect use of safety seats for more than 20 years and was represented on the original National Blue Ribbon Panel on Child Restraint & Vehicle Compatibility. One of the major areas of concern for that Panel was making the attachment of safety seats to vehicles easier and, thus, more likely to be done correctly. Those of us involved in child passenger safety since the '70s or '80s recall the results of the grave mistake of believing that a simple warning message would change patterns of behavior in vehicles without extensive, focused education. This is the legacy of the introduction of passenger air bags into the U.S. fleet. The history of deaths of children across the country reminds all of us that extensive education must precede change and, even more important, that improved engineering can lead to reduced errors.

It is our strong recommendation that NHTSA consider dividing the campaigns for tether usage and understanding lower anchors. There are good reasons to do this.

**TETHERS**

1. Tether use provides a distinct safety advantage; when a tether is present, it should be used. There is no alternative piece of equipment that serves the function of the tether.
2. Tethers can be used in almost every vehicle. They are available in three seating positions in most vehicles since the 2000 model year. They can be installed easily in most vehicles back to at least 1989 and in some, such as Toyotas, to 1979. Whether a lower anchor or a safety belt is used to attach the safety seat, the recommendation is the same: use the top tether. The Decina study released in December 2006 shows that many parents have no idea how important it is.
3. The value of using a top tether strap, regardless of the vehicle model or seating position selected, can be easily explained to the public. If it is there, use it; if it is not, ask the dealer to install it.

4. Lumping together educational messages about two concepts (lower anchors and tethers) muddies the message. Just today, a highly motivated parent with four children revealed to me that she did not use the tether on her three-year-old's seat because she understood from the instructions that she should use the safety belt OR LATCH but not both. Therefore, when she chose to use the safety belt, she omitted use of the top tether strap, even though she clearly knew where the anchor was located because she described the "anchor" logo on its cover.

(Tethers Are Better! by Deborah Stewart of Safe Ride News Publications, is an excellent example of an educational piece that conveys the message clearly and effectively; it is available in English and Spanish.)

## LOWER ANCHORS

In 2000, SBS USA, at the request of an associate administrator of NHTSA, shared a list of concerns about the potential incorrect usages of lower anchors. These early concerns have been validated, in large part, by the experience with lower anchors. Lower anchors often confuse the public. Although when they use them, they tend to prefer them, parents rarely are clear about the details of usage. That should not surprise anyone, since discussions about the acceptability of certain usages are ongoing in the safety seat/motor vehicle community. Parents are making "errors" which may or may not be important.

At this time, there is NOT a straightforward message to be conveyed about the lower anchors (commonly called LATCH anchors) due to several important issues.

1. Many safety seats with a harness for children over 40 pounds are now on the general market. Most vehicle and child restraint manufacturers state that weight limits for lower anchor use are 40-48 pounds. This means parents are expected to stop using LATCH and start using the vehicle belt when the child reaches a certain weight, which often does not occur. By the time the child reaches the designated weight, parents have forgotten what they read years earlier.
2. Regarding installation in the middle seating position, parents are cautioned by many vehicle or child restraint manufacturers not to use the inner bars when lower anchors are located only at the outboard locations. However, many either never notice this warning or ignore it.

If parents realize that they cannot use the inner bars, many are frustrated because it conflicts with the long-standing recommendation to place children in the center location. Framing the choice as between the "next generation of safety" vs. using a vehicle belt in the center location may result in their putting the child on the side instead of the center. For example, one Technician reported that her neighbor asked her to take a quick look at his child's seat, which was placed in the center of the rear seat, attached to one LATCH anchor from each outboard pair. The Technician advised him that this usage was not authorized by the vehicle manufacturer, said he should use the vehicle belt instead, and arranged to help him the next day. When they met the following day, he had moved the seat to the side because he had heard that using LATCH was "much safer" than the belt.

A study of deaths of children in safety seats conducted by Insurance Institute for Highway Safety noted that side impacts were a major factor in deaths of restrained child passengers. Ironically,

one NHTSA goal in its 12/06 LATCH report is to increase use of safety seats in the center seating location.

3. There are some clear patterns of misuse which can become serious risks in a crash. The design of the majority of lower attachment leads to mis-routing of various types. In fact, the drawing of a convertible seat with lower attachments distributed by NHTSA shows the attachments in the wrong location for forward facing. Many have copied or distributed that drawing. We find parents and professionals mimicking the mistake shown in the drawing by threading the LATCH attachments through the rear-facing belt path when the seat is installed forward facing.

Examples of misuse seen in the field:

- Attaching straps for convertible seats are often threaded through the same belt paths for both rear and forward facing by parents who do not understand that it matters.

- Attaching straps that are routed under the pad are often entangled in the child's harness. The most recent recall notification came from a manufacturing error which left the attachments intermingled with the lap portion of the child's harness.

- Recently a parent attached both hooks to the top tether anchor on the back of the vehicle seatback. Others have attached the hooks to fabric or have used the anchor hooks upside down, which might result in detachment. In one crash investigation, it was found that a parent attached only one hook.

4. There are specific areas of research that were suggested after the LATCH meeting on February 8, 2007, including whether or not it mattered if parents decided to use lower anchors and safety belts concurrently or to use inner bars (one left, one right) to place the restraint in the center. Until these major issues are resolved at the highest levels, it is difficult to overcome or even properly identify misuse. How can we convince parents or professionals to avoid these practices now that we are aware that there are test data to support them? It is time to reduce the clutter of warnings and cut to the important concerns by imposing some design or universal usage restrictions based on research. If these issues do not reduce protection, let's stop focusing on them.

5. Is it easy to recognize lower anchors? It is easier than recognizing all of the tether anchors in their diverse locations and styles. However, it is not always easy to attach to them or detach from them. We already know that the push-on style is highly preferred by the public. The manufacturers use the dog-leash hook to reduce their costs, but no one looks at the costs in person-time to deal with that problem.

6. Should unoccupied boosters be secured with lower anchors (and/or tether) when they are present? Recently, a grandmother stated that the rear window of her vehicle was broken out after a swerve to avoid a truck sent the unrestrained, unoccupied seats flying to the back. Would use of lower anchors on boosters be a boon to parents who are dropping off school-aged children and have no easy way to secure the boosters after the children jump out?

7. Many Technicians reject use of lower attachments because the center location is known to be safer and is not so equipped. We also know that the design of the bars can and should be changed to make it impossible to hook two safety seats to the same bar; see comments from Britax consultant on 2/8/07.

Frankly, a campaign to use lower anchors that results in more children sitting in outboard positions seems to be a major safety mistake.

Good labeling of anchors in vehicles will go a long way to helping families to use lower anchors and top tethers; intuitive design is even better and should be the goal of this effort.

## CONCLUSION

A campaign regarding use of the lower anchors is needed, but it should be delayed until there is consensus on the issues raised above. Once the message can be simplified by elimination of restrictions that are not truly issues of safety, the campaign can focus on the key message: Make sure your child's safety seat is tightly installed in the safest location in the vehicle—whether using lower anchors or belts (or possibly both).

In the meantime, a strong, clear campaign to increase tether use should be conducted. Instead of confusing the issue further, let's build on what we know conclusively: tethers can help reduce injury in frontal and side impacts; tethers help parents to get a tight fit, making it less likely that seats will be out-of-position in a crash or sudden stop.

Once the message about LATCH is determined, it will be time to consider a logo or, possibly, a catchy phrase. However, whatever is done for that aspect of the campaign should grow out of the essence of the message. We know that the Administrator is a person who wants to make change happen and applaud this attitude. However, by separating the issues and clarifying them, the messages will be more effective and will build more confidence in the public.

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To view the NHTSA materials, go to:

<http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/pdf/07-4022.pdf>

This **Federal Register** notice includes the graphic and slogan (on page 2) that has been devised and tells you various ways to submit your proposal, on-line at <http://dms.dot.gov> (use the short form of the Docket No. "28934") or by fax (202-493-2251). You can read other comments at the "dms" web address, too.

Additional comments from **Safe Ride News Publications** are posted at <http://www.saferideneews.com/html/New.htm>.