

National Child Passenger Safety Board www.cpsboard.org

Fact or Fiction

CPS Continuing Education Presentation

Revised: October 2011

What is Fact or Fiction?



- As technicians, we have to stay current in a field that is constantly changing.
- New technology requires that we continuously re-educate ourselves.
- Some changes have a big impact in our everyday CPS world.
- The latest CPS Student manual (revised January 2008) is available at www.cpsboard.org under Training.



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A pool noodle can be used with both forward-facing and rear-facing child restraints.



- Pool noodles should never be placed under or behind a forward-facing CR
- For rear-facing CR's that do not have an adjustable base, a pool noodle can be placed at the vehicle seat bight
- For rear-facing CR's that have an adjustable base (foot), use either the foot or pool noodle but generally not both
- Use a few as possible
- Follow manufacturer's instructions





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It is okay to use both the LATCH lower attachments and the vehicle seat belt to install a harnessed CR.



- Currently, no manufacturer approves LATCH (lower anchor)-seat belt "double use" to secure their CR
- The use of both systems could make the child restraint stiffer than it would normally be, so it would absorb energy differently
- The two systems used together might not be aligned in the seating position
- The LATCH attachment might interfere with the seat belt buckle
- There are concerns that CRs may not function as expected in a crash when anchored by both systems



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A parent may alter or replace the fabric of their child restraint with prettier or softer fabric to match the interior of their vehicle.



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• By altering the fabric the parent has potentially compromised the child restraint by:



- Using a fabric not intended or tested (for flammability or even crash protection depending on other features of the padding) by the manufacturer
- Possibly covering up the required air bag safety warning of a rear-facing convertible or infant-only CR
- Using an untested item that would void the manufacturer's warranty
- Taking apart the child restraint in ways not outlined in the CR instructions, meaning that the CR might have been put back together in a way that changed the strap routing



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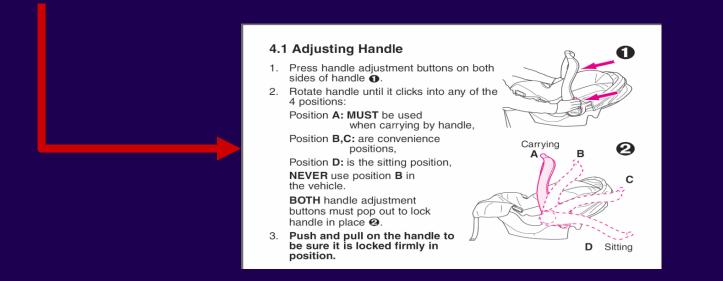
An infant seat carrying handle must always be in the down position while using it in a vehicle.



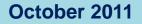


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- Several rear-facing only CRs allow the handle to be in a variety
 of positions even when in use in the vehicle.
- Some rear-facing only CRs instruct that the handle is to be, or can be, left in the upright "carry" position in the vehicle
- Always carefully read the CR's instructions to confirm the allowable handle positions.



Example: SnugRide 3





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Some vehicles with advanced air bags (AABs) do not allow anything to press against the back of the front passenger seat or be placed under that seat.



Fact



- Pressure on the seatback may cause a false reading by the sensors that regulate the passenger-side advanced air bag, possibly causing the AAB to deploy when it is not needed.
- Technicians and parents should always follow the vehicle's manufacturer guidelines



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When using LATCH the unused lap / shoulder belt cannot be buckled behind the safety seat.





- To prevent possible strangulation issues, some manufactures recommend fastening the seat belt behind the CR before installing it
- Make sure the belt buckle does not interfere with the installation of the lower attachments (LATCH)
- Consult manufacturer's instructions before using this method



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Using a top tether with a child restraint exceeding the tether weight limits listed in the vehicle owner's manual could result in serious injury to the child.



Fact



- CPS Technicians should never exceed the manufacturer suggested guidelines
- If no information is available in the owner's manual, call the vehicle manufacturer for further information
- If there is no stated limit or no additional information available, the CPST should assume the limit is 40 lbs.



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A locking clip should never be used on a seat belt without a retractor.



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Fact

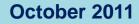


- A locking Clip can only be used if all three of the following conditions are present
 - Lap/Shoulder is all one piece of webbing
 - Lap/Shoulder belt is on an emergency locking retractor (ELR)
 - Sliding latchplate does not lock pre-crash



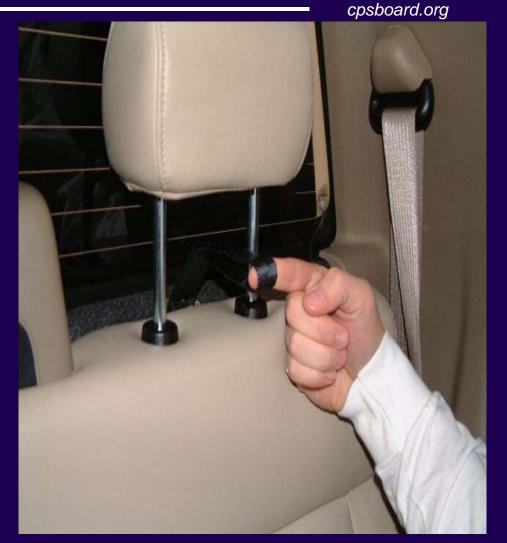
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There should never be more than one seat attached to a tether anchor





- Many pickup trucks with loop tether anchors will allow this
- Refer to vehicle manufacturer instructions





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A belt-tightening tool is okay for a parent to use if they cannot get the seat installed correctly.



- There currently are no regulations or recommended testing procedures for belttightening tools
- There are concerns about possible stress on CR and seat belt because of overtightening
- Vehicle and CR manufacturer approval needed for use with such products



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It is okay to place a locking clip on the opposite side of a child from the latchplate.



- Unless instructed otherwise by the manufacturer, place the locking clip no more than 1 inch from the buckle.
- If the locking clip binds against the lip of the frame or shell of the CR and it cannot be moved closer to the latch plate, move the clip just far enough away from the latch plate so that it rests just inside the frame or shell.
- The lap-shoulder belt must be a continuous loop with non-precrash locking latchplate system.







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Always use a top tether if there is an anchor point in the vehicle and it is available on a RF convertible CR.

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- Only a few models of convertibles are made for tether use in the rear-facing position.
- Unless the directions specifically allow a rearfacing tether, use the tether strap only in the forward-facing direction.
- The tether strap on a convertible CR should be stowed securely when the CR is used facing the rear.
- The tether strap should only be removed if the CR directions approve removal.



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When installing a CR on the second-row in a van which has third-row seating, an unused seat belt in the third-row may sometimes be used as a tether anchor if there are no second-row tether anchors available or the tether anchor weight limits are too low for the child using the child restraint.

Fact



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- Only if allowed by the vehicle and child restraint manufacturer
- In some cases the seat belt provides a very strong anchor, much stronger than a standard tether anchor.
- Due to varying seat belt designs, follow the vehicle owner's manual regarding which part of the belt to use if possible

Refer to page 53 of the 2009 LATCH Manual or page 59 of the 2011 LATCH Manual for more information



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NHTSA must certify that every child restraint meets FMVSS 213 before they go to market





- NHTSA does not certify CRs before they go to market
- CR manufacturers self-certify their products as meeting NHTSA performance standards
- NHTSA conducts random compliance tests





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Household infant carriers can be used for transport in a vehicle when no CR is available.



- Parents should not use a household carrier for transporting the infant in a vehicle
- All rear-facing seats must have labels that state they meet FMVSS 213
- If the labels are missing, the seat should be considered unsafe to use in the vehicle





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You must always use the lower harness slots with a convertible seat when using it rear facing





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- The slots have to be approved by the manufacturer for use rear facing.
- Check the manufacturer's instructions
- Use the harness slots that are at or below the infant's shoulders



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An unused BPB should be secured in the vehicle at all times.



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Fact



- Belt Positioning Boosters should be secured in the vehicle when not being used for transport.
- When not buckled, the booster seat is a projectile (an object that can be tossed the vehicle causing injury to the vehicle occupants during a crash or sudden stop).



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FMVSS 213 applies to all child restraints.

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FMVSS 213 covers all types of systems (infant only seats, child seats, harnesses, and car beds) that restrain children under **65 pounds** in motor vehicles



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The Lockability Standard of 1995 states that all passenger vehicles made after September 1, 1995 (Model Year 1996) must have switchable retractors.



- All passenger vehicles have to have belt systems that will allow for the installation of CRs without additional hardware (i.e., locking clips)
- This did give us switchable retractors in many vehicles, but also gave us locking latchplates on L/S belt combinations in other vehicles



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If a vehicle owner's manual and the child restraint instructions do not address maximum tether anchor weight or the vehicle and CR instructions defer to each other, it is safe to use to tether



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If both manufacturers state to follow the instructions of the other and no specific weight limit is given then the CPST should assume the weight limit for tether anchor is 40 lbs

More details in the CPSB LATCH and Tether PPT



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Since side air bags (SABs) are designed to fill the space between the side of the vehicle and the passenger seating position, a properly restrained child in a properly installed CR is not in danger from the air bag.



Fact



- In a study of over 1,500 cases of side impact crashes with the SABs, NHTSA has seen no indication that roof-mounted SABs pose a threat to children.
- Always follow vehicle and CR manufacturer's instructions regarding SABs



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If a CR has a has a built-in lock-off on both sides of the CR, both should be used.



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- Some manufacturers may recommend using both lock-offs; others may select one or the other.
- Review the CR's instructions to know which lock-off to use and to know whether the lap belt alone or the lap-and-shoulder belt is threaded through the lock-off
- Manufacturers developed lock-offs to make pre-crash locking easier for caregivers.



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The FAA requires that all children under the age of 2 be restrained properly in a CR when traveling on an aircraft.



- In August 2005, the FAA announced that they will not require the use of child safety seats on airplanes.
- Airlines currently allow children under the age of 2 to fly free of charge as "lap children"
- Since turbulence can happen with little warning, the safest place for children is in an approved CR
- The FAA strongly urges parents and guardians to secure children in an appropriate child restraint based on the child's weight and size
 - Use a rear-facing CR for infants less than one and 20 pounds
 - Use a forward facing CR for children over age 1 and 20 pounds
 - Use the airplane seat belt for all children over age 2 if no CR is available



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A pinch test can be used to determine if the harness straps are snug enough.

Fact



- A pinch test can be used to test the harness straps
- Test at the child's shoulder
- Try to pinch the webbing up and down
- Your fingers should slide off
- Check the instructions of the manufacturer.

Think Critically



- Technology changes almost every day.
- There are a lot of gray areas with few absolutes.
- When in doubt, always go to the manufacturer first.

Take the Quiz:

http://www.cpsboard.org/ceus_quiz3.htm#quiz

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