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SAFETY

INSTALLING CHILD SAFETY SEATS



**CHILD SAFETY SEATS ARE REQUIRED
BY LAW IN EVERY STATE BECAUSE
THEY PROVIDE THE BEST PROTECTION
FOR INFANTS AND YOUNG CHILDREN.**

INSTALLING CHILD SAFETY SEATS

April 2012

Child safety seats are required by law in every state because they provide the best protection for infants and young children. However, correctly installing a child safety seat can be challenging, especially with the wide variety of restraint systems, vehicle belt systems and passenger vehicles available on the market today.

Selecting And Installing A Child Safety Seat

It is important to remember these guidelines:

- It must be appropriate for your child's age, height and weight.
- **It must fit tightly into your vehicle and not move more than 1 inch from side to side and front to back at the belt path. The back seat is the best place for the child safety seat.**
- Always refer to the child safety seat instructions and vehicle manufacturer's instructions for weight limits, proper use and installation.
- Avoid seats that are too old. All manufacturers are required to include the model number and manufacture date on each seat they produce. It can be found on a label attached to the restraint usually on the bottom or the side of the seat. Most manufacturers recommend replacing any child safety seat over 6 years old.
- New child safety seats have a registration card. Register your child's safety seat with the manufacturer so you can be notified of any recall. To register, mail your registration card to the manufacturer, or register on the manufacturer's website.

Resources

- The National Highway Traffic Safety Administration (NHTSA) rates child safety seats on how easy they are to properly install. For more information, visit www.nhtsa.gov.
- A certified child passenger safety technician can check the installation of your child safety seat and answer questions. To find a technician or an inspection station near you, go to www.nhtsa.gov.
- If your child's safety seat has been in a vehicle that was involved in a crash, check your child safety seat manufacturer's recommendations for replacement, or call the toll-free number on the side of the child safety seat. For more information, visit the National Highway Traffic Safety Administration (NHTSA) at www.nhtsa.gov.
- For information on state child restraint laws, visit the following website:
 - The Insurance Institute For Highway Safety (IIHS) www.iihs.org/laws/childrestraint.aspx

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CHILD RESTRAINT RECOMMENDATIONS 1

AGE GROUP	TYPE OF SEAT	GENERAL GUIDELINES
Infants/Toddlers	Infant seats and rear-facing convertible seats	All infants and toddlers should ride in a Rear-Facing Car Safety Seat until they are 2 years of age or until they reach the highest weight or height allowed by their car safety seat's manufacturer.
Toddlers/Preschoolers	Convertible seats and forward-facing seats with harnesses	All children 2 years or older, or those younger than 2 years who have outgrown the rear-facing weight or height limit for their car safety seat, should use a Forward-Facing Car Safety Seat with a harness for as long as possible, up to the highest weight or height allowed by their car safety seat's manufacturer.
School-aged Children	Booster seats	All children whose weight or height is above the forward-facing limit for their car safety seat should use a Belt-Positioning Booster Seat until the vehicle seat belt fits properly, typically when they have reached 4 feet 9 inches in height and are between 8 and 12 years of age.
Older Children	Seat belts	<p>When children are old enough and large enough to use the vehicle seat belt alone, they should always use Lap and Shoulder Seat Belts for optimal protection.</p> <p>All children younger than 13 years should be restrained in the Rear Seats of vehicles for optimal protection.</p>

Used with permission of the American Academy of Pediatrics. For additional car safety seat advice and other children's health information, visit HealthyChildren.org, the official American Academy of Pediatrics website for parents.

2 REAR-FACING INFANT SEATS — CORRECT



Position The Infant Seat At The Correct Angle

- ✓ Rear-facing infant seat is positioned at an appropriate angle. Read the manufacturer's instructions to determine the correct angle for your child's infant seat to help ensure unobstructed breathing.

Some infant seats can be installed without the base. However, there are some infant seats that cannot be installed without the base. Therefore, you should always check the owner's manual to be sure.

A THIN RECEIVING BLANKET CAN BE INSERTED BETWEEN THE HARNESS BUCKLE AND THE CHILD'S GROIN TO TAKE UP THE GAP.

Getting The Correct Angle When Not Using The Base

- ✓ If you do install an infant seat without the base, make sure you get the correct angle. Rolled towels or foam noodles may be used at the crack of the vehicle seat to position most infant seats to the correct angle (approximately 30 to 45 degrees). Read the manufacturer's instructions to determine the correct angle of the child safety seat and if the seat does not allow the use of rolled towels or foam noodles. A thin rubber grip may be placed on the vehicle seat to protect the seat.





Avoid The Upright Angle

- ❌ Rear-facing infant seat is positioned at an upright angle. This position could force the child's head to tilt forward and obstruct breathing.

Correct: Read the manufacturer's instructions to determine the correct angle of the restraint.

Take Up The Slack

- ❌ Harness straps are loose and twisted.
Correct: Keep harness straps snug, straight and flat.

- ❌ Harness chest clip is not fastened.
Correct: Harness chest clip should be fastened at the middle of the chest and level with the armpits.



Do Not Let The Clip Slip

- ❌ Add-on product has forced the harness chest clip to slide out of position. An add-on product is anything that is attached to the restraint that did not originally come with the restraint. These products are not regulated by the National Highway Traffic Safety Administration (NHTSA). Some add-on products may void the manufacturer's warranty and liability. Some child safety seats provide shoulder pads that can be added to the shoulder straps. If used, the pads must be properly positioned on the child's shoulders. Read the manufacturer's instructions for proper use.

Correct: Harness chest clip should be at the middle of the chest and level with the armpits.

4 REAR-FACING INFANT SEATS — CORRECT



Keep The Harness Chest Clip Level With The Armpits

- ✓ Harness straps on rear-facing infant seats should be **at, or below**, the shoulders.
- ✓ Harness chest clip is positioned at the middle of the chest and is level with the armpits. This keeps the shoulder straps in the correct position.
- ✓ Harness straps are snug, straight and flat.
- ✓ Top of the child's head should be no closer than one inch to the top of the plastic shell (rear-facing infant seat/convertible seat only). Coverings may exceed the top of the plastic shell.



HARNESS
CHEST CLIP

HARNESS
STRAPS

ROLLED RECEIVING BLANKETS ON EITHER SIDE OF THE CHILD PROVIDE SUPPORT. POSITION RECEIVING BLANKETS FROM THE TOP OF THE HIPS TO THE TOP OF THE HEAD TO PROVIDE SUPPORT. DO NOT PUT ROLLED RECEIVING BLANKETS UNDERNEATH THE CHILD'S HEAD/NECK.



Take The Wraps Off

- X** Blanket is between the child and the harness straps.
Correct: Remove bulky clothing or blankets before placing the child in the restraint system. Never place blankets underneath or behind the child, or inside the harness system.

Avoid Seats That Are Too Small

- X** Child is too tall and too old for the infant seat. The child's head is above the top of the seat.
Correct: The top of the child's head should be at least 1 inch below the top of the plastic shell of a rear-facing infant seat.
- X** Harness chest clip is too low.
Correct: Harness chest clip should be at the middle of the chest and level with the armpits.



Never Place A Rear-Facing Seat In The Forward-Facing Position

- X** Rear-facing infant seat is in the forward-facing position.
Correct: All infants and toddlers should ride in a rear-facing safety seat until they are 2 years of age or until they reach the highest weight or height allowed by their safety seat's manufacturer.
- X** Harness chest clip is not fastened.
Correct: Harness chest clip should be fastened at the middle of the chest and level with the armpits.



6 REAR-FACING CONVERTIBLE SEATS — CORRECT



Keep Straps Snug, Straight And Flat

- ✓ Harness straps are snug, straight and flat.
- ✓ Harness straps are **at, or below**, the shoulders.
- ✓ Harness chest clip is at the middle of the chest and level with the armpits.

A CONVERTIBLE SEAT CAN BE USED AS A REPLACEMENT WHEN THE CHILD OUTGROWS THE HEIGHT AND WEIGHT RECOMMENDATIONS OF AN INFANT SEAT, BUT STILL NEEDS TO RIDE REAR-FACING. IT IS BEST FOR CHILDREN TO RIDE REAR-FACING UP TO 2 YEARS OF AGE OR TO THE HIGHEST WEIGHT OR HEIGHT ALLOWED BY THE MANUFACTURER OF THEIR CONVERTIBLE SEAT.

Position The Safety Seat At The Correct Angle

- ✓ Child safety seat is positioned at an appropriate angle. Read the manufacturer's instructions to determine the correct angle for the child safety seat.
- ✓ Harness chest clip is at the middle of the chest and level with the armpits.
- ✓ Harness straps are snug, straight and flat.
- ✓ Vehicle seat belt is in the correct belt path.





Do Not Take The Wrong Path

- ✘ Vehicle seat belt is in the wrong belt path for a rear-facing convertible seat.
Correct: Place seat belt in the correct belt path according to the manufacturer's instructions.
- ✘ Child seat is positioned at an upright angle. This position could force a younger child's head to tilt forward and obstruct breathing.
Correct: Check the manufacturer's recommendation to determine the correct angle for the child safety seat.

SOME CHILD SAFETY SEATS PROVIDE SHOULDER PADS THAT CAN BE ADDED TO THE SHOULDER STRAPS. IF USED, THE PADS MUST BE PROPERLY POSITIONED ON THE CHILD'S SHOULDERS. READ THE MANUFACTURER'S INSTRUCTIONS FOR PROPER USE.

Take Up The Slack

- ✘ Harness straps are loose, twisted and positioned too high above the shoulders.
*Correct: Adjust harness straps so that they are snug, straight and flat and are positioned **at, or below,** the shoulders.*
- ✘ Harness chest clip is not fastened.
Correct: Harness chest clip should be fastened at the middle of the chest and level with the armpits.



8 FORWARD-FACING CONVERTIBLE SEATS — CORRECT



Position Straps At, Or Above, The Shoulders

- ✓ Harness straps on forward-facing child safety seats should be positioned **at, or above**, the shoulders. Harness straps should be threaded through the reinforced slots. Read the manufacturer's instructions to determine which slots are reinforced.
- ✓ Harness straps are snug, straight and flat.
- ✓ Harness chest clip is at the middle of the chest and level with the armpits.
- ✓ Mid-point of the back of the head is not above the top of the plastic shell.

Keep Straps Snug, Straight And Flat



- ✓ Harness straps are snug, straight and flat.
- ✓ Harness straps are **at, or above**, the shoulders.



ALL CHILDREN 2 YEARS OF AGE OR OLDER, OR THOSE YOUNGER THAN 2 YEARS OF AGE WHO HAVE OUTGROWN THE REAR-FACING WEIGHT OR HEIGHT LIMIT FOR THEIR SAFETY SEAT, SHOULD USE A FORWARD-FACING SAFETY SEAT WITH A HARNESS FOR AS LONG AS POSSIBLE, UP TO THE HIGHEST WEIGHT OR HEIGHT ALLOWED BY THEIR SAFETY SEAT'S MANUFACTURER.





Do Not Let The Clip Slip

-  Harness chest clip is positioned too low.
Correct: Harness chest clip should be at the middle of the chest and level with the armpits.
-  Harness straps are loose.
Correct: Harness straps should lay snug, straight and flat.

SOME CHILD SAFETY SEATS PROVIDE SHOULDER PADS THAT CAN BE ADDED TO THE SHOULDER STRAPS. IF USED, THE PADS MUST BE PROPERLY POSITIONED ON THE CHILD'S SHOULDERS. READ THE MANUFACTURER'S INSTRUCTIONS FOR PROPER USE.

Never Let Children Ride Unrestrained

-  Child is unrestrained without a harness strap.
Correct: Child should be properly restrained with harness straps. Most states require children under 4 years of age to be properly restrained in an appropriate child safety seat.
-  Harness chest clip is not fastened.
Correct: Harness chest clip should be fastened at the middle of the chest and level with the armpits.





Combination Seat

- ✓ 5-point harness is in the correct position. A 5-point harness seat must be secured to the vehicle.

Child is in a combination seat. A combination seat is a type of forward-facing child restraint that is used with an internal harness system to secure a child up to 40 pounds or higher, and then, with the removal of the internal harness, is used as a high-back belt positioning booster (BPB) seat. Read the manufacturer's instructions for more information.



COMBINATION SEATS CANNOT BE USED REAR-FACING.

SOME CHILD SAFETY SEATS PROVIDE SHOULDER PADS THAT CAN BE ADDED TO THE SHOULDER STRAPS. IF USED, THE PADS MUST BE PROPERLY POSITIONED ON THE CHILD'S SHOULDERS. READ THE MANUFACTURER'S INSTRUCTIONS FOR PROPER USE.



Remove Internal Harness When Shoulders Are Above All Harness Slots

X Harness straps are below the shoulders.

Correct: Internal harness system should be removed from combination seats and the restraint should be used as a belt-positioning booster with the vehicle lap/shoulder belt.

POSITION HARNESS STRAPS IN A FORWARD-FACING CHILD SAFETY SEAT AT, OR ABOVE — NOT BELOW — THE CHILD'S SHOULDERS.

A CERTIFIED CHILD PASSENGER SAFETY TECHNICIAN CAN CHECK THE INSTALLATION OF YOUR CHILD SAFETY SEAT AND ANSWER QUESTIONS. CONTACT THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) FOR MORE INFORMATION.

Avoid Seats That Are Too Big

X Infant is too small for the seat.

*Correct: Infant should be in a rear-facing infant seat or rear-facing convertible seat with harness straps **at, or below,** shoulder level.*



12 BELT-POSITIONING BOOSTER SEATS — CORRECT



HIGH-BACK BOOSTER

Always Use The Lap/Shoulder Belt With Booster Seats

- ✓ Child is in a high-back booster secured by the vehicle lap/shoulder belt. The lap belt is snug across the child's upper thighs and the shoulder belt is snug across the chest.

LAP BELT ON
UPPER THIGHS

HIGH-BACK AND NO-BACK BOOSTER SEATS SHOULD BE USED FOR A CHILD WHO HAS OUTGROWN A CHILD SAFETY SEAT WITH INTERNAL HARNESSSES AND IS NOT TALL ENOUGH (LESS THAN 4 FEET 9 INCHES TALL) FOR THE VEHICLE SEAT BELT SYSTEM.

ALL CHILDREN WHOSE WEIGHT OR HEIGHT IS ABOVE THE FORWARD-FACING LIMIT FOR THEIR SAFETY SEAT SHOULD USE A BELT-POSITIONING BOOSTER SEAT UNTIL THE VEHICLE SEAT BELT FITS PROPERLY, TYPICALLY WHEN THEY HAVE REACHED 4 FEET 9 INCHES IN HEIGHT AND ARE BETWEEN 8 AND 12 YEARS OF AGE.

- ✓ Child is in a no-back booster secured by the vehicle lap/shoulder belt. The lap belt is snug across the child's upper thighs and the shoulder belt is snug across the chest.

- ✓ Child has head and neck protection with an adjustable head restraint.



NO-BACK BOOSTER



Never Use Just The Lap Belt With Booster Seats

- ✘ Child is restrained with a vehicle lap belt only. Children can be severely injured if not properly restrained in a lap/shoulder belt.

Correct: For upper body protection, a lap/shoulder belt should always be used with a booster.

ALWAYS POSITION THE LAP PORTION OF THE VEHICLE SEAT BELT SNUG ACROSS THE UPPER THIGHS (PELVIC BONE) AND THE SHOULDER BELT SNUG ACROSS THE CHEST.

Do Not Allow Children To Play With Hard Toys And Other Objects

- ✘ Hard toys and other objects can become dangerous projectiles during hard braking and crash situations.

Correct: Use soft toys only.

- ✘ Child is restrained with a vehicle lap belt only. Children can be severely injured if not properly restrained in a lap/shoulder belt.

Correct: For upper body protection, a lap/shoulder belt should always be used with a booster.

NEVER USE PILLOWS, TOWELS OR BOOKS AS A BOOSTER SEAT — DOING SO CAN COMPROMISE YOUR CHILD'S SAFETY.



14 SEAT BELT SYSTEMS — CORRECT



Keep The Lap Belt Low On The Upper Thighs

- ✓ Child is sitting straight against the back of the vehicle seat with his knees bent comfortably at the edge of the seat.
- ✓ The shoulder belt is snug across the chest and the vehicle lap belt fits snug and low over the upper thighs.
- ✓ Child has head and neck protection with an adjustable head restraint.



CHILDREN SHOULD SIT STRAIGHT AGAINST THE BACK OF THE VEHICLE SEAT WITH KNEES BENT COMFORTABLY AT THE EDGE OF THE SEAT. THE VEHICLE'S SHOULDER BELT SHOULD FIT SNUG ACROSS THE CHEST AND THE LAP BELT SNUG AND LOW OVER THE UPPER THIGHS.



Never Put A Small Child In A Seat Belt

- X** Child is too short to be in a vehicle lap/shoulder belt. The vehicle shoulder belt is under the child's arm. This can cause serious injuries in a crash.

Correct: Child should be in a forward-facing seat with an internal harness. Only children who are tall enough (4 feet 9 inches or taller) can fit properly in vehicle seat belts.
- X** Child's legs do not bend at the edge of the seat.

Correct: Child should be sitting straight against the back of the vehicle seat with his knees bent comfortably at the edge of the seat.

ALWAYS POSITION THE LAP PORTION OF THE VEHICLE SEAT BELT ACROSS THE UPPER THIGHS (PELVIC BONE) AND THE SHOULDER BELT SNUG ACROSS THE CHEST.

Never Put A Shoulder Belt Behind The Back

- X** Vehicle shoulder belt is behind the child's back. Children can be severely injured if not properly restrained in a lap/shoulder belt.

Correct: Shoulder belt should fit snug across the chest.
- X** Lap belt is on the child's abdomen. Children can be severely injured if not properly restrained in a lap/shoulder belt.

Correct: Lap belt should fit securely on the child's upper thighs.



16 THINGS TO AVOID



The “Child Crusher” Position

- ❌ Lap-held child is unrestrained in the front seat and is sitting in front of the passenger side airbag. This is the “child crusher” position.

Correct: Child should be properly restrained in the back seat. Never hold a child while riding in a vehicle.

A Lack Of Restraint

- ❌ Child is unrestrained in the front seat and is sitting too close to the dash and the passenger side air bag.

Correct: Child should be properly restrained in the back seat.

- ❌ Child is wearing a backpack.

Correct: Children should never wear backpacks in the vehicle. Backpacks can limit the effectiveness of restraint systems.



CHILDREN UNDER 13 YEARS OF AGE SHOULD BE PROPERLY RESTRAINED IN THE BACK SEAT OF THE VEHICLE.



Keep Children Under 13 Years Of Age Properly Restrained In The Back Seat

X Rear-facing child safety seat is in the front seat directly in the air bag deployment zone.

Correct: Child should be properly restrained in the back seat of the vehicle.

AIR BAGS CAN CAUSE SERIOUS INJURY OR DEATH TO CHILDREN, ESPECIALLY INFANTS IN REAR-FACING CHILD SAFETY SEATS. CHILDREN UNDER 13 YEARS OF AGE SHOULD BE PROPERLY RESTRAINED IN THE BACK SEAT OF THE VEHICLE.

Air Bag Deployment Zone

X Forward-facing child safety seat is in the air bag deployment zone.

Correct: Child should be properly restrained in the back seat of the vehicle.



18 WARNING LABELS



Seat Belt

- ◆ Vehicle seat belt system with an air bag warning label.

Child Safety Seat

- ◆ Child safety seat with an air bag warning label.

AIR BAG WARNING LABELS CAN BE IN A VARIETY OF LOCATIONS.

BY LAW, ALL RESTRAINT SYSTEMS ARE REQUIRED TO HAVE AN AIR BAG WARNING LABEL.



Vehicle Visor

- ◆ Vehicle visor with an air bag warning label.





LATCH Child Safety Seat Attachment

- ◆ LATCH (Lower Anchors and Tethers for Children) is an alternative way to attach the child safety seat to the vehicle and designed to simplify child safety seat installations. LATCH secures a child safety seat to the vehicle using straps from the child safety seat that connect to special metal anchors in the vehicle. However, unless both the vehicle and the child safety seat are compatible with the LATCH system, then the vehicle's safety seat belt will need to be used to secure the child safety seat.

Parents must read the vehicle manufacturer's instructions to determine if the vehicle is equipped with the LATCH system and to locate the LATCH anchors in the rear seating positions. It is important to note that installing child safety seats with either the vehicle's seat belt or the LATCH system are equally safe as long as the child safety seat is installed correctly and fits securely in the vehicle.

THE LATCH SYSTEM AND THE VEHICLE'S SEAT BELT SYSTEM SHOULD NEVER BE USED TOGETHER.



Upper Tether Attachment

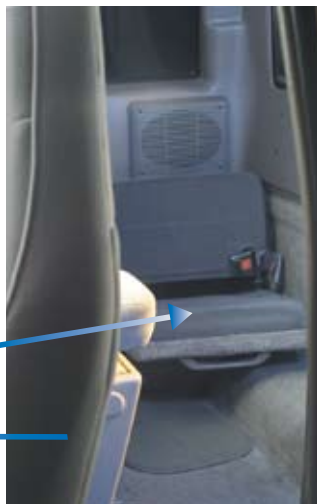
- ◆ For forward-facing seats, you must use both the lower attachments **and** the top tether strap. Most rear-facing seats do not allow for the use of the upper tether. Read your child safety seat instructions for proper use.

20 COMPATIBILITY ISSUES

Pickup Truck Jump Seats

- ◆ Child safety seats cannot be used safely in side-facing pickup truck jump seats. Side-facing jump seats are unsafe for a child safety seat under all circumstances.

JUMP SEAT
FRONT OF VEHICLE



Seat Buckles

- ◆ Buckles on extended webbing can make it difficult to install a child safety seat in the correct position.

EXTENDED WEBBING



Contoured Seats

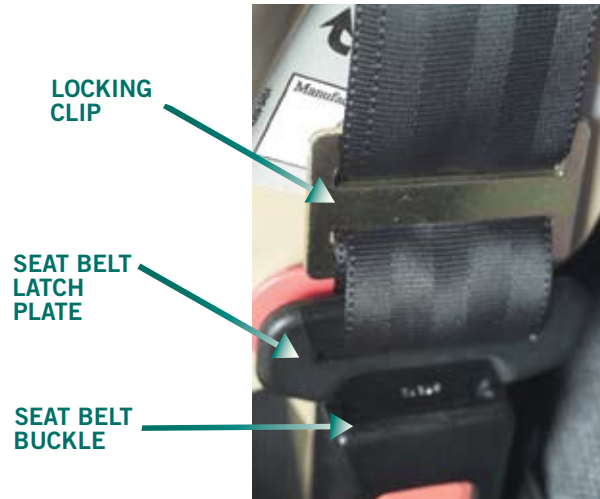
- ◆ Contours in a vehicle seat or a hump in the center can make it difficult or impossible to install a child safety seat in the correct position. To be sure a child safety seat will fit properly in your vehicle, try installing it before you purchase it.



Lock It Up

- ✓ Some vehicle seat belt systems require additional hardware such as a locking clip to lock the child restraint. Newer seat belt systems have a built-in locking mechanism. Refer to the vehicle manufacturer's instructions to determine whether to use a locking clip to secure the child safety seat.

USE YOUR HAND TO PRESS THE CHILD SAFETY SEAT TIGHTLY INTO THE VEHICLE CUSHION. IF YOU CANNOT GET A TIGHT FIT, PUT YOUR WEIGHT INTO THE CHILD SAFETY SEAT, COMPRESS THE VEHICLE SEAT AND TIGHTEN THE SEAT BELT AS MUCH AS POSSIBLE. THE SEAT SHOULD NOT MOVE MORE THAN 1 INCH FROM SIDE TO SIDE AND FRONT TO BACK AT THE BELT PATH.



Special Needs

- ✓ Premature infants and children with respiratory difficulties, orthopedic challenges, neurological and behavioral problems may require special child restraints. For more information, visit the American Academy of Pediatrics (AAP) at www.aap.org.

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If a website address or phone number has changed since you received this publication, log on to a search engine and type in keywords of the subject matter or organization you are researching to locate such updated information.

Somerset County Traffic Safety Alliance
www.sctrafficsafety.com

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