ARE YOU USING IT RIGHT?

Four out of five of these children are incorrectly buckled.
Do you know which one is correct?

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THE BIG PICTURE

(Front Cover)

Which child is buckled correctly?

If you guessed the one in the middle, then you're right. The harness straps are flat, snug and in position, and the chest clip is at the proper mid-chest, armpit level.

The other photos illustrate some common mistakes that compromise protection and result in almost 80% of children being improperly restrained.

- **Upper left:** The child is too small to be in a vehicle lap/shoulder belt. The shoulder belt is under the child's arm, and the lap belt is resting on the child's abdomen.
- **Upper right:** Harness straps are too high, loose and the chest clip is too low.
- **Bottom right:** Harness straps are loose and twisted and the chest clip is disconnected.
- **Bottom left:** Although the lap belt is positioned correctly, the vehicle shoulder belt is under the child's arm.

With the wide variety of child restraint systems, belt systems and passenger vehicles, correctly installing a child restraint system can be challenging. This booklet is designed to help you identify and learn how to correct common mistakes when installing a child restraint and securing your child in the restraint. Making the right connections will help improve overall protection for your child. Always read child restraint and vehicle manufacturers' instructions for proper use and installation information.

Air Bags

TAKE A BACK SEAT TO AIR BAGS

- Child should be in the back seat. Infant seat is in the air bag deployment zone.

AIR BAG DEPLOYMENT ZONE

An infant in a rear-facing child restraint should NEVER be positioned in the path of a frontal air bag.

THE DANGER ZONE

- Rear-facing child is positioned in front of the passenger air bag deployment zone.
- Seat is resting on the dash/air bag.
- Child is also incorrectly secured:
  - Harness chest clip is too low (should be at armpit level).
  - Harness straps are positioned too high (should be at, or below, infant's shoulders).

Air bags can cause serious injury or death to children, especially infants in rear-facing child seats.

Rear-Facing Infant Seats

WELL-CONNECTED

- Harness chest clip is correctly positioned at the child's mid-chest or armpit level.
- Harness straps are snug and straight.
- Rear-facing harness straps should be positioned at, or slightly below, the child's shoulders.

A harness chest clip should be positioned at the child's mid-chest or armpit level. This keeps the shoulder straps in the correct position.

THE RIGHT ANGLE

- Used with a detachable base, this rear-facing infant seat is positioned at approximately a 45-degree angle (check the manufacturer's recommendation for the correct angle).

Children are safest when properly restrained in the back seat.

TOO UPRIGHT IS WRONG

- An infant seat sitting too upright can cause a child's head to drop forward, cutting off his/her airway.

DON'T LET THE CLIP SLIP

- After-market products have forced the chest clip to ride too low on the child's abdomen.

RESIST THE TWIST

- Twisted, loose harness straps compromise protection.
- Chest clip is not fastened.

TAKE THE WRAPS OFF

- Children should **never** be wrapped up in a blanket, thick coat or other bulky garments before being strapped into a restraint system. Instead, place blankets over the internal harness straps.

Rear-Facing Infant Seats CONTINUED

WELL-COVERED

- Blanket is correctly placed over both the internal harness straps and the child.

A blanket should never be placed between the child and the harness straps, or underneath or behind the child.

IN POSITION

- Harness straps and chest clip are correctly positioned.
- Blanket covering child is correctly positioned.
- Rolled towels are placed on both sides of the child for proper position.

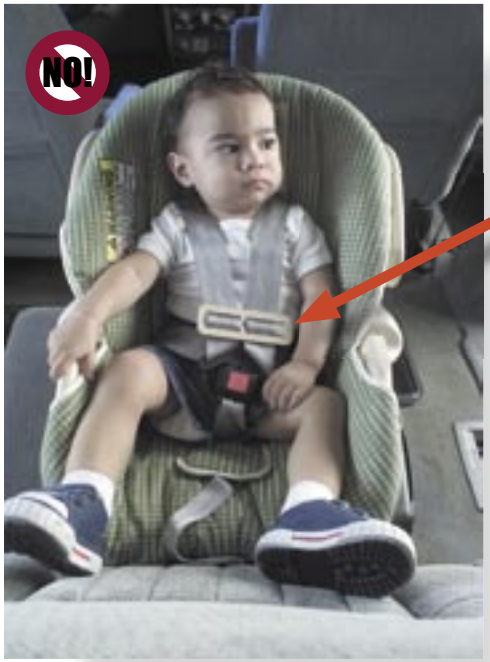
ON A ROLL

- A rolled towel or foam noodle at the crack of the vehicle seat helps position the infant seat at the correct 45-degree angle (check the manufacturer's recommendation for the correct angle).

CLOSE THE GAP

- A washcloth helps fill the space between the restraint buckle and the child's groin area.
- Harness straps are snug and straight.

DON'T COMPROMISE ON SIZE



- The seat is too small for the child. His head is at the top of the seat. Use a convertible seat that can be used rear-facing to 30-35 lbs.
- Chest clip is positioned too low. (Should be at armpit level).

Rear-facing infant seats should NEVER be placed in a forward-facing position. Babies should ride rear-facing until at least one year of age and at least 20 pounds.

AVOID MAKING A WRONG TURN

- Rear-facing infant seat is incorrectly placed in a forward-facing position.
- Safety belt is loose and placed through the incorrect belt path.
- Harness straps are loose.
- Carrying handle is in the upright position. For most child seats, handle should be in the down position.

Rear-Facing Convertible Seats

BELOW THE SHOULDERS

- Harness straps on **rear-facing seats** should be positioned at, or slightly below, the child's shoulders.
- Harness chest clip is in the correct location.
- Harness straps are snug and straight.

For a snug fit, adjust harness straps so they lie in a straight line without sagging. Place the chest clip at the armpit level.

THE RIGHT ANGLE

- Child restraint is positioned at approximately a 45-degree angle (check the manufacturer's recommendation for the correct angle).
- Harness straps and chest clip are correctly positioned on the child's body.
- Child seat is secured using the correct belt path.

OVERSIZED SEATS MINIMIZE SAFETY

- Infant is much too small for the convertible seat. Her head is in front of the shield.

DON'T TAKE THE WRONG PATH

- Safety belt system is placed through the incorrect belt path.

INCORRECT

CORRECT

STRAPS THAT ARE LOOSE LIMIT USE

- Harness straps are loose, twisted and positioned too high above the infant's shoulders. Straps must be snug, lie flat and be at, or slightly below, the infant's shoulders.
- Chest clip is positioned too low. It should be at armpit level.

AVOID THE UPRIGHT POSITION

- Restraint is positioned at the incorrect angle causing the infant to sit too upright. This could cause an infant to drop his/her head, cutting off the airway.
- Harness straps are not touching the child's shoulders.
- Child is too small for the restraint.

Forward-Facing Convertible Seats

OVER AND ABOVE

- Harness straps on **forward-facing restraints** should be positioned at, or slightly above, the child's shoulders.
- Harness straps are snug and straight.
- Harness chest clip is positioned at the child's mid-chest or armpit area.

Children should remain in a forward facing child restraint until they are approximately 40 pounds and 4 years of age.

FIT TO A T-SHIELD

- T-shield is correctly positioned, and is resting snugly on the child's thighs.
- Harness straps are snug and straight and are at, or above, shoulder level.
- Harness chest clip is positioned at the child's mid-chest or armpit level.

SHIELD OF DEFENSE

- Tray shield is correctly positioned on the child.
- Harness straps are snug and straight and are at, or above, shoulder level.

TAKE UP THE SLACK

- Harness straps are loose and twisted.
- Harness chest clip is too low and not connected.

TIGHTEN UP THE STRAPS

- Harness straps are loose.
- Harness chest clip is too low.

STAY CONNECTED

- Harness straps are not in use.

Be sure to read the manufacturer's instructions to determine which harness slots should be used.

KEEP INFANTS REAR-FACING

- This infant should not be forward-facing. Children under one year **and** under 20 pounds should remain rear-facing.
- Harness straps are loose.
- Chest clip is too low and not connected.
- Safety belt system is placed through the incorrect belt path.

Forward-Facing Seats

THE RIGHT COMBINATION

- Combination seats convert from a 5-point harness system to a belt-positioning booster seat.
- At 40 pounds, harness straps should be removed and child should use the vehicle lap/shoulder belt.
- Some combination seats may be used without harness straps up to 60, 65, 70 or 80 pounds.

5-POINT HARNESS

- When a combination seat is used with a 5-point harness, the child seat must be secured to the vehicle using the vehicle's safety belt system.

- This seat has a flap in the seat cover to make threading the safety belt through the child seat easier.

AN OVERLAPPING OPTION

- This looks like a booster seat. But, it is a forward-facing restraint that can be used with either a lap or lap/shoulder belt combination on a child weighing 30–65 pounds.
- No longer in production.

BUILT-IN PROTECTION

- An integrated seat is a built-in option on some vehicles and is forward-facing only.
- Integrated child restraints have a 5-point harness system.
- Read the vehicle owner's manual for weight limits.

SIZE UP THE SITUATION

- Child has outgrown the internal harness system of the child restraint. The harness straps are below the child's shoulders.
- Internal harness system should be removed.
- Child should use the seat as a belt-positioning booster with the vehicle lap/shoulder belt system.

KEEP STRAPS AT OR ABOVE THE SHOULDERS

- Harness straps in a forward-facing restraint system should not be below the child's shoulders.

DON'T MOVE THEM OUT OF A SAFETY SEAT TOO SOON

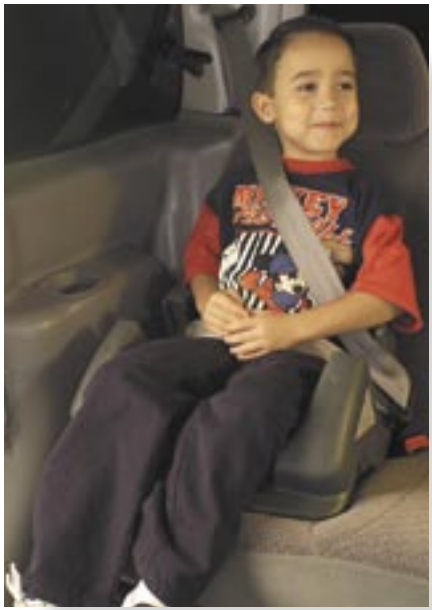
- The shoulder belt is behind the child and the lap belt is riding up on the child's stomach. This can cause serious injury in a crash.
- Child is too small for the vehicle's lap and shoulder belt. The child should ride in a child safety seat until 40 lbs., then use a belt positioning booster seat until at least 8 years old, unless the child is 4'9" tall.

Belt-Positioning Booster Seats

RAISE THEM UP

- No-back booster is used to correctly position the child in a vehicle lap/shoulder belt.
- Booster seat correctly positions the lap belt across the child's upper thighs and the shoulder belt across the chest.

High-back and no-back booster seats are for children who have outgrown child safety seats, at 40 lbs, and are not large enough for the vehicle belt system. Children should use a belt positioning booster seat until they are at least 8 years old or 4'9" tall.



Always use the lap/shoulder belt combination with a belt-positioning booster. Never use a lap belt only.

A GOOD FIT

- High-back booster is used to correctly position the vehicle lap/shoulder belt on the child; correctly positioning the lap belt across the child's upper thighs and the shoulder belt across the chest.
- A safety belt system may not fit properly on children who cannot sit all the way back against the vehicle seat with knees bent comfortably over the edge of the vehicle seat.

NO-BACK BOOSTER

- Child is incorrectly positioned with a vehicle lap belt only and is at risk for serious abdominal, spinal and other injuries.
- Always use the lap/shoulder belt with a no-back, belt-positioning booster seat.

HIGH-BACK BOOSTER

- Child is incorrectly positioned with a vehicle lap belt only and is at risk for serious abdominal, spinal and other injuries.
- Always use the lap/shoulder belt with a high-back booster.

NO VEHICLE SAFETY BELT

- Child does not have vehicle safety belt on.
- Belt positioning booster seat must be used with the vehicle's lap and shoulder belt.

Safety Belt Systems

MAINTAIN GOOD POSTURE

- This lap/shoulder restraint system fits properly. The child's back is straight and her knees are bent at the edge of the vehicle seat.

The lap belt should fit snug and low over the upper thighs. If it rides up on the abdomen, it could cause serious injuries in a crash.

Children should sit straight against the seat back. Shoulder belts should fit snugly across the chest.

KEEP LAP BELT LOW ON THE UPPER THIGHS

- The lap belt is positioned securely on the child's upper thighs.

NO BELTS BEHIND THE BACK

- Shoulder belt is incorrectly positioned behind the child's back.
- Lap belt is too high on the child's stomach.

Never allow a child to place a shoulder belt behind his/her back.

AVOID ADD-ON PRODUCTS

- Add-on product has positioned the vehicle lap belt too high on the child's abdomen. These types of products are not crash-tested by NHTSA.
- Child should be in a belt-positioning booster seat.

A BELT UNDER THE ARM CAN CAUSE HARM

- Running the shoulder belt under a child's arm can cause life-threatening injuries in a crash.
- Child is too small to be in a vehicle lap/shoulder belt.
- Lap belt is on the child's abdomen, which can cause serious injury in a crash.

Things To Remember

PUT YOUR WEIGHT INTO IT

- Get a tight fit between the child restraint system and the vehicle seat. Put your weight into the child restraint system to compress the vehicle seat while tightening the safety belt as much as possible.

STAY INFORMED

- Information on using vehicle safety belts with child restraints may be obtained from the vehicle safety belt's and the owner's manual.
- For proper installation, read both the vehicle owner's manual and the child restraint instruction manual.

SPECIAL NEEDS

- Some children require special child restraints. Premature infants, children with respiratory difficulties, orthopedic challenges, and neurological and behavioral problems may require special child restraints.

LOCK IT UP

- Newer safety belt systems have a built-in locking mechanism.
- Some vehicle safety belt systems require additional hardware, such as a locking clip, to lock the child restraint during normal driving conditions.
- Check your vehicle's owner's manual to determine whether a locking clip is needed to secure the child safety seat.

Things To Avoid

THE PATH OF LEAST RESISTANCE

- Infant carriers are not designed to protect infants in a crash. They do not have a belt path or a label stating they meet federal motor vehicle safety standards.

THE "CHILD CRUSHER" POSITION

- Child is unrestrained and should be in the child restraint in the back seat. No adult can safely transport a child on his/her lap.

A lap-held, unrestrained child is in the "child crusher" position.

AVOID CHILD'S PLAY

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

Always use the correct child restraint system. Never use pillows, books or towels to boost a child. Doing so can compromise your child's safety.

A LACK OF RESTRAINT

- A child should **never** be unrestrained in any vehicle seat, with **or** without an air bag system.

Warning Labels

READ THE LABELS

■ Air bag warning label on the safety belt system.

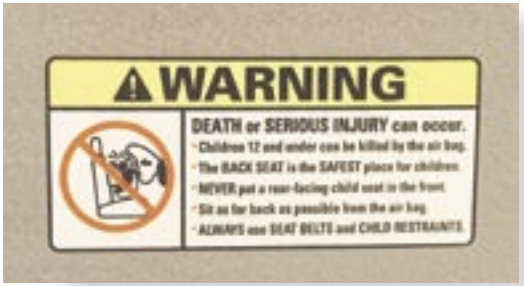
HEED THE WARNING

■ Air bag warning label on child restraint system.

Air bags have saved the lives of more than 6,500 people. However, they work best when everyone is buckled. Children under 12 are safest when properly restrained in the back seat.

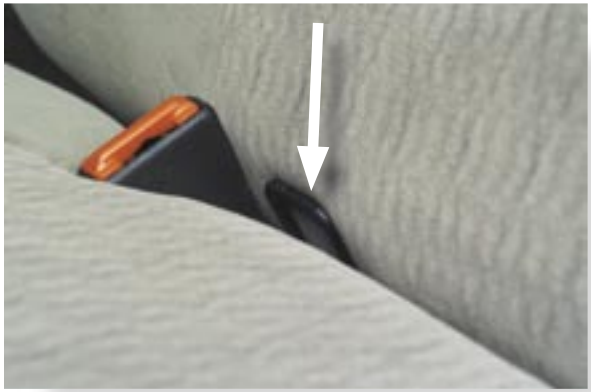
STAY ADVISED

■ Air bag warning label on vehicle visor.



LATCH (LOWER ANCHORS AND TETHERS FOR CHILDREN)

LOWER ANCHOR ATTACHMENT



UPPER TETHER ATTACHMENT

Upper tether attachment improves protection by attaching the top of the child safety seat more securely to the vehicle. Older model vehicles may require special hardware installation. Lower attachments make installation easier by allowing the child restraint to be attached to the vehicle without using the vehicle's belt system.

LATCH CHILD RESTRAINT ATTACHMENT

LATCH is required on most child safety seats and all vehicles manufactured after September 1, 2002.

Compatibility Issues

NO MIDDLE SEAT

- Some vehicle seats do not have a middle position that can be used with a child restraint system.

CONTOURED SEAT

- Contours in vehicle seats can make it difficult to install a child restraint correctly.
- Rear-facing convertible seat is too upright.

JUMPSEATS

- Child restraint system manufacturers prohibit the use of child restraints in side-facing vehicle seats (jumpseats).

SEAT BUCKLES

- Buckles on extended webbing may make it difficult to properly install a child restraint system.

General Child Seat Use Information

Children ages 12 and under are safest when properly buckled in the rear seat.

Always refer to the child seat and vehicle manufacturers' instructions for proper use and installation instructions.

Age/Weight	Seat Type/Seat Position	Usage Tips
Infants		
Birth to at least 1 year **and** at least 20 lbs. Less than 1 year/ 20-35 lbs. *Children may remain in their rear-facing seats as long as they haven't exceeded the height or weight requirements.*	Infant-Only Seat/rear-facing **or** Convertible Seat/used rear-facing Convertible Seat/used rear-facing (select one recommended for heavier infants) *Seats should be secured to the vehicle by the safety belts or by the LATCH system.*	Never use in a front seat where an air bag is present. Tightly install child seat in rear seat, facing the rear. Child seat should recline at approximately a 45 degree angle. Harness straps/slots at or below shoulder level (lower set of slots for most convertible child safety seats). Harness straps snug on child; harness clip at armpit level.
Preschoolers/Toddlers		
1 to 4 years/ at least 20 lbs. to approximately 40 lbs. *Children may remain in their forward-facing seats as long as they haven't exceeded the height or weight requirements.*	Convertible Seat/forward-facing **or** Forward-Facing Only **or** Combination Seat with Harness. *Seats should be secured to the vehicle by the safety belts or by the LATCH system.*	Tightly install child seat in rear seat, facing forward. Harness straps/slots at or above child's shoulders (usually top set of slots for convertible child safety seats). Harness straps snug on child; harness clip at armpit level.
Young Children		
4 to at least 8 years/unless they are 4'9" (57") tall.	Belt-Positioning Booster No back **or** High Back Belt-Positioning Booster. *NEVER use with lap-only belts—belt-positioning boosters are always used with lap and shoulder belts.*	Booster used with adult lap and shoulder belt in rear seat. Shoulder belt should rest snugly across chest, rests on shoulder; and should NEVER be placed under the arm or behind the back. Lap-belt should rest low, across the lap/upper thigh area—not across the stomach.

Stay informed about child safety seat recalls; be sure to fill out the registration card that comes with new child seats.

DOT HS 809 245
(revised) March 2005

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National Highway Traffic Safety Administration

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