



THE FACTS ON AIRBAGS

READ YOUR OWNERS MANUAL!

Supplemental Restraint Systems (SRS) or Airbags have been documented for saving thousands of lives. Airbags are also blamed for injuries or fatalities when occupants have not been wearing seat belts or belts worn improperly. These guidelines will help prevent this type of injury.

DRIVERS SIDE:

- **ALWAYS** wear your safety belt snug across your hips and shoulder strap between your neck shoulder tip.
- Hold steering wheel at 9:00 & 3:00 or 8:00 & 4:00 (where the grip holds are) and **NOT** 10:00 & 2:00.
- Sit back at least 10" away from steering wheel (pedal extenders are available if this is not possible) with tilt steering aim the wheel at center chest area.
- **NO** object should be between you and the steering wheel.
- Shuffle steer when turning and use false grip (thumbs to the outside).

PASSENGER SIDE:

- **ALWAYS** wear your safety belt properly with the seat as far back as possible.
- **NEVER** use a rear facing child seat in front and children age **12 or under** should ride in back! {Must be 13 years of age and 5 feet tall and 100 lbs.} The rear seat is 35% safer than the front. If the seatbelt doesn't fit get a booster up thru 8 years and 80 lbs.
- **DO NOT** brace yourself on the dash or raise your hands in the event of a collision or store or mount anything on the dash and avoid leaning on dash cover.

ALSO:

- Pre-crash braking with an improperly restrained occupant puts them out of position for proper airbag deployment and can put them in danger. Buckle up and sit back as far as possible.
- Improper structural body work or windshield installation can affect airbag deployment timing.
- In Fire Rescue operations airbags can deploy!
- Technicians should use care when handling.
- Many new vehicles have side airbags and have warnings specifically for them in the owners manual.
- **READ YOUR OWNERS MANUAL FOR SPECIFIC USE OF RESTRAINT SYSTEMS!**

See www.airbaginstitute.com for the *ALERT airbag safety class*
North EMS Education @ 800-994-9780 or ABRA @ 800-536-2334
INJURY FACTS ON AIRBAGS, BELTS and WINDSHIELDS

North Memorial Medical Center and ABRA Auto Body & Glass (07-2004)

Crashes are Very Violent Energy Forces to the Human Body

“The most important thing is for people to understand how violent a 30 mph crash really is.” Ricardo Martinez, former Director of National Highway Transportation Safety Administration.

- Serious injuries occur at 20 mph, death at 30 mph. Crashes are the number one cause of death for persons 1-34 years of age. In 2001, an average day in Minnesota produced 271 crashes, 116 injuries, along with 2 deaths, costing Minnesota’s economy \$4.4 million dollars daily! In the USA: approximately 42,000 die in traffic crashes, 6,000 teen and young drivers, or 24 teens a day!

Windshields are Primary Restraints in a Motor Vehicle

- Windshields provide retention (FMVSS 208), strength/structural integrity in a frontal crash (FMVSS 212), and the roll bar/roof support of today’s vehicle (FMVSS 216).
- Never have your windshield replaced below 40 degrees F, the primers to activate the urethane won’t flash below freezing.
- Original Equipment Manufacturers, OEM adhesive, must match the car companies recommendations for the urethane adhesive. The urethane glue must dry completely before the car is driven, check the Safe Drive Away Time with the urethane manufacturer.
- Make sure your installers are National Glass Association trained and the company affiliated with the NGA. (ABC News 20/20 reports 02-25-00) and the urethane glue dries completely before the vehicle is driven. (FOX NEWS Boston 2-25-02).

Seatbelts and Pretensioners are Secondary Restraints and No Longer Optional.

“It’s indefensible to allow anyone to ride unbelted.” Paul Brand, Auto Expert, Minneapolis Star and Tribune, January 8, 2000.

- Belts allow you to ride-out & ride-down the deployment of the airbag and provide some distance for proper airbag inflation.
- Belts reduce serious death and injury by 45% in cars, 60% in trucks/SUV’s. They prevent ejection (3 out of 4 person’s die when ejected.) It is the greatest chance for survival and less injury in a crash. Belts keep drivers in the seat where maximum vehicle control is possible without endangering the general public and safe communities.

Airbag and Seatbelt Injuries- Minor and Rare

- Airbags are supplemental restraints, supplemental to the seatbelt and the whole car. The driver’s bag reduces the chance of dying by 30% in a frontal crash for drivers. Nearly 15,000 lives have been saved by the airbags.
- Combination of seatbelt + airbag = Up to 70-80% reduction in serious injuries to the head and chest
- 96% of airbag injuries are minor (abrasions), 3-4% are moderate (fractures), and less than 1% are fatal. Majority of the deaths (#231) are infants, small children, small females-unbelted and misbelted. Airbags were never designated for children or infants.

Side Impact Airbags- Not required but some offer more head protection in side crashes

- You are more likely to die in a side impact crash than a frontal crash. The number one killer is head and chest injuries.
- In over 300 vehicle models, located in the doors, seats, head curtains, tubular windshield/A-Pillar, rear/C-pillar and roof. They protect the occupant’s head and chest from the striking bullet vehicle and prevent ejection.
- Slim-jimMING is not recommended, all fatal stories are hoaxes, see www.extrication.com.
- Deaths are rare with side airbags. Out of position occupants are always at risk from any airbag inflation. Remind all occupants and children not to lean into a side airbag. There are no child fatalities and serious injuries are rare.

The Best of the Best Cars-What's the Safest Car?

For the most protection in a crash, a vehicle should do well in all three below.

- NHTSA Gov’t **Frontal** Impact Crash Test at 30 mph – Star rating 1 lowest, 5 stars the best. The test for **restraints** in the vehicle.
- NHTSA Gov’t **Side** Impact Crash Test (18 mph) – Star rating 1 the lowest, 5 stars the best. The test both for **restraints and structural integrity** of the vehicle. See www.nhtsa.dot.gov
- Insurance Institute for Highway Safety – 40 mph **Offset** Crash Test into deformable barrier. The independent test for **structural integrity** of the vehicle. About 75% of frontal crashes are of this type. Ratings from lowest to highest; poor-marginal-acceptable-good. See www.highwaysafety.org
- NHTSA Gov’t **Roll-Over** Crash testing -- See www.safecars.gov
- Cars and older models see www.crashstest.com