

airbags

Airbags are inflatable devices that deploy in a fraction of a second after a serious crash.

They provide additional protection during a severe crash, when the head and chest of a buckled-up occupant can move forward and strike the steering wheel or dashboard.

Front and side airbags

Front airbags are located in the steering wheel hub and in the passenger-side dashboard. Most new passenger cars, light trucks and vans are equipped with front airbags and side airbags. Side airbags are designed to provide protection during side impacts and, in some vehicles, during rollover crashes. Side airbags and side curtains are mounted in the doors, seats or roof rails. If you have airbags in your vehicle, read the owner's manual before installing child restraint seats.

SRS / SIR

If the initials "SRS" appear on the steering wheel, dash or side airbag unit, you have a Supplemental Restraint System (airbag) in front or to the side of you. In a few vehicles, the steering wheel or dashboard is marked "SIR" which stands for Supplemental Inflatable Restraint.

How airbags work

Rapid deceleration caused by a crash triggers the airbag. Nitrogen gas is rapidly produced and the airbag inflates at speeds up to 300 km/h (faster than the blink of an eye). Remember a crash is over in a fraction of a second so the airbag has to inflate very fast to protect you.

In low-speed front-end collisions, your seatbelt is usually enough to provide protection for your head and chest. However, in higher speed front-end crashes, front airbags deploy to protect your head and chest as they move forward. Front airbags usually don't deploy in rear-end collisions, side impacts or rollovers. Side airbags deploy during side impacts and rollovers, and provide buffers between the occupants and the doors. Although airbags provide the best protection during serious crashes, they may also deploy during low-speed collisions (sometimes as low as 15 km/h). Because of this, occupants should buckle up and stay out of the airbag deployment zone.

Airbags also have vents, so they deflate immediately after absorbing the energy of an occupant. They cannot smother you and they don't restrict your movement. If you see "smoke," that's a non-toxic starch or talc used to keep the insides of the airbag from sticking together. It's normal to see a smoke-like, powdery residue or smell the burnt repellant. Read your vehicle owner's guide for a more detailed description.

Airbags and injuries

Airbags usually only cause minor abrasions and bruises. But some can be serious or even fatal to occupants who are out of position in the vehicle. Occupants who are out of position include drivers sitting too close to the airbag module, infants riding in rear-facing restraints in the front passenger seat, improperly restrained or unrestrained adults or children sitting or standing too close to the dashboard.

How to minimize airbag injuries

- Give the airbag plenty of room to inflate.
- Always wear your lap and shoulder belt system. Airbags are not a replacement for seatbelts.
- Don't place your arms across the steering wheel.
- Tilt the steering wheel downward toward your chest, not your head or neck.
- Move your driver and the front passenger seat as far rearward as practicable.
- Allow at least 25 cm (10") between the chest and airbag unit.
- Tell your front seat passengers not to put their feet or any objects on the dashboard.
- Never install a rear-facing infant restraint in a front passenger seat that has an active airbag.
- Restrain children 12 years and younger in the back seat.

When to deactivate an airbag

Airbag deactivation involves the installation of a switch that allows the driver or front passenger airbag (or both) to be turned off. When the airbag is turned off, a warning light will remain on to remind you and your passengers that the airbag has been deactivated. Some pickups and convertibles that only have front seats come equipped with factory installed on/off switches to protect infants in rear-facing restraints.

The vast majority of people don't need an on/off switch. Along with Transport Canada, we don't recommend you deactivating your airbags. However, in a few select cases, installing an on/off switch may be appropriate.

Transport Canada provides Canadians with a process by which they may seek to have the driver or passenger airbags deactivated.

- Deactivate your front passenger airbag if you have no option but to transport infants riding in rear-facing infant seats in the front passenger seat.
- Deactivate your front passenger airbag if you have no option but to transport children age 12 and younger in the front passenger seat.

- Have an on/off switch installed for the driver's side airbag if you cannot change your customary driving position to keep about 25 cm (10") between the centre of the steering wheel and the centre of your breastbone.
- Have your airbag deactivated if your doctor certifies that, due to your medical condition, the airbag poses a special risk that outweighs the risk of hitting your head, neck or chest in a crash if the airbag is turned off.

Airbag performance varies among vehicle makes and models. Before deactivating an airbag or installing an on/off switch, talk to your vehicle manufacturer.

Transport Canada has prepared an application form and an information brochure on how to professionally and safely deactivate airbags. Don't disable the airbag yourself — it's risky, complicated and can be dangerous.

To make an informed decision, check out Transport Canada's website at www.tc.gc.ca.

For more information on vehicle safety, go to **icbc.com**.

