Air Bag On-Off Switches: Questions and Answers

What does the final rule allow? Beginning January 19, 1998, the final rule allows repair shops and dealers to install "on-off" switches that allow air bags in passenger cars and light trucks to be turned on and off in appropriate circumstances. Dealers and repair shops cannot perform this work without an authorization letter from the National Highway Traffic Safety Administration (NHTSA). Vehicle owners can get this authorization letter by filling out a request form developed by NHTSA and sending it to the agency.

Who can get an on-off switch? Vehicle owners can get on-off switches installed for one or both air bags in their vehicles if they (or users of their vehicle) fall into one or more of four specific risk groups.

For both driver and passenger sides:

1. Individuals with medical conditions where the risks of a deploying air bag exceed the risk of impacting the steering wheel, dashboard, or windshield in the absence of an air bag.

For the driver side, in addition to medical conditions:

2. Individuals who cannot position themselves to properly operate the vehicle with the center of their breastbone at least 10 inches back from the center of the driver air bag cover.

For the passenger side, in addition to medical conditions:

3. Individuals with the need to transport an infant in a rear-facing child restraint in the front seat because the vehicle has no rear seat, the rear seat is too small to accommodate a rear-facing child restraint, or because it is necessary to constantly monitor the child's medical condition.

4. Individuals with the need to carry children between 1 and 12-years-old in the front seat because the vehicle has no rear seat, the consumer must carry more children than can be accommodated in the rear seat, or because it is necessary to constantly monitor a child's medical condition.

These are the only four groups that are eligible for the installation of on-off switches.

How can most people ride safely with air bags? Most people can take steps that will eliminate or at least significantly reduce any risk without turning off air bags and losing their protection. The main source of risk is proximity; an air bag needs space to inflate. Move your seat rearward, and tilt your seat back - as a driver, you should ride at least 10 inches (measured from the center of the steering wheel to your breastbone) from the air bag cover if you can do this while maintaining full control of your vehicle. Passengers also need to sit at least 10 inches back from the air bag. Wear your seat belt, and remove any excess slack in the belt. Insist that children 12-years-old and younger ride in the back seat. Never put a rear-facing child restraint in front of an air bag.

Who is at risk from air bags? Very few people. Almost everyone is safer with an air bag than without one. There is a serious risk only if you are very close to the air bag cover (within 2-3 inches) when the air bag deploys.
On the **driver** side, if you are one of the relatively few people **unable to get back at least 10 inches** (1) from the air bag cover (measured from the center of the steering wheel center to your breastbone), you **may** be a candidate for an on-off switch. At progressively shorter distances, the chances of being saved by an air bag decreases and the chances of being injured by it increases. The distance below 10 inches at which you might consider getting an on-off switch varies from vehicle model to vehicle model, because the risk is affected by differences in the design and performance of different air bags and crash sensors. The vast majority of people who currently sit less than 10 inches from the steering wheel can achieve that distance by moving their seat to the rear as far as possible (while still being able to comfortably drive the vehicle) and/or tilting the seat back slightly. If you cannot maintain at least a 10-inch distance from the air bag, despite your best efforts, you may wish to **contact your dealer or vehicle manufacturer for advice about additional ways of moving back from your air bag**. If you still are unable to come close to achieving the 10-inch distance, you may wish to consider getting an on-off switch. **Since air bag performance varies among vehicle models, you may wish to consult your vehicle manufacturer for additional advice**. If you do get an on-off switch, leave the air bag turned on for all drivers who can get back at least 10 inches.

If you are a **driver with a medical condition**, you should only turn off your air bag if you have been advised by a physician that an air bag poses a special risk to you and this risk outweighs the increased risk that your head, neck or chest will hit the steering wheel or dashboard in a crash if your air bag is turned off. **Hitting these components can occur even if you are using your seat belt.**

At the recent National Conference on Medical Indications for Air Bag Deactivation, a group of physicians considered all medical conditions commonly cited in letters to NHTSA as possible justifications for turning off air bags. The physicians did **not** recommend turning off air bags for many relatively common medical conditions, such as pacemakers, eyeglasses, angina, emphysema, asthma, breast reconstruction, mastectomy, previous back or neck surgery, hyperacusis, tinnitus, advanced age, osteoporosis and arthritis (if the person can sit at a safe distance from the air bag), or pregnancy. The physicians recommended turning off an air bag if a safe sitting distance or position cannot be maintained by a driver because of scoliosis or achondroplasia or by a passenger because of scoliosis or Down syndrome and atlantoaxial instability. The physicians also noted that a passenger air bag might have to be turned off if an infant or child has a medical condition and must ride in front so that he or she can be monitored. To obtain a copy of the recommendations, call the NHTSA Hotline or see the NHTSA website.

**Older drivers** should follow the advice given above for all drivers.

On the **passenger side**, all children up through age 12 belong in the back seat. But, **if you must place a rear-facing infant seat in front of an air bag, get an on-off switch and turn the air bag off**. **Never place a rear-facing infant seat in front of an activated air bag.**

**If children 12 years and younger** must sit in the front seat, first ensure that they use seat belts and/or child restraints appropriate for their size or weight. Then, move their vehicle seat all the way back. If these steps are taken, the risk of injury from the air bag will be substantially reduced. However, since children sometimes lean far forward or slip out of their shoulder belt, placing themselves in danger, you may wish to consider getting a switch and turning off the air bag. Since air bag performance varies from vehicle model to model, you may wish to **contact your vehicle manufacturer for advice**.

**Passengers with medical conditions** should follow the advice above for drivers with such conditions.

People not in any of the above groups will be worse off if they turn off their air bag. This includes the
vast majority of teenagers and adults. By turning off their air bags, they will increase their chance of
death or serious injury in moderate or high speed crashes.

**What if I'm pregnant? Should I disconnect my air bag?** No, not unless you are a member of a risk
group. Pregnant women should follow the same advice as other adults: buckle up and stay back from the
air bag. The lap belt should be positioned low on the abdomen, below the fetus, with the shoulder belt
worn normally. Pull any slack out of the belt. Just as for everyone else, the greatest danger to a pregnant
woman comes from slamming her head, neck or chest on the steering wheel in a crash. When crashes
occur, the fetus can be injured by striking the lower rim of the steering wheel or from crash forces
concentrated in the area where a seat belt crosses the mother's abdomen. By helping to restrain the upper
chest, the seat belt will keep a pregnant woman as far as possible from the steering wheel. The air bag
will spread out the crash forces that would otherwise be concentrated by the seat belt.

**How do I get an on-off switch?** If you are interested in having an on-off switch installed in a vehicle
you own or lease, you first need to get a copy of NHTSA's information brochure, *Air Bags and On-
Off Switches: Information for an Informed Decision*, and the accompanying form, *Request for Air Bag
On-Off Switch*. The brochure and request form are available at many sources, including NHTSA's web
site (http://www.nhtsa.dot.gov), many new car dealers, state motor vehicle departments, all AAA clubs,
and many other organizations. You also can obtain them by calling NHTSA's toll-free Auto Safety
Hotline at 1-800-424-9393. Read the brochure carefully before filling out the form; you may decide that
an on-off switch is not appropriate for you. If you decide to request an on-off switch, you must fill out
and submit the request form to NHTSA. The mailing address is provided on the form. You will need to
certify on the request form that you have read the brochure and that you (or other occupants of your
vehicle) fall into one or more of the risk groups for the air bag(s) for which you request a switch. If the
form is properly and completely filled out, NHTSA will then send you an authorization letter that you
can take to your dealer or repair shop.

You should check with your auto dealer or repair shop to see whether an on-off switch is available for
your vehicle. Also, you should be aware that dealers and repair shops will not be installing on-off
switches before January 19, 1998. Even after this date, it may take a while for switches to become
available for all vehicles. You should also ask how much the switch will cost. If a switch is available
and the dealer or repair shop is willing to install it, give the authorization letter directly to the dealer or
repair business. After the dealer or repair shop installs the on-off switch, it will return a form (which will
be included with the authorization letter) to NHTSA indicating to the agency it has done the work for
you.

**Why must I submit the request form to NHTSA? Why can't I just ask a dealer or repair shop to
install an on-off switch?** We decided to require this step to emphasize the importance of taking
seriously the safety consequences of installing an air bag on-off switch. In addition, prior review of
requests will enable the agency to monitor directly, from the very beginning, the implementation of the
regulation and the effectiveness of educational efforts to promote informed decisionmaking about air
bag on-off switches.

**Why can't I get an on-off switch now? Why must I wait until January 19, 1998?** Manufacturers are
just beginning the process of tooling up to produce on-off switches in volume. They need time to make
switches, get them to their dealers, and for the dealers to get ready. In addition, NHTSA and other safety
groups will be conducting educational efforts to provide consumers with information on on-off switches,
and who should (or should not) consider them.

**What if no switch is available after January 19, 1998?** If the manufacturer of your vehicle does not
Can consumers get their air bags deactivated instead of installing a retrofit on-off switch? Generally, no. If a retrofit on-off switch is available from the vehicle manufacturer for a particular vehicle, eligible consumers desiring to disable their air bags must have a retrofit on-off switch installed; a dealer or repair shop cannot simply deactivate (or disconnect) the air bags. If a retrofit on-off switch is not yet available from the vehicle manufacturer for a particular vehicle, NHTSA will authorize air bag deactivation on a case-by-case basis under certain circumstances. If a retrofit on-off switch is available only from an aftermarket company, NHTSA still will authorize air bag deactivation for eligible people.

Under what circumstances will NHTSA allow air bag deactivation? If the vehicle manufacturer does not make an on-off switch available for a particular vehicle, NHTSA will authorize deactivation for the following reasons:

- A rear-facing infant restraint must be placed in the front seat of a vehicle because there is no back seat or the back seat is too small for the child restraint (passenger air bag only).
- A child 12-years-old or younger must ride in the front seat because the child has a condition that requires frequent medical monitoring in the front seat (passenger air bag only).
- An individual who drives (or rides in the front seat of) the vehicle has a medical condition that, on balance, makes it safer to have the air bag(s) turned off (driver and/or passenger air bag, as appropriate). Each request based on a medical condition must be accompanied by a written statement from a physician unless the request is based on a medical condition for which the National Conference on Medical Indications for Air Bag Deactivation recommends deactivation.
- Drivers who must sit within a few inches of the air bag (typically because they are extremely short-statured, i.e., four feet, six inches or less\(^{(3)}\)) (driver air bag only).

These circumstances apply to me. How do I get an authorization from NHTSA to deactivate my air bags? Write a letter to NHTSA, 400 7th Street, SW, Washington, DC 20590-1000. Requests also can be faxed to (202) 366-3820. Include: (1) the name and address of the vehicle owner or lessee, (2) the reason for the deactivation request, and (3) any supporting documentation (for example, a letter from a physician for all deactivation requests based on medical conditions for which the National Conference on Medical Indications for Air Bag Deactivation has not recommended deactivation. The physician's letter should not only identify the particular condition, but state that, in the physician's judgment, the condition is such that the potential risk of air bag deployment outweighs the risk of an air bag not deploying in a crash.). If the request concerns a child that must ride in the front seat to enable the driver to monitor the child's medical condition, the supporting physician's statement must identify the condition and state that frequent monitoring by the driver is necessary.

If the request is approved, NHTSA will send you a letter authorizing deactivation, an agency information brochure, labels alerting vehicle occupants about the deactivated air bags, and a form to be filled out and mailed back to the agency regarding the deactivation. You should then call your dealer or repair shop and ask whether it will disconnect the air bag. Some dealers and repair businesses have a policy of not disconnecting air bags. NHTSA cannot require them to deactivate air bags; however, most
people should be able to find a qualified automotive mechanic or technician who will do the work.

NHTSA strongly urges owners and lessees to have the air bag reactivated if the condition that causes the deactivation ceases to exist, or if they sell the vehicle. If the vehicle is sold, and the air bag is not reactivated, the new owner needs to be notified.

**Will NHTSA allow or require manufacturers to install on-off switches in new vehicles?** NHTSA allows vehicle manufacturers to install passenger air bag on-off switches in new vehicles in limited circumstances. "Factory-installed" passenger air bag on-off switches are allowed in new vehicles only if they do not have rear seats, or if the rear seat is too small to accommodate a rear-facing child restraint. "Factory-installed" on-off switches are not allowed for the driver air bag in any new vehicle. Manufacturers are not required to install on-off switches in any new vehicle.

NHTSA decided against requiring or allowing on a widespread basis on-off switches as "factory-installed" equipment for several reasons. First, the switch is tied to a person in a risk group; the agency was concerned that extending the option of on-off switches to all new vehicles might result in on-off switches being installed as standard equipment in all new vehicles, thus resulting in on-off switches being installed without regard to whether individual consumers were at risk. NHTSA also was concerned that integrating on-off switches into new vehicles, which probably would require redesigning instrument panels, would divert resources from the development of more sophisticated air bag systems.

**I am buying a new car, and want an air bag on-off switch. Can I have one installed?** Yes. If you decide you want one (and you or a user of your vehicle falls into one of the risk groups), starting January 19, 1998, a dealer or repair shop can install an on-off switch in a new car or light truck, if you have an authorization letter from NHTSA. Remember, in order to request a switch, you must know the vehicle identification number of your vehicle and write it on your request form.

**What about vehicles with "depowered" air bags? Can on-off switches be installed in these vehicles?** Yes, you can have an on-off switch installed in a vehicle with a depowered air bag. However, depowered air bags will reduce the risk of injury caused by air bags. On the driver side, depowered air bags are expected to substantially reduce any air-bag-related risks for short drivers. On the passenger side, NHTSA believes that, with depowered air bags, there would be almost no chance of fatality to a properly-belted child sitting back from the air bag. There still would be a substantial risk for an infant in a rear-facing child restraint and for unrestrained or out-of-position children ages 12-and-under. Even if you or a user of your vehicle fall within one or more of the risk groups eligible for an on-off switch, you should consult with your vehicle manufacturer before installing an on-off switch in a vehicle with depowered air bags.

**What about rental cars?** Rental car companies will be able to have switches installed in their vehicles if they believe the vehicles will be used by people in one or more of the four risk groups.

**Why should I leave the air bags in my vehicle turned on?** Motor vehicle crashes are the leading cause of death for each age, 5 through 27 years old. Air bags reduce the risk of dying in a direct frontal crash by about 30 percent. Air bags have saved over 2,600 lives through November 1, 1997. They also have prevented a large number of serious head and chest injuries. Overall, air bags add to the protection offered by seat belts. In the vast majority of cases, adults are safer with an air bag that is "on."

**How can I get more information?** Informational brochures will be available through auto dealers, State motor vehicle departments, AAA clubs, or from the National Highway Traffic Safety Administration directly. You can call the agency's toll-free Auto Safety Hotline at 1-800-424-9393 or you can visit http://www.nhtsa.dot.gov/airbags/airbgQandA.html
NHTSA's site on the World-Wide Web at http://www.nhtsa.dot.gov. Click on the air bag icon for detailed information that should help you make an informed decision about air bag use in your vehicle. Copies of the necessary information brochure and request form also can be downloaded from the NHTSA web site.

1. The 10-inch distance is a general guideline that includes a safety margin. It was calculated by allowing 2-3 inches for the size of the "risk zone" just beyond the air bag cover, plus 5 inches for the distance occupants may move forward in a crash (even if belted) while the air bags are inflating, plus 2-3 more inches to give a margin of safety. Since air bag performance differs among vehicle models, drivers may wish to consult their vehicle manufacturer for additional advice on how far to get back from an air bag in a particular vehicle.

2. If you lease a vehicle, you should check with the company you lease it from to see whether installing an on-off switch would violate the terms of your lease.

3. A recent study found that almost all women in a group ranging in height from 4 feet, 8 inches to 5 feet, 2 inches were able to get back 10 inches from their driver air bag.