

Air Bags

Overview

In 25 years—from 1987 to 2012—frontal air bags saved 39,976 lives. That's enough people to fill a major league ballpark.

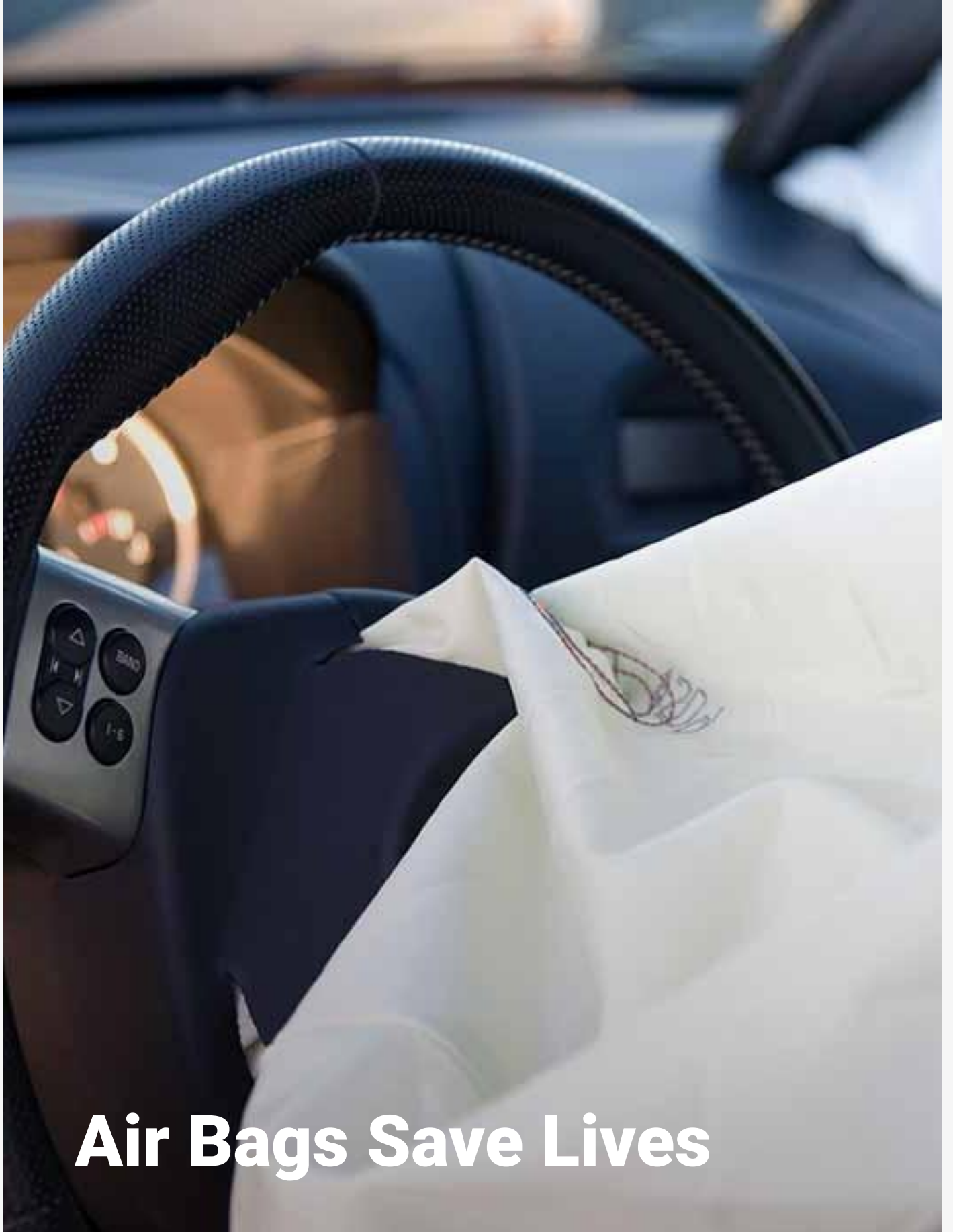
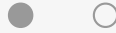
NHTSA provides information about the safety benefits of frontal and side air bags and the importance of using seat belts—your first line of defense. We also test and provide guidance on the risks of counterfeit and defective air bags, and urge vehicle owners with recalled air bags to immediately get their air bags replaced by a dealer.

Share:    

Air Bags Facts

39,976

ESTIMATED LIVES SAVED BY FRONTAL AIR BAGS FROM 1987 TO 2012



Air Bags Save Lives

Air Bags ▾

THE TOPIC

Protection

Air bags are supplemental restraints and are designed to work best in combination with seat belts. Both frontal and side-impact air bags are designed to deploy in moderate to severe crashes.

Air bags reduce the chance that an occupant's upper body or head will strike the vehicle's interior during a crash. To avoid an air-bag-related injury, always ensure proper seating position. Wearing your seat belt properly helps ensure that you're properly seated.

Vehicles can be equipped with both front and side air bags (SABs). Frontal air bags have been standard equipment in all passenger cars since model year 1998 and all SUVs, pickups and vans since model year 1999. SABs are being offered as standard or optional equipment on many new passenger vehicles.

AIR BAG DEPLOYMENT

HOW AIR BAGS WORK

[VIDEO: UNDERSTANDING AIR BAGS](#)

When there is a moderate to severe crash, a signal is sent from the air bag system's electronic control unit to the inflator within the air bag module. An igniter in the inflator starts a chemical reaction that produces a harmless gas, which inflates the air bag within the blink of an eye – or less than 1/20th of a second. Side-impact air bags inflate even more quickly since there is less space between the occupant and the striking object, such as the interior of the vehicle, another vehicle, a tree, or a pole.

Because air bags deploy very rapidly, serious or sometimes fatal injuries can occur if the occupant is too close to – or is in direct contact with – the air bag when it first begins to deploy. Sitting as far back from the steering wheel or dashboard as possible and using seat belts help prevent occupants from being "too close" to a deploying frontal air bag.

To ensure the continued protection of occupants, used air bags should be replaced without delay by an authorized repair center before the vehicle is driven again.

THE TOPIC

Recalls

Takata air bags installed in tens of millions of U.S. vehicles are subject to recall due to a safety defect that may cause their inflators to explode and cause serious injuries or deaths. If your car or truck is included in this [list of affected vehicles](#), contact your dealer for the appropriate repair. For full coverage of the Takata recall, support for consumers, and the latest news, visit NHTSA's [Recalls Spotlight](#).

THE TOPIC

Fake Air Bags

You count on your air bag to protect you and others in your vehicle in the event of a crash. If your vehicle is equipped with a counterfeit air bag, there is cause for concern.

Counterfeit air bags have been shown to consistently malfunction in ways that range from non-deployment to the expulsion of metal shrapnel during deployment.

NHTSA has identified certain vehicle makes and models for which these air bags may be available and believes this issue affects less than 0.1 percent of the U.S. vehicle fleet.

Consumers whose vehicles have been in a crash and had their air bags replaced by a repair shop that is not part of a new car dealership within the past three years or who have purchased a replacement air bag online should contact the call center that has been

established by their auto manufacturer to have their vehicle inspected at their own expense and their air bag replaced if necessary. The responsibility for replacing a counterfeit air bag will vary depending on the circumstances around the original installation of the part.

If you are concerned and have an air bag that was replaced at a repair shop recommended by your insurance company we recommend that you contact your insurance company. If you purchased a counterfeit air bag from eBay it may be covered by that company's "Buyer Protection" program. Contact eBay's Customer Support center accessible at www.eBay.com. You may also wish to contact your local Consumer Protection Agency or the appropriate State Office of the Attorney General to determine your rights under the law; and the Better Business Bureau or the Federal Trade Commission to file a complaint.

THE TOPIC

ON-OFF

There are few circumstances under which the risk of sitting in front of an active frontal air bag outweigh the safety benefits. Under these circumstances NHTSA will authorize the installation of an air bag ON-OFF switch. Authorization will be granted under the following four circumstances:

1. A rear-facing infant restraint must be placed in the front seat of a vehicle because there is no rear seat or the rear seat is too small for the child restraint. (For the passenger air bag only.)
2. A child under 13 years of age must ride in the front seat because the child has a condition that requires frequent medical monitoring in the front seat. (For the passenger air bag only.)
3. An individual with a medical condition is safer if the frontal air bag is turned off. A written statement from a physician must accompany each request based on a medical condition unless the request is based on a medical condition for which the [National Conference on Medical Indications for Air Bag Deactivation](#) recommends deactivation. (For driver and/or passenger frontal air bag as appropriate.)

4. Driver must sit within a few inches of the air bag, typically because they are of extremely small stature (i.e., four feet, six inches or less). (For the driver frontal air bag only.)

In those instances where an ON-OFF switch is not made for a particular vehicle, the agency will consider allowing an air bag to be deactivated. The approval process for deactivation is more rigorous because while an ON-OFF switch allows the driver or passenger frontal air bag to be turned on and off in appropriate circumstances, deactivation is not so flexible. Once deactivated, an air bag cannot be easily activated for those occupants who may need it.

ON-OFF SWITCH/DEACTIVATION

Only authorized dealers and repair shops can install ON-OFF switches and can do so only with an authorization letter from NHTSA. If you are interested in having an air bag ON-OFF switch installed in a vehicle you own or lease (check with the leasing company first to see if installing an ON-OFF switch would violate the terms of your lease), you will need to:

- Read NHTSA's brochure, "[Air Bags & On-Off Switches: Information for an Informed Decision](#)" or request a copy by mail.
- [Download the form](#) or request a copy by mail.
- Before filling out the form, ensure you have read the brochure carefully: you may decide that an ON-OFF switch is not appropriate for you.
- If you decide to request an ON-OFF switch, 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 high-risk groups for the air bag(s) for which you request a switch.
- Fill out and submit the request form to NHTSA at the following address:
 - National Highway Traffic Safety Administration

Attention: Air Bag Switch Requests

1200 New Jersey Avenue, SE

Washington, DC 20590-1000

- For a faster response, write your phone number on the form and fax it to: 202-493-2833 or 202-366-6916. For questions, call the Air Bag Division at 202-366-6982 or e-mail Derrick.Lewis@dot.gov.
- 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.
- In most cases, you can expect a response back to your request within one week from the date your request is received by NHTSA -- and not longer than two weeks.
- Check with your auto dealer or repair shop to see if an ON-OFF switch is available for your vehicle and 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, they will return a form along with the authorization letter to NHTSA, indicating the work has been done for you.

ON-OFF SWITCHES

Please note that not all installers will install switches on all vehicles. For example, a Ford dealership may decide to only install switches on Fords. NHTSA has not certified installers as competent or specially trained to install ON-OFF switches. Some installers have received specialized training from vehicle manufacturers on proper installation; others have no specialized training. Any questions regarding training or willingness to install switches on a particular vehicle should be raised with an installer directly.

THE TOPIC

FAQs

What is meant by a "moderate to severe" crash?



I just bought a vehicle with advanced frontal air bags. Does this mean I can start putting my kids in the front seat



again?

What should I do when the "pass air bag off" (or "passenger air bag off") indicator light does not give me the expected result?



Why do air bags sometimes fail to deploy during a crash?



After an advanced frontal air bag deploys, can it be re-used?



Have advanced air bag systems been tested on child-size dummies?



With advanced frontal air bags, do I still need to maintain 10 inches between the air bag cover and my breastbone?



How are advanced frontal air bags different?



THE TOPIC

Resources

Search for more resources