

How Do Airbags Work?



Everything You Need To Know About How Airbags Work

Do you think a bag with air is called an airbag? The name is fascinating though. Yeah, it works. Whenever we are going to buy a car first of all we all look forward to safety features built in. Undoubtedly, the airbag became one of the most efficient safety features in the automobile industry. But do you ever wonder why it is more efficient than other features? Don't worry. We are here to guide you.

- **What is an airbag?**

Airbags are a kind of soft pillow. It is termed a SIR (supplemental restraint system). It means it is designed to work with seatbelts to provide you with utmost safety. It activates when a car senses a collision. It automatically activates when an accident occurs. It is designed to cushion your head and neck from injury. The bag is designed with nylon fabric. It is folded generally into the steering wheel or door or seat.

- **Airbags patent**

On August 5, 1952, **John W. Hetrick** after a road car accident first time filed for a patent (named US Patent #2649,311). **Walter Linderer**, a German inventor, In October 1951 filed for an airbag patent(DE896312C). So basically almost at the same time, two individual men from two different places thought about utmost safety for cars and passengers both.



- **How does an Airbag work?**

1. When a car meets a collision, it starts to lose speed suddenly.
 2. The airbag contains an accelerometer. It detects any speed changes.
 3. If it detects deceleration above normal braking speed it triggers the airbag circuit.
 4. The circuit passes an electric current through an electric element.
 5. The electric element burns a chemical explosive.
 6. This produces a large amount of harmless gas(mainly nitrogen or argon) that rushes into the airbag.
 7. Airbag is packed behind the steering wheel. When an accident occurs as the bag expands, it inflates in front of a driver or passenger.
 8. When the driver or passenger head makes contact with the airbag it starts to deflate. There are small holes in the edges of the bag. Gas is eliminated from those holes.
- Now you know why airbags are so important