



Rear Inflatable Seat Belts

Ford is introducing the auto industry's first-ever production inflatable seat belts, which are designed to enhance protection for rear-seat occupants. They will debut on the next-generation Ford Explorer sport utility vehicle, which goes into production next year.



Step 1: The Belt in Everyday Use

Ford's rear inflatable seat belt functions like a standard seat belt in normal everyday use. The vehicle's crash sensing system determines when the inflatable belt should deploy.

Step 2: Belt Inflates During Crash

Each belt's tubular air bag inflates with cold compressed gas that flows through a specially designed buckle from a cylinder housed below the seat.

Step 3: Belt Fully Inflated

After the belt's accordion-folded air bag breaks through the belt fabric, it fills with air, expanding across the occupant's body.

Comfort

Ford research also shows that the majority of consumers who have worn Ford's inflatable belt under demonstration conditions consider it similar to or more comfortable than a standard seat belt.

This is due to the padded feeling provided by the enclosed air bag material and the rolled edges of the belt itself.

By using cold compressed gas, the inflated belts feel no warmer on the wearer's body than the ambient temperature.



Protection

Extensive testing by Ford safety engineers has shown the inflatable seat belt to be effective in helping to reduce the risk of injury.

The inflated belt helps distribute crash force energy across five times more of the occupant's torso than a traditional belt.

By doing so, it expands its range of protection by diffusing crash pressure over a larger area while supporting the head and neck.

