■SRS AIRBAG SYSTEM

1. General

- The RSCA (Roll Sensing Curtain Shield Airbags) function has been provided as standard on all models.
- The RSCA function is used in order to deploy the curtain shield airbags and the driver and front passenger seat belt pretensioners, in the event that the vehicle rolls over.
- An RSCA OFF switch has been provided to disable the RSCA function.

2. Airbag for Roll Over

When the vehicle is rolling sideways, the RSCA helps to reduce the impact that is applied to the occupants by operating the left and right curtain shield airbags and the seat belt pretensioners for the driver and front passenger.

- If the vehicle rolls over due to an incline, the two roll rate sensors and lateral deceleration sensor that are built into the airbag sensor assembly detect the vehicle's roll angle, rotation speed and lateral deceleration speed.

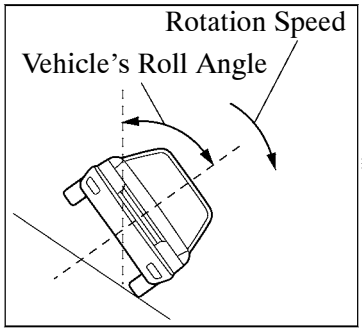
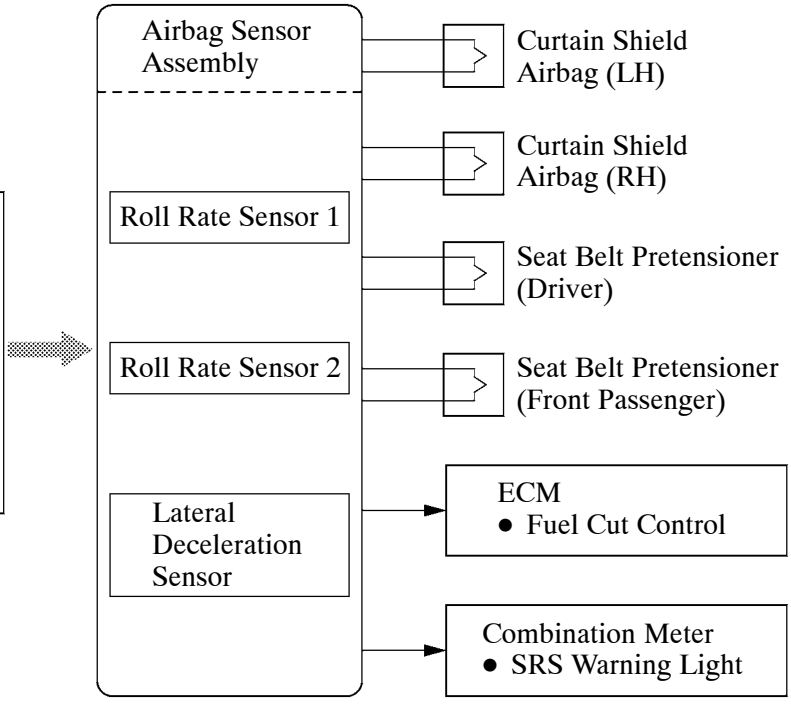


Image of vehicle roll over



Roll over due to an incline

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- If the vehicle has rolled over due to a side or rear side collision, the side and curtain shield and/or curtain shield airbag sensors detect the impact of the collision and deploy the side and/or curtain shield airbags on the collision side. Roll over is detected by the two roll rate sensors and lateral deceleration sensor, and airbag sensor assembly deploys the curtain shield airbag on the opposite side of the collision and the driver and front passenger seat belt pretensioners.

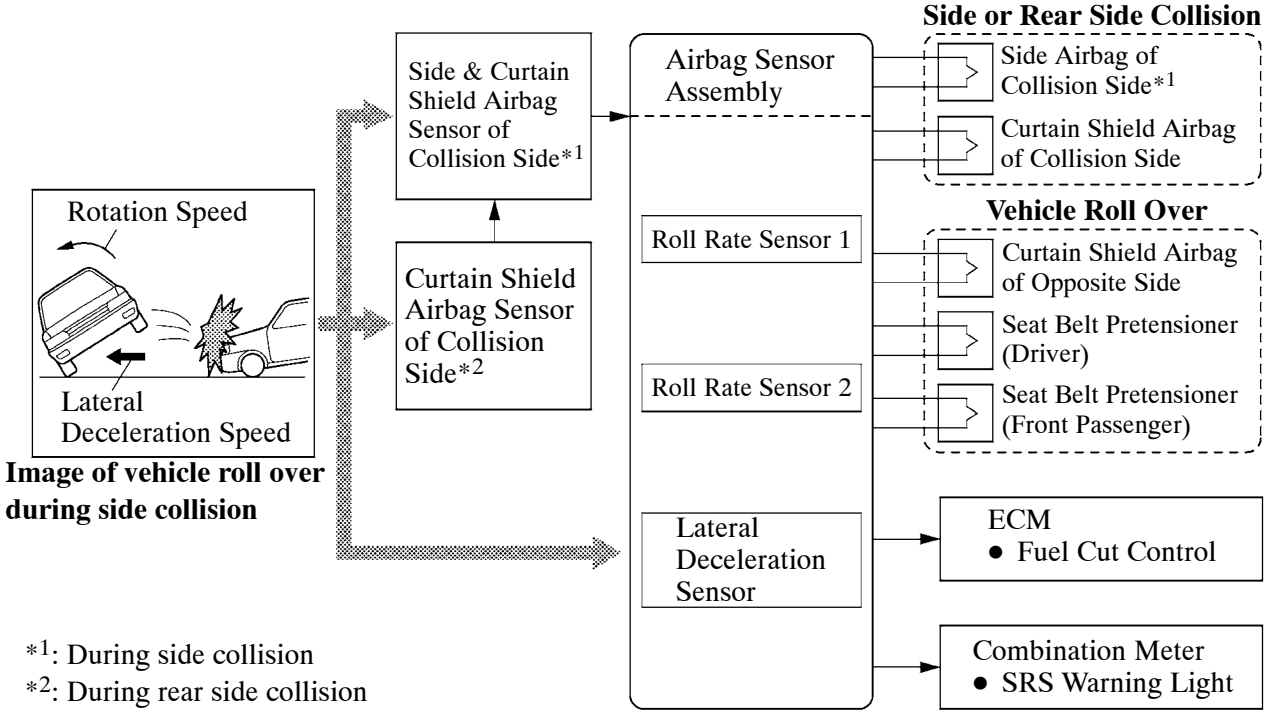


Image of vehicle roll over during side collision

*1: During side collision
*2: During rear side collision

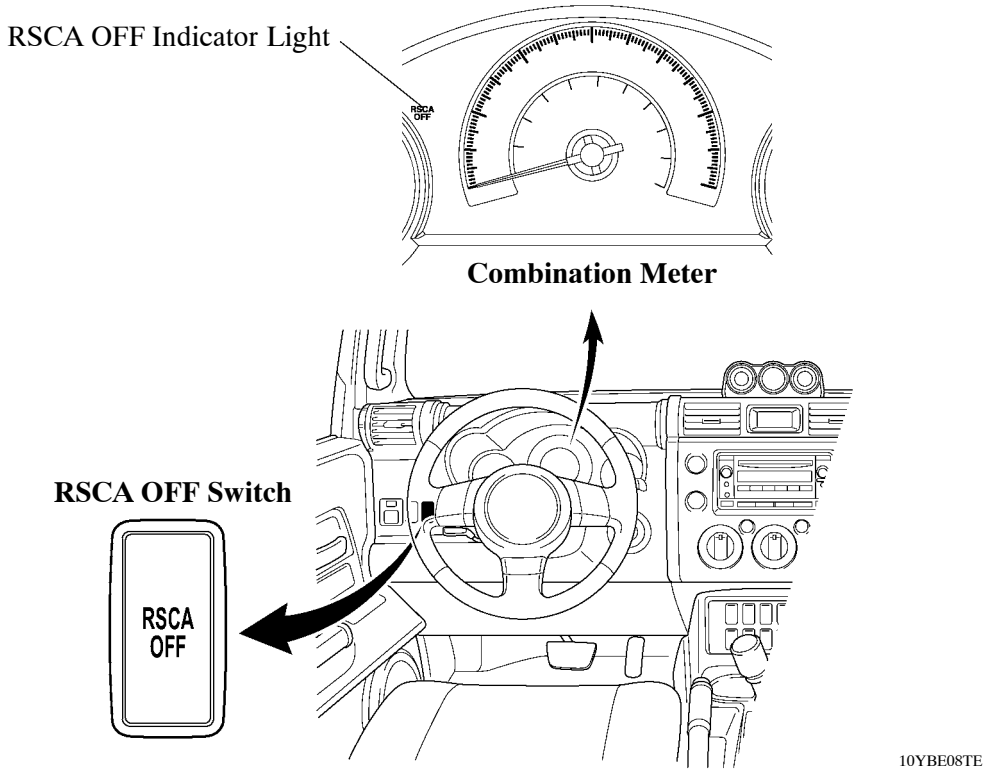
Roll over during side or rear side collision

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3. RSCA OFF Switch

In consideration of off-road driving, an RSCA OFF switch is used to enable the driver to cut off the RSCA function at will.

- If the RSCA OFF switch remains pressed for approximately 2 seconds or more, the airbag sensor assembly cuts off the operation of the RSCA. At the same time, the RSCA OFF indicator light in the combination meter comes on to indicate that the RSCA function is inactive.
- In the case of a side collision, the airbag sensor assembly will operate the curtain shield airbags regardless of whether the RSCA OFF switch is ON or OFF.



▶ System Diagram ◀

