

Repairs and Inspections Required After a Collision

Accident With or Without Air Bag Deployment — Component Inspections

Caution: Proper operation of the Supplemental Inflatable Restraint (SIR) sensing system requires that any repairs to the vehicle structure return the vehicle structure to the original production configuration. Not properly repairing the vehicle structure could cause non-deployment of the air bag(s) in a frontal collision or deployment of the air bag(s) for conditions less severe than intended.

Caution: Proper operation of the Supplemental Inflatable Restraint (SIR) sensing system requires that any repairs to the vehicle structure return the vehicle structure to the original production configuration. Not properly repairing the vehicle structure could cause non-deployment of the side impact air bag(s) in a side impact collision or deployment of the side impact air bag(s) for conditions less severe than intended.

After any collision, inspect the following components as indicated. If you detect any damage, replace the component. If you detect any damage to the mounting points or mounting hardware, repair the component or replace the hardware as needed.

- The steering column—Perform the steering column accident damage checking procedures. Refer to *Steering Column Accident Damage Inspection*.
- The instrument panel (I/P) knee bolsters and mounting points—Inspect the knee bolsters for bending, twisting, buckling, or any other type of damage.
- The I/P brackets, braces, etc.—Inspect for bending, twisting, buckling, or any other type of damage.
- The seat belts—Perform the seat belt operational and functional checks. Refer to *Repairs and Inspections Required After a Collision* on page 1-156.
- The I/P cross car beam—Inspect for bending, twisting, buckling, or any other type of damage.
- The I/P mounting points and brackets—Inspect for bending, twisting, buckling, or any other type of damage.
- The seats and seat mounting points—Inspect for bending, twisting, buckling, or any other type of damage.
- The roof and headliner mounting points

Accident With Frontal Air Bag Deployment — Component Replacement and Inspections

After a collision involving air bag deployment, replace the following components:

- The inflatable restraint I/P module
- The inflatable restraint steering wheel module
- The inflatable restraint sensing and diagnostic module (SDM)
- The inflatable restraint front end sensors
- The inflatable restraint side impact modules, front seat air bags, if equipped
- The inflatable restraint seat belt pretensioners

Perform additional inspections on the following components:

- Steering wheel module coil and the coil wiring pigtail—Inspect for melting, scorching, or other damage due to excessive heat.
- Mounting points or mounting hardware for the I/P module, steering wheel module, SDM, and pretensioners—Inspect for any damage and repair or replace each component as needed.

Accident With Side Air Bag Deployment — Component Replacement and Inspections

After a collision involving side air bag deployment, replace the following components:

- The inflatable restraint side impact sensors (SIS), Left/Right, on the side of the impact
- The inflatable restraint roof rail module, Left/Right, on the side of the impact
- The inflatable restraint side impact modules, front seat air bags, if equipped
- The inflatable restraint sensing and diagnostic module (SDM)
- The inflatable restraint seat belt pretensioner

Perform additional inspections on the following components:

- Mounting points or mounting hardware for the SIS, and side impact module (LF/RF) on the side of impact—Inspect for any damage and repair or replace each component as needed.
- Mounting points or mounting hardware for the roof rail module (left/right) on the side of impact—Inspect for any damage and repair or replace each component as needed.
- Mounting points or mounting hardware for the SDM and seat belt pretensioners—Inspect for any damage and repair or replace each component as needed.

Sensor Replacement Guidelines

The SIR/side air bag sensor replacement policy requires replacing sensors in the area of accident damage. The area of accident damage is defined as the portion of the vehicle which is crushed, bent, or damaged due to a collision. An example of this would be a moderate collision where the front of the vehicle impacts a tree. If the vehicle has an SIR sensor mounted forward of the radiator, it must be replaced.

- Replace the sensor whether or not the air bags have deployed.
- Replace the sensor even if it appears to be undamaged.

Sensor damage which is not visible, such as slight bending of the mounting bracket or cuts in the wire insulation, can cause improper operation of the SIR/side air bag sensing system. Do not try to determine whether the sensor is undamaged, replace the sensor. Also, if you follow a diagnostic trouble code (DTC) table and a malfunctioning sensor is indicated, replace the sensor.