

AIRBAG SYSTEM > Inspection Locations after a Collision

INSPECTION

If the vehicle is involved in a collision, even if it is a slight collision, be sure to check the following systems.


1. DRIVER'S AIRBAG MODULE ASSEMBLY

1. Frontal collision (driver's airbag module assembly activated)

1. Replace the following parts with new ones.

- Airbag control module
- Driver's airbag module
- Knee airbag module
- Passenger's airbag module (if deployed)
- Curtain airbag module (right and left / if deployed)
- Seat belt pretensioner (right and left)
- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module) (if passenger's airbag module is deployed)
- Steering wheel
- Column assembly - steering
- Roll connector


2. Visually inspect the following items and replace any damaged part with a new one.

- Side airbag module
- Cover COMPL - front seat backrest
- Pad assembly - front seat backrest
- Frame assembly - front seat backrest
- Frame assembly - front seat cushion
- Universal joint assembly - steering
- Steering gearbox
- Beam COMPL - steering
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
- Harnesses and connectors on body side that are linked to the replaced parts


2. Frontal collision (driver's airbag module not activated)

Visually inspect the following items and replace any damaged or cracked part with a new one. Specially inspect the damage of airbag module body, mounting bracket and harness connector.

- Driver's airbag module
- Knee airbag module
- Passenger's airbag module
- Seat belt pretensioner (right and left)
- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module)

- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

3. No frontal collision

- Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)


2. KNEE AIRBAG MODULE

1. Frontal collision (knee airbag module activated)

1. Replace the following parts with new ones.

- Airbag control module
- Driver's airbag module
- Knee airbag module
- Passenger's airbag module (if deployed)
- Curtain airbag module (right and left / if deployed)
- Seat belt pretensioner (right and left)
- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module) (if passenger's airbag module is deployed)
- Steering wheel
- Column assembly - steering
- Roll connector


2. Visually inspect the following items and replace any damaged part with a new one.

- Side airbag module
- Cover COMPL - front seat backrest
- Pad assembly - front seat backrest
- Frame assembly - front seat backrest
- Frame assembly - front seat cushion
- Universal joint assembly - steering
- Steering gearbox
- Beam COMPL - steering
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
- Harnesses and connectors on body side that are linked to the replaced parts


2. Frontal collision (knee airbag module not activated)

Visually inspect the following items and replace any damaged or cracked part with a new one. Specially inspect the damage of airbag module body, mounting bracket and harness connector.

- Driver's airbag module
- Knee airbag module
- Passenger's airbag module
- Seat belt pretensioner (right and left)

- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module)
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

3. No frontal collision

- Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)


3. PASSENGER'S AIRBAG MODULE

1. Frontal collision (passenger's airbag module activated)

1. Replace the following parts with new ones.

- Airbag control module
- Driver's airbag module
- Knee airbag module
- Passenger's airbag module
- Curtain airbag module (right and left / if deployed)
- Seat belt pretensioner (right and left)
- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module)
- Steering wheel
- Column assembly - steering
- Roll connector


2. Visually inspect the following items and replace any damaged part with a new one.

- Side airbag module
- Cover COMPL - front seat backrest
- Pad assembly - front seat backrest
- Frame assembly - front seat backrest
- Frame assembly - front seat cushion
- Universal joint assembly - steering
- Steering gearbox
- Beam COMPL - steering
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
- Harnesses and connectors on body side that are linked to the replaced parts


2. Frontal collision (passenger's airbag module not activated)

Visually inspect the following items and replace any damaged or cracked part with a new one. Specially inspect the damage of airbag module body, mounting bracket and harness connector.

- Driver's airbag module
- Knee airbag module

- Passenger's airbag module
- Seat belt pretensioner (right and left)
- Lap seat belt pretensioner (passenger's side only)
- Front sub sensor (right and left)
- Instrument panel assembly (because it is integrated with passenger's airbag module)
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

3. No frontal collision

- Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

4. SIDE AIRBAG MODULE


1. Side impact (side airbag module activated)

1. Replace the following parts with new ones.

- Airbag control module
- Satellite safing sensor
- Cover - satellite safing
- Front door impact sensor (collision side)
- Plate - door (collision side)
- Seat belt pretensioner (if triggered or damaged)
- Lap seat belt pretensioner (passenger's seat only) (collision side)
- Side airbag module (collision side)
- Side airbag sensor (collision side)
- Curtain airbag module (collision side)
- Curtain airbag sensor (collision side)
- Cover COMPL - front seat backrest (collision side)
- Pad assembly - front seat backrest (collision side)
- Frame assembly - front seat backrest (collision side)
- Frame assembly - front seat cushion (collision side)
- Trim panel - roof assembly
- Trim panel for each pillar (collision side)

2. Visually inspect the following items and replace any damaged part (collision side) with a new one.


- Headrest assembly
- Bushing - lock headrest
- Slide rail assembly - OUT
- Slide rail assembly - INN
- Cover - hinge front seat
- Knob - lifter
- Lever - reclining
- Seat belt pretensioner (if deployed)
- Lap seat belt pretensioner (passenger's seat only) (if triggered)

- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
- Harnesses and connectors on body side that are linked to the replaced parts


2. Side impact (side airbag module not activated)

Visually inspect the following items and replace any damaged or cracked part (collision side) with a new one.

Specially inspect the damage of airbag module body, mounting bracket and harness connector.

- Cover COMPL - front seat backrest
- Pad assembly - front seat backrest
- Frame assembly - front seat backrest
- Frame assembly - front seat cushion
- Satellite safing sensor
- Cover - satellite safing
- Front door impact sensor
- Side airbag module
- Side airbag sensor
- Curtain airbag module
- Curtain airbag sensor
- Seat belt pretensioner
- Lap seat belt pretensioner (passenger's seat only)
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

3. No side impact




- Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.
- Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

5. CURTAIN AIRBAG MODULE

1. Side impact or roll over (curtain airbag module activated)

1. Replace the following parts with new ones.

- Airbag control module
- Satellite safing sensor
- Cover - satellite safing
- Side airbag module (collision side)
- Curtain airbag module (collision side)
- Seat belt pretensioner (if triggered or damaged)
- Lap seat belt pretensioner (passenger's seat only) (if triggered or damaged)
- Front door impact sensor (collision side)
- Side airbag sensor (collision side)
- Curtain airbag sensor (collision side)
- Cover COMPL - front backrest (collision side)
- Pad assembly - front seat backrest (collision side)

- Frame assembly - front backrest (collision side)
 - Frame assembly - front seat cushion (collision side)
 - Trim panel - roof assembly
 - Trim panel for each pillar (collision side)
 - Airbag bracket (model with sunroof) (collision side)
2. Visually inspect the following items and replace any damaged part (collision side) with a new one.
- Assist rail - front and rear
 - Bracket - assist rail front and rear
 - Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
 - Harnesses and connectors on body side that are linked to the replaced parts
- 2.** Side impact (curtain airbag module not activated)
- Visually inspect the following items and replace any damaged or cracked part (collision side) with a new one.
- Specially inspect the damage of airbag module body, mounting bracket and harness connector.
- Trim panel - roof assembly
 - Trim panel for each pillar
 - Curtain airbag module
 - Satellite safing sensor
 - Cover - satellite safing
 - Front door impact sensor
 - Side airbag sensor
 - Curtain airbag sensor
 - Seat belt pretensioner (if deployed)
 - Lap seat belt pretensioner (passenger's seat only) (if triggered)
 - Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)
- 3.** No side impact
- Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.
 - Passenger's occupant detection system (check according to the diagnosis procedure in "OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)" section)  [Ref. to OCCUPANT DETECTION SYSTEM \(DIAGNOSTICS\)>Basic Diagnostic Procedure>PROCEDURE.](#)

6. AIRBAG CONTROL MODULE

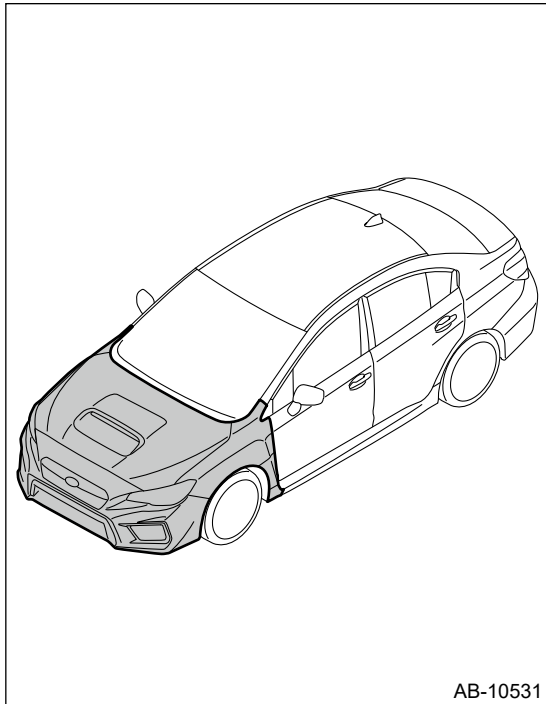
Check for the following, and replace the damaged parts with new parts.

- Control module is cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Driver's airbag module has been activated.
- Knee airbag module has been activated.
- Passenger's airbag module has been activated.
- Side airbag module has been activated.
- Curtain airbag module has been activated.

- Seat belt pretensioner has been activated.
- Lap seat belt pretensioner has been activated.

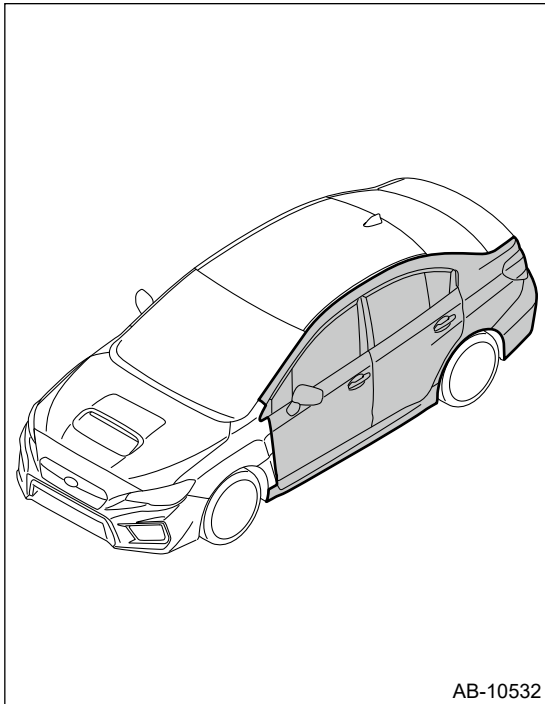
7. FRONT SUB SENSOR

If the section of vehicle as shown in the figure is damaged, check the following items and replace the damaged parts with new parts.



- Front sub sensor is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Driver's airbag module, knee airbag module or passenger's airbag module has been activated.

8. FRONT DOOR IMPACT SENSOR, SATELLITE SAFING SENSOR, SIDE AIRBAG SENSOR AND CURTAIN AIRBAG SENSOR



- Front door impact sensor, side airbag sensor, satellite safing sensor, sensor cover and curtain airbag sensor are cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Side airbag module or curtain airbag module has been activated. (Operating side)




9. ROLL CONNECTOR


Check for the following, and replace the damaged parts such as cracks, deformation, etc. with new parts.

- Combination switch
- Steering roll connector

10. CHECK STEERING SYSTEM

For steering wheel, column assembly - steering, universal joint assembly - steering, and steering gearbox, check the following items, and if there is anything out of standard value, it is considered to be damaged. If so, replace it with a new part.

- Check the following items for the column assembly - steering.  [Ref. to POWER ASSISTED SYSTEM \(POWER STEERING\)>Steering Column>INSPECTION.](#)
 - Mounting conditions and deflection of front and rear, upward and downward directions of the steering wheel and column assembly - steering.
 - Deflection of front and rear, upward and downward directions, and mounting condition to vehicle body of the column assembly - steering. (After a collision, absorbing part of the column assembly - steering may have been operated.)
- Check for deflection and the swing load of the universal joint assembly - steering.  [Ref. to POWER ASSISTED SYSTEM \(POWER STEERING\)>Universal Joint>INSPECTION.](#)
- Check the following items for the steering gearbox. (Except for STi)  [Ref. to POWER ASSISTED SYSTEM \(POWER STEERING\)>Electric Power Steering Gearbox>INSPECTION.](#)
 - Rack sliding resistance and deflection

- Input shaft play
- Rotational resistance of gearbox
- Check the following items for the steering gearbox. (STi)  [Ref. to POWER ASSISTED SYSTEM \(POWER STEERING\)>Steering Gearbox>INSPECTION.](#)
 - Rack sliding resistance and deflection
 - Input shaft play
 - Rotational resistance of gearbox

11. PASSENGER'S SEAT

Caution:

If any of the following applies, replace the pad assembly - front seat cushion & frame assembly - front cushion as a unit. Do not disassemble.

- **The frame assembly - front cushion or the pad assembly - front seat cushion is cracked or deformed.**
 - **Scratches, cracks, or deformation found on the occupant detection system sensor mat or occupant detection control module, or attachment brackets of the control module.**
 - **Harness and/or connector is cracked, deformed or open. Harness wire is exposed.**
1. Check for the following, and replace the damaged parts with new parts.
 - Body or bracket of the seat belt inner - front is scratched, cracked or deformed.
 - Frame assembly - front backrest is cracked or deformed.
 - Headrest assembly for deformation or play
 - If the cover - front cushion and the cover COMPL - front backrest is damaged or frayed, replace the cover with a new part.
 - If the cover - front cushion and the seat heater are replaced, replace the cover hang wire with a new part.
 2. When the passenger's seat cover COMPL - front seat has been removed or replaced, make sure that the occupant detection system operates normally.
 3. Use the Subaru Select Monitor to check whether the passenger's seat belt buckle switch is operating normally.

12. INSPECTION OF OTHER PARTS

Check for the following parts, and replace the damaged parts with new parts.

1. Check the following parts equipped with the direct type connector for damage, and also check each harness for pinch and connector damage. Replace the main harness as a unit if damage is found.
 - Driver's airbag module
 - Knee airbag module
 - Curtain airbag module
 - Pretensioner
2. Check the seat cushion, backrest, slide rail and headrest for installation condition and looseness.
3. If any break or fray is found in the cover COMPL - front backrest of the driver's seat or passenger's seat, the side airbag system may not operate normally. In this case, replace the cover COMPL - front backrest with a new part.