

Inspection Locations after a Collision

AIRBAG SYSTEM

3. Inspection Locations after a Collision

A: REPLACEMENT

Replace the following parts if the airbag has been activated.

1. FRONT COLLISION

- 1) Driver's airbag module
- 2) Passenger's airbag module
- 3) Driver's seat belt (pretensioner)
- 4) Driver's seat belt (lap seat belt pretensioner)
- 5) Passenger's seat belt (pretensioner)
- 6) Passenger's seat belt (lap seat belt pretensioner)
- 7) Airbag control module
- 8) Front sub sensor (right and left)
- 9) Roll connector
- 10) Passenger's side seat cushion pad and frame assembly
- 11) Instrument panel (for integrating with passenger's airbag module)
- 12) Curtain airbag module (when activated)

2. SIDE COLLISION

- 1) Airbag control module
- 2) Side airbag module (operating side)
- 3) Side airbag sensor (operating side)
- 4) Front door impact sensor (operating side)
- 5) Curtain airbag module (operating side)
- 6) Curtain airbag sensor (operating side)
- 7) Driver's seat belt (pretensioner) (operating side)
- 8) Driver's seat belt (lap seat belt pretensioner) (operating side)
- 9) Passenger's seat belt (pretensioner) (operating side)
- 10) Passenger's seat belt (lap seat belt pretensioner) (operating side)

3. INSPECTION OF OTHER PARTS

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

- 1) Steering wheel and steering shaft

Check the steering shaft for mounting conditions and deflection of front and rear, upward and downward directions, and deflection of front and rear direction with tilt lever released. (After a collision, absorbing part of steering shaft may have been operated.)

- 2) Check the direct type connector of driver's airbag module, curtain airbag module, and pretensioner for damage, and also check each harness for pinching and connector damage. Replace the main harness as an assembly if damage is found.

- 3) Check the seat cushion, backrest, seat rail and headrest for installing condition and play.

- 4) If any break or fray is found in the backrest cover of the driver's seat or passenger's seat, replace the backrest cover with a new part because the side airbag system may not operate normally if no care is made.

- 5) For the passenger's seat, replace the seat cushion pad frame assembly with a new part if the seat cushion frame assembly is deformed or cracked.

- 6) If there are tears or loosening in the passenger side seat cushion cover, it may interfere with the proper operation of the occupant detection system. Replace with a new cushion cover.

- 7) Be sure to perform the system calibration for the occupant detection system after removing or replacing the passenger seat cushion cover. If system adjustment is not performed, the occupant detection system may not function properly. <Ref. to OD(diag)-18, OPERATION, System Calibration (Rezeroing).>

- 8) Use the Subaru Select Monitor to check the front right seat belt buckle switch is operating normally.

B: 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

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

1. Replace the following parts with new ones.

- Airbag control module
- Driver's airbag module assembly
- Passenger's airbag module assembly
- Curtain airbag module assembly (when activated)
- Seat belt pretensioner assembly (left and right)
- Lap seat belt pretensioner assembly (left and right)
- Front sub sensor (right and left)
- Sensor cover plate (left and right)
- Steering shaft assembly

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

- Steering wheel assembly
- Steering support beam assembly
- Column cover
- Knee protector
- Instrument panel harness and connector on body side

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 assembly
- Passenger's airbag module assembly
- Curtain airbag module assembly (left and right)
- Seat belt pretensioner assembly (left and right)
- Lap seat belt pretensioner assembly (left and right)
- Front sub sensor (right and left)
- Sensor cover plate (left and right)
- Instrument panel assembly (because it is integrated with passenger's airbag module)

3) No frontal collision

Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.

2. 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 assembly
- Passenger's airbag module assembly
- Curtain airbag module assembly (when activated)
- Seat belt pretensioner assembly (left and right)
- Lap seat belt pretensioner assembly (left and right)
- Front sub sensor (right and left)
- Sensor cover plate (left and right)
- Instrument panel assembly (because it is integrated with passenger's airbag module)

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

- Steering support beam assembly
- Instrument panel harness and connector on body side

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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 assembly
- Passenger's airbag module assembly
- Curtain airbag module assembly (left and right)
- Seat belt pretensioner assembly (left and right)
- Lap seat belt pretensioner assembly (left and right)
- Front sub sensor (right and left)
- Sensor cover plate (left and right)
- Instrument panel assembly (because it is integrated with passenger's airbag module)

3) No frontal collision

Visually inspect the airbag modules for damage or contamination and replace any faulty part with a new one.

3. SIDE AIRBAG MODULE

1) Side impact (side airbag activated)

1. Replace the following parts with new ones.

- Airbag control module
- Front door impact sensor
- Side airbag module assembly
- Side airbag sensor
- Curtain airbag module assembly
- Curtain airbag sensor
- Seat belt pretensioner assembly
- Lap seat belt pretensioner assembly
- Backrest pad assembly
- Backrest frame assembly
- Backrest cover assembly

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

- Headrest assembly
- Headrest lock bushing
- Outer slide rail
- Inner slide rail
- Seat hinge cover
- Seat lifter lever
- Reclining lever
- Side airbag harness and connector on body side

2) Side impact (side airbag 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.

- Backrest pad assembly
- Backrest frame assembly
- Backrest cover assembly
- Front door impact sensor
- Side airbag module assembly
- Side airbag sensor
- Curtain airbag module assembly
- Curtain airbag sensor
- Seat belt pretensioner assembly
- Lap seat belt pretensioner assembly

3) No side impact

Visually inspect the airbag modules for contamination and replace any faulty part with a new one.

4. CURTAIN AIRBAG MODULE

1) Side impact (curtain airbag activated)

1. Replace the following parts with new ones.

- Airbag control module
- Curtain airbag module assembly
- Front door impact sensor
- Side airbag sensor
- Curtain airbag sensor
- Seat belt pretensioner assembly
- Lap seat belt pretensioner assembly
- Roof trim
- Each pillar trim
- Airbag bracket (model with sunroof)

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

- Assist grip
- Assist grip bracket
- Curtain airbag harness and connector on body side.

2) Side impact (side airbag 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.

- Roof trim
- Each pillar trim
- Curtain airbag module assembly
- Seat belt pretensioner assembly
- Lap seat belt pretensioner assembly
- Front Door Impact Sensor
- Side airbag sensor
- Curtain airbag sensor

3) No side impact

Visually inspect the airbag covers for damage or contamination and replace any faulty part with a new one.

5. AIRBAG CONTROL MODULE

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

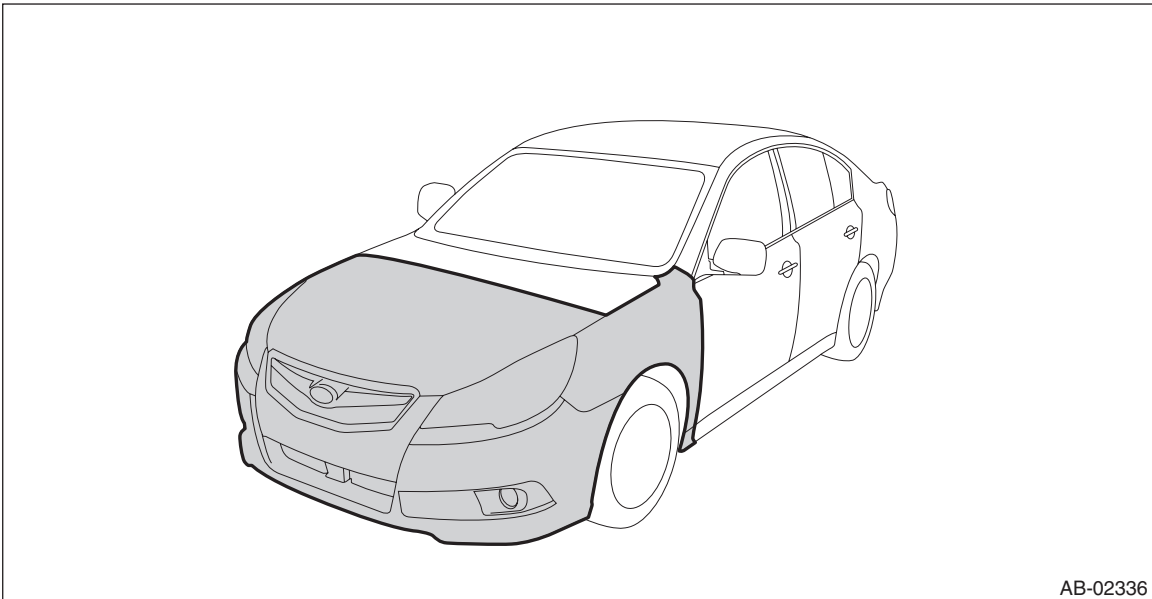
- Control module is cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Driver's airbag has been activated.
- Passenger's airbag has been activated.
- Side airbag has been activated.
- Curtain airbag has been activated.
- Seat belt pretensioner has been activated.
- Lap seat belt pretensioner has been activated.

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6. FRONT SUB SENSOR

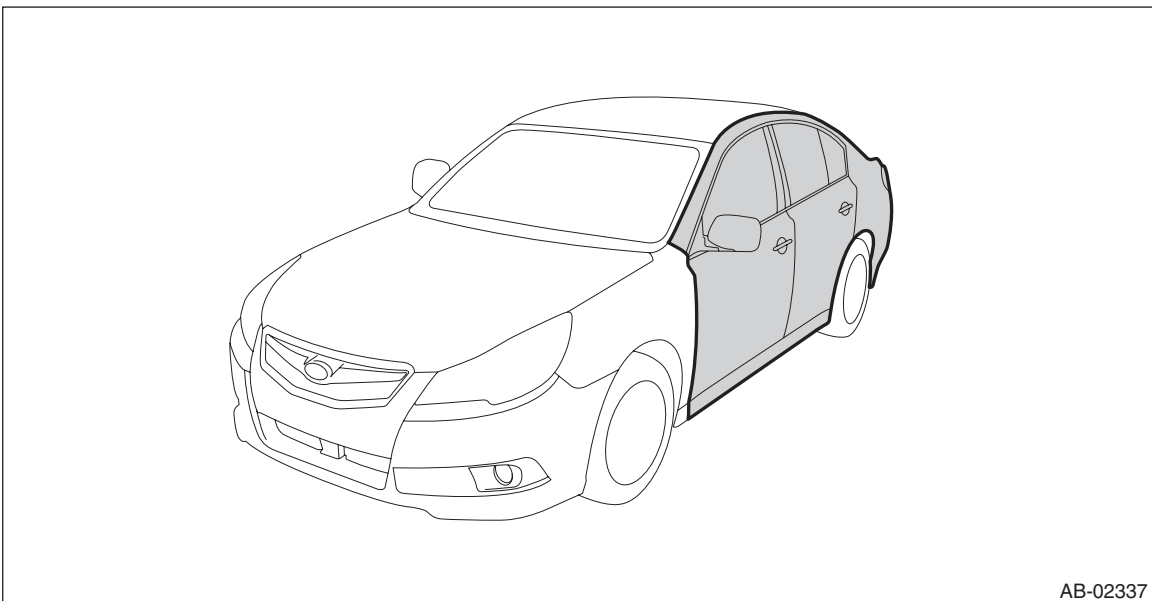
If the section of vehicle as shown in the figure is damaged, check the following items and replace the damaged parts with new parts.



- Front sub sensor is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Airbag has been activated.

7. FRONT DOOR IMPACT SENSOR, SIDE AIRBAG SENSOR AND CURTAIN AIRBAG 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 door impact sensor, side airbag sensor and curtain airbag sensor are cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched, cracked or deformed.
- Front door impact sensor, side airbag or curtain airbag has been activated. (operating side)

8. ROLL CONNECTOR

Check the following items and replace any damaged, cracked, or deformed parts with new parts.

- Combination switch
- Steering roll connector

9. STEERING SHAFT AND STEERING WHEEL

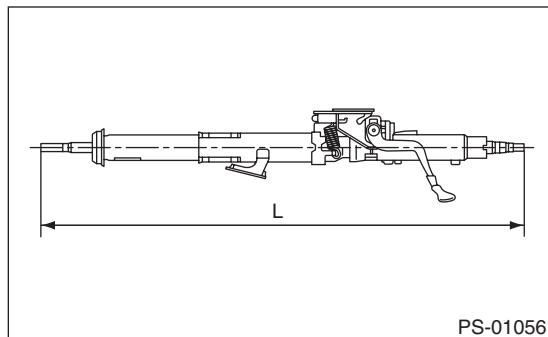
Check the following items, and if there is anything out of standard value, it is considered to be damaged. If so, replace it with a new part.

- Measure the whole length of the steering column.

Standard: Overall length L

Tilt and telescopic column (measure while minimized)

$816.9^{+1.5}_{-1.5}$ mm ($32.16^{+0.059}_{-0.059}$ in)



- Check the steering wheel deflection in axial and vertical directions.

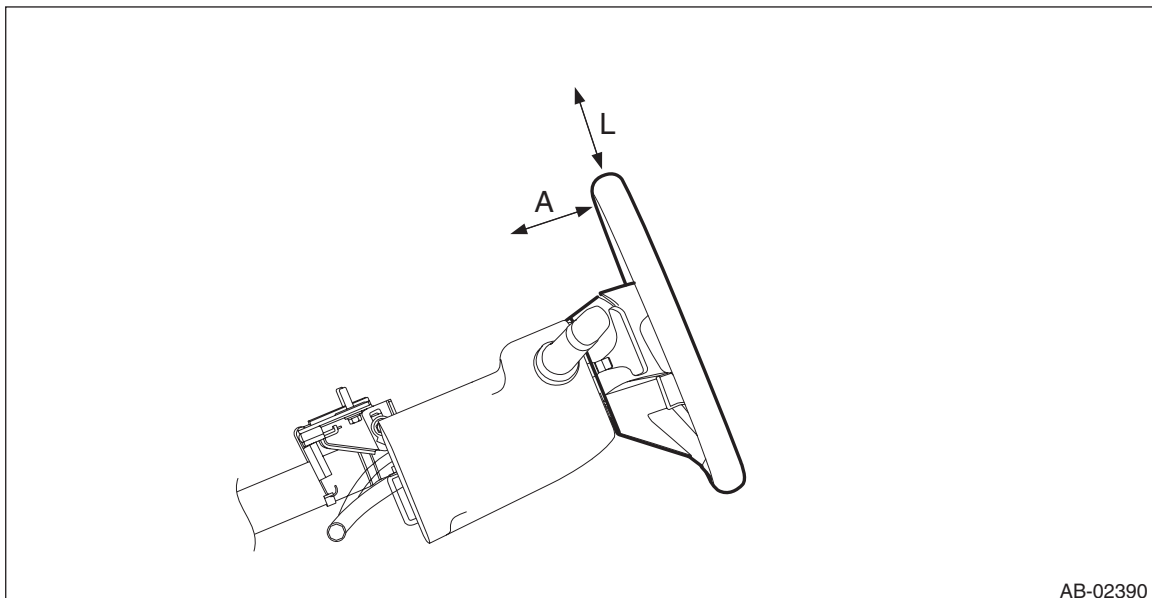
Specification:

Axial deflection A (deflection of steering wheel)

Less than 6 mm (0.24 in)

Vertical deflection L (runout of steering wheel)

Less than 17 mm (0.68 in)



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10.PASSENGER'S SEAT

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

- Seat belt buckle body or bracket is scratched, cracked or deformed.
- Backrest frame for crack or deformation
- Headrest for deformation or play
- If the seat cushion cover and seat backrest cover is scratched or coming loose, replace with a new cover and readjust the system. <Ref. to OD(diag)-18, OPERATION, System Calibration (Rezeroing).>

CAUTION:

If any of the following applies, replace the seat cushion pad and frame assembly. Do not disassemble.

- **Cracks or deformation found in the seat cushion frame or seat cushion pad.**
- **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.**

2) After checking the installing condition of passenger's seat, perform the system adjustment of occupant detection system. <Ref. to OD(diag)-18, OPERATION, System Calibration (Rezeroing).>