SRS AIRBAG

PRECAUTION

CAUTION:

- The LEXUS IS 300 is equipped with SRS, which comprises a driver airbag, front passenger airbag, side airbag and curtain shield airbag. Failure to carry out service operations in the correct sequence could cause the SRS to unexpectedly deploy during servicing, possibly leading to a serious accident. Further, if a mistake is made in servicing the SRS, it is possible that the SRS may fail to operate when required. Before performing servicing (including removal or installation of parts, inspection or replacement), be sure to read the following items carefully, then follow the correct procedures described in the repair manual.
- Work must be started 90 seconds after the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery. (The SRS is equipped with a back-up power source so that if work is started within 90 seconds from disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed.)
- Do not expose the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, airbag sensor assembly, front airbag sensor or side and curtain shield airbag sensor assembly directly to hot air or flames.

NOTICE:

- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- Even in cases of a minor collision where the SRS does not deploy, the steering wheel pad, front passenger airbag assembly, side airbag assembly, airbag sensor assembly, front airbag sensor, curtain shield airbag assembly and side and curtain shield airbag sensor assembly should be inspected (See page RS-15, RS-29, RS-43, RS-43, RS-58, RS-69, RS-74 and RS-79).
- Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, airbag sensor assembly, front airbag sensor or side and curtain shield airbag sensor assembly in order to reuse it.
- If the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, airbag sensor assembly, front airbag sensor or side and curtain shield airbag sensor assembly has been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace it with new one.
- Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting the system’s electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- After work on the SRS is completed, perform the SRS warning light check (See page DI-607).
- When the negative (-) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. To avoid erasing the memory in each memory system, never use a back-up power supply from outside the vehicle.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section.
OPERATION

1. STEERING WHEEL PAD (with AIRBAG)
The inflater and bag of the SRS are stored in the steering wheel pad and cannot be disassembled. The inflater contains a squib, igniter charge, gas generator, etc., and inflates the bag when instructed by the airbag sensor assembly.

2. SPIRAL CABLE (in COMBINATION SWITCH)
A spiral cable is used as an electrical joint from the vehicle body side to the steering wheel.

3. FRONT PASSENGER AIRBAG ASSEMBLY
The inflater and bag of the SRS are stored in the front passenger airbag assembly and cannot be disassembled. The inflater contains a squib, igniter charge, gas generator, etc., and inflates the bag when instructed by the airbag sensor assembly.

4. SIDE AIRBAG ASSEMBLY
The inflater and bag of the SRS side airbag are stored in the side airbag assembly and cannot be disassembled. The inflater contains a squib, igniter charge, gas generator, etc., and inflates the bag when instructed by the side and curtain shield airbag sensor assembly.

5. CURTAIN SHIELD AIRBAG ASSEMBLY
The inflater and bag of the SRS are stored in the curtain shield airbag assembly and cannot be disassembled. The inflater contains a squib, igniter charge, gas generator, etc., and inflates the bag when instructed by the airbag sensor assembly.
6. SEAT BELT PRETENSIONER
The seat belt pretensioner system is a component of the front seat outer belt. The pretensioner contains a squib, gas generator, wire, piston, etc., and operates in the event of a frontal collision. The seat belt pretensioner cannot be disassembled.

7. SRS WARNING LIGHT
The SRS warning light is located on the combination meter. It goes on to alert the driver of trouble in the system when a malfunction is detected in the airbag sensor assembly self-diagnosis. In normal operation conditions when the ignition switch is turned to the ON position, the light goes on for about 6 seconds and then goes off.

8. AIRBAG SENSOR ASSEMBLY
The airbag sensor assembly is mounted on the floor inside the console box. The airbag sensor assembly consists of an airbag sensor, safing sensor, diagnosis circuit, ignition control, drive circuit, etc. It receives signals from the airbag sensor, front airbag sensor, side and curtain shield airbag sensor assembly and door side airbag assembly and judges whether the SRS must be activated or not. The airbag sensor assembly cannot be disassembled.

9. FRONT AIRBAG SENSOR
The front airbag sensor is mounted inside each of the side members. The sensor unit is a mechanical type. When the sensor detects deceleration force above a predetermined limit, contact is made in the sensor, sending a signal to the airbag sensor assembly. The front airbag sensor cannot be disassembled.

10. SIDE AND CURTAIN SHIELD AIRBAG SENSOR ASSEMBLY
The side and curtain shield airbag sensor assembly is mounted in the LH and RH center pillars. The side and curtain shield airbag sensor assembly consists of a lateral deceleration sensor, safing sensor, diagnosis circuit, etc. It sends signals to the airbag sensor assembly to judge whether the SRS side and curtain shield airbag must be activated or not. The side and curtain shield airbag sensor assembly cannot be disassembled.
11. SRS CONNECTORS

HINT:
SRS connectors are located as shown in the following illustration.
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Terminal Twin-Lock Mechanism</td>
<td>Connectors 2, 4, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 21, 23</td>
</tr>
<tr>
<td>(2)</td>
<td>Airbag Activation Prevention Mechanism</td>
<td>Connectors 2, 4, 12, 14, 18, 20, 22, 24</td>
</tr>
<tr>
<td>(3)</td>
<td>Electrical Connection Check Mechanism</td>
<td>Connectors 1, 2, 3, 4</td>
</tr>
<tr>
<td>(4)</td>
<td>Half Connection Prevention Mechanism</td>
<td>Connectors 6, 8, 9, 11, 13, 17, 19, 21, 23</td>
</tr>
<tr>
<td>(5)</td>
<td>Connector Twin-Lock Mechanism</td>
<td>Connectors 16</td>
</tr>
</tbody>
</table>

(a) All connectors in the SRS are colored in yellow to distinguish them from other connectors. Connectors having special functions and specifically designed for the SRS are used in the locations shown on the previous page to ensure high reliability. These connectors use durable gold-plated terminals.

(1) **Terminal twin-lock mechanism:**
Each connector has a two-piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent terminals from coming out.

(2) **Airbag activation prevention mechanism:**
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects positive (+) terminal and negative (-) terminal of the squib.
HINT:
The type of connector is shown in the diagram on the previous page.

(3) Electrical connection check mechanism:
This mechanism electrically checks that connectors are connected correctly and completely. The electrical connection check mechanism is designed so that the disconnection detection pin connects with the diagnosis terminals when the connector housing lock is locked.
HINT:
The connectors shown in this illustration are connectors, "1", "2" and "3" in step 8.

(4) Half connection prevention mechanism:
If the connector is not completely connected, the connector is disconnected due to the spring operation to the extent that no continuity exists.

(5) Connector twin-lock mechanism:
With this mechanism connectors (male and female connectors) are locked by 2 locking devices to increase the connection reliability. If the primary lock is incomplete, ribs interfere and prevent the secondary lock.
(b) When the vehicle is involved in a frontal collision in the hatched area (Fig. 1) and the shock is larger than the predetermined level, the SRS is activated automatically. A safing sensor is designed to go on at a smaller deceleration rate than the airbag sensor. As illustrated in Fig. 2, ignition is caused when current flows to the squib, which happens when a safing sensor and the deceleration sensor go on simultaneously. When a deceleration force acts on the sensors, 2 squibs in the driver airbag and front passenger airbag ignite and generate gas. The gas discharging into the driver airbag and front passenger airbag rapidly increases the pressure inside the bags, breaking open the steering wheel pad and instrument panel. Bag inflation then ends, and the bags deflate as the gas is discharged through discharge holes at the bag's rear or side.

12. DISCONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR AND SIDE AND CURTAIN SHIELD AIRBAG SENSOR

(a) While holding both flank sides of the outer, slide the outer to the direction shown by an arrow.

(b) Lock of the connectors is released, then disconnect the connectors.

HINT:
Be sure to hold both flank sides of the outer. If holding the top and bottom sides, it will obstruct disconnection.
13. CONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR AND SIDE AND CURTAIN SHIELD AIRBAG SENSOR

(a) Align the male connector (of the side of sensor) and female connector in the same direction as shown in the illustration and fit in them without rubbing.

(b) As they are fitted in, the outer slides rearward. Press it until the outer returns to its original position again. If fitting stops half way, connectors will separate.

(c) Be sure to insert until they are locked. After fitting in, pull them slightly to check that they are locked. (When locked, make sure that the outer returns to its original position and sound at the time of fitting in can be heard.)

HINT:
- Do not fit in while holding the outer.
- When fitting in, the outer slides. Do not touch it.

14. DISCONNECTION OF SIDE AIRBAG CONNECTOR
(a) Place a finger on the slider.
(b) Slide the slider to release lock.
(c) Disconnect the connector.
15. CONNECTION OF SIDE AIRBAG CONNECTOR

(a) Align a lock part of male connector and a slider of female connector in the same direction as shown in the illustration, fit in them without rubbing.

(b) Be sure to insert until they are locked. After fitting in pull them slightly to check that they are locked. (When locked, make sure that the outer returns to its original position and sound at the time of fitting in can be heard.)

HINT:
- As the slider slides, do not touch it.
- Be careful not to deform the release board. If the release board is deformed, replace it with a new one.
16. DISCONNECTION OF CONNECTORS FOR STEERING WHEEL PAD (with AIRBAG), CURTAIN SHIELD AIRBAG ASSEMBLY AND FRONT PASSENGER AIRBAG ASSEMBLY

(a) Place a finger on the slider.
(b) Slide the slider to release lock.
(c) Disconnect the connector.

Disconnection is completed
17. CONNECTION OF CONNECTORS FOR STEERING WHEEL PAD (with AIRBAG), CURTAIN SHIELD AIRBAG ASSEMBLY AND FRONT PASSENGER AIRBAG ASSEMBLY

(a) Align a lock part of male connector and a slider of female connector in the same direction as shown in the illustration, fit in them without rubbing.

(b) Be sure to insert until they are locked. After fitting in pull them slightly to check that they are locked. (When locked, make sure that the outer returns to its original position and sound at the time of fitting in can be heard.)

HINT:
• As the slider slides, do not touch it.
• Be careful not to deform the release board. If the release board is deformed, replace it with a new one.
STEERING WHEEL PAD AND SPIRAL CABLE

COMPONENTS

- Steering Column Upper Cover
- Spiral Cable
- Steering Wheel
- Steering Column Lower Cover
- Steering Wheel Pad

**Torx Screw**
- 8.8 (90, 78 in.-lbf)
- 50 (510, 37)

**N·m (kgf·cm, ft·lbf)**: Specified torque

SUPPLEMENTAL RESTRAINT SYSTEM - STEERING WHEEL PAD AND SPIRAL CABLE

2005 LEXUS IS300 (RM1140U)

Author: Date: 1929
REMOVAL

HINT:
For step 1 to 4, refer to page SR-13.
1. REMOVE STEERING WHEEL PAD
2. REMOVE STEERING WHEEL
3. REMOVE STEERING COLUMN UPPER AND LOWER COVERS
4. REMOVE SPIRAL CABLE
INSPECTION

1. Vehicle not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following items with
       the steering wheel pad (with airbag) installed in the vehicle.
       Check cuts, minute cracks or marked discoloration on the
       steering wheel pad top surface and in the grooved portion.

2. Vehicle involved in collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following items with
       the steering wheel pad (with airbag) removed from the vehicle.
       - Check cuts, minute cracks or marked discoloration on the
         steering wheel pad top surface and in the grooved portion.
       - Check cuts and cracks in the wire harness, and
         chipping in the connectors.
       - Check the deformation of the horn button contact plate on the steering wheel.

CAUTION:
For removal and installation of the steering wheel pad, see
page SR-13 and SR-25, and be sure to follow the correct procedure.
HINT:
- If the horn button contact plate of the steering wheel is deformed, never repair it. Always replace the steering wheel assembly with a new one.
- There should be no interference between the steering wheel pad and steering wheel, and the clearance should be uniform all the way around when a new steering wheel pad is installed on the steering wheel.
3. **Vehicle involved in collision and airbag is deployed:**

**INSPECT SUPPLEMENTAL RESTRAINT SYSTEM**

(a) Do a diagnostic system check (See page DI-607).

(b) Do a visual check which includes the following items with the steering wheel pad (with airbag) removed from the vehicle.

- Check the deformation on the horn button contact plate of the steering wheel.
- Check the damage on the spiral cable connector and wire harness.

**HINT:**
- If the horn button contact plate of the steering wheel is deformed, never repair it. Always replace the steering wheel assembly with a new one.

- There should be no interference between the steering wheel pad and steering wheel, and the clearance should be uniform all the way around when a new steering wheel pad is installed on the steering wheel.
DISPOSAL

HINT:
When scrapping vehicle equipped with an SRS or disposing of a steering wheel pad (with airbag), always first deploy the airbag in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

- Never dispose of a steering wheel pad which has an undeployed airbag.
- The airbag produces a sizeable exploding sound when it deploys, so perform the operation out-of-doors and where it will not create a nuisance to nearby residents.

When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.

SST 09082-00700

- When deploying an airbag, perform the operation at least 10 m (33 ft) away from the steering wheel pad.
- The steering wheel pad is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a steering wheel pad with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a steering wheel pad with the deployed airbag.

1. AIRBAG DEPLOYMENT WHEN SCRAPPING VEHICLE

HINT:
Have a battery ready as the power source to deploy the airbag.
RS-18
SUPPLEMENTAL RESTRAINT SYSTEM - STEERING WHEEL PAD AND SPIRAL CABLE

(a) Check functioning of the SST.

**CAUTION:**
When deploying the airbag, always use the specified SST: SRS Airbag Deployment Tool.

SST  09082-00700

1. Connect the SST to the battery.
   Connect the red clip of the SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

**HINT:**
Do not connect the yellow connector which will be connected with the supplemental restraint system.

2. Check functioning of the SST.
   Press the SST activation switch, and check that the LED of the SST activation switch lights up.

**CAUTION:**
If the LED lights up when the activation switch is not being pressed, SST malfunction is probable, so definitely do not use the SST.

3. Disconnect the SST from the battery.

(b) Install the SST.

**CAUTION:**
Check that there is no looseness in the steering wheel and steering wheel pad.

1. While turning the steering wheel right/left, remove the 3 screws and column lower cover.

2. Disconnect the airbag connector of the spiral cable.

3. Connect the SST connector to the airbag connector of the spiral cable.

SST  09082-00700

**NOTICE:**
To avoid damaging the connector of the SST and wire harness, do not lock the secondary lock of the twin lock.
(4) Move the SST at least 10 m (33 ft) away from the front of the vehicle.

(5) Close all the doors and windows of the vehicle.

**NOTICE:**
Take care not to damage the SST wire harness.

(6) Connect the SST red clip to the battery positive (+) terminal and the black clip to the negative (-) terminal.

(c) Deploy the airbag.

(1) Confirm that no one is inside the vehicle or within 10 m (33 ft) area around the vehicle.

(2) Press the SST activation switch and deploy the airbag.

**CAUTION:**
- The steering wheel pad is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a steering wheel pad with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a steering wheel pad with the deployed airbag.
- When scrapping a vehicle, deploy the airbag and scrap the vehicle with the steering wheel pad still installed.
- When moving a vehicle for scrapping which has a steering wheel pad with deployed airbag, use gloves and safety glasses.

**HINT:**
The airbag deploys simultaneously as the LED of the SST activation switch lights up.

2. **DEPLOYMENT WHEN DISPOSING OF STEERING WHEEL PAD ONLY**

**NOTICE:**
- When disposing of the steering wheel pad (with airbag) only, never use the customers vehicle to deploy the airbag.
- Be sure to follow the procedure given below when deploying the airbag.

**HINT:**
Have a battery ready as the power source to deploy the airbag.
(a) Remove the steering wheel pad (See page SR-13 ).

CAUTION:
- When removing the steering wheel pad, work must be started 90 seconds after the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.
- When storing the steering wheel pad, keep the upper surface of the pad facing upward.

(b) Remove the connector on the rear surface of the steering wheel pad from the bracket.

(c) Disconnect the engagement of the claw and remove the steering wheel pad cover.

(d) Using a service-purpose wire harness, tie down the steering wheel pad to the disc wheel.

Wire harness: Stripped wire harness section 1.25 mm² or more (0.0019 in² or more).

CAUTION:
If a wire harness which is too thin or some other thing is used to tie down the steering wheel pad, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use which is at least 1.25 mm² (0.0019 in²).

HINT:
To calculate the square of the stripped wire harness section:
Square = \( 3.14 \times (\text{Diameter})^2 \) divided by 4

(1) Install the 2 bolts with the washers in the 2 bolt holes in the steering wheel pad.

Bolt:
L: 35.0 mm (1.387 in.)
M: 6.0 mm (0.236 in.)
Pitch: 1.0 mm (0.039 in.)

NOTICE:
- Tighten the bolts by hand until the bolts become difficult to turn.
- Do not tighten the bolts too much.
(2) Using 3 wire harness, wind the wire harness at least 2 times each around the bolts installed on the left and right sides of the steering wheel pad.

**CAUTION:**
- Tightly wind the wire harness around the bolts so that there is no slack.
- If there is slack in the wire harness, the steering wheel pad may come loose due to the shock when the airbag is deployed. This is highly dangerous.

(3) Face the upper surface of the steering wheel pad upward. Separately tie the left and right sides of the steering wheel pad to the disc wheel through the hub nut holes. Position the steering wheel pad connector so that it hangs downward through a hub hole in the disc wheel.

**CAUTION:**
- Make sure that the wire harness is tight. It is very dangerous when looseness in the wire harness results in the steering wheel pad coming free through the shock from the airbag deploying.
- Always tie down the steering wheel pad with the pad side facing upward. It is very dangerous if the steering wheel pad is tied down with the metal surface facing upward as the wire harness will be cut by the shock from the airbag deploying and the steering wheel pad will be thrown into the air.

**NOTICE:**
The disc wheel will be marked by airbag deployment, so when disposing of the airbag use a redundant disc wheel.

(e) Check functioning of the SST (See step 1-(a)).
SST 09082-00700
(f) Install the SST.

CAUTION:
Place the disc wheel on the level ground.

1. Connect the connector of 2 SST to the steering wheel pad connector.

SST 09082-00700, 09082-00760

NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the disc wheel.

(2) Move the SST to at least 10 m (33 ft) away from the steering wheel pad tied down on the disc wheel.

(g) Cover the steering wheel pad with a cardboard box or tires.

- Covering method using a cardboard box:
  Cover the steering wheel pad with the cardboard box and weight the cardboard box down in 4 places with at least 190 N (20 kg, 44 lb).

Size of cardboard box:
Must exceed the following dimensions:
X = 460 mm (18.11 in.)
Y = 650 mm (25.59 in.)

NOTICE:
- When dimension Y of the cardboard box exceeds the diameter of the disc wheel with tire to which the steering wheel pad is tied, X should be the following size.
  X = 460 mm (18.11 in.) + width of tire
- If a cardboard box smaller than the specified size is used, the cardboard box will be broken by the shock from the airbag deployment.
Covering method using tires:
Place at least 3 tires without disc wheel on top of the
disc wheel with tire to which the steering wheel pad
is tied.

Tire size: Must exceed the following dimensions-
Width: 185 mm (7.87 in.)
Inner diameter: 360 mm (14.17 in.)

CAUTION:
Do not use tires with disc wheels.

NOTICE:
The tires may be marked by the airbag deployment, so use
the redundant tires.

(h) Deploy the airbag.

(1) Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

(2) Check that no one is within 10 m (33 ft) area around
the disc wheel which the steering wheel pad is tied
to.

(3) Press the SST activation switch and deploy the airbag.

HINT:
The airbag deploys simultaneously as the LED of the SST ac-
tivation switch lights up.

(i) Dispose of the steering wheel pad (with airbag).

CAUTION:

• The steering wheel pad is very hot when the airbag is
deployed, so leave it alone for at least 30 minutes af-
ter deployment.

• Use gloves and safety glasses when handling a steer-
ing wheel pad with deployed airbag.

• Always wash your hands with water after completing
the operation.

• Do not apply water, etc. to a steering wheel pad with
deployed airbag.

(1) Remove the steering wheel pad from the disc
wheel.

(2) Place the steering wheel pad in a vinyl bag, tie the
end tightly and dispose of it in the same way as oth-
er general parts disposal.
3. DEPLOYMENT WHEN DISPOSING OF STEERING WHEEL PAD WITH AIRBAG DEPLOYED IN COLLISION

Dispose of the steering wheel pad (with airbag).

CAUTION:

- The steering wheel pad is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- When moving a vehicle for scrapping which has a steering wheel pad with the deployed airbag, use gloves and safety glasses.
- Use gloves and safety glasses when handling a steering wheel pad with deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a steering wheel pad with the deployed airbag.

(1) Remove the steering wheel pad from the steering wheel (See page SR-13).

(2) Place the steering wheel pad in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts disposal.
REPLACEMENT

REPLACEMENT REQUIREMENTS
In the following cases, replace the steering wheel pad, steering wheel or spiral cable.

<table>
<thead>
<tr>
<th>Case</th>
<th>Replacing part</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the airbag has been deployed.</td>
<td>Steering wheel pad</td>
</tr>
<tr>
<td>If the steering wheel pad has been found to be faulty in troubleshooting.</td>
<td>Steering wheel pad</td>
</tr>
<tr>
<td>If the spiral cable has been found to be faulty in troubleshooting.</td>
<td>Spiral cable</td>
</tr>
<tr>
<td>If the steering wheel pad has been found to be faulty during checking items (See page RS-15).</td>
<td>Steering wheel pad</td>
</tr>
<tr>
<td>If the steering wheel has been found to be faulty during checking items (See page RS-15).</td>
<td>Steering wheel</td>
</tr>
<tr>
<td>If the spiral cable has been found to be faulty during checking items (See page RS-15).</td>
<td>Spiral cable</td>
</tr>
<tr>
<td>If the steering wheel pad has been dropped.</td>
<td>Steering wheel pad</td>
</tr>
</tbody>
</table>

CAUTION:
For removal and installation of the steering wheel pad, see page SR-13 and SR-25. Be sure to follow the correct procedure.
INSTALLATION

HINT:
For step 1 to 4, refer to page SR-25.
1. INSTALL SPIRAL CABLE
2. INSTALL STEERING COLUMN UPPER AND LOWER COVERS
3. INSTALL STEERING WHEEL
4. INSTALL STEERING WHEEL PAD
FRONT PASSENGER AIRBAG ASSEMBLY

COMPONENTS

Front Passenger Airbag Assembly

Glove Compartment Door

Center Bracket

Hinge Shaft

N·m (kgf·cm, ft·lbf): Specified torque

5.4 (55, 48 in.-lbf)

20 (205, 15)
REMOVAL
NOTICE:
- If the wiring connector of the SRS is disconnected and the ignition switch is in ON or ACC position, DTCs will be recorded.
- Never use the airbag parts from another vehicle. When replacing parts, replace them with new parts.

1. DISCONNECT FRONT PASSENGER AIRBAG ASSEMBLY CONNECTOR
Open the glove compartment door and disconnect the front passenger airbag assembly connector.
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

2. REMOVE GLOVE COMPARTMENT DOOR
(See page BO-135)

3. REMOVE CENTER BRACKET
Remove the 3 screws and center bracket.

4. REMOVE FRONT PASSENGER AIRBAG ASSEMBLY
(a) Remove the 2 bolts and nuts from the front passenger airbag assembly.
(b) Disconnect the engagement of the claw at 10 positions and remove the front passenger airbag assembly from the instrument panel.

CAUTION:
- Do not store the front passenger airbag assembly with the airbag deployment side facing downward.
- Never disassemble the front passenger airbag assembly.

NOTICE:
When removing the front passenger airbag assembly, take care not to damage the wire harness.
INSPECTION

1. Vehicle not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following item with the front passenger airbag assembly installed in the vehicle.
       Check cuts, minute cracks or marked discoloration on the front passenger airbag assembly and instrument panel.

2. Vehicle involved in collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following items with the front passenger airbag assembly removed from the vehicle.
       • Check cuts, minute cracks or marked discoloration on the front passenger airbag assembly.
       • Check cuts and cracks in the wire harness, and for chipping in the connectors.

       • Check the deformation or cracks on the instrument panel and instrument panel reinforcement.

CAUTION:
For removal and installation of the front passenger airbag assembly, see page RS-28 and RS-38, and be sure to follow the correct procedure.

HINT:
If the instrument panel or instrument panel reinforcement is deformed or cracked, never repair it. Always replace it with a new one.
3. **Vehicle involved in collision and airbag is deployed:**

**INSPECT SUPPLEMENTAL RESTRAINT SYSTEM**

(a) Do a diagnostic system check (See page DI-607).

(b) Do a visual check which includes the following items with the front passenger airbag assembly removed from the vehicle.

- Check the deformation or cracks on the instrument panel and instrument panel reinforcement.
- Check the damage on the connector and wire harness.

**CAUTION:**

For removal and installation of the front passenger airbag assembly, see page RS-28 and RS-38, and be sure to follow the correct procedure.

**HINT:**

If the instrument panel or instrument panel reinforcement is deformed or cracked, never repair it. Always replace it with a new one.
DISPOSAL

HINT:
When scrapping vehicle equipped with an SRS or disposing of a front passenger airbag assembly, always first deploy the airbag in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:
- Never dispose of a front passenger airbag assembly which has an undeployed airbag.
- The airbag produces a sizeable exploding sound when it deploys, so perform the operation out-of-doors and where it will not create a nuisance to nearby residents.
- When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.
- When deploying an airbag, perform the operation at least 10 m (33 ft) away from the front passenger airbag assembly.
- The front passenger airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a front passenger airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a front passenger airbag assembly with the deployed airbag.

1. AIRBAG DEPLOYMENT WHEN SCRAPPING VEHICLE

HINT:
Have a battery ready as the power source to deploy the airbag.
(a) Check functioning of the SST (See page RS-17).
SST 09082-00700
(b) Disconnect the front passenger airbag assembly connector.
Open the glove compartment door and disconnect the front passenger airbag assembly connector.

**NOTICE:**
When handling the airbag connector, take care not to damage the airbag wire harness.

(c) Install the SST.
1. Connect the connector of 2 SST to the front passenger airbag assembly connector.
   SST 09082-00700, 09082-00760

**NOTICE:**
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

   (2) Move the SST to at least 10 m (33 ft) away from the front of the vehicle.
   (3) Close all the doors and windows of the vehicle.

**NOTICE:**
Take care not to damage the SST wire harness.

   (4) Connect the SST red clip to the battery positive (+) terminal and the black clip to the negative (-) terminal.

(d) Deploy the airbag.
1. Check that no one is inside the vehicle or within 10 m (33 ft) area around the vehicle.
2. Press the SST activation switch and deploy the airbag.

**CAUTION:**
- The front passenger airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a front passenger airbag assembly with deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a front passenger airbag assembly with deployed airbag.
- When moving a vehicle for scrapping which has a front passenger airbag assembly with deployed airbag, use gloves and safety glasses.
HINT:
The airbag deploys simultaneously as the LED of the SST activation switch light up.

2. DEPLOYMENT WHEN DISPOSING OF FRONT PASSENGER AIRBAG ASSEMBLY ONLY

NOTICE:
- When disposing of the front passenger airbag assembly only, never use the customer’s vehicle to deploy the airbag.
- Be sure to follow the procedure given below when deploying the airbag.

HINT:
Have a battery ready as the power source to deploy the airbag.

(a) Remove the front passenger airbag assembly
(See page RS-28).

CAUTION:
- When removing the front passenger airbag assembly, work must be started 90 seconds after the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.
- When storing the front passenger airbag assembly, keep the upper surface of the airbag deployment side facing upward.
(b) Using a service-purpose wire harness for the vehicle, tie down the front passenger airbag assembly to the tire. 

**Wire harness: Stripped wire harness section**

1.25 mm$^2$ or more (0.0019 in.$^2$ or more)

**CAUTION:**

If the front passenger airbag assembly is tied down with too thin wire harness, it may snap. This is highly dangerous. Always use a wire harness which is at least 1.25 mm$^2$ (0.0019 in.$^2$).

**HINT:**

To calculate the square of the stripped wire harness section:

\[
\text{Square} = 3.14 \times (\text{Diameter})^2 \text{ divided by } 4
\]

---

(1) Pass the wire harness through the installation holes, as shown in the illustration.

(2) Position the front passenger airbag assembly inside the tire with the airbag deployment side facing inside. Tie the front passenger airbag assembly to the tire, as shown in the illustration.

**Tire size: Must exceed the following dimensions**

- **Width:** 185 mm (7.28 in.)
- **Inner diameter:** 360 mm (14.17 in.)

**CAUTION:**

- Make sure that the wire harness is tight. It is very dangerous if looseness in the wire harness results in the front passenger airbag assembly coming free due to the shock from the airbag deploying.
- Always tie down the front passenger airbag assembly with the airbag deployment side facing inside.

**NOTICE:**

The tire will be marked by the airbag deployment, so use a redundant tire.
(c) Check functioning of the SST (See step 1-(a) on page RS-14).
SST 09082-00700

(d) Place the tires.
1. Place at least 2 tires under the tire to which the front passenger airbag assembly is tied.
2. Place at least 2 tires over the tire to which the front passenger airbag assembly is tied. The top tire should have the wheel installed.

3. Tie the tires together with the 2 wire harness.

CAUTION:
Make sure that the wire harness is tight. It is very dangerous if loose wire harness result in the tires coming free due to the shock from the airbag deploying.

HINT:
Place the SST connector and wire harness inside tires. Provide at least 1 m (3 ft) of slack for the wire harness.

(e) Install the SST.
Connect the connector of 2 SST to the front passenger airbag assembly connector.
SST 09082-00700, 09082-00760

NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(f) Deploy the airbag.
1. Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.
2. Check that no one is within 10 m (33 ft) area around the tire which the front passenger airbag assembly is tied to.
3. Press the SST activation switch and deploy the airbag.

HINT:
The airbag deploys simultaneously as the LED of the SST activation switch lights up.
(g) Dispose of the front passenger airbag assembly.

**CAUTION:**
- The front passenger airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a front passenger airbag assembly with deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a front passenger airbag assembly with deployed airbag.

1. Remove the front passenger airbag assembly from the tire.
2. Place the front passenger airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts.

3. DEPLOYMENT WHEN DISPOSING OF FRONT PASSENGER AIRBAG ASSEMBLY WITH AIRBAG DEPLOYED IN COLLISION

Dispose of the front passenger airbag assembly.

**CAUTION:**
- The front passenger airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Using gloves and safety glasses when handling a front passenger airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a front passenger airbag assembly with the deployed airbag.

1. Remove the front passenger airbag assembly from the instrument panel (See page BO-139).
2. Place the front passenger airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way so as other general parts disposal.
REPLACEMENT
REPLACEMENT REQUIREMENTS
In the following cases, replace the front passenger airbag assembly, instrument panel or instrument panel reinforcement.

<table>
<thead>
<tr>
<th>Case</th>
<th>Replacing part</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the airbag has been deployed.</td>
<td>Front passenger airbag assembly</td>
</tr>
<tr>
<td>If the front passenger airbag assembly has been found to be faulty in troubleshooting.</td>
<td>Front passenger airbag assembly</td>
</tr>
<tr>
<td>If the front passenger airbag assembly has been found to be faulty during checking items (See page RS-29).</td>
<td>Front passenger airbag assembly</td>
</tr>
<tr>
<td>If the instrument panel has been found to be faulty during checking items (See page RS-29).</td>
<td>Instrument panel</td>
</tr>
<tr>
<td>If the instrument panel reinforcement has been found to be faulty during checking items (See page RS-29).</td>
<td>Instrument panel reinforcement</td>
</tr>
<tr>
<td>If the front passenger airbag assembly has been dropped.</td>
<td>Front passenger airbag assembly</td>
</tr>
</tbody>
</table>

**CAUTION:**
For replacement of the front passenger airbag assembly, see page RS-28 and RS-38. Be sure to follow the correct procedure.
INSTALLATION

NOTICE:
Never use airbag parts from another vehicle. When replacing parts, replace them with new parts.

1. INSTALL FRONT PASSENGER AIRBAG ASSEMBLY
Connect the engagement of the claw at 10 positions and install the front passenger airbag assembly to the instrument panel with the 2 bolts and nuts.
   Torque:
   Bolt: 20 N·m (205 kgf·cm, 15 ft·lbf)
   Nut: 5.4 N·m (55 kgf·cm, 48 in·lbf)

   NOTICE:
   • Make sure that the front passenger airbag assembly is installed with the specified torque.
   • When installing the front passenger airbag assembly, take care that the wiring does not interfere with other parts and is not pinched between other parts.
   • If the front passenger airbag assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the front passenger airbag assembly with a new one.

2. INSTALL CENTER BRACKET
Install the center bracket with the 3 screws.

3. INSTALL GLOVE COMPARTMENT DOOR
(See page BO-149)

4. CONNECT FRONT PASSENGER AIRBAG ASSEMBLY CONNECTOR
SIDE AIRBAG ASSEMBLY

COMPONENTS

Power adjuster type:

- Front Seat Cushion
- Inner Shield

Manual adjuster type:

- Hog Ring

Seat Track Cover

37 (375, 27)

Seatback Cover

43 (440, 32)

Headrest

Headrest Support

Seatback Assembly

Side Airbag Assembly

Front Seat Airbag Door

Cover

Hog Ring

4.7 (48, 42 in.-lbf)

43 (440, 32)

Seat Cushion Assembly

37 (375, 27)

Manual adjuster type:

- Front Seat Cushion Shield

Power adjuster type:

Manual adjuster type:

Reclining Adjuster Knob

Power Seat Switch Knob

N·m (kgf·cm, ft·lbf) : Specified torque

♦ Non-reusable part
REMOVAL

NOTICE:
- If the wiring connector of the SRS is disconnected and the ignition switch is at ON or ACC position, DTCs will be recorded.
- Never use the airbag parts from another vehicle. When replacing parts, replace them with new parts.

1. REMOVE FRONT SEAT
   (a) Remove the 2 seat track covers and 4 bolts.
   (b) Disconnect the connectors under the front seat.

   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (c) Remove the front seat.

2. REMOVE HEADREST

3. REMOVE FRONT SEAT AIRBAG DOOR
   (a) Using a screwdriver, remove the 2 covers.
   HINT:
   Tape the screwdriver tip before use.
   (b) Remove the 2 bolts.
   (c) Slide up the front seat airbag door and remove it.

4. Power adjuster type:
   REMOVE POWER SEAT SWITCH KNOBS

5. Manual adjuster type:
   REMOVE RECLINING ADJUSTER KNOB
   Remove the screw and reclining adjuster knob.
6. Power adjuster type:
   **REMOVE FRONT SEAT CUSHION SHIELD**
   Remove the 4 screws and front seat cushion shield.

7. Manual adjuster type:
   **REMOVE FRONT SEAT CUSHION SHIELD**
   Remove the 3 screws and front seat cushion shield.

8. Power adjuster type:
   **REMOVE FRONT SEAT CUSHION INNER SHIELD**
   Remove the 2 screws and front seat cushion inner shield.

9. Manual adjuster type:
   **REMOVE FRONT SEAT CUSHION INNER SHIELD**
   Remove the 2 screws and front seat cushion inner shield.

10. **DISCONNECT WIRE HARNESS FOR SIDE AIRBAG ASSEMBLY FROM SEAT CUSHION ASSEMBLY**
    (a) Remove the band clamps.
    (b) Pull out the wire harness of the side airbag assembly and seat heater (w/ seat heater).
11. **REMOVE SEATBACK ASSEMBLY**
(a) Remove the LH reclining adjuster inside cover set screw.
(b) Disconnect the wire harness of the side airbag assembly from the LH reclining adjuster inside cover.
(c) Remove the 3 hog rings.
(d) Remove the 4 bolts and move the seatback assembly a little upward.
**NOTICE:**
*Do not apply unnatural force to the airbag wire harness.*
(e) Remove the seatback assembly.
**NOTICE:**
*Take care not to let the airbag wire harness catch on the seat adjuster assembly, as this can damage the airbag wire harness.*
INSPECTION

1. Vehicle not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following item with
       the seatback assembly installed in the vehicle.
       Check for cuts, minute cracks or marked discoloration of
       the front seat airbag door.

2. Vehicle involved in collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following items with
       the seatback assembly removed from the vehicle.
       Check cuts and cracks of the side airbag assembly.
       Check for cuts, minute cracks or marked discoloration of
       the front seat airbag door.
       Check cuts and cracks in the wire harness, and
       chipping in the connectors.

   CAUTION:
   For removal and installation of the seatback assembly, see
   page RS-40 and RS-52. Be sure to follow the correct pro-
   cedure.

3. Vehicle involved in collision and airbag is deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Do a diagnostic system check (See page DI-607).
   (b) Do a visual check which includes the following items with
       the seatback assembly removed from the vehicle.
       Check the seatback installation part of the seat ad-
       juster.
       Check the damage to the connector and wire har-
       ness.

   CAUTION:
   For removal and installation of the seatback assembly, see
   page RS-40 and RS-52. Be sure to follow the correct pro-
   cedure.

HINT:
If the seat adjuster is deformed, never repair it. Always replace
it with a new one.
DISPOSAL

HINT:
When scrapping vehicles equipped with an SRS or disposing of the side airbag assembly always first deploy the airbag in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

- Never dispose of a side airbag assembly which has an undeployed airbag.
- The airbag produces a sizeable exploding sound when it deploys, so perform the operation out of doors and where it will not create a nuisance to nearby residents.

- When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool), perform the operation in a place away from electrical noise.
  SST 09082-00700
- When deploying an airbag, perform the operation at least 10 m (33 ft) away from the airbag assembly.
- The side airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling side airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a side airbag assembly with the deployed airbag.

1. AIRBAG DEPLOYMENT WHEN SCRAPPING VEHICLE

HINT:
Have a battery ready as the power source to deploy the airbag.
(a) Check functioning of the SST (See step 1 - (a) on page RS-17).
  SST 09082-00700
(b) Disconnect the side airbag assembly connector.  
**NOTICE:**  
When handling the airbag connector, take care not to damage the airbag wire harness.

(c) Install the SST.  
(1) Connect the connector of 2 SST to the side airbag assembly connector.  
SST 09082-00700, 09082-00750  
**NOTICE:**  
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(2) Move the SST at least 10 m (33 ft) away from the front of the vehicle.  
(3) Close all the doors and windows of the vehicle.  
**NOTICE:**  
Take care not to damage the SST wire harness.  
(4) Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

(d) Deploy the airbag.  
(1) Check that no one is inside the vehicle or within 10 m (33 ft) area around the vehicle.  
(2) Press the SST activation switch and deploy the airbag.  
**CAUTION:**  
- The side airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.  
- Use gloves and safety glasses when handling a side airbag assembly with the deployed airbag.  
- Do not apply water, etc. to a side airbag assembly with the deployed airbag.  
- Always wash your hands with water after completing the operation.  
- When scrapping a vehicle, deploy the airbag and scrap the vehicle with the side airbag assembly still installed.
HINT:
The airbag deploys simultaneously as the LED of SST activation switch lights up.

2. DEPLOYMENT WHEN DISPOSING OF SIDE AIRBAG ASSEMBLY

NOTICE:
- When disposing of the side airbag assembly only, never use the customer’s vehicle to deploy the airbag.
- Be sure to follow the procedure given below when deploying the airbag.

HINT:
Have a battery ready as the power source to deploy the airbag.

(a) Remove the side airbag assembly.
   (1) Disengage the seatback cover hooks circumference of the side airbag assembly.

(2) Remove the 10 hog rings, headrest supports and seat back cover, as shown in the illustration.
(3) Remove the 2 nuts and side airbag assembly.

CAUTION:
When storing the side airbag assembly, keep the upper surface of the airbag deployment side facing upward.

(b) Using a service-purpose wire harness, tie down the side airbag assembly.

Wire harness: Stripped wire harness section
1.25 mm² or more (0.0019 in² or more)

CAUTION:
If a wire harness which is too thin or some other thing is used to tie down the side airbag assembly, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use which is at least 1.25 mm² (0.0019 in²).

HINT:
To calculate the square of the stripped wire harness section:
Square = 3.14 x (Diameter)² divided by 4

(1) Install the 2 nuts to the side airbag assembly.
(2) Wind the wire harness around the stud bolts of the side airbag assembly, as shown in the illustration.

(3) Position the side airbag assembly inside the tire with the airbag deployment direction facing inside. Tie the side airbag assembly to the tire, as shown in the illustration.

Tire size: Must exceed the following dimensions:
Width: 185 mm (7.28 in.)
Inner diameter: 360 mm (14.17 in.)
CAUTION:
- Make sure the wire harness is tight. It is very dangerous when a loose wire harness results in the side airbag assembly coming free due to the shock from the airbag deploying.
- Always tie down the side airbag assembly with the airbag deployment side facing inside.

NOTICE:
The tire will be marked by the airbag deployment, so when disposing of the airbag use a redundant tire.

(c) Check functioning of the SST
(See step 1 - (a) on page RS-17).
SST 09082-00700

(d) Place the tires.
(1) Place at least 2 tires under the tire to which the side airbag assembly is tied.
(2) Place at least 2 tires over the tire to which the side airbag assembly is tied. The top tire should have the wheel installed.

(3) Tie the tires together with the 2 wire harness.

CAUTION:
Make sure that the wire harness is tight. It is very dangerous when loose wire harness results in the tires coming free due to the shock from the airbag deploying.

HINT:
Place the SST connector and wire harness inside tires. Secure at least 1 m (3 ft) of slack for the wire harness.

(e) Install the SST.
Connect the connector of 2 SST to the side airbag assembly connector.
SST 09082-00700, 09082-00750

NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.
(f) Deploy the airbag.
   (1) Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.
   (2) Check that no one is within 10 m (33 ft) area around the tire which the side airbag assembly is tied to.
   (3) Press the SST activation switch and deploy the airbag.

HINT:
The airbag deploys simultaneously as the LED of the SST activation switch lights up.

(g) Dispose of the side airbag assembly.

CAUTION:
- The side airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a side airbag assembly with the deployed airbag.
- Do not apply water etc. to a side airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.

(1) Remove the side airbag assembly from the tire.
(2) Place the side airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts disposal.
3. DEPLOYMENT WHEN DISPOSING OF SIDE AIRBAG ASSEMBLY WITH AIRBAG DEPLOYED IN COLLISION

Dispose of the side airbag assembly.

CAUTION:
- The side airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a side airbag assembly with deployed airbag.
- Do not apply water, etc. to a side airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.

(1) Remove the side airbag assembly from the seat (See step 2).
(2) Place the side airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts disposal.
REPLACEMENT

REPLACEMENT REQUIREMENTS

In the following cases, replace the seatback assembly or front seat airbag door.

<table>
<thead>
<tr>
<th>Case</th>
<th>Replacing part</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the side airbag has been deployed.</td>
<td>Seatback assembly</td>
</tr>
<tr>
<td>If the side airbag assembly has been found to be faulty in troubleshooting.</td>
<td>Seatback assembly</td>
</tr>
<tr>
<td>If the side airbag assembly has been found to be faulty during checking items (See page RS-43).</td>
<td>Seatback assembly</td>
</tr>
<tr>
<td>If the front seat airbag door has been found to be faulty during checking items (See page RS-43).</td>
<td>Front seat airbag door</td>
</tr>
<tr>
<td>If the seatback assembly has been dropped.</td>
<td>Seatback assembly</td>
</tr>
</tbody>
</table>

CAUTION:
For removal and installation of the seatback assembly, see page RS-40 and RS-52. Be sure to follow the correct procedure.
INSTALLATION

NOTICE:
Never use airbag parts from another vehicle. When replacing parts, replace them with new parts.

1. INSTALL SEATBACK ASSEMBLY
(a) Temporarily install the seatback assembly.

(b) Set the wire harness of the side airbag assembly to the LH reclining adjuster inside cover, as shown.
(c) Install the LH reclining adjuster inside cover set screw.

(d) Install the 4 bolts.  
Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)

NOTICE:
- Make sure that the seatback assembly is installed with the specified torque.
- If the seatback assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the seatback assembly with a new one.
- When installing the seatback assembly, take care it is not pinched between other parts.

(e) Install 3 new hog rings, as shown in the illustration.

HINT:
When installing the hog rings, take care to prevent wrinkles as much as possible.
2. **SET WIRE HARNESS FOR SIDE AIRBAG ASSEMBLY TO SEAT CUSHION ASSEMBLY**
   
   (a) Set the wire harness of the side airbag assembly and seat heater (w/ seat heater).
   
   (b) Install the band clamps, as shown in the illustration.

3. **Power adjuster type:**
   **INSTALL FRONT SEAT CUSHION INNER SHIELD**
   Install the front seat cushion inner shield with the 2 screws.

4. **Manual adjuster type:**
   **INSTALL FRONT SEAT CUSHION INNER SHIELD**
   Install the front seat cushion inner shield with the 2 screws.

5. **Power adjuster type:**
   **INSTALL FRONT SEAT CUSHION SHIELD**
   Install the front seat cushion shield with the 4 screws.

6. **Manual adjuster type:**
   **INSTALL FRONT SEAT CUSHION SHIELD**
   Install the front seat cushion shield with the 3 screws.

7. **Power adjuster type:**
   **INSTALL POWER SEAT SWITCH KNOBS**
8. Manual adjuster type:
   INSTALL RECLINING ADJUSTER KNOB
   Install the reclining adjuster knob with the screw.

9. INSTALL FRONT SEAT AIRBAG DOOR
   (a) Slide down the front seat airbag door and install it.
   (b) Install the front seat airbag door with the 2 screws.
       Torque: 4.7 N·m (48 kgf·cm, 42 in·lbf)

10. INSTALL HEADREST

11. INSTALL FRONT SEAT
    (a) Mount the front seat to the vehicle.
    NOTICE:
    When mounting the seat to the vehicle, take care not to damage the airbag wire harness.
    (b) Connect the connectors under the front seat.
    (c) Slide the front seat to the front most position.
    NOTICE:
    Make sure that seat adjuster locks.
    (d) Tighten the bolts on the rear side temporarily, starting from the bolt on the inner side tighten them completely.
        Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)
    (e) Slide the seat to the rearmost position to install the bolts on the front side.
        Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)
CURTAIN SHIELD AIRBAG ASSEMBLY

COMPONENTS

Curtain Shield Airbag Assembly

N·m (kgf·cm, ft·lbf) : Specified torque

9.8 (100, 86 in.·lbf)

9.8 (100, 86 in.·lbf)

9.8 (100, 86 in.·lbf)
REMOVAL

NOTICE:
- If the wiring connector of the SRS is disconnected and the ignition switch is at ON position, DTCs will be recorded.
- Never use any airbag parts removed from another vehicle. When replacing parts, replace them with new ones.

1. REMOVE ROOF HEADLINING

<table>
<thead>
<tr>
<th>Pages for reference</th>
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<td>BO-156</td>
</tr>
<tr>
<td>Wagon</td>
<td>BO-164</td>
</tr>
</tbody>
</table>

2. In case without removing inflater:

   REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY

   (a) In the order shown in the illustration, remove the bolts and deployment section of the curtain shield airbag assembly.

   (b) Put the removed curtain shield airbag assembly into a clear plastic bag and put it on the instrument panel.

   **CAUTION:**
   Never disassemble the curtain shield airbag assembly.

   **NOTICE:**
   The clear plastic bag is not reusable.

3. REMOVE INSTRUMENT PANEL (See page BO-139)
4. REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY
(a) Disengage the clamp and remove the curtain shield airbag assembly connector.
(b) Disconnect the connector for curtain sealed airbag assembly.
(c) Disengage the claw and disconnect the vehicle wire harness from the bracket of the curtain shield airbag assembly.
(d) In the order shown in the illustration, remove the bolts and curtain shield airbag assembly.
(e) Put the removed curtain shield airbag assembly into a clear plastic bag and keep it in a safe place.

CAUTION:
Never disassemble the curtain shield airbag assembly.

NOTICE:
The protection bag is not reusable.
INSPECTION

1. Vehicles not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Perform a diagnostic system check (See page DI-607).
   (b) Perform a visual check which includes the following item with the curtain shield airbag assembly installed in the vehicle.
       Check for cuts, minute cracks or marked discoloration on the front pillar garnish and roof headlining.

2. Vehicle involved in a collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Perform a diagnostic system check (See page DI-607).

   (b) Perform a visual check which includes the following items with the curtain shield airbag assembly removed from the vehicle.
       • Check for cuts, tears and cracks, or marked discoloration of the curtain shield airbag assembly.
       • Check for cuts and cracks in wire harness, and chipping in connectors.

CAUTION:
For removal and installation of the curtain shield airbag assembly, see page RS-56 and RS-66. Be sure to follow the correct procedure.

3. Vehicle involved in a collision and airbag is deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Perform a diagnostic system check (See page DI-607).
   (b) Perform a visual check which includes the following items with the curtain shield airbag assembly removed from the vehicle.
       • Check for deformation or cracks on the body part to where the curtain shield airbag installed.
       • Check for damage of the connector and wire harness.

HINT:
If the body part is deformed or cracked, replace it.
DISPOSAL

HINT:
When scrapping vehicles equipped with an SRS or disposing of the curtain shield airbag assembly always first deploy the airbag in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:
- Never dispose of a curtain shield airbag assembly which has an undeployed airbag.
- The airbag produces a sizeable exploding sound when it deploys, so perform the operation out-of-doors and where it will not create a nuisance to nearby residents.

- When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool), perform the operation in a place away from electrical noise.
  SST 09082-00700
- When deploying an airbag, perform the operation at least 10 m (33 ft) away from the airbag assembly.
- The side airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling side airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
- Do not apply water, etc. to a side airbag assembly with the deployed airbag.

1. AIRBAG DEPLOYMENT WHEN SCRAPPING VEHICLE

HINT:
Have a battery ready as the power source to deploy the airbag.
(a) Check functioning of the SST (See step 1-(a) on page RS-17).
  SST 09082-00700
(b) Disconnect the curtain shield airbag connector.

**NOTICE:**
When handling the airbag connector, take care not to damage the airbag wire harness.

(c) Install the SST.

1. Connect the connectors of the 2 SST to the airbag connector.

   SST 09082-00700, 09082-00760

   **NOTICE:**
   To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

   2. Move the SST at least 10 m (33 ft) away from the front of the vehicle.

   3. Close all the doors and windows of the vehicle.

   **NOTICE:**
   Take care not to damage the SST wire harness.

   4. Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

(d) Deploy the airbag.

1. Check that no one is inside the vehicle or within 10 m (33 ft) area around the vehicle.

2. Press the SST activation switch and deploy the airbag.

**CAUTION:**
- The curtain shield airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling the curtain shield airbag assembly with the deployed airbag.
- Do not apply water, etc. to the curtain shield airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
- When scrapping a vehicle, deploy the airbag and scrap the vehicle with the curtain shield airbag assembly still installed.
2. DEPLOYMENT WHEN DISPOSING OF CURTAIN SHIELD AIRBAG ASSEMBLY

NOTICE:
- When disposing of the curtain shield airbag assembly only, never use the customer’s vehicle to deploy the airbag.
- Be sure to follow the procedure given below when deploying the airbag.

HINT:
Have a battery ready as the power source to deploy the airbag.
(a) Remove the curtain shield airbag assembly (See page RS-56).

(b) Cut off the deployment section in airbag from inflator.

(c) Using a service-purpose wire harness, tie down the curtain shield airbag assembly to the tire.

Wire harness: Stripped wire harness section 1.25 mm² or more (0.0019 in² or more)

CAUTION:
If a wire harness which is too thin or some other thing is used to tie down the side airbag assembly, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use which is at least 1.25 mm² (0.0019 in²).

HINT:
To calculate the square of the stripped wire harness section:

\[ \text{Square} = 3.14 \times \left( \text{Diameter} \right)^2 \] divided by 4
Position the curtain shield airbag assembly inside the tire with the airbag deployment direction facing inside.

**Tire size:** Must exceed the following dimensions-
- **Width:** 185 mm (7.28 in.)
- **Inner diameter:** 360 mm (14.17 in.)

**CAUTION:**
Make sure the wire harness is tight. It is very dangerous when a loose wire harness results in the curtain shield airbag assembly coming free due to the shock from the airbag deploying.

**NOTICE:**
The tire will be marked by the airbag deployment, so when disposing of the airbag use a redundant tire.

---

(d) Check functioning of the SST (See step 1-(a) on page RS-17).

SST 09082-00700

(e) Place the tires.

**CAUTION:**
Place the tire so that the deployment direction of the curtain shield airbag will be downward.

1. Place at least 2 tires under the tire to which the side airbag assembly is tied.
2. Place at least 2 tires over the tire to which the side airbag assembly is tied. The top tire should have the wheel installed.
3. Tie the tires together with 2 wire harness.

**CAUTION:**
Make sure that the wire harness are tight. It is very dangerous when loose wire harness results in the tires coming free due to the shock from the airbag deploying.

**HINT:**
Place the SST connector and wire harness inside tires. Secure at least 1 m (3 ft) of slack for the wire harness.
(f) Install the SST.
   Connect the connectors of the 2 SST to the curtain shield airbag assembly connector.
   SST  09082-00700, 09082-00760

**NOTICE:**
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.

(g) Deploy the airbag.
   (1) Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.
   (2) Check that no one is within 10 m (33 ft) area around the tire which the side airbag assembly is tied to.
   (3) Press the SST activation switch and deploy the airbag.

**HINT:**
The airbag deploys simultaneously as the LED of the SST activation switch lights up.

(h) Dispose of the curtain shield airbag assembly.

**CAUTION:**
- The curtain shield airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a curtain shield airbag assembly with the deployed airbag.
- Do not apply water etc. to a curtain shield airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.
   (1) Remove the curtain shield airbag assembly from the tire.
   (2) Place the curtain shield airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts disposal.
3. DEPLOYMENT WHEN DISPOSING OF SIDE AIRBAG ASSEMBLY WITH AIRBAG DEPLOYED IN COLLISION

Dispose of the curtain shield airbag assembly.

CAUTION:

- The curtain shield airbag assembly is very hot when the airbag is deployed, so leave it alone for at least 30 minutes after deployment.
- Use gloves and safety glasses when handling a curtain shield airbag assembly with the deployed airbag.
- Do not apply water etc. to a curtain shield airbag assembly with the deployed airbag.
- Always wash your hands with water after completing the operation.

(1) Remove the curtain shield airbag assembly (See page RS-56).
(2) Place the curtain shield airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts disposal.
REPLACEMENT

REPLACEMENT REQUIREMENTS

In the following cases, replace the curtain shield airbag assembly, front pillar garnish and/or roof headlining.

<table>
<thead>
<tr>
<th>Case</th>
<th>Part to be replaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the curtain shield airbag has been deployed.</td>
<td>Curtain shield airbag assembly</td>
</tr>
<tr>
<td>If the curtain shield airbag assembly has been found to be faulty in troubleshooting.</td>
<td>Curtain shield airbag assembly</td>
</tr>
<tr>
<td>If the curtain shield airbag assembly has been found to be faulty during checking items (See page RS-58).</td>
<td>Curtain shield airbag assembly</td>
</tr>
<tr>
<td>If the front pillar garnish has been found to be faulty during the check (See page RS-58).</td>
<td>Front pillar garnish</td>
</tr>
<tr>
<td>If the roof headlining has been found to be faulty during the check (See page RS-58).</td>
<td>Roof headlining</td>
</tr>
<tr>
<td>If the curtain shield airbag assembly has been dropped.</td>
<td>Curtain shield airbag assembly</td>
</tr>
</tbody>
</table>

CAUTION:

For removal and installation of the curtain shield airbag assembly, see page RS-56 and RS-66. Be sure to follow the correct procedure.
INSTALLATION

NOTICE:
Never use airbag parts removed from another vehicle. When replacing parts, replace them with new parts.

1. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY
   (a) In order shown in the illustration, install the curtain shield airbag assembly with the 6 bolts.
   Torque: 9.8 N·m (100 kgf·cm, 86 in.-lbf)
   CAUTION:
   Pay attention not to twist the deployment section of the curtain shield airbag assembly.
   NOTICE:
   • Make sure that the curtain shield airbag assembly is installed with the specified torque.
   • If the curtain shield airbag assembly has been dropped, or any cracks, dents or other defects in the case or connector, replace the curtain shield airbag assembly with a new one.
   • When installing the curtain shield airbag assembly, be careful to prevent it from being pinched between other parts.
   (b) Connect the connector of the curtain shield airbag assembly.

2. INSTALL INSTRUMENT PANEL (See page BO-149)

3. When inflator is installed:
   INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY
   In order shown in the illustration, install the deployment section of the curtain shield airbag assembly with the 4 bolts.
   Torque: 9.8 N·m (100 kgf·cm, 86 in.-lbf)
   CAUTION:
   Pay attention not to twist it.
   NOTICE:
   • Make sure that the curtain shield airbag assembly is installed with the specified torque.
   • When installing the curtain shield airbag assembly, be careful to prevent it from being pinched between other parts.

4. INSTALL ROOF HEADLINING

<table>
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<tr>
<td>Wagon</td>
<td>BO-169</td>
</tr>
</tbody>
</table>
AIRBAG SENSOR ASSEMBLY

COMPONENTS

Center Register Opening Cover
Center Cluster Finish Panel
A/C Control with Radio Receiver Assembly
Floor Shift Lever Knob
Upper Console Panel
Control Position Indicator Plate
Parking Brake Hole Cover
Console Box

Airbag Sensor Assembly
Airbag Sensor Assembly Connector

N·m (kgf·cm, ft·lbf) : Specified torque
REMOVAL

NOTICE:
Do not open the cover or the case of the ECU and various electrical devices unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

HINT:
For step 1 to 8, refer to page BO-139.

1. REMOVE FLOOR SHIFT LEVER KNOB
2. REMOVE UPPER CONSOLE PANEL
3. REMOVE CENTER REGISTER OPENING COVER
4. REMOVE CENTER CLUSTER FINISH PANEL
5. REMOVE LOWER CENTER CLUSTER FINISH PANEL
6. REMOVE A/C CONTROL WITH RADIO RECEIVER ASSEMBLY
7. REMOVE PARKING BRAKE HOLE COVER
8. REMOVE CONSOLE BOX
9. REMOVE CONTROL POSITION INDICATOR PLATE
   (a) Disconnect the connector.
   (b) Disconnect the engagement of the claw at 4 positions and remove the control position indicator plate.

10. REMOVE AIRBAG SENSOR ASSEMBLY
    (a) Disconnect the 3 airbag sensor assembly connectors.

NOTICE:
Disconnect the connectors with the sensor assembly installed.

(b) Using a torx wrench, remove the 3 screws and airbag sensor assembly.
    Torx wrench: T40 (Part No.09042-00020 or locally manufactured tool)
INSPECTION

1. Vehicle not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Do a diagnostic system check (See page DI-607 ).

2. Vehicle involved in collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Do a diagnostic system check (See page DI-607 ).

3. Vehicle involved in collision and airbag is deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Replace the airbag sensor assembly (See page RS-68 ).
REPLACEMENT

REPLACEMENT REQUIREMENTS
In the following cases, replace the airbag sensor assembly.

- If the SRS has been deployed in a collision.
- If the airbag sensor assembly has been found to be faulty in troubleshooting.
- If the airbag sensor assembly has been dropped.

CAUTION:
For removal and installation of the airbag sensor assembly, see page RS-68 and RS-71. Be sure to follow the correct procedure.
INSTALLATION

NOTICE:
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Never reuse the airbag sensor assembly involved in a collision when the airbag has deployed.
- Never repair a sensor in order to reuse it.

HINT:
For step 3 to 10, refer to page BO-149.

1. INSTALL AIRBAG SENSOR ASSEMBLY
   (a) Using a torx wrench, install the airbag sensor assembly with the 3 screws.
      Torx wrench: T40 (Part No.09042-00020 or locally manufactured tool)
      Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)
   (b) Connect the 3 airbag sensor assembly connectors.

   NOTICE:
   - Connection of the connector is done after the sensor assembly has been installed.
   - Make sure the sensor assembly is installed with the specified torque.
   - If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.
   - When installing the sensor assembly, take care that the SRS wiring does not interfere with other parts and is not pinched between other parts.
   - After installing, shake the sensor assembly to check that there is no looseness.

2. INSTALL CONTROL POSITION INDICATOR PLATE
   (a) Connect the engagement of the claw at 4 positions and install the control position indicator plate.
   (b) Connect the connector.

3. INSTALL CONSOLE BOX
4. INSTALL PARKING BRAKE HOLE COVER
5. INSTALL A/C CONTROL WITH RADIO RECEIVER ASSEMBLY
6. INSTALL LOWER CENTER CLUSTER FINISH PANEL
7. INSTALL CENTER CLUSTER FINISH PANEL
8. INSTALL CENTER REGISTER OPENING COVER
9. INSTALL UPPER CONSOLE PANEL
10. INSTALL FLOOR SHIFT LEVER KNOB
FRONT AIRBAG SENSOR
COMPONENTS

Front Airbag Sensor RH

Front Airbag Sensor RH Connector

8.5 (86.7, 75 in.-lbf)

Front Airbag Sensor LH

Front Airbag Sensor LH Connector

8.5 (86.7, 75 in.-lbf)

N·m (kgf·cm, ft-lbf) : Specified torque
REMOVAL

NOTICE:

- If the wiring connector of the SRS is disconnected with the ignition switch in ON or ACC position, DTCs will be recorded.
- Never use any SRS parts removed from another vehicle. When replacing parts, replace them with new one.
- Never reuse the sensor involved in a collision when the SRS has deployed.
- Never repair a sensor in order to reuse it.

REMOVE FRONT AIRBAG SENSOR

(a) Disconnect the front airbag sensor connector.

NOTICE: Disconnect the connector with the sensor assembly installed.

(b) Remove the 2 bolts and front airbag sensor.

(c) Employ the same manner described above to the other side.
**INSPECTION**

1. **VEHICLES NOT INVOLVED IN COLLISION**
   Perform a diagnostic system check (See page DI-607).

2. **VEHICLES INVOLVED IN COLLISION**
   (a) Perform a diagnostic system check (See page DI-607).
   (b) If the front fender of the car or its periphery is damaged, do a visual check for damage to the front airbag sensor, which includes the following items even if the airbag was not deployed:
      - Bracket deformation
      - Paint peeling off the bracket
      - Cracks, dents or chips in the case
      - Cracks, dents, chipping and scratches in the connector
      - Peeling of the label or damage to the serial number
REPLACEMENT

REPLACEMENT REQUIREMENTS

In the following cases, replace the front airbag sensor.

- If the SRS has been deployed in a collision (Replace both the left and right airbag sensors.).
- If the front airbag sensor has been found to be faulty in troubleshooting.
- If the front airbag sensor has been found to be faulty during the check in item (See page RS-74).
- If the front airbag sensor has been dropped.

CAUTION:

For removal and installation of the front airbag sensor, see page RS-73 and RS-76. Be sure to follow the correct procedure.
INSTALLATION

INSTALL FRONT AIRBAG SENSOR

(a) Install the front airbag sensor with the arrow on the sensor facing toward the front of the vehicle.
Torque: 8.5 N·m (86.7 kgf·cm, 75 in.-lbf)

NOTICE:
• Connection of the connector is done after the sensor has been installed.
• Make sure the sensor is installed with the specified torque.
• If the sensor has been dropped, or there are cracks, dents or other defects in the case, brackets or connector, replace the removed sensor with a new one.
• The front sensor is equipped with an electrical connection check mechanism. Be sure to lock this mechanism securely when connecting the connector. If the connector is not securely locked, a malfunction code will be detected by the diagnostic system.

(b) Connect the front airbag sensor connector.
SIDE AND CURTAIN SHIELD AIRBAG SENSOR ASSEMBLY

COMPONENTS

- Front Door Inside Scuff Plate
- Center Pillar Lower Garnish
- Anchor Cover
- Rear Door Inside Scuff Plate
- Front Seat Outer Belt Assembly
- Outer Anchor Cover

N·m (kgf·cm, ft·lbf) : Specified torque

20 (205, 15)
8.8 (90, 78 in·lbf)
44 (450, 33)

SUPPLEMENTAL RESTRAINT SYSTEM - SIDE AND CURTAIN SHIELD AIRBAG SENSOR ASSEMBLY

2005 LEXUS IS300 (RM1140U)

Author: Date: 1993
REMOVAL

NOTICE:
- If the wiring connector of the SRS is disconnected with the ignition switch at ON position, DTC will be recorded.
- Do not open the cover or the case of the ECU and various electrical devices unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

1. REMOVE FRONT AND REAR DOOR INSIDE SCUFF PLATES
2. REMOVE CENTER PILLAR LOWER GARNISH
3. REMOVE FRONT SEAT OUTER BELT ASSEMBLY

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</tbody>
</table>

4. REMOVE SIDE AND CURTAIN SHIELD AIRBAG SENSOR ASSEMBLY

(a) Disconnect the side and curtain shield airbag sensor assembly connector.

NOTICE:
Disconnect the connector with the sensor assembly installed.

(b) Remove the 3 bolts and side and curtain shield airbag sensor assembly.
INSPECTION

1. Vehicle not involved in collision:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Do a diagnostic system check (See page DI-607).

2. Vehicle involved in collision and airbag is not deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Do a diagnostic system check (See page DI-607).

3. Vehicle involved in collision and airbag is deployed:
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Replace the side airbag sensor assembly (See page RS-78).
REPLACEMENT
REPLACEMENT REQUIREMENTS
In the following cases, replace the side and curtain shield airbag sensor assembly.

- If the side and curtain shield airbag sensor assembly has been deployed in a collision.
- If the side and curtain shield airbag sensor assembly has been found to be faulty in troubleshooting.
- If the side and curtain shield airbag sensor assembly has been dropped.

CAUTION:
For removal and installation of the side and curtain shield airbag sensor assembly, see page RS-78 and RS-81. Be sure to follow the correct procedure.
INSTALLATION

NOTICE:
- Never use SRS parts from another vehicle. When replacing parts, replace them with new ones.
- Never reuse the side and curtain shield airbag sensor assembly involved in a collision when the airbag has deployed.
- Never repair a sensor in order to reuse it.

1. INSTALL SIDE AND CURTAIN SHIELD AIRBAG SENSOR ASSEMBLY
   (a) Install the side and curtain shield airbag sensor assembly with the 3 bolts.
      Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)
   (b) Connect the side and curtain shield airbag sensor assembly connector.

   NOTICE:
   - Connection of the connector is done after the sensor assembly has been installed. Make sure the sensor assembly is installed with the specified torque.
   - If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.
   - When installing the sensor assembly, take care that the SRS wiring does not interfere with other parts and is not pinched between other parts.
   - After installation, shake the sensor assembly to check that there is no looseness.

2. INSTALL FRONT SEAT OUTER BELT ASSEMBLY

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</table>

3. INSTALL CENTER PILLAR LOWER GARNISH
4. INSTALL FRONT AND REAR DOOR INSIDE SCUFF PLATES
WIRE HARNESS AND CONNECTOR

LOCATION

Sedan:

- Curtain Shield Airbag Assembly (LH)
- Curtain Shield Airbag Assembly (RH)
- Steering Wheel Pad (with Airbag)
- Front Airbag Assembly (LH)
- Front Airbag Assembly (RH)
- Front Passenger Airbag Assembly
- Side Airbag Assembly (LH)
- Side Airbag Assembly (RH)
- Seat Belt Pretensioner (LH)
- Seat Belt Pretensioner (RH)
- Side Airbag Assembly
- Side and Curtain Shield Airbag Sensor Assembly (LH)
- Side and Curtain Shield Airbag Sensor Assembly (RH)
- Airbag Sensor Assembly
- Combination Meter (Warning Light)
- Spiral Cable
Wagon:

- Front Airbag Sensor (LH)
- Combination Meter (Warning Light)
- Front Airbag Assembly (RH)
- Steering Wheel Pad (with Airbag)
- Curtain Shield Airbag Assembly (LH)
- Side and Curtain Shield Airbag Assembly (LH)
- Side Airbag Sensor Assembly (RH)
- Seat Belt Pretensioner (RH)
- Side and Curtain Shield Airbag Sensor Assembly (LH)
- Seat Belt Pretensioner (LH)
- Side Airbag Sensor Assembly (LH)
- Curtain Shield Airbag Assembly (RH)
- Front Passenger Airbag Assembly
- Side and Curtain Shield Airbag Assembly (RH)
- Seat Belt Pretensioner (RH)
- Side Airbag Sensor Assembly (RH)
INSPECTION

HINT:
The SRS wire harness is integrated with the instrument panel wire harness assembly. All the connectors in the system are a standard yellow color.

1. **Vehicles not involved in collision:**
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   Perform a diagnostic system check (See page DI-607).

2. **Vehicles involved in collision:**
   INSPECT SUPPLEMENTAL RESTRAINT SYSTEM
   (a) Perform a diagnostic system check (See page DI-607).
   (b) Check breaks in all wires of the SRS wire harness, and exposed conductors.
   (c) Check to see if the SRS wire harness connectors are cracked or chipped.
REPLACEMENT
In the following cases, replace the wire harness or connector.

- If any part of the SRS wire harness or any connector has been found to be faulty in troubleshooting.
- If any part of the SRS wire harness or any connector has been found to be faulty during checking items (See page RS-84).

CAUTION:
If the wire harness used in the SRS is damaged, replace the whole wire harness assembly.