

SUPPLEMENTAL RESTRAINT SYSTEM (From August, 2003)

60091-01

PRECAUTION

CAUTION:

- 4RUNNER is equipped with SRS, which consists of 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 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 indicated in the repair manual.
- Wait at least 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 after disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed.)
- Do not expose the horn button assy, instr pnl pass l/door airbag assy, airbag sensor assy center, airbag front sensor, front seat airbag assy, side airbag sensor assy, curtain shield airbag assy, airbag sensor rear or seat position airbag sensor directly to hot air or flames.

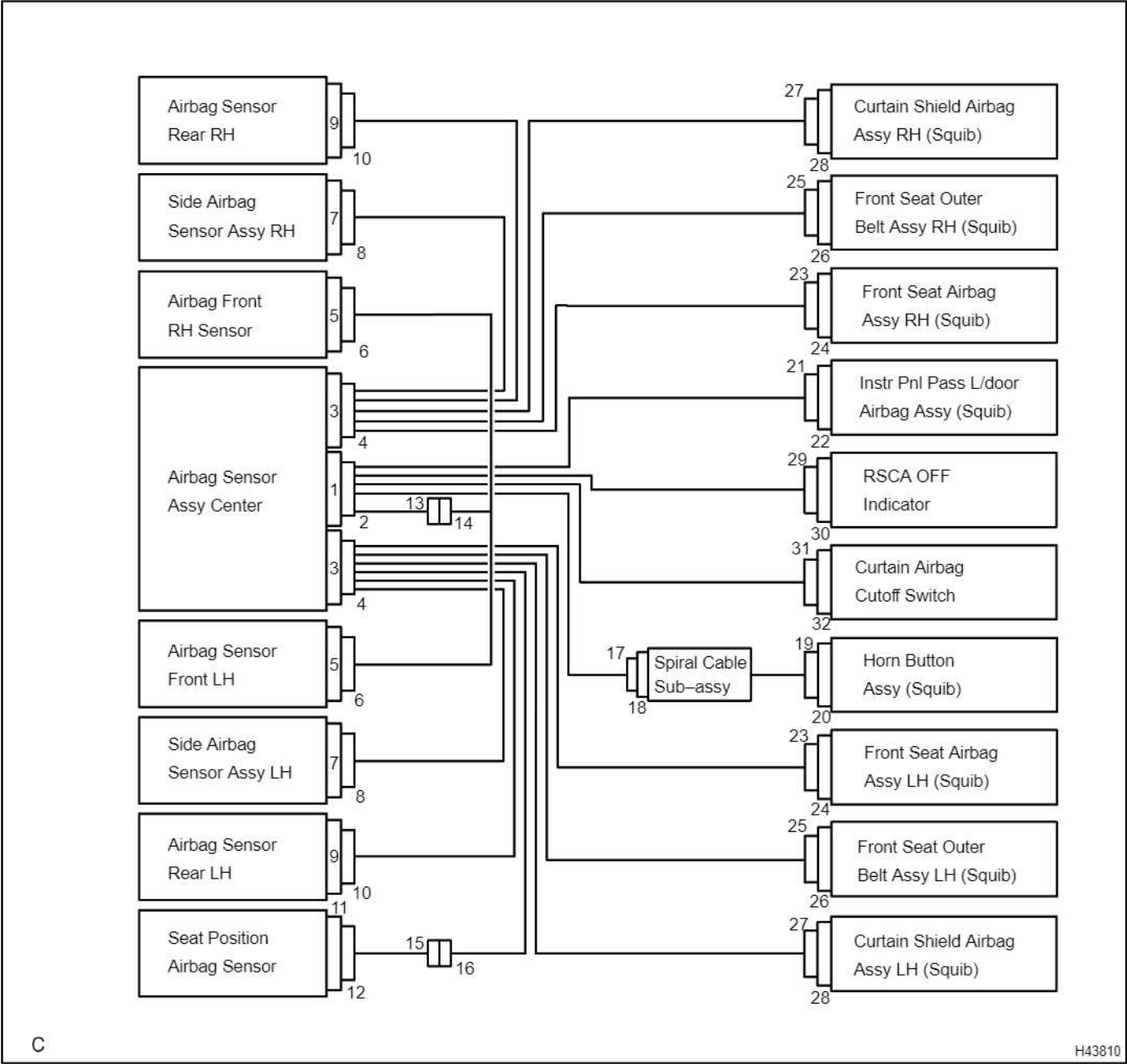
NOTICE:

- Malfunction symptoms of the SRS are difficult to confirm, so DTCs are the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect DTCs before disconnecting the battery.
- Even in the case of a minor collision when the SRS does not deploy, the horn button assy, instr pnl pass l/door airbag assy, airbag sensor assy center, airbag front sensor, front seat airbag assy, side airbag sensor assy, curtain shield airbag assy, airbag sensor rear and seat position airbag sensor should be inspected (see page 60-10).
- Before repair work, remove the airbag sensor if any kind of shock is likely to occur to the airbag sensor during the operation.
- Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.
- Never disassemble or repair the horn button assy, instr pnl pass l/door airbag assy, airbag sensor assy center, airbag front sensor, front seat airbag assy, side airbag sensor assy, curtain shield airbag assy, airbag sensor rear or seat position airbag sensor in order to reuse it.
- If the horn button assy, instr pnl pass l/door airbag assy, airbag sensor assy center, airbag front sensor, front seat airbag assy, side airbag sensor assy, curtain shield airbag assy, airbag sensor rear or seat position airbag sensor has been dropped, or if there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.
- Use a volt/ohmmeter with high impedance (10 k Ω /V minimum) for troubleshooting the electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions in the caution.
- After work on the SRS is completed, perform the SRS warning light check (see page 05-1238).
- 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 system as it was 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 INTRODUCTION section.

1. SRS CONNECTORS

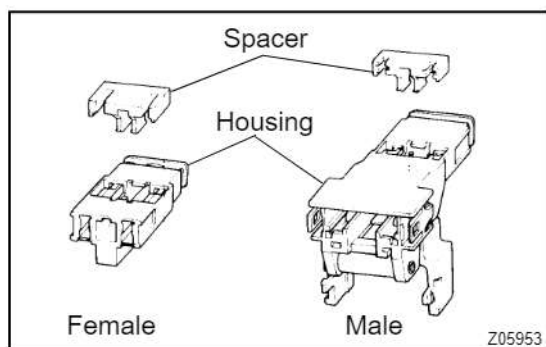
HINT:

SRS connectors are located as shown in the following illustration.

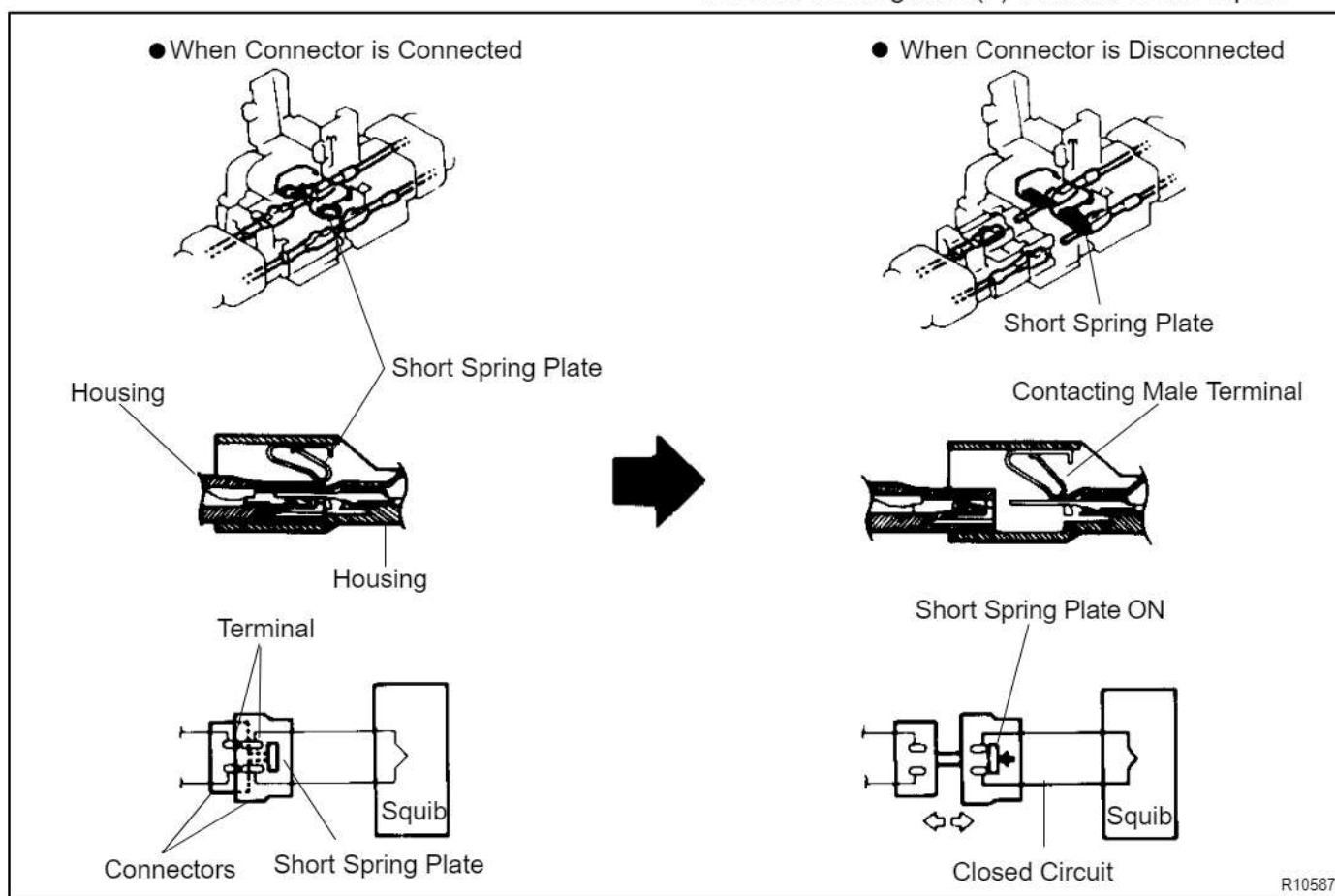


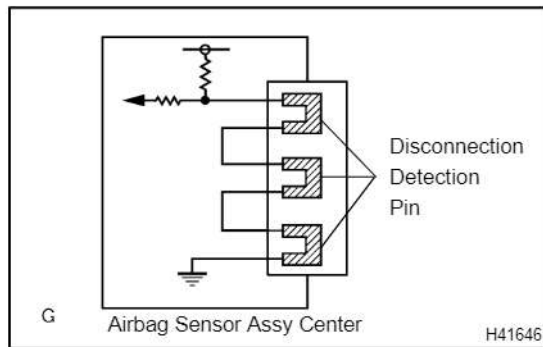
No.	Connector Type	Application
(1)	Terminal Twin-Lock Mechanism	Connectors 2, 4, 6, 8, 10, 12, 13, 14, 15, 16, 17, 23, 24, 31
(2)	Airbag Activation Prevention Mechanism	Connectors 2, 4, 18, 20, 22, 24, 26, 28
(3)	Electrical Connection Check Mechanism	Connectors 1, 2, 3, 4
(4)	Half Connection Prevention Mechanism	Connectors 6, 8, 10, 14, 23
(5)	Connector Lock Mechanism	Connectors 19, 25, 27

- (a) All connectors in the SRS are colored yellow to distinguish them from other connectors, except the seat position airbag sensor connector. Some connectors have special functions, and are specially designed for the SRS. These connectors use durable gold-plated terminals, and are placed in the locations shown on the previous page to ensure high reliability.

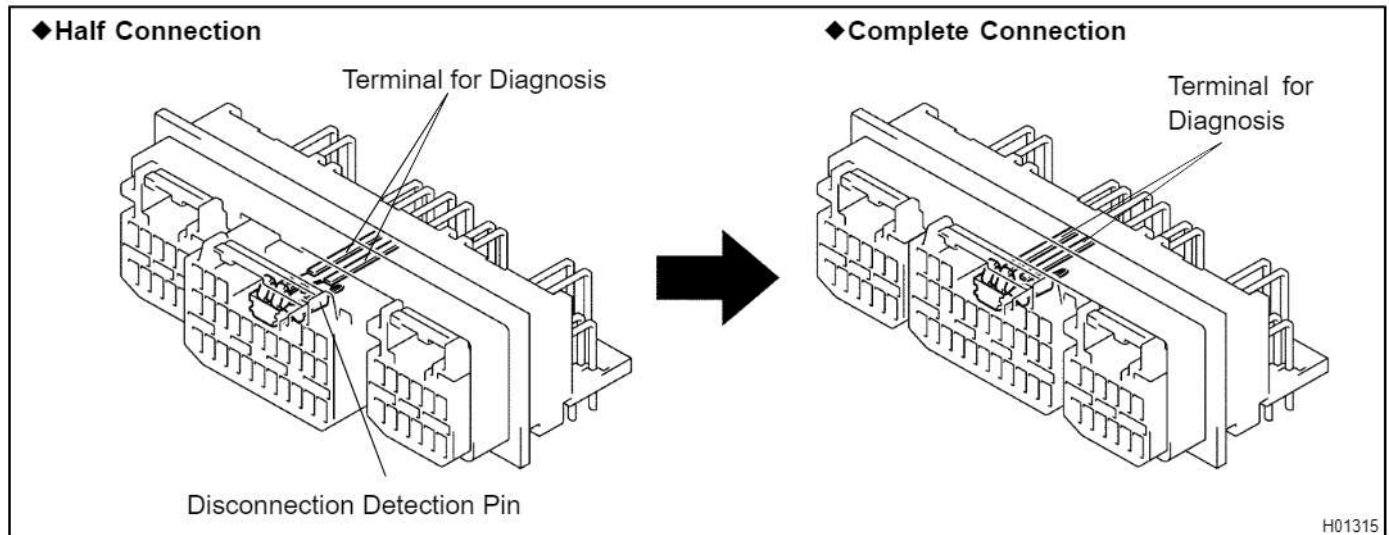


- (1) Terminal twin-lock mechanism:
Each connector has a two-piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent terminals from coming out.
- (2) Activation prevention mechanism:
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the positive (+) terminal and the negative (-) terminal of the squib.

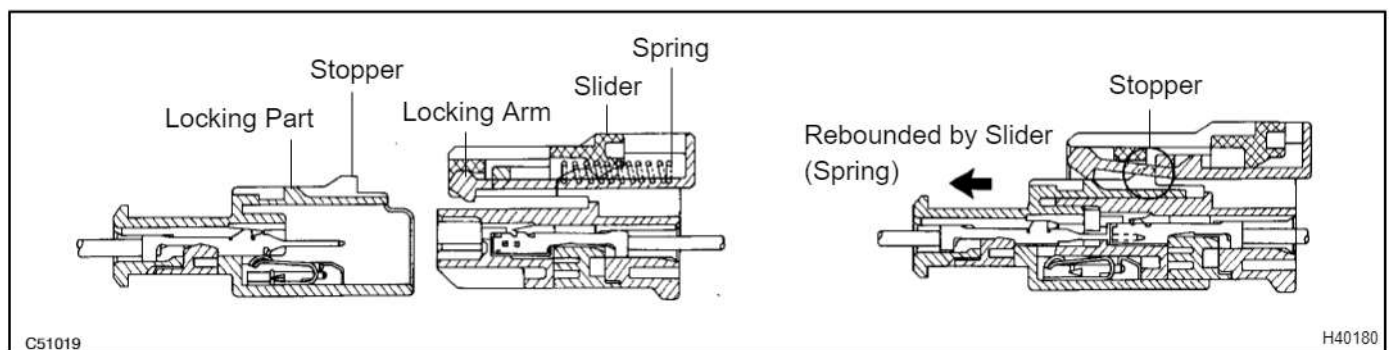




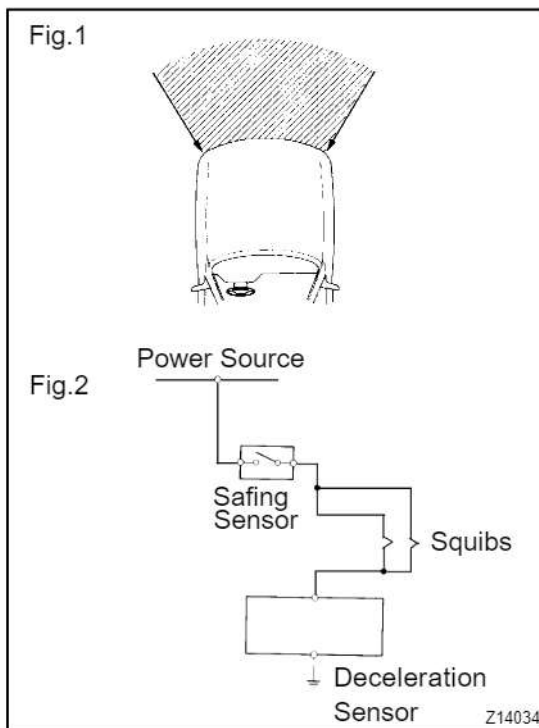
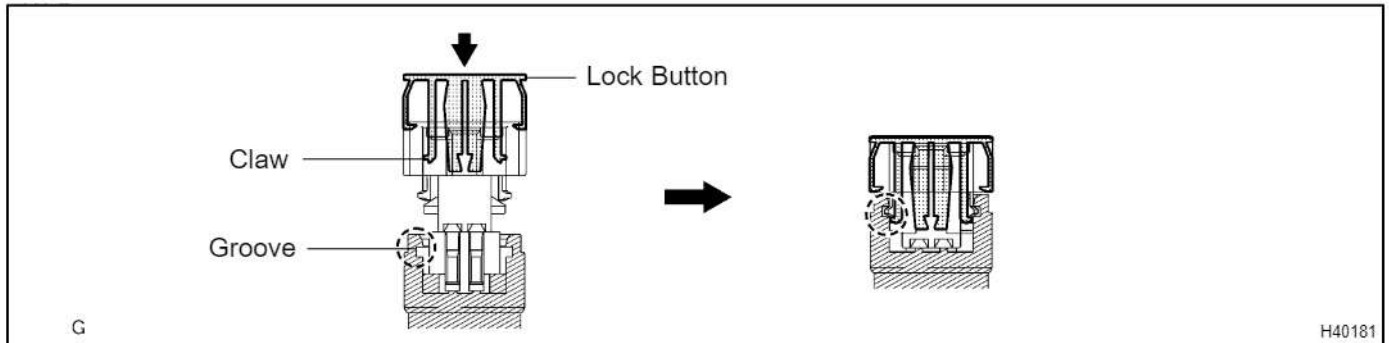
- (3) **Electrical connection check mechanism:**
This mechanism electrically checks that connectors are connected correctly and completely. The electrical connection check mechanism is designed so that the disconnection detection pin connects with the diagnosis terminals when the connector housing lock is locked.



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



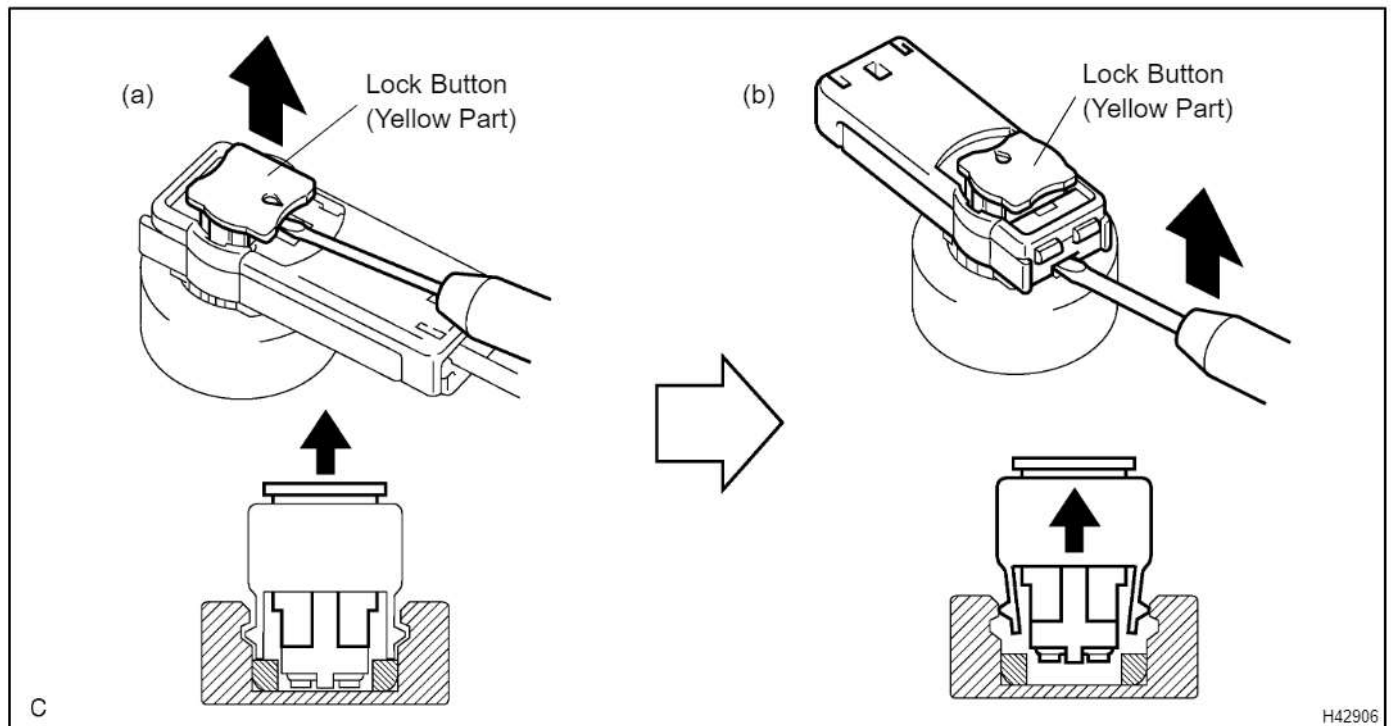
- (5) Connector lock mechanism:
Locking the connector lock button connects the connector securely.



- (b) When the vehicle is involved in a frontal collision in the hatched area (Fig.1) and the shock is larger than the pre-determined level, the SRS is activated automatically. The 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 the 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 the horn button assy and instrument panel. The deployment of the bags then ends, and the bags deflate as the gas is discharged through discharge holes at the bag's rear or side.

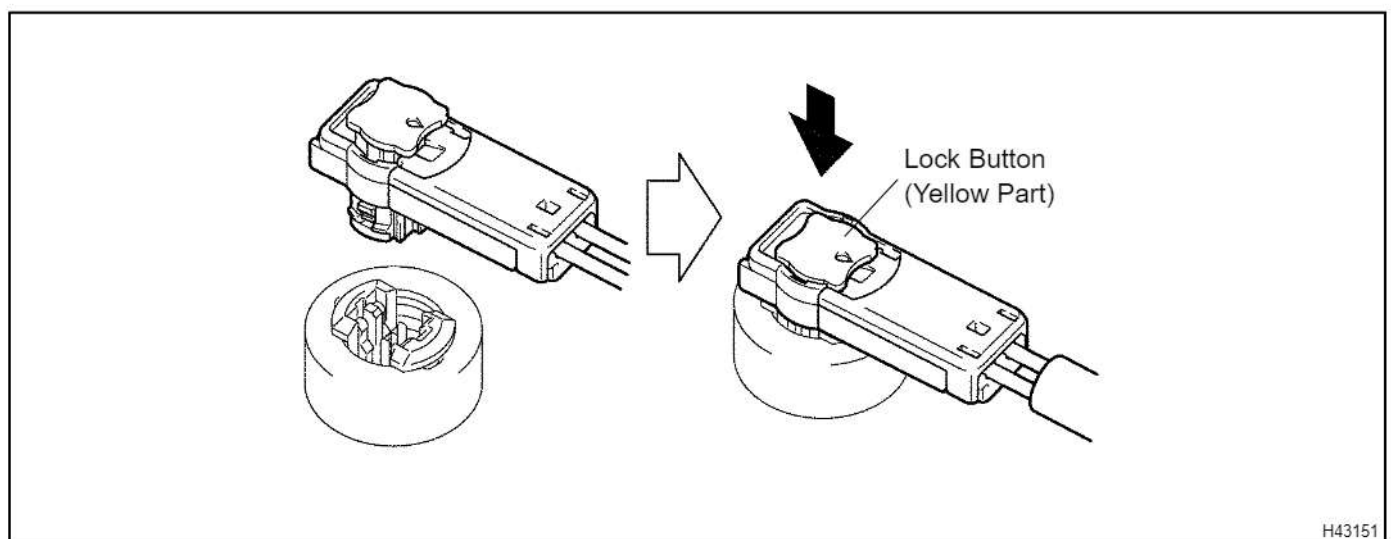
2. DISCONNECTION OF CONNECTORS FOR HORN BUTTON ASSY AND CURTAIN SHIELD AIRBAG ASSY

- Release the lock button (yellow part) of the connector using a screwdriver.
- Insert the screwdriver tip between the connector and the base, and then raise the connector.



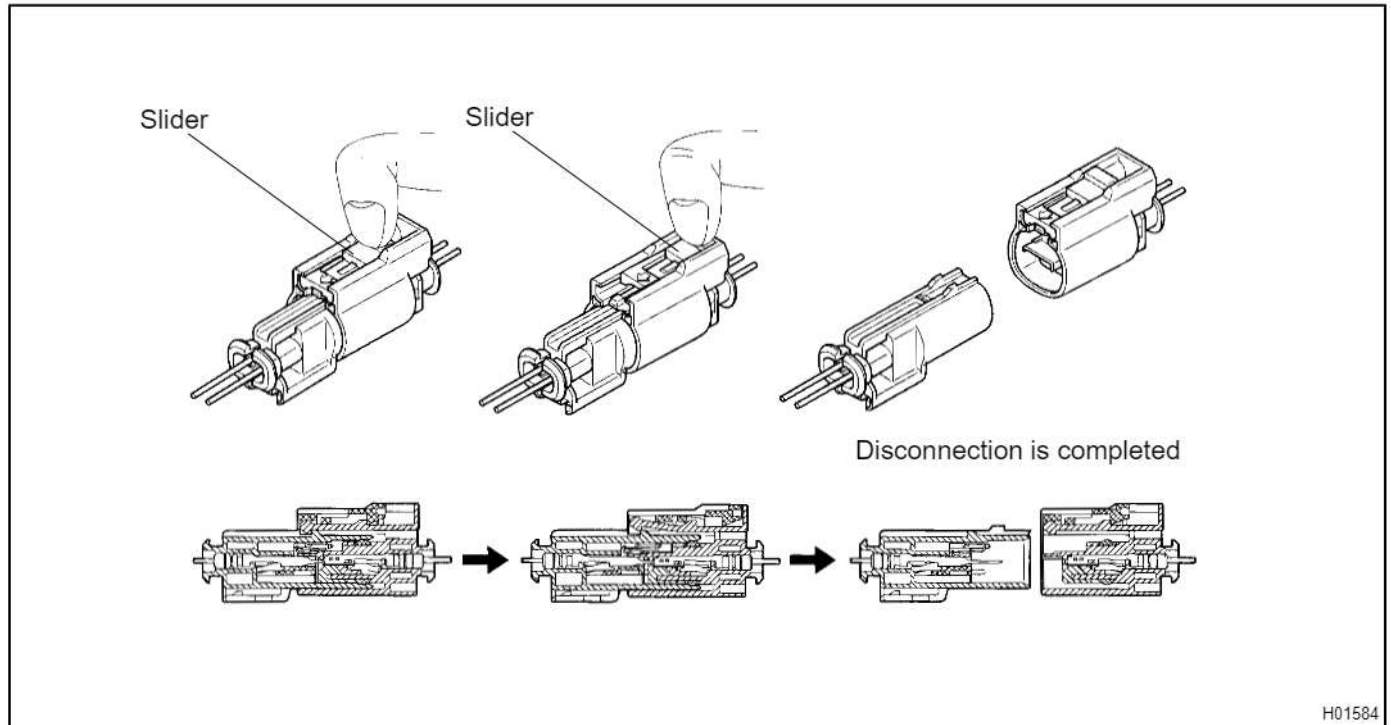
3. CONNECTION OF CONNECTORS FOR HORN BUTTON ASSY AND CURTAIN SHIELD AIRBAG ASSY

- Connect the connector.
- Push down securely on the lock button (yellow part) of the connector. (When locking, a click sound can be heard.)



4. DISCONNECTION OF CONNECTOR FOR FRONT SEAT AIRBAG ASSY

- Place a finger on the slider.
- Slide the slider to release lock.
- Disconnect the connector.

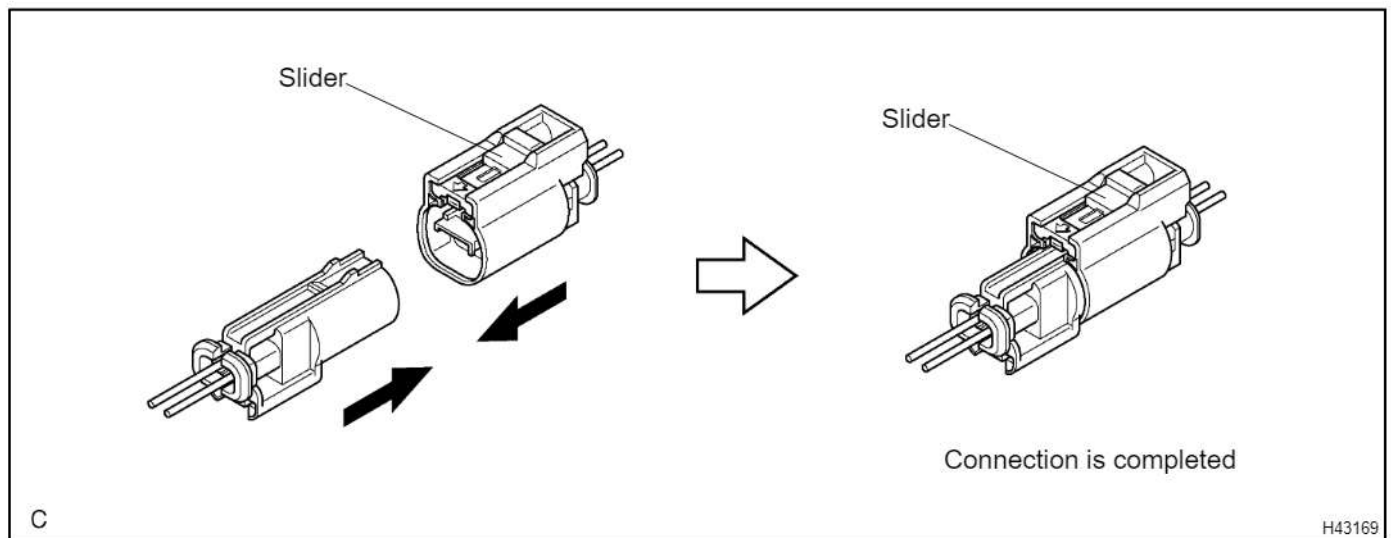


5. CONNECTION OF CONNECTOR FOR FRONT SEAT AIRBAG ASSY

- Connect the connector as shown in the illustration. (When locking, make sure that the slider returns to its original position and a click sound can be heard.)

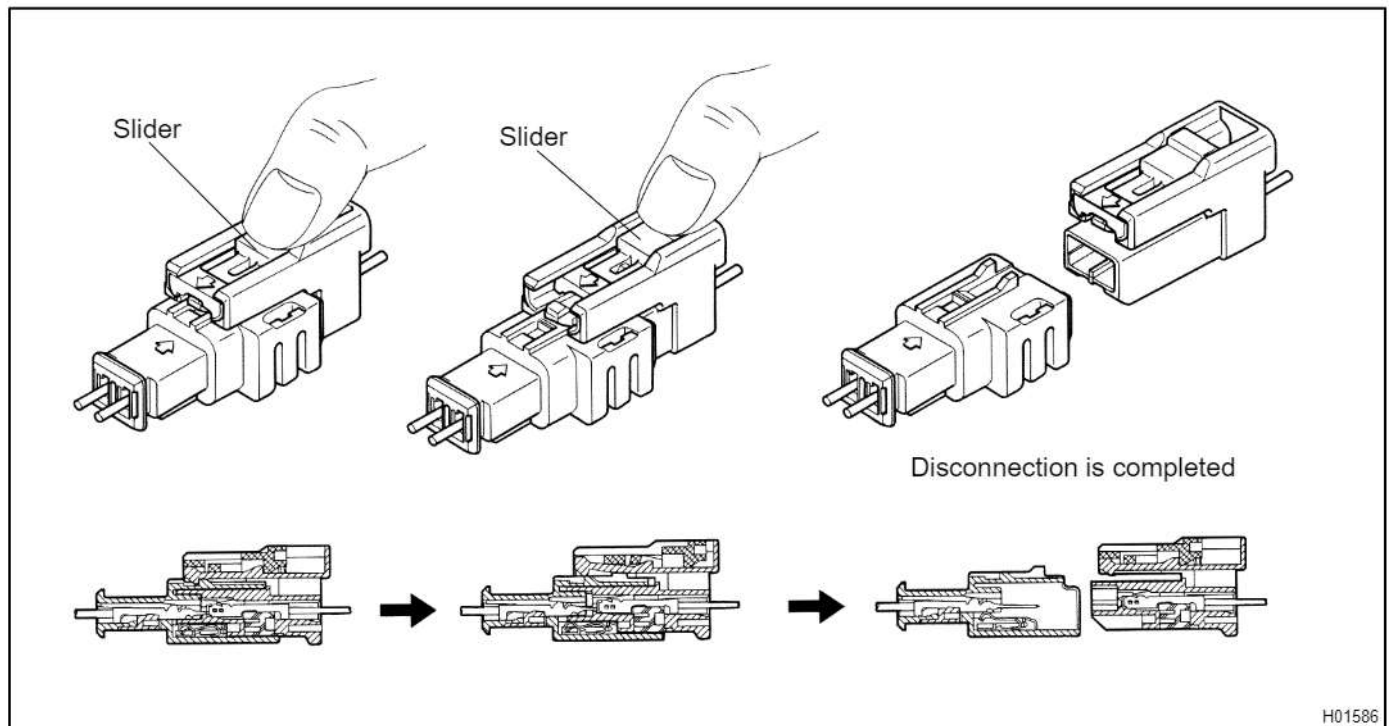
HINT:

When connecting them, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.



6. DISCONNECTION OF CONNECTOR FOR INSTR PNL PASS L/DOOR AIRBAG ASSY

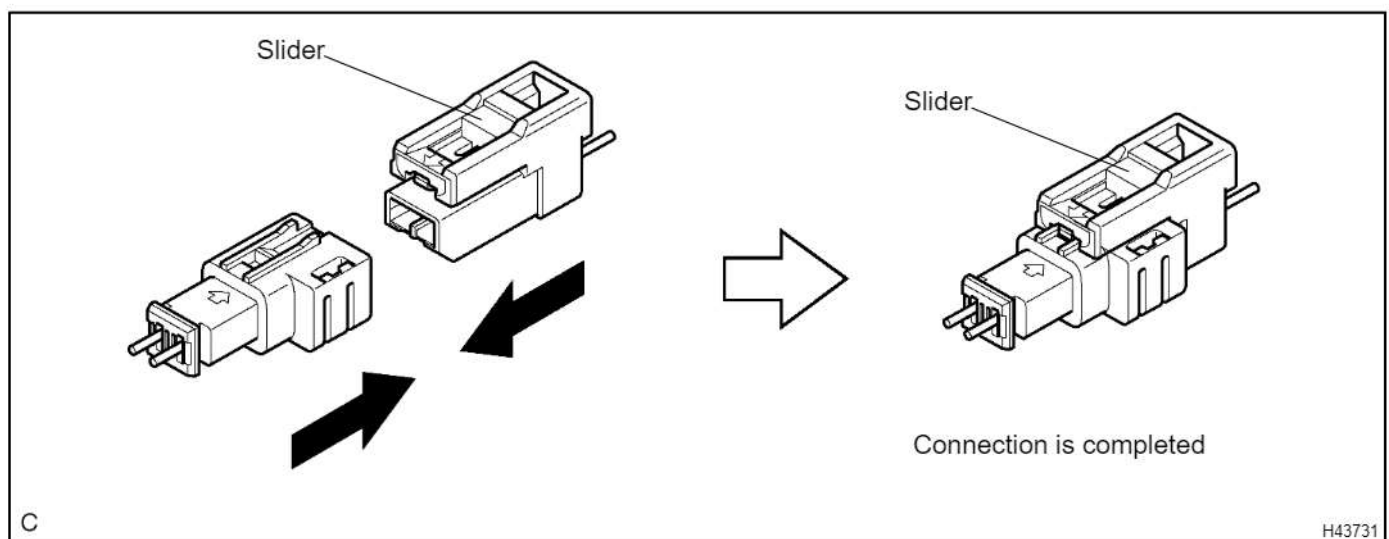
- (a) Place a finger on the slider.
- (b) Slide the slider to release lock.
- (c) Disconnect the connector.

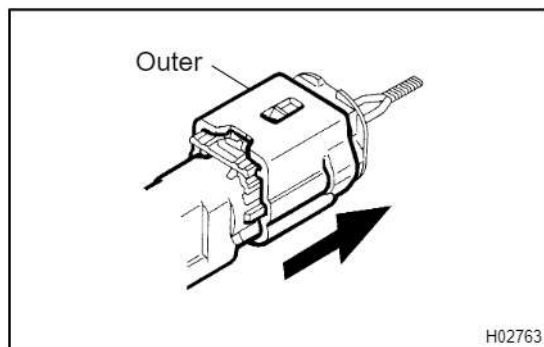
**7. CONNECTION OF CONNECTOR FOR INSTR PNL PASS L/DOOR AIRBAG ASSY**

- (a) Connect the connector as shown in the illustration. (When locking, make sure that the slider returns to its original position and a click sound can be heard.)

HINT:

When connecting them, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.

**HINT:**

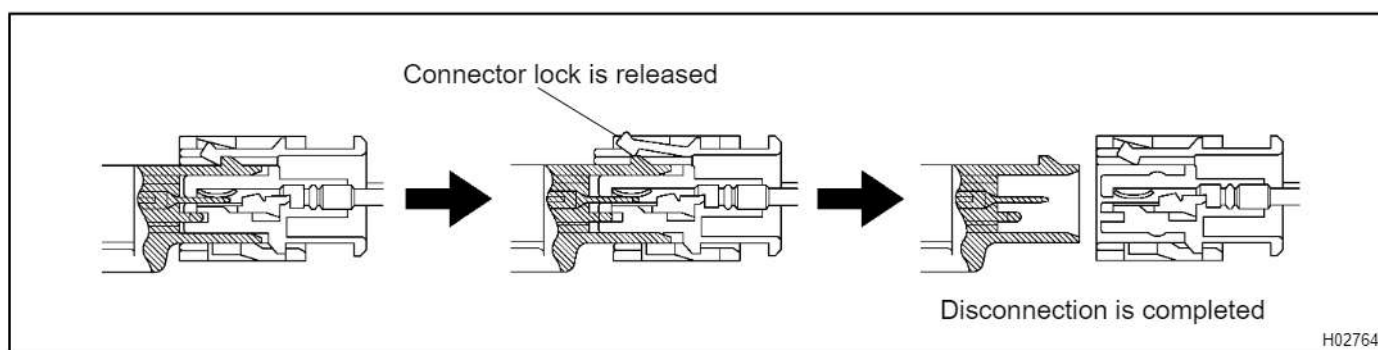


8. DISCONNECTION OF CONNECTORS FOR AIRBAG FRONT SENSOR, SIDE AIRBAG SENSOR AND AIRBAG SENSOR REAR

- (a) While holding both outer flank sides, slide the outer in the direction shown by the arrow.
- (b) When the connector lock is released, the connectors are disconnected.

HINT:

Be sure to hold both outer flank sides. Holding the top and bottom sides will make disconnection difficult.

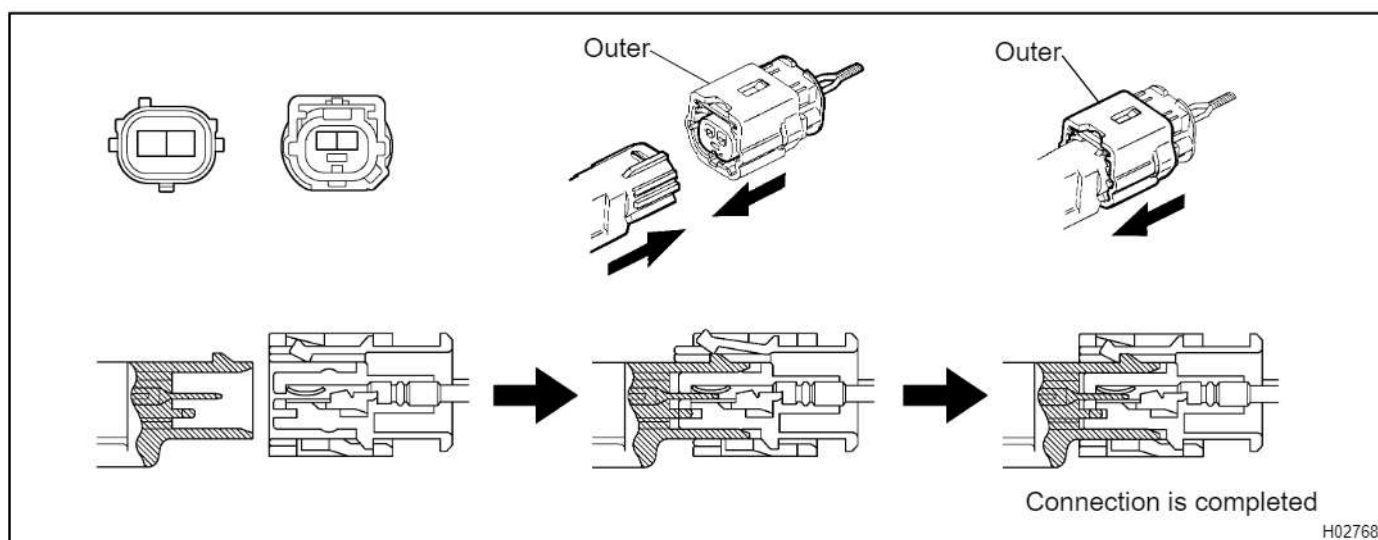


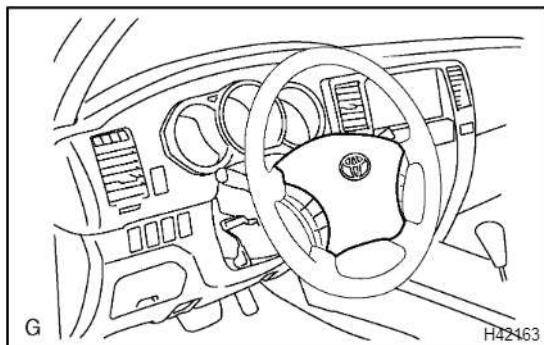
9. CONNECTION OF CONNECTORS FOR AIRBAG FRONT SENSOR, SIDE AIRBAG SENSOR AND AIRBAG SENSOR REAR

- (a) Connect the connector as shown in the illustration. (When locking, make sure that the outer returns to its original position and a click sound can be heard.)

HINT:

When connecting them, the outer will slide. Be sure not to hold the outer while connecting, as it may result in an insecure fit.

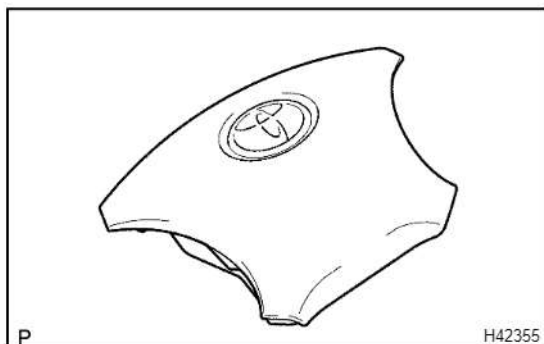




ON-VEHICLE INSPECTION

1. HORN BUTTON ASSY (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) With the horn button assy installed on the vehicle, perform a visual check including the following:
Cuts, minute cracks or marked discoloration on the horn button assy top surface and in the grooved portion.

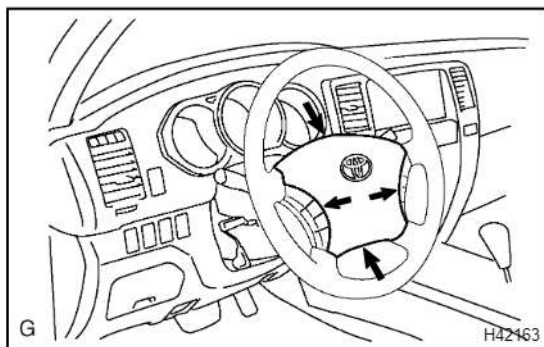
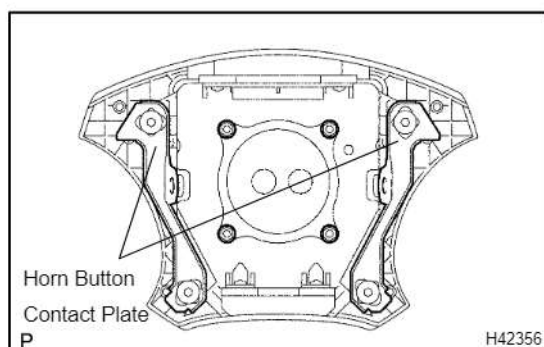


2. HORN BUTTON ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) With the horn button assy removed from the vehicle, perform a visual check including the following:
 - ◆ Cuts, minute cracks or marked discoloration on the horn button assy top surface and in the grooved portion.
 - ◆ Cracks or other damage in the connectors.
 - ◆ Deformation of the steering wheel assy.
 - ◆ Deformation of the horn button contact plate of the horn button assy.

HINT:

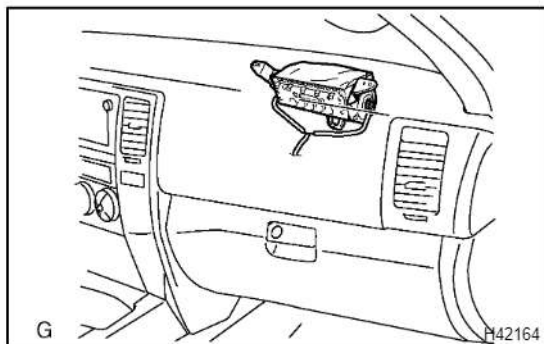
- ◆ If the horn button contact plate of the horn button assy is deformed, never repair it. Always replace the horn button assy with a new one.



- ◆ There should be no interference between the horn button assy and steering wheel assy, and the clearance should be uniform all the way around when the new horn button assy is installed on the steering wheel assy.

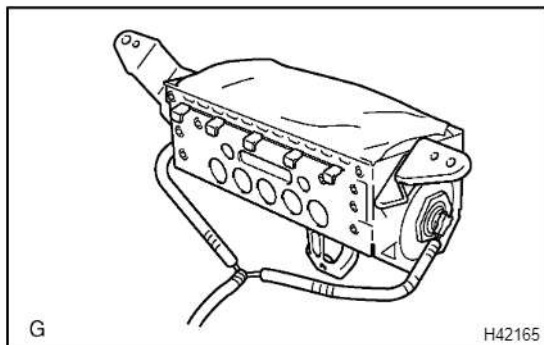
CAUTION:

For removal and installation procedures of the horn button assy, see "Replacement" on page 60-15, and be sure to follow the correct procedure.



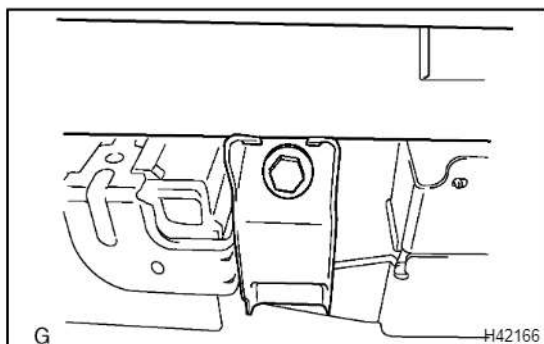
3. INSTR PNL PASS L/DOOR AIRBAG ASSY (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) With the instr pnl pass l/door airbag assy installed on the vehicle, perform a visual check including the following:
Cuts, minute cracks or marked discoloration on the instrument panel around the instr pnl pass l/door airbag assy.



4. INSTR PNL PASS L/DOOR AIRBAG ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05–1238).
- (b) With the instr pnl pass l/door airbag assy removed from the vehicle, perform a visual check including the following:
 - ◆ Cuts, minute cracks or marked discoloration on the instr pnl pass l/door airbag assy.
 - ◆ Cracks or other damage to the wire harness or connector.



- ◆ Deformation or cracks on the instrument panel or instrument panel reinforcement.

HINT:

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

CAUTION:

For removal and installation procedures of the instr pnl pass l/door airbag assy, see "Replacement" on page 60–26, and be sure to follow the correct procedure.

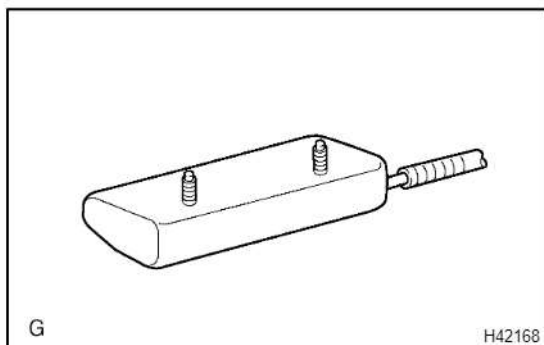
5. FRONT SEAT AIRBAG ASSY (VEHICLE NOT INVOLVED IN COLLISION)

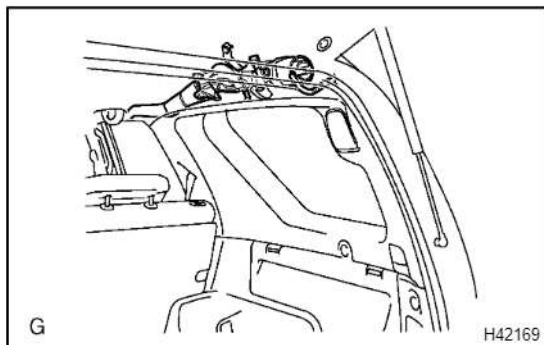
- (a) Perform a diagnostic system check (see page 05–1238).
- (b) With the front seat airbag assy installed on the vehicle, perform a visual check including the following:
 - Cuts, minute cracks or marked discoloration on the front seat back assy around the front seat airbag assy.



6. FRONT SEAT AIRBAG ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

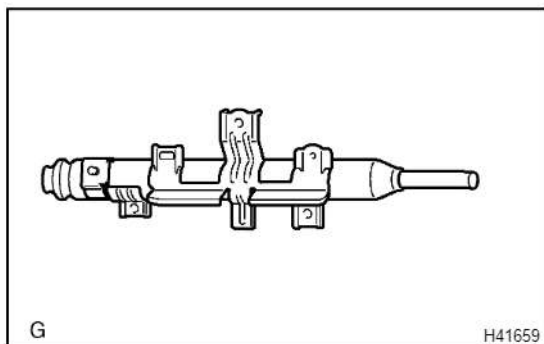
- (a) Perform a diagnostic system check (see page 05–1238).
- (b) With the front seat airbag assy removed from the vehicle, perform a visual check including the following:
 - ◆ Cuts, minute cracks or marked discoloration on the front seat airbag assy.
 - ◆ Cracks or other damage to the wire harness or connector.





7. CURTAIN SHIELD AIRBAG ASSY (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) With the curtain shield airbag assy installed on the vehicle, perform a visual check including the following:
Cuts, minute cracks or marked discoloration on the front pillar garnish and roof headlining assy around the curtain shield airbag assy.



8. CURTAIN SHIELD AIRBAG ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) With the curtain shield airbag assy removed from the vehicle, perform a visual check including the following:
 - ◆ Cuts, minute cracks or marked discoloration on the curtain shield airbag assy.
 - ◆ Cracks or other damage in the connector.

9. AIRBAG SENSOR ASSY CENTER (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05-1238).

10. AIRBAG SENSOR ASSY CENTER (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05-1238).

11. AIRBAG SENSOR ASSY CENTER (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

- (a) Replace the airbag sensor assy center (see page 60-47).

12. AIRBAG FRONT SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05-1238).

13. AIRBAG FRONT SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05-1238).
- (b) When the front bumper of the vehicle or its periphery is damaged, check if there is any damage to the airbag front sensor. If there are any defects as mentioned below, replace the airbag front sensor with a new one:
 - ◆ Cracks, dents or chips in the case.
 - ◆ Cracks or other damage to the connector.
 - ◆ Peeling off of the label or damage to the serial number.

14. AIRBAG FRONT SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

- (a) Replace the airbag front sensor (see page 60-50).

15. SIDE AIRBAG SENSOR ASSY (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05–1238).

16. SIDE AIRBAG SENSOR ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05–1238).
- (b) When the center pillar of the vehicle or its periphery is damaged, check if there is any damage to the side airbag sensor assy. If there are any defects as mentioned below, replace the side airbag sensor assy with a new one:
- ◆ Cracks, dents or chips in the case.
 - ◆ Cracks or other damage to the connector.
 - ◆ Peeling off of the label or damage to the serial number.

17. SIDE AIRBAG SENSOR ASSY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

- (a) Replace the side airbag sensor assy (see page 60–52).

18. AIRBAG SENSOR REAR (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05–1238).

19. AIRBAG SENSOR REAR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS NOT DEPLOYED)

- (a) Perform a diagnostic system check (see page 05–1238).
- (b) When the quarter panel of the vehicle or its periphery is damaged, check if there is any damage to the airbag sensor rear. If there are any defects as mentioned below, replace the airbag sensor rear with a new one:
- ◆ Cracks, dents or chips in the case.
 - ◆ Cracks or other damage to the connector.
 - ◆ Peeling off of the label or damage to the serial number.

20. AIRBAG SENSOR REAR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

- (a) Replace the airbag sensor rear (see page 60–54).

21. SEAT POSITION AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05–1238).

22. SEAT POSITION AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05–1238).
- (b) Even if the airbag was not deployed, perform a visual check for damage to the seat position airbag sensor including the following:
- ◆ Cracks, dents or chips in the case.
 - ◆ Cracks or other damage to the connector.

23. WIRE HARNESS AND CONNECTOR (VEHICLE NOT INVOLVED IN COLLISION)

- (a) Perform a diagnostic system check (see page 05–1238).

24. WIRE HARNESS AND CONNECTOR (VEHICLE INVOLVED IN COLLISION)

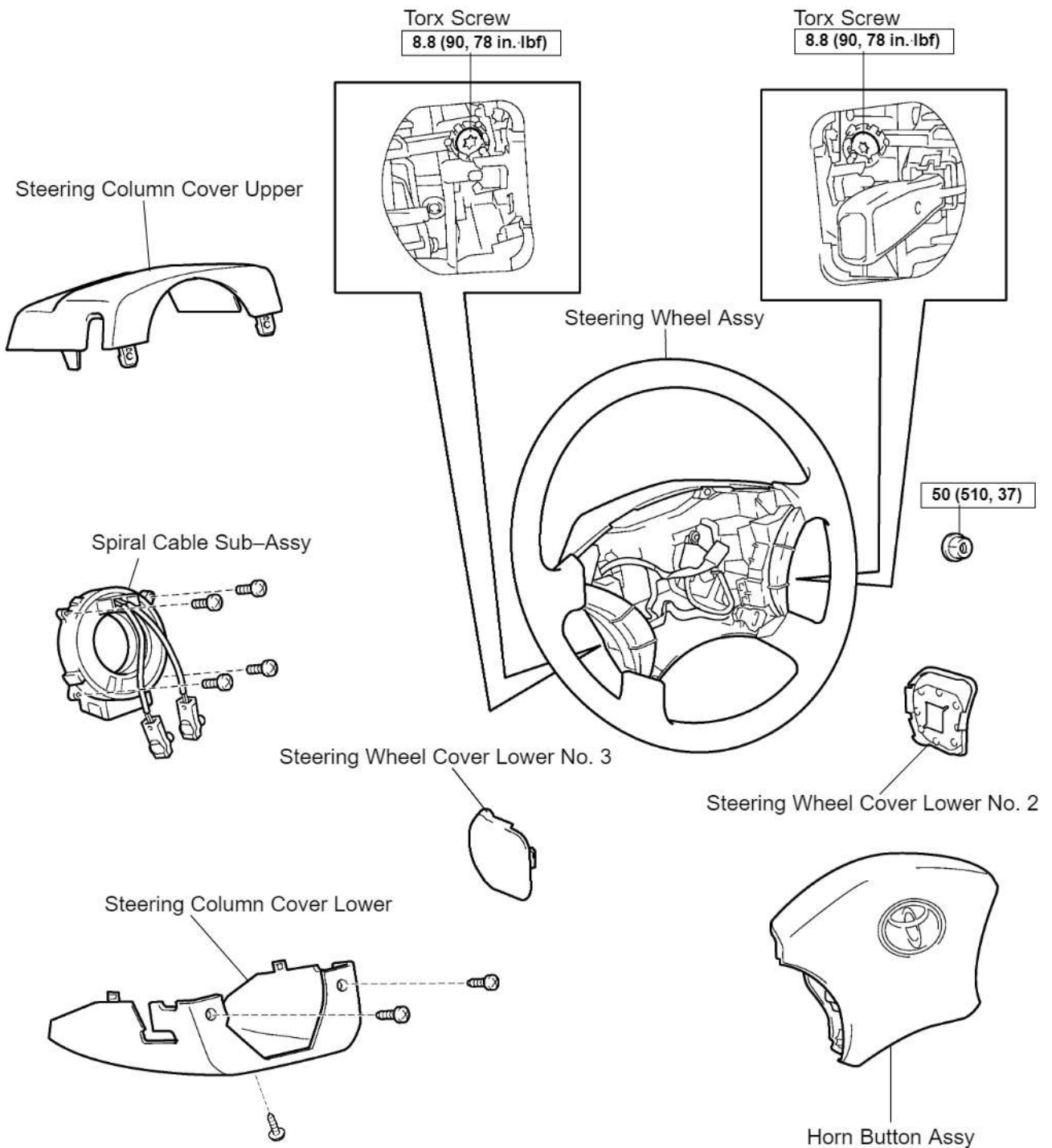
- (a) Perform a diagnostic system check (see page 05–1238).
- (b) Check for breaks in all wires of the SRS wire harness and exposed conductors.
- (c) Check to see if the SRS wire harness connectors are cracked or chipped.

HINT:

The SRS wire harness is integrated with the engine room main wire, instrument panel wire, floor wire and floor wire No.2.

HORN BUTTON ASSY COMPONENTS

6008X-04

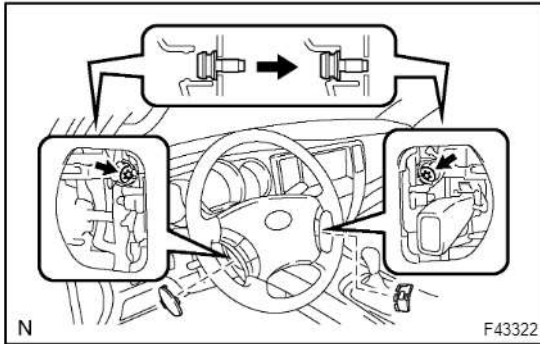


G N·m (kgf·cm, ft·lbf) : Specified torque

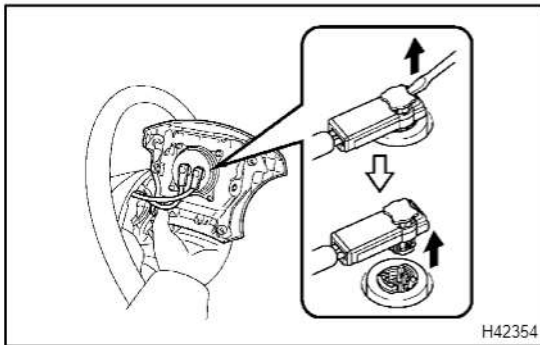
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REPLACEMENT

1. **PRECAUTION**(See page 60-1)
2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-1)



3. **REMOVE STEERING WHEEL COVER LOWER NO.2**
 - (a) Using a screw driver, remove the steering wheel cover lower No.2.
4. **REMOVE STEERING WHEEL COVER LOWER NO.3**
 - (a) Using a screw driver, remove the steering wheel cover lower No.3.
5. **REMOVE HORN BUTTON ASSY**
 - (a) Place the front wheels facing straight ahead.
 - (b) Using a torx socket wrench (T30), loosen the 2 torx screws until the groove along the screw circumference catches on the screw case.

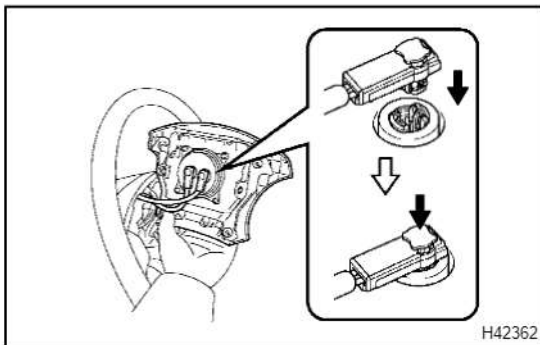


- (c) Pull out the horn button assy from the steering wheel assy and support the horn button assy one-handed as shown in the illustration.

NOTICE:

When removing the horn button assy, take care not to pull the airbag wire harness.

- (d) Using a screwdriver, disconnect the airbag connectors.
- (e) Remove the horn button assy.



6. **INSTALL HORN BUTTON ASSY**
 - (a) Support the horn button assy one-handed as shown in the illustration.
 - (b) Connect the airbag connectors.
 - (c) Connect the horn connector.
 - (d) Install the horn button after confirming that the circumference groove of the torx screws is caught on the screw case.
 - (e) Using a torx socket wrench (T 30), install the 2 screws.
Torque: 8.8 N·m (90 kgf·cm, 78 in.·lbf)

7. **INSPECT HORN BUTTON ASSY**
8. **INSPECT SRS WARNING LIGHT**(See page 05-1238)

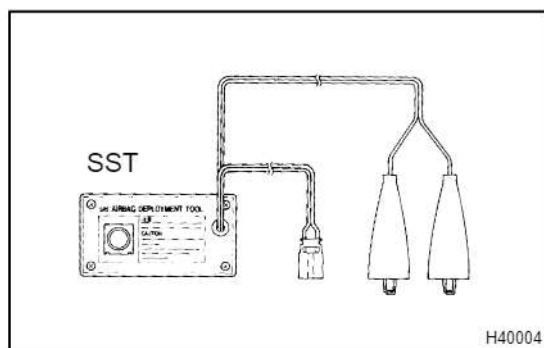
DISPOSAL

HINT:

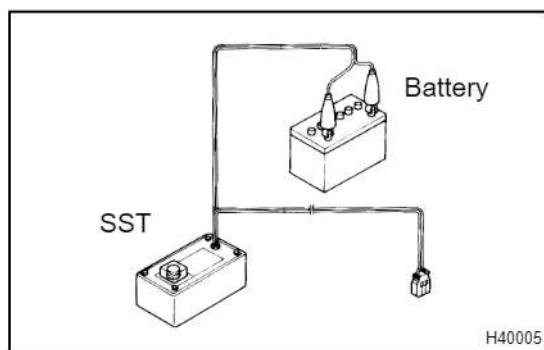
When scrapping vehicle equipped with an SRS or disposing of a horn button assy, always first deploy the airbag in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

- ◆ Never dispose of a horn button assy which has not a deployed 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.



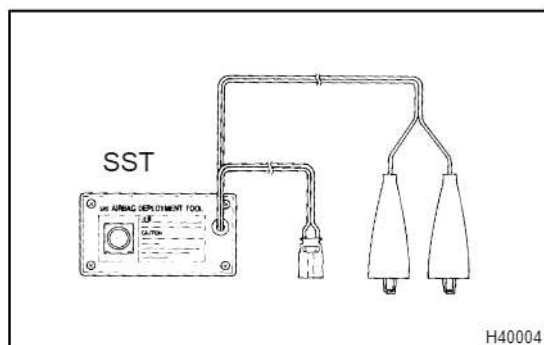
- ◆ When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.
- ◆ When deploying an airbag, perform the operation at least 10 m (33 ft) away from the horn button assy.
- ◆ The horn button assy is very hot when the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



1. DISPOSE OF HORN BUTTON ASSY (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

HINT:

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

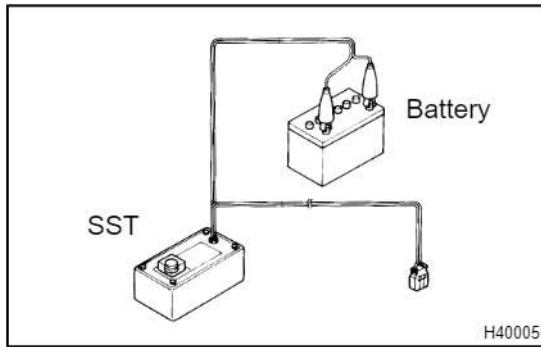


(a) Check the function of the SST.

CAUTION:

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

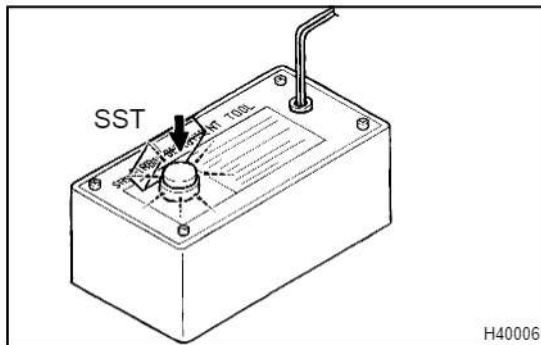
SST 09082-00700



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

HINT:

Do not connect the yellow connector of the SST which will be connected with the supplemental restraint system.

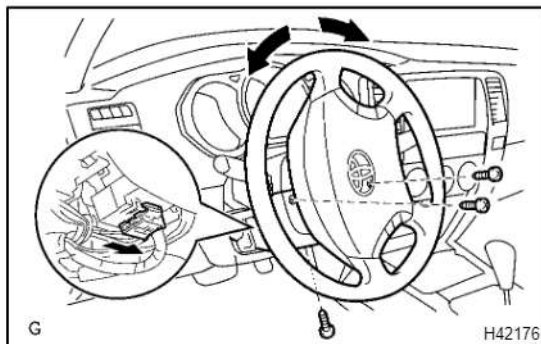


- (2) Check functioning of the SST.
Press the SST activation switch, and check that the LED of the SST activation switch comes on.

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.

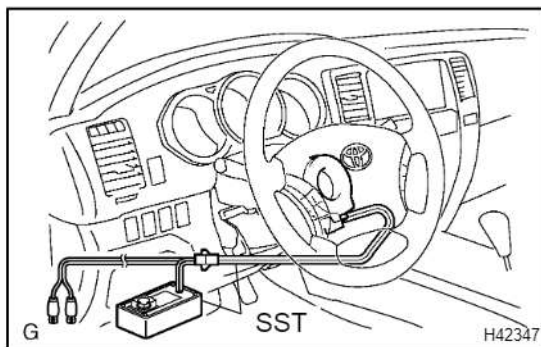


- (b) Install the SST.

CAUTION:

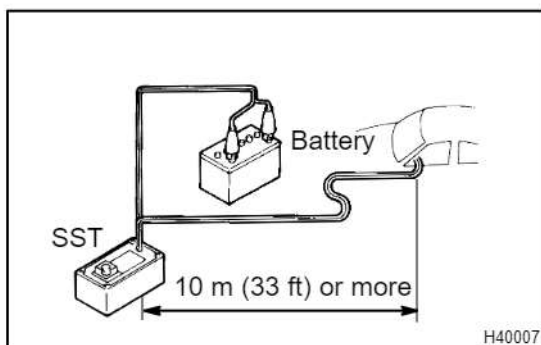
Check that there is no looseness in the steering wheel and horn button assy.

- (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 connectors of the 2 SST to the airbag connector of the spiral cable.

SST 09082-00700, 09082-00780



- (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 red clip of the SST to the battery positive (+) terminal and the black clip of the SST 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 activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.

- (d) Dispose of the horn button assy (with airbag).

CAUTION:

- ◆ The horn button assy 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 horn button assy with deployed airbag, use gloves and safety glasses.
- ◆ Use gloves and safety glasses when handling a horn button assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.
- ◆ Do not apply water, etc. to a horn button assy with the deployed airbag.

HINT:

When scrapping a vehicle, deploy the airbag and scrap the vehicle with the horn button assy still installed.

2. DISPOSE OF HORN BUTTON ASSY (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)

NOTICE:

- ◆ When disposing of the horn button assy (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 horn button assy (See page 60-15).

CAUTION:

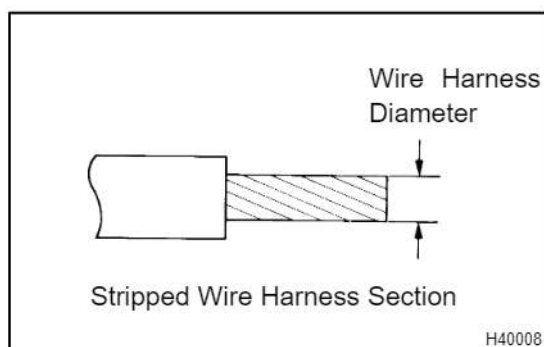
When storing the horn button assy, keep the upper surface of the pad facing upward.

- (b) Using a service-purpose wire harness for the vehicle, tie down the horn button assy 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 horn button assy, 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).

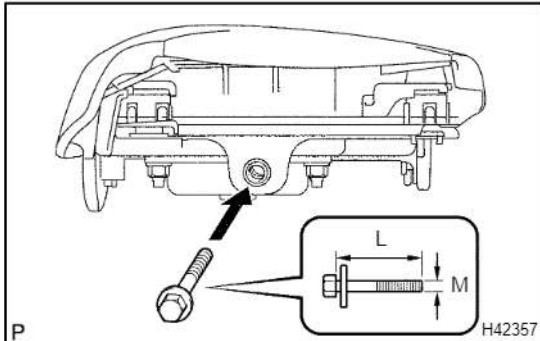


H40008

HINT:

To calculate the square of the stripped wire harness section:

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



- (1) Install the 2 bolts with washers in the 2 bolt holes in the horn button assy.

Bolt:

L: 35.0 mm (1.387 in.)

M: 6.0 mm (0.236 in.)

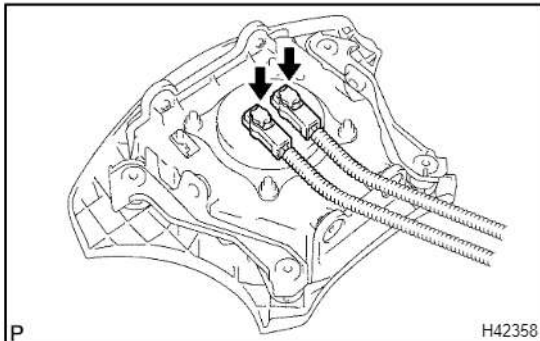
Pitch: 1.0 mm (0.039 in.)

NOTICE:

- ◆ Tighten the bolts by hand until the bolts become difficult to turn.
- ◆ Do not tighten the bolts excessively.

- (2) After connecting the following to SST, connect them to the horn button assy.

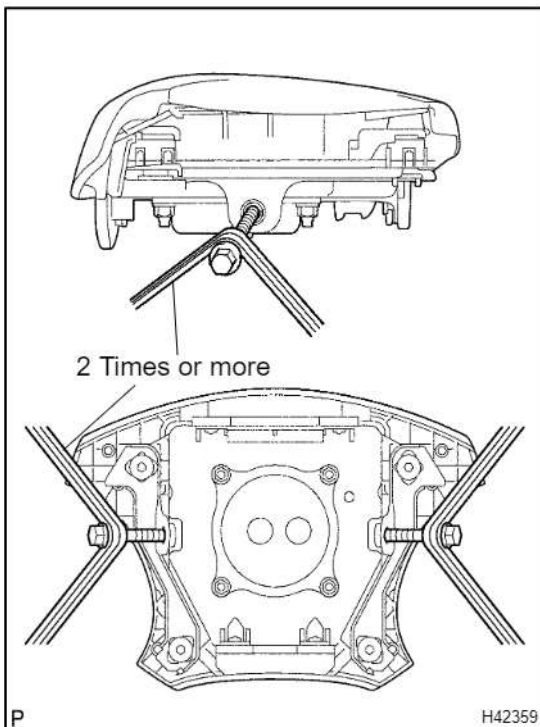
SST 09082-00802 (09082-10801, 09082-30801)

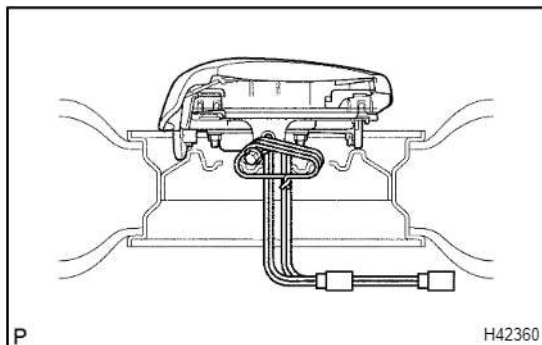


- (3) Using 3 wire harness, wind the wire harness at least 2 times each around the bolts installed on the left and right sides of the horn button assy.

CAUTION:

- ◆ Tightly wind the wire harness around the bolts so that there is no slack.
- ◆ If there is slack in the wire harness, the horn button assy may come loose due to the shock when the air-bag is deployed. This is highly dangerous.





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

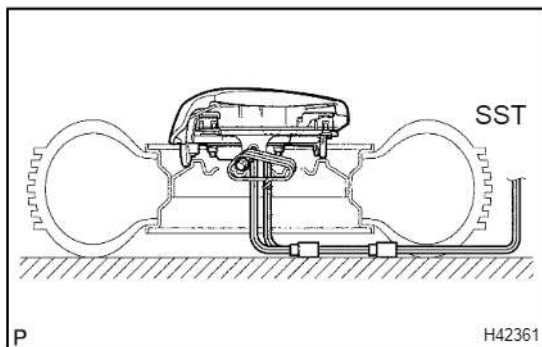
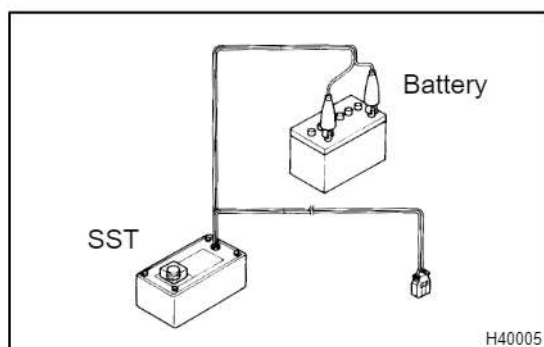
CAUTION:

- ◆ Make sure that the wire harness is tight. It is very dangerous when looseness in the wire harness results in the horn button assy coming free through the shock from the airbag deploying.
- ◆ Always tie down the horn button assy with the pad side facing upward. It is very dangerous if the horn button assy is tied down with the metal surface facing upward as the wire harness will be cut by the shock caused by the airbag deployment and the horn button assy 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.

- (c) Check the function of the SST (See step 1-(a)).



- (d) Install the SST.

CAUTION:

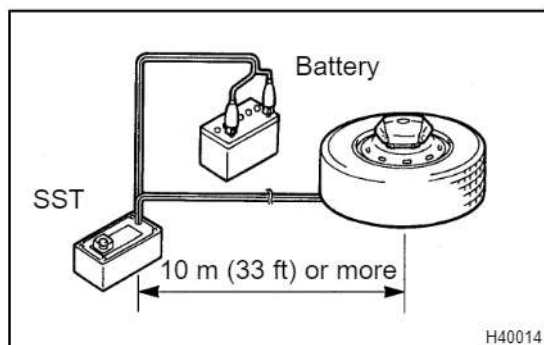
Place the disc wheel on the level ground.

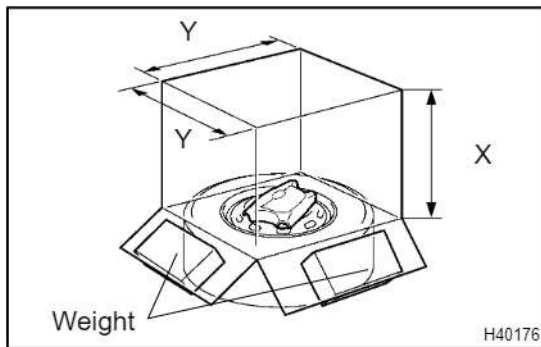
- (1) Connect the connector of the SST.
SST 09082-00700

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 horn button assy tied down on the disc wheel.





- (e) Cover the horn button assy with a cardboard box or tires.
- ◆ Covering method using a cardboard box:
Cover the horn button assy 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:

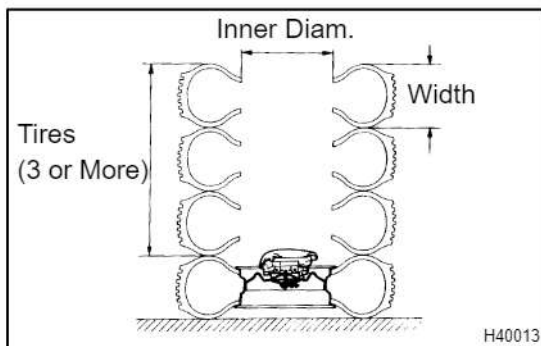
Must exceed the following dimensions:

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 horn button assy 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 with no disc wheels on top of the tire with disc wheel to which the horn button assy is tied.

Tire size: Must exceed the following dimensions–

Width: 185 mm (7.28 in.)

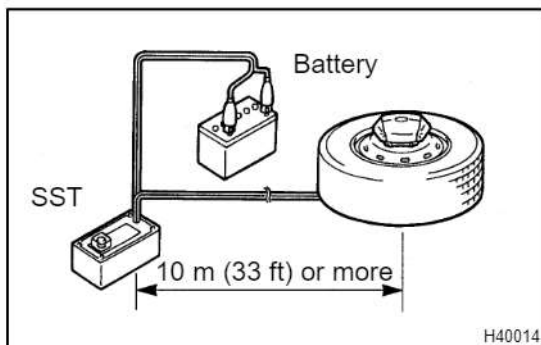
Inner diameter: 360 mm (14.17 in.)

CAUTION:

Do not use tires with disc wheels.

NOTICE:

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



- (f) Deploy the airbag.
- (1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (–) terminal.
 - (2) Check that no one is within 10 m (33 ft) area around the disc wheel which the horn button assy is tied to.
 - (3) Press the activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.



(g) Dispose of the horn button assy (with airbag).

CAUTION:

- ◆ The horn button assy 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 horn button assy with the deployed airbag.
- ◆ Do not apply water, etc. to a horn button assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.
 - (1) Remove the horn button assy from the disc wheel.
 - (2) Place the horn button assy in a plastic bag, tie the end tightly and dispose of it as the other general parts disposal.

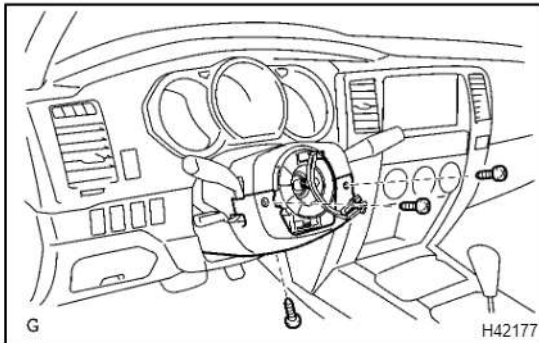
SPIRAL CABLE SUB-ASSY REPLACEMENT

60091-09

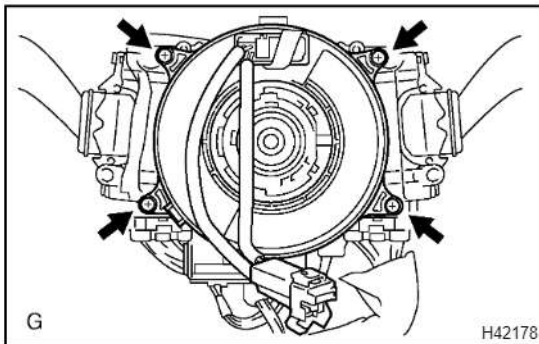
HINT:

COMPONENTS: See page 60-14

1. **PRECAUTION**(See page 60-1)
 2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-1)
 3. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
 4. **REMOVE STEERING WHEEL COVER LOWER NO.2**
 5. **REMOVE STEERING WHEEL COVER LOWER NO.3**
 6. **REMOVE HORN BUTTON ASSY**(See page 60-15)
 7. **REMOVE STEERING WHEEL ASSY**(See page 50-8)
- SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)



8. **REMOVE STEERING COLUMN COVER LWR**
 - (a) Remove the 3 screws and steering column cover LWR.
9. **REMOVE STEERING COLUMN COVER UPR**
 - (a) Remove the steering column cover UPR.



10. **REMOVE SPIRAL CABLE SUB-ASSY**
 - (a) Disconnect the airbag connector and connector from the spiral cable sub-assy.
 - (b) Remove the 4 screws and spiral cable sub-assy.

11. INSPECT SPIRAL CABLE SUB-ASSY

- (a) If the following condition is identified, replace the spiral cable sub-assy with new one.

Condition:**Scratches or cracks on the connector****Cracks, dents or chipping of the spiral cable sub-assy**

12. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

- (a) Check that the front wheels are facing straight ahead.

13. INSTALL SPIRAL CABLE SUB-ASSY

- (a) Set the turn signal switch in neutral position.

NOTICE:

Make sure of the neutral position since the pin of the turn signal switch may be snapped.

- (b) Install the spiral cable sub-assy with the 4 screws.

NOTICE:

When replacing the spiral cable sub-assy with new one, remove the lock pin before installing the handle.

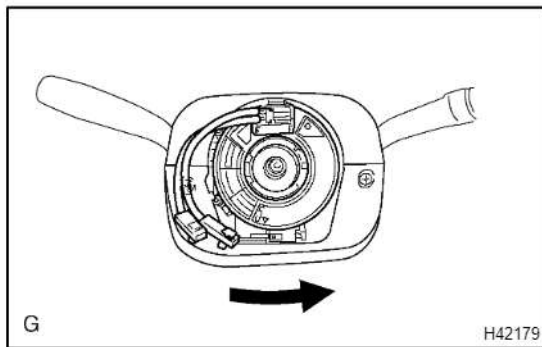
- (c) Connect the airbag connector and connector.
 (d) Install the steering column cover with the 3 screws.

14. CENTER SPIRAL CABLE

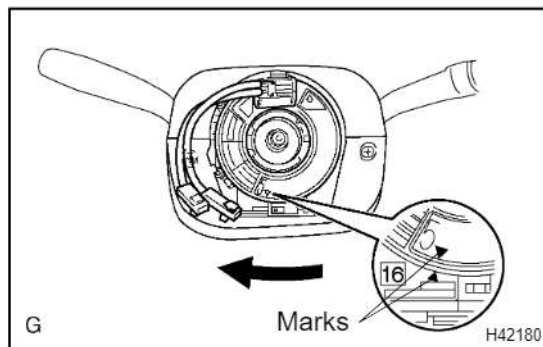
- (a) Check that the ignition switch is OFF.
 (b) Check that the battery negative terminal is disconnected.

NOTICE:

Do not start the operation for 90 seconds after removing the terminal.



- (c) Turn the cable counterclockwise by hand until it becomes harder to turn.



- (d) Then rotate the cable clockwise about 2.5 turns to align the marks.

HINT:

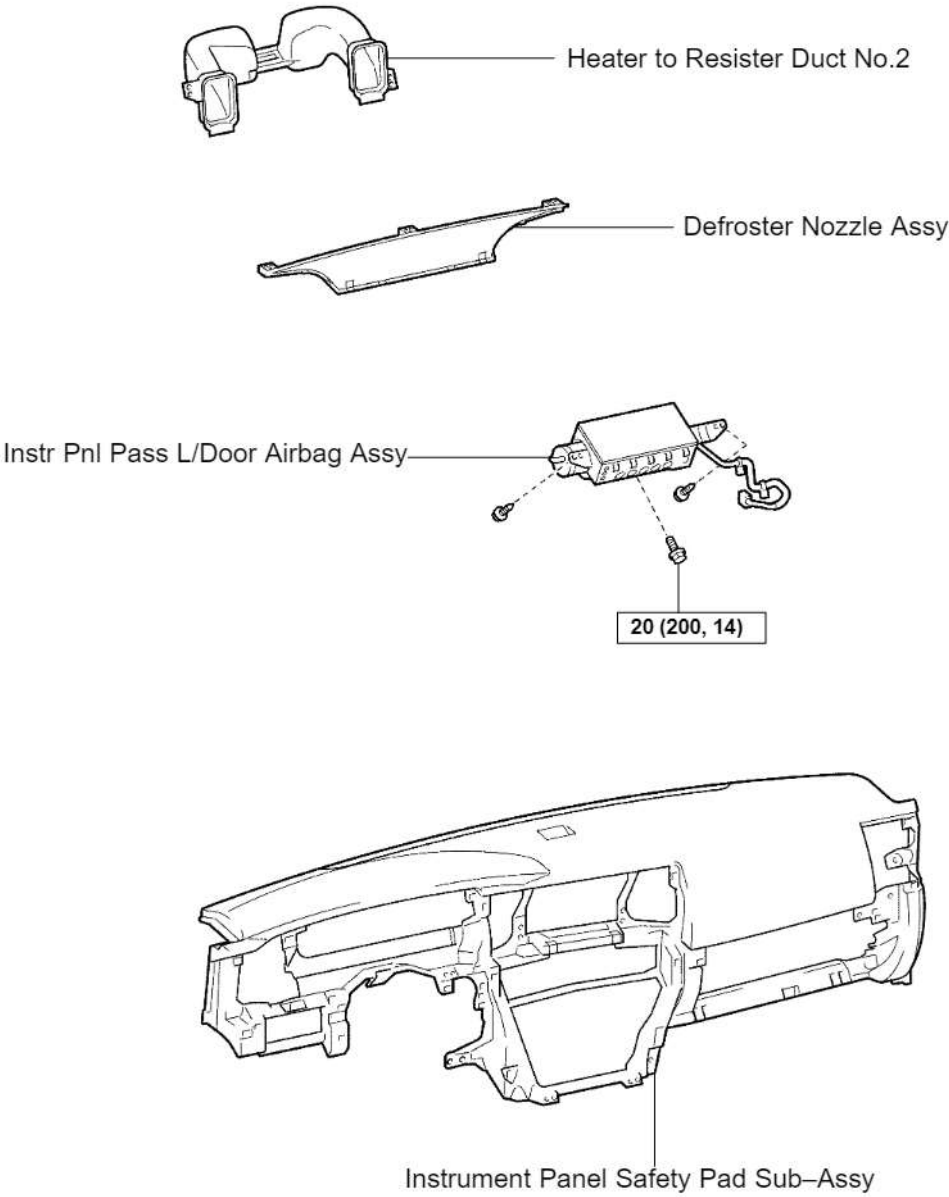
The cable will rotate about 2.5 turns to both left and right of the center.

15. INSTALL STEERING WHEEL ASSY(See page 50-8)**16. INSTALL HORN BUTTON ASSY(See page 60-15)****17. INSPECT HORN BUTTON ASSY(See page 60-10)****18. INSPECT SRS WARNING LIGHT(See page 05-1238)**

INSTR PNL PASS L/DOOR AIR BAG ASSY

COMPONENTS

600FS-01

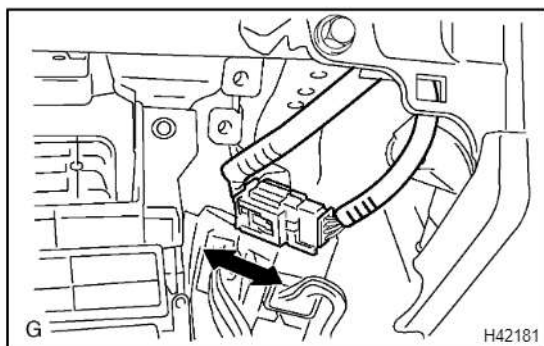


P N·m (kgf·cm, ft·lbf) : Specified torque

H42343

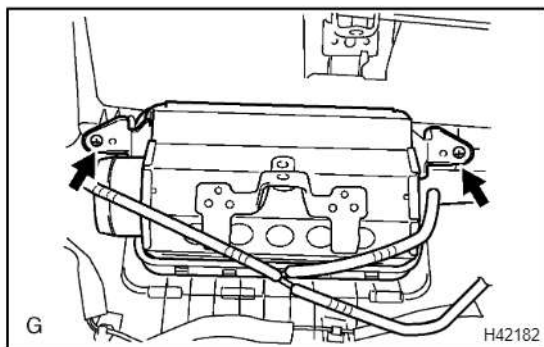
REPLACEMENT

1. **PRECAUTION**(See page 60-1)
2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-1)
3. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
4. **REMOVE STEERING WHEEL COVER LOWER NO.2**
5. **REMOVE STEERING WHEEL COVER LOWER NO.3**
6. **REMOVE HORN BUTTON ASSY**
7. **REMOVE STEERING WHEEL ASSY**(See page 50-8)
SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)
8. **REMOVE STEERING COLUMN COVER LWR**
9. **REMOVE STEERING COLUMN COVER UPR**

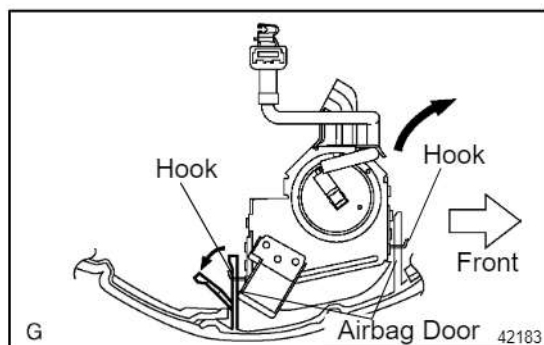


10. **DISCONNECT PASSENGER AIRBAG CONNECTOR**

11. **REMOVE INSTRUMENT PANEL SAFETY PAD SUB-ASSY**
12. **REMOVE DEFROSTER NOZZLE ASSY**
13. **REMOVE HEATER TO REGISTER DUCT NO.2**



14. **REMOVE INSTR PNL PASS L/DOOR AIR BAG ASSY**
(a) Remove the 2 screws.



- (b) Release the rear side wall of the airbag door from the hook by slightly deflecting it and roll the instr pnl pass l/door airbag assy forward.
- (c) Release the front side wall of the airbag door from the other hook and remove the instr pnl pass l/door airbag assy.

15. INSPECT INSTR PNL PASS L/DOOR AIR BAG ASSY(See page [60-10](#))
16. INSTALL INSTR PNL PASS L/DOOR AIR BAG ASSY
17. INSTALL INSTRUMENT PANEL SAFETY PAD SUB-ASSY
18. CENTER SPIRAL CABLE(See page [60-23](#))
19. INSTALL STEERING WHEEL ASSY(See page [50-8](#))
20. INSPECT STEERING WHEEL CENTER POINT
21. INSTALL HORN BUTTON ASSY(See page [60-15](#))
22. INSPECT HORN BUTTON ASSY(See page [60-10](#))
23. INSPECT SRS WARNING LIGHT(See page [05-1238](#))

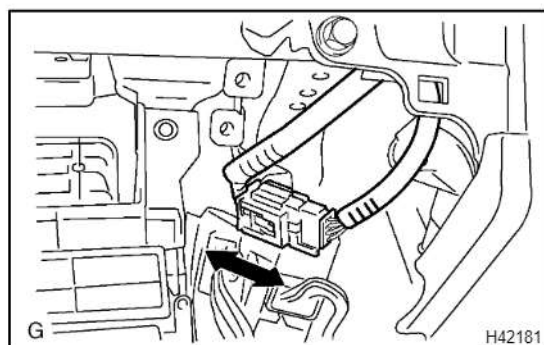
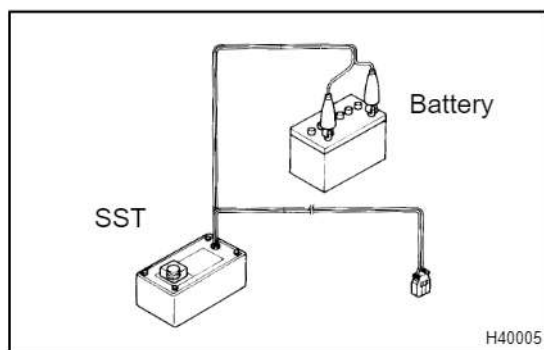
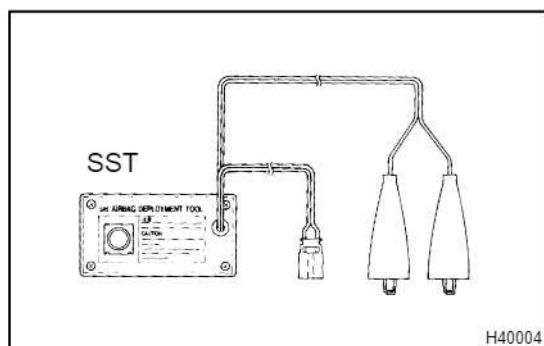
DISPOSAL

HINT:

When scrapping vehicle equipped with an SRS or disposing of a instr pnl pass l/door airbag assy, 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 instr pnl pass l/door airbag assy 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 instr pnl pass l/door airbag assy.
 - ◆ The instr pnl pass l/door airbag assy 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 instr pnl pass l/door airbag assy with the deployed airbag.
 - ◆ Do not apply water, etc. to a instr pnl pass l/door airbag assy with the deployed airbag.
 - ◆ Always wash your hands with water after completing the operation.
1. **DISPOSE OF INSTR PNL PASS L/DOOR AIR BAG ASSY (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)**

HINT:

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

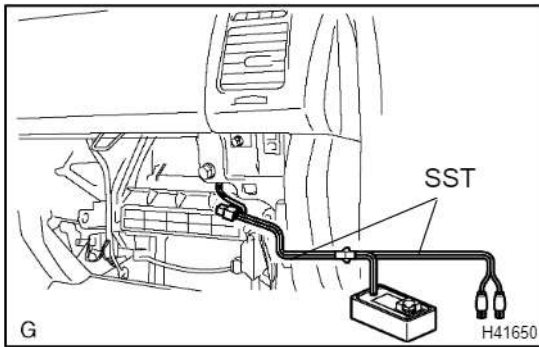
- (a) Check functioning of the SST (See step 1-(a) on page 60-16).

- (b) Disconnect the airbag connectors.
 - (1) Remove the instrument panel under cover sub-assy No.2.
 - (2) Remove the glove compartment door assy.

NOTICE:

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

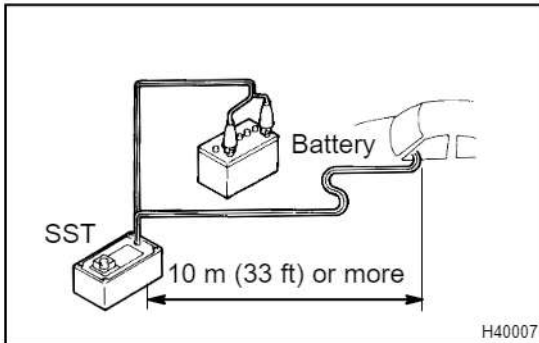
- (3) Disconnect the airbag connectors.



- (c) Install the SST.
- (1) Connect the connector of the SST to the instr pnl pass l/door airbag assy connector.
- SST 09082-00700, 09082-00780

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 red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.
- (d) Deploy the airbag.
- (1) Check that no one is inside the vehicle, nor within 10 m (33 ft) area around the vehicle.
 - (2) Press the activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.

- (e) Dispose of the instr pnl pass l/door airbag assy.

CAUTION:

- ◆ The instr pnl pass l/door airbag assy 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 instr pnl pass l/door airbag assy with the deployed airbag.
- ◆ When moving a vehicle for scrapping which has a instr pnl pass l/door airbag assy with the deployed airbag, use gloves and safety glasses.
- ◆ Do not apply water, etc. to a instr pnl pass l/door airbag assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.

HINT:

When scrapping a vehicle, deploy the airbag and scrap the vehicle with the instr pnl pass l/door airbag assy still installed.

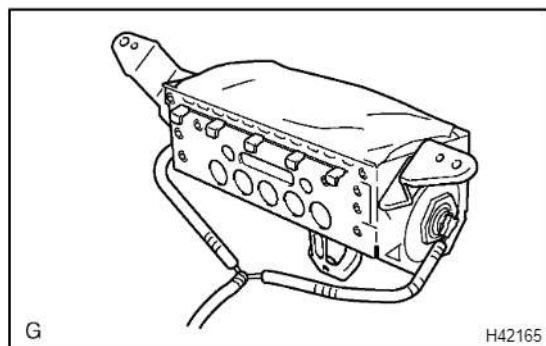
2. DISPOSE OF INSTR PNL PASS L/DOOR AIR BAG ASSY (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)

NOTICE:

- ◆ When disposing of the instr pnl pass l/door airbag assy only, never use the customer's vehicle to deploy the airbag.
- ◆ Be sure to follow the procedure given below when deploying the airbag.

HINT:

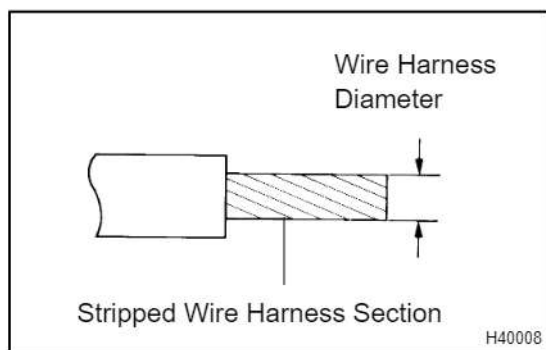
Have a battery ready as the power source to deploy the airbag.



- (a) Remove the instr pnl pass l/door airbag assy (See page 60-26).

CAUTION:

- ◆ When removing the instr pnl pass l/door airbag assy, 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 instr pnl pass l/door airbag assy, keep the upper surface of the airbag deployment side facing upward.



- (b) Using a service-purpose wire harness for the vehicle, tie down the instr pnl pass l/door airbag assy to the tire.

Wire harness: Stripped wire harness section
1.25 mm² or more (0.0019 in.² or more)

CAUTION:

If a wire harness which is too thin or some other thing is used to tie down the instr pnl pass l/door airbag assy, 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 in.²).

HINT:

To calculate the square of the stripped wire harness section:

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

Position the instr pnl pass l/door airbag assy inside the tire with the airbag deployment side facing inside.

Tire size: Must exceed the following dimensions–

Width: 185 mm (7.28 in.)

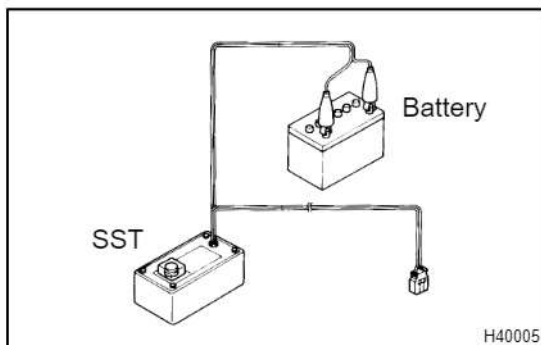
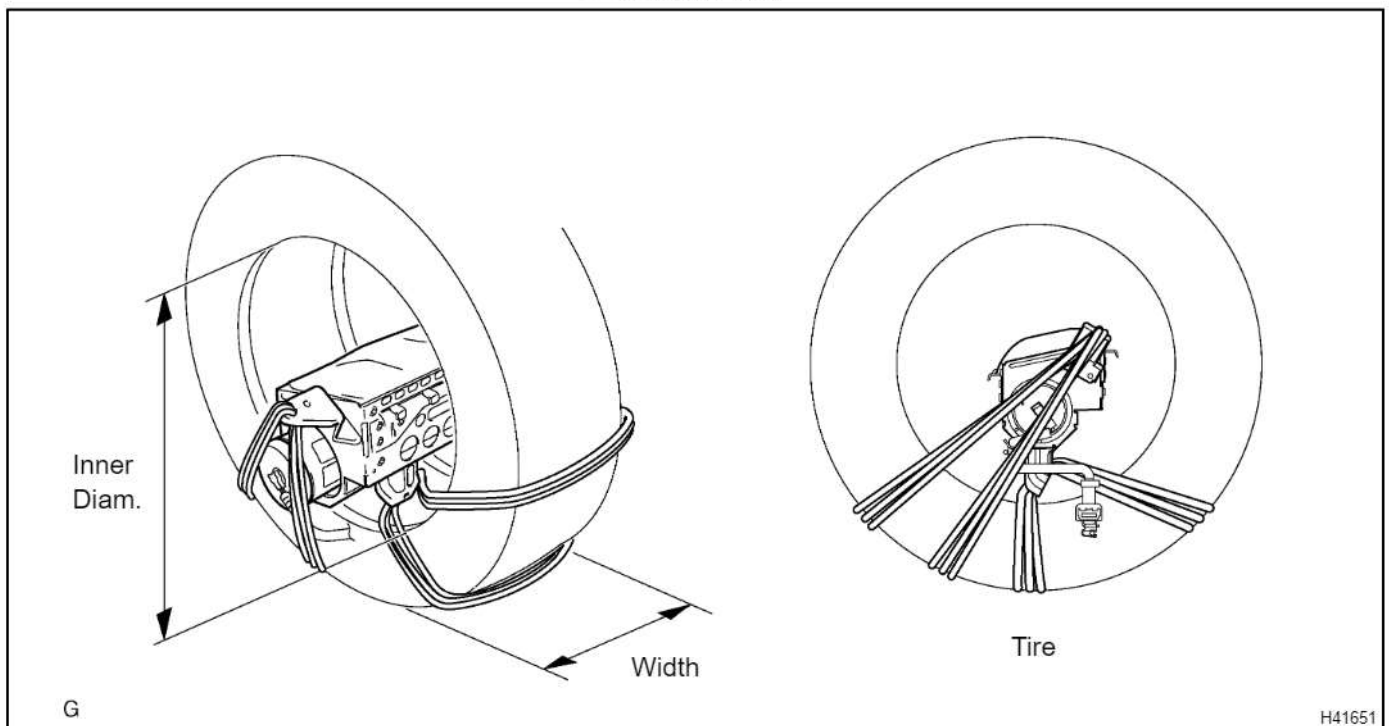
Inner diameter: 360 mm (14.17 in.)

CAUTION:

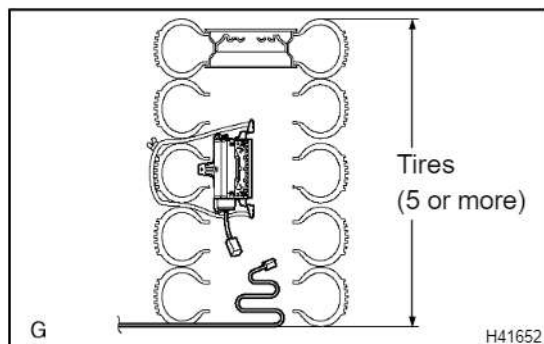
- ◆ Make sure that the wire harness is tight. It is very dangerous if looseness in the wire harness results in the instr pnl pass l/door airbag assy coming free due to the shock from the airbag deploying.
- ◆ Always tie down the instr pnl pass l/door airbag assy with the airbag deployment side facing inside.

NOTICE:

The tire will be marked by the airbag deployment, so use a redundant tire.

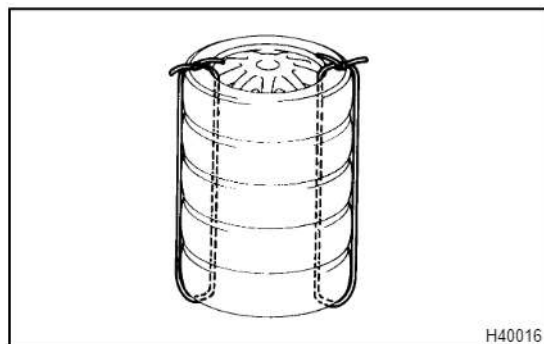


- (c) Check the function of the SST (See step 1-(a) on page 60-16).



(d) Place tires.

- (1) Place at least 2 tires under the tire to which the instr pnl pass l/door airbag assy is tied.
- (2) Place at least 2 tires over the tire to which the instr pnl pass l/door airbag assy is tied. The top tire should have the wheel installed.



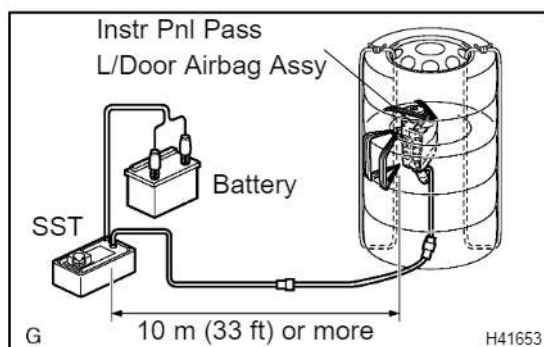
(3) Tie the tires together with 2 wire harness.

CAUTION:

Make sure that the wire harness is tight. It is very dangerous if looseness in the 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. Secure at least 1 m (3 ft) of slack for the wire harness.



(e) Install the SST.

Connect the connectors of the SST to the instr pnl pass l/door airbag assy connector.

SST 09082-00700, 09082-00780

NOTICE:

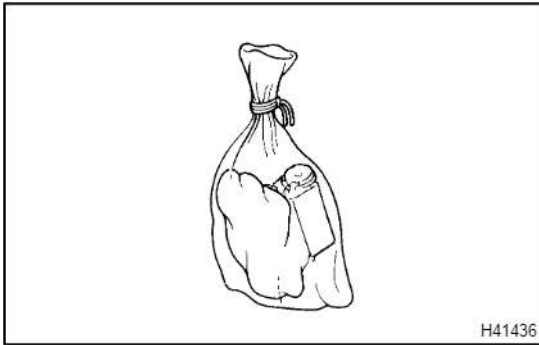
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(f) Deploy the airbag.

- (1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
- (2) Check that no one is within 10 m (33 ft) area around the tire which the instr pnl pass l/door airbag assy is tied to.
- (3) Press the activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.



(g) Dispose of the instr pnl pass l/door airbag assy.

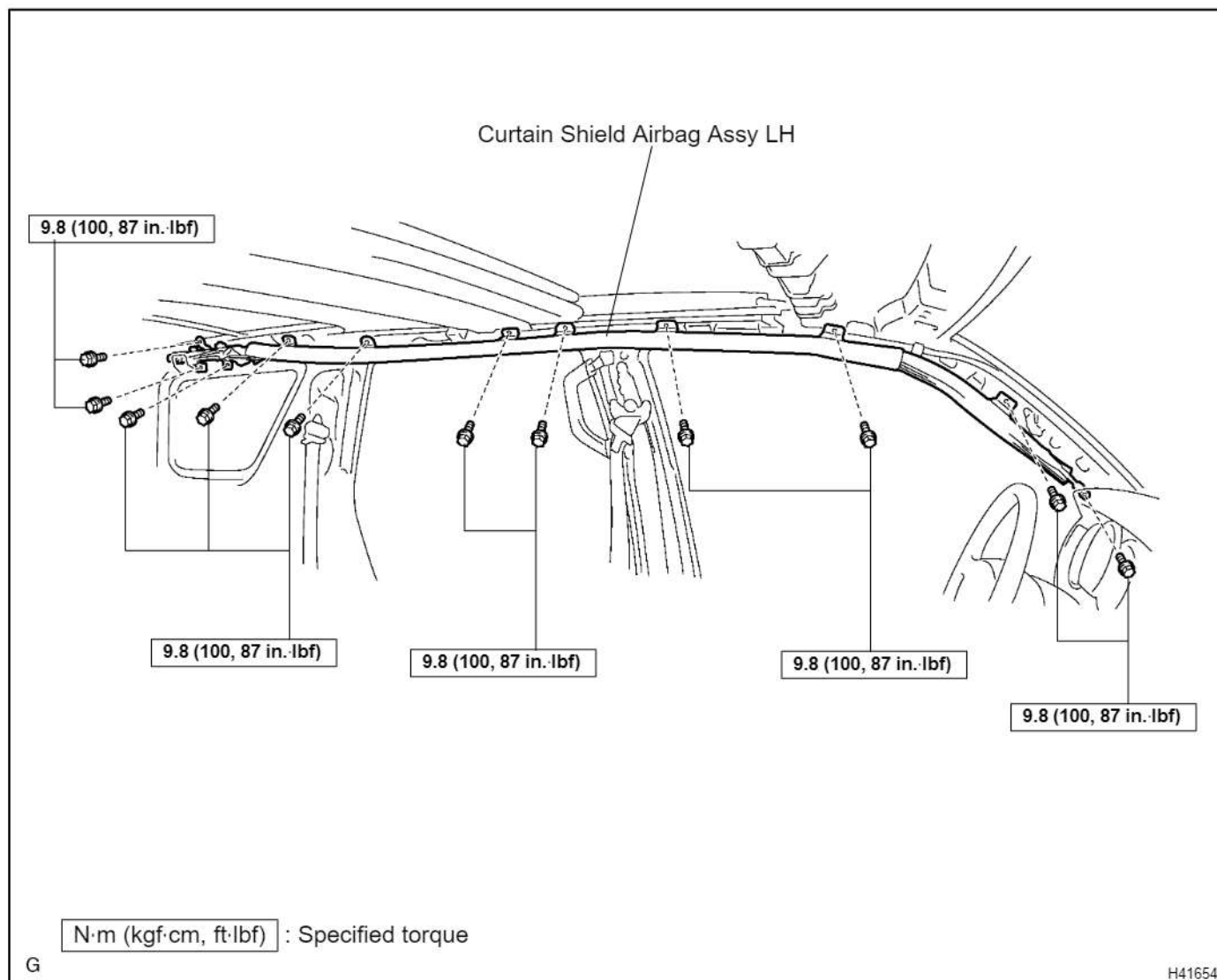
CAUTION:

- ◆ The instr pnl pass l/door airbag assy 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 instr pnl pass l/door airbag assy with the deployed airbag.
 - ◆ Do not apply water, etc. to a instr pnl pass l/door airbag assy with the deployed airbag.
 - ◆ Always wash your hands with water after completing the operation.
- (1) Remove the instr pnl pass l/door airbag assy from the tire.
 - (2) Place the instr pnl pass l/door airbag assy in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts disposal.

CURTAIN SHIELD AIR BAG ASSY LH

COMPONENTS

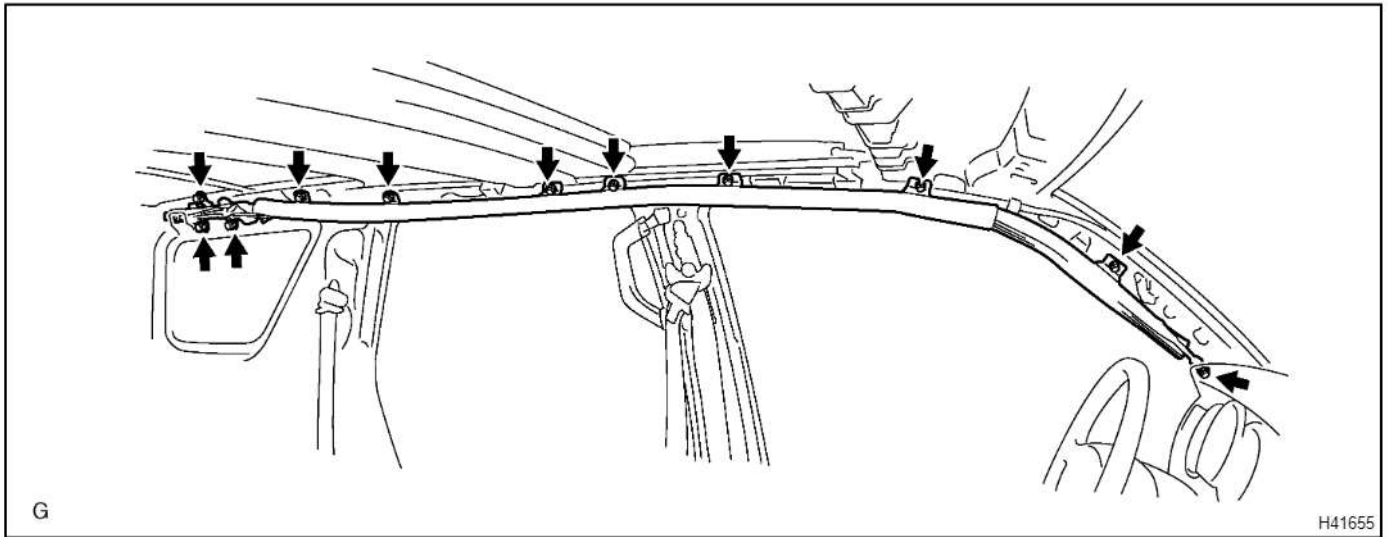
60095-03



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REPLACEMENT

1. **PRECAUTION**(See page 60-10)
 2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-10)
 3. **REMOVE ROOF HEADLINING ASSY**(See page 76-43)
 4. **REMOVE CURTAIN SHIELD AIR BAG ASSY LH**
 - (a) Using a screwdriver, disconnect the connector of the curtain shield airbag assy LH.
 - (b) Remove the 11 bolts and curtain shield airbag assy LH.
- HINT:**
Remove the bolts from front side of the vehicle in order.



5. **INSPECT CURTAIN SHIELD AIR BAG ASSY LH**
 6. **INSTALL CURTAIN SHIELD AIR BAG ASSY LH**
 - (a) Install the curtain shield airbag assy LH with the 11 bolts.
Torque: 9.8 N·m (100 kgf·cm, 87 in.·lbf)
- HINT:**
Install the bolts from rear side of the vehicle in order.
- (b) Connect the curtain shield airbag assy LH connector.
 7. **INSTALL ROOF HEADLINING ASSY**(See page 76-43)
 8. **INSPECT SRS WARNING LIGHT**(See page 05-1238)

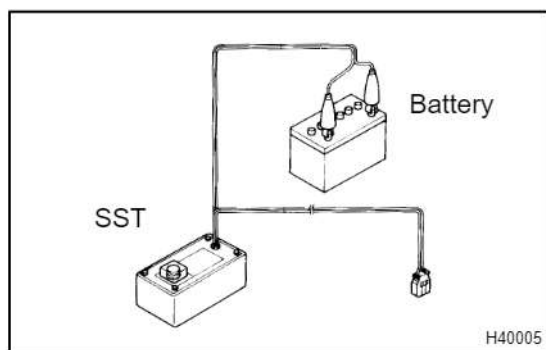
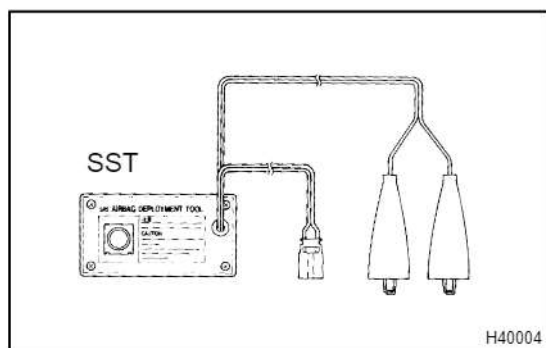
DISPOSAL

HINT:

When scrapping vehicle equipped with an SRS or disposing of a curtain shield airbag assy, 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 assy 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.



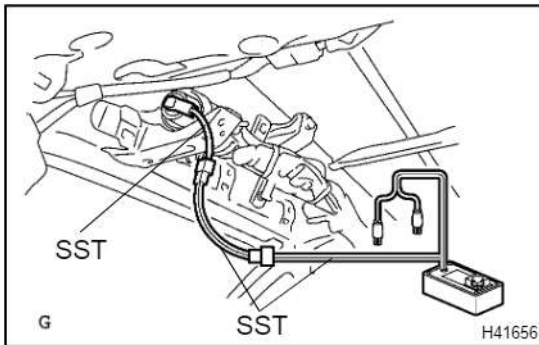
- ◆ When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.
- ◆ When deploying an airbag, perform the operation at least 10 m (33 ft) away from the curtain shield airbag assy.
- ◆ The curtain shield airbag assy 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 assy with the deployed airbag.
- ◆ Do not apply water, etc. to a curtain shield airbag assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.

1. DISPOSE OF CURTAIN SHIELD AIR BAG ASSY LH (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

HINT:

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

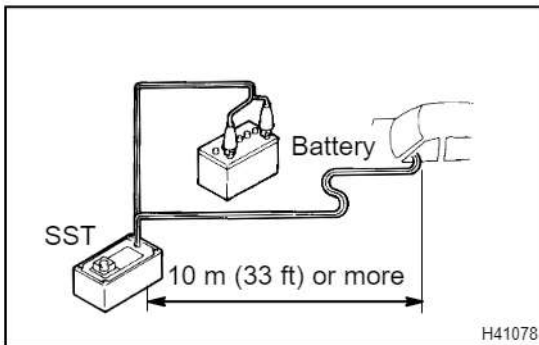
- (a) Check functioning of the SST (See step 1-(a) on page 60-16).
- (b) Disconnect the airbag connector.
 - (1) Remove the roof headlining sub-assy.
 - (2) Using a screwdriver, disconnect the curtain shield airbag connector.



- (c) Install the SST.
- (1) Connect the connectors of the SST to the curtain shield airbag assy LH connector.
- SST 09082-00700, 09082-00802 (09082-10801, 09082-20801)

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 rear 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 red clip of the SST to the battery positive (+) terminal and the black of the SST 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 activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.

- (e) Dispose of the curtain shield airbag assy.

CAUTION:

- ◆ The curtain shield airbag assy 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 assy with the deployed airbag.
- ◆ When moving a vehicle for scrapping which has a curtain shield airbag assy with the deployed airbag, use gloves and safety glasses.
- ◆ Do not apply water, etc. to a curtain shield airbag assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.

HINT:

When scrapping a vehicle, deploy the airbag and scrap the vehicle with the curtain shield airbag assy still installed.

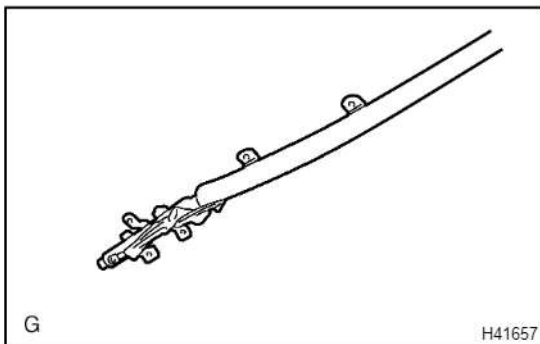
2. DISPOSE OF CURTAIN SHIELD AIR BAG ASSY LH (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)

NOTICE:

- ◆ When disposing of the curtain shield airbag assy RH only, never use the customer's vehicle to deploy the airbag.
- ◆ Be sure to follow the procedure given below when deploying the airbag.

HINT:

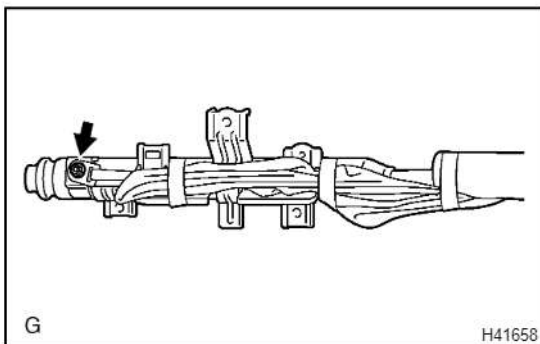
Have a battery ready as the power source to deploy the airbag.



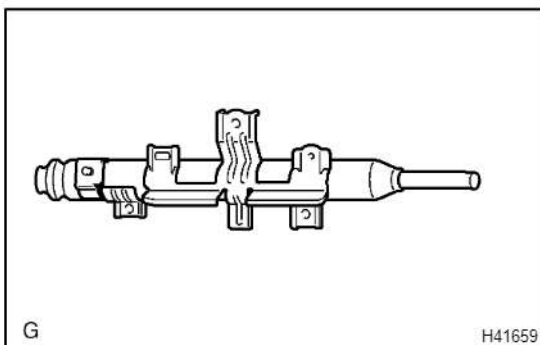
- (a) Remove the curtain shield airbag assy (See page 60-35).

CAUTION:

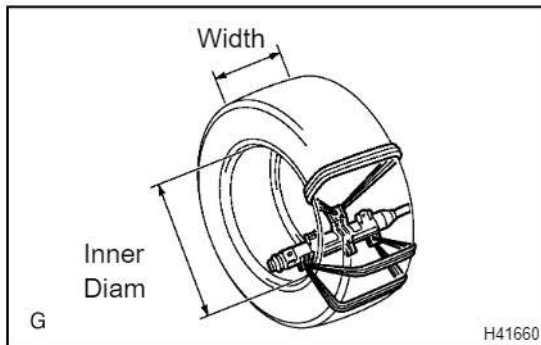
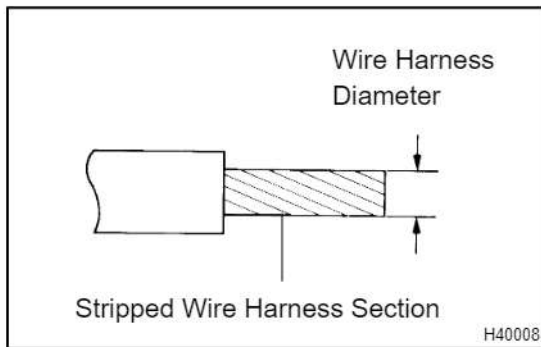
When removing the curtain shield airbag assy, work must be started 90 seconds after the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.



- (b) Remove the bolt from the inflator.



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



- (d) Using a service-purpose wire harness for the vehicle, tie down the curtain shield airbag assy to the tire.

Wire harness: Stripped wire harness section
1.25 mm² or more (0.0019 in.² or more)

CAUTION:

If a wire harness which is too thin or some other thing is used to tie down the curtain shield airbag assy, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use which is at least 1.25 mm² (0.0019 in.²).

HINT:

To calculate the square of the stripped wire harness section:

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

Position the curtain shield airbag assy LH inside the tire with the airbag deployment side facing inside.

Tire size: Must exceed the following dimensions-

Width: 185 mm (7.28 in.)

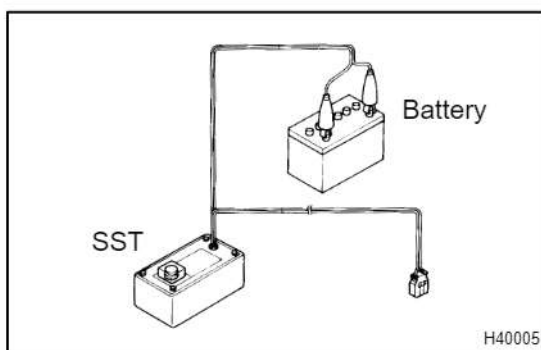
Inner diameter: 360 mm (14.17 in.)

CAUTION:

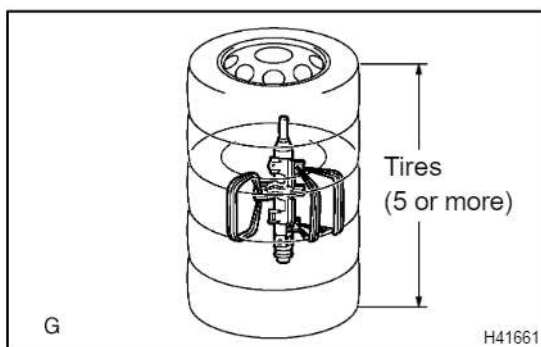
- ◆ Make sure that the wire harness is tight. It is very dangerous if looseness in the wire harness results in the curtain shield airbag assy LH coming free due to the shock from the airbag deploying.
- ◆ Always tie down the curtain shield airbag assy LH with the airbag deployment side facing inside.

NOTICE:

The tire will be marked by the airbag deployment, so use a redundant tire.



- (e) Check functioning of the SST (See step 1-(a) on page 60-16).

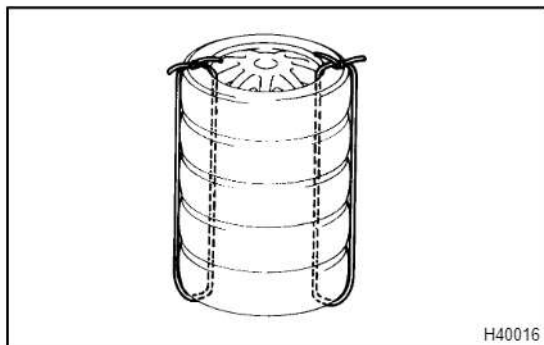


- (f) Place the tires.

CAUTION:

Place the tire so that the deployment direction of the curtain shield airbag assy LH will be downward.

- (1) Place at least 2 tires under the tire to which the curtain shield airbag assy LH is tied.
- (2) Place at least 2 tires over the tire to which the curtain shield airbag assy is tied. The top tire should have the wheel installed.



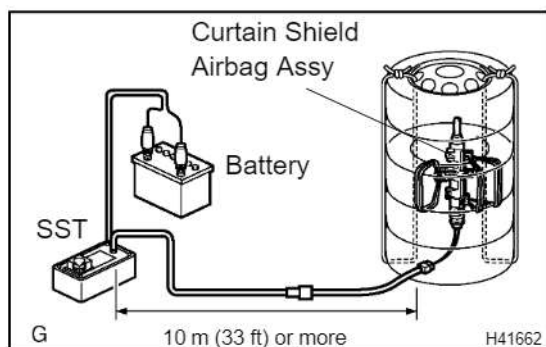
- (3) Tie the tires together with 2 wire harness.

CAUTION:

Make sure that the wire harness is tight. It is very dangerous if looseness in the 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. Secure at least 1 m (3 ft) of slack for the wire harness.



- (g) Install the SST.

Connect the connectors of the SST to the curtain shield airbag assy connector.

SST 09082-00700, 09082-00802 (09082-10801, 09082-20801)

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.

- (h) Deploy the airbag.

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

HINT:

The airbag deploys as the LED of the SST activation switch comes on.



- (i) Dispose of the curtain shield airbag assy.

CAUTION:

- ◆ The curtain shield airbag assy 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 assy with the deployed airbag.
 - ◆ Always wash your hands with water after completing the operation.
 - ◆ Do not apply water, etc. to a curtain shield airbag assy with the deployed airbag.
- (1) Remove the curtain shield airbag assy from the tire.
 - (2) Place the curtain shield airbag assy in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts disposal.

FRONT SEAT AIRBAG ASSY LH

DISPOSAL

60098-07

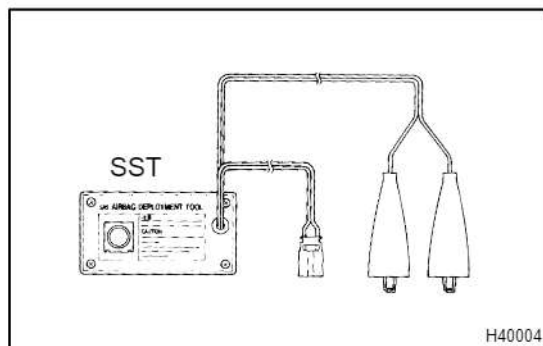
HINT:

When scrapping vehicles equipped with an SRS or disposing of the front seat airbag assy 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.

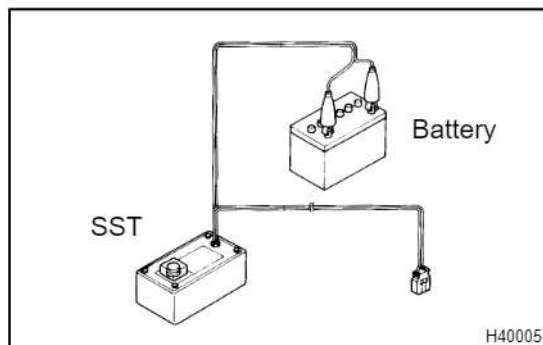
When disposing of a front seat airbag assy with an airbag deployed in a collision, follow the same procedure given in step 1-(e) in "DISPOSAL".

CAUTION:

- ◆ Never dispose of a front seat airbag assy which has not a deployed 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 airbag assy.
- ◆ The front seat airbag assy 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 front seat airbag assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.
- ◆ Do not apply water, etc. to a front seat airbag assy with the deployed airbag.

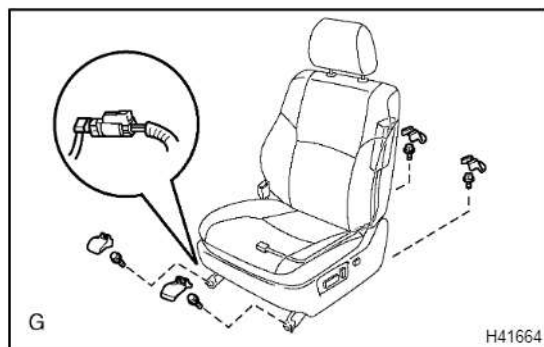


1. DISPOSE OF FRONT SEAT AIRBAG ASSY LH (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

HINT:

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

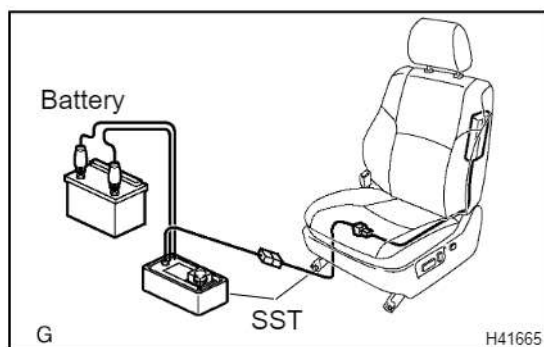
- (a) Check the function of the SST (See step 1- (a) on page 60-16).



- (b) Remove the front seat assy (See page 72-9).
 (c) Disconnect the front seat airbag connector.

NOTICE:

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

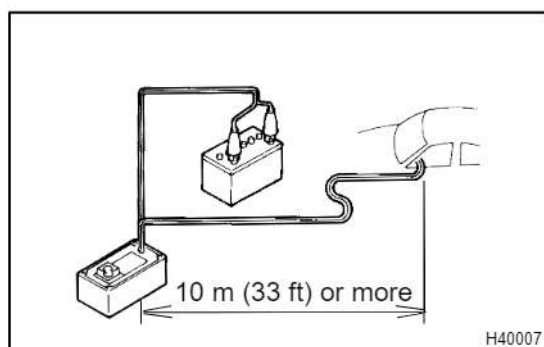


- (d) Install the SST.
 (1) Connect the connectors of the SST connector to the front seat airbag connector.

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 red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
 (e) 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 activation switch of the SST and deploy the airbag.

HINT:

The airbag deploys as the LED of the SST activation switch comes on.

- (f) Dispose of the front seat airbag assy.

CAUTION:

- ◆ The front seat airbag assy 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 seat airbag assy with the deployed airbag.
- ◆ When moving a vehicle for scrapping which has a front seat airbag assy with the deployed airbag, use gloves and safety glasses.
- ◆ Do not apply water, etc. to a front seat airbag assy with the deployed airbag.
- ◆ Always wash your hands with water after completing the operation.

HINT:

When scrapping a vehicle, deploy the airbag and scrap the vehicle with the front seat airbag assy still installed.

2. DISPOSE OF FRONT SEAT AIRBAG ASSY LH (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)

NOTICE:

- ◆ When disposing of the front seat airbag assy 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 seat airbag assy.

(1) Remove the 2 nuts and front seat airbag assy from the seatback assembly.

CAUTION:

Store the front seat airbag assy with the airbag deployment side facing upward.

(b) Using a service-purpose wire harness, tie down the front seat airbag assy.

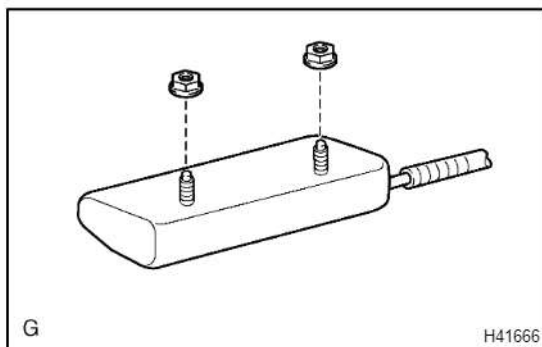
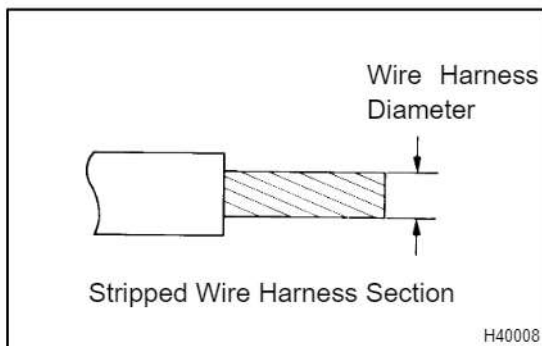
Wire harness: Stripped wire harness section
1.25 mm² or more (0.0019 in² or more)

HINT:

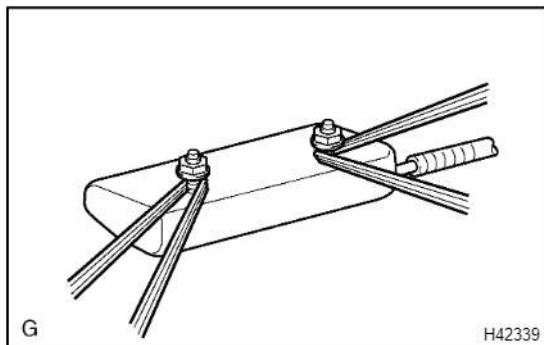
To calculate the square of the stripped wire harness section :
 Square = $3.14 \times (\text{Diameter})^2$ divided by 4

CAUTION:

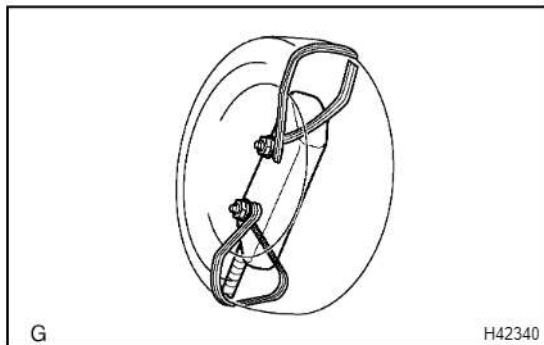
If a wire harness which is too thin or some other thing is used to tie down the front seat airbag assy, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use which is at least 1.25 mm² (0.0019 in²).



(1) Install the 2 nuts in the front seat airbag assy.



- (2) Wind the wire harness around the stud bolts of the front seat airbag assy as shown in the illustration.



- (3) Position the front seat airbag assy inside the tire with the airbag deployment direction facing inside.

Tire size : Must exceed the following dimensions:-

Width 185 mm (7.28 in.)

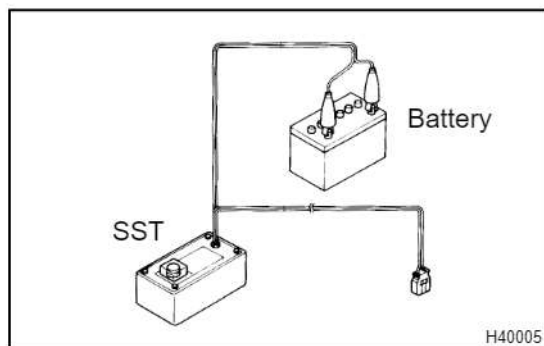
Inner diameter 360 mm (14.17 in.)

CAUTION:

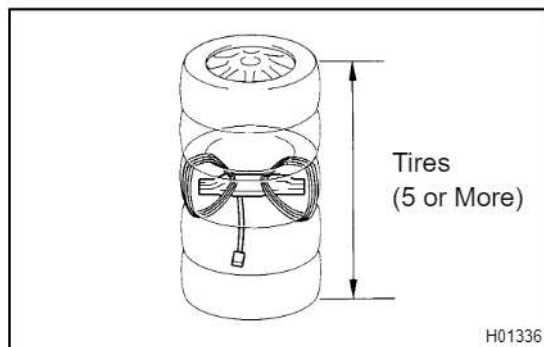
- ◆ Make sure the wire harness is tight. It is very dangerous when a loose wire harness results in the front seat airbag assy coming free due to the shock from the airbag deploying.
- ◆ Always tie down the front seat airbag assy with the airbag door facing inside.

NOTICE:

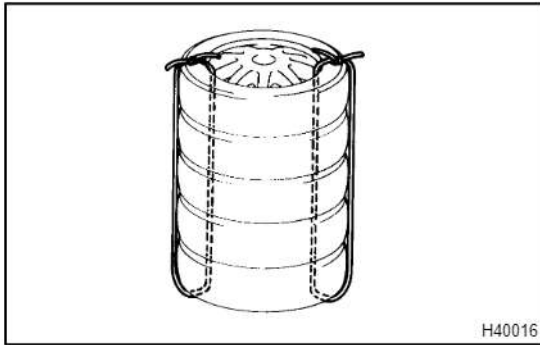
The tire will be marked by the airbag deployment, so use the redundant tire.



- (c) Check functioning of the SST(See step 1– (a) on page 60-16).



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



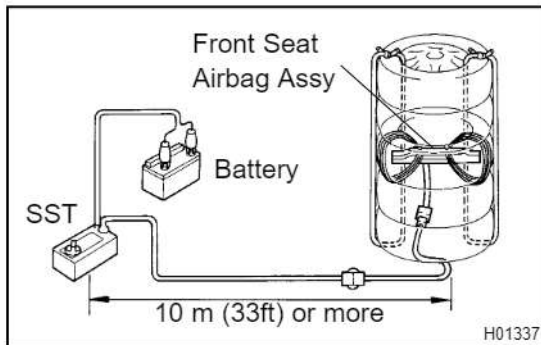
- (3) Tie the tires together with 2 wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. It is very dangerous if looseness in the 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 SST to the front seat airbag assy 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.

- (f) Deploy the airbag.

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

HINT:

The airbag deploys as the LED of the SST activation switch comes on.



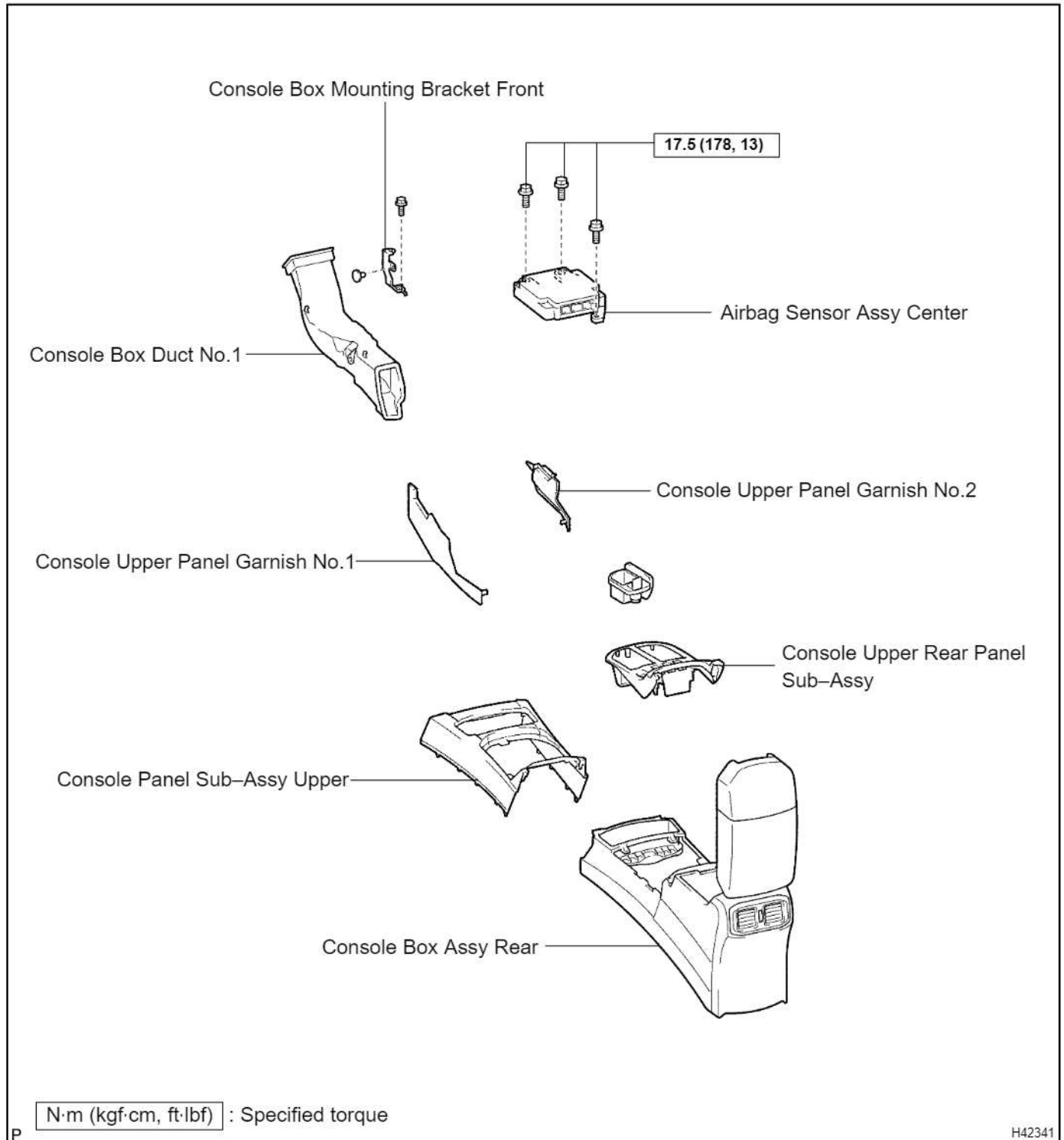
- (g) Dispose of the front seat airbag assy.

CAUTION:

- ◆ The front seat airbag assy 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 seat airbag assy with the deployed airbag.
 - ◆ Always wash your hands with water after completing the operation.
 - ◆ Do not apply water etc. to a front seat airbag assy with the deployed airbag.
- (1) Remove the front seat airbag assy from the tire.
 - (2) Place the front seat airbag assy in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts disposal.

AIR BAG SENSOR ASSY CENTER COMPONENTS

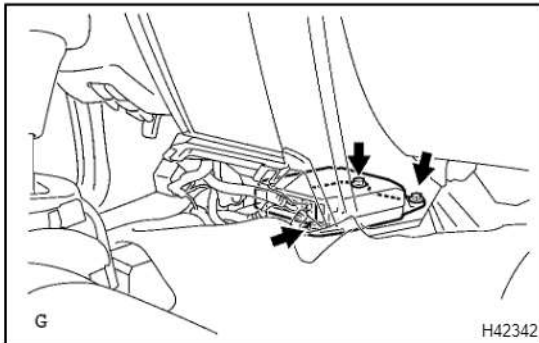
60099-03



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REPLACEMENT

1. PRECAUTION(See page 60-1)
2. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
3. REMOVE CONSOLE UPPER REAR PANEL SUB-ASSY(See page 71-14)
4. REMOVE CONSOLE PANEL SUB-ASSY UPPER(See page 71-14)
5. REMOVE CONSOLE UPPER PANEL GARNISH NO.1(See page 71-14)
6. REMOVE CONSOLE UPPER PANEL GARNISH NO.2(See page 71-14)
7. REMOVE CONSOLE BOX ASSY REAR(See page 71-14)
8. REMOVE CONSOLE BOX MOUNTING BRACKET FRONT(See page 71-14)
9. REMOVE CONSOLE BOX DUCT NO.1(See page 71-14)



10. REMOVE AIR BAG SENSOR ASSY CENTER

- (a) Disconnect the 3 connectors from the air bag sensor assy center.
- (b) Remove the 3 bolts and airbag sensor assy center.

11. INSPECT AIR BAG SENSOR ASSY CENTER(See page 60-10)

12. INSTALL AIR BAG SENSOR ASSY CENTER

- (a) Check that the ignition switch turn OFF.
- (b) Check that the battery negative terminal is disconnected.

NOTICE:

Do not start the operation for 90 seconds after removing the terminal.

- (c) Temporarily install the air bag sensor assy center with the 3 bolts.
- (d) Tighten the 3 bolts to the specified torque.

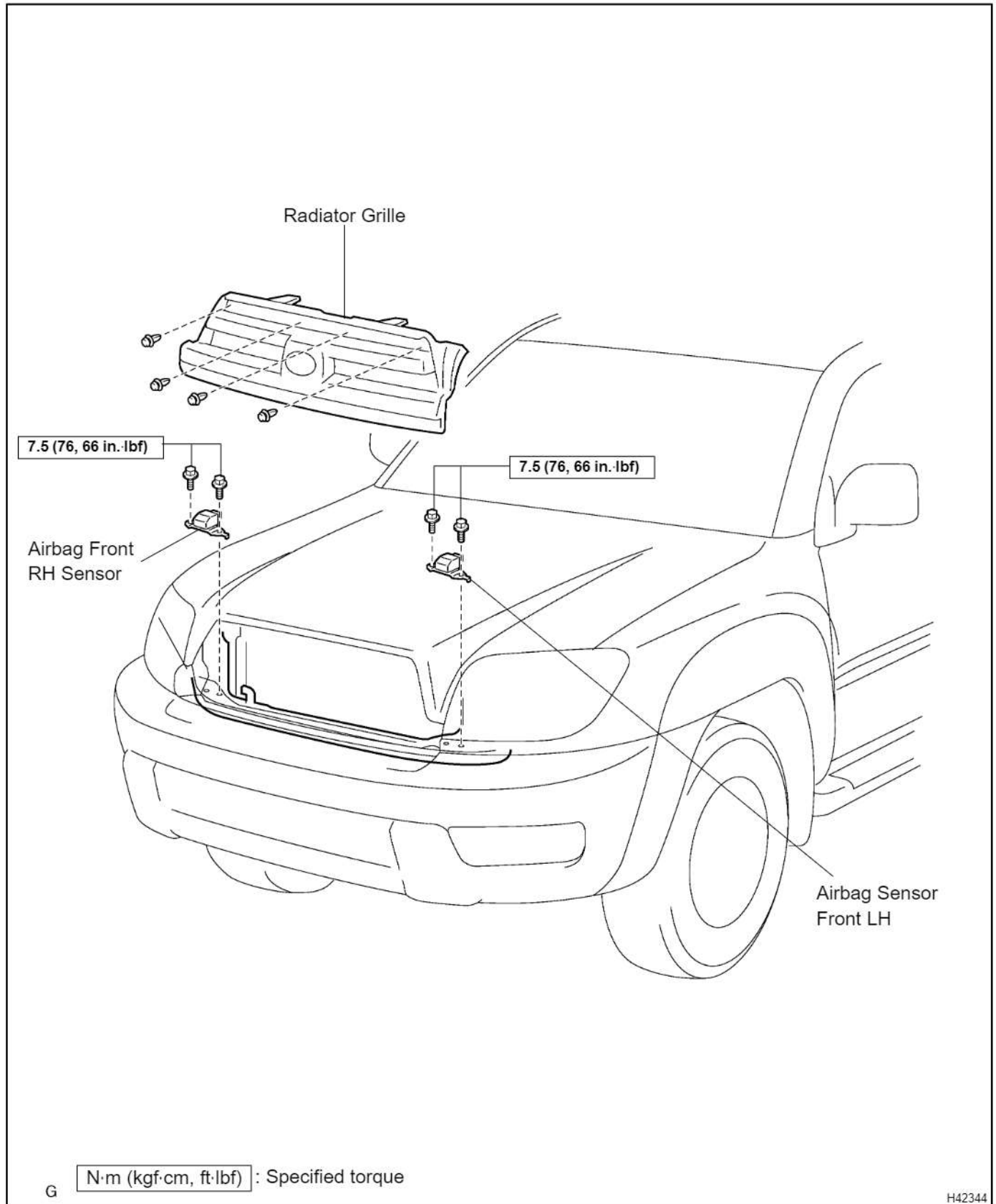
Torque: 17.5 N·m (178 kgf·cm, 13 ft·lbf)

- (e) Connect the connector to the air bag sensor assy center.
- (f) Check that no play is identified.
- (g) Check that the water-proof sheet is properly set.

13. INSPECT SRS WARNING LIGHT(See page 05-1238)

AIR BAG FRONT RH SENSOR COMPONENTS

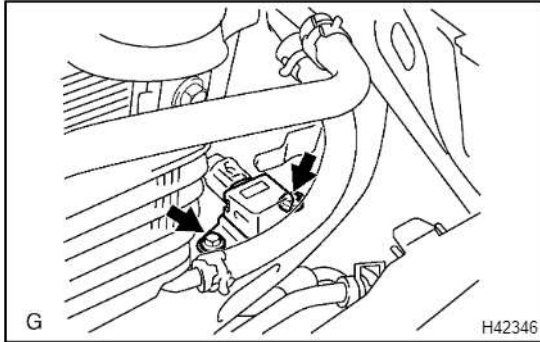
6009B-03



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REPLACEMENT

1. **PRECAUTION**(See page 60-1)
2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-1)
3. **REMOVE RADIATOR GRILLE**(See page 76-2)



4. REMOVE AIR BAG FRONT RH SENSOR

- (a) Remove the 2 bolts and airbag front RH sensor.
- (b) Disconnect the connector from the airbag front RH sensor.

5. **INSPECT AIR BAG FRONT RH SENSOR**(See page 60-10)
6. **INSTALL AIR BAG FRONT RH SENSOR**

- (a) Check that the ignition switch is OFF.
- (b) Check that the battery negative terminal is disconnected.

NOTICE:

Do not start the operation for 90 seconds after removing the terminal.

- (c) Install the airbag front RH sensor with the 2 bolts.
Torque: 7.5 N·m (76 kgf·cm, 66 in·lbf)
- (d) Connect the connector to the airbag front RH sensor.
- (e) Check that no play is identified.

7. **INSPECT SRS WARNING LIGHT**(See page 05-1238)

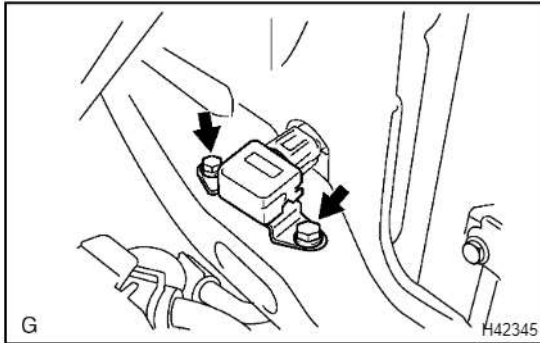
AIR BAG SENSOR FRONT LH REPLACEMENT

600FU-02

HINT:

COMPONENTS: See page 60-48

1. **PRECAUTION**(See page 60-1)
2. **DISCONNECT BATTERY NEGATIVE TERMINAL**(See page 60-1)
3. **REMOVE RADIATOR GRILLE**(See page 76-2)



4. **REMOVE AIR BAG SENSOR FRONT LH**
 - (a) Remove the 2 bolts and airbag sensor front LH.
 - (b) Disconnect the connector from the airbag sensor front LH.

5. **INSPECT AIR BAG SENSOR FRONT LH**(See page 60-10)
6. **INSTALL AIR BAG SENSOR FRONT LH**
 - (a) Check that the ignition switch is OFF.
 - (b) Check that the battery negative terminal is disconnected.

NOTICE:

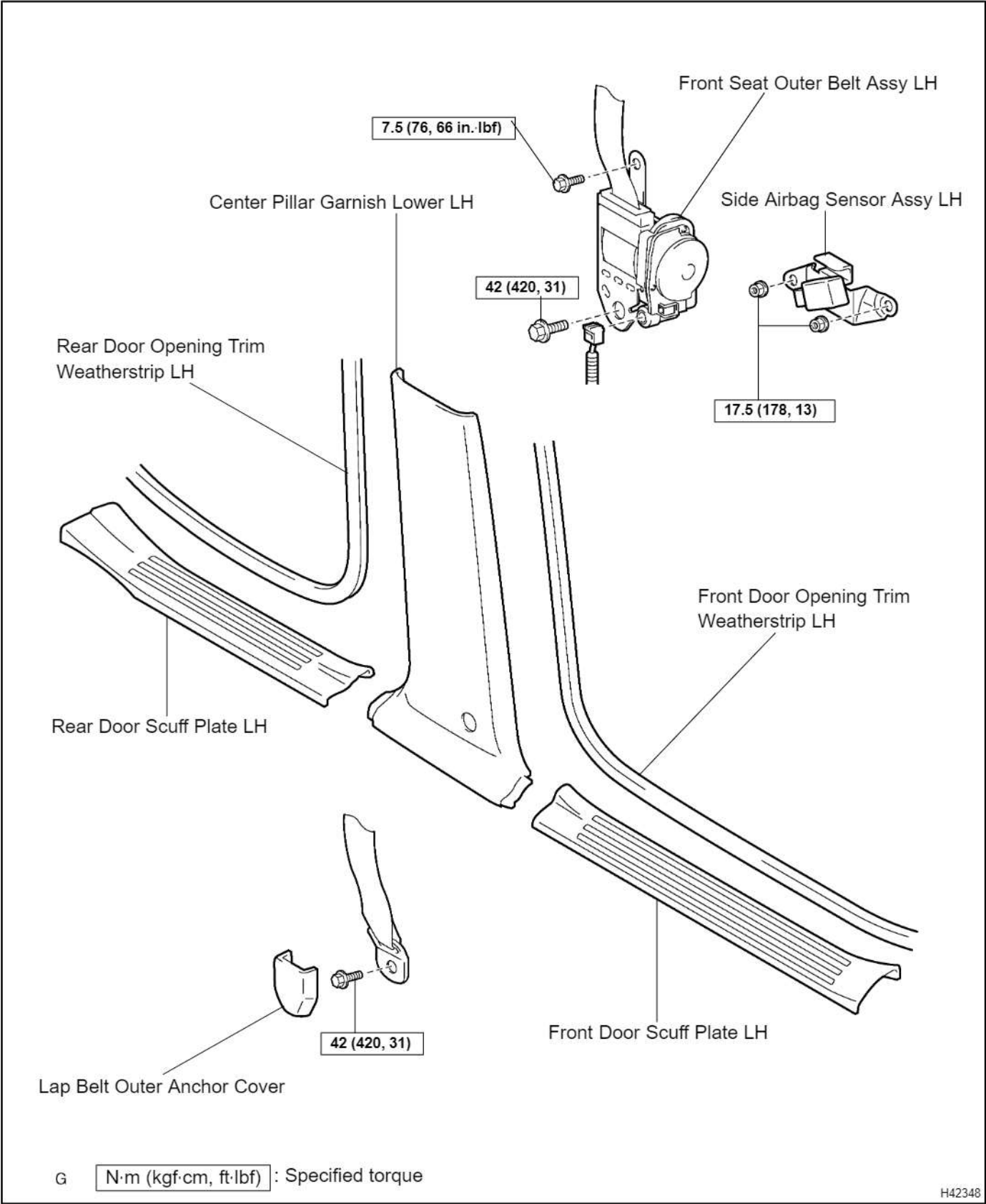
Do not start the operation for 90 seconds after removing the terminal.

- (c) Install the front airbag sensor LH with the 2 bolts.
Torque: 7.5 N·m (76 kgf·cm, 66 in.·lbf)
- (d) Connect the connector to the airbag sensor front LH.
- (e) Check that no play is identified.
7. **INSPECT SRS WARNING LIGHT**(See page 05-1238)

SIDE AIR BAG SENSOR ASSY LH

COMPONENTS

6009F-03

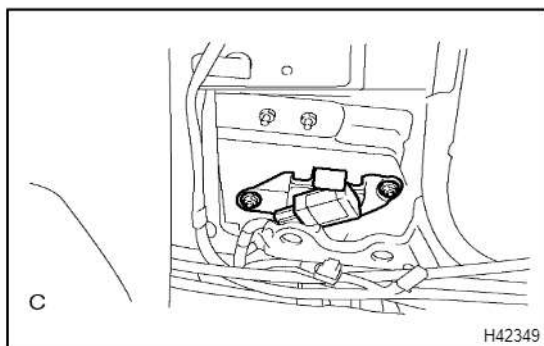


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H42348

REPLACEMENT

1. PRECAUTION(See page 60-1)
2. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
3. REMOVE FRONT DOOR SCUFF PLATE LH(See page 76-43)
4. REMOVE REAR DOOR SCUFF PLATE LH(See page 76-43)
5. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP LH(See page 76-43)
6. REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH(See page 76-43)
7. REMOVE LAP BELT OUTER ANCHOR COVER(See page 76-43)
8. REMOVE CENTER PILLAR GARNISH LOWER LH(See page 76-43)
9. REMOVE FRONT SEAT OUTER BELT ASSY LH(See page 61-10)



10. REMOVE SIDE AIR BAG SENSOR ASSY LH
 - (a) Remove the 2 nuts and side airbag sensor assy LH.
 - (b) Disconnect the connector from the side airbag sensor assy LH.

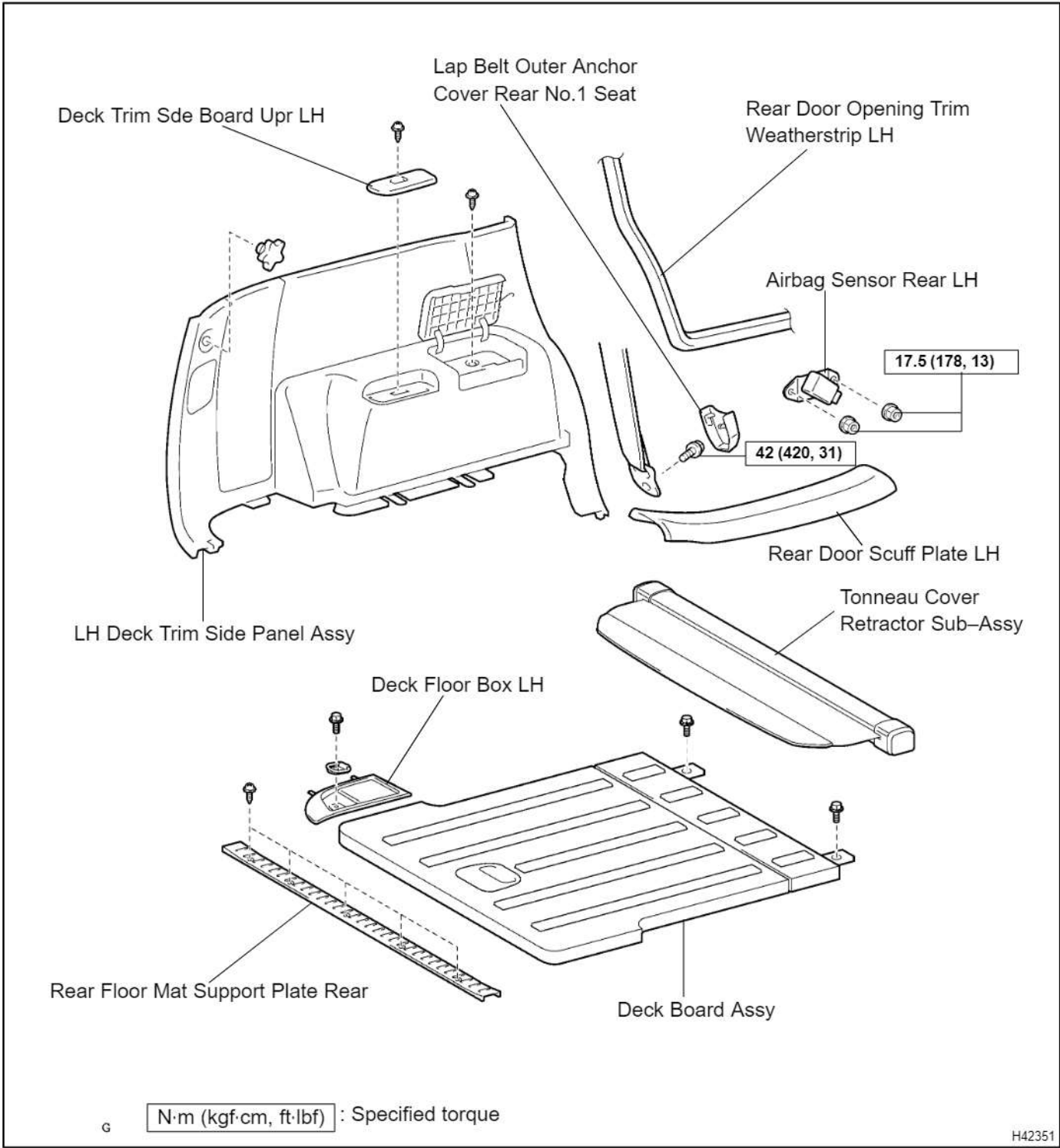
11. INSPECT SIDE AIR BAG SENSOR ASSY LH(See page 60-10)
12. INSTALL SIDE AIR BAG SENSOR ASSY LH
 - (a) Connect the side airbag sensor connector.
 - (b) Install the side airbag sensor assy LH with the 2 nuts.
Torque: 17.5 N·m (178 kgf·cm, 13 ft·lbf)

NOTICE:

- ◆ Installation of the connector is done with the sensor assembly 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.
13. INSTALL FRONT SEAT OUTER BELT ASSY LH(See page 61-10)
Torque:
Upper bolt: 7.5 N·m (76 kgf·cm, 66 in·lbf)
Lower bolt: 42 N·m (420 kgf·cm, 31 ft·lbf)
 14. INSPECT SRS WARNING LIGHT(See page 05-1238)

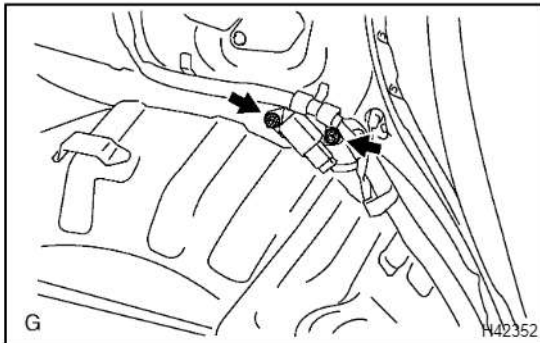
AIR BAG SENSOR REAR LH COMPONENTS

6009H-03



REPLACEMENT

1. PRECAUTION(See page 60-1)
2. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
3. REMOVE TONNEAU COVER RETRACTOR SUB-ASSY(See page 76-43)
4. REMOVE DECK BOARD ASSY(See page 76-43)
5. REMOVE REAR FLOOR MAT SUPPORT PLATE REAR(See page 76-43)
6. REMOVE DECK FLOOR BOX LH(See page 76-43)
7. REMOVE REAR DOOR SCUFF PLATE LH(See page 76-43)
8. REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH(See page 76-43)
9. REMOVE LAP BELT OUTER ANCHOR COVER REAR NO.1 SAET(See page 76-43)
10. REMOVE DECK TRIM SIDE BOARD UPR LH(See page 76-43)
11. REMOVE PANEL ASSY, DECK TRIM SIDE, LH(See page 76-43)



12. REMOVE AIR BAG SENSOR REAR LH

- (a) Disconnect the connector of the airbag sensor rear LH.
- (b) Remove the 2 nuts and the airbag sensor rear LH.

13. INSTALL AIR BAG SENSOR REAR LH

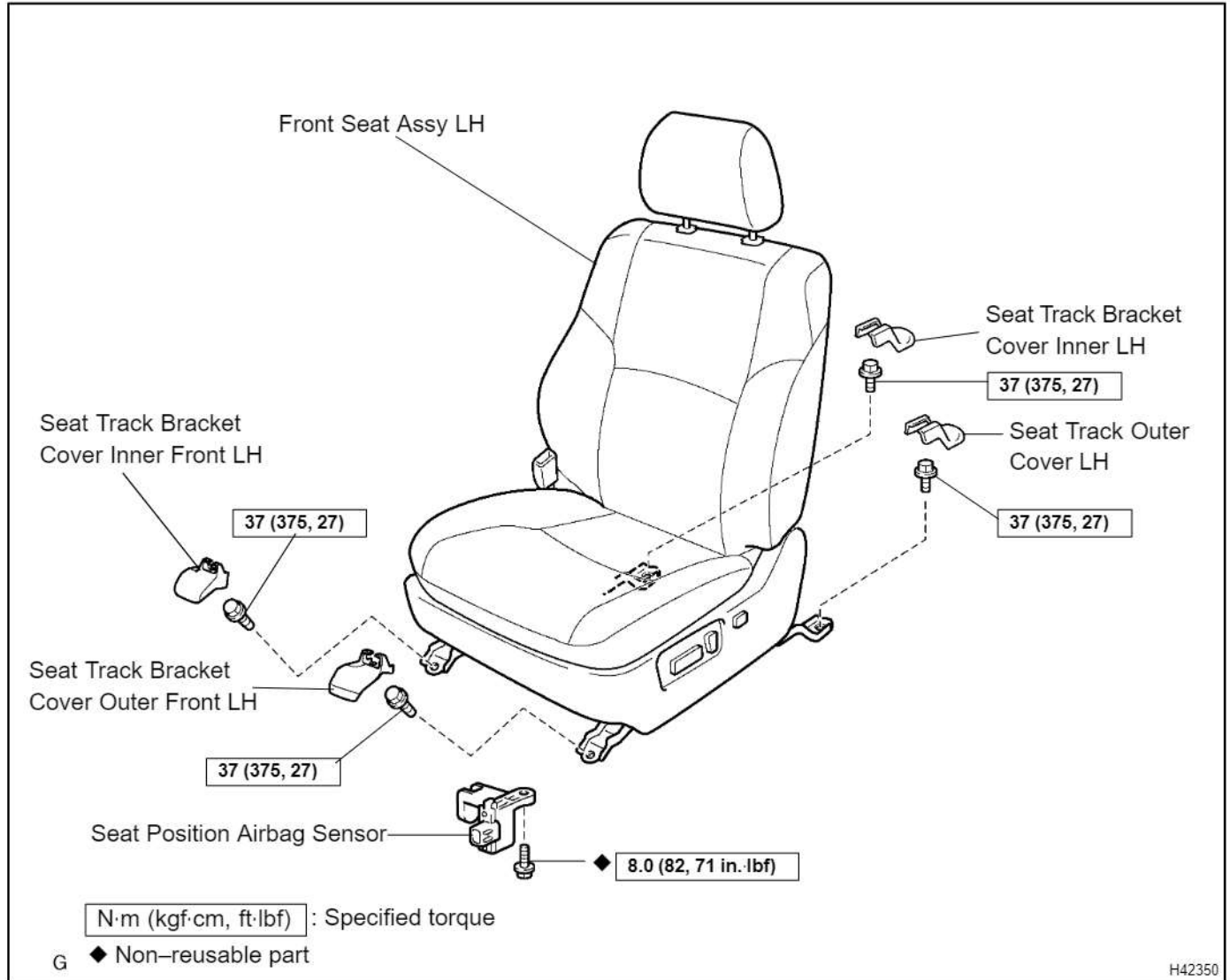
- (a) Install the airbag sensor rear LH with the 2 nuts.
Torque: 17.5 N·m (178 kgf·cm, 13 ft·lbf)
- (b) Connect the connector of the airbag sensor rear LH.

NOTICE:

- ◆ Installation of the connector is done with the sensor assembly 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.
14. INSPECT AIR BAG SENSOR REAR LH(See page 60-10)
 15. INSPECT SRS WARNING LIGHT(See page 05-1238)

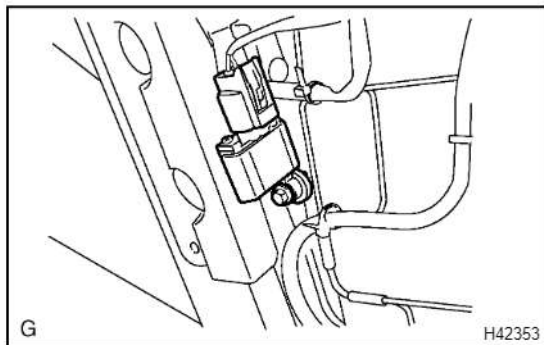
SEAT POSITION AIR BAG SENSOR COMPONENTS

6009J-03



REPLACEMENT

1. PRECAUTION(See page 60-1)
2. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
3. REMOVE SEAT TRACK BRACKET COVER OUTER FRONT LH(See page 72-10)
4. REMOVE SEAT TRACK BRACKET COVER INNER FRONT LH(See page 72-10)
5. REMOVE SEAT TRACK OUTER COVER LH(See page 72-10)
6. REMOVE SEAT TRACK BRACKET COVER INNER LH(See page 72-10)
7. REMOVE FRONT SEAT ASSY LH(See page 72-10)



8. REMOVE SEAT POSITION AIR BAG SENSOR

- (a) Disconnect the connector of the seat position airbag sensor.
- (b) Remove the bolt and seat position airbag sensor.

9. INSTALL SEAT POSITION AIR BAG SENSOR

- (a) Install the seat position airbag sensor with a new bolt.

Part No.:

Bolt: 90119-06871

Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

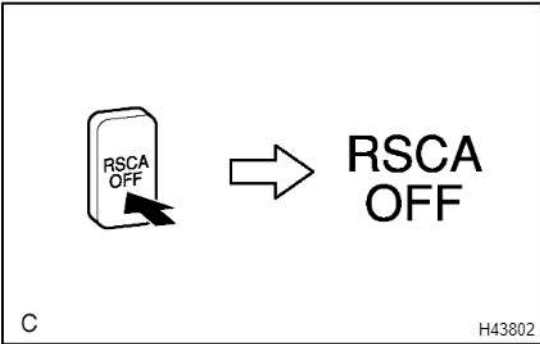
- (b) Connect the connector of the seat position sensor.

NOTICE:

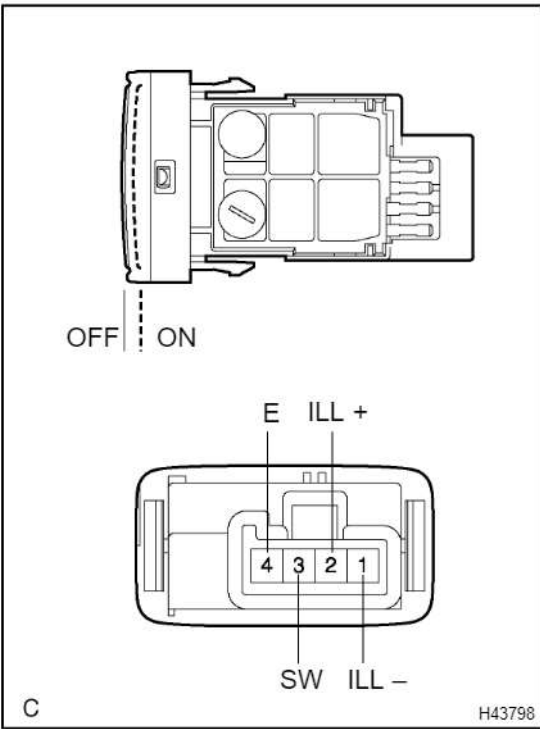
- ◆ Installation of the connector is done with the sensor assembly installed. Make sure the sensor assembly is installed with the specified torque.
 - ◆ If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly 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.
10. INSTALL FRONT SEAT ASSY LH(See page 72-10)
Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)
 11. INSPECT SRS WARNING LIGHT(See page 05-1238)

CURTAIN AIRBAG CUTOFF SWITCH INSPECTION

600Q4-01



1. **INSPECT RSCA OFF INDICATOR**
 - (a) Turn the ignition switch to the ON position.
 - (b) Check that the RSCA OFF indicator comes on for approximately 3 seconds and then goes off.
 - (c) Check that the RSCA OFF indicator goes off after pressing the curtain airbag cut off switch for approximately 2 seconds.
2. **INSPECT CURTAIN AIRBAG CUTOFF SWITCH**
 - (a) Remove the instrument panel finish panel sub-assy lower (see page 71-14).
 - (b) Remove the curtain airbag cutoff switch from the instrument panel finish panel sub-assy lower.



- (c) Measure the resistance according to the value(s) in the table below.

Tester connection	Condition	Specified condition
SW (3) - E (4)	OFF (Release)	10 kΩ or higher
SW (3) - E (4)	ON (Pushed in)	Below 1 Ω

- (d) Inspect the illumination operation.
 - (1) Connect the battery positive terminal to terminal ILL + (2) of the connector, and the battery negative terminal to terminal ILL - (1), and check that the indicator comes on.