# SUPPLEMENTAL RESTRAINT SYSTEM

600Y2−01

## PRECAUTION

**CAUTION:**

- **The vehicle 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 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 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 before starting the operation.**
  **(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, front passenger airbag assy, airbag sensor assy center, airbag sensor front, 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.**
- **Be sure to perform the initialization of the occupant classification ECU under the conditions listed below (See page 05−1452). If the initialization is not performed, the SRS may not operate properly.**
  - **The occupant classification ECU is replaced.**
  - **Accessories (seatback tray or seat cover, etc.) are installed to the vehicle.**
  - **The passenger seat is removed from the vehicle.**
  - **Both the SRS warning light and passenger airbag ON/OFF indicator light (”OFF”) come on.**
  - **The vehicle is brought to the workshop for repair purpose due to an accident or collision.**

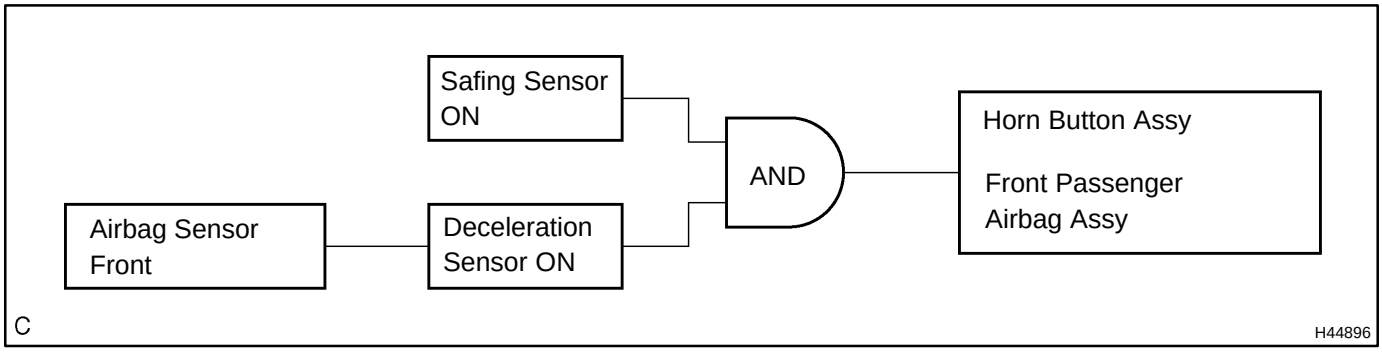
**NOTICE:**

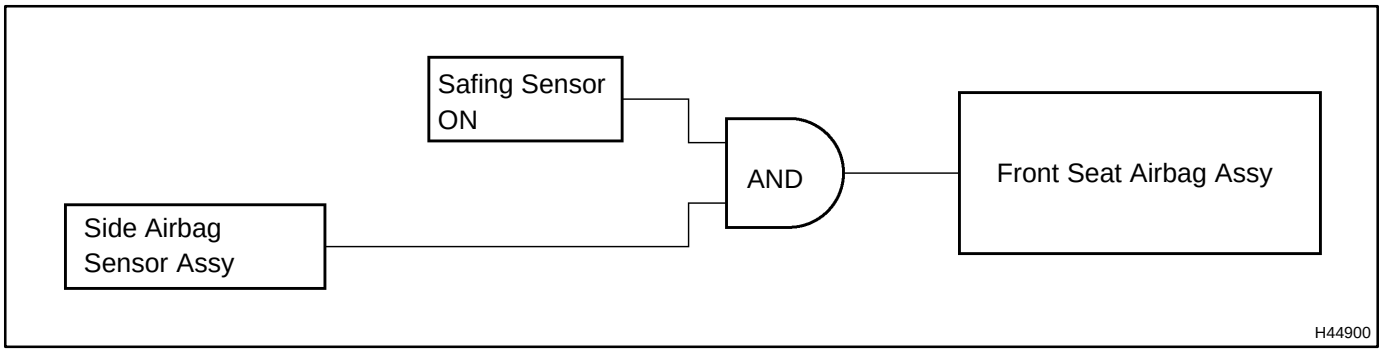
- **Malfunction symptoms of the SRS are difficult to confirm, so DTCs are the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect DTCs before disconnecting the battery.**
- **Even in the case of a minor collision when the SRS does not deploy, the horn button assy, front passenger airbag assy, airbag sensor assy center, airbag sensor front, 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 60−17).**
- **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, front passenger airbag assy, airbag sensor assy center, airbag sensor front, 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, front passenger airbag assy, airbag sensor assy center, airbag sensor front, 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 kΩ/V minimum) for troubleshooting the electrical circuits.**

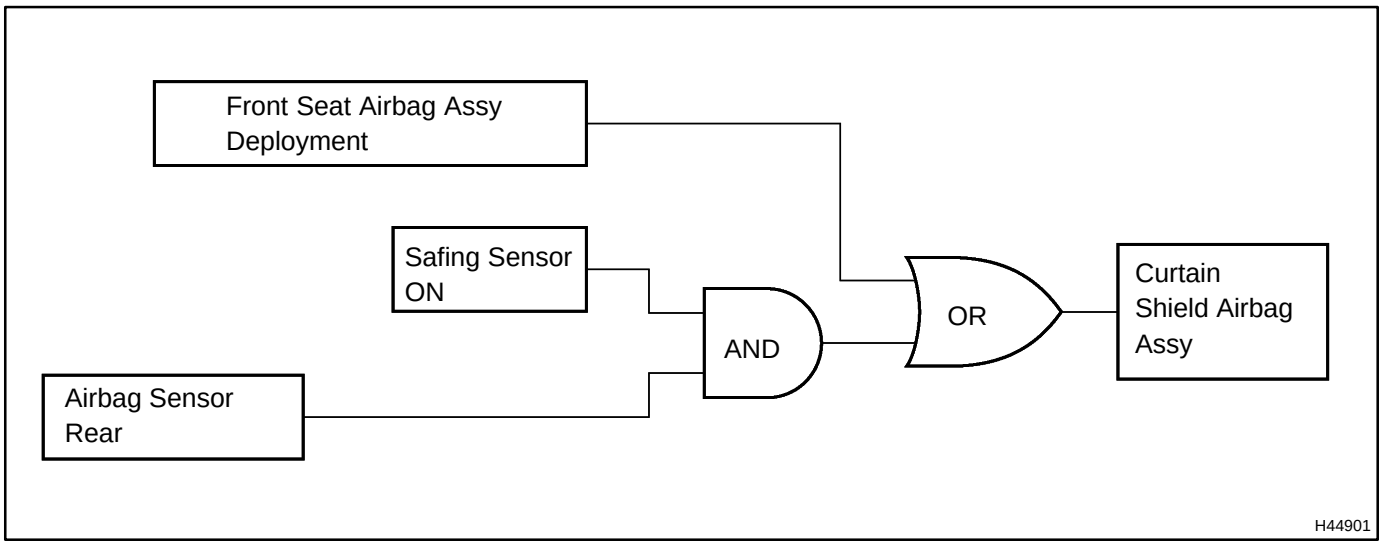
- **Information labels are attached to the periphery of the SRS components. Follow the instructions in the caution.**
- **After work on the SRS is completed, perform the SRS warning light check (See page 05−1456).**
- **When the negative (−) terminal cable is disconnected from the battery, the memory will be cleared. Because of this, be sure to make a record of the contents memorized in each system before starting work. When work is finished, adjust each system as it was before. Never use a back−up power supply from outside the vehicle to avoid erasing the memory in any system.**
- **If the vehicle is equipped with a mobile communication system, see page 01−5.**

## 1. DEPLOYMENT CONDITION

(a) When the vehicle collides and the shock is greater than the specified value, the SRS is activated automatically. The airbag sensor assy center includes the safing sensor and deceleration sensor. The safing sensor was designed to be turned on at a smaller deceleration rate than the deceleration sensor. The deceleration sensor determines whether or not ignition is necessary based on signals from the airbag sensor front. Current flows to the squibs to deploy the SRS when the conditions shown in the illustrations below are met.



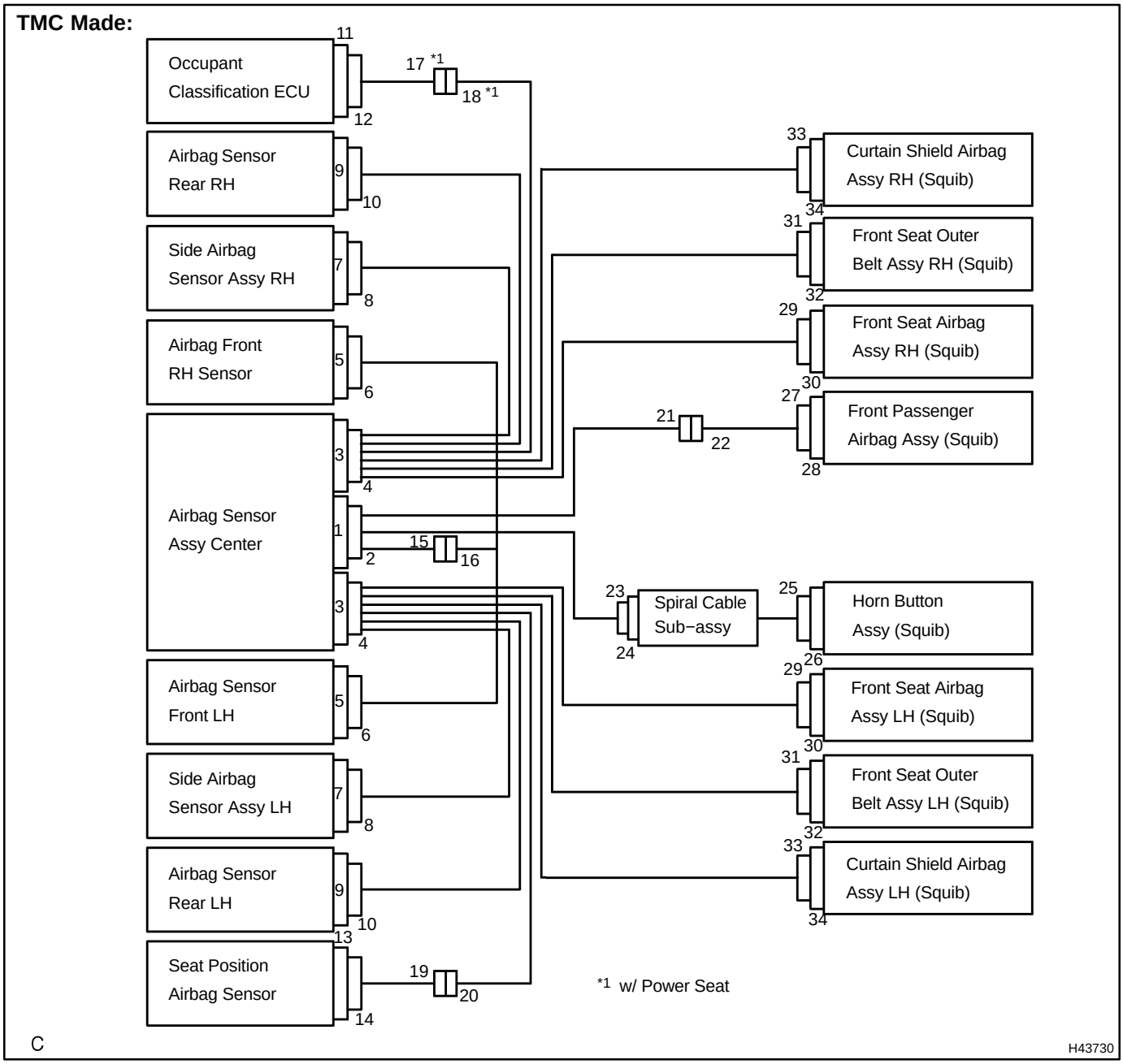



## 2. SRS CONNECTORS

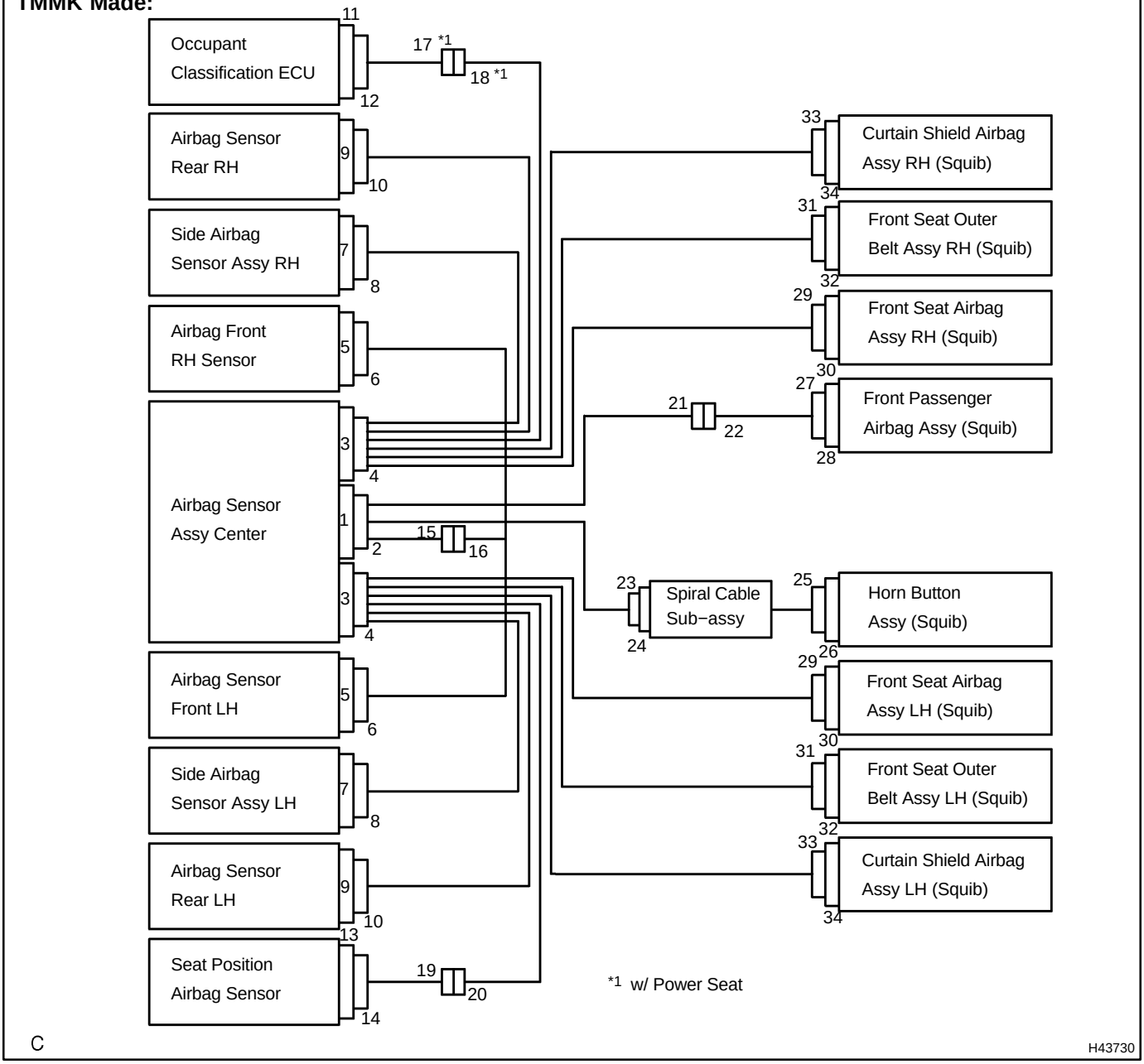
HINT:

SRS connectors are located as shown in the following illustration.



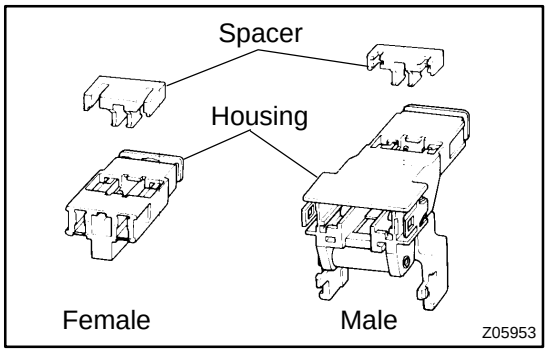

| No. | Connector Type | Application |
|---|---|---|
| (1) | Terminal Twin−Lock Mechanism | Connectors 2, 4, 6, 8, 10, 14, 15, 16, 18, 20, 21, 22, 23, 29, 30 |
| (2) | Activation Prevention Mechanism | Connectors 2, 4, 16, 22, 24, 26, 28, 30, 32, 34 |
| (3) | Half Connection Prevention Mechanism | Connectors 6, 8, 10, 16, 21, 23, 29 |
| (4) | Connector Lock Mechanism (1) | Connectors 25, 27, 31, 33 |
| (5) | Connector Lock Mechanism (2) | Connectors 2, 4 |
| (6) | Improper Connection Prevention Lock Mechanism | Connectors 1, 3 |

**TMMK Made:**



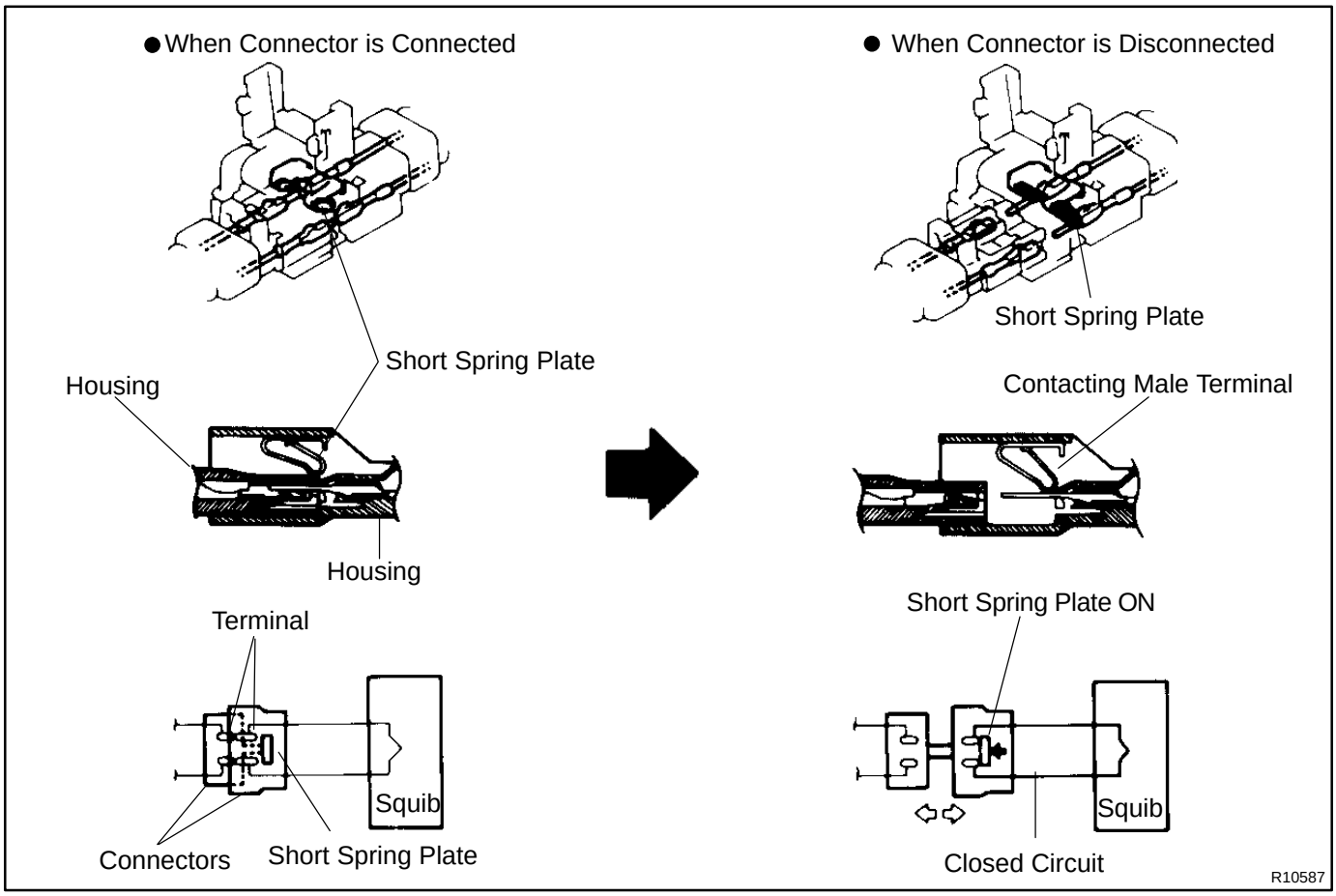

| No. | Connector Type | Application |
|---|---|---|
| (1) | Terminal Twin−Lock Mechanism | Connectors 2, 4, 6, 8, 10, 14, 15, 16, 18, 20, 21, 22, 23 29, 30 33, 34 |
| (2) | Activation Prevention Mechanism | Connectors 2, 4, 16, 22, 24, 26, 28, 30, 32, 33, 34 |
| (3) | Half Connection Prevention Mechanism | Connectors 6, 8, 10, 16, 21, 23, 29, 33 |
| (4) | Connector Lock Mechanism (1) | Connectors 25, 27, 31 |
| (5) | Connector Lock Mechanism (2) | Connectors 2, 4 |
| (6) | Improper Connection Prevention Lock Mechanism | Connectors 1, 3 |

(a) All connectors in the SRS are colored yellow to distinguish them from other connectors, except seat position airbag sensor connector and occupant classification ECU 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.

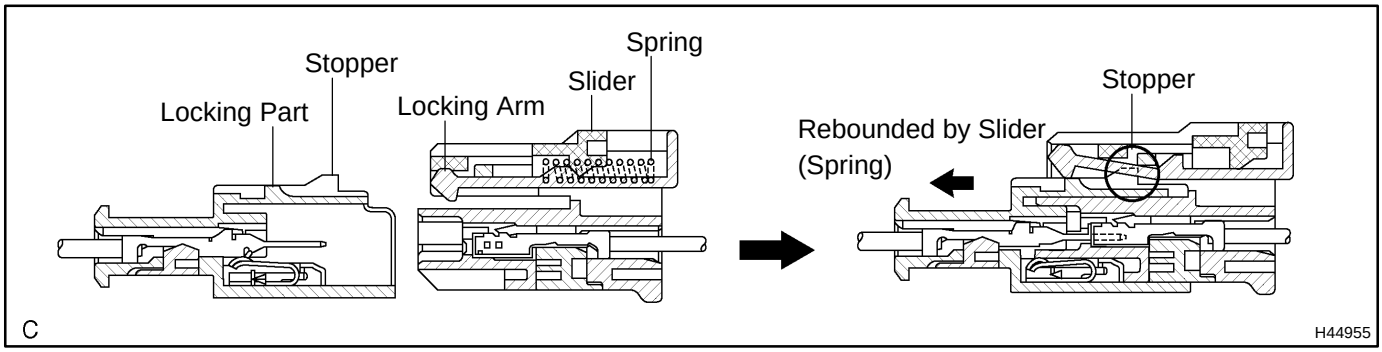



(1) Terminal twin−lock mechanism:
Each connector has a two−piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent terminals from coming out.

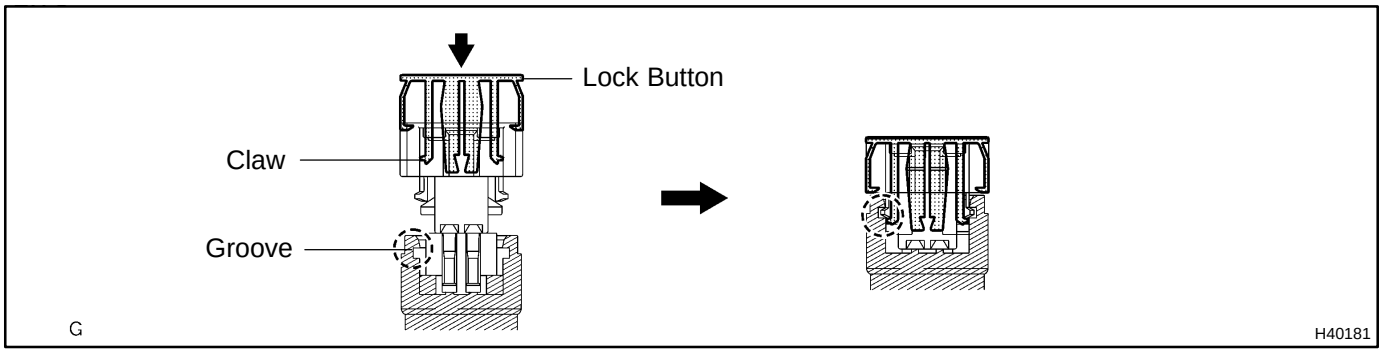
(2) Activation prevention mechanism:
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the positive (+) terminal and the negative (−) terminal of the squib.



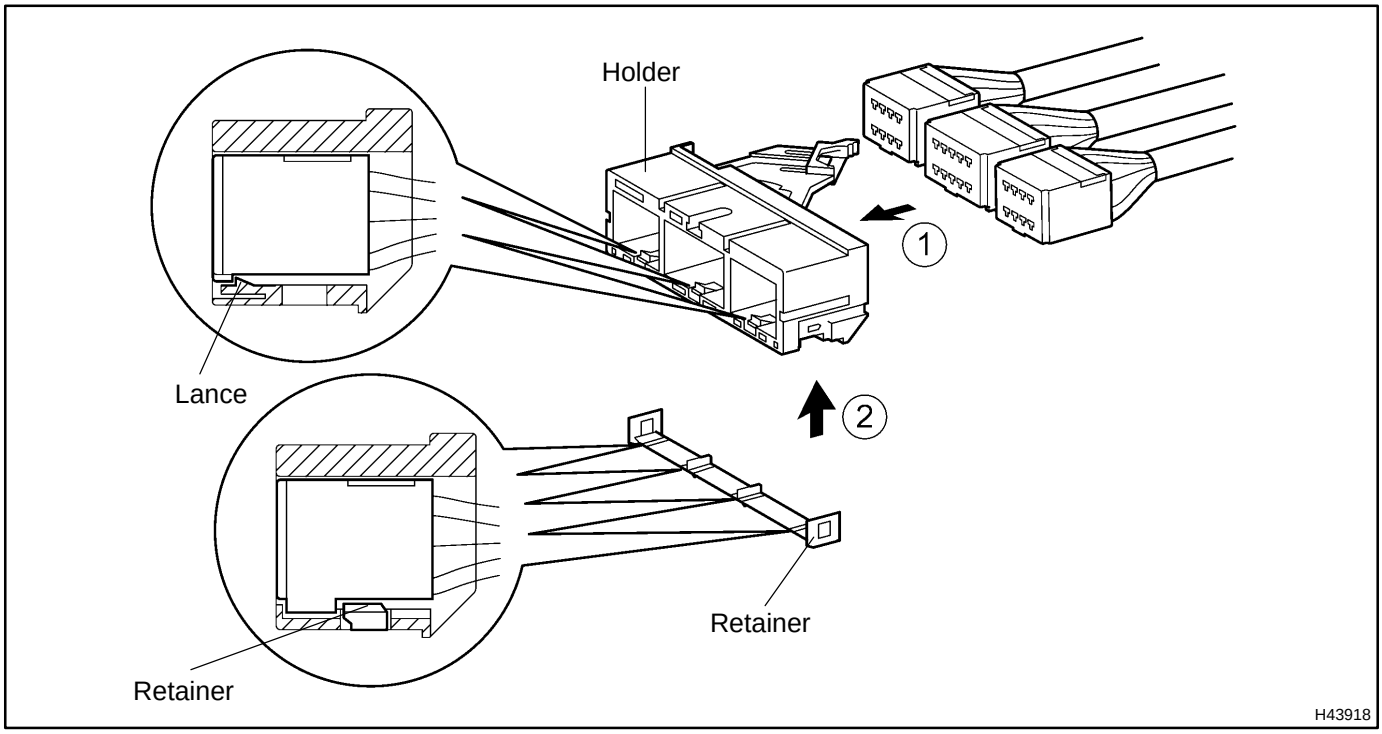
(3) Half connection prevention mechanism:
If the connector is not completely connected, the connector is disconnected due to the spring operation so that no continuity exists.



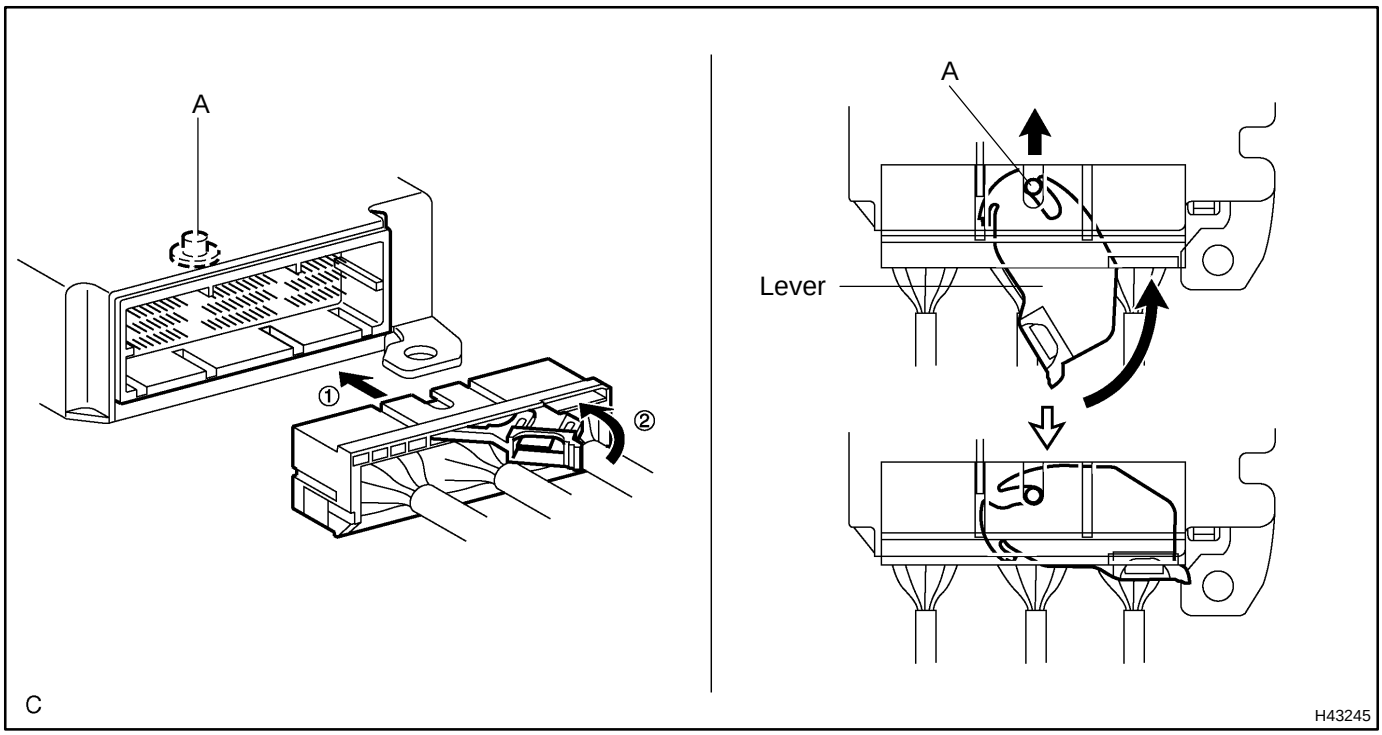

(4) Connector lock mechanism (1):
Locking the connector lock button connects the connector securely.



(5) Connector lock mechanism (2):
Both the primary lock with holder lances and the secondary lock with retainer prevent the connectors from becoming disconnected.



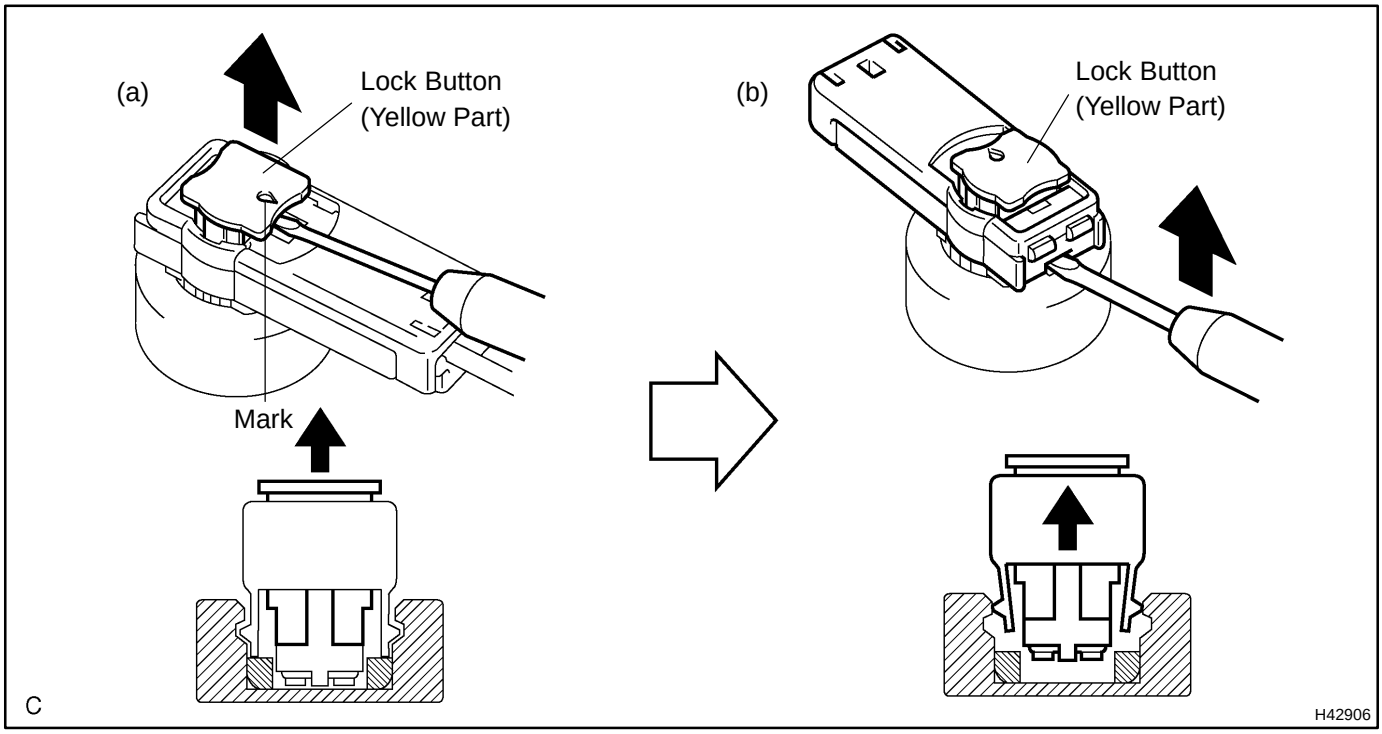

(6) Improper connection prevention lock mechanism:
When connecting the holder, the lever is pushed into the end by rotating around the A axis to lock the holder securely.



**3. DISCONNECTION OF CONNECTORS FOR CURTAIN SHIELD AIRBAG ASSY (TMC MADE), HORN BUTTON ASSY AND FRONT PASSENGER AIRBAG ASSY**

(a) Release the lock button (yellow part) of the connector using a screwdriver.

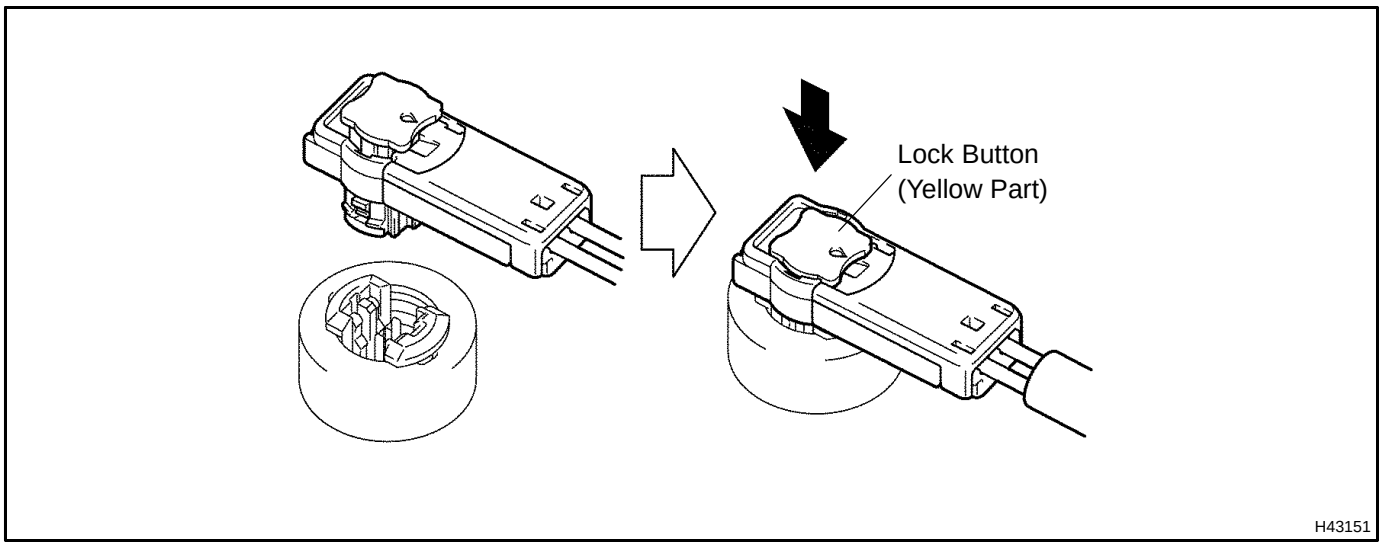
(b) Insert the screwdriver tip between the connector and the base, and then raise the connector.




**4. CONNECTION OF CONNECTORS FOR CURTAIN SHIELD AIRBAG ASSY (TMC MADE), HORN BUTTON ASSY AND FRONT PASSENGER AIRBAG ASSY**

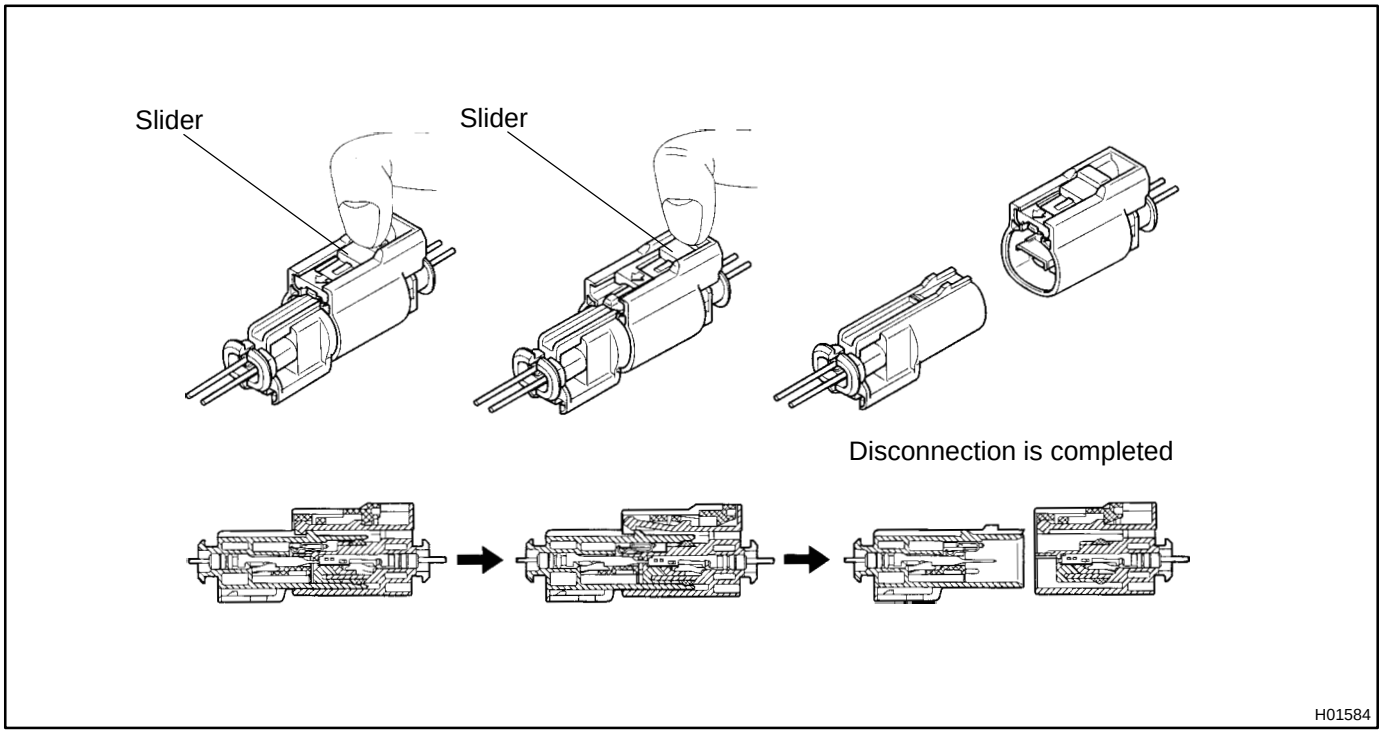
(a) Connect the connector.

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



**5. DISCONNECTION OF CONNECTOR FOR FRONT SEAT AIRBAG ASSY**

(a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.

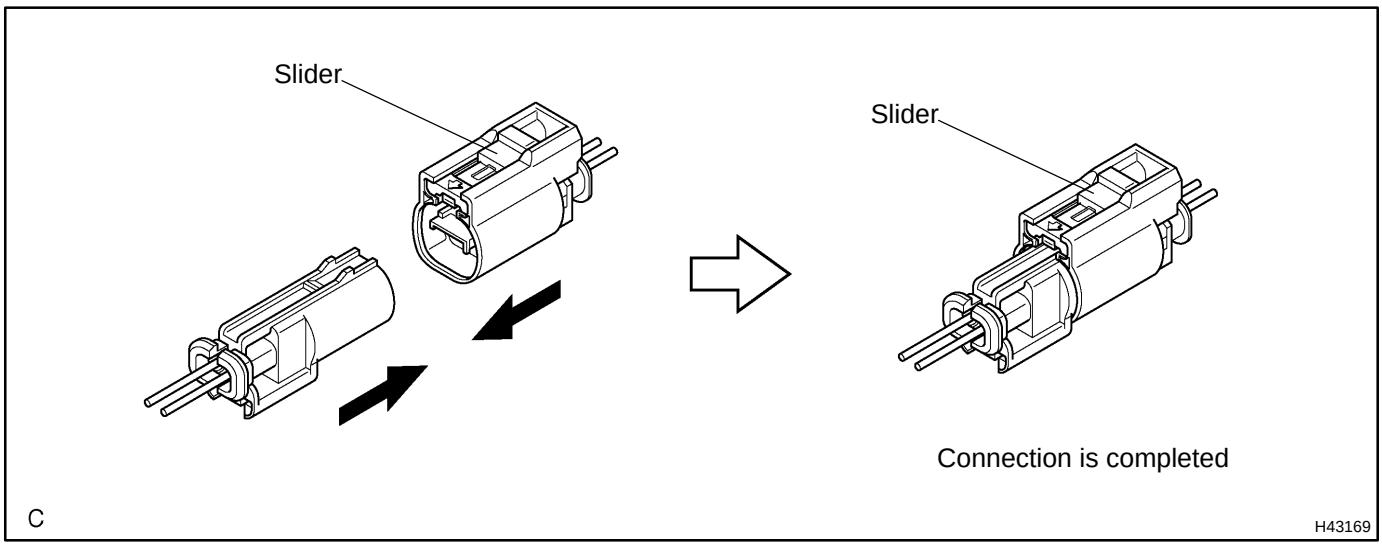



**6. CONNECTION OF CONNECTOR FOR FRONT SEAT AIRBAG ASSY**

(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.)

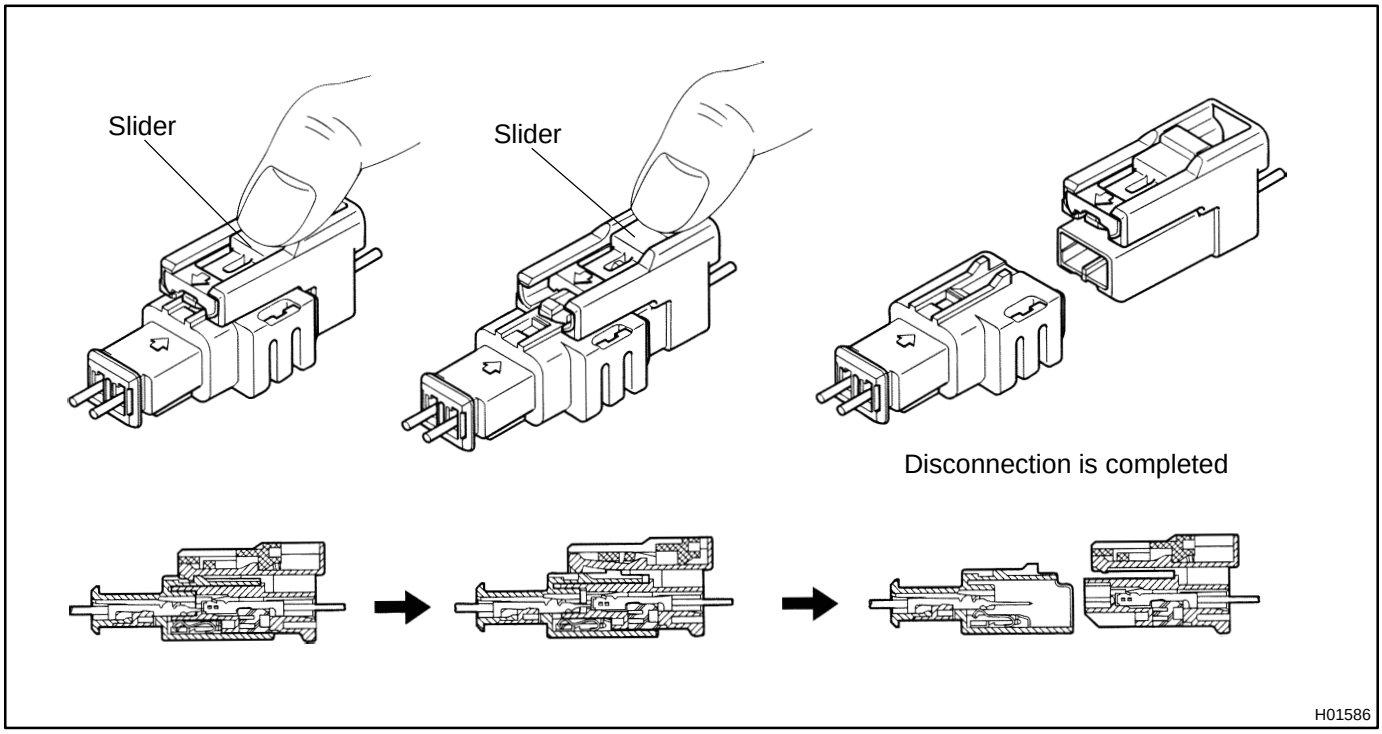
HINT:

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



**7. DISCONNECTION OF CONNECTOR FOR CURTAIN SHIELD AIRBAG ASSY (TMMK MADE)**

(a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.

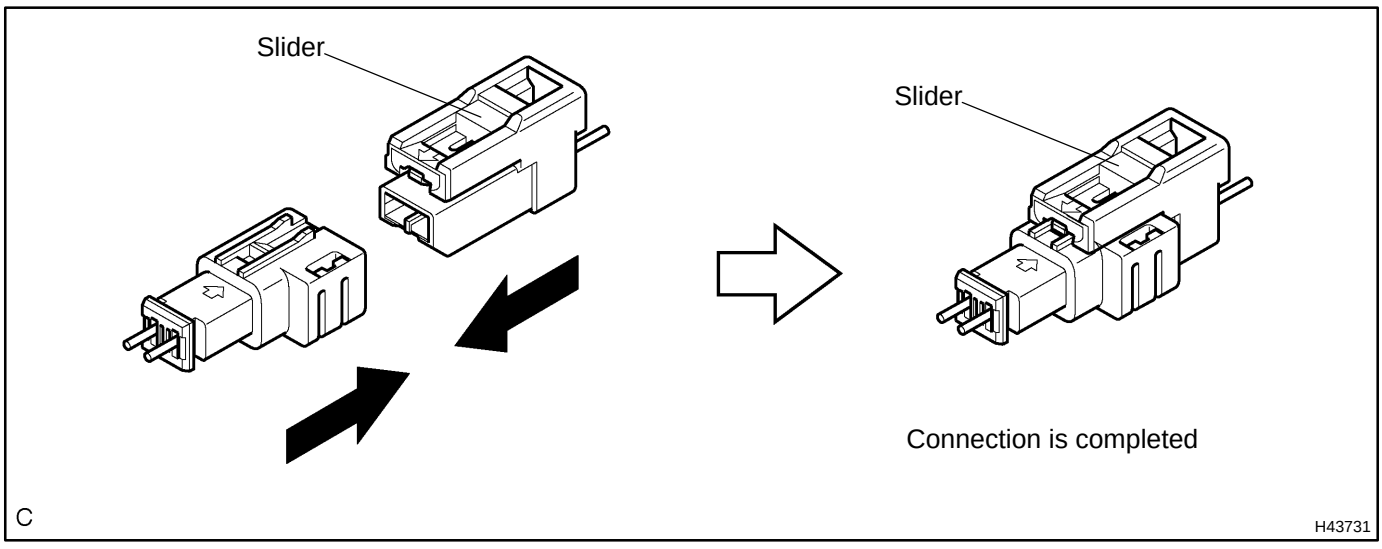



**8. CONNECTION OF CONNECTOR FOR CURTAIN SHIELD AIRBAG ASSY (TMMK MADE)**

(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.)

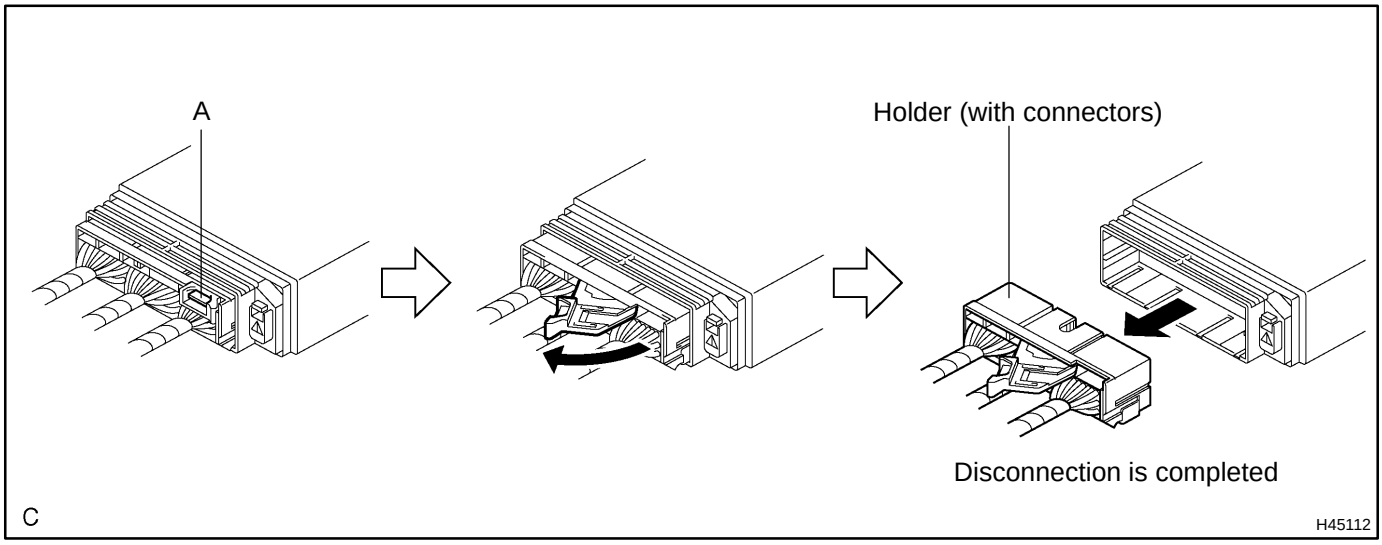
HINT:

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



## 9. DISCONNECTION OF CONNECTOR FOR AIRBAG SENSOR ASSY CENTER

(a) Pull the lever by pushing part A as shown in the illustration and disconnect the holder (with connectors).

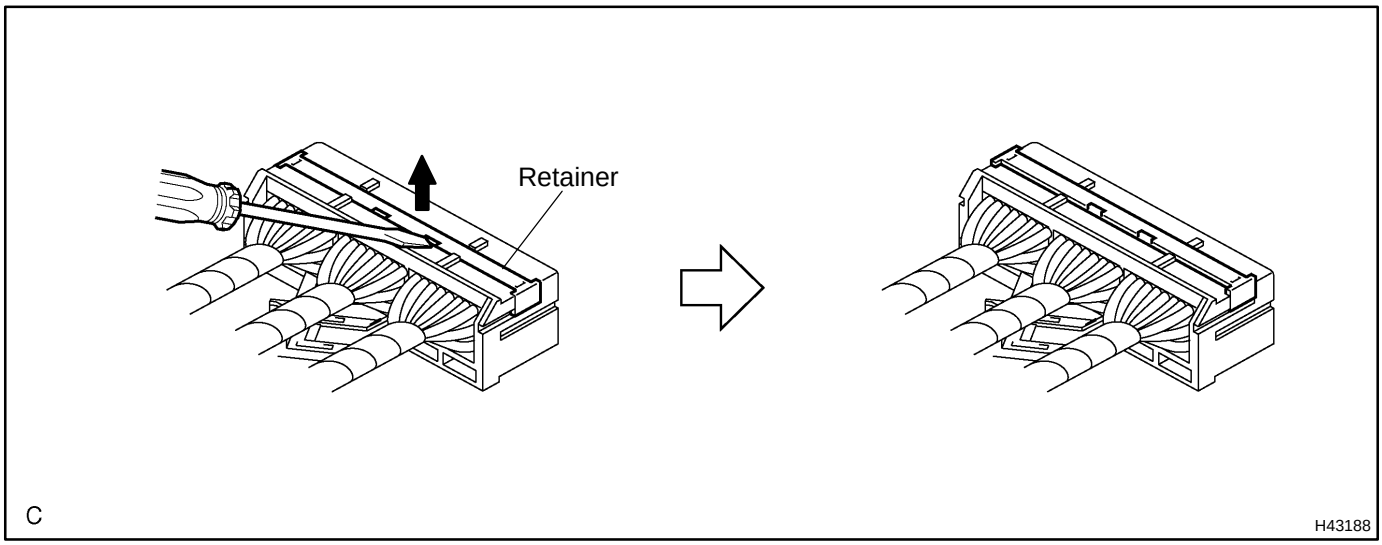



HINT:

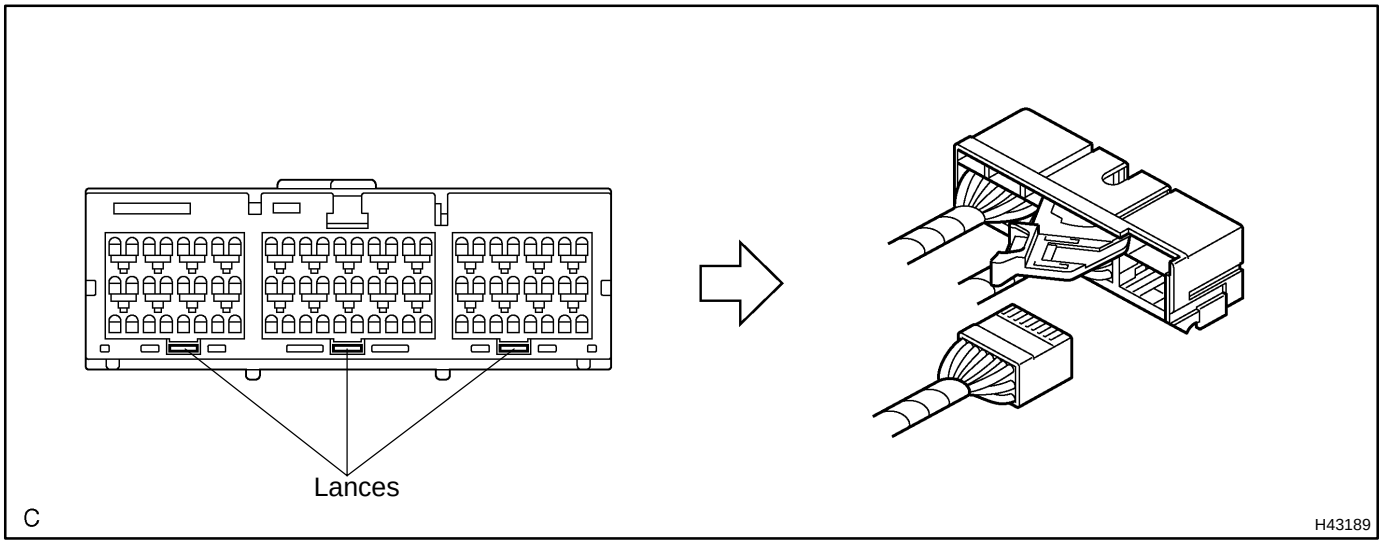
Perform the following procedures when replacing the holder.

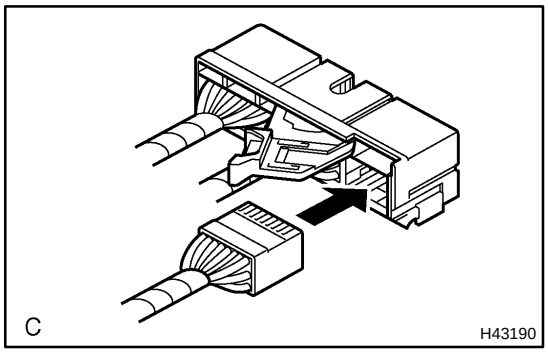
(b) Remove the holder.

(1) Using a screwdriver, unlock the retainer.



(2) Release the lances and remove the holder.




(c) Install the holder.

(1) Install the connectors to the holder. (When locking, a click sound can be heard.)

HINT:

The retainer is locked when the holder is connected.

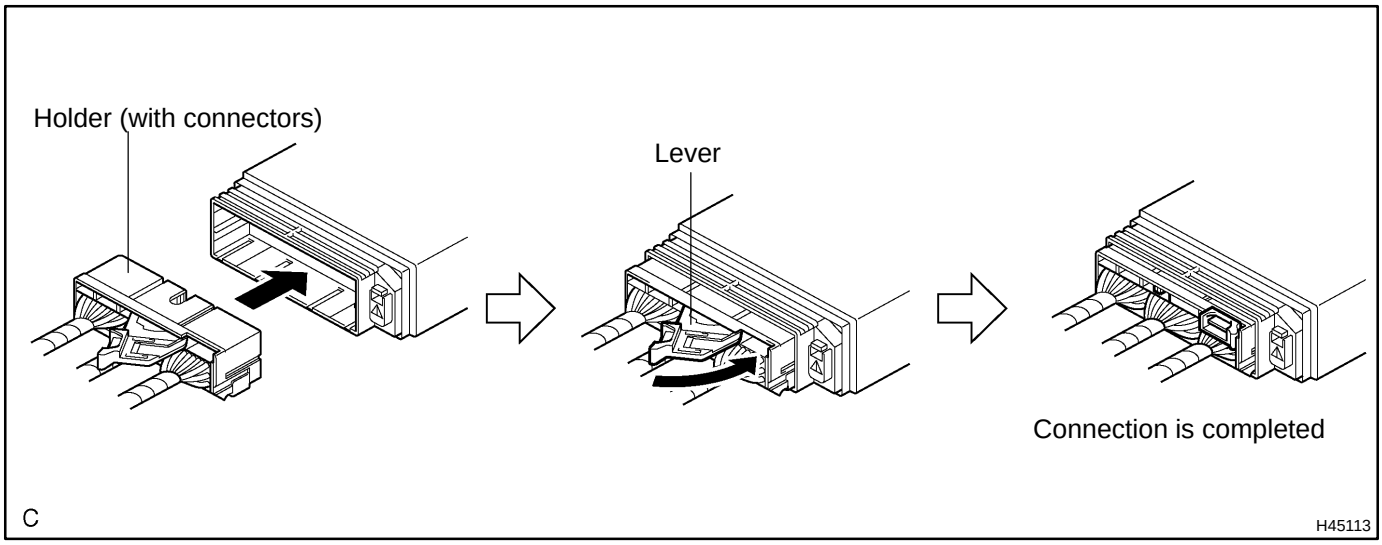
**10. CONNECTION OF CONNECTOR FOR AIRBAG SENSOR ASSY CENTER**

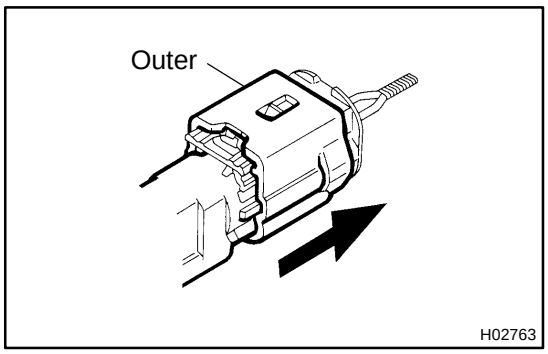
(a) Firmly insert the holder (with connectors) until it can not be pushed any further.

(b) Push the lever to connect the holder (with connectors). (When locking, a click sound can be heard.)

HINT:

The holder slides when connecting. Be sure not to hold the holder while connecting, as it may result in an insecure fit.





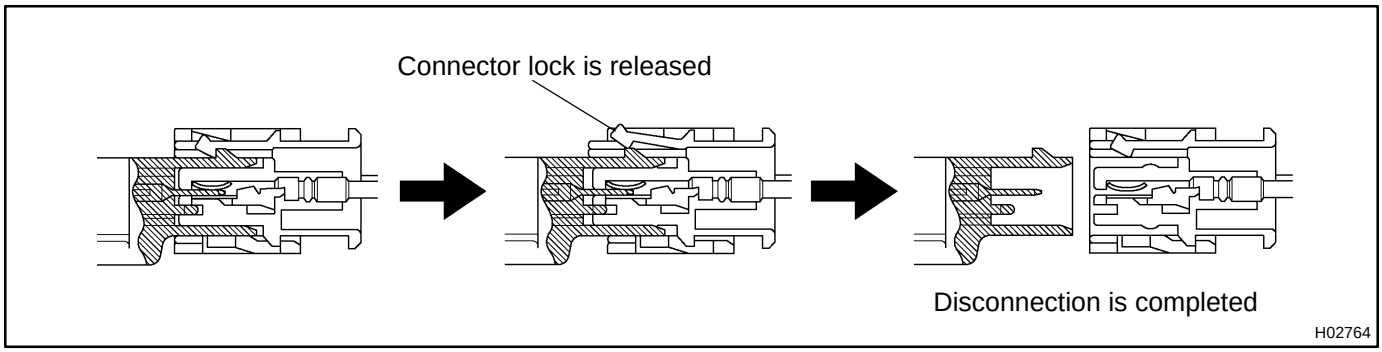

**11. DISCONNECTION OF CONNECTORS FOR AIRBAG FRONT SENSOR, SIDE AIRBAG SENSOR AND AIRBAG SENSOR REAR**

(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 will make disconnection difficult.

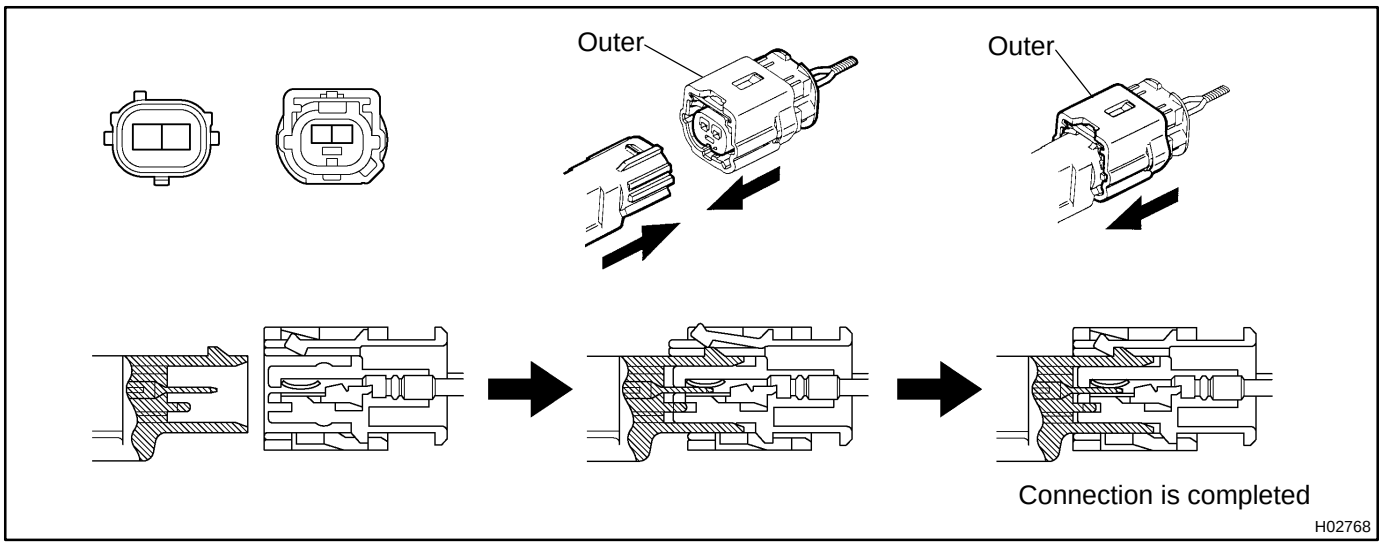



**12. CONNECTION OF CONNECTORS FOR AIRBAG FRONT SENSOR, SIDE AIRBAG SENSOR AND AIRBAG SENSOR REAR**

(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.)

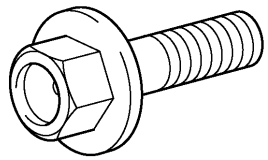
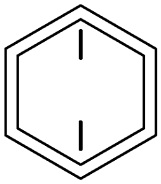
HINT:

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



## 13. NOTICE REGARDING AIRBAG SENSOR INSTALLATION BOLT

(a) As the tightening torque is different depending on the property class of the airbag sensor installation bolt, choose a bolt referring to the following illustration and tighten it with the specified tightening torque written in the repair manual.

| | PROPERTY CLASS | 6T | 8T |
|---|---|---|---|
|  | Deep Recess Bolt |  |  |

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