

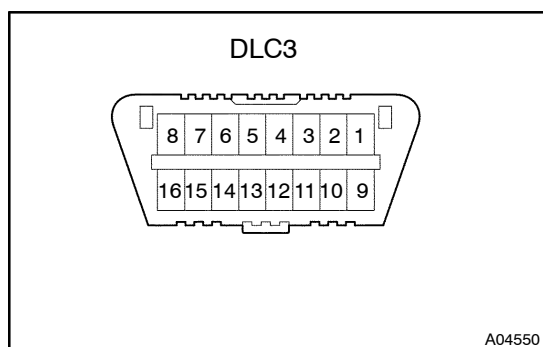
PRE-CHECK

NOTICE:

If the ignition switch is turned ON with the airbag sensor assembly connectors disconnected, or if a vehicle battery is removed with the ignition switch ON, the system will determine this condition as a failure and it will automatically call the call center. When an accidental call is made automatically, access to the call center and ask them to cut off the line.

To prevent this, perform the following when working on operation related to the airbag sensor assembly or battery:

- Disconnect the connectors of the mayday ECU and the back-up battery before disconnecting the airbag sensor assembly connector.
- Be sure that the ignition switch is OFF when removing a vehicle battery.
- If not signal has been received from the airbag sensor assembly since the ignition switch was turned ON, a service call will be made.
- If good signal reception from the airbag sensor assembly after the ignition switch ON is interrupted, an emergency call will be made.



1. DIAGNOSIS SYSTEM

- (a) Check the DLC3.

HINT:

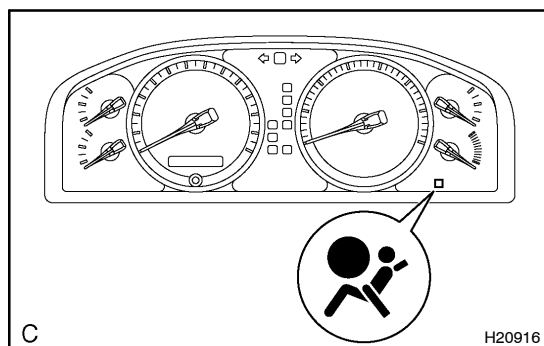
The vehicle's ECM uses ISO 9141-2 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 9141-2 format.

Terminal No.	Connection/Voltage or Resistance	Condition
7	Bus $\oplus$ Line/Pulse generation	During Transmission
4	Chassis Ground $\leftrightarrow$ Body Ground/1 Ω or less	Always
16	Battery Positive $\leftrightarrow$ Body Ground/9 $\pm$ 14 V	Always

HINT:

If your display shows **UNABLE TO CONNECT TO VEHICLE** when you have connected the cable of the OBD II scan tool or LEXUS hand-held tester to the DLC3, turned the ignition switch ON and operated the scan tool, there is a problem on the vehicle side or tool side.

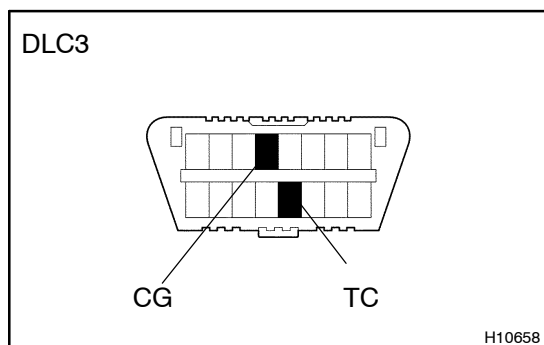
- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tool itself, so consult the Service Department listed in the tool's instruction manual.

**2. SRS WARNING LIGHT CHECK**

- Turn the ignition switch to ON, and check that the SRS warning light comes on.
- Check that the SRS warning light goes out after approx. 6 seconds.

HINT:

- When the ignition switch is at ON and the SRS warning light remains on or blinks, the airbag sensor assembly has detected a malfunction code.
- If, after approx. 6 seconds have elapsed, the SRS warning light sometimes comes on even when the ignition switch is OFF. In this case, a short in the SRS warning light circuit is possible. Proceed to "SRS warning light circuit malfunction" on page [DI-1108](#).

**3. DTC CHECK (Using diagnosis check wire)**

- Present troubles codes:
Output the DTC.

- Turn the ignition switch to ON, and wait for approx. 60 seconds.
- Using SST, connect terminal TC and CG of the DLC3.

SST 09843-18040

NOTICE:

Pay attention to the terminal connecting position to avoid a malfunction.

(b) Past troubles codes:

Output the DTC.

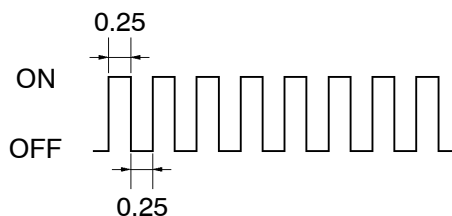
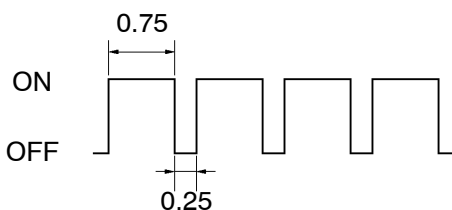
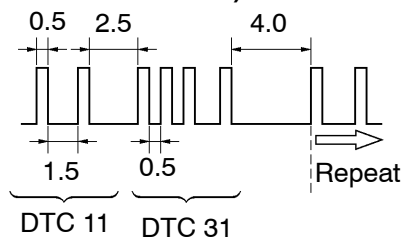
- (1) Using SST, connect terminal TC and CG of the DLC3.

SST 09843-18040

- (2) Turn the ignition switch to ON, and wait for approx. 60 seconds.

NOTICE:

Pay attention to the terminal connecting position to avoid a malfunction.

Normal Code (w/o Past Trouble Code)**Normal Code (w/ Past Trouble Code)****Malfunction Code
(Example Code 11 and 13)**

N

H13050

(c) Read the DTC.

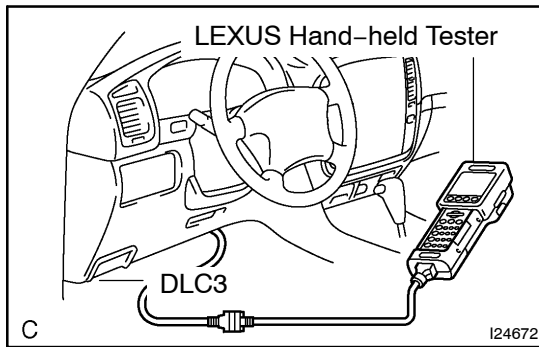
Read the DTC by counting the blinking times. As an example, the blinking patterns of normal, 11 and 31 are shown in the illustration.

- Normal code indication (w/o past trouble code)
The light blinks 2 times per seconds.
- Normal code indication (w/ past trouble code)
When the past troubles code is stored in the airbag sensor assembly, the light blinks only ones a second.
- Malfunction code indication
The first blinking indicates the first DTC. Second blinking occurs after 1.5-second of pausing.

If there are 2 or more codes, there will be a 2.5-second pause between each code. After all the codes are shown, there will be a 4.0-second pausing, and they will all be repeated.

HINT:

- If 2 or more malfunctions are found, the indication starts from the smaller numbered code.
- If the light does not blink or comes out at all, or if DTCs are indicated without a connection of the terminals, proceed to the TC terminal circuit inspection on page [DI-1113](#).



4. DTC CHECK (Using LEXUS hand-held tester)

- (a) Hook up the LEXUS hand-held tester to the DLC3.
- (b) Read the DTCs by following the prompts on the tester screen.

HINT:

Please refer to the LEXUS hand-held tester operator's manual for further details.

5. DTC CLEARANCE (Not using service wire)

When the ignition switch is turned OFF, the diagnostic trouble code is cleared.

HINT:

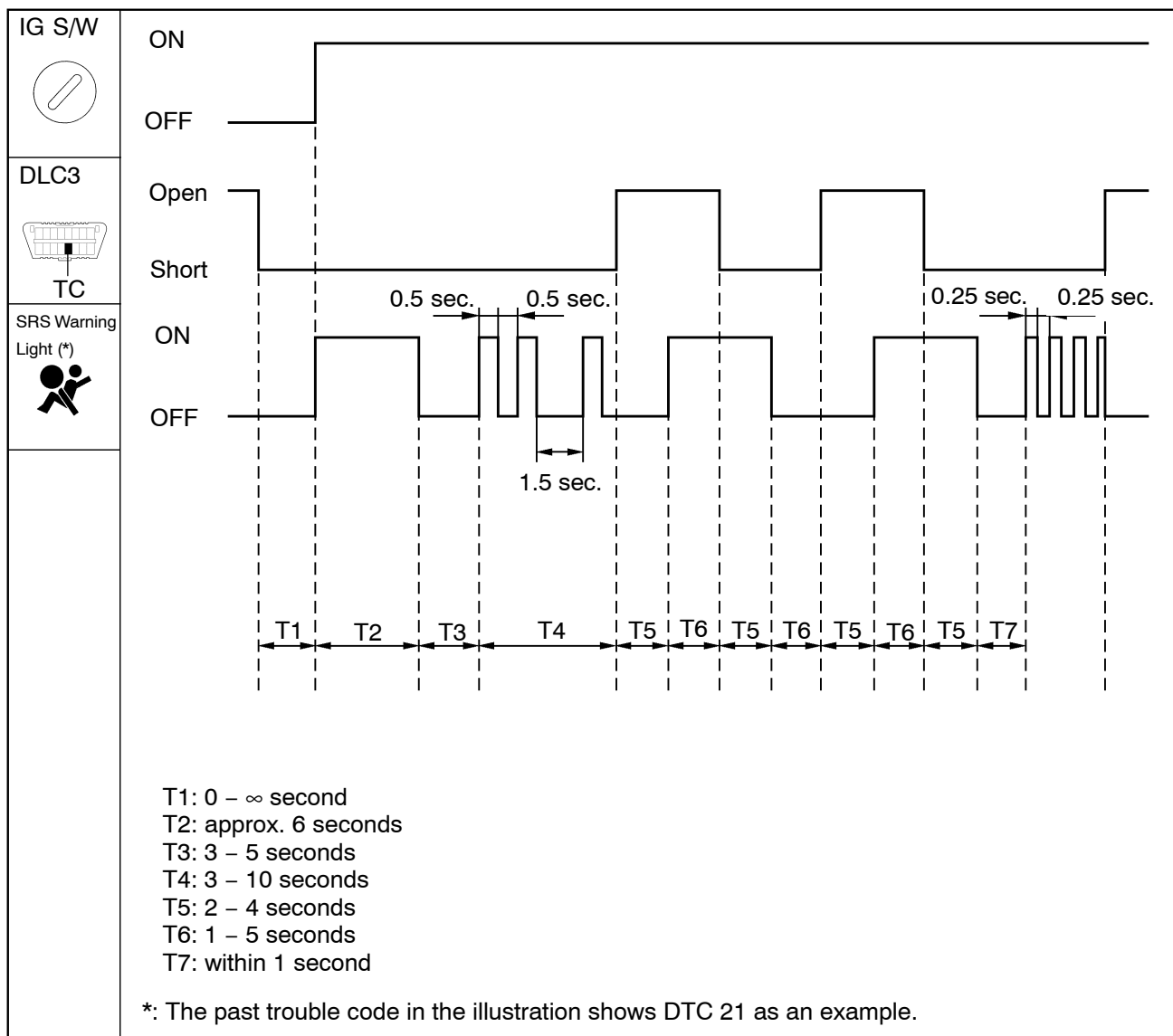
Depending on the DTC, the code might not be cleared by turning the ignition switch OFF.

In this case, proceed to the next step.

6. DTC CLEARANCE (Using service wire)

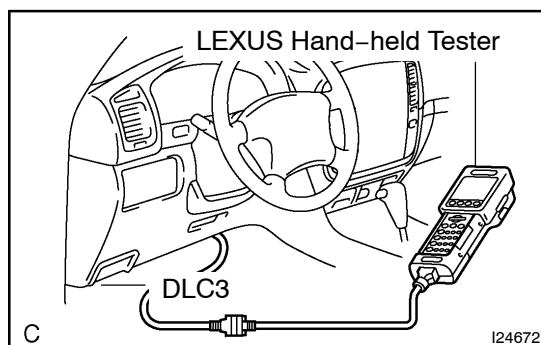
- (a) Connect the service wire to terminal TC of the DLC3.
- (b) Ground terminal TC of the DLC3.
- (c) Turn the ignition switch to the ON position.
- (d) Within 3 to 10 sec. after DTC is started to be output, release ground from terminal TC of the DLC3.
- (e) The SRS warning light comes on 2 to 4 sec. later. Within 1 to 5 sec. after that, ground terminal TC of the DLC3.
- (f) The SRS warning light goes off 2 to 4 sec. after grounding terminal TC. Within 1 to 5 sec. after that, release ground from terminal TC again.
- (g) The SRS warning light comes on again 2 to 4 sec. later. Within 1 to 5 sec. after that, ground terminal TC of the DLC3 again.
- (h) The SRS warning light goes off 2 to 4 sec. later. Within 1 sec. after that, normal code is output indicating that DTC deletion is completed.

If DTCs are not cleared, repeat the above procedure until the codes are cleared.



N

H13049



7. DTC CLEARANCE (Using LEXUS hand-held tester)

- Hook up the LEXUS hand-held tester to the DLC3.
- Clear the DTCs by following the prompts on the tester screen.

HINT:

Please refer to the LEXUS hand-held tester operation's manual for further details.

8. RELEASE METHOD OF AIRBAG ACTIVATION PREVENTION MECHANISM

An airbag activation prevention mechanism is built into the connector for the squib circuit of the SRS.

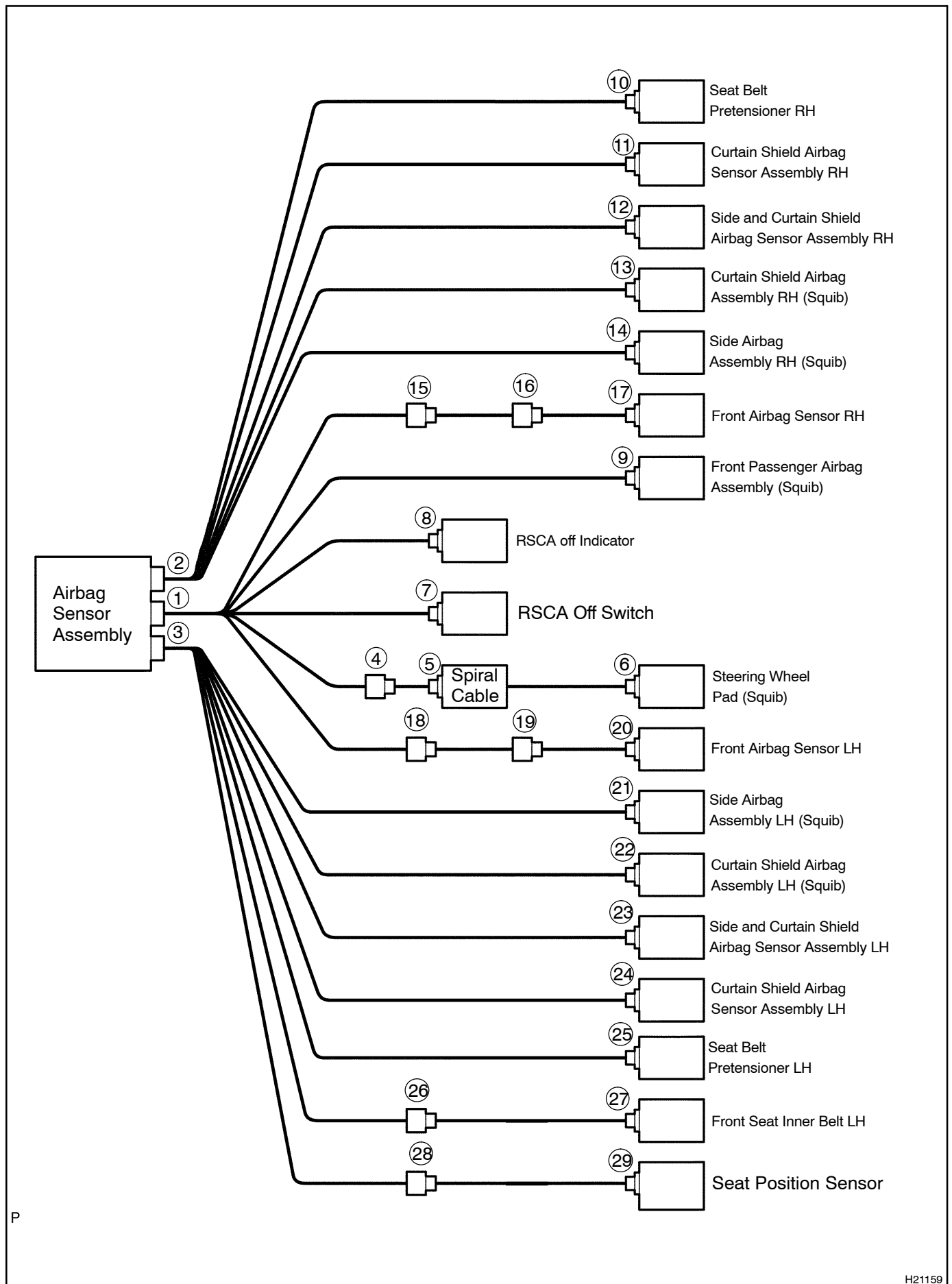
As explained in the troubleshooting later, insert a paper with the same thickness as the male terminal between the terminal and the short spring to release it (Refer to illustrations on next 2 pages).

CAUTION:

Never release the airbag activation prevention mechanism on the squib connector.

NOTICE:

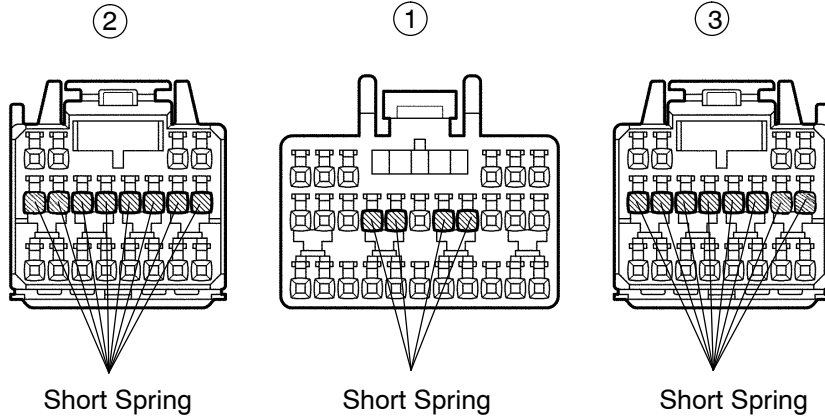
- **Do not release the airbag activation prevention mechanism unless specifically directed by the troubleshooting procedure.**
- **To prevent the terminal and the short spring to be damaged, always use a paper with the same thickness as the male terminals.**



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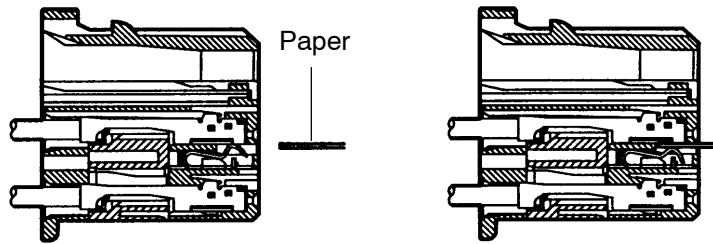
H21159

Airbag Sensor Assembly Connector



Before Release

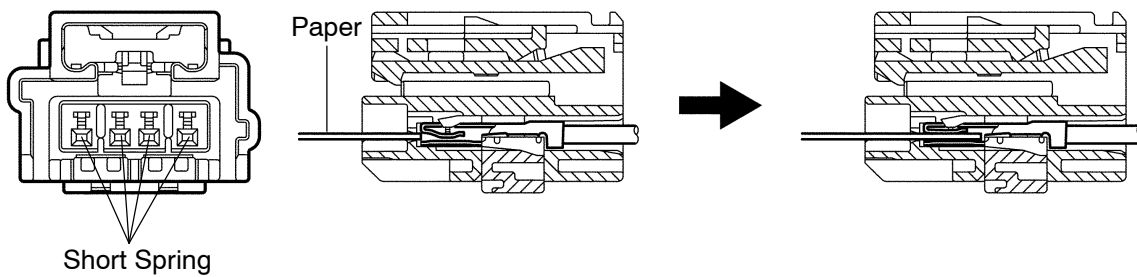
After Release



Connector ④ ⑤ ⑨

Before Release

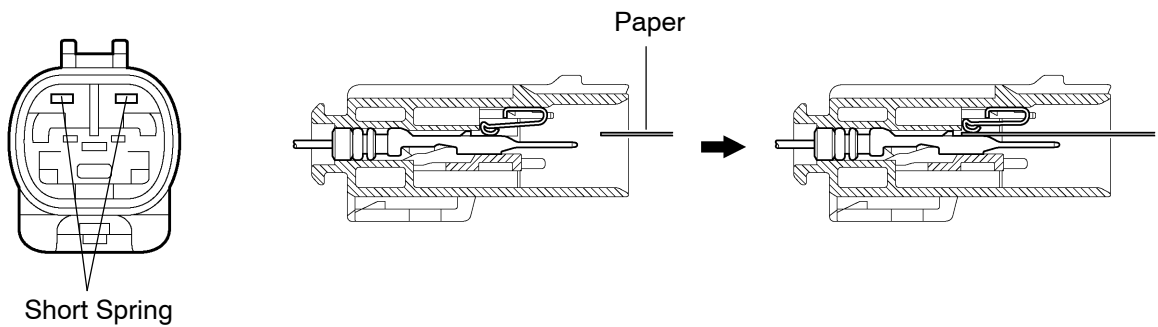
After Release



Connector ⑫ ⑰

Before Release

After Release



H16882 H01233
H16883
H09672 H09658

H21759