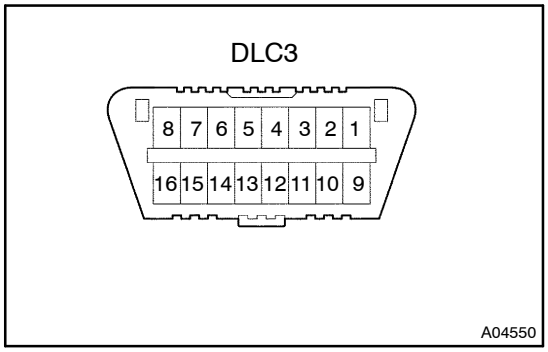
DIASW–01



PRE–CHECK

1. DIAGNOSIS SYSTEM

(a) Check the DLC3.

HINT:

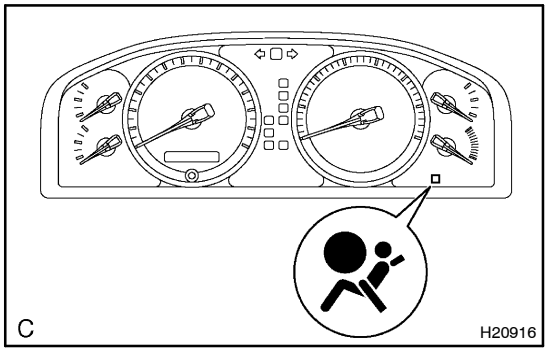
The vehicle's ECM uses ISO 9 141–2 for communication. The terminal arrangement of the DLC3 complies with ISO 15031–3 and matches the ISO 9 141–2 format.

Terminal No.	Connection/Voltage or Resistance	Condition
7	Bus ⊕ Line/Pulse generation	During Transmission
4	Chassis Ground ↔ Body Ground/ 1 Ω or less	Always
16	Battery Positive ↔ Body Ground/ 9 – 14 V	Always

HINT:

If your display shows UNABLE TO CONNECT TO VEHICLE when you have connected the cable of the hand –held tester to the DLC3, turned the ignition switch ON and operated the hand–held tester, 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.



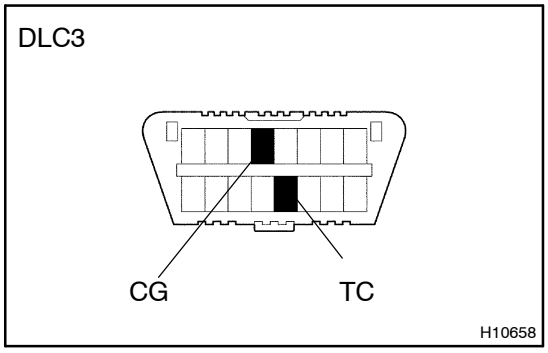
2. SRS WARNING LIGHT CHECK

(a) Turn the ignition switch to ON, and check that the SRS warning light comes on.

(b) 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 flashes, 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– 768.



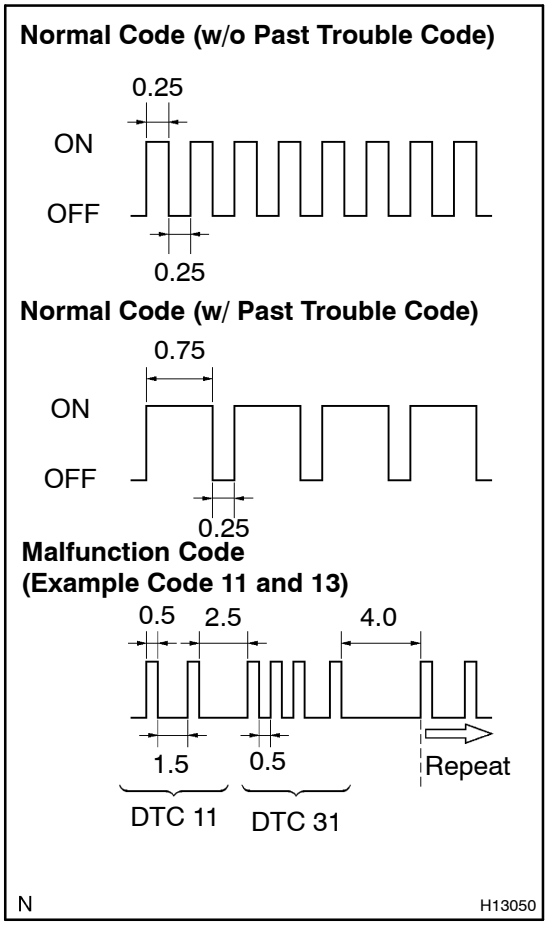
3. DTC CHECK (Using diagnosis check wire)

(a) Present troubles codes:
Output the DTC.
(1) Turn the ignition switch to ON, and wait for approx. 10 seconds.
(2) 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. 10 seconds.

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

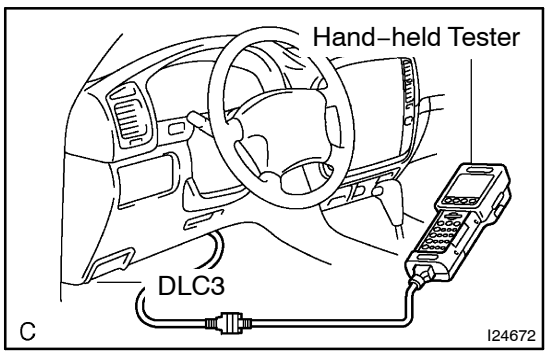


(c) Read the DTC.
Read the DTC by counting the blinking times. As an example, the blinking patterns of normal, 11 and 31 are shown in the illustration.

- 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–773.



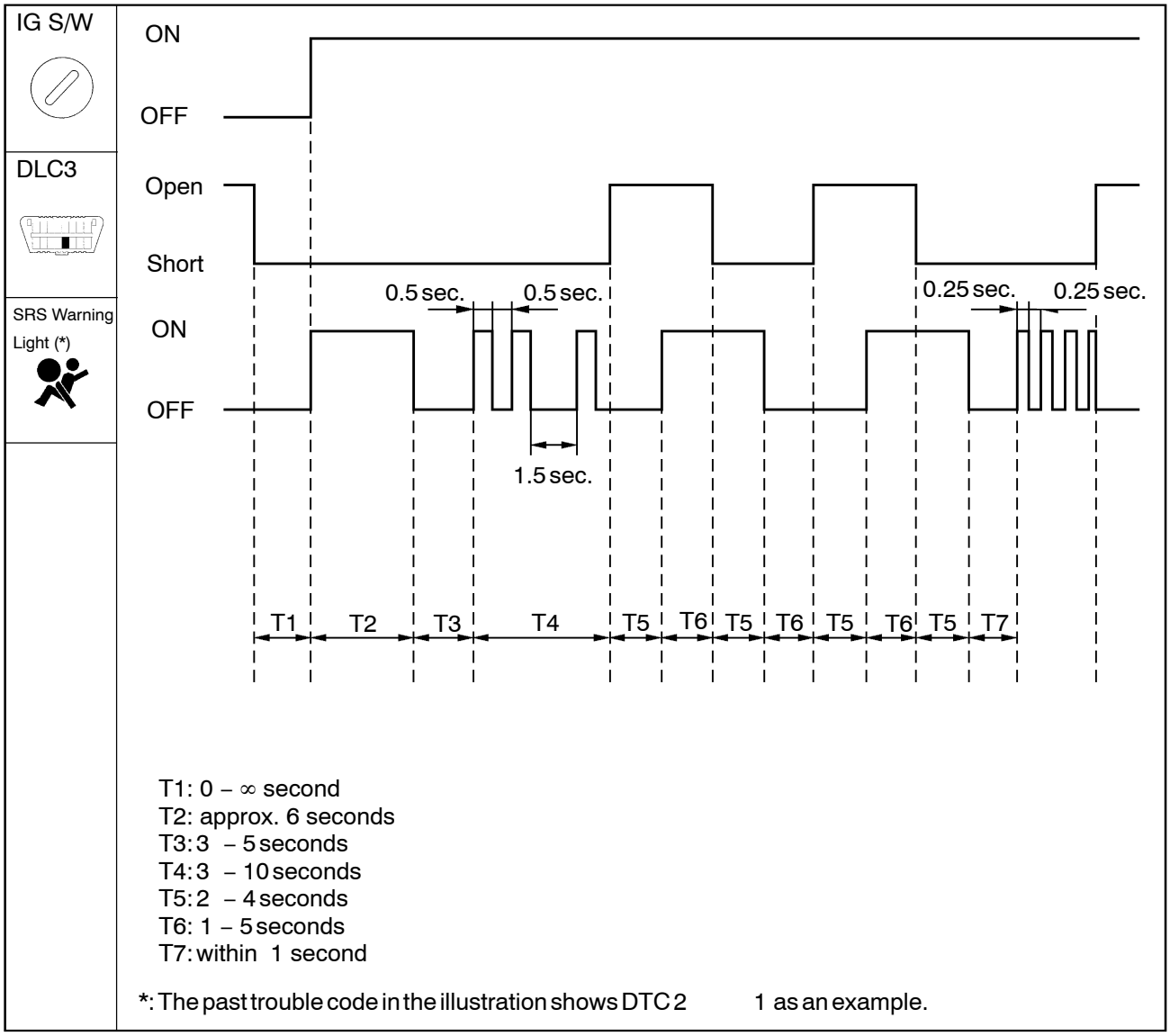
4. DTC CHECK (Using hand –held tester)
(a) Hook up the hand –held tester to the DLC3.
(b) Read the DTCs by following the prompts on the tester screen.
HINT:
Please refer to the hand –held tester operator's manual for further details.

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) Using SST, connect terminal TC and CG.
SST 09843 –18040
(b) Disconnect terminal TC of DLC3 within 10 seconds after the DTCs appear, and check if the warning light come on within 3.0 seconds.
(c) Within 2.0 seconds to 4.0 seconds after the SRS warning light come on, re –connect the terminals TC and CG of DLC3.

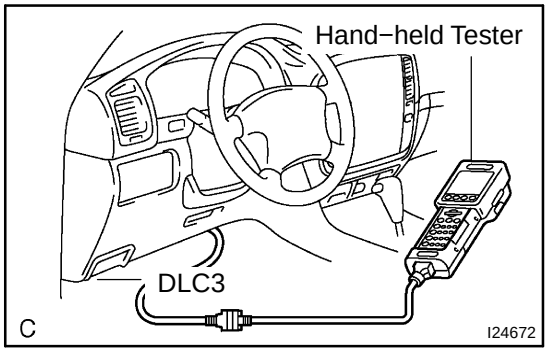
(d) SRS warning light goes off 3.0 seconds after re –connecting the terminal TC and CG. Then disconnect the terminal TC of DLC3within 2.0 to 4.0 seconds after the SRS warning light goes off.
(e) Warning light comes on within 3.0 seconds after re –disconnecting the terminal TC and CG.
(f) Within 2.0 seconds to 4.0 seconds after the SRS warning light come on, re –connect the terminals TC and CG of DLC3.
(g) SRS warning light goes off 3 seconds after re –connecting the terminal TC and CG.
(h) Normal code appears 1.0 seconds after the SRS warning light goes off.

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



T1: 0 – ∞ second
T2: approx. 6 seconds
T3: 3 – 5 seconds
T4: 3 – 10 seconds
T5: 2 – 4 seconds
T6: 1 – 5 seconds
T7: within 1 second

*: The past trouble code in the illustration shows DTC 2 1 as an example.



7. DTC CLEARANCE (Using hand−held tester)

(a) Hook up the hand−held tester to the DLC3.

(b) Clear the DTCs by following the prompts on the tester screen.

HINT:

Please refer to the 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 4 pages).

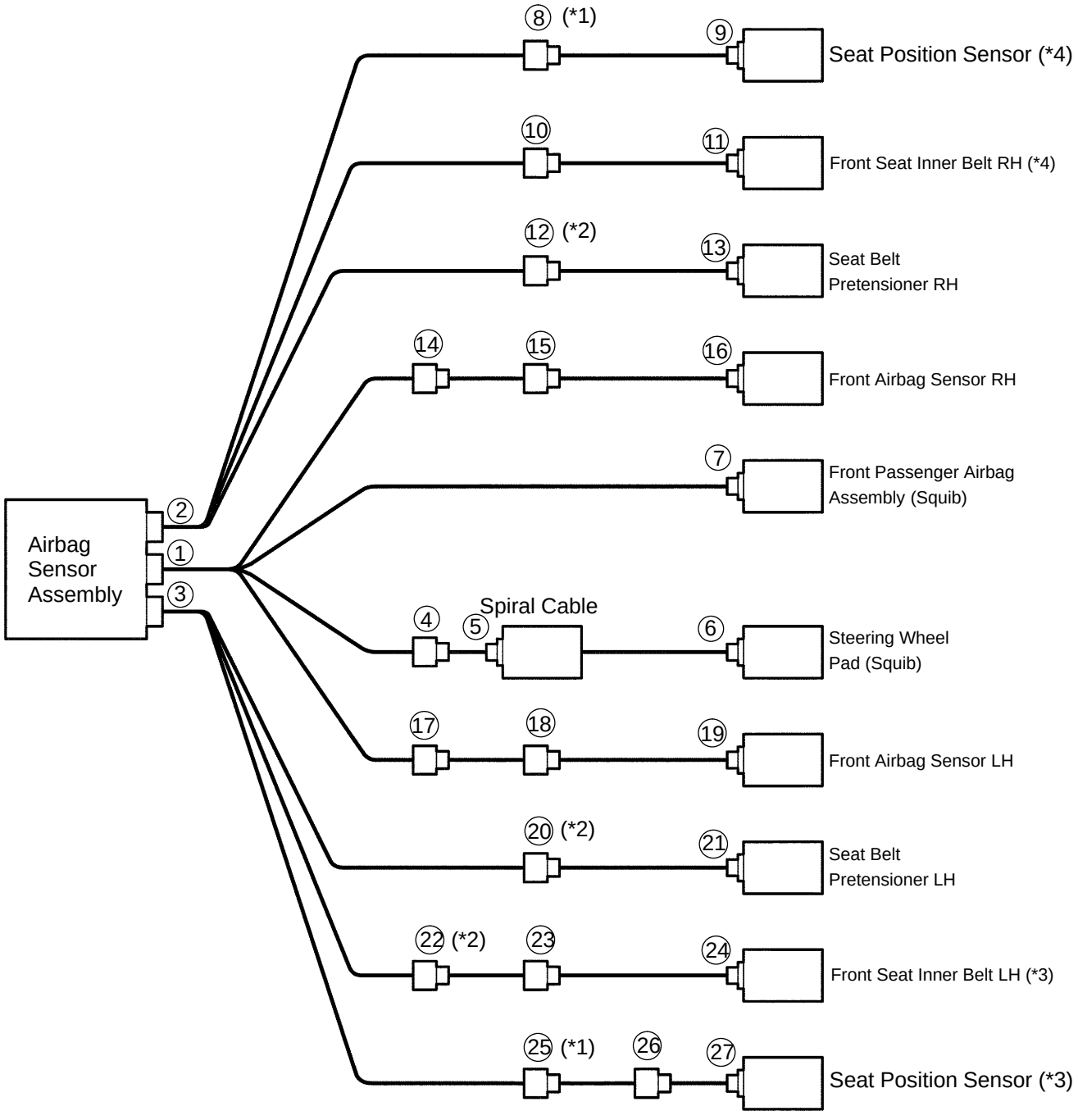
CAUTION:

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

NOTICE:

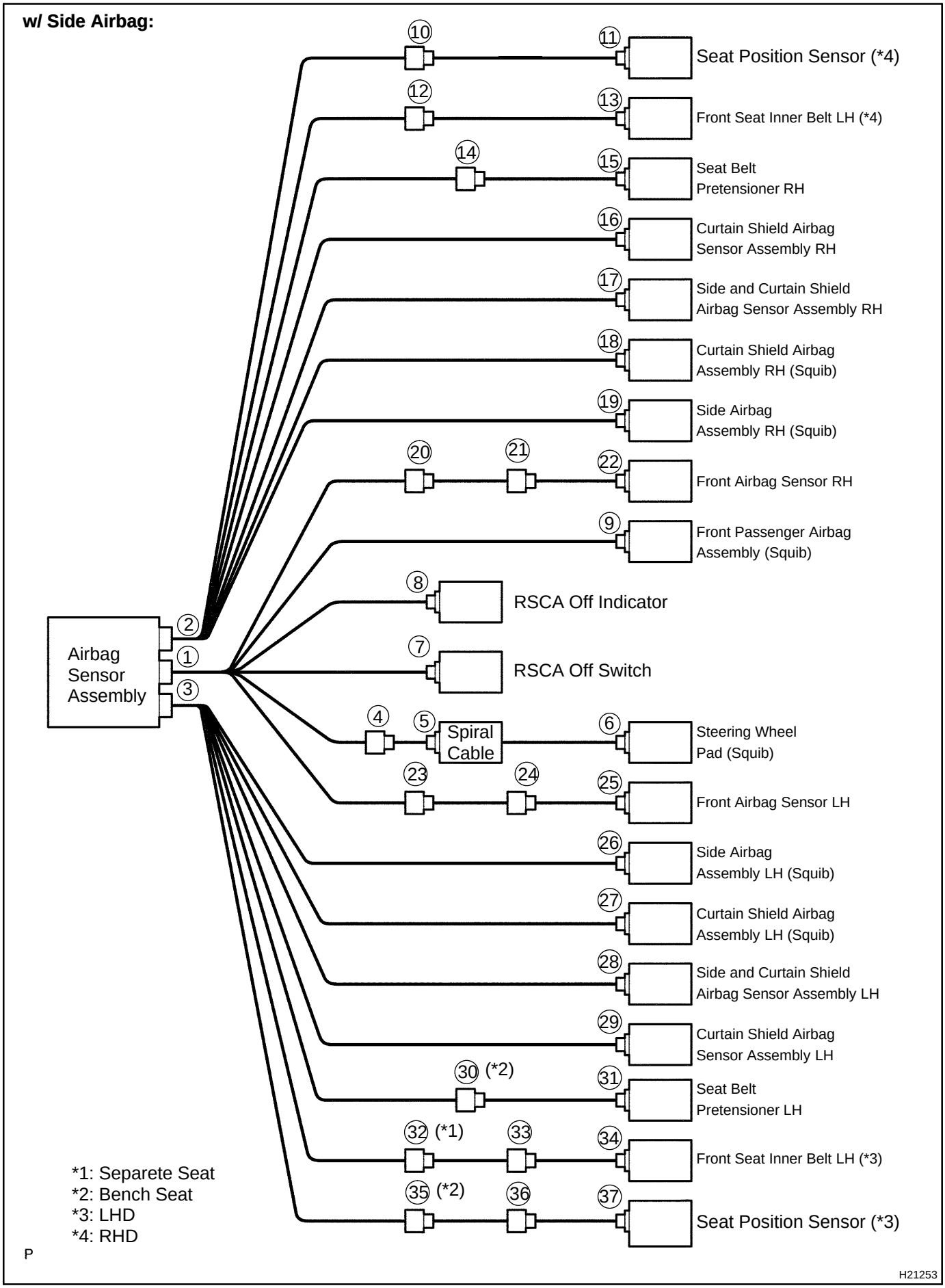
- **Do not release the airbag activation prevention mechanism unless specifically directed by the troubleshooting procedure.**
- **To prevent the terminal and the short spring to be damaged, always use a paper with the same thickness as the male terminals.**

w/o Side Airbag:

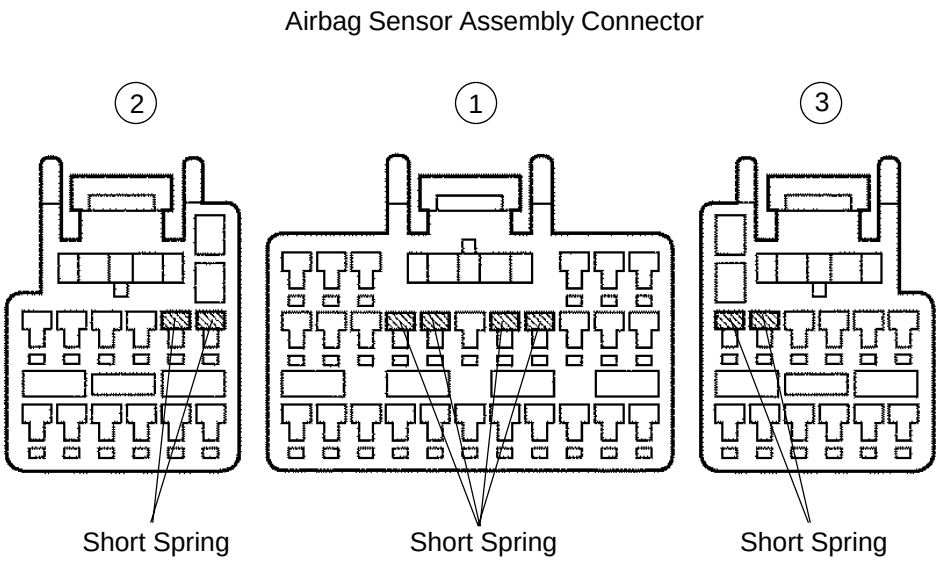


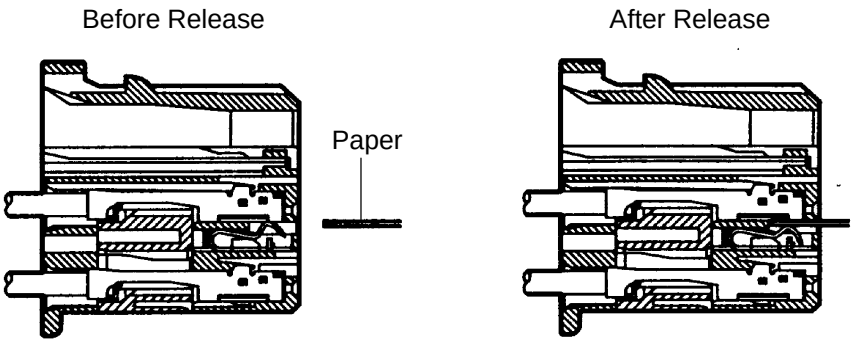
*1: Separate Seat
*2: Bench Seat
*3: LHD, Dual Stage Airbag
*4: RHD, Dual Stage Airbag

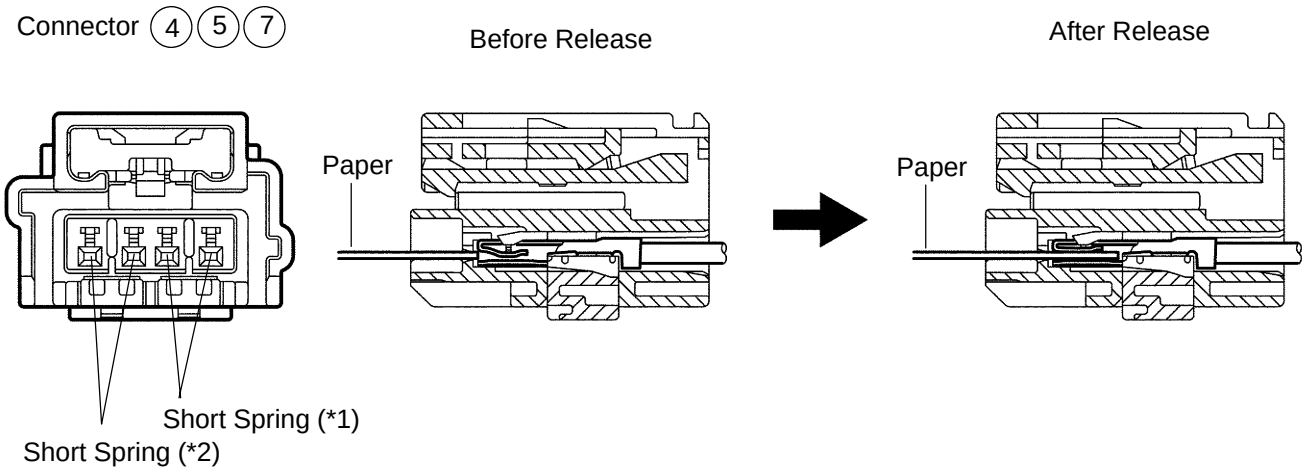
P H21252


w/ Side Airbag:
Airbag Sensor Assembly
2
1
3
10
11
Seat Position Sensor (*4)
12
13
Front Seat Inner Belt LH (*4)
14
15
Seat Belt Pretensioner RH
16
Curtain Shield Airbag Sensor Assembly RH
17
Side and Curtain Shield Airbag Sensor Assembly RH
18
Curtain Shield Airbag Assembly RH (Squib)
19
Side Airbag Assembly RH (Squib)
20
21
22
Front Airbag Sensor RH
9
Front Passenger Airbag Assembly (Squib)
8
RSCA Off Indicator
7
RSCA Off Switch
4
5
Spiral Cable
6
Steering Wheel Pad (Squib)
23
24
25
Front Airbag Sensor LH
26
Side Airbag Assembly LH (Squib)
27
Curtain Shield Airbag Assembly LH (Squib)
28
Side and Curtain Shield Airbag Sensor Assembly LH
29
Curtain Shield Airbag Sensor Assembly LH
30 (*2)
31
Seat Belt Pretensioner LH
32 (*1)
33
34
Front Seat Inner Belt LH (*3)
35 (*2)
36
37
Seat Position Sensor (*3)
*1: Separete Seat
*2: Bench Seat
*3: LHD
*4: RHD
P
H21253

w/o Side Airbag:





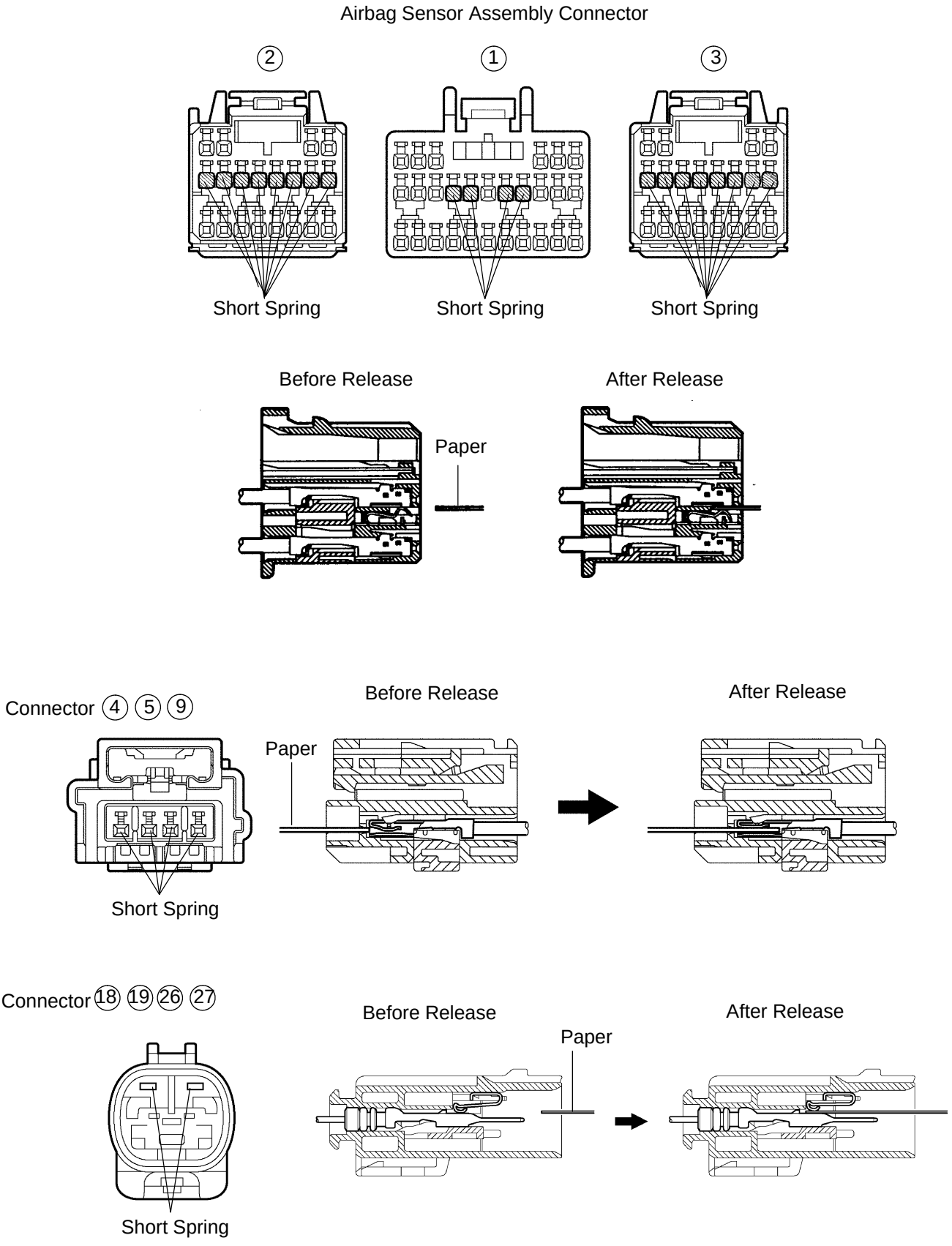


*1: Single Stage Airbag
*2: Dual Stage Airbag

H02297
H01233
H16883

H21585

w/ Side Airbag:



H16882 H01233
H16883
H09672 H09658

H21759