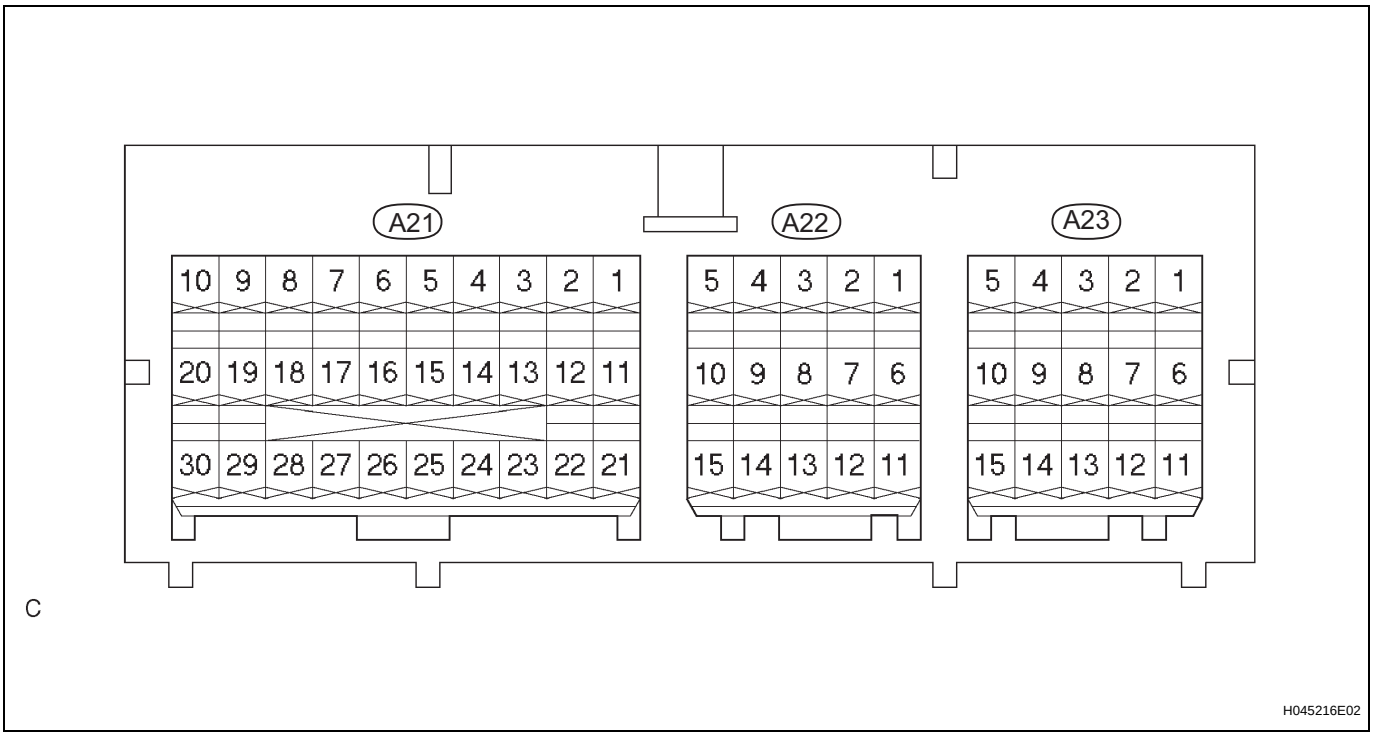
PROBLEM SYMPTOMS TABLE

Symptom	Suspected area	See page
When ignition switch in ON position, SRS warning light occasionally comes on approximately 6 seconds after engine start.	SRS warning light circuit malfunction (SRS Warning Light Remains ON).	RS-341
SRS warning light always comes on even when DTC not set.	SRS warning light circuit malfunction (SRS Warning Light Remains ON).	RS-341
With ignition switch in ON position, SRS warning light does not come on.	SRS warning light circuit malfunction (SRS Warning Light does not Come On).	RS-346
Although SRS warning light operates normaly, neither DTCs normal system indication displayed.	TC and CG Terminal Circuit	RS-349
Although terminals TC and CG not connected, DTC or normal system indication displayed.	TC and CG Terminal Circuit	RS-349

TERMINALS OF ECU

1. CENTER AIRBAG SENSOR ASSEMBLY



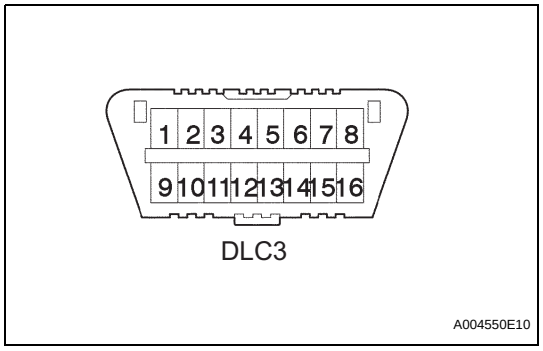
Terminal No.	Terminal Symbol	Destination
A21-1	P2+	Front passenger airbag assembly (Front passenger side squib 2nd step)
A21-2	P2-	Front passenger airbag assembly (Front passenger side squib 2nd step)
A21-3	P-	Front passenger airbag assembly (Front passenger side squib)
A21-4	P+	Front passenger airbag assembly (Front passenger side squib)
A21-5	D+	Steering pad (Driver side squib)
A21-6	D-	Steering pad (Driver side squib)
A21-7	D2-	Steering pad (Driver side squib 2nd step)
A21-8	D2+	Steering pad (Driver side squib 2nd step)
A21-11(*1)	MSW+	Airbag cut-off switch
A21-12(*1)	MSW-	Airbag cut-off switch
A21-13	PBEW	Passenger seat belt warning light assembly
A21-14	LA	Combination meter assembly
A21-15	TC	DLC3
A21-16	SIL	DLC3
A21-17	P-AB	Passenger seat belt warning light assembly
A21-21	IG2	IGN fuse (Power Source)
A21-22	GSW2	ECM
A21-23	PAON	Passenger seat belt warning light assembly
A21-24(*3)	GSW3	Occupant classification ECU
A21-25	E1	Ground
A21-26	E2	Ground
A21-27	-SR	Front airbag sensor RH
A21-28	-SL	Front airbag sensor LH
A21-29	+SR	Front airbag sensor RH
A21-30	+SL	Front airbag sensor LH
A22-1	PD-	Front seat outer belt assembly LH (Front pretensioner squib LH)

Terminal No.	Terminal Symbol	Destination
A22-2	PD+	Front seat outer belt assembly RH (Front pretensioner squib RH)
A22-6(*2)	ICD-	Curtain shield airbag assembly LH (Curtain shield squib LH)
A22-7(*2)	ICD+	Curtain shield airbag assembly LH (Curtain shield squib LH)
A22-8(*2)	BBD+	Side airbag sensor assembly LH
A22-9(*2)	SFD+	Front seat airbag assembly LH (Side squib LH)
A22-10(*2)	SFD-	Front seat airbag assembly LH (Side squib LH)
A22-11	DBE+	Front seat inner belt assembly LH
A22-12	DBE-	Front seat inner belt assembly LH
A22-13	DSP-	Seat position sensor
A22-14	DSP+	Seat position sensor
A22-15 (*2)	BBD-	Side airbag sensor assembly LH
A23-4	PP+	Front seat outer belt assembly RH (Front pretensioner squib RH)
A23-5	PP-	Front seat outer belt assembly RH (Front pretensioner squib RH)
A23-6(*2)	SFP-	Front seat airbag assembly RH (Side squib RH)
A23-7(*2)	SFP+	Front seat airbag assembly RH (Side squib RH)
A23-8(*2)	BBP+	Side airbag sensor assembly RH
A23-9 (*2)	ICP+	Curtain shield airbag assembly RH (Curtain shield squib RH)
A23-10 (*2)	ICP-	Curtain shield airbag assembly RH (Curtain shield squib RH)
A23-11(*2)	BBP-	Side airbag sensor assembly RH
A23-12	FSP+	Occupant classification ECU
A23-13	FSP-	Occupant classification ECU

*1:Except double cab

*2:With side and curtain shield airbag

*3:Bench Seat



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The vehicle's ECU uses the ISO 9141-2 for communication protocol. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

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Symbols (Terminals No.)	Terminal Description	Condition	Specified condition
SIL (7) - SG (5)	Bus + line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	10 to 14 V

HINT:

If the display shows a communication error message when connecting the cable of the intelligent tester to the DLC3, turning the engine switch on (IG) and operating the intelligent tester, there is a problem on the vehicle side or tool side.

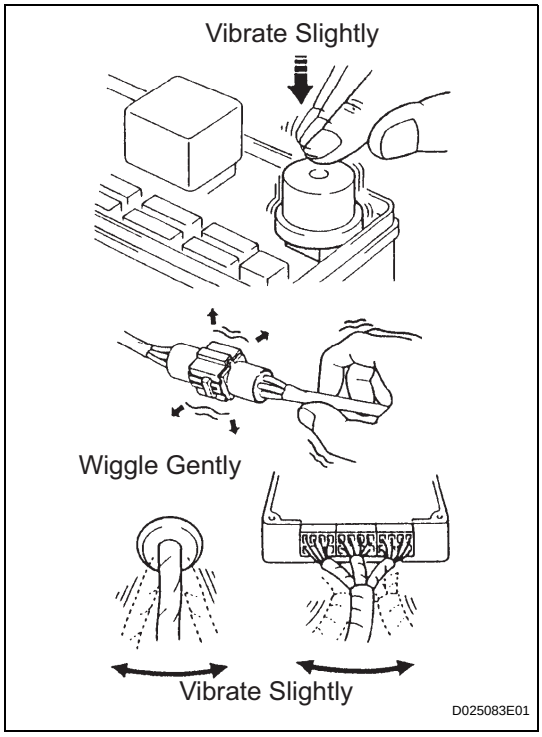
- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tool itself. Consult the Service Department listed in the tool's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

2. SYMPTOM SIMULATION

HINT:

The most difficult case in troubleshooting is when no symptoms occur. In such cases, a thorough customer problem analysis must be carried out. Then the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be simulated. No matter how experienced or skilled a technician may be, if he proceeds to troubleshoot without confirming the problem symptoms, he will likely overlook something important and make a wrong guess at some points in the repair operation.

This leads to a standstill in troubleshooting.



(a) Vibration method: When vibration seems to be the major cause.

HINT:

Perform the simulation method only during the primary check period (for approximately 6 seconds after the engine switch is turned on (IG)).

(1) Slightly vibrate the part of the sensor considered to be the problem cause with your fingers and check whether the malfunction occurs.

HINT:

Shaking the relays too strongly may result in open relays.

(2) Slightly shake the connector vertically and horizontally.

(3) Slightly shake the wire harness vertically and horizontally.

The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

3. FUNCTION OF SRS WARNING LIGHT

(a) Primary check.

(1) Turn the engine switch off. Wait for at least 2 seconds, then turn the engine switch on (IG). The SRS warning light comes on for approximately 6 seconds and the diagnosis of the airbag system (including the seat belt pretensioners) is performed.

HINT:

If trouble is detected during the primary check, the SRS warning light remains on even after the primary check period (for approximately 6 seconds) has elapsed.

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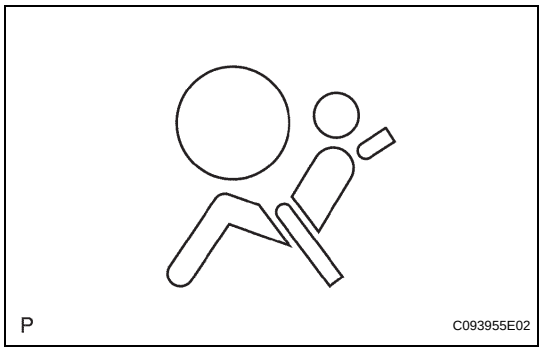
(b) Constant check.
(1) After the primary check, the center airbag sensor assembly constantly monitors the airbag system for trouble.
HINT:
If trouble is detected during the constant check, the center airbag sensor assembly functions as follows:
- The SRS warning light comes on.
- The SRS warning light goes off, and then comes on. This blinking pattern indicates a source voltage drop. The SRS warning light goes off 10 seconds after the source voltage returns to normal.

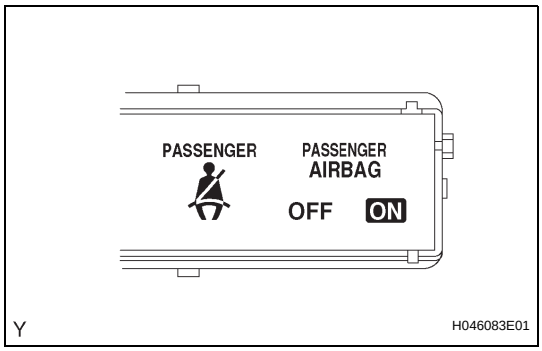
(c) Review.
(1) When the airbag system is normal:
The SRS warning light comes on only during the primary check period (for approximately 6 seconds after the engine switch is turned on (IG)).
(2) When the airbag system has trouble:
- The SRS warning light remains on even after the primary check period has elapsed.
- The SRS warning light goes off after the primary check, but comes on again during the constant check.
- The SRS warning light does not come on when turning the engine switch from off to on (IG).

HINT:
The center airbag sensor assembly keeps the SRS warning light on if the airbag has been deployed.



4. SRS WARNING LIGHT CHECK

(a) Turn the engine switch on (IG), and check that the SRS warning light comes on for approximately 6 seconds (primary check).
(b) Check that the SRS warning light goes off approximately 6 seconds after the engine switch is turned on (IG) (constant check).
HINT:
When any of the following symptoms occur, refer to the "Problem Symptoms Table" (See page RS-26).
- The SRS warning light comes on occasionally, after the primary check period has elapsed.
- The SRS warning light comes on, but a DTC is not output.
- The engine switch is turned from off to on (IG), but the SRS warning light does not come on.



5. PASSENGER AIRBAG ON/OFF INDICATOR CHECK

(a) Turn the ignition switch to the ON position.

(b) Check that the passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.

HINT:

Refer to the table in step 4 regarding the passenger airbag ON/ OFF indicator when the ignition switch is turned to the ON position and approximately 6 seconds have passed.

6. RELEASE METHOD OF ACTIVATION PREVENTION MECHANISM

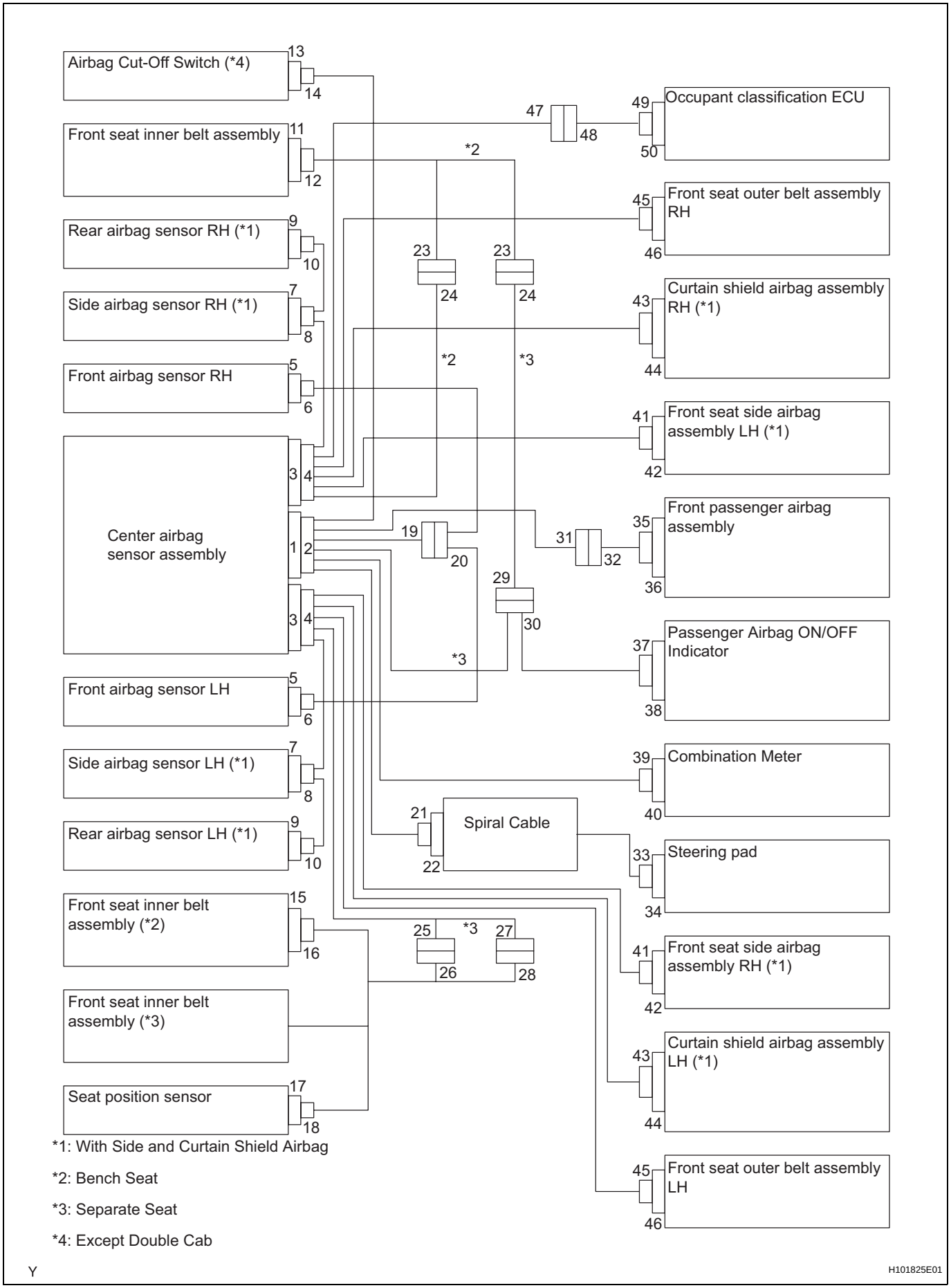
(a) The activation prevention mechanism is built into the connector for the squib circuit of the SRS. As explained in the troubleshooting section, insert a piece of paper that is the same thickness as the male terminal between the terminal and the short spring to release it (refer to the illustrations on the next 3 pages).

CAUTION:

Never release the activation prevention mechanism on the squib connector even when inspecting with the squib disconnected.

NOTICE:

- **Do not release the activation prevention mechanism unless specially directed by the troubleshooting procedure.**
- **To prevent the terminal and the short spring from being damaged, always use a piece of paper of the same thickness as the male terminal.**


Airbag Cut-Off Switch (*4)
13
14
Front seat inner belt assembly
11
12
Rear airbag sensor RH (*1)
9
10
Side airbag sensor RH (*1)
7
8
Front airbag sensor RH
5
6
Center airbag sensor assembly
3
4
1
2
3
4
Front airbag sensor LH
5
6
Side airbag sensor LH (*1)
7
8
Rear airbag sensor LH (*1)
9
10
Front seat inner belt assembly (*2)
15
16
Front seat inner belt assembly (*3)
Seat position sensor
17
18
47
48
*2
23
24
23
24
*2
*3
19
20
29
30
*3
21
22
Spiral Cable
25
26
*3
27
28
49
50
Occupant classification ECU
45
46
Front seat outer belt assembly RH
43
44
Curtain shield airbag assembly RH (*1)
41
42
Front seat side airbag assembly LH (*1)
31
32
35
36
Front passenger airbag assembly
37
38
Passenger Airbag ON/OFF Indicator
39
40
Combination Meter
33
34
Steering pad
41
42
Front seat side airbag assembly RH (*1)
43
44
Curtain shield airbag assembly LH (*1)
45
46
Front seat outer belt assembly LH
*1: With Side and Curtain Shield Airbag
*2: Bench Seat
*3: Separate Seat
*4: Except Double Cab
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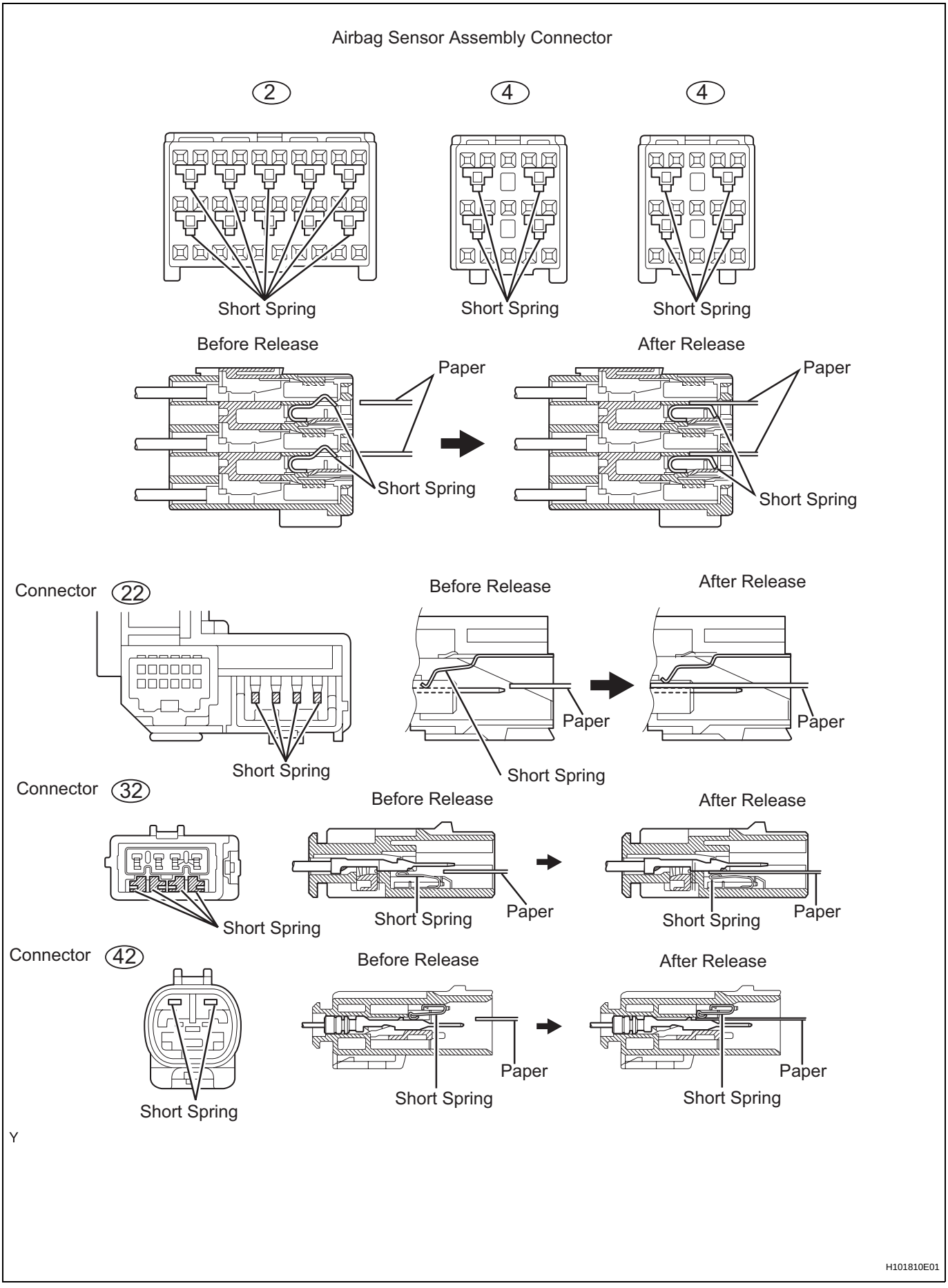

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