DI8FC-09

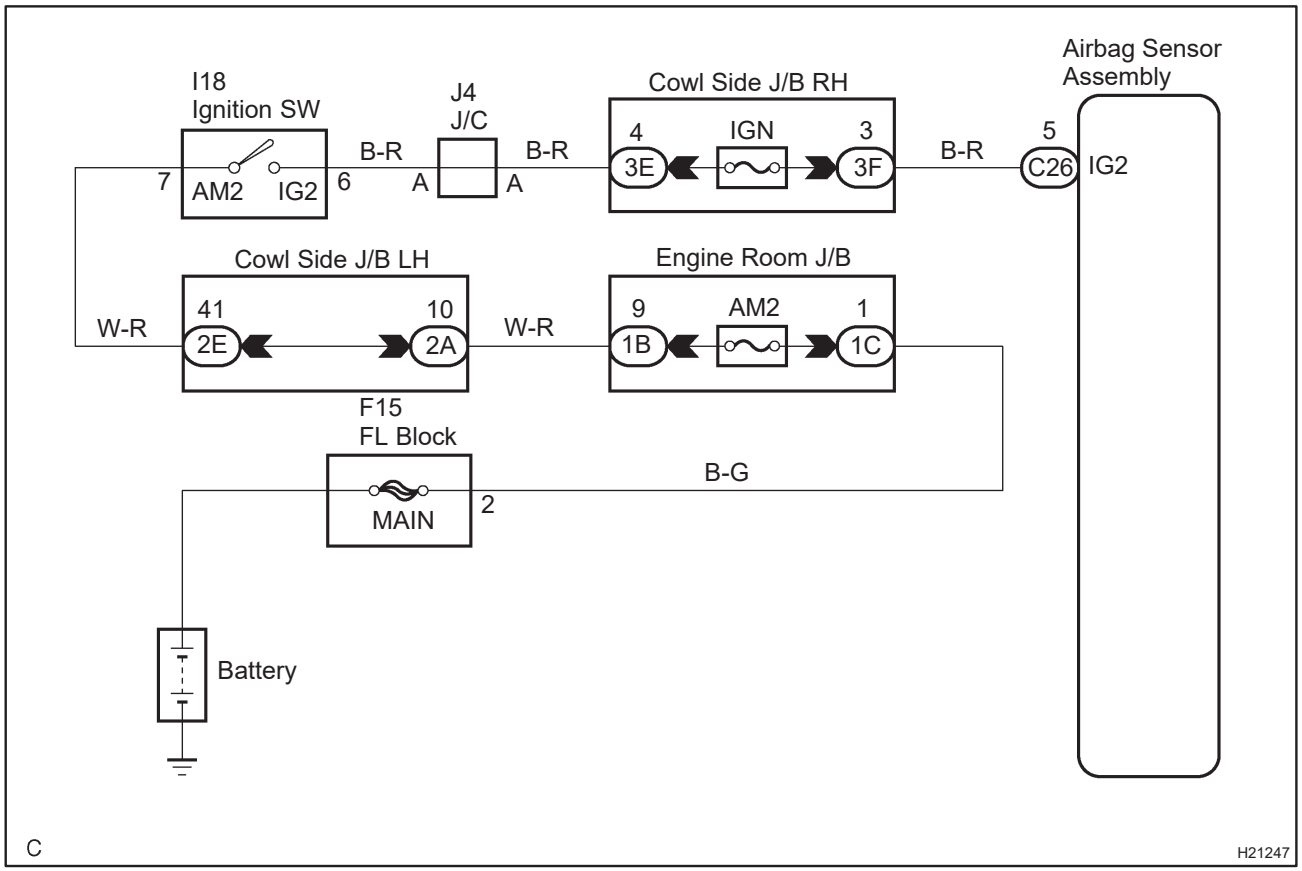
DTC	Normal	Source Voltage Drop

CIRCUIT DESCRIPTION

The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the airbag sensor assembly in case the source voltage drops.
When the battery voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to normal voltage.
The diagnosis system malfunction display for this circuit is differ from the other circuits in that when the SRS warning light remains on and the DTC shows a normal code, source voltage drop is indicated.
Malfunction in this circuit is not recorded in the airbag sensor assembly, and when the source voltage returns to normal, the SRS warning light automatically goes off.

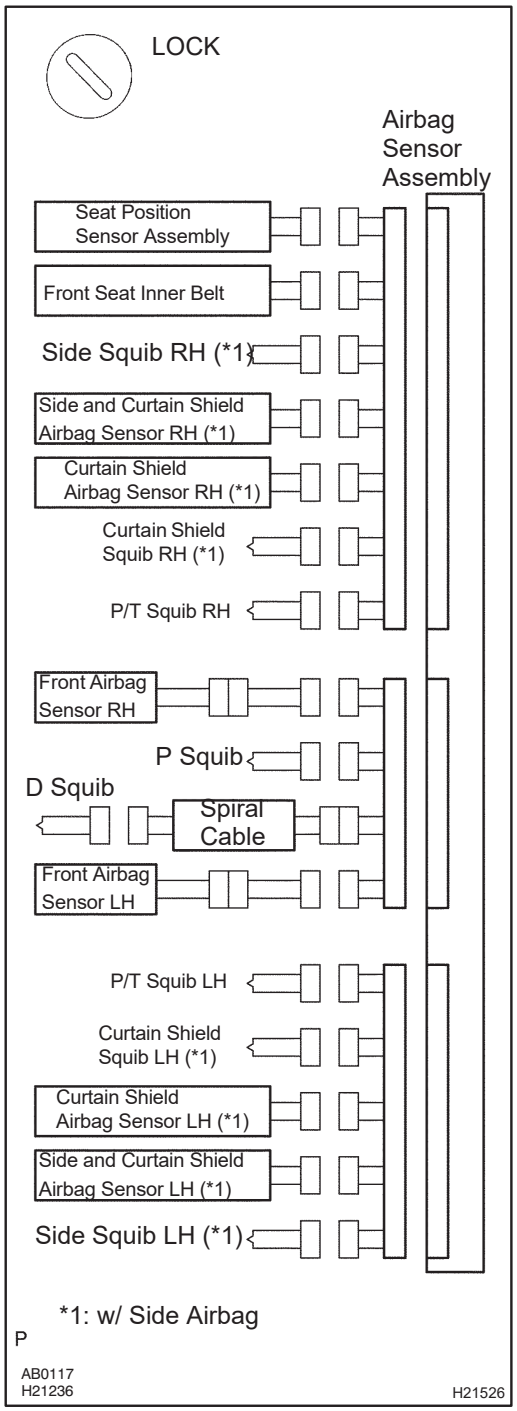
DTC No.	Diagnosis
(Normal)	Source voltage drop

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Prepare for inspection.**



PREPARATION:

(a) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.

(b) Remove the steering wheel pad (See page SR-29).

(c) Disconnect the connector of the front passenger airbag assembly (See page RS-31).

(d) w/ Side airbag:
Disconnect the connector of the side airbag assembly RH and LH (See page RS-44).

(e) w/ Side airbag:
Disconnect the connector of the curtain shield airbag assembly RH and LH (See page RS-59).

(f) Disconnect the connector of the seat belt pretensioner RH and LH (See page BO-141).

(g) Disconnect the connectors of the airbag sensor assembly (See page RS-70).

(h) Disconnect the connector of the front airbag sensor RH and LH (See page RS-75).

(i) w/ Side airbag:
Disconnect the connector of the side and curtain shield airbag sensor assembly RH and LH (See page RS-80).

(j) w/ Side airbag:
Disconnect the connector of the curtain shield airbag sensor assembly RH and LH (See page RS-86).

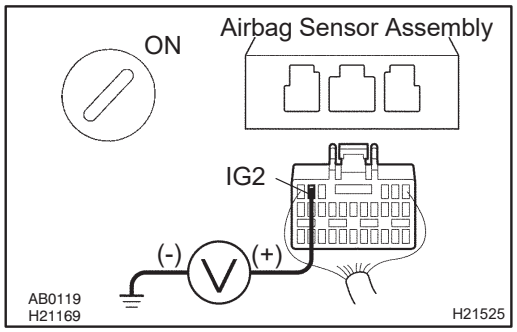
(k) Disconnect the connector of the seat position sensor assembly (See page RS-91).

(l) Disconnect the front seat inner belt LH connector (See page BO-106).

CAUTION:

Store the steering wheel pad, front passenger airbag assembly, side airbag assembly and curtain shield airbag assembly with the front surface facing upward.

2	Check source voltage.



PREPARATION:

Connect the negative (-) terminal cable to the battery.

CHECK:

(a) Turn the ignition switch to ON.

(b) Measure the voltage between the body ground and IG2 on the airbag sensor assembly and operate electric system (defogger, wiper, headlight, heater blower, etc.).

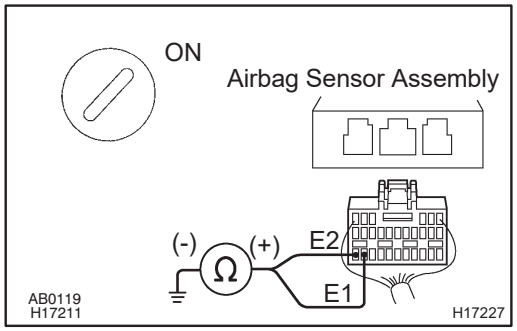
OK:

Voltage: 10 - 14 V

NG	Check harness between battery and airbag sensor assembly, and check battery and charging system.

OK

3	Check airbag sensor assembly connector.



CHECK:

Measure the resistance between the body ground and each of E1 and E2 of the airbag sensor assembly connector.

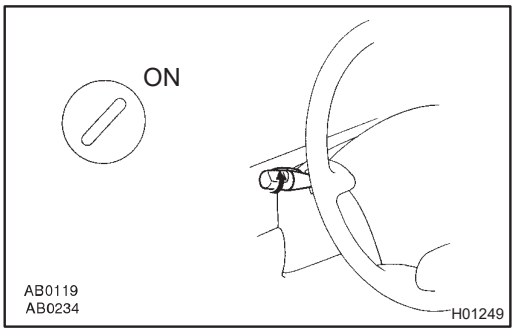
OK:

Resistance: 0 Ω (Continuity)

NG	Repair or replace airbag sensor assembly connector.

OK

4	Does SRS warning light turn off?



PREPARATION:

(a) Turn the ignition switch to LOCK.
(b) Connect the steering wheel pad connector.
(c) Connect the front passenger airbag assembly connector.
(d) w/ Side airbag:
Connect the side airbag assembly connectors.
(e) Connect the seat belt pretensioner connectors.
(f) Connect the airbag sensor assembly connectors.
(g) Connect the front airbag sensor connectors.
(h) w/ Side airbag:
Connect the side and curtain shield airbag sensor assembly connectors.
(i) w/ Side airbag:
Connect the curtain shield airbag assembly connectors.
(j) w/ Side airbag:
Connect the curtain shield airbag sensor assembly connectors.
(k) Connect the seat position sensor assembly connector.
(l) Connect the front seat inner belt LH connector.

CHECK:

(a) Turn the ignition switch to ON.
(b) Operate electric system (defogger, wiper, headlight, heater blower, etc.) and check that SRS warning light goes off.

NO → **Check for DTCs. If a DTC is output, perform troubleshooting for the DTC. If a normal code is output, replace airbag sensor assembly.**

YES

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

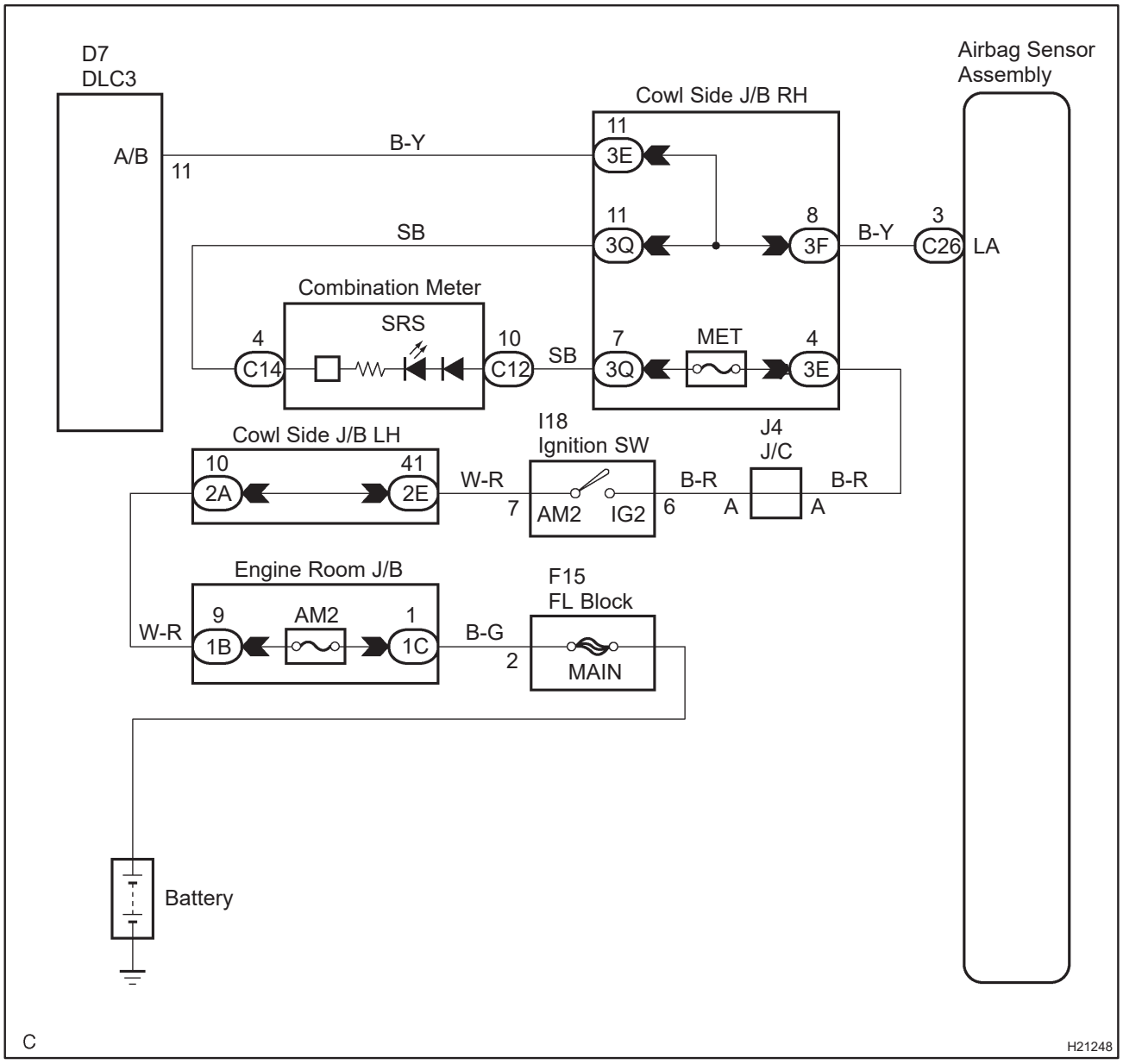
DIB45-01

SRS Warning Light Circuit Malfunction

CIRCUIT DESCRIPTION

The SRS warning light is located on the combination meter.
When the SRS is normal, the SRS warning light comes on for approx. 6 seconds after the ignition switch is turned from the LOCK position to ON position, and then turns off automatically.
If there is a malfunction in the SRS, the SRS warning light lights up to inform the driver of the abnormality.
When terminal TC and CG of the DLC3 are connected, the DTC is indicated by blinking the SRS warning light.

WIRING DIAGRAM

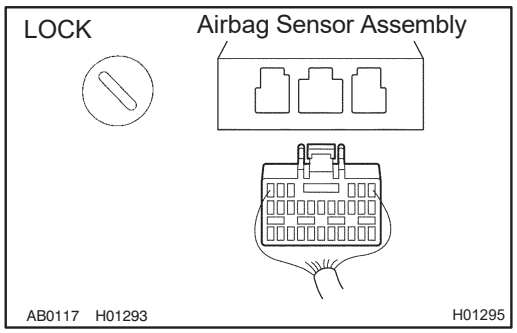


INSPECTION PROCEDURE

Always lights up, when ignition switch is in LOCK position.

1	Prepare for inspection (See step 1 on page DI-923).

2	Does SRS warning light turn off?



PREPARATION:

(a) Turn the ignition switch to LOCK.
(b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
(c) Disconnect the airbag sensor assembly connector.
(d) Connect the negative (-) terminal cable to the battery.

CHECK:

Check operation of SRS warning light.

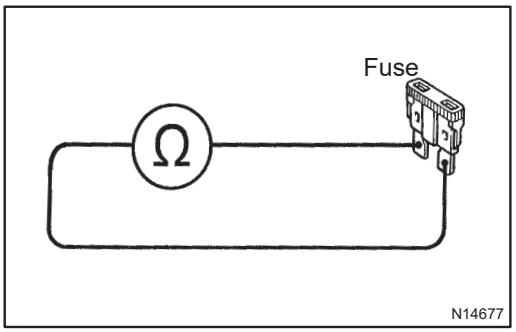
NO → Check combination mater (See page BE-2).

YES

Replace airbag sensor assembly.

Does not light up, when ignition switch is turned to ON.

1	**Check AM2 Fuse.**



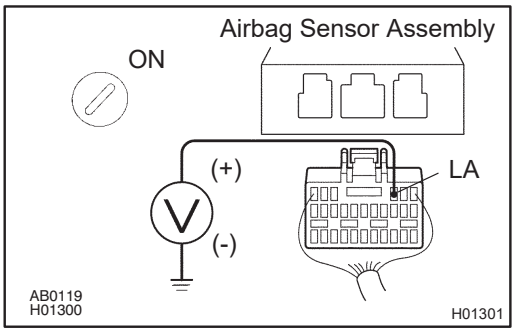
PREPARATION:
Remove the AM2 fuse.
CHECK:
Check continuity of the AM2 fuse.
OK:
Continuity
HINT:
★ Fuse may be burnt out even if it appears to be OK during visual inspection.
★ If fuse is OK, install it.

NG	**Go to step 5.**

OK

2	**Prepare for inspection (See step 1 on page DI-923).**

3	**Check SRS warning light circuit.**

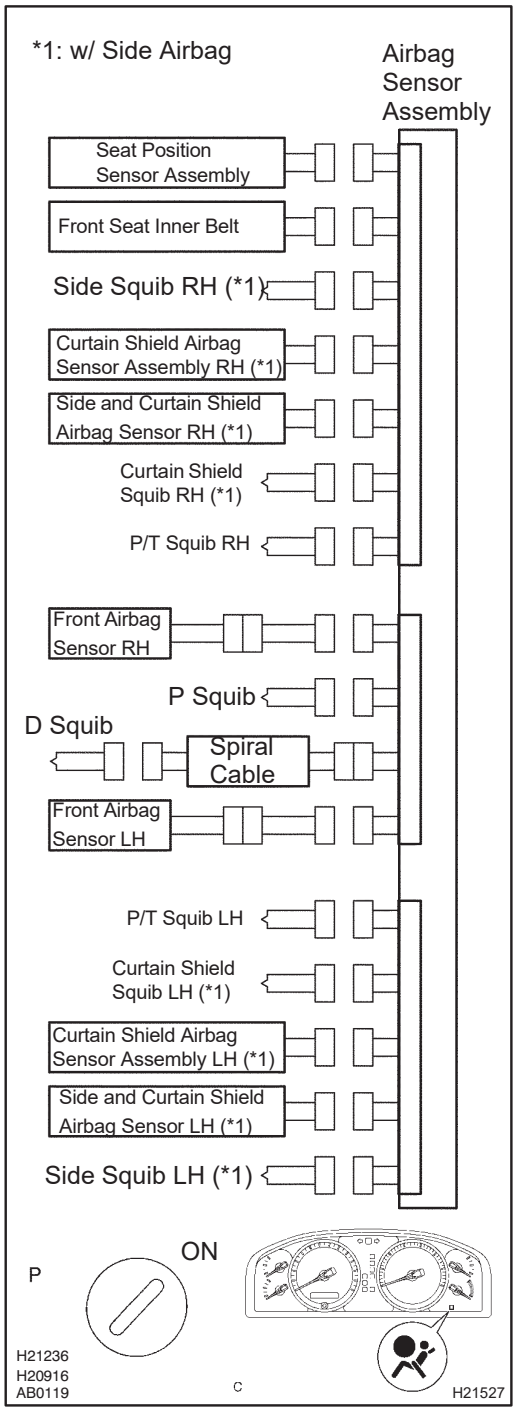


PREPARATION:
Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.
CHECK:
(a) Turn the ignition switch to ON.
(b) Measure the voltage between the body ground and LA of the airbag sensor assembly connector.
OK:
Voltage: 10 - 14 V

NG	**Check SRS warning light bulb or repair SRS warning light circuit.**

OK

4	Does SRS warning light come on?



PREPARATION:

(a) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
(b) Connect the airbag sensor assembly connector.
(c) Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

(a) Turn the ignition switch to ON.
(b) Check operation of the SRS warning light.

NO → **Replace airbag sensor assembly.**

YES

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use simulation method to check.

5	Is new AM2 fuse burnt out again?

NO → Using simulation method, reproduce malfunction symptoms (See page IN-26).

YES →

Check harness between AM2 fuse and SRS warning light.

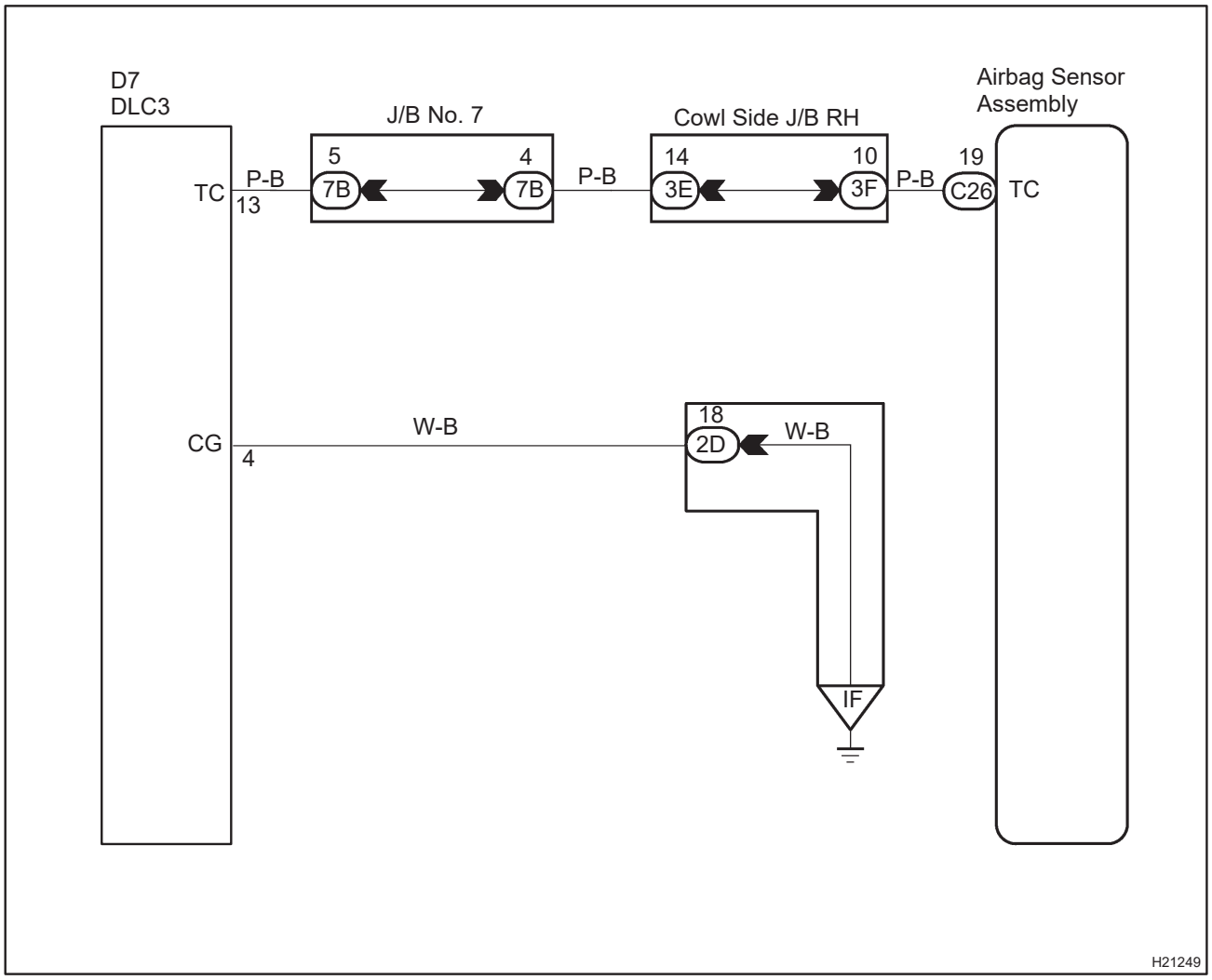
DIB46-02

TC Terminal Circuit

CIRCUIT DESCRIPTION

DTC output mode is set by connecting terminal TC and CG of the DLC3 the airbag sensor assembly. The DTCs are displayed by blinking the SRS warning light.

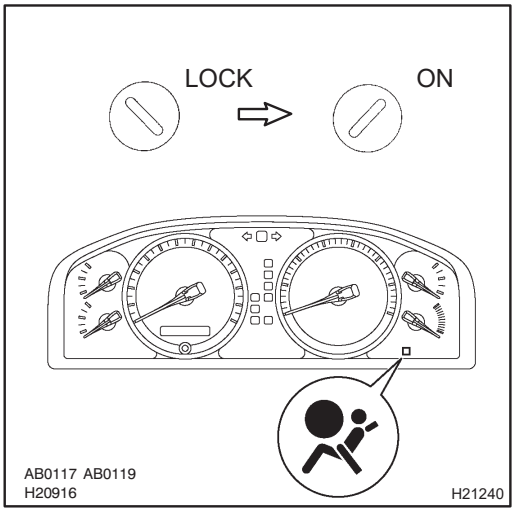
WIRING DIAGRAM



INSPECTION PROCEDURE

If the DTC is not displayed, do the following troubleshooting.

1	**Does SRS warning light light up for approx. 6 seconds?**



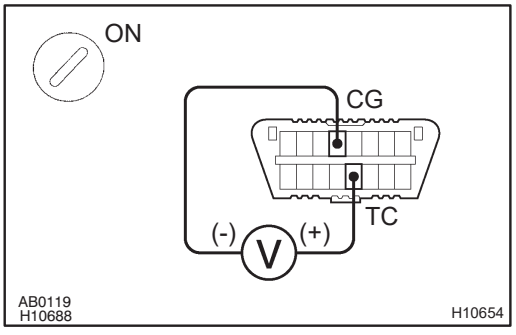
CHECK:

Check operation of the SRS warning light after ignition switch is turned from LOCK position to ON position.

NO → **Check SRS warning light system. (See page DI-927)**

YES

2	**Check voltage between terminal TC and CG of DLC3.**



PREPARATION:

Turn the ignition switch to ON.

CHECK:

Measure the voltage between terminal TC and CG of DLC3.

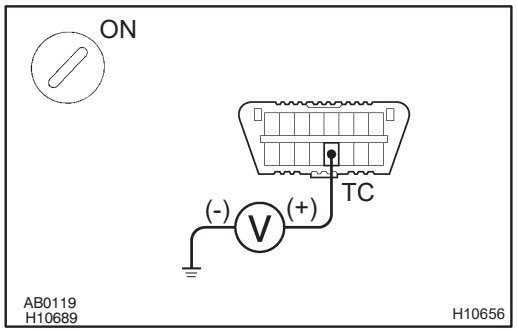
OK:

Voltage: 4 - 14 V

OK → **Go to step 4.**

NG

3	Check voltage between terminal TC of DLC3 and body ground.



CHECK:

Measure the voltage between the body ground and terminal TC of DLC3.

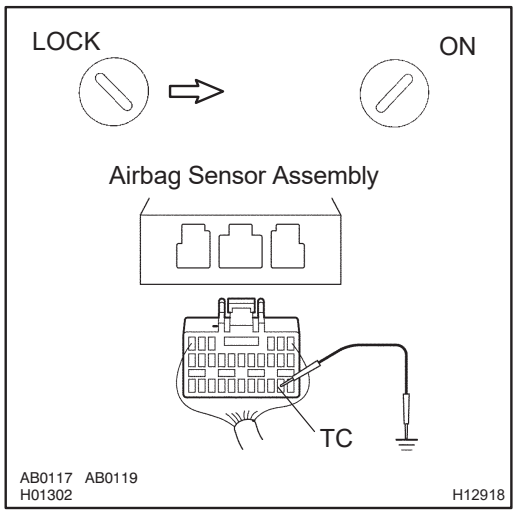
OK:

Voltage: 4 - 14 V

OK → **Check harness between terminal CG of DLC3 and body ground.**

NG

4	Check airbag sensor assembly.



PREPARATION:

(a) Turn the ignition switch to LOCK.
(b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
(c) Disconnect the airbag sensor assembly connector.
(d) Insert the service wire into terminal TC from back side as shown in the illustration.
(e) Connect the airbag sensor assembly connector with service wire.
(f) Connect the negative (-) terminal cable to the battery.
(g) Turn the ignition switch to ON and wait at least for 20 seconds.
(h) Connect the service wire of terminal TC to body ground.

CHECK:

Check operation of SRS warning light.

OK:

SRS waning light comes on.

NOTICE:

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

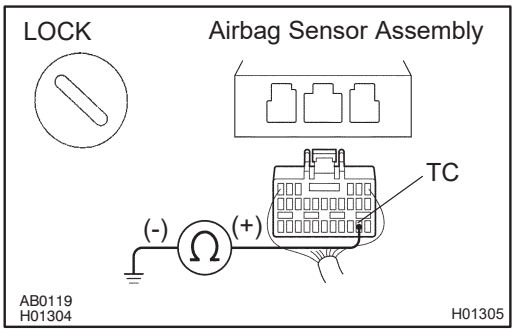
OK → **Check harness between the airbag sensor assembly and DLC3.**

NG

Replace airbag sensor assembly.

If the DTC is displayed without a DTC check procedure, perform the following troubleshooting.

1	**Check resistance between terminal TC of airbag sensor assembly and body ground.**



PREPARATION:

(a) Turn the ignition switch to LOCK.

(b) Disconnect negative (-) terminal cable from the battery, and wait at least for 90 seconds.

(c) Disconnect the airbag sensor assembly connector.

CHECK:

Check resistance between terminal TC of the airbag sensor assembly connector and body ground.

OK:

Resistance: 1 MΩ or Higher

NG → **Repair or replace harness or connector.**

OK

Replace airbag sensor assembly.