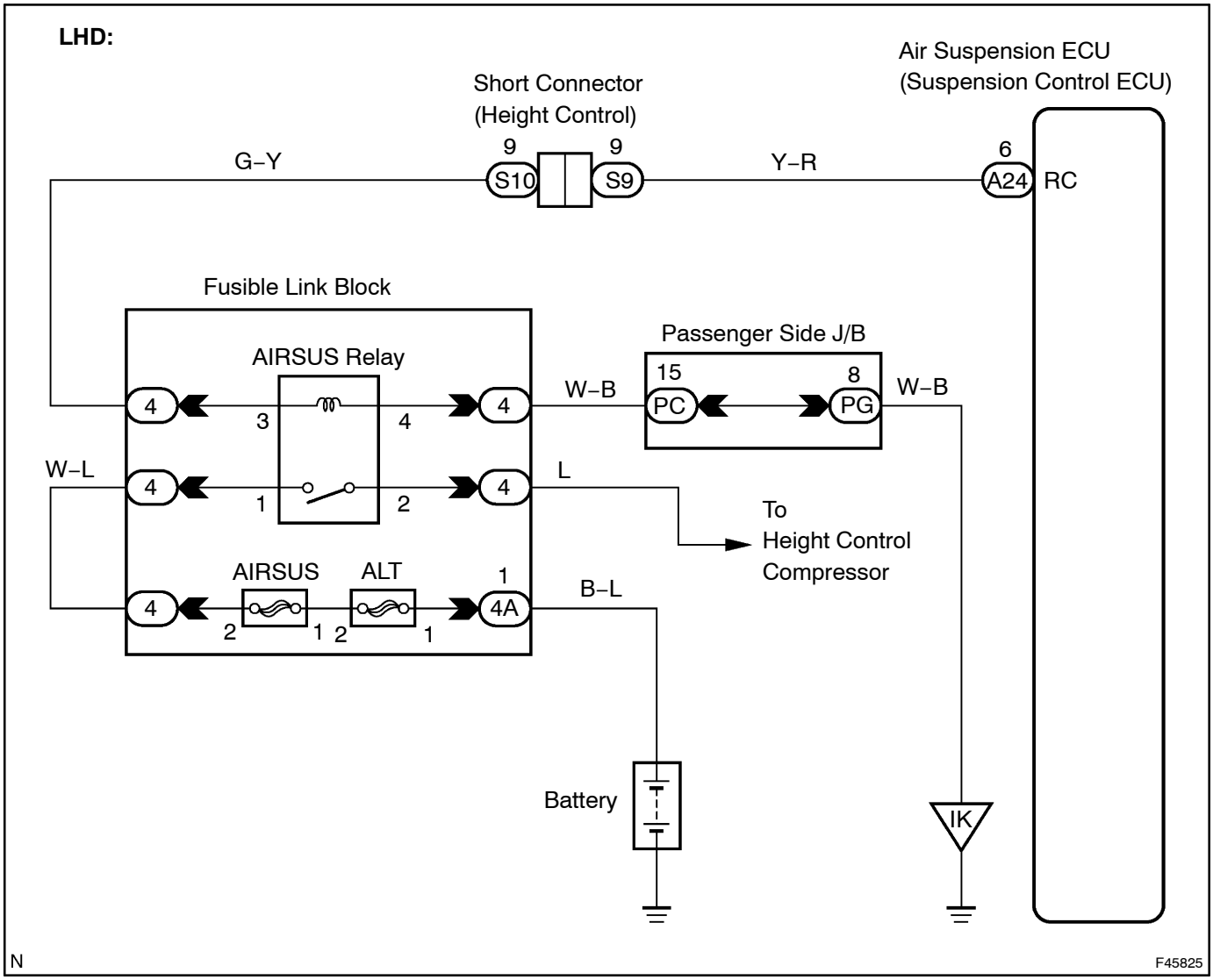
DTC C1741 AIR SUS RELAY CIRCUIT

CIRCUIT DESCRIPTION

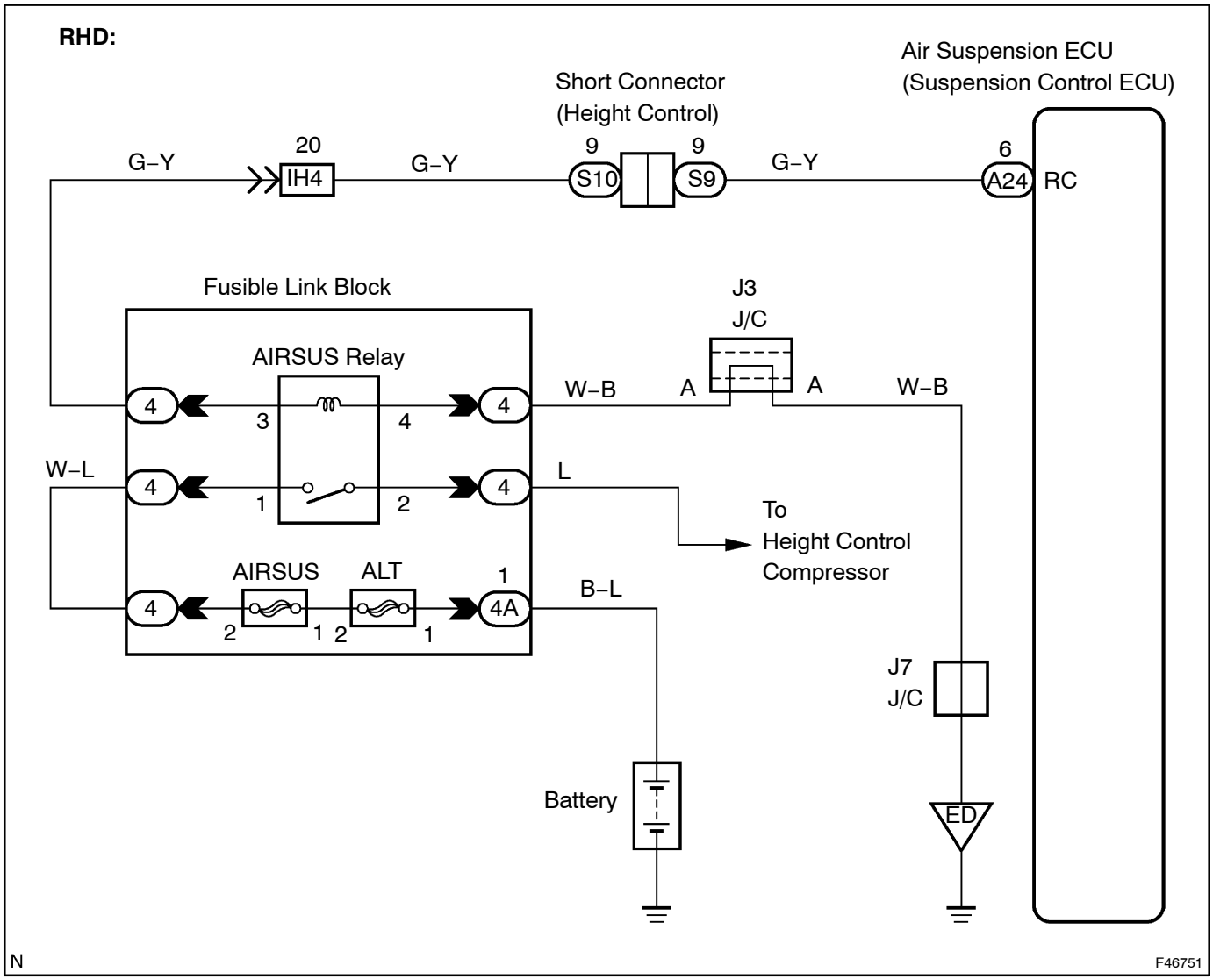
The signal from the suspension control ECU switches the AIR SUS relay on, and then the height control compressor motor starts.

DTC No.	DTC Detecting Condition	Trouble Area
C1741	Either the condition 1. or 2. is detected: 1. With the AIR SUS relay not activated, an open signal of the AIR SUS relay is detected for 1 sec. or more. 2. With the AIR SUS relay activated, a short signal of the AIR SUS relay is detected 8 times successively.	• AIR SUS relay • AIR SUS relay circuit • Suspension control ECU

WIRING DIAGRAM



RHD:


Air Suspension ECU
(Suspension Control ECU)
Short Connector
(Height Control)
G–Y
20
IH4
G–Y
9
S10
9
S9
G–Y
6
A24
RC
Fusible Link Block
AIRSUS Relay
J3
J/C
W–B
A
A
W–B
4
3
4
4
W–L
4
1
2
4
L
To
Height Control
Compressor
AIRSUS
ALT
1
4
2
1
1
2
1
4A
B–L
J7
J/C
Battery
ED
N
F46751

INSPECTION PROCEDURE

1	RECONFIRM DTC

(a) Check DTCs (see page 05–248).
(1) Confirm if DTC C1761 and/or C1774 is recorded.
OK:
DTC C1761 and/or C1774 is not output.

HINT:
If either DTC C1761 (ECU malfunction) (see page 05–313) or C1774 (power source circuit) (see page 05–316) is displayed, carry out the necessary inspection. If they are output at the same time, carry out the necessary inspection for DTC C1774 first.

NG → **REPAIR CIRCUIT INDICATED BY OUTPUT CODE**

OK

2	PERFORM ACTIVE TEST BY INTELLIGENT TESTER II

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch to the ON position and turn the intelligent tester II main switch on.
(c) Select the item below in the ACTIVE TEST and operate it with the intelligent tester II.
AIRSUS:

Item	Vehicle Condition / Test Details	Diagnostic Note
MOTOR RELAY	AIR SUS relay / ON or OFF	Operation of solenoid (clicking sound) can be heard

(d) Check the operation sound of the AIR SUS relay when operating it with the intelligent tester II.
OK:
The operation sound of the AIR SUS relay can be heard.

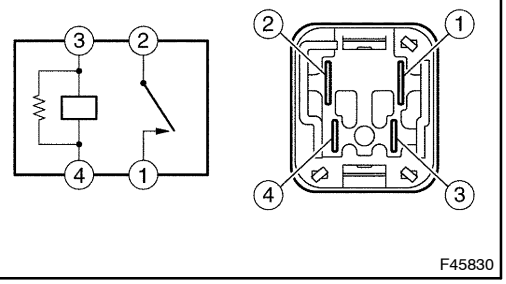
NG → **Go to step 3**

OK

REPLACE SUSPENSION CONTROL ECU (SEE PAGE 25–20)

3 INSPECT AIR SUS RELAY

AIR SUS Relay:



(a) Remove the AIR SUS relay from the fusible link block.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

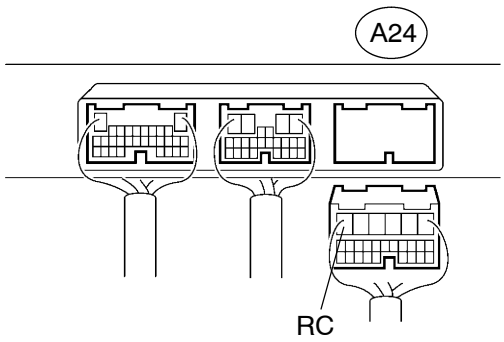
Tester Connection	Specified Condition
1 – 2	10 kΩ higher
1 – 2	Below 1 Ω (When battery voltage is applied to terminals 3 and 4)

NG → REPLACE AIR SUS RELAY

OK

4 CHECK HARNESS AND CONNECTOR(SUSPENSION CONTROL ECU – AIR SUS RELAY) (SEE PAGE 01–44)

Suspension Control ECU:

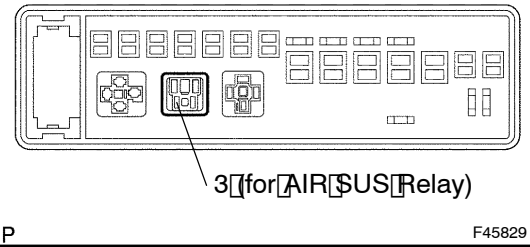


(a) Disconnect the suspension control ECU A24 connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
A24–6 (RC) – 3 (for AIR SUS relay)	Below 1 Ω
A24–6 (RC) – Body ground	10 kΩ or higher

Fusible Link Block Side:

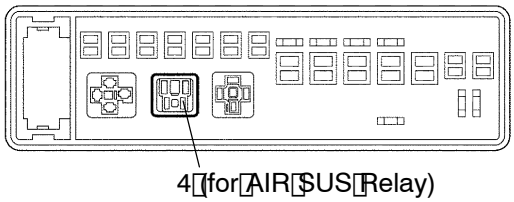


NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5	CHECK HARNESS AND CONNECTOR(AIR SUS RELAY – BODY GROUND) (SEE PAGE 01–44)

Fusible Link Block Side:



(a) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
4 (for AIR SUS relay) – Body ground	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE SUSPENSION CONTROL ECU (SEE PAGE 25–20)