DTC C1741/41 AIR SUS RELAY CIRCUIT

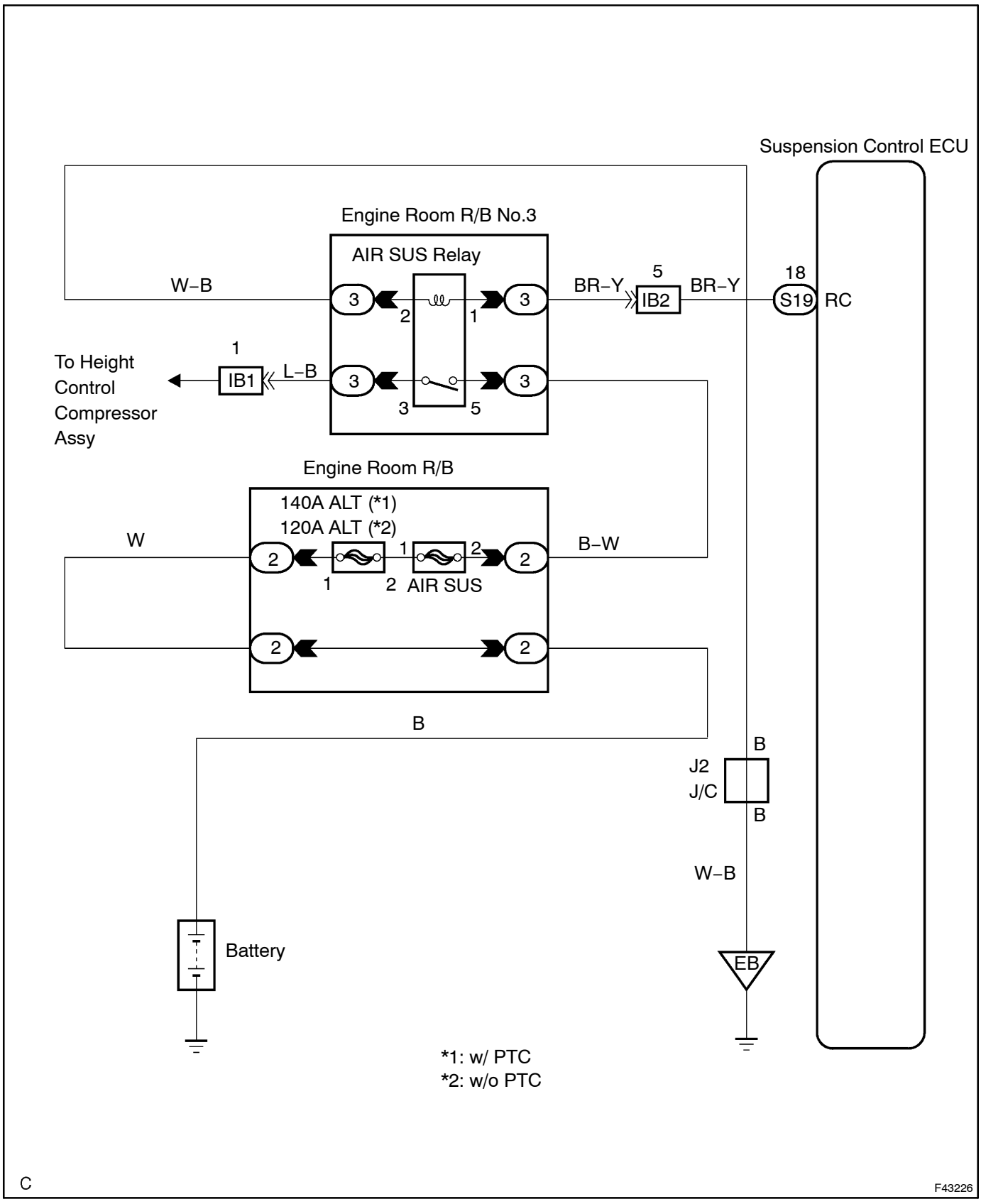
CIRCUIT DESCRIPTION

When ”UP” side of the height control switch is pressed, a signal is sent from terminal RC of the suspension control ECU to the AIR SUS relay to turn it on.
As a result, the current flows to the AIR SUS relay coil, closing the relay contact, and then the battery positive voltage is applied to the compressor, which causes the compressed air to raise the vehicle height.

DTC No.	DTC Detecting Condition	Trouble Area
C1741/41	Either the condition 1. or 2. is detected. 1. With the AIR SUS relay inactivated, 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

HINT:
Once ECU stores DTC C1741/41 in the memory, the vehicle height control is not carried out until a normal signal is input to ECU from the AIR SUS relay. However, the control resumes if the ignition switch is once turned OFF, and then turned ON again.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- If DTC C1761/61 (ECU malfunction) and/or C1774/74 (power source circuit) is displayed, perform the inspection necessary for DTC C1761/61 (See page 05–630) and/or C1774/74 (See page 05–632) first.
  (If DTC C1761/61 and C1774/74 are output at the same time, perform the inspection necessary for DTC C1774/74 first.)
- Start the inspection from step 1 in the case of using the hand–held tester, and start from step 2 in the case of not using the hand–held tester.

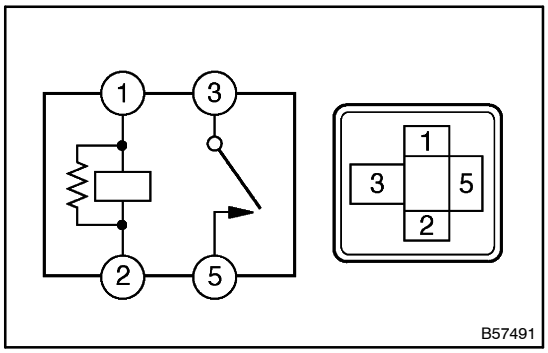
1	PERFORM ACTIVE TEST BY HAND–HELD TESTER

(a) Connect the hand–held tester to DLC3.
(b) Turn the ignition switch to ON, and turn the hand–held tester main switch to ON.
(c) Select the item "MOTOR RELAY" in the ACTIVE TEST, and operate it with the hand–held tester.
(d) Check the operation sound of the AIR SUS relay when operating it with the hand–held tester.
Standard:
The operation sound of the AIR SUS relay can be heard.

OK → **CHECK AND REPLACE SUSPENSION CONTROL ECU (See page 01–36)**

NG

2	INSPECT AIR SUS RELAY



(a) Remove the AIR SUS relay from the engine room R/B No.3.
(b) Check continuity between each terminal of the AIR SUS relay.
Standard:

Tester connection	Specification
1 – 2	Continuity (Reference value 62 Ω)
3 – 5	No continuity

(c) Apply battery positive voltage between terminal 1 and 2.
(d) Check continuity between terminal 3 and 5 of the AIR SUS relay.
Standard:

Tester connection	Specification
3 – 5	Continuity

NG → **REPLACE AIR SUS RELAY**

OK

3	CHECK HARNESS AND CONNECTOR(AIR SUS RELAY – SUSPENSION CONTROL ECU)

(a) Check for open and short circuit in the harness and the connector between the AIR SUS relay and the suspension control ECU (See page 01–36).

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4	CHECK HARNESS AND CONNECTOR(AIR SUS RELAY – BODY GROUND)

(a) Check for open and short circuit in the harness and the connector between the AIR SUS relay and the body ground (See page 01–36).

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE SUSPENSION CONTROL ECU (See page 01–36)