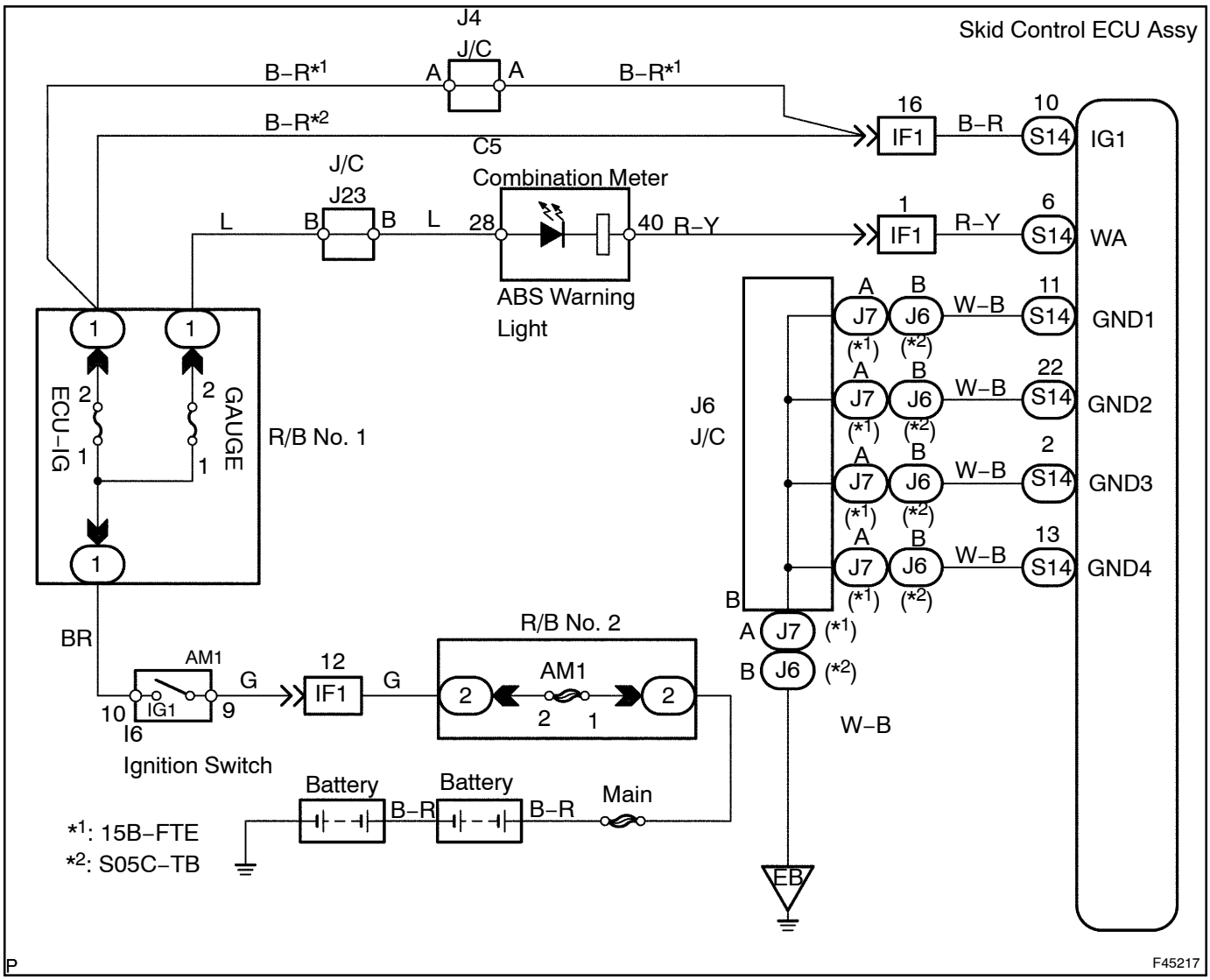
DTC	AlwaysON	MALFUNCTION IN ABS ECU

CIRCUIT DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
Always ON	Any of following 1. 2. or 3. is detected: 1. ECU connectors are disconnected from ECU 2. There is a malfunction in ECU internal circuit 3. There is a malfunction in ABS warning light circuit	• Battery • Fuse • ABS warning light circuit • Charging system • Power source circuit • Skid control ECU assy

Fail–safe function:
If any trouble occurs in the ECU, the ECU will cut off the current to the ABS solenoid relay and prohibit the ABS control, and the brake system will becomes normal.
HINT:
There is a case that the hand–held tester cannot be used if the ECU is abnormal.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT BATTERY

(a) Inspect the battery positive voltage.
Standard: 20 – 28 V

NG → **CHECK AND REPLACE CHARGING SYSTEM**

OK

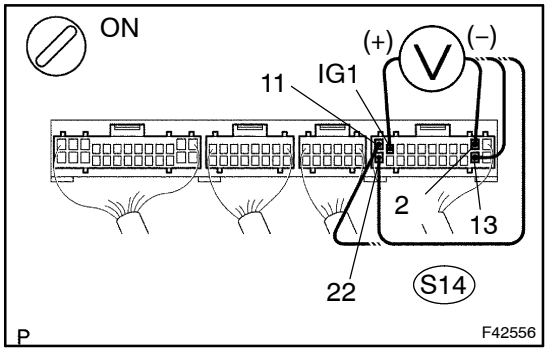
2	CHECK SKID CONTROL ECU ASSY (CONNECTOR SECURELY CONNECTED)

NG → **CONNECT CONNECTOR**

OK

3	CHECK SKID CONTROL ECU ASSY (POWER SOURCE)

When using the hand–held tester:
(a) Select the item ”IG VOLTAGE” in the DATA LIST and read its value displayed on the hand–held tester.
(b) Check the voltage condition output from the ECU, which is displayed on the hand–held tester.
Standard:
”Normal” is displayed.



When not using the hand–held tester:
(c) Remove the ECU with the connectors still connected.
(d) Turn the ignition switch ON, and measure the voltage between terminals IG1 (S14–10) and GND (S14–2, 11, 13, 22) of the S14 ECU connector.
Standard: 20 – 28 V

OK → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

NG

4	CHECK WIRE HARNESS (BATTERY ⇔ SKID CONTROL ECU ASSY)

(a) Check for open and short circuit in the wire harness between the battery and S14 ECU connectors (See page 01–27).

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

OK

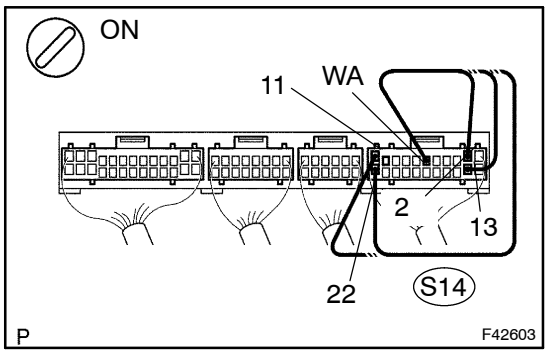
5	CHECK WIRE HARNESS (DLC3 ⇔ SKID CONTROL ECU ASSY)

(a) Check for short circuit in the harness and connector between terminal TC of the D3 DLC3 and the S13 ECU connectors (See page 01–27).

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

6	CHECK ABS WARNING LIGHT



(a) Turn the ignition switch OFF.
(b) Remove the ECU with the connectors still connected.
(c) Using a service wire, connect terminals WA (S14–6) and GND (S14–2, 11, 13, 22) of the S14 ECU connector.
(d) Turn the ignition switch ON.
(e) Check that the ABS warning light goes off.

OK → CHECK AND REPLACE SKID CONTROL ECU ASSY (See page 01–27)

NG

7	RECONFIRM DTC

(a) Check the DTC (See page 05–205).

HINT:
After erasing the DTC and driving the vehicle more than 30 km/h (19 mph), check for DTC.

A	Normal Code
B	Malfunction Code

B → REPAIR CIRCUIT INDICATED BY OUTPUT CODE

A

CHECK AND REPLACE COMBINATION METER ASSEMBLY