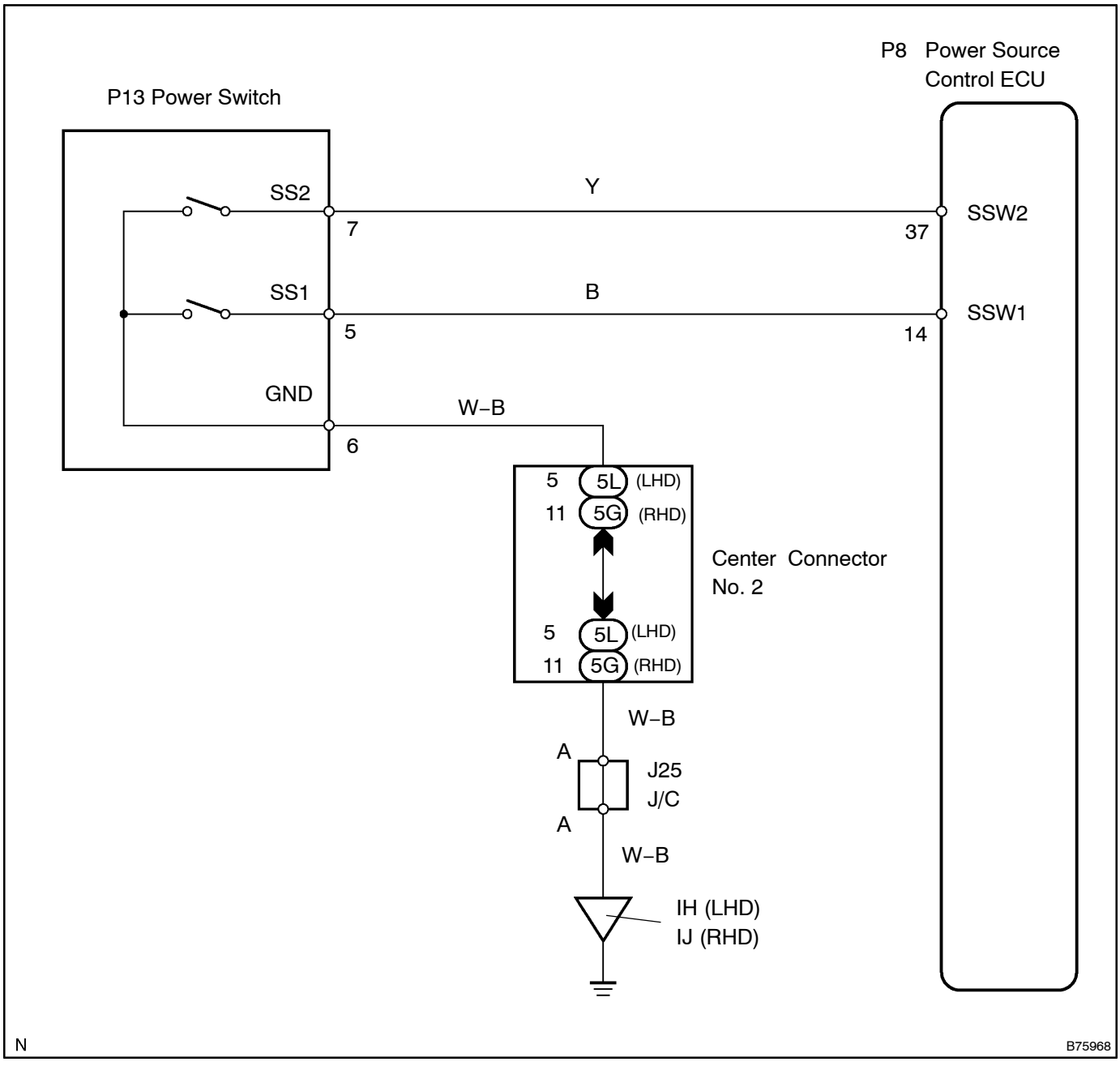
DTC	B2278	MAIN SWITCH (POWER SWITCH) MALFUNCTION

CIRCUIT DESCRIPTION

This DTC is output when 1) a malfunction is detected between the power source control ECU and the power switch; or 2) either of the switches inside the power switch is malfunctioning.

DTC No.	DTC detection condition	Trouble area
B2278	Communication is abnormal between power source control ECU and power switch; or power switch is defective	• Power source control ECU • Power switch • Wire harness

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER II

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the power switch ON (IG) and press the intelligent tester II main switch ON.
(c) Read the DATA LIST according to the displays on the tester.

Standard (Power source control ECU):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
POWER SWITCH 1	Power switch / ON or OFF	ON: Power switch 1 is ON OFF: Power switch 1 is OFF	–
POWER SWITCH 2	Power switch / ON or OFF	ON: Power switch 2 is ON OFF: Power switch 2 is OFF	–

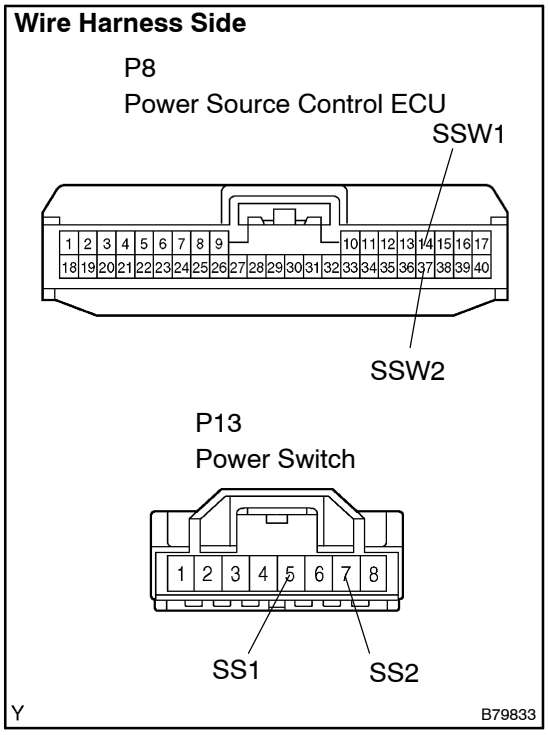
OK: "ON" (power switches 1 and 2 are ON) appears on the screen

NG → **Go to step 2**

OK

REPLACE POWER SOURCE CONTROL ECU

2 CHECK WIRE HARNESS (POWER SWITCH – POWER SOURCE CONTROL ECU AND BODY GROUND)



(a) Disconnect the P13 power switch connector.
(b) Disconnect the P8 ECU connector.
(c) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
P13–5 (SS1) – P8–14 (SSW1)	Below 1 Ω
P13–7 (SS2) – P8–37 (SSW2)	Below 1 Ω
P13–6 – Body ground	Below 1 Ω
P13–5 (SS2) or P8–14 (SSW1) – Body ground	10 kΩ higher
P13–7 (SS2) or P8–37 (SSW2) – Body ground	10 kΩ higher

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

OK

REPLACE POWER SOURCE CONTROL ECU