DTC	P3110/223 HV MAIN RELAY MALFUNCTION

DTC	P3110/527 HV MAIN RELAY MALFUNCTION

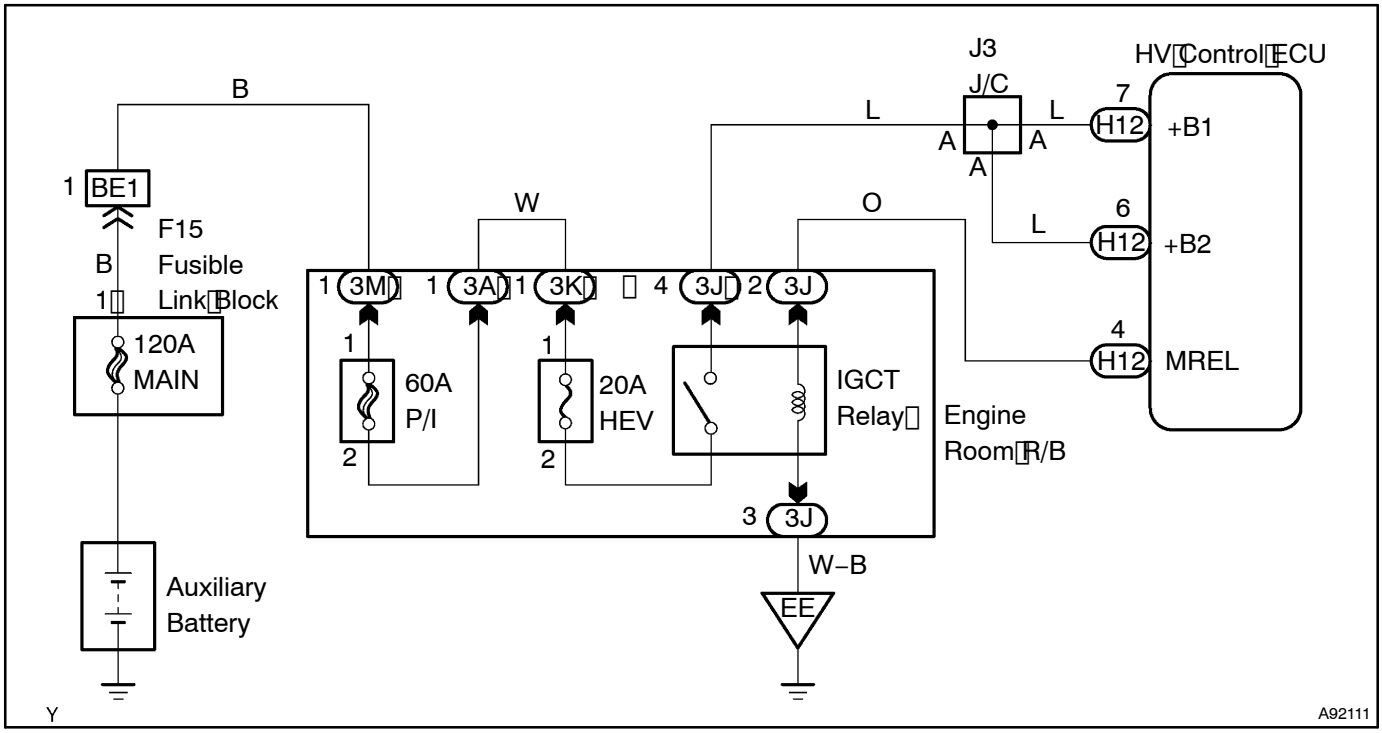
CIRCUIT DESCRIPTION

The HV control ECU monitors the IGCT relay and IG2 relay to detect malfunction.

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P3110	223	IGCT relay is always closed	• Wire harness or connector • Integration relay (IGCT relay)
P3110	527	IG2 logical inconsistency	• Wire harness or connector • Integration relay (IG2 relay)

WIRING DIAGRAM

Refer to the wiring diagram for the IG2 relay on page 05–333.

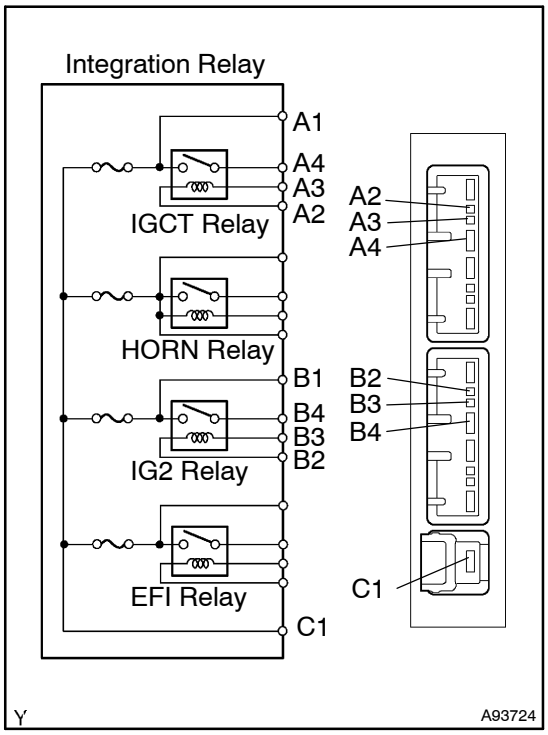


INSPECTION PROCEDURE

HINT:

If there is a battery voltage at the +B, MREL or IGSW terminal of the HV control ECU even though the power switch is turned OFF, the circuit is shorted to the +B power supply.

1	INSPECT INTEGRATION RELAY(IGCT RELAY AND IG2 RELAY)



(a) Remove the integration relay from the engine room R/B.

(b) Inspect the IGCT relay.

(1) Check the resistance between the terminals of the integration relay.

Standard:

Tester Connection	Specified Condition
A4 – C1	10 kΩ or higher
A4 – C1 (Apply battery voltage to terminals A2 and A3)	Below 1 Ω

(c) Inspect the IG2 relay.

(1) Check the resistance between the terminals of the integration relay.

Standard:

Tester Connection	Specified Condition
B4 – C1	10 kΩ or higher
B4 – C1 (Apply battery voltage to terminals B2 and B3)	Below 1 Ω

NG → **REPLACE INTEGRATION RELAY (IGCT RELAY OR IG2 RELAY)**

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR AFTER INSPECTION (HV CONTROL ECU – INTEGRATION RELAY)