DTC	B2799–539	ENGINE IMMOBILISER SYSTEM MALFUNCTION

DTC	B2799–540	ENGINE IMMOBILISER SYSTEM MALFUNCTION

DTC	B2799–541	ENGINE IMMOBILISER SYSTEM MALFUNCTION

DTC	B2799–542	ENGINE IMMOBILISER SYSTEM MALFUNCTION

DTC	B2799–543	ENGINE IMMOBILISER SYSTEM MALFUNCTION

DTC	B2799–544	ENGINE IMMOBILISER SYSTEM MALFUNCTION

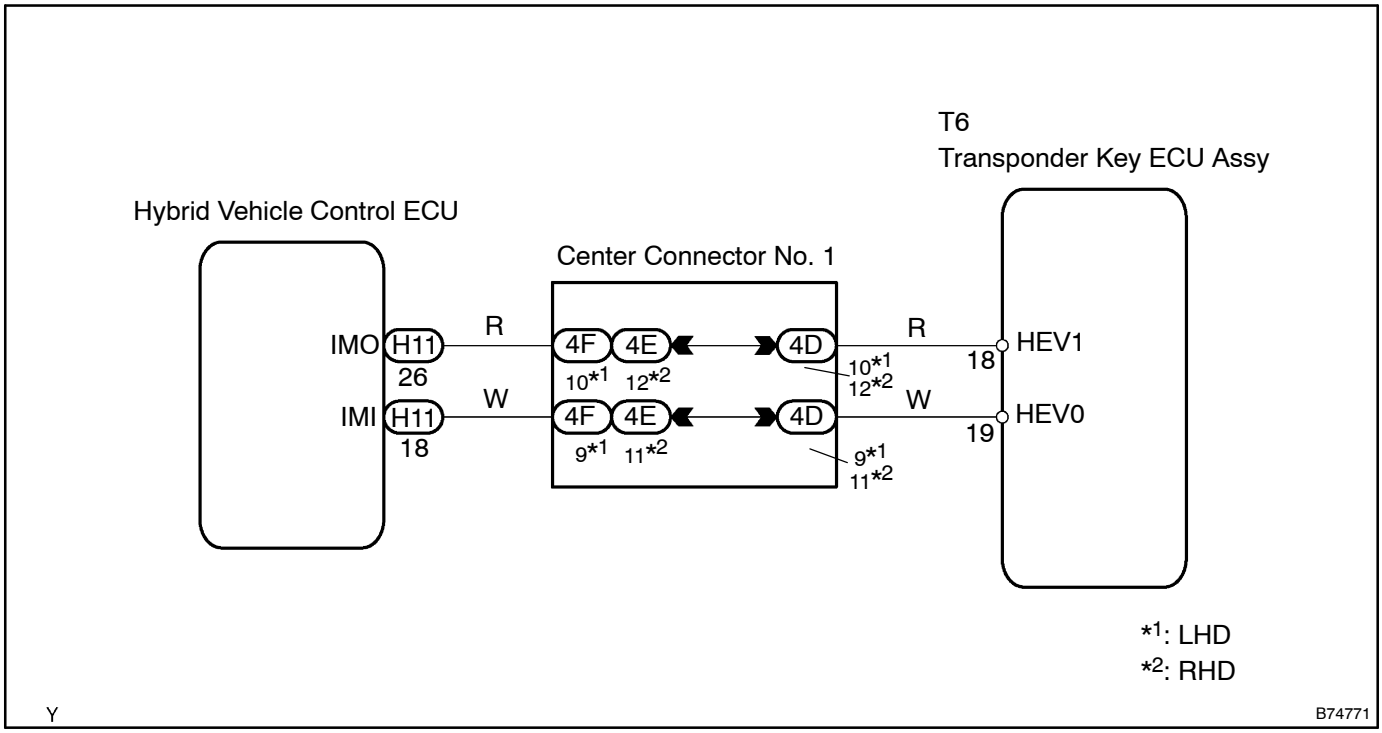
CIRCUIT DESCRIPTION

These DTCs are detected when: 1) the wire harness between the transponder key ECU and hybrid vehicle control ECU is open or short circuited, 2) the ECU communication IDs of the hybrid vehicle control ECU and transponder key ECU are different, 3) the start (ON (READY) signal delayed, or 4) the key codes are unmatched.

Before troubleshooting for the this DTC, make sure no transponder key ECU DTCs are present. If present, troubleshoot the transponder key ECU DTCs or hybrid vehicle control ECUs first.

DTC No.	DTC Detection Condition	Trouble Area
B2799–539 B2799–540 B2799–541 B2799–542 B2799–543 B2799–544	When any of the following conditions are met: • wire harness between transponder key ECU and hybrid vehicle control ECU is open or short • ECU communication IDs of hybrid vehicle control ECU and transponder key ECU are different • ON (READY) signal is delayed more than 10 seconds from when power switch is set to ON (READY) • Key codes are unmatched.	• Wire harness • Hybrid vehicle control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK FOR DTCS

(a) Delete the DTC (see page 05–2061).
(b) Check that no DTC is output.
OK: DTC is not output.

NG → **Go to step 2**

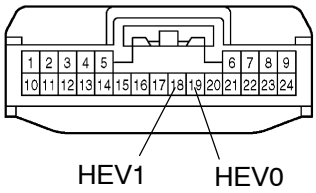
OK

END

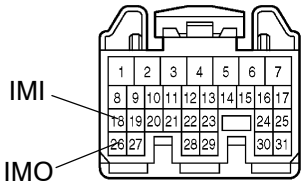
2	CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY – HYBRID VEHICLE CONTROL ECU) (TRANSPONDER KEY ECU ASSY OR HYBRID VEHICLE CONTROL ECU – BODY GROUND)

Wire Harness Side

T6
Transponder Key ECU Assy



H11
Hybrid Vehicle Control ECU



Y B74765

(a) Disconnect the T6 and H11 ECU connectors.
(b) Measure the resistance of the wire harness side connectors.
Standard:

Tester Connection	Specified Condition
T6–19 (HEV0) – H11–18 (IMI)	Below 1 Ω
T6–18 (HEV1) – H11–26 (IMO)	Below 1 Ω
T6–19 (HEV0) or H11–18 (IMI) – Body ground	10 kΩ or higher
T6–18 (HEV1) or H11–26 (IMO) – Body ground	10 kΩ or higher

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

OK

REPLACE HYBRID VEHICLE CONTROL ECU