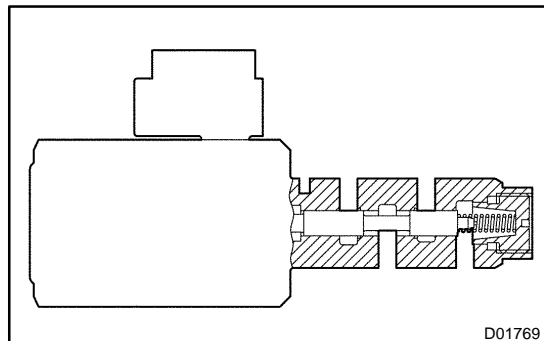


DTC	P0770	Shift Solenoid "E" Malfunction (Shift Solenoid Valve SLU)
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SYSTEM DESCRIPTION

The ECM uses the signals from the Throttle Position Sensor and Air-flow Meter to monitor the engagement condition of the lock-up clutch.

Then the ECM compares the engagement condition of the lock-up clutch with the lock-up schedule in the ECM memory to detect mechanical trouble of the shift solenoid valve SLU, valve body, torque converter clutch and automatic transmission assembly (clutch, brake or gear etc.).

DTC No.	DTC Detecting Condition	Trouble Area
P0770	Lock-up does not occur when driving in the lock-up range (normal driving at 80 km/h [50 mph]), or lock-up remains ON in the lock-up OFF range (2-trip detection logic).	<ul style="list-style-type: none"> • Shift solenoid valve SLU is stuck open or closed • Valve body blocked up or stuck • Lock-up clutch • Automatic transmission assembly

INSPECTION PROCEDURE

HINT:

In case of using LEXUS hand-held tester, start the inspection from step 1 and in case of not using the LEXUS hand-held tester, start from step 2.

1	Active test.
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PREPARATION:

- Remove the DLC3 cover.
- Connect a LEXUS hand-held tester.
- Turn the ignition switch ON and LEXUS hand-held tester main switch ON.

CHECK:

Using active test, check the lock-shift operation.

OK:

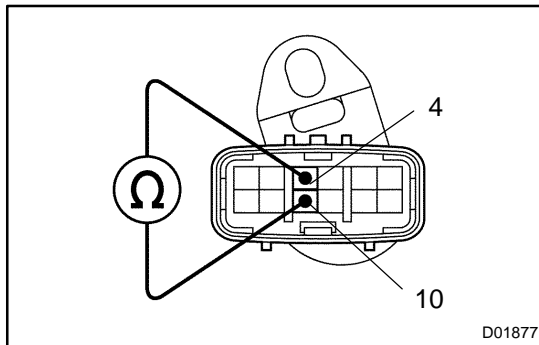
Lock-up ON

NG

Replace the torque converter clutch.

OK

2 Check solenoid valve SLU resistance.



PREPARATION:

Disconnect the solenoid wire connector.

CHECK:

Measure the resistance between terminals 4 and 10 of solenoid connector.

OK:

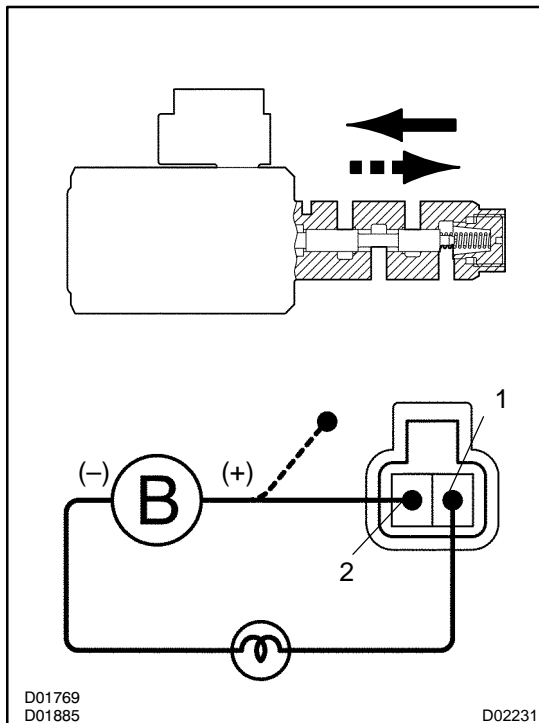
Resistance: 5.0 – 5.6 Ω at 20 °C (68 °F)

NG

Replace the solenoid valve SLU.

OK

3 Check solenoid valve SLU operation.



PREPARATION:

(a) Remove the oil pan.


(b) Remove the solenoid valve SLU.

CHECK:


Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1.

OK:

When B⁺ is applied.

Valve moves in  direction in illustration on the left.

When B⁺ is cut off.

Valve moves in  direction in illustration on the left.

NG

Replace the solenoid valve SLU.

OK

4	Check valve body (See page DI-362).
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NG**Repair or replace the valve body.****OK****Replace the torque converter clutch.**