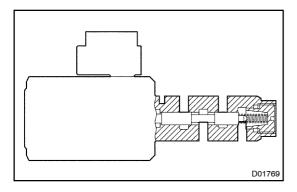
DI25R-04

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



# SYSTEM DESCRIPTION

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

Then the Engine & ECT ECU compares the engagement condition of the lock-up clutch with the lock-up schedule in the Engine & ECT ECU memory to detect mechanical trouble of the SLU solenoid valve SLU, valve body, torque converter 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). | SLU solenoid valve is stuck open or closed Valve body blocked up or stuck Lock-up clutch Automatic transmission assembly |

### INSPECTION PROCEDURE

#### HINT:

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

1 Active test.

### **PREPARATION:**

- (a) Remove the DLC3 cover.
- (b) Connect a hand-held tester.
- (c) Turn the ignition switch ON and hand-held tester main switch ON.

## **CHECK:**

Using active test, check the lock-shift operation.

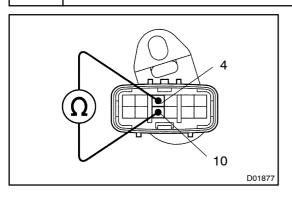
#### OK:

Lock-up ON

NG Replace the torque converter.

OK

# 2 Check SLU solenoid valve 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  $\Omega$  at 20 °C (68 °F)

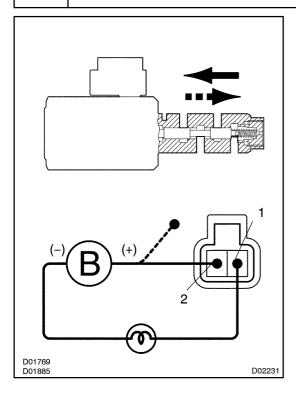
NG

Replace the SLU solenoid valve.



3

# Check SLU solenoid valve operation.



### **PREPARATION:**

- (a) Remove the oil pan.
- (b) Remove the SLU solenoid valve.

### **CHECK:**

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

#### OK:

| When B <sup>+</sup> is applied. | Valve moves in direction in illustration on the left. |
|---------------------------------|---|
| When B <sup>+</sup> is cut off. | Valve moves in direction in illustration on the left. |

NG

Replace the SLU solenoid valve.

ОК

4 Check[valve[body[See[page[DI-191]].

NG

Repair[or[replace[the[valve[body.

OK

 $\label{lem:converter} Replace[the[torque]converter \\ (See[page]AT-35).$