

<b>DTC</b>	<b>P0743</b>	<b>Torque Converter Clutch Circuit Electrical</b>
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## CIRCUIT DESCRIPTION

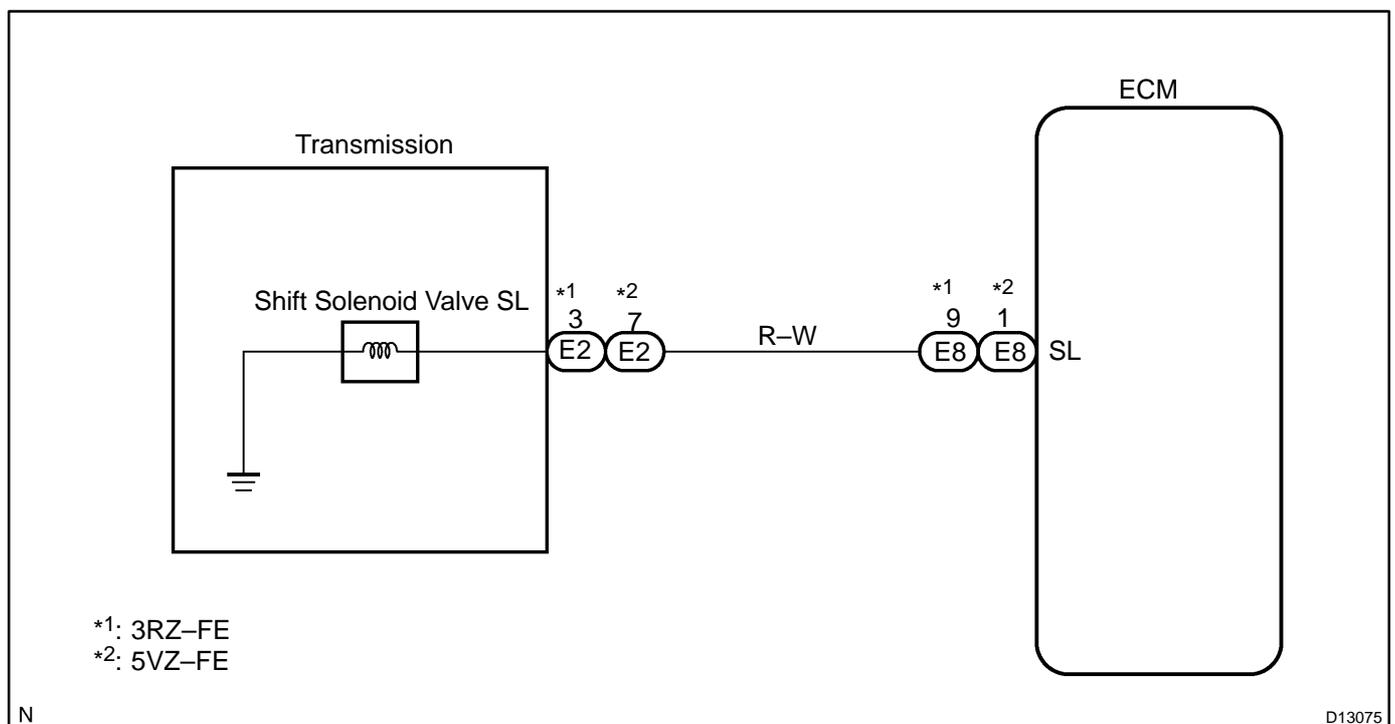
The shift solenoid valve SL is turned ON and OFF by signals from the ECM to control the hydraulic pressure acting on the lock-up relay valve, which then controls the operation of the lock-up clutch.

DTC No.	DTC Detection Condition	Trouble Area
P0743	<ul style="list-style-type: none"> <li>ECM detects open in solenoid SL circuit 4 times when solenoid SL is not operated (2-trip detection logic)</li> <li>ECM detects short in solenoid SL circuit 4 times when solenoid SL is operated (2-trip detection logic)</li> </ul>	<ul style="list-style-type: none"> <li>Open or short in shift solenoid valve SL circuit</li> <li>Shift solenoid valve SL</li> <li>ECM</li> </ul>

Fail safe function

If the ECM detects a malfunction, it turns the shift solenoid valve SL OFF.

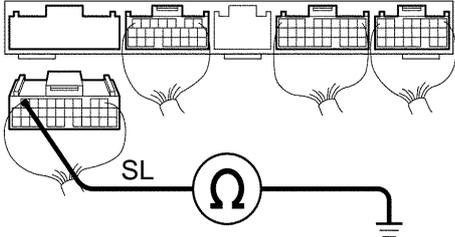
## WIRING DIAGRAM



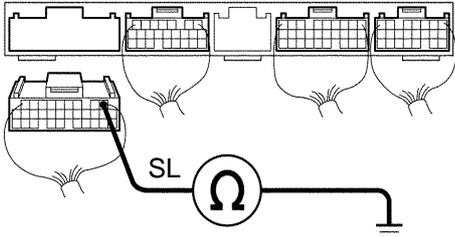
## INSPECTION PROCEDURE

- 1 Measure resistance between terminal SL of ECM and body ground.

3RZ-FE



5VZ-FE



P

D12440

**PREPARATION:**

Disconnect the connector from ECM.

**CHECK:**

Measure resistance between terminal SL of ECM and body ground.

**OK:**

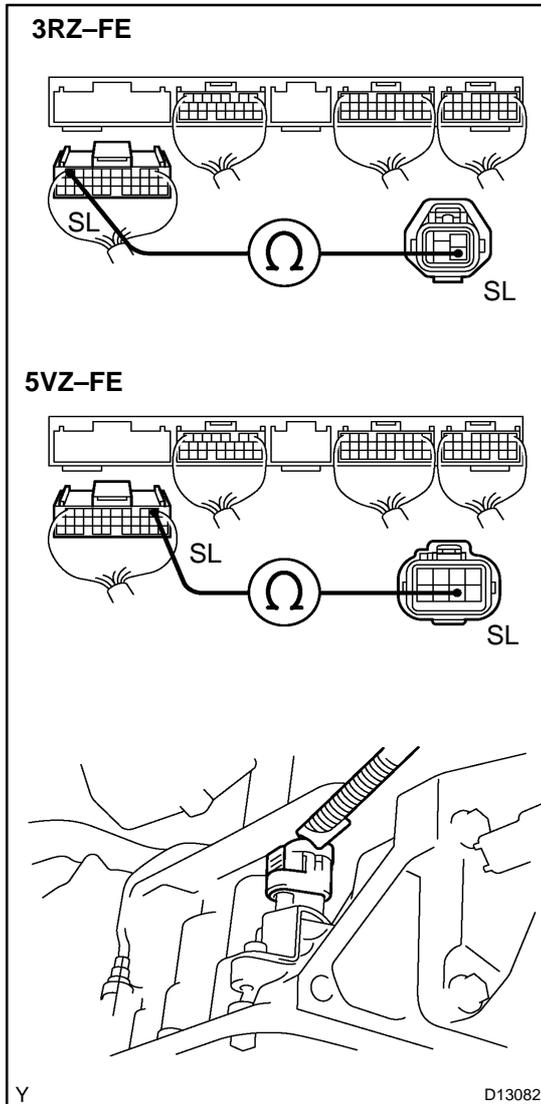
Resistance: 11 – 15 Ω

OK

Check and replace the ECM (See page [IN-28](#)).

NG

**2 Check harness and connector between ECM and automatic transmission solenoid connector.**



**PREPARATION:**

Disconnect the solenoid connector from the transmission.

**CHECK:**

Check the harness between terminal SL of ECM and terminal SL of automatic transmission solenoid connector.

**OK:**

**There is no open or short circuit.**

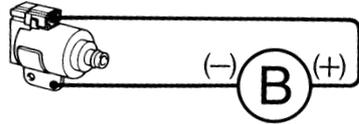
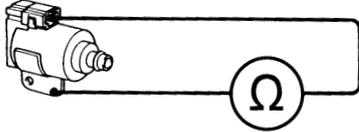
**NG**

**Repair or replace the harness or connector between ECM and automatic transmission solenoid connector.**

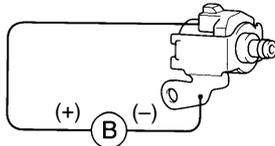
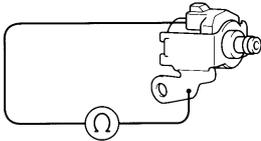
**OK**

### 3 Check shift solenoid valve SL.

3RZ-FE:



5VZ-FE:



D00005  
D03074

D05955

#### PREPARATION:

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

#### CHECK:

- (a) Measure the resistance between the solenoid connector terminal and the body ground.

**Standard: 11 – 15 Ω at 20 °C (68 °F)**

- (b) Connect the battery positive lead to the solenoid connector terminal and the battery negative lead to the solenoid body ground.

**Standard: Solenoid operation noise is produced.**

#### OK:

Standard.

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Replace shift solenoid valve SL.

OK

Check and replace the ECM  
(See page [IN-28](#)).