DTC	P2716	Pressure Control Solenoid "D" Electrical (Shift Solenoid Valve SLT)

DESCRIPTION

Refer to DTC P2714 (See page AT-119).

DTC No.	DTC Detection Conditions	Trouble Areas
P2716	Open or short is detected in shift solenoid valve SLT circuit for 1 second or more while driving (1-trip detection logic)	• Open or short in shift solenoid valve SLT circuit • Shift solenoid valve SLT • ECM

MONITOR DESCRIPTION

When an open or short is detected in the linear solenoid valve (SLT) circuit, the ECM interprets this as a fault.
The ECM turns on the MIL and stores the DTC.

MONITOR STRATEGY

Related DTCs	P2716: Shift solenoid valve SLT/Range check
Required sensors/Components	Shift solenoid valve SLT
Frequency of operation	Continuous
Duration	Condition (A) and (B): 1 second
MIL operation	Immediate
Sequence of operation	None

TYPICAL ENABLING CONDITIONS

The following conditions are common to Condition (A) and (B).

The monitor will run whenever the following DTCs are not present.	None
Ignition switch	ON
Starter	OFF

Condition (A)

Solenoid current cut status	Not cut
Battery voltage	11 V or more

Condition (B)

Battery voltage	8 V or more

TYPICAL MALFUNCTION THRESHOLDS

Either of the following conditions is met: Condition (A) or (B)

Condition (A)

Solenoid status (SLT) from Hybrid IC	Fail

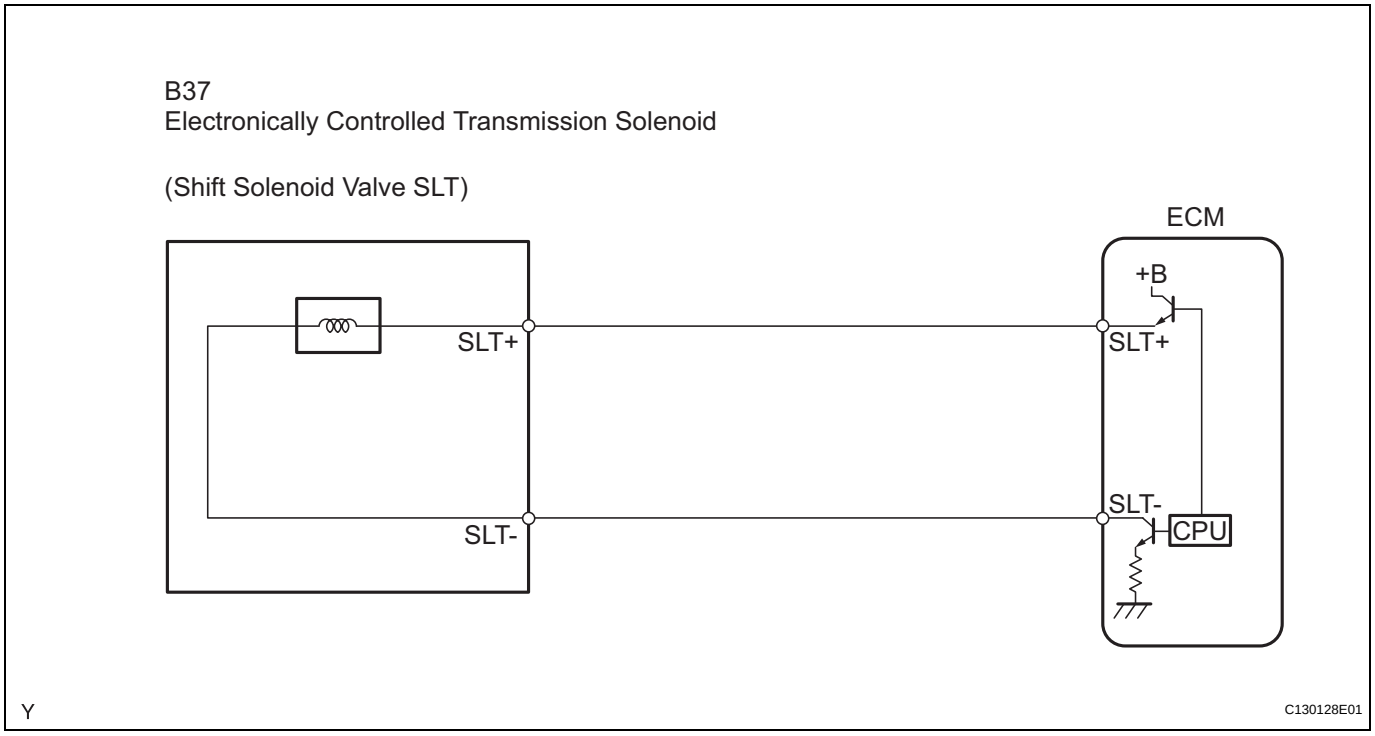
Condition (B)

Hybrid IC status	Fail

COMPONENT OPERATING RANGE

Shift solenoid valve SLT	Resistance: 5.0 to 5.6 Ω at 20°C (68°F)

WIRING DIAGRAM

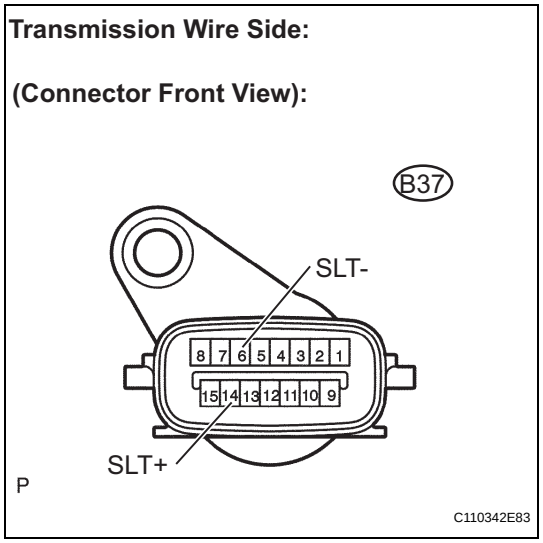


INSPECTION PROCEDURE

1	INSPECT TRANSMISSION WIRE (SLT)

Transmission Wire Side:

(Connector Front View):



(a) Disconnect the transmission wire connector from the transmission.

(b) Measure the resistance.

Standard resistance

Tester Connection	Specified Condition
14 (SLT+) - 6 (SLT-)	5.0 to 5.6 Ω at 20°C (68°F)

(c) Measure the resistance.

Standard resistance (Check for short)

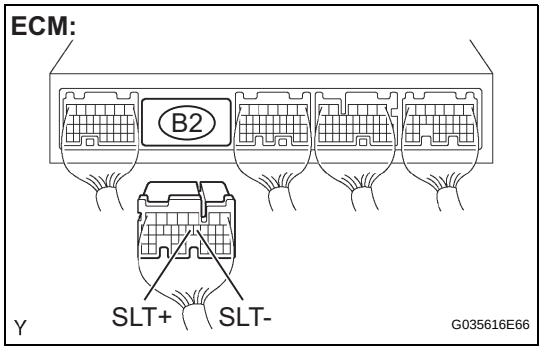
Tester Connection	Specified Condition
14 (SLT+) - Body ground	10 kΩ or higher
6 (SLT-) - Body ground	10 kΩ or higher

NG → **Go to step 3**

OK

AT

2 CHECK HARNESS AND CONNECTOR (TRANSMISSION WIRE - ECM)



(a) Connect the transmission wire connector to the transmission.
(b) Disconnect the ECM connector.
(c) Measure the resistance.
Standard resistance

Tester Connection	Specified Condition
B2-13 (SLT+) - B2-12 (SLT-)	5.0 to 5.6 Ω at 20°C (68°F)

(d) Measure the resistance.
Standard resistance (Check for short)

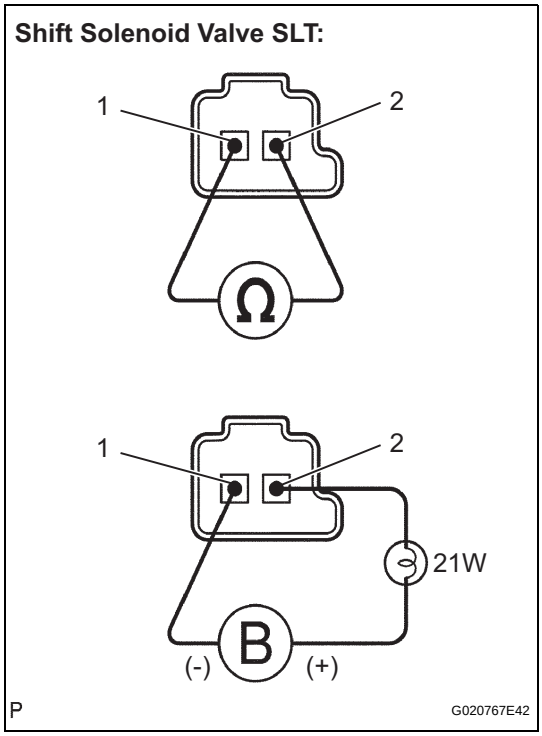
Tester Connection	Specified Condition
B2-13 (SLT+) - Body ground	10 kΩ or higher
B2-12 (SLT-) - Body ground	10 kΩ or higher

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

OK

REPLACE ECM

3 INSPECT SHIFT SOLENOID VALVE SLT



(a) Remove the shift solenoid valve SLT.
(b) Measure the resistance.
Standard resistance

Tester Connection	Specified Condition
1 - 2	5.0 to 5.6 Ω at 20°C (68°F)

(c) Connect the positive (+) lead with a 21 W bulb to terminal 2 and the negative (-) lead to terminal 1 of the solenoid valve connector, then check the movement of the valve.
OK:
The solenoid makes operating sounds.

NG → **REPLACE SHIFT SOLENOID VALVE SLT**

AT

OK

REPAIR OR REPLACE TRANSMISSION WIRE