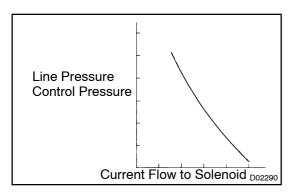
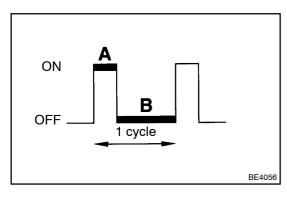
DIAVO-01

DTC

P2716/77

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





CIRCUIT DESCRIPTION

The throttle pressure that is applied to the primary regulator valve (which modulates line pressure) causes the solenoid valve SLT, under electronic control, to precisely and minutely modulate and generate line pressure according to the accelerator pedal effort, or the detected engine power output.

This controls the line pressure and provides smooth shifting characteristics.

Upon receiving the throttle valve opening angle signal, Engine and ECT ECU controls the line pressure by sending a predetermined (*) duty ratio to the solenoid valve, modulating the line pressure, and generating throttle pressure.

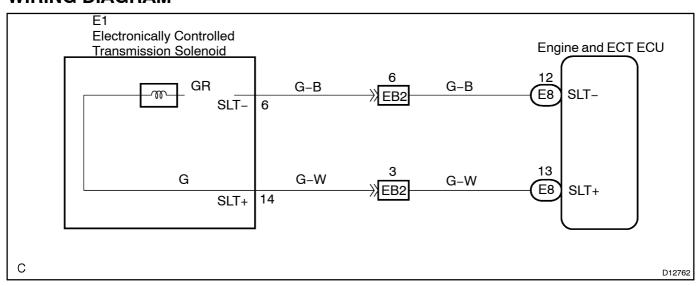
(*) Duty Ratio

The duty ratio is the ratio of the period of continuity in one cycle. For example, if A is the period of continuity in one cycle, and B is the period of non-continuity, then

Duty Ratio =
$$\frac{A}{A+B}$$
 x 100 (%)

	DTC No.	DTC Detection Condition	Trouble Area
ı	P2716/77	Engine and ECT ECU detects solenoid SLT circuit malfunction for 1 sec. or more (1-trip detection logic)	Open or short in shift solenoid valve SLT circuit Shift solenoid valve SLT Engine and ECT ECU

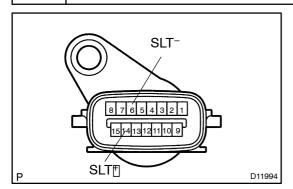
WIRING DIAGRAM



INSPECTION PROCEDURE

1∏

Check transmission wire.



PREPARATION:

Disconnect he ransmission wire connector.

CHECK:

Measure[resistance[between[SLT+[and[SLT-]of[]ransmission wire.

OK:

Resistance: 5.0 - 5.6 Ω[at[20°C[68°F]

CHECK:

Measure[resistance[between[terminals[SLT+and[SLT-of[the transmission[wire]connector]and[body]ground.

OK:

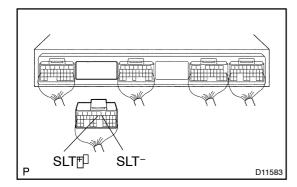
Resistance: 1[M\(\Omega\)[or[higher

NG

Go[to[step[3.

OK

2 | Measure resistance between terminal SLT- of Engine and ECT ECU connector.



PREPARATION:

- (a) Connect the transmission wire connector.
- (b) Disconnect the connector of the Engine and ECT ECU.

CHECK:

Measure[resistance[between[reminals[SLT+and[SLT-of[Engine]and[ECT[ECU[connector.

OK:

Resistance: [5.0 - [5.6 Ω[at [20°C [68°F)

CHECK:

Measure[resistance[between[reminals[]]]] Heasure[resistance[between[reminals[]]]] Heasure[resistance[between[reminals[]]]] Heasure[resistance[between[reminals[]]]] Heasure[resistance[between[reminals[]]]]] Heasure[resistance[between[reminals[]]]] Heasure[resistance[between[reminals[]]]]] Heasure[resistance[between[reminals[]]]]] Heasure[reminals[]]] Heasure[remina

OK:

Resistance: 1 MΩ or higher

NG

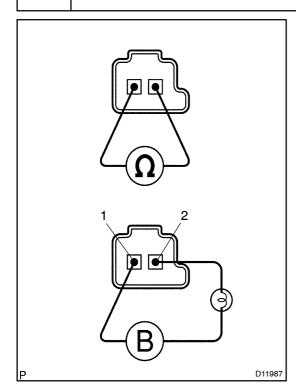
Repair or replace the harness or connector (See page N-38).

ОК

Check and replace the Engine and ECT ECU (See page N-38).

LAND[CRUISER[[W/G)[SUP[] (RM970E)

3 | Check[shift[solenoid[valve[SLT.



PREPARATION:

- (a) Jack up the vehicle.
- (b) Remove the oil pan.
- (c) Remove the shift solenoid valve \$LT.

CHECK:

(a) Measure[the] resistance between terminals and the fisolenoid connector.

Standard: $5.0 - 5.6 \Omega at 20^{\circ} C (68^{\circ} F)$

(b) Connect[the[positive[]+)[]ead[with[an[21]]V[bulb[to[terminal 2[pf[solenoid[connector[and[negative[]-)]]ead[to[terminal 1[pf[]he[solenoid[valve[connector,[]hen[check[]he[]movement[pf[]he[]valve.]

Standard: Solenoid sounds operation hoise.

OK:

Standard



Replace[he[shift[solenoid[valve[SLT (See[page[AT-8)]]



Repair or replace the transmission wire (See page AT-6).