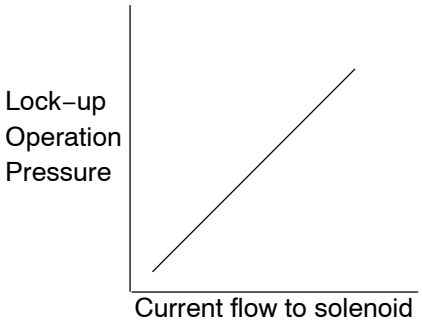
DTC	68	Liner Solenoid for Lock Up Ctrl Cir Malfunction (Shift Solenoid Valve SLU)

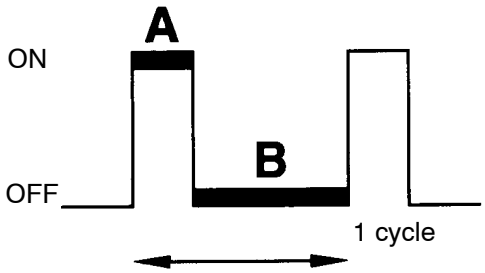


CIRCUIT DESCRIPTION

The amount of current flow to the solenoid is controlled by the (*) duty ratio of the Engine and ECT ECU output signal. The higher the duty ratio becomes, the higher the lock–up hydraulic pressure becomes during the lock–up operation.

(*) 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



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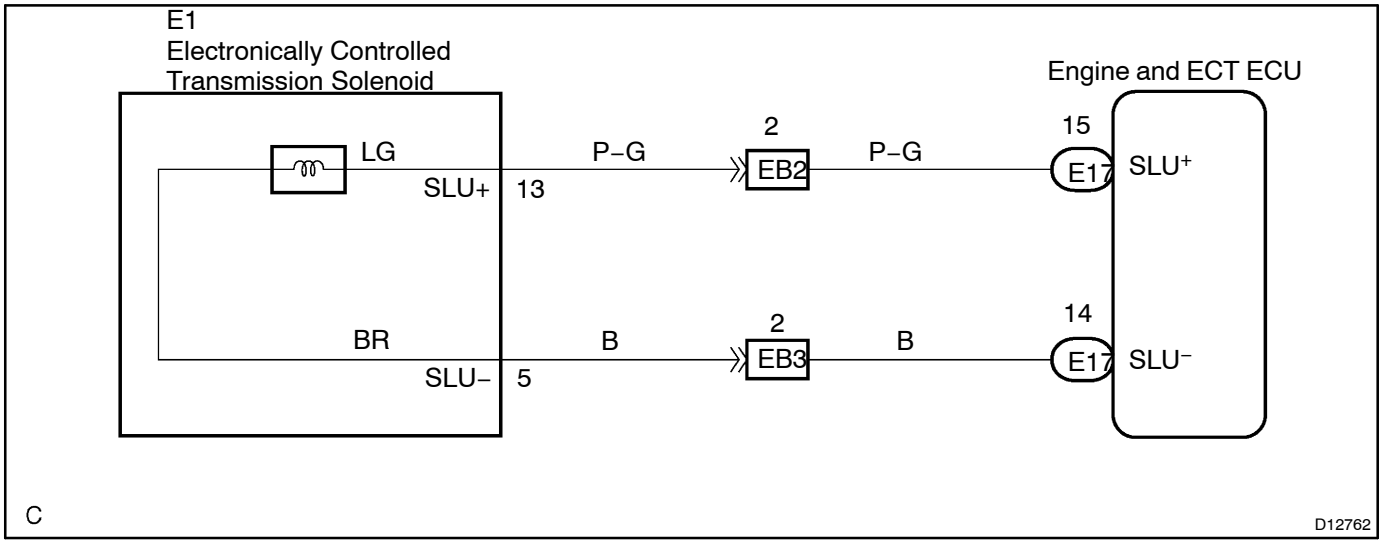
(*)

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

D00160

DTC No.	DTC detection condition	Trouble Area
68	The following condition is detected. (1–trip detection logic) SLU output signal's duty ON of 3.3 msec. or more with duty ratio of least 95% lasts for 1 second.	• Open or short in shift solenoid valve SLU circuit • Shift solenoid valve SLU • Engine and ECT ECU

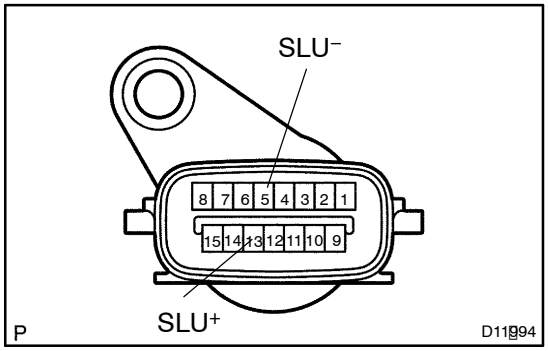
WIRING DIAGRAM



D12762

INSPECTION PROCEDURE

1	**Check transmission wire.**

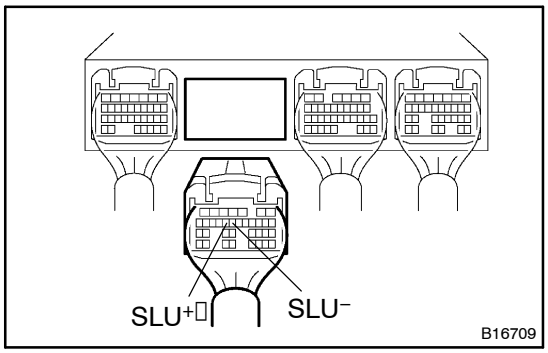


PREPARATION:
Disconnect the transmission wire connector.
CHECK:
Measure resistance between SLU+ and SLU– of transmission wire.
OK:
Resistance: 5.0 – 5.6 Ω at 20°C (68°F)
CHECK:
Measure resistance between terminals SLU+ and SLU– of the transmission wire connector and body ground.
OK:
Resistance: 1 MΩ or higher

NG	**Go to step 3.**

OK

2	**Measure resistance between terminal SLU+ and SLU– of Engine and ECT ECU connector.**



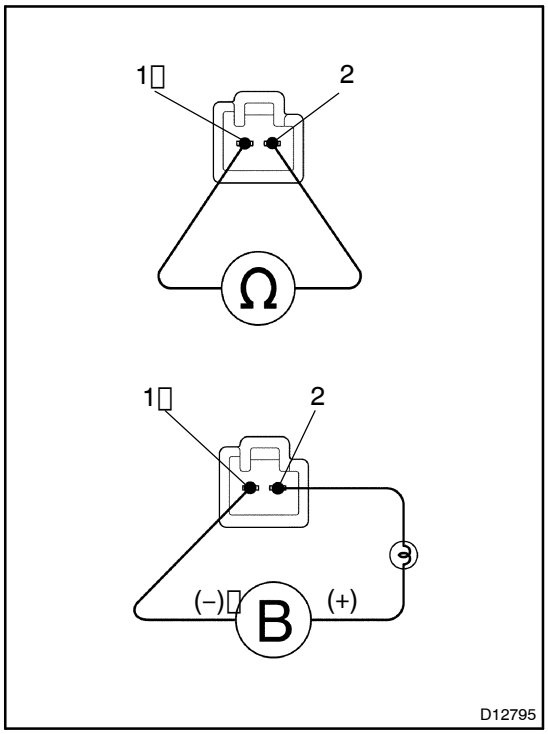
PREPARATION:
(a) Connect the transmission wire connector.
(b) Disconnect the connector of the Engine and ECT ECU.
CHECK:
Measure resistance between terminals SLU+ and SLU– of Engine and ECT ECU connector.
OK:
Resistance: 5.0 – 5.6 Ω at 20°C (68°F)
CHECK:
Measure resistance between terminals SLU+ and SLU– of the Engine and ECT ECU connector and body ground.
OK:
Resistance: 1 MΩ or higher

NG	**Repair or replace the harness or connector (See page IN–38).**

OK

Check and replace the Engine and ECT ECU (See page IN–38).

3	Check shift solenoid valve SLU.



PREPARATION:

(a) Jack up the vehicle.
(b) Remove the oil pan.
(c) Remove the shift solenoid valve SLU.

CHECK:

(a) Measure the resistance between terminals 1 and 2 of solenoid connector.
Standard: 5.0 – 5.6 Ω at 20°C (68°F)
(b) Connect the positive (+) lead with an 21 W bulb to terminal 2 of solenoid connector and negative (–) lead to terminal 1 of the solenoid valve connector, then check the movement of the valve.
Standard: Solenoid sounds operation noise.

OK:

Standard

NG → **Replace the shift solenoid valve SLU (See page AT–8).**

OK

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