DI3R6–01

DTC	P0773/64	Shift Solenoid E Electrical Malfunction (SL Solenoid Valve)

CIRCUIT DESCRIPTION

The SL solenoid valve is turned ON and OFF by signals from the Engine and ECT ECU (2UZ –FE, 1FZ–FE) or ECT ECU (1HZ, 1HD–T, 1HD–FTE) to control the hydraulic pressure acting on the lock –up relay valve, which then controls operation of the lock –up clutch.

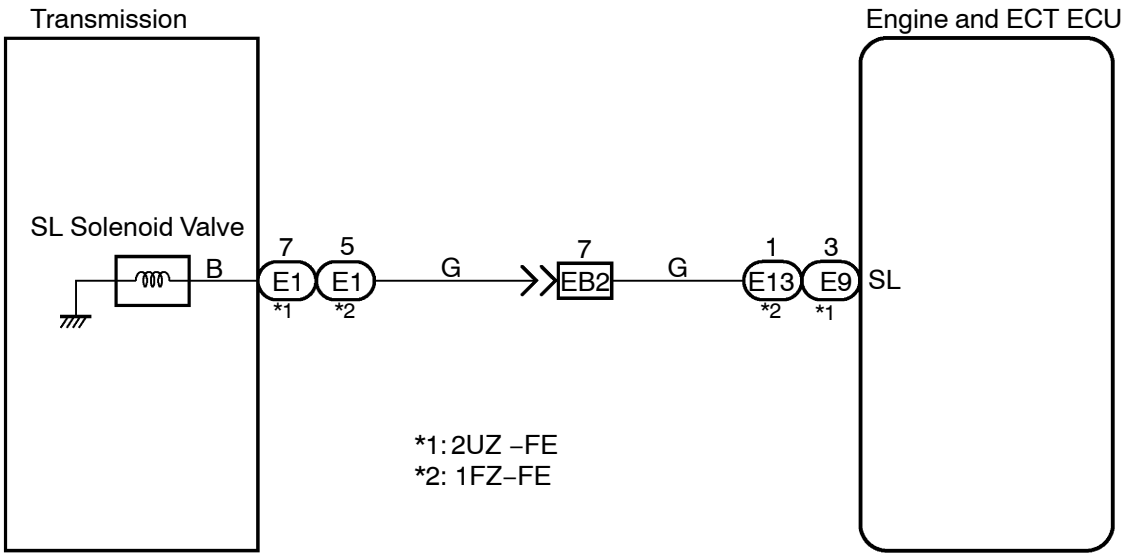
DTC No.	DTC Detecting Condition	Trouble Area
P0773/64	Either (a) or (b) is detected for 1 time. (a) Solenoid resistance is 8 Ω or less (short circuit) when the solenoid is energized. (b) Solenoid resistance is 100 k Ω or more (open circuit) when the solenoid is not energized.	• Open or short in SL solenoid valve circuit • SL solenoid valve • Engine and ECT ECU (2UZ –FE, 1FZ–FE) • ECT ECU (1HZ, 1HD–T, 1HD–FTE)

Fail safe function

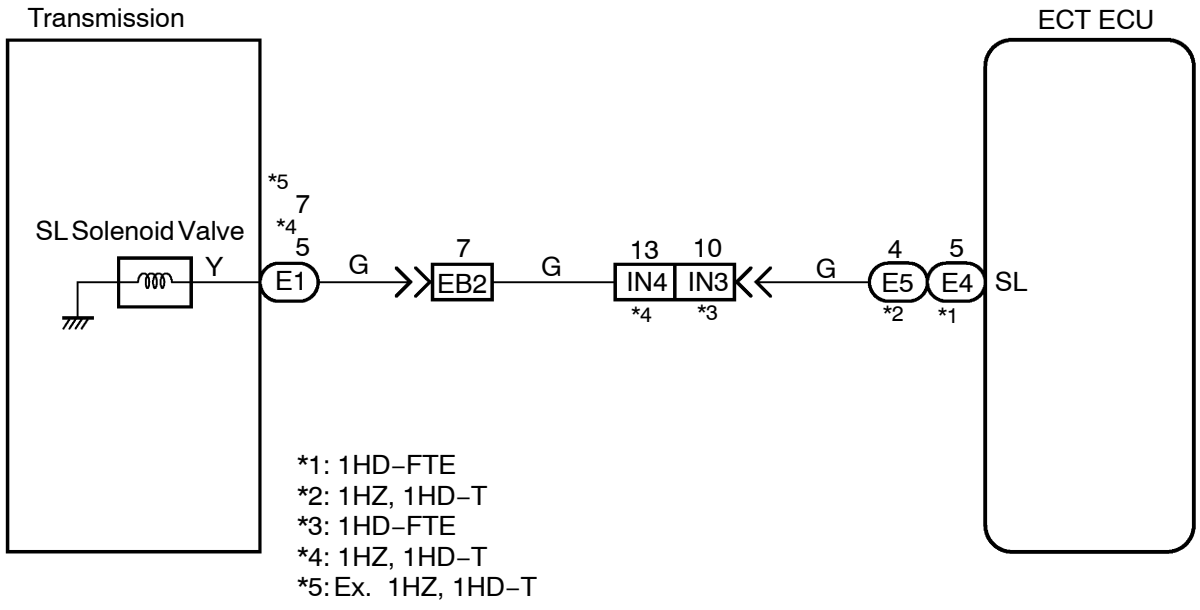
If the Engine and ECT ECU or ECT ECU detects a malfunction, it turns the SL solenoid valve OFF.

WIRING DIAGRAM

1FZ–FE, 2UZ –FE



1HZ, 1HD–T, 1HD–FTE



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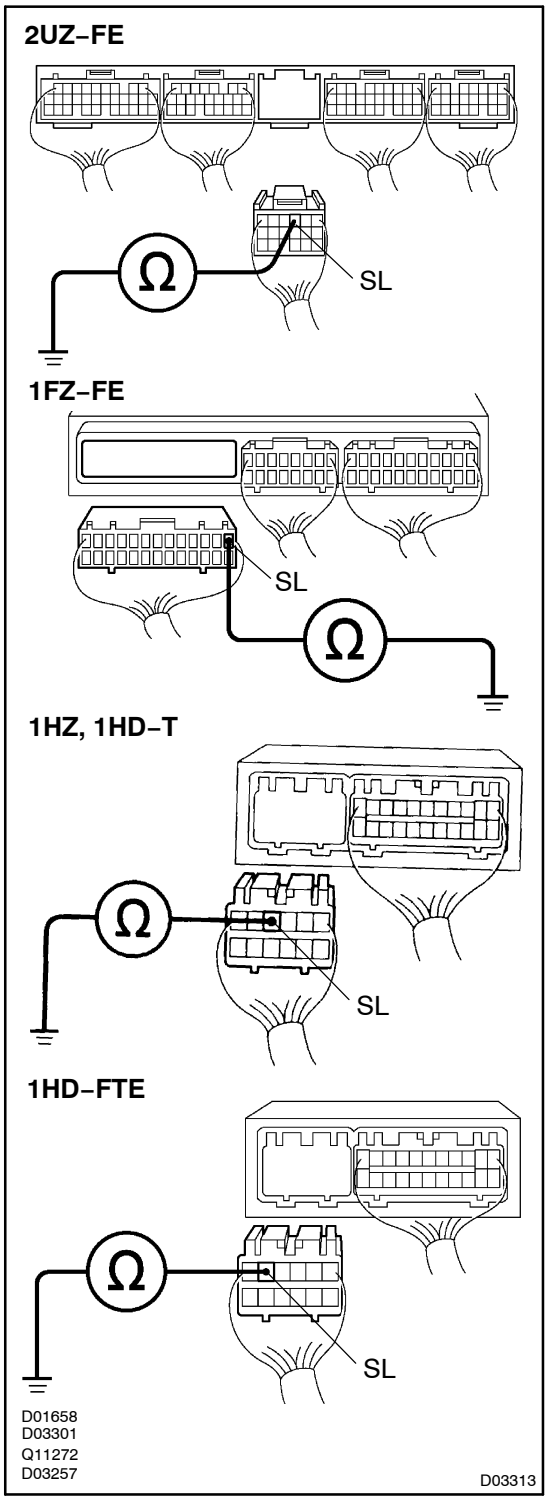
INSPECTION PROCEDURE

1	**Measure resistance between terminal SL of Engine and ECT ECU or ECT ECU and body ground.**



PREPARATION:

(a) Remove the glove compartment door (See page BO–127).

(b) Disconnect the connector from Engine and ECT ECU or ECT ECU.

CHECK:

Measure resistance between terminal SL of Engine and ECT ECU or ECT ECU and body ground.

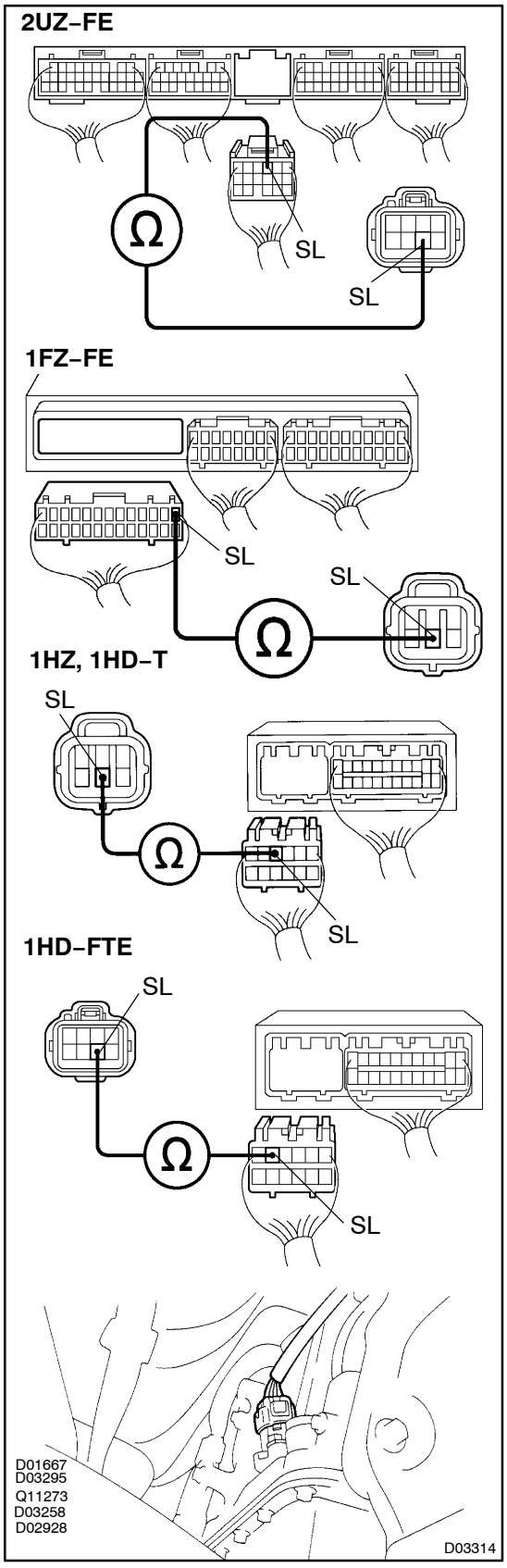
OK:

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

OK	**Check and replace the Engine and ECT ECU or ECT ECU (See page IN–35).**

NG

2	**Check harness and connector between Engine and ECT ECU or ECT ECU and automatic transmission solenoid connector.**



PREPARATION:

Disconnect the solenoid connector from the transmission.

CHECK:

Check the harness between terminal SL of Engine and ECT ECU or ECT ECU and terminal SL of transmission solenoid connector.

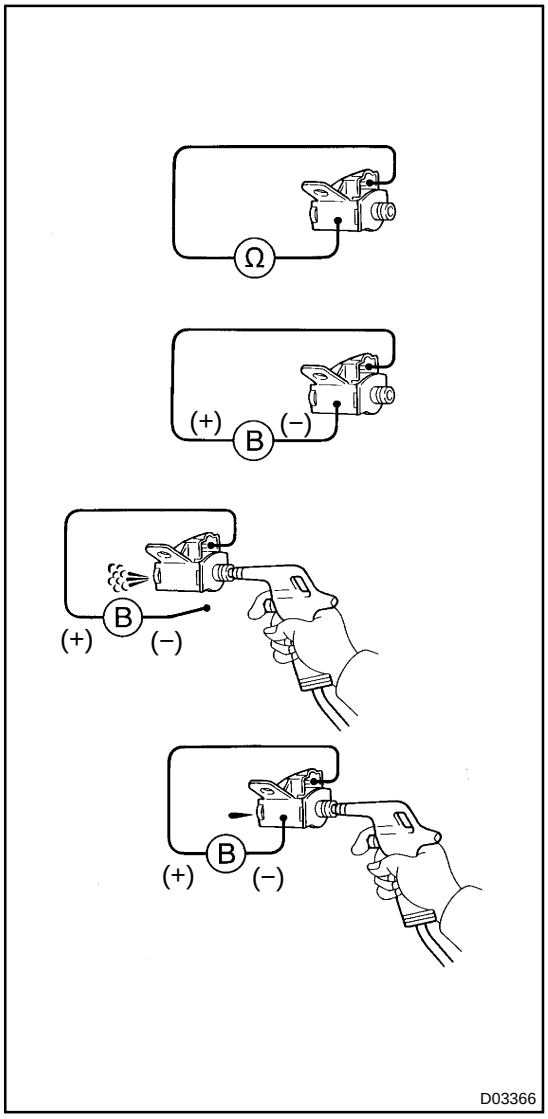
OK:

There is no open or short circuit.

NG	**Repair or replace the harness or connector.**

OK

3	**Check SL solenoid valve.**



Electrical Check:

PREPARATION:

(a) Jack up the vehicle.
(b) Remove the oil pan.
(c) Disconnect the solenoid connector.
(d) Remove the SL solenoid valve.

CHECK:

(a) Measure resistance between terminal SL of solenoid valve and solenoid body.
(b) Connect positive ⊕ lead of the battery to terminal of solenoid connector, negative ⊖ lead of the battery to solenoid body.

OK:

(a) Resistance: 11 − 15 Ω at 20 ˚C (68 ˚F)
(b) The SL solenoid valve makes operating noise.

Mechanical Check:

PREPARATION:

(a) Jack up the vehicle.
(b) Remove the oil pan.
(c) Disconnect the solenoid connector.
(d) Remove the SL solenoid valve.

CHECK:

(a) Applying 490 kPa (5 kgf/cm^2, 71 psi) of compressed air, check that the solenoid valve opens.
(b) When battery positive voltage is supplied to the solenoid valve, check that the solenoid valve does not leak air.

OK:

(a) Solenoid valve opens
(b) Solenoid valve does not leak air

NG	**Replace the SL solenoid valve.**

OK

Repair or replace the solenoid wire.