Shift Solenoid Malfunction

SYSTEM DESCRIPTION

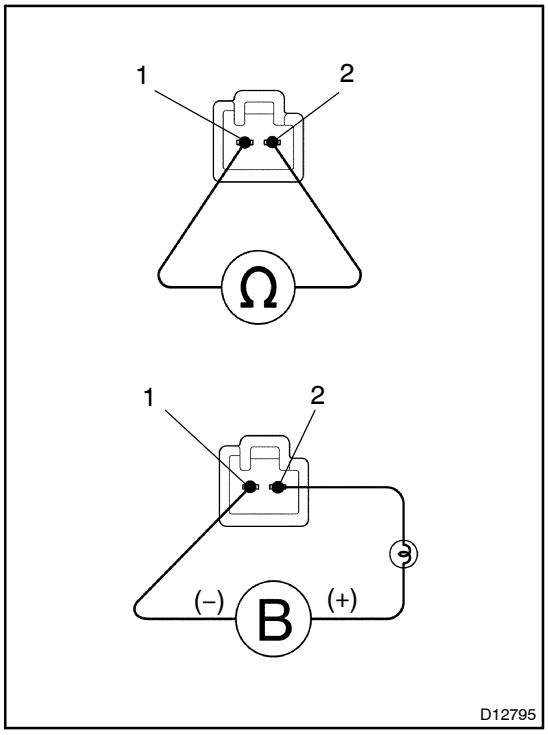
See page DI–135.

HINT:

- Start the inspection from step 1 when shift solenoid valve SL1.
- Start the inspection from step 2 when shift solenoid valve SL2.
- Start the inspection from step 3 when shift solenoid valve SLT.
- Start the inspection from step 4 when shift solenoid valve SLU.
- Start the inspection from step 5 when shift solenoid valve S1.
- Start the inspection from step 5 when shift solenoid valve S2.
- Start the inspection from step 6 when shift solenoid valve SR.

INSPECTION PROCEDURE

1	**Check shift solenoid valve SL1 operation.**



PREPARATION:

Remove the shift solenoid valve SL1.

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:

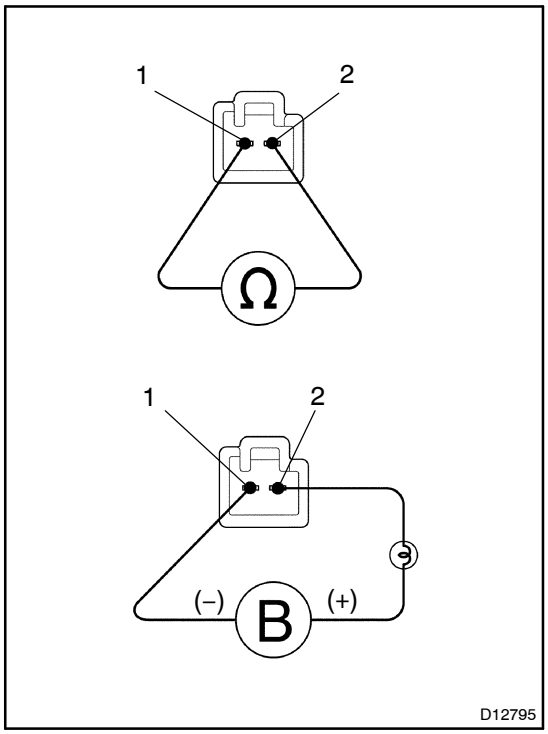
Standard

OK	**Go to step 7.**

NG

Replace shift solenoid valve SL 1 (See page AT–8).

2	Check shift solenoid valve SL2 operation.



PREPARATION:

(a) Jack up the vehicle.
(b) Remove the oil pan.
(c) Remove the shift solenoid valve SL2.

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:

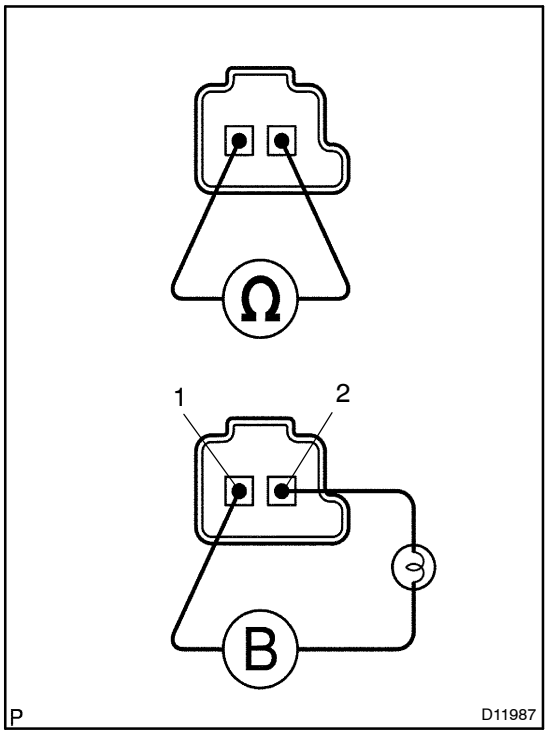
Standard

OK	Go to step 7.

NG

Replace shift solenoid valve SL2 (See page AT–8).

3	Check shift solenoid valve SLT operation.



PREPARATION:

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

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:

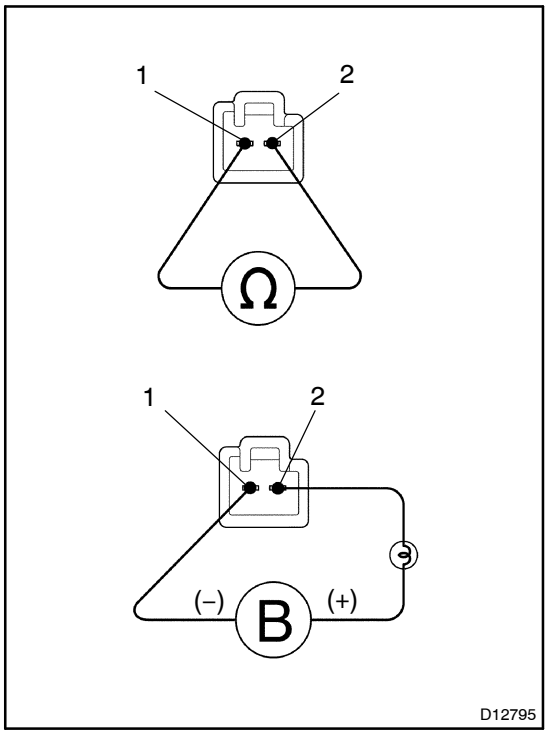
Standard

OK	Go to step 7.

NG

Replace shift solenoid valve SLT (See page AT–8).

4	Check shift solenoid valve SLU operation.



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:

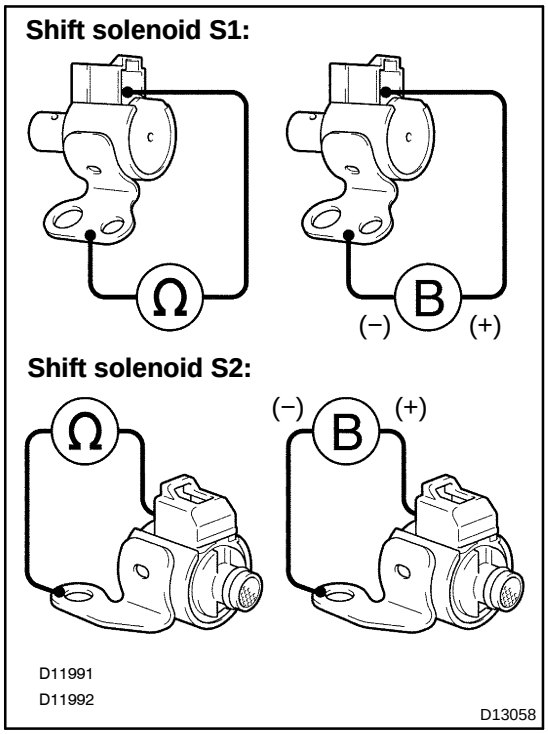
Standard

OK	Go to step 7.

NG

Replace shift solenoid valve SLU (See page AT–8).

5	Check shift solenoid valve S1 or S2 operation.



PREPARATION:

(a) Jack up the vehicle.
(b) Remove the oil pan.
(c) Remove the shift solenoid valve S1 or S2.

CHECK:

Measure the resistance between the solenoid connector terminal and the body ground.

OK:

Resistance: 11 − 15 Ω at 20˚C (68˚F)

CHECK:

Connect the battery positive lead to the solenoid connector terminal and the battery negative lead to the solenoid body ground.

OK:

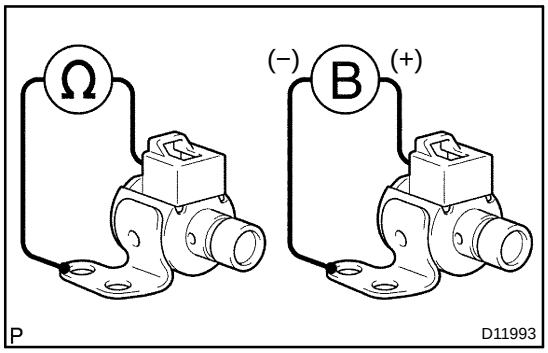
Solenoid sounds operation noise.

OK	Go to step 7.

NG

Replace shift solenoid valve S1 or S2 (See page AT−8).

6	Check shift solenoid valve SR operation.



PREPARATION:

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

CHECK:

Measure the resistance between the solenoid connector terminal and the body ground.

OK:

Resistance: 11 − 15 Ω at 20˚C (68˚F)

CHECK:

Connect the battery positive lead to the solenoid connector terminal and the battery negative lead to the solenoid body ground.

OK:

Solenoid sounds operation noise.

OK → **Go to step 7.**

NG

Replace shift solenoid valve SR (See page AT−8).

7	Check valve body.

NG → **Repair or replace valve body (See page AT−8).**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI−119).