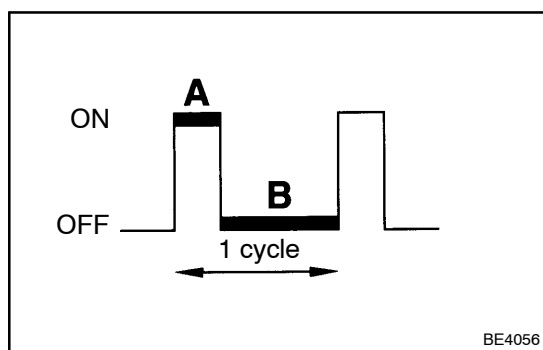
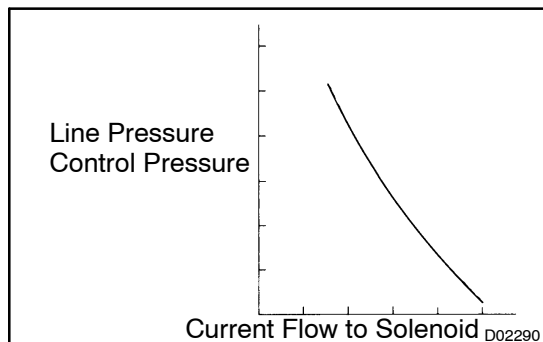


|            |              |                                                                            |
|------------|--------------|----------------------------------------------------------------------------|
| <b>DTC</b> | <b>P1760</b> | <b>Linear Solenoid for Line Pressure Control Circuit Malfunction (SLT)</b> |
|------------|--------------|----------------------------------------------------------------------------|



## 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 reduces the function of line pressure and provides smooth shifting characteristics.

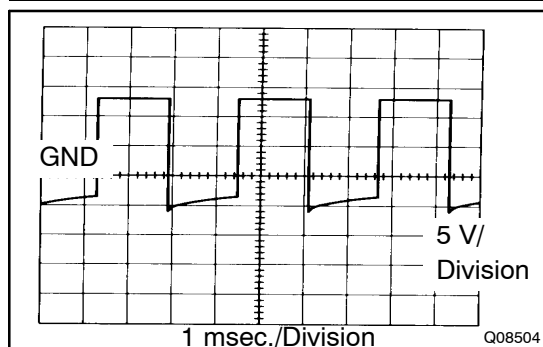
Upon receiving the throttle valve opening angle signal, ECM controls the line pressure by sending a predetermined (\*) duty ratio to the solenoid valve, modulating the line pressure, and generating throttle pressure.

(\*) 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

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

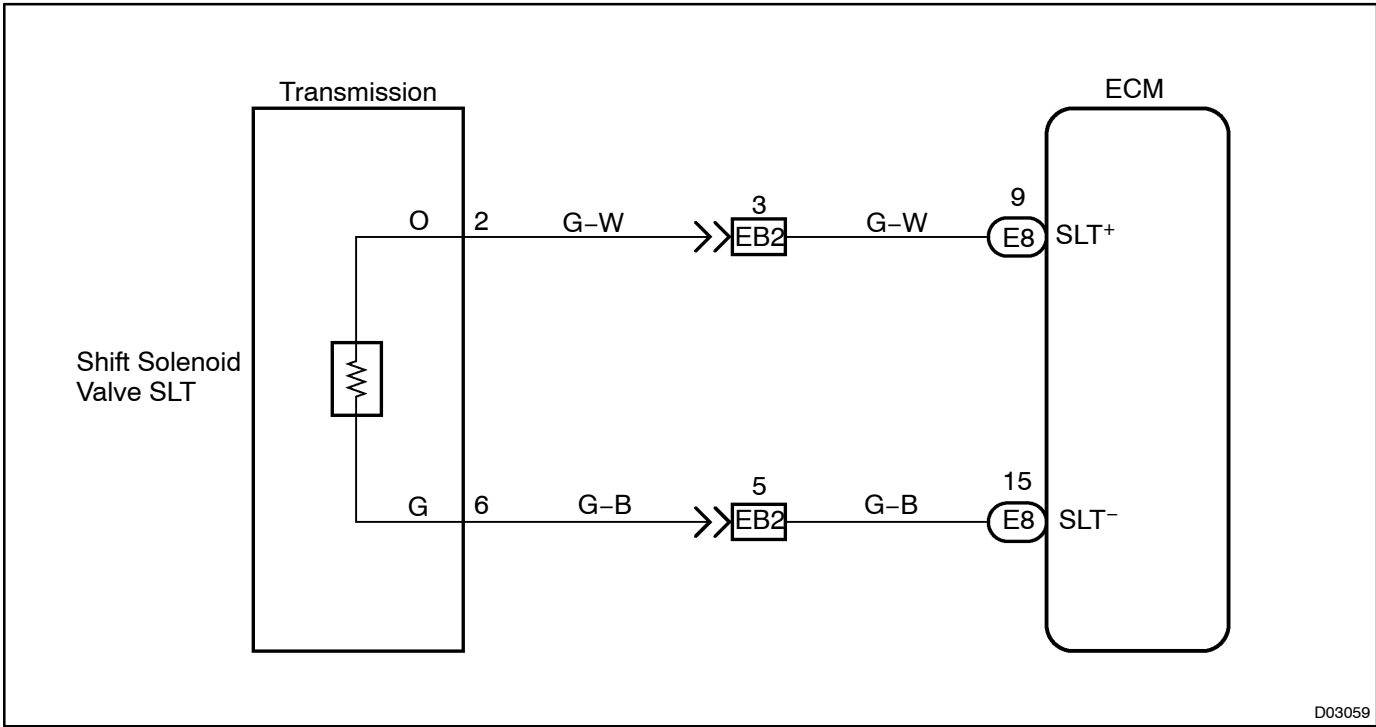
| DTC No. | DTC Detecting Condition                                                                                                                 | Trouble Area                                                                                                                                             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| P1760   | (a) or (b) condition below is detected for 1 second or more.<br>(a) SLT <sup>-</sup> terminal: 0V<br>(b) SLT <sup>-</sup> terminal: 12V | <ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve SLT circuit</li> <li>• Shift solenoid valve SLT</li> <li>• ECM</li> </ul> |



## HINT:

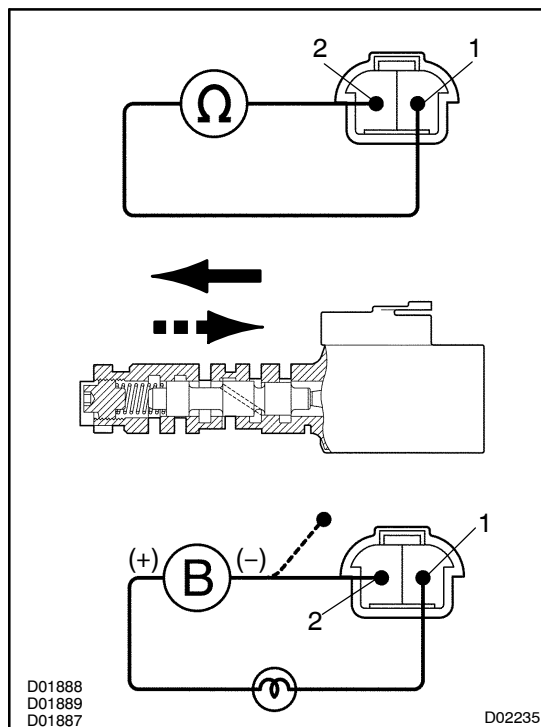
Waveform between terminals SLT<sup>+</sup> and SLT<sup>-</sup> during engine idling.

WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check shift solenoid valve SLT.

**PREPARATION:**

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

**Check solenoid resistance:****CHECK:**

Measure resistance between terminals 1 and 2 of solenoid connector.

**OK:**

**Resistance: 5.0 ~ 5.6 Ω at 20 °C**

**Check solenoid operation:****CHECK:**

Connect positive (+) lead with an 8 ~ 10W bulb to terminal 1 of solenoid connector and negative (-) lead to terminal 2, then check the movement of the valve.

**OK:**

|                                           |                                                                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| When battery positive voltage is applied. | Valve moves in  direction in illustration at left.  |
| When battery positive voltage is cut off. | Valve moves in  direction in illustration at left. |

NG

Replace shift solenoid valve SLT.

OK

2 Check harness and connector between shift solenoid valve SLT and ECM (See page [IN-34](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-34](#)).