

MIL 8 BLINKS (TP SENSOR)

- Before starting the inspection, check for loose or poor contact on the TP sensor connector and recheck the MIL blinking.

1. TP Sensor Output Voltage Inspection

Turn the ignition switch OFF.

Connect the ECM test harness to ECM connectors (page 6-10).

Turn the ignition switch ON and engine stop switch "Q".

Measure the TP sensor output voltage at the test harness terminals.

Connection: B14 (+) – B17 (-)

Standard: *0.4 – 0.6 V (throttle fully closed)

*4.2 – 4.8 V (throttle fully opened)

NOTE:

- A voltage marked * refers to the value of the ECM output voltage (STEP 1) when the voltage reading shows 5 V.

When the ECM output voltage reading shows other than 5 V, derive the TP sensor output voltage at the test harness as follows:

In the case of the ECM output voltage is 4.75 V:

$$0.4 \times 4.75 / 5.0 = 0.38 \text{ V}$$

$$0.6 \times 4.75 / 5.0 = 0.57 \text{ V}$$

Thus, the solution is "0.38 – 0.57 V" with the throttle fully closed.

Replace 0.4 and 0.6 with 4.2 and 4.8 respectively, in the above equations to determine the throttle fully opened range.

Is there standard voltage?

- YES** –
- Intermittent failure
 - Loose or poor contact on the ECM connectors

NO – GO TO STEP 2.

2. TP Sensor Input Voltage Inspection

Turn the ignition switch OFF.

Disconnect the TP sensor 3P connector.

Turn the ignition switch ON and engine stop switch "Q".

Measure the voltage at the wire harness side.

Connection: Yellow/red (+) – Green/orange (-)

Is the voltage within 4.75 – 5.25 V?

YES – GO TO STEP 4.

NO – GO TO STEP 3.

