

FUEL SYSTEM (PGM-FI)

MIL 8 BLINKS (TP SENSOR)

- Before starting the inspection, check for loose or poor contact on the TP sensor 3P (Blue) connector and recheck the MIL blinking.

1. TP Sensor Output Voltage

Turn the ignition switch OFF.

Connect the ECM test harness to ECM connectors (page 6-17).

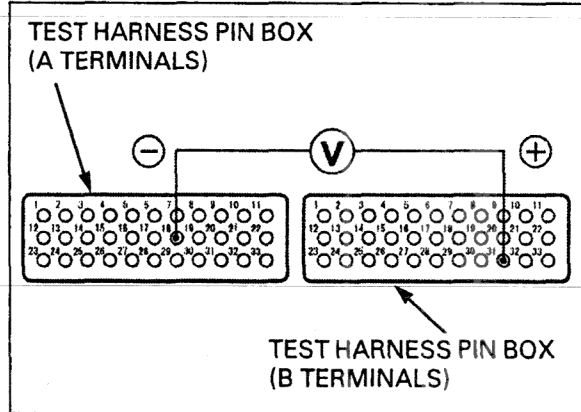
Turn the ignition switch ON and engine stop switch "Q".

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

Connection: B31 (+) – A18 (–)

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

*4.3 – 4.9 V (throttle fully opened)



NOTE:

- A voltage marked * refers to the value of the ECM output voltage (STEP 3) 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 4.3 and 4.9 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 (Blue) connector.

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

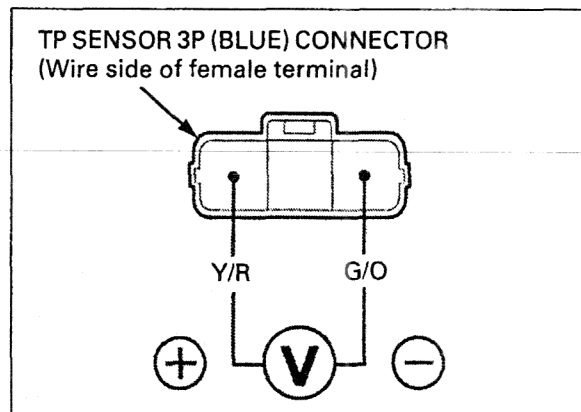
Measure the voltage at the wire harness side.

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

Is the voltage within 4.75 – 5.25 V?

YES – GO TO STEP 4.

NO – GO TO STEP 3.



3. TP Sensor Output Voltage Inspection

Turn the ignition switch OFF.
Connect the ECM test harness to ECM connectors (page 6-17).

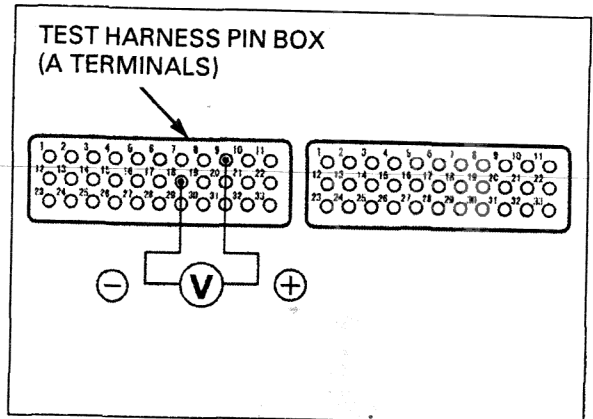
Turn the ignition switch ON and engine stop switch "O".
Measure the voltage at the test harness terminals.

Connection: A9 (+) - A18 (-)

Is the voltage within 4.75 - 5.25V?

YES - • Open circuit in Red/yellow wire
• Open circuit in Green/orange wire

NO - Replace the ECM with a known good one, and recheck.



4. TP Sensor Output Line Inspection

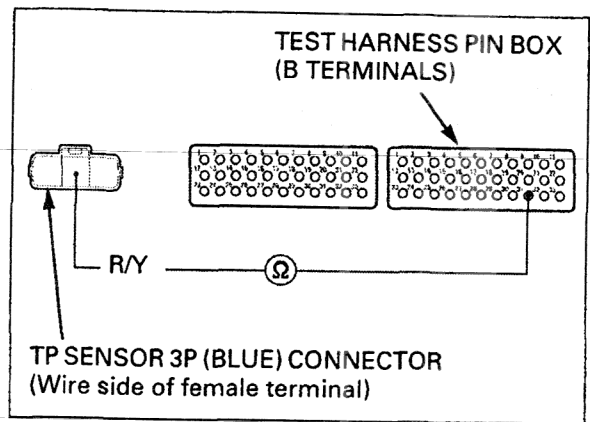
Check for continuity between the TP sensor 3P (Blue) connector terminal of the wire harness side and the test harness terminal.

Connection: Red/yellow - B31

Is there continuity?

YES - GO TO STEP 5.

NO - Open circuit in Red/yellow wire



5. TP Sensor Output Line Short Circuit Inspection

Turn the ignition switch OFF.

Check for continuity between the TP sensor 3P (Blue) connector terminal of the wire harness side and ground.

Connection: Red/yellow (+) - ground (-)

Is there continuity?

YES - Short circuit in Red/yellow wire

NO - Faulty TP sensor

