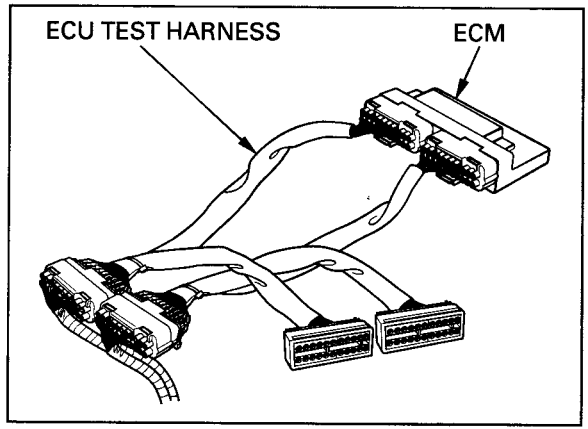
TP SENSOR

INSPECTION

Remove the ECM cover (page 5-89).

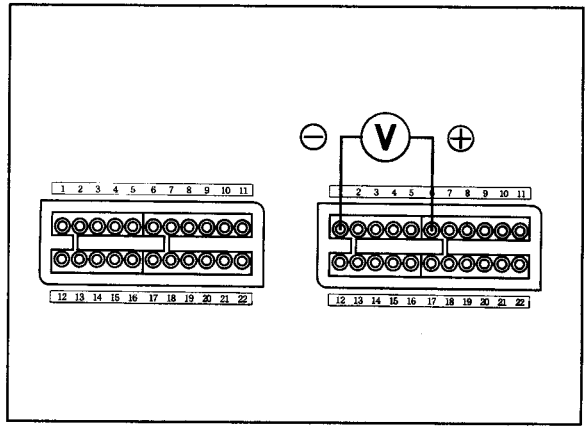
Disconnect the ECM 22P (Black) and 22P (Light gray) connectors.
Check the connector for loose or corroded terminals.
Connect the ECU test harness between the ECM and main wire harness.

TOOLS:
ECU test harness 07YMZ-0010100
(two required)



1. INPUT VOLTAGE INSPECTION
Turn the ignition switch ON and measure and record the input voltage at the test harness terminals using a digital multimeter.

CONNECTION :
B5 (+) – B1 (–)
Standard: 4.5 – 5.5 V

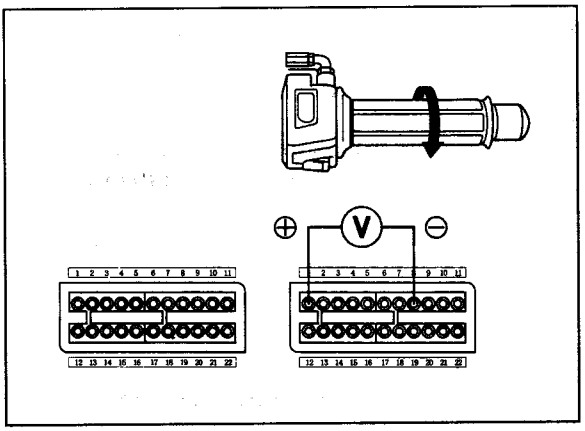


If the measurement is out of specification, check the following:
– Loose connection of the ECM multi-connector
– Open circuit in wire harness

2. OUTPUT VOLTAGE INSPECTION WITH THROTTLE FULLY OPEN

Turn the ignition switch ON and measure and record the output voltage at the test harness terminals.

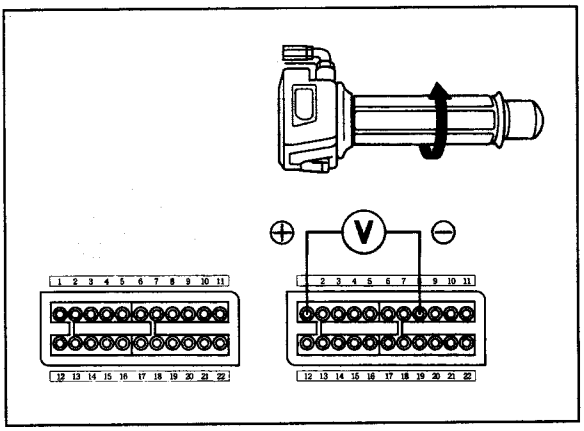
CONNECTION :
B8 (+) – B1 (–)
MEASURING CONDITION:
At throttle fully open



3. OUTPUT VOLTAGE INSPECTION WITH THROTTLE FULLY CLOSED

Turn the ignition switch ON and measure and record the output voltage with the throttle fully closed.

CONNECTION :
B8 (+) – B1 (–)
MEASURING CONDITION:
At throttle fully closed



4. CALCULATE RESULT COMPARISON

Compare the measurement to the result of the following calculation.

With the throttle fully open:
Measured input voltage × 0.824 = Vo

The sensor is normal if the measurement output voltage measured in step 2 is within 10% of Vo.

With the throttle fully closed:
Measured input voltage × 0.1 = Vc

The sensor is normal if the throttle closed output voltage measured in step 3 is within 10% of Vc.

Using an analog meter, check that the needle of the voltmeter swings slowly when the throttle is opened gradually.

CONTINUITY INSPECTION

Open and support the front end of fuel tank (page 3-4).

Disconnect the ECM 22P (Light gray) connector and the TP sensor 3P connector.
Check for continuity between the ECM and TP sensor.

If there is no continuity, check the open or short circuit in wire harness.