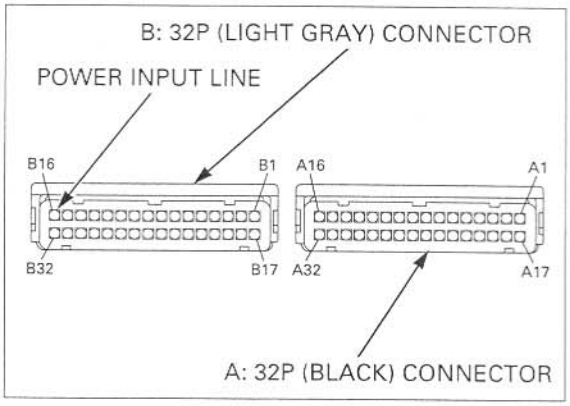
DTC 23-1 (No.1 O_2 SENSOR HEATER): California type only

- Before starting the inspection, check for loose or poor contact on the O_2 sensor connector and recheck the DTC.

DTC	O_2 Sensor	POWER INPUT LINE	SIGNAL LINE	SIGNAL AT ECM
23-1	No.1 O_2 Sensor	Black/ white	White	A10
24-1	No.2 O_2 Sensor	Black/ white	White	A9



1. **O_2 Sensor System Inspection**

   Reset the ECM (page 6-9).

   Start the engine and check the O_2 sensor heater with the HDS.

   Is the DTC 23-1 indicated?

   YES – GO TO STEP 2.

   NO – • Intermittent failure
   • Loose or poor contact on the O_2 sensor connector

2. **O_2 Sensor Heater Resistance Inspection**

   Turn the ignition switch OFF.

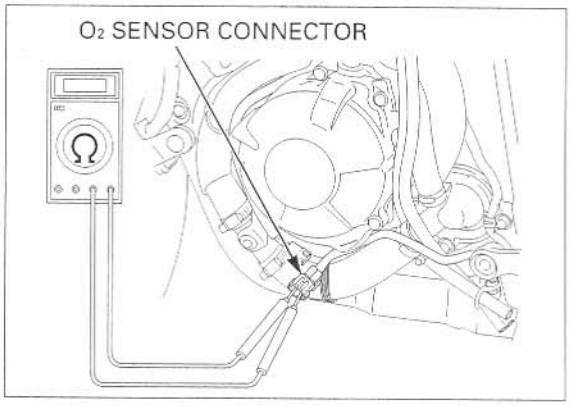
   Disconnect the O_2 sensor connector and measure the resistance at the sensor side connector white and Green/orange wire terminals.

   Connection: White – White

   Is the resistance within 10 – 40 Ω (20°C/68°F)?

   YES – GO TO STEP 3.

   NO – Faulty O_2 sensor



3. **O_2 Sensor Heater Open circuit Inspection**

   Connect the O_2 sensor connector.

   Disconnect the ECM 32P connectors and measure the resistance at the ECM terminals.

   Connection: POWER INPUT LINE – SIGNAL

   Is the resistance within 10 – 40 Ω (20°C/68°F)?

   YES – GO TO STEP 4.

   NO – • Open circuit in the Black/white wire
   • Open circuit in the SIGNAL LINE wire