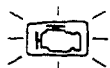


# PGM-FI System

## TDC/CKP/CYP Sensor



4

The Malfunction Indicator Lamp (MIL) indicates Diagnostic Trouble Code (DTC) 4: A problem in the Crankshaft Position (CKP) Sensor circuit.



8

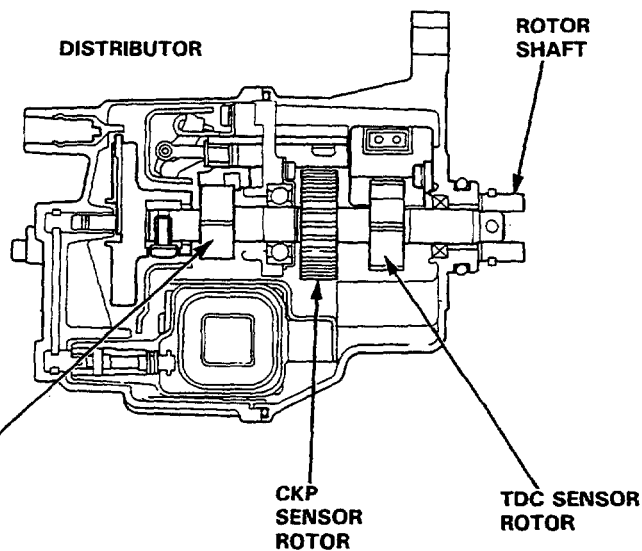
The Malfunction Indicator Lamp (MIL) indicates Diagnostic Trouble Code (DTC) 8: A problem in the Top Dead Center (TDC) Sensor circuit.



9

The Malfunction Indicator Lamp (MIL) indicates Diagnostic Trouble Code (DTC) 9: A problem in the Cylinder Position (CYP) Sensor circuit.

The CKP Sensor determines timing for fuel injection and ignition of each cylinder and also detects engine speed. The TDC Sensor determines ignition timing at start-up (cranking) and when crank angle is abnormal. The CYP Sensor detects the position of No. 1 cylinder for sequential fuel injection to each cylinder.



- The MIL has been reported on.
- With the SCS short connector connected (see page 11-14), code 4, 8 and/or 9 are indicated.

Do the ECM Reset procedure (see page 11-15).

Start the engine.

Is the MIL on and does it indicate code 4, 8 and/or 9?

NO

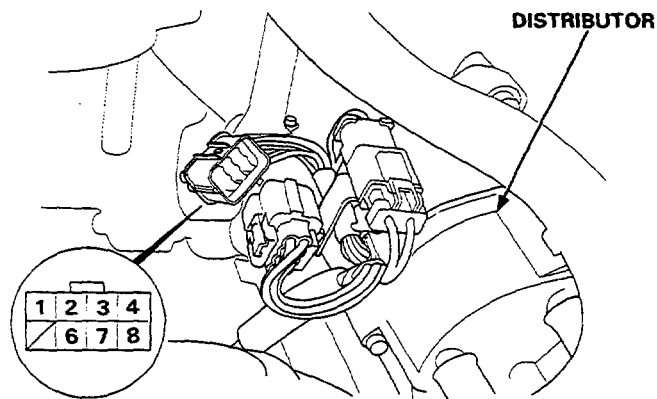
Intermittent failure, system is OK at this time (test drive may be necessary).  
Check for poor connections or loose wires between TDC/CKP/CYP Sensor and ECM.

YES

Turn the ignition switch OFF.

Disconnect the 8P connector from the TDC/CKP/CYP sensor.

(To page 11-45)



WIRE SIDE OF FEMALE TERMINALS



(From page 11-44)

Measure resistance between terminals of the indicated sensor.  
\*see table

Is there 350–700  $\Omega$ ?

NO

Replace the distributor ignition housing (see section 23).

YES

Check for continuity to body ground on both terminals of the indicated sensor.

Is there continuity?

YES

Replace the distributor ignition housing (see section 23).

NO

Reconnect the connector.

Connect the test harness to the main wire harness only, not to the ECM (see page 11-17).

Measure resistance between terminals of the indicated sensor on test harness.  
\*see table

Is there 350–700  $\Omega$ ?

NO

Repair open in the indicated sensor wires.  
\*see table

YES

Check for continuity to body ground on B15, B13 and/or B11 terminals.

Is there continuity?

YES

Repair short to body ground in the indicated sensor wires.  
\*see table

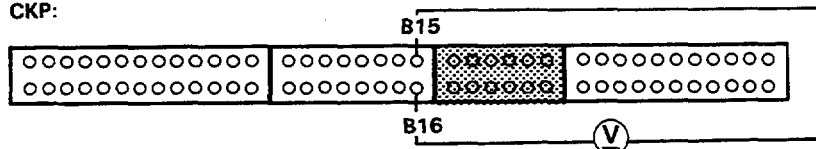
NO

Substitute a known-good ECM and recheck. If symptom/indication goes away, replace the original ECM.

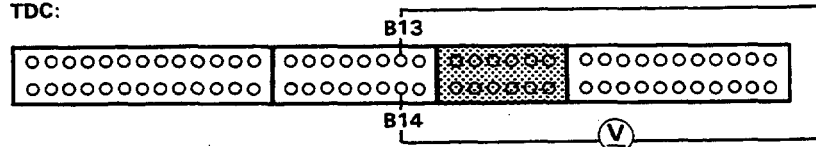
\*

| SENSOR | DTC | SENSOR TERMINAL | ECM TERMINAL | WIRE COLOR |
|--------|-----|-----------------|--------------|------------|
| CKP    | 4   | 2               | B15          | BLU/GRN    |
|        |     | 6               | B16          | BLU/YEL    |
| TDC    | 8   | 3               | B13          | ORN/BLU    |
|        |     | 7               | B14          | WHT/BLU    |
| CYP    | 9   | 4               | B11          | ORN        |
|        |     | 8               | B12          | WHT        |

CKP:



TDC:



CYP:

