

PGM-FI System

Crankshaft Position/Cylinder Position (CKP/CYP) Sensor

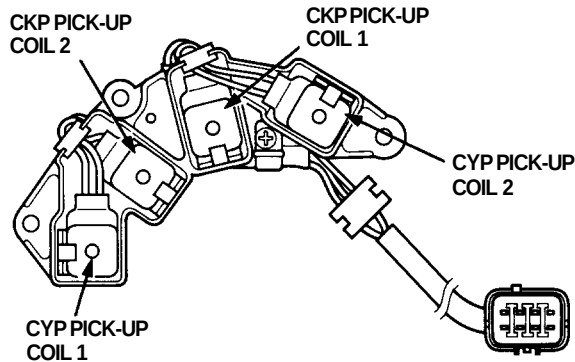
- P0335** The scan tool indicates Diagnostic Trouble Code (DTC) P0335: A malfunction in the circuit of the Crankshaft Position (CKP) sensor 1.
- P0336** The scan tool indicates Diagnostic Trouble Code (DTC) P0336: An intermittent interruption problem of the Crankshaft Position (CKP) sensor 1.
- P1337** The scan tool indicates Diagnostic Trouble Code (DTC) P1337: A malfunction in the circuit of the Crankshaft Position (CKP) sensor 2.
- P1336** The scan tool indicates Diagnostic Trouble Code (DTC) P1336: An intermittent interruption problem of the Crankshaft Position (CKP) sensor 2.
- P1381** The scan tool indicates Diagnostic Trouble Code (DTC) P1381: An intermittent interruption problem of the Cylinder Position (CYP) sensor 1.
- P1382** The scan tool indicates Diagnostic Trouble Code (DTC) P1382: A malfunction in the circuit of the Cylinder Position (CYP) sensor 1.
- P1386** The scan tool indicates Diagnostic Trouble Code (DTC) P1386: An intermittent interruption problem of the Cylinder Position (CYP) sensor 2.
- P1387** The scan tool indicates Diagnostic Trouble Code (DTC) P1387: A malfunction in the circuit of the Cylinder Position (CYP) sensor 2.

The CKP Sensor determines timing for injection and ignition of each cylinder and also detects engine speed. The CYP Sensor detects the position of No. 1 cylinder for sequential injection to each cylinder. The CKP/CYP Sensor is installed behind the front camshaft pulley.

- The MIL has been reported on.
- DTC P0335, P0336, P1337, P1336, P1381, P1382, P1386 and/or P1387 are stored.

Problem verification:

1. Do the PCM Reset Procedure.
2. Start the engine.



Is DTC P0335, P0336, P1337, P1336, P1381, P1382, P1386 and/or P1387 indicated?

NO

Intermittent failure, system is OK at this time. Check for poor connections or loose wires at C251, C255 (located at left shock tower), C130 (CKP/CYP) sensor and PCM.

YES

Check for an open in the CKP/CYP sensor:

1. Turn the ignition switch OFF.
2. Disconnect the CKP/CYP 8P connector.
3. Measure resistance between the terminals of the indicated sensor (see table).

Is there 650 - 850 Ω?

NO

Replace the CKP/CYP sensor (see [section 6](#)).

YES

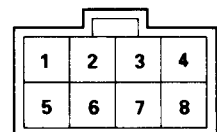
Check for a short in the CKP/CYP sensor:

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

(To page [11-107](#))

SENSOR	DTC	SENSOR TERMINAL	PCM TERMINAL	WIRE COLOR
CKP 1	P0335	1	B8	BLU
	P0336	2	B16	WHT
CKP 2	P1337	3	B15	WHT/RED
	P1336	4	B7	BLU/RED
CYP 1	P1381	7	D12	BLK
	P1382	8	B6	YEL
CYP 2	P1386	5	B5	YEL/RED
	P1387	6	D14	BLK/RED

CKP/CYP SENSOR 8P CONNECTOR



Terminal side of male terminals



(From page 11-106)

Is there continuity?

YES

Replace the CKP/CYP sensor (see [section 6](#)).

NO

Check for an open in the wires (CKP/CYP lines):

1. Reconnect the CKP/CYP 8P sensor connector.
2. Disconnect the PCM connector B (16P) and D (22P).
3. Measure resistance between the terminals of the indicated sensor on the PCM connector (see table).

PCM CONNECTORS

B (16P)

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

D (22P)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

Wire side of female terminals

Is there 650 - 850 Ω ?

NO

Repair open in the indicated sensor wires (see table).

YES

Check for a short in the wires (CKP/CYP lines):

Check for continuity between PCM connector terminals B5, B6, B7, B8 and body ground.

Is there continuity?

YES

Repair short to body ground in the indicated sensor wires (see table).

NO

Substitute a known-good PCM and recheck (see page 11-41 for immobilizer information). If symptom/indication goes away, replace the original PCM.

