

PGM-FI System

Crankshaft Position/Camshaft Position (CKP/CMP) (Crankshaft Position/Cylinder Position (CKP/CYP)) Sensor

- P0345** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0345: A malfunction in the circuit of the Crankshaft Position (CKP) sensor 1.
- P0349** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0349: An intermittent interruption problem of the Crankshaft Position (CKP) sensor 1.
- P0390** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0390: A malfunction in the circuit of the Camshaft Position (CMP) (Cylinder Position (CYP)) sensor 1.
- P0394** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0394: An intermittent interruption problem of the Camshaft Position (CMP) (Cylinder Position (CYP)) sensor 1.
- P1336** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P1336: An intermittent interruption problem of the Crankshaft Position (CKP) sensor 2.
- P1337** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P1337: A malfunction in the circuit of the Crankshaft Position (CKP) sensor 2.
- P1386** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P1386: An intermittent interruption problem of the Camshaft Position (CMP) (Cylinder Position (CYP)) sensor 2.
- P1387** The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P1387: A malfunction in the circuit of the Camshaft Position (CMP) (Cylinder Position (CYP)) sensor 2.

The CKP Sensor determines timing for injection and ignition of each cylinder and also detects engine speed.

The CMP (CYP) Sensor detects the position of No. 1 cylinder for sequential injection to each cylinder. The CKP/CMP (CKP/CYP) Sensor is installed behind the front camshaft pulley.

- The MIL has been reported on.
- DTC P0345, P0349, P0390, P0394, P1336, P1337, P1386 and/or P1387 are stored.

Problem verification:

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

Is DTC P0345, P0349, P0390, P0394, P1336, P1337, P1386 and/or P1387 indicated?

NO

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

YES

Check for an open in the CKP/ CMP (CKP/CYP) sensor:

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

Is there 650 - 850 fl?

NO

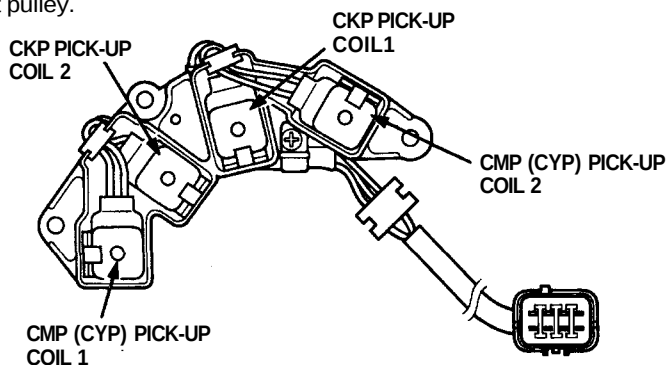
Replace the CKP/CMP (CKP/CYP) sensor (see section 6).

YES

Check for a short in the CKP/ CMP (CKP/CYP) sensor:

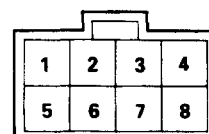
Check for continuity to body ground on both terminals of the indicated sensor.

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SENSOR	DTC	SENSOR TERMINAL	PCM TERMINAL	WIRE COLOR
CKP 1	P0345	1	B8	BLU
	P0349	2	B16	WHT
CKP 2	P1336	3	B15	WHT/RED
	P1337	4	B7	BLU/RED
CMP (CYP) 1	P0390	7	D12	BLK
	P0394	8	B6	YEL
CMP (CYP) 2	P1386	5	B5	YEL/RED
	P1387	6	D14	BLK/RED

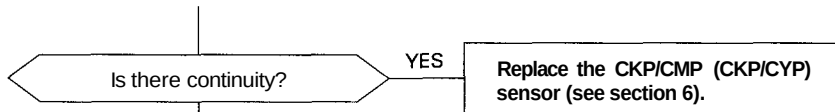
CKP/CMP (CKP/CYP) SENSOR 8P CONNECTOR



Terminal side of male terminals



(From page 11-64)



NO

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

1. Reconnect the CKP/CMP (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

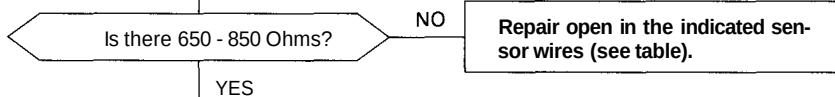
B (16P)

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

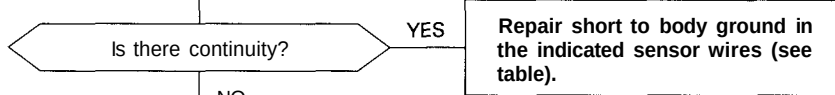
Wire side of female terminals



YES

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

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



NO

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

