

DTC P0385 Crankshaft Position Sensor “B” Circuit Malfunction

CIRCUIT DESCRIPTION

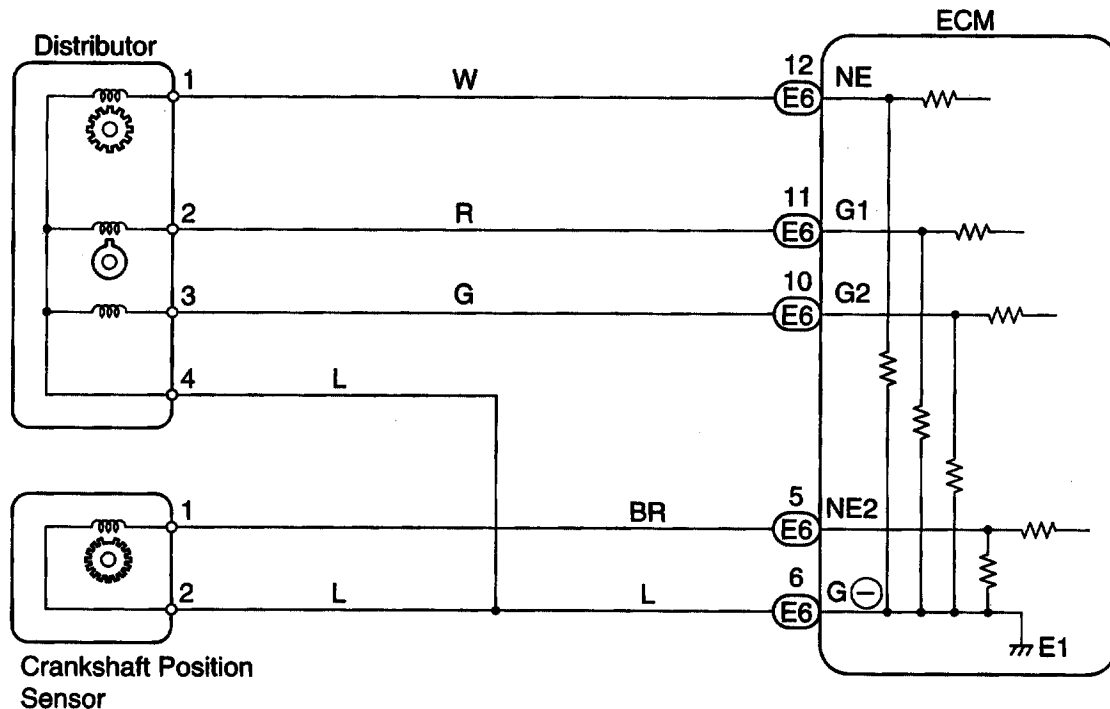
The crankshaft position sensor (NE2 signal) consists of a signal plate and a pick up coil.

The NE2 signal plate has 34 teeth and is mounted on the crankshaft. When the crankshaft rotates, the protrusion on the signal plate and the air gap on the pick up coil change, causing fluctuations in the magnetic field and generating an electromotive force in the pick up coil.

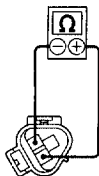
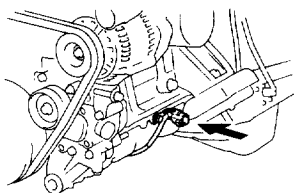
The NE2 signal sensor generates 34 signals for every engine revolution. The ECM detects the standard crankshaft angle based on G1, G2 signals, detects the actual crankshaft angle and the engine speed by NE signals, and detects misfire by NE2 signals.

DTC No.	Diagnostic Trouble Code Detecting Condition	Trouble Area
P0385	No crankshaft position sensor signal (NE2 signal) to ECM with engine speed 550 rpm or more. (2 trip detection logic)	- Open or short in crankshaft position sensor for NE2 signals. - Crankshaft position sensor for NE2 signal - ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check resistance of crankshaft position sensor for NE2 signal.

P Disconnect crankshaft position sensor connector.

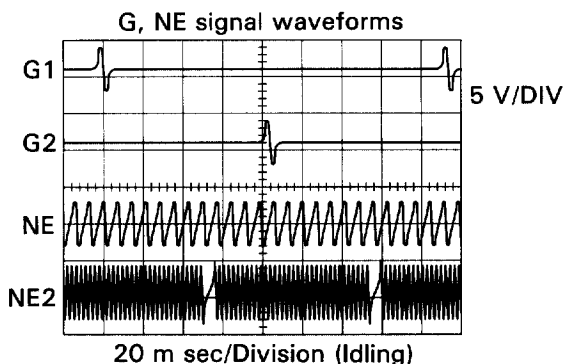
C Measure resistance between terminals 1 and 2 of crankshaft position sensor connector.

OK

	Resistance
Cold	1630 ~ 2740 Ω
Hot	2065 ~ 3225 Ω

"Cold" is from -10°C (14°F) to 50°C (122°F) and "Hot" is from 50°C (122°F) to 100°C (212°F).

P22894
P22898

Reference INSPECTION USING OSCILLOSCOPE

P23505

OK

NG

Replace crankshaft position sensor.

2 Check for open and short in harness and connector between ECM and crankshaft position sensor for NE2 signal (See page [IN-26](#)).

OK

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Repair or replace harness or connector.

3 Inspect sensor installation and teeth of signal plate.

OK

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Tighten the sensor.
Replace signal plate.

Check and replace ECM (See page [IN-31](#)).