

DTC	P0385	Crankshaft Position Sensor "B" Circuit Malfunction
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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.	DTC Detecting Condition	Trouble Area
P0385	No crankshaft position sensor signal (NE2 signal) to ECM with engine speed 600 rpm or more (2 trip detection logic)	<ul style="list-style-type: none"> • Open or short in crankshaft position sensor for NE2 signal • Crankshaft position sensor for NE2 signal • ECM

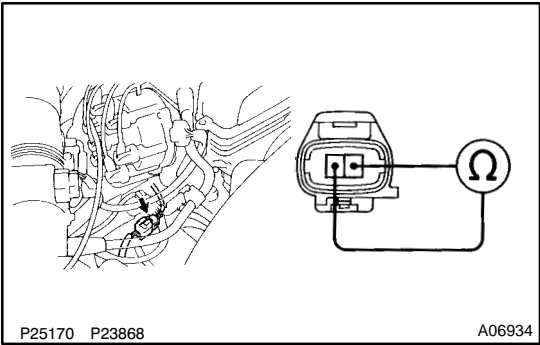
WIRING DIAGRAM

Refer to page [DI-67](#) for the WIRING DIAGRAM.

INSPECTION PROCEDURE

1

Check resistance of crankshaft position sensor for NE2 signal.



PREPARATION:

Disconnect crankshaft position sensor connector.

CHECK:

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

OK:

	Resistance
Cold	1,630 – 2,740 Ω
Hot	2,065 – 3,225 Ω

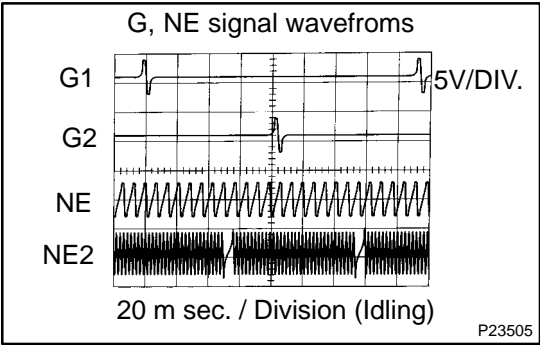
"Cold" is from -10°C (14°F) to 50°C (122°F) and "Hot" is from 50°C (122°F) to 100°C (212°F).

Reference: INSPECTION USING OSCILLOSCOPE

During cranking or idling check between ECM terminals G1, G2, NE and G⊖, and between NE2 and NE2⊖.

HINT:

The correct waveforms are as shown.



NG

Replace crankshaft position sensor.

OK

2

Check for open and short in harness and connector between ECM and crankshaft position sensor for NE2 signal (See page [IN-29](#)).

NG

Repair or replace harness or connector.

OK

3	Inspect sensor installation and teeth of signal plate.
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NG**Tighten the sensor.
Replace signal plate.****OK****Check and replace ECM (See page [IN-29](#)).**