

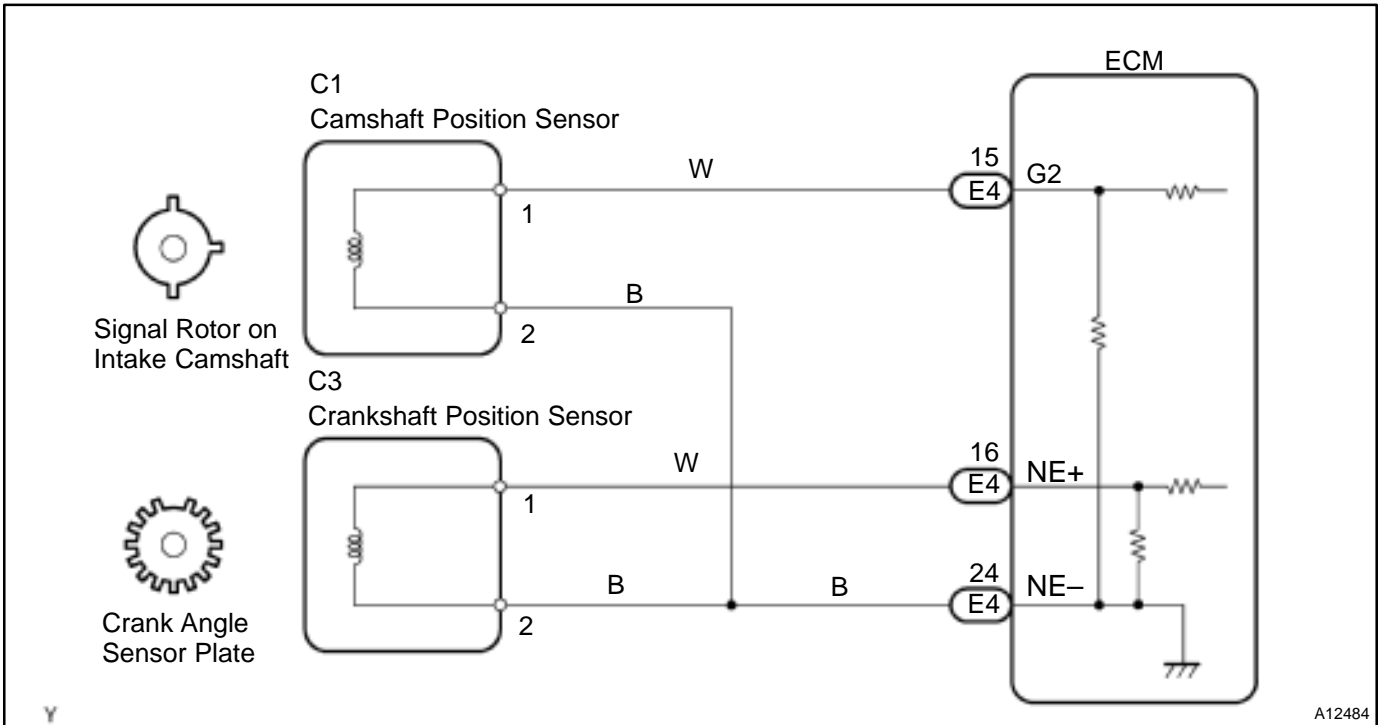
DTC	P0335	Crankshaft Position Sensor "A" Circuit Malfunction
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CIRCUIT DESCRIPTION

Crankshaft position sensor (NE signal) consists of a magnet, iron core and pick up coil. The NE signal plate (crank angle sensor plate) has 34 teeth and is mounted on the crankshaft. The NE signal sensor generates 34 signals at every engine revolution. The ECM detects the standard crankshaft angle based on the G signal, the actual crankshaft angle and the engine speed by the NE signal.

DTC No.	DTC Detection Condition	Trouble Area
P0335	No crankshaft position sensor signal to ECM during cranking (2 trip detection logic)	<ul style="list-style-type: none"> • Open or short in crankshaft position sensor circuit • Crankshaft position sensor
	No crankshaft position sensor signal to ECM with engine speed 600 rpm or more (2 trip detection logic)	<ul style="list-style-type: none"> • Crank angle sensor plate • ECM

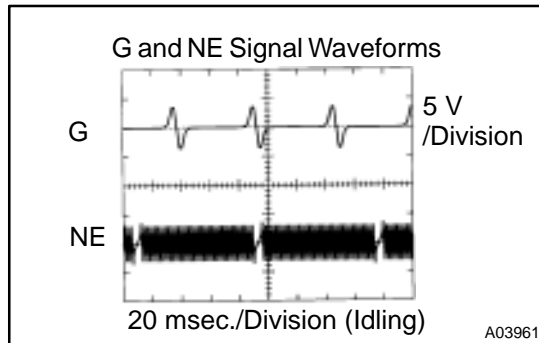
WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- Perform troubleshooting of DTC P0335 1st. If no trouble is found, troubleshoot the following mechanical system.
- Read freeze frame data using TOYOTA hand-held tester or OBD II scan tool. Because freeze frame records the engine conditions when the malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air-fuel ratio was lean or rich, etc. at the time of the malfunction.

1 Check resistance of crankshaft position sensor (See page [IG-1](#)).**Reference: INSPECTION USING OSCILLOSCOPE**

During cranking or idling, check the waveform between terminals G2 and NE– and NE+ and NE– of the ECM connector.

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 (See page [IN-28](#)).****NG****Repair or replace harness or connector.****OK****3 Inspect sensor installation and teeth of crank angle sensor plate (See page [EM-11](#)).****NG****Tighten sensor. Replace crank angle sensor plate.****OK****Check and replace ECM (See page [IN-28](#)).**