

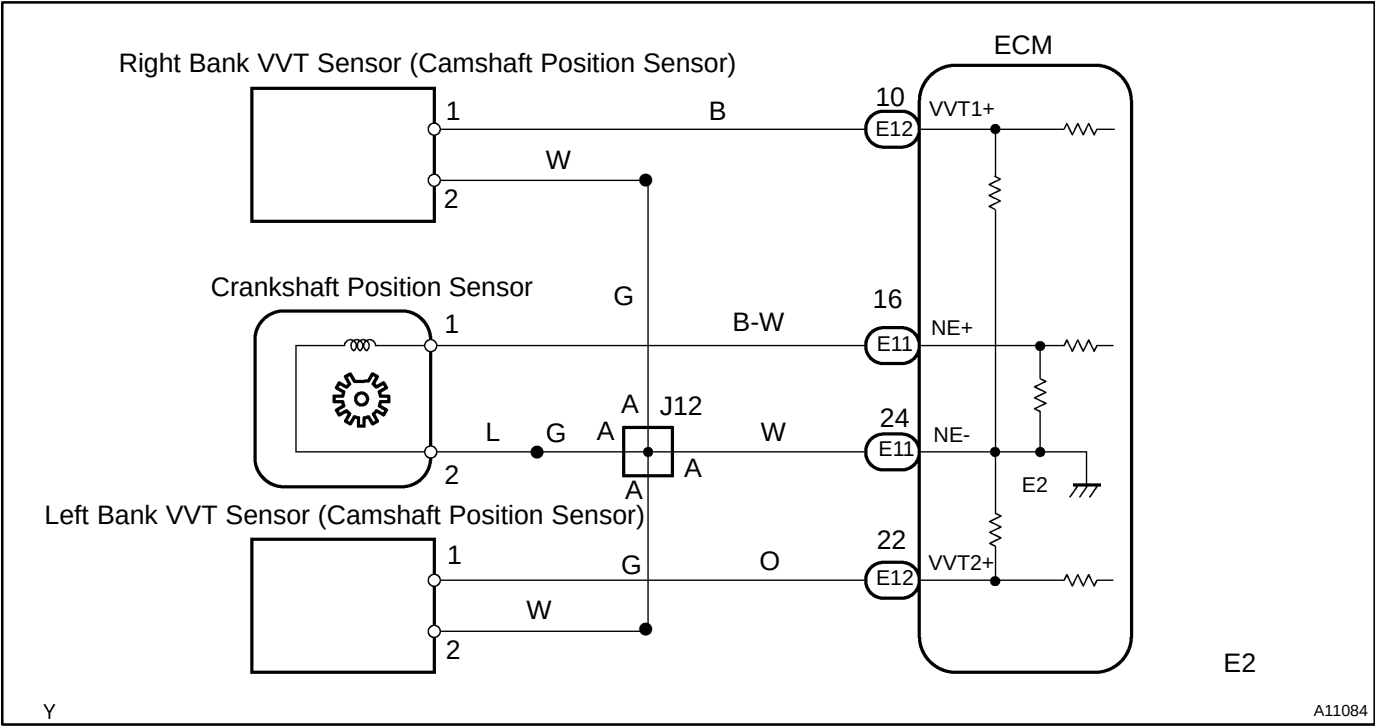
DTC	P0335	Crankshaft Position Sensor "A" Circuit Malfunction
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CIRCUIT DESCRIPTION

Crankshaft position sensor (NE signal) consists of a signal plate and pickup coil. The NE signal plate has 34 teeth and is mounted on the crankshaft. The NE signal sensor generates 34 signals for every engine revolution. The ECM detects the standard crankshaft angle based on the G22 signals, and the actual crankshaft angle and the engine speed by the NE signals.

DTC No.	DTC Detecting Condition	Trouble Area
P0335	No crankshaft position sensor signal to ECM during cranking (2 trip detection logic)	• 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)	• Starter • ECM

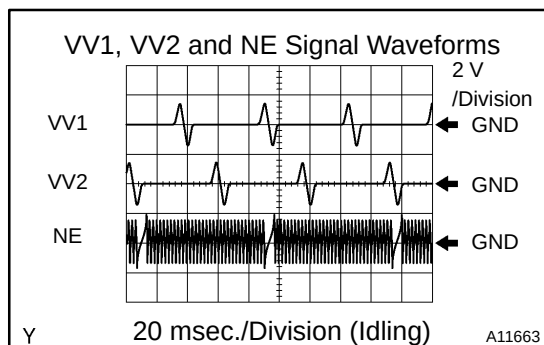
WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- Perform troubleshooting of DTC P0335 first. If no trouble is found, troubleshoot the following mechanical systems.
- 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 warmed up or not, the air-fuel ratio 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 between terminals G22+ and NE-, 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-31](#)).****NG****Repair or replace harness or connector.****OK****3 Inspect sensor installation and teeth of crankshaft timing pulley.****NG****Tighten the sensor.
Replace crankshaft timing pulley.****OK****Check and replace ECM
(See page [IN-31](#)).**