

DTC	P0340	Camshaft Position Sensor Circuit Malfunction (G Signal)
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CIRCUIT DESCRIPTION

Camshaft position sensor (G signal) consists of an iron core and pickup coil.

The G signal rotor has 3 teeth, and is installed on the intake camshaft.

When the camshafts rotate, the protrusion on the signal rotor and the air gap on the pickup coil change, causing fluctuations in the magnetic field and generating an electromotive force in the pickup coil.

The NE signal plate has 34 teeth and is installed on the crankshaft timing pulley. The NE signal sensor generates 34 signals for every engine revolution. The engine ECU detects the standard crankshaft angle based on the G2 signal and the actual crankshaft angle and the engine speed by the NE signals.

DTC No.	DTC Detecting Condition	Trouble Area
P0340	No camshaft position sensor signal to engine ECU during cranking (2 trip detection logic)	<ul style="list-style-type: none"> • Open or short in camshaft position sensor circuit • Camshaft position sensor • Intake camshaft • Engine ECU
	No camshaft position sensor signal to engine ECU with engine speed 600 rpm or more	

WIRING DIAGRAM

Refer to DTC P0335 on [page DI-144](#).

INSPECTION PROCEDURE

HINT:

Read freeze frame data using OBD scan tool or hand-held tester. 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 camshaft position sensor (See page IG-1).
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Reference: INSPECTION USING OSCILLOSCOPE

Refer to DTC P0335 on [page DI-144](#).

NG

Replace camshaft position sensor.

OK

2	Check for open and short in harness and connector between engine ECU and camshaft position sensor (See page IN-30).
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Repair or replace harness or connector.

OK

3	Inspect sensor installation and signal rotor of the intake camshaft.
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NG	Tighten sensor. Replace intake camshaft.
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OK

Check and replace engine ECU
([See page N-30](#)).