

DTC	P1346/18	VVT Sensor (Camshaft Position Sensor) Circuit Range/Performance Problem
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CIRCUIT DESCRIPTION

VVT sensor consist of a signal plate and pickup coil.

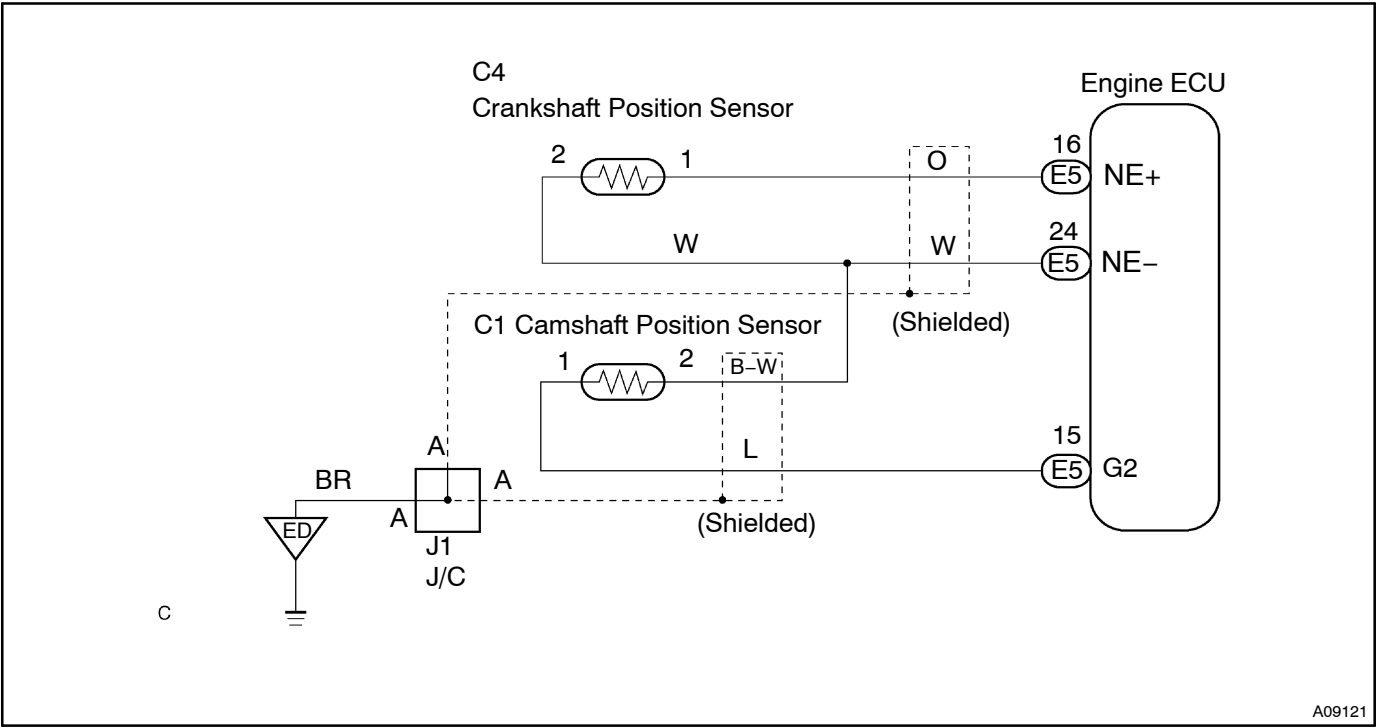
The signal plate has 1 tooth on its outer circumference and is mounted on the intake camshafts.

When the camshafts rotate, the protrusion on the signal plate 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 actual camshaft angle is detected by the VVT sensor and it provides feedback to the engine ECU to control the intake valve timing in response to during condition.

DTC No.	Detection Item	Trouble Area
P1346/18	Deviation in crankshaft position sensor signal and VVT sensor signal (2 trip detection logic)	•Mechanical system malfunction (Skipping teeth of timing chain, chain stretched) •Engine ECU

WIRING DIAGRAM



A09121

INSPECTION PROCEDURE

HINT:

Read freeze frame data using 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 warmed up or not, the air-fuel ratio lean or rich, etc. at the time of the malfunction.

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| 1 | Check valve timing (Check for loose and jumping teeth of timing chain)
(See page EM-26). |
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Adjust valve timing (Repair or replace timing chain).

OK

Check and replace engine ECU ([See page IN-20](#)).