

Description

Camshaft Position Sensor (CMPS) is a hall sensor and detects the camshaft position by using a hall element.

It is related with Crankshaft Position Sensor (CKPS) and detects the piston position of each cylinder which the CKPS can't detect.

The CMPS is installed on engine head cover and uses a target wheel installed on the camshaft. The Cam Position sensor is a hall-effect type sensor. As the target wheel passes the Hall sensor, the magnetic field changes in the sensor. The sensor then switches a signal which creates a square wave.

[Bank 1 / Intake]

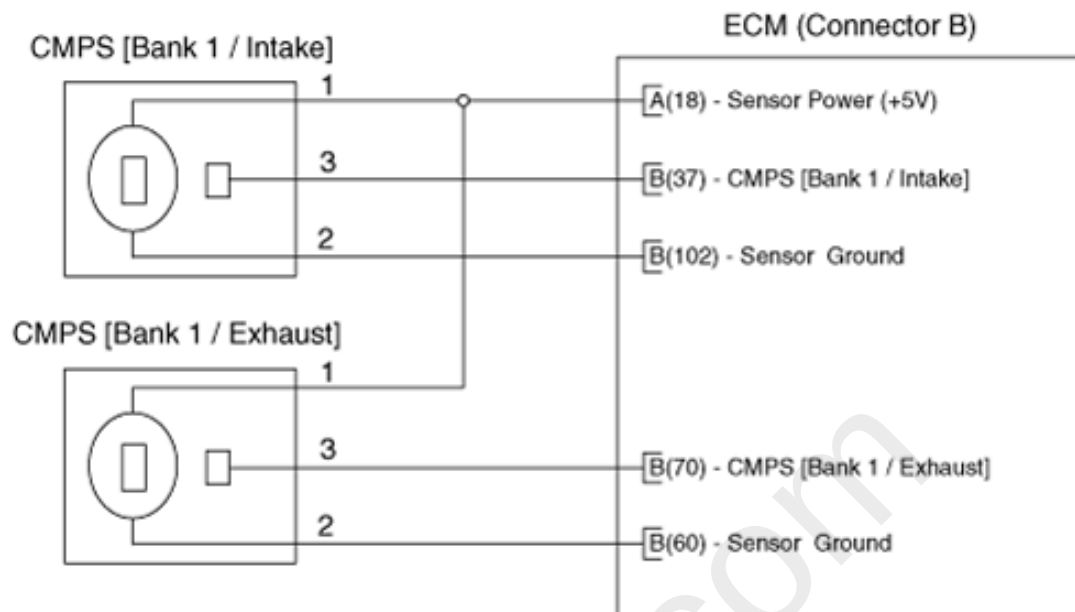


[Bank 1 / Exhaust]

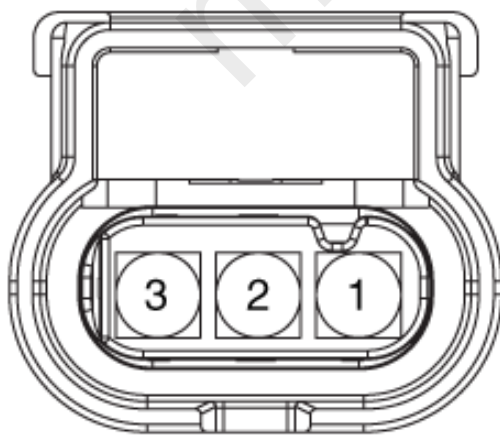


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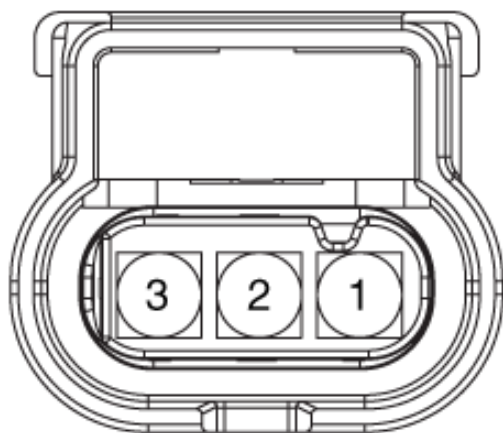
Circuit
Diagram



Harness Connector
CMPS [Bank 1 / Intake]



CMPS [Bank 1 / Exhaust]



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Inspection

1. Check signal waveform of CKPS and CMPS using a diagnostic tool.

Specification : Refer to "DTC Diagnosis Guide"

Removal



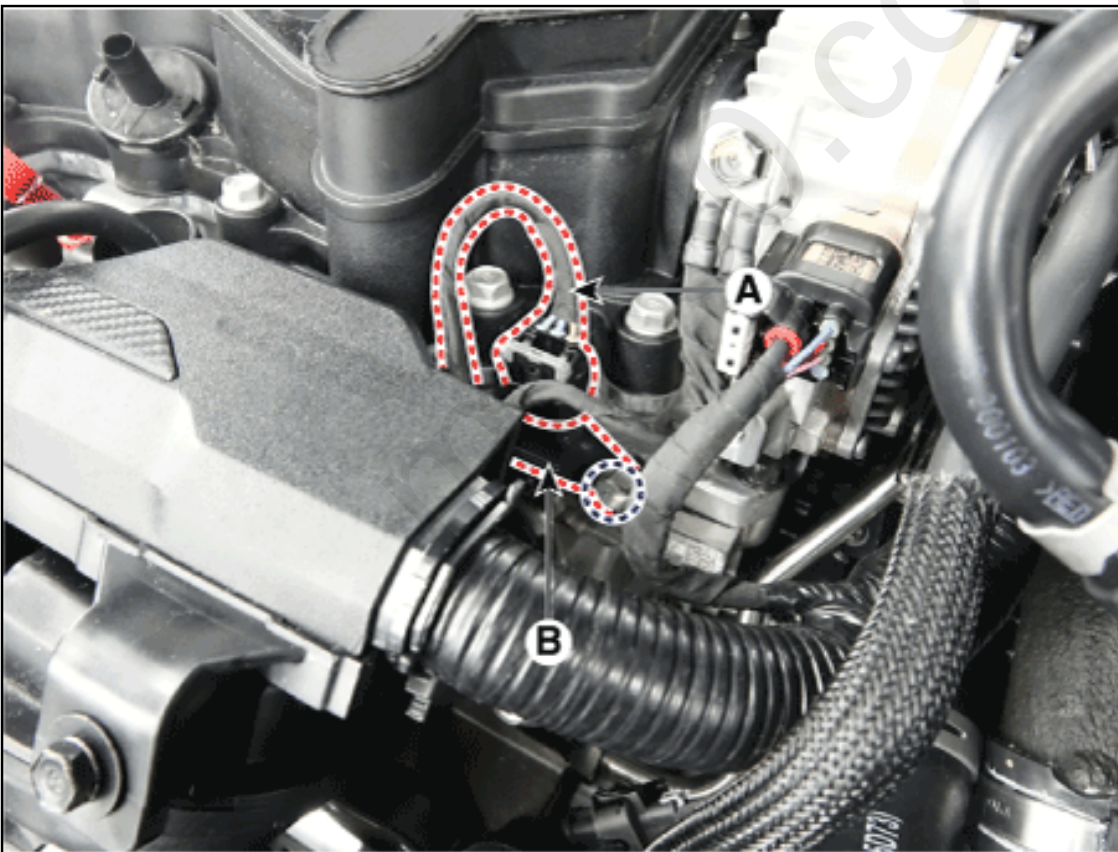
- DON'T remove the camshaft position sensor during engine running or right after engine stops, or a scald by the flowed out engine oil may occur.

[Bank 1 / Intake]

1. Turn ignition switch OFF and disconnect the battery negative (-) terminal.
2. Disconnect the camshaft position sensor connector (A).
3. Remove the installation bolt, and then remove the sensor (B).

Tightening Torque :

9.8 - 11.8 N.m (1.0 - 1.2 kgf.m, 7.2 - 8.7 lb-ft)



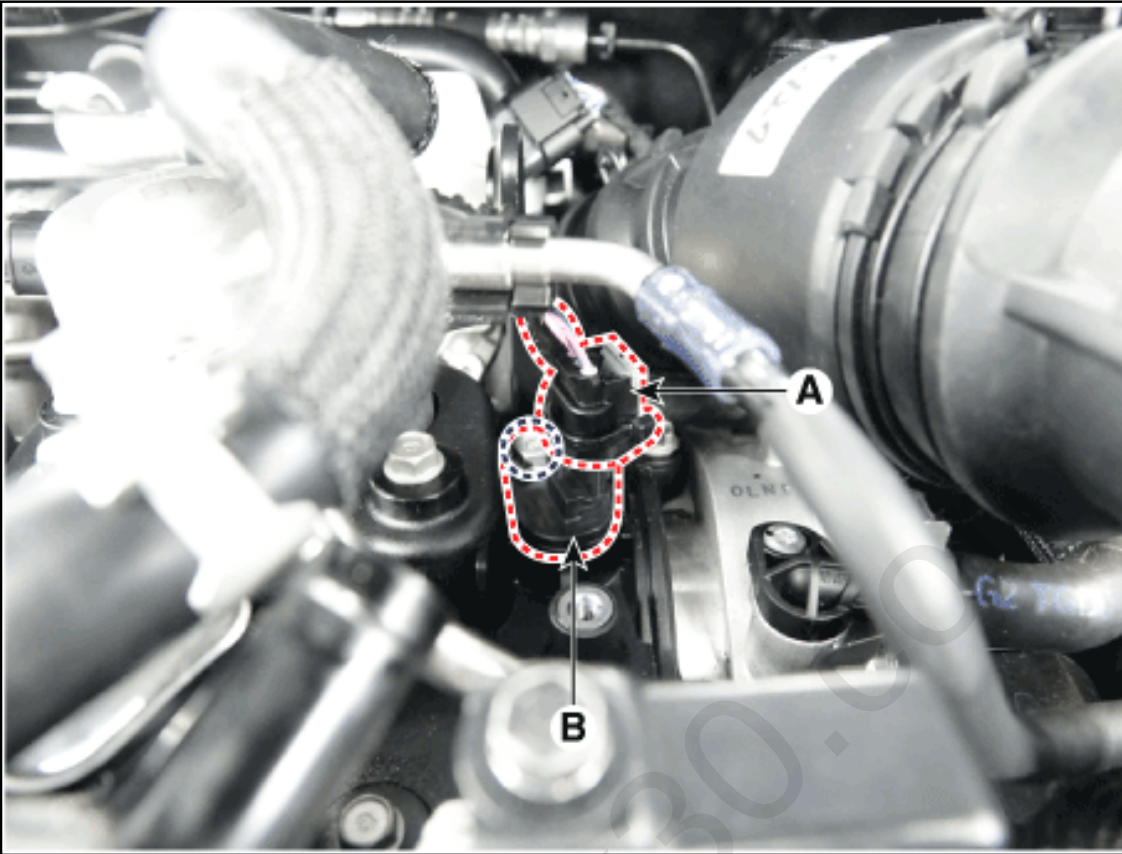
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Installation



- Install the component with the specified torques.
- Note that internal damage may occur when the component is dropped. If the component has been dropped, inspect before installing.



- Apply the engine coolant to the O-ring.



- Insert the sensor in the installation hole and be careful not to damage.

1. Install in the reverse order of removal.