

PARTS & SERVICE NEWS

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(C)

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SUBJECT: INTAKE MANIFOLD TEMPERATURE SENSOR

PURPOSE: To introduce a new intake manifold temperature sensor.

APPLICATION: HD785-5LC Dump Truck Serial Number A10144, A10224, A10228 and up
330M Dump Truck Serial Number A10231 to A10232
WA800-3LC Wheel Loader Serial Number A50001 and up
WA900-3LC Wheel Loader Serial Number A50001 and up

FAILURE CODE: DG10ZC

DESCRIPTION:

Introduction:

A new Intake Manifold sensor (for engine model SAA12V140ZF-2) has been introduced to resolve sensor failure due to moisture in the intake system. The new sensor part number 6216-84-9180 is sealed and will resist moisture damage.

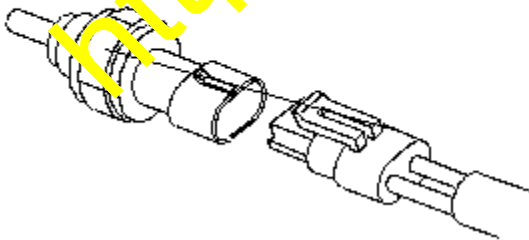
Intake Manifold Temperature Sensor Description

The intake manifold temperature sensor is used by the electronic control module (ECM) to monitor the temperature of the air in the intake manifold after the after cooler. The intake manifold temperature sensor is used by the ECM for the engine protection system, timing, and fueling control.

The ECM monitors the voltage on pin 34. The ECM expects to see the voltage vary between 0.5 and 4.88 volts. If the voltage is above 4.88 volts, the ECM will log Fault Code 153.

Voltage above 4.88 volts on pin 34 can be caused by opens in the signal or return wires, voltage shorts to the signal or return wires, or a failed open sensor.

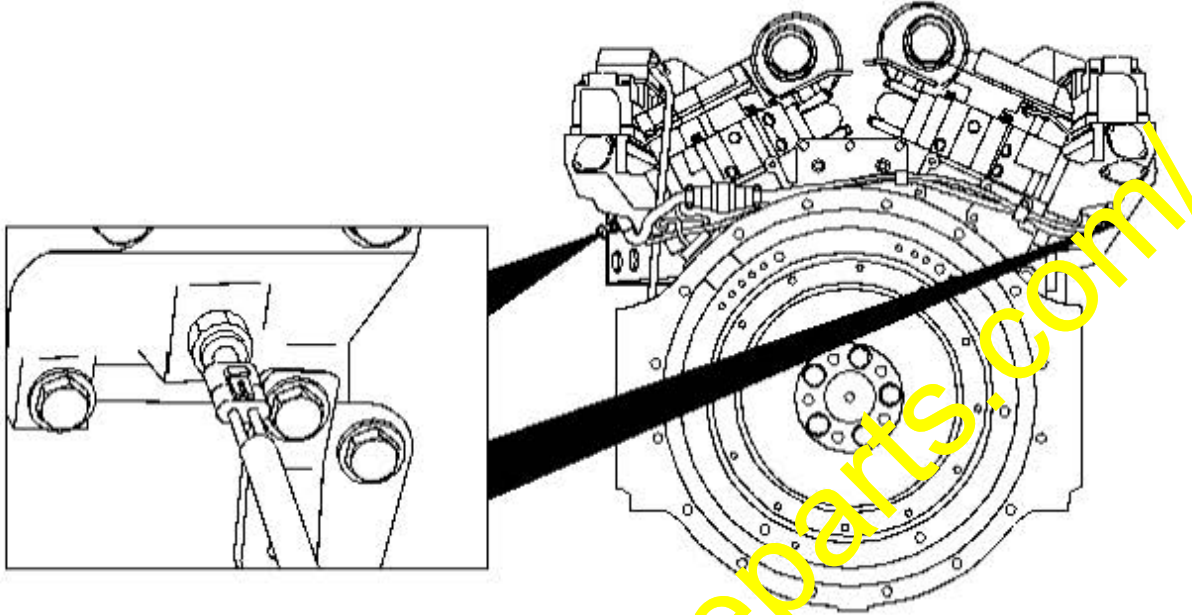
Intake Manifold Temperature Sensor



PN 6216-84-9180

INTAKE MANIFOLD TEMPERATURE SENSOR LOCATION

Two intake manifold temperature sensors are used on the industrial engine, one on each side. The sensors are located in the intake manifold at the rear of the engine.



Intake Manifold Temperature Sensor Circuit

