

Using a diagnostic scan tool, view the IPC Parameter Identifications (PIDs).

Select the IPC temperature gauge (ENGCOOLNT) PID.



NOTE: Make sure to set the diagnostic scan tool to 0 or full cold before beginning this step.

Command the temperature gauge on and off while monitoring the temperature gauge.

Does the temperature gauge start at cold (C), move to full hot (H) and return to cold (C)?

Yes	INSTALL a new GWM. REFER to: Gateway Module A (GWM) . CLEAR the Diagnostic Trouble Codes (DTCs). REPEAT the self-test. If the temperature gauge is still inoperative, INSTALL a new PCM. Refer to the appropriate article for the procedure.
No	INSTALL a new IPC. REFER to: Instrument Panel Cluster (IPC) .

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Normal Operation and Fault Conditions

See Temperature Gauge. REFER to: Instrument Panel Cluster (IPC) - System Operation and Component Description .

If the engine coolant temperature data or engine overheat indication request messages are missing for 5 seconds or less or if the IPC receives invalid engine temperature data for 5 seconds or less, the IPC defaults the temperature gauge to the last setting, based upon the last known good temperature status message.

Possible Sources

- Engine cooling system concern
- PCM input concern
- IPC

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J1 CHECK FOR CORRECT OPERATION OF THE COOLING SYSTEM

Ignition ON.

Verify that the engine cooling system and thermostat are functioning correctly.

Does the engine cooling system and thermostat operate correctly?

Yes	GO to J2
No	Refer to the appropriate article for the procedure.

J2 RETRIEVE THE RECORDED DTCS FROM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

Ignition ON.

Using a diagnostic scan tool, perform the PCM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	Refer to the appropriate article for the procedure.
No	GO to J3

J3 PERFORM THE IPC (INSTRUMENT PANEL CLUSTER) SELF-TEST

Using a diagnostic scan tool, perform the IPC self-test.

Check for recorded Diagnostic Trouble Codes (DTCs) from the IPC self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to DTC Chart: IPC .
No	GO to J4

J4 PERFORM THE TEMPERATURE GAUGE ACTIVE COMMAND USING THE DIAGNOSTIC SCAN TOOL

Using a diagnostic scan tool, view the IPC Parameter Identifications (PIDs).

Select the IPC temperature gauge (ENGCOOLNT) PID.



NOTE: Make sure to set the diagnostic scan tool to 0 or full cold before beginning this step.

Command the temperature gauge as follows: