



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** Intermittent DTC P2181 Engine Cooling System Performance

**Models:** 2009 Chevrolet Aveo  
2009 Pontiac G3  
2009 Pontiac Wave (Canada Only)  
2009 Holden Barina  
with 1.6L Engine (RPO LXV)

*This PI was superseded to update models and keywords. Please discard PIP4599C.*

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

### Condition/Concern

In rare instances a 2009 Chevrolet Aveo / Pontiac Wave/G3/Barina may set a DTC of P2181.

This document is for vehicles that ONLY set DTC P2181 and no other cooling system DTC's. If the vehicle is setting other cooling system DTC's follow the diagnostics in eSI to repair the vehicle.

### Recommendation/Instructions

The condition for setting DTC P2181 may not accurately reflect the operating parameters for all operating conditions. Currently development work is in process to evaluate the data over a wider range of operating conditions.

Use the following procedure below if DTC P2181 ONLY has set.

- Let the vehicle cool for 2 hours first.
- Then hook up a Tech 2 and command the engine coolant thermostat heater to 0%. Tech2 path (Diagnostics / 2009 / Passenger Car / Vehicle Line / Product Line (T) / Powertrain / (E) 1.6L L4 LXV/ Transmission Type / Engine Control Module / Special Functions / Output Control / Engine Coolant Thermostat Heater)
- Start the engine and raise the RPM to 3000.
- Observe the engine coolant temperature (ECT), run engine for 5 minutes and note coolant temperature. Tech2 path (Diagnostics / 2009 / Passenger Car / Vehicle Line / Product Line (T) / Powertrain / (E) 1.6L L4 LXV / Transmission Type / Engine Control Module / Data Display / Engine Data / ECT Sensor)- If the coolant temperature does not reach 195F (90C) within 5 minutes, replace the thermostat. Check for the latest calibration. If the calibration is not current, install the latest calibration available in Tis2Web.
- If the coolant temperature does not reach 195F (90C) within 5 minutes, replace the thermostat. Check for the latest calibration. If the calibration is not current, install the latest calibration available in Tis2Web.
- If the engine coolant temperature reaches 195F (90C) in less than 5 minutes clear the DTC and check for the latest calibration. If the calibration is not current, install the latest calibration available in Tis2Web.

**Note:** The calibration information in Tis2Web does NOT specifically call out that it is for DTC P2181; however it is included in the latest update. When the above system performance test is completed, install the most recent ECM calibration available if it has not previously been done.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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