File in Section: -

Bulletin No.: PIP5066

Date: October, 2012

## PRELIMINARY INFORMATION

**Subject:** Engine Overheat or Cooling Fans Inoperative

Models: 2013 Cadillac ATS

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

## **Condition/Concern**

You may see a vehicle come in with an engine overheat concern or cooling fans are inoperative.

Further, DTC's P0480, P0691, P0692, or P1258 may be set.

There may be an SES light or engine overheat message along with protection mode activity.

This may be the result of a concern with the Cooling Fan Control Module.

## Recommendation/Instructions

If you get a vehicle in exhibiting any of the above concerns, the procedure outlined below should be followed before normal SI diagnostics.

First verify if the Cooling Fan Control Module has a suspect date code (Refer to picture below).

Any date code less than 12207 (23JUL12) is suspect.

If the Cooling Fan Control Module is suspect then use the service scan tool and procedure below to perform a system check on the Cooling Fan Control Module.

Command the Engine cooling fan through states 1-5 with the engine running at idle for approximately 20-30 minutes in order to get the under-hood temperature hot (The front grille may be blocked to reduce test time).

If the electric cooling fan stops working then replace the Cooling Fan Control Module:

Command State 1 operates the cooling fan at approximately 18%

Command State 2 operates the cooling fan at approximately 54%

Command State 3 operates the cooling fan at approximately 67%

Command State 4 operates the cooling fan at approximately 85%

Command State 5 operates the cooling fan at approximately 90%



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**Note:** When operating the cooling fan with a scan tool, the Commanded States 1–5 should be exercised in order, from OFF to High or High to OFF.

The cooling fan control module may disable the cooling fan if a Commanded State is skipped.

The cooling fan will not operate when the scan tool Cooling Fan Motor Command parameter displays less than 4%. This is a normal condition.

A delay or ramp up of approximately 12 seconds may occur before the cooling fan activates or changes speed when being commanded with a scan tool.

During normal operating conditions the ECM may initially activate the cooling fan at 4 or 5% and then increase to the percentages indicated above, as needed, to satisfy powertrain cooling requirements.

Generally, the ECM will operate the cooling fan at the specified percentages but, may scale the percentages either higher or lower in response to generator demand.

## **Warranty Information**

For vehicles repaired under warranty use:

Labor Operation	Description	Labor Time
J3395	Fan Control Module Replacement	Use Published Labor Operation Time

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.