Advanced

## CADILLAC P1AC1: STARTER/GENERATOR CONTROL MODULE COOLING FAN RELAY CONTROL CIRCUIT LOW VOLTAGE OVERVIEW High

Repair Cost : \$400-\$1500

Can I Still Drive? : No

**DIY Difficulty Level** 

## What Does The Cadillac P1AC1 Code Mean?

The Starter/Generator Control Module (SGCM) controls the coolant fan operation by applying voltage to the coolant fan relay control circuit with an internal solid state device called a driver. When the SGCM is commanding the relay ON, the voltage of the control circuit should be low, near 0 volts.

When the SGCM is commanding the relay OFF, the voltage potential of the control circuit should be high, near 12 volts.

The SGCM monitors the relay control circuits for the following conditions:

- Short to ground
- Short to voltage
- An open circuit

If the SGCM detects an improper voltage level on the coolant fan relay control circuit, then DTC P1AC1 or P1AC2 will set and the driver will be disabled.



## **How Can You Fix The Cadillac P1AC1 Code?**

If condition is not present, refer to Testing for Intermittent Conditions and Poor Connections.

## **Reference Sources**

Cadillac P1AC1, DTCDECODE.

