

GMC P111C: CHARGE AIR COOLER (CAC) TEMPERATURE - INTAKE AIR TEMPERATURE (IAT) SENSOR 2 CORRELATION

OVERVIEW

Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$90-\$1000
Can I Still Drive?	:	Yes

What Does The GMC P111C Code Mean?

DTCs [P0016](#), [P007C](#), [P0097](#), [P0098](#), [P0112](#), [P0113](#), [P0335](#), [P0336](#), [P0340](#), or [P0341](#) are not set. Ignition has been OFF Ignition has been OFF for 8 hours or more. The engine is running. In the first 60 s of engine run time, the ECM determines the block heater is OFF. AND In the first 10 minutes of engine run time, the vehicle speed as been at least 24 km/h (15 mph) for at least 5 minutes and the ECM determines there is no Sunload. This DTC runs once per key cycle when the conditions in 1 or 2 are met.

Condition 1: The ECM determines the absolute temperature difference between the CAC Temperature Sensor signal and the IAT Sensor 2 signal is more than 100°C (180°F) at start up.

Condition 2: The ECM determines the absolute temperature difference between the CAC Temperature Sensor signal and the IAT Sensor 2 signal is more than 35°C (63°F), but less than or equal to 100°C (180°F) after 10 minutes of engine run time.

- The ECM determines the block heater if OFF.
- The ECM determines there is no sunload.

Reference Sources

[12 OBDG09 Engine Diagnostics for P111C](#) - General Motors, page 159.