



# Service Bulletin

## TECHNICAL

**Subject:** Outside Temperature Displayed Takes Long Time to Update After Initial Startup, Malfunction Indicator Lamp (MIL) Illuminated - DTC P0234, P05Cc, P05Cd, P05Ce, P05Cf Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	CT6	2016	2017			LGW, LGX	

Involved Region or Country	North America, Middle East, Europe, Israel, Japan, South Korea
Condition	<p>Some customers may comment that:</p> <ul style="list-style-type: none"><li>• Malfunction Indicator Lamp is illuminated.</li><li>• Outside temperature display takes a long time to update after initial startup.</li></ul> <p>The Technician may find one or more DTCs set:</p> <ul style="list-style-type: none"><li>• P0234</li><li>• P05Cc</li><li>• P05Cd</li><li>• P05Ce</li><li>• P05Cf</li></ul> <p>The technician may also find DTC U0422 set in the ICCM.</p>
Cause	<p>This condition may be caused during vehicle startup (on occasion). The PEPS module arbitration along with high bus traffic leads to the BCM setting the door open switch Virtual Device Availability (VDA) to unavailable. The BCM does not update the VDA back to Available until the door switch changes state (because this signal is event based as opposed to periodic). The ICCM sets the U0422 DTC after 1 second of either the door ajar VDA or door open VDA being unavailable.</p>

### Correction

The following improvements were implemented per the specific RPOs below.

#### LGW

1. P02 Revisions were made to improve the robustness of the P0234 over boost diagnostic.
2. Outside Air Temperature (OAT) sensor: The OAT reading was changed to update sooner after initial startup.
3. P05Cc/Cd/Ce/Cf: Cold start phaser codes changed from Type A to Type B DTC, reducing the occurrence of any of these codes setting.

## LGX

1. Outside Air Temperature (OAT) sensor: The OAT reading was changed to update sooner after initial startup.
2. P05Cc/Cd/Ce/Cf: Cold start phaser codes changed from Type A to Type B DTC, reducing the occurrence of any of these codes setting.

## Service Procedure

**Important:** Verify the battery voltage is more than 12.6 volts but less than 15.5 volts before proceeding with reprogramming. The battery must be fully charged **BEFORE** reprogramming.

A revised calibration has been released to address these conditions. Update the Engine Control Module (ECM). Refer to *K20 Engine Control Module: Programming and Setup* in SI.

**Important:** During reprogramming, the battery voltage must be maintained within the proper range of 12.6-15.5 volts. **CONNECT** the approved Midtronics® PSC 550 Battery Maintainer (SPS Programming Support Tool (EL-49642) to the vehicle or the GR8 (EL50313) in the power supply mode.

## Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
2810075	Engine Control Module Reprogramming with SPS	Use Published Labor Operation Time

Version	1
Modified	

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may 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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