

Bulletin No.: PIC4935D

Date: Nov-2012

PRELIMINARY INFORMATION

Subject: Normal Characteristic - OnStar Power Consumption

Models: 2000-2013 GM Passenger Car and Light Duty Trucks With OnStar Gen6, Gen7, Gen8, or Gen9

This PI was superseded to update recommended fields. Please discard PIC4935C.

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

Condition/Concern

During battery parasitic drain test, there may be some confusion as to what the normal power consumption reading should be from the OnStar® system.

Recommendation/Instructions

When performing a current draw test it is important to understand the power cycles of the various OnStar® systems. All OnStar® customers with active accounts on their vehicles have digital cellular capability. A green status LED on the OnStar® keypad normally indicates an active OnStar® account. A red LED indicates a system DTC. On Gen 6 and later systems, a dark or no LED lit may indicate the OnStar® system has been deactivated or possibly it may have a no power/no communication concern.

The OnStar® system will stay powered up after ignition off for an extended time in order to allow for remote services like door unlock, horn honk, light flash, etc. to take place as requested by the customer.

Power cycle (also referred to as DRX) times vary depending on the generation of the OnStar® system. Technicians may identify the system generation by using a Tech 2 (Body>VCIM>Module ID Information>Module Information 2), or using GDS/GDS 2 (Telematics Communication Interface Control Module/ Identification Information.

All Gen 6, 7, 8, and 9 systems are powered up continuously for 48 hours from ignition off. After the 48 hours the Gen 6 and some Gen 7 power off; Gen 7.XXL, and all Gen 8 systems will enter a 9 minute OFF 1 minute ON power cycle for an additional 72 hours.

Gen9 and FCP1 (Volt) will remain in that mode for 120 hours (5 days). At the beginning and end of the 1 minute ON stage, you may experience a short spike of current at the beginning and at the end. This allows for calls from OnStar to be received by the system.

After 120 hours from ignition off, these systems then completely power off. The expected current draw of the OnStar® module is:

- IGN ON 240 to 400 mA
- IGN OFF 3 to 20 mA for 48 hours or 120 hours on Gen9, FCP1 (Volt), and specified VCP's
- IGN OFF 0.2 to 0.8 mA after 48 hours or 120 hours on Gen9, FCP1 (Volt), and specified VCP's
- During extended current monitoring for platform battery parasitic it is possible that you may see an amperage spike caused by a cellular registration call
 that was triggered by the local cellular system, or that OnStar® has set a monthly trigger for a vehicle data upload call for the OnStar® Vehicle
 Diagnostic email upload.

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.

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.

