Bulletin No.: 16-NA-054

Date: Feb-2016

Service Bulletin

INFORMATION

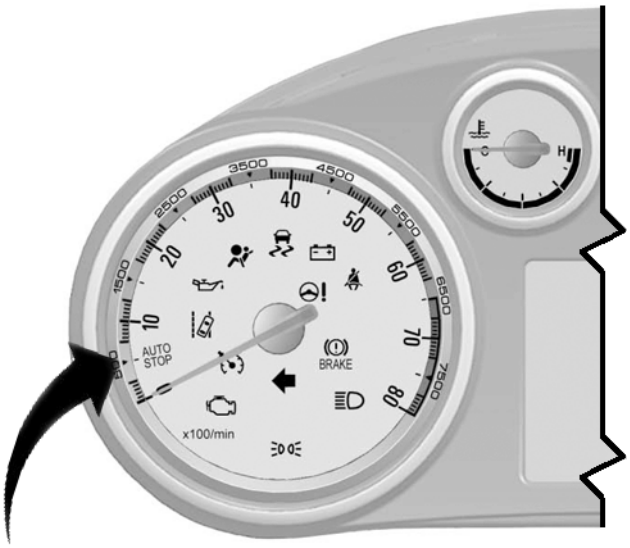
Subject: **Diagnostic Tips for Stop/Start and AutoStop Operation**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Encore	2016	2016			1.4L Engine (RPO LE2)	All

Condition	Some customers may comment on one or both of the following concerns: • Vehicle does not engage in AutoStop mode. • Vehicle automatically restarts during an AutoStop event.
Cause	A system malfunction may be the cause for loss of AutoStop, and a diagnostic trouble code (DTC) may be set. (Many of the conditions that allow, or shorten, an AutoStop are not visible or controlled by the operator. In general, skipped AutoStop should be considered normal.)
Additional Options	Equipped with 1.4L Engine (RPO LE2) and Stop/Start System (RPO KL9)

Recommendation/Instructions

AutoStop mode is based on many factors. It is important first to verify that all conditions are met to enable AutoStop mode.



AutoStop may be deactivated if:

- A minimum vehicle speed is not reached; minimum 20 km/h (12 mph) prior to first AutoStop, then 10 km/h (6 mph) thereafter.

  Note: Refer to the table in the Stop/Start Enable Temperature Criteria below.
- The ambient, engine and transmission temperatures are not at the required operating ranges.
- The shift lever is in any gear other than Drive.
- The battery charge is low; less than 12V.
- A/C compressor request from HVAC (A/C or Defrost modes).
  - The interior comfort level has not been reached the required level for the climate control system or defog settings.
  - Humidity level too high inside the passenger compartment, commanding A/C compressor ON.
- The AutoStop time is greater than two minutes.

  Note: AutoStop will be disabled for entire ignition cycle if hood is open at the start of the ignition cycle.
- Hood switch status shows open.
- Brake pedal is not depressed beyond approximately 25%.
- Accelerator pedal is being applied.
- Brake booster vacuum is less than 45 kPa (7 psi).
- Engine speed is above 1,000 RPM.
- Battery state of charge as monitored in the ECM, is less than 60%.

Stop/Start Enable Temperature Criteria

Ambient Temperature	-20°C (-4°F)	-5°C (23°F)	15°C (59°F)	35°C (95°F)	45°C (113°F)
Engine Temperature	70°C (158°F)	70°C (158°F)	30°C (86°F)	55°C (131°F)	65°C (149°F)
Transmission Temperature	28°C (82°F)	28°C (82°F)	20°C (68°F)	35°C (95°F)	45°C (113°F)

Stop/Start System Training

An overview course will be available at the following websites:

- In the United States go to > www.centerlearning.com (will be available end of February, 2016)
- In Canada go to > www.gmprocanada.com (availability in 2nd quarter of 2016)

Course Name	Description	Course Type	Intended Audience
16040.31W	12V Stop/Start System 2	Web	All Service Personnel

Customer Education Unique Operating Characteristics

Customer Education

It is imperative that the customer be well informed about the unique features and operational characteristics of their vehicle equipped with Stop/Start. For the sales team to be fully prepared, they should use the Getting to Know Your Vehicle (GTK) guide (U.S. Only) as an outline when presenting the vehicle to the customer. Additionally, service and parts leadership, service writers and technicians should familiarize themselves with these materials to avoid attempting repair of normal operating characteristics.

Refer customers to the Owner Manual *Stop/Start System* and *Climate Control Systems (Comfort/Eco Air Conditioning) (For Stop/Start Vehicles)* sections for operating characteristics.

Diagnostic Aids

When attempting to diagnose an AutoStart or AutoStop concern, the technician should review the Autostart Inhibit Reason and/or Autostop Disable Reason lists available in the ECM. This list contains several parameters that are directly related to the Auto Start/Stop feature. They can be found in GDS 2 under ECM/Data Display. These parameters list the current state of several parameters that can inhibit the Stop/Start feature. These parameters can be viewed while operating the vehicle on the road or on a hoist with traction control turned off, to assist in determining why an Autostop did not occur.

Version	1
Modified	