Subject: Diagnostic Aid - Whine Noise Underhood For 15-20 Seconds At Startup

Models: 2010 - 2014 Buick LaCrosse
2011 - 2014 Buick Regal

This PI was superseded to update model years and customer information section. Please discard PIC5669A.

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

Condition/Concern
A customer or technician may hear a loud whine noise from under the hood (when first started) on the passenger side (under hood) often mistaken for a generator.

This noise is a result of normal operation from brake booster electric vacuum pump – located behind the right front wheelhouse liner.

Important: As a technician diagnosing this noise, you would think it’s a Generator making the noise and, if you disconnect the Generator, the noise will be gone. However, it’s important to know that, when system voltage is being changed, vacuum pump voltage and RPM are also affected.

Recommendation/Instructions
2010 Buick LaCrosse and 2011 Buick Regal with LAF Engine:

With engine and ignition off:
Apply or Pump the brake pedal 3 times.

Turn the ignition to run with the engine off, the Brake Booster Electric Vacuum Pump should be heard running at passenger front wheel opening below the generator.

The pump should run for approximately 10 seconds and then shut off; with a maximum run time of 20 seconds.
If required, compare to a known good vehicle. Replace the Brake Booster Electric Vacuum Pump ONLY if an abnormal noise is heard.

2011 - 2014 Buick LaCrosse and 2012 - 2014 Buick Regal:

With ignition on and engine off use GDS2; select Module Diagnosis > Electronic Brake Control Module > Control Functions and select Brake Booster Electric Vacuum Pump.

Command the pump on, it should be heard running at passenger front wheel opening below the generator.
Confirn this is the source of the customer concern.
If required, compare to a known good vehicle. Replace the Brake Booster Electric Vacuum Pump ONLY if an abnormal noise is heard.

Customer Information
For cases in which the Brake Booster Electric Vacuum Pump is operating normally, please communicate to the customer this condition is a normal operating characteristic of their vehicle. It will not impact the designed performance or reliability of the vehicle. Please share this information with the customer, including a copy of this message.

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.

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