



# Service Bulletin

File in Section: -

Bulletin No.: PI1297C

Date: November, 2018

## PRELIMINARY INFORMATION

**Subject:** Diagnostic Tips for Engine Compartment Whistle Noise or Chirp Noise

**Models:** 2013-2015 Buick Encore  
2014-2015 Cadillac ELR  
2013-2015 Chevrolet Cruze, Sonic, Trax, Volt  
Equipped with 1.4L Engine (RPO LUV or LUU)

**Attention:** This PI also applies to any of the above models that may be China, Europe and Australia Export models.

This PI has been revised to update the Recommendation/Instructions. Please discard PI1297B.

### Condition/Concern

Some customers may comment about a whistle or chirp noise heard from the engine area after the vehicle has warmed up. It is also possible for this noise to continue for up to 10 seconds after the engine is shut off.

### Recommendation/Instructions

There may be several causes for a whistle noise from the engine compartment. It is important to try and isolate what component could be causing this whistle noise without replacing multiple parts by following the diagnostic tips below:

#### **Vacuum leak most likely at the front crankshaft seal (Vehicles Built Prior to December 1, 2014)**

**Important:** Vehicles built after the above date already have the new design front crank seal.

With the engine running, remove the oil dipstick. If the noise stops, it was due to a vacuum leak most likely at the front crankshaft seal. Replace the seal and retest. For this fault, a customer may also comment that they hear the noise for up to 10 seconds after the engine is shut off. This is due to the vacuum in the engine crankcase equalizing with the atmospheric pressure. Proceed to the next tip if the noise is still present.

#### **Water Pump**

Whistle noise at the water pump may be caused by one of the following conditions:

- Low coolant with air moving through the cooling system.
- Noisy water pump bearing (rattle or growl).
- The coolant shaft seal (higher pitched whine, typically heard at idle only with engine warm).

Squeeze the upper radiator hose to see if this changes or stops the whistle sound. If not, carefully reduce the pressure in the reservoir tank. If the noise goes away, try adding coolant while thoroughly bleeding the air out of the cooling system. Proceed to the next tip if the noise is still present.

#### **Drive Belt**

Remove the accessory drive belt and start the engine. If the noise goes away, then it could have been due to the water pump or the belt tensioner. The use of a stethoscope to listen for the location of the noise may help to isolate which component is causing the noise.