

Preliminary Information

PIP4176A Cold Start Drive Belt Tensioner Rattle at Low RPM -Possible Characteristic

<u>Models</u>

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to	Engine.	Transmissions.
Saturn	Aura (Greenline Hybrid)All	2007	All	All	2.4L (LAT)All	All

Supersession Statement

This PI was superseded to update Keywords Please discard PIP4176.

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

Condition / Concern

When the engine is cold, a light rattle noise may be heard from under the hood at 1,100 - 1,200 RPM. This noise is a result of normal drive belt and tensioner resonance that may be amplified on a cold engine.

As a result, this noise will be isolated to the drive belt tensioner area. This noise is most noticeable on a cold engine and typically, is not noticeable on a warm engine.

Due to differences from engine to engine and hybrid generator loads, this noise may vary from vehicle to vehicle. Generally, most customers will not hear this noise when sitting in the driver's seat.

Technicians should be able to verify this noise in their repair bay by performing the following test:

- 1) Apply the parking brake
- 2) Apply and hold the brake pedal by foot
- 3) Use the ignition key to start the engine with the 12 volt starter
- 4) Place the transmission in drive

5) Brake torque the engine by sweeping the RPM from 1,100 to 1,200 while listening for the rattle

Recommendations / Instructions

If this concern is experienced, it is currently considered a normal operating characteristic of the hybrid drive belt tensioner system and system loads from the hybrid starter/generator, and no repairs should be performed.

If a future correction is developed to address this noise, this PI will be updated with additional details and a proactive email will be sent to dealers who have a TAC case referring to this PI.

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.



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