



Preliminary Information

PIP5652A Rattle Noise From Front of Engine With or Without DTCs P0011, P0014, P0016, P0017

Proactive

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	XT4	2019	All	All	2.0 LSY	All

Involved Region or Country:	North America
Condition:	Rattle noise from front of engine with or without DTC's P0011 P0014 P0016 P0017.
Cause:	Timing chain tensioner may be stuck or collapsed.

You may encounter a vehicle with a rattle noise from the front of the engine with or without a Malfunction Indicator Lamp (MIL) illuminated with any combination of the following DTC's P0011 P0014 P0016 P0017.

A stuck or collapsed timing chain tensioner may cause damage to the oil control valve assemblies in either Camshaft Sprocket Bolt.

If a vehicle arrives with a rattle noise, remove the Camshaft Position Actuator Valve Solenoids following the latest SI document.

Check for a missing, out of position or damaged Camshaft Position Actuator Valve snap ring. (see picture below)



If the Snap Ring for either Camshaft Sprocket bolt is missing, out of position or damaged, replace both Camshaft Sprocket Bolts following the latest SI documents and perform the timing chain tensioner / guide inspections listed below.

If both Snap Rings are in the correct position, perform the timing chain tensioner and guide inspections listed below.

Remove the lower engine front cover assembly and inspect the timing chain tensioner for an air gap between the tensioner plunger and timing chain guide. (see picture below)

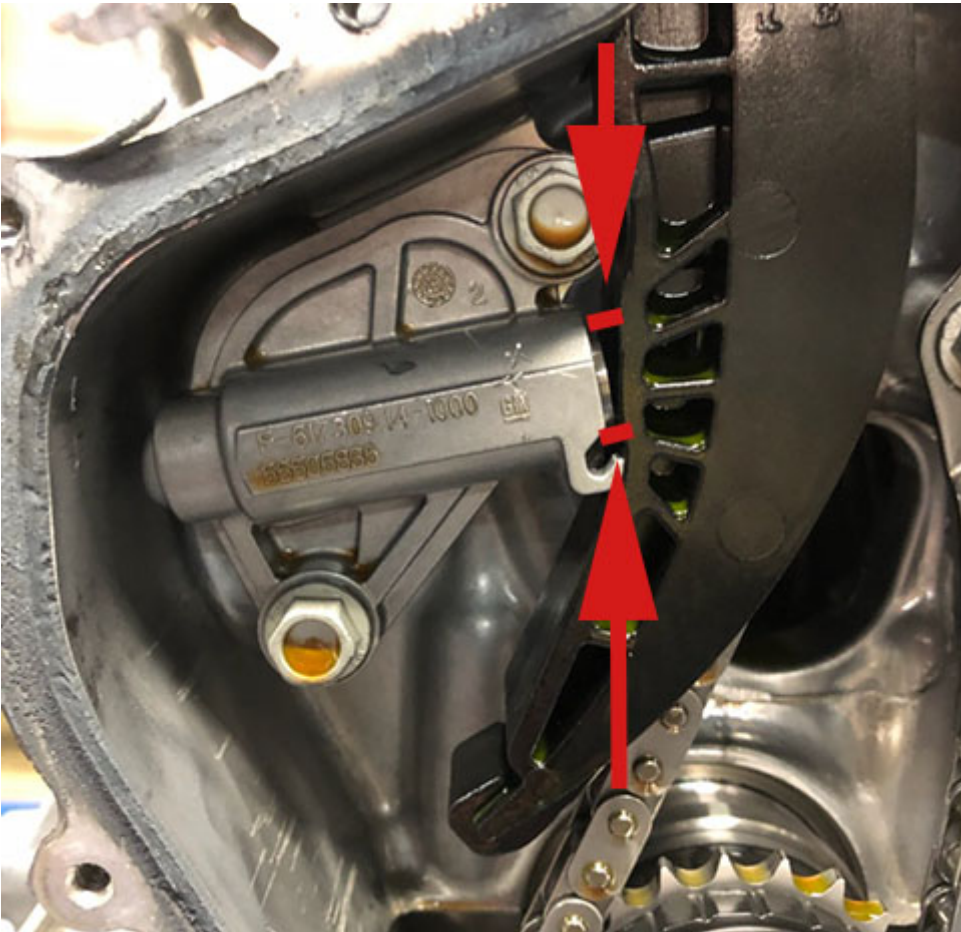


Photo below shows the timing tensioner removed from engine. Note the plunger is stuck in body of tensioner.



If the timing chain tensioner is found to be stuck or collapsed, replace the Timing Chain Tensioner, inspect the three timing chain guides for excessive wear or damage and replace as necessary.

Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation:	Description	Labor Time:
4087218	Camshaft Position Actuator Valve Solenoid Inspection only	0.5 Hr.

Labor Operation:	Description	Labor Time:
4087228	Camshaft Position Actuator Valve Solenoid Inspection and Bolt replacement	2.9 Hr.
4063990	Replace Timing Chain Tensioner	Base = 2.2 Hr. AWD = 3.6 Hr.

Version History

Version	2
Modified	05/21/2019 - Created on 11/01/2019 - Updated to add potential DTC's, inspection instructions and labor operations.



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