



Preliminary Information

PIP5216F Engine Replacement Recommendations for HFV6 Gen 1 and Gen 2

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Enclave	2008 - 2018	ALL	ALL	3.6 LLT, 3.6 LFY	ALL
Buick	LaCrosse	2010 - 2018	ALL	ALL	3.0 LF1, 3.0 LFW, 3.6 LLT, 3.6 LFX, 3.6 LGX	ALL
Cadillac	ATS	2013 - 2018	ALL	ALL	3.6 LFX, 3.6 LGX	ALL
Cadillac	ATS-V	2016 - 2018	ALL	ALL	3.6 LF4	ALL
Cadillac	CT6	2016 - 2018	ALL	ALL	3.0 LGW, 3.6 LGX	ALL
Cadillac	CTS	2007 - 2018	ALL	ALL	3.0 LF1, 3.0 LFW, 3.6 LY7, 3.6 LLT, 3.6 LFX, 3.6 LGX	ALL
Cadillac	CTS V-Sport	2014 - 2018	ALL	ALL	3.6 LF3	ALL
Cadillac	SRX	2007 - 2016	ALL	ALL	2.8 LAU, 3.0, LF1, 3.0 LFW, 3.6 LFX	ALL
Cadillac	STS	2007 - 2011	ALL	ALL	3.6 LY7, 3.6 LLT	ALL
Cadillac	XT5	2017 - 2018	ALL	ALL	3.6 LGX	ALL
Cadillac	XTS	2013 - 2018	ALL	ALL	3.6 LF3, 3.6 LFX	ALL
Chevrolet	Camaro	2010 - 2018	ALL	ALL	3.6 LLT, 3.6 LFX, 3.6 LGX	ALL
Chevrolet	Caprice PPV	2012 - 2013	ALL	ALL	3.6 LFX	ALL
Chevrolet	Captiva Sport	2012 - 2015	ALL	ALL	3.6 LFX	ALL
Chevrolet	Colorado	2015 - 2018	ALL	ALL	3.6 LFX, 3.6 LGZ	ALL
Chevrolet	Equinox	2008 - 2017	ALL	ALL	3.0 LFW, 3.0 LF1, 3.6 LFX	ALL
Chevrolet	Impala Vin W	2012 - 2016	ALL	ALL	3.6 LFX	ALL
Chevrolet	Impala Vin 1 (including Bi-fuel)	2014 - 2018	ALL	ALL	3.6 LFR, 3.6 LFX	ALL
Chevrolet	Malibu	2008 - 2012	ALL	ALL	3.7 LY7	ALL
Chevrolet	Traverse	2009 - 2018	ALL	ALL	3.6 LLT, 3.6 LFY	ALL
GMC	Acadia	2007 - 2018	ALL	ALL	3.6 LY7, 3.6 LLT, 3.6 LGX	ALL
GMC	Canyon	2015 - 2018	ALL	ALL	3.6 LFX, 3.6 LGX	ALL
GMC	Terrain	2010 - 2017	ALL	ALL	3.0 LF1, 3.0 LFW, 3.6 LFX	ALL
Pontiac	G6	2008 - 2010	ALL	ALL	3.6 LY7	ALL
Pontiac	G8	2008 - 2009	ALL	ALL	3.0 LF1, 3.0 LFW, 3.6 LY7, 3.6 LLT	ALL
Pontiac	Torrent	2008 - 2009	ALL	ALL	3.0 LFW, 3.6 LLT	ALL
Saturn	Aura	2007 - 2009	ALL	ALL	3.6 LY7	ALL
Saturn	Vue	2008 - 2010	ALL	ALL	3.6 LY7	ALL
Saturn	Outlook	2007 - 2010	ALL	ALL	3.6 LY7, 3.6 LLT	ALL

Supersession Statement

This PI was superseded to update model years. Please discard PIP5216E.

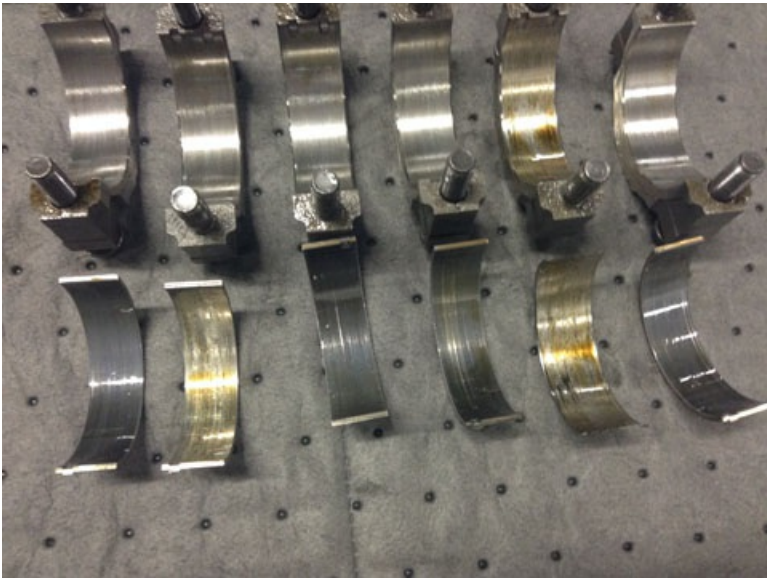
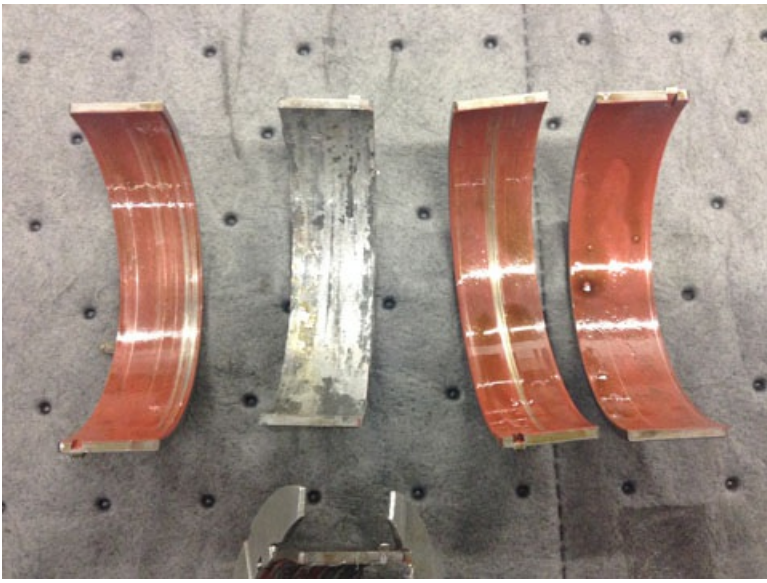
The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition / Concern

If a vehicle comes into the dealership with a knock noise, seized engine, lower end squeak or squeal or any condition that you suspect a rod or main bearing failure.

NOTE: THIS PI ONLY REFERS TO CRANKSHAFT BEARING DAMAGE DEBRIS.

First, verify there is metal in the engine oil caused by BEARING DAMAGE / debris by removing the oil pan.

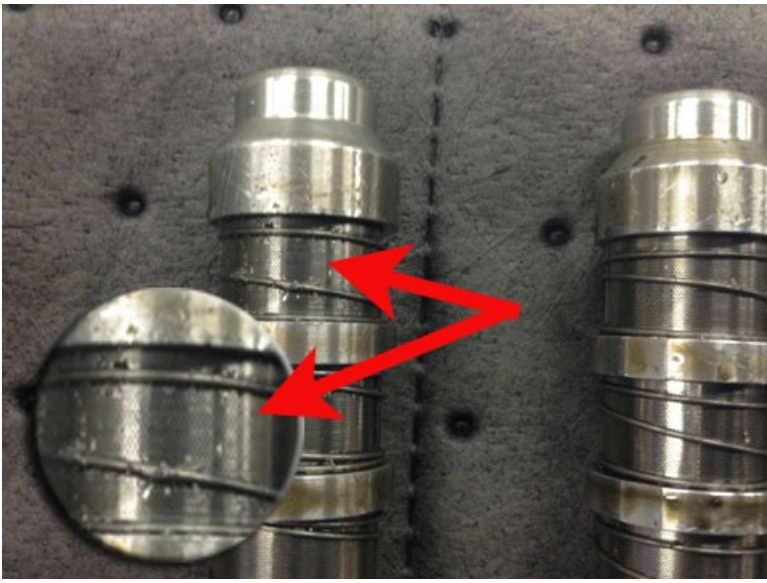


If Due To BEARING FAILURE when completing diagnosis, and deciding whether to replace the engine or repair it, complete the following before making that determination.

Recommendations / Instructions

1) Inspect the oil control solenoids for metal debris. This shows the oil filter is in by-pass and unfiltered oil with bearing debris was pumped into the oil lubrication galleries, throughout the engine

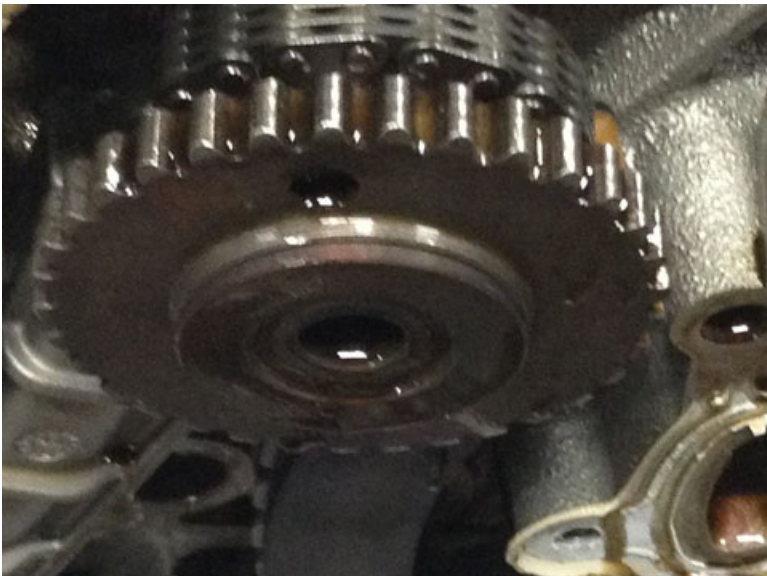




2) Inspect for damage to the cam caps Journals and camshaft journals on the heads (obvious signs of metal through the cap).



3) Inspect the timing chain idler sprockets for stiffness when turning. (Should turn smooth and free)



Any Of These 3 instances would be cause to replace the engine instead of repair.
While engine replacement at this point will be necessary, additional inspections should also be made for:
a) Sludging caused by lack of maintenance. See the latest version of TSB [16-NA-222](#).

b) Global oil starvation caused by running the engine very low on oil.

c) Intentional abuse to the engine.

If these conditions exist, warranty could be declined or feedback made on WPC inspection.

Maintenance documentation should be obtained in these instances for warranty validation.

NOTE: If this is the case, then a call to TAC is NOT required prior to engine replacement.

At this point you should clearly document your findings on your repair order, fill out the cost worksheet, and call PQC only if required for your dealer.

Keep in mind that a repair and then replacement will usually be cause for additional inspection and scrutiny that could result in more questioning about the repair methods.

HFV6 engines are scheduled to be returned to the WPC for inspection to verify the concern, as well as the information provided in the repair order to support the engine replacement.

Warranty Information

For Vehicles Repaired Under Warranty Use

Labor Operation	Description	Labor Time
4067490	Engine Replacement	Use Published Labor Operation Time

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.



© 2016 General Motors. All Rights Reserved.