



Service Bulletin

PRELIMINARY INFORMATION

Subject: Engine Replacement Recommendations HFV6 Only

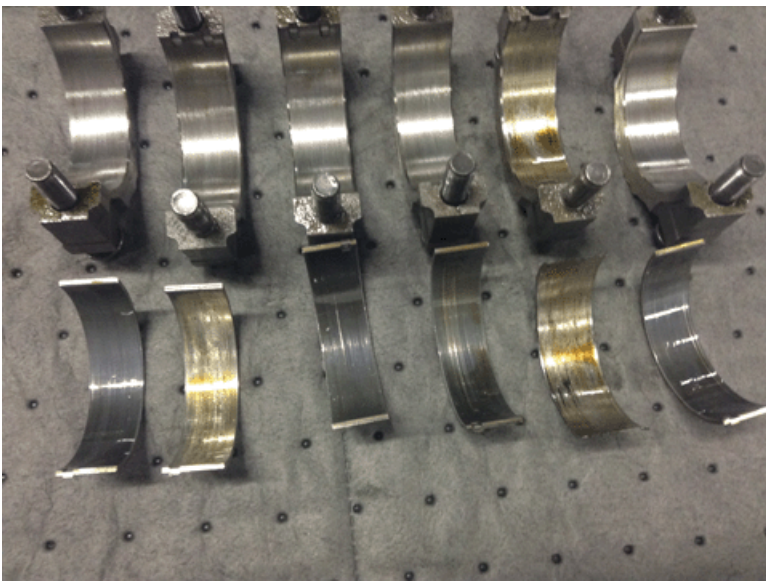
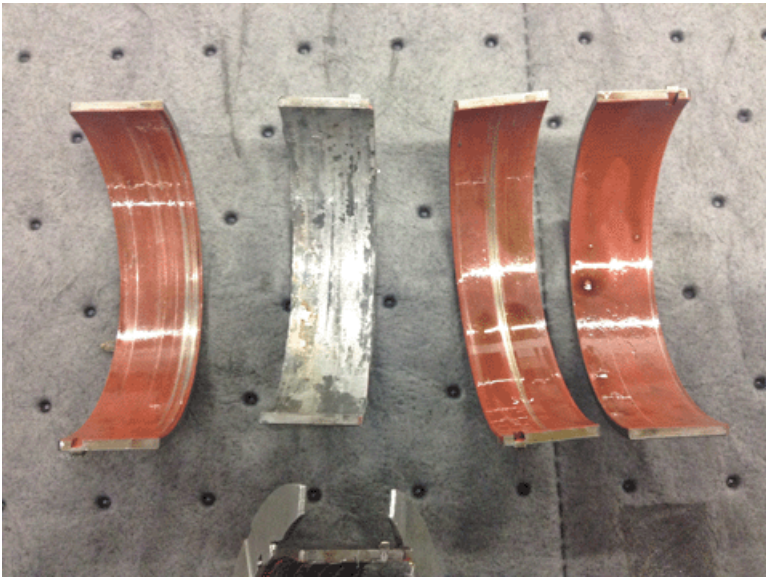
Models: 2009-2015 Buick Enclave
2010-2015 Buick LaCrosse
2013-2015 Cadillac ATS
2007-2015 Cadillac CTS
2007-2010 Cadillac STS
2007-2015 Cadillac SRX
2013-2015 Cadillac XTS
2010-2015 Chevrolet Camaro
2012-2013 Chevrolet Caprice PPV
2012-2015 Chevrolet Captiva Sport
2015 Chevrolet Colorado
2008-2015 Chevrolet Equinox
2012-2015 Chevrolet Impala Vin W
2014-2015 Chevrolet Impala Vin 1
2009-2015 Chevrolet Traverse
2007-2015 GMC Acadia
2015 GMC Canyon
2010-2015 GMC Terrain
2008-2010 Pontiac G6
2008-2009 Pontiac G8
2008-2009 Pontiac Torrent
2007-2009 Saturn Aura
2008-2010 Saturn Vue
2007-2010 Saturn Outlook
Equipped with HFV6 engines.

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.

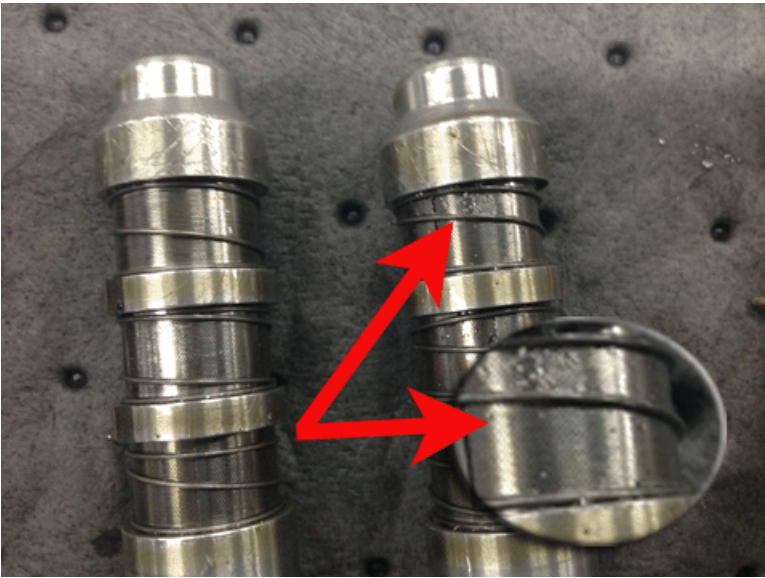
First, verify there is metal in the engine oil caused by bearing damage / debris by removing the oil pan



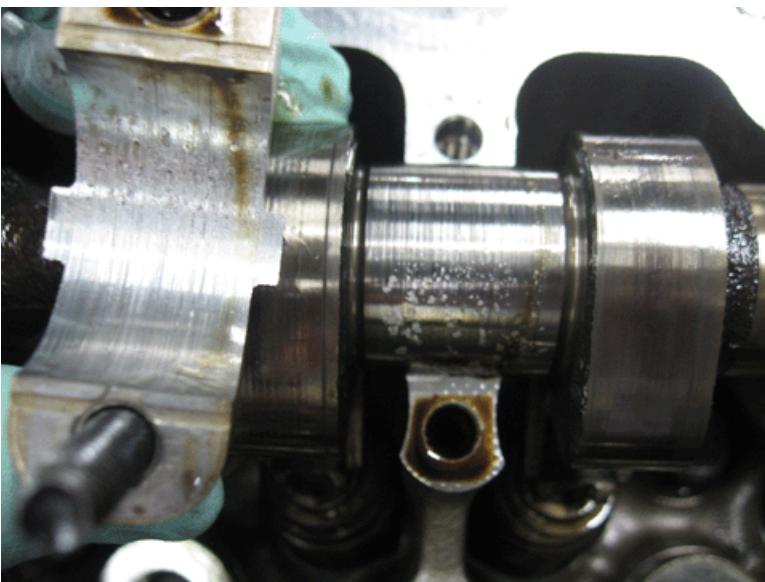
If Due To Bearing Failure when completing diagnosis, and deciding whether to replace the engine or repair it, complete the following before making that determination.

Recommendation/Instructions

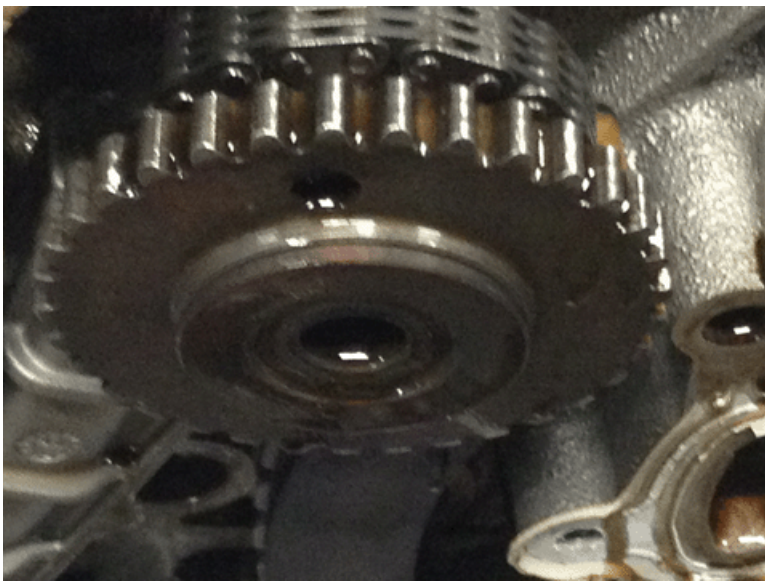
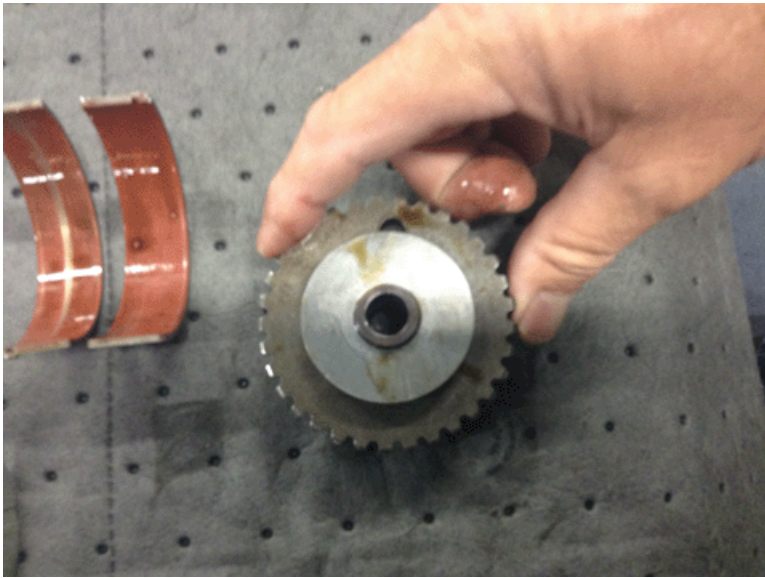
1. Inspect the oil control solenoids for metal debris. This shows the oil filter is in by-pass and unfiltered oil with bearing debris was pumped into the oil lubrication galleries, throughout the engine.



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.

A repair would entail cylinder head and all timing component replacement, Crankshaft and bearing replacement, and at least 1 rod replaced.

Further the entire engine would need to be completely stripped down, tanked, and blown out to ensure all metal was cleaned out.

This is particularly difficult on this engine due to the inaccessibility of the Main Oil Gallery to clean.

Also the piston skirt sprayers could become plugged as well as all the lifters.

If a complete engine tear down and clean procedure and parts replacement is completed, normally the cost comparison would warrant engine replacement anyway and the danger of a dealer caused repeat failure is far less likely.

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.

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.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION