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Other Languages: NONE **Author:** Allan Hertko
Viewed: 367

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Coding Information

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Title: Oil Pump Bushing Replacement Procedure

Applies To: 2010-2013 MaxxForce 11 & 13 & 2013-2016 N13

Title: Oil Pump Bushing Replacement Procedure

Applications: 2010-2013 MaxxForce 11 & 13 (non-SCR), 2013-2016 N13 (SCR)

CHANGE LOG

Dealers: Please refer to the change log text box below for recent changes to this article

09/21/2016 - Initial Article Release
 11/2/2016 - Updated SRT Labor Operation
 11/25/2017 - Updated article PSC will be sending the tool kit and bushings.

DESCRIPTION

This a step by step procedure for replacement of the oil pump bushing for an 11 or 13 liter engine.

SYMPTOM(s)

Internal Engine Failure

Fan Drive Failure

Instrumentation: **Oil Pressure Gauge Fluctuation**

Warning Indicators Check Engine & Stop Engine Lights: **Low Oil Pressure Faults**

Damaged Oil Pump Assembly

SPECIAL TOOL(s)

The oil pump bushing tool is only available through the **Product Support Center (PSC) tool loaner program**. Submit a case file with proper documentation and pictures of the failed components such as the oil pump bushing, gear-train, main and connecting rod bearings including debris in the oil pan.

Navistar Supplied: Oil Pump Bushing Tool Kit

Contents: (2) Bushings, Extractor, Installer, 11 & 13 adapters threaded end

Slide Hammer: Dealer Supplied

OTC Part# SKU 1155 or equivalent with a 5/8"-18



SERVICE PARTS INFORMATION

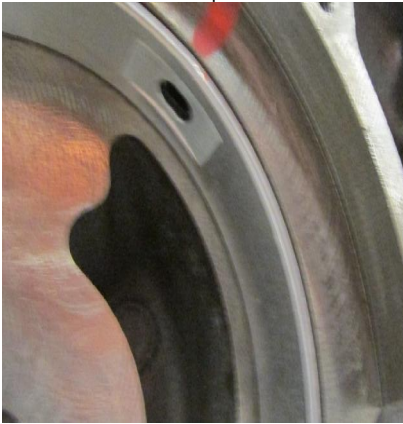
The oil pump bushing **3013399C1** is not available for purchase through parts, the bushing will be supplied with the tool kit.

Procedure

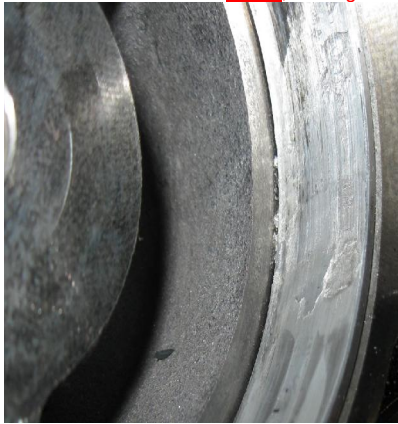
Step 1: The oil supply port is visible and aligned,

Note: The oil pump bushing has spun in the bore blocking the supply port.

continue with the iKNow procedure.



Do not continue with the iKNow, the engine block has to be replaced.



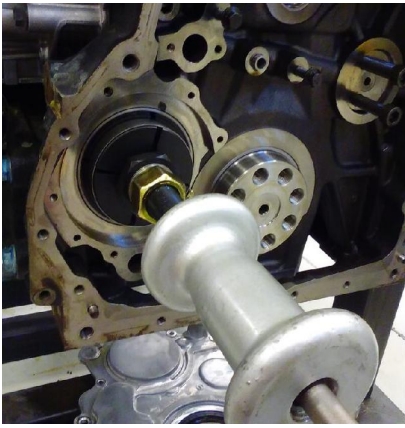
Step 2: Remove the oil pump pinion.



Step 3: Install the extractor and loosen clamp, tighten nut until it's fully expanded, making contact with the bushing.



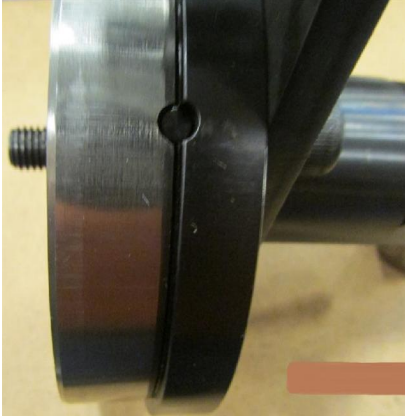
Step 4: Thread the slide hammer in 3/4 - 1", this will prevent damage to the extractor. Slide hammer the bushing from the engine.



Step 5: Clean and remove any excess debris and oil from the pump bore.



Step 6: Install the new bushing onto the installation tool. **Note:** For proper installation, the bushing has to be aligned with the dowel pin.



Step 7: Use the correct adapter. **The 13L adapter will be installed with the tool. If needed, the 11L adapter will be in the storage cavity.** Thread the installation bolt into the block and check alignment. To install the bushing, tighten the outer nut, this will press the bushing into block. The tool will be flush with the block after installation.



Step 8: Remove the installation tool and check for proper installation of the bushing with the supply port. **If the oil feed is blocked, replace the bushing to correct the concern.**



Step 9: Replace all necessary gaskets and seals, pre-lube the oil pump assembly. Reassemble the engine following the correct steps and torque procedures listed within the **Engine Service Manual.**

Step 10: Complete the repair by road-testing and checking operation. Monitor oil pressure and compare to the specifications listed within the **Engine Service Manual.**

WARNING:

If the oil pump bushing is spun the engine block has to be replaced. **Do not replace the bushing!**

Standard Repair Time(s): (0.3) **Operation Code:** N12-4713U-1 (Oil Pump Bushing Replacement)

Special Requirement(s): **Please contact Product Support Center (PSC) through case file at psc@navistar.com**

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