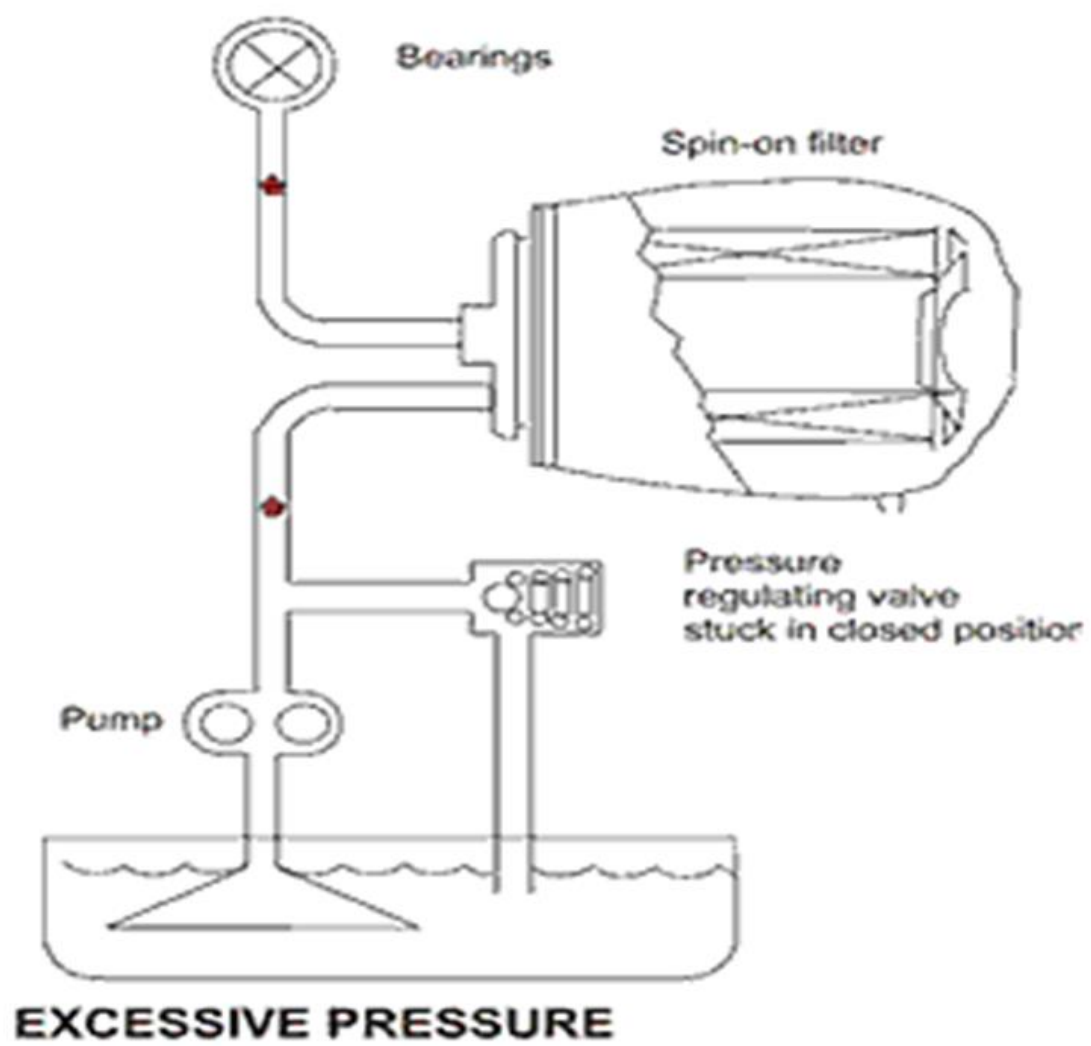


Damaged filter Identification











HYUNDAI

Technical Service Bulletin

GROUP

ENGINE

NUMBER

12-EM-006

DATE

SEPTEMBER 2012

MODEL

ALL MODELS

SUBJECT

USE OF AFTERMARKET ENGINE OIL FILTERS
CAUSING ENGINE KNOCKING NOISE

This bulletin supersedes TSB 05-20-002.

Description:

Some vehicles may experience an engine knock noise with the use of an aftermarket oil filter. Aftermarket oil filters may use different materials, construction and specifications than genuine Hyundai oil filters, which may lead to pressure variations within the engine, thus contributing to an engine knocking noise.

Vehicles Affected:

All Models

KIA/Hyundai engine recall 1.5 million

- **KIA, HYUNDAI ENGINE RECALL**

- Kia and Hyundai are recalling nearly 1.5 million cars and SUVs in the US, Canada and South Korea due to potential engine failures that can result in the engine seizing and the risk of a crash, according to the National Highway Traffic Safety Administration.
- Kia applications involve certain 2011- 2014 Optima, 2012-2014 Sorento and 2011-2013 Sportage vehicles.
- Hyundai applications involve certain 2013-2014 Sonata and Santa Fe Sport vehicles.
- The engine failure is due to machining errors during the manufacturing process, whereby metal fragments/debris were left in the engine, promoting bearing wear/failure. Engines affected are the 2.0L and 2.4L gasoline engines. Vehicle owners may contact Hyundai customer service at 800.633.5151, Kia 800.333.4542, the NHTSA vehicle safety hotline at 888.327.4236 or go to: www.safercar.gov

- **THERE'S MORE TO THE STORY**

- There is more to the story than what has been described in the recall notice concerning engine failures. The industry has been plagued with oil pressure related symptoms on the mentioned Kia and Hyundai applications. At one point, Kia produced a bulletin that basically implied that only OE oil filters were compatible with their engines and the warranty would not be covered on engine failures where an aftermarket filter was installed. This prompted much response from the aftermarket filter suppliers, and it was addressed aggressively by the filter manufacturers, as it was not in compliance with the Magnuson Moss Warranty Act.
- While there was no mention from the vehicle manufacturers and NHTSA in the engine recall notice concerning under/over pressurization of the lubricating system, be advised the same metal fragments illustrated in the engine failures can restrict movement of the pressure regulating valve, which controls oil pressure. One minute fragment of metal can result in a catastrophic engine failure or an under or over oil pressurization condition.

Oil filter TSB filter manufacturers

- PRODUCT BULLETIN Bulletin #: FP-16_01–MIGHTY Customer: All Mighty Customers Date: February 26, 2016 Subject: Hyundai/Kia Oil Filter Coverage Program Update
- Technical Bulletin: Date: March 4, 2016 TSB: 16.3.4JL Subject: MileGuard Spin-on Oil Filter P/N MO9688 used on Hyundai/Kia Vehicle Applications
- Service Pro Oil Filter M4459A & E4459A / M10479 Technical Bulletin Posted on [February 12, 2016](#) February 9, 2016 Technical Service Bulletin ENG 103
- BULLETIN NUMBER: 20160209 TO: Valvoline Oil Filter Catalog Users, All Formats FROM: MOTOR Specifications Data Acquisition DATE: February 9, 2016 SUBJECT: Hyundai and KIA Oil System Related Failures - TSB#: VF-OIL-02-TL
- Technical Bulletin: Date: March 4, 2016 TSB: 16.3.4SC Subject: Service Champ Spin-on Oil Filter P/N OF4459/WPH2808 used on Hyundai/KIA Vehicle Applications
- **Plus many more!**

	GROUP Engine	MODEL All
	NUMBER 114	DATE February 2012
TECHNICAL SERVICE BULLETIN		
SUBJECT: AFTERMARKET OIL FILTERS		

During engine research & development, the mechanical engine lubrication system is designed to operate at specific volumes and pressures to keep the reciprocating & rotary components properly lubricated. Kia has assigned specific guidelines for the use of oil filters (Cartridge / Spin-on) and oil viscosity to conform to; filtration, leak down, oil flow rate and pressure variations, and to keep the lubrication system at optimal performance.

The use of aftermarket oil filters / o-rings / improper oil viscosities could result in less than optimal filtration, leak down, oil flow rate and pressure variations due to different oil filter designs and construction. Some of the symptoms and concerns that may arise with aftermarket filters / wrong oil viscosities include but are not limited to:

- Valve Train Noise
- Low Oil Pressure With Warning Light On
- Engine Knocking Noise
- Cold Start Engine Noise (2-7 seconds duration)
- Idle / Cruising Speed Engine Noise
- Whistle Noises

Kia does not test or approve any aftermarket filters and only recommends the use of Kia genuine parts that are designed to operate at the specifications set forth during engine lubrication design and testing. If the engine oil has been changed recently and a noise condition has developed, perform an inspection of the oil filter and or Customer oil change maintenance records to help you in determining if an aftermarket filter or the wrong oil viscosity was used. If the vehicle is equipped with an aftermarket oil filter, perform an oil change and filter using the correct oil grade / viscosity and a replacement genuine Kia oil filter at the customer's expense. It is always best to use the electronic parts catalog, search by VIN to obtain the correct oil filter P/N; this will avoid confusion and possible engine damage.

Note: Customer concerns as a result of incorrect oil viscosity or use of aftermarket oil filter should not be treated as a warranty repair and any related damage is not warrantable, nor is changing the engine oil and filter to isolate this condition.



File Under: <Engine>

- Circulate To:** General Manager Service Manager Parts Manager
- Service Advisor(s) Technician(s) Body Shop Manager Fleet Repair

Reverse Plug

Jeep



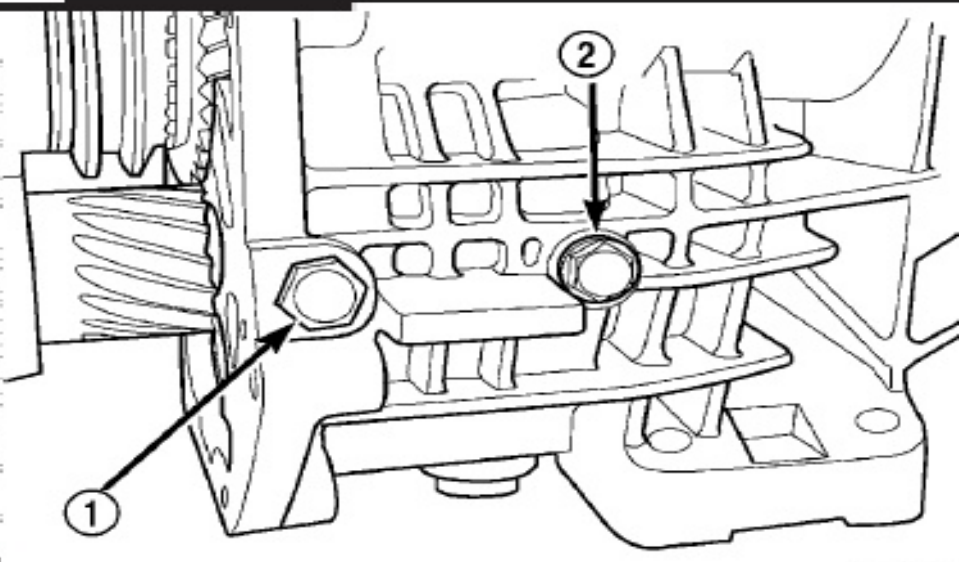
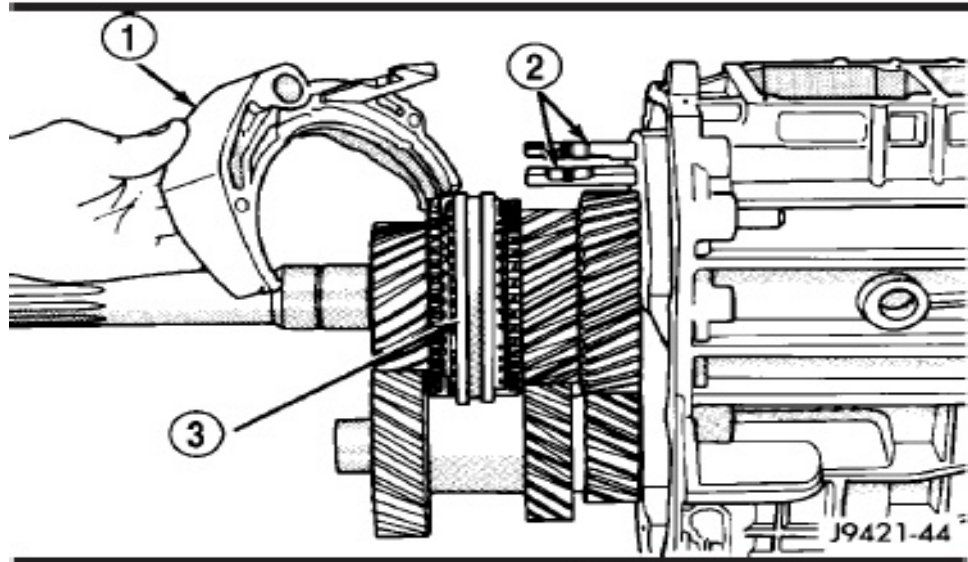


What it actually is

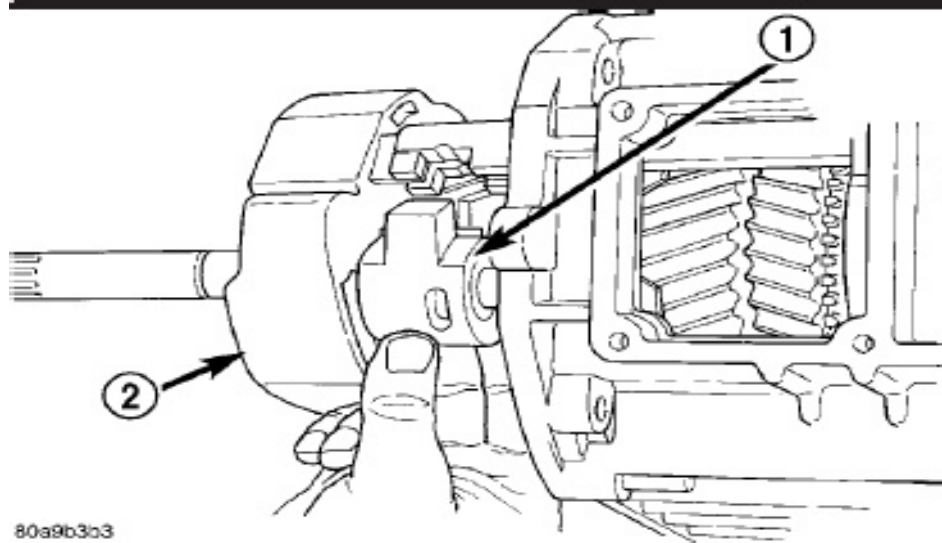
REVERSE IDLER SHAFT/ SUPPORT BOLT

It holds the idler shaft support containing the reverse gear assembly

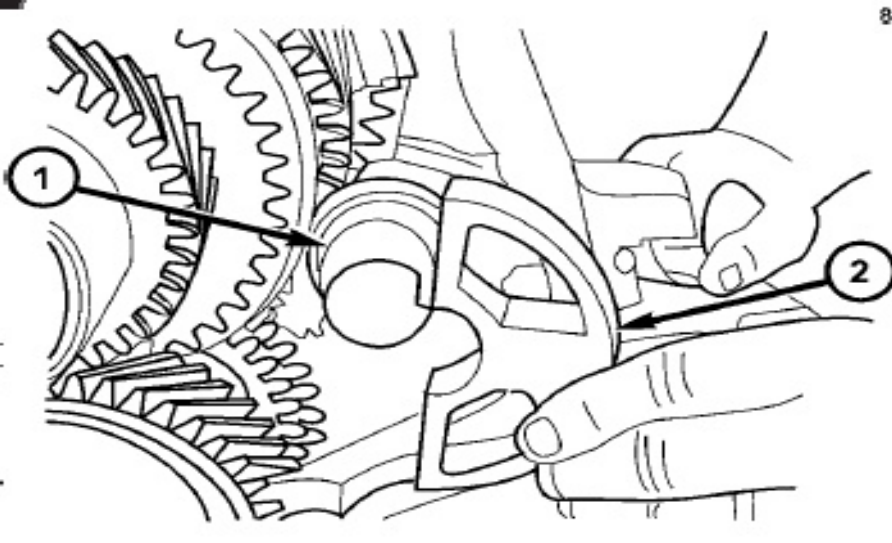




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What to do if it's pulled

- DO NOT under any circumstances move the vehicle or start it!
- There is a couple methods that have been successful (we know this because we have pulled them before....)
- Method 1: Use 2 flat head screw drivers to walk the assembly back into place where the hole is aligned. You may need to put a bit of grease in there so when it's aligned it wont fall down when installing the plug support.
- Method 2: Remove the correct check plug 1st then the drain plug 2nd. Use a piece of wire bent with a Y at the end and fish it through the drain plug and push the assembly back up to align the shaft and support holes looking through the support bolt hole. Reinstall support bolt.

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