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Coding Information

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Title: 2015+ N13 Cylinder Pack - Update for Excessive Lubrication Oil Consumption

Applies To: 2015+ N13

CHANGE LOG

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

02/25/2016 - Initial Article Release

DESCRIPTION

On certain N13B engines, carbon can build-up on the top lands of the pistons and cause the piston rings to stick leading to loss of oil control in the power cylinders and increased oil consumption.

An updated cylinder kit is now available to address this condition. The updated liner integrates a removable "anti-polish" carbon scraping ring which sits in a machined counterbore. This anti-polish ring (APR) has a smaller internal diameter than the rest of the liner that allows it to scrape carbon off of the top land of the piston during normal operation. This action of continuously removing carbon buildup from the top land of the piston prevents the rings from carbon packing and losing oil control in the power cylinders.

NOTE:

APR liners cannot be mismatched with standard non-APR liners. If for any reason an APR liner is installed in an engine, all 6 liners will need to be updated to the APR liners.

SYMPTOM(s)

Excessive Lubrication Oil Consumption (as defined by the diagnostic manual)

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number
Tool, Piston Cope	12-146-01
Cylinder Sleeve Puller	ZTSE2536
	ZTSE4787

Socket, Head Bolt (E24 Torx)	
Socket, External Torx (E18)	ZTSE4835
Tap, M18x2 Bottoming (Head)	ZTSE4855
Bracket, Cylinder Head Lifting	ZTSE4869
Set MaxxForce 11&13 Cap & Plug	ZTSE4891

SERVICE PARTS INFORMATION

CAUTION:

The following component inspections and/or replacements are not covered under warranty for this repair:

- Oil Pump
- Main Bearing
- Turbo
- Fuel Injector
- Oil Cooler
- Engine Oil (Recommended to replace at time of maintenance interval)
- Engine Coolant
- Cylinder Head

Any additional parts that are replaced will be considered customer responsibility.

NOTE:

The parts listed below are to be replaced under warranty during the warranty period. This is an update to correct the symptom of oil consumption on 2015+ N13 Engines and is not considered a overhaul. The parts listed below are the only parts covered for this symptom.

CAUTION:

The N13 Engine has two different cylinder liners available in the Parts Catalog. It is important to verify that the most up-to-date liner is being installed. Follow the parts listed below.

Kit Description	Part Number	Quantity Required	Notes
KIT, CYLINDER HEAD REMOVAL	2515548C9*	1	
GASKET, 13L CYLINDER HEAD	62039010402	1	
GASKET,OIL PAN	3003425C*	1	
KIT, OIL FILTER	3007498C9*	1	
KIT, PSTN SLV & RING (718 13L)	2514508C9*	6	
	2513433C91*	6	

KIT, 745 CONNECTING ROD BEARING- 1 CYLINDER			13L connecting rod bolt torque is CRITICAL. Follow the procedure EXACTLY as written using a calibrated torque wrench.
SCREW	62904900079	12	
SEAL O-RING 32 X 5	06569361612	1	
TUBE ASSEMBLY TURBOCHARGER OIL SUPPLY	3018397C9*	1	
GASKET	2601233C*	2	Aftertreatment DOC/DPF Gaskets
GASKET 4" EXH PIPE FLANGE	3846392C*	1	Exhaust pipe gasket

DIAGNOSTIC STEP(s)

Follow: [2015 N13 Engine Diagnostic Manual](#) for oil consumption diagnostics.

REPAIR STEP(s)

Follow: [2015 N13 Engine Service Manual](#) for base engine repairs.

CAUTION:

Due to the large amount of oil the engine has consumed, removal and baking of the DPF is required to ensure repair is robust.

13L connecting rod bolt torque is CRITICAL. Follow the procedure EXACTLY as written using a calibrated torque wrench.

WARRANTY INFORMATION

Warranty Claim Coding:

Group:	12000 - ENGINES
Noun:	146 - Ring, Piston

Standard Repair Time(s):

Description	Chassis	Engine	SRT	Notes
12 - CYLINDER HEAD OR REPLACE GASKET (I-6 ENGINES), R & R AND/OR REPLACE	7600	N13	N12-1342US	
	8600		Q12-1342US	
	ProStar		R12-1342US	
	5000		T12-1342US	
	CT660		TC12-1342US	

12 - PISTON AND/OR SLEEVE (I-6), REPLACE Models, ALL N13			A12-1192U	ONE
			A12-1192US-11	EACH ADDITIONAL
			A12-1192L-1	ROD BEARING REPLACE
18 - DPF CANISTER, REPLACE	Models, ALL	N13	A18-1859UT-20	Required for cleaning of DPF
18 - DOC CANISTER, REPLACE	Models, ALL	N13	A18-1859UT	Required for removal of DPF

OTHER RESOURCES

[Master Service Information Site](#)



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