Technical Service Bulletin Number
TSB150163

Technical Service Bulletin

Subject

Excessive Lubricating Oil Consumption on Engines Outside of Warranty or Extended Coverage Period

Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected:

- ISX15 CM2250
- ISX15 CM2250 SN
- ISX15 CM2350 X101

Issue

Some engines may experience an issue with excessive lubricating oil consumption outside of the warranty or extended coverage period.

- Reference Technical Service Bulletin, Anti-Polishing Ring Cylinder Liner Release to Prevent Bore Polish and Elevated Oil Consumption Caused by Piston Top Land Carbon Packing, Bulletin, TSB150069.
- Reference Technical Service Bulletin, ISX15 and QSX15 Early Life Oil Consumption Caused by Vertical Liner Lobing, TSB140030.

To address excessive oil consumption issues on engines outside of the warranty or extended coverage period in a more cost effective manner, a specially formulated lubricating oil, Valvoline™ Premium Blue Restore™, has been developed. Valvoline™ Premium Blue Restore™ can potentially reduce lubricating oil consumption rates on the affected engines by removing deposits from pistons, piston ring lands, and other engine components.

Verification

The use of Valvoline™ Premium Blue Restore™ should **only** be considered when:

- Fault codes related to frequent aftertreatment regeneration (Fault code 2754, 3375, 3376 or 5383) are accompanied by a complaint of lubricating oil consumption **OR**
- A documented oil consumption complaint with oil consumption rates greater (numerically lower) than 1100 miles per quart [1875 kilometers per liter]as indicated by maintenance or driver records, or a Cummins Inc. Engine Lubricating Oil Consumption Report Form 4755. See the link below for the Engine Lubricating Oil Consumption Report Form 4755.

NOTE: https://quickserve.cummins.com/common/files/qsol/en/warranty/engine_lubricating_oil_consumption_report_form.pdf

Further inspection may be required if the engine being evaluated is also experiencing the following:

- Lubricating oil filter plugging (Fault Code 143 or 415)
- High crankcase pressure (Fault Code 555 or 556)

These can be indicators of internal engine damage. If internal engine damage is identified, Valvoline™ Premium Blue Restore™ should **not** be used. Reference the Expert Diagnostic System (EDS) and/or service publication for the specific fault code or complaint being evaluated to determine the appropriate corrective action.

Resolution

If an engine meets the criteria in the Verification section above, the existing lubricating oil and lubricating oil filter can be replaced with the following:

- Valvoline™ Premium Blue Restore™ lubricating oil
- Cummins Filtration™ lubricating oil filter, Part Number LF14000NN

⚠ CAUTION ⚠

During the installation of Valvoline™ Premium Blue Restore™, a Cummins Filtration® LF14000NN™ lubricating oil filter **must** also be installed or premature lubricating oil filter plugging may result. Lubricating oil filter plugging can result in internal engine damage.

Purchasing Valvoline™ Premium Blue Restore™

For Cummins® Distributors:

- From either Valvoline™ or local Valvoline™ distributor **only**

For all others:

- From a local Cummins® Distributor **only**

Part Numbers for Valvoline™ Premium Blue Restore™

See Table 1 below for Valvoline™ Premium Blue Restore™ Part Numbers.

Table 1: Valvoline™ Premium Blue Restore™ Part Numbers	
Quantity [US Gallons]	**Valvoline™ Part Number**
55	868101
5	869810
1	869831

Installing the Lubricating Oil and Lubricating Oil Filter

- Valvoline™ Premium Blue Restore™ lubricating oil and Cummins Filtration™ lubricating oil filter, Part Number LF14000NN should be installed in place of the normal lubricating oil and lubricating oil filter by following the corresponding service procedures and lubricating oil pan capacities.
- Following the installation of Valvoline™ Premium Blue Restore™, if equipped with an aftertreatment diesel particulate filter (DPF), the INSITE™ Electronic Service Tool should be used to run an aftertreatment DPF restriction test to determine if maintenance cleaning or replacement of the aftertreatment DPF is required.
- See the ISX15 CM2250 Service Manual, Bulletin 4022250. Refer to Procedure 011-085 in Section 11.
- See the ISX15 CM2350 X101 Service Manual, Bulletin 4310641. Refer to Procedure 011-085 in Section 11.
- Cummins Inc. recommends that all customers update all applicable lubricating oil maintenance intervals or documents to ensure that the Valvoline™ Premium Blue Restore™ is **not** drained prior to the engine reaching the end of the customer's normal lubricating oil maintenance interval.
- See the ISX15 CM2250 Owners Manual, Bulletin 2883360. Refer to Procedure 102-002 in Section 2.
- See the ISX15 CM2250 SN Owners Manual, Bulletin 4310734. Refer to Procedure 102-002 in Section 2.
- See the ISX15 CM2350 X101 Owners Manual, Bulletin 4310639, Refer to Procedure 359-009 in Section 3.
- A maintenance interval reminder sticker will be included on Valvoline™ Premium Blue Restore™ product labels. The sticker is used to communicate the mileage and/or date when the next lubricating oil change needs to be made. The sticker should be filled in and placed on a clean surface inside the driver side door jamb.

Requirements for Best Results

- If the lubricating oil needs to be topped off, ensure that **only** Valvoline™ Premium Blue Restore™ is used. Cummins Inc. recommends three additional gallons of Valvoline™ Premium Blue Restore™ be obtained to allow for top off during the maintenance interval.
- For Valvoline™ Premium Blue Restore™ to achieve maximum deposit cleaning effectiveness, Cummins Inc. recommends that the published lubricating oil drain interval be followed. See the corresponding Owners Manual for applicable lubricating oil drain interval.
- Once the end of the maintenance interval has been reached, the Valvoline™ Premium Blue Restore™ and lubricating oil filter, Part Number LF14000NN, can be removed and normal lubricating oil and lubricating oil filter can be used.
- Cummins Inc. suggested that Valvoline™ Premium Blue Restore™ and lubricating oil filter, Part Number LF14000NN, be used **every** 120,000 to 160,000 miles [193,000 to 257,000 kilometers] to prevent engine deposits.

NOTE: Valvoline™ Premium Blue Restore™ is designed to remove carbon deposits from the piston, piston rings, and

associated components. Valvoline™ Premium Blue Restore™ is not guaranteed to improve oil consumption if the cylinder liners have already experienced polishing as a result of extended operation with carbon packing or the cylinder liners have severe lobing issues.

Document History

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2015-10-8	Module Created

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