

Dear Sirs

Occasionally, a high rate of lubricating oil consumption has been observed on the engine type L23/30H. MAN Diesel & Turbo has investigated the cause of the high lubricating oil consumption and found it to be the result of too high a lubricating oil level in the top cover. A too high lubrication oil level will cause too high lubricating oil drainage between valve spindles and valve guides.

In some cases, overhauls have revealed a large build-up of coke deposits on the valve cones and exhaust channels originating from the excessive flow of lubricating oil flowing from the valve guides.

A normal – and low level of lubricating oil in the top cover has been ensured by adding one extra drain hole in the roller guide draining to the oil sump. The existing roller guides can be modified by crew. A guideline for the modification is enclosed with this Service Letter. The new modified valve roller guides can be ordered from our PrimeServ sales organisation.

The investigation also revealed a second issue related to correct drainage of the lubricating oil from the top cover. In a few cases, incorrect dimensions of the push rods and protecting tube have restricted the oil flow. The outer diameter of the push rod must be 25 mm and the inner diameter of the protecting tube must be 30 mm. If the dimensions of the push rod and the protection pipe are incorrect, they must be replaced to obtain a correct drain flow from the top cover. The roller guide with two drain holes has been introduced as the standard on new engines since July 2014.

For the L23/30H type engine, two types of lube oil can be used; SAE30 and SAE40. However, thermostatic elements must be in accordance with the viscosity of the lube oil. For SAE30, a 60°C thermostatic lube oil element must be selected, and for SAE40, a 66°C thermostatic lube oil element must be selected. Incorrect thermostatic elements may also be the cause of drain problems from the top cover.

In case of any questions, please do not hesitate to contact the Operation Department in Holeby at [LEO9-hol@mandieselturbo.com](mailto:LEO9-hol@mandieselturbo.com)

Yours faithfully

  
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Encl.

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**Action code: WHEN CONVENIENT**

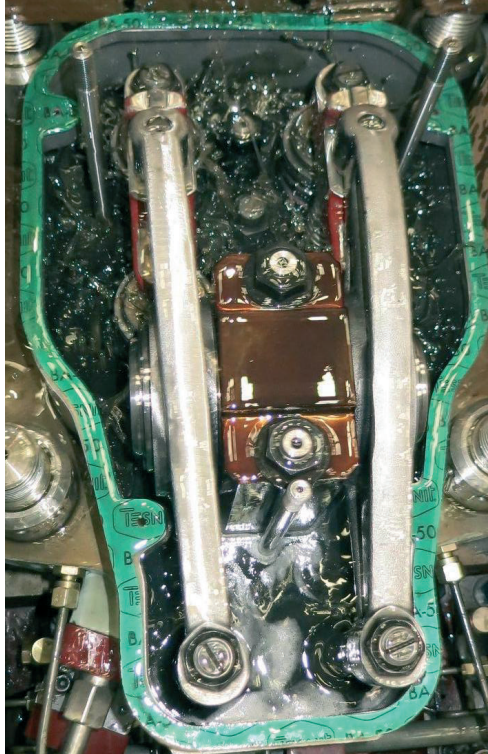
## Lubricating Oil Consumption

SL14-594/KEL  
 December 2014

**Concerns**  
 Owners and operators of  
 MAN four-stroke diesel engines.  
 Type: L23/30H GenSet

**Summary**  
 Too high lubricating oil level in the top cover can cause increased lubricating oil consumption.

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# Modification of valve roller guide L23/30H



**Kjeld Lorentzen**

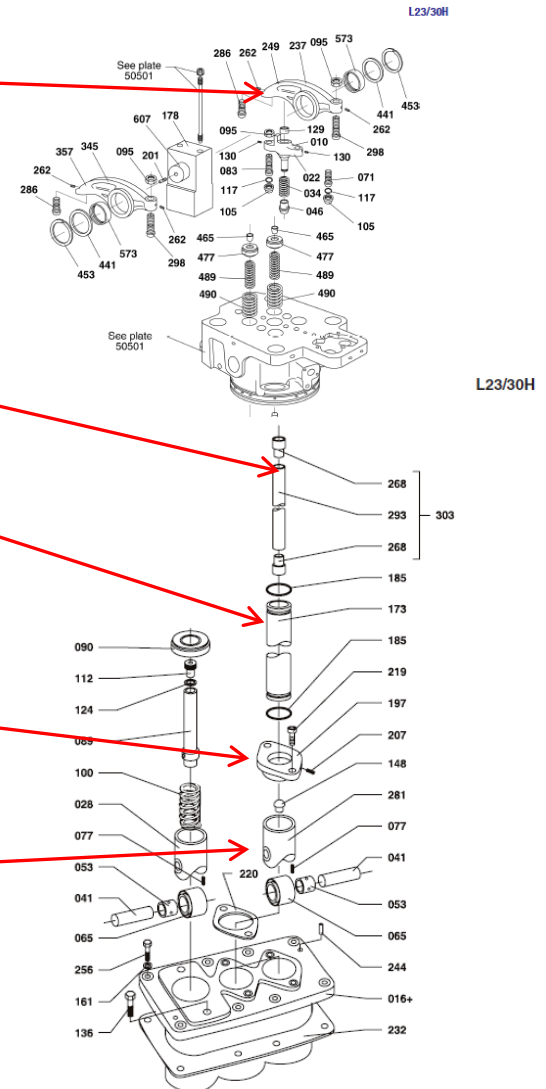
**LEO9**

**Holeby, December 2014**

# Modification of valve roller guide



- Dismantle the rocker arms
- Dismantle the push rods
- Dismantle the protection pipe for push rod
- Dismantle the flange for push rods
- Dismantle the roller guide for valve



# Modification of valve roller guide



Dismantle the locking screw



Dismantle the pin and roller



Punch mark opposite side of the existing drain hole

# Modification of valve roller guide



Punch mark



Align the roller guide



Drill an 8-mm hole



# Modification of valve roller guide



New drain hole



Clean the roller guide by air and diesel oil if required.



# Modification of valve roller guide



Check for particles



Install the roller  
and pin



The key must be  
aligned according to  
roller guide

# Modification of valve roller guide



The locking screw must be installed and secured by means of Locktite 243.

- Install the roller guide in the housing
- Install the push rod pipe and protection pipe
- Install the rocker arms
- Adjust the valve clearance according to instruction manual.