



भारतीय रेल (रेल मंत्रालय)
डीजल रेल इंजन कारखाना
वाराणसी-२२१००४, भारत
INDIAN RAILWAYS (MINISTRY OF RAILWAYS)
DIESEL LOCOMOTIVE WORKS
VARANASI-221004, INDIA



स्वर्ण जयंती
डीजल रेल इंजन कारखाना, वाराणसी
व्यवस्थापक कार्यालय, वाराणसी

No. dlw.m.65.4.2g

Date: 18/05/2014

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ED(MP),
RDSO, Lucknow

Sub: Increase in lube oil sump capacity by 25%. - *issue of Mod sheet*

- Ref: 1) Discussion during DMG meeting held at Chennai on
9th & 10th 2014.
2) This office letter of even no. dated 30/01/2014

- 1) In pursuance to the discussions during DMG meeting, DLW has explored options for adding to the lubricating oil capacity. The present capacity of the lubricating oil is dictated by the following:
 - The oil level should be below the handhole cover hole in the shutdown condition (to enable maintenance access).
 - The oil level should be below the counter weights in working condition (to prevent splashing)
 - The oil level should be below the likely seepage points – the lowest such point is the mounting hole of the accessory drive.
- 2) Keeping these criteria as a reference points, it was decided to explore increase in usable oil capacity by 25%. Since at the existing "high" level mark each inch increase in height adds 79 litres, the lube oil level raised by 2" i.e. 160 litres above high mark. The results are as below:
 - a) Lube oil level in shut down condition:

With 160 litres above high mark, this level is found to be 20mm below hand hole cover. Thus the level is adequately to allow opening of hand hole cover in shutdown condition.
 - b) Lube oil level during working condition:

This level is found be to 80 mm below hand hole cover hole. However, of the likely seepage pints, three bottom spline nuts of cam shaft housing and seven bottom bolts of accessory drive cover are submerged in the oil.

