

GOVERNMENT OF INDIA, MINISTRY OF RAILWAYS
RESEARCH DESIGNS & STANDARDS ORGANISATION

105
KANAK NAGAR, LUCKNOW-226 011

No. EL/3.1.3

Dated: 12 May 1981

MODIFICATION SHEET NO. RDSO/TAE-4/112

MODIFICATION TO AIR SANDING CIRCUIT

1. OBJECT

1.1 While negotiating critical loaded and curved sections the drivers normally resort to continuous sanding as a precautionary/preventive measure. This may result in the loss of air pressure. It is recommended that only the leading sanders of each bogie should be operated during running, since it is considered that under running condition, operation of leading sanders is adequate for preventing wheel slip.

2. WORK TO BE DONE

2.1 Sanding circuit is to be modified so that sanders No. 1, 2 & 4 (or 6, 5 & 3) are operated at start and sanders of only the leading axles are operated during the run. Two switches as ZVES2 and ZVES4 are to be provided, one in each cab (ZVES2 in Cab 1 and ZVES4 in Cab 2), on the driver's desk as per RDSO.SKE-3390. The modification to the pipe work of the pneumatic circuit has already been advised vide RDSO's Letter No. S.DEV.L.20.1 dated 10.4.1981.

- NOTE:
- (1) While driving from Cab 1, the driver should close switch ZVES2 before start, so that sanders (1,2&4) are operative.
 - (2) While driving from Cab 2, the driver should close switch ZVES4 before start, so that sanders (6,5&3) are operative.
 - (3) When the locomotive has picked up a speed of about 30 km/h, the respective switch ZVES2/ZVES4 is to be put off by the driver so that during running only leading axle sanders are operative.
 - (4) After doing the above modification, Sheds/CLW should ensure that the sanders are working as per the above requirements.

3. APPLICATION

LM-4 class locomotives.

4. MATERIAL REQUIRED

- (i) 110V, 5A switch - 2 Nos.
- (ii) 3 mm² cable of required length.

MATERIAL RENDERED SURPLUS

Nil.

DRAWING NO.

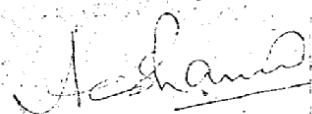
SK.EL-3390

AGENCY FOR MODIFICATION

- (1) Railways - Electric Locomotive Sheds and POU Sheds for locomotives in service.
- (2) CLW - For locomotives under production.

5. DISTRIBUTION

As per mailing list attached.



(A. C. Sharma)
for Mah Nideshak (Vidyut)

Encl: SK.EL-3390.

RNS
4.5.81

