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Government of India
Ministry of Railways
Research Designs & Standards Organisation

No. RL/3.2.53/2/ADL-02

Manaknagar, Lucknow-11
Dated 24 July, 1981

MODIFICATION SHEET No. RDSO/WA 14/113.

Modification to Siemens make programme switches for minimising failures of Bakelite catch lever arms.

1. Object

1.1 Railways have reported breakage of bakelite catch lever arms holding the operating spring of Siemens switch model K-138 (25A). Generally the breakage occurs at the heel engaged in the metal base. Investigations have revealed that there are three common causes for these failures :

- (a) Misalignment between the switch and the hub for ZPT application.
- (b) Spurious spares procured from the trade.
- (c) Poor quality of bakelite material.

1.2 The object of this modification is to replace the existing bakelite catch lever arms with cast aluminium alloy levers for preventing such breakages.

2.0 Work to be done

2.1 Procure cast aluminium alloy levers and replace the existing bakelite levers, giving priority for ZPT application.

2.2 If required, sharp edges of the cast lever coming in contact with the roller pin may be finished with a fine file, for smooth operation. Avoid removal of excess material.

2.3 Original levers can be identified by the following legends embossed :

Out side 1110011

Inside .0055 (51) or Blank (1) or (2)

In case the markings are otherwise, the levers shall be replaced on priority.

Reference

Baroda Shed has tried catch levers made of aluminium and the same have given satisfactory service. The original catch levers were used as a pattern for making the aluminium catch levers.

Application

All locos with Siemens make programme switches.

Material required:

Catch lever arm made of aluminium casting alloy, grade 4600 to IS:617-1975, 2 nos. per switch.

Material rendered surplus:

Two nos. bakelite catch lever arms (for each switch) to be discarded.

Drawing No. - SK EL 3402

Agency for Modification:

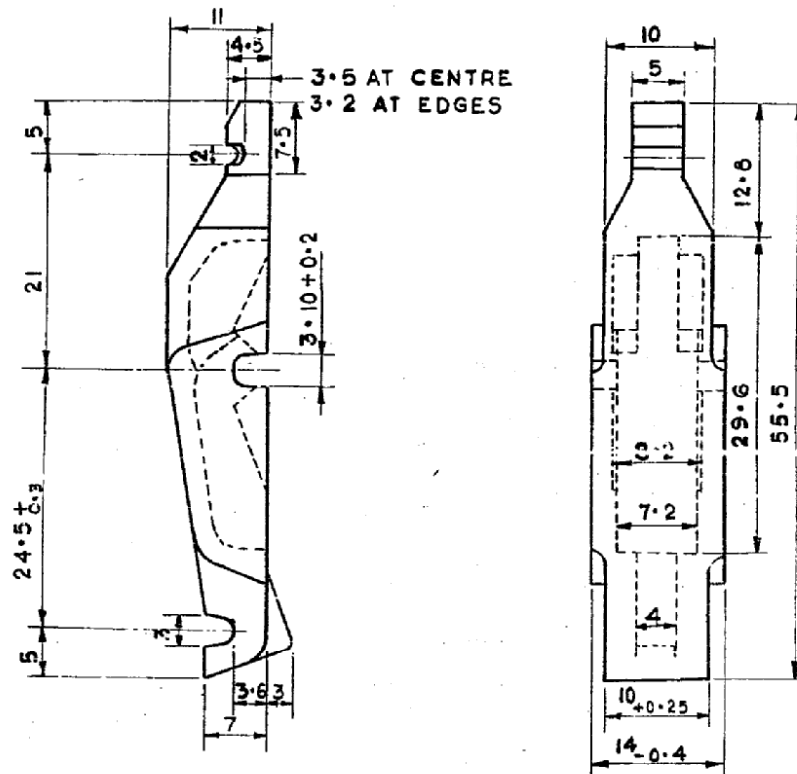
- 1) Railways - Electric Loco Sheds and POH Shops for loco in service.
- 2) CLW - For locos under production.

Distribution: As per mailing list.

SK EL - 3402

(T.V. Sastri)
for Director General (Ele)

SKEL. 3402



MATERIAL:- ALUMINIUM ALLOY - DIE CAST/PRESSURE DIE CAST
GRADE 4600, IS: 617-1975

NOTE:- DIMENSIONS GIVEN ARE FOR GUIDANCE ONLY.
ORIGINAL SIEMENS LEVERS IDENTIFIED AS IN PARA
2.3 OF MS/RDSO/WAM4/113 MAY BE USED AS PATTERN
FOR THE ALUMINIUM ALLOY CAST LEVER.

WAM4/113

EL 201/12557 MICRO FILMED 5/87

REF. SIEMENS SWITCH L80/K-138-25 Amps SCALE:- 2:1 APPROVED JVSJABti

CATCH LEVER FOR
OPERATING MECHANISM

R.D.S.O. ELEC. DTE SKEL. 3402

DT	26-6
D	26/6/75
T	