

MODIFICATION SHEET NO WAG7/8**(MS/0276)****DROPPING OF SPLIT PIN COTTAR FOR EQUALISER PIN IN
HIGH ADHESION BOGIES****1. OBJECT**

Railways have reported the problem of dropping of split pin cottar (6 x 20 x 120 long) through the slot of equaliser pin in WAG7 locomotive. This is due to different sizes of slot provided on equaliser pins. It is reported that there are three sizes of slots on different equaliser pins. Also it is reported that the breakage of split pin at the splitted portion and dropping of split pin--cottar causes falling of the equaliser beam on track causing derailment of locomotives.

To eliminate the above safety problems RDSO have studied the arrangement of split pin cottar provided in WCAM3 locomotive (built by BHEL) running on Central Railway, Kalyan Shed, WAG7 locomotive based at Kanpur Shed, suggestion given by Ajni Shed, Central Railway during the MSG Meeting and the present arrangement. of split pin being provided by CLW. On studying all the above the following improvements have been made by RDSO to solve the above problem :-

(i) The shape of the head of the split pin cottar has been modified from rectangular to a circular shape because the rectangular cottar has been reported to be falling down from the equaliser pin slot. By making it circular with a diameter of 18 mm the chances of its falling down by slipping through the equaliser pin slot shall be arrested.

(i i) The length of the split pin cottar has been increased to 140 mm so as to have sufficient projected length for easier splitting of the cottar leading to a larger split radius which will give lesser stresses at the splitted portion thus reducing the chances of breakage at the splitted portion.

(iii) The split pin cottar being provided at present are generally corroded due to bare iron and uneven surfaces. Therefore provision of cadmium plating and passivated coating to a thickness of 0.015 mm has been provided.

2. **REFERENCE DRAWINGS**

CLW Drg. No. 06 / 1 / 15 / 1 and 06/1/15/38.

3. **DETAILS OF MODIFICATION**

As per enclosed RDSO Drg. No. SKEL 4456.

4. **WORK TO BE CARRIED OUT**

To replace old split pin cottar with modified split pin cottar as per RDSO Drg. No. SKEL 4456 at all locations of high adhesion bogies fitted on WAG7 locomotive. (Ref. CLW Drg. No. 06/4/15/16 for location of equaliser pins i.e. 28 Nos. per loco.)

5. **APPLICATION TO CLASS OF LOCOS**

All locos fitted with high adhesion bogies i.e. WAG7 WCAM3 & WCM6.

6. **AGENCY OF IMPLEMENTATION**

(i) A11 electric loco sheds holding WAG7, WCAM3 and WCM6 locomotives.

(ii) CLW / Chittaranjan.

(iii) All POH shops.

7. **MATERIALS REQUIRED**

Hot Rolled Steel Sheet of size 3.15 thick x 16 mm.

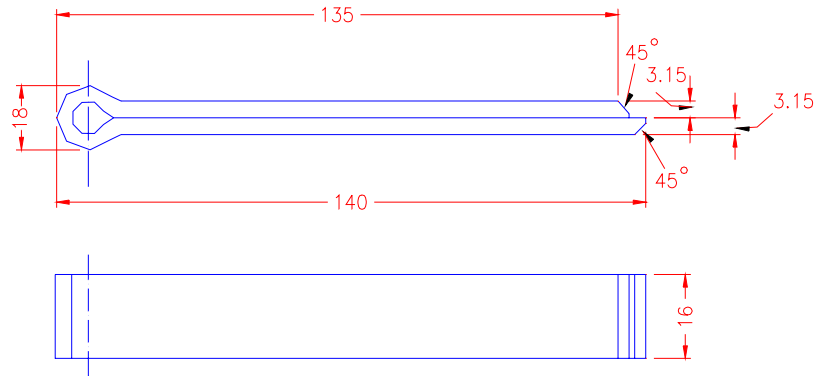
8. **MATERIAL RENDERED SURPLUS**

Nil

9. **DISTRIBUTION**

As per list enclosed.

(V.K.Aggarwal)
for Director General / Elect



NOTE:-

1. ALL DIMENSIONS ARE IN mm
2. FOR MATERIAL & DIMENSIONS REFER IS:2638
3. FINISH: TO BE CADMIUM PLATED AND PASSIVATED
TO THE THICKNESS 0.015
4. ALL SHARP EDGES AND CORNERS ARE TO BE ROUNDED
OFF BEFORE PLATING.

REFERENCE
CLW.DRG.No.06/4/15/1,38
BHEL.DRG.No.3719 15 04 007

SCALE:- NTS

APPROVED BY:-

1.4.98
(FOR D.G.)

FLAT SPLIT PIN COTTER FOR
HIGH ADHESION BOGIES
WAG-7 AND WCAM.3 LOCOMOTIVES.

RDSO. ELEC. DTE.

SK.EL-4456

Dt.	30.3.98
D	Lav. Kushi Mishra
T	
C	R.K.B. Rao