# Government of India, Ministry of Railways, Research, Designs & Standards Organisation

#### Manak Nagar, Lucknow - 226 011

No. EL/3.1.3 Dated: 24.11.99

#### Chief Electrical Loco Engineers

- -Central Railway, Mumbai CST 400001
- -Eastern Railway, Fairlie Place, Calcutta 700001
- -East Central Railway, Chandrashekharpur, Bhubaneshwar 751001
- -Northen Railway, Baroda House, New Delhi -110001
- -North Central Railway, Hasting Road, Allahabad 211001
- -Southern Railway, Park Town, Chennai 600003
- -South Central Railway, Rail Nilayam, Secunderabad –500371
- -South Eastern Railway, Garden Reach, Calcutta 700043
- -South Western Railway, Bangalore 560046
- -Western Railway, Church Gate, Mumbai 400020
- -West Central Railway, Jabalpur
- -New Zone Railway, Bilaspur
- -Chittaranjan Locomotive Works, Chittaranjan 713331

#### Modification Sheet No. ELRS/MS/0272, Rev 'O'

#### 1.0 **Title:**

Provision of brass ferrule in place of aluminum ferrule on roof bars.

#### 2.0 **Object :**

There are a number of cases of flashing, over heating and melting of aluminum ferrule in roof bars. As a result, unschedule attention is required for flashed/overheated roof bars at knife contact mating with tube and ferrule.

To overcome the above problems, provision of brass ferrule with increased collar diameter has been made in place of existing aluminum ferrule.

#### 3.0 Work to be carried out:

Roof bars ferrule and check nut are is to be produced/manufactured made of/from high tensile brass (IS 304-81) as per enclosed drawing.

### 4.0 Applicable to class of locomotives :

All class of AC Electric Locomotives.

### 5.0 Material Required

High tensile brass rod of 40 mm dia as per IS:304-81

## 6.0 Material Rendered Surplus:

Two nos. of aluminum ferrule and check nut of each existing roof bar.

### 7.0 **Reference:**

Suggestion received from South Eastern Railway vide their letter no. CEE/RS/220-B dated 26.2.99.

### 8.0 **Modification Drawings:**

Enclosed as Annexure I.

### 9.0 Agency of Implementation:

All Electric Loco Sheds, Workshops, CLW & BHEL/ Jhansi.

### 10.0 **Distribution**

As per enclosed list.

Encl : As above

To

(O.H.Pande)

For Director General/Elect.

