

Ministry of Railways
Research, Designs & Standards Organisation

No. EL/2.2.36

Lucknow,
Dt. 30th June, 1979.

Modification Sheet No. RDSO/WAM-4/79

Replacement of existing 3.00 mm² CIW type
18, 19 and 20 cable sockets by new Sockets
18A, 19A and 20A.

1. Object of Modification:-

1.1 Some types of existing sockets do not have provision for gripping of insulation of 3.00 mm² cables and a number of cases of snapping of wires from the sockets were reported by Railways. Use of new sockets on C.118 contactor was recommended by CIW vide modification No. CIW/WAM-4/44. Railways have reported that this type of sockets with insulation grip has given satisfactory service and is, therefore, recommended for all 3.00 mm² cables for original fitment and replacements when sockets fail.

1.2 Priority may be given to those locations where failures are frequent due to higher levels of vibrations.

2. Work to be carried out:-

2.1 The new sockets and the matching tool shall be used to crimp the socket on cable so that both conductor and insulation are properly gripped in the socket.

2.2 Test one percent of sockets crimped by pull-out test. The pull-out force shall not be less than 30 Kg. If the pull-out load is less than 30 KG the crimping tool may have to be replaced. The design of the socket may also be checked. Sockets tested in this manner should not be re-used.

3. Application to Class of Locomotives:-

3.1 All electric locomotives manufactured by CIW.

3.2 All imported electric locomotives using about 3.0mm² cable.

4. Material required:- Sockets in number as required.

5. Material rendered surplus:- NIL

6. Reference:- CIW Modification No. CIW/WAM-4/44

7. Modification Drawing:- RDSO SK. EL--3112

8. Agency for modifications:-

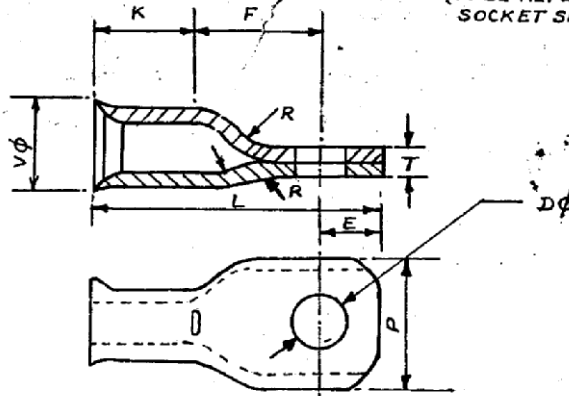
8.1 CIW for Locos under production.

8.2 All Railways for existing Locomotives.

9. Distribution:-

Sd. xx xx xx,
(Signature)

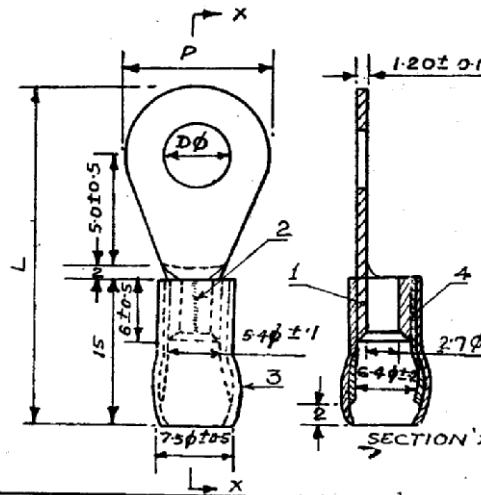
EXISTING SOCKET
(TO BE REPLACED BY THE NEW
SOCKET SHOWN BELOW)



DIMENSIONS IN MM

TYPE	B ±0.25	C ±0.25	D ±0.1	E ±0.5	F ±0.5	K ±0.5	L ±1	P ±0.2	T ±0.1	V ±0.1
18	2.6	4.6	5.2	4.5	7.0	6.0	17.5	8.0	1.4	5.5
19	2.6	4.6	4.2	4.5	7.0	6.0	17.5	8.0	1.4	5.6
20	2.6	4.6	3.2	4.5	6.0	6.0	16.5	7.0	1.6	5.6

NEW SOCKET



SIZE	TYPE	D ±0.1	P ±0.2	L ±1
3	18A	5.2	8	26
3	19A	4.2	8	26
3	20A	3.2	7	25.5

REF.
1. CABLE SOCKET
2. SILVER BRAZING (TOI
2927 BA-CUPS)
3. PVC SLEEVE 0.5 mm
THICK.
4. COPPER SLEEVE 0.25
mm THICK!

REF: WAM4/79

SCALE: NTS

APP. BY: S. Shukla

SOCKET FOR 3mm² 750V GRADE RUBBER CABLES

R.D.S.O. ELECT. DTE.

SKEL-3M2.

DT	15-6-79
D	Shukla
T	
C	