Government of India
Ministry of Railways
Research, Designs & Standards Organisation
Manak Nagar, Lucknow - 226 011

No. EL/3.2.30/J-6 Dated : 29.5.1986

MODIFICATION SHEET NO. RDSO/WAM4/152

STAGGERING OF RGR GRIDS OF TAP CHANGER NO. 32 HBB MAKE

1. OBJECT

Railways have reported a few cases of melting/overheating of indigenous grids. Investigations have revealed that these failures are mainly due to touching of the grids in vibration with each other during loco run. It is, therefore, proposed to stagger the grids to increase the end spacing between the elements and facilitate better cooling.

2. WORK TO BE CARRIED OUT

- Dismantle the existing RGR grids,
- Assemble the RGR elements by staggering them alternately from both sides instead of one side of insulated tubes as per enclosed drawing.
- Washer arrangement between the grids are the same as in the existing assembly.
- Provide necessary punched washers on both ends of RGR grid assembly as shown in SK EL 3892.
- Measure the resistance value of modified resistor assembly . It should be within 1.6±10% Ohm.

3. APPLICATION TO CLASS OF LOCOMOTIVES

All electric locomotive fitted with indigenous RGR on Tap Changer type No.32.

4. MATERIAL REQUIRED

Nil

5. MATERIAL RENDERED SURPLUS

Nil

6. REFERENCE

Item 9 (Page 6) of the minutes of the meeting held between Railways and M/s HBB in Jan. 1986 circulated vide RDSO letter No. EL/3.2.30/J-6 dated 14.2.1986.

7. Modification drawing No. SK EL 3892

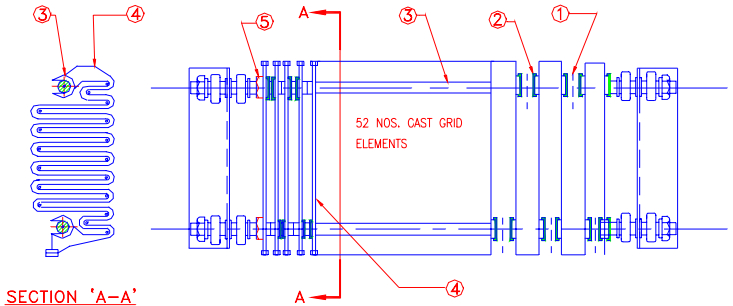
8. AGENCY OF IMPLEMENTATION

- Railways for existing locomotives.
- CLW for locos under production.
- M/s HBB on new supply of tap changer.

9. DISTRIBUTION : As per the list attached.

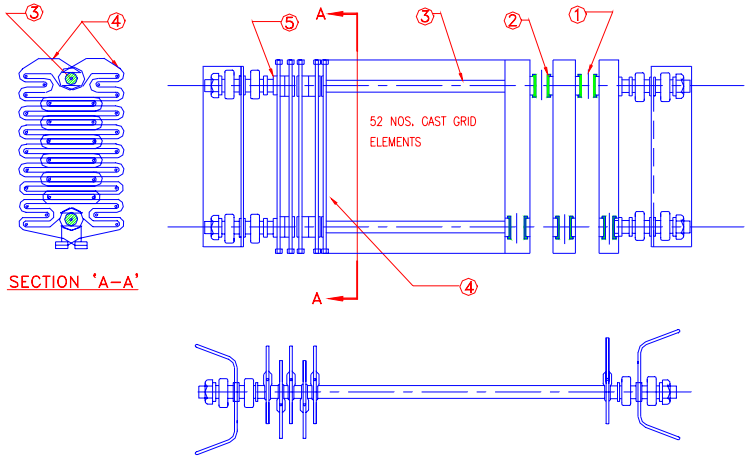
(S.S. Khurana)
for Director

Encl.: SK EL : 3892.
General/Elect



SECTION 'A–A'

EXISTING GRID ARRANGEMENT



SECTION 'A–A'

MODIFIED GRID ARRANGEMENTS

5	PLAIN WASHER (AS REQD.)		EXISTING
4	GRID ELEMENTS	52	"
3	STUD	2	"
2	SPECIAL WASHER	106	"
1	INSULATING WASHER	67	"
PART No.	D E S C R I P T I O N	QTY	MATL / SPEC

REF :- | SCALE:- 1:1 | APPROVED:- FOR D.G.

MODIFIED GRID ARRANGEMENT OF TRANSITION RESISTANCE (RGR) FOR TAP CHANGER

RDSO.ELEC. DTE. SK.EL.–3892

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