

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

No. EL/3.2.172

Dated 27.2.1998

Modification Sheet No. RDSO/WAG 5/27

(New No. WAG5/240)

1. Title : Adoption of modified insulating rod assembly (for positive & negative support) and modified fixation arrangement of BHRR flexible cable interconnectors for Traction Motor type HS 15250A.

2. Application : Traction Motor type HS15250A.

3. Object : Railways have reported that during the maintenance the shed people are facing problems to open & refit the brush holder flexible interconnectors and positive & negative flexible lead connections from their respective brush holder box arm and insulating rod assemblies, while the motor is in assembled condition due to bolt heads being inaccessible.

This matter has also been discussed in the meeting held at CLW/Chittaranjan on 23rd & 24th Dec'97 on the performance of WAG7 loco & Hitachi Traction Motors, where the representatives from Railway Board, RDSO, CLW, Zonal Railways, M/s BHEL and CGL participated.

To Improve the performance of Traction Motor as well as to overcome the above maintenance problems, it is recommended to adopt the modified insulating rod assembly for positive and negative support as per RDSO Drg. No. SKEL.-4439 and also follow the modified fixation arrangements for the BHRR interconnectors and positive and negative flexible lead at the respective brush boxes as per RDSO DRg. No. SKEL. 4450. In the modified layout or interconnections, the fixing bolts are accessible while the YM is in assembled condition.

4. Work to be Carried out. :

- 4.1** Remove the existing insulating rod assembly for positive and negative support.
- 4.2** Refit the modified insulating rod assembly for positive & negative support, procured as per RDSO Drg. NO. SKEL.-4439 at the respective position.
- 4.3** Machine/Mill the brush box arm by 1mm from top side instead of machining milling 1 mm from lower side, to have proper seating base for brush holder interconnecting head cable and also positive/negative insulating rod assembly flexible interconnectors on it.

- 4.4 Reconnect all the flexible connectors as per RDSO Drg. No. SKEL.-4450.
- 4.5 Tighten the connections at the brush box arm and positive and negative support insulating rod assembly properly at the specified torque of 4.18 kgfm and 10.2 kgfm from respectively.
5. **Reference :** RDSO Drg. No. SKEL.-4439 & 4450 (copy enclosed).
6. **Periodicity of implementation :**
Whenever the Traction Motors are taken out from bogie for any repairs or major overhauling (IOH/POH).
7. **Agency of implementations :** -
– TM manufacturers
– TM workshops
– POH/repair shops
– Electric loco sheds
8. **Distribution :** As per enclosed list.

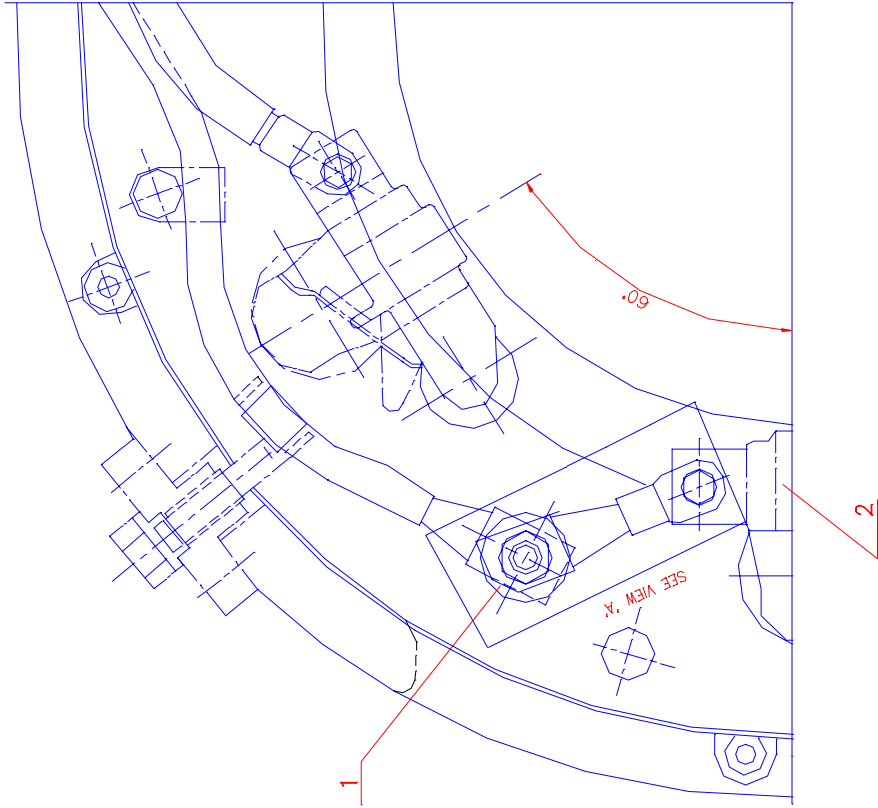


(R. K. Kulshrestha
)
for Director
General/Electrical

Encl: As Above.

(RDSO Drg. No. SKEL. 4439 and 4450)

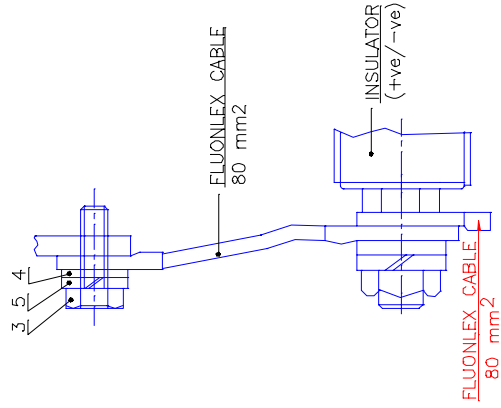
8	7	6	5	4	3	2	1																																																
F				ALT.NO. AUTHORITY	DESCRIPTION	INITIAL	DATE																																																
E																																																							
D	<p>NOTES :-</p> <ol style="list-style-type: none">1. DIMENSION OF TEFLON SLEEVE(ITEM 4) BEFORE ASSEMBLY O/D=525 I/D=44±0.1,L=472. HEAT THE SLEEVE TO 250°~280°C FOR SHRINKAGE OVER INSULATION(ITEM-3)3. EXPOSED STEEL PARTS SHALL BE ZINC PLATED/CADMIUM PLATED4. CHAMFER ALL SHARP CORNERS TO 0.5X0.5 WHERE NOT SPECIFIED.5. TOLERANCE ±0.2 WHERE NOT SPECIFIED.6. THE INSULATOR SPECIALLY THE BINDER SHALL BE SUITABLE FOR<ul style="list-style-type: none">(i)CONTINUOUS WORKING TEMPERATURE 150°C AND ALSO (ii) OCCASIONAL OVER HEATING AT 200°C FOR LONG DURATIONS 16~24 HRS WITHOUT LOSS OF PROPERTIES7. INSULATORS SHOULD COMPLY WITH THE FOLLOWING MECHANICAL AND ELECTRICAL PROPERTIES:-<ul style="list-style-type: none">(i)ULTIMATE TENSION NOT LESS THAN 3250Kg(TYPE,TEST,FOR EACH LOT).(ii)ROUTINE TENSILE STRENGTH TEST AT 2000Kg.(iii)BENDING STRENGTH : MORE THAN-200Kg X 65 mm. (SEE FIG-1)(iv)TORSIONAL STRENGTH : MORE THAN-30Kg M (SEE FIG-2)(v)INSULATION RESISTANCE : MORE THAN 1000 MEGAΩH.(vi)ALL INSULATOR TO BE TESTED AT 15KV. 50C/S FOR ONE MINUTE IN AIR(vii)ONE SAMPLE FROM EACH LOT SHALL WITHSTAND 32 KV. 50C/S FOR ONE MINUTE IN OIL.																																																						
C	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
B	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					
F	<table><tr><th>ITEM</th><th>DESCRIPTION</th><th>QTY./TM</th><th>MATL.</th><th>SCALE:</th><th>NTS</th><th>APPROVED</th><th>SPECN.</th></tr><tr><td>4</td><td>TEFLON SLEEVE</td><td>2</td><td></td><td>SEE NOTE</td><td></td><td></td><td></td></tr><tr><td>3</td><td>INSULATION</td><td>2</td><td>GLASSBON DED MICA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>IS:961-75 HTW 58 ST/BS:970-72STEEL080M40</td></tr><tr><td>1</td><td>STEEL FITTING</td><td>2</td><td>H.T.STEEL</td><td></td><td></td><td></td><td>-DO-</td></tr><tr><td>-</td><td>INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</td><td>2</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>REF:CLW.DWGNO.31WD.095 007</p> <p>TRACTION MOTOR HS.15250A INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)</p>							ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.	4	TEFLON SLEEVE	2		SEE NOTE				3	INSULATION	2	GLASSBON DED MICA					2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40	1	STEEL FITTING	2	H.T.STEEL				-DO-	-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2					
ITEM	DESCRIPTION	QTY./TM	MATL.	SCALE:	NTS	APPROVED	SPECN.																																																
4	TEFLON SLEEVE	2		SEE NOTE																																																			
3	INSULATION	2	GLASSBON DED MICA																																																				
2	STEEL FITTING	2	H.T.STEEL				IS:961-75 HTW 58 ST/BS:970-72STEEL080M40																																																
1	STEEL FITTING	2	H.T.STEEL				-DO-																																																
-	INSULATING ROD ASSEMBLY (FOR+Ve & -Ve SUPPORT)	2																																																					



NOTE :-

SCREW WITH SPRING AND PLAIN WASHER (ITEM 3,4,5) ARE CHANGED FROM BOTTOM SIDE TO TOP SIDE FOR EASE OF MAINTENANCE REFER RDSO MODIFICATION SHEET WAG5/27.

VIEW 'A'



5	SPRING WASHER B12	6	-	IS:3063-94(Zn PLATED)
4	PLAIN WASHER M12	6	-	IS:2016-67(Zn PLATED)
3	HEX.HD.SCREW, M12X28	6	-	IS:1364pt2'92-8.8P
2	BRUSH HOLDER ASSY.	6	SKEL-4442	-
1	INSULATING ROD ASSY(+ve/-ve)	2	SKEL-4439	-
ITEM NO.	DESCRIPTION	QTY/TM	DRG.NO.	MATL./SPECN.

REF:-	SCALE:-	NTS	APPROVED	FOR DG
-------	---------	-----	----------	--------

TM TYPE-HS 15250A
MODIFIED FIXATION ARRANGEMENT OF FLEXIBLE
CONNECTORS AT BRUSH BOX ASSEMBLY

RDSO.ELEC.DTE. SKEL - 4450

