

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
रेलवे बोर्ड RAILWAY BOARD

No. 2015/M (L)/466/1(4)

New Delhi, dt.05.11.2015


General Manager,
DLW
Varanasi

Sub: Procurement of spares of HHP locomotives.
Ref: Board's letter no. 2014/M (L)/466/1(4) dt. 23.12.2014

Board vide letter under reference advised a list of 138 imported HHP loco spares to be procured through Bulk Indent for Zonal Railways holding less than 100HHP locomotives.

NR has proposed a list of additional 137 imported HHP loco spares (copy enclosed) which are not included the Board's list.

The List of 137 items proposed by NR is approved for procurement through Bulk Indent for 2018-19 cycle. DLW and Zonal Railways are advised to take action accordingly.


(Vivek Kumar)
Exec.Dir.Mech. Engg. (Tr.)
Railway Board

Enclosure: As above

Copy to : CMEs/All Indian Railways

S.N 39

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2014/M(L)/466/1(4)

New Delhi, dt. 23.12.2014

General Manager
Diesel Locomotive Works
Varanasi

Chief Mechanical Engineers
All Indian Railways

Sub: Procurement of imported spares for HHP locomotives through Bulk Indent.

Ref: Railway Board's letter No. 2008/RS(G)/779/10 dt. 4.9.2014 - S.N 60 39 A

In the letter under reference issued by Stores Directorate of the Railway Board, the policy for procurement of imported spares for HHP locomotives for Zonal Railways, having a holding of less than 100 HHP locomotives, was laid down. Presently, all Zonal Railways except SWR, WR, NFR, NWR and SCR have HHP locomotives holding less than 100.

The list of 138 such imported spares to be procured through Bulk Indent has been finalised and is enclosed herewith for necessary action please.

Encl: As above

A. SMIL
23.12.14

(Vivek Kumar)
Exec.Dir.Mech.Engg.(Tr.)
Railway Board

List of items to be imported items to be added to BI list

SL	PL No.	Description	EMD part no
1	16020571	Kit detector repair consisting of 31 items	9535869
2	16050113	HOSE ASSEMBLY	40047151
3	16050125	HOSE ASSEMBLY	40047152
4	16050137	HOSE ASSEMBLY	40047153
5	16070124	Water pump repair kit	40000927
6	16080040	AG drive assembly	8460738
7	16122008	Impeller water pump	8248248
8	16150478	Bushing rotor	9534390
9	16150545	Bushing gear	40076287
10	18490050	Bearing spherical rotor(EMD make)	9437992
11	16170118	Gasket hand hole cover	8291349
12	16170430	Gasket tank to core	40040016
13	16170490	Gasket expansion joint	40026937
14	16170507	Gasket adaptor to Expansion joint	40026938
15	16170519	Gasket expansion joint to turbocharger	40026939
16	16170520	Gasket chamber to adaptor	40026936
17	16170600	Gasket Water Pipe to Manifold	40034634
18	16170611	GASKET Y FLANGE MOUNTING	40034629
19	16171070	Gasket Mounting Scavenging Pump	40040023
20	16171184	Gasket Water Pipe Mounting	40034630
21	16171329	Kit power pack installation	9582482
22	16171354	Kit gasket water pump application	9580723
23	16171378	Kit gasket lube oil strainer	40052426
24	16171380	Kit gasket lube oil scavenging pump	9575132
25	16171408	Kit gasket after cooler change out	9580722
26	16171410	Kit gasket lube oil pump piston cooling pump	9580728
27	16171421	Kit seal cylinder head	9575130
28	16980013	Kit Gasket Cam shaft drive	9575125
29	16210074	Roller clutch	8477363
30	16210542	Kit hardware fork rod	8409745
31	16240868	Seal assembly oil	9089606
32	16350042	Kit cylinder head test vlave	40036607
33	17270911	Seal O ring upper head to tank Viton	40044420
34	18030210	Radar lense cap	40048758
35	18160013	Sensor current - 1 BKBL 192 measure upto 300 A	40046384
36	18380037	Silicon Diode negative base alternator	40029131
37	18380049	Diode assembly silicon positive base alternator	40029132
38	18380050	Diode assembly silicon negative base	8485245
39	18380062	Diode silicon positive base battery charger	8413522
40	18380074	Rectifer suppressor 0.15 amps 4 cells	8413523

04/22/20
 2/17/20
 A. G. MIC

SL	PL No.	Description	EMD part no
41	18380104	Diode silicon bridge 700 REV RMS 250 amps	8452949
42	18380116	Silicon diode	8452951
43	18380128	Diode silicon free wheeling 840 Rev	8452952
44	18390160	Rectifier assembly	40079512
45	18390195	Rectifier assembly	8421017
46	18390213	Capcitor CA 32 5 MFD	8452954
47	18390250	Rectifier silicon controlled 1000 peak	8452948
48	18400012	Transformer current	8374003
49	18400103	Transducer GRT	9519568
50	18420102	Brush Holder Assembly. TA 17	9577092
51	18420114	Spring brush holder clip TA 17	8434285
52	16240418	Valve 1/4 " relief	40047147
53	16060842	Kit lube oil seperator	40052430
54	16171615	Kit gasket Turbo Charger	40069484
55	16171688	Kit Gasket cylinder head cover	40012903
56	18022340	Cover assembly slipring	9581064
57	18001269	Chasis assembly	40052667
58	18010556	EPU/TPU recepticle	10634220
59	18310590	DC link contactor T/P	40001025
60	16150429	Bushing stationary	8052224
61	16170090	Kit cylinder test valve	40017341
62	16170167	Gasket gear train oil retainer	9570645
63	16171755	Kit gasket fuel oil manifold	9580697
64	16240613	Valve assembly relief	8292205
65	16980931	Kit Gasket over speed trip housing	40052429
66	16862077	Pump and motor assembly booster . pump ./4 HP 115 V single phase 9000 rpm includes 2.16 AWG leads 3 ft long	40030890
67	17410095	Spring brush holder clip CA 6B	8434286
68	18000137	Rectifier assembly battery charger	8479400
69	18120015	ASC 300	40042056
70	18120027	FCD 300	40042250
71	18120039	PSM 300	40042252
72	18120040	PSM 310	40042254
73	18120052	PSM 320	40042256
74	18120076	FCF 301	40058133
75	18120088	ADA 305	40058136
76	18120118	TLF 301	40077482
77	18120131	DIO 300	40030373
78	18120155	Display assembly computer tactile High voltage cabinet	40052356
79	18120179	Module circuit TDP	40046898
80	18120180	Module circuit HVRECP to EMD partno	40057403
81	18120283	Box display distributor dual	40043448
82	18120349	Transducer TR - MRPT	40052557
83	18120350	Barometer out pr sensitive	16137039
84	18120799	Circuit module PRG 301	40081644
85	18120817	Circuit module COM 304	40087667
86	18120878	Circuit module CPM 401	40104546
87	18120880	Panel mounted DVR 301	40106746
88	18160025	Transducer current ITCC 192	40046385

A 3/11

SL	PL No.	Description	EMD part no
89	18160062	Sensor voltage 10 mA VDCL	40026571
90	18250014	Resistor FLCE1 to 4	9519538
91	18300303	Resistor assembly grid battery charging 0.05	8485235
92	18300364	Resistor REAG FLD 5.7-750 W	40058373
93	18351050	Connector power distribution	9567173
94	18351580	Contact assembly movable	8424739
95	18410017	Coil magnet 267 ohms/74 VDC	8358489
96	18440060	Kit gear motor	8492386
97	18450064	Kit interlock motor	8492389
98	18530491	Insulator poly glass 7x5/8 inch include 4 nos 9/32 inch holes	40044952
99	18530837	Insulator assembly fuse bus bar	8470293
100	18530849	Insulator	40017606
101	-	stud 3/8-16x7 1/4"	8345701
102	-	Stud 3/8-16x4inches	8310266
103	-	Stud 3/8-16x2-3/8 inches	8310267
104	-	stud 3/8-16x5 5/8"	8345700
105	-	Module MBB	40076568
106	-	BOLT.. Hex head 1/2-20 x 6 - Turbocharger mounting	186342
107	-	BOLT.. Hex head 3/4-16 x 11-5/16 - Turbocharger mounting	8261288
108	16050459	Link assembly adjusting	8070027
109	16150557	Bushing gear lube oil pump	40076291
110	16170039	Gasket assembly head to liner with integrated grommet seals	8476400/ 40099569
111	16170234	Gasket overspeed trip housing to crankcase	40039283
112	16060271	Tubing Piston Cooling Manifold	40046561
113	16060854	SPACER DIAPHRAGM	40036616
114	16150557	Bushing Gear Lube Oil Pump	40076291
115	16170210	Gasket accessory drive housing to crankcase	40040015
116	16170404	Gasket Cover Flange to Manifold Flange	9571663
117	16170428	Gasket header to core	40046695
118	16170799	Gasket Filter Mounting	40034636
119	16170854	GASKET .. FLANGE TO CRANKCASE	40034623
120	16171366	Kit gasket cylinder head	8479836
121	17320409	Flexible Coupling	8195996
122	17390217	Valve Assembly.. Ball Cock - Relief - 3/4pt	9330855
123	17455479	Kit valve assembly handle	40027422
124	18240010	RESISTOR 400W 6.60 hms	6958079
125	18300352	RESISTOR ASSEMBLY.. Headlight dim-3.75-3.75 ohms	8429166
126	18310035	SWITCH ROTARY .F.P./E.S-3 POSITION	8346425
127	18310138	Breaker-Circuit -250 Amps	40018060
128	18310151	SWITCH.. Slide - Dynamic brake cutout - Exterior lights - Maintenance room lights	8404148

J. Smith

RBS No. 8/2014

भारत सरकार BHARAT SARKAR
रेल मंत्रालय MINISTRY OF RAILWAYS
रेलवे बोर्ड RAILWAY BOARD

No. 2008/RS(G)/779/10

New Delhi, dated 4-9-2014

The General Manager, All Indian Railways/PUs, NF(C), CORE
The DG/RDSO/Lucknow & NAIR/Madodara
CAOs, DMW/Patiala, WPO/Patna, COFMOW/NDLS, RCF/RBL/NDLS

Subject: Policy regarding procurement of imported spares for HHP locomotives.

Ref: Board's letter Nos. 2008/RS(G)/779/10 dated 21.10.2008, 20.11.2008, 29.9.2009, 17.2.2010, 15.1.2013 & 13.3.2013.

In view of problems being experienced by Railways in procurement of imported spares of HHP locomotives, the matter regarding centralized procurement of imported spares of HHP locomotives has been reviewed by Railway Board. Most of the zonal railways have received HHP locomotives in small number and practical problems are being felt in procurement of spares because the requirement of spares is small and suppliers are unwilling to supply the small quantity. Accordingly it has been decided:

1. Zonal Railways having a holding of more than 100 HHP locomotives will make their own procurement of imported spares. HHP locomotives holding would mean the no. of HHP locomotives allotted to the diesel sheds of a particular Railway for maintenance.
 2. Zonal Railways having a holding of 100 HHP locomotives or less would have the option of procuring their imported spares on their own or by placing an indent on DLW. The indent will be generated based on the extant laid down procedure.
 - 2.1 In case of a crisis, Zonal railways with holding of 100 HHP locomotives or less may make their own purchase and advise DLW of quantity adjustment as required.
 3. This policy would be implemented from 2016-17 consumption period onwards.
 4. This letter supersedes earlier instructions on the subject.
- This is issued with the concurrence of Finance Directorate.

Santosh Mittal
(Santosh Mittal)
Dy. Dir. Rly. Stores(G)-I
Railway Board

No. 2008/RS(G)/779/10

New Delhi, dated : 4-9-2014

1. FA&CAOs, All Indian Railways & Production Units

AVM

2. PCEs, All Indian Railways & PUs, WPO/Patna, RCF/RBL, COFMOW, DMW
3. The ADAI(Railways), New Delhi (with 10 spares copies)
4. The Director of Audit, All Indian Railways

AVM

for Financial Commissioner / Railways

No. 2008/RS(G)/779/10

New Delhi, dated : 4-9-2014

1. COSs, CMEs, CEEs, CSTEes, All Indian Railways & PUs, RCF/RBL/NDLS, COFMOW, CORE, WPO and RWP/Bela
2. The Directors—
 - a) Indian Railway Institute of Sig. Engg. & Telecom, Secunderabad
 - b) Indian Railway Institute of Mech. & Elec. Engg., Jamalpur
 - c) Indian Railway Institute of Elect. Engg., Nasik
 - d) Sr. Prof. (Material Management), NAIR, Vadodara
 - e) Indian Railway Institute of Civil Engg., Pune
 - f) Indian Railway Institute of Traffic Management, Lucknow
3. Director, Iron & Steel, 3, Koila Ghat Street, Kolkata
4. Executive Director (Stores), RDSO, Lucknow
5. Chief Commissioner, Railway Safety, Lucknow
6. Zonal Railway Training Institute, Sukadia Circle, Udaipur

Santosh Mittal

(Santosh Mittal)

Dy. Dir. Rly. Stores(G)-I
Railway Board

No. 2008/RS(G)/779/10

New Delhi, dated : 4-9-2014

Copy to :

1. The Genl. Secy., AIRF, Room No. 248, & NFIR Room No. 256-C, Rail Bhavan
2. The Secy. Genl., IRPOF, Room No. 268, FROA, Room No. 256-D & AIRPFA, Room No. 256-D Rail Bhavan

Santosh Mittal

(Santosh Mittal)

Dy. Dir. Rly. Stores(G)-I
Railway Board

Copy to:- Sr. PPSs / PPS / PS to :

1. MR, MOS(R)
2. CRB, FC, ME, ML, MM, MS, MT, SECY., DG (RHS), DG (RPF)
3. All AMs, Advisors & Executive Directors of Railway Board

Northern Railway

Headquarters Office
Baroda House
New Delhi

No. 516-M/303/GM Loco/ML-III

dtd 30.01.15

EDME(Traction)
Railway Board

Sub: Stocking and procurement of spares for HHP locomotives
Ref: Your office letter No. 2014/M(L)/466/1(4) dtd 19.01.15

Point-wise remarks are as follows:-

a) Shed wise number of HHP items stocked

TKD	AMV	CB Dsl
668	786	13

b) Number of HHP items of which procurement has started and one procurement cycle has been completed

Procurement status of HHP Loco stock items year-wise is as under:-

Year	Stock items	PO placed	Indent on DLW
2011-12	701	126	402 (NS)
2012-13	701	201	192
2013-14	734	150	-
2014-15	827	141	83

c) Number of imported items for which order was placed in 2013-14 and 2014-15

2012-13	2013-14	2014-15
20 items received from EMD	PO of 8 items placed on EMD. LC to open	PO for 14 items under vetting. TC for 56 items under finalization. DLW Indent for balance 186 items initiated.

d) Action plan for streamlining of HHP spares

- Board has advised list of 138 imported spares to be procured through Bulk Indent for Zonal Railways holding less than 100 HHP locomotives.
- Northern Railways has additional 137 imported spares which are not appearing in recent list.
- Board is therefore requested to include these 137 imported spares to be procured through Bulk Indent. List of items is enclosed as Annexure-I.

Encl: Annexure-I

CMPE/Dst

Procurement of imported spares for HHP locomotives not covered through Bulk Indent

SN	PLNo	DESCRIPTION	EMD Pt No	Sources	Authority
1	16040144	LASH ADJUSTER	40145726/ 8085254/ 40118613	EMD, INFINITIVE	DLW
2	16050186	CLEVIS ASSY	8104467	EMD, SPX	DLW Parent
3	16050344	TRIP ASSEMBLY OVERSPEED	40013182	EMD, Patra	DLW
4	16060209	Filter Assembly Lube oil turbo charger	40053420	EMD, KK IND	DLW
5	16060829	Kit main bearing upper	40017535	EMD, Miba	RDSO
6	16060830	Kit main bearing lower	40017536	EMD, Miba	RDSO
7	16070070	KIT water manifold support 1)Bkt 9312008-2 2)Bolt 273046-2 3)Washer 131019-8 4)Nut8032727-2 5)Strap 8347343-2 6)Nut 8032717-4 7)Washer 103341-4 8)Thread 9581263-8	9326240	EMD	SWR PO
8	16080543	BOLT AND SPACER ASSEMBLY.. Exhaust manifold leg	40055467	EMD, PoojaForge	DLW
9	16120930	HOUSING ASM WATER PUMP IMPELLER	40004233	EMD, Ganesh Foundry	DLW
10	16120991	Flange 'Y' water discharge	8289021	EMD, KK Indus, HMTPinjore	DLW
11	16140357	Roller assly cam follower	9571597	EMD, Emerson, Autotech, M cGill, NRB Brg	DLW
12	16150168	Bushing arm	9571921	EMD, MahleGmbh, PatelBr ass, GaneraAutomotive	DLW
13	16150170	Bushing roller	9571598	EMD, Emerson, Autotech, M cGill, NRB Brg	DLW Parent
14	16150247	Bearing Clutch	9534826	EMD, MahleGmbh, PatelBr ass	DLW
15	16170222	Gasket Cover to Housing	40040029	EMD, GasketEng	DLW
16	16170672	GASKET FUEL MANIFOLD TO FUEL FILTER	40034631	EMD, FederalMogul	DLW
17	16170714	GASKET FUEL MANIFOLD CROSSOVER	40034635	EMD, FederalMogul	DLW
18	16170878	Seal O Ring Fuel Strainer & Soak Back Filter	8343161	EMD, ParkerHannifin	DLW Parent
19	16170933	GASKET PUMP INLET AND OUTLET	40039270	EMD, FederalMogul, MGM	DLW
20	16171007	Seal O ring strainer housing	8478924	EMD, ParkerUSA	DLW
21	16171044	Seal O ring lube strainer	8085182	EMD, Western	DLW
22	16171159	Seal O Ring (Lube oil drum)	40065194	EMD	SWR PO
23	16171160	Seal O Ring (Fuel Oil filter cover)	40061836	EMD, Mazdoor, BEC, GGInd us	DLW Parent

SN	PLNo	DESCRIPTION	EMD Pt No	Sources	Authority
24	16171421	Seal cylinder head cover	9575318	EMD, Saban	DLW
25	16191857	GASKET RELIEF VALVE	40085273	EMD, Patra, Tirupati	DLW
26	16241010	Hose Assly air Supply	40022538	EMD, Eaton	DLW
27	16241381	Bowel by pass sight glass	8361381	EMD, SPX	DLW Parent
28	16242099	Kit Hose Manifold for Turbo Charger	40031867	EMD	DLW Parent
29	16980827	Gasket Header Discharge.	40059392	EMD, Free(I)Gask, MGM, Starflex, Talbros, MicoGask, Ravi	DLW
30	16980839	Gasket Header Tube	40058894	EMD, Free(I)Gask, MGM, Starflex, Talbros, MicoGask, Ravi	DLW
31	16980955	Circuit Braker 15A	40037994	EMD, Medha, Siemens	RDSO Parent
32	16981777	Spring Coil Bogie WDP4	40090911	EMD, Federnwerke, Frontier, GBSpring, AbokSpring	RDSO
33	17020244	THRUST PAD ASSY	40074617	EMD, LordCorpUSA, MechanicalProductUsa, BasantRub, Prag, GMT	DLW
34	17020293	SPRING ASM RUBBER SEC VERTICAL	40075328	EMD, LORD CORP, BASANT, PRAG	RDSO
35	17031916	90 days kit of lube oil strainer (consisting of two type of O-rings) 8085182-2, 8478924-1		EMD, ParkerUSA, Western, USA	DLW
36	17031928	TM Air duct boot assembly	40058521	EMD, Basant, Prag	DLW
37	17043323	Sight glass assly (water tank level)	9515894	EMD, Electromech, Jaypee	DLW
38	17050054	Dust Bin/TCC blower motor	2804094	DPG/USA, ElgiElect, Drespl, EMD	
39	17050625	Cap assembly pressure 3 prong 20 PSI	9323490	Mazdoor	SWR PO
40	17160534	LOCK BOLT 1X 10-5/8	40078349	Alcoa, EMD	DLW Parent
41	17240074	DOWEL ASSY CLUTCH	40001043	EMD, Trident, GEAuto	DLW
42	17250110	SPACER FAN	40054976	DPG/USA, DaulatRam, DPG/India	RDSO Parent
43	17270250	GASKET WATER DISCHARGE FITTING	9570675	EMD	SWR PO
44	17270881	GASKET BOTTOM HEADER TO TANK	9570895	EMD, StandardRad, Tool&Gauge, Vikrant, Mark&Steeve, Omex, FreeIndia	DLW Parent
45	17270893	GASKET HEAD TO CORE	9570894	EMD, StandardRad, Tool&Gauge, Vikrant, Mark&Steeve, Omex, FreeIndia	DLW Parent
46	17270923	GASKET TOP HEADER TO PIPE FLANGE	9572322	EMD, YoungTouchStone, StandardRadiator	DLW Parent

SN	PLNo	DESCRIPTION	EMD Pt No	Sources	Authority
47	17270960	GASKET LUBE OIL OUTLET	9570678	EMD,BasantRub,Manisha,Free(I)Gsk,ABElasto,MGM,Tirupati	DLW
48	17271058	Weather Strip 28-1/2/ Glassx4x2(in 21 kgs roll)	8167425	EMD	RDSO Parent
49	17271666	Weather Strip filler 100 ft.28-1/2/Glassx4x2 (in 21 kgs roll)	8166637	EMD	RDSO Parent
50	17272464	Gasket for 3/4 coupling	8479543	EMD	SWR PO
51	17272476	Gasket for 2-1/2 coupling	8479601	EMD	SWR PO
52	17272488	Gasket for 1 coupling	8479544	EMD	SWR PO
53	17280825	COUPLING FLEXIBLE 3"	8471160	EMD,VikrantEngg,Omex	DLW
54	17281155	Coupling flex 2-1/2 inch	9516671	EMD, Vikrant, ShriSaraswati	DLW
55	17281507	Coupling Flexible 1/2"	8476711	EMD,VikrantEngg,Suneet,Mark&Steve	DLW
56	17450391	Radiator cooling fan ASM	10632019 ALT -D	Daulatram,DPG/USA,DPG/India	
57	17452065	Sander control valve assly (magnet)	9574325	EMD,Rotex,Recon	DLW
58	17452879	Coupling Flexible 4"	8252895	EMD,VikrantEngg,Suneet,Mark&Steve,Omex	DLW
59	17453185	FUEL OIL PUMP	8422951	EMD,ParagonProducts	DLW Parent
60	17453458	CYLINDER WEAR HALF	40075177	EMD,Quadrant,Electroplast	RDSO
61	17455455	Kit Sander Control Valve	40029184	EMD,Rotex,Recon	DLW Parent
62	17455509	Kit Seal MVCC	40029183	EMD,Faiveley	SWR PO
63	17456022	Sight Glass for Water Exp.Tank (3/4" O.D x 19-1/2" long)	9538379	EMD,Electromech,Jaypee	DLW Parent
64	18000125	Diode Input Panel	40028426	EMD,Medha,Siemens	RDSO Parent
65	18001233	Chassis Assembly Module	40041846	EMD,Medha,Siemens	RDSO Parent
66	18022200	STATOR ASSEMBLY RADIATOR COOLING FAN	40067184	Daulatram,DPG/USA,DPG/India	
67	18022273	SHEET ASSY COVER	8428176	EMD	DLW
68	18100028	Turbo Lube Oil Pump Motor (AC)	22109359	Signotron,EMD	old DLW
69	18120209	COMPARTMENT EQUIPPED MICRO	40064109	EMD,Siemens,Medha	RDSO Parent
70	18120600	RUBBER PAD	40074620	EMD,LordCorpUSA,MechanicalProductUsa,BasantRub,Prag,GMT	DLW Parent

	PLNo	DESCRIPTION	EMD Pt No	Sources	Authority
71	18140014	Contactora STA	8482180	EMD, Siemens, CGL	RDSO Parent
72	18140026	Contactora ST	9325207	EMD, Siemens, CGL	RDSO Parent
73	18140040	Contactora AC - 2 Pole 150	40034362	EMD, Siemens, CGL	RDSO Parent
74	18140063	GF Contactora	8330937	EMD, Medha, Siemens	RDSO Parent
75	18140075	GFD Contactora	40010561	EMD, Medha, Siemens	RDSO Parent
76	18140154	Chutch Assembly ARC	9570152	EMD, Medha, Siemens	RDSO Parent
77	18140166	Carrier Assembly Movable Contact	8276115	EMD, Medha, Siemens	RDSO Parent
78	18140178	Post Assembly Contact	8435874	EMD, Medha, Siemens	RDSO Parent
79	18140180	Carrier Assembly Post Plate	8326499	EMD, Medha, Siemens	RDSO Parent
80	18140191	Aux. Contact for Braking Contactora	9539494	EMD, Medha, Siemens	RDSO Parent
81	18140208	Chute	9577680	EMD, Medha, Siemens	RDSO Parent
82	18180012	Relay (GP)	8357415	EMD, Medha, Siemens	RDSO Parent
83	18180024	Relay (GP)	8363168	EMD, Medha, Siemens	RDSO Parent
84	18180036	Relay (GP)	9516672	EMD, Medha, Siemens	RDSO Parent
85	18180048	Relay (GR)	40050359	EMD, Medha, Siemens	RDSO Parent
86	18180050	Relay kit #1 (for EMD Loco) 6 items 8373523-1, 8373524-1, 8373528-1, 8387477-1, 8415919-1, 8431417-1		EMD, Siemens	RDSO Parent
87	18250038	DYNAMIC BRAKING GRID RESISTANCE 545 AMPS, 1.222 OHMS(NFT)	10634215	EMD, Daulat, Mosebach	RDSO
88	18250040	RESISTOR GRID - DYNAMIC BRAKE - RE3, RE7 - 1.235 OHMS - 545 AMPS	10634216	EMD, Daulat, Mosebach	RDSO
89	18300327	Resistor RE2 - 4.8Ohms - 400Watts	40066539	EMD, Medha, Siemens	RDSO Parent
90	18300340	RESISTOR ASSEMBLY REGR 1, 2, 3, 4 - 10-10 OHMS	8394789	EMD, Siemens, Medha	RDSO Parent
91	18300376	REVDCL	40023287	EMD, Medha, Siemens	RDSO Parent
92	18300388	RESISTOR REGRT - 190 - 50W	9519539	EMD, Siemens, Medha	RDSO Parent

SN	PLNo	DESCRIPTION	EMD Pt No	Sources	Authority
93	18300390	REGNR - REGNL - 100/50W	40023288	EMD, Siemens, Medha	RDSO Parent
94	18300406	REPRG	8318101	EMD, Siemens	RDSO Parent
95	18310072	Fuse 800 Amp	8414678	EMD, FERRAZ/USA BUSSMAN/USA	DLW
96	18310096	Circuit Braker 15A	40050140	EMD, Medha, Siemens	RDSO Parent
97	18310140	Fuse 300 amps for radiator fan	10635464	EMD, Siemens, Medha, Bussman, Ferraz	RDSO Parent
98	18310217	CIRCUIT BREAKER.. Gen fld - 90 amp	8458724	EMD, Medha, Siemens	RDSO Parent
99	18310229	CIRCUIT BREAKER.. Fuel pump - Turbo - Lights - 30 amp	8458724	EMD, Medha, Siemens	RDSO Parent
100	18310230	Circuit Braker 35A	8458726	EMD, Medha, Siemens	RDSO Parent
101	18310242	CIRCUIT BREAKER.. Local control - 30 amp	40037997	EMD, Medha, Siemens	RDSO Parent
102	18310254	CIRCUIT BREAKER.. Control - 40 amp	40037995	EMD, Medha, Siemens	RDSO Parent
103	18310266	CIRCUIT BREAKER.. TCC1 - TCC2 computer - 10 amp	40054194	EMD, Medha, Siemens	RDSO Parent
104	18310278	Circuit Braker 15A	40054796	EMD, Siemens	RDSO Parent
105	18310280	CIRCUIT BREAKER.. AC GTO1 - AC GTO2 power supply -15 amp	8458727	EMD, Siemens	RDSO Parent
106	18310291	CIRCUIT BREAKER.. DCL control - 3 amp	40037996	EMD, Siemens	RDSO Parent
107	18310308	Circuit Braker 10A	9322826	EMD, Siemens	RDSO Parent
108	18310310	Breaker 3A	8458735	EMD, Siemens	RDSO Parent
109	18310321	CIRCUIT BREAKER.. TCC electric blower motor / filter blower motor - 30 amp	40051839	EMD, Siemens	RDSO Parent
110	18310333	CIRCUIT BREAKER.. 15 amp - Cab fan Air dryer - Micro air brake - Radio	8458739	EMD, Siemens	RDSO Parent
111	18310345	Switch Toggle GRCO 3 PST	8362643	EMD, Siemens	RDSO Parent
112	18310606	FUSE & INDICATOR ASSY	8407729	EMD	RDSO Parent
113	18310618	Circuit Breaker 10Amps	40087301	EMD, Siemens	RDSO Parent
114	18310679	Circuit Breaker 30 Amps	40083994	EMD, Siemens	RDSO Parent
115	18350549	Rec 3G 2A	40019311	EMD, Siemens	RDSO Parent

