

भारतीय रेल  
बनारस रेल इंजन कारखाना  
वाराणसी-221004



कार्यालय:  
मुख्य यांत्रिक इंजीनियर/एस.ई  
दूरभाष रेलवे: 42602  
टेलिफैक्स: 0542-2270224

सं. 2020/SPC/13/11-Pt.1

दिनांक: 18.12.2020

PCEE  
All Indian Railways  
&  
PCAO  
DMW/Patiala

**विषय: Submission of vetted indents for the year 2021-22 & 2022-23.**

- संदर्भ:** 1. Rly.Bd's. letter no.2020/M(L)/466/5 dated 03.12.2020.  
2. Rly.Bd's. letter no.2020/RS(L)/779/1 dated 28.10.2020  
3. This office letter of even no. dated 25.11.2019 & 11.06.2020.  
4. This office letter no. 2016/MCO/13/11 dated 03.04.2019.  
5. This office letter no. 2016/MCO/13/15 dated 11.05.2019.

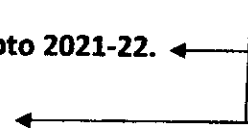
Vide this office letter under reference (4) & (5), vetted indents of bulk spares for HHP Diesel locos to be procured for the year 2021-22 was asked from Z.Rlys & DMW/PTA by BLW. Further, vide letters under reference (3), it was requested to Z.Rlys to review the demands for the year 2020-21 & 2021-22.

2. Revised demands received from Zonal Railways for the year 2021-22, outstanding indents upto 2019-20, supply status of BIM, Imported and Tooling items for the year 2020-21 and list of above items which will be procured by BLW for the consumption cycle 2022-23 are available on BLW website on following link:

**BLW Website ([www.blw.indianrailways.gov.in](http://www.blw.indianrailways.gov.in)) → Loco Portal → HHP BIM SPARES**

**Demand, Supply & Balance Position of HHP BIM Items upto 2021-22.**

**Submission of vetted indents for the year 2022-23**



3. Rly Bd. vide its letter dated 10.07.2020 has advised to withhold procurement of Diesel loco maintenance spares. Now, Rly Bd. has issued directives for procurement of the same vide letter referred at (1) above. Accordingly, Z.Rlys & DMW/PTA are requested to review their demands of HHP Diesel loco maintenance spares in accordance with instructions contained in Rly Board letter referred at (1) above for the year 2021-22 & after obtaining due approval of respective General Manager submit the same to BLW by 15.01.2021. It is also requested to submit the vetted indents for above items for the year 2022-23 by 01.03.21. It is prudent to mention that while Z.Rlys assess their demands for the year 2021-22 and 2022-23, outstanding indents upto 2020-21 shall also be taken into consideration to avoid overstocking of items.

In addition to above, details of surplus items like description, BLW PL No., spareable quantities etc of HHP Diesel locos maintenance spares available with each Rlys are also to be furnished, if any, on given below format:

S.No.	BLW PL No.	Item Description	Spareable Qty	Name of Shed/Depot where material available	Remarks if any
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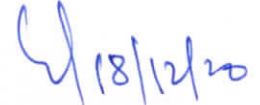
4. It has also been advised by Rly Bd. vide its letter referred at (2) above that “**BLW shall be centralised for import of all spares/items of Diesel Locomotives**”. In this regard, Z.Rlys are also requested to submit their vetted indents of such imported items which are being procured by Z.Rlys itself through import (This includes items other than those already being procured by BLW as mentioned on above link) duly approved by respective GM for the year 2021-22 by 15.01.2021 and for year 2022-23 by 01.03.2021. List of such items should be provided separately on the given format:

S.No.	BLW PL No.	Item Description	Qty. Required	Remarks if any
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5. Zonal Railways & DMW/PTA are requested to submit iMMS system generated vetted indents for all indented items on the BLW PL No. only. Indents other than iMMS system and/or without BLW PL No. shall not be entertained at this end.

6. To control overstocking and inventory of HHP Diesel loco maintenance spares at BLW, it is worth mentioning that Z.Rlys & DMW/PTA should submit their vetted indent qty after due deliberation because any reduction wrt indented quantities shall not be feasible at later stage and Z.Rlys & DMW/PTA shall be liable to receive the entire indented quantities on receipt of supplies.

Since, Procurement for consumption cycle 2021-22 already gets delayed, it is requested to all Z.Rlys & DMW/PTA to submit their revised indents for the year 2021-22 by 15.01.2021 & vetted indents for the year 2022-23 by 01.03.2021 after due approval of respective GM.



(SUNEEL KUMAR)

मुख्य यांत्रिक इंजीनियर/एस.ई

Chief Mech. Engineer/SE

- प्रतिलिपि: 1. PED/EE(RS)/Rly.Bd, for kind information.  
2. PCMM - All Indian Railways, for kind information.  
3. CMPE/DSL - All Indian Railways, for kind information and n/action pl.  
4. CPLE/DMW, for kind information and n/action pl .

S N	BLW PL No.	DESCRIPTION	Book Rate as on 05/12/2020	Remarks
1	11815565	Fuel Pump Motor	152187.50	In place of Fuel Pump, 17454633.
2	16020390	Insert	2006.14	
3	16020408	Cover Assy Hand Hole	1967.09	
4	16030023	Damper Assy	56344.00	
5	16030059	Connecting Rod Assy Fork	27895.47	
6	16030308	Cam Shaft Assy Lb	99120.00	
7	16030310	Cam Shaft Assy Rb	134148.20	
8	16030473	Idler Stud Shaft Assembly	108498.09	
9	16030527	Coupling Assembly Crankshaft drive	57427.72	
10	16030564	Gear Assembly Accessory Drive	53401.36	
11	16030618	Piston Ring Set	18130.73	
12	16040016	Cylinder Head Sub Assembly	80709.96	
13	16040030	Rocker Arm Assy Exhaust	4407.99	
14	16040041	Rocker Arm Sub Assy Exhaust	4108.63	
15	16040053	Valve Bridge Assembly	1654.84	
16	16040119	Rocker Arm Assembly Injector	5059.13	
17	16040120	Rocker Arm Sub Assembly Injector	4150.96	
18	16040132	Exhaust Valve Bridge Assembly	2973.07	
19	16040156	Ring Cylinder Head	2856.83	
20	16040247	Repair kit for Injector Assy (Ecotip Superstack Injector)	14377.21	
21	16050198	Manifold Asm Fuel Line Lb	19586.59	
22	16050216	Manifold Asm Fuel Line Rb	19534.13	
23	16050230	Fuel Oil Line Assembly	1047.09	
24	16050253	INLET TUBE ASM	3449.01	
25	16050320	OST Shaft Assy RB	3902.79	
26	16050423	Gear Governor Drive Asm	34745.24	
27	16060027	Lube Oil Pump Assy (Piston Cooling)	100773.77	
28	16060090	Scavenging Lube Oil Pump Assy	168967.45	
29	16060131	Rotor (Outline DRG)	15242.08	
30	16060210	Pump Asm Turbo Soak Back	16607.35	
31	16060222	Turbo Lube Oil Soak Back Pump Motor	82155.63	
32	16060260	Elbow Assembly	5817.93	
33	16060374	Housing Lube Oil ASM	58647.59	
34	16060490	Clutch Drive Assembly	374759.21	
35	16070100	Water Pump Left Bank	26379.01	
36	16070148	Water Pump Right Bank	27431.21	
37	16080142	Exhaust Chamber Assembly Intermediate Front	79618.64	
38	16080154	Exhaust Chamber Assembly Intermediate Rear	71869.57	
39	16080518	Adopter & Screen ASM for Exh.	59914.21	
40	16080919	Modified After Cooler Assy	127039.27	
41	16120073	Machined Piston	43430.99	
42	16120140	Guide Exhaust Valve	232.72	
43	16120670	Elbow	1882.34	
44	16130157	Cam	251.47	
45	16130169	Elbow (Piston Cooling)	8018.81	
46	16130285	Elbow Water Outlet	1018.27	
47	16130297	Thrust Collar	4804.84	
48	16130364	Thrust Washer	1232.00	
49	16140266	Gear Crank Shaft 79 Teeth	77885.68	
50	16140308	Connecting Rod Blade	16433.67	
51	16140310	Gear Cam Shaft	41408.70	
52	16140710	Cam Shaft Stub Shaft	15283.52	
53	16140734	Cam Shaft Stub Shaft	15380.71	
54	16140898	Slinger Aux Gen Drive Oil	2196.28	
55	16140953	Crab Cyl Head Intermediate	3295.83	
56	16141040	Gear Governor Drive 22 Teeth	5420.06	

S N	BLW PL No.	DESCRIPTION	Book Rate as on 05/12/2020	Remarks
57	16141210	Gear Lower Idler	23821.20	
58	16141430	Carrier Piston Pin	13664.70	
59	16141441	Pin Piston	10236.49	
60	16141465	Coupling Flange	2932.00	
61	16141842	Shaft Drive	8631.89	
62	16150030	Main Bearing Upper Inter	7072.02	
63	16150041	Main Bearing Lower Inter	6651.12	
64	16150053	Main Bearing Upper Gen End	10644.24	
65	16150065	Main Bearing Lower Gen End	11150.68	
66	16150077	Main Bearing Upper Centre	9698.80	
67	16150089	Main Bearing Lower Centre	8570.85	
68	16150090	Bearing Insert	4982.85	
69	16150107	Retainer Bearing	124.62	
70	16150119	Bearing Half Camshaft	1229.69	
71	16150120	Bearing Half Camshaft	552.10	
72	16150144	Bushing Camshaft Bearing	185.69	
73	16150181	Bearing Con Rod Lower	7307.23	
74	16150193	Bearing Con Rod Upper	17443.90	
75	16150211	Bearing Sleeve Roller	17957.12	
76	16150259	Bushing	1343.82	
77	16150260	Bushing	1868.53	
78	16150314	Bearing Thrust	4745.61	
79	16150326	Support And Bushing Asm	1659.55	
80	16150338	Bushing	242.45	
81	16150340	Bushing	2544.84	
82	16150351	Bushing	2027.76	
83	16150480	Needle Bearing Assly	70.25	
84	16150491	Ball Bearing Assly	1049.93	
85	16150510	Ball Bearing Assly	966.46	
86	16160034	Spring Exhaust Valve	85.49	
87	16160058	Spring	285.30	
88	16160060	Oil Retainer	3641.52	
89	16160204	Spring	1639.99	
90	16170015	SEAL 'O' RING	7.18	
91	16170027	SEAL 'O' RING WATER OUTLET	10.62	
92	16170052	SEAL 'O' RING WATER LINER	101.57	
93	16170489	GASKET	1414.14	
94	16191432	Plate Spacer	1855.80	
95	16191900	Gear Ring	59834.34	
96	16210050	Race Inner	160.49	
97	16210360	Shaft	2765.26	
98	16230530	Sleeve	2214.41	
99	16230644	Sleeve Upper Stub	37200.74	
100	16240066	Exhaust Valve Flat Head	1386.92	
101	16240236	Button Bridge For Rocker Arm	140.47	
102	16240248	Seat Spring	1263.08	
103	16240546	Valve Check Filter Discharge	3372.70	
104	16240571	Tube Assy Elbow Governor	1507.06	
105	16240777	EXPANSION JOINT ASM	30126.93	
106	16240807	Joint Assembly Adopter To Turbo Charger	28242.69	
107	16240881	Soak Back Filter Assy	6632.22	
108	16240947	Valve 7/8 Relief	3249.53	
109	16241137	Valve Assy Cylinder Test	1120.05	
110	16241174	Pickup.. Magnetic	2150.11	
111	16241186	Ecotip Superstack Injector	58087.59	
112	16241216	Valve Assembly.. Cut-Off - Low Pressure	6049.85	

S N	BLW PL No.	DESCRIPTION	Book Rate as on 05/12/2020	Remarks
113	16241228	Valve Thermostatic 255 F	5135.62	
114	16241332	Sensor Turbo Speed	7128.52	
115	16241344	Valve Relief	8820.99	
116	16241617	Seat Valve Spring	1284.41	
117	16241629	Lock Spring Seat	72.77	
118	16330020	Retainer Assembly	10085.22	
119	16340139	Plug Assly	3868.72	
120	16350017	Cylinder Power Assembly- Fork Rod	294205.60	
121	16350029	Cylinder Power Assembly- Blade Rod	282634.44	
122	16360023	Detector Assy	50005.54	
123	16360163	Exhaust Chamber Assembly Front	75129.29	
124	17020025	Hand Brake	9684.37	
125	17020323	Link Assly Traction Motor Nose	10000.00	
126	17021420	Car Body Rod Assy	5692.80	
127	17050200	Coupling Asm (Drive Shaft to Air Compressor)	16315.02	
128	17051228	Lube Oil Gear Driven Pump Assy	55947.91	
129	17250249	Bezel Assembly	5051.41	
130	17250390	Cover Assy	13501.46	
131	17272490	Seal Fuel Pump Mechanical	2627.17	
132	17390059	Valve Assy Automatic Drain	7194.86	
133	17390310	Valve Assy Bypass	4251.58	
134	17410060	SPRING SINGLE COIL	8383.09	
135	17451103	E-Type Coupler(G4)	47141.44	
136	17451115	Gear Assembly.. Draft - Model Nc390 - Alignment Control	164981.08	
137	17452582	Valve Relay	5040.00	
138	17452855	SECONDARY YAWDAMPER	16719.26	
139	17452880	DRIVE SHAFT ASM	1257.32	
140	17453252	Core & header ASM	149184.89	
141	17453793	GEAR CASE MACHINING ASM	59289.44	
142	17454505	E-Type Coupler(P4)	49079.31	
143	17454530	Gear Asm- Draft - Ms-488-6A (Wdp-4)	132333.81	
144	17454992	SHOCK ABSORBER	10974.40	
145	17455017	Kit For Radiator Assembly Consist of Radiator Assembly(RH) & Radiator Assembly(LH)	1377062.05	
146	17455339	Rotor Assely Fuel Pump	20844.41	
147	17455480	Head Assembly	3540.00	
148	17455492	Idler Assembly fuel pump Include Bushing	6038.53	
149	17456010	Joint Centre Bonded Rubber	1156.11	
150	17660403	Lock Bolt Kit for Plate ASM (Consisting of 2 items Lock Bolt 1-3/8", 17420040- 12 nos & Coller, 17084301-12 nos.)	31777.56	
151	17660415	Lock Bolt Kit for Link Mach (Consisting of 2 items Lock Bolt 1", 17160546- 12 nos & Coller 1", 17140213-12 nos.)	10851.00	
152	17660427	Lock Bolt Kit for Carbody Rod (Consisting of 2 items Lock Bolt 1-3/8", 19331095- 02 nos & Coller, 17084301-02 nos.)	11138.96	
153	17660439	Lock Bolt Kit for Centre Pivot (Consisting of 2 items Lock Bolt 1", 17420076- 02 nos & Coller 1", 17142921-02 nos.)	5787.90	
154	18000137	Rectifier & Resistor Assembly	195474.08	
155	18000162	Ind. Light Switch Panel Assembly	5689.31	
156	18010544	C/A 242-ECC1/Radar	10270.56	
157	18021554	Rectifier Bank Asm	353710.93	
158	18021645	Housing Assly- Aux Bearing	157377.87	
159	18021670	Sleeve -Bearing	35041.08	
160	18021803	Slip Ring Assy	75911.85	
161	18022418	Slip Ring Assy Mach.	25108.25	

S N	BLW PL No.	DESCRIPTION	Book Rate as on 05/12/2020	Remarks
162	18030294	Locomotive Speed Sensor	113879.99	
163	18040020	Auxiliary Generator	283963.19	
164	18080145	TM Speed Sensor (Suitable for Medha & Siemens AC-AC Traction system)	18338.07	
165	18080157	TM Temperature Sensor (Suitable for Medha, Siemens & EMD AC-AC Traction system)	17516.74	
166	18080170	TM Speed Sensor (Suitable for EMD AC-AC Traction system)	36383.32	
167	18090011	Starter Motor	78896.99	
168	18100259	Stator & Coil Assembly	110539.88	
169	18100260	Armature & Rectifier Mounting Assembly	71388.00	
170	18120570	Module Motor	178237.95	
171	18120787	Power Supply- 55Ac275Dc, (Used in EMD & Siemens old 4000HP Loco system.)	405188.37	
172	18140038	AC Contactor - 3 Pole 325 Amps	94269.28	
173	18140051	AC Contactor - 3 Pole 150 Amps	38938.02	
174	18140099	Contactors- 1200 Amps	124644.45	
175	18140117	Contactor AC 3 Pole 250 Amp	84328.26	
176	18310590	Switch Module	106451.61	
177	18320041	Bus Bar	1039.76	
178	18320405	Bus Bar	897.83	
179	18350446	Terminal Board & Supt Asm.	18833.93	
180	18360816	Receptacle for Locomotive	4999.73	
181	18400024	Reactor Copper Winding	495681.48	
182	18400048	SCR Exciter Bridge Asm	254614.11	
183	18440010	PINION 17 TEETH	18854.30	
184	18440022	GEAR 90 TEETH	74893.02	
185	18440034	PINION 17 T	20961.98	
186	18440046	GEAR 77 T	89079.58	
187	18460057	Spacer - Cable	2.31	
188	18640023	Sensor Assembly- 1000 Rtd	1845.07	
189	19110017	Cylinder Liner Stud Assy	66187.25	
190	19151019	Screw Adjusting	228.09	
191	19330250	Pin Cam Follower	124.08	
192	19394160	Washer Special	1076.76	

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
1	11327753	Hose Assly	786.91
2	16020571	Kit detector repair consisting of 31 items	9029.97
3	16040144	Lash Adjuster	524.27
4	16050113	Hose Assembly	1638.65
5	16050125	Hose Assembly	1731.13
6	16050137	Hose Assembly	2884.20
7	16050186	Clevis Assy	1788.82
8	16050344	Trip Assembly Overspeed	1317.78
9	16050459	Link assembly adjusting	19647.52
10	16060209	Filter Assembly Lube Oil Turbo Charger	12498.99
11	16060271	Tubing piston cooling manifold	4608.90
12	16060829	Kit Main bearing upper	80047.71
13	16060830	kit main bearing lower	76697.59
14	16060842	Kit lube oil seperator	1071.38
15	16060854	Spacer diaphragm	1712.21
16	16070070	Kit water manifold support 1	4860.72
17	16070124	Water pump repair kit	17000.00
18	16080040	AG drive assembly	182304.43
19	16080543	Bolt and spacer assmebly exhaust manifolding	499.07
20	16120930	Housing asm water pump impeller	9503.28
21	16120991	Flang 'y' water discharge	3305.29
22	16122008	Impeller water pump	2459.74
23	16140357	Roller assly cam follower	926.21
24	16150168	Bushing arm	198.50
25	16150170	Bushing roller	879.19
26	16150247	Bearing clutch	2129.86
27	16150429	Bushing stationary	3856.46
28	16150478	Bushing rotor	9288.68
29	16150545	Bushing gear	1161.05
30	16150557	Bushing gear lube oil pump	1325.13
31	16170039	Gasket assembly head to liner with integrated grommet seals	1493.28
32	16170090	Kit cylinder test valve	128.04
33	16170118	Gasket hand hole cover	55.50
34	16170167	Gasket gear train oil retainer	457.82
35	16170210	Gasket accessory drive housing to crankcase	1181.66
36	16170222	Gasket cover to housing	717.55
37	16170234	Gasket overspeed trip housing to crankcase	666.40
38	16170404	Gasket cover flange to manifold flange	911.32
39	16170428	Gasket header to core	508.60
40	16170430	Gasket tank to core	227.84
41	16170490	Gasket expansion joint	1607.42
42	16170507	Gasket adaptor to expansion joint	1585.38
43	16170519	Gasket expansion joint to turbocharger	1131.07
44	16170520	Gasket chamber to adaptor	1506.16
45	16170600	Gasket water pipe to manifold	294.74
46	16170611	Gasket Y flange mounting	955.99
47	16170672	Gasket fuel manifold to fuel filter	254.61
48	16170714	Gasket fuel manifold crossover	212.67
49	16170799	Gasket filter mounting	445.94
50	16170854	Gasket flange to crankcase	450.97
51	16170878	Seal o ring fuel strainer & soak	9.33
52	16170933	Gasket pump inlet and outlet	340.42
53	16171007	Seal o ring strainer housing	133.33
54	16171044	Seal o ring lube strainer	102.04
55	16171070	Gasket mounting scavenging pump	237.41
56	16171159	Seal o ring (lube oil drum)	890.04
57	16171160	Seal o ring (fuel oil filter cover)	99.75
58	16171184	Gasket water pipe mounting	126.53
59	16171329	Kit power pack installation	583.53
60	16171354	Kit gasket water pump application	935.08

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
61	16171366	Kit gasket cylinder head	4999.82
62	16171378	Kit gasket lube oil strainer	4690.50
63	16171380	Kit gasket lube oil scavenging pump	797.80
64	16171391	Kit gasket cylinder head cover and support frame	3080.13
65	16171408	Kit gasket after cooler change out	939.49
66	16171410	Kit gasket lube oil pump piston cooling pump	876.75
67	16171421	Kit seal cylinder head	2730.00
68	16171597	Kit gasket over speed trip housing	3721.92
69	16171615	Kit gasket turbo charger	131938.64
70	16171627	Kit gasket cam shaft drive	2376.35
71	16171688	Kit gasket cylinder head cover	6252.40
72	16171706	Kit gasket fuel oil manifold	886.22
73	16191857	Gasket relief valve	237.62
74	16210542	Kit hardware fork rod	1183.82
75	16240418	Valve 1/4" relief	3602.46
76	16240868	Seal assembly oil	2268.54
77	16241381	Bowel by pass sight glass	2821.47
78	16241526	Pump and motor assembly booster pump/4HP 115V single phase 9000 rpm includes 2.16 AWG leads 3ft long	37890.53
79	16242099	Hose Assembly Kit	22627.55
80	16350042	Kit cylinder head test valve	1617.87
81	17020244	Thrust pad assy	16850.81
82	17020293	Spring asm rubber sec vertical	22982.56
83	17031904	TM air duct boot assembly	31983.71
84	17043323	Sight glass assly (water tank level)	2406.81
85	17050054	Dust bin/TCC blower motor	42245.89
86	17050625	Cap assembly pressure 3 prong 20 PSI	2278.40
87	17160534	Lock bolt 1 x10-5/8	796.91
88	17240074	Dowel asly clutch	27785.03
89	17250110	Spacer fan	3150.00
90	17270212	Gasket header tube	43.88
91	17270250	Gasket water discharge fitting	169.54
92	17270261	Rubber shim for radiator (In metre)	719.74
93	17270753	Rubber strip for radiator (In metre)	1071.67
94	17270881	Gasket bottom header to tank	2926.79
95	17270893	Gasket head to core	1602.30
96	17270911	Seal O ring upper head to tank viton	118.50
97	17270923	Gasket top header to pipe flange	50.68
98	17270960	Gasket lube oil outlet	93.17
99	17271058	Weather strip	514.65
100	17272130	Gasket	178.26
101	17272464	RUBBER SEAL OF COUPLING FLEX 3/4 INCH	88.64
102	17272476	RUBBER SEAL OF COUPLING 2 1/2 INCH FLANGE	159.49
103	17272488	Gasket fbx 1"	109.07
104	17273778	Seal Door (In Feet)	138.44
105	17280825	Coupling flexible 3"	2157.20
106	17281155	Coupling flex 2-1/2 inch	2076.94
107	17281507	Coupling flexible 1/2"	897.71
108	17320409	Flexible Coupling	6198.17
109	17390217	Valve assembly ball cock relief 3/4 pt	14429.45
110	17410095	Spring brush holder clip CA6B	668.73
111	17410101	Spring coil bogie WDP4	10819.38
112	17452065	Sander control valve assly	3768.05
113	17452879	Coupling flexible 4"	3739.80
114	17453458	Cylinder wear half	1291.17
115	17455455	Kit sander control valve (EMD Make)	826.00
116	17455479	Kit valve assembly handle	10921.44
117	17455509	Kit seal MVCC	1079.23
118	17456022	Sight glass for water exp. Tank (3/4" O.D x19-1/2" long	527.81
119	17660105	Kit sander control valve (Recon Make)	1575.00
120	17660117	Kit sander control valve ((Fluid Tech Make)	1150.00



S N	BLW PL No.	Description	Book Rate as on 05/12/2020
121	17660397	Kit sander control valve (Rotex Make)	1029.00
122	18000125	Diode input panel	15877.99
123	18001233	Chassis assembly module	46204.31
124	18001269	Chasis assembly	263290.40
125	18010556	C/A 243- ECC1/MAG	18582.34
126	18021505	Filler Strip	173.74
127	18021700	Cap bearing	40488.41
128	18022273	Sheet assy cover	7917.78
129	18022340	Cover assembly slipping	73387.95
130	18030210	Radar lense cap	1375.26
131	18090023	Radiator Cooling fan asm 54"	466876.77
132	18120015	ASC 300	91164.83
133	18120027	FCD300	83171.00
134	18120039	PSM 300	185611.85
135	18120040	PSM 310	222476.40
136	18120052	PSM320	151128.94
137	18120076	FCF 301	84931.02
138	18120088	ADA 305	202351.13
139	18120118	TLF 301	81660.02
140	18120131	DIO 300	160809.32
141	18120155	Display assembly computer tactile high voltage cabinet	406082.99
142	18120179	Module circuit TDP	11405.16
143	18120180	Module circuit HVRECP	79311.40
144	18120209	compartment equipped micro	352771.06
145	18120283	Box display distributor dual	9784.39
146	18120349	Transducer TR-MRPT	49641.29
147	18120350	Barometer out pr sensitive	6529.28
148	18120600	Pad Bonded contact	14910.00
149	18120799	Circuit module PRG 301	214628.87
150	18120817	Circuit module COM 304	212724.82
151	18120878	Circuit module CPM 401	1196598.48
152	18120880	Panel mounted DVR 301	98395.00
153	18140014	Contactora STA	53986.03
154	18140026	Contactora ST	138075.88
155	18140040	Contactora AC-2 pole 150	41172.82
156	18140063	GF Contactora	123041.17
157	18140075	GFD contactora	30160.23
158	18140154	EXTENDED ARC CHUTE ASSEMBLY	30779.54
159	18140166	Carrier assembly movable contact	11029.46
160	18140178	Post assembly contact	5408.63
161	18140180	Carrier assembly post plate	4047.40
162	18140191	AUXILIARY INTERLOCK KIT	10078.32
163	18140208	ARC CHUTE ASSEMBLY FOR GFD CONTACTOR	12551.66
164	18140221	Plate assembly movable contact	4750.84
165	18140233	Contact assembly fixed	32686.00
166	18140245	Housing assembly two contact stationary	3599.00
167	18160013	Sensor current - 1 BKBL 192 measure upto 300	26874.29
168	18160025	Transducer current ITCC 192	36875.00
169	18160062	Sensor voltage 10 MA VDCL	27444.16
170	18180012	Relay(GP)	12075.94
171	18180024	Relay(GP)	10562.49
172	18180036	Relay(GP)	18243.70
173	18180048	Relay(GR)	84000.00
174	18180050	Relay Kit # 1(for EMD loco)6 items 8373523-1, 8373524-1, 8373528-1,8387477-1, 8415919-1, 8431417-1	12095.00
175	18180085	Housing assembly three contact - stationary	7691.23
176	18240010	Resistor 400W 6.60 hms	2001.67
177	18250014	Resistor FLCE 1 to 4	455.95
178	18250038	Dynamic braking grid resistance 545 amps, 1.222 Ohms (NFT)	103763.24
179	18250040	Resistor grid-dynamic brake-RE3, RE7-1.235 Ohms-545 amps	105734.05
180	18300303	Resistor assembly grid battery charging 0.05	20687.80

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
181	18300327	Resistor RE2-4.80 hms-400watts	2000.10
182	18300340	Resistor assembly regr 1, 2, 3, 4-10-10 ohms	3912.50
183	18300352	Resistor assembly headlight dim-3.75-3.75 ohms	2463.29
184	18300364	Resistor REAG FLD 5.7-750W	7620.04
185	18300376	REVDCL	5706.82
186	18300388	Resister REGRT-190-50W	3060.88
187	18300390	REGNR-REGNL-100/50W	16135.24
188	18300406	REPRG	819.99
189	18310035	Switch rotary F.P/E.S-3 position	8392.92
190	18310072	Fuse 800 amp	4038.05
191	18310096	Circuit braker 15A	2049.54
192	18310138	Breaker circuit 250 amps	16124.69
193	18310140	Fuse 300 amps for radiator fan	5990.99
194	18310151	Switch slide dynamic brake coutout exterior lights maintenance room lights	2325.88
195	18310175	Switch rotary isolation	6733.78
196	18310187	Switch rotary snap class lights	9483.61
197	18310199	Switch push button emergency fuel put off and engine stop	1939.91
198	18310217	Circuit breaker ..gen fld-90 amp	7021.00
199	18310229	Circuit breaker ..fuel pump turbo lights- 30amp	2100.80
200	18310230	Circuit braker 35A	2200.00
201	18310242	Circuit breaker ..local control-30 amp	2299.82
202	18310254	Circuit breaker ..local control-40 amp	2112.21
203	18310266	Circuit breaker ..TCC1-TCC2 computer-10 amp	2812.94
204	18310278	Circuit braker 15A	2408.48
205	18310280	Circuit breaker ..AC GT01-AC GTO2 power supply-15 amp	2080.59
206	18310291	Circuit breaker ..DCL control-3 amp	2160.42
207	18310308	Circuit breaker 10A	1829.98
208	18310310	Breaker 3A	2642.46
209	18310321	Circuit breaker ..TCC electric blower motor/filter blower motor-30amp	2104.07
210	18310333	Circuit breaker ..15 amp-cab fan air dryer-Micro air brake-Radio	2275.62
211	18310345	Switch toggle GRCO 3 PST	1264.85
212	18310485	Switch slide gen field	2904.73
213	18310606	Fuse & indicator assy	3770.09
214	18310818	Circuit breaker-15	1879.73
215	18310679	Circuit breaker 30 amps	7110.84
216	18310680	Connector	12241.88
217	18310795	DC link contactor T/F	48201.21
218	18310989	Circuit braker 15A	2652.55
219	18350549	Rec 3G 2A	6888.39
220	18350770	Terminal Bd-8PT, TB 32A,B,C, 8PT	20569.76
221	18350781	Terminal board-8PT	1760.56
222	18351050	Connector power distribution	3143.50
223	18351580	Contact assembly movable	7014.04
224	18380037	Silicon diode negative base alternator	7318.99
225	18380049	Diode assembly silicon positive base alternator	6031.61
226	18380050	Diode assembly silicon negative base	4050.69
227	18380062	Diode silicon positive base battery charger	4806.89
228	18380074	Rectifier suppressor 0.15 amp 4 cells	6321.91
229	18380104	diode silicon bridge 700 REV RM 250 amps	3666.49
230	18380116	Silicon diode	3798.01
231	18380128	Diode silicon free wheeling 840 rev	6217.59
232	18390160	Rectifier assembly	29829.51
233	18390183	Rectifier Assembly	3573.43
234	18390195	Rectifier assembly	1047.29
235	18390213	Capcitor CA 325 MFD 41	1003.72
236	18390250	Rectifier silicon controlled 1000 peak	9179.87
237	18390596	Rectifier Assembly, Mounting rotating	17674.48
238	18400012	Transformer current	7354.84
239	18400036	Transformer T2, 300VA	13153.22
240	18400103	Transducer GRT	55808.69
241	18410030	Coil magnet 267 ohms/74 VDC	28155.17

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
242	18410042	Coil magnet - 1128 ohms	1491.52
243	18420084	Brush holder assembly CA6B	7916.94
244	18420102	Brush holder assembly TA17	3557.52
245	18420114	Spring brush holder clip TA 17	1037.56
246	18420126	Brush assembly movable contact	6443.09
247	18450015	Contact assembly post stationary	4519.28
248	18450064	Kit interlock motor	28968.47
249	18490013	Fearing ball aux alternator	2895.27
250	18490050	Bearing spherical rotor (EMD make)	68740.66
251	18520066	Jumper & Hanger ASM-MU	14184.14
252	18530837	Insulator assembly fluse bus bar	542.33
253	18530849	Insulator	719.97
254	18530941	Insulator poly glass 7x5/8 inch include 4 nos 9/32 inch holes	2352.62
255	19014077	Bolt hex head 1/2-20 x 1-1/4 "	26.91
256	19014170	Bolt hex head 1/2-20x6 turbocharger mounting	55.99
257	19019026	Bolt hex head 3/4-16x11-5/16 turbocharger mounting	885.02
258	19110510	Stud 3/8-16x4 inches	647.82
259	19110522	Stud 3/8-16x2-3/8 inches	535.10
260	19110534	Stud 3/8-16x5 5/8"	935.00
261	19110546	Stud 3/8-16x7 1/4"	1101.60
262	19151044	Male jackscrew	345.74
263	19151056	Female jackscrew	411.82
264	19340011	Ring Snap	402.52
265	19350156	Nut (Adjusting screw)5/8 x 18	36.84
266	19394500	Washer special 2-1/2 O.D. x 1-1/16 I.D. x 3/8 inch thick	104.72

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
1	15610670	Spring depressor(cyl. head valve & valve lever)	3217.87
2	15610019	Hook for lifting accessory drive housing.	1690.97
3	15610020	Jacking tool for adjusting & lining up accessory drive HSG on C\ case	2190.29
4	15610032	Jacking tool for lining accessory drive housing on engine assly. Line	2694.22
5	15610044	Arrangement for alignment of water pump in GM Loco	46726.93
6	15610056	Accessory housing alignment gauge(oil pump holes)	46855.05
7	15610068	Distance gauge # 2 idler gear stub & L/S cam shaft	29368.96
8	15610070	Master setting gauge for GP01GM0009	10500.00
9	15610081	Guide pin to line up oil pan to crankcase during assly.	4726.64
10	15610093	Template to check line up of oil pan & crank case on accessory end.	13461.09
11	15610100	Alignment gauge to check line up of oil pan & crankcase on camshaft drive end	12413.50
12	15610111	Crankcase line up fixture for oil pan assembly	3586.24
13	15610123	Crankcase line up fixture(small length) for oil pan assembly	3119.64
14	15610135	Alignment gauge with dial indicator for oil pan to c'case.	17088.60
15	15610147	Lifter for 'G' turbocharger Pt. # 40053534	16542.89
16	15610159	Cranking Tool For G. M. Engine	7901.26
17	15610160	Line up indicators gauge to set up of stubshaft from crankshaft & camshaft	67922.87
18	15610172	Backlash check gauge on starter gear & bracket assly.	39020.89
19	15610184	Clamp lifting piston, liner and head assly	4480.97
20	15610196	Piston holder for power pack drop(lifting device)	977.46
21	15610202	Clamp for lifting cyl. Head.	2275.52
22	15610214	Lifter For Aux. Gen. Assly.	1416.00
23	15610226	Spanner bar to check flexing of acc. Drive gear assembly.	4724.54
24	15610238	Hook and clamp for lifting lube oil strainer assly.	4067.57
25	15610240	Bracket lifter for assembly of camshaft housing.	991.93
26	15610251	Lifting device turbo air duct assly.	22237.00
27	15610263	Timing gauge for end of injection at full rack	821.12
28	15610275	Resting pad for end crab cyl head at accessory end.	1380.00
29	15610287	Engine lift device & hooking positions.	227357.83
30	15610317	Holding fix for crankshaft with crank case	5198.51
31	15610329	Jack for governor injector linkage	1301.87
32	15610330	Lifter for aftercooler cone assly.	23388.40
33	15610342	C' clamp for aux. Gen. Assly.	10368.35
34	15610354	Try square 12"(Std.) for counter weight setting acc. End	56761.55
35	15610366	Ream fix. And plug to be used to ream stub shaft to crank case plate	9045.00
36	15610378	Eye bolt for lifting turbo	436.99
37	15610391	Assly. Fix. For connecting rod ,carrier, & piston pin	6527.01
38	15610408	Piston ring compressor guide (std.)	10972.52
39	15610410	Leak test gauge attachment (For GM Power pack assly.)	3779.17
40	15610421	Mandrel for assly/disassly. For valve guid(G. M. loco)	500.00
41	15610433	Lifting arrangement for head frame	3917.74
42	15610445	Clamp lifter for cyl. Liner assy.	3019.28
43	15610457	Steel straight edge 36" for counter weight setting acc. End	20858.21
44	15610469	Counter weight alignment gauge at camshaft drive end	8986.85
45	15610470	Arrangement for alignment of r.s. water pump in G.M. Loco	45663.72
46	15610482	Gauge with dial indicator for cam shaft drive housing alignment	13595.42
47	15610494	Clamp for lifting idler gear stub shaft in horizontal position	6799.67
48	15610512	Cleaning tool for water seal counter bore in cyl. Liner	493.45
49	15610524	Lifter for bearing caps.	2857.20
50	15610536	Flat wire brush for cleaning of P.C. Pipe.	1229.70
51	15610548	Wire brush for cleaning of c/case lube oil manifold	1739.40
52	15610550	Insert pressing fixture for crank case assembly.	77277.57
53	15610561	Gauge for injector rack setting.	4987.38
54	15610573	Cradle for four power pack	37326.94
55	15610603	Wrench for cylinder test valve	211.66

S N	BLW PL No.	Description	Book Rate as on 05/12/2020
56	15610615	Pressing tool for water pump impeller to drive shaft assy.	777.00
57	15610627	Valve bridge spring compressor	1382.58
58	15610639	Gauge to check minimum clearance between lash adjuster body & the end of valve stem	276.70
59	15610640	Installer for hydraulic lash adjuster	2333.50
60	15610652	Tram for exhaust valve height checking	1255.03
61	15610664	Tube for crab stud thread protector	381.76
62	15610690	Puller for Valve Bridge Lash Adjuster	3845.85
63	15610718	Pin vise for holding 0.0" - 0.040" dia. Wire	2331.56
64	15610720	Pry bar for injector removing	2430.39
65	15610731	Wrench for loosening nut of injector assembly	2729.70
66	15610743	Clamp (connecting rod positioning during assembly/ removal) .	684.25
67	15610755	Fitting Arrangement for snap Ring of valve bridge	420.00
68	15610779	Remover for upper main bearing shell (except 2 center bearing)	211.51
69	15610792	Seal inserter for head frame	480.11
70	15610809	Gauge block for lash adjuster test stand	12000.00
71	15610810	Box socket wrench -half moon 5/8" x 3/4"(for water pump mounting bolts & governor rear nuts)	14223.50
72	15610822	Water pump disassembly tool	745.52
73	15610846	Crank over tool (manual operation) for EMD engines	127066.60
74	15610858	Air drive kit for crank over tool	198355.91
75	15610860	Wrench for basket bolt & nut	2499.45
76	15610871	Tool for oil loading in lash adjuster	1854.79
77	15610883	Reamer for cylinder test valve seat	3180.33
78	15610895	Lead wire holder(for piston to cyl. Head clearance check)	265.32
79	15610937	Qualifying Gauge for conn. Rod fork and blade	261751.00
80	15610986	Compression Tester for HHP Engine	228955.00
81	15620013	Special socket 1-1/4" hex. For diode	1575.00
82	15630018	Line up tooling for engine to compressor applied to shaft	44431.10
83	15630020	Doweling fixture for generator	6466.94
84	15630031	Alignment fixture for water coupling(engine) to equipment rack	3571.87
85	15630043	Lifter for radiator assly.	40840.58
86	15630055	Lifter for cooling fan assly.	53602.07
87	15630060	G.M. Loco alternator & engine alignment device	42512.40
88	15630092	Gauge for alignment of driving end aux. generator(mount on shaft dia.)	28463.85
89	15630109	Mounting arrangement on flange dia.of dial gauge for alignment of driving end aux.gen.	28967.41
90	15630134	Torque Multiplier Kit for Loosening, Tightening & Torqueing of fuel tank mounting bolt & nuts.	555380.00