


ANNEXURE -'A'

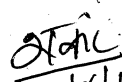
List of items and vendors for critical gauges from Maintenance Tooling Category:-

Sl. No	Part No.	Description	Drg. No.
1	15610044	Accessory housing alignment gauge for L.S. water pump hole	MT01GM0094
2	15610056	Accessory housing alignment gauge for oil pump holes	GP01GM0017
3	15610068	Distance gauge # 2 idler gear stub & L/S cam shaft	GP01GM0009
4	15610070	Master setting gauge for GP01GM0009 used with Stub idler shaft setting	GP01GM0238
5	15610093	Template to check line up of oil pan & crank case on accessory end.	GP01GM0012
6	15610100	Alignment gauge to check line up of oil pan & crankcase on camshaft drive end.	GP01GM0013
7	15610160	Line up indicators gauge to set up of stubshaft from crankshaft & camshaft.	GP01GM0236
8	15610172	Backlash check gauge on starter gear & bracket assly.	GP01GM0244
9	15610469	Counter weight alignment gauge at camshaft drive end.	GP01GM0243
10	15610470	Accessory housing alignment gauge for R.S. water pump hole	MT01GM0147
11	15610937	Qualifying gauge for connecting rod fork & blade.	GI06GM0206

Sl. No**Vendors Address**

- 1 M/s Delta Engineering Works, Ichapur, H.I.T. Road, Kamardanga, Santragachi, Howrah - 711 104.
- 2 M/s G.V. Enterprises, B-139, Sector-11, Faridabad - 121001.
- 3 M/s Indian Instruments Pvt. Ltd., 4, Mandeville Gardens, Kolkata-700019
- 4 M/s Rail Associate Enterprises, G 122, Rajanigandha Complex, G. T. Road, Ghaziabad- 201007


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ANNEXURE -'B'

List of items and vendors for critical or special purpose tools from Maintenance Tooling Category:-

(a)

Sl. No	Part No.	Description	Drg. No.
1	15610287	Engine lift device & hooking positions.	SK01GM0032

Sl. No

Vendors Address

- 1 M/s Boyd Smith S Private Limited, G.P.O. Box No. 42, B-3/5, Gillander House, 8, Netaji Subhas Road, Kolkata-700 001, West Bengal.
- 2 M/s PES Hydraulics (India) Pvt. Ltd., Plot No.-15, Phase-II, Industrial Estate, Yamuna Nagar-135001
- 3 M/s Rail Associate Enterprises, G 122, Rajanigandha Complex, G. T. Road, Ghaziabad- 201007

(b)

Sl. No	Part No.	Description	Drg. No.
1	15610846	Crank over tool (manual operation) for EMD engines	SP02GM0043
2	15610858	Air drive kit for crank over tool	SP02GM0044

Sl. No

Vendors Address

- 1 M/s Ingersoll-Rand Technologies & Services Pvt. Ltd., 37A, Site-IV, Sahibabad Industrial Area, Ghaziabad-201010.
- 2 M/s Rail Associate Enterprises, G 122, Rajanigandha Complex, G. T. Road, Ghaziabad- 201007.
- 3 M/s Unique Technocare Private Limited. 9 Gulab Katra, DLW, Opp. Newada Petrol Pump. Varanasi-221005

(c)

Sl. No	Part No.	Description	Drg. No.
1	15630110	Lock bolting equipment & collar cutter	SP23GM0055

Sl. No

Vendors Address

- 1 M/s Ranka Engineering Corporation, 4-2-257/3, Mahankali Street, Secunderabad-500003 (Telangana)
- 2 M/s Arconic Of India Private Limited, Chowringhee Court Unit No-28, 55/1 Chowringhee Road Kolkata-700071

(d)

Sl. No	Part No.	Description	Drg. No.
1	15610925	Master injector kit	SP02GM0059
2	15610949	Test bench for Mechanical Unit Injector	SP02GM0061

Sl. No

Vendors Address

- 1 M/s Bosch Limited, Hosur Road, Adugodi, Bangalore-560030
- 2 M/s Interstate-Mc-Bee, LLC, Interstate Diesel service Inc., Mc Bee Supply Corp., 4901, Lakeside Avenue, Ohio 441144-3996, USA
- 3 M/s M/s SLVMR Fuel Injection Equipments, 360, Export Promotion Indl. Park, Kundli (Haryana)-131028

(e)

Sl. No	Part No.	Description	Drg. No.
1	15630122	Hydraulic equipment for pinion pressing on traction motor shaft	MT35GM0204

Sl. No

Vendors Address

- 1 M/s PES Hydraulics (India) Pvt. Ltd., Plot No.-15, Phase-II, Industrial Estate, Yamuna Nagar-135001
- 2 M/s Crimpwell Services, 8 Radhabazar lane, ground floor, near Calcutta Gujrati Hospital, Kolkatta-700001

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ANNEXURE -'C'

List of items and vendors for general tools from Maintenance Tooling items Category :-

S. No	PL No.	Description	Drq. No.
1	15510670	Spring depressor(cyl. head valve & valve lever)	MSTE-5170
2	15610019	Hook for lifting accessory drive housing.	MT01GM0044
3	15610020	Jacking tool for adjusting & lining up accessory drive HSG on C/case	MT01GM0138
4	15610032	Jacking tool for lining accessory drive housing on engine assly. Line	MT01GM0111
5	15610081	Guide pin to line up oil pan to crankcase during assly.	MT01GM0136
6	15610111	Crankcase line up fixture for oil pan assembly	MT01GM0116
7	15610123	Crankcase line up fixture(small length) for oil pan assembly	MT01GM0137
8	15610135	Alignment gauge with dial indicator for oil pan to c'case.	GP01GM0008
9	15610147	Lifter for 'G' turbocharger Pt. # 40053534	MT01GM0040
10	15610159	Cranking Tool For G.M. Engine	MT01G40081
11	15610184	Clamp lifting piston, liner and head assly	MT01GM0097
12	15610196	Piston holder for power pack drop(lifting device)	MT01GM0098
13	15610202	Clamp for lifting cyl. Head.	MT05GM0103
14	15610214	Lifter For Aux. Gen. Assly.	MT01GM0106
15	15610226	Spanner bar to check flexing of acc. Drive gear assembly.	MT01GM0060
16	15610238	Hook and clamp for lifting lube oil strainer assly.	MT01GM0041
17	15610240	Bracket lifter for assembly of camshaft housing.	MT01GM0045
18	15610251	Lifting device turbo air duct assly.	MT01GM0046
19	15610263	Timing gauge for end of injection at full rack	MT01G40083
20	15610275	Locating pad for end crab cyl head at accessory end.	MT01GM0100
21	15610317	Holding fix for crankshaft with crank case	MT01GM0151
22	15610329	Jack for governor injector linkage	MT01GM0140
23	15610330	Lifter for aftercooler cone assly.	MT01GM0042
24	15610342	C' clamp for aux. Gen. Assly.	SK01GM0114
25	15610354	Try square 12"(Std.) for counter weight setting acc. End	MT01GM0142
26	15610366	Ream fix. And plug to be used to ream stub shaft to crank case plate	MT01GM0153
27	15610378	Eye bolt for lifting turbo	MT01GM0040/13
28	15610391	Assly. Fix. For connecting rod ,carrier,& piston pin	MT05GM0101
29	15610408	Piston ring compressor guide (std.)	MT05GM0096
30	15610410	Leak test gauge attachment (For GM Power pack assly.)	MT05GM0112
31	15610421	Mandrel for assly/disassly. for HHP valve guide.	MT05GM0061
32	15610433	Lifting arrangement for head frame	MT01GM0149
33	15610445	Clamp lifter for cyl. Liner assy.	MT05G40051
34	15610457	Steel straight edge 36" for counter weight setting acc. End	MT01GM0143

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35	15610482	Gauge with dial indicator for cam shaft drive housing alignment	GA01GM0014
36	15610494	Clamp for lifting idler gear stub shaft in horizontal position	MT01GM0141
37	15610512	Cleaning tool for water seal counter bore in cyl. Liner	MT05GM0152
38	15610524	Lifter for bearing caps.	MT01GM0158
39	15610536	Flat wire brush for cleaning of P.C. Pipe.	EQ04G40052
40	15610548	Wire brush for cleaning of c/case lube oil manifold	EQ01G40083
41	15610550	Insert pressing fixture for crank case assembly.	MT01GM0150
42	15610561	Gauge for injector rack setting.	GA01GM0015
43	15610573	Cradle for four power pack	SK05GM0052
44	15610603	Wrench for cylinder test valve	MT01GM0165
45	15610615	Pressing tool for water pump impeller to drive shaft assly.	MT05GM0168
46	15610627	Valve bridge spring compressor	MT05GM0169
47	15610639	Gauge to check minimum clearance between lash adjuster body & the end of valve stem	MT01GM0170
48	15610640	Installer for hydraulic lash adjuster	MT05GM0171
49	15610652	Tram for exhaust valve height checking	MT05GM0172
50	15610664	Tube for crab stud thread protector	MT01GM0173
51	15610690	Puller for Valve Bridge Lash Aduster	MT05G40085
52	15610718	Pin vise for holding 0.0" - 0.040" dia. Wire	SP02GM0041
53	15610720	Pry bar for injector removing	MT01GM0176
54	15610731	Wrench for loosening nut of injector assembly	MT02GM0177
55	15610743	Clamp (connecting rod positioning during assembly/ removal) .	MT01GM0178
56	15610755	Fitting Arrangement for snap Ring of valve bridge	MT05GM0131
57	15610779	Remover for upper main bearing shell (except 2 center bearing)	MT01GM0182
58	15610792	Seal inserter for head frame	MT01GM0184
59	15610809	Gauge block for lash adjuster test stand	MT05GM0185
60	15610810	Box socket wrench -half moon 5/8" x 3/4"(for water pump mounting bolts & governor rear nuts)	MT01GM0186
61	15610822	Water pump disassembly tool	MT05GM0187
62	15610860	Wrench for basket bolt & nut	MT01GM0190
63	15610871	Tool for oil loading in lash adjuster	MT05GM0193
64	15610883	Reamer for cylinder test valve seat	MT01GM0194
65	15610895	Lead wire holder(for piston to cyl. Head clearance check)	MT01GM0195
66	15610901	Expander for G.M.'s piston ring	MT05GM0196
67	15620013	Special socket 1-1/4" hex. For diode	MT21GM0191
68	15630018	Line up tooling for engine to compressor applied to shaft	MT21GM0002
69	15630020	Doweling fixture for generator	MT21GM0006
70	15630031	Alignment fixture for water coupling(engine) to equipment rack	MT21GM0031
71	15630043	Lifter for radiator assly.	MT21GM0124

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72	15630055	Lifter for cooling fan assly.	MT21GM0130
73	15630080	G.M. Loco alternator & engine alignment device.	MT21GM0159
74	15630092	Gauge for alignment of driving end aux. generator (mount on shaft dia.)	MT21GM0157
75	15630109	Gauge for alignment of driving end aux. generator (mount on flange dia.)	MT21GM0156

Remark:- Following vendors can supply all above items of Annexure-C.

Sl. No

Vendors Address

- 1 M/s Boyd Smith S Private Limited, G.P.O. Box No. 42, B-3/5, Gillander House, 8, Netaji Subhas Road, Kolkata-700 001, West Bengal.
- 2 M/s Delta Engineering Works, Ichapur, H.I.T. Road, Kamardanga, Santragachi, Howrah - 711 104.
- 3 M/s G. V. Enterprises, B-139, Sector-11, Faridabad -121001.
- 4 M/s Indian Instruments Pvt. Ltd., 4, Mandeville Gardens, Kolkata-700019
- 5 M/s Machine & Tools Co., 76, Kali Kundu Lane, Howrah-711101
- 6 M/s PES Hydraulics (India) Pvt. Ltd., Plot No.-15, Phase-II, Industrial Estate, Yamuna Nagar-135001
- 7 M/s Perfect Engg., Works, 104, Baldev Park, Delhi- 110051
- 8 M/s Rail Associate Enterprises, G 122, Rajanigandha Complex, G. T. Road, Ghaziabad- 201007

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