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TM/HM/BRM/Pt-IV

Date: 07.09.2020

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|--|---|
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Detailed addresses are enclosed herewith.

विषय: बैलास्ट रेगुलेटिंग मशीन (क्रशॉ, मैटेक्श और पी०बी०र० 400आर) संशोधन-1 की क्रिटिकल स्पेयर्स पार्ट सूची।

Sub: Critical Spares Parts list for (Rev.1) for Ballast Regulating Machine (Kershwa, Metex and PBR 400R).

Ref: CE/TMC/Seminar held on 4th and 5th April 2019.

बैलास्ट रेगुलेटिंग मशीन (क्रशॉ, मैटेक्श और पी०बी०र०-400आर) संशोधन-1 के क्रिटिकल स्पेयर्स पार्ट सूची, ई.सी.आर. और एन.डब्ल्यू.आर.से प्राप्त सुझावों के आधार पर, मसौदा एवं अनंतिम क्रमशः पत्र सं टीएम/एचएम/1 दि 31.12.2019 द्वारा 30 दिनों के लिये, और पत्र सं टीएम/एचएम/बी०आर०एम०/पार्ट.IV दि 20.07.2020 द्वारा 15 दिनों के लिये जारी किया गया था परन्तु क्षेत्रिय रेलवे से कोई टिप्पणी प्राप्त नहीं हुई, अब क्रिटिकल स्पेयर्स पार्ट सूची को अंतिम रूप में तैयार किया गया है जिसकी प्रति आपके सूचनार्थ तथा मशीन के कर्मचारियों, जो फील्ड में कार्य कर रहे हैं के मार्ग दर्शन हेतु संलग्न है। यद्यपि उपरोक्त सूची/पुनरीक्षण बनाते समय सभी सावधानियों बरती गई हैं, फिर भी यदि कोई त्रुटि हो तो, कृपया अपने सुझावों/टिप्पणियों को ईमेल/फैक्स/पत्राचार द्वारा अधोहस्ताक्षरी को अवगत करायें।

Draft and provisional Critical Spares Parts list for Ballast Regulating Machine (Kershwa, Metex and PBR 400R) Rev-1 have been prepared based on suggestion of ECR and NWR, circulated vide letter no.TM/HM/1 dt.31-12-2019 for 30 days and letter no.TM/HM/BRM/pt.IV dt. 20-07-2020 for 15 days respectively, but no comments received from Zonal Railways. Now critical spares part list has been finalized.

A copy of the same is enclosed herewith for your information and guidance of the machine staff working in the field. However every care has been taken during preparation of the above said list, the discrepancy noticed, if any, may be brought to the knowledge of the undersigned for further improvement by email/fax/post.

E-mail Id- hmtmmrdso@gmail.com
DA: As above

Digitally signed by OM
PRAKASH
Date: Tue Sep 15 17:32:17 IST
2020
Reason: Approved

(ओम प्रकाश)
(Om Prakash)
निदेशक रेलपथ मशीन-III
Director Track Machine-III

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INDIAN RAILWAYS

CRITICAL SPARES OF TRACK MACHINES

BRM (PBR-400R)

Rev.-1

September-2020

RESERCH DESIGNS AND STANDARDS ORGANISATION
Manak Nagar, Lucknow-226011

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SITE - At machine

STMD - Satellite depot

ZTMD - Zonal depot

BRM –PBR-400R**ENGINE**

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
1.1	Cummins NT 855L 240 BHP						
1.1	Self Starter	20/3021036/MT 42	1	3	1	0	0
1.2	Oil Level Gauge	FSA127/2oviton	3	3	0	0	1
1.3	Air Filter	0455800001	1	0.3	1	1	2
1.4	Alternator BOSCH Make	28v/55A	1	2	0	0	1
1.5	Lube Oil Filter	3166554	1	0.2	1	0	4
1.6	Lube Oil Bypass Filter	3873576	1	0.2	2	2	2
1.7	Air Cleaner	3226018 & 32260189	1	1	1	0	1
1.8	V-belt	KCL200328	2	0.6	1	0	1
1.9	Lube Oil Pressure Gauge	500109	1	5	0	0	0.2*
1.10	Lube Oil Pressure Switch	VD037/30(0-10 bar)	1	3	0	0	0.3*
1.11	Fuel Filter	4962810	1	0.2	2	2	2
1.12	House Pipe (SLO BY PASS NT 855)	AS060720055	1	1	1	0	1
1.13	Tube Injector for Fuel Supply	3815852	1	0.3	1	1	2
1.14	Filter Element Water	4108421	1	0.2	1	0	4

*Minimum Quantity -1

BRM –PBR-400R**HYDRAULICS**

Sr. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
2.1	Hydraulic						
2.1	Cylinder (for shoulder plough)	HZGB.063.036.0660.1.054	2	6	0	0	0.3*
2.2	Cylinder (for shoulder plough)	HZGB.100.050.0820.1	2	6	0	0	0.3*
2.3	Cylinder (for shoulder plough)	HZGB.063.040.0210.1	2	6	0	0	0.3*
2.4	Cylinder (for shoulder plough)	HZGB.080.045.0350.1	4	6	0	0	0.6*
2.5	Cylinder (for sweeper unit)	HZGB.063.036.0425.1	1	6	0	0	0.2*
2.6	Cylinder (for side plough for sweep equipment)	HZGB.040.025.0110.2	2	6	0	0	0.3*
2.7	Cylinder (for front plough)	HZGB.063.036.0420.1.001	2	6	0	0	0.3*
2.8	Cylinder (for front plough)	HZPK.063.036.0560.1.005	2	6	0	0	0.3*
2.9	Cylinder (for front plough)	HZGB.063.036.0420.1	2	6	0	0	0.3*
2.10	Cylinder (for Fuel Actuating)	WM388-U1C2B	2	6	0	0	0.3*
2.11	Drive motor	HY945 _x 107HAIT-40/280 bar	2	6	0	0	0.3*
2.12	Charging Filter	HY-E507.800.03	1	0.3	1	1	2
2.13	Suction Filter	HY-S501.460.150	1	0.3	1	1	2
2.14	Suction Filter	HYS501.160.P10ES	1	0.3	1	1	2
2.15	Return Filter	HY-R501.330.10A	1	0.3	1	1	2
2.16	Control valve (change-over mechanism)	90350/3,8	1	6	0	0	0.2*
2.17	Housing Complete	HY935N10 113429	1	6	0	0	0.2*
2.18	Stop block	HY157.47	2	6	0	0	0.3*

*Minimum Quantity -1

BRM –PBR-400R**HYDRAULICS**

Sr. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
2.19	Seal Kit	HZ01.040	1	1	0	0	1
2.20	Seal Kit	HZ02.040.025	1	1	0	0	1
2.21	Seal Kit	HZ01.063	5	1	2	1	2
2.22	Seal Kit	HZ02.063.036	4	1	2	0	2
2.23	Seal Kit	HZ01.100	1	1	0	0	1
2.24	Seal Kit	HZ02.100.050	1	1	0	0	1
2.25	Seal Kit	HZ02.063.040	1	1	0	0	1
2.26	Seal Kit	HZ01.080	1	1	0	0	1
2.27	Seal Kit	HZ02.080.045	1	1	0	0	1
2.28	Seal Kit	90293DS	1	1	0	0	1
2.29	Dist. (30 Bar) To Pressure Gauge (Hose Pipe)	NW400BARx4500	1	6	0	0	0.2*
2.30	Driving Motor (Front) To Pressure Gauge (Hose Pipe)	NW400BARx2400	1	6	0	0	0.2*
2.31	Driving Pump To Dist. (Hose Pipe)	GH506-16x850	1	6	0	0	0.2*
2.32	Mobile Valve to Joint Block-i (Shoulder Plough) (Hose Pipe)	R02-4x3650	8	6	1	0	1
2.33	Mobile Valve to Joint Block-i (Shoulder Plough) (Hose Pipe)	R02-4x3600	6	6	0	0	1
2.34	Mobile Valve to P.O.C. Valve (Shoulder Plough Lifting) (Hose Pipe)	R02-4x4350	2	6	0	0	0.3*
2.35	Mobile Valve to P.O.C. Valve (Shoulder Plough In-Out) (Hose Pipe)	R02-4x4200	2	6	0	0	0.3*
2.36	Mobile Valve to Joint Block (Brush Box) (Hose Pipe)	R02-4x3850	3	6	0	0	0.5*
2.37	Mobile Valve to Joint Block (Brush Box) (Hose Pipe)	R02-4x3950	3	6	0	0	0.5*
2.38	Suction Filter To Vacuum Gauge (Driving Pump) (Hose Pipe)	NW400BARx1850	1	6	0	0	0.2*
2.39	Housing	Hy.935.N10113429	1	6	0	0	0.2*

BRM –PBR-400R**MECHANICAL**

Sr. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
3.0	Mechanical						
3.1	Plough blade	3000.03.235.3CWIE GEZ.	1	1	1	0	1
3.2	Plough blade	3000.03.236.3CSPGL	1	1	1	0	1
3.3	Lock nut	M10DIN982-8	24	6	2	1	1
3.4	Tight nut	GN206-25-M12	2	6	0	0	0.3*
3.5	Hexagon bolt	M10X16DIN933-8.8/VERZ.	1	6	0	0	0.2*
3.6	Hexagon bolt	M12X20DIN933-8.8/VERZ.	16	6	1	1	1
3.7	Hexagon bolt	M8X16DIN933-8.8/VERZ	30	6	2	0	3
3.8	Hexagon bolt	M14X35DIN933-8.8/VERZ	8	6	0	0	1
3.9	Hexagon bolt	M24X190DIN931-8.8/VERZ	4	6	0	0	0.6*
3.10	Coupling bolt	HZ70.02-20.60	2	6	0	0	0.3*
3.11	Threaded bolt	3000.08.128	4	6	0	0	0.6*
3.12	Dist.washer	E63.121	4	1	1	1	2
3.13	Dist.washer	UD62.2519	4	1	1	1	2
3.14	Spring washer	B8,1016DIN127/VER Z.	1	1	0	0	1
3.15	Counter sunk screw	M5X12DIN963-5.8/VERZ.	10	1	2	3	5
3.16	Counter sunk screw	M8X30DIN7991-8.8/VERZ.	40	1	10	10	20
3.17	O-ring	190X3-N-DIN3771-NBR90	3	1	1	1	1
3.18	O-ring	158,42X2,62-N-DIN3771-NBR90	2	1	1	0	1

*Minimum Quantity -1

BRM –PBR-400R**MECHANICAL**

Sr. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
3.19	O-ring	216168	1	1	0	0	1
3.20	Pin	DL220.05	1	2	0	0	0.5*
3.21	Pin	UD140.402	1	2	0	0	0.5*
3.22	Pin	UD63.1055	1	2	0	0	0.5*
3.23	Pin	WN107-35h11.112,5.8-1	4	2	1	0	1
3.24	Pin	WN107-20e8.70,5.5-1	1	2	0	0	0.5*
3.25	Pin	WN107-25h7.84.6,3-1	1	2	0	0	0.5*
3.26	Split pin	8X63DIN94/VERZ.	12	2	2	2	2
3.27	Split pin	5X36DIN94/VERZ.	4	2	1	0	1
3.28	Split pin	6,3X50DIN94	4	2	1	0	1
3.29	Split pin	5X40DIN94/VERZ	4	2	1	0	1
3.30	Split pin	4X20DIN94/VERZ.	4	2	1	0	1
3.31	Penion	WN 70. 9204	2	2	1	1	2
3.32	Cone bearing	571801313-50SH	1	1	0	0	1
3.33	Cylindric roller bearing	NJ2212ECP	1	1	0	0	1
3.34	Bearing	CA187.00-I	28	1	7	7	14
3.35	Special bearing	DL63.307A/P	2	1	1	0	1
3.36	Axle roller bearing	UD62.2618P	2	1	1	0	1
3.37	Axle roller bearing	UD62.2610P	2	1	1	0	1
3.38	Plug-in type bearing	90355B	1	1	0	0	1

*Minimum Quantity -1

BRM –PBR-400R**MECHANICAL**

Sr. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
3.39	Sweeper	.....	1Set	1	0	0	1
3.40	Clamp	3000.01.405	6	3	1	0	1
3.41	Chain 400 g8w	WIN10 400	1	1	1	0	1
3.42	Chain	WN163-18.5.290-1	2	1	1	0	1
3.43	Engager	WN 70.1407	2	3	1	0	2
3.44	Control rod	WN 70.1408	2	3	1	0	2
3.45	Column bearing	CRW400.10A	1	1	0	0	1
3.46	Roller bearing	51106	1	1	0	0	1
3.47	Cone bearing	571801911-40SH	4	1	1	1	2
3.48	Deep groove ball bearing	6211	6	1	2	2	2
3.49	Deep groove ball bearing	6209/2RS	1	1	0	0	1
3.50	Screw plug	M38X1,5DIN910	1	1	0	0	1
3.51	Shaft sealing ring	BA60-80-10DIN3760-NB	1	1	0	0	1
3.52	Shaft sealing ring	BADUO20-40-14DIN3760-NB	1	1	0	0	1
3.53	Shaft sealing ring	BA20-32-7DIN3760-NB	1	1	0	0	1
3.54	Shaft sealing ring	BA160-190-13DIN3760-NB	4	1	2	1	1
3.55	Sealing ring	A38X44X1,5DIN7603-CU	1	1	0	0	1
3.56	Brake shoe	WN156-EHG-1	8	0.5	4	4	8
3.57	Conveyor belt	CRW400.9425-SP.1668	1	4	0	1	0.2*
3.58	Drive shaft	U 64.1208A	1	6	0	0	0.2*
3.59	Wet air filter	4100462142	2	0.5	1	1	2
3.60	Sliding gear	WN 70.9102	2	6	0	0	0.3*
3.61	Dummy male & female off sizes	.....	-	-	-	-	-

*Minimum Quantity -1

BRM –PBR-400R**ELECTRICAL**

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
4.0	Electrical						
4.1	Relay	0332209203	2	6	0	0	0.3*
4.2	Time Relay	ZR5MF025	1	6	0	0	0.2*
4.3	Relay/24V/50A	0332002250	1	6	0	0	0.2*
4.4	Relay 300A 24V	EL-T7125	1	6	0	0	0.2*
4.5	Diode	1A600V1N4005	19	6	2	2	2
4.6	Diode	5A800V/BY500-800	1	6	0	0	0.2*
4.7	Diode	3A1000V1N5408	3	6	0	0	0.5*
4.8	Diode (not required)	1A600V1N4005	1	6	0	0	0.2*
4.9	Dummy Plug	EL-T7250-BS/16,5D	2	6	0	0	0.3*
4.10	Pull Cable	DZ95/G=1500/HUB70	1	6	0	0	0.2*
4.11	Pull Cable	DZ160/G=1500/HUB200	1	6	0	0	0.2*
4.12	Pull Cable	DZ160/G=2500/HUB200	1	6	0	0	0.2*
4.13	Proximity Switch	EL-T1422/K/U	2	6	0	0	0.3*
4.14	Wiper Motor 24V	404405-	1	6	0	0	0.3*
4.15	Fuses	.....	8	....	2	2	4

*Minimum Quantity -1

ACKNOWLEDGEMENT

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement / Mc/year		
					SITE	STMD	ZTMD
5.0	Pneumatic						
5.1	Seal kit	PN2Z-KF.50/18/88-50/18/44DS	1	1	1	0	0
5.2	Seal kit	PN2Z-35DS	2	1	1	0	1
5.3	Seal kit	PN2Z-50DS	2	1	1	0	1
5.4	Seal kit	PN1Z-25DS	1	1	1	0	0
5.5	Pneumatic cylinder	PN2Z-KF.50/18/88-50/18/44	1	6	0	0	0.2*
5.6	Pneumatic cylinder	PN2Z-G.50/16/250	1	6	0	0	0.2*
5.7	Pneumatic valve	90371	3	6	0	0	0.5*
5.8	Pneumatic valve	90344	12	6	1	1	2
5.9	Pneumatic valve	90343	2	6	0	0	0.3*
5.10	Pneumatic valve	90346	2	6	0	0	0.3*
5.11	Pressure regulator valve	275200	1	3	0	0	0.3*
5.12	Connection tube	90291-500LG	8	2	1	1	2
5.13	Air dryer cartridge	90187 ES	2	0.3	2	2	3
5.14	Colling device	DL 90.37	1	4	0	0	0.2*
5.15	Regulator	90189	6	6	0	0	1
5.16	Air Horn Connection (Hose Pipe)	8.4x2.1x2200	1	6	0	0	0.2*
5.17	Air Horn Connection (Hose Pipe)	8.4x2.1x350	1	6	0	0	0.2*
5.18	Air Horn Connection (Hose Pipe)	8.4x2.1x800	1	6	0	0	0.2*
5.19	Brake Box to Silencer (Hose Pipe)	R5R-10x1000	3	6	0	0	0.5*
5.20	Jubilee Clamp Off Sizes	.....	50	2	6	10	50

*Minimum Quantity 1

Note:- Any other items which the Zonal Railways decide as per condition and safe operation of the machine shall be kept on the machine.

ACKNOWLEDGEMENT

Following officers and staff have made their valuable contributions in finalization of the Critical Spare Parts list for Ballast Regulating Machine (PBR 400R)

RAILWAYS

E.C.RAILWAY

RDSO

1. Shri Muslim Ahmad ARE/TM
2. Shri V. P. Srivastava SSE/TM