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टीएम/एच एम/बी सी एम पार्ट. III
TM/HM/BCM,Pt- III

दिनांक- 05 -03-2024
Date- 05 -03-2024

I-	मुख्य अभियन्ता (ट्रैक मशीन) सभी क्षेत्रीय रेलवे	Chief Engineer (Track Machines) All Zonal Railways
II-	मुख्य कार्यशालाप्रबन्धक (ट्रैक मशीन) सी.पी.ओ.एच. कार्यशाला प्रयागराज , रायनापाडु, कंचरापारा, अहमदाबाद,	Chief Workshop Manager (Track Machines) CPOH Workshop, Prayagraj , Rayanapadu, Kachrapara, Ahmedabad
III-	प्रधानाचार्यभा.रे.रे.प.म.प्र.के. पीपलगांव प्रयागराज-211011	Principal, IRTMTC, Pipalgaon, Prayagraj-211011
	Details of addresses are enclosed herewith.	

विषय	:	बैलास्ट क्लिनिंग मशीन माडल -आर एम-80-92यु (मशीन क्रम सं- 57088-57105 एवं 57165-57175) की निरीक्षण जांच सूची ।
Sub	:	Inspection Check List of Ballast Cleaning Machine (RM-80-92U) (Machine Sr.No.57088-57105 & 57165-57175).

ओईएम मैनुअल, आइआरटीएमएम-2019 एवं उत्तर रेलवे से प्राप्त सुझाव के आधार पर बैलास्ट क्लिनिंग मशीन माडल -आर एम-80-92यु (मशीन क्रम सं- 57088-57105 & 57165-57175) की निरीक्षण जांच सूची का मसौदा तैयार कर टीएम/एच एम/ बी सी एम पार्ट. III दि. 21.09.2023 द्वारा 30 दिनों के लिये जारी किया गया था, और अंतिम निरीक्षण जांच सूची पत्र सं. टीएम/एच एम/ बी सी एम पार्ट. III दि. 27.12.2023 द्वारा 15 दिनों के लिये सभी क्षेत्रीय रेलवे को, जारी किया गया था। इसके उपरान्त उत्तर मध्य रेलवे से प्राप्त सुझाव/टिप्पणी के आधार पर अंतिम रूप से तैयार किया गया है, जिसकी एक प्रति आपके सूचनार्थ तथा सभी मशीन के कर्मचारियों जो फील्ड में काम कर रहे हैं, के मार्गदर्शन हेतु संलग्न है। यद्यपि उपरोक्त सूची बनाते समय सभी सावधानियाँ बरती गई हैं, फिर भी यदि कोई त्रुटि हो तो कृपया अपने सुझावों/टिप्पणियों को सुधार हेतु ई-मेल/पत्राचार द्वारा अद्योहस्ताक्षरी को भेजे।

On the basis of OEM manual, IRTMM-2019 and suggestion received from Northern railway draft of Inspection Check List of Ballast Cleaning Machine (RM-80-92U) (Machine Sr.No.57088-57105 & 57165-57175) had been prepared and circulated vide letter no. TM/HM/BCM/Pt-III dated 21/09/2023 for 30 days and provisional Inspection Check List circulated vide letter no. TM/HM/BCM/Pt-III dated 27/12/2023 for 15 days respectively. After incorporating Suggestions/Comments received from North Central Railway, Inspection Check 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/post.

DA: As above

Email id - hmtmmrdso@gmail.com

Digitally Signed by Amar
Dev Maurya (ए. डी. मौर्य)
Date: 05-03-2024 15:57:52
Reason: Approved
मि. अमर देव मौर्य
Director/Track Machine-III

I- मुख्य अभियन्ता (ट्रैक मशीन)

- 1.0 मध्य रेलवे, सीएसटी, मुम्बई-400 001
- 2.0 पूर्वरेलवे, फेयरलीप्लेस, कोलकाता-700 001
- 3.0 उत्तररेलवे, बड़ौदा हाउस, नयी दिल्ली-110 001
- 4.0 पूर्वोत्तर रेलवे, गोरखपुर 273012
- 5.0 पूर्वोत्तर सीमान्त रेलवे, मालीगांव, गुवाहाटी-781 011
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- 7.0 दक्षिण मध्य रेलवे, रेल निलयम, सिकन्दराबाद-500 025
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- 9.0 पश्चिम रेलवे, चर्चगेट, मुम्बई-400 020
- 10.0 उत्तर पश्चिम रेलवे, जयपुर-302 001
- 11.0 पूर्व मध्य रेलवे, हाजीपुर-844 101
- 12.0 दक्षिण पश्चिम रेलवे, हुवली-580 023
- 13.0 उत्तर मध्य रेलवे, प्रयागराज-211 015
- 14.0 पूर्व तट रेलवे, भुवनेश्वर-751 001
- 15.0 पश्चिम मध्य रेलवे, जबलपुर-482 001
- 16.0 दक्षिण पूर्व मध्य रेलवे, बिलासपुर-495 004

II- मुख्य अभियन्ता ,सी.पी.ओ.एच,पश्चिम रेलवे, मंडल रेल प्रबंधक कार्यालय ,चामुंडा, माता मंदिर के पास , नरोड़ा रोड , पो0 सैजपुर बोधा, अहमदाबाद-382345

Chief Engineer (Track Machines)

- C R, CST, Mumbai - 400 001.
 E R, Fairlie Place, Kolkata-700 001.
 N R, Baroda House, New Delhi-110 001.
 N E R, Gorakhpur-273 012.
 N F R, Maligaon, Guwahati -781 011.
 S R, Park Town, Chennai -600 003.
 SCR, Rail Nilayam, Secunderabad - 500 025.
 S E R, Garden Reach, Kolkata-700 043.
 W R, Churchgate, Mumbai-400 020
 N W R, Jaipur-302 001.
 E C R, Hazipur-844 101
 SWR, Hubli-580 023
 NCR, Prayagraj-211 015
 East Coast Rly, Bhubaneshwar- 751 001
 WCR, Jabalpur-482 001
 South East Central Rly, Bilaspur-495 004

Chief Engineer. C.P.O.H, Western Railway, Divisional Railway Manager Office, Near Chamunda Mata Mandir, Naroda Road, P.O. – Saijpur Bogha, Ahmedabad-382345

III- मुख्य कार्यशाला प्रबन्धक (ट्रैक मशीन)

Chief Workshop Manager (Track Machines)

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- 2.0 सी.पी.ओ.एच. कार्यशाला, दक्षिण मध्य रेलवे, रायनापाडु,, विजयवाडा, जिला कृष्णा, आन्ध्रप्रदेश. 521241
- 3.0 सी.पी.ओ.एच. कार्यशाला, पूर्व रेलवे, भूतबागान ,रेलवेकॉलोनी, कंचरापाड़ा, पी.एस- बिजपुर पो0 कंचरापाड़ा ,पश्चिम बंगाल -743145

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 CPOH Workshop,South Central Railway, Rayanapadu, Vijaywada, Dist.-Krishna, Andhra Pradesh- 521241
 CPOH Workshop, Eastern Railway, Bhutbagan Railway Colony, Kanchrapara, P.S: Bizpur, P.O.: Kanchrapara, West Bengal-743145

IV- प्रधानाचार्य भा.रे.रे.प.म.प्र.के. पीपलगांव प्रयागराज-211011

Principal, IRTMTC, Pipal Gaon, Prayagraj- 211011



भारतसरकार
रेल मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF
RAILWAYS

ब्लास्ट क्लिनिंग मशीन माडल –आर एम-80-92यु
(मशीन क्रम सं- 57088-57105 & 57165-57175)
की
निरीक्षणजांचसूची

**Inspection Check List
for
Ballast Cleaning Machine (RM-80-92U)
(Machine Sr.No.57088-57105 & 57165-57175)**

रिपोर्ट संख्या-टी.एम.-280
Report No.TM - 280

फरवरी-2024
February—2024

इंफ्रास्ट्रक्चर निदेशालय (रेलपथ मशीन एवं मानीटरिंग)
अनुसंधान अभिकल्प और मानक संगठन, लखनऊ-226011
DIRECTORATE OF INFRASTRUCTURE (TRACK MACHINE & MONITORING)
RESEARCH DESIGNS & STANDARDS ORGANISATION, LUCKNOW-226011

PREFACE

Any Machine can only be kept in good condition by regular Inspection of its various assemblies at different levels of inspections. To ensure that the components of On-Track machines are properly working & being maintained and the documentation of the same is being done properly, multi-tiered Inspection of On-Track machines is also required. For the purpose IRTMM-2019 includes the duties of different inspecting authorities from Dy.CE/TMC to SSE/TMC with the objective to monitor the health of machines and to ensure that the officials concerned are carrying out their duties satisfactorily. For the guidance of the inspecting authorities, RDSO is dealing with the preparation and issuing the list of items to be inspected for a particular type of machine.

The Inspection Check list of Ballast Cleaning Machine (RM-80-92U, Machine Sr.No.57088-57105 & 57165-57175) is prepared on the basis of OEM Manual, IRTMM-2019 and suggestions from Northern & North Central Railway. While every care has been taken to make the Inspection Check List quite exhaustive, there will always be scope for further improvement. Suggestions from the railways in this regard will be welcome and may be sent to the undersigned for future improvement.

(ए डी मौर्य)

(A.D Maurya)

निदेशक रेल पथ मशीन –III

Director/Track Machine-III

RDSO/Lucknow-226011

INSPECTION CHECK LIST FOR BALLASTCLEANING MACHINE (RM-80-92U) (Machine Sr.No.57088-57105 & 57165-57175)

**Name & Designation of
Inspecting
Official**

Date of Inspection

Machine No.

Base Station/Division

Working between station

From_____

To_____

Location km

From_____

To_____

Block hours

Progress

Remarks

S.N.	Items	Remarks given by inspecting officer
1.0	General:	
1.1.	Name of supervisor	
1.2.	Machine make & model	
1.3.	Last attention given to engine by Service Eng.	
1.4.	Last attention given to machine by Service Eng.	
1.5.	Year of manufacturing	
1.6.	First POH of Machine done on	
1.7.	Last IOH of M/C done on	
1.8.	Next IOH of M/C due on	
1.9.	Last POH of M/C done on	
1.10.	Next POH of M/C due on	
1.11.	Last POH of camping coach done on	
1.12.	Next POH of camping coach due on	
1.13.	All log book filled properly	
1.14.	Pending Maintenance Schedule and its reason in Schedule I,II,III,IV,V,VI,VII	
1.15.	Failure register updated	
1.16.	Reserve stock of consumables and spare parts	

History of Machine:

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S. No.	Items	Prevailing Condition	
1.17.	General cleanliness of the machine.	Ok <input type="checkbox"/>	To be cleaned <input type="checkbox"/>
1.18.	Function of all locking devices.	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
1.19.	Condition of camping coach.	Satisfactory <input type="checkbox"/>	Poor <input type="checkbox"/>
1.20.	Condition of machine base stabling siding.	Satisfactory <input type="checkbox"/>	Poor <input type="checkbox"/>
1.21.	Condition of rest house at stabling station if available.	Satisfactory <input type="checkbox"/>	Poor <input type="checkbox"/>
1.22.	Provision of water & electric supply at stabling station.	available <input type="checkbox"/>	Not available <input type="checkbox"/>
1.23.	Condition of tools & plants (spanner, wrench etc.)	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
1.24.	Spare available at site (as per critical spares parts list of machine issued by RDSO/LKO).	Yes <input type="checkbox"/>	No <input type="checkbox"/>
1.25.	Condition of Gen-set/Welding Plant if available.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
1.26.	Over all condition of machine health.	Excellent <input type="checkbox"/> Good <input type="checkbox"/>	Very good <input type="checkbox"/> Average <input type="checkbox"/>

Remarks:[illegible]

Sr. no.	I t e m s	Prevailing Conditions Deutz BF6M- 1015CP (1st engine)		Prevailing Conditions Deutz BF6M-1015CP (2 nd engine)	
2.0	ENGINE:				
2.1.	Engine hours on date	-----ERH		ERH	
2.2.	Last top overhauling of the Engine if done	Dated-----ERH	Dated-----ERH
2.3.	Starting problem	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.4.	Condition of smoke	White <input type="checkbox"/>	Black <input type="checkbox"/>	White <input type="checkbox"/>	Black <input type="checkbox"/>
		Normal <input type="checkbox"/>		Normal <input type="checkbox"/>	
2.5.	Engine temperature during working (Optimum range 750 c to 850 c for both engine)	Actual..... ° C		Actual..... ° C	
	Thermostat working	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
2.6.	Leakage in head gasket	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.7.	V-belt condition and tension	Ok <input type="checkbox"/>	To be tightened <input type="checkbox"/>	Ok <input type="checkbox"/>	To be tightened <input type="checkbox"/>
2.8.	Function of air compressor	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
2.9.	Leakage of water from water pump, seal hose and radiator	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
2.10.	RPM of the Engine (rated 2200)	Actual.....		Actual.....	
2.11.	Calibration of Fuel Injectors (to be done after every 2000 hrs)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.12.	Calibration of fuel injection pump (to be done after every 2000 hrs)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.13.	Change of Air Cleaner filters (1000 Hrs duration)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.14.	Change of engine oil (250 Hrs duration)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.15.	Change of lub oil filter (250 Hrs duration)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.16.	Change of fuel pre filter (500 Hrs duration)	done <input type="checkbox"/>	due <input type="checkbox"/>	done <input type="checkbox"/>	due <input type="checkbox"/>
2.17.	Engine oil pressure Minimum 3.0 kg/cm ² at idle rpm Minimum 5.0 Kg/cm ² on rated rpm after 2 hours working	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
		Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
2.18.	Tightness of engine mounting bolts	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>	Ok <input type="checkbox"/>	Need attention <input type="checkbox"/>
2.19.	Overall condition of engine	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>

Sr. no.	I t e m s	Prevailing Conditions Deutz BF6M- 1015CP (1st engine)		Prevailing Conditions Deutz BF6M-1015CP (2 nd engine)	
2.20.	Whether working gauges/display are in order or not				
	a) R.P.M	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	i) In working cabin				
	ii) In rear cabin	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	b) Lub. oil/Hyd. oil Pressure (In working cabin)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	c) Lub. oil temp. (In working cabin)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	d) Speedometer	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	i) in rear cabin				
	ii) Working cabin	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	e) Pneumatic pressure gauge	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	f) Hydraulic oil level gauge	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	g) Hydraulic oil temperature gauge	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.21.	Condition of battery terminals	Ok <input type="checkbox"/>	To be tightened <input type="checkbox"/>	Ok <input type="checkbox"/>	To be tightened <input type="checkbox"/>
2.22.	Battery charging system	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>
2.23.	Condition of batteries	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>	Ok <input type="checkbox"/>	Not satisfactory <input type="checkbox"/>
2.24.	Electrolyte level in batteries (Plates should be embedded in electrolyte)	Ok <input type="checkbox"/>	Need top up <input type="checkbox"/>	Ok <input type="checkbox"/>	Need Top up <input type="checkbox"/>
2.25.	Specific gravity of electrolyte (min 1.24)	Ok <input type="checkbox"/>	Less <input type="checkbox"/>	Ok <input type="checkbox"/>	Less <input type="checkbox"/>
2.26.	Engine radiator coolant level	Ok <input type="checkbox"/>	Less <input type="checkbox"/>	Ok <input type="checkbox"/>	Less <input type="checkbox"/>
2.27.	Any abnormal sound	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Remarks:

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S.N.	Items	Agent / Description	Prevailing Condition			
3.0	OIL LEVELS					
3.1.	Hydraulic oil	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.2.	Diesel tank	HSD	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.3.	Axle gear box	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.4.	Main gear box	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.5.	Engine lube oil	SHELL RIMULA R6 LM 10W-40	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.6.	Conveyor gear box	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.7.	Turn table container	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.8.	Turret drum container	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.9.	Swivel drive for waste Conveyor	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.10.	Vibration drum	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
3.11.	Tensioning cylinder	SHELL TELLUS S2 VX 68	Ok	<input type="checkbox"/>	Need Top up <input type="checkbox"/>	
4.0	POWER TRANSMISSION					
4.1.	Oil leakage in gear boxes		Yes	<input type="checkbox"/>	No <input type="checkbox"/>	
4.2.	Play in universal joint		Ok	<input type="checkbox"/>	To be attended <input type="checkbox"/>	
4.3.	Clutch adjustment		Ok	<input type="checkbox"/>	To be adjusted <input type="checkbox"/>	
4.4.	Greasing of all Cardon shaft		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.0	FILTER					
5.1.	Change of Hydraulic Suction filters (16pcs) (at every 1000 Engine hrs.)		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.2.	Change of return filters of Dredger drum at every 500 Engine hrs.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.3.	Change of superfine filter (3nos.) at every 500 Engine hrs.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.4.	Change of Main gearbox oil filter (2Pcs) at every 500 Engine hrs.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.5.	Change of Dredger drum gearbox filter at every 1000 Engine hrs.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.6.	Change of Screen drive filter (2Pcs) at every 1000 Engine hrs.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	
5.7.	Change of axle gear box aeration filters every 1000h or annually.		Done	<input type="checkbox"/>	Not done <input type="checkbox"/>	

S.N.	Items	Prevailing Condition	
5.8.	Change of hydraulic return filter cartridge (2Pcs) (at every 1000hrs*)	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.9.	Change of Conveyor belt gearbox filter cartridge (at every 1000hrs*)	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.10.	Change of Driving Pump Line Filter (2Pcs)(at every 1000hrs*).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.11.	Change of Hydraulic passage through filter (2Pcs) (at every 1000hrs*).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.12.	Change of Hydac filter (at every 1000hrs*)	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.13.	Change of aeration filter of Screen drive (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.14.	Change of Air drier filter and granulate cartridge (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.15.	Change of aeration filter of Main gearbox 1 and 2 (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.16.	Change of aeration filter of Dredger drum gearbox (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.17.	Change of aeration filter of Hydraulic tank (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.18.	Change of aeration filter of Fuel tank (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
5.19.	Change of aeration filter of axle gearbox (4 nos.) (at every 1000hrs).	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
Note- *If for any filter,the gauge indication is within the red range/pilot lamp is lightening, the filter element has to be changed.			
6.0	EXCAVATION UNIT		
6.1.	Greasing of Descending corner rollers	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
6.2.	Working of grease pump (Pneumatic)	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
6.3.	Condition of Guide roller	Satisfactory <input type="checkbox"/>	To be attended No. <input type="checkbox"/>
6.4.	Condition of Wear plates	Satisfactory <input type="checkbox"/>	To be attended No. <input type="checkbox"/>
6.5.	Condition of excavating chain & finger	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
6.6.	Condition of cutter bar	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
7.0	SCREENING UNIT & DISTRIBUTOR		
7.1.	Condition of ballast distribution chute	Ok <input type="checkbox"/>	<input type="checkbox"/> Unsatisfactory
7.2.	Vibration of the screening unit	Ok <input type="checkbox"/>	<input type="checkbox"/> Unsatisfactory

S.N.	Items	Prevailing Condition	
7.3.	Greasing of screen guide plates	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
7.4.	Condition of screen meshes & chute plates	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
7.5.	Condition of wing plate	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
7.6.	Condition of rubber pads	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
7.7.	Whether screen is clean or not	Ok <input type="checkbox"/>	Not clean <input type="checkbox"/>
8.0	TRACK LIFTING & SLEWING DEVICES		
8.1.	Greasing of lifting unit guide column	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
8.2.	Greasing of rail clamp pivot pins	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
8.3.	Greasing of roller clamp housing	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
8.4.	Greasing of locking devices pivots	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
8.5.	Tightness of roller bracket locking	Ok <input type="checkbox"/>	To be tightened <input type="checkbox"/>
8.6.	Clearance of lifting roller disc below the rail head in lower conditions- Rear - 5 mm Front - 12 mm	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
8.7.	Working of slewing devices	Ok <input type="checkbox"/>	<input type="checkbox"/> Unsatisfactory
8.8.	Working of lifting cylinder	Ok <input type="checkbox"/>	<input type="checkbox"/> Unsatisfactory
8.9.	Greasing of lifting roller bearing	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
8.10.	Condition of lifting roller disc	Ok <input type="checkbox"/>	<input type="checkbox"/> Unsatisfactory

Remarks:

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S.N.	Items	Prevailing Condition	
9.0	HYDRAULIC AND PNEUMATIC PRESSURE & TEMPERATURE		
9.1.	Transit drive pressure (Max.m 380 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.2.	Chain drive pressure (Max.m 350 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.3.	Vibration pressure (Max.m 350 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.4.	Conveyor belt pressure (Max.m 200 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.5.	Cooler pressure (Max.m 120 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.6.	Maximum Hydraulic oil temperature during work (below than 80 0c)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
9.7.	Pneumatic pressure (Maxm 7 bar)	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
10.0	CONVEYOR BELTS		
10.1.	Condition of conveyor belts	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
10.2.	Tension in the conveyor belts	Ok <input type="checkbox"/>	To be adjusted <input type="checkbox"/>
10.3.	Hydraulic slew ability of waste conveyor belts (left & right)	Ok <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
10.4.	Hydraulic slew ability of conveyor belts for movement	Ok <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
10.5.	Proper positioning of waste conveyor belts (It should be at lower position)	Ok <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
10.6.	Locking / unlocking devices of conveyor belt	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
10.7.	Greasing of main conveyor bearing (50 Hrs)	Ok <input type="checkbox"/>	To be done <input type="checkbox"/>
10.8.	Condition of idle rollers	Ok <input type="checkbox"/>	To be replaced <input type="checkbox"/>
10.9.	Condition of conveyor safety system	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
11.0	ELECTRICAL AND ELECTRONICS		
11.1.	Working Head light, Tail light and other light	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
11.2.	Emergency stop button/switches	Working <input type="checkbox"/>	Not working <input type="checkbox"/>

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S.N.	Items	Prevailing Condition	
Cond.	Electrical and Electronics		
11.3.	Audible warning system	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
11.4.	Flasher light	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
11.5.	Hooter	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
11.6.	Working of Electric Horns	Ok <input type="checkbox"/>	Need attantion <input type="checkbox"/>
11.7.	Defective/Released PCB available with machine	Part no	
12.0	PNEUMATICS		
12.1.	Condition and clearance of brake shoes	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
12.2.	Drain all drip cups	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
12.3.	Condition of pneumatic plough cylinder	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
12.4.	Condition of KE valve (indirect brake)	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
12.5.	Pneumatic horn	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
12.6.	Pneumatic lubricator	Working <input type="checkbox"/>	Not working <input type="checkbox"/>
13.0	UNDER FRAME INSPECTION		
13.1.	UNDER FRAME		
13.1.1.	Visual Inspection of centre pivot mounting Bolts and Mounting of Suspension system ,Bogie Frame etc.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.1.2.	Examine the shock absorber for damages.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.1.3.	Visual Inspect centre pivot cover.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.1.4.	Check condition of head stock/sole bar of centre buffer Coupler.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.2.	BOGIE FRAME & WHEELS		
13.2.1.	Visual and Physical inspection of wheel shall be done at a frequency of once in a year or after every 1000 engine running hours whichever is earlier.	Done <input type="checkbox"/>	Not done <input type="checkbox"/>
13.2.2.	Visual Inspection of wheels and under gear for any infringement.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.2.3.	Visually inspect all the welding locations.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>
13.2.4.	Visually check the suspension brackets.	Ok <input type="checkbox"/>	To be attended <input type="checkbox"/>

S.N.	Items	Prevailing Condition			
13.3.	BRAKE RIGGING				
13.3.1.	Visually check the rubbing plates.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.3.2.	Examine brake beams breakages/ damages.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.3.3.	Inspection of Brake hanger bracket , torque support , cardan shaft hanger brackets for damages	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.4.	DRAW GEAR				
13.4.1.	Check condition of th screw coupling/CBC coupling and replace if required.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.4.2.	Examine draw hook ,draw bars, rubber pads for damages	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.4.3.	Ensure that wear at any section on draw hook should not exceed 10 mm.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.4.4.	Ensure that wear on screw coupling shackle pins, trunion pins, shackle/link holes and draw hook holes should not exceed 3 mm.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.5.	BUFFING GEAR				
13.5.1.	Visually examine the wheel tyre profile and crack with tyre profile gauge as mention in procedure for inspection of wheels (On Track Machines) issued by RDSO report no. TM-170	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.5.2.	Examine for corrosion of sole bar and other under frame member with track light or inspection lamp.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
13.5.3.	Visually examine the buffers casing for cracks/damages.	Ok	<input type="checkbox"/>	To be attended	<input type="checkbox"/>
14.0	STAFF				
14.1.	Strength of staff as per IRTMM (Second Edition)-2019	Full	<input type="checkbox"/>	Deficient	<input type="checkbox"/>
14.2.	Safety awareness	Excellent	<input type="checkbox"/>	Very good	<input type="checkbox"/>
		Good	<input type="checkbox"/>	Average	<input type="checkbox"/>
14.3.	Staff due for Medical	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
14.4.	Staff due for training	No	<input type="checkbox"/>	Overdue	<input type="checkbox"/>
14.5.	Competency certificate of the Operator	Current	<input type="checkbox"/>	Expired	<input type="checkbox"/>
14.6.	Staff availing rest on due date	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
14.7.	Staff amenities as per up to date IRTMM (Second Edition)-2019	Satisfactory	<input type="checkbox"/>	Poor	<input type="checkbox"/>

S.N.	Items	Prevailing Condition	
15.0	SAFETY ITEMS		
15.1.	Safety equipment as per Annexure-I	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
15.2.	Working of safety Emergency Braking System of the machine	Ok <input type="checkbox"/>	Defective <input type="checkbox"/>
15.3.	Working of parking Braking System	Ok <input type="checkbox"/>	Defective <input type="checkbox"/>
15.4.	Fire extinguisher	Current <input type="checkbox"/>	Expired (Date -----) <input type="checkbox"/>
15.5.	Ultrasonic testing of axles of machine shall be done between 40,000 to 45,000 kms of running or three years, whichever is earlier.	Done <input type="checkbox"/>	Not done <input type="checkbox"/>

Remarks:

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Date-.....**Signature of inspecting authority**

List of Safety Equipments

S.No.	Description	Quantity	Status	
1.	Detonators in a tin case	1box	Available <input type="checkbox"/> Valid upto-----	Deficient <input type="checkbox"/>
2.	H.S. flag red	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
3.	H.S. flag green	1nos.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
4.	H.S. Tri Colour lamps/LED lamps	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
5.	Chain & Padlock	1set	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
6.	Point Clamp with Padlock	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
7.	50t jack traverse type*	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
8.	Crow bars	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
9.	Wooden blocks off sizes	8nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
10.	Gauge cum level	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
11.	Rail thermometer(dial type)	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
12.	Banner flag	2nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
13.	Walki -talki	1nos.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
14.	First Aid Box	1no.	Available <input type="checkbox"/> Valid upto-----	Deficient <input type="checkbox"/>
15.	Skids	4nos.	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
16.	Working time table of section where machine working	1copy	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
17.	G & SR book with up-to-date amendment slips	1copy	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
18.	4cell flasher light/LED torch,6watt	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
19.	LED Petromax /Lamps	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
20.	Safety helmets	For each Machine staff	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
*List of jacks sent to railway bd. vide I no.TM/HM/1, Vol-II dated 22/.08.2019 for approval which is awaited.				

S.No.	Description	Quantity	Status	
21.	Protective clothing, safety shoes and safety gloves	For each Machine staff	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
22.	Track Machine Manual with latest correction slips.	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
23.	Accident Manual with latest correction slips.	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
24.	Fire extinguisher	1no.	Available <input type="checkbox"/> Valid upto-----	Not available <input type="checkbox"/>
25.	Hooter(Manual/Remote)	2nos	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>
26.	Hydraulic Hand Pump	1no.	Available <input type="checkbox"/>	Not available <input type="checkbox"/>
27.	Emergency pneumatic/Hydraulic hose off sizes (complete with end fittings)	1set	Available <input type="checkbox"/>	Deficient <input type="checkbox"/>

ACKNOWLEDGEMENT

Following officers and staff have made their valuable contributions in preparation of Inspection Check List for Ballast Cleaning Machine (RM-80-92U, Machine Sr.No.57088-57105 & 57165-57175)

RAILWAYS

- | | | |
|----|---------------------------|-----------|
| 1. | Shri Prasanth kumar | SSE/TM/NR |
| 2. | Shri Mahesh Kumar | SSE/TM/NR |
| 3. | Shri Bhupendra | JE/TM/NR |
| 4. | Shri Udayveer Singh Meena | SSE/NCR |
| 5. | Shri Ashish Negi | SSE/NCR |

RDSO

- | | | |
|----|-----------------------------|-----------|
| 1. | Shri Rakesh Tiwari | ARE/TM |
| 2. | Shri Ved Prakash Srivastava | SSE/TM |
| 3. | Shri D G Sharma | SSE/Civil |

28-02-2024