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टी. एम./एच. एम./टी. –इ एक्स पी /पार्ट –III
TM/HM/T-Exp/Pt-III

दिनांक: .03.2024
Date: .03.2024

I मुख्य अभियंता (ट्रैक मशीन), सभी क्षेत्रीय रेलवे
Chief Engineer (Track Machines)
All Zonal Railways

II मुख्य कार्यशाला प्रबंधक (ट्रैक मशीन), सी पी ओ एच कार्यशाला, प्रयागराज, रायनापाडू, कचरापारा , अहमदाबाद
Chief Workshop Manager (Track Machines) CPOH WORKSHOP, Prayagraj, Rayanapadu, Kachrapara, Ahmedabad.

III प्रधानाचार्य, आई. आर. टी. एम. टी. सी., पीपलगाँव, प्रयागराज
Principal, IRTMTC, PipalGaon, Prayagraj-211011

Detailed addresses are enclosed herewith.

विषयः मैसर्स प्लासर इंडिया की हाई आउटपुट टैम्पिंग एंड स्टेबलाइजिंग मशीन (09-3X) डायनामिक (सिंगल इंजन) की निरीक्षण जांच सूची ।

Sub: Inspection check list of High Output Tamping & Stabilizing Machine (09-3X) Dynamic (Single engine) of M/s Plasser India.

मैसर्स प्लासर इंडिया की हाई आउटपुट टैम्पिंग एंड स्टेबलाइजिंग मशीन (**09-3X**) डायनामिक (सिंगल इंजन) की मसौदा और अनंतिम निरीक्षण जांच सूची ओईएम मैनुअल, आईआरटीएमएम 2019 के आधार पर तैयार की गई थी और पत्र संख्या टीएम/एचएम/टी-एक्सपी/पीटी-III दिनांक 02/11/2023 और दिनांक 13/12/2023 के माध्यम से क्रमशः 30 दिनों और 15 दिनों के लिए परिचालित की गई थी। लेकिन क्षेत्रीय रेलों से कोई सुझाव/टिप्पणी प्राप्त नहीं हुई है। अब अंतिम निरीक्षण जांच सूची तैयार की गई है और इसकी एक प्रति आपकी जानकारी और मशीन कर्मचारियों के मार्गदर्शन के लिए यहां संलग्न है। तथापि, उपर्युक्त निरीक्षण जांच सूची तैयार करते समय हर सावधानी बरती गई है, यदि कोई सुझाव/ टिप्पणियां हो तो उसे ईमेल/पोस्ट/फैक्स द्वारा अधोहस्ताक्षरी के संज्ञान में लाया जा सकता है।

Draft and Provisional Inspection check list of High Output Tamping & Stabilizing Machine (09-3X) Dynamic (Single engine) of M/s Plasser India had been prepared on the basis of OEM manual, IRTMM 2019 and circulated vide letter no TM/HM/T-Exp/Pt-III dated 02/11/2023 and dated 13/12/2023 for 30 days and 15 days respectively. But no suggestions/comment have received from Zonal Railways. Now Final Inspection check list has been prepared and a copy of same is enclosed herewith for your information and guidance of the machine staff. However, every care has been taken during preparation of the above Inspection check list, observations if any, may be brought to the knowledge of the undersigned by email/post/fax for further improvement.

Email address: hmtmmrdso@gmail.com
DA: As above

AMAR DEV MAURYA
Digitally signed by AMAR DEV MAURYA
Date: 2024.03.20 17:27:05 +05'30'

(ए डी मौर्य)
(A D Maurya)
निदेशक/ रेलपथ मशीन –III
Director /Track Machine-III

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File No.RDSO-TMM0HM(H066)/1/2020-O/o PED/TMM/RDSO

Government of India - Ministry of Railways

Research Designs and Standards Organisation

मैसर्स प्लासर इंडिया की हाई आउटपुट टैम्पिंग एंड स्टेबलाइजिंग मशीन (09-3X) डायनामिक (सिंगल इंजन) के लिए निरीक्षण जांच सूची

INSPECTION CHECK LIST FOR HIGH OUTPUT TAMPING & STABILIZING MACHINE (09-3X) DYNAMIC (SINGLE ENGINE) OF M/S PLASSER INDIA

(Applicable for series 56737-58, 56842-72, 57050-58, 57137-48)

Report No. TM - 295
March- 2024

अनुसंधान अभिकल्प एवं मानक संगठन
लखनऊ– 226011

RESEARCH DESIGNS & STANDARDS ORGANISATION
LUCKNOW- 226 011

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 this 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 concerned officials 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.

In this context, Inspection check list of High Output Tamping & Stabilizing Machine (09-3X) Dynamic (Single engine) of M/s Plasser India is prepared on the basis of OEM manual and IRTMM-2019.

While every care has been taken to make the Inspection check list quite exhaustive, there will always be a scope for further improvement. Suggestions from the Railways in this regard will be welcome and may be sent to the undersigned for future improvement.

Email address: hmtmmrdso@gmail.com

March-2024

(ए डी मौर्य)
(A D Maurya)
निदेशक रेलपथ मशीन –III
Director Track Machine-III

Inspection check list of High Output Tamping & Stabilizing Machine (09-3X) Dynamic (Single engine) of M/s Plasser India

Name & Designation of Inspecting Official :
Date of Inspection :
Machine No. :
Base Station /Division :
Location of working :
Block hours :
Progress :

1. General :

S. No	Items	Remarks given by inspecting officer
1.1.	Name of supervisor	
1.2.	Machine make	
1.3.	Year of manufacturing	
1.4.	Last attention given to engine by service Engineer	
1.5.	Last attention given to machine by service Engineer	
1.6.	Last IOH of M/C done on	
1.7.	Next IOH of M/C due on	
1.8.	First POH of Machine done 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 books and register filled properly	
1.14.	Pending Maintenance schedule and reasons	
1.15.	Reserve stock of consumables and spare parts	

Remarks----------

S. no.	I t e m s	Prevailing Condition	
1.16.	General cleanliness of the machine	Ok ☐	To be cleaned ☐
1.17.	Functions of all locking devices	Working ☐	Not working ☐
1.18.	Condition of camping coach	Satisfactory ☐	Poor ☐
1.19.	Condition of machine base stabling siding	Satisfactory ☐	Poor ☐
1.20.	Condition of rest house at stabling station if available	Satisfactory ☐	Poor ☐
1.21.	Provision of water & electric supply at stabling station	Available ☐	Not available ☐
1.22.	Emergency back-up system of machinery	Working ☐	Not working ☐
1.23.	Condition of tools & plants (spanner, wrench etc.)	Ok ☐	To be replaced ☐
1.24.	Condition of Genset/welding plant	Ok ☐	To be attended ☐
1.25.	Condition of Tamping tool	Ok ☐	To be attended ☐
1.26.	Overall machine working performance	Satisfactory ☐	Poor ☐

Remarks----------

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2. Mode of Working

S. no.	I t e m s	Prevailing Condition	
2.1.	Pre and Post Tamping Operations being Done	Yes ☐	No ☐
2.2.	Depth of Clean Cushion under Sleeper	Actual -	
		OK ☐	Less ☐
2.3.	Condition of Ballast	Caked ☐	Clean ☐
2.4.	Lining Working Method	3 point ☐	4point ☐
2.5.	Mode of working	Smoothening ☐	Design ☐
2.6.	Lifting working mode	Proportional (Smoothening) ☐	Design ☐
2.7.	Working method	Manual ☐	Measuring run ☐
2.8.	Working of data recording Processor	Satisfactory ☐	Poor ☐
2.9.	Hydraulic leakage from circuit	Location -	
2.10.	Pneumatic leakage from circuit	Location -	
2.11.	Overall condition of the Machine	Excellent ☐ Good ☐	Very good ☐ Average ☐

Remarks----------

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3. Oil/water/level in tank/container

S. no.	Items	Agent / Description	Prevailing Condition	
3.1.	Hydraulic oil	Shell Tellus S2 VX68/ Shell Tellus S2 MX68 *	OK ☐	Need top up ☐
3.2.	ZF Gear Box	Servo CF4 15W40 / Mobil Delvac 1ATF*	OK ☐	Need top up ☐
3.3.	Cardan shaft power divider	G80W90	OK ☐	Need top up ☐
3.4.	Stabilizer unit	Servo CF4 15W40	OK ☐	Need top up ☐
3.5.	Diesel Oil	HSD	OK ☐	Need top up ☐
3.6.	Satellite Gear Box	G80W90	OK ☐	Need top up ☐
3.7.	Pump Gear Box	Servo CF4 15W40 / Shell Omala S4GXV150 *	OK ☐	Need top up ☐
3.8.	Reduction Gear Box	G 80W90	OK ☐	Need top up ☐
3.9.	Engine Lube oil	CAT DEO 15W40	OK ☐	Need top up ☐
3.10.	Engine radiator cooling agent	CAT ELC	OK ☐	Need top up ☐
3.11.	Driving Axle Gear Box I	G 80W90	OK ☐	Need top up ☐
3.12.	Driving Axle Gear Box II	G 80W90	OK ☐	Need top up ☐
3.13.	Satellite Axle Gear Box	G 80W90	OK ☐	Need top up ☐
3.14.	Tamping unit oil tank LHS	Shell Tellus S 2 M 100	OK ☐	Need top up ☐
3.15.	Tamping unit oil tank RHS	Shell Tellus S 2 M 100	OK ☐	Need top up ☐

* Refer maintenance manual.

Remarks----------

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4. Filters

S. No.	I t e m s	Prevailing Condition Remark	
4.1.	Cleaning of air cleaner filter outer (Cleaned after every 250 hrs. or on dirt indication and change after 1000hrs)	Done ☐	Not done ☐
4.2.	Change of air cleaner filter inner (After every 1000 hrs.)	Done ☐	Not done ☐
4.3.	Change of engine oil filters on changing oil (After every 500 hrs.)	Done ☐	Not done ☐
4.4.	Change of diesel filters (After every 250 hrs.)	Done ☐	Not done ☐
4.5.	Change of ZF gear box filter (After every 500 hrs. or on choke indication)	Done ☐	Not done ☐
4.6.	Change of superfine filter (After every 500 hrs.)	Done ☐	Not done ☐
4.7.	Change of Servo valve filter (After every 250 hrs. or on choke indication)	Done ☐	Not done ☐
4.8.	Change of proportional valve filter (After every 250 hrs. or on choke indication)	Done ☐	Not done ☐
4.9.	Change of return filter (After every 500 hrs. or on choke indication)	Done ☐	Not done ☐
4.10.	Change of suction filter (After every 500 hrs. or on choke indication)	Done ☐	Not done ☐
4.11.	Change of air dryer filter (After every 1000 hrs. or at least once a year)	Done ☐	Not done ☐
4.12.	Change of variable pump suction filter (After every 250 hrs. or on choke indication)	Done ☐	Not done ☐

Remarks----------

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5. Lubrication (Oiling & Greasing as per maintenance schedule)

S. no.	Item	Agent / Description	Prevailing Condition	
5.1 Tamping units				
5.1.1.	Tamping unit guide column (Both bank)	Shell Gedus S 3 V220 C 2	Done ☐	Not done ☐
5.1.2.	Tamping arm Bolt (55mm)	Shell Tellus S 2 M 100	Done ☐	Not done ☐
5.1.3.	Vibration shaft main bearing	Shell Gedus S 3 V220 C 2	Done ☐	Not done ☐
5.1.4.	Connecting rod bolt (35mm pin)	Shell Tellus S3 V 220 C2	Done ☐	Not done ☐
Note- Machine is equipped with auto greasing unit, working of it should be ensured time to time, if it is not working properly then manual greasing should be done.				
5.2 Satellite				
5.2.1.	Satellite slide rollers	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.2.2.	Satellite support roller	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.2.3.	Satellite sliding plate (lateral)	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.2.4.	Satellite sliding roller (horizontal)	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3 Lifting and lining units				
5.3.1.	Clamp Pivot	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3.2.	Lifting Unit Guide Column	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3.3.	Lining rollers	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3.4.	Clamp Housing	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3.5.	Lining cylinder pivot	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.3.6.	Lifting unit locking	Shell Gedus S 2 V100 2	Done ☐	Not done ☐

Remarks----------

S. no.	Item	Agent / Description	Prevailing Condition	
5.4 Cardon shaft				
5.4.1.	Engine to Pump Gear Box	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.4.2.	Pump Gear Box to ZF	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.4.3.	ZF to Distributor Gear Box	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.4.4.	Distributor Gear Box to axle II	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.4.5.	Distributor Gear Box to intermediate shaft	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.4.6.	Intermediate shaft to axle I	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5 Miscellaneous				
5.5.1.	Middle feeler rod bush	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.2.	Torque arm pivot	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.3.	Driving bogie Brake linkage	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.4.	Running bogie Brake linkage	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.5.	Pivot joint & bush of Front Trolley	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.6.	Pivot joint & bush of Rear Trolley	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.7.	Pivot joint & bush of Middle feeler Trolley	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.8.	Pivot joint & bush of Lining Trolley	Shell Gedus S 2 V100 2	Done ☐	Not done ☐
5.5.9.	Axle gear box flange cover	Shell Gedus S 2 V100 2	Done ☐	Not done ☐

Remarks-

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6. Engine Model no. C-18 Engine hours on date-

S. no	Items	Prevailing Condition	
6.1.	Over-hauling of the Engine C-18 as per Maintenance Schedule	Due ☐	Not due ☐
6.2.	Last overhauling of the engine if done	Date	ERH……
6.3.	Last repair/change of self-starter	Date	ERH……
6.4.	Last repair/change of alternator	Date	ERH……
6.5.	Last repair/change of air compressor	Date	ERH……
6.6.	Starting problem for Engine C-18	No ☐	Required attention ☐
6.7.	Condition of smoke for Engine C-18	White ☐ Normal ☐	Black ☐
6.8.	Engine C-18 temperature during working	Actual _____ °C	
6.9.	Leakage in Head gasket of the Engine C-18	No ☐	Yes ☐ (Head no.-)
6.10.	Compressor leakage of the Engine C-18	Yes ☐	No ☐
6.11.	Belt condition and tension of the Engine C-18	Ok ☐	Need attention ☐
6.12.	Leakage of water from water pump, seal hose and radiator of the Engine C-18	No ☐	Need attention ☐
6.13.	Battery charging	Ok ☐	Need attention ☐
6.14.	RPM of the Engine C-18	Actual---	
		Ok ☐	Need attention ☐
6.15.	Engine oil pressure (minimum)		
	Engine Model-C-18 At idle rpm Rated rpm after 2 hrs. Working	 Actual--- Actual---	
6.16.	Overall condition of Engine C-18	Ok ☐	Need attention ☐

Remarks----------

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7. Electrical and Electronics

S.no	Items	Prevailing Condition	
7.1.	Condition of batteries	Ok ☐	Need attention ☐
7.2.	Condition of battery terminals	Ok ☐	Not satisfactory ☐
7.3.	Condition of programmer battery	Ok ☐	Not satisfactory ☐
7.4.	Condition of working light, head light, tail light and flasher lights	Ok ☐	Need attention ☐
7.5.	Condition of self-starter	Ok ☐	Need attention ☐
7.6.	Condition of alternator	Ok ☐	Need attention ☐
7.7.	Condition of Depth transducer	Ok ☐	Need attention ☐
7.8.	Condition of lining transducer	Ok ☐	Need attention ☐
7.9.	Condition of Height transducer	Ok ☐	Need attention ☐
7.10.	Working of lining and levelling galvanometer	Ok ☐	Need attention ☐
7.11.	Emergency stop buttons, switches and air conditioning system.	Ok ☐	Need attention ☐
7.12.	Working of Lifting indication voltmeter LHS and RHS	Ok ☐	Need attention ☐
7.13.	Safety circuit for Engine	Ok ☐	Need attention ☐
7.14.	Safety circuit for Driving	Ok ☐	Need attention ☐
7.15.	Electrolyte level in batteries (Plates should be embedded in electrolyte)	Ok ☐	Need top up ☐
7.16.	Specific gravity of electrolyte (min 1.24)	Ok ☐	Less ☐

Remarks----------

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8. Gauges and meters working status

S.no	Items	Prevailing Condition	
8.1.	RPM display in front Cabin	Ok ☐	Need attention ☐
8.2.	RPM display in rear Cabin	Ok ☐	Need attention ☐
8.3.	Speedometer/Tachometer front Cabin	Ok ☐	Need attention ☐
8.4.	Speedometer/Tachometer rear Cabin	Ok ☐	Need attention ☐
8.5.	Engine Oil Pressure display	Ok ☐	Need attention ☐
8.6.	Engine Temperature display	Ok ☐	Need attention ☐
8.7.	ZF oil pressure meter	Ok ☐	Need attention ☐
8.8.	ZF oil temperature meter	Ok ☐	Need attention ☐
8.9.	Battery charging display	Ok ☐	Need attention ☐
8.10.	Battery voltage display	Ok ☐	Need attention ☐
8.11.	System pressure gauges	Ok ☐	Need attention ☐
8.12.	Pneumatic pressure gauge	Ok ☐	Need attention ☐
8.13.	Hydraulic oil level/ temp gauge	Ok ☐	Need attention ☐

Remarks----------

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9. Pneumatic

S.no	Items	Prevailing Condition	
9.1	Water separator working	Satisfactory ☐	Need attention ☐
9.2	Condition of air dryer system	Satisfactory ☐	To be attended ☐
9.3	Condition and clearance of brake shoes	Satisfactory ☐	To be attended ☐
9.4	Condition of Pn. Cylinders	Satisfactory ☐	To be attended ☐
9.5	Working of direct brake application	Satisfactory ☐	To be attended ☐
9.6	Working of indirect brake application	Satisfactory ☐	To be attended ☐
9.7	Working of parking brake application	Satisfactory ☐	To be attended ☐
9.8	Working of unloader valve	Satisfactory ☐	To be attended ☐
9.9	Locking system of lifting/lining unit	Satisfactory ☐	To be attended ☐
9.10	Locking system of tamping units	Satisfactory ☐	To be attended ☐
9.11	Condition of Pneumatic horns	Satisfactory ☐	To be attended ☐
9.12	Locking system of feeler rod	Satisfactory ☐	To be attended ☐
9.13	Locking system of trolleys	Satisfactory ☐	To be attended ☐
9.14	Locking system of satellite	Satisfactory ☐	To be attended ☐
9.15	Locking system of Stabilizing unit	Satisfactory ☐	To be attended ☐

Remarks

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10. Hydraulic pressure and operation

Sl no.	Items	Prevailing Condition	
		Recommended value	Actual value
10.1.	System Pressure	150 bar	
10.2.	High Pressure System	150 bar	
10.3.	Counter Pressure for small squeezing cylinder	55 bar	
10.4.	Squeezing Pressure for concrete sleepers	110 -120 bar	
10.5.	ZF Oil Pressure	10 -15 bar	
10.6.	Charging Pressure	30 bar	
10.7.	Accumulator pressure for		
	a) High pressure	100 (Max)	
	b) Working pressure	100 (Max.)	
10.8.	Squeezing pressure	35 bar	
10.9.	Vibration pressure LHS	150 bar	
10.10.	Vibration pressure RHS	150 bar	
10.11.	Satellite Booster pressure	40-60 bar	
10.12.	Squeezing time	0.8-1.2 second	
10.13.	Air Pressure (in kg / cm^2)	8 - 9 bar	
10.14.	Preload pneumatic pressure	2-5 bar	
10.15.	Pending Maintenance Schedule and reasons.	Schedule I,II,III,IV,V,VI,VII	
10.16.	Condition of Oil Coolers	Clean ☐	Clogged ☐
10.17.	Function of satellite axle support cylinders (4 nos)	Satisfactory ☐	Leaking ☐
10.18.	Hydraulic Oil Temperature after working of machine for 2 hrs	____ °C	

Remarks

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11. Miscellaneous:

Sl no.	Items	Prevailing Condition	
11.1.	Adjustment of track lifting roller height LHS	Ok ☐	To be adjusted ☐
11.2.	Adjustment of track lifting roller height RHS	Ok ☐	To be adjusted ☐
11.3.	Correction of alignment	Satisfactory ☐	Need attention ☐
11.4.	Performance of Tamping unit up/down	Satisfactory ☐	Need attention ☐
11.5.	Performance of Lifting & Levelling	Satisfactory ☐	Need attention ☐
11.6.	Performance of satellite	Satisfactory ☐	Need attention ☐
11.7.	Performance of stabilizing unit	Satisfactory ☐	Need attention ☐
11.8.	Overall performance of Machine working	Satisfactory ☐	Need attention ☐

12. Safety Items:

Sl no.	Items	Prevailing Condition	
12.1.	Safety equipment as per Annexure-I	Available ☐	Deficient ☐
12.2.	Working of Emergency Braking System of the machine	Ok ☐	Defective ☐
12.3.	Competency certificate of operator	Ok ☐	Expired ☐
12.4.	Fire Extinguisher	Ok ☐	Expired ☐
12.5.	Strength of staff	Full ☐	Deficient ☐
12.6.	Safety awareness	Excellent ☐ Good ☐	V. Good ☐ Average ☐
12.7.	Staff due for Medical	Yes ☐	No ☐
12.8.	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 ☐	Not done ☐

Remarks----------

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13. Under Frame Inspection

Sl no.	Items	Prevailing Condition	
13.1 Under Frame			
13.1.1.	Visual Inspection of centre pivot mounting Bolts and Mounting of Suspension system ,Bogie Frame etc.	Ok ☐	To be attended ☐
13.1.2.	Examine the shock absorber for damages.	Ok ☐	To be attended ☐
13.1.3.	Check condition of head stock/sole bar of centre buffer Coupler	Ok ☐	To be attended ☐
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 ☐	Not done ☐
13.2.2.	Visual Inspection of wheels and under gear for any infringement	Ok ☐	To be attended ☐
13.2.3.	Visually inspect all the welding locations.	Ok ☐	To be attended ☐
13.2.4.	Visually check the suspension brackets.	Ok ☐	To be attended ☐
13.3 Brake Rigging			
13.3.1.	Visually check the rubbing plates.	Ok ☐	To be attended ☐
13.3.2.	Examine brake beams breakages/ damages.	Ok ☐	To be attended ☐
13.3.3.	Inspection of Brake hanger bracket, torque support, cardan shaft hanger brackets for damages	Ok ☐	To be attended ☐
13.4 Draw Gear			
13.4.1.	Check condition of the screw coupling and replace if required.	Ok ☐	To be attended ☐
13.4.2.	Examine draw hook ,draw bars, rubber pads for damages	Ok ☐	To be attended ☐
13.4.3.	Ensure that wear at any section on draw hook should not exceed 10 mm.	Ok ☐	To be attended ☐
13.4.4.	Ensure that wear on screw coupling shackle pins, trunion pins, shackle/link holes and draw hook holes should not exceed 3mm.	Ok ☐	To be attended ☐
13.4.5.	Check condition of draw beam and locking pins on it.	Ok ☐	To be attended ☐
13.4.6.	Examine visually draft key locking pins.	Ok ☐	To be attended ☐

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 ☐	To be attended ☐
13.5.2.	Examine for corrosion of sole bar and other under frame member with track tight or inspection lamp.	Ok ☐	To be attended ☐
13.5.3.	Visually examine the buffers casing for cracks/damages.	Ok ☐	To be attended ☐
13.6 Running Gear and Wheels			
13.6.1.	Visually inspect axle box covers.	Ok ☐	To be attended ☐
13.6.2.	Inspect wheel tread for shattered rim, spread rim, shelled tread, thermal cracks, heat checks.	Ok ☐	To be attended ☐

Signature of Inspecting authority

Annexure - I

List of Safety Equipment

S. No.	Description	Quantity
1.	Fog signals (Detonators) in a tin case	1 box
2.	Red hand signal flags	2 nos.
3.	Green hand signal flag	1 nos.
4.	Tri- colour hand signal lamps/LED torch	2 nos.
5.	Chains with padlocks.	2 set
6.	Clamp with Padlock	2 nos.
7.	10 t jack with terfor	2 nos.
8.	Crow bars	4 nos.
9.	Wooden blocks off sizes	4 nos.
10.	One hydraulic hand pump	1 nos.
11.	Banner flag	2 nos.
12.	Walkie talkie with frequency of SM, Guard and Loco Pilots.	2 nos.
13.	First Aid Box (valid up to ……)	1 no
14.	Skids	2 nos.
15.	Working time table of section where machine is working	1 copy
16.	G&SR book with upto date amendment slips	1 copy
17.	4 cell flasher light LED lamp cum flasher light	1 no.
18.	Tail Lamp	1 no.
19.	Safety helmets	For each Machine staff
20.	Protective clothing, safety shoes and safety gloves	For each Machine staff
21.	Track Machine Manual with latest correction slips	1 no.
22.	Accident Manual with up to date correction slips	1 no.
23.	Fire extinguisher (each cabin) (Valid up to ……)	3 nos.
24.	Hooter (manual/remote controlled)	2 nos.
25.	Emergency pneumatic/Hydraulic hose of sizes suiting to different machines(complete with end fittings)	1 no.
26.	Internal communication system like walkie-talkie and/or head mounted system	-

Annexure –II

Track Parameters measured

Km post/ Sleeper no.	Curve/ Straight	Before tamping			After tamping & Stabilising		
		XL	Twist	Alignment at ___	XL	Twist	Alignment at ___

Annexure-III

ANY OTHER OBSERVATIONS:

Annexure-IV

Signature of Inspecting Officer

Name	Designation	Signature

ACKNOWLEDGEMENT

Following officers and staff have made their valuable contributions in finalization of the Inspection Check List for High output tamping & stabilizing machine (09-3X) dynamic (Single Engine)

RDSO

1. Shri Rakesh Tiwari	ARE/TM
2. Shri Prakhar Gupta	SSRE/TM
3. Shri Manu Gupta	JRE/TM