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TM/HM/WST/pt.IV **Date :27-03-2017**

I-	मुख्य अभियन्ता (ट्रैक मशीन)	**Chief Engineer (Track Machines)**
1.	मध्य रेलवे, सीएसटी, मुम्बई–400 001	CST, C R, Mumbai - 400 001.
2.	फेयरली प्लेस, पूर्व रेलवे, कोलकाता–700 001	Fairlie Place, E R, Kolkata-700 001.
3.	बड़ौदा हाउस, उत्तर रेलवे, नयी दिल्ली–110 001	Baroda House, N R, New Delhi-110 001.
4.	उत्तरपूर्व रेलवे, गोरखपुर 273012	N E R, Gorakhpur-273 012.
5.	मालीगांव, उत्तरपूर्व सीमान्त रेलवे, गुवाहाटी–781 011	Maligaon, N F R, Guwahati -781 011.
6.	पार्क टाउन, दक्षिण रेलवे, चेन्नई–600 003	Park Town, S R, Chennai -600 003.
7.	रेल निलायम, दक्षिण मध्य रेलवे, सिकन्दराबाद–500 371	Rail Nilayam, SCR, Secunderabad-500 371.
8.	गार्डन रीच, दक्षिणपूर्व रेलवे, कोलकाता–700 043	Garden Reach, S E R, Kolkata-700 043.
9.	चर्चगेट, पश्चिम रेलवे, मुम्बई–400 020	Churchgate, W R, Mumbai-400 020
10.	उत्तर पश्चिम रेलवे, जयपुर–302 001	N W R, Jaipur-302 001.
11.	पूर्व मध्य रेलवे, हाजीपुर–844 101	E C R, Hazipur-844 101
12.	दक्षिण पश्चिम रेलवे, हुबली–580 023	SWR, Hubli-580 023
13.	उत्तर मध्य रेलवे, इलाहाबाद–211 001	NCR, Allahabad-211 001
14.	पूर्व तट रेलवे, भुवनेश्वर–751 001	East Coast Rly, Bhubaneshwar-751 001
15.	पश्चिम मध्य रेलवे, जबलपुर–482 001	WCR, Jabalpur-482 001
16.	दक्षिण पूर्व मध्य रेलवे, बिलासपुर–495 004	South East Central Rly, Bilaspur-495 004
II-	उप मुख्य अभियन्ता (ट्रैक मशीन)	**Dy Chief Engineer (Track Machines)**
1.	सी.पी.ओ.एच. कार्यशाला पो0 धूमनगंज इलाहाबाद–221012	CPOH WPRKSHOP,PO. Dhoomanganj Allahabad-221012
2.	सी.पी.ओ.एच. कार्यशाला, दक्षिण मध्य रेलवे,रायनापाडु,. विजयवाडा, जिला कृष्णा, आन्ध्र प्रदेश. 521241	CPOH WPRKSHOP,South Central Railway, Rayanapadu,Vijaywada,Dist.-Krishna,Andhra Pradesh-521241
III-	प्रधानाचार्य भा.रे.रे.प.म.प्र.के. पीपल गांव इलाहाबाद–211001	Principal,IRTMTC,Pipal Gaon,,Allahabad-211001

विषय : प्लासर निर्मित वर्कसाइट टैम्पिंग मशीन की निरीक्षण जांच सूची के संशोधन –1 ।

Sub: Revision-1 of Inspection check list of Plasser make Worksite Tamping Machine.

प्लासर निर्मित वर्कसाइट टैम्पिंग मशीन की निरीक्षण जांच सूची (टीएम–रिपोर्ट–129)पत्र सं. टीएम/एच/एम /15 दि. 20.03.2009 का संशोधन – 1 तैयार किया गया है। जिसकी प्रति, आपके सूचनार्थ तथा मशीन के कर्मचारियों जो फील्ड मे काम कर रहे हैं, के मार्गदर्शन हेतु संलग्न है । यद्यपि उपरोक्त संशोधन बनाते समय सभी सावधनियाँ बरती गईं है ,फिर भी यदि कोई त्रुटि हो तो ,कृपया अपने सुझावों/ टिप्पणियों को सुधार हेतु ई–मेल/ फैक्स /पत्राचार द्वारा अद्योहस्ताक्षरी को भेजे ।

Revision-1 for the Inspection check list (TM Report-129) of Plasser make Worksite Tamping Machine, issued vide letter no.**TM/HM/15 date 20-03-2009** has been prepared. 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 revision of the above said list, the discrepancy noticed, if any ,may be come to the knowledge of the undersigned for further improvement. by email/fax/post.

DA: As above

(मुदित भटनागर)
कार्यकारी निदेशक/ रेलपथमशीन

भारत सरकार
रेल मंत्रालय

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

प्लासर निर्मित वर्कसाइट टेमपिगं मशीन की निरीक्षण जांच सूची

INSPECTION CHECK LIST FOR OF PLASSER MAKE WORKSITE TAMPING MACHINE (PLASSER MAKE)

रिपोर्ट संख्या–टी.एम.–129
Report No.TM - 129
(Revision-1 of 2017)

मार्च–2017
March-2017

अनुसंधान अभिकल्प और मानक संगठन
लखनऊ–226011
RESEARCH DESIGNS & STANDARDS ORGANISATION
LUCKNOW- 226 011

INSPECTION OF WORKSITE TAMPING MACHINE

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

1. General :

Sl. no.	Items	Remarks given by inspecting officer
I.	Name of supervisor	
II.	Machine make	
III.	Year of manufacturing	
IV.	First POH of Machine done on	
V.	Last IOH of M/C done on	
VI.	Next IOH of M/C due on	
VII.	Last POH of M/C done on	
VIII.	Next POH of M/C due on	
IX.	Last POH of camping coach done on	
X.	Next POH of camping coach due on	
XI.	All log book filled properly	

History of Machine:----------

Sl. no.	I t e m s	Prevailing Condition	
2.	Mode of Working		
I.	Pre and Post Tamping Operations being Done	Yes ☐	No ☐
II.	Depth of Clean Cushion under Sleeper (required min. is 150 mm)	Actual—	
		OK ☐	Less ☐
III.	Condition of Ballast	Caked ☐	clean ☐
IV.	Lining Working Method	3 point ☐	4point ☐
V.	Mode of working	smoothening ☐	design ☐
VI.	Lifting working mode	Proportional (smoothing) ☐	design ☐
VII.	Working method	Manual ☐	Measuring run ☐
VIII.	Hydraulic leakage from circuit	Location --------	
IX.	Overall condition of the Machine.	Excellent ☐ Good ☐	Very good ☐ Average ☐

Remarks.

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3 . Oil/water/level in tank/container

Sl. no.	Items	Agent / Description	Prevailing Condition	
I.	Hydraulic oil	servo System HLP68N or equivalent*	OK ☐	Need top up ☐
II.	Radiator	Water with coolant	OK ☐	Need top up ☐
III.	ZF Gear Box	CF-4 15W40	OK ☐	Need top up ☐
IV.	Diesel Oil	HSD	OK ☐	Need top up ☐
V.	Distribution Gear Box (After every 500Engine hrs)	SAE-90 or equivalent	OK ☐	Need top up ☐
VI.	Reduction Gear Box (After every 500Engine hrs)	SAE-90 or equivalent	OK ☐	Need top up ☐
VII.	Engine Lube oil (After every 300 Engine hrs)	CF-4 15W40	OK ☐	Need top up ☐
VIII.	Tamping unit centre arm pin assembly	SS-100 or equivalent	OK ☐	Need top up ☐
IX.	Main bearing housing	SS-100 or equivalent	OK ☐	Need top up ☐
X.	Driving Axle Gear Box I (After every 500 Engine hrs)	SAE-90 or equivalent	OK ☐	Need top up ☐
XI.	Driving Axle Gear Box II (After every 500Engine hrs)	SAE-90 or equivalent	OK ☐	Need top up ☐
XII.	Compressor lube oil (if used)	CF-4 15W40	OK ☐	Need top up ☐
XIII.	Tamping unit oil tank LHS	servo System HLP68N or equivalent*	OK ☐	Need top up ☐
XIV.	Tamping unit oil tank RHS	servo System HLP68N or equivalent*	OK ☐	Need top up ☐

*equivalent of servo system HLP68N list issued by RDSO vide l.n.TM/HM/Oils dated dt.26/07/2012

Remarks----------

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4. Filters

Sl. no.	Items	Prevailing Condition Remark	
I.	Cleaning of Air Cleaner filters outer (1no) (Cleaned after every 250hrs or on dirt indication and change after 1000hrs)	Done ☐	Not done ☐
II.	Change of air cleaner inner (1no) (after every 1000 engine hrs)	Done ☐	Not done ☐
III.	Change of engine oil filters (1no) (after every 300 engine hrs)	Done ☐	Not done ☐
IV.	Change of diesel filters (2nos) (To be done after every 300 engine hrs)	Done ☐	Not done ☐
V.	Change of ZF gear box filter (1no) (after every 500hrs or on choke indication)	Done ☐	Not done ☐
VI.	Change of Servo valve filter (2nos) (after every 250 engine hrs or on choke indication)	Done ☐	Not done ☐
VII.	Change of Servo valve button filter (6nos) (after every 250 engine hrs or on choke indication)	Done ☐	Not done ☐
VIII.	Change of proportional valve filter (1no) (after every 250hrs or on choke indication)	Done ☐	Not done ☐
IX.	Change of return filter (2nos) (after every 500 engine hrs or on choke indication)	Done ☐	Not done ☐
X.	Change of suction filter (4nos) (after every 500 engine hrs or on choke indication)	Done ☐	Not done ☐
XI.	Change of variable pump suction filter (2nos) (after every 500 engine hrs or on choke indication)	Done ☐	Not done ☐
XII.	Change of air dyer filter if used (2nos) (after every 500 engine hrs or at least once year)	Done ☐	Not done ☐

Remarks----------

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

Sl. no.	Item	Agent / Description	Prevailing Condition	
5.1Tamping units				
I.	Any leakage from circuit of central lubrication system	--------	Yes ☐	No ☐
II.	Functioning of all distributor blocks of central lubrication system,if used.	--------	Ok ☐	Need attention ☐
III.	Functioning of chocking indicator of central lubrication system,if used.	----------	Ok ☐	Need attention ☐
IV.	Connecting rod bolt (35mm pin)	Grease shell alvania RL2	Done ☐	Not done ☐
V.	Vibration shaft main bearing cover leakage	--------	Yes ☐	No ☐
5.3 Lifting and lining units				
I.	Clamp Pivot	Grease shell alvania RL2	Done ☐	Not done ☐
II.	Lifting Unit Guide Column	Grease shell alvania RL2	Done ☐	Not done ☐
III.	Lining rollers	Grease shell alvania RL2	Done ☐	Not done ☐
IV.	Clamp carrier /Housing	Grease shell alvania RL2	Done ☐	Not done ☐
V.	Lining cylinder pivot	Grease shell alvania RL2	Done ☐	Not done ☐
VI.	Lifting roller clamp	Grease shell alvania RL2	Done ☐	Not done ☐
VII.	Lifting unit locking	Grease shell alvania RL2	Done ☐	Not done ☐

*equivalent of servo system HLP68N list issued by RDSO vide l.n.TM/HM/Oils dated dt.26/07/2012

Remarks----------

Sl. no.	Item	Agent / Description	Prevailing Condition	
5.4 Cardon shaft				
I.	Engine to ZF Gear Box	Grease shell alvania RL2	Done ☐	Not done ☐
II.	ZF to Distributor Gear Box	Grease shell alvania RL2	Done ☐	Not done ☐
III.	Distributor Gear Box to axle I Gear box	Grease shell alvania RL2	Done ☐	Not done ☐
IV.	Distributor Gear Box to intermediate Gear Box	Grease shell alvania RL2	Done ☐	Not done ☐
V.	Intermediate Gear Box to rear axle II	Grease shell alvania RL2	Done ☐	Not done ☐
VI.	Reduction gear box to ZF gear box	Grease shell alvania RL2	Done ☐	Not done ☐
5.5 Miscellaneous				
I.	Middle feeler rod bush	Grease shell alvania RL2	Done ☐	Not done ☐
II.	Torque arm pivot	Grease shell alvania RL2	Done ☐	Not done ☐
III.	Driving bogie Brake linkage	Grease shell alvania RL2	Done ☐	Not done ☐
IV.	Running bogie Brake linkage	Grease shell alvania RL2	Done ☐	Not done ☐
V.	pivot joint & bush of Front Trolley	Grease shell alvania RL2	Done ☐	Not done ☐
VI.	pivot joint & bush of Rear Trolley	Grease shell alvania RL2	Done ☐	Not done ☐
VII.	pivot joint & bush of Middle feeler cum Trolley	Grease shell alvania RL2	Done ☐	Not done ☐
VIII.	pivot joint & bush of Lining Trolley	Grease shell alvania RL2	Done ☐	Not done ☐
IX.	Axle gear box flange cover	Grease shell alvania RL2	Done ☐	Not done ☐

Remarks-

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6. Engine Model no.: **Engine hours on date-**

Sl. no.	Items	**Prevailing Condition**	
I.	Over-hauling of the Engine as per Main. Schedule	Due ☐	Not due ☐
II.	Starting problem	No ☐	Required attention ☐
III.	Condition of smoke	White ☐ Normal ☐	Black ☐
IV.	Max.Engine temperature during working (approx.after 2 hours working) a) Cummins Engine: Optimum 75 to 85ºc	Actual ------ °C	
		Ok ☐	Required attention ☐
V.	Leakage from engine cylinder head	No ☐	Yes ☐ (Head no.-)
VI.	Compressor working	Ok ☐	Not satisfactory ☐
VII.	Belt condition and tension	Ok ☐	Need attention ☐
VIII.	Leakage of water from water pump, seal hose and radiator	No ☐	Required attention ☐
IX.	RPM of the Engine (rated 2100)	Actual---	
		Ok ☐	Need attention ☐
X.	Engine oil pressure (minimum) Minimum 1-2Kg/cm^2 -1.5Kg/cm^2 at idle Minimum 3-7Kg/cm^2 2.5 Kg/cm^2at rated speed	Actual--- Actual---	
XI.	Pressure and temperature switch of engine circuit	Ok ☐	Need attention ☐
XII.	Condition of radiators	Ok ☐	Need attention ☐
XIII.	Overall condition of Engine	Ok ☐	Need attention ☐

Remarks

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7. Power Transmission

Sl. no.	Items	Prevailing Condition	
I.	Oil leakage in Gear boxes	Yes ☐	No ☐
II.	Tightness of engine mounting Bolts	O.K ☐	To be tighten ☐
III.	Condition of shock absorber.	Ok ☐	Need attention ☐
IV.	Any jerk in gear boxes (check play in torque support pin)	No ☐	Yes ☐ (Location.-)

Remarks

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8. Electrical and Electronics

Sl. no.	Items	Prevailing Condition	
I.	Battery Charging system	Working ☐	Need attention ☐
II.	All lights	Working ☐	To be attended ☐
III.	Limit switch	Working ☐	Need attention ☐
IV.	Electrical Horns	Working ☐	Need attention ☐
V.	Proximity switch	Working ☐	Need attention ☐
VI.	Requirement of PCB, if any	Part no.---------	
VII.	Condition of electrical wiring	O.k ☐	Need attention ☐
VIII.	Condition of batteries	Ok ☐	Not satisfactory ☐
IX.	Condition of self starter	Ok ☐	Need attention ☐
X.	Condition of alternator	Ok ☐	Need Attention ☐

Sl. no.	Items	Prevailing Condition			
Xl.	Condition of Depth transducer (2nos)	Ok	☐	Need attention	☐
Xll.	Condition of Lining transducer (2nos)	Ok	☐	Need attention	☐
Xlll.	Condition of Height transducer (2nos)	Ok	☐	Need attention	☐
XlV.	Working of Lining galvanometer(2nos)	Ok	☐	Need attention	☐
XV.	Working of X- Level galvanometer (2nos)	Ok	☐	Need attention	☐
XVl.	Working of Lifting indication voltmeter LHS (Front cabin)	Ok	☐	Need attention	☐
XVll.	Working of Lifting indication voltmeter RHS(Front cabin)	Ok	☐	Need attention	☐
XVlll.	Working of Lifting indication voltmeter LHS (Working cabin)	Ok	☐	Need attention	☐
XlX.	Working of Lifting indication voltmeter RHS(Working cabin)	Ok	☐	Need attention	☐
XX.	Safety circuit for Engine	Ok	☐	Need attention	☐
XXl.	Safety circuit for Driving	Ok	☐	Need attention	☐
XXll.	Electrolyte level in batteries (Plates should be embedded in electrolyte)	Ok	☐	Need top up	☐
XXlll.	Specific gravity of electrolyte (min 1.24)	Ok	☐	Less	☐

Remarks

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9. Gauges and meters working status

Sl. no.	Items	Prevailing Condition	
I.	RPM meter in Working Cabin	Ok ☐	Need attention ☐
II.	RPM meter in Front Cabin	Ok ☐	Need attention ☐
III.	Speedometer/Tachometer working Cabin	Ok ☐	Need attention ☐
IV.	Speedometer/Tachometer front Cabin	Ok ☐	Need attention ☐
V.	Engine Oil Pressure meter	Ok ☐	Need attention ☐
VI.	Engine Temperature meter	Ok ☐	Need attention ☐
VII.	ZF oil pressure meter	Ok ☐	Need attention ☐
VIII.	ZF oil temperature meter	Ok ☐	Need attention ☐
IX.	Battery charging Ammeter	Ok ☐	Need attention ☐
X.	Battery voltage meter	Ok ☐	Need attention ☐
XI.	Hydraulic oil pressure meters	Ok ☐	Need attention ☐
XII.	Hyd. Oil temperature meter	Ok ☐	Need attention ☐
XIII.	Hydraulic driving pressure meters	Ok ☐	Need attention ☐
XIV.	Pneumatic pressure meter (Front cabin)	Ok ☐	Need attention ☐
XV.	Pneumatic pressure meter (Working cabin)	Ok ☐	Need attention ☐

Remarks

10.Pneumatic

Sl. no.	Items	Prevailing Condition	
I.	Air Oiler working properly	Yes ☐	Need attention ☐
II.	Leakage in Pneumatic circuit	No ☐	Yes ☐ (Location.-)
III.	Water separator working properly	Yes ☐	Need attention ☐
IV.	Condition of brake shoes	Ok ☐	To be changed ☐
V.	Clearance between brake shoes and wheel (3-5mm)	Ok ☐	To be changed ☐
VI.	Working of brake application	Satisfactory ☐	To be attented ☐
VII.	Working of unloader valve	Satisfactory ☐	To be attented ☐
VIII.	Locking system of lifting/lining units	Satisfactory ☐	To be attented ☐
IX.	Locking system of tamping units	Satisfactory ☐	To be attented ☐
X.	Locking system of lining trolley	Satisfactory ☐	To be attented ☐
XI.	Locking system of middle feeler cum trolley	Satisfactory ☐	To be attented ☐
XII.	Locking system of measuring feeler trolley	Satisfactory ☐	To be attented ☐

Remarks

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11. Hydraulic pressure and operation

Sl. no.	Items	Prevailing Condition	
		Recommended value	Actual value
I.	System and working drive pressure	Approx.130 bar	
II.	Safety valve for working system	Approx.170 bar	
III.	High Pressure System	Approx.150 bar	
IV.	Safety valve for high Pressure System	Approx.175 bar	
V.	Counter pressure	Approx.35 bar	
VI.	Safety valve tamping unit opening pressure	Approx.90 bar	
VII.	Tamping unit vibration drive pressure	Approx.150 bar /180 bar	
VIII.	Squeezing Pressure	110-125 bar	
IX.	Accumulator Pressure for working pressure	85 bar	
X.	High pressure Accumulator	100 bar	
XI.	Condition of hoses	Satisfactory ☐	Need attention ☐
XII.	Condition of D.C. valves,Proportional valve & servo valve.	Ok ☐	Leaking ☐ (Location------)
XIII.	Squeezing time	0.8 – 1.2 second	
XIV.	Air Pressure (in kg / cm^2)	Approx. 7 bar	
XV.	Pending Maintenance Schedule and reasons.	Schedule I,II,III,IV,V,VI,VII	
XVI.	Condition of Oil Coolers	Clean ☐	Clogged ☐
XVII.	Hydraulic Oil Temperature after working of machine for 2 hrs. (Max limit 76^0c)	------ °C	

Remarks

12.Miscellaneous:

Sl. no.	Items	Prevailing Condition	
I.	Adjustment of track lifting roller height LHS	Ok ☐	To be adjusted ☐
II.	Adjustment of track lifting roller height RHS	Ok ☐	To be adjusted ☐
III.	Condition of tamping bank	Satisfactory ☐	Need attention ☐
IV.	Condition of tamping tool	Ok ☐	To be replaced ☐
V.	Infringement of tamping tools with one another	Yes ☐	No ☐
VI.	Actual nos. of tamping tools with which machine is working	Nos.	
VII.	Condition of machine working tools (Spanner set etc)	Satisfactory ☐	To be replaced ☐
VIII.	Leakage from vibration shaft housing	Yes ☐	No ☐
IX.	Vibration shaft housing breathers	Clean ☐	Clogged ☐
X.	Change of ZF gear box oil	Due ☐	Not due ☐
XI.	Working of bogie and wheel support cylinders	O.K ☐	Need attention ☐
XII.	Working of tamping unit slide cylinder	O.K ☐	Need attention ☐
XIII.	Emergency back up system	Functioning ☐	Need attention ☐
XIV.	Depth of tamping tool (clearance between the bottom edge of the sleeper and top of tamping tool blade, Normally it should be 15-20mm)	Within limit ☐	To be adjusted ☐
XV.	General condition of the machine.	Excellent ☐ Good ☐	V. Good ☐ Average ☐
XVI.	Breakdown (Permissible unit 3 days)	Within limit ☐	Beyond limit ☐
XVII.	Pending Maintenance Schedule and reasons.	----------	
XVIII.	Availability of spares and tools	Complete ☐	deficient ☐
XIX.	Availability of staff amenities as per para 8.4.5 and annexure 8.2 of IRTMM -2000	Complete ☐	deficient ☐
XX.	General observation of camping coach	O.K ☐	To be Maintained ☐

Sl. no.	Items	Prevailing Condition	
XXI.	Condition of machine stabling siding	Clean ☐	To be Cleaned ☐
XXII.	Condition of rest house at stabling station	O.K ☐	To be attended ☐
XXIII.	Date of return of camping coach	Date--------	
XXIV.	Correction of alignment	Satisfactory ☐	Need attention ☐
XXV.	Performance of Tamping unit up/down	Satisfactory ☐	Need attention ☐
XXVI.	Performance of Lifting &Levelling	Satisfactory ☐	Need attention ☐
XXVII.	Overall performance of Machine working	Satisfactory ☐	Need attention ☐

13.Safety Items:

Sl. no.	Items	Prevailing Condition	
I.	Safety equipment as per Annexure-I	Available ☐	deficient ☐
II.	Working of safety Emergency Braking System of the machine	Ok ☐	Defective ☐
III.	Competency certificate of operator	Current ☐	Expired ☐
IV.	Strength of staff as per IRTMM-2000	Full ☐	deficient ☐
V.	Safety awareness	Excellent ☐ Good ☐	V. Good ☐ Average ☐
VI.	Staff due for Medical	Yes ☐	No ☐
VII.	Group Performance	Excellent ☐ Good ☐	V. Good ☐ Average ☐
VIII.	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 ☐
IX.	Ultrasonic testing of axles of machine shall be done between 40,000 to 45,000 kms of running engine hours or three years, whichever is earlier.	Done ☐	Not done ☐

Remarks----------

Signature of inspecting authority

Annexure - I

List of Safety Equipments

S. No.	Description	Quantity
1.	Detonators in a tin case	1 box
2.	H.S. flag red	2 nos.
3.	H.S. flag green	1 nos.
4.	H.S. Tri colour lamps	2 nos.
5.	Chain & Padlock	1 set
6.	Clamp with Padlock	2 nos.
8.	10 t jack	2 nos.
9.	Crow bars	4 nos.
10.	Wooden blocks off sizes	4 nos.
11.	Gauge cum level	1 no.
12.	Rail thermometer (dial type)	1 no.
13	Banner flag	2 nos.
14.	Portable Control Phone/Walky takly	1 no
15.	First Aid Box	1 no
16.	Skids	2 nos.
18	Working time table of section where machine working	1 copy
19	G&SR book with upto date amendment slips	1 copy
20.	4 cell flasher light	1 no.
21.	Petromax /LPG lamps	1 no.
22.	Safety helmets	For each Machine staff
23.	Protective clothing, safety shoes and safety gloves	For each Machine staff
24.	Track Machine Manual wth all CS till date	1 no.
25.	Accident Manual	1 no.
26.	Fire extinguisher	1 no.
27.	Hooter (manually operated)	2 nos.
28.	Hydraulic Hand Pump	1 no.
29	Emergency pneumatic/Hydraulic hose of sizes suiting to different machines(complete with end fittings)	1 no.

ANNEXURE -II

SPARE PARTS TO BE KEPT IN MACHINE'S STORE

Sl. no.	Description of Items	Part No.	Qty.
A.	**Tamping Unit**		
1.	Hex socket head cap screw	M10X25	2Nos.
2.	Spring washer	2E22.35	1 Nos.
3.	Hex bolt	M20X75	1 Nos.
4.	Spring washer	20 mm	2 Nos.
5.	Hex nut	M20	2 Nos.
6.	Adjusting screw	2E11.30	1 Nos.
7.	Castle nut	2E22.36	1 Nos.
8.	Hex bolt	M20X40	6 Nos.
9.	Washer	VS 12	4 Nos.
10.	Nut	M 14x1	2 No.
11.	Gear ring	GR 100	1 No.
12.	Filter (breather)	FLE-001/4"ZG.1234D	1 No.
13.	Spring washer	8DIN7980	4 Nos.
14.	Hex socket head cap screw	M8X20	4 Nos.
15.	Spring washer	8mm	8 Nos.
16.	Adjusting screw	E60.08AAS	4 Nos.
17.	Spring washer	33mm	2 Nos.
18.	Hex bolt	M20X1.5X50	4 Nos.
19.	Piston rod bush	2E34.231	1 Nos.
20.	Connecting rod bolt	G20.13	2 Nos.
21.	Toothed disc	FZ116	4 Nos.
22.	Washer	14mm	4 Nos.
23.	Disc	2E32.05	2 Nos.
24.	Washer	VS 24	2 Nos.
25.	Hex nut	M24X1	2 Nos.
26.	Washer	G20.14	2 Nos.
27.	Hex socket head cap screw	M16X35	2 Nos.
28.	Hex socket head cap screw	M16X110	4 Nos.
29.	Washer	VS16	4 Nos.
30.	Split pin	2X25	2 Nos.
31.	Lock nut	UD66.3273 – I	1 Nos.
32.	Cylinder pin	6M6x24	1 Nos.
33.	Cylinder pin	M6x18	2 Nos.
34.	Seal kit	HZS-DS-243	2 Nos.
35.	Piston screw	E36.48	1 No.
36.	Threaded pin	M6X8	2 Nos.
37.	Grease nipple big		4 Nos.

Sl. no.	Description of Items	Part No.	Qty.
38.	Piston	2E36.457	1No.
39.	Cylinder	2E34.150B	1No.
40.	Seal Kit	HZS.DS.401	1 Nos.
41.	Seal kit	H2D02.080.040	1 Nos
42.	Tamping Way limitation (Bracket)	2E33.70	1 No.
43.	Washer	VS10	2 No.
44.	Hex socket head cap screw	M10X30	2 Nos.
45.	Washer	14MM	2 Nos.
46.	Hex nut	16 MM	4 Nos.
47.	Washer	10MM	2 Nos.
48.	Hex bolt	M12X90	4 Nos.
49.	Hex socket head cap screw	16X35	4 Nos.
50.	Hex nut	M42X1	1 No.
51.	Safety nut	M10x1	2Nos.
52.	Bolt	2E32.63A	2Nos.
53.	Split pin	3.2x28Din	2Nos.
54.	Bolt	2E33.65	2Nos.
55.	Bolt	2E33.62	2Nos.
56.	Piston	2E35.303	1No.
57.	Piston rod bush	2E35.250	1No.
58.	Split pin	8x80	1no.
59.	Spring washer	42mm	2Nos.
60.	Bolt	2E31.04	1No.
61.	Washer	VS20	20Nos.
62.	Washer	2E31.19A	2Nos.
63.	Fitting key	2E22.31	1No.
64.	Washer	VS16	10Nos.
65.	Hex bolt	CU30.406	10Nos.
66.	Nut	KM13	1No.
67.	Clutch flange	UD22.28	1 No.
68.	Lock plate	MB13	1No.
69.	Seal kit	HZ01.080	1No.
70.	Hex nut	16 mm	4Nos.
71.	Tamping tools	---	1Set
72.	Hex nut	12mm	4No.
73.	Adjusting screw	DL10.73	4Nos.
B.	**Wheel support**		
1.	Seal kit	UD50.100DS	2 Nos.

Sl. no.	Description of Items	Part No.	Qty.
C	**Lifting and lining unit**		
1.	Seal kit	HZ02.100.045	1 No
2.	Washer	8MM	2 Nos.
3.	Seal kit	HZ01.125	1 No.
4.	Seal kit	HZ02.125.050	1 No.
5.	Seal kit	E150.180DS	1 No.
6.	Hex bolt	M8X30	4 Nos.
7.	Clamp roller	DL150.011	1 No.
8.	Seal Kit	HZ01.100	1 No.
D	**Brake System**		
1.	Brake shoe	WN146-730.K-4	2 Nos.
2.	Seal kit	W33.200ADS	1No.
E.	**Versine Transducer**		
1.	Chord wire	EL-T576.10	7m
2.	Cheese head screw	M4X30	4 Nos.
3.	Rod	EL-T609.45	2 Nos.
4.	Potentiometer	EL-T595	1 No.
5.	Carrier	EL-T67.00B	1 No.
6.	Chord Wire	2 mm	50 m
7	Power supply PCB	ELT-813.00LV	1 No.
F	**Measuring Bogies**		
1	PN. Cylinder	PN2Z.G.70/20/300	1No.
2	PN. Cylinder	PN2Z.G.100/25/400	1No.
3	Rod	UD251.13101	2Nos.

Annexure-III

Track Parameters measured

Km post/ Sleeper no.	Curve/ Straight	Before tamping			After tamping		
		XL	Twist	Align- -ment at ___	XL	Twist	Alignm -ent at ___

Annexure-IV

ANY OTHER REMARKS BY INSPECTING OFFICER /:

Annexure-V

Signature of Inspecting Officer

Name	Designation	Signature

ACKNOWLEDGEMENT

Following officers and staff have made their valuable contributions in finalization of the revision -1 of Inspection Check List for Plasser Make Worksite Tamping Machine .

Railways.

1. S/Shri Manoj Kumar Pandey SSE/TM/NER

RDSO

1. S/Shri Muslim ahmad ARE/TM

2. S/Shri D.G.Sharma SSE/TM

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