



**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**INSPECTION CHECK LIST
OF
TRACK RELAYING TRAIN
(P811S)**

REPORT No. TM – 107

FEBURARY-2007

RESEARCH DESIGNS AND STANDARDS ORGANISATION

LUCKNOW-226011

Name & Designation of Inspecting Official :

Date of Inspection :

Machine No. :

Base Station :

**ITEMS TO BE CHECKED
(As per maintenance schedules)**

S.no.	Items	Agent / Description	Prevailing Conditions
1.	Oil / Water Levels :		
A.	Main Machine		
i)	Hydraulic oil	Servo System – 68 or equivalent	Ok / Less
ii)	Radiator	Water /Coolant	Ok / Less
iii)	Diesel Oil	HSD	Ok / Less
iv)	Engine Lube oil	API CF-4 15W40	Ok / Less
v)	Compressor lube oil	API CF-4 15W40	Ok / Less
B.	Gantry		
i)	Radiator	Water / Coolant	Ok / Less
ii)	Engine Lube oil	API CF-4 15W40	Ok / Less
iii)	Hydraulic oil	Servo System – 68 or equivalent	Ok / Less
2.	Lubrication (As per maintenance schedule)		
A.	Main Machine		
i)	Sled chain	Lube oil	Done / Not done
ii)	N.T. rubber pads	Lube oil	Done / Not done
iii)	Clutch and drive shafts universals	Grease MP-2 or RR -3	Done / Not done

S.no.	Items	Agent / Description	Prevailing Conditions
iv)	Old sleeper pick up mechanism	Grease MP-2 or RR -3	Done / Not done
v)	New sleepers drop mechanism	Grease	Done / Not done
vi)	Magazine rollers	Grease	Done / Not done
vii)	Dynamic plow	Grease	Done / Not done
viii)	Conveyor shaft bearings	Grease	Done / Not done
ix)	Conveyor chain	Lube oil	Done / Not done
x)	Cardon shaft	Grease	Done / Not done
xi)	All thread in and thread out rollers	Grease	Done / Not done
xii)	Pump control linkage	Grease	Done / Not done
xiii)	Track laying frame stabilizer arms	Grease	Done / Not done
B.	Gantry		
i)	Gantry wheel bearings	Grease	Done / Not done
ii)	Intermediate gear bearings	Grease	Done / Not done
iii)	Cardon shafts	Grease	Done / Not done

S. no.	Items	Prevailing Conditions
	As per maintenance schedule	
3.	Engine:	
A.	Main machine	
	Engine Model & No.:	Engine hours:
i)	Starting problem	Yes / No
ii)	Condition of smoke	White / black / Normal
iii)	Engine temperature after 2 Hrs working	°C
iv)	Leakage in Head gasket	No / Yes (Head no.)
v)	Electrolyte level in batteries	Ok / Less
vi)	Specific gravity of electrolyte (min 1.24)	Ok / Less
vii)	Compression leakage	Yes / No
viii)	Belt tension	Ok / To be tightened
ix)	Condition of V-belts	Ok/To be replaced
x)	Leakage in engine hoses	Yes/no
xi)	Condition of battery terminals	Ok /To be attended
xii)	RPM of the Engine	
	Engine oil pressure	Actual
xiii)	a) 1.5 Kg/cm ² at idle speed b) 2.5 Kg/ cm ² on rated speed after 2 hours working	
xiv)	Last change of Air Cleaner element	Dated Engine hrs
xv)	Last change of engine oil	Dated Engine hrs
xvi)	Last change of engine oil filters	Dated Engine hrs
xvii)	Last change of diesel filters	Dated Engine hrs
xviii)	Last changing / Replacement of batteries	Dated Engine hrs
xix)	Last / change of self starter	Dated Engine hrs
xx)	Last repair / change of alternator	Dated Engine hrs

S. no.	I t e m s	Prevailing Conditions
xxi)	Last over-hauling of the Engine	Dated Engine hrs
xxii)	Last calibration of fuel injection pump	Dated Engine hrs
xxiii)	Last calibration of Fuel Injectors	Dated Engine hrs
xxiv)	Whether working gauges are in order	
a)	R.P.M.	Yes/No
b)	Oil Pressure	Yes/No
c)	Temperature	Yes/No
d)	Battery charging	Yes/No
B.	GANTRY	
i)	Lube oil pressure after 2 Hrs working	Ok/Less
ii)	V-Belt tension	Ok/To be tightened
4.	General:	
A.	Main Machine	
i)	Tightness of all nuts & bolts	Ok / To be tightened
ii)	Sled chain Tension	Ok / Less
iii)	Fingers of pick up unit	Ok / To be attended
iv)	Condition of sled rollers	Ok / To be attended
v)	Condition of sled sprocket and chains	Ok / To be replaced
vi)	Condition of Rail alignment rollers	Ok / To be replaced
vii)	Leakage from hydraulic system	Ok / To be attended
viii)	Leakage from exhaust vent	Ok / Leaking
ix)	Clearance between brake shoes and wheels	Ok / To be attended
x)	Condition of machine working tools	Satisfactory /To be replaced
xi)	All log books filled properly	Yes/No
B.	Gantry	
i)	Brake application	Satisfactory/To be attended
ii)	Tightness of nuts & bolts	Ok/To be tightened
iii)	Condition of brake shoes	Ok/To be replaced
S.	I t e m s	Prevailing Conditions

no.		
iv)	Condition of lock pins of all bridges and gantry rails of BRH	Ok/To be replaced
v)	Leakage from exhaust vent	Ok/Leaking
vi)	Condition of Rope	Ok/To be replaced
vii)	Condition of drive chain for excess wear & developing cracks	Satisfactory/To be replaced
viii)	Condition of bearing, pins and gear teeth for excessive wear	Satisfactory/To be changed
5.	Safety Items:	
i)	Safety equipment	Available / Deficient
ii)	Working of safety circuit of the machine	Ok / Defective
iii)	Competency certificate of the operator	Current / Expired
iv)	Fire extinguisher	Working / Expired
6.	During Block Working:	
i)	Location of block working	Km / TP
ii)	Duration of block	Hrs Min.
iii)	Output of work	Km
7.	Staff:	
i)	Strength of staff	Full / Deficient
ii)	Group Performance	Excellent / V. Good / Good / Average
iii)	Cost awareness	Excellent / V. Good / Good / Average
iv)	Safety awareness	Excellent / V. Good / Good / Average
v)	Staff due for Medical	
8.	General condition of the machine.	Excellent / Very good / Good / Average
9.	Breakdown (Permissible unit 3 days)	Within limit/Beyond limit
10.	Pending Maintenance Schedule and reasons.	
11.	Availability of spares	Complete/Deficient
12.	Any other remarks by Inspecting Officer:	

Signature of Inspecting officer

List of Safety Equipments

S. no.	Description	Quantity
1.	Detonators	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 & Pad lock	1 set
6.	Terfor (2 t capacity)	1 no.
7.	25 t jack with traverser	1 no.
8.	Crow bars	4 nos.
9.	Wooden blocks off sizes	8 nos.
11.	Rail thermometer (dial type)	1 no.
12.	Banner flag	2 nos.
13	Portable Control Phone	1 no.
14.	First Aid Box	1 no.
15.	Skids	4 nos.
16.	Walkie Talkie Set	1 no.
17.	G & SR Book	1 no.

ACKNOWLEDGEMENT

Following officers and staff have made their valuable contributions in finalization of inspection check list of Track Renewal Train (TRT-P811S).

RAILWAYS

1. SHRI Vibhuti Sharma SE/TM/TRT/WCR
2. “ Mohan Lal SE/TM/TRT/WCR
3. “ Surendra Kumar JE-I/TM/TRT/WCR
4. “ B.K. Mishra SSE/TM/TRT/NR

RDSO

- 1.S/Shri A.K. Pandey DTM-V
2. “ H.C.Pandey DD/TM
3. “ M.N.Siddiqui, SE/Engg./TM
4. “ A.N. Shrivastva SRE/TM
5. “ Prem Kumar SREI/TM