

Minutes of meeting with DY.CEE/W/KPA and Sr. Sr.DEE/MEMU/JAJ held on 01.12.23 & 02.12.23 in the chamber of DY.CEE/W/KPA

Members present:

<u>KPA</u>	<u>JAJ</u>
Sri G. N. Halder, DY.CEE/W	Sri Sanjeev Kumar, Sr.DEE/MEMU
Sri J. Karmakar, AWM/EMU	Sri Rajesh Kumar, SSE/Store
Sri P.C. Meena, AWM/G	

Sr.DEE/MEMU/JAJ visited Carriage Complex of Kanchrapara Workshop on account of witnessing the Tr. Motor failure (TM-1, SL. No.4919723, Type 4303 make - BHEL) on line at Pipra in SEE Division of ECR on 22.10.23. He also visited Motor Section, Switch Group Section, Relay Section, Tap changer Section, Bogie Section for witnessing the activities for POH of different apparatus.

The following points noted for compliance.

1. Visited the Motor Section. The motor was opened in front of Sr.DEE/MEMU/JAJ wherein end shield was locked and could not be dismantled as per normal POH activities but one arrangement made (bigger size special puller) for opening the end shield and opened on 02.12.23. The condition of bearing on both PE & CE ends is OK and found no abnormality in bearing.

Bearing Make – PE – Fag India, Mfg. 2019
CE – Fag Germany R 221, Mfg. 2018

It has been inferred that case of failure is intactness and metallic bonding of End Shield collar with bearing inner sleeve in PE side.

2. It has also been decided that more and more cab modification is required for JAJ MEMU Motor Coaches. Till date we have made 10 nos. modification as on date through RSP programme of E.Rly. and in future it has been planned to modify another 10 motor coaches for this year i.e. 2023-24.

30/12/2023
(Sanjeev Kumar)
Sr. DEEMEMU/JAJ

(G. Halder)
DY.CEE/W/KPA

No.EC/T/Misc./GH/

December 2, 2023

Distribution: CWM/KPA – for kind information.
CWE/ER/KKK – for kind information.
CESE/ECR – for kind information.
Sr.DEE/MEMU/JAJ/ECR – for information please.

Minutes of meeting with DY.CEE/W/KPA and Sr. Sr.DEE/MEMU/IAJ held on 01.12.23 & 02.12.23 in the chamber of DY.CEE/W/KPA

Members present:

<u>KPA</u>	<u>IAJ</u>
Sri G. N. Halder, DY.CEE/W	Sri Sanjeev Kumar, Sr.DEE/MEMU
Sri J. Karmakar, AWM/MEMU	Sri Rajesh Kumar, SSE/Store
Sri P.C. Meena, AWM/G	

Sr.DEE/MEMU/IAJ visited Carriage Complex of Kanchrapara Workshop on account of witnessing the Tr. Motor failure (TM-1, SL. No.4919723, Type 4303 make - BHEL) on line at Pipra in SEE Division of ECR on 22.10.23. He also visited Motor Section, Switch Group Section, Relay Section, Tap changer Section, Bogie Section for witnessing the activities for POH of different apparatus.

The following points noted for compliance.

1. Visited the Motor Section. The motor was opened in front of Sr.DEE/MEMU/IAJ wherein end shield was locked and could not be dismantled as per normal POH activities but one arrangement made (bigger size special puller) for opening the end shield and opened on 02.12.23. The condition of bearing on both PE & CE ends is OK and found no abnormality in bearing.

Bearing Make – PE – Fag India, Mfg. 2019
CE – Fag Germany R.221, Mfg. 2018

It has been inferred that cause of failure is intactness and metallic bonding of End Shield collar with bearing inner sleeve in PE side.

2. It has also been decided that more and more cab modification is required for IAJ MEMU Motor Coaches. Till date we have made 10 nos. modification as on date through RSP programme of E.Rly, and in future it has been planned to modify another 10 motor coaches for this year i.e. 2023-24.

30/12/2023
(Sanjeev Kumar)
Sr. DEEMEMU/IAJ

[Signature]
(G. Halder)
DY.CEE/W/KPA

No.EC/T/Misc./GH/

December 2, 2023

Distribution: CWM/KPA – for kind information.
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Sr.DEE/MEMU/IAJ/ECR – for information please.

Inspection Note of Sh Amit Kumar Aggarwal, PCME/ECR during visit to KPA workshop on 09.06.2023

Sl no.	Inspection Details	Action by
1.	In order to prevent the failure of pinion slipping of traction motor, the detailed procedure of pinion fitment followed by workshop has been demonstrated like colour matching and pinion advancement measurement in cold & hot stage during visit.	CWM/KPA
2.	Different types of traction motor failure due to bearing had been displayed. It was deliberated whether rivet less or riveted bearing is better. It has been suggested to refer the matter to RDSO in view of past failures of riveted bearings.	CWM/KPA
3.	For proper maintenance of traction motor, advice has been given by OEM for re-greasing of traction motor which should be followed by the Division.	CESE/ECR Sr DEE/MEMU/JAJ
4.	Irreversible type temperature sticker to be pasted on TM bearing housing for recording any abnormal temperature rise.	CESE/ECR Sr DEE/MEMU/JAJ
5.	Conversion of MEMU coaches MC 21020 and 21021 into inspection car has been inspected. PDC is 30.06.2023.	CWM/KPA
6.	Procurement of Emergency Talk back system for ladies coaches to be done by ECR and commissioning may be done during POH at KPA Workshop.	CESE/ECR CWM/KPA
7.	Deficient Air Dryer (10 nos.) to be fitted by JAJ Shed and remaining bypass arrangement in DMC to be done by KPA.	CWM/KPA Sr DEE/MEMU/JAJ
8.	ACP overhauling and wire changing to be done by KPA workshop on regular basis during POH.	CWM/KPA
9.	Parking Brake fitment is not done in last four POH rake due to material shortage. Material to be arranged and start fitment.	CWM/KPA

13.	PU pipe of tap-changer & switch group to be changed in every POH.	CWM/KPA
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RAJENDRA
KUMAR
CHOUHARY

Deputy Engineer
RAJENDRA KUMAR
CHOUHARY
Date: 20/06/2023
18:14:40 (IST)

CESE/ECR/HJP

No. ECR-HQ0Mech(MEMU)/1/2023

Dated: 20.06.2023

Copy to:

1. PCME/ER, ECR- For kind information.
2. CWM/KPA- For information and n. a. pl.
3. Sr DEE/MEMU/JAJ- For information and n. a. pl.

Minutes of meeting with WM/C/KPA, AWM/EMU/KPA & AME/MEMU/JAJ held on 23.02.2023

Member Present:

<u>KPA Workshop</u>	<u>JAJ Shed</u>
1.Sh. Nilesh kumar bhalavi (WM/Coaching/KPA) 2.Sh. Jayanta Karmakar (AWM/EMU/KPA)	1. Sh. B.K.Manglam (AME/MEMU/JAJ) 2. Sh. Vikash Kumar SSE/MEMU/JAJ

The following points were discussed in the meeting: -

a) POH related

SN	Item	JAJ MEMU Shed Remarks	KPA workshop Remarks
I.	Parking brake	Parking break functional in 29 MEMU rakes . Fitment of parking brake should be continued for remaining 21 MEMU rakes.	As all incoming rakes are received with still deficient condition. It is very difficult to maintain parking brake in each Motor Coach.
II	Repair/overhauling of different passenger amenity items like Sliding & hinge door, window glass & toilet.	01 case of hinge door found broken in TC 41025 within 15 day after POH. Besides it roller bearing is not being replaced due to this sliding door gets defective within 2-3 months after OFF POH.Also channel of door need replacement/repair, most of the time roller comes out from channel and Door gets jammed.	Proper care has been taken for passengers amenity items during POH. 100% checking is being done during POH. Channel and roller procurement under process. After receiving the material same will be changed.
III.	ACP	It is being attended during POH. ACP is functional in 47 MEMU rakes.	ACP function are maintaining in each rake during POH.
IV.	Air dryer	Overhauling of Air Dryer is being done in POH. Although KBL make air dryer found defective in MC 40053.	Conditionals items to be procured at Shed level for keeping & maintenance the Air dryers in functional condition. However, during POH air dryers has been overhauled on regular basis as per availability of material.

V.	IFD problems	Total 9 cases of wheel changing due to IFD accounts. Due to IFD non availability of suitable wheel keeps stock in defective position for longer time.	Investigation report to be send within week.
VI.	Auxiliary motors (specially Radiator & rectifier) overhauling issues	Total 50 nos. radiator motor has been changed since April 2022. This shows that mandatory overhauling during POH has not been done. Proper Overhauling of motors should be ensured during POH.	Details investigation report of motors received at KPA are attached herewith. Remaining motors to be send by JAI with sl. No. for further action.
VII.	Auxiliary Compressor failure	Total 9 nos of ACP has been changed since April. ACP is being used only when Unit is dead. Hence this shows poor maintenance during POH. Also POH booklet does not mention regarding overhauling of ACP.	No failure along-with MC nos. & failure details communicated till date & no failed item received till date. However, 06 nos. ACP has been sent for repairing assistance for which investigation report to be send within a week & necessary assistance will be given after repairing if possible.
VIII.	Traction motor	Total 17 nos. traction motor changed since April. Failure analysis has not been relayed to JAI shed. KPA workshop is requested to improve their workmanship if needed.	Detail investigation report is attached herewith.
IX.	Carbon brush holder touches with riser	Recently 01 more case of Carbon brush holder having zero gap are found in MC 40092. Its CB holder is being changed at JAI Shed. Proper gap b/w holder & riser should be maintained during POH.	It is being maintained during POH since Dec -2022.
X.	BP & MR pipe changing of Front DMC.	It has been noticed that during POH these pipe has not been changed. In the event of Loco attachment , Air leakage issue arises. Recently OFF POH MC 40090 having such problem. May please look into the matter.	It is being maintained during POH since Jan -2023.
XI.	Choke tank	02 nos. choke tank has been replaced in MC 40013 & 40008 due to frequent B.I.R & EFRP problem respectively. KPA is communicated regarding failure analysis of MC 40013 in which radiator fins found in choke tank which get shorted with coil resulted into frequent B.I.R.	Necessary step will be taken to prevent the flowing of radiator fins through oil pipeline to choke tank.

KPA is requested to take suitable action during POH of choke tank & radiator by which such failures can be arrested.

XII.	Ferrule Joint	Ferrule joint of BP angle cock worked out in TC 41236 & TC 41211 resulting pressure drop. So, it should be checked minutely during POH.	During POH , it is being checked & changed if required.
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b) Other issues

SN	Item	JAJ MEMU Shed Remarks	KPA workshop Remarks
1	Fitment of emergency talk back system in ladies coaches in MEMU	ECR has informed that KPA vide letter no. ECR/MECH/MEMU/102 dtd. 25.08.22 for procurement and fitment of this item in 49 rakes at their end during POH of rakes.	Dy CEE/P&D KPA Workshop informed that case of supply & fitment on ECR coaches has been included. Estimate is under process.
2	Conversion of inspection car	Workshop plan to convert these coaches into self-propelled Inspection Car. Certification of "Over aged & unserviceable for passenger services" will be provided by Workshop.	Work under progress. tentative PDC is 15.05.2023
3	Credit of sold-out coaches	Credit of sold-out coaches are yet to be transferred to ECR.	Sold order has been issued. New credit will be given to E.C.R

c) Material assistance:

Following items are required:

- (i) Servomotor for wiper.
- (ii) Stay tube for MC.
- (iii) Toggle switch (Dim/Bright) for head light.
- (iv) Headlight Holder
- (v) Signal Bell
- (vi) Fan blade of rectifier motor -
- (vii) Fan blade of radiator motor
- (viii) T-joint for Tab changer air pipe (Blue Colour)
- (ix) Gaco washer in exchange of earlier given 100 nos.
- (x) Look out glass

d) Material of JAJ Memu car shed at KPA workshop as on date 23.02.23

- (i) Traction motor

TYPE 4601 - 05 nos

TYPE 4303 - 01 nos

(ii) Radiator motor - 03 nos

(iii) Rectifier motor - 03nos

(iv) ABR relay - 02 nos

(V) Axle wheel set (motor coach) - 17 nos.

(Vi) Axle wheel set (TC). - 09 nos.

KPA workshop has requested to repair & return above material early to JAJ Shed.


Sh. Jayanta Karmakar
(AWM/EMU/KPA)


Sh. Nilesh kumar bhalavi
(WM/Coaching/KPA)


Sh. B.K. Manglam
(AME/MEMU/JAJ)

Copy to:

- i. DY.CEE/W/KPA : for kind information please.
- ii. Dy.CME/TS/HJP : for kind information please.
- iii. Sr.CDO/TS/JAJ : for kind information please.

**Minutes of Coordination Meeting at Kanchrapara Workshop with CWM/KPA on
17.01.2023 with CESE/ECR for MEMU POH**

Present:-

ECR	KPA Workshop
1. Rajendra Kumar Choudhary, CESE/ECR 2. Randhir Kumar, DME/JAJ	1. Surendra Kumar, CWM/KPA 2. Dharmaveer Yadav, Dy CEE/Loco/KPA 3. Nilesh Ballavi, WM/C/KPA 4. Jayanto Karmakar, AWM/EMU/KPA

1. MEMU POH: (CONVENTIONAL)

As informed by DME/Jhajha, MEMU POH status as on 08.09.22 is as follows:

Year	Arising	Done	Through forward
2021-22	544	512	32
2022-23	32+312= 344	128	216
2023-24	504		

2. MEMU POH: (3- Phase)

3 Phase MEMU arising in 2023-24 is 36 unit. KPA Workshop assured that they have capacity to undertake entire arising of ECR.

3. POH related issues:

SN	Item	JAJ MEMU Shed remarks	KPA Remarks
(i)	Parking brake	It is being fitted in driving MC only during POH. Parking brake functional in 29 MEMU rakes. Fitment of parking brake should be continued. Remaining 21 MEMU rake to be completed during POH.	Workshop is maintaining to provide parking brake at least in both end driving coach as per present EAC available. Non driving motor coach will be provided once deficiency of driving coach has been recovered.
(ii)	Repair/overhauling of different passenger amenity items like Sliding & hinge door, window glass & toilet.	All are being attended during POH. But roller bearing is not being replaced due to this sliding door gets defective within 2-3 months after OFF POH. Also channel of door need replacement/ repair as most of the time roller comes out from channel and Door gets jammed.	Proper care has been taken for passenger amenities item during POH. From Oct'22, PU painting has been started & in total 46 coaches PU painting has been completed upto Dec'22. Channel at present is not available in shop. It will be procured. In future, channel and Roller will be changed if found defective.
(iii)	ACP	It is being attended during POH. ACP is functional in 47 MEMU rakes.	It is continued process for last one year. However, division has to maintain

			proper working of ACP also.			
(iv)	Smoke detector	It is not being fitted during POH. Almost 105 DMC is having smoke detector which is not working/ wire out. It is once again requested to repair during POH.	One time repair of all fitted smoke detector with the help of OEM will be done. AMC status from division not yet confirmed. For remaining DMC, sanction of RSP is required from ECR.			
(v)	Gear Case	Workshop confirmed that 100% Gear Case is attended during POH. Depot should inform specific cases if it is found leaking/ defective in any coaches.	Already maintaining for last two years. No adverse report received from division as a 100 days failure.			
(vi)	Air leakage from Tap changer & Switch group	ASCO make in lieu of BOSCO make GACO washer is being fitted in tap changer during POH. Major problems arise in Balaji make GACO washer.	BOSCO make Gaco washer issued from store/KPA on 13.12.2022 & onwards which has been used during POH now.			
(vii)	Air dryer DVH	Overhauling of Air Dryer is being done in POH. Although KBL make air dryer found defective in MC 40053.	Year	Defective received	Deficient	New fitted
			21-21	09	04	02
			21-22	23	05	00
			22-23	29	08	04
			Total	61 rectified	16	06 new fitted
(viii)	Axle lock crack due to defect in Traction Motor	One case of impeller breakage found on 13.12.2022 in MC 40084.	As on date, 370 nos. BHET make Armature fan have been tested out of which 60 nos. found cracked. As on date, 92 nos. CGL make Armature fan have been tested out of which 40 nos. found cracked. No further axle lock report received from division due to fan crack as on date after starting the DPT /MPT.			
(ix)	POH Booklet	Being sent with POH rake. Updation of POH booklet needed as per latest mandatory replacement items.	POH booklet is being sent with rake itself now & sent through email also.			

4. RSP item: Fitment of emergency talkback system in ladies coaches

Sl.no.	Item	KPA remarks
1.	ECR has informed that KPA vide letter no. ECR/MECH/ MEMU/102 dtd. 25.08.22 for procurement and fitment of this item in 49 rakes at their end during POH of rakes.	Workshop informed that case of supply & fitment on ER coaches for same item is under process. ECR quantity will be included in this. Proposal has already sent to ER, HQ by KPA workshop.

5. Credit for sold out condemned coaches & condemnation of coaches:

(i) Credit for following sold out coaches are yet to be transferred to ECR:

Year	No. of coaches	Coach Nos.	Corrected coach no.	KPA Remarks
2020-21	4 TC	22001, 22000, 22007, 22003	22001,22000,22007,22013	Sell order has been issued, new credit will be given to JAJ shed.
2021-22	1 TC	220041	22041	
2022-23	2 TC	22018, 22035A	22018,22035A	

(ii) Under Condemnation:

Coach No.	Status	Latest status
MC 21021 MC 21020	Workshop has been requested to convert these coaches into self-propelled Inspection Car. Certification of "Over aged & unserviceable for passenger services" will be provided by Workshop.	Necessary scope of work along with approved drawing has been requested from division vide letter no. EC/T/IC /21020 & 21021/ 22-23 /GH dated 04.11.22 after which work can be started according to requirement. It is to be communicated by ECR whether independent or coupled coach formation is required.
TC 2086-B	Stripping done and will be offered to Store for sale by 10.09.2022.	Sold on 29.09.22. Delivery completed on 11.11.22

6. NEW AGENDA ITEMS:

SN	Item	JAJ Shed Remarks	KPA Remarks
(i)	Increased Flange Distance problems	Total 9 cases of wheel changing due to IFD accounts has been reported. Due to non availability of suitable wheel in stock, It remains in defective position for longer time.	Wheel to be sent with defect mentioned. Also redisking data will be analyzed for IFD.

(ii)	Radiator motor overhauling issues	Total 43 nos radiator motor has been changed since April. This shows that mandatory overhauling during POH has not been done. Overhauling of radiator motor to be ensured.	Total 43 nos. failure details received from JAJ as on date & failure analysis causewise will be done shortly. 100% overhauling during POH has been carried out. However 6306zz bearing (PL85013882) replacement, which is a Must change item in alternate POH, could not be done due to non-availability. 362 nos. Brg. received presently which is under approval.
(iii)	Traction motor	Total 17 nos traction motor changed since April. Failure analysis has not been relayed to JAJ shed. KPA is requested to inform failure analysis to JAJ shed. Preventive action to be taken by KPA to improve their workmanship if needed.	Total 17 nos. failure details received from JAJ as on date & failure analysis cause-wise & make-wise will be done shortly.
(iv)	Auxiliary Compressor failure	Total 9 nos of Aux Compressors have been changed since April'22. Aux Comp is being used only when Unit is dead. Hence this shows poor maintenance during POH. Also POH booklet does not mention regarding overhauling of Aux Comp.	Details of failed equipments will be collected as early as possible and failure analysis will be done accordingly. All details will be given in POH Booklet.
(v)	BP & MR pipe changing of Front DMC.	It has been noticed that during POH these pipe has not been changed. In the event of Loco attachment, Air leakage issue arises. May please look into.	It will be provided.
(vi)	LT compartment cleaning	Proper cleaning with wire of LT compartment to be done with Orion-77.	It will be done.

7. Material assistance:

Following items are required from KPA as assistance to JAJ shed:

- (i) Servomotor for wiper.
- (ii) Stay tube for MC.
- (iii) Toggle switch (Dim/Bright) for head light.
- (iv) Headlight Holder
- (v) Signal Bell.
- (vi) Fan blade of rectifier motor.
- (vii) Fan blade of radiator motor.
- (viii) T-joint for Tab changer air pipe(Blue Colour)

(ix) Gaeco washer in exchange of earlier given 100 nos.

Lorry with demand letter will be sent shortly for collection of above materials. KPA workshop is requested to spare.

8. Material of JAJ Memu car shed at KPA workshop as on date 17.01.23

(i) Traction motor

TYPE 4601 - 06 nos

TYPE 4303 - 01 nos

(ii) Radiator motor - 04 nos

(iii) Rectifier motor - 3 nos

(iv) ABR relay - 02 nos

(V) Axle wheel set (motor coach) - 17 nos.

(Vi) Axle wheel set (TC) - 09 nos.

KPA workshop was requested to repair and return above materials early to JAJ shed.

PAJENDRA KUMAR
CHOUHARY

CESE/ECR/HJP

Dated: 20.01.22

No. ECR/MEC/MEMU/102

Copy to:

1. PCME/ER, ECR- For kind information.
2. CWM/KPA- For information and n. a. pl.
3. Sr CDO/JAJ- For information and n. a. pl.



❖ Minutes of Meeting with AWM/EMU/KPA and AEE/MEMU/JAJ held on 16.12.2022 in chamber of AWM/EMU/KPA.

➤ Member Present:

KPA

JAJ

- (ii) Shri. Jayanta Karmakar, AWM/EMU/KPA. (i) Shri. S. K Ekka, AEE/MEMU/JAJ.
(ii) Shri Manoranjan Kumar, SSE/MEMU/JAJ.

The following points were discussed in the meeting:-

1. MC No. 40033- 20.11.22 OFF POH, IC0-1.11.22. Offer schedule TI, MCB of radiator motor 1 tripped again & again dt. 08.12.22, motor found defective.
2. MC No.188241- TM4 Armature winding rapping with shaft.
3. MC No.40091 – a OFF POH, IC0-10.11.22, Motor TM3 No.-2162002-225, make CGL- internal winding defect.
4. MC No.40111- IC0-10.11.22, VCB Failure dtd.-03.12.22-VCB Governor found malfunctioned.
5. During POH, in both end driving motor coaches BP and MR pipes to be provided.
6. Some Motor Coach-TM carbon brush holder and commutator raiser gap found less than 1.0 mm to 0.2 mm(Only for HHP Motor).
7. Inspection Car Self Propulsion System.

Assistance Required:-

- 1.10 nos. ABR relay repaired.
- 2.VCB Governor- 05 nos. required
- 3.04 nos.TM laying at JAJ Shed(HHP-02 nos., Conv. 02 nos.) will be sent next week for POH.
- 4.Conventional Motor Coaches Axle Wheel Set required in JAJ Shed.


(S.K. Ekka)
AEE/MEMU/JAJ


J. Karmakar
AWM/EMU/KPA

Copy to: (i) DY.CEE(W)/KPA- for kind information please.
(ii)DY.CME/TS/HJP- for kind information please.
(iii)Sr.CDO/TS/MEMU/JAJ- for kind Information please.

Members present:

<u>KPA</u>	<u>JAJ</u>
Sri G. N. Halder, DY CEEW	Sri K. N. S. Yadav, Sr. CDO
Sri Nitesh Bhallavi, WMC	Sri S. K. Singh, Sr. SE
Sri J. Karmakar, AWM/EMU	

The following points were discussed in the meeting and the decision taken in the meeting are furnished below:

1. Aging of POH rake is 2 rakes per month which is being maintained.

2. 100 days' failure – Suitable action will be taken by KPAW to avoid such failures.

- Trailer coach bogie bolster failure – It is under investigation and report to be sent to JAJ in due course.
- In Motor Coach No. 40033, MCP connecting rod failure on 29.09.22. POH done on 20.09.22.
- In Motor Coach No. 40033, Air dryer failure on 22.09.22. Make KBL. POH done on 20.09.22.
- In Motor Coach No. 40050, Gear case felt seal failure on 15.10.22. POH done on 20.09.22.
- In Motor Coach No. 199136, Oil pump motor not working – failure on 15.09.22. POH done on 24.07.22.
- In Motor Coach No. 40055, Support bolt of stopper plate of reverser coil found loose – failure on 12.09.22. POH done on 31.08.22.
- In Motor Coach No. 19858, BP Hose pipe burst – failure on 04.08.22. POH done on 02.06.22.

3. Other failures – Suitable action will be taken by KPAW to avoid such failures.

- In Motor Coach No. 198524, VCB punctured on 29.10.22. POH done on 08.02.21. Material manufactured in February, 2019. Make AAL. Observation: To raise issue with the manufacturer.
- Failure of air pipeline of new tap changer: to be checked for recent failure.
- Wiper motor not working properly. Make: ELGI. To check during POH thoroughly.
- Failure of Gaco Rubber Washer has been increased recently. Quality of Gaco rubber washer needs to be checked.

4. Off POH defects/deficiencies – Suitable action will be taken by KPAW to avoid such failures.

During checking of POH rakes at JAJ shed in ICD schedule General defects/deficiencies are noted as below:-

- Inter/After cooler & CDC Gasket not replaced.
- Nut & bolts are either found loosely fitted or deficient at many locations (in Tap changer, switch group, cattle guard, vertical damper etc.)
- Cables of control/power circuit are sometimes found loosely fitted with damaged insulation.
- Transformer oil leakage from draining port.
- Pressure gauges not fitted.
- BP pipe for Loco attachment is generally not replaced.
- TM junction box stud found broken also cable are loosely fitted.
- Defective wipers & wiper assembly not replaced.
- Anchor links found loosely fitted also vertical damper defective.
- Damaged/defective floor sheets are not replaced.
- Replacement/repairing of passenger amenities items i.e. window glass, door shutter not ensured.

Necessary action will be taken to curb above defects/deficiencies.

EP Contactor failure

The details of failure on account of leakage from EP Contactor are furnished below:-

Dt. of failure	Motor Coach	Last POH	Name of EP contactor
14.07.2022	40121	OCT-2021	T-4
13.07.2022	40147	OCT-2021	T-5 & T-7
13.07.2022	40010	FEB-2021	WCO
01.07.2022	188175	APR-2021	T-6
05.07.2022	188178	APR-2021	T-3
04.07.2022	21034	JAN-2021	NC-4
03.07.2022	188524	AUG-2021	T-8
28.06.2022	188174	JULY-2021	T-8 & WCO
29.06.2022	40002	JULY-2021	M-1 & M-4
29.06.2022	40066	JULY-2021	T-8
01.06.2022	40115	JAN-2021	NC-1 & NC-2

Other issues

- Fitment of parking brake during POH is being done in both ends of driving motor coaches.
- Working of Smoke Detector is to be ensured. A sanction in RSP from MEMU Shed is required for fitment of smoke detector in coaches where it is not fitted earlier.
- Overhauling of Air dryer & BUD - To be ensured during POH.
- Conversion of Inspection Car - Conversion of overhauled motor coach to inspection car bearing No 21020 & 21021 of which one is for E.C.R.

Detailed information is to be sent to E.C. Rly soon.

Assistance of materials

1. HHP Motor
2. High Capacity TM (Overhauled)
3. BUD
4. Servo Motors for wiper
5. Lightning arrestors
6. Carbon brush holder for high speed Traction Motor (BHFL & CGL make)
7. ABR relay & Light/Fan contactor set
8. Sun Visor
9. Roller sliding assembly

(K.N.B. Yadav)
Sr. CRO/TS/JR

1/1 EQ-T/Mcc/GR

(G.N. Halder)
DY. GEN. W. Rly.

November 2, 2022

Distribution:

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PJN

1. KPA Workshop:

(a) MEMU POH:

As informed by Sr. CDO/Dhahha, MEMU POH status as on 08.09.22 is as follows:

Year	Arising	Done	Through forward
2021-22	544	512	32
2022-23	32+312= 344	128 (till Aug)	216 (as on 01.09.22)
2023-24	504		

KPA Workshop assured that they have capacity to undertake entire arising of ECR.

(b) POH related issues:

SN	Item	Status
(i)	Parking brake	EAC for spares is based on 100% attention, which is being done since Feb'22, except in periods when material (lever arrangement to PL 31357209) is not available, it is made functional in 1 st and last coach. Workshop was requested to improve material availability & turn out coaches with 100% functional parking brakes.
(ii)	Repair/overhauling of different passenger amenity items like Sliding & hinge door, window glass & toilet.	Workshop confirmed that these items being attended during POH. Contract for PU painting has been finalised against which work will start soon. Buffing of Lav pan & other S.S. items has been included in contractual Scope of Work.
(iii)	ACP	Workshop confirmed that 100% ACP is made functional during POH since last one year. Depot should inform specific cases if it is found non-functional in any coaches.
(iv)	Smoke detector	For coaches in which it is fitted, AMC is being processed. For fresh fitment in balance coaches, sanction under RSP will be required, which is being proposed.
(v)	Gear Case	Workshop confirmed that 100% Gear cases is attended during POH. Depot should inform specific cases if, any.
(vi)	Air leakage from Tap charger & Switch group	It was informed that GACO washer of Balaji and ISCO make are failing regularly in ER coaches also. Shop was advised to get the material checked as per drawing/specification by CMT. Shop informed that fresh order has been placed for Alpha make. The issue needs to be analysed from design/poor quality of material point of view.
(vii)	Air dryer OVH	Workshop confirmed that 100% Air dryer is made functional during POH. Depot should inform specific cases if it is found non-functional in any coaches. Workshop informed that depots are not undertaking prescribed schedule maintenance, which should be checked.
(viii)	Axle lock crack due to defect in Traction Motor	Workshop informed that BHEL & CGL Motors was having problem of breakage of fan blade & unbalancing. Shop has started doing MPT of fan blade & balancing during which out of 275 checked, 70 fan blades was found crack & 210 cases of unbalance. These are unusually high cases which need to be taken up with OEM.
(ix)	POH Booklet	Shop informed that now POH booklet is being sent with rake itself. It will also be sent by email.

(c) RSP item: Fitment of emergency talkback system in ladies coaches:

ECR has informed KPA vide letter no. ECR/MECH/ MEMU/102 dt. 25.08.22 for procurement and fitment of this item in 49 rakes at their end during POH of rakes. Workshop informed that case of supply & fitment on ER coaches for same item is under process. ECR quantity will be included in this.

(d) Credit for sold out condemned coaches & condemnation of coaches:

(i) Credit for following sold out coaches are yet to be transferred to ECR:

Year	No. of coaches	Coach Nos.
2020-21	4 TC	22001, 22000, 22007, 22003
2021-22	1 TC	220041
2022-23	2 TC	22018, 22035A

(ii) Under Condemnation:

Coach No.	Status
MC 21021	Workshop plans to convert these coaches into self propelled inspection Car. Certification of "Over aged & unserviceable for passenger services" will be provided by Workshop.
MC 21020	
TC 2086-B	Stripping done and will be offered to Store for sale by 10.09.2022.

(iii) Report on 1 MC & 6 TC burnt in Agniveer agitation:

- TC report for condemnation for 5 and repair for 1 TC has already been sent.
- MC report for "beyond economical repair will be sent shortly."

(e) Material assistance:

Truck for JHA/JHA shed was collecting material for KPA on 07.09.22. Following items are being spared:

- (i) Pantograph - 1
- (ii) HHPTM - 1
- (iii) Rectifier Motor - 1
- (iv) Lightning arrestor - 1
- (v) MCP contractor - 2 serviceable
- (vi) Servo Motor for wiper assembly - 4 serviceable
- (vii) TFP oil pump - 1 new + 1 serviceable

2. LLH Workshop:

(a) POH Outturn:

(i) Till Aug. LLH has carried POH of 171 coaches against target of $25 \times 5 = 125$. Workshop has assured to undertake POH @ 35/month, subject to feed.

(ii) As on 08.09.22, there are

- 22 coaches inside shop including 8 Power Car and 1 RA EC013.
- 3 Power Car, 5 LWS and 1 LWSCN have been made ready but not pulled out from Shop.

(iii) Power Car:-

- 8 Power Car (6 G.C. and 2 Cummins) are in shop. 3 of these (2 Cummins & 1 G.C.) will be tuned out in Sept. & rest in Oct'22.
- G.C. Power Cars are getting delayed due to material which is expected by 30.09.22.
- As per data given by AME/Chg./ECR, there are 38 more Power Cars due POH till March'23 (10 G.C. 4 Kirloskar and 24 Cummins). LLH has requested to send Cummins PC on priority since contract for Cummins is available. G.C. PCs should be sent from Nov.'22 onwards. LLH will undertake POH of PCs @ 4/month. Workshop was requested to increase the outturn to 5-6/month considering large arising of ECR during 22-23.

(b) Modification of LHB pipe line [Ref. ECR letter no. ECR/HQBMech(CRIG)/30/2020 dated 23.08.22. LHM has confirmed vide letter no. LRC 3/LHB/PI VIII dated 07.09.22 that all eligible coaches of ECR will be modified from Oct.22 onwards.

(c) Roof Leakage

Workshop informed that they are processing for replacement of FRP tray with SS metal trough below RMPH on 5 coaches to gain experience. For bulk replacement, sanction under RSP will be required @Rs 1.75 lakh/coaches. In the meantime, ICT has issued CAI for repair procedure for roof leakage which the workshop plans to implement.

(d) Revised wiring layout with modified junction box of RDSO's letter no. MC/LHB/Brake dt. 27.02.19. It is being done on ECR against supply & fitment contract for which P.O has been issued for 2 makes.

(e) Air Brake Pipes & fitting modifications: RDSO letter no. MC/LHB/Brake dt. 12.04.2019.

LHM has informed ECR vide letter No. LRC 3/Contract/PI VIII dt. 31.08.22 that, "LHM finalised AMC contract with OEM for LH coaches only. ECR finalised AMC for ECR coaches. Hence, ECR should advise OEM to undertake these attentions during POH of LHM."

(f) Assistance of material: LHM has agreed to spare following items:

SN	PL No	Material description	Demanded QTY in nos.	QTY spared
1	77037500	Paint Enamel Synthetic Golden Yellow finishing Exterior	40	20
2	80010738	Internal combustion engine crankcase OHS for diesel engine	420	NIL
3	33611053	FOLDABLE SAFETY RAIL FOR 2- TIER LHB COACHES	50	20
4	33500060	Axle Box Pivot Bush	10	NIL
5	36437852	Valve flushing complete	100	20
6	33589452	FOOT REST MULTISTAGE ARRANGEMENT FOR LHB TYPE AC CHAIR CAR	20	NIL
7	33672593	INTERLOCK WASHER SUITABLE FOR M16 BOLT	500	100
8	86010402	DCP(CO2 Cartridge Type) Fire Extinguisher	50	NIL
9	30636024	GRAVITY COCK	300	50
10	30972851	DOOR LATCH R.H.TO RCF	50	NIL
11	33501002	Primary Vertical Damper	50	16
12	31357969	Cut off angle cock with vent and reducing bush	20	20
13	33570530	Folding Table for AC First Class of LHB Coaches.	24	NIL
14	73156279	Prevailing torque type hex nut with non metallic	200	NIL
15	30972759	Installation Lever Assembly with Ball and Socket	50	NIL
16	30478200	Worm drive hose clamp 35mm	100	100
17	30478194	Worm drive hose clamp 50mm	100	20
18	30478182	Worm drive hose clamp 70mm	50	NIL
19	33560165	SET OF GLASS ASSEMBLY AND LOCK FOR BODY SIDE WINDOW FOR LHB NON AC COACHES	100 set	NIL
20	33560158	SEALED WINDOW GLASS UNIT SIZE : 1419 X 819 X 18.38 mm for LHB AC Chair Car Coaches.	50	NIL
21	73571003	Screw Self Tapping Round Head Type C 10x22mm	5 HDS	3000
22	30478110	Steel Wire Rope 3 mm nominal dia with fibre core,	1000 mtr	200 mtr
23	33870597	HEX HEAD PLUG SCREW M22X1.5	5	5
24	33501282	HEX HEAD SCREW CTRD M20X60	10	10

(Anil Kumar Gupta)
CWE

Date: 14.09.2022

No. ECR-HQBMech(Work)/30/2020

Copy: PCIAE/ER, ECR - for kind information.

CWE/ER - for kind information.

CRSE/Chg./ECK, CWM/LHM, CWM/KPA - for information & n.a. pl.



Sample No: S/555/2022

TEST CERTIFICATE NO. F/LLH/LAB/28 dated 24/10/2022

Material: 01 no. broken Bolster Helical spring (outer) for MEMU Trailer Coach was received in two parts from Dy CME/CHG/KPA/ER, vide letter no. MCP/Mat.Cell/4/3005 dated 17/10/2022 for Failure Analysis

History: During inspection at Sonapur sickline, the Bolster Helical spring (outer) attached with MEMU T/C Coach no. 41082, found broken in two parts.

1. Particulars:

Item	:	01 no. Broken Bolster Helical spring (outer) for MEMU Trailer Coach
MEMU Coach No. and type of Coach	:	41082 MEMU T/C
Date and place of Failure	:	13/10/2022, at Sonapur sickline.
PNH	:	13/09/2022 at KPA
R/Dt	:	03/2024
Drawing No.	:	MEMU/TC-0-5-006
Material Specification	:	52Cr4Mo2V to WD-01-HLS-94 (Rev.3). Amendment slip no. 1 of September 2016.

2. Visual observation:

Broken Bolster Helical spring (outer) for MEMU Trailer Coach

2.1 Location of Fracture	Fracture took place at third active coil of the spring at bottom side.
2.2 Nature of Fracture	Fracture was transverse, inclined at angle of 45° to spring axis & progressive in nature indicating torsional mode of fracture.
2.3 Other Observations	(i) Corrosion pits with high concentration are observed at/near the fracture face. Fatigue nucleated from the corrosion pits and grew up to approx. 10-20 % of cross-sectional area of the fracture face. (ii) Pair of small surface cracks found at/near fracture face. (iii) Source of stress concentration is indicated by the Chevron pattern found on the fracture surface. (iv) Stamping particulars: CM AFJ 02 20 G57 (v) Diameter of the coil- 41 mm.



Location of fracture



Fig. 1: Broken Bolster Helical spring (outer) with stamping particulars.

Contd 2

- 2.
3. **Macro-examination:** The macro-examination was conducted on the spring sample cut near to the fracture face. The test revealed corrosion pits and pair of small surface cracks at/near the fracture face, after deep etching in 1:1 hot HCl solution.

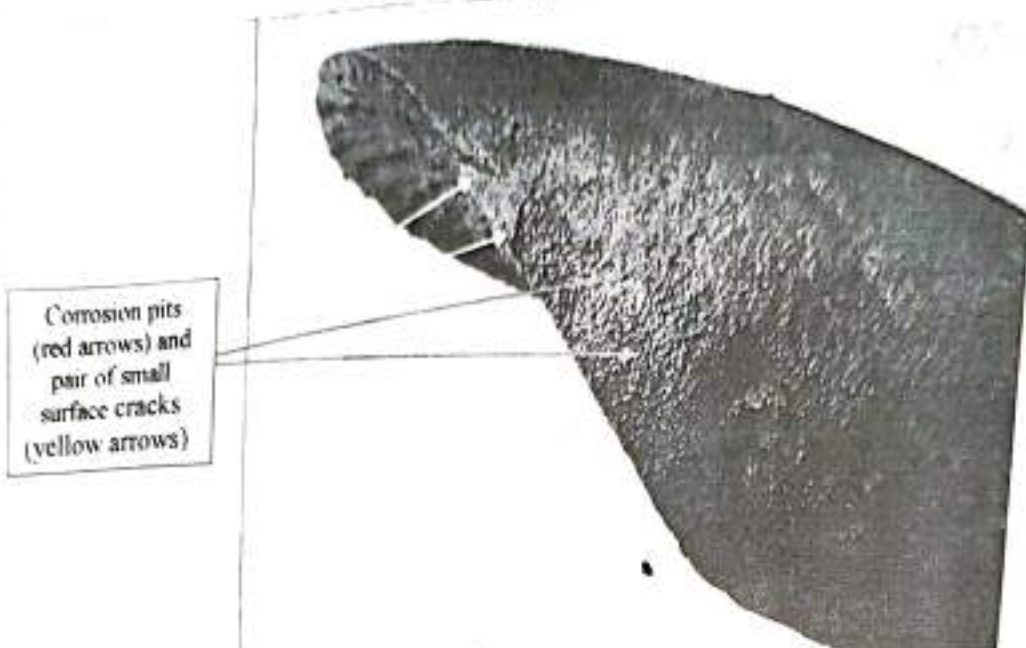


Fig.2: Corrosion pits and surface cracks at/near fracture face revealed in macro-examination.



Fig.3: Fatigue initiated from corrosion pits present at/near fracture face

3. **Mechanical Properties:**

Test Parameter	As specified in 52Cr4Mo2V to WD-01-HLS-94(Rev.3), Amendment slip no. 1 of September 2016 for Cr-Mo Steel	As found	Inference
Average Hardness (in BHN)	415-460	460	Conforms

Contd 3

Chemical Composition:

Test Parameter	As specified in Gr. 52Cr4Mo2V in WD-01-HLS-94(Rev.3), Amendment slip no. 1 of September 2016 for Cr-Mo Steel	As Found	Inference
Carbon % -	0.48-0.56	0.52	Conforms
Manganese % -	0.70-1.10	0.89	Conforms
Silicon % -	0.15-0.40	0.21	Conforms
Chromium % -	0.90-1.20	1.03	Conforms
Vanadium % -	0.07-0.12	0.12	Conforms
Molybdenum % -	0.15-0.25	0.19	Conforms
Phosphorous % -	0.025 Max	0.014	Conforms
Sulphur % -	0.025 Max	0.005	Conforms

5. Micro Examination:

Fig. 4: Micro Examination (500X, 2% nital) of the transverse section of the material revealed tempered martensitic structure.

6. **Discussion:** (i) **Chemical composition** of the item are satisfactory to Gr. 52Cr4Mo2V of RDSO Spec. WD-01-HLS-94(Rev.3), amendment slip no. 1 of September 2016 for Cr-Mo Steel.
- (ii) **Hardness** value of the spring is found to be satisfactory as per Gr. 52Cr4Mo2V of RDSO Spec. WD-01-HLS-94(Rev.3), amendment slip no. 1 of September 2016 for Cr-Mo Steel.
- (iii) **Micro-examination** of transverse section of the item revealed tempered martensitic structure as per RDSO Spec. WD-01-HLS-94(Rev.3), amendment slip no. 1 of September 2016 for Cr-Mo Steel.
- (iv) Presence of corrosion pits at/near the fracture surface indicates that the spring was exposed to corrosive environment. Initiation and growth of fatigue occurred from these corrosion pits which acted as sites of stress raisers. Presence of surface cracks reduced fatigue strength of the material before final fracture of the spring in chevron pattern.
7. **Conclusion:** Based on above discussion, it is concluded that failure of the bolster helical spring (outer) is attributed to fatigue crack originated from corrosion pits at/near the fracture face. Small surface cracks further accentuated the failure of the spring.
8. **Remedial Measures:** Presence of corrosion pits and surface cracks on the spring surface should be avoided.

Dy. CCMT/LLH
24/10/22

Dist (i) Dy. CME(M)-LLH - for information please.
(ii) Dy. CME(CHG)-KPA ER - for information please.
(iii) SSE, E-Shop - for information please.

9/2

Members present:

<u>KPA</u>	<u>JAJ</u>
Sri G. N. Halder, DY.CEE/W	Sri K.N.S. Yadav, Sr. CDO
Sri Nilesh Bhallavi, WM/C	Sri S.K. Singh, Sr. SE
Sri J. Karmakar, AWM/EMU	

The following points were discussed in the meeting and the decision taken in the meeting are furnished below :-

1. Arising of POH rake is 2 rakes per month which is being maintained

2. **100 days' failure** – Suitable action will be taken by KPAW to avoid such failures

- Trailer coach bogie bolster failure – It is under investigation and report to be sent to JAJ in due course.
- In Motor Coach No.40033, MCP connecting rod failure on 29.09.22. POH done on 20.09.22.
- In Motor Coach No.40033, Air dryer failure on 22.09.22. Make KBL. POH done on 20.09.22.
- In Motor Coach No.40050, Gear case felt seal failure on 15.10.22, POH done on 20.09.22.
- In Motor Coach No.199136, Oil pump motor not working – failure on 15.09.22. POH done on 24.07.22.
- In Motor Coach No.40055, Support bolt of stopper plate of reverser coil found loose – failure on 12.09.22. POH done on 31.08.22.
- In Motor Coach No.19858, BP Hose pipe burst – failure on 04.08.22. POH done on 02.06.22.

3. **Other failures** – Suitable action will be taken by KPAW to avoid such failures.

- In Motor Coach No.188524, VCB punctured on 29.10.22. POH done on 08.02.21. Material manufactured in February, 2019. Make AAL. Observation: To raise issue with the manufacturer.
- Failure of air pipeline of new tap changer to be checked for recent failure.
- Wiper motor not working properly. Make ELGI. To check during POH thoroughly.
- Failure of Gaco Rubber Washer has been increased recently. Quality of Gaco rubber washer needs to be checked.

4. **Off POH defects/deficiencies** – Suitable action will be taken by KPAW to avoid such failures

During checking of POH rakes at JAJ shed in IC0 schedule. General defects/deficiencies are noted as below:-

- Inter/After cooler & CDC Gasket not replaced.
- Nut & bolts are either found loosely fitted or deficient at many locations (in Tap changer, switch group, cattle guard, vertical damper etc.).
- Cables of control/power circuit are sometimes found loosely fitted/with damaged insulation.
- Transformer oil leakage from draining port.
- Pressure gauges not fitted.
- BP pipe for Loco attachment is generally not replaced.
- TM junction box stud found broken also cable are loosely fitted.
- Defective wipers & wiper assembly not replaced.
- Anchor links found loosely fitted also vertical damper defective.
- Damaged/defective floor sheets are not replaced.
- Replacement/repairing of passenger amenities items i.e. window glass door shutter not ensured.

Necessary action will be taken to curb above defects/deficiencies.

5. **EP Contactor failure**

The details of failure on account of leakage from EP Contactor are furnished below -

Dt. of failure	Motor Coach	Last POH	Name of EP contactor
14.07.2022	40121	OCT-2021	T-4
13.07.2022	40047	OCT-2021	T-5 & T-7
13.07.2022	40010	FEB-2021	WCO
07.07.2022	188175	APR-2021	T-6
05.07.2022	188178	APR-2021	T-3
04.07.2022	21034	JAN-2021	NC-4
03.07.2022	188524	AUG-2021	T-8
29.06.2022	188174	JULY-2021	T-8 & WCO
29.06.2022	40002	JULY-2021	M-1 & M-4
29.06.2022	40066	JULY-2021	T-8
01.06.2022	40115	JAN-2021	NC-1 & NC-2

6. **Other issues**

- Fitment of parking brake during POH is being done in both ends of driving motor coaches.
- Working of Smoke Detector is to be ensured. A sanction in RSP from MEMU Shed is required for fitment of smoke detector in coaches where it is not fitted earlier.
- Overhauling of Air dryer & BUD - To be ensured during POH.
- Conversion of Inspection Car - Conversion of overhauled motor coach to Inspection car bearing No 21020 & 21021 of which one is for E.C.R.

Detailed information is to be sent to E.C. Rly soon.

7. **Assistance of materials**

- HHP Motor
- High Capacity TM (Overhauled)
- BUD
- Servo Motors for wiper
- Lightening arrestors
- Carbon brush holder for high speed Traction Motor (BHEL & CGL make)
- ABR relay & Light/Fan contactor set.
- Sun Visor
- Roller sliding assembly


(K N S. Yadav)
Sr. CDO/TS/JAJ

No. EC/T/Misc./GH/


(G N Halder)
DY CEE/WKPA

November 2, 2022

Distribution:

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DY CME/TS/ECR/HJP - for information please.
DY CME/C/KPA - for information please.

**MINUTES OF MEETING BETWEEN SRI A.K.SINGH, CESE/ECR & SRI S.KUMAR,
CWM/KPA ON 25.02.2022 DURING OFFICIAL VISIT OF CESE/ECR AT EASTERN
RAILWAY WORKSHOP, KANCHRAPARA**


Members attended:


1	Sri A.K. Singh, CESE/ECR	2	Sri S.Kumar, CWM/KPA/ER
3	Sri. Adarsh Kumar, DME/MEMU/JAJ/ECR	4	Sri G.Halder, Dy.CEE/W/KPA/ER
		5	Sri D.K. Thakur, Dy.CME(C)/KPA/ER
		6	Sri. J.Karmakar, AWM/EMU/KPA/ER


Points discussed:

1. Total 6 rakes of 16 coaches will be due for POH upto March 2022. POH planning will be done accordingly.
2. **POH of Traction Motor** – 9 no. (1 HHP + 8 Normal) TMs will be sent to KPA from JAJ by 1st week of March 2022, which are to be POHed by KPA & to be returned to JAJ as early as possible. From KPA side it has been decided that 4 no. normal TM to be sent by March 2nd Week.
3. **Overhauling of TM** – Shed reported that, total 7 nos (6 HHP + 1 Normal) is in isolated condition during service due to problem of EFRP & Pinion out. It will be send to POH shop.
4. **Side Bearer Crack**- at JAJ some cases of damaged side bearer is reported. Longer length stopper bolt may be the cause of the damage. It has been decided that, further on Shorter length Stopper bolt will be used on Dust Guard
5. **Vertical Damper 900 Kgf for MC & 600 Kgf for TC**- few cases of leakage have been observed by shed within 100 days of POH. It is to be checked by KPA end.
6. **Radial Damper 200Kgf for MC & 100 Kgf for TC** – few cases of leakage have been observed by shed within 100 days of POH. It is to be checked by KPA end.
7. **Parking Brake**: Parking Brake components found deficient & not functioning. Incoming deficiency will be made good & both end of the rake formation will be provided with parking arrangement with KPA stock subjected to material availability.
8. **Sliding & Hinge door in MC & TC** – cases of malfunction of sliding & hinge door have been reported. KPA to ensure proper POH of both doors & greasing to be ensured at JAJ end.
9. **Window Glass** - in some cases window glass found missing in TC & MC. It will be properly checked & ensured before dispatch of Rake.
10. **Toilet** –toilet furnishing & bio-tank attention of TC to be properly done at KPA. Innoculum filling in Off-POH coaches to be ensured at JAJ end.
11. **ACP** – Proper attention to ACP & connected devices to be ensured at KPA.
12. **Smoke Detector in MC**- Proper POH of smoke detection system to be ensured at KPA. To ensure proper functioning of smoke detection system training will be provided to JAJ by KPA.
13. **Cattle Guard of MC**- Proper attention to the damaged CG to be ensured at KPA.
14. **Gear Case** – Felt wick pad of GC found damaged & leakage of bluecoat reported from GC. GC Vertical & Lateral Bolt found missing in some cases. It has been already ensured as Felt wick supplied by Mallick Felt Industries was detected defective in some cases & material has been rectified by the firm at KPA.
15. **Buffing Gear** – A case of buffing gear centering bolt found damaged in TC was reported. It will be ensured at KPA end.
16. **Suspension Bearing Housing** – SB topping arrangement thread found missing/bent. A case of wickpad of SB housing found in burnt condition has been reported. It may be the after effect of bearing broken case. However, necessary attention will be taken from KPA.
17. **TM** – in Junction box it is found that bolt is missing due to thread damaged. Also found that TM foundation bolt fitted of different size. It will be checked properly.

18. **MC Jumper Spare connection to retain as usual.** It has been followed already only in few cases where jumper has been changed it will be ensured further.
19. **TAP Changer Gasket Leakage** - Gayco Washer leakage was found & brakeage of Nylon Pipe which has been already noticed in other division also. Corrective action from KPA is already taken.
20. **Wheel of MC & TC** - Mixing of Cast & Forged wheel has been reported. It will be ensured by KPA end.
21. **Air Suspension Leakage** - It is reported that, air suspension bellow has been tilted during service in some cases & also leakage reported. However, during checking at shed no leakage is found. Training for setting of leveling valve & fixation arrangement of Air suspension will be provided to JAJ shed.
22. **Center Pivot Fixation Bolt** - in some cases fixation bolt thread of center pivot is found damaged/loose. Proper tightness to be ensured at KPA end. Root Cause Analysis to be done at JAJ end.
23. **Bogie** - a case of anchor-link of different sizes in same brake beam has been reported. It will be ensured by KPA end.
24. **Speedometer** - shed sought requirement of at least 5 complete sets of speedometer. It will be spared as per availability of KPA.
25. **Jumper cable** - shed sought requirement of at least 200 mts of 19 core Jumper cable. It will be spared as per availability of KPA.
26. **MSU Axle Wheel set of MC** - 4 nos MSU Axle Wheel set PO issued in favour of KPA. Some of the items will be send by shed to KPA, after that complete assembly of wheel set will be done & dispatch to shed.
27. **Condemnation of coach** - 5 nos over aged TC was send by shed for Condemnation. After complete process of Condemnation intimation will be sent.


Sri D.K. Thakur,
Dy.CME(C)/KPA/ER


Sri G. Halder,
Dy.CEE(W)/KPA/ER


Sri S. Kumar,
CWM/KPA/ER

Sri A.K. Singh,
CESE/ECR