# MAINTENANCE PATTERN OF COACHING TRAINS



- INTRODUCED IN 2001
- FIRST REVISION DONE IN YEAR 2007 VIDE LETTER NO-95/M(C)/141/1 DATED 31.01.2007
- SECOND REVISION DONE IN YEAR
   2017 VIDE LETTER NO-95/M(C)/141/1 Pt
   DATED 14.06.2017

# MAINTENANCE PATTERN OF COACHING TRAINS

REVISION
JUNE 2017

(Letter No.95/M(C)/141/1Pt. Dated 14.06.2017)

	1. CATEGORY OF TRAIN -RAJDHANI/DURONTO TRAINS		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	At both the ends.	
3	Internal cleaning, passenger amenity attention and watering.	At both the ends.	
4	External cleaning on nominated line with proper facilities.	At both the ends.	
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Complete air brake testing with issue of fresh BPC at both ends.	

"Rolling-in and Rollingout"examination shall be conducted for each of the **Duronto trains at** the respective operational halts and also at terminals(Board's letter No.2009/M(c)/141 /2 dated 25.8.2009)

	1A. CATEGORY OF TRAIN – SHATABDI EXPRESS		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	At primary end	
3	Internal cleaning, passenger amenity attention and watering.	At both the ends.	
4	External cleaning on nominated line with proper facilities.	At primary end	
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform otherwise BP Check with endorsement on BPC	

Nil

2. CATEGORY OF TRAIN – MAIL/EXP ROUND TRIP RUN >3500 Kms FOR ICF AND >4000 Kms FOR LHB COACHES			
1	Preventive maintenance schedules at pitline.	At primary end.	Remarks
2	Under gear examination and brake system maintenance at pit line.	At both the ends.	
3	Internal cleaning, passenger amenity attention and watering.	At both the ends.	
4	External cleaning on nominated line with proper facilities.	At both the ends.	Nil
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Complete air brake testing with issue of fresh BPC At both the ends	

3(a)(i). CATEGORY OF TRAIN – MAIL/EXP ROUND TRIP RUN UPTO	
3500 KM FOR ICF AND UPTO 4000 kms FOR LHB(EXCLUDING	
CATEGORY 1 TRAINS)	

	CATEGORY 1 TRAINS)		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	Only at primary end.	
3	Internal cleaning, passenger amenity attention and watering.	At both the ends.	
4	External cleaning on nominated line with proper facilities.	At primary end.	
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform Otherwise, brake power check with endorsement on original BPC.	

For the other end maintenance, a minimum of 3 hours halt(except for intercity day trains) should be mandatorily provided for carrying out the cleaning and attention to passenger amenities besides continuity/bpc (Board's letter No.2009/M(c)/141/2 dated 12.09.2016). CME of the Railway on which the base depot of the train is located will personally satisfy himself that the mandatory condition applicable to primary and as well as other end are fully satisfied terminals(Board's letter No.2009/M(c)/141/2 dated 31.01.2007)

3(a)(ii) Mail/Exp train that touch the Primary station more than once within the limit of 3500 Kms (ICF) or 4000 Kms (LHB)and 96 Hrs.whichever is earlier (excluding Rajdhani,Duronto,Shatabdi trains)

1	Preventive maintenance schedules at pitline.	At primary end.
2	Under gear examination and brake system maintenance at pit line.	At Primary end only once within the limit of 3500 Kms (ICF) or 4000 Kms (LHB)/96 Hrs.whichever is earlier
3	Internal cleaning, passenger amenity attention and watering.	At both the ends
4	External cleaning on nominated line with proper facilities.	At primary end.
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Each.Terminating station
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform Otherwise, brake power check with endorsement on original BPC.

### Remarks

At the primary end( for non pit line maintenance trips ) CME and COM of the primary railway jointly certifying that 1 The condition / infrastructure for maintenance vide boards letter dated 31.01.2007 are fulfilled in letter and sprit at the location where the rake will be given maintenance at the primary station. 2 All necessary steps have been taken for ensuring the positive safety and security of the rake, and incase the security is considered in adequate, the rake should be taken to pit line for necessary attention.

3 A minimum time of 3 hours is given for carrying out the cleaning, watering etc during the intermediate visit of the rake to the primary station.

4 the decision to provide OBHS in such trains may be taken by CME on a case to case basis, even if these trains do not fall within the extant policy guidelines for OBHS.

5 no proposal for the condonation of time/ KMS limit for such train shall be entertained by railway board (Board's letter No.2009/M(c)/141/2 dated 16.01.2017) other end maintenance a minimum of

three hours halt (except for intercity day trains) should be mandatorily provided for carrying out the cleaning and attention to passenger amenities besides continuity/ BPC (Board's letter No.2009/M(c)/141/2 dated 12.09.2016).

3(b) Interconnected Mail/Exp round trip run upto 3500 Kms (ICF) or 4000 Kms (LHB)		
1	Preventive maintenance schedules at pitline.	At primary end.
2	Under gear examination and brake system maintenance at pit line.	To be done within the limit of 3500 Kms (ICF) or 4000 Kms (LHB)/96 Hrs after the issue of original BPC,whichever is earlier only at Primary end.
3	Internal cleaning, passenger amenity attention and watering.	At primary end and each terminal
4	External cleaning on nominated line with proper facilities.	At primary end
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform. Otherwise, brake power check with endorsement on original BPC.

The integrated train rakes should have a standard composition. The original bpc issued by the primary end should be revalidated at every terminal station in the link. Or wherever the train engine is changed (Board's letter No.2009/M(c)/141/2 dated 28.06.2007). For the other end maintenance, a minimum of three hours halt (except for intercity day trains) should be mandatorily provided for carrying out the cleaning and attention to passenger amenities besides continuity/ **BPC** (Board's letter No.2009/M(c)/141/2 dated 12.09.2016). CME of the Railway on which the base depot of the train is located will personally satisfy himself that the mandatory condition applicable to primary and as well as other end are fully satisfied terminals(Board's letter No.2009/M(c)/141/2 dated 31.01.2007)

4. CATEGORY OF TRAIN – PASSENGER TRAINS WITH TOILETS INCLUDING INTERCONNECTED PASSENGER TRAINS, SHUTTLES.		
1	Preventive maintenance schedules at pitline.	At primary end.
2	Under gear examination and brake system maintenance at pit line.	To be done after 3500 Kms. Or 96 hours after the issue of original BPC whichever is earlier. Only at Primary end.
3	Internal cleaning, passenger amenity attention and watering.	At primary end and each terminal.
4	External cleaning on nominated line with proper facilities.	At primary end.
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform .Otherwise, brake power check with endorsement on original BPC.

	5. CATEGORY OF TRAIN – PASSENGER TRAINS WITHOUT TOILETS.		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	To be done within 3500 Kms Or 7 days whichever is earlier. Only at Primary end.	
3	Internal cleaning, passenger amenity attention and watering.	At primary end and each terminal.	
4	External cleaning on nominated line with proper facilities.	At primary end.	
5	Enroute / Terminating Examination	Once a day at primary end or at a nominated terminal.	
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform. Otherwise, brake power check with endorsement on original BPC.	

	6. CATEGORY OF TRAIN –Dedicated Parcel Trains		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	To be done within 4500 Kms Or 10 days whichever is earlier.	
3	Internal cleaning, passenger amenity attention and watering.	Not Applicable	
4	External cleaning on nominated line with proper facilities.	Not Applicable	
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform. Otherwise, brake power check with endorsement on original BPC.	

The dedicated parcel express train shall be allotted a base depot and will be required to undergo primary maintenance in the pit line for a clear 6 hours slot. If such a base depot / station does not have requisite infrastructure and pit line slot, the rake may be maintained at the nearest coaching depot where such facilities are available. Attaching / detaching of parcel vans/ to from the dedicated parcel express train at an identified enroute station may be permitted subject to a detailed pit line examination of such coaches before attachment. Amalgamation / disintegration of two/ more segments of parcels special rakes may also be permitted. The bpc issued at the primary end shall be valid provided the rake integrity is not broken or changed or the train engine is not changed, otherwise the bpc will be revalidated by ENGINEER (C & W) after ensuring brake continuity, provided that parcel vans being attached, if any, have been subject to pit line examination. For circuits where the total round trip journey is greater than 4500 kms, the rake shall also be required to undergo a detailed pit line examination at other end( or at the nearest coaching depot) where requisite infrastructure is available (Board's letter No.97/M(c)/202/4 dated 22.11.2010). OCVs that are part of a mail / express/ passenger trains shall have an examination schedule as applicable for that train (Board's letter No.2003/M(c)/141/19 dated 02.03.2006)

	7. CATEGORY OF TRAIN –Military/Election Special trains		
1	Preventive maintenance schedules at pitline.	At primary end.	
2	Under gear examination and brake system maintenance at pit line.	To be done after 3500 Kms (ICF) Or 4000 Kms (LHB) or 96 Hrs.whichever is earlier. Only at Primary end.	
3	Internal cleaning, passenger amenity attention and watering.	At Primary end and each terminal.	
4	External cleaning on nominated line with proper facilities.	At Primary end	
5	Enroute / Terminating Examination	Enroute: after every 250 to 350 kms of run at locations to be decided by Railway for each train.  Terminating Examination: Terminating station	
6	Brake system check prior to start at platform at the other end.	Only continuity check if stabled at platform. Otherwise, brake power check with endorsement on original BPC.	

The BPC will indicate the first destination. At the first destination, if such a train is to re-originate without fresh examination, the station master will endorse the next destination on the BPC available with the guard and driver, provided the total distance /time limit from the point of primary maintenance till the finakl destination is not going to exceed the prescribed limit(Board's letter No.2003/M(c)/141/19 dated 02.03.2006)

	CATEGORY OF TRAIN -DEMU		
1	Preventive maintenance schedules at pitline.	At the base depot	
2	Under gear examination and brake system maintenance at pit line.	At the maintenance shed during every trip inspection 10 days periodicity for all DEMUs other than 700 HP 7 days periodicity for 700 HP DEMUs	
3	Internal cleaning, passenger amenity attention and watering.	At the base depot and at the nominated stations based on the rake link(CME's to decide).  Dry sweeping and attention to passenger amenity,log book items,etc as required,shall be done at the night stabling point.	
4	External cleaning on nominated line with proper facilities.	At the base depot	
5	Enroute / Terminating Examination	Enroute: Rolling-in examination at all locations where facilities exist by train examining staff (CME's to decide).  Terminating Examination: Rolling-in examination at nominated stations will be performed by existing train examining staff (CME's to decide).	
6	Brake system check prior to start at platform at the other end.	Issue of BPC:The Platform Train Examiner will issue BPC for the train before commencement of the first outward journey as passenger train after maintenance at the base depot.  Brake system check prior to start at platform/stabling line by Crew & Guard.	

The instructions regarding permissible percentage of brake power will be the same as for Main line trains(Board's letter No.2003/M(c)/141/19 dated 26.06.2002)

CATEGORY OF TRAIN –MEMU and EMU			
1		Preventive maintenance schedules at pitline.	At the base depot
2	2	Under gear examination and brake system maintenance at pit line.	At the maintenance shed during every trip inspection 10 days periodicity for all MEMUs other than 700 HP 7 days periodicity for 700 HP MEMUs
3	3	Internal cleaning, passenger amenity attention and watering.	At the base depot and at the nominated stations based on the rake link(CME's to decide).  Dry sweeping and attention to passenger amenity,log book items,etc as required,shall be done at the night stabling point.
4	1	External cleaning on nominated line with proper facilities.	At the base depot
Ę		Enroute / Terminating Examination	Enroute: Rolling-in examination at all locations where facilities exist by train examining staff (CME's to decide).  Terminating Examination: Rolling-in examination at nominated stations will be performed by existing train examining staff (CME's to decide).
6	5	Brake system check prior to start at platform at the other end.	Issue of BPC:To be issued at the time of departure of rake from the base depot.  Brake system check prior to start at platform/stabling line by Motorman & Guard.

The instructions regarding permissible percentage of brake power will be the same as for Main line trains(Board's letter No.2003/M(c)/141/19 dated 26.06.2002)

# Annexure A to Board's Letter No.95/M(C)/141/1 Pt. dated 14.06.17 Maintenance Pattern Of Coaching Trains (Mainline) (June 2017)

8- Mandatory condition for Round Trip Pattern of Maintenance(Board's Letter No.95/M(C)/141/1 Pt.dated 31.01.07.

# A-Primary End:-

- 1. Clear maintenance time of 6 hrs. should be ensured at the Primary end to enable intensive attention.
- 2.100% Brake power shall be ensured.
- 3.Brake blocks should be changed as bogie sets.
- 4.All missing passenger amenity fitting must be replaced and the rake must be turned out as 'Zero-Missing-Fitting' rake.
- 5. Intensive cleaning of coach toilets shall be ensured.
- 6.Provision of proper washing cum maintenance pit line facility with adequate testing equipment and high pressure water cleaning arrangement shall be ensured.
- 7. Adequate gang strength with proper supervision to ensure intensive attention.

# **B-Other End:-**

- 1. Whenever the lie-over is more than 2 hrs at the platform of the rake is stable in the yard, the rake should be locked and positive security should be provided.
- 2. The minimum infrastructure, as prescribed in the letter, shall be provided.

**C-General Points:-** A joint safety certificate covering each clause of the mandatory conditions will be issued by Mechanical and Operating branches at Divisional level. No relaxation will be permissible except with approval of the Board on a case to case basis.

# Annexure A to Board's Letter No.95/M(C)/141/1 Pt. dated 14.06.17 Maintenance Pattern Of Coaching Trains (Mainline) (June 2017)

# 9- Board's Letter No.95/M(C)/141/1 Pt. dated 18.07.2002

The maintenance pattern on which a particular train is running shall be mentioned on the Upper right hand corner of the BPC.

# Board's Letter No.95/M(C)/137/19 Pt. dated 14.11.2006

- 1.For trains starting from different stations and amalgamating at an enroute station, the BPCs of individual trains shall be clubbed and revalidated at the intermediate amalgamating point.
- 2.For trains originating from one station and disintegrating into 2 or more trains at an enroute station, the originating station shall issue separate BPCs for these parts of the train which shall be revalidated at the intermediate station.
- 3.For the purpose of checking brake continuity and revalidation of BPC, wherever required, it must be ensured that the values of BP, FP in the locomotives and the rearmost brake van are recorded afresh each time whenever the engine is changed or the rake composition is altered.

# Board's Letter Nos2003/M(C)/141/19 Pt.II dated 23.05.2013 & 95/M(C)/141/1 dated 29.10.01.

- **1.Introduction of New Trains:** Before introduction of new trains, compliance with RPC-4 will be certified jointly by CPTMs and CRSEs of the originating railways, duly consulting the terminating railways.
- **2.Review of Rake Links of Existing Trains:** For existing trains, CPTMs and CRSEs of Zonal Railways are required to review the existing coaching links in order to see if it is complying with the provisions of RPC-4. Wherever, there is a deviation/gap from the stipulation, a phased plan should be drawn to switch over such trains to the revised pattern of maintenance progressively. In case, Railways are unable to get over these deviations, in any particular case, Board's approval should be obtained, duly stating the reasons for seeking exemptions.

# NOTE:

- ■INTERNAL CLEANING, PASSENGER AMENITY ATTENTION AND WATERING MAY BE DONE AT PLATFORM LINE OR NOMINATED STABLING LINE PROVIDED STIPULATED FACILITIES ARE AVAILABLE AT SUCH LINE.
- ■INCASE THE RAKE STABLED IN YARD FOR MORE THAN 6 HOURS
  POSITIVE SAFETY ARRANGEMENT SHOULD BE MADE FOR THE RAKE
  AND IN CASE THE SECURITY IS CONSIDERED INADEQUATE, THE
  RAKES SHOULD BE TAKEN TO PITLINE FOR ATTENTION TO UNDER
  GEAR AS GIVEN IN THE TABLES.

# THANK YOU....