

FREIGHT TRAIN EXAMINATION

STC/SPJ

The efficient working of freight stock is closely linked to the standard of yard maintenance. Several factors are responsible for good and quality examination/repairs in the yard.

Steps of Intensive Examination:

- Rolling examination including axle box feeling.
- Intensive examination of origination trains including repairs, detachment of damaged/sick wagons, brake power testing etc.
- Issue of intensive Brake power certificates after ensuring brake continuity of the formed rake.

Rolling in Examination:-

- All terminating trains should be given rolling in examination while entering a station/yard with a train examination depot.
- To carry out this examination a Train examiner and his staff should take up positions on both sides of the lines short of the normal halting place on which the train is to be received.

The following inspection should be carried out during the rolling in Examination--

- The rolling in examination must be conducted to detect any skidded wheel.
- Inspection and observation of under gear of wagons for any loose or dangling components.
- Immediately after the train has comes to a halt, all axle boxes should be felt within 20 minutes of the train arrival and those axle boxes which are found running at high temperature, should be marked.
- Examination of any abnormal behaviour of any of the vehicles or any other observation which may relate to unsafe working condition.
- Defect in the brake system .

Intensive Examination and Repairs-

The rake should be protected at both the ends before undertaking the following examination and repair activities:-

- Inspection and repairs of running gear, brake gear, suspension gears and draw & buffing gear.
- Checking and making good the deficiency of safety fittings, safety brackets, safety loops, etc.

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- Visual examination of under frame members, body, checking and proper securing of doors especially of covered wagons.
- Correct functioning and positioning of empty load device.
- Look for abnormal and unequal buffer heights.
- CBC wear or deficiency of parts to be marked and their operation to be checked.

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- The bogies complete i.e., side frames and bolsters to be visually examined for cracks and missing parts. All springs, snubbers, spigots, centre pivots fastening, side bearers to be checked for defects, if any.
- Thorough check of Air brake components like brake cylinders, distributor valves, auxiliary reservoir control chambers and other pipe joints

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- wheel profile should be examined visually. If any defect is noticed, it should be checked with tyre defect gauge and wagon to be marked sick for wheel changing, if required.
- If bent axle is suspected wheel gauging must be done.
- Hand brakes must be checked for smooth and effective operation.
- Brake blocks should be replaced on reaching condemning thickness.

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- After fitment of brake block and key on brake head fitment of split pin should be ensured.
- Correct fitment of washers, bulb cotters and all brake gear pins to be ensured.
- Brake power should be tested as per rule E-5 of Appendix E of the IRCA Rules Part III.
- Where a rejectable defect can not be attended to on the train in the yard, the wagon shall be damaged labelled for attention in the sick line.

New Pattern of Freight Train Examination:

It is based on the Revised JPO issued by Railway board letter No. 94/M(N)/951/57 Vol-2 dated 25.10.04, letter NO-2005/M(N)/951/13 Dated 07.04.05 and even no dated 25.04.2006 and 5.11.07.

Following are the main feature of new pattern examination of freights trains.

1. Word CRT has been deleted as the stock has been phased out.
2. The freight train can only be subjected to examine for intensive End to End, Premium End to End and Close Circuit rakes.
3. The practice of safe to run examination of freight trains per se may be discontinued.
4. En route rolling-in-Examination freight trains may be discontinued. However rolling in examination as part of intensive examination will continue.

5. Post loading examination by TXR Staff may be discontinued for all type of stock (except loading of steel consignment). This check is to be carried out by Guard and Driver as per standard proforma issued by Railway Board. The post loading check must be carried out by TXR Staff and securing of steel bundles with lashing chains may be ensured.

6. After Tippling the rake will be offered for post Tippling examination, in case less than three rakes are day, the check may be carried out by guard and driver as per standard proforma issued by railway board. In cases 3 or more trains are being tippling, post tippling check will be done by Skelton TXR staff. After tippling the rakes should be subjected post tippling check either by TXR Staff or by GUARD & Driver in case of non provision of TXR Staff in siding.

7. It should be ensured that unexamined load (after unloading before next TXR Point) of freight trains running end to end pattern or invalid BPC in case of premier & cc rakes does not exceed 400 kilometer .

8. Since multiple loading and unloading are permitted in CC & Premium Rakes .movement of CC rakes & premium rakes will be monitored through FOIS by Traffic Department with C & W control.

9. In case of mechanized loading and unloading (i.e. BOXN wagon) examination by TXR will be desirable.

10. In case of clearance of stable load instruction contained in Board letter No. 2000/safety (A&R) /19/35/ dated 31.7.01 should be followed.

11. The CC rakes shall be offered for PME in empty condition at the cc base depot where the cc rake was originally formed.

12. ROH and POH wagons from CC rake will be marked and detach at base Depot.

13. The rake integrity of CC rake as listed in the BPC should be maintained .However up to 4 wagon (10 FWU) may be replaced by good examined wagons in the entire Run between the two PME.(05 BLC or one mark in case of BLC rakes allowed for attended or replaced

END TO END RUNNING OF AIR BRAKE STOCK

- i) The rake should normally be intensively examined in empty condition except when back loading of rake has to be done at stations/sidings.
- ii) The BPC of empty rake may have no destination mentioned. But, after loading the empty rake, the operating staff (commercial staff, if not operating staff is posted at that station) will ensure that the destination of the loaded train is clearly mentioned on the BPC and the same BPC will then become valid upto such destination.

iii) No driver should move the loaded train from the loading point unless the destination is clearly mentioned on the BPC. BPC of the loaded train without destination will be considered as invalid.

iv) At the destination after unloading, the rake must be examined once again in the empty condition and the above cycle repeats. In the absence of freight train examination facilities at the unloading point, the empty rake/back loaded rake must be examined at the first freight train examination point in the direction of movement. The movement of empty rake/back loaded rake from the unloading point to the first freight train examination point will be permitted on Driver and Guard's certificate.

PREMIUM EXAMINATION

The concept of premium rates is applicable
subject to compliance of certain
conditions (vide Bd's letter no. 2005/
M(N)/951/13 dated 07/10. 04.2006)

The salient features of such types of examination are under:

1. Premium rake will be form out of air brake stock (i.e. BOXN, BOXNHS, BCN, BCNHS & BOBRN etc.) only.
2. Such rakes will be given intensive examination in empty condition at nominated examination yard only.
3. Premium examination point must be upgraded to “A” category yard on top priority.

4. Stipulation to form rake out of Off POH /ROH wagons as in case of CC rakes are not applied in case of premium rakes.

5. Similar types of wagons are taken to form premium rakes, mixed wagons not allowed for such rake.

6. The rakes will be turned out with minimum 95% brake power and BPC will be issued on Green Book only.

7. The validity of BPC to be issued for 12 days including date of issue. However grace period of 3 days is given when rake is loaded condition and on 15 days rake must be unloaded and must be offered for C &W examination.

8. The rake is handed over to Operating Department for multiple loading and unloading within 12 days.

9. After each loading and unloading , the rake must be offered for Guard and Driver check before commencement of journey as per proforma issued by Railway Board and observation will be recorded on the relevant column of the BPC.

10. Movement of premium rakes will be monitored through FOIS by Traffic Department along with Mechanical Department.

11. If the rakes stabled in yard more than 24 hours, the rakes must be offered for C&W examination otherwise BPC will be treated as invalid.

12. Man hours are decided as 75 for Premium End to End (PEE) examination.

13. The integrity of rake will be maintained. However 4(10 FWU) wagons may be replaced by examined wagons en-route.

14. After expiry of the grace period i.e. after a lapse of 15 days after the date of issue of BPC, even a loaded premium rake shall be offered for examination at the first TXR point in the direction of movement. Further, in no case Premium end to end rake shall be offered for loading through bypass routes or through yards which are not nominated for examination. After examination the rake will be certified as premium rake subject to fulfillment of above mentioned conditions, otherwise as conventional end to end rake

CC RAKES

CC rake are being formed in term of Railway Board's letter No.94/M(N)/951/57 Vol- II dated 25.10.2004 and letter No. 87/M(N)/951/31 dated 22.08.1989 & letter no. 2005/M(N) 951/ 13 dated 08.02.06

Following are the main feature of CC rakes:-

1. CC rakes will run on predefined path and under completion of day / km mention on BPC the rake should be examined at nominated base depot only.
2. Off POH/ROH wagon should be preferred during formation of CC rakes.
3. Examination should be conducted in day light only (morning to sun set).

4. The examination should be conducted on nominated line by CRSE & CFTM of the Railway.

5. All reject able items must be attended during examination of such rake.

6. The air brake wagons of same types of stocks are formed in CC rake .Mixed wagon can not be allowed.

7. For examination of CC rake, 100 man hrs is to be taken.

8. After examination BPC with 100 % brake power is issued on prescribed yellow color certificate.

9. The examination of CC rakes is carried out where the minimum infrastructure facility for examination as standardized by CAMTECH is available.

10. There are 3 types of CC rakes be examined and validity of BPC being issued over Indian railway.

(i) 4500 kms/20 days whichever is earlier (examined at "A" ,"B" and "C" Cat. Yard)

(ii) 6000kms /30 days whichever is earlier (examined in "A" cat. Yard)

(iii) 7500 kms/35 days whichever is the earliest (being examined at Special "A" cat. Yard)

11. The rakes are handed over to Traffic Department for multiple loading/unloading within the validity of BPC and GDR check.

12. Listed wagons on BPC are allowed to run .En route if detachment or attachment by 4 or more wagons (10FWU) is done without examination by TXR, BPC should be treated as invalid (In case of BLC 5 wagons/ one unit)

13. Movement of CC rakes will be monitored through FOIS by Traffic Department along with Mechanical Department.

14. About 5-6 hours time, preferably during daylight will be provided for the intensive repairs.

Further, zonal Railways shall maintain detailed record w.r.t. en route detachments. Brake power and detachment during examination of these rakes and give monthly feed back to board on their performance.

GDR CHECK

Trains should be checked for the following points:

1. Rake Integrity is not disturbed by more than 04 wagons (in case of BLCA/BLCB, the maximum limit of wagons which can be detached/replaced during run are 05 i.e. 01 unit = 05 wagons) and intensively examined wagons given fitness by train examining staff be attached.

(Railway Board's Letter No. 2002/M(N)/204/10 Vol.I dated 30.07.2009)

2. All CBCs/Screw couplings are coupled and it should also be ensured that CBCs are locked and Screw couplings are tightened and Broad Gauge screw couplings not in use are hung on the suspension hooks provided for the purposes.

3. All Air hoses are fitted and secured.

4. Air hose at the end of train is properly placed on Air hose carrier.

5. On air-braked stock all the Angle cocks are in open condition and the angle cock at the end of train is in closed condition.
6. Empty/Load device handles are kept in position on loaded/empty rakes.
7. Numbers of dummy / inoperative cylinders are not exceeding the limits prescribed.
8. There are no loose fittings/hanging parts like pull rod, Brake beam, Safety brackets and Brake blocks etc., which endanger safe running of the train.

9. All hand brake levers/wheels are released.

10. It shall be ensured by the Guard that all the doors of the covered & open wagons are properly closed or secured in open condition in case of perishable/lime stone consignments.

11. Any other abnormalities noticed are to be recorded. Guard & Driver shall prepare a memo jointly on a plain sheet in triplicate indicating the brake power and deficiency, if any, and shall append their signatures and both of them shall retain a copy of the same.

12. Guard should obtain SM/YM's endorsement on two copies of joint memo and hand over the third for SM/YM's record.

13. SM/YM will inform the section control after making the endorsement on the joint memo and obtain clearance for the train to move.

14. Continuity of the Train pipe is confirmed through VHF/Whistle code before starting the train.

15. Fitment of Air Brake Gauge is mandatory by Guard of the train.

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THANKS