भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
रेलवे बोर्ड RAILWAY BOARD

No.2017/M(N)/60/3

Dated: 18.04.2022

General Managers
All Indian Railways

**Sub: Operation of freight trains in twin pipe air brake system mode**

Ref: (i) JPO for the running of freight trains with twin pipe brake system letter no. 2010/M(N)/60/10 Pt. II dated 28.08.2015 (Copy enclosed)
(ii) Railway Board's letters no. 2017/M(N)/60/3 dated 8th June and 14th Aug'17 (Copies enclosed)
(iii) Railway Board's letter no. 2017/M(N)/60/3 dated 30.12.2020 (Copy enclosed)

Instructions have been given to the POH workshops and ROH depots for retro fitment of twin pipe air brake system in wagons during POH and ROH, issued vide letters u/r (ii). JPO for operation of freight trains with twin pipe brake system has also been issued in 2015, vide letter u/r (i).

However, operation of freight trains with twin pipe has hardly started. Hence, following instructions are hereby issued:

**A. Conversion of Wagons to twin pipe:**

1. No wagon to be turned out from POH workshop and ROH depot without twin pipe, after 1st June'22.

2. Its monitoring mechanism at the highest level should be put in place in the respective Zones. Suggested check points for this monitoring are:

   i) Whether Zone has sufficient RSP provision for the conversion (if not, board may be approached for the same)

   ii) Whether contracts are in place to meet the estimated conversion requirement.

   iii) Whether the arising of wagons for conversion is being covered or not.

**B. Formation of twin pipes rakes:**

1. All maintenance points will ensure that maximum CC and Premium rakes are formed using twin pipe wagons so that they can be operated in twin pipe mode.

2. "Twin Pipe Rake" shall be clearly written on BPC of such rakes. CRIS to ensure the provision in FMM for the same.

**C. Operation:**

1. These twin pipe fitted rakes will be identified separately by COA, FOIS and FMM. Suitable provisions for the same to be made by CRIS.

2. Crew will ensure that no train with twin pipe endorsement on BPC runs in single pipe mode and in case of any deviation, report the same to respective divisional control, duly giving reasons.

3. While attachment of piecemeal wagons in twin pipe enabled rakes, operating staff will ensure that, as far as possible, only wagons with twin pipe air brake system are attached in the rake.

4. After loading/unloading of these rakes, the operating staff will ensure that all the feed pipes in rake are properly connected for further operation in twin pipe air brake mode.

**D. Reports:** Following reports shall be provided by CRIS on daily basis in its web portal-

1. Number of BPC issued with twin pipe, railway-wise and total.

2. Number of rakes running in FOIS with twin pipe or otherwise.

3. Number of rakes having BPC endorsement of twin pipe converted to single pipe

4. Loss of twin pipe rakes

It is requested to arrange to comply the above instructions.

***This issues with the approval of Board [M(T&RS), M(O&BD)].***

**DA: As above**

Vivek 19/04/22

**(Vivek Mohan)**
**Dir. Mech. Engg. (Freight)**
**Railway Board**
**Telephone No. 011-23047448**
**Email: dmef@rb.railnet.gov.in**

**Copy to :**

1. AM/TT/Railway Board-for kind information
2. Managing Director, CRIS, New Delhi -for kind information and necessary action
3. PCMEs; PCOMs – All Zonal Railways-for kind information and necessary action
4. Director (NCO), New Delhi

2017/M(N)/60/3.

704534/2020/MECHANICAL(WAGON)

S.No. 27

**GOVERNMENT OF INDIA**
**MINISTRY OF RAILWAYS**
**(RAILWAY BOARD)**

**No. :** 2017/M (N)/60/3 **New Delhi dated:** 14/08/2017

**The Chief Mechanical Engineers**
**All Zonal Railways**

**Sub: Conversion of single pipe air brake wagons to twin pipe**
**Ref** This office's letter of even no. dated 08/06/2017

At present there are three operational RSPs for conversion of single pipe air brake wagons to twin pipe:

a) Item no. 760/PD/2017 – 18
b) Item no. 860/PD/2017 – 18
c) Item no. 1275/NA/2017 – 18

Railway Board had earlier laid down priority for this conversion as BOXNHL, BCNHL and BVZI wagons for which RSPs mentioned at a) and b) above have been operated by zonal railways.

Meanwhile, Railway Board has taken a policy decision to convert all existing single pipe wagons to twin pipe for which RSP item no. 1275/NA has been sanctioned in pink book 2017 – 18.

In view of the above circumstances, it has been decided that the scope of RSP item no. 760/PD/2017 – 18 and item no. 860/PD/2017 – 18 be expanded to include all types of single pipe air brake wagons so that the balance quantity available against these RSP items can be quickly utilized by zonal railways.

This has the approval of Board (MRS & FC).

Zonal Railways may take action accordingly.

14/08/17
**(Anirudh Kumar)**
**Dir Mech Engg (Freight)**

**Copy:**

1. **EDF (S), Railway Board** : For kind information please

16-8-17

90732/2021/MECHANICAL(WAGON)

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

रेल भवन, नई दिल्ली- 110001, तिथि
No. 2017/M (N)/60/3 Rail Bhavan, New Delhi-110001, dated 08.06.2017

The Chief Mechanical Engineers
All Indian Railways

**Sub: Retrofitment of twin pipe in wagons**
**Ref:** 1) Board's letters No.2017/M(W)/814/5 dated 10.10.16&13.04.17
2) CWE/ER's lr.No.MR-5/2017-18/RSP/Vol.I dt.07.06.2016

Retrofitment of twin pipe brake system in BOXNHL, BCNHL & BVZI wagons was earlier prioritized by Board and the work was taken up under RSP provision available vide item No.760/RB/PD/17-18 and 860/RB/PD/17-18. Specific instructions were issued from Board for undertaking conversion to twin pipe system, these three types of wagons against the two RSP provisions.

Board has taken a decision during 2016-17 that all wagons are to be converted to twin pipe brake system for which RSP provisions for 170000 wagons has been made vide RSP item no.1275/RB/NA/17-18 Initially allotment for 20000 wagons against this RSP provision were made vide Board's letter u/r above.

On some railways clarifications have been sought whether there is any restriction on the type of wagon that can be converted under the RSP provision:

a) As regards RSP items 760 & 860/RB/PD/17-18, the matter is being reviewed and railways would be advised of Board's decision in due course.
b) The provisions available against 1275/RB/NA/17-18 are for conversion of all types of air brake wagons to twin pipe brake system. Railways must ensure that the supply/works contracted as applicable get finalised against this RSP provision and work started at the earliest.
c) Railways, which have workshops must plan for ensuring that all railway owned wagons coming from POH are converted to twin pipe brake system before they are turned out from workshop. 100% conversion to twin pipe during POH is to be implemented from 1.1.2018.
d) Railways, which do not have workshops on their system should plan to undertake the conversion to twin pipe brake system in their suitable ROH depots sick line against the RSP provision allotted to them.
e) Air brake wagons are also being operated by various private entities under LWIS, SFTO, AFTO, CTO & other policies of Indian Railways. In all the cases railways have the

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रेल मंत्रालय Ministry of Railways Railway Board
रेलवे बोर्ड
Issue Enclosure
Signature
Date of Issue

agreement for maintenance and upkeep of these privately owned wagons. Railways are required to advise the concerned operators to get their wagons converted to twin pipe brake system either through a deposit arrangement with the railway (deposit work with Open Line in case of railways not having workshops and deposit work with workshop in case workshop is available) or to get the operators to arrange for such conversion through approved agencies for air brake (twin pipe) conversion for railways.

f) In cases where the conversion work is done through contract entered into by the owners with agencies other than railways, the final inspection of the twin pipe conversion work should be arranged by the railway itself where the wagons are based.

g) Railways must ensure that the targets allotted to them for the year 2017-18 are fully met without any failures.

(Ajay Nandan)
Exec. Director Mech. Engg. (Fr)
Railway Board

**Copy to : ED/Wagon/RDSO** - for necessary action regarding release of drawings and related procedures wherever required by railways.

2017/M(N)/60/3.

1124256/2022/MECHANICAL(WAGON)

भारत सरकार/GOVERNMENT OF INDIA
रेल मंत्रालय /MINISTRY OF RAILWAYS
रेलवे बो र्ड/(RAILWAY BOARD)

**No. 2010/M(N)/60/10 Pt.II** **New Delhi, dated** 25 .8.2015

**The General Manager**
All Indian Railways

**Sub: Joint Procedure Order for the running of freight trains with twin pipe brake system**

Working of freight trains on twin pipe brake system improves the operational efficiency and the average speed of freight trains, as the brake releasing time is lesser. Data reveals that twin pipe brake system also results in a reduction in train parting cases.

Some of the railways have reported that many of the rakes that had been turned out with twin pipe brake system after examination were returned with single pipe working, the main reason for which was due to the FP Hoses being disconnected. Besides, non-availability of loco and brake vans having twin pipe brake system, etc. have also been cited as reasons for twin pipe rakes working on single pipe.

In view of the facts stated above, the following action needs to be taken:

1. The field operating staff may be directed to ensure that the twin pipe rakes should work on twin pipe brake system and the FP hoses should be reconnected, if they were disconnected for unloading.

2. In case of defective / deficient feed pipe, the crew should be instructed to replace with the feed pipe available in the loco. In case feed pipe in wagons is deficient / damaged and cannot be attended by crew, assistance of TXR staff should be sought at the first available opportunity and an endorsement should be made on the BPC to this effect.

3. The following stamp shall be provided on the BPC of twin pipe rakes at the time of examination/issue of BPC by TXR:

| **This rake is fitted with twin pipe air brake system**<br>**FP Pressure in Loco .....Kg/cm$^2$**<br>**FP Pressure in Brake Van..... Kg/cm$^2$** |
|---|

4. An item should be added to the list of items to be checked during GDR checks circulated vide Railway Board's letter No. 2005/M(N)/951/13 dated 08.02.06 as follows: ***"the rake should be cleared with twin pipe brake system if BPC has endorsement as twin pipe, subject to a compatible loco being attached to the train".***

Contd...../-

5. Whenever the rake is maintained by TXR as a twin pipe rake, the Pool ID of the rake in FOIS shall be entered with a suffix of "TP" so that the users of FOIS are aware that the rake is twin pipe. This suffix of "TP" shall be entered into FOIS based on a certificate issued by TXR.
6. All cases wherein twin pipe rakes have to be operated in single pipe shall be flagged on FOIS by control based on message conveyed by Train crew. The report should be should be perused by operating and mechanical officers in the Divisions and Zonal Headquarters for taking suitable corrective action.
7. Frequent surprise checks should be carried out by the Railways and the flying squads of IRCA so as to ensure that the twin pipe rakes are actually working on twin pipe in the field.
8. The FP gauge along with adopter shall be provided to the Guards as a personal store.
9. Locos having twin pipe air brake system in operational condition should be provided for working the twin pipe rakes.
10. **Non-availability of twin pipe brake van** : As far as possible, the brake vans having the provision of twin pipe air brake system should be provided for working the twin pipe rakes. However, in case of non-availability of twin pipe brake vans, the train should work with twin pipe brake system upto the last wagon ahead of the brake van and the brake van may be with single pipe brake system. Such rakes shall be treated as twin pipe rakes for the purpose of entry of Pool ID in FOIS. However, it shall be ensured that the feed pipe (F.P.) hose couplings are connected to form a continuous air passage from locomotive to last wagon ahead of the single pipe Brake Van. The following point shall be ensured at the originating station/C&W examination point:

    (i) Suitable arrangement shall be used by SSE/C&W for checking of feed pipe pressure at the tail end of the last wagon (before single pipe Brake Van) & to ensure that the feed pipe pressure is not less than 5.8 kg/cm$^2$.
    (ii) After checking of feed pipe pressure, it is to be ensured that the cut off angle cock of feed pipe of last wagon is in closed condition.
    (iii) Other general guidelines for operation & examination of twin pipe air brake system of complete train as per amendment No. 3 of Jan'2010 of G-97 are to be followed.

**(Ref: RDSO's letter No. MW/APB/TPM dated 29.07.15)**

This issues with the approval of Board (MM and MT).

**(A.K. Behera)**
Executive Director /Traffic Trans. (S)
Railway Board

**(Ajay Nandan)**
Exec. Director Mech. Engg. (Frt)
Railway Board

**C/-**

(i) **CMEs & COMs/All Indian Railways)**
(ii) **Adv.EE/RS, Railway Board** ) for information and necessary
**EDME(Tr)/Railway Board** ) action.
(iii) **GS/IRCA, New Delhi.**

Please discuss 25/9/15

Railways Railway Board ... closure ... 26/09

**File No.2017/M(N)/60/3.**

**भारत सरकार Government of India**
**रेल मंत्रालय Ministry of Railways**
**रेलवे बोर्ड Railway Board**

**No.2017/M(N)/60/3** **New Delhi, dated: 30.12.2020**

**The Pr.Chief Mechanical Engineers**
**All Indian Railways**

**Sub:** Retrofitment of twin-pipe in wagons.
**Ref:** Board's letter no. 2017/M(N)/60/3 dated 28.06.2019.

Vide letter u/r, it was advised that the retrofitment of twin-pipe air brake system in wagons would not be an NTXR rejectable defect. However, the progress of the work is not satisfactory and therefore, the aforesaid decision has been reconsidered. In light of that it has been decided that

**"the RSP work shall be an NTXR rejectable defect from 01.02.2021 and dispensation will not be permitted thereafter".**

It is requested that necessary action be taken immediately to ensure that no wagon is turned with single pipe brake system after 01.02.2021.

This issues with the approval of AM/ME(Railway Board).

Digitally signed by VIVEK MOHAN
Date:Wed Dec 30 15:48:11 IST 2020
Reason: Approved

**(Vivek Mohan)**
**Dir. Mech. Engg. Frt.**
**Railway Board**

**Copy to: EDME(W&T)/Railway Board**
**Dir(NCO)/IRCA Building/New Delhi : From 01.02.2021, non-fitment of twin-pipe in all wagons leaving workshop may be treated as a rejectable defect.**