



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

150 गौरवपूर्ण वर्ष

रेल भवन, नई दिल्ली-110001, दिनांक  
Rail Bhavan, New Delhi-110 001, dated

No. 2000/M(N)/60/2/wagon census.

4<sup>th</sup> July, 2003.

8

The General Managers (OL),  
All Indian Railways.

Sub. :- New Wagon Numbering System.

As you are aware, monitoring and liquidating overage arrears of rolling stock is a focus area in the interest of safety of train operations. However, some of the Railways have reported difficulty in ascertaining the age of wagons where the manufacturer's plate is missing. Also computerization of wagon data is becoming cumbersome with development of various versions in a category e.g. BG bogie open wagons BOXN, BOXNHS, BOXNAHA, BOXNCR and BOXNLW are being clubbed together by the computer cell and shown as BOXN in the holding.

2. To overcome the above-mentioned problems and to facilitate computerization of the wagon data base, a new wagon numbering system has been evolved in consultation with zonal railways, RDSO and C&IS directorate of the Board.

3. As per the new scheme, the wagon number shall consist of 11 digits. First two digits will indicate 'Type of Wagon'. Next two digits will indicate 'Owning Railway'. Next two digits will indicate 'Year of Manufacture'. Next four digits will indicate 'Individual Wagon Number' and the last digit will be a 'Check digit'.

Type of wagon	Owning Rly	Year of manufacture	Individual Wagon Number	Check Digit
C1 C2	C3 C4	C5 C6	C7 C8 C9 C10	C11

The codification scheme and procedure of calculating check digit may be seen in the enclosed Annexure. For clarification, two examples have also been worked out.

4. However, for the convenience in normal day-to-day use, type of wagons would be stenciled alphabetically also. For example, Northern Railway owned BOXNHS wagon no. 4567 manufactured in 2003 would be stenciled as

BOXNHS  
12030345679

5. Above mentioned new wagon numbering scheme should be adopted for all newly manufactured wagons, whose marking particulars are issued by the zonal railways/CONCOR after the receipt of this letter.

Please acknowledge and confirm compliance.



24/7/03

( A. K. PUTHIA )

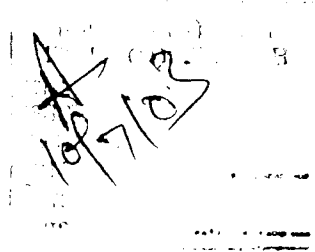
Executive Director, Mech. Engg. (Frt.)

Copy to :

1. CME(OL)/All Indian Railways -- for information and necessary action please.
2. COM/All Indian Railways -- for information and necessary action please.
3. GGM(Tech.)/CONCOR -- for information and necessary action please.
4. EDTT(M),ED(C&IS),EDRS(S), Railway Board for information & necessary action please.
5. ED(I&L)/RDSO -- to please ensure that wagons owned by private parties also follow the above numbering scheme henceforth.

Ok  
Please issue form  
K Gupta  
10/7/2003

10/7/03



ANNEXURE

NEW WAGON NUMBERING SCHEME-2003

1.0 As per the new scheme, the wagon number shall consist of 11 digits. First two digits will indicate 'Type of Wagon'. Next two digits will indicate 'Owning Railway'. Next two digits will indicate 'Year of Manufacture'. Next four digits will indicate 'Individual Wagon Number' and the last digit will be a 'Check digit'.

Type of wagon	Owning Rly	Year of manufacture	Individual Wagon Number	Check Digit
C1 C2	C3 C4	C5 C6	C7 C8 C9 C10	C11

2.0 TYPE OF WAGON CODES (C1,C2)

i) Open Wagon -

Code allotted 10 to 29

- BOXN - 10
- BOXNHA - 11
- BOXNHS - 12
- BOXNCR - 13
- BOXNLW - 14
- BOXNB - 15
- BOXNF - 16
- BOXNG - 17
- BOY - 18
- BOST - 19
- BOXNAL - 20
- BOSTHS - 21

BOXNHL - 22 ←

ii) Covered Wagon -

Code allotted 30 to 39

- BCNA - 30
- BCNAHS - 31
- BCCNR - 32

iii) Tank Wagon -

Code allotted 40 to 54

- BTPN - 40
- BTPNHS - 41
- BTPGLN - 42
- BTALN - 43
- BTCS - 44
- BTPH - 45
- BTAP - 46

iv) Flat Wagon -

Code allotted 55 to 69

- BRNA - 55
- BRNAHS - 56
- BFNS - 57
- BOMN - 58
- BRSTH - 59

- BFAT - 60
- BLCA - 61
- BLCB - 62
- BLLA - 63
- v) Hopper Wagon -
- BOBYN - 70
- BOBYNHS - 71
- BOBRN - 72
- BOBRNHS - 73
- BOBRAL - 74

BLLB - 64, BRS - 65, BFU - 66 ←  
 Code allotted 70 to 79  
 ← BRHNEHS - 67, BCL - 68,  
 BCLA - 69

vi) Well Wagon - Code allotted 80 to 84

- BWTB - 80
- MBWT - 81

DBKM - 82, MBWZ - 83 ←

vii) Brake Van - Code allotted 85 to 89

- BVZC - 85
- BVZI - 86

### 3.0 OWNERSHIP (RAILWAYS) CODES (C3,C4) :

Sl. No.	Name of Railways	Numerical codes
1	Central Railway	01
2	Eastern Railway	02
3	Northern Railway	03
4	North East Railway	04
5	Northeast Frontier Railway	05
6	Southern Railway	06
7	South Eastern Railway	07
8	Western Railway	08
9	South Central Railway	09
10	East Central Railway	10
11	North Western Railway	11
12	East Coast Railway	12
13	North Central Railway	13
14	South East Central Railway	14
15	South Western Railway	15
16	West Central Railway	16
17	Wagons owned by CONCOR	25
18	Wagons owned by other private parties	26
19	Wagons owned by Defence	24

### 4.0 YEAR OF MANUFACTURE CODE (C5,C6) :

This will consist of last two digits of the year of manufacture. For example wagon manufacture in 2016 will have code 16.

### 5.0 INDIVIDUAL WAGON No. (C7,C8,C9,C10) :

This will be running serial number from 0001 to 9999. Numbers 0001 to 0999 will be departmental stock and 1000 to 9999 will be for other (traffic) stock. This will be running number

irrespective of year. For departmental, after 9999, the number will begin from 0001. For others, after 9999, the number will begin from 1000.

The series will not change with type of wagon. For example, on ECR if 1001 is BOXNHS, next wagon which may be BCNHS will be 1002.

## 6.0 CHECK DIGIT – Method of calculation

The 'Check Digit' for each wagon is calculated using a six-step algorithm based on ten digit wagon number arrived at as indicated below.

Type of wagon		Railway Code		Year of manufacture		Individual Wagon Number				Check Digit
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11

Step – 1 Starting from the left, add all the Characters in the even position.  
 $S1 = C2 + C4 + C6 + C8 + C10$

Step – 2 Multiply the sum by 3 to get 3S1

Step – 3 Starting from the left, add all the Characters in the odd position.  
 $S2 = C1 + C3 + C5 + C7 + C9$

Step – 4 Add the sum of step 2 to the sum of step 3 to get  $S4 = 3S1 + S2$

Step – 5 Round this total up to the next multiple of 10.

Step – 6 The check digit is the number required to be added to round up to the next multiple of 10

*\*Note : If the total in S4 is already a multiple of 10, then the check digit is 0.*

## 7.0 EXAMPLES :

### 7.1

Type of wagon		Railway Code		Year of manufacture		Individual Wagon Number				Check Digit
1	2	0	3	0	3	4	5	6	7	9
BOXNHS		N Rly.		2003						

Step – 1 Starting from the left, add all the Characters in the even position.  
 $S1 = C2 + C4 + C6 + C8 + C10$   
 $S1 = 2 + 3 + 3 + 5 + 7 = 20$

Step – 2 Multiply the sum by 3 to get 3S1  
 $3S1 = 3 \times 20 = 60$

Step – 3 Starting from the left, add all the Characters in the odd position.  
 $S2 = C1 + C3 + C5 + C7 + C9$   
 $S2 = 1 + 0 + 0 + 4 + 6 = 11$

Step - 4 Add the sum of step 2 to the sum of step 3 to get  $S4 = 3S1 + S2$   
 $S4 = 60 + 11 = 71$

Step - 5 Round this total (S4) up to the next multiple of 10.  
 $71 + 9 = 80$

Step - 6 The check digit is the number required to be added to round up to the next multiple of 10. **Check digit is 9**

Therefore, the wagon number will be stenciled as :

**BOXNHS**  
**12030345679**

7.2

Type of wagon	Railway Code	Year of manufacture	Individual Wagon Number	Check Digit
3 1 BCNAHS	1 0 EC Rly.	1 6 2016	9 5 2 1	5

Step - 1 Starting from the left, add all the Characters in the even position.  
 $S1 = C2 + C4 + C6 + C8 + C10$   
 $S1 = 1+0+6+5+1 = 13$

Step - 2 Multiply the sum by 3 to get  $3S1$   
 $3S1 = 3 \times 13 = 39$

Step - 3 Starting from the left, add all the Characters in the odd position.  
 $S2 = C1 + C3 + C5 + C7 + C9$   
 $S2 = 3+1+1+9+2 = 16$

Step - 4 Add the sum of step 2 to the sum of step 3 to get  $S4 = 3S1 + S2$   
 $S4 = 39 + 16 = 55$

Step - 5 Round this total (S4) up to the next multiple of 10.  
 $55 + 5 = 60$

Step - 6 The check digit is the number required to be added to round up to the next multiple of 10. **Check digit is 5**

Therefore, the wagon number will be stenciled as :

**BCNAHS**  
**31101695215**

\*Note : If the total  $S4$  is already a multiple of 10, then the check digit is 0.

(A.K.PUTHIA)

Executive Director, Mech. Engg. (Frt.)