

I/75419/2025



भारत सरकार-रेल मंत्रालय
अनुसंधान अभिकल्प औरमानक संगठन
लखनऊ- 226011

E-mail: dse4group@gmail.com
Telephone : 2465754 & 42226(Rly)

Government of India - Ministry of Railways
Research, Designs & Standards Organization,
LUCKNOW – 226011



No. EL/3.1.10/1 (WLU)

Dated: As signed

Principal Chief Electrical Engineer,

1. Central Railway, Mumbai, CST-400 001.
2. East Central Railway, Hazipur-844101.
3. East Coast Railway, Chandrashekharapur, Bhubaneswar-751016.
4. Eastern Railway, Fairlie Place, Calcutta-700001.
5. North Central Railway, Block-A, Subedarganj, Allahabad- 211033.
6. Northern Railway, Baroda House, New Delhi-110001.
7. North Eastern Railway, Gorakhpur-273001.
8. South Central Railway, Secunderabad-500 071.
9. South East Central Railway, Bilaspur-495004.
10. South Eastern Railway, Garden Reach, Calcutta-700 043.
11. Southern Railway, Park Town, Chennai-600 003.
12. South Western Railway, Hubli-580020.
13. West Central Railway, Jabalpur-482001.
14. Western Railway, Churchgate, Mumbai-400 020
15. North East Frontier Railway, Maligaon, Guwahati-781011
16. North Western Railway, Jaipur- 302 006
17. Chittaranjan Locomotive Works, Chittaranjan - 713 331
18. Banaras Locomotive Works, Varanasi- 221004
19. Patiala locomotive Works, Patiyala- 147 003

Sub: Modification sheet no. RDSO/2025/EL/MS/0508, Rev. '0' dated 23.04.2025 for provision of Waterless Urinal in WAP-7 Three Phase Electric Locomotives.

Modification sheet no. RDSO/2025/EL/MS/0508, Rev. '0' dated 23.04.2025 for provision of Waterless Urinal in WAP-7 three phase electric locomotives has been issued and enclosed here with.

This is for kind information and necessary action please.

Encl: As above

Digitally Signed by Amit
Yadav (Amit Yadav)
Joint Director Standard Electrical
Date: 23-04-2025 18:55:16
Reason: Approved

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Modification Sheet No. RDSO/2025/EL/MS/0508, Rev. '0' Dated: 23.04.2025

1. TITLE:

Provision of Waterless Urinal in WAP-7 Three Phase Electric Locomotives.

2. Object:

Indian Railway has always endeavour to provide best in class facilities to the passengers. Provision of superior toilets in trains has been one of the key focus areas of Indian Railway. In the same pursuit, it becomes imminent for Indian Railway to provide safe and hygienic urinal facility to its Loco Pilots who are the fountain head of the exemplary services offered by Indian Railway to its passengers.

The Waterless Urinal in WAG-9HC locomotives are being provided in the space available near Cab-1 (LHS). Since there is no such required space (1050 L X 600 W X 1830 H) available in WAP-7 locomotives. Waterless urinal shall be installed at the space vacated by harmonic filter as per RDSO Modification Sheet No. RDSO/2024/EL/MS/0504, Rev. 1 dated 23.04.2025.

3. Modified Arrangement:

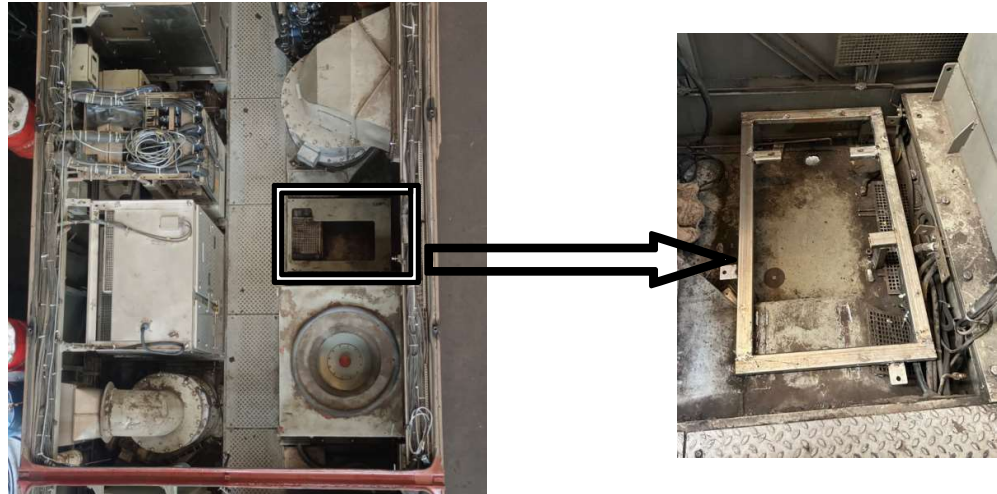
This scheme shall be applicable to those locomotives where Harmonic Filter can be removed as per RDSO Modification Sheet No. RDSO/2024/EL/MS/0504, Rev. 1 dated 23.04.2025 or latest. Waterless urinal

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shall be installed at vacated space on suitable mounting frame after removal of Harmonic Filter as annexure-I.

Work to be done

- i. Complete Harmonic filter cubicle shall be removed from the Loco and the Waterless Urinal shall be installed after providing the mounting frame. Shown as given below:



- ii. The Waterless Urinal mounting stand shall be as per drawing attached as annexure-II.
- iii. The design of urinal has been prepared for WAG9 locomotives with maximum permissible height of 1830 mm. However for fitment in WAP7 locomotives as per this modification sheet the vendor supplying urinals with height above 1750 mm will have to shorten the door from bottom by 40 mm and a U channel shall be provided to fit the waterless urinal as per drawing attached as annexure-III.
- iv. The discharge pipe for the waterless urinal shall be fitted beside wheel no. 6. The discharge pipe shall be secured with additional clamps as shown below.

**4. Material required:**

- i. 01 No. Waterless Urinal.
- ii. 01 No. Mounting Frame.
- iii. Drainage pipe as per requirement.
- iv. Clamp and Nut & Bolt as per requirement.

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- 5. Reference:** (i) FRS No. RDSO/2023/EL/FRS/0034 (Rev-01) or latest.
(ii) RDSO Modification Sheet No. RDSO/2024/EL/MS/0504, Rev. 1 dated 23.04.2025 or latest.

6. Applicable to class of Locomotives: WAP-7

7. Agency of Implementation: All POH workshop/Electric Loco Sheds/PUs

Encl: as above.

Digitally Signed by Amit

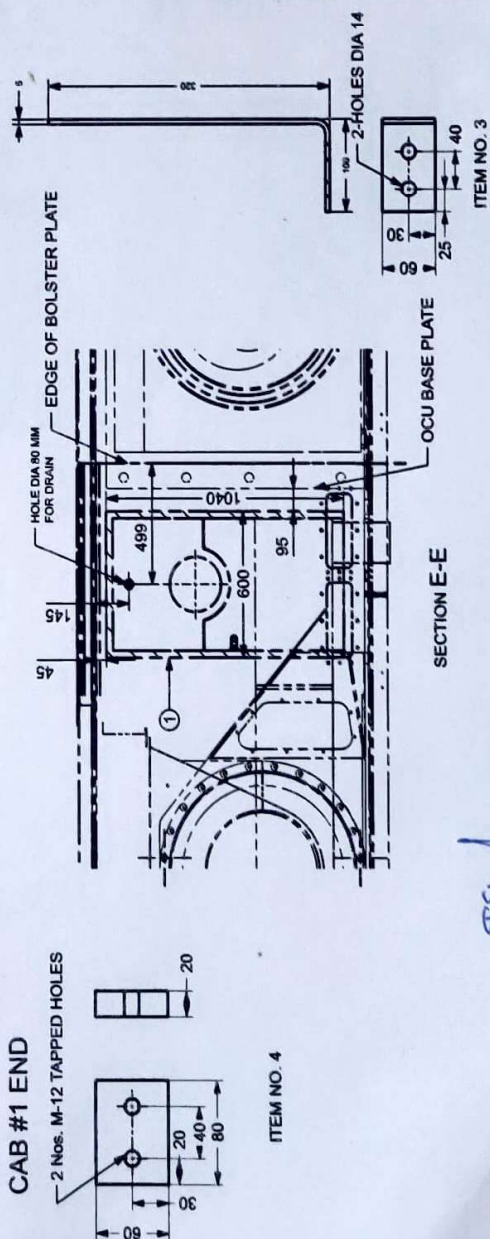
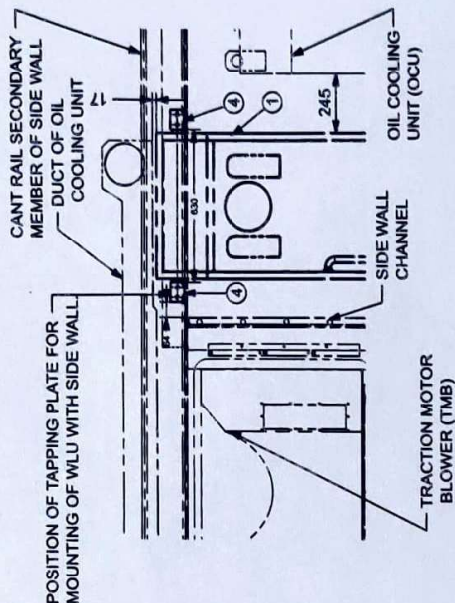
Yadav

Date: 23-04-2025 18:54:21

Reason: Approved

(Amit Yadav)
Joint Director Standard Electrical

Copy to: As per standard mailing list.



NO. OFF	DESCRIPTION & DIMENSION	ITEM	PART NO.	QTY./UNIT	MATERIAL	SPECIFICATION
4	FLAT WASHER M-12	5	-	-	STEEL	-
4	BOLT HEX M-12	5	-	-	STEEL	-
2	TAPPING PLATE (60 X 60 X 20 TH)	4	-	-	STEEL	151-2502, JPN S
2	BROCKET FOR BULL W/TS	3	-	-	STEEL	151-2502, JPN S
1	STAND FOR BULL W/TS, HEIGHT 15, 250 MM	1	-	-	STEEL	151-2502, JPN S
1	WATER LEAKS URINAL HAS PER 4050 PPS)	1	-	200 KG	S/L STEEL	151-2502, JPN S
	GROUP : SUPERSTRUCTURE			QTY./UNIT	MATERIAL	SPECIFICATION
				SUPERSTRUCTURE		

LAYOUT OF WLU FOR WAP7
IN PLACE OF CUBICAL FILTER
(SCHEME-I)

व.रे.का.

LOCOMOTIVE WORKS
VARANASI

ORG NO. ELSK - 170

ASST. PART NO.

AGE/BOLE

5

1

1

1

|

1

1

6

03-03-01

19

CHEN
CHEN

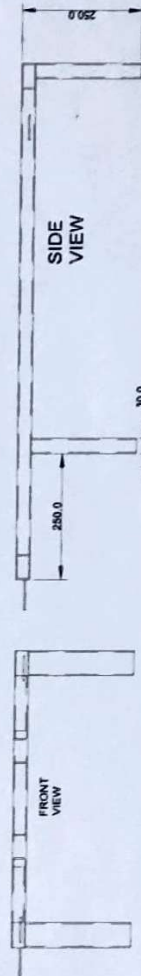
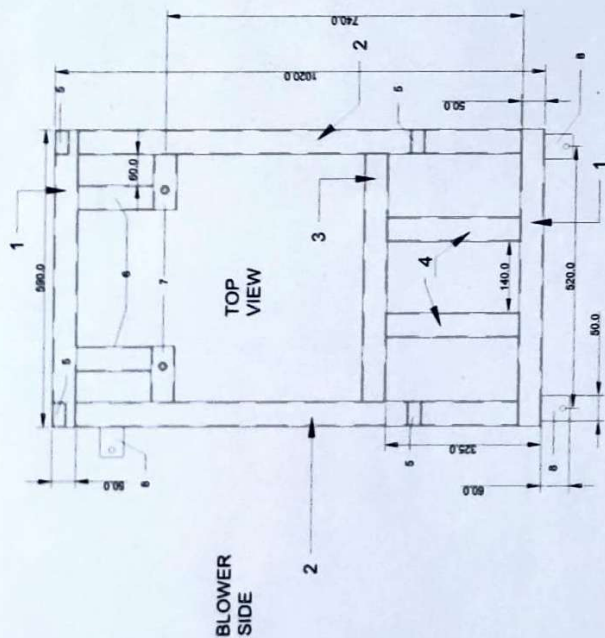
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Annexure-I

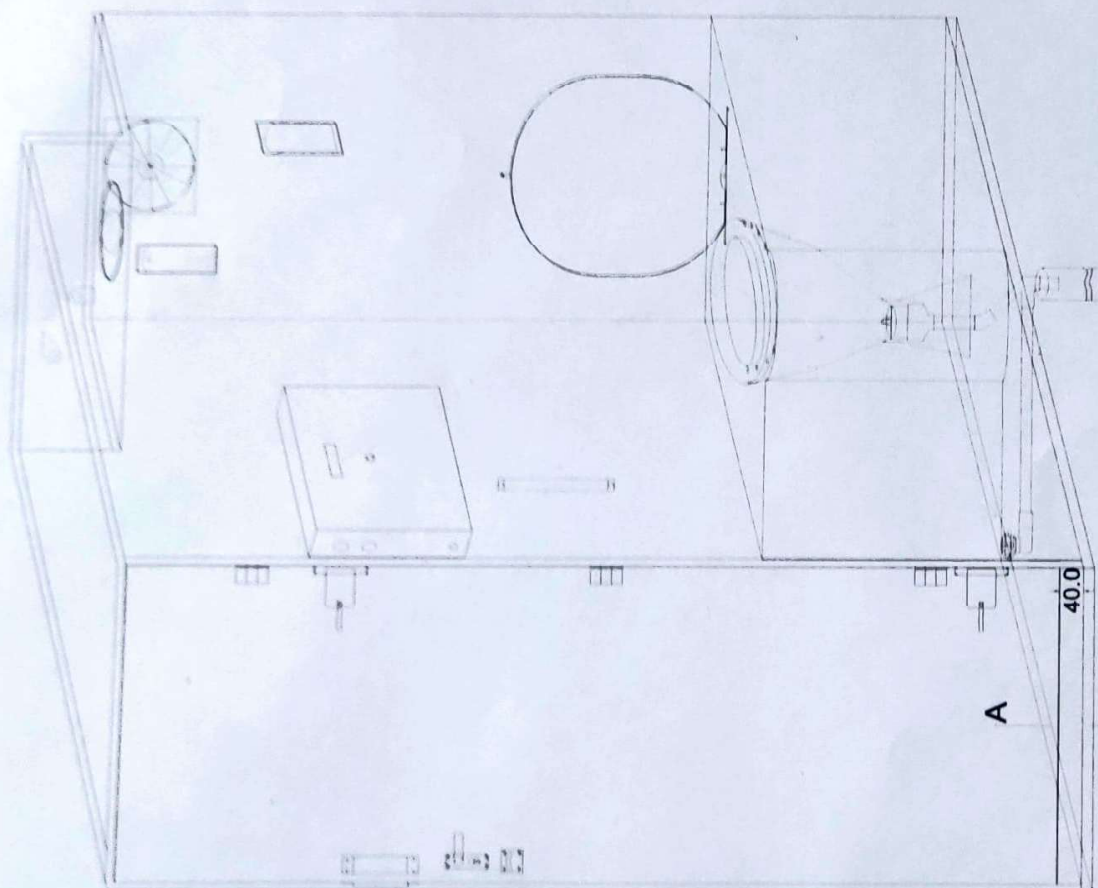
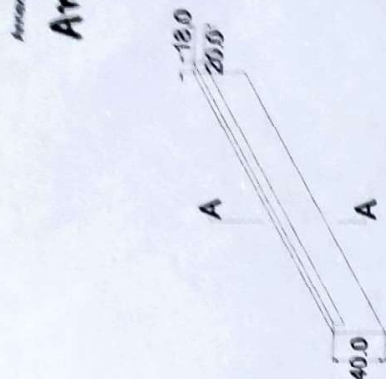


06	Bracket	03	4.0	60X50	SS304
07	Channel	02	3.0	25X50X110	SS304
06	Channel	02	3.0	25X50X155	SS304
05	Rectangular tube	04	3.0	30X50X220	SS304
04	Channel	02	3.0	25X50X275	SS304
03	Channel	01	3.0	25X50X490	SS304
02	Rectangular tube	01	3.0	30X50X920	SS304
01	Rectangular tube	01	3.0	30X50X590	SS304
SI	Description	Qty (in Nos.)	THK	SIZE	MAT./GR

STAINLESS STEEL.	ALL DIMENSIONS ARE IN MM.	WT.	SPECIFICATION
MATERIAL:	DESCRIPTION & DIMENSION	UNIT	
ASTM A240 GR. 304	BASE FOR WATERLESS URINAL FOR WAP7		

2021/09/16

Annexure-III



Sl. No.	Description	Qty. (in Thick Nos.)	SIZE	MAT. GR.
	MATERIAL:	ALL DIMENSIONS ARE IN MM.		
			DESCRIPTION & DIMENSION	SPECIFICATION
		Wt.	UNIT	
		WATERLESS URINAL FOR LOCOMOTIVES		

58nd
SS6/D1/Elect/18D80