

No. 96/M(C)/141/77

New Delhi, Dated 24.06.2024

General Managers,  
All Zonal Railways

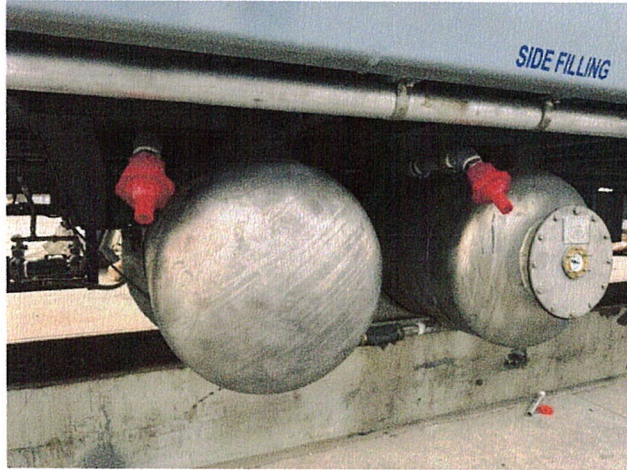
**Sub: Improvement in water filling arrangement in coaches**

Ref: i. Railway Board letter No. 96/M(C)/141/77 dated 20.05.2024  
ii. RCF CAI/RCF/MECH/LHB/061 dated 10/5/2024

In order to increase the water filling rate in LHB coaches, vide reference (i) above, all Zonal Railways were advised by Board to provide additional water filling arrangements in LHB coaches as per CAI issued by RCF vide reference (ii). Needless to mention, there is saving in the water filling time in coaches once this modification is carried out.

RCF was advised to procure and arrange to supply kits for carrying out the modification in 1000 LHB coaches for each Zonal Railway, and further all Zonal Railways were advised to plan and indent material beyond 1000 LHB coaches at their end.

**Zonal Railways should review the progress of the above modification regularly so as to complete the modification at the earliest.**



Additional water filling arrangement

  
(Satish Kumar)  
Member (T&RS)  
Railway Board

Copy to:

**GM/ RCF:-**

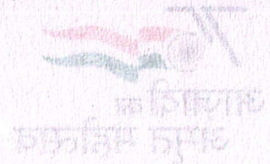
1. All coaches being turned out from RCF be modified.
2. Material as referred in para above be supplied at the earliest.

**GM/ICF & MCF:** All coaches being turned out from PUs be modified with additional water filling arrangement.





भारत सरकार  
रेलवे मंत्रालय  
रेलवे बोर्ड



New Delhi, Dated 24.08.2024

No. 2000/2024

General Manager,  
All Zonal Railways

Subject: Improvement in water filling arrangement in coaches

Ref: 1. Railway Board letter No. 2000/2024 dated 20.08.2024

2. RCF CARRIAGE MECHANICALS dated 10.08.2024

In order to increase the water filling rate in LHB coaches, vide reference (i) above, all Zonal Railways were advised by Board to provide additional water filling arrangements in LHB coaches as per CAI issued by RCF vide reference (ii). Needless to mention, there is saving in the water filling time in coaches once this modification is carried out.

RCF was advised to procure and arrange to supply kits for carrying out the modification in 1000 LHB coaches for each Zonal Railway, and further all Zonal Railways were advised to plan and indent material beyond 1000 LHB coaches at their end.

Zonal Railways should review the progress of the above modification regularly so as to complete the modification at the earliest.



Additional water filling arrangement

(Sd/-) Kumar  
Member (T&S)  
Railway Board

Copy for:

GM/RCF:-

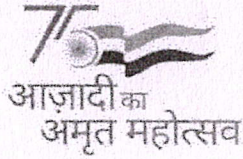
1. All coaches being turned out from RCF be modified.

2. Material as referred in para above be supplied at the earliest.

GM/CF & MCF: All coaches being turned out from PUs be modified with additional

water filling arrangement.





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



No. 96/M(C)/141/77

(E-Office 3435093)  
New Delhi, Dated 20.05.2024

General Managers  
RCF, ICF and MCF,  
All Zonal Railways

**Sub: Improvement in water filling arrangement in coaches**

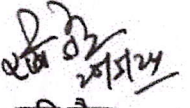
Ref: i. Railway Board letter No. 96/M(C)/141/77 dated 23.01.2024  
ii. RCF CAI/RCF/MECH/LHB/061 dated 10/5/2024  
iii. VC held on date 20.05.2024

Vide reference (ii) above, RCF has issued CAI for Retro fitment of Additional water filling arrangement in LHB type Coaches". As discussed during VC held on date, NR informed that trial for providing additional water filling arrangement has been carried out in 48 LHB coaches at NDLS Depot/NR, and the results of the trial were encouraging since the water-filling time requirement has gone down. NR also confirmed that the said modification can be carried out at the washing line itself, without need for detachment and coach placement at Sickline.

In view of the above, as discussed during the VC, the following instructions are issued to all PUs & Zonal Railways :

1. RCF should procure and arrange to supply kits for carrying out the modification in 1000 LHB coaches for each Zonal Railway, and
2. All Zonal Railways should immediately plan and indent material for said modification kits on priority beyond 1000 nos to be supplied by RCF.
3. All PUs should immediately cut in the modification in the new coaches being turned out.
4. All Zonal Railways should ensure that the modification is completed in all LHB coaches within the next 90 days. Zonal Railways may consider carrying out the modifications first in coaches plying in trains with maximum watering complaints, and then in the balance coaches, to the extent possible.
5. RDSO and RCF to submit the recommendations with respect to RB letter at (i) above at the earliest.

For necessary action please.

  
(रवि जैन)  
कार्य. निदेशक / यांत्रिक इंजी. को.  
रेलवे बोर्ड

C/- PED/RS/RDSO, PCME/RCF - For kind information and necessary action please.  
PCMEs/Au ZRs, PCME/ICF & MCF - "







**RAIL COACH FACTORY, KAPURTHALA**

**(Coach Alteration Instruction No. CAI/RCF/MECH/LHB/061)**

**MD46111**

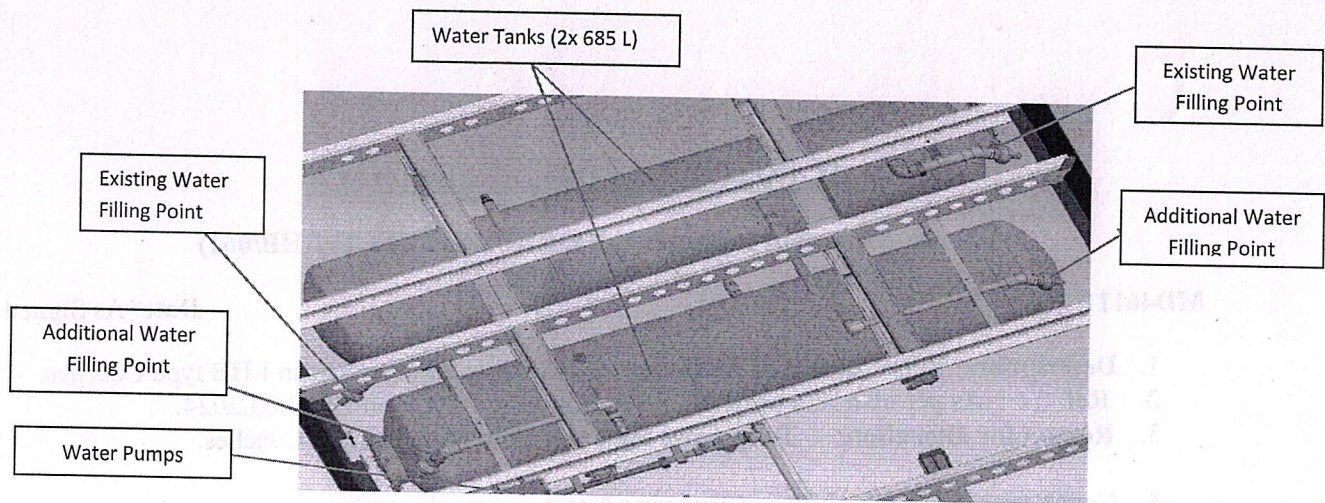
**Date:** As Signed

1. **Description:** Retro fitment of Additional water filling arrangement in LHB type Coaches.
2. **Ref** : As per instructions of MTRS during visit to RCF on Dt 29.03.2024.
3. **Reason for alteration:** To increase the water filling rate in LHB Coaches.

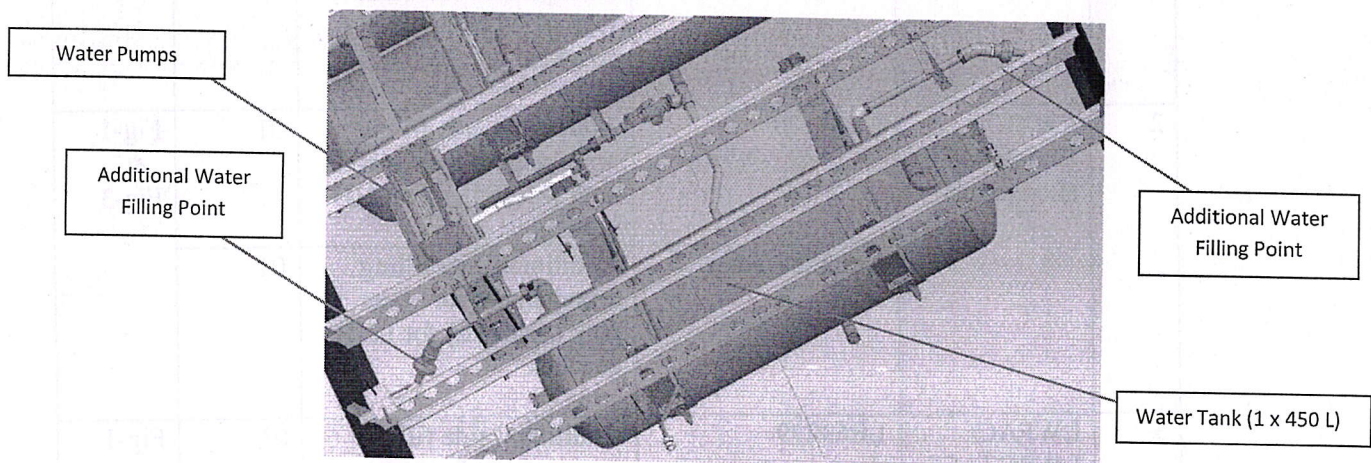
**4. Coach type & Applicability of Drawing No :**

S.No	Coach Type	Applicable Drawing No	Description	QPC	Fig
1	LWACCW/L WACCN/ LWCBAC	LE63279	Additional side filling arrangement for water tank (2X685L) for LHB coaches.	01	Fig-1 & Fig-2
		LE63280	Additional side filling arrangement for water tank (450L) for LHB coaches.	01	
2	LWSCN /LWACCNE (Economy)	LE63279	Additional side filling arrangement for water tank (2X685L) for LHB coaches.	01	Fig-1 & Fig-3
		LE63281 Alt-a	Additional side filling arrangement for water tank (1X685L) for LHB coaches.	01	
3	LWFAC/ LWSCZAC/ LWFCZAC	LE63279	Additional side filling arrangement for water tank (2X685L) for LHB coaches	01	Fig-1



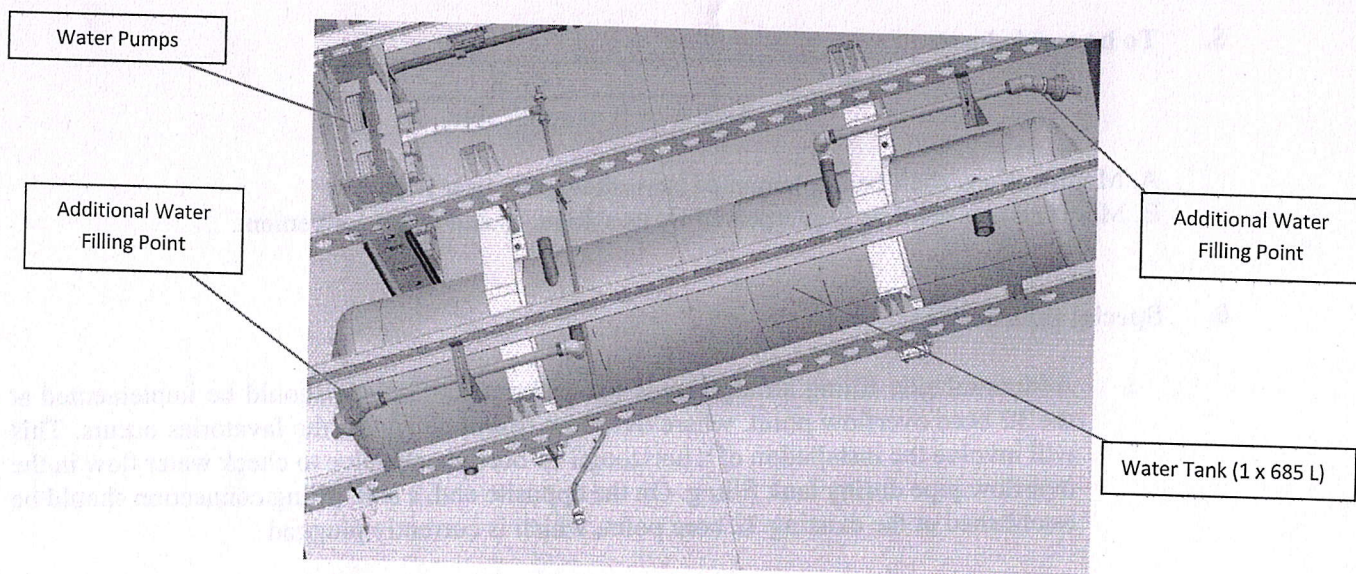


**Fig-1**

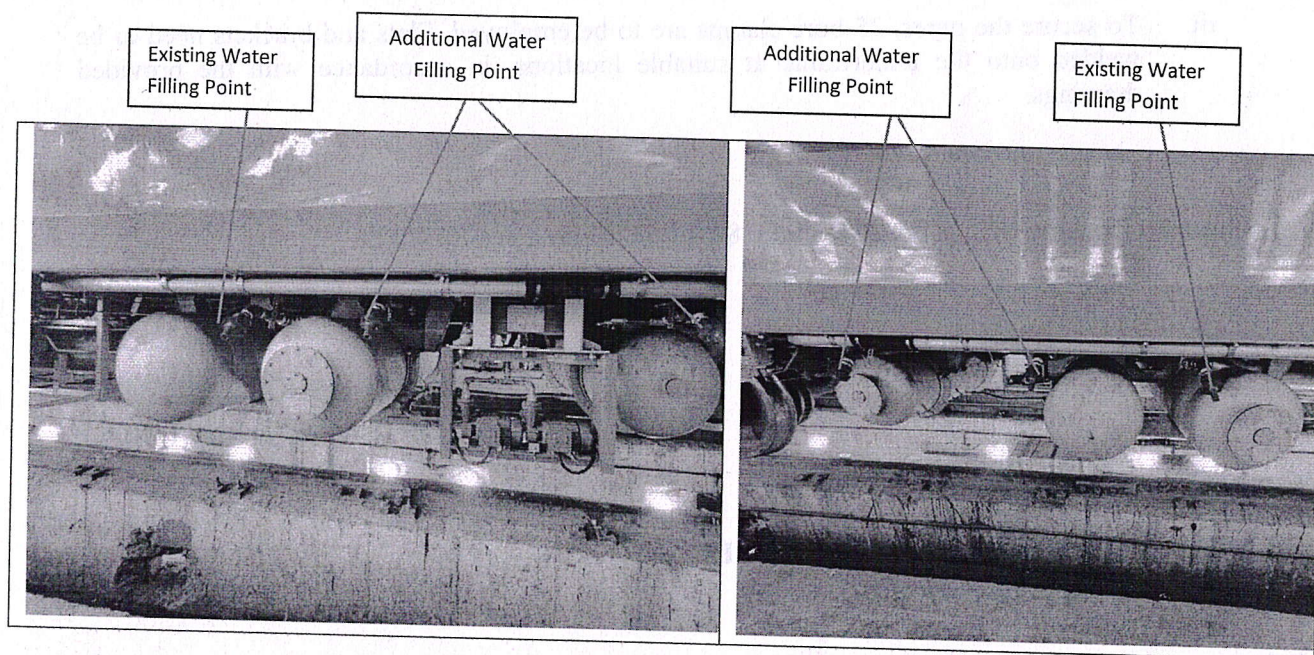


**Fig-2**





**Fig-3**



**Fig-4 (Water Filling arrangements fitted on LHB ACCN Coach)**



5. To be carried out:

A	✓ B
Tick A or B as applicable	

A. Modifications shall be implemented immediately by user Rlys.

B. Modifications shall be implemented by user Rlys. as and when convenient.

6. Special Instructions:

- i. Additional side filling arrangements for water tanks (2x685) should be implemented at the 32 bore overflow point, where overflow from one end of the lavatories occurs. This will involve the installation of a horizontal 15 bore check valve to check water flow in the overflow pipe during tank filling. On the opposite end, a side filling connection should be established at the existing 32 bore point, which is currently plugged.
- ii. For all filling arrangements outlined above, 25 bore stainless pipes must be utilized, along with appropriate hex bushings (32x25 bore, 40x25 bore, and 50x25 bore) as per the provided drawings.
- iii. To secure the pipes, 25 bore clamps are to be employed. Flats and brackets need to be welded onto the underframe at suitable locations, in accordance with the provided drawings.

**Enclosure:** Drawing Nos: LE63279, LE63280, LE63281 alt-a & LE63282

JUGAL KISHOR Digitally signed by JUGAL KISHOR  
Date: 2024.05.10 12:41:38 +05'30'  
For General Manager (Mech.)

**Copy to:**

**All Principal Chief Mechanical Engineers of IR**

**All Chief workshop Engineers of IR**

**Principal Chief Mechanical Engineers :**

1. Central Railway, Mumbai CST-400 001
2. W. Railway Churchgate, Mumbai - 400 020
3. Northern Railway, Baroda House, New Delhi- 110 001
4. N.E. Railway Gorakhpur., Gorakhpur-273 001
5. N.F. Railway Maligaon, Guwahati- 781 011
6. S. Railway, Park Town, Chennai- 600 003
7. S. C. Railway, Rail Nilayam, Secunderabad- 500 371



8. S. E. Railway, Garden Reach, Kolkata-700 043
9. Eastern Railway, Fairlie Place, Kolkata-700 001
10. E. Coast. Railway, Bhubhaneswar- 751 016
11. North Central Railway, Allahabad – 211 001
12. North West Railway, Jaipur – 302 001
13. S. E. Central Railway, Bilaspur- 495 004
14. S. W. Railway, Hubli – 580 023
15. West Central Railway, Jabalpur- 482 001
16. East Central Railway, Hazipur- 844 101

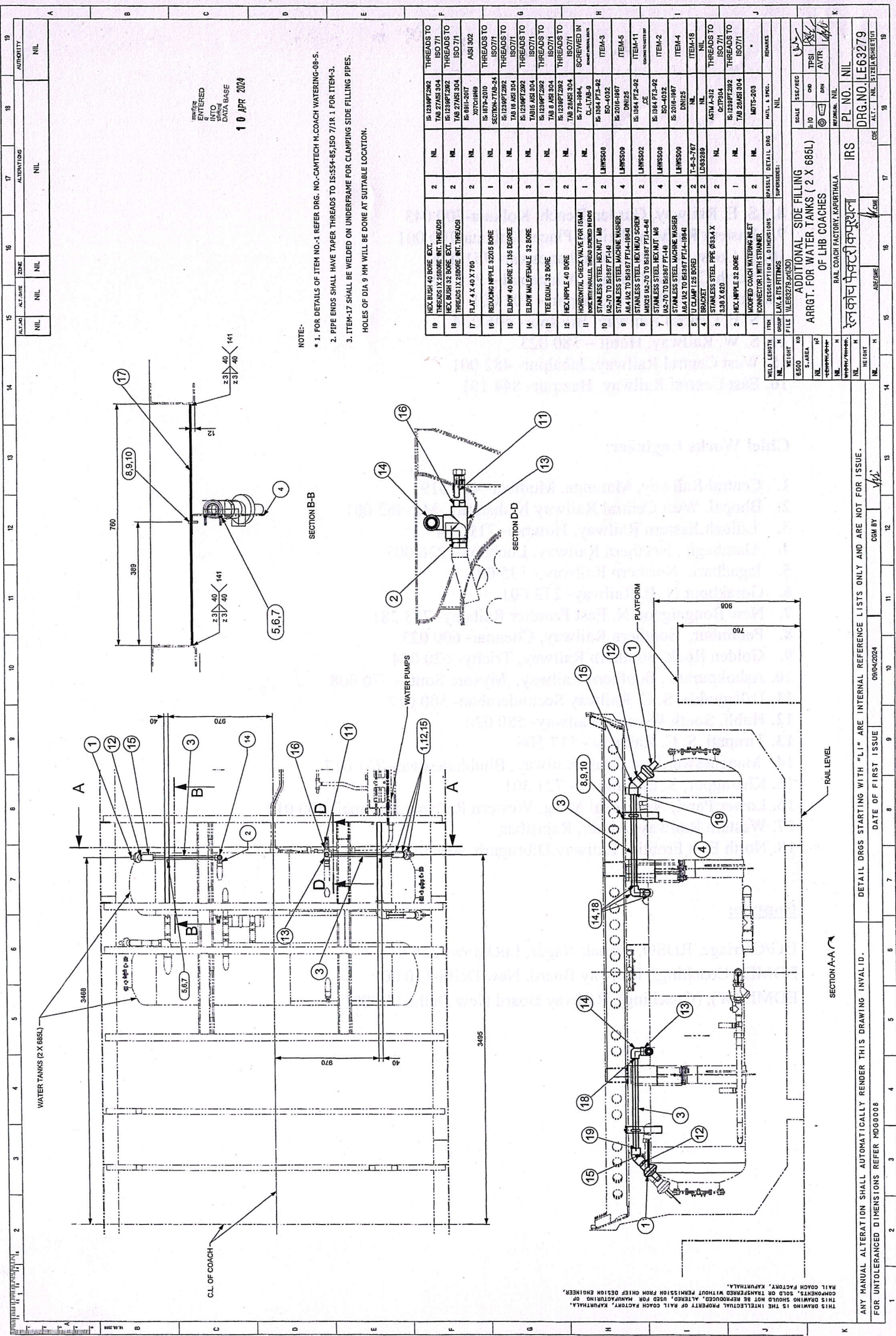
**Chief Works Engineer:**

1. Central Railway, Matunga, Mumbai- 400 019
2. Bhopal, West Central Railway Nishatpura, MP-462 001
3. Lilluah, Eastern Railway, Howrah- 711 204
4. Alambagh , Northern Railway, Lucknow- 226 005
5. Jagadhari, Northern Railway,- 135 003
6. Gorakhpur N. E. Railway- 273 001
7. New Bongaigaon N. East Frontier Railway- 783 381
8. Perambur, Southern Railway, Chennai- 600 023
9. Golden Rock, Southern Railway, Trichy- 620 004
10. Ashokpuram , Southern Railway, Mysore South- 570 008
11. Lallagudda, S. C. Railway Secunderabad- 500 017
12. Hubli, South Western Railway- 580 020
13. Tirupati ,S. C. Railway - 517 506
14. Mancheswar, East Coast Railway, Bhubhaneswar- 751 017
15. Kharagpur, S. E. Railway- 721 301
16. Lower Parel, N.M.Joshi Marg, Western Railway, Mumbai- 400 013
17. Western Railway, Ajmer, Rajasthan
18. North East Frontier Railway, Dibrugarh, Assam-786 001

**Copy to:**

DG/Carriage, RDSO, Manak Nagar, Lucknow- 226 011  
EDME (Coaching), Railway Board, New Delhi-110 001  
EDME (W), (Coaching), Railway Board New Delhi-110 001





NOTE:-

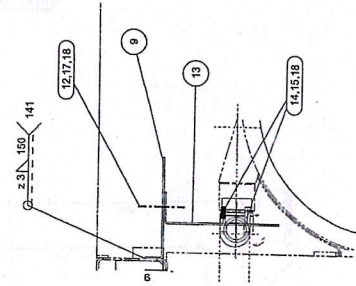
- \* 1. FOR DETAILS OF ITEM NO-1 REFER DRG. NO. CAMTECH M COACH WATERING-08-S.
- 2. PIPE ENDS SHALL HAVE TAPER THREADS TO IS:5545-85, ISO 7/18. 1 FOR ITEM-3.
- 3. ITEM-17 SHALL BE WELDED ON UNDERFRAME FOR CLAMPING SIDE FILLING PIPES.

HOLES OF DIA 9 MM WILL BE DONE AT SUITABLE LOCATION.

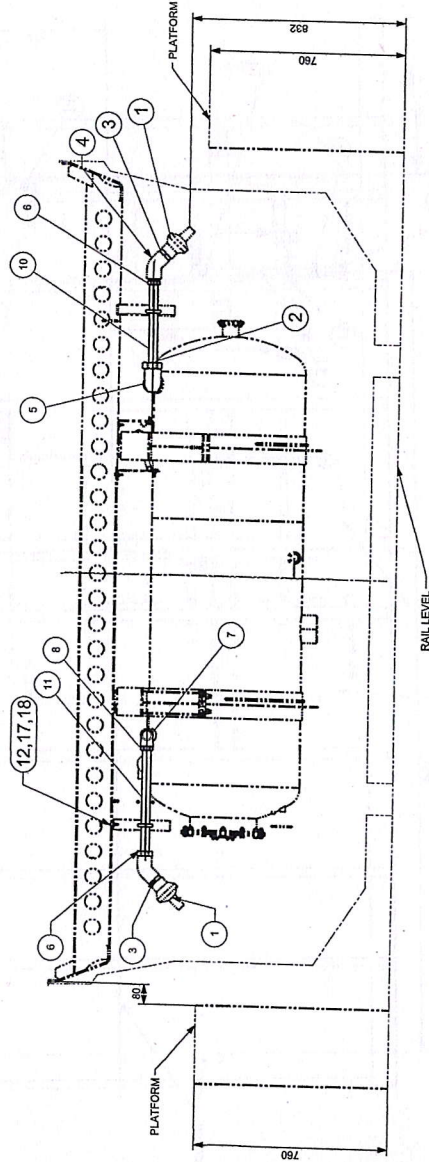
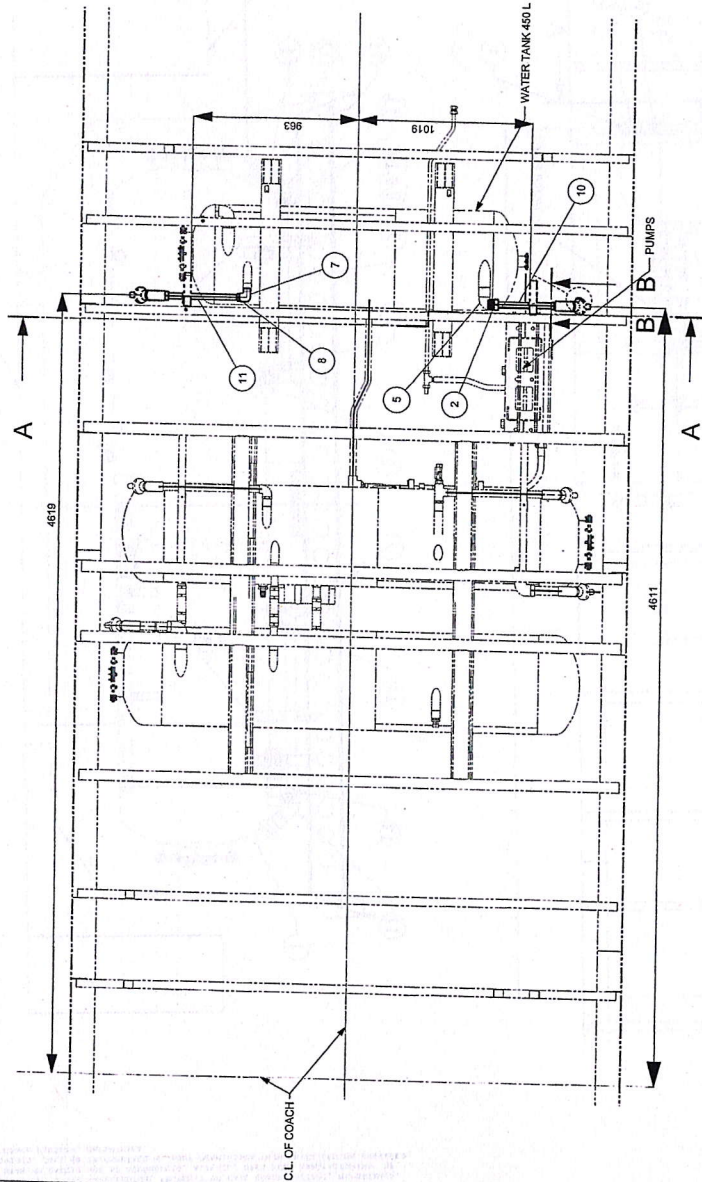
ITEM NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	WATER TANK (2 X 685L)	2	NL	
2	WATER PUMP	2	NL	
3	PIPE (1/2" X 40 X 700)	2	NL	
4	FLAT (1/2" X 40 X 700)	2	NL	
5	REDUCING NIPPLE (32X15 BORE)	1	NL	
6	ELBOW (40 BORE X 105 DEGREE)	2	NL	
7	ELBOW (40 BORE X 105 DEGREE)	2	NL	
8	TEE (40 BORE)	1	NL	
9	TEE (40 BORE)	1	NL	
10	TEE (40 BORE)	1	NL	
11	TEE (40 BORE)	1	NL	
12	TEE (40 BORE)	1	NL	
13	TEE (40 BORE)	1	NL	
14	TEE (40 BORE)	1	NL	
15	TEE (40 BORE)	1	NL	
16	TEE (40 BORE)	1	NL	
17	TEE (40 BORE)	1	NL	
18	TEE (40 BORE)	1	NL	
19	TEE (40 BORE)	1	NL	

PL NO.	NIL
DRG. NO.	LE63279
DATE OF FIRST ISSUE	09/04/2024
DATE OF LAST ISSUE	
DATE OF CANCELLATION	
DATE OF REVISION	
DATE OF APPROVAL	
DATE OF REVIEW	
DATE OF CHECK	
DATE OF DESIGN	
DATE OF DRAWING	
DATE OF PRINTING	
DATE OF DELIVERY	
DATE OF STORAGE	
DATE OF DISPOSAL	





SECTION B-B



SECTION A-A

NOTE:

- \* 1. FOR DETAILS OF ITEM NO-1 REFER DRG. NO-CANTECH M.COACH WATERING-08-S.
2. PIPE ENDS SHALL HAVE TAPER THREADS TO IS:554-85,ISO 7/1R 1 FOR ITEMS 10 & 11.
3. ITEM-3 SHALL BE WELDED ON UNDERFRAME FOR CLAMPING THE FILLING PIPES.

ITEM NO.	ITEM DESCRIPTION	QTY	ITEM NO.	ITEM DESCRIPTION	QTY
18	STAINLESS STEEL MACHINE WASHER A64 1/2 TO IS1987 PT14-18A41	4	19	STAINLESS STEEL MACHINE WASHER A64 1/2 TO IS1987 PT14-18A41	4
17	STAINLESS STEEL HEX HEAD SCREW M10X25 1/2 TO IS1987 PT14-18A41	2	20	STAINLESS STEEL HEX HEAD SCREW M10X25 1/2 TO IS1987 PT14-18A41	2
16	STAINLESS STEEL HEX NUT M8 1/2 TO IS1987 PT14-18A41	4	21	STAINLESS STEEL HEX NUT M8 1/2 TO IS1987 PT14-18A41	4
15	STAINLESS STEEL MACHINE WASHER A64 1/2 TO IS1987 PT14-18A41	4	22	STAINLESS STEEL MACHINE WASHER A64 1/2 TO IS1987 PT14-18A41	4
14	U-CLAMP 125 BORE	2	23	U-CLAMP 125 BORE	2
13	BRACKET	2	24	BRACKET	2
12	STAINLESS STEEL HEX NUT M8 1/2 TO IS1987 PT14-18A41	2	25	STAINLESS STEEL HEX NUT M8 1/2 TO IS1987 PT14-18A41	2
11	STAINLESS STEEL PIPE 93.3X4 1/2 TO IS1987 PT14-18A41	1	26	STAINLESS STEEL PIPE 93.3X4 1/2 TO IS1987 PT14-18A41	1
10	STAINLESS STEEL PIPE 93.3X4 1/2 TO IS1987 PT14-18A41	1	27	STAINLESS STEEL PIPE 93.3X4 1/2 TO IS1987 PT14-18A41	1
9	BRACKET	2	28	BRACKET	2
8	HEX BUSH 32X25 BORE	1	29	HEX BUSH 32X25 BORE	1
7	ELBOW MALE/FEMALE 32BORE	1	30	ELBOW MALE/FEMALE 32BORE	1
6	HEX BUSH 40X25 BORE	2	31	HEX BUSH 40X25 BORE	2
5	ELBOW MALE/FEMALE 40 BORE	1	32	ELBOW MALE/FEMALE 40 BORE	1
4	ELBOW 40 BORE X 1/2 BORE	2	33	ELBOW 40 BORE X 1/2 BORE	2
3	HEX NUT 40 BORE	2	34	HEX NUT 40 BORE	2
2	HEX BUSH 60X25 BORE	1	35	HEX BUSH 60X25 BORE	1
1	WATERING INLET CONNECTOR WITH STONER	2	36	WATERING INLET CONNECTOR WITH STONER	2

ADDITIONAL SIDE FILLING

ARRGT. FOR WATER TANK ( 1 X 450 )

RAIL COACH FACTORY, KAPURTHALA

PL NO. NIL

DRG. NO. ILE63280

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE

09/04/2024

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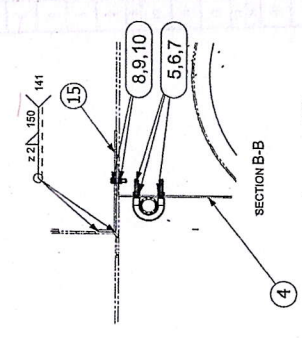
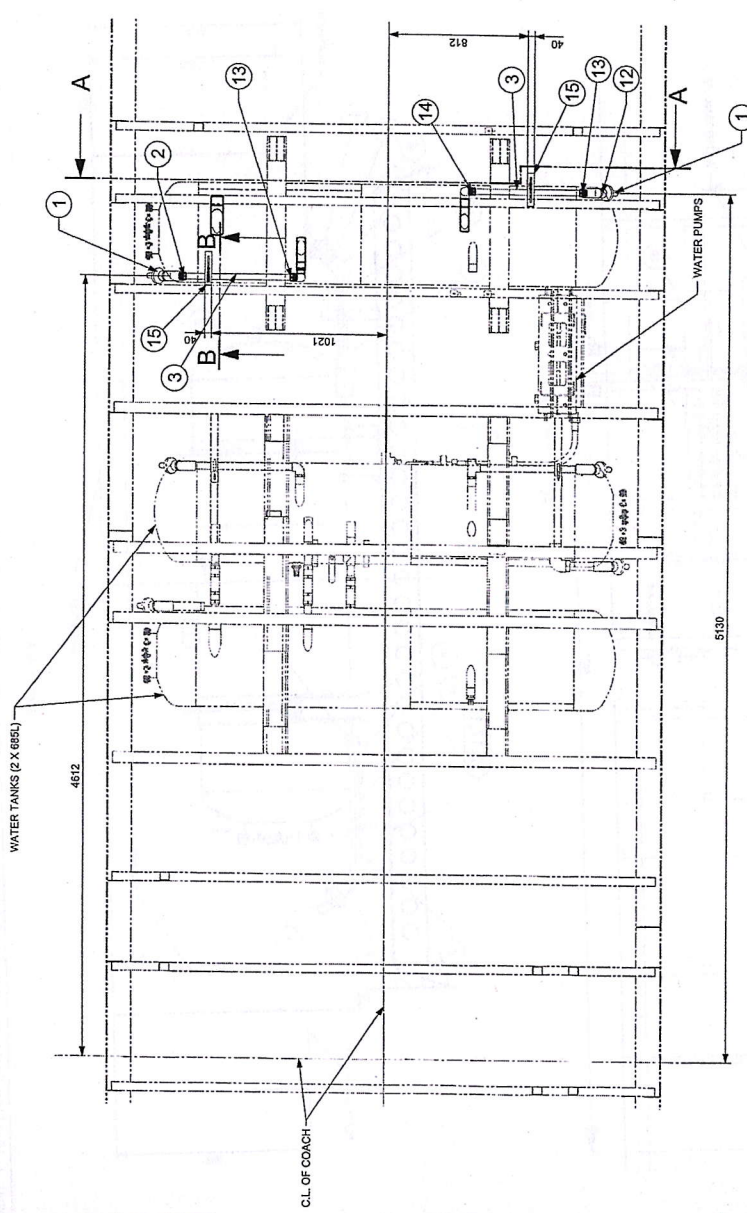
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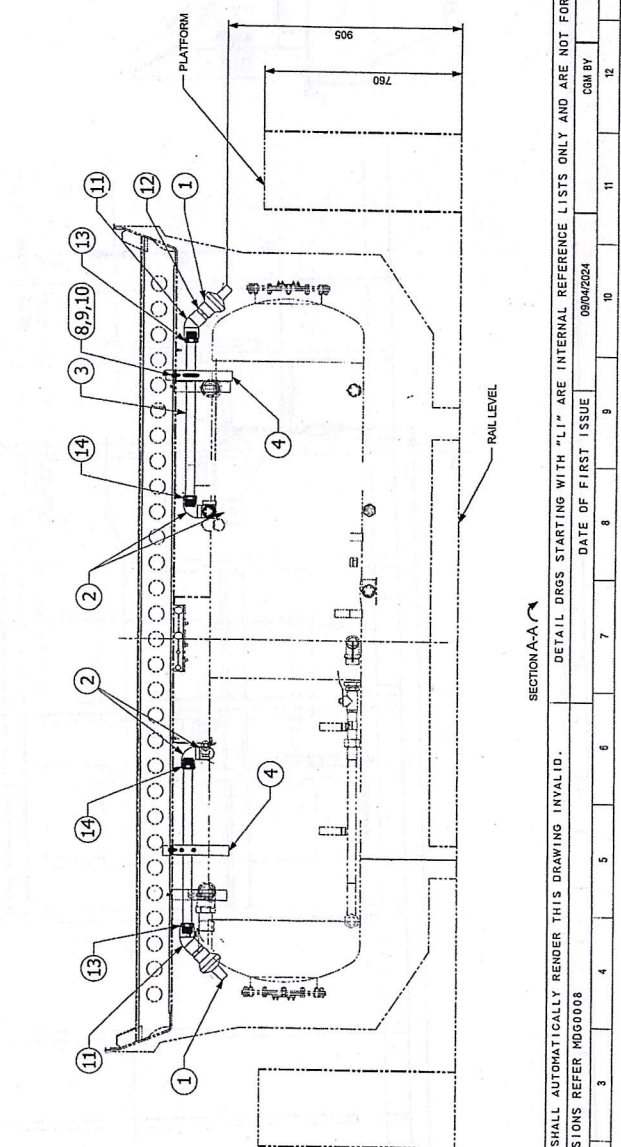


NOTE:-

- \* 1. FOR DETAILS OF ITEM NO.-1 REFER DRG. NO.-CAMTECH M.COACH WATERING-08-S.
- 2. PIPE ENDS SHALL HAVE TAPER THREADS TO IS:554-48, ISO 7/81 FOR ITEM-3.
- 3. ITEM-15 SHALL BE WELDED ON UNDER FRAME FOR CLAMPING PURPOSE.

ENTERED  
INTO  
DATA BASE  
17-06 MAY 2024

ITEM	GROUP	DESCRIPTION	QTY	UNIT	REMARKS
15	BRACKET	IS 12397/2002	2	LE63282	NIL
14	HEX BUSH 32 X 25 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
13	HEX BUSH 40 X 25 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
12	HEX NUT 40 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
11	ELBOW 40 BORE X 105 DEG	IS 12397/2002	2	NL	THREADS TO ISO 7/1
10	STAINLESS STEEL HEX NUT M8	IS 12397/2002	2	LHRS506	ITEM-3
9	STAINLESS STEEL MACHINE WASHER	IS 2016-1987	4	LHRS509	ITEM-5
8	STAINLESS STEEL HEX NUT M8	IS 12397/2002	2	LHRS502	ITEM-11
7	STAINLESS STEEL HEX NUT M8	IS 12397/2002	4	LHRS508	ITEM-2
6	STAINLESS STEEL MACHINE WASHER	IS 2016-1987	4	LHRS509	ITEM-4
5	U CLAMP 25 BORE	IS 12397/2002	2	7-6-3-767	ITEM-18
4	STAINLESS STEEL PIPE Ø33.4 X 3.18 X 680	IS 12397/2002	2	LHRS509	NIL
3	MALE ELBOW 32 BORE	IS 12397/2002	4	NL	THREADS TO ISO 7/1
2	MALE FEMALE ELBOW 32 BORE	IS 12397/2002	4	NL	THREADS TO ISO 7/1
1	CONNECTOR WITH STRAINER	IS 12397/2002	2	NL	ITEMS-203



ITEM	GROUP	DESCRIPTION	QTY	UNIT	REMARKS
1	CONNECTOR WITH STRAINER	IS 12397/2002	2	NL	ITEMS-203
2	MALE FEMALE ELBOW 32 BORE	IS 12397/2002	4	NL	THREADS TO ISO 7/1
3	MALE ELBOW 32 BORE	IS 12397/2002	4	NL	THREADS TO ISO 7/1
4	STAINLESS STEEL PIPE Ø33.4 X 3.18 X 680	IS 12397/2002	2	LHRS509	NIL
5	U CLAMP 25 BORE	IS 12397/2002	2	7-6-3-767	ITEM-18
6	STAINLESS STEEL MACHINE WASHER	IS 2016-1987	4	LHRS509	ITEM-4
7	STAINLESS STEEL HEX NUT M8	IS 12397/2002	4	LHRS508	ITEM-2
8	STAINLESS STEEL HEX NUT M8	IS 12397/2002	2	LHRS502	ITEM-11
9	STAINLESS STEEL MACHINE WASHER	IS 2016-1987	4	LHRS509	ITEM-5
10	STAINLESS STEEL HEX NUT M8	IS 12397/2002	2	LHRS506	ITEM-3
11	ELBOW 40 BORE X 105 DEG	IS 12397/2002	2	NL	THREADS TO ISO 7/1
12	HEX NUT 40 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
13	HEX BUSH 40 X 25 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
14	HEX BUSH 32 X 25 BORE	IS 12397/2002	2	NL	THREADS TO ISO 7/1
15	BRACKET	IS 12397/2002	2	LE63282	NIL

ARRGT. FOR WATER TANK (1 X 685L)

PL NO. NIL

DRG. NO. LE63281

DATE OF FIRST ISSUE 09/04/2024

COM BY

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DATE OF FIRST ISSUE 09/04/2024

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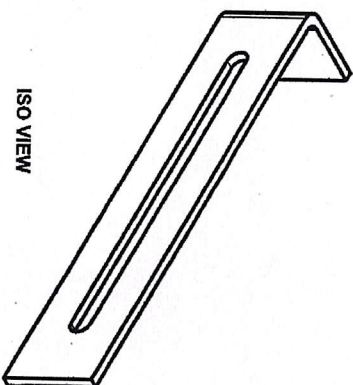
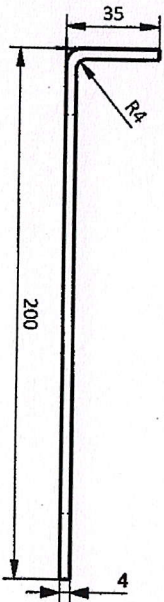
Technical drawing of a U-shaped metal part. The drawing shows two views: a side view and a front view.

**Side View (Left):**

- Overall height: 200
- Top flange width: 35
- Bottom flange width: 4
- Inner radius:  $R4$

**Front View (Right):**

- Overall width: 40
- Top flange width: 20
- Inner radius:  $R4.5$
- Bottom flange width: 9
- Overall depth: 150
- Top flange thickness: 25



**ISO VIEW**

**BENDING LINE**

**DEVELOPED VIEW (FOR REF. ONLY)**

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NIL SHEET 4X35X228		NIL	NIL	IS:6971-92	AI SI-304
X04C-19N19					
WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS	QTY ASSY	DETAIL DWG
NIL	M	GROUP	LAVATORY & ITS FITTINGS	SUPERSERIES:	NIL
WEIGHT	KG	FILE	NIL E63282.prt (3D)		
S. AREA					
NIL	M2				
BRACKET					
RAL COACH FACTORY, KAPURTHALA					
NIL	N				
रैन कोच फैक्टरी कपूरथला					
NIL	M	IRS			
ADD/NAME					
NIL	M	CDE			
DRG. NO.		PL NO.		NIL	
LE63282		1:1		TPSI	
S12E3A SHEET 1/1		DRI		SAND	

आकाशिया  
ENTERED  
में  
INTO  
प्रविष्टियां  
DATA BASE

2024

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FUR UNIDLERANCED DIMENSIONS REFER MDG0008	DATE OF FIRST ISSUE	08/04/2024
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CGM BY

HE 1081

रत्नकोच फेक्टरी कपूरभाना

707C057	DNV.NO
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