

RAIL COACH FACTORY, KAPURTHALA
(Coach Alteration Instruction)

CAI/RCF/MECH/R-SS/008

MD46251

Date: 06.05.06

1. **Description:** Provision of Gravity Taps and release of space above wash basin in FRP lavatory modules of RCF Stainless Steel coaches (Rajdhani Rake).

2. **Drawing No:**

S. No.	Description	Drawing No. & alt
1	Pipe Laying for water at Lavatory euro2	LW63171 alt 'b'
2	Pipe Laying for water at Lavatory euro1	LW63174 alt 'a'
3	Pipe Laying for water at Lavatory orient1	LW63175 alt 'a'
4	Pipe Laying for water at Lavatory orient2	LW63176 alt 'a'
5	Flap RH mounting for water piping	LW63184 alt. nil
6	Flap LH mounting for water piping	LW63185 alt. nil
7	Mirror RH mounting	LW63182 alt. nil
8	Mirror LH mounting	LW63183 alt. nil
9	Mirror	LW63181 alt 'nil'
10	Flap for water piping	LW63186 alt 'nil'
11	Flap for water piping	LW63187 alt 'nil'
12	Lavatory light fitting with CFL	LW76033 alt 'a'

3. **Alteration:** 1 Provision of Gravity Taps in place of Solenoid Magnetic Valve controlled Water Taps.
2 Relocation / replacement of tube light and mirror.

4. **Reason for alteration:** 1 To improve the water supply and flow of water in Lavatories.
2 To provide proper head space above sink includes: larger size mirror, relocation of tap, relocation of lavatory light.

5. **Coach type:** RCF Stainless Steel coaches.

6. **To be carried out:** During IOH/POH or unscheduled repair in sick line.

7. **Special Instructions:**

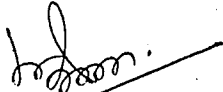
a. **Dismantling:**

- Complete piping assembly of Lavatory
- Existing mirror with holders
- Existing complete lavatory light cover with fittings such as; light, light cover, electrics etc.

b. **Assembling:**

- Fill-up the existing holes in FRP with FRP resin and touch up with paint to MDTs-118.
- Drill suitable size holes to fit blind rivet nuts at indicated locations in drawings for securing components.
 - Blind rivet nut sizes are:
 - For mirror use blind rivet nut M8; drawing no. LW63182 and LW63183

- b. For tube light use blind rivet nut M5
 - c. For piping use blind rivet nut M6 as per drawing no LW63171, LW63174, LW63175 and LW 63176 for respective lavatories.
 - d. For flap mounting use blind rivet nut M4 & M5 as required in drawing no. LW63184, LW63185
- iii. Piping to be made as per drawing nos LW63171, LW63174, LW63175 AND LW63176 for respective lavatories
- iv. Flap for piping is to be provided as per drawing Nos: LW63184 alt. nil, LW63185 alt. nil, LW63186 alt. nil, LW63187 alt. nil.
- v. Replace the mirror and tube light as per modified design as per details given in the drawing no.s LW63181, LW63182, and LW63183.

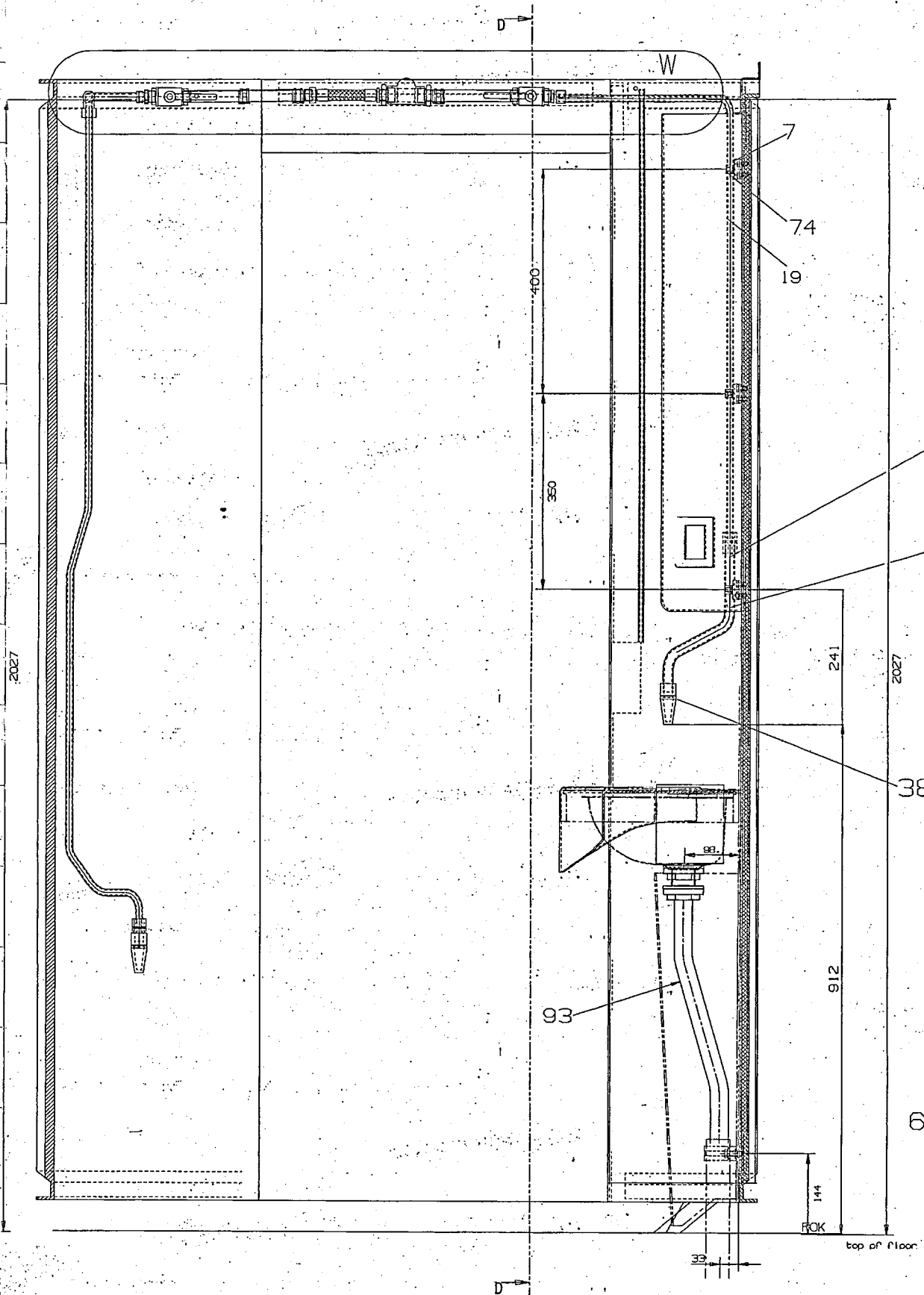

For General Manager (Mech.)

Encls:

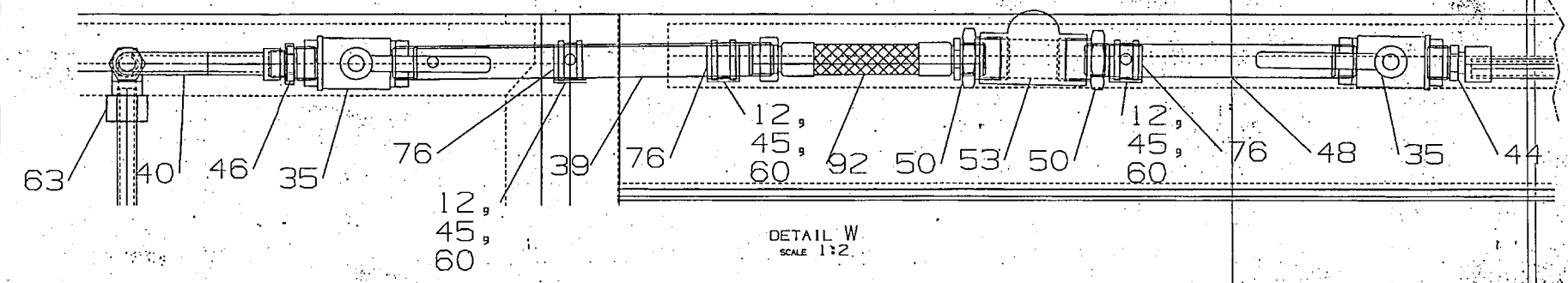
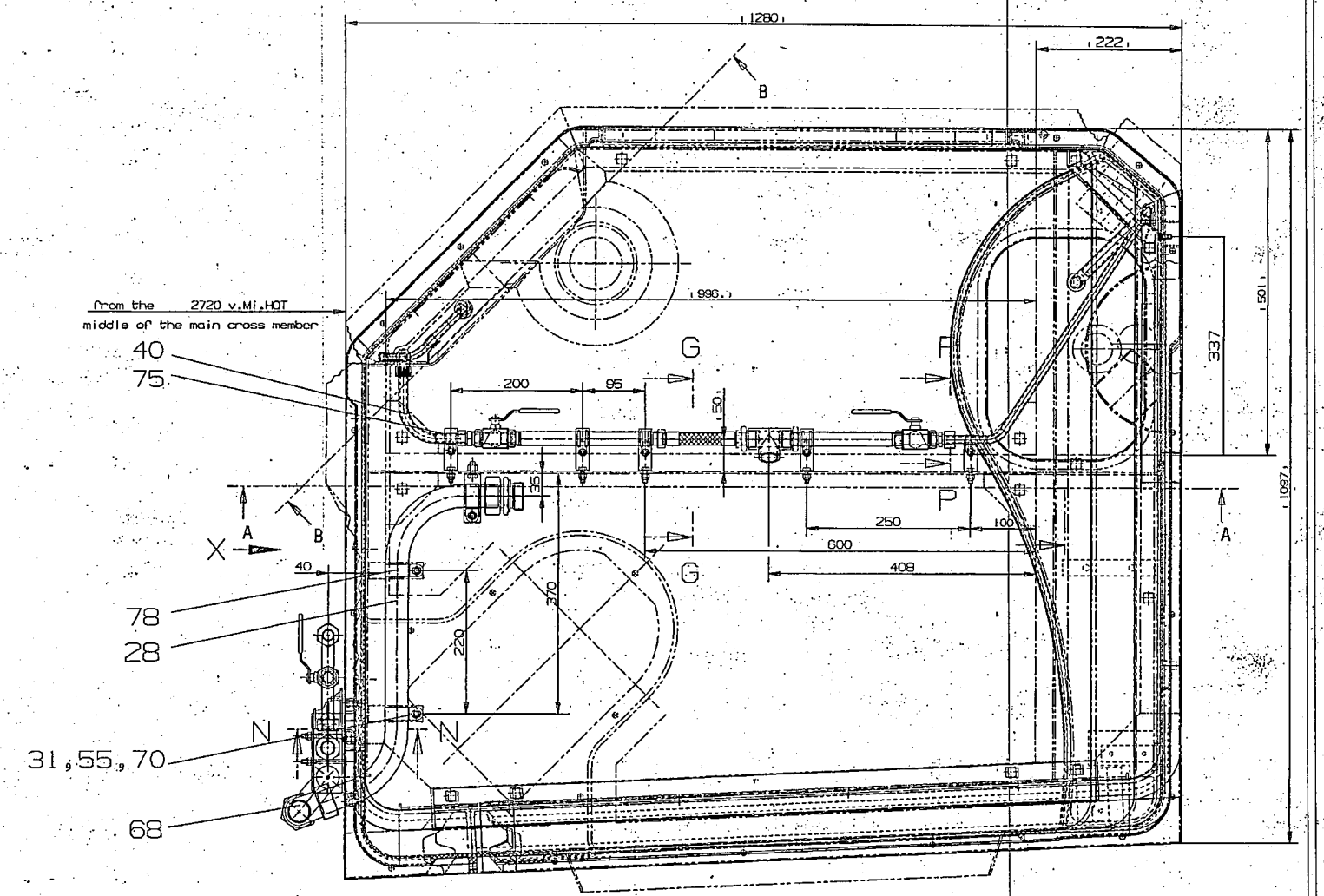
LW63171 alt 'b'
LW63174 alt 'a'
LW63175 alt 'a'
LW63176 alt 'a'
LW63184 alt. nil
LW63185 alt. nil
LW63182 alt. nil
LW63183 alt. nil
LW63181 alt 'nil'
LW63186 alt. 'nil'
LW63187 alt. 'nil'
LW76033 alt ~~'a'~~ 'a'

Chief Mechanical Engineer/Western Railway
Chief Mechanical Engineer/Eastern Railway

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SECTION A-A
SCALE 1:5



DETAIL W
SCALE 1:2

SCANNED

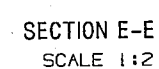
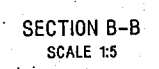
1 FEB 2005

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OR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.
DATE OF FIRST ISSUE 24/02/2004 CGM BY

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	SPASSLY	DETAIL DRG	HATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING			NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63171b.prt (3D)				
NIL	KG					
S. AREA						
NIL	M ²					
LENGTH/DTA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

PIPE LAYING FOR WATER	SCALE	SSE/REC	DRN
AT LAVATORY EURO2 FOR LHB TYPE COACHES	1:5	CHD	
RAIL COACH FACTORY, KAPURTHALA			
INDIAN RAILWAYS STANDARD			
REF.DRG No. 1 10113.0.30.100.008			
PL NO. NIL			
DRG.NO. LW63171			
ALT. 1	SIZE A	SHEET 1/4	



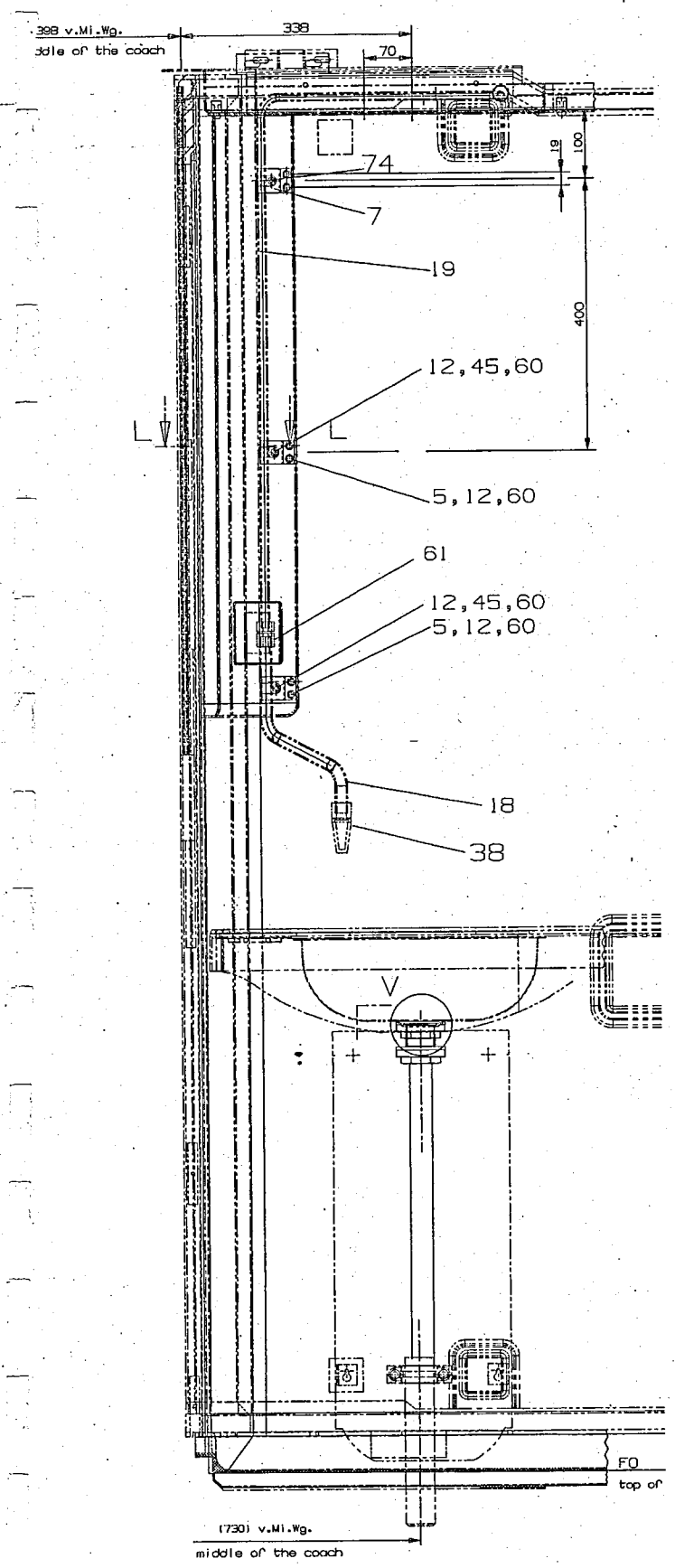
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NIL	M	GROUP	LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NASDEV\ASSLY\LW\lw6317\l.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER				
S.AREA	AT LAVATORY EURO2 FOR LHB TYPE COACHES					
NIL						M ²
LENGTH/DIA	RAIL COACH FACTORY, KAPURTHALA				REF.DRG.NO. 1 10113-0-30.100.006	
NIL	M	INDIAN RAILWAYS STANDARD				PL NO. NIL
WIDTH/THICK.	DRG.NO. LW63171					
NIL						M
HEIGHT	ADE/SME		DY.CME		CDE	ALT. b SIZE A1 SHEET 2/4
NIL	M					

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UNINTOLERANCED DIMENSIONS REFER MDG0008

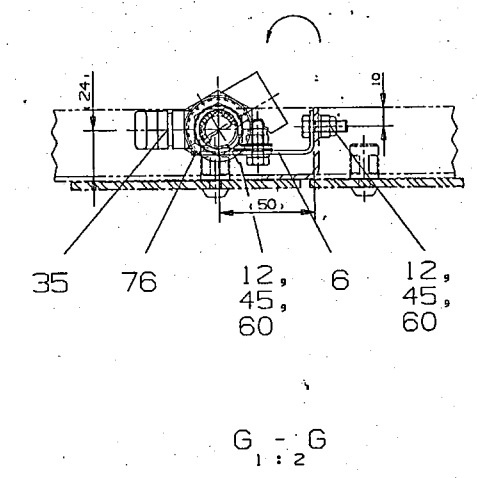
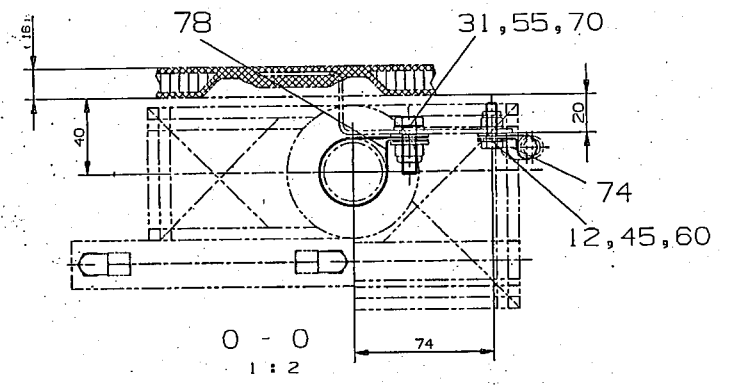
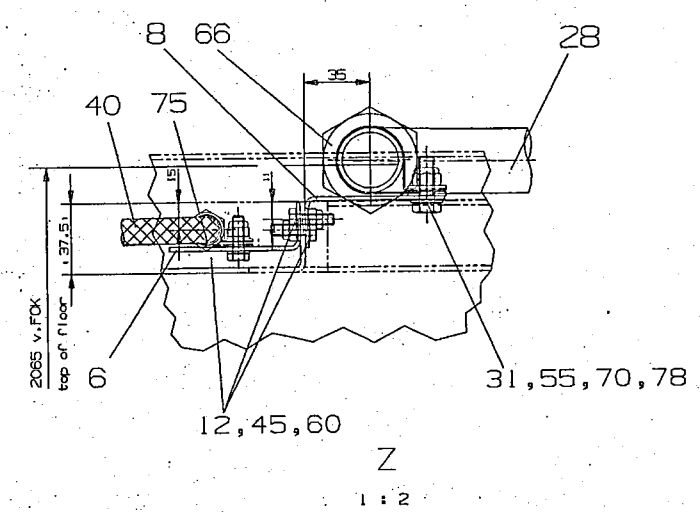
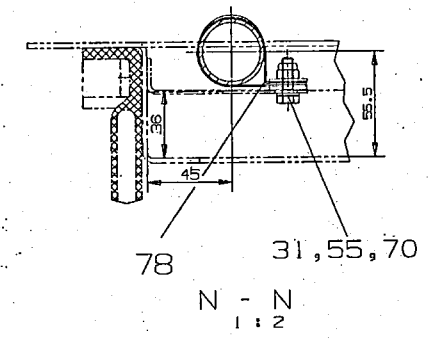
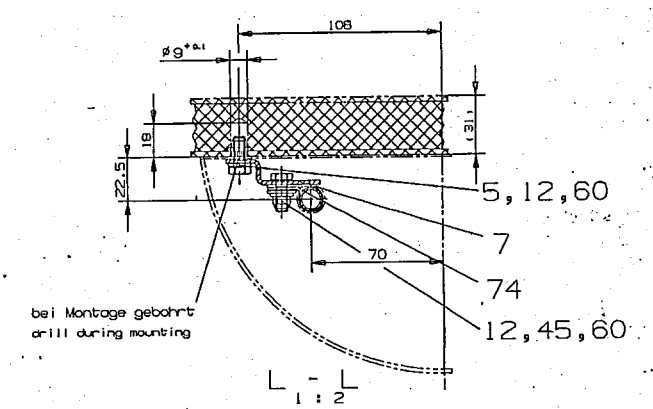
DETAIL ORGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.			
DATE OF FIRST ISSUE	24/02/2004	CGM BY	<i>[Signature]</i>

6/4

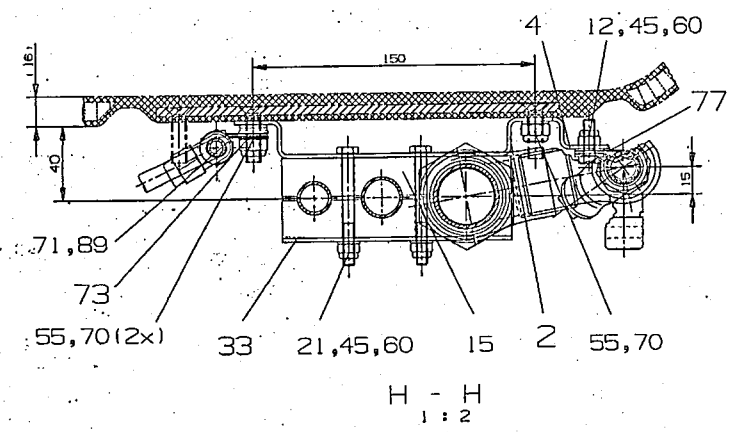
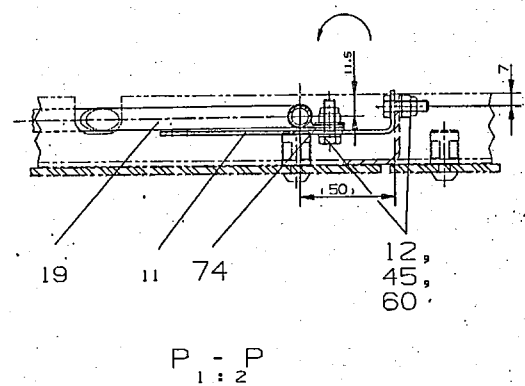
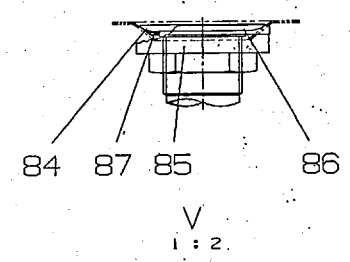
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
ALT.NO	ALT.DATE	ZONE	ALTERATIONS														AUTHORITY	



SECTION D-D
SCALE 1:5



Entered
into
Date Base
1 FEB 2005



WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63171b.prt (3D)			
NIL	KG	PIPE LAYING FOR WATER		SCALE	SSE/REC
NIL	M ²	AT LAVATORY EURO2 FOR LHB TYPE COACHES		1:5	CHD
LENGTH/STK.	M	RAIL COACH FACTORY, KAPURTHALA		DRN	
WIDTH/THICK.	M	INDIAN RAILWAYS STANDARD		REF.DWG. No. 1 10113:0:30.100.005	
NIL	M			PL NO.	NIL
HEIGHT	M			DRG.NO.	LW63171
NIL	M			ALT.	b
				SIZE	A1 SHEET 3/4

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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Entered
2-10
Date Draw
1 FEB 2005

93	DRAIN PIPE WITH INTEGRATED (CONNECTING SOCKET 1/4" BSP LENGTH 1.5 IN. EXPRINGLES)	1	NIL	PVC	it should	56	FEMALE STUD COUPLING	1	NIL	6A112LR1/2KEG71 ERMETO	NIL
92	CONNECTION FLEXIBLE HOSE 1/2"x140	1	LW63112	NIL	Item no.3	55	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS4367 PT.14-1984)	41	L1HW5509	IS: 2016-1967 DIN125	ITEM-4
91	SEALING RING LORO DN40	1	NIL	ART.NO.913X DN 40	FA.LORO	59	UNION 3/4" UII	1	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1
90	SUPPORTING BUSH	1	NIL	SO 5.0003-12-9	FA.JACOB	58	UNION 1/2" UII	2	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1
89	SUPPORTING BUSH - Ø 7.9X15	1	NIL	SO 5.0003-10-0	FA.JACOB	57	SCREW JOINT 12-3/8"	1	NIL	SOS.1121	NIL
88	WATER TRAP FOR WASH BASIN OUTFLOW	1	4EUR001.4. 30.025.003	NIL	NIL	56	ELBOW M/F 25 BORE	1	NIL	IS: 1239-92(P12) TAB.15.A1S1304	THREADS ISO-7/1
87	SEALING 2X42X50	2	NIL	CENTELEN, WS3820 08GZ	Z.b.Hecker	54	REDUCING BRANCH TEE 32X25	1	NIL	IS: 1239-92(P12) TAB.15.A1S1304	THREADS ISO-7/1
86	CONICLE NIPPLE F.WASH BASIN OUTFLOW	1	STW563.14. 048	NIL	NIL	53	EQUAL TEE 20 BORE	1	NIL	IS: 1239-92(P12) TAB.8.A1S1304	THREADS ISO-7/1
85	CONICLE NIPPLE NUT F.WASH BASIN OUTFLOW	1	4FWP291.0. 30.025.011	NIL	NIL	52	SOCKET 15 BORE	1	NIL	IS: 1239-92(P12) TAB.6.A1S1304	NIL
84	VENT CASING F.WASH BASIN OUTFLOW	1	FWP087.30. 025.20	NIL	FA.KTG	51	HEXAGON REDUCTION DOUBLE NIPPLE 1"x3/8"	1	LW63101	NIL	NIL
83	HOSE BAND CLIP MIKALOR-SUPRA	2	NIL	0301311-2 40-43, W4	NIL	50	HEXAGON BUSH 20X15	2	NIL	IS: 1239-92(P12) TAB.27.A1S1304	THREADS ISO-7/1
82	FIXING CLIP	1	NIL	DIN3016 G1-46X15, W4	NIL	49	PIPE DOUBLE NIPPLE 10X60	1	NIL	IS: 1239-92(P12) TAB.2.A1S1304	THREADS ISO-7/1
81	FIXING CLIP	1	NIL	DIN3016 G1-43X9, W4	NIL	48	PIPE Ø 21.34X2.77X170	1	NIL	ASTM A-312 Gr. TP304	THREADS ISO-7/1
80	PIPE BRACKET 19X6.6	1	LW63103	NIL	NIL	47	REDUCTION DOUBLE NIPPLE 1/2"x1/4"	2	NIL	IS: 1879-87, TAB.7.2.A1S1304	THREADS ISO-7/1
79	FIXING CLIP	1	NIL	DIN3016 F1-43X20, W4	NIL	46	REDUCTION DOUBLE NIPPLE 1/2"x3/8"	1	NIL	IS: 1879-87, TAB.7.2.A1S1304	THREADS ISO-7/1
78	FIXING CLIP	4	NIL	DIN3016 A1-35X20, W4	NIL	45	STAINLESS STEEL NYLOC NUT M5 (A2-70 TO IS4367 PT.14)	35	L1HW5508	IS: 7002-1991 DIN982	ITEM-7 COATING TO MOT5 057
77	FIXING CLIP	1	NIL	DIN3016 A1-17X15, W4	NIL	44	MALE STUD COUPLING	2	NIL	6A112LR1/2KEG71 ERMETO	NIL
76	FIXING CLIP	3	NIL	DIN3016 D1-19X15, W4	NIL	43	FILTER 3/8"	1	LW63100	NIL	ITEM-2
75	FIXING CLIP	1	NIL	DIN3016 A1-15X15, W4	NIL	42	FILTER 1/4"	2	LW63100	NIL	NIL
74	FIXING CLIP	9	NIL	DIN3016 A1-12X15, W4	NIL	41	HOSE 35X4X100	1	NIL	DIN73411 ELASTOMER	NIL
73	FIXING CLIP	1	NIL	DIN3016 D1-11X20, W4	NIL	40	CONNECTION HOSE FLEXIBLE 3/8"x175	1	LW63112	NIL	ITEM-4
72	BOW 30 DEGREE	1	LW63130	NIL	NIL	39	PIPE Ø 21.34X2.77X235	1	NIL	ASTM A-312 Gr. TP304	Threads ISO 7/1
71	SCREW JOINT	1	NIL	SOS.2021-10 JACOB	NIL	38	GRAVITY COCK 15 BORE	2	LW63170	NIL	NIL
70	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS4367 PT.14-1984)	28	L1HW5509	IS: 2016-1967 DIN125	ITEM-5	37	STAINLESS STEEL HEX HEAD SCREW M6X30 (A2-70 TO IS4367 PT.14-84)	2	L1HW5502	IS: 1364 PT.2-92 CE	ITEM-12 COATING TO MOT5 057
69	UNION	1	NIL	G10L71 ERMETO	NIL	36	BALL VALVE 3/8"	1	LW63106	NIL	ITEM-2
68	UNION ELBOW	1	NIL	W35L71 ERMETO	NIL	35	BALL VALVE 1/2"	3	LW63106	NIL	ITEM-3
67	TEE REDUCTION	1	NIL	TR22/18/22L71 ERMETO	NIL	34	PLATE	1	4 10113.0. 30.095.061	NIL	NIL
66	MALE STUD CONNECTOR	3	NIL	GE35LR71 ERMETO	NIL	33	PLATE	1	4 10113.0. 30.095.060	NIL	NIL
65	MALE STUD COUPLING	2	NIL	GE22LR3/4KEG71 ERMETO	NIL	32	PLATE	1	4 10113.0. 30.095.059	NIL	NIL
64	MALE STUD COUPLING	6	NIL	GE18LR1/2KEG71 ERMETO	NIL	31	STAINLESS STEEL HEX HEAD SCREW M6X20 (A2-70 TO IS4367 PT.14-84)	2	L1HW5502	IS: 1364 PT.2-92 CE	ITEM-10 COATING TO MOT5 057
63	MALE STUD ELBOW	1	NIL	WE12LR71 ERMETO	NIL	30	ANGLE PIPE	1	3 10113.0. 30.140.007	NIL	NIL
62	MALE STUD COUPLING	1	NIL	GE12LR1/4KEG71 ERMETO	NIL	29	PIPE Ø 00 35X2X165	1	NIL	DIN2462	DIN17456 X5CrNi1810
61	MALE STUD COUPLING	1	NIL	GE12LR1/4KEG71 ERMETO	NIL	28	PIPE	1	3 10113.R. 30.135.002	NIL	NIL
60	MALE STUD COUPLING	2	NIL	GE12LR1/4KEG71 ERMETO	NIL	27	PIPE	1	3 10113.R. 30.135.003	NIL	NIL
59	MALE STUD COUPLING	6	NIL	WE12LR71 ERMETO	NIL	26	PIPE	1	3 10113.R. 30.118.007	NIL	NIL
58	MALE STUD COUPLING	1	NIL	GE12LR1/4KEG71 ERMETO	NIL	25	PIPE	1	3 10113.R. 30.122.001	NIL	NIL

24	PIPE	1	3 10113.R. 30.118.001	NIL	NIL
23	SUPPORT BLOCK	1	4 10113.0. 30.095.089	NIL	NIL
22	SUPPORT BLOCK	1	4 10113.0. 30.095.065	NIL	NIL
21	STAINLESS STEEL HEX HEAD SCREW M6X50 (A2-70 TO IS4367 PT.14-84)	10	L1HW5502	IS: 1364 PT.2-92 CE	ITEM-9 COATING TO MOT5 057
20	PIPE	1	3 10113.R. 30.112.006	NIL	NIL
19	PIPE	1	LW63180	NIL	NIL
18	PIPE	1	LW63169	NIL	NIL
17	PIPE	1	3 10113.R. 30.110.002	NIL	NIL
16	MOULDED CLIP	1	3 10113.0. 30.095.064	NIL	NIL
15	MOULDED CLIP	3	3 10113.0. 30.095.063	NIL	NIL
14	MOULDED CLIP	1	3 10113.0. 30.095.062	NIL	NIL
13	STAINLESS STEEL HEX HEAD SCREW M6X35 (A2-70 TO IS4367 PT.14-84)	2	L1HW5502	IS: 1364 PT.2-92 CE	ITEM-8 COATING TO MOT5 057
12	STAINLESS STEEL HEX HEAD SCREW M6X20 (A2-70 TO IS4367 PT.14-84)	23	L1HW5502	IS: 1364 PT.2-92 CE	ITEM-5 COATING TO MOT5 057
11	BRACKET	1	3 10113.0. 30.095.094	NIL	NIL
10	BRACKET	1	3 10113.0. 30.095.088	NIL	NIL
9	BLIND RIVET NUT M6	2	NIL	BEST. NR. 23307060035	FA.BOLLHOFF
8	BRACKET	1	3 10113.0. 30.095.058	NIL	NIL
7	BRACKET	3	3 10113.0. 30.095.057	NIL	NIL
6	BRACKET	4	3 10113.0. 30.095.056	NIL	NIL
5	BLIND RIVET NUT M6	6	NIL	BEST. NR. 23307060045	FA.BOLLHOFF
4	BRACKET	1	3 10113.0. 30.095.054	NIL	NIL
3	BRACKET	1	3 10113.0. 30.095.053	NIL	NIL
2	BRACKET	2	3 10113.0. 30.095.052	NIL	NIL
1	BRACKET	1	3 10113.0. 30.095.051	NIL	NIL

NOTE:-
For all connections between the thread fittings of noncorroding steel the external threads have to be wrapped with (hempl and covered with (sealing paste) before they are screwed in.
All screw connections/ bolt connections, with or without nuts, of stainless steel that are not to be secured with (loctite) have to be greased with (molykote) prior to be screwed in.

WELD LENGTH
NIL
WEIGHT
NIL
S. AREA
NIL
LENGTH/DIA
NIL
WIDTH/THICK.
NIL
HEIGHT
NIL

ITEM
M
GROUP
FILE
N
M
M
M
M
M

DESCRIPTION & DIMENSIONS
LAVATORY & ITS FITTING
PIPE LAYING FOR WATER
AT LAVATORY EURO2 FOR LHB TYPE COACHES
RAIL COACH FACTORY, KAPURTHALA
INDIAN RAILWAYS STANDARD

OPASSLY
DETAIL DRG
SUPERSEDES:
NIL

MATL. & SPEC.
NIL

REMARKS
NIL

SCALE
1:5
CHD
DRN

REF.DRG.No. 1 10113.0.30.100.008

PL NO. NIL
DRG.NO. LW63171

DATE OF FIRST ISSUE
24/02/2004

CGM BY
[Signature]

DATE
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BY CME
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CDE
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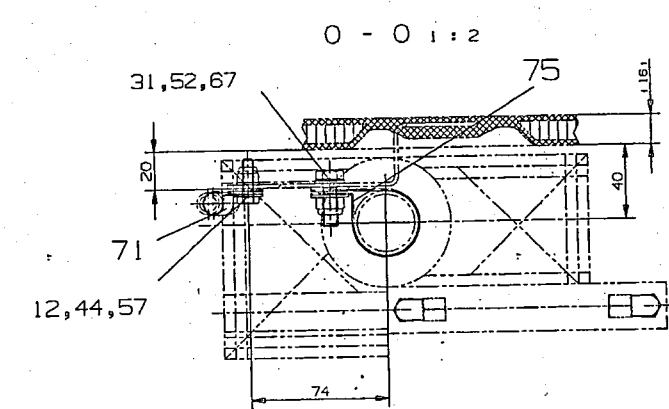
ALT. b

SIZE A1 SHEET 4/4

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

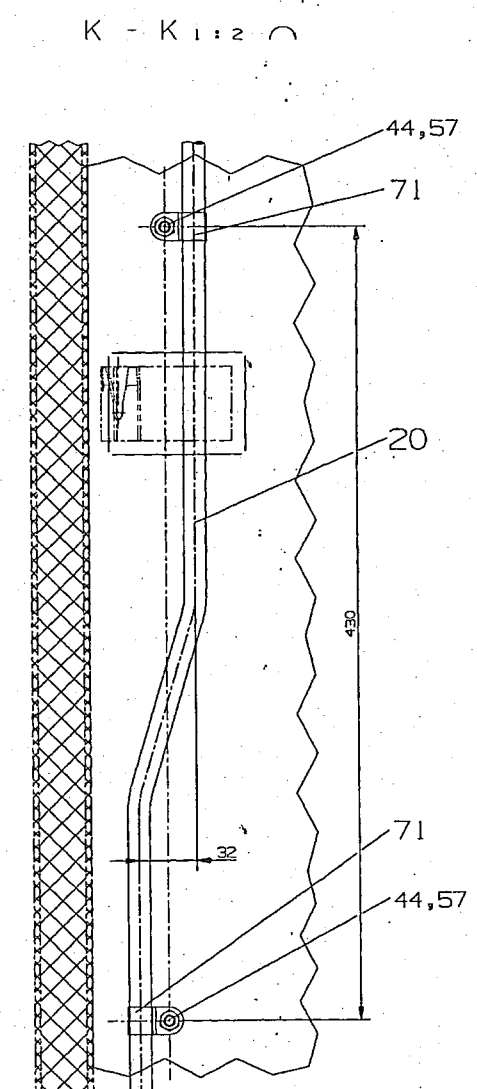
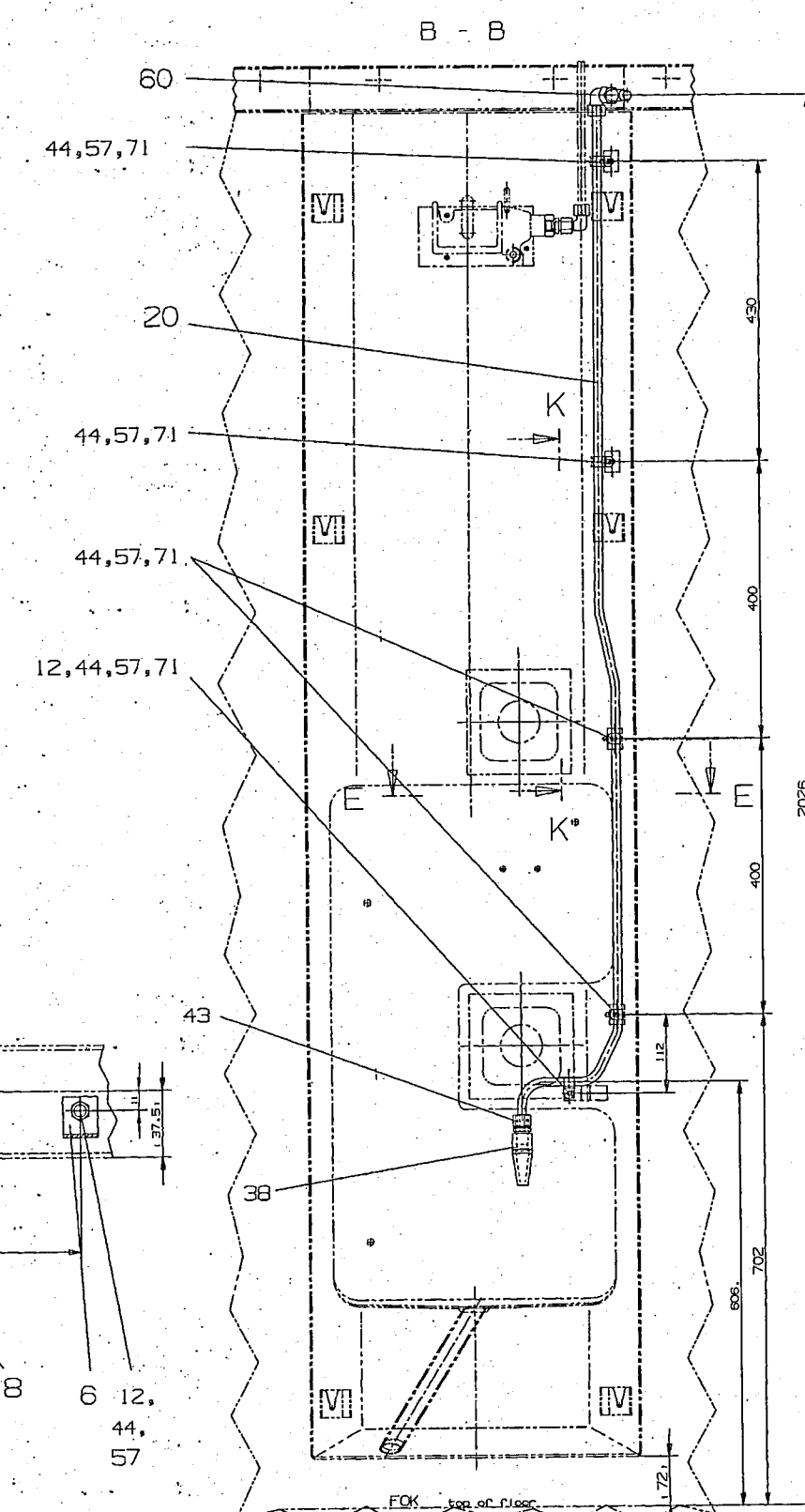
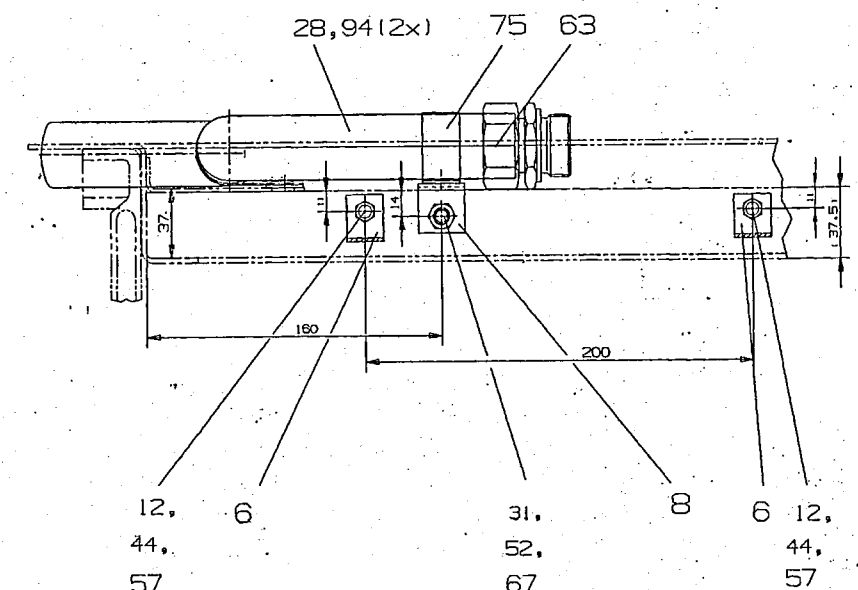
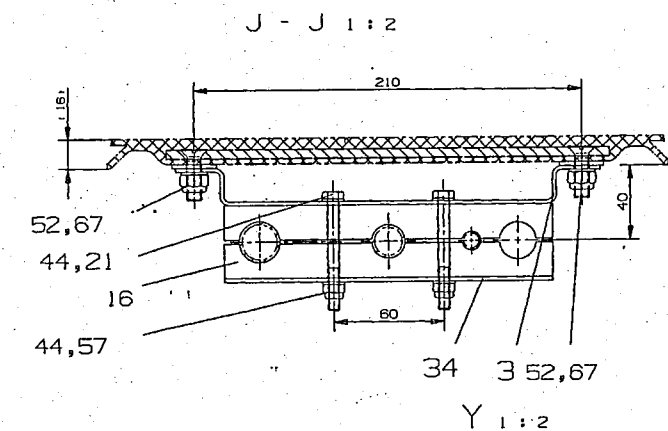
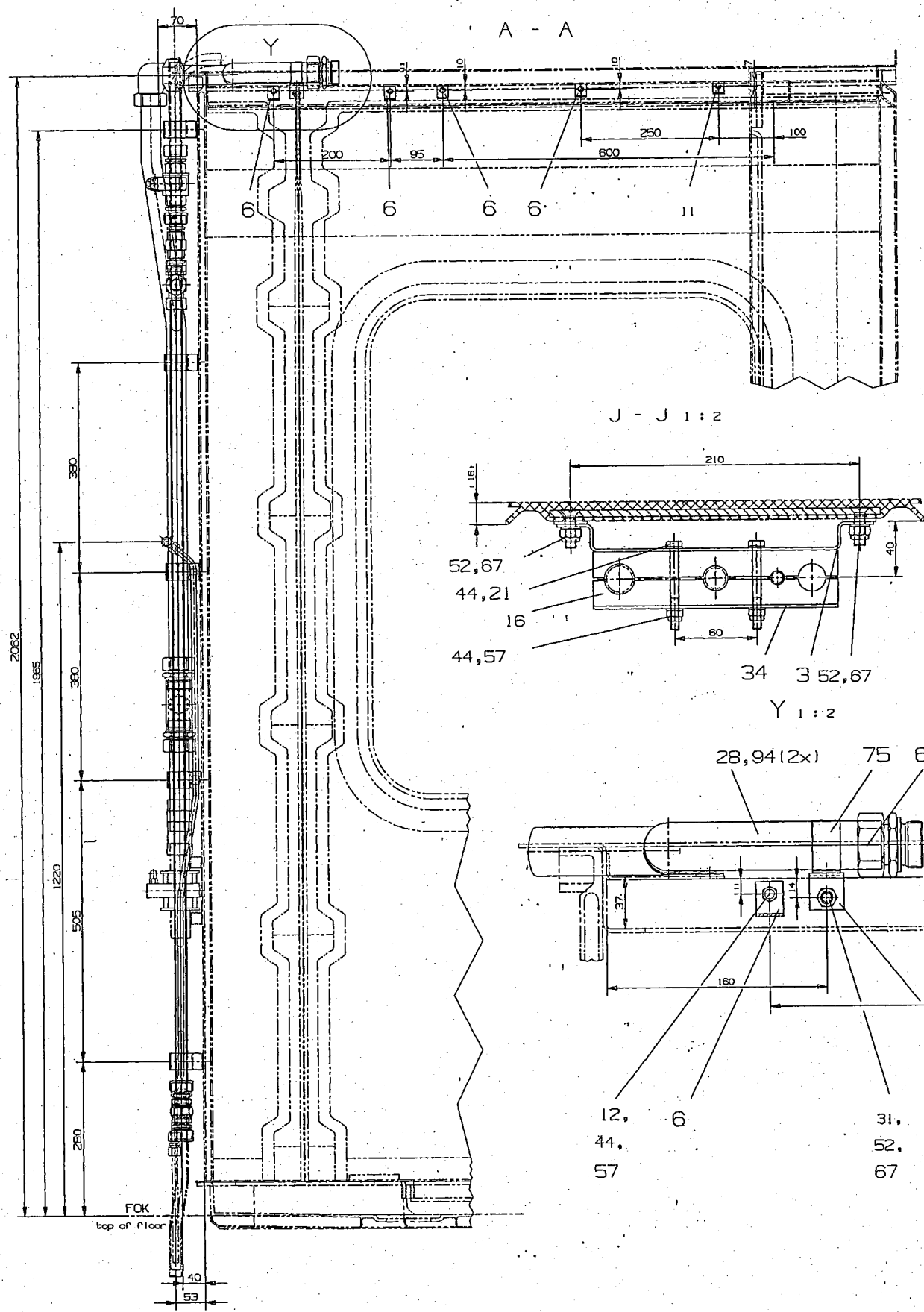
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008



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DATE OF FIRST ISSUE	24/06/2004	CGM BY	<i>[Signature]</i>	

WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS		OPASSY	DETAIL DRG	MATL & SPEC.		REMARKS					
NIL		M	LAVATORY & ITS FITTING		SUPERSEDES:		NIL							
WEIGHT		FILE	\\NASDEV\ASSLY\LW\lw63174s\l.d.pr\12D)											
NIL		KG	PIPE LAYING FOR WATER						SCALE		SSE/REC			
S.AREA			AT LAVATORY EURO1 FOR LHB TYPE COACHES						1:5		CHD			
NIL		M ²							⑦		⑦		DRN	
LENGTH/DIA														
NIL		M	RAIL COACH FACTORY, KAPURTHALA						REF.DRG.NO. 1 10113.0.30.100.005					
WIDTH/THICK.			INDIAN RAILWAYS STANDARD						PL NO.		NIL			
NIL		M	12m dhm						DRG.NO.		LW63174			
HEIGHT									ADE/SME		DY.CME		CDE	
NIL		M							SIZE A1		SHEET 1/5			



Entered
Into
Date Base

27 JAN 2005

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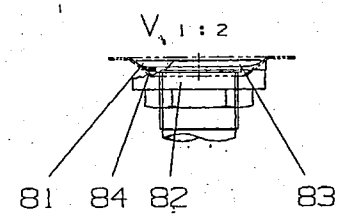
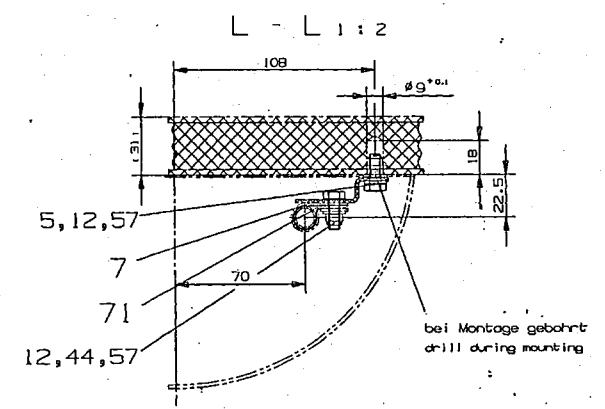
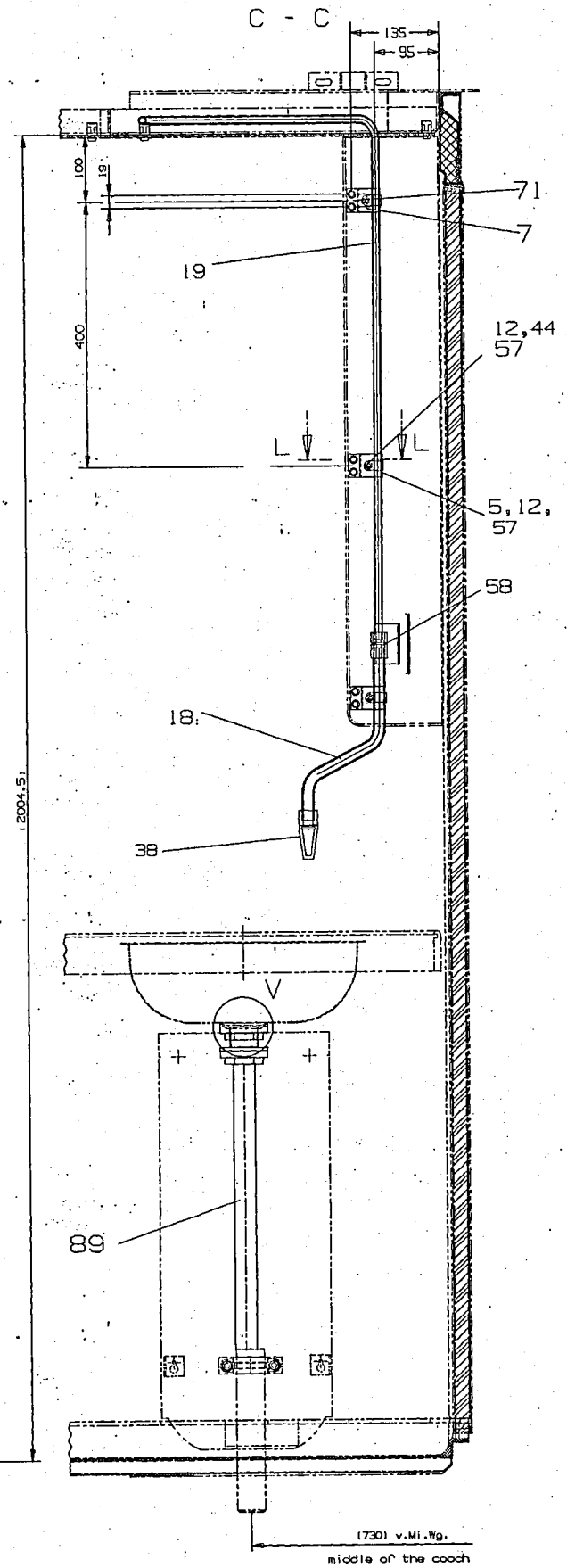
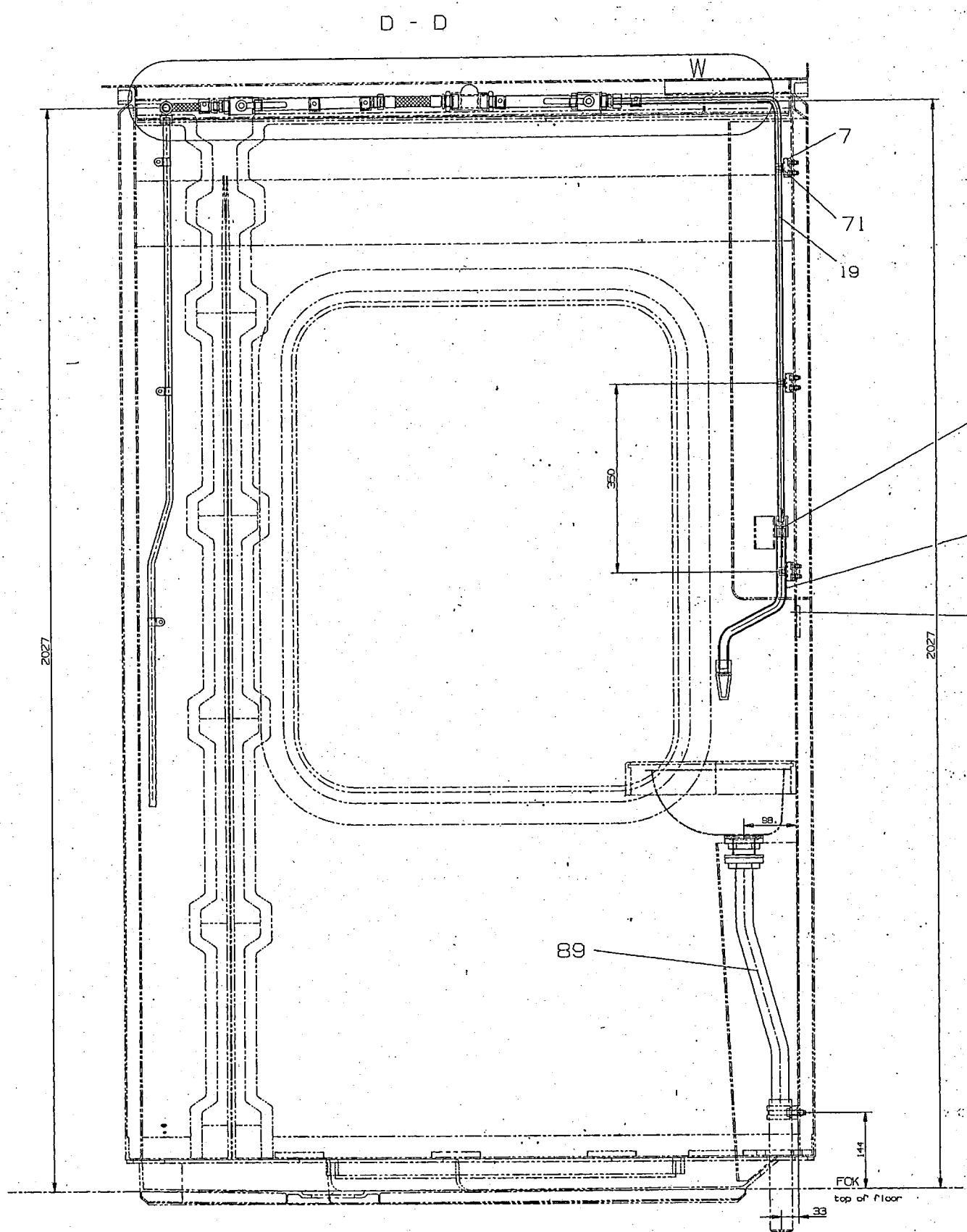
DATE OF FIRST ISSUE 24/06/2004

CGM BY

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	GROUP	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	GROUP	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63174s2a.prt (2D)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA						
NIL	M ²	AT LAVATORY EURO1 FOR LHB TYPE COACHES				
LENGTH/STA						
NIL	M	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.						
NIL	M	INDIAN RAILWAYS STANDARD				
HEIGHT						
NIL	M					

SCALE	SSE/REC	REF.DWG. NO.	PL NO.
1:5	CHD	10113.0.30.100.005	NIL
DRN			
DRG. NO.	SIZE	SHEET	
LW63174	A	2/5	

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
15		16	17	18



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Into
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27 JAN 2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	APPROVAL	DETAIL ORG	MAT. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING			NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63174s3a.prt (20)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA						
NIL	M ²					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

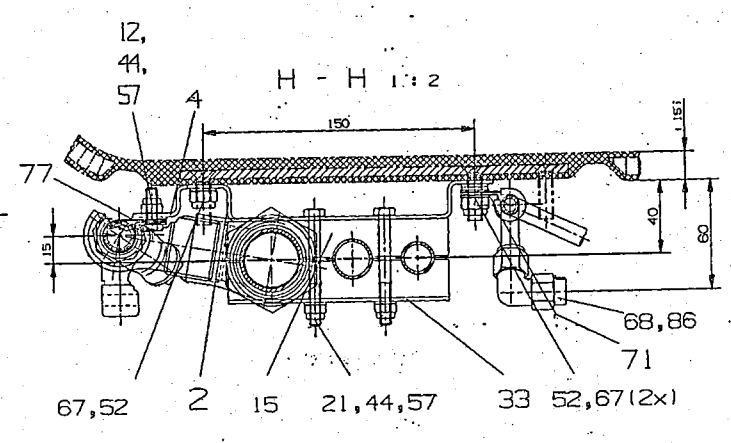
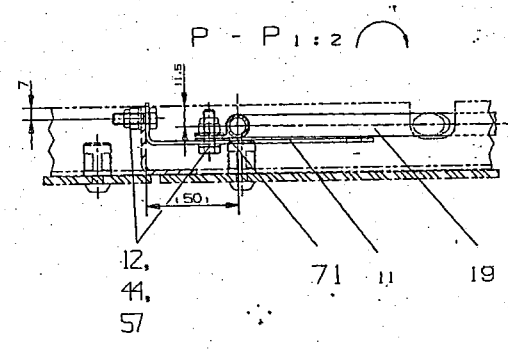
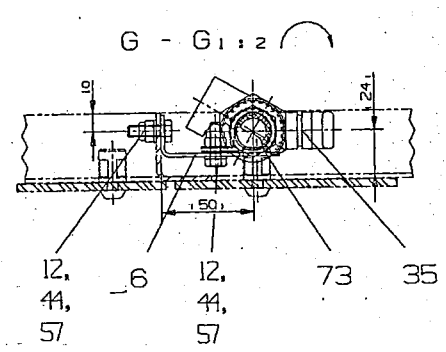
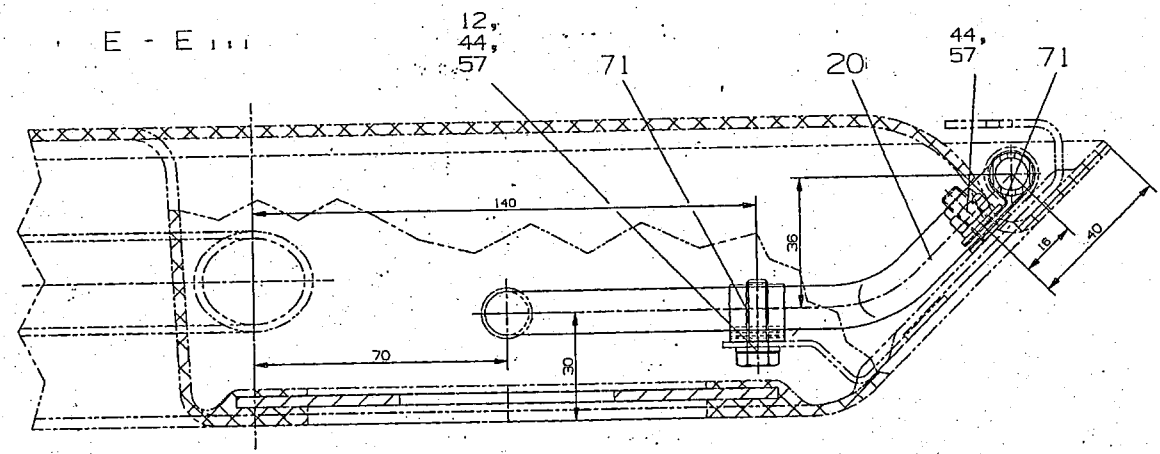
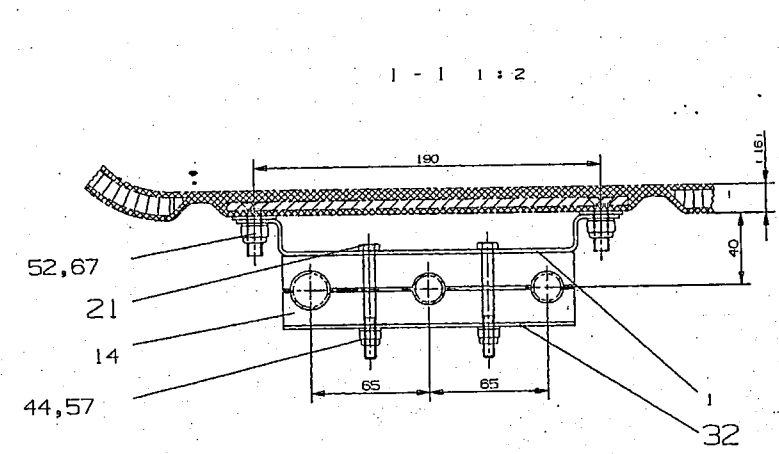
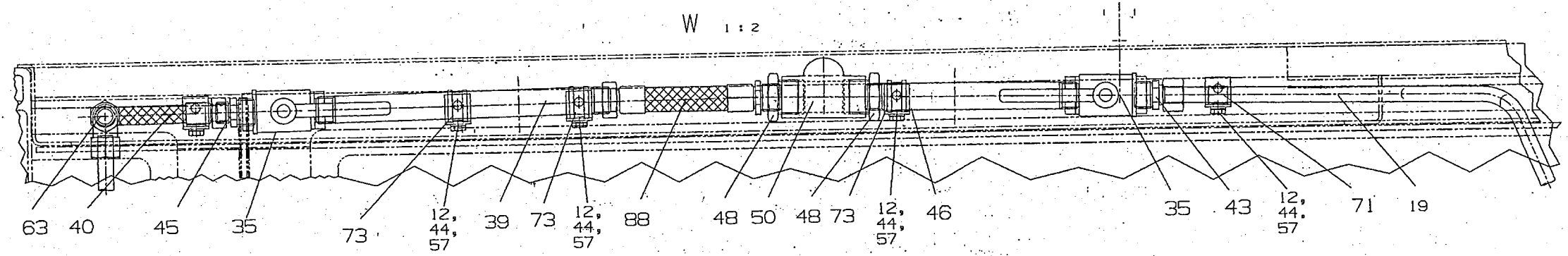
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
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DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE 24/06/2004 CGM BY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS														AUTHORITY

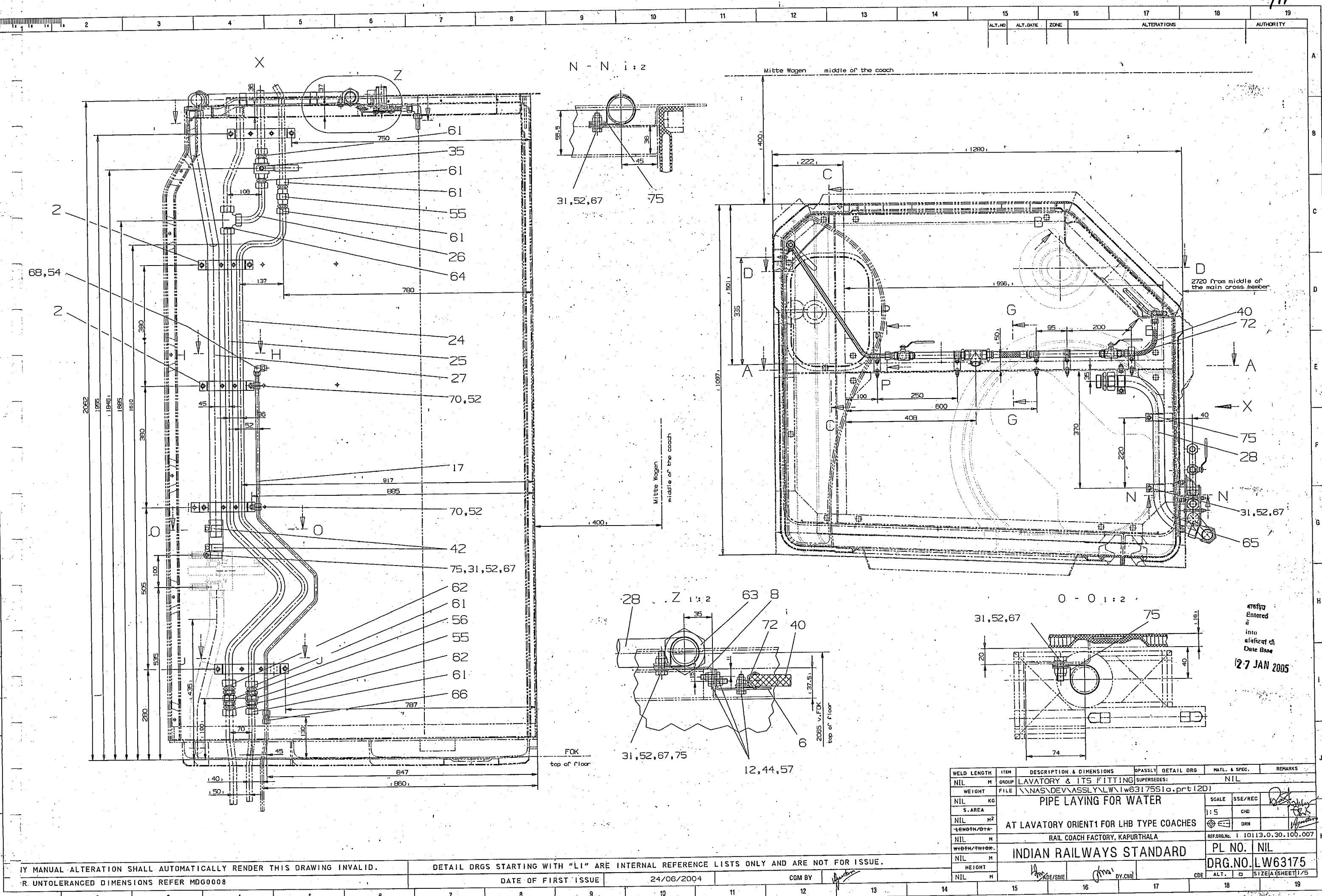


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DATE OF FIRST ISSUE 24/06/2004
CGM BY

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NAS\DEV\ASSEMBLY\LW\lw63174s4a.prt (20)			
NIL	KG	PIPE LAYING FOR WATER			
S. AREA		AT LAVATORY EURO1 FOR LHB TYPE COACHES			
NIL	M ²	RAIL COACH FACTORY, KAPURTHALA			
LENGTH/DIA	M	INDIAN RAILWAYS STANDARD			
WIDTH/THICK.	M	PL NO. NIL			
NIL	M	DRG. NO. LW63174			
HEIGHT	M	DATE/ISSUE	BY/CME	COE	ALT. 'C' SIZE (SHEET) 4/5
NIL	M				



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27 JAN 2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw631751a.prt (2D)			
NIL	KG	PIPE LAYING FOR WATER			
S. AREA					
NIL	M ²				
LENGTH/WT					
NIL	M				
WIDTH/THICK.					
NIL	M				
HEIGHT					
NIL	M				

SCALE	SSE/REG	DRN
1:5	CHD	

REF.DWG. No.	1 10113.0.30.100.007
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PL NO.	NIL
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DRG. NO.	LW63175
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DATE/ISSUE	DATE/ISSUE	DATE/ISSUE
24/06/2004	24/06/2004	24/06/2004

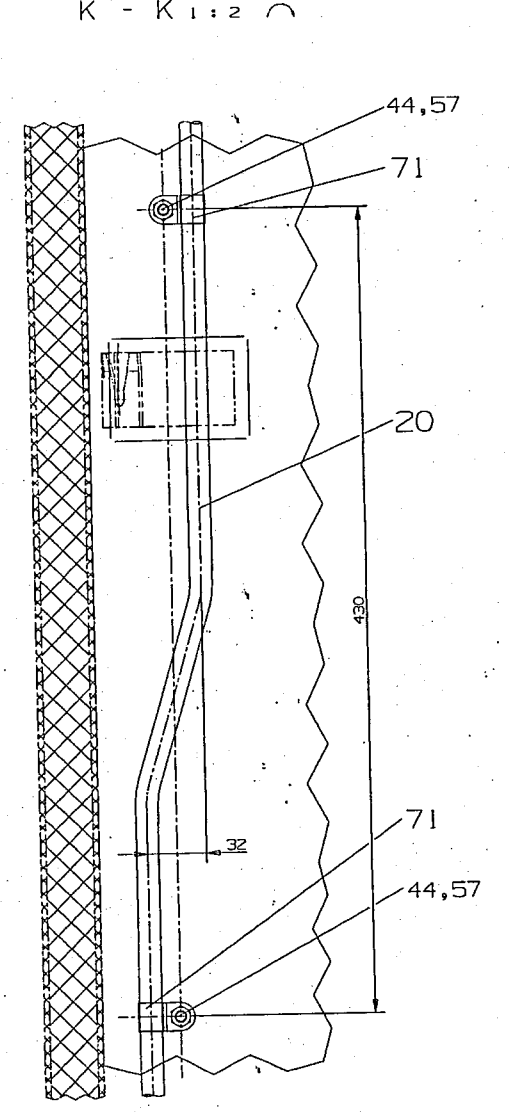
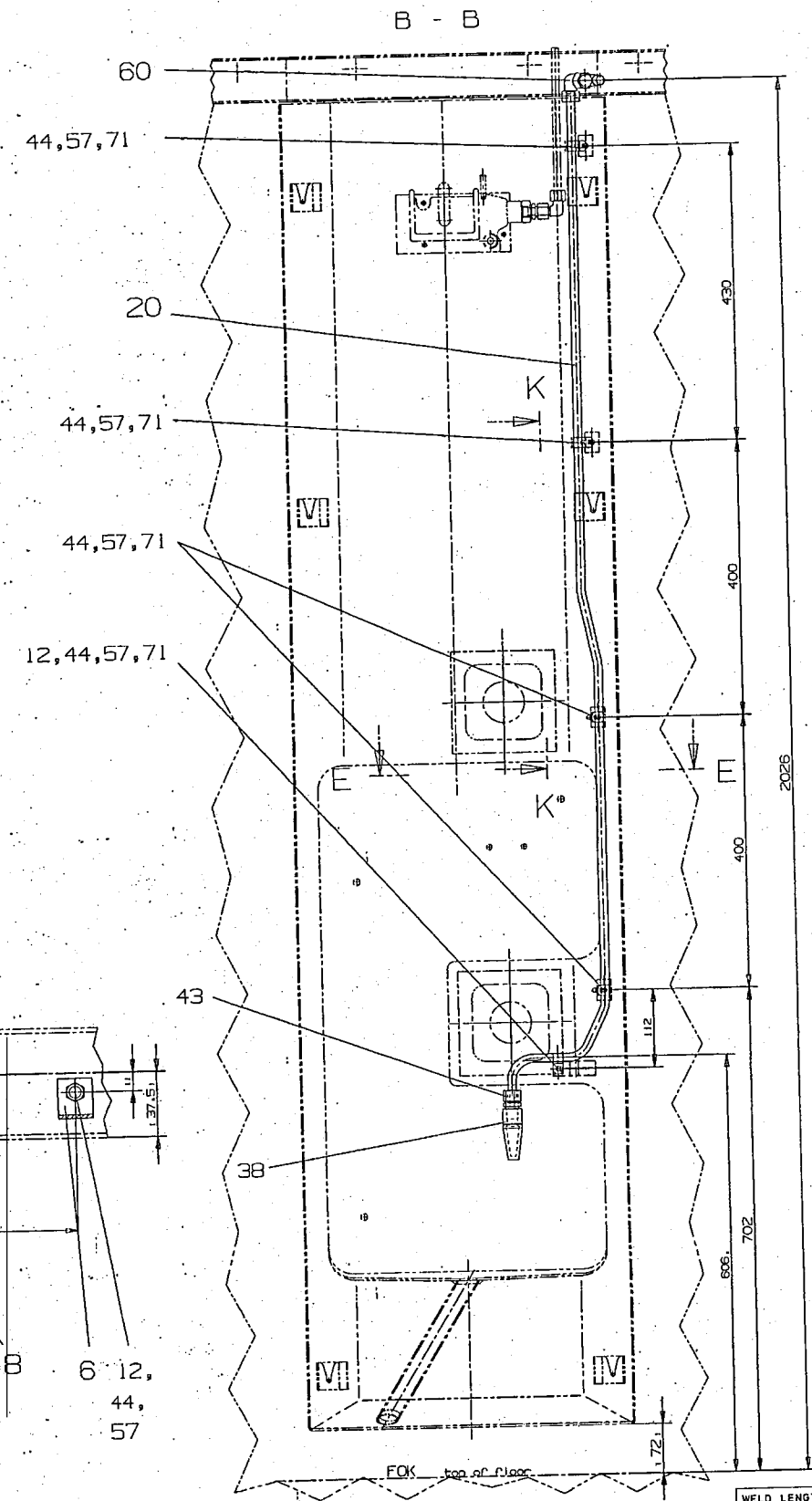
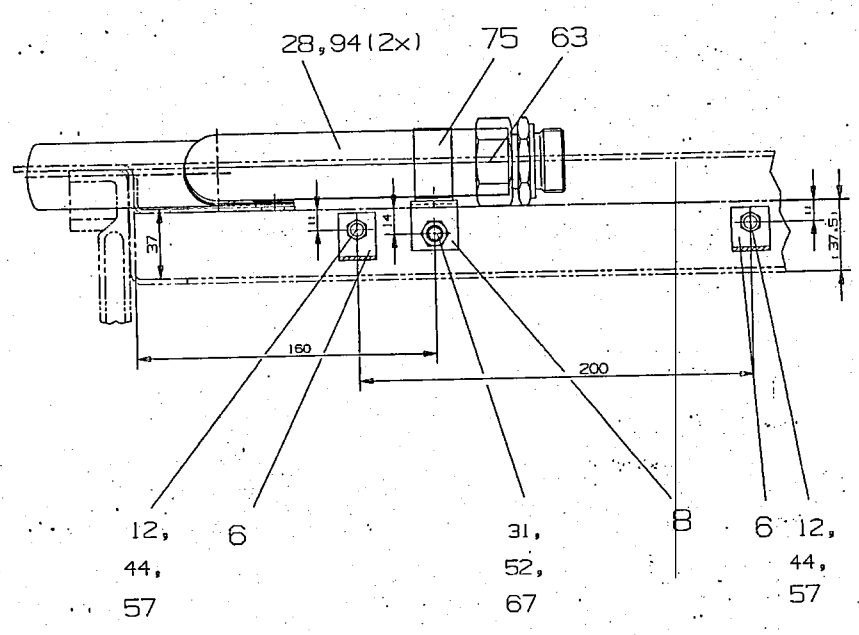
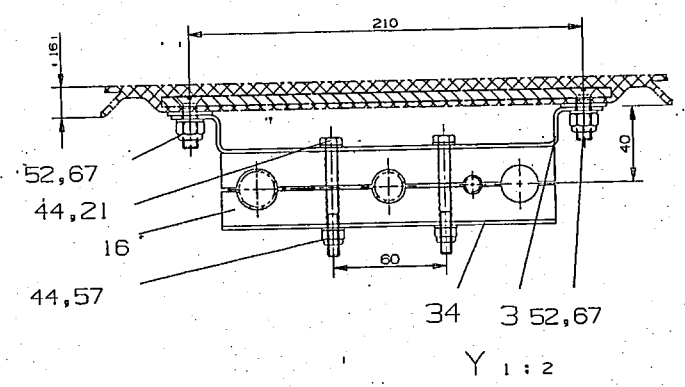
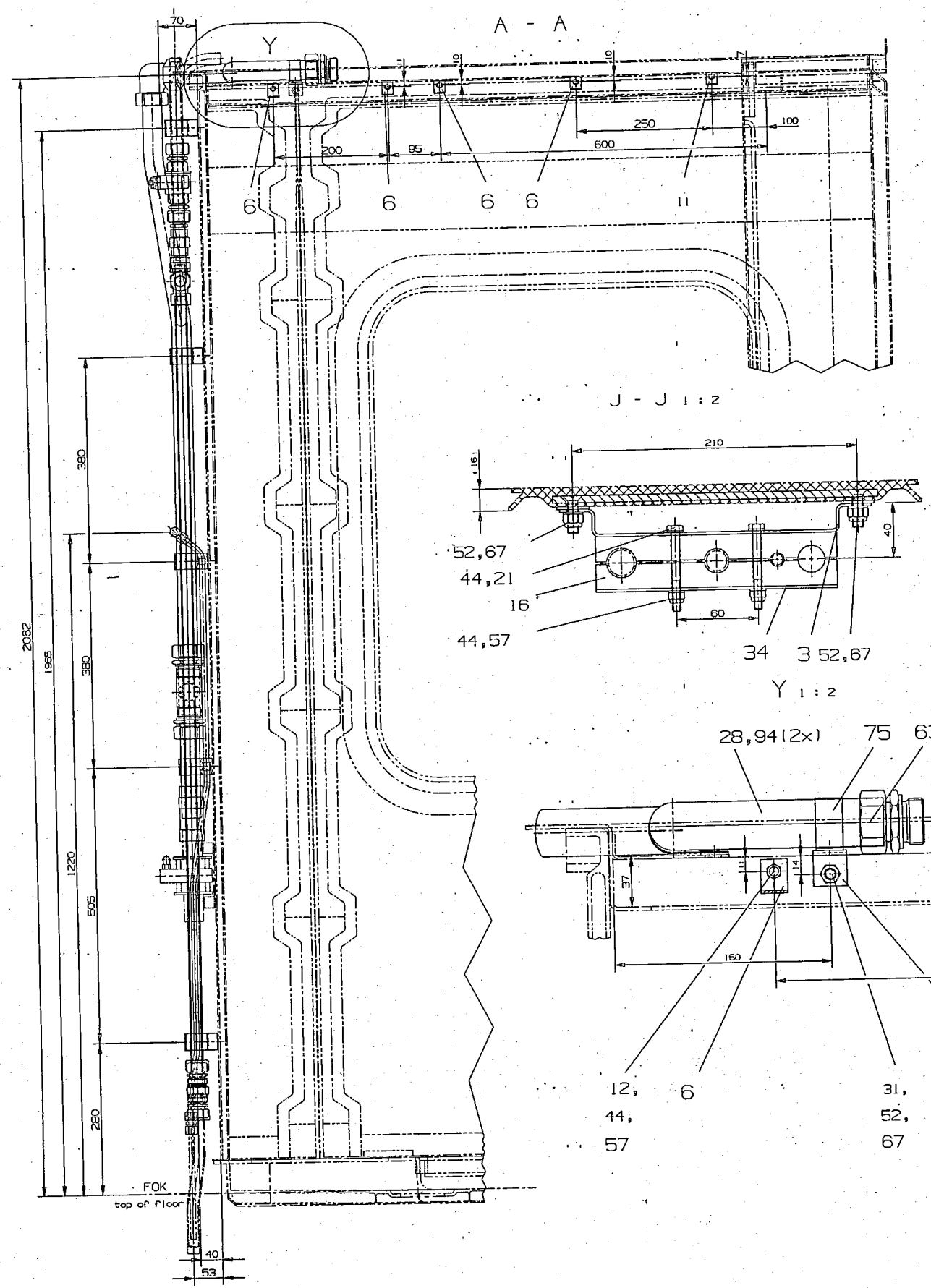
IF MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
R. UNTOLERANCED DIMENSIONS REFER MDG0008

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WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	SUPERSEDES:	NIL		
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63175S2a.prt (2D)				
NIL	KG	PIPE LAYING FOR WATER				
S.AREA						
NIL	M ²	AT LAVATORY ORIENT1 FOR LHB TYPE COACHES				
LENGTH/B+A		RAIL COACH FACTORY, KAPURTHALA				
NIL	M	INDIAN RAILWAYS STANDARD				
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

SCALE	SSE/REG	PL NO.	NIL
1:5	CHD	DRG.NO.	LW63175
REF.DWG. NO.	1 10113.0.30.100.007	SIZE	A/SHEET 2/5

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DATE OF FIRST ISSUE 24/06/2004

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ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
a	12/01/2005	all	item no. 10,13,22,23,29,30,36,37,53,54,59, 74 deleted.	MD000152 DT. 01/06/2000
		shs all	qpc of item no.4,5,7,9,12,31,71 was 2,4,2,4,22,4,8 respectively.	
		shs r17	drng. no. of item no. 19 was 3 10113.R.30.112.002	
		shs j11	Description of item no. 39 was pipe Ø21.34x2.77x365.	
		shs r12	item no. 77 added and view updated.	
		shs 4 ds	item no. 76 added and view updated	

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62	MALE STUD COUPLING	2	NIL	GE22LR3/4KE671 ERMETO	NIL	31	STAINLESS STEEL HEX HEAD SCREW MEX20 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-10 COATING TO MTS 057
61	MALE STUD COUPLING	6	NIL	GE18LR1/2KE671 ERMETO	NIL	30	ANGLE PIPE	1	3 10113.0. 30.140.007	NIL	NIL
60	MALE STUD ELBOW	1	NIL	WE12LR71 ERMETO	NIL	29	FIXING CLIP	1	NIL	DIN3016 G1-43X9, W4	NIL
59	SEALING RING LORO	1	NIL	Art. no.913x DN 40	FA.LORO	28	PIPE	1	3 10113.R. 30.135.002	NIL	NIL
58	FEMALE STUD COUPLING	1	NIL	GA112LR1/2KE671 ERMETO	NIL	27	PIPE	1	3 10113.R. 30.135.001	NIL	NIL
57	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS4367 PT.14-1984)	41	LHWSS09	IS: 2016-1967 DIN125	ITEM-4	26	PIPE	1	3 10113.R. 30.118.007	NIL	NIL
56	UNION 3/4" UI1	1	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	25	PIPE	1	3 10113.R. 30.122.001	NIL	NIL
55	UNION 1/2" UI1	2	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	24	PIPE	1	3 10113.R. 30.118.001	NIL	NIL
54	SUPPORTING BUSH Ø 7.9X15	1	NIL	50 5.0093 10-0	FA.JACOB	23	SUPPORT BLOCK	1	4 10113.0. 30.095.089	NIL	NIL
53	WATER TRAP FOR WASH BASIN OUTFLOW	1	4ELR001.4. 30.025.003	NIL	NIL	22	SUPPORT BLOCK	1	4 10113.0. 30.095.065	NIL	NIL
52	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS4367 PT.14)	15	LHWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MTS 057	21	STAINLESS STEEL HEX HEAD SCREW MEX60 (A2-70 TO IS4367 PT.14-84)	10	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-9 COATING TO MTS 057
51	CONICLE NIPPLE FOR WASH BASIN OUTFLOW	1	STW563.14. 048	NIL	NIL	20	PIPE	1	3 10113.R. 30.112.003	NIL	NIL
50	EQUAL TEE 20 BORE	1	NIL	IS: 1239-92(PT2) TAB.8.A151304	THREADS ISO-7/1	19	PIPE	1	LW63179	NIL	NIL
49	CONICLE NIPPLE NUT FOR WASH BASIN OUTFLOW	1	4FWP291.0. 30.025.011	NIL	NIL	18	PIPE	1	LW63169	NIL	NIL
48	HEXAGON BUSH 20X15	2	NIL	IS: 1239-92(PT2) TAB.27.A151304	THREADS ISO-7/1	17	PIPE	1	3 10113.R. 30.110.001	NIL	NIL
47	VENT CASING FOR WASH BASIN OUTFLOW	1	FWP087.30. 025.20	NIL	FA.KTG	16	MOULDED CLIP	1	3 10113.0. 30.095.064	NIL	NIL
46	PIPE Ø 21.34X2.77X170	1	NIL	ASTM A-312 Gr. TP304	THREADS ISO-7/1	15	MOULDED CLIP	3	3 10113.0. 30.095.063	NIL	NIL
45	REDUCTION DOUBLE NIPPLE 1/2"X3/8"	1	NIL	IS: 1879-87, TAB.7.2.A151304	THREADS ISO-7/1	14	MOULDED CLIP	1	3 10113.0. 30.095.062	NIL	NIL
44	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS4367 PT.14)	35	LHWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MTS 057	13	STAINLESS STEEL HEX HEAD SCREW MEX35 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-8 COATING TO MTS 057
43	MALE STUD COUPLING	2	NIL	GE12LR1/2KE671 ERMETO	NIL	12	STAINLESS STEEL HEX HEAD SCREW MEX20 (A2-70 TO IS4367 PT.14-84)	23	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-5 COATING TO MTS 057
42	HOSE BAND CLIP MIKOLAR-SUPRA	2	NIL	0301311-2 40-43, W4	NIL	11	BRACKET	1	3 10113.0. 30.095.094	NIL	NIL
41	HOSE 35X4X100	1	NIL	DIN73411 ELASTOMER	NIL	10	BRACKET	1	3 10113.0. 30.095.190	NIL	NIL
40	CONNECTION HOSE FLEXIBLE 3/8"X175	1	LW63112	NIL	ITEM-4	9	BLIND RIVET NUT M8	2	NIL	BEST. NR.: 23307060035	FA.BOLLHOFF
39	PIPE Ø 21.34X2.77X235	1	NIL	ASTM A-312 Gr. TP304	Threads ISO 7/1	8	BRACKET	1	3 10113.0. 30.095.098	NIL	NIL
38	GRAVITY COCK 15 BORE	2	LW63170	NIL	NIL	7	BRACKET	3	3 10113.0. 30.095.057	NIL	NIL
37	STAINLESS STEEL HEX HEAD SCREW MEX30 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-12 COATING TO MTS 057	6	BRACKET	4	3 10113.0. 30.095.056	NIL	NIL
36	FIXING CLIP	1	NIL	DIN3016 G1-46X15, W4	NIL	5	BLIND RIVET NUT M6	6	NIL	BEST. NR.: 23307060045	FA.BOLLHOFF
35	BALL VALVE 1/2"	3	LW63106	NIL	ITEM-3	4	PIPE BRACKET 19X6.6	1	LW63103	NIL	NIL
34	PLATE	1	4 10113.0. 30.095.061	NIL	NIL	3	BRACKET	1	3 10113.0. 30.095.053	NIL	NIL
33	PLATE	3	4 10113.0. 30.095.060	NIL	NIL	2	BRACKET	3	3 10113.0. 30.095.052	NIL	NIL
32	PLATE	1	4 10113.0. 30.095.059	NIL	NIL	1	BRACKET	1	3 10113.0. 30.095.051	NIL	NIL

77	DRAIN PIPE WITH INTEGRATED CONNECTING SOCKET (THESE 1-1/4" NPT LENGTH 1.5 M EXPLOSIVE)	1	NIL	PVC	it should be prepared with this size 45
76	CONNECTION FLEXIBLE HOSE 1/2"x140	1	LH63112	NIL	Item no.
75	FIXING CLIP	4	NIL	DIN3016 A1-35X20, W4	NIL
74	FIXING CLIP	1	NIL	DIN3016 F1-43X20, W4	NIL
73	FIXING CLIP	3	NIL	DIN3016 D1-19X15, W4	NIL
72	FIXING CLIP	1	NIL	DIN3016 A1-15X15, W4	NIL
71	FIXING CLIP	9	NIL	DIN3016 A1-12X15, W4	NIL
70	FIXING CLIP	1	NIL	DIN3016 D1-11X20, W4	NIL
69	BOW 30 DEGREE	1	LWS3130	NIL	NIL
68	SCREW JOINT	1	NIL	SOS.2021-10 JACOB	NIL
67	STAINLESS STEEL MACHINE WASHER A8.4 (A2 TO IS4367 PT.14-1984)	28	L1HWSS09	IS: 2016-1967 DIN125	ITEM-5
66	UNION	1	NIL	G10L71 ERMETO	NIL
65	UNION ELBOW	1	NIL	W3SL71 ERMETO	NIL
64	TEE REDUCTION	1	NIL	TR22/18/22.71 ERMETO	NIL
63	MALE STD CONNECTOR	1	NIL	G3SLR71 ERMETO	NIL

NOTE:-

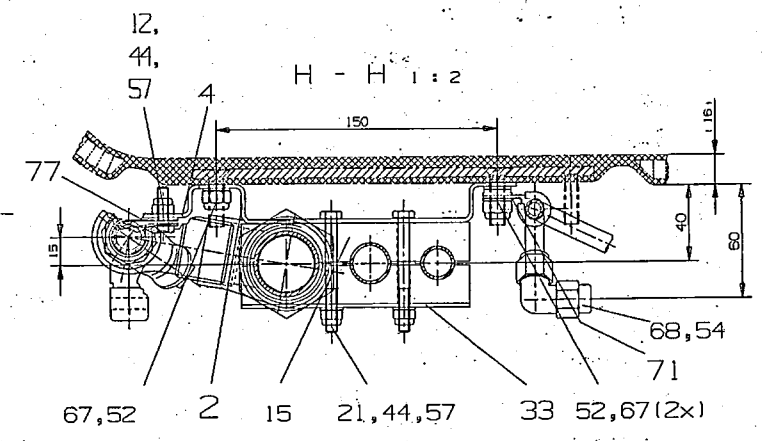
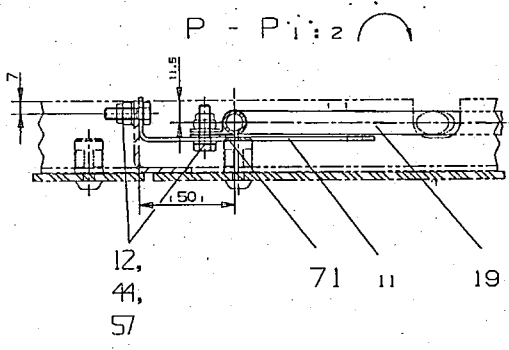
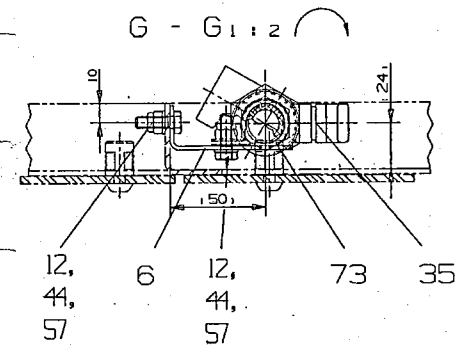
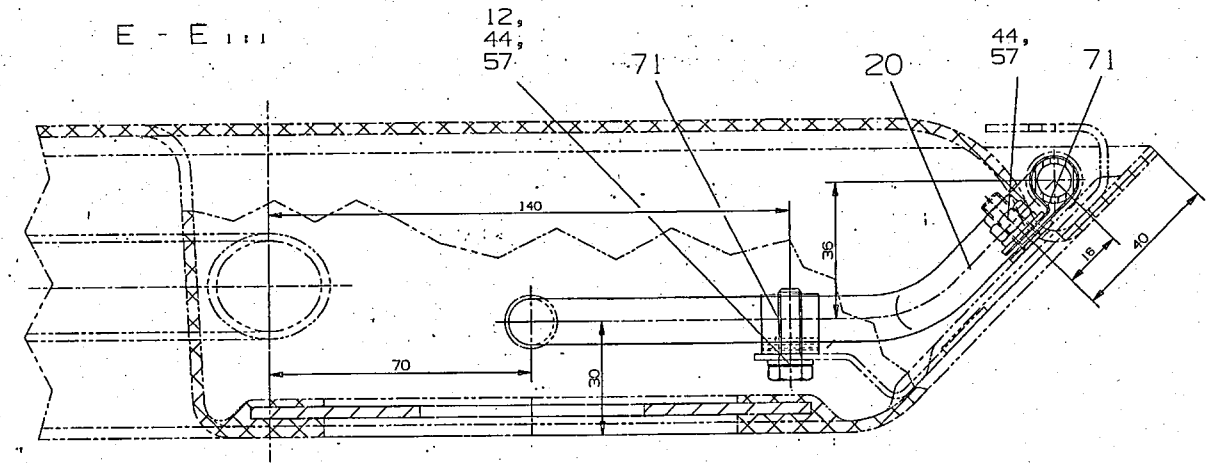
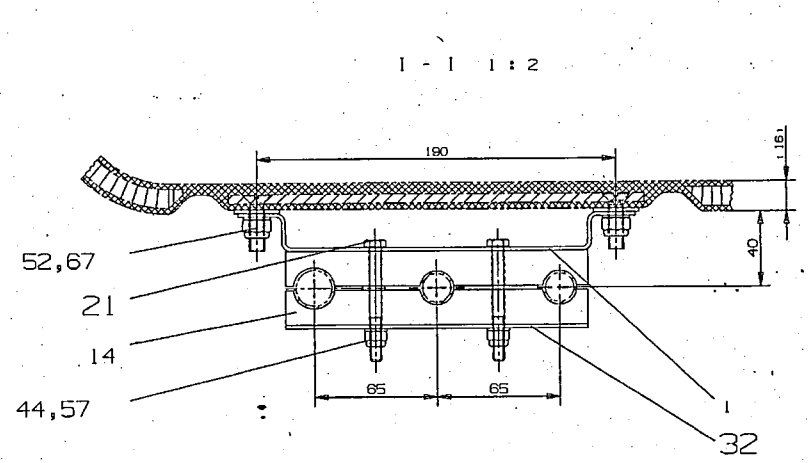
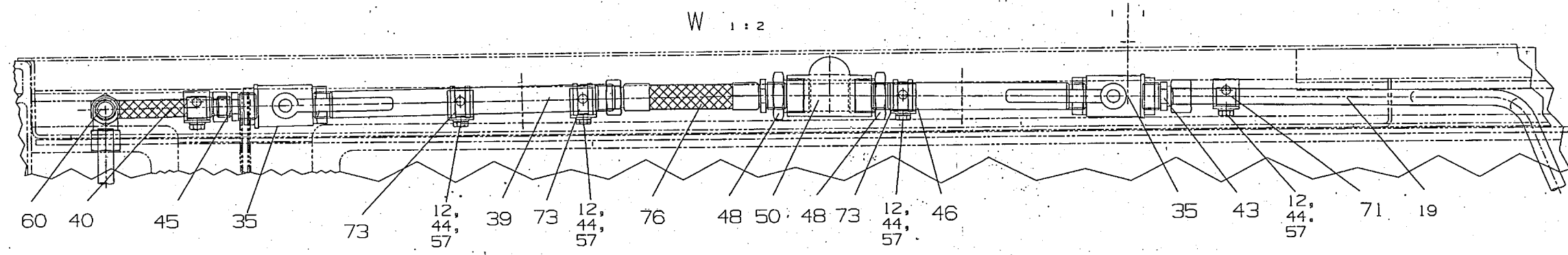
For all connections between the thread fittings of noncorroding steel the external threads have to be wrapped with (hemp) and covered with (sealing paste) before they are screwed in.

All screw connections/ bolt connections, with or without nuts, of stainless steel that are not to be secured with (loctite) have to be greased with (molykote) prior to be screwed in.

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS		DPASSLY DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NASDEV\ASSLY\LW\lw6317555a.prt (2D)				
NIL	KG	PIPE LAYING FOR WATER			SCALE	SSE/REC
S. AREA		AT LAVATORY ORIENT1 FOR LHB TYPE COACHES			1:5	CHD
NIL	M ²					
LENGTH/DIA		RAIL COACH FACTORY, KAPURTHALA				DRN
NIL	M				REF.DRG.No. 1 1013.0.30.100.007	
WIDTH/FTHK.		INDIAN RAILWAYS STANDARD			PL NO.	NIL
NIL	M				DRG.NO.	LW63175
HEIGHT						
NIL	M	DATE/SME	BY. CME	CDE	ALT.	SIZE A SHEET 5/5

6/14

																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
															ALT. NO.	ALT. DATE	ZONE	ALTERATIONS		AUTHORITY



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Date
27 JAN 2005

WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS		DETAIL DRG	MATL. & SPEC.		REMARKS
NIL		M	GROUP	LAVATORY & ITS FITTING		SUPERSEDES:		NIL
WEIGHT		KG	FILE	\\NAS\DEV\ASSLY\LW\lw6317554a.prt (2D)				
S. AREA		M ²	PIPE LAYING FOR WATER					SCALE 1:5 CHD DRN REF.DRG.No. 1 10113.0.30.100.007
LENGTH/ DIA		M	AT LAVATORY ORIENT1 FOR LHB TYPE COACHES					
WIDTH/ THICK.		M	RAIL COACH FACTORY, KAPURTHALA					PL NO. NIL
HEIGHT		M	INDIAN RAILWAYS STANDARD					DRG.NO. LW63175
NIL		M	DATE/SME	BY/EME	CDE	ALT. Q		SIZE A SHEET 4/5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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Date Base

127 JAN 2005

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
0	12/01/2005	all	item no. 10,13,22,23,29,30,36,37,53,54,59, 74 deleted. qpc of item no.4,5,7,9,12,31,71 was 2,4,2,4,22,4,8 respectively. drg. no. of item no. 19 was 3 10113.R.30.112.002 Description of item no. 39 was pipe Ø21.34x2.77x365. item no. 77 added and view updated. item no. 76 added and view updated	MD000152 DT. 01/06/2000

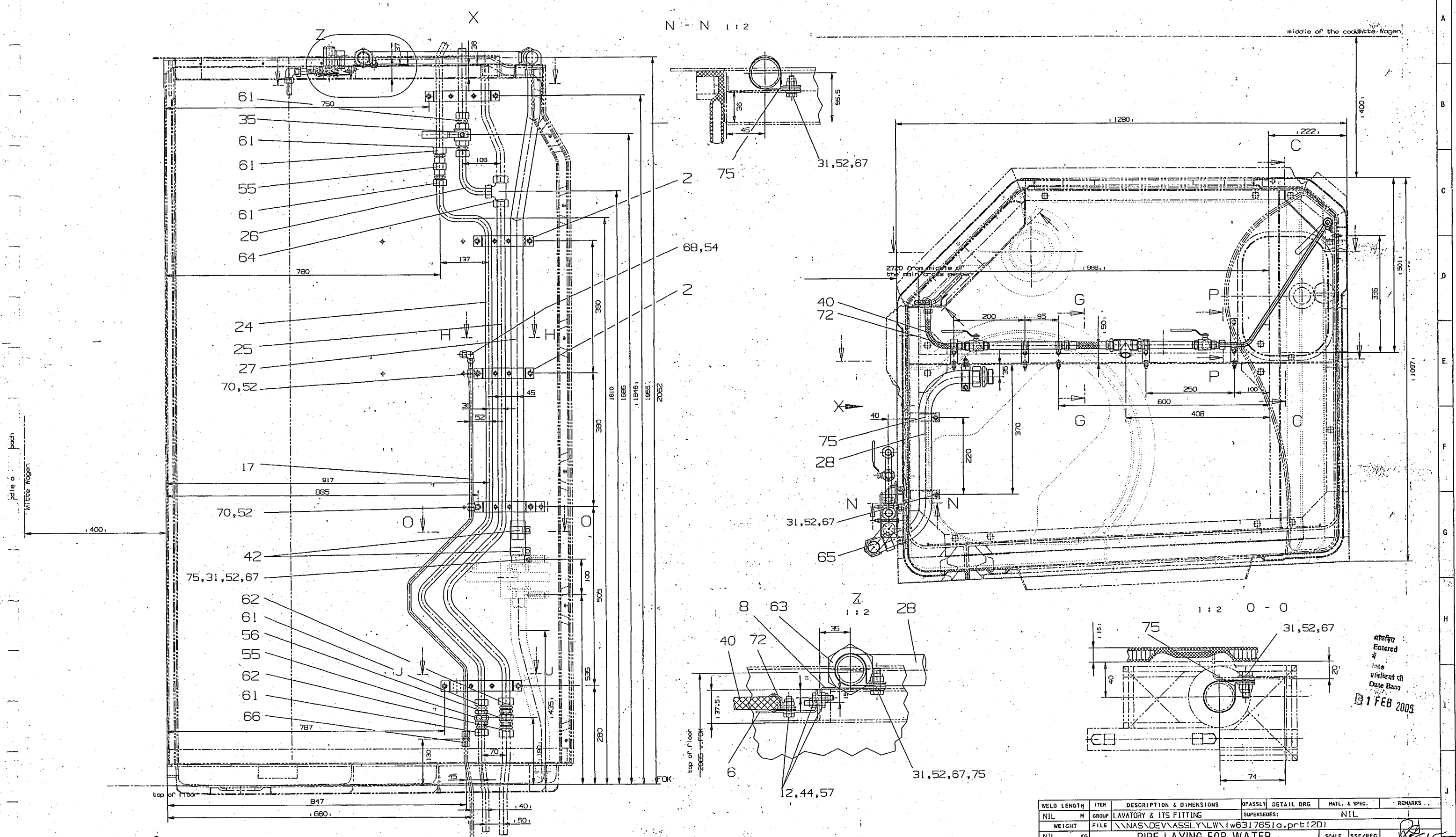
62	MALE STUD COUPLING	2	NIL	GE22LR3/4K671 ERMETO	NIL	31	STAINLESS STEEL HEX HEAD SCREW M8X20 (A2-70 TO IS4367 PT.14-B4)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-10 COATING TO MOTS 057
61	MALE STUD COUPLING	6	NIL	GE18LR1/2K671 ERMETO	NIL	30	ANGLE PIPE	1	3 10113.0. 30.140.007	NIL	NIL
60	MALE STUD ELBOW	1	NIL	WE12LR71 ERMETO	NIL	29	FIXING CLIP	1	NIL	DIN9016 61-43X9, W4	NIL
59	SEALING RING-LORO	1	NIL	Art. no.913x DN 40	For LORO	28	PIPE	1	3 10113.R. 30.135.002	NIL	NIL
58	FEMALE STUD COUPLING	1	NIL	GA112LR1/2K671 ERMETO	NIL	27	PIPE	1	3 10113.R. 30.135.001	NIL	NIL
57	STAINLESS STEEL MACHINE WASHER M6.4 (A2 TO IS4367 PT.14-1984)	41	LHWSS09	IS: 2016-1967 DIN125	ITEM-4	26	PIPE	1	3 10113.R. 30.118.007	NIL	NIL
56	UNION 3/4" U11	1	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	25	PIPE	1	3 10113.R. 30.122.001	NIL	NIL
55	UNION 1/2" U11	2	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	24	PIPE	1	3 10113.R. 30.118.001	NIL	NIL
54	SUPPORTING BUSH Ø7.9X15	1	NIL	50-5.6663-10-8	For JACOB	23	SUPPORT BLOCK	1	4 10113.0. 30.095.089	NIL	NIL
53	WATER TRAP FOR WASH BASIN OUTFLOW	1	NIL	4ELR001.4. 30.025.003	NIL	22	SUPPORT BLOCK	1	4 10113.0. 30.095.065	NIL	NIL
52	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS4367 PT.14)	15	LHWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MOTS 057	21	STAINLESS STEEL HEX HEAD SCREW M8X60 (A2-70 TO IS4367 PT.14-B4)	10	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-9 COATING TO MOTS 057
51	CONICLE NIPPLE FOR WASH BASIN OUTFLOW	1	STM563.14. 04B	NIL	NIL	20	PIPE	1	3 10113.R. 30.112.003	NIL	NIL
50	EQUAL TEE 20 BORE	1	NIL	IS: 1239-92(P12) TAB.8.A1S1304	THREADS ISO-7/1	19	PIPE	1	LW63179	NIL	NIL
49	CONICLE NIPPLE NUT FOR WASH BASIN OUTFLOW	1	NIL	4FWP291.0. 30.025.011	NIL	18	PIPE	1	LW63169	NIL	NIL
48	HEXAGON BUSH 20X15	2	NIL	IS: 1239-92(P12) TAB.27.A1S1304	THREADS ISO-7/1	17	PIPE	1	3 10113.R. 30.110.001	NIL	NIL
47	VENT CASING FOR WASH BASIN OUTFLOW	1	FMP087.30. 025.20	NIL	For KTG	16	MOULDED CLIP	1	3 10113.0. 30.095.064	NIL	NIL
46	PIPE Ø21.34X2.77X170	1	NIL	ASTM A-312 Gr. TP304	THREADS ISO-7/1	15	MOULDED CLIP	3	3 10113.0. 30.095.063	NIL	NIL
45	REDUCTION DOUBLE NIPPLE 1/2"x3/8"	1	NIL	IS: 1879-87, TAB.7.2.A1S1304	THREADS ISO-7/1	14	MOULDED CLIP	1	3 10113.0. 30.095.062	NIL	NIL
44	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS4367 PT.14)	35	LHWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MOTS 057	13	STAINLESS STEEL HEX HEAD SCREW M6X35 (A2-70 TO IS4367 PT.14-B4)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-8 COATING TO MOTS 057
43	MALE STUD COUPLING	2	NIL	GE12LR1/2K671 ERMETO	NIL	12	STAINLESS STEEL HEX HEAD SCREW M8X20 (A2-70 TO IS4367 PT.14-B4)	23	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-5 COATING TO MOTS 057
42	HOSE BAND CLIP MIKOLAR-SUPRA	2	NIL	0301311-2 40-43, W4	NIL	11	BRACKET	1	3 10113.0. 30.095.094	NIL	NIL
41	HOSE 35X4X100	1	NIL	DIN73411 ELASTOMER	NIL	10	BRACKET	1	3 10113.0. 30.095.190	NIL	NIL
40	CONNECTION HOSE FLEXIBLE 3/8"x175	1	LH63112	NIL	ITEM-4	9	BLIND RIVET NUT M8	2	NIL	BEST. NR. 23307080035	FA.BOLLHOFF
39	PIPE Ø21.34X2.77X235	1	NIL	ASTM A-312 Gr. TP304	Threads ISO 7/1	8	BRACKET	1	3 10113.0. 30.095.050	NIL	NIL
38	GRAVITY LOCK 15 BORE	2	LW63170	NIL	NIL	7	BRACKET	3	3 10113.0. 30.095.057	NIL	NIL
37	STAINLESS STEEL HEX HEAD SCREW M8X30 (A2-70 TO IS4367 PT.14-B4)	2	LHWSS02	IS: 1364 PT.2-92 CE	ITEM-12 COATING TO MOTS 057	6	BRACKET	4	3 10113.0. 30.095.056	NIL	NIL
36	FIXING CLIP	1	NIL	DIN9016 61-43X15, W4	NIL	5	BLIND RIVET NUT M6	6	NIL	BEST. NR. 23307060045	FA.BOLLHOFF
35	BALL VALVE 1/2"	3	LW63106	NIL	ITEM-3	4	PIPE BRACKET 19X6.6	1	LW63103	NIL	NIL
34	PLATE	1	4 10113.0. 30.095.061	NIL	NIL	3	BRACKET	1	3 10113.0. 30.095.053	NIL	NIL
33	PLATE	3	4 10113.0. 30.095.060	NIL	NIL	2	BRACKET	3	3 10113.0. 30.095.052	NIL	NIL
32	PLATE	1	4 10113.0. 30.095.059	NIL	NIL	1	BRACKET	1	3 10113.0. 30.095.051	NIL	NIL

77	DRAIN PIPE WITH INTEGRATED CONNECTING SOCKET (THREADS 1-1/4" BSP LENGTH 1.5 M DIMENSION)	1	NIL	PVC	it should
76	CONNECTION FLEXIBLE HOSE 1/2"x140	1	LH63112	NIL	Item no.3
75	FIXING CLIP	4	NIL	DIN9016 A1-35X20, W4	NIL
74	FIXING CLIP	1	NIL	DIN9016 A1-43X20, W4	NIL
73	FIXING CLIP	3	NIL	DIN9016 D1-19X15, W4	NIL
72	FIXING CLIP	1	NIL	DIN9016 A1-15X15, W4	NIL
71	FIXING CLIP	9	NIL	DIN9016 A1-12X15, W4	NIL
70	FIXING CLIP	1	NIL	DIN9016 D1-11X20, W4	NIL
69	BOW 30 DEGREE	1	LW63130	NIL	NIL
68	SCREW JOINT	1	NIL	SOS.2021-10 JALOB	NIL
67	STAINLESS STEEL MACHINE WASHER M6.4 (A2 TO IS4367 PT.14-1984)	20	LHWSS09	IS: 2016-1967 DIN125	ITEM-5
66	UNION	1	NIL	G10LR71 ERMETO	NIL
65	UNION ELBOW	1	NIL	W3SL71 ERMETO	NIL
64	TEE REDUCTION	1	NIL	TR22/18/22LR71 ERMETO	NIL
63	MALE STUD CONNECTOR	1	NIL	GE22LR71 ERMETO	NIL

NOTE:-

For all connections between the thread fittings of noncorroding steel the external threads have to be wrapped with (templ) and covered with (sealing paste) before they are screwed in.
All screw connections/ bolt connections, with or without nuts, of stainless steel that are not to be secured with (Loctite) have to be greased with (molycotel) prior to be screwed in.

WELD LENGTH	NIL	DESCRIPTION & DIMENSIONS	DETAIL DRG	SCALE	SSE/REC
WEIGHT	NIL	AT LAVATORY ORIENT1 FOR LHB TYPE COACHES	PL NO. NIL	1:5	CND
S.AREA	NIL	INDIAN RAILWAYS STANDARD	DRG.NO. LW63175	DRN	
LENGTH/DIA	NIL	RAIL COACH FACTORY, KAPURTHALA	REF.DRG. 1 10113.0.30.100.007		
WIDTH/THICK.	NIL				
HEIGHT	NIL				



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file
Date 01 FEB 2003

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	MAT. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	SUPERSEDES:	NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw6317651a.prt (20)			
NIL	KG	PIPE LAYING FOR WATER			
S. AREA			SCALE	SSE/REG	
NIL	M ²		1:5	CHD	
LENGTH/Ø+±			DRN		
NIL	M	RAIL COACH FACTORY, KAPURTHALA	REF. DRG. NO.	1 10113.0.30.100.006	
WIDTH/TH+OK.		INDIAN RAILWAYS STANDARD	PL NO.	NIL	
NIL	M		DRG. NO.	LW63176	
HEIGHT			DATE	01 FEB 2003	
NIL	M		BY	CMC	

Y MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
R UNTOLERANCED DIMENSIONS REFER MDG0008
DATE OF FIRST ISSUE 24/06/2004
CGM BY

6/18

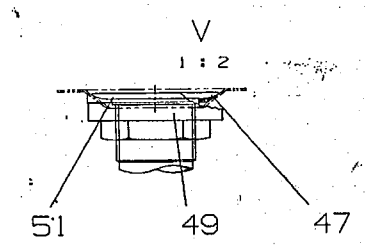
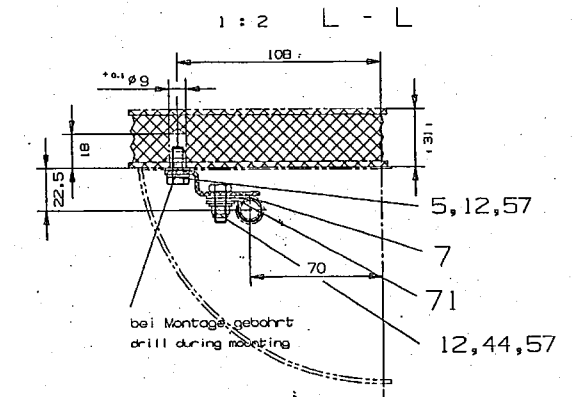
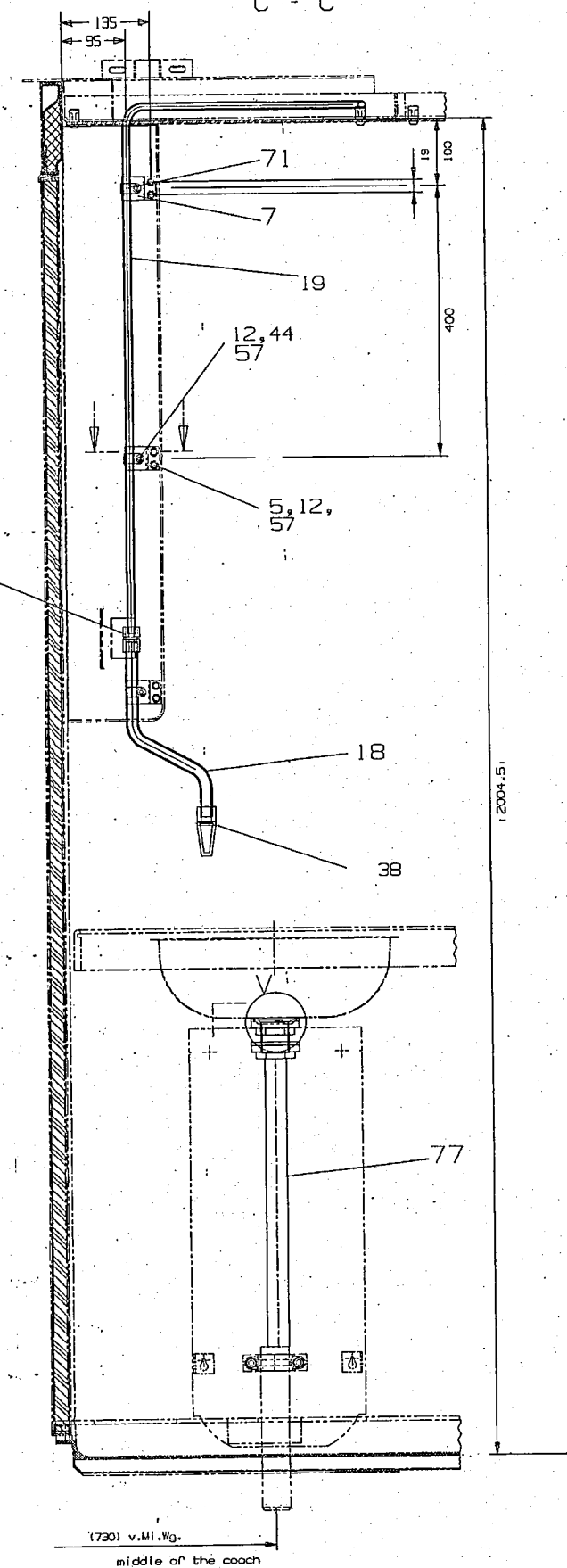
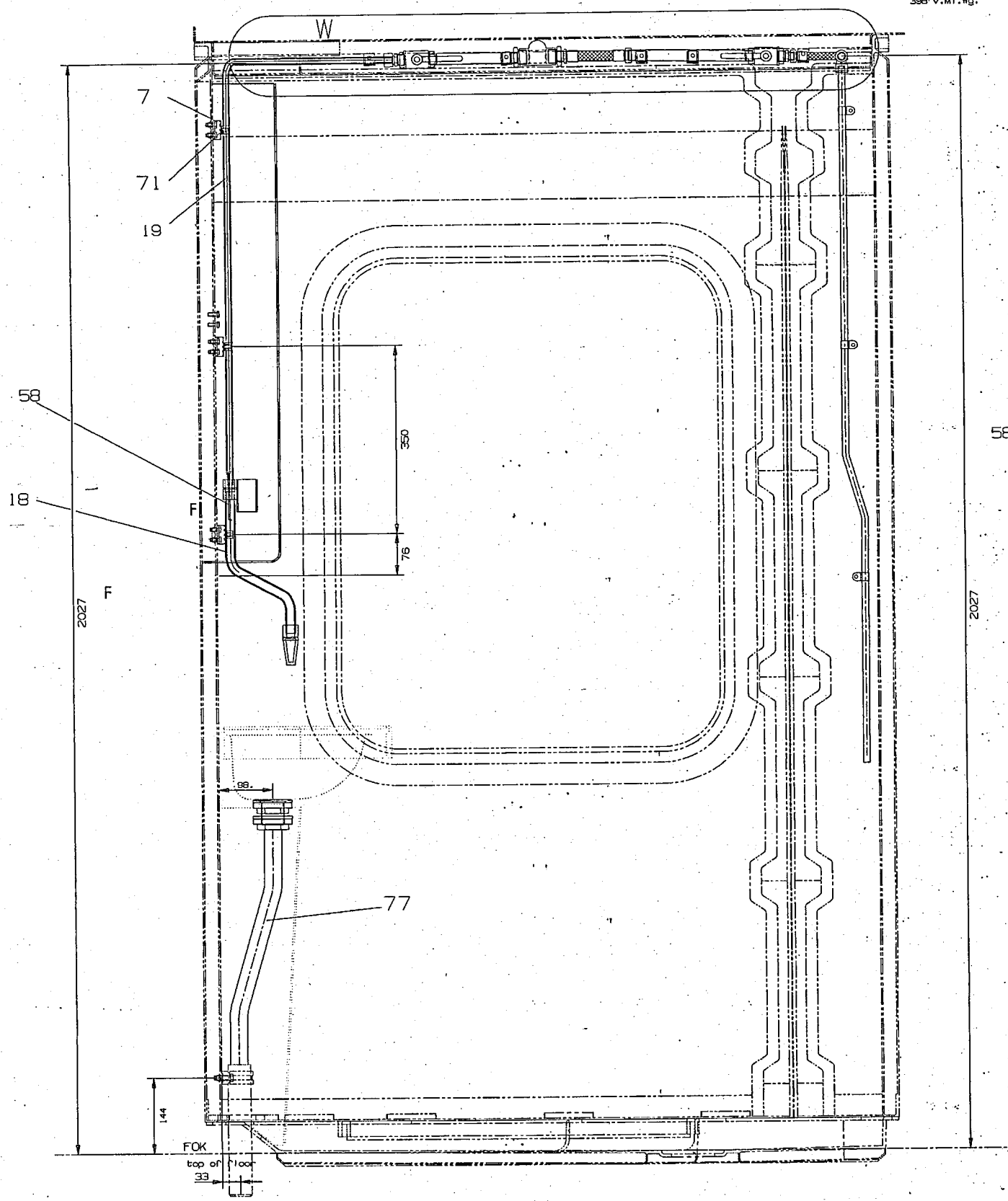
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS					AUTHORITY										

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1 FEB 2005

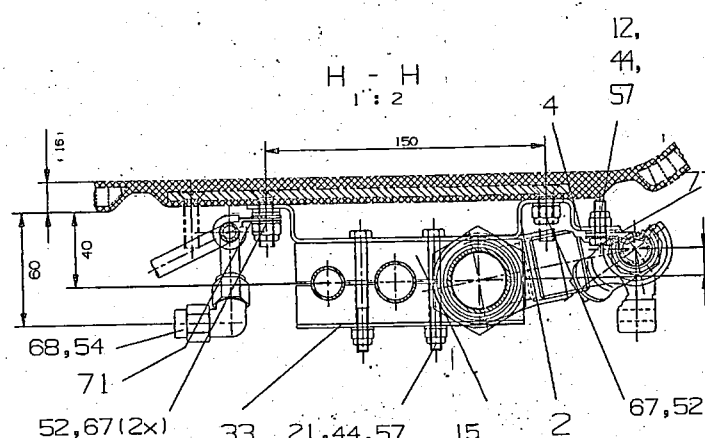
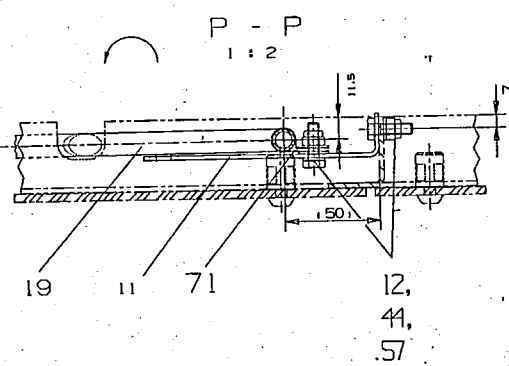
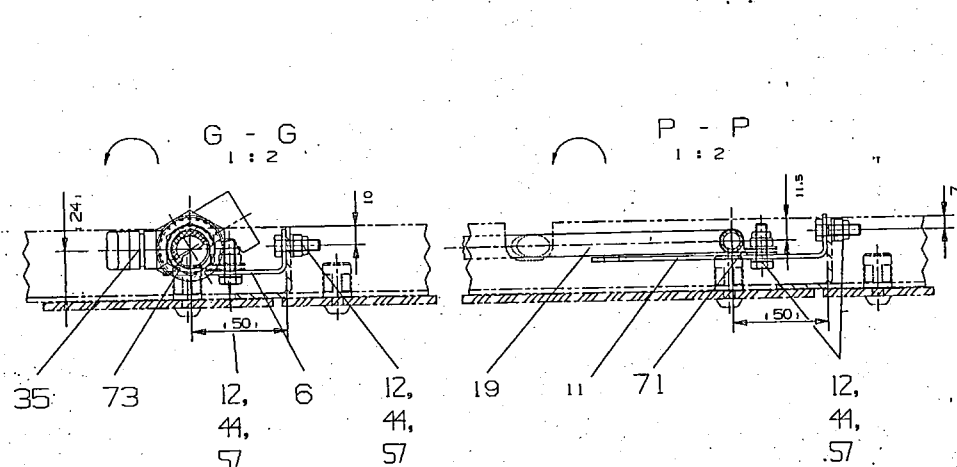
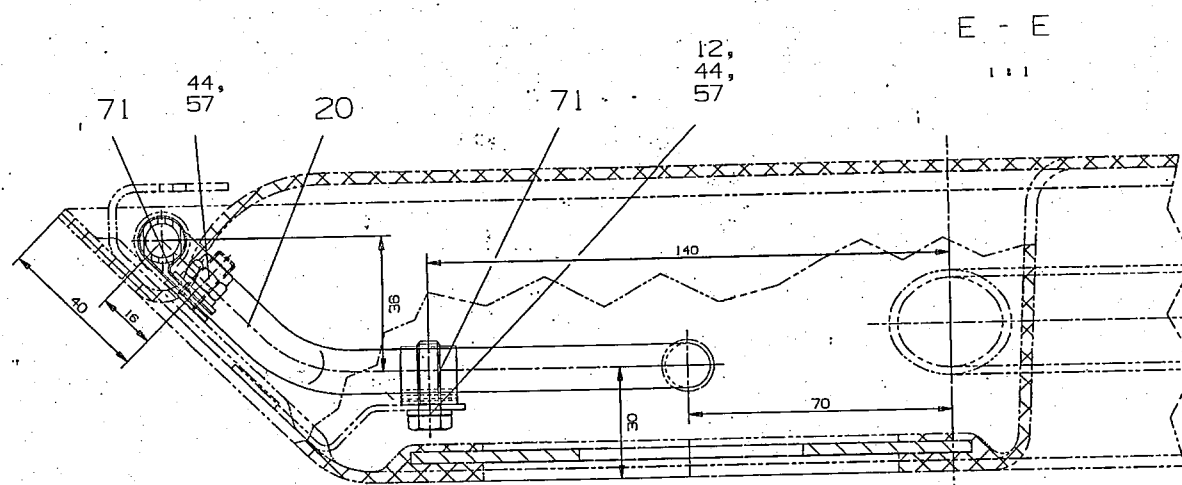
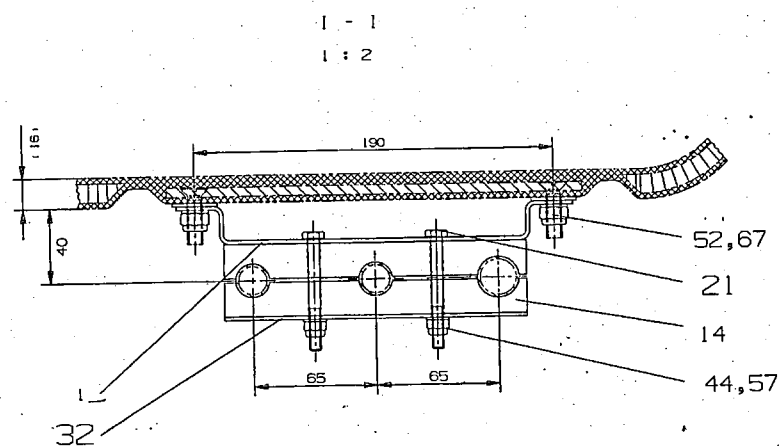
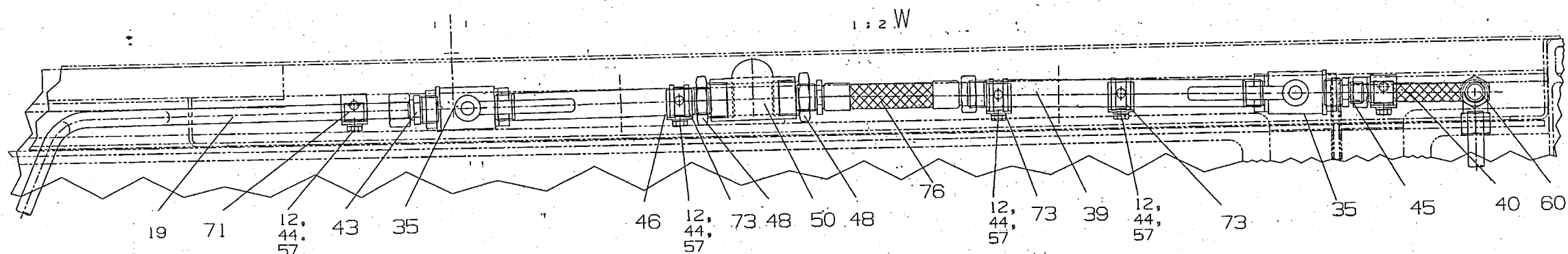
NY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
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DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.
DATE OF FIRST ISSUE 24/06/2004 CGM BY

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING	SUPERSEDES:	NIL		
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw63176S3a.prt (2D)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA		AT LAVATORY ORIENT2 FOR LHB TYPE COACHES				
NIL	M ²	RAIL COACH FACTORY, KAPURTHALA				
LENGTH/DIA		INDIAN RAILWAYS STANDARD				
NIL	M	REF.DRG.NO. 1 10113.0.30.100.008				
WIDTH/THICK.		PL NO. NIL				
NIL	M	DRG.NO. LW63176				
HEIGHT		CDE ALT. α SIZE A1 SHEET 2/5				
NIL	M	DY.CME				

6/19

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY



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Date
Date Basu
1 FEB 2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	GPASSLY DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	LAVATORY & ITS FITTING	SUPERSEDES:	NIL
WEIGHT	FILE	FILE	\\NAS\DEV\ASSLY\ALW\lw63176S4a.prt (2D)		
NIL	KG		PIPE LAYING FOR WATER	SCALE	SSE/REG
S. AREA				1:5	CHD
NIL	M ²		AT LAVATORY ORIENT2 FOR LHB TYPE COACHES	DRN	
LENGTH/DIA			RAIL COACH FACTORY, KAPURTHALA	REF.DRG.No. 1	10113.0.30.100.005
NIL	M		INDIAN RAILWAYS STANDARD	PL NO.	NIL
WIDTH/THICK.				DRG.NO.	LW63176
NIL	M			ALT.	α
HEIGHT				SIZE	A
NIL	M			SHEET	1/5

NY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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DATE OF FIRST ISSUE 24/06/2004

CGM BY

ADP/SME

DY.CME

ALT. α SIZE A SHEET 1/5

15	16	17	18	19
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
a	11/01/2005	a11 alt4 c10 f17 alt3 h12 alt4 a11	item no. 10,13,22,23,29,30,36,37,53,54,59, 74 deleted. item no. 76 added and lenth of item no. 39 was 365. Drg. no. of item no. 19 was 3 10113.R.30.112.005 item no.77 added and view updated qpc of item no. 4,5,7,9,12,31,71 was 2,4,2,4,22,4,8 respectively.	MD000152 DT. 01/06/2005

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1 FEB 2005

65	UNION	1	NIL	610L71 ERMETO	NIL	33	PLATE	3	4 10113.0. 30.095.060	NIL	NIL
65	UNION ELBOW	1	NIL	W3SL71 ERMETO	NIL	32	PLATE	1	4 10113.0. 30.095.059	NIL	NIL
54	TEE REDUCTION	1	NIL	TR22/18/22L71 ERMETO	NIL	31	STAINLESS STEEL HEX HEAD SCREW M6X20 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 .CE	ITEM-10 COATING TO MOTS 057
63	MALE STUD CONNECTOR	1	NIL	GE33LR71 ERMETO	NIL	30	ANGLE PIPE	1	3 10113.0. 30.140.007	NIL	NIL
62	MALE STUD COUPLING	2	NIL	GE22LR3/4KEG71 ERMETO	NIL	29	FIXING CLIP	1	NIL	DIN3016 61-46X9, W4	NIL
61	MALE STUD COUPLING	6	NIL	GE18LR1/2KEG71 ERMETO	NIL	28	PIPE	1	3 10113.R. 30.135.002	NIL	NIL
60	MALE STUD ELBOW	1	NIL	WE12LR71 ERMETO	NIL	27	PIPE	1	3 10113.R. 30.135.003	NIL	NIL
59	SEALING RING LONG	1	NIL	Art. no.913x DN 40	FA.LORO	26	PIPE	1	3 10113.R. 30.118.007	NIL	NIL
58	FEMALE STUD COUPLING	1	NIL	GA112LR1/2KEG71 ERMETO	NIL	25	PIPE	1	3 10113.R. 30.122.001	NIL	NIL
57	STAINLESS STEEL MACHINE WASHER A5.4 (A2 TO IS4367 PT.14-1984)	41	LHWSS09	IS: 2016-1967 DIN125	ITEM-4	24	PIPE	1	3 10113.R. 30.118.001	NIL	NIL
56	UNION 3/4" U11	1	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	23	SUPPORT BLOCK	1	4 10113.0. 30.095.089	NIL	NIL
55	UNION 1/2" U11	2	NIL	IS: 1879-87, TAB.10.1	THREADS ISO-7/1	22	SUPPORT BLOCK	1	4 10113.0. 30.095.065	NIL	NIL
54	SUPPORTING BUSH Ø 7.5X15	1	NIL	50-5.0003 10-0	FA.JAGOB	21	STAINLESS STEEL HEX HEAD SCREW M6X60 (A2-70 TO IS4367 PT.14-84)	10	LHWSS02	IS: 1364 PT.2-92 .CE	ITEM-9 COATING TO MOTS 057
53	WATER TRAP FOR WASH BASIN OUTFLOW	1	NIL	4ELR001.4. 30.025.003	NIL	20	PIPE	1	3 10113.R. 30.112.006	NIL	NIL
52	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS4367 PT.14)	15	LHWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MOTS 057	19	PIPE	1	LW63180	NIL	NIL
51	CONICLE NIPPLE FOR WASH BASIN OUTFLOW	1	NIL	STWS63.14. 049	NIL	18	PIPE	1	LW63169	NIL	NIL
50	EQUAL TEE 20 BORE	1	NIL	IS: 1239-92(PT2) TAB.8.A1S1304	THREADS ISO-7/1	17	PIPE	1	3 10113.R. 30.110.002	NIL	NIL
49	CONICLE NIPPLE NUT FOR WASH BASIN OUTFLOW	1	NIL	4FWP291.0. 30.025.011	NIL	16	MOULDED CLIP	1	3 10113.0. 30.095.064	NIL	NIL
48	HEXAGON BUSH 20X15	2	NIL	IS: 1239-92(PT2) TAB.27.A1S1304	THREADS ISO-7/1	15	MOULDED CLIP	3	3 10113.0. 30.095.063	NIL	NIL
47	VENT CASING FOR WASH BASIN OUTFLOW	1	NIL	FWP087.30. 025.20	FA.KTG	14	MOULDED CLIP	1	3 10113.0. 30.095.062	NIL	NIL
46	PIPE Ø 21.34X2.77X170	1	NIL	ASTM A-312 6r. TP304	THREADS ISO-7/1	13	STAINLESS STEEL HEX HEAD SCREW M6X35 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 .CE	ITEM-8 COATING TO MOTS 057
45	REDUCTION DOUBLE NIPPLE 1/2"x3/8"	1	NIL	IS: 1879-87, TAB.7.2.A1S1304	THREADS ISO-7/1	12	STAINLESS STEEL HEX HEAD SCREW M6X20 (A2-70 TO IS4367 PT.14-84)	23	LHWSS02	IS: 1364 PT.2-92 .CE	ITEM-5 COATING TO MOTS 057
44	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS4367 PT.14)	35	LHWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MOTS 057	11	BRACKET	1	3 10113.0. 30.095.094	NIL	NIL
43	MALE STUD COUPLING	2	NIL	GE12LR1/2KEG71 ERMETO	NIL	10	BRACKET	1	3 10113.0. 30.095.088	NIL	NIL
42	HOSE BAND CLIP MIKOLAR-SUPRA	2	NIL	0301311-2 40-43, W4	NIL	9	BLIND RIVET NUT M8	2	NIL	BEST. NR. 23307080035	FA.BOLLHOFF
41	HOSE 35X4X100	1	NIL	DIN73411 ELASTOMER	NIL	8	BRACKET	1	3 10113.0. 30.095.058	NIL	NIL
40	CONNECTION HOSE FLEXIBLE 3/8"x175	1	NIL	LH63112	ITEM-4	7	BRACKET	3	3 10113.0. 30.095.057	NIL	NIL
39	PIPE Ø 21.34X2.77X235	1	NIL	ASTM A-312 6r. TP304	Threads ISO 7/1	6	BRACKET	4	3 10113.0. 30.095.056	NIL	NIL
38	GRAVITY COCK 15 BORE	2	NIL	LW63170	NIL	5	BLIND RIVET NUT M6	6	NIL	BEST. NR. 23307060045	FA.BOLLHOFF
37	STAINLESS STEEL HEX HEAD SCREW M6X30 (A2-70 TO IS4367 PT.14-84)	2	LHWSS02	IS: 1364 PT.2-92 .CE	ITEM-12 COATING TO MOTS 057	4	PIPE BRACKET 19X6.6	1	LW63103	NIL	NIL
36	FIXING CLIP	1	NIL	DIN3016 61-46X15, W4	NIL	3	BRACKET	1	3 10113.0. 30.095.053	NIL	NIL
35	BALL VALVE 1/2"	3	NIL	LW63106	ITEM-3	2	BRACKET	3	3 10113.0. 30.095.052	NIL	NIL
34	PLATE	1	NIL	4 10113.0. 30.095.061	NIL	1	BRACKET	1	3 10113.0. 30.095.051	NIL	NIL

					THIS ITEM
77	FLEXIBLE DRAIN PIPE WITH INTEGRATED CONNECTING SOCKET (1-1/4" BSP THREADS)	1	NIL	PVC	-----
75	CONNECTION HOSE, FLEXIBLE 1/2"X140	1	LHG3112	NIL	NIL
75	FIXING CLIP	4	NIL	DIN3016 A1-35X20, W4	NIL
74	FIXING CLIP	1	NIL	DIN3016 F1-43X20, W4	NIL
73	FIXING CLIP	3	NIL	DIN3016 D1-19X15, W4	NIL
72	FIXING CLIP	1	NIL	DIN3016 A1-15X15, W4	NIL
71	FIXING CLIP	9	NIL	DIN3016 A1-12X15, W4	NIL
70	FIXING CLIP	1	NIL	DIN3016 D1-11X20, W4	NIL
69	BOW, 30 DEGREE	1	LWG3130	NIL	NIL
68	SCREW JOINT	1	NIL	SOS.2021-10 JACOB	NIL
67	STAINLESS STEEL MACHINE WASHER A8.4 (A2 TO IS4367 PT.14-1984)	28	LTHW5509	IS: 2016-1967 DIN125	ITEM-5

NOTE:- For all connections between the thread fittings of noncorroding steel the external threads have to be wrapped with (hemp) and covered with (sealing paste) before they are screwed in. All screw connections/ bolt connections, with or without nuts, of stainless steel that are not to be secured with (loctite) have to be greased with (molykotel) prior to be screwed in.

WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS	OPASSLT	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	LAVATORY & ITS FITTING	SUPERSEDES:		NIL	
WEIGHT	FILE	\\NAS\DEV\ASSLY\LW\lw6317655a.prt (2D)					
NIL	KG	PIPE LAYING FOR WATER					
S.AREA		AT LAVATORY ORIENT2 FOR LHB TYPE COACHES					
NIL	M ²	RAIL COACH FACTORY, KAPURTHALA					
LENGTH/DIA		REF.DRG.No. 1 10113.0.30.100.006					
NIL	M	INDIAN RAILWAYS STANDARD					
WIDTH/THICK.		PL NO. NIL					
NIL	M	DRG.NO. LW63176					
HEIGHT		ALT. □ SIZE A1 SHEET 5/5					
NIL	M	DATE/SME	DY.CME	CDE			

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DATE 11/1/78	BY J. J. J.	CHECKED BY J. J. J.	APPROVED BY J. J. J.

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DATE OF FIRST ISSUE		24/06/2004		CGM BY		<i>Signature</i>			
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ANY MANUAL ALTERATION SHALL BE INITIALED AND DATED				DATE OF FIRST ISSUE				27/06/2023		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80		81		82		83		84		85		86		87		88		89		90		91		92		93		94		95		96		97		98		99		100		101		102		103		104		105		106		107		108		109		110		111		112		113		114		115		116		117		118		119		120		121		122		123		124		125		126		127		128		129		130		131		132		133		134		135		136		137		138		139		140		141		142		143		144		145		146		147		148		149		150		151		152		153		154		155		156		157		158		159		160		161		162		163		164		165		166		167		168		169		170		171		172		173		174		175		176		177		178		179		180		181		182		183		184		185		186		187		188		189		190		191		192		193		194		195		196		197		198		199		200		201		202		203		204		205		206		207		208		209		210		211		212		213		214		215		216		217		218		219		220		221		222		223		224		225		226		227		228		229		230		231		232		233		234		235		236		237		238		239		240		241		242		243		244		245		246		247		248		249		250		251		252		253		254		255		256		257		258		259		260		261		262		263		264		265		266		267		268		269		270		271		272		273		274		275		276		277		278		279		280		281		282		283		284		285		286		287		288		289		290		291		292		293		294		295		296		297		298		299		300		301		302		303		304		305		306		307		308		309		310		311		312		313		314		315		316		317		318		319		320		321		322		323		324		325		326		327		328		329		330		331		332		333		334		335		336		337		338		339		340		341		342		343		344		345		346		347		348		349		350		351		352		353		35	
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