



# COMPENDIUM OF LHB DRAWINGS

(FOR THE USE OF COACHING DEPOTS)

COMPILED BY :-

**COACHING DEPOT  
CHHAPRA**

N.E.RLY, VARANASI DIVISION

## PREFACE

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We, the coaching Depot officials are dedicated in quality maintenance of all Coaching and wagon Stocks. We have been maintaining ICF coaching stocks in our coaching depots since several years. The supervisors and staffs have got expertise in maintaining ICF Stocks. Now, we are switching over to LHB Stocks on fast-track mode. It is obvious that the maintenance of LHB stocks at depot level is new for all supervisors and staffs of Coaching Depot but they are getting trained about it on fast pace due to regular training courses and work experience.

In order to make supervisors and staffs aware about the LHB Design, a compendium of LHB Drawing have prepared in booklet form. The Drawings of various components of LHB Coaches have collected through various sources & personal efforts and compiled as a booklet. It is well known that LHB Drawings are not easily available at field level and there is no any suitable platform from where it may be suitably retrieved. The soft copies of LHB drawings have been collected on personal interest and compiled for the ease at depot level. For further convenience, e-version of this booklet has also been made.

The Objective of this book is to provide a tool to the staffs who involved in maintenance of LHB Stocks. It will definitely help in enhancing the know how skill of staffs at depot level.

We are sure that this book consisting of various LHB drawings will definitely be useful in increasing the knowledge at Depot level.

We are very thankful to **Shri S.P Srivastav, (Sr.DME/C&W/BSB)** sir for his inspiration and benign support.

**Hari Shankar Kumar**  
**Coaching Depot Officer**

**Coaching Depot, Chhapra**  
**Date: -01.07.2021**

# LHB DRAWINGS

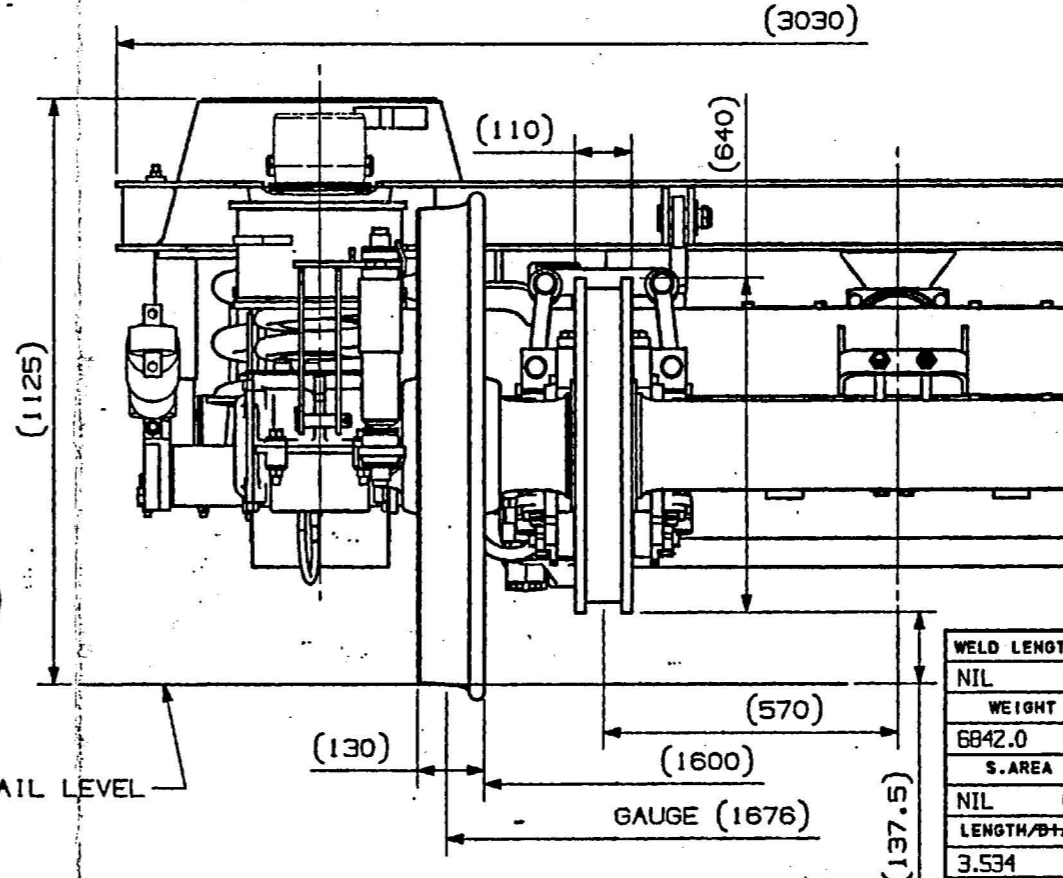
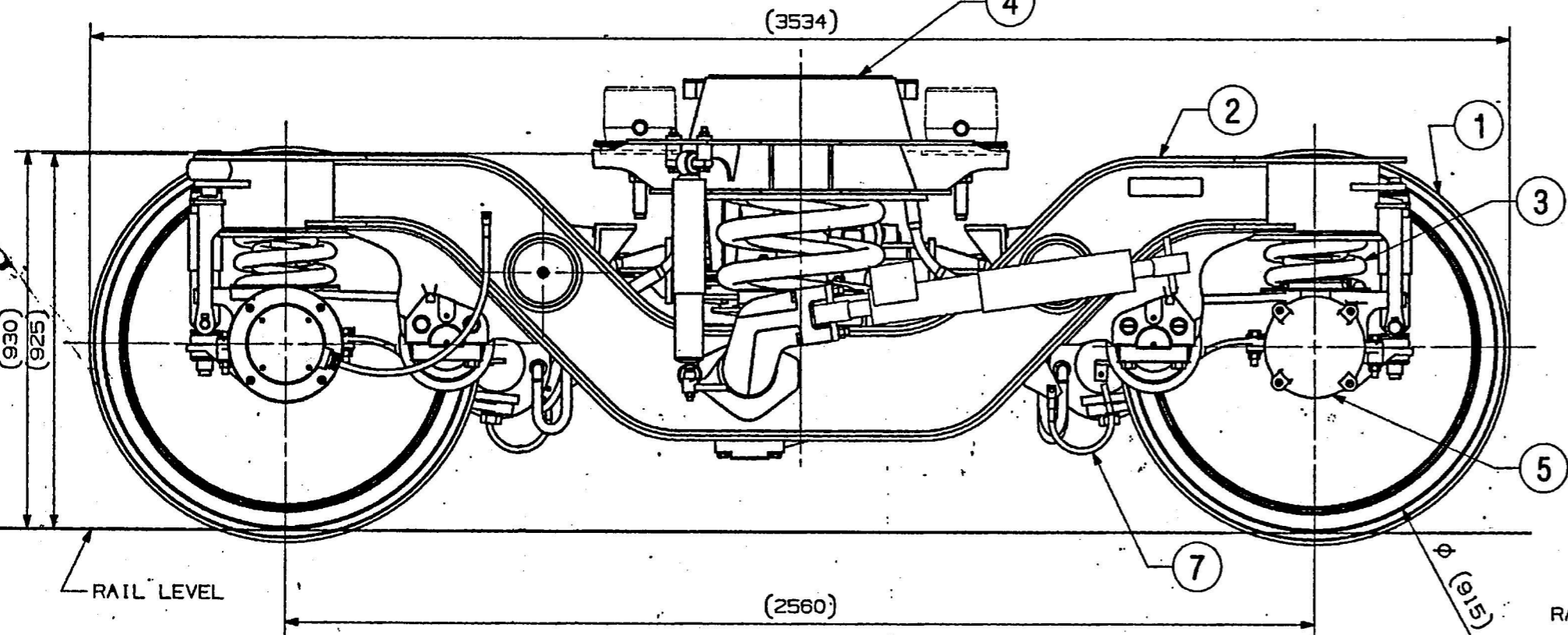
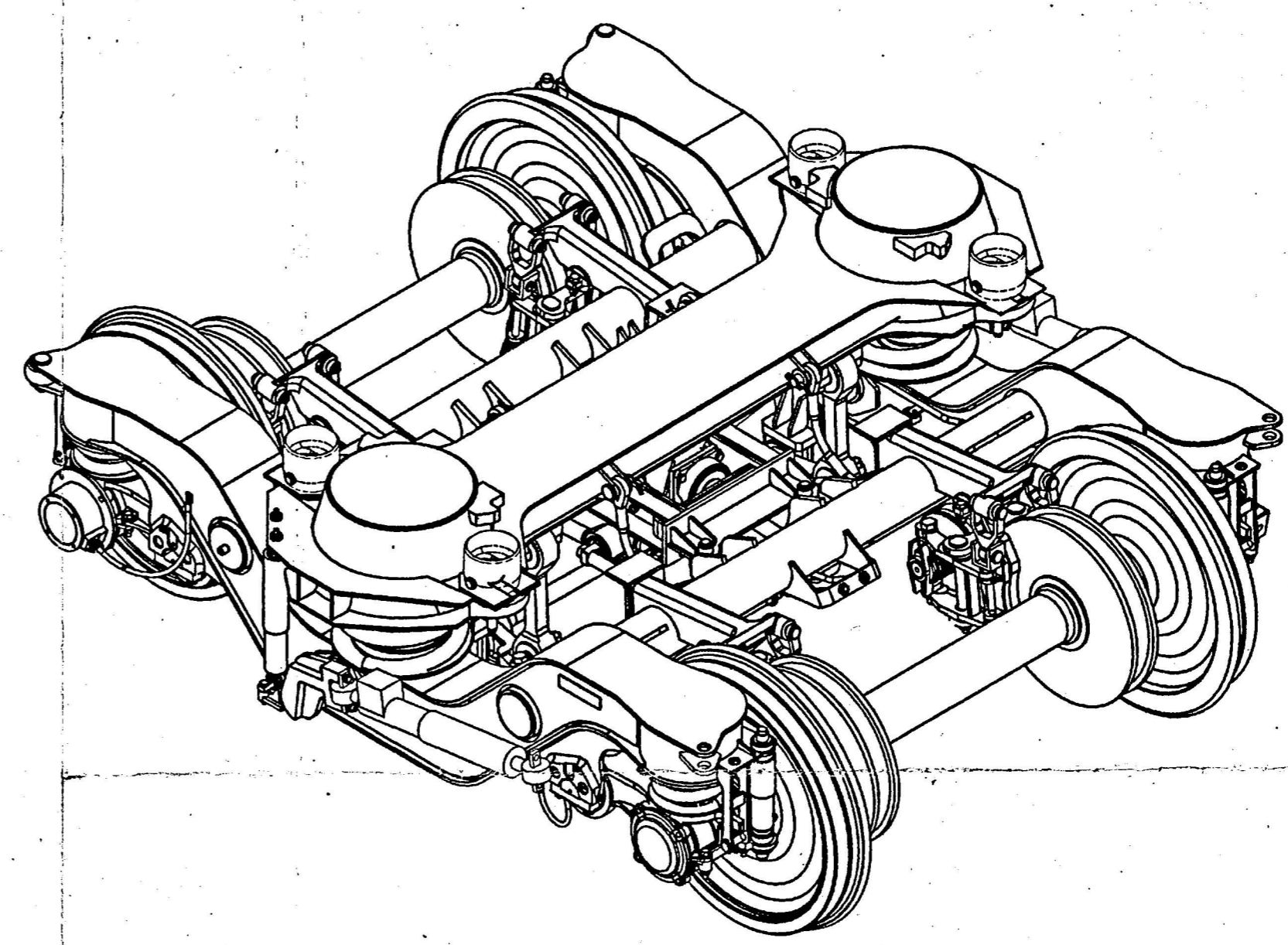
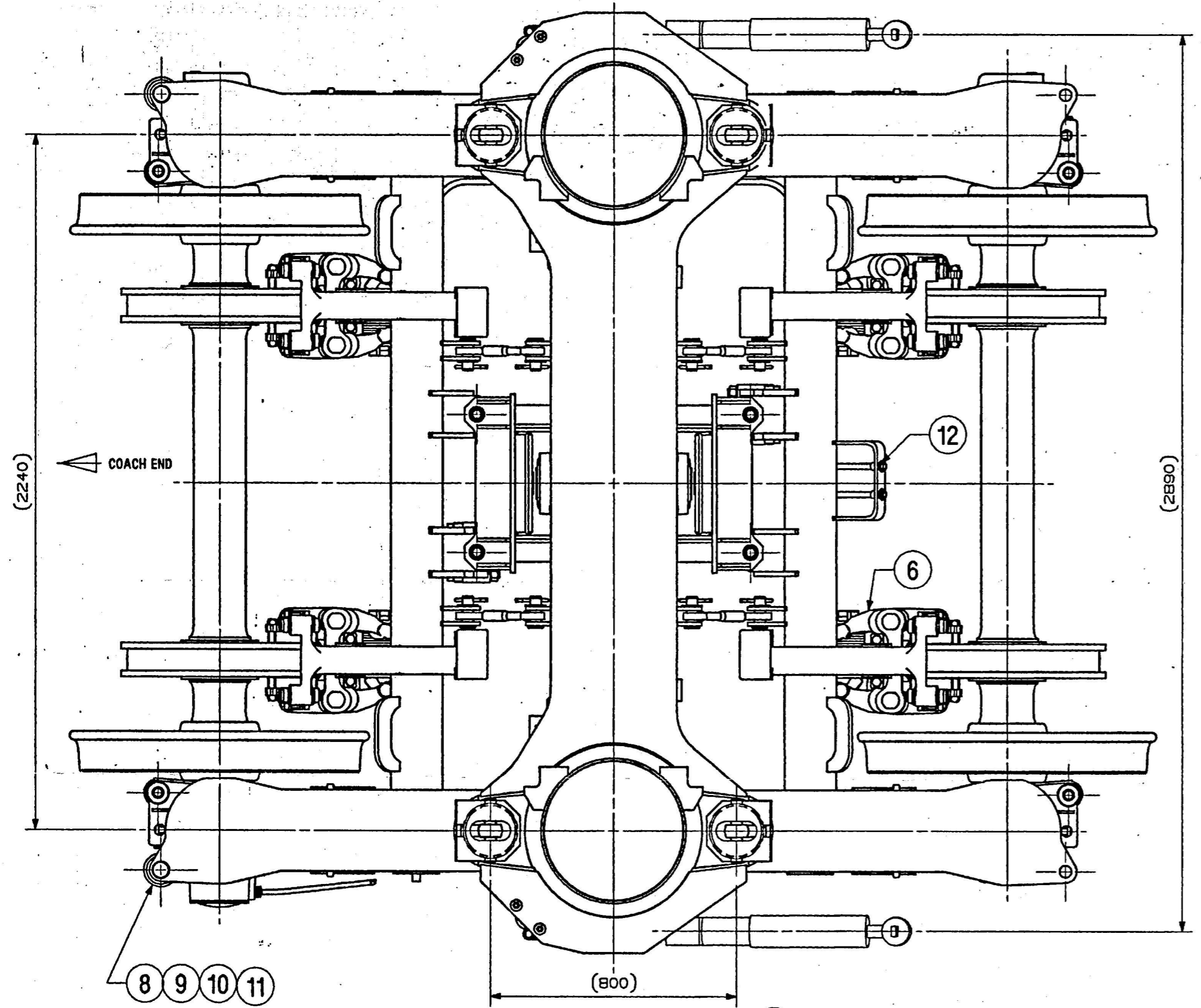
	Description	HYPERLINK	DRAWING NO	PAGE NO
<b>(A)</b>	<b>BOGIE GENERAL ARRANGEMENT</b>			
1	ACCN(EOG)	<a href="#">LW00001</a>	LW00001	1
2	GS/SCN(EOG)	<a href="#">LG00003</a>	LG00003	2
3	AC 2T(EOG) WITH AIR SPRING 120KN IN SECONDARY SUSPENSION	<a href="#">LW00007</a>	LW00007	3
4	POWER CAR (NON GUARD SIDE) SIDE-2 WITH AIR SPRING 120 KN IN SECONDARY SUSPENSION	<a href="#">LW00011</a>	LW00011	4
5	POWER CAR (WITH HAND BRAKE) SIDE-1 WITH AIR SPRING 120 KN IN SECONDARY SUSPENSION	<a href="#">LW00010</a>	LW00010	5
6	HOT BUFFET CAR WITH AIR SPRING 120KN IN SECONDARY SUSPENSION	<a href="#">LW00009</a>	LW00009	6
7	SLR SIDE-1 UNDERSLUNG WITH POWERPACK WITH HAND BRAKE WITH AIR SUSPENSION IN SS	<a href="#">LR00003</a>	LR00003	7
8	NON AC LHB COACHES WITH AIR SPRING 140KN	<a href="#">LG00004</a>	LG00004	8
9	ANTI ROLL BAR ASSEMBLY	<a href="#">1267422</a>	1267422	9
10	BOGIE FRAME ASSEMBLY	<a href="#">1267401</a>	1267401	10
11	BOLSTER WITH AIR SPRING	<a href="#">LW04001</a>	LW04001	11
12	CENTER PIVOT ASSEMBLY	<a href="#">1268371</a>	1268371	12
13	TRACTION CENTRE ASSEMBLY	<a href="#">1267507</a>	1267507	13
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1	PRIMARY SUSPENSION FOR ACCN(EOG) BOGIE	<a href="#">LW01001</a>	LW01001	14
2	PRIMARY SUSPENSION FOR GS BOGIE	<a href="#">LG01102</a>	LG01102	15
3	SECONDARY SUSPENSION WITH AIR SPRING 140KN FOR NON-AC LHB COACHES	<a href="#">LG05108</a>	LG05108	16
4	SECONDARY SUSPENSION ARRANGEMENT FOR GS BOGIE	<a href="#">LG05001</a>	LG05001	17
5	PNEUMATIC PIPING ARRANGEMENT FOR RCF BOGIE WITH AIR SPRING IN SECONDARY SUSPENS.	<a href="#">LW36003</a>	LW36003	18
<b>(C)</b>	<b>AIR BRAKE</b>			
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1(b)	BRAKE DEVICE MOUNTING FOR AC(EOG)	<a href="#">LW36182</a>	LW36182	20
2(a)	COMPRESSED AIR BRAKE MOUNTING PP END MIDDLE	<a href="#">111012.0.09.100.004</a>	111012.0.09.100.004	21
2(b)	COMPRESSED AIR BRAKE MOUNTING PP END MIDDLE	<a href="#">111012.0.09.100.004</a>	111012.0.09.100.004	22
2(c)	COMPRESSED AIR BRAKE MOUNTING PP END MIDDLE	<a href="#">111012.0.09.100.004</a>	111012.0.09.100.004	23
2(d)	COMPRESSED AIR BRAKE MOUNTING PP END MIDDLE	<a href="#">111012.0.09.100.004</a>	111012.0.09.100.004	24
3(a)	HAND BRAKE AND INDICATING UNIT FOR POWER CAR	<a href="#">111012.0.07.200.001</a>	111012.0.07.200.001	25
3(b)	HAND BRAKE AND INDICATING UNIT FOR POWER CAR	<a href="#">111012.0.07.200.001</a>	111012.0.07.200.001	26
3(c)	HAND BRAKE AND INDICATING UNIT FOR POWER CAR	<a href="#">111012.0.07.200.001</a>	111012.0.07.200.001	27
4	HAND BRAKE ASSEMBLY	<a href="#">111012.0.07.200.002</a>	111012.0.07.200.002	28
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7(d)	AIR BRAKE COMPLETE ON UNDERFRAME FOR DSLR MIDDLE	<a href="#">LR36331</a>	LR36331	36
8(a)	AIR BRAKE COMPLETE ON UNDERFRAME FOR DSLR LUGGAGE END	<a href="#">LR36332</a>	LR36332	37
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23	HINGED COVER		LW71350	91
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4	WSP ELECTRICAL WIRING DIAGRAM FOR MODIFIED ARRANGEMENT ( 4 NOS. OF JUNCTION BOXES) FTRIL - SWKP		FT0052052 - W00	101
5	WSP ELECTRICAL WIRING DIAGRAM FOR EXISTING ARRANGEMENT ( 6 NOS. OF JUNCTION BOXES) FTRIL - AEF2		FT0052052 - W03	102

6	WSP ELECTRICAL WIRING DIAGRAM FOR MODIFIED ARRANGEMENT ( 4 NOS. OF JUNCTION BOXES) FTRIL - AEEG2	FT0052052 - W01	103
7	WSP ELECTRICAL WIRING DIAGRAM FOR EXISTING ARRANGEMENT ( 6 NOS. OF JUNCTION BOXES) ESCORTS - PE94 MSV	EL01069 Alt-1	104
8	WSP ELECTRICAL WIRING DIAGRAM FOR MODIFIED ARRANGEMENT ( 4 NOS. OF JUNCTION BOXES) ESCORTS - PE94 MSV	EL01069 Alt-2	105

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



DATE  
 ENTER  
 IN  
 DATE

MAY 2002

ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	LW30010-11	NIL	NIL
12	PIPING ARRANGEMENT	1	1268882	NIL	NIL
11	PLAIN WASHER 38	2	NIL	DIN125-1,ST50	NIL
10	SPLIT PIN 10X63	2	L1H006	IS: 549-1974	ITEM-14 COATING TO MTS 087
9	PIN	2	1901864	NIL	NIL
8	CURVE ROLL	2	1267532	NIL	NIL
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	1268820	NIL	NIL
5	AXLE BOX LAYOUT	1	1268819-1	NIL	NIL
4	SECONDARY SUSPENSION	1	LW05001-a	NIL	NIL
3	PRIMARY SUSPENSION	2	LW01001-w	NIL	NIL
2	BOGIE FRAME ASSEMBLY	1	1267401-s	NIL	NIL
1	WHEEL & AXLE COMPLETE	2	LW02001-c	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	GROUP	BOGIE GENERAL ARRANGEMENT				NIL
6842.0	WEIGHT	FILE \\Highpc2\w2\bogie\lw\lw00001.prt				
NIL	S. AREA	BOGIE GENERAL ARRANGEMENT FOR ACCN (EOG)				
3.534	LENGTH/B*H	RAIL COACH FACTORY, KAPURTHALA				
3.030	WIDTH/T*H	INDIAN RAILWAYS STANDARD				
1.114	HEIGHT	PL NO. 02000258				
		DRG. NO. LW00001				

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. DATE OF FIRST ISSUE: 25/04/2002

FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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

SCALE: 1:10

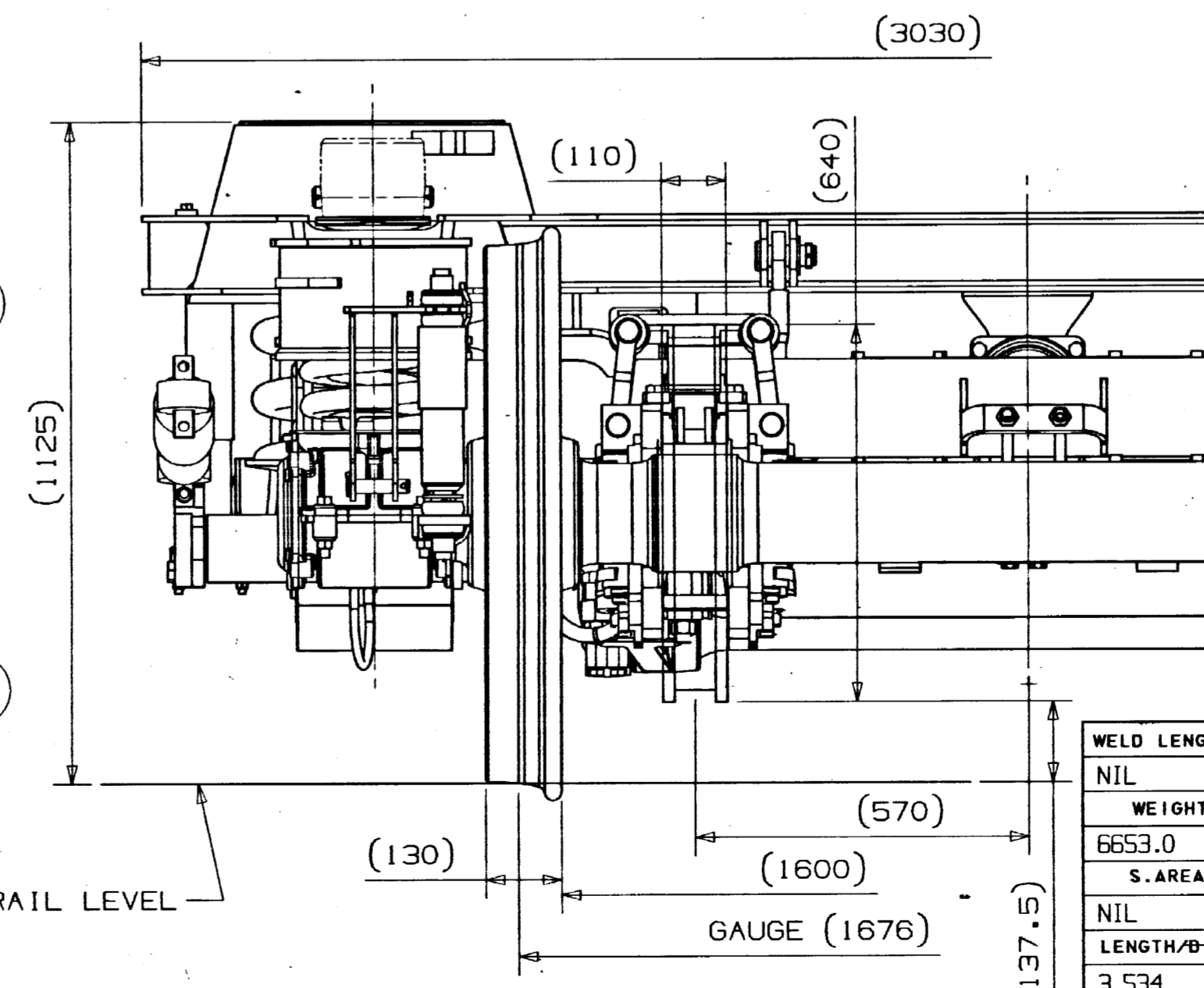
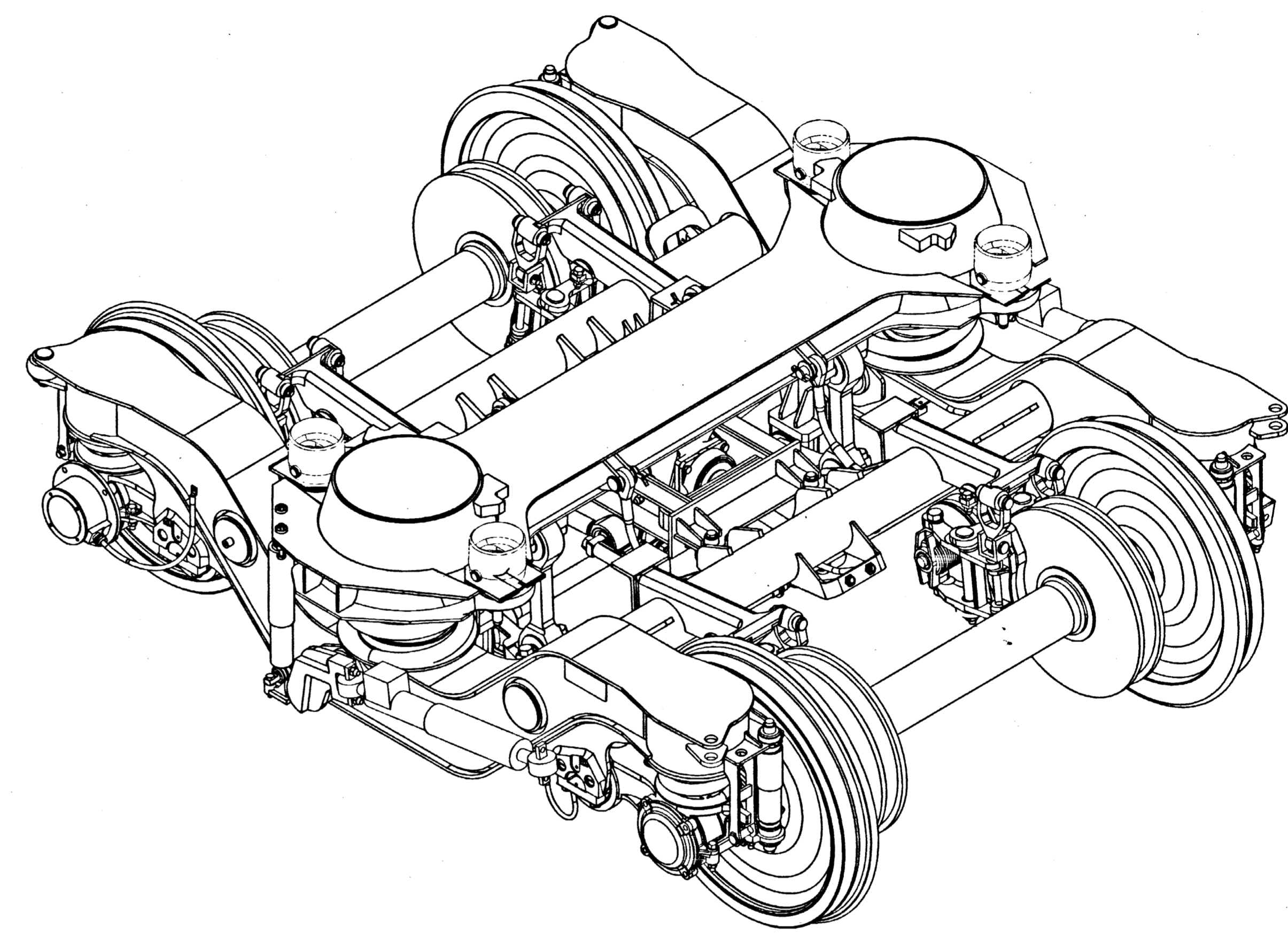
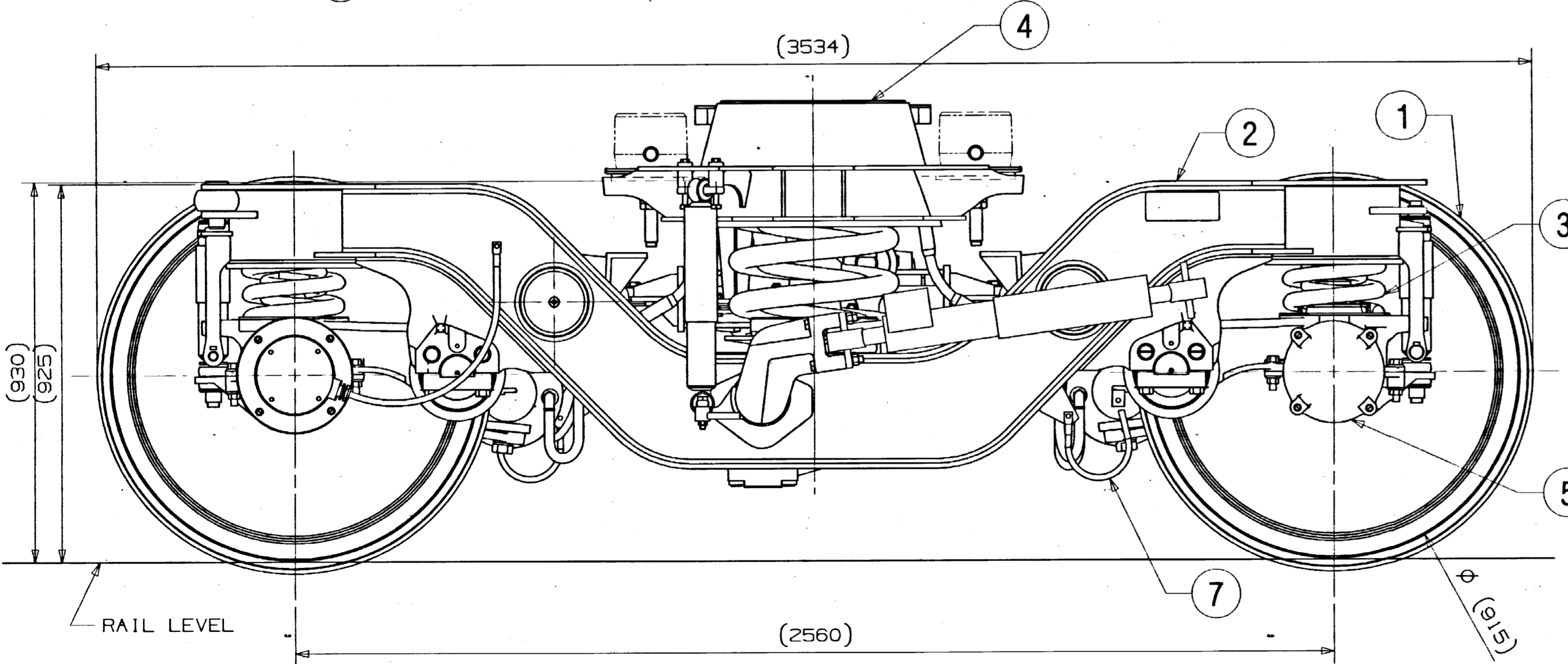
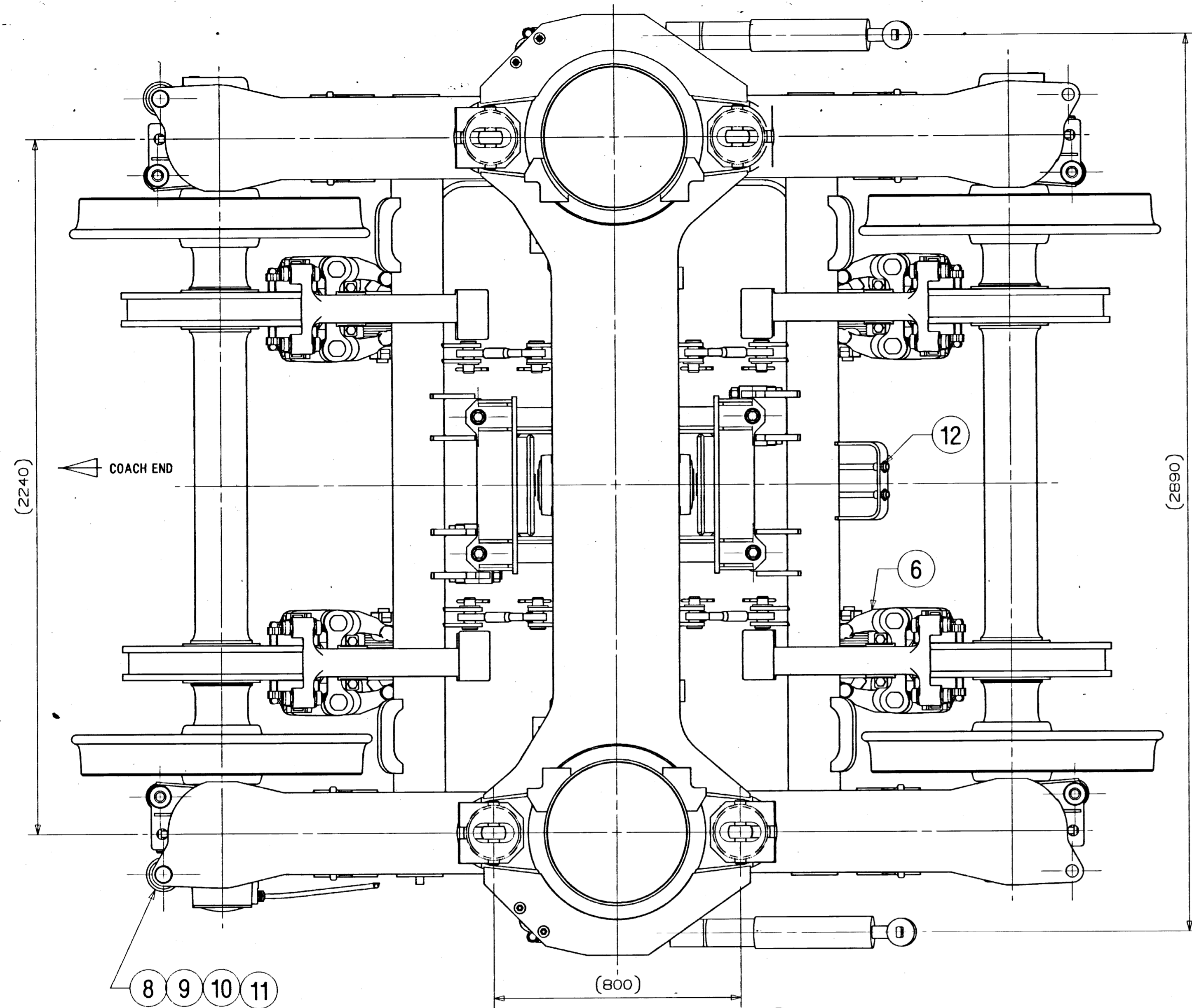
INDIAN RAILWAYS STANDARD

PL NO. 02000258

DRG. NO. LW00001

ALT. NIL (SIZE A) (SHEET) 1/1

15	16	17	18	19
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



ITEM	DESCRIPTION & DIMENSIONS	QTY	ASSY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	L690004	NIL	NIL	
12	PIPING ARRANGEMENT	1	1268882	NIL	NIL	
11	PLAIN WASHER 33	2	NIL	01N125-1,ST50	NIL	
10	SPLIT PIN 10X63	2	L1HW06	IS: 549-1974	NIL	ITEM-14 COATING TO MTS 057
9	PIN	2	1901864	NIL	NIL	
8	CURVE ROLL	2	1267532	NIL	NIL	
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	1268820	NIL	NIL	
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL	
4	SECONDARY SUSPENSION	1	1605001	NIL	NIL	
3	PRIMARY SUSPENSION	2	1601102	NIL	NIL	
2	BOGIE FRAME ASSEMBLY	1	1267401	NIL	NIL	
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL	

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	ASSY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	M	GROUP	BOGIE GENERAL ARRANGEMENT	SUPERSEDES:	NIL			
6653.0	KG	WEIGHT	BOGIE GENERAL ARRANGEMENT					SCALE SSE/REC
NIL	M <sup>2</sup>	S. AREA	INDIAN RAILWAYS STANDARD					1:10
3.534	M	LENGTH/DIA	FOR LHB GS/EOG & LHB SCN/EOG					CHD
3.030	M	WIDTH/THICK.	RAIL COACH FACTORY, KAPURTHALA					DRN
1.114	M	HEIGHT	INDIAN RAILWAYS STANDARD					REF.DRG.No. 1267400 VER. 03
			INDIAN RAILWAYS STANDARD					PL NO. NIL
			INDIAN RAILWAYS STANDARD					DRG. NO. LG00003
			INDIAN RAILWAYS STANDARD					ALT. NIL
			INDIAN RAILWAYS STANDARD					SIZE A/SHEET 1/1

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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

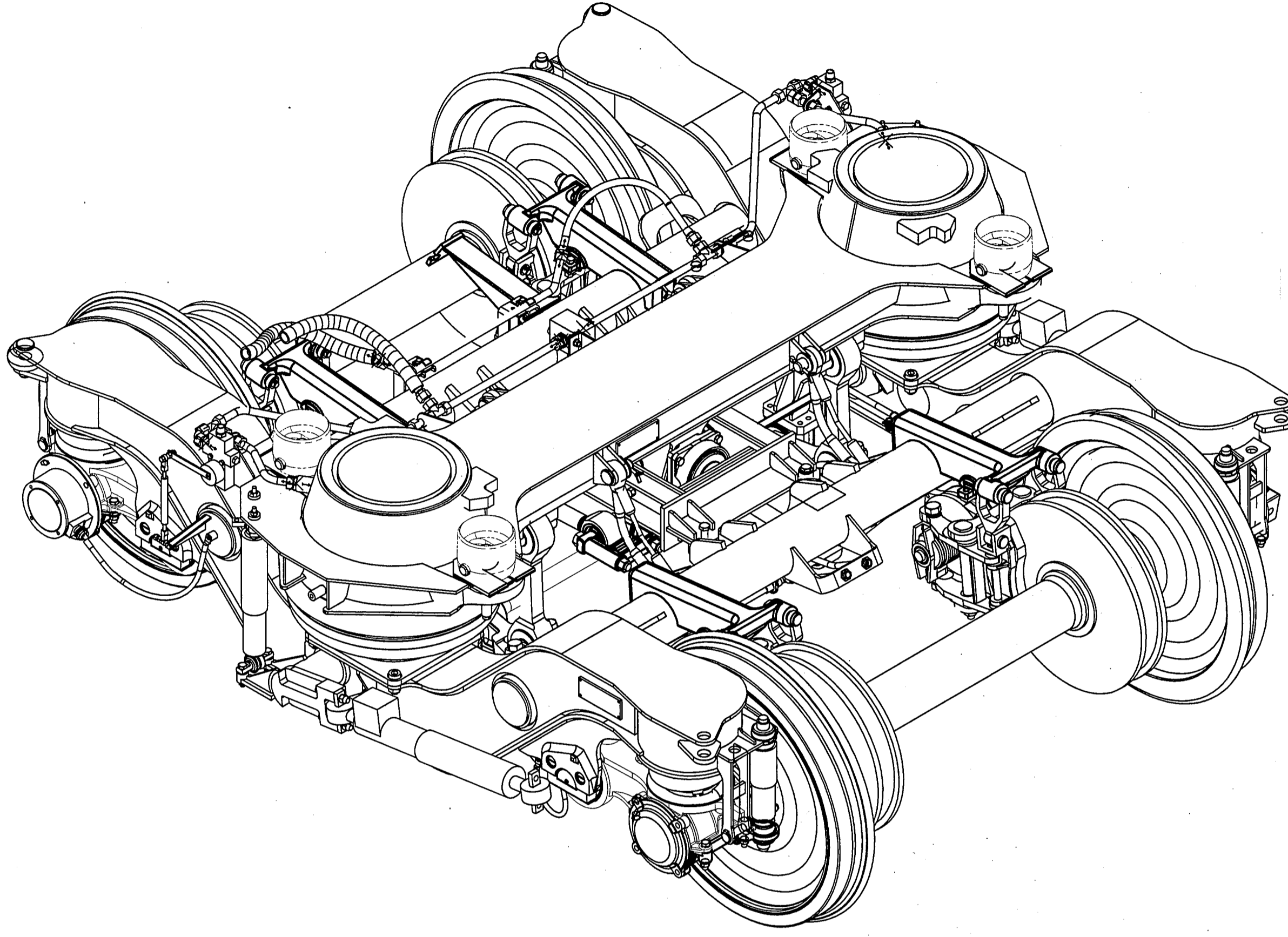
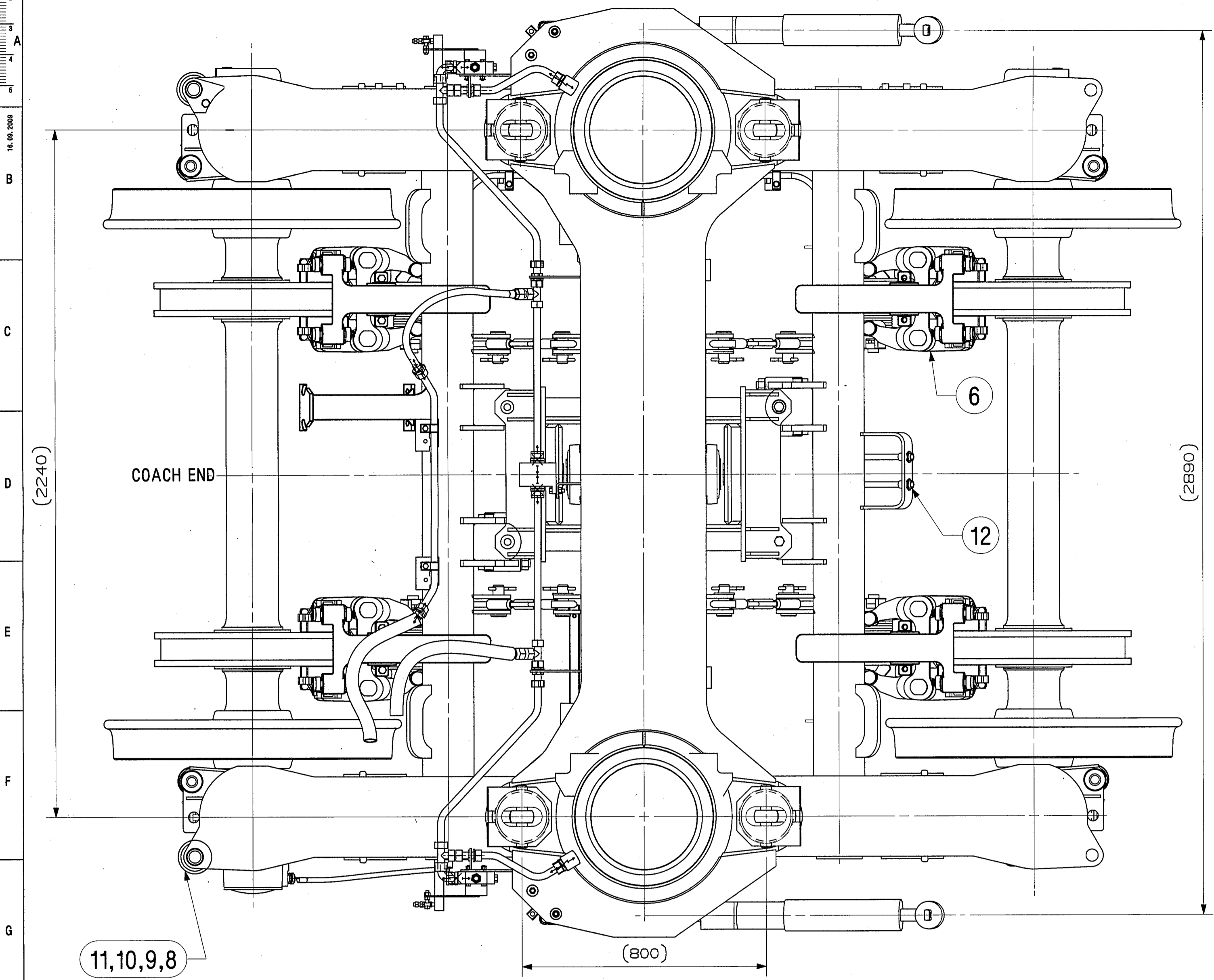
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30 APR 2014

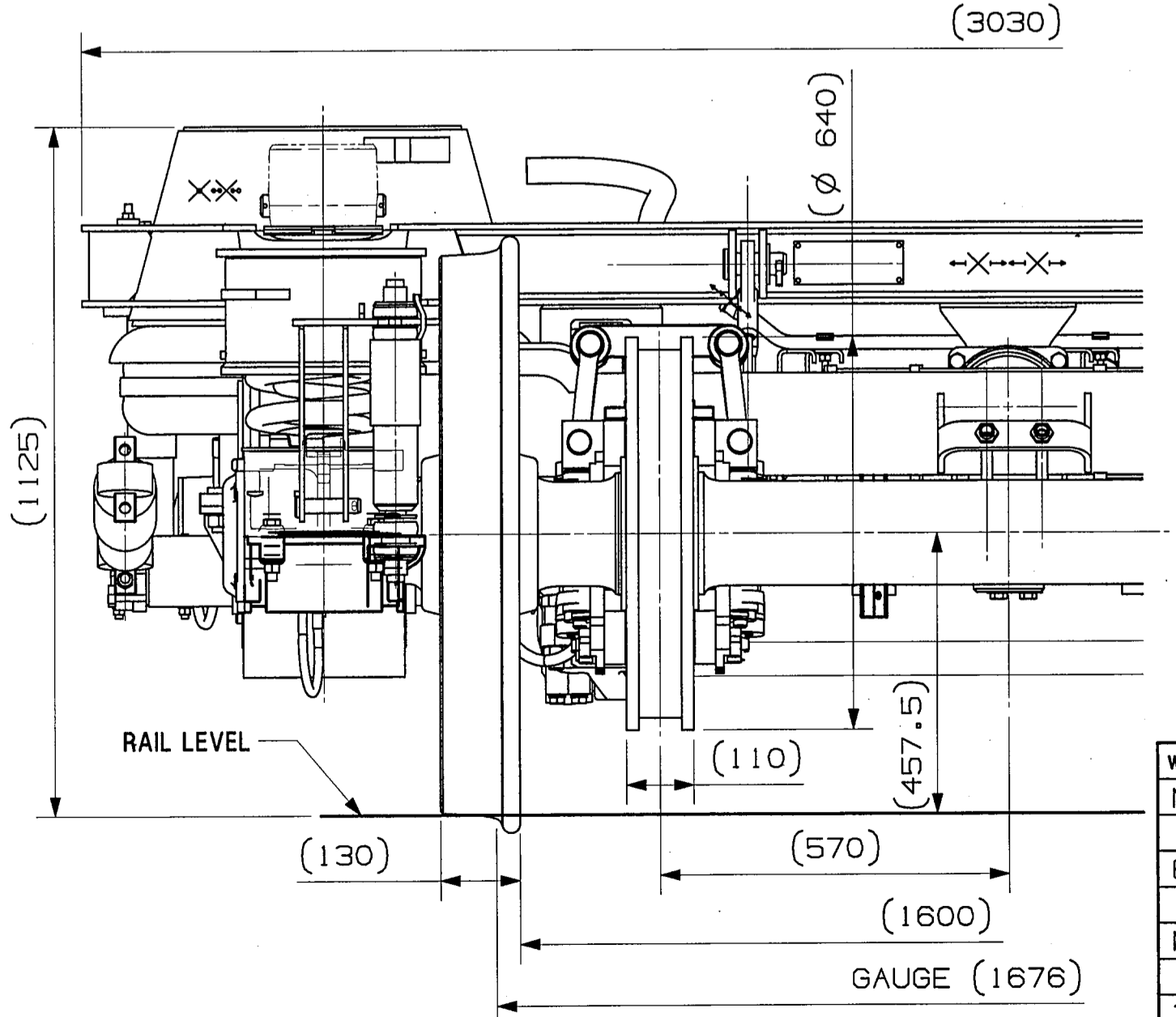
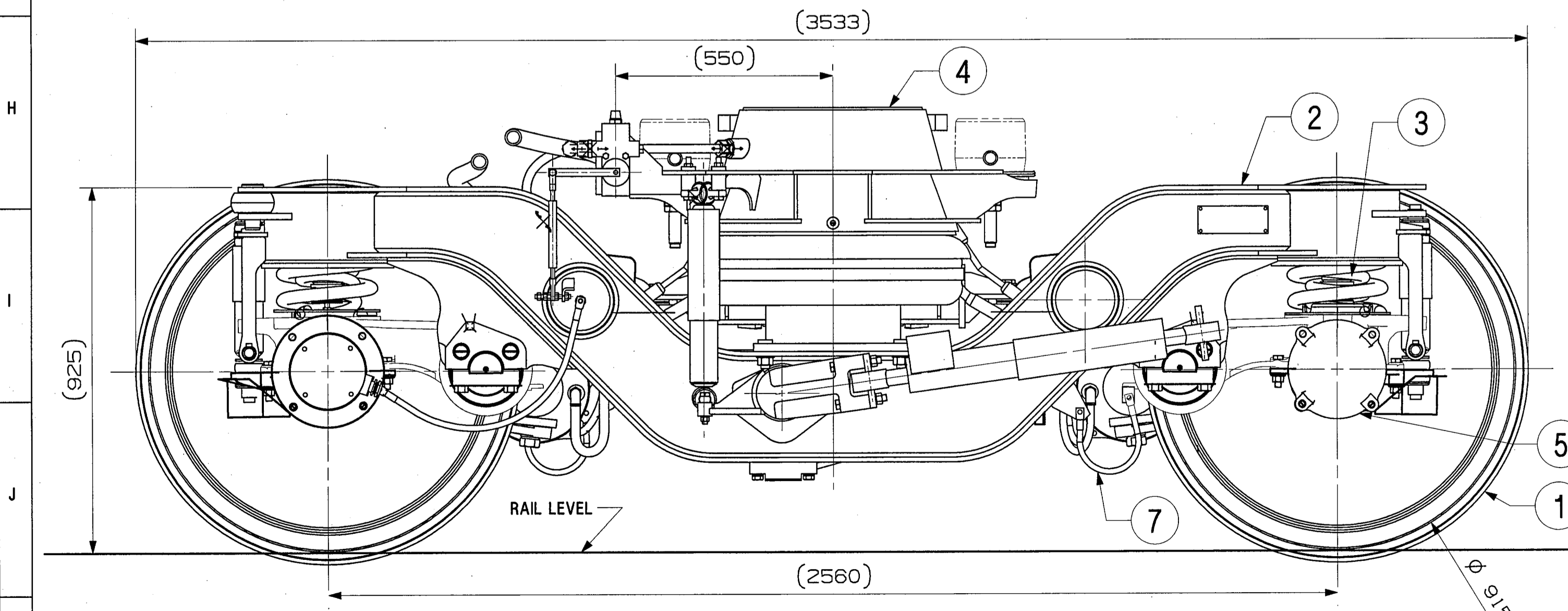




ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	27/09/2016	I-17	DRAWING NO. FOR ITEM NO.9 WAS 1901864. ITEM NO.10 SPEC. UPDATED.	DY.CME-D1 NOTING ON MD44121



TFR ISO



आवृत्त  
ENTERED  
INTO  
प्रसिद्ध  
DATA BASE

03 OCT 2016

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	LW90033	NIL	NIL
12	PIPING ARRANGEMENT	1	LW36004	NIL	NIL
11	PLAIN WASHER 41	2	NIL	DINI25-1,ST50	NIL
10	SPLIT PIN 10X63	2	NIL	IS: 549-05, ST34	COATING TO MDT5 057
9	PIN	2	LW05124	NIL	NIL
8	CURVE ROLL	2	1267532	NIL	NIL
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	1272112	NIL	NIL
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL
4	SECONDARY SUSPENSION ARRET.	1	LW05004	NIL	NIL
3	PRIMARY SUSPENSION	2	1272174	NIL	NIL
2	BOGIE FRAME ASSEMBLY	1	LW03002	NIL	NIL
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	BOGIE GENERAL ARRANGEMENT	SUPERSEDES:	LW00011	ALT NIL
6920.0	KG	WEIGHT				
NIL	M <sup>2</sup>	S.AREA				
3.534	M	LENGTH/Ø+*				
3.030	M	WIDTH/FH+ØK.				
1.114	M	HEIGHT				

**BOGIE GENERAL ARRANGEMENT**  
FOR SIDE-2 POWER CAR (NON GUARD SIDE)  
WITH AIR SPRING (120 KN) IN SECONDARY SUSPENSION

SCALE: 1:10  
CHD: AMAN  
DRN: AMIT

रेल कोच फैक्टरी कपूरथला

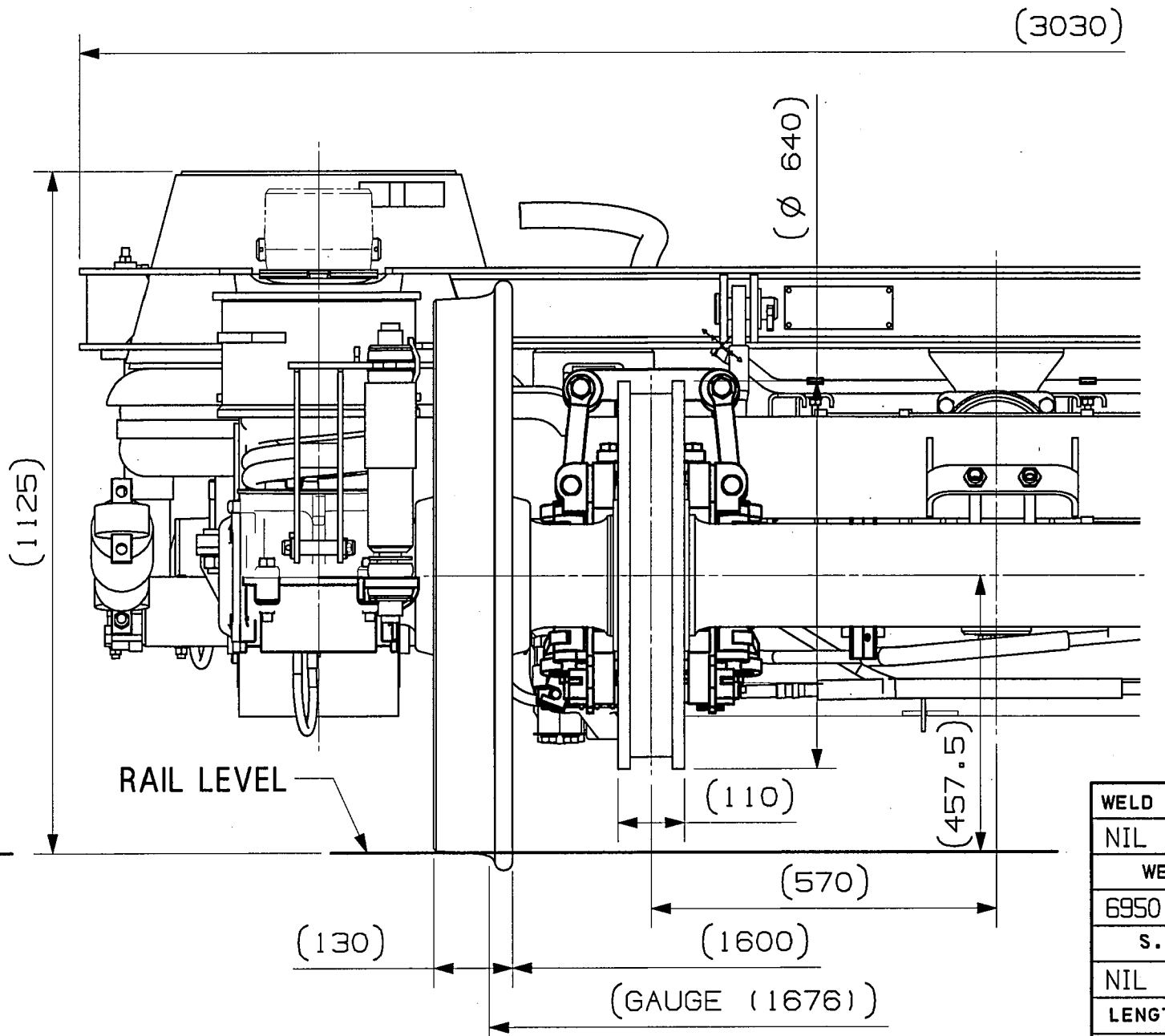
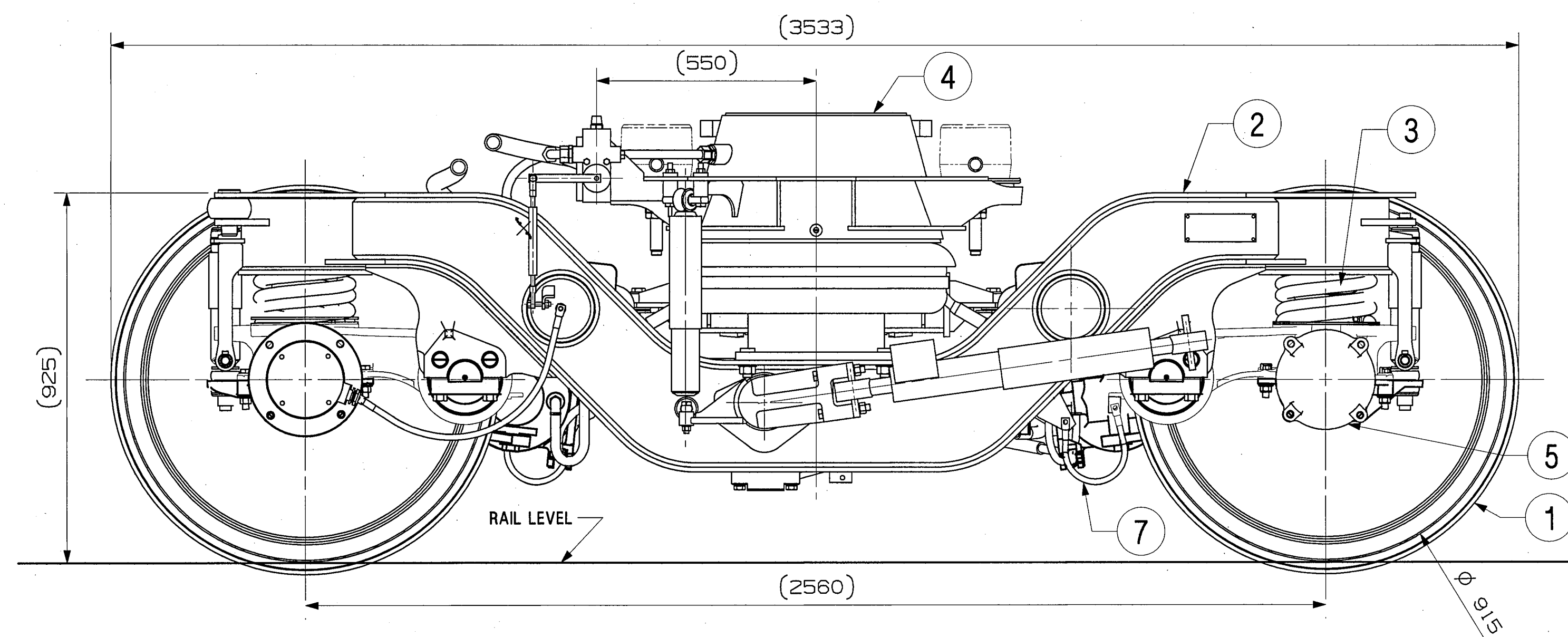
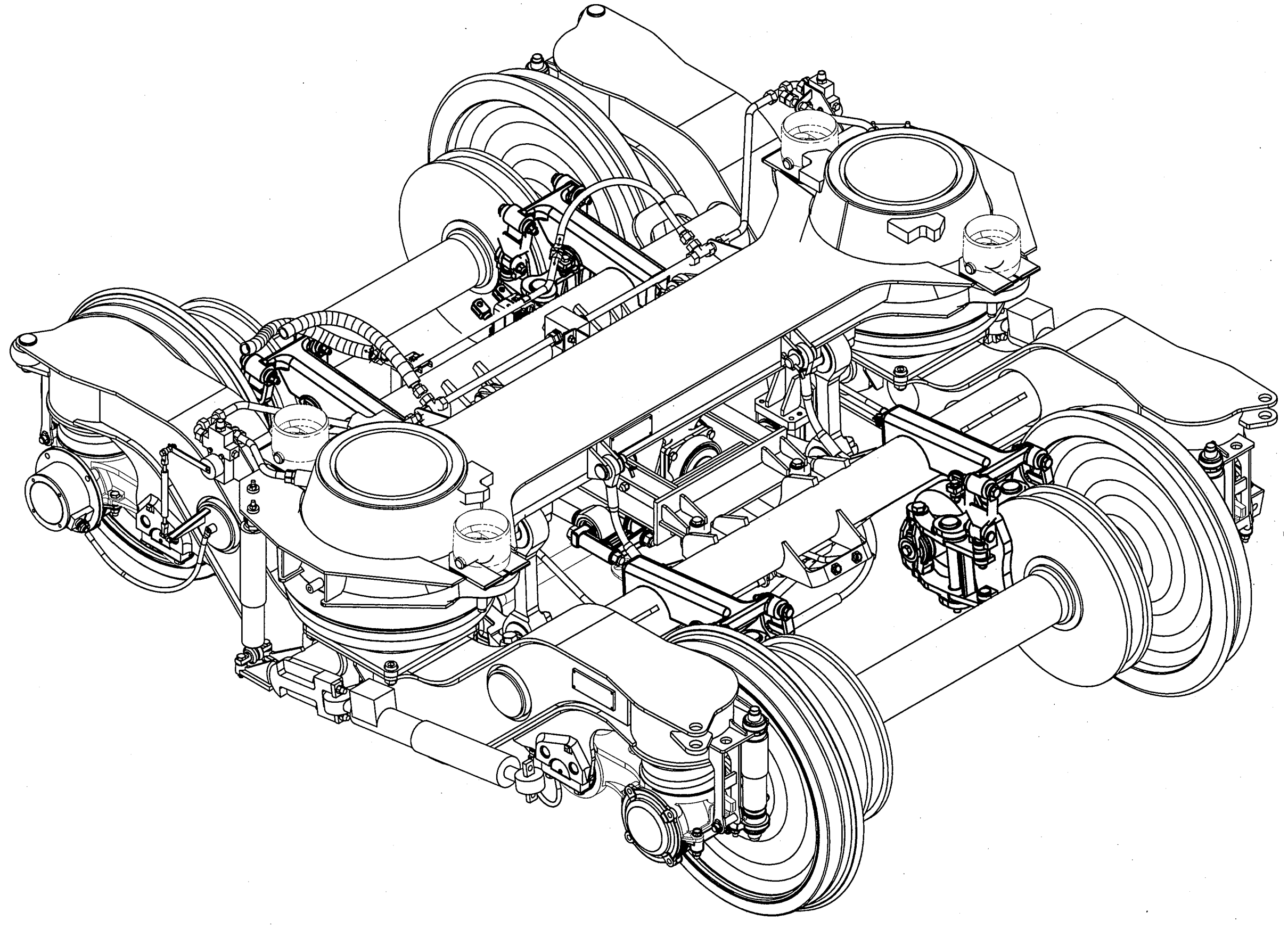
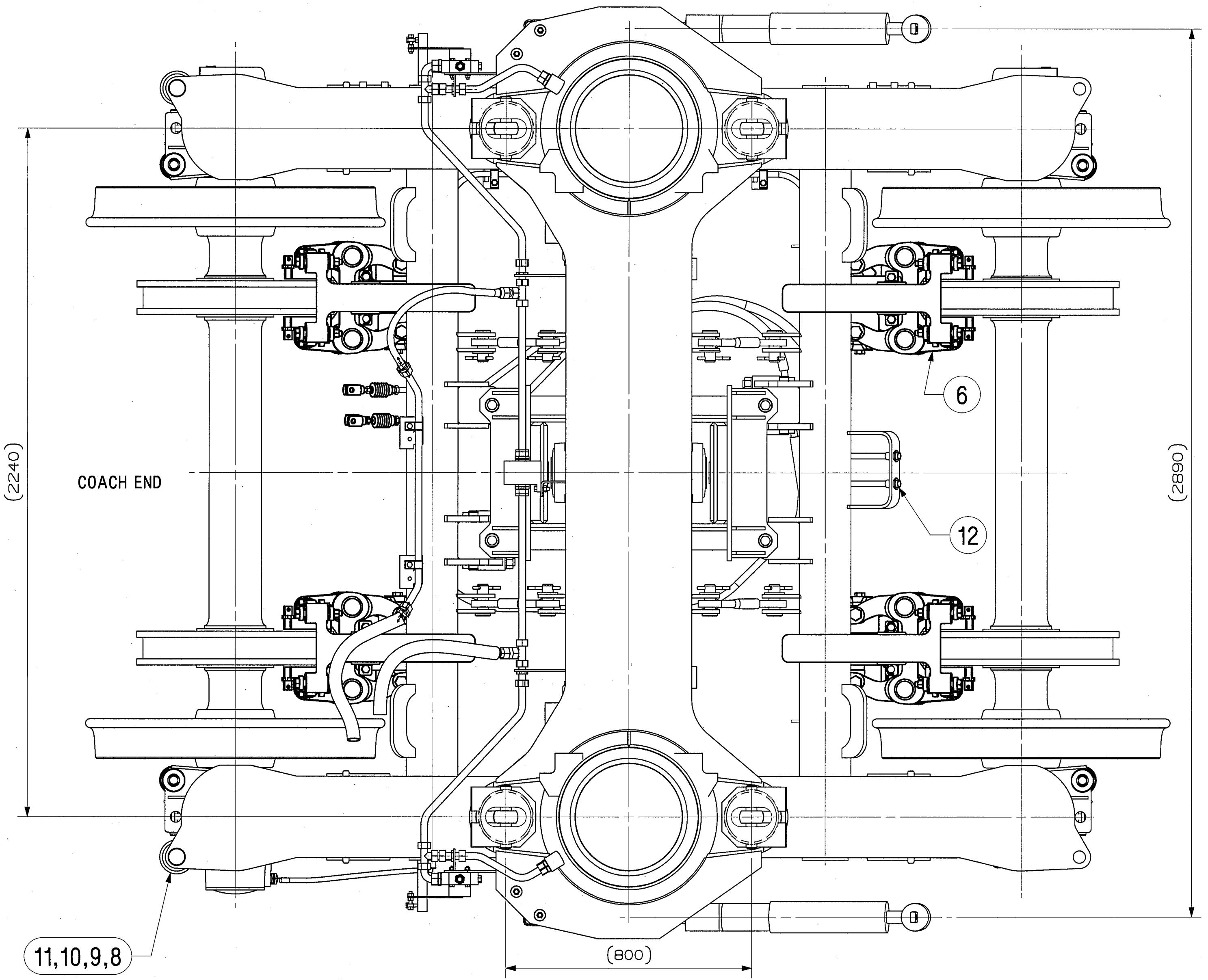
PL NO. NIL  
DRG. NO. LW00011

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE: 10/03/2006  
CGM BY:

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	27/09/2016	1-17	DRAWING NO. FOR ITEM NO.9 WAS 1901864. ITEM NO.10 SPEC. UPDATED.	DY.CME-D1 NOTING ON MD44121



आकृति  
ENTERED  
INTO  
प्रविष्टि  
DATA BASE  
3 OCT 2016

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	LW90033	NIL	NIL
12	PIPING ARRANGEMENT	1	LW36004	NIL	NIL
11	PLAIN WASHER 41	2	NIL	DIN125-1,ST50	NIL
10	SPLIT PIN 10X63	2	NIL	IS: 549-05, ST34	COATING TO MDT5 057
9	PIN	2	LW05124	NIL	NIL
8	CURVE ROLL	2	1267532	NIL	NIL
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	1272116	NIL	NIL
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL
4	SECONDARY SUSPENSION ARRGT.	1	LW05004	NIL	NIL
3	PRIMARY SUSPENSION	2	1272174	NIL	NIL
2	BOGIE FRAME ASSEMBLY	1	LW03003	NIL	NIL
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL

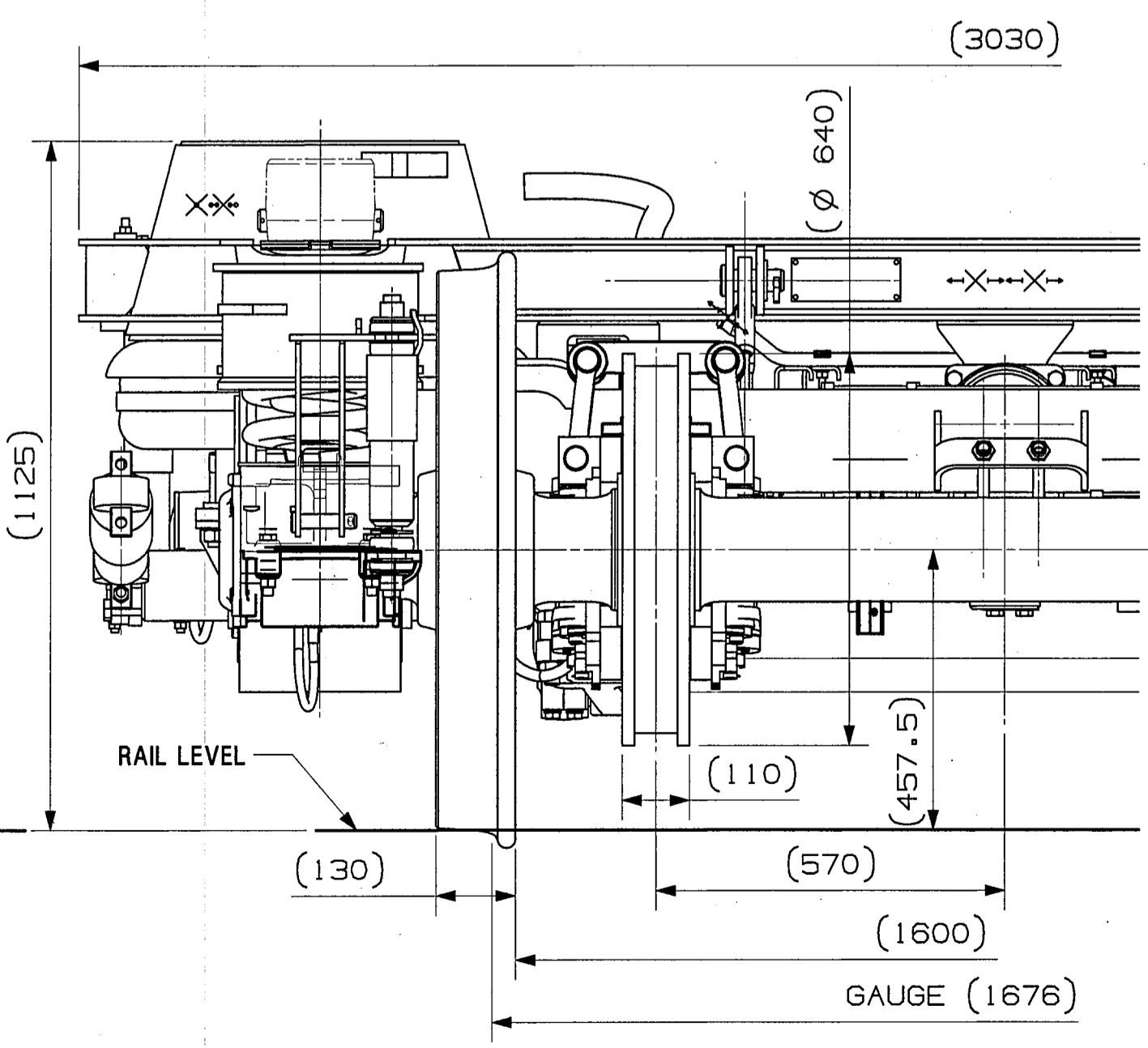
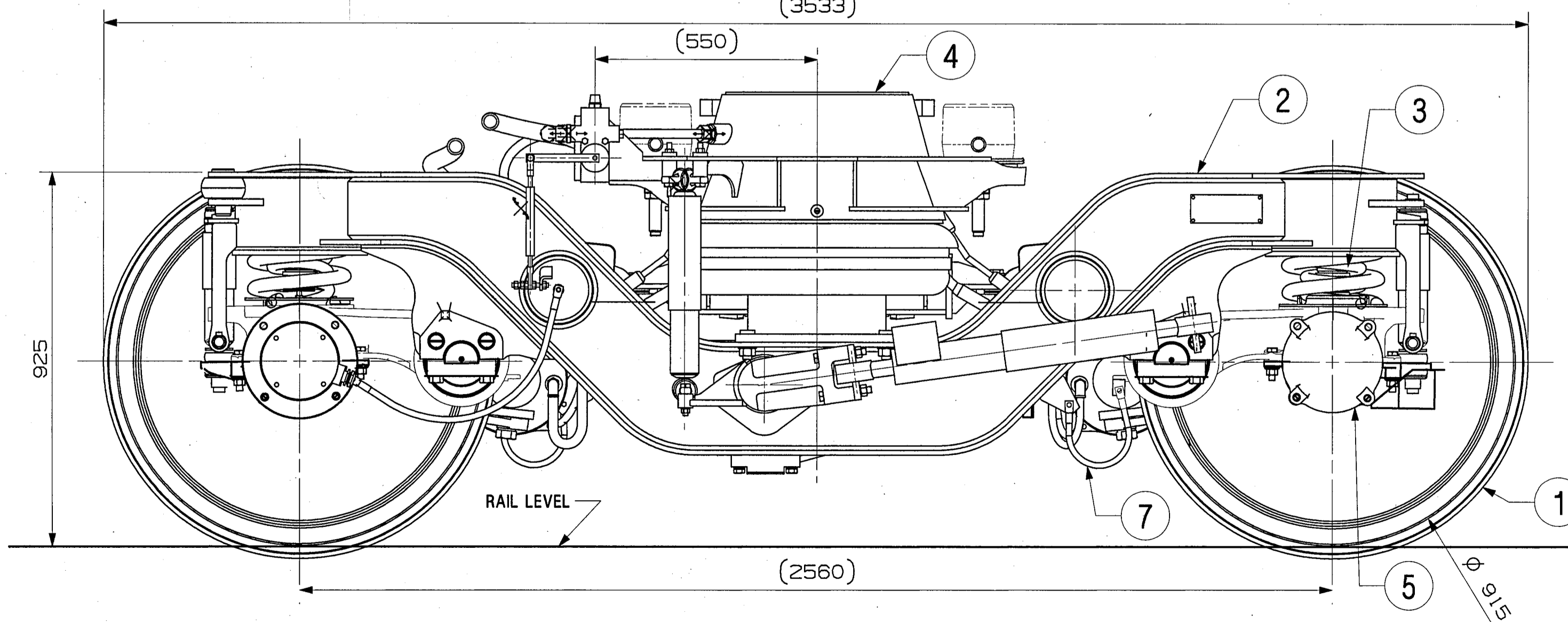
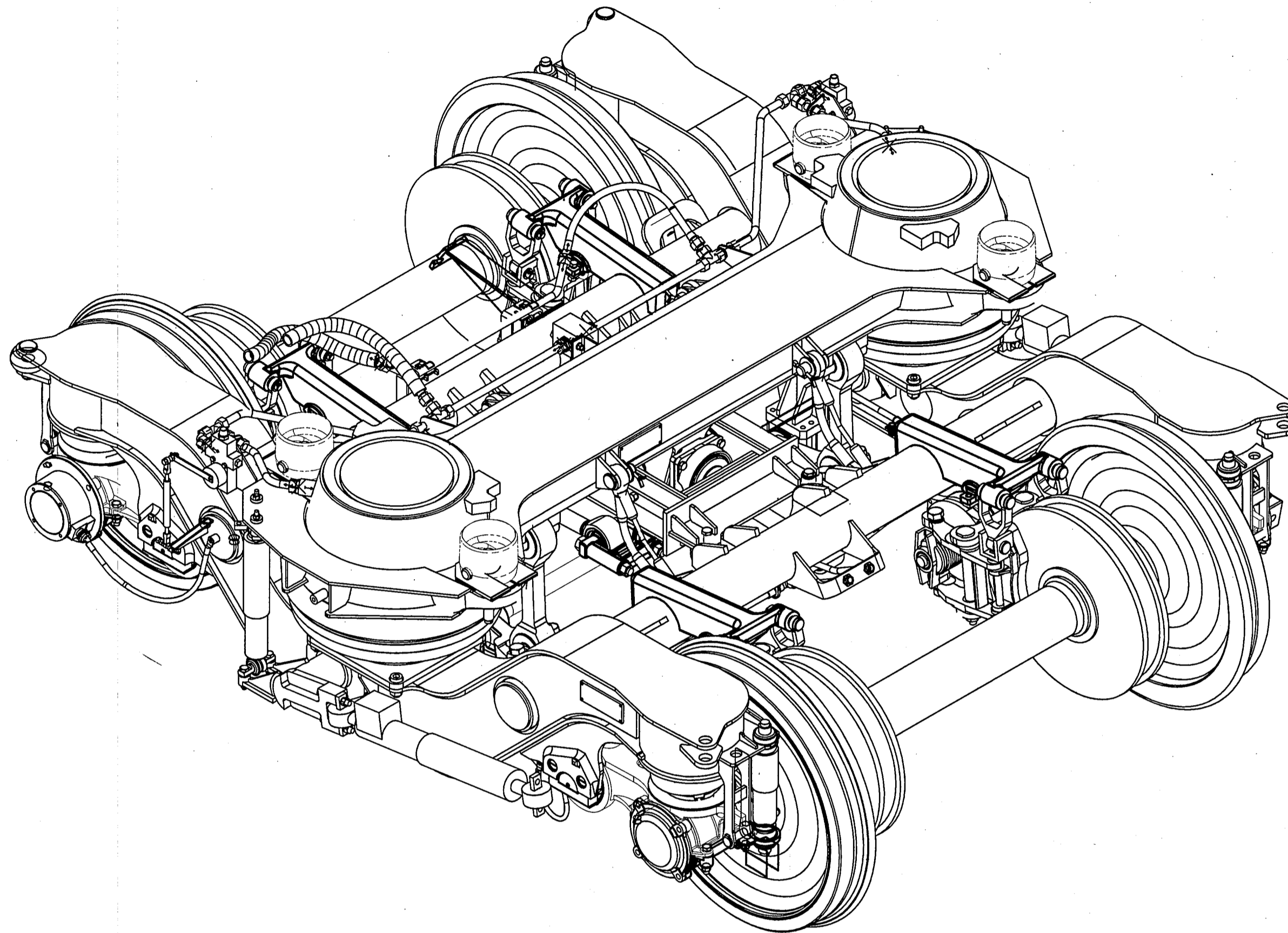
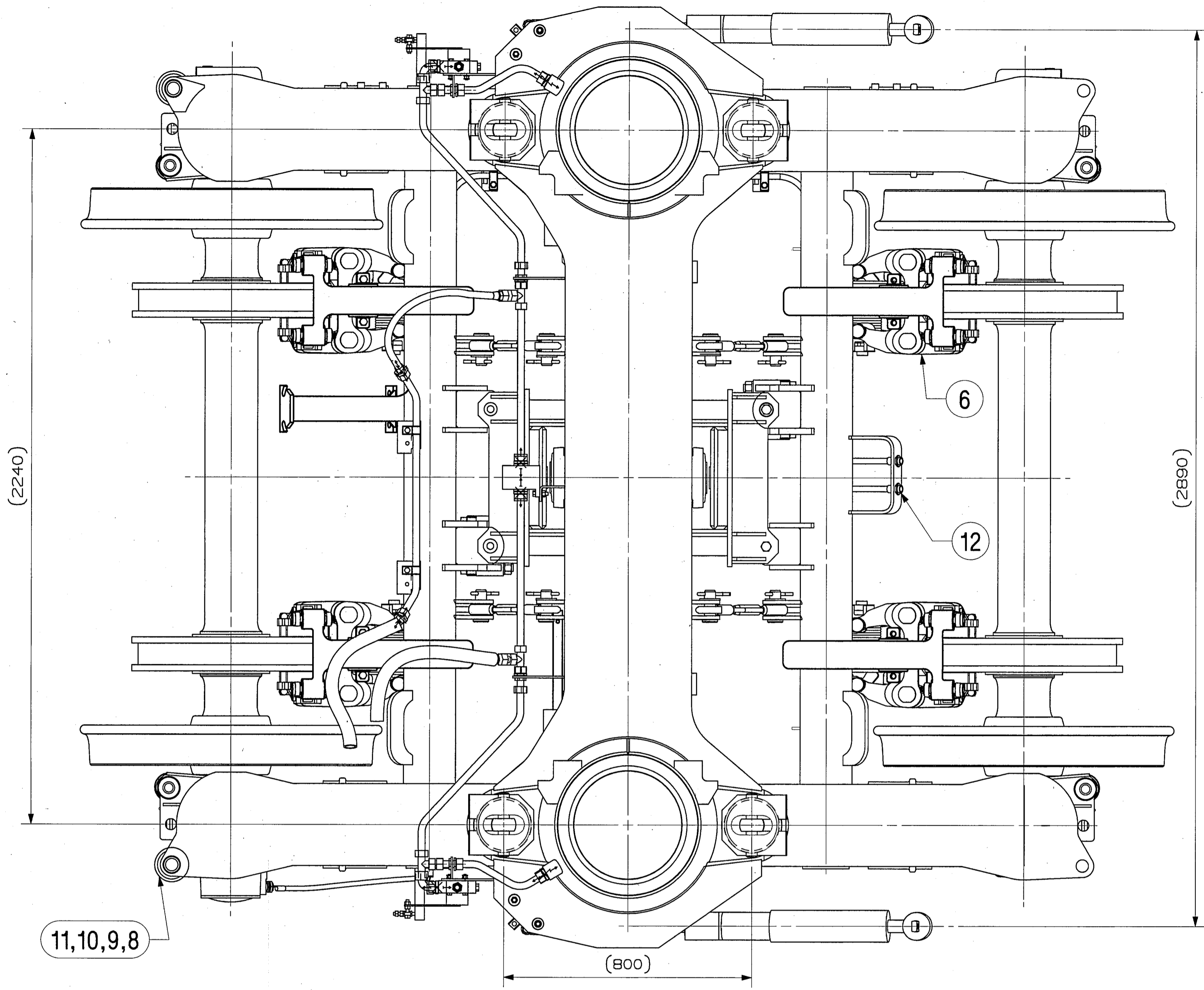
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	BOGIE GENERAL ARRANGEMENT			
SUPERSEDES: LW00010 ALT NIL						
FILE: \\nas\bogie\assembly\fiat_drg\cont_i_drg\lw00010a.prt(3d)						
WEIGHT: 6950.0 KG						
S.AREA: NIL						
LENGTH/Ø+±: 3.534 M						
WIDTH/HH+OK: 3.030 M						
HEIGHT: 1.114 M						
<b>BOGIE GENERAL ARRANGEMENT</b> <b>FOR SIDE-1 POWER CAR (WITH HAND BRAKE)</b> <b>WITH AIR SPRING (120 KN) IN SECONDARY SUSPENSION</b> RAIL COACH FACTORY, KAPURTHALA REF.ORG.No. 1267334 VER. 03						
रेलकोच फैक्टरी कपूरथला ADE/SME			IRS DY.CME		SCALE: 1:10 CHD: AMAN DRN: AMIT PL NO. NIL DRG.NO. LW00010 ALT. a SIZE A1 SHEET 1/1	

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008	DATE OF FIRST ISSUE	10/03/2006	CGM BY	
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ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	27/09/2016	1-17	DRAWING NO. FOR ITEM NO.9 WAS 1901864. ITEM NO.10 SPEC. UPDATED.	DY.CME-D1 NOTING ON MD44121



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ENTERED  
IN  
प्रतिष्ठान  
DATA BASE  
03 OCT 2016

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	LW90033	NIL	NIL
12	PIPING ARRANGEMENT	1	LW36004	NIL	NIL
11	PLAIN WASHER 41	2	NIL	DIN125-1,ST50	NIL
10	SPLIT PIN 10X63	2	NIL	IS: 549-05, ST34	COATING TO MDT5 057
9	PIN	2	LW05124	NIL	NIL
8	CURVE ROLL	2	1267532	NIL	NIL
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	1268820	NIL	NIL
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL
4	SECONDARY SUSPENSION ARRGT.	1	LW05004	NIL	NIL
3	PRIMARY ASSEMBLY	2	1268732	NIL	NIL
2	BOGIE FRAME ASSEMBLY	1	LW03002	NIL	NIL
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	BOGIE GENERAL ARRANGEMENT			
WEIGHT	FILE	\\nas\bogie\assly\fiat_drg\cont_i_drg\lw00009a.prt (3d)				
6920.0	KG	SUPERSEDES: lw00009 ALT NIL				
S. AREA	BOGIE GENERAL ARRANGEMENT FOR HOT BUFFET EOG					
NIL	M <sup>2</sup>	WITH AIR SPRING (120 KN) IN SECONDARY SUSPENSION				
LENGTH/Ø+*	RAIL COACH FACTORY, KAPURTHALA					
3.534	M	REF.DRG.No. 1267400 VER. 03				
WIDTH/TH+OK	रेल कोच फैक्टरी कपूरथला					
3.030	M	PL NO. NIL				
HEIGHT	DRG.NO. LW00009					
1.114	M	ALT. 0 SIZE A1 SHEET 1/1				

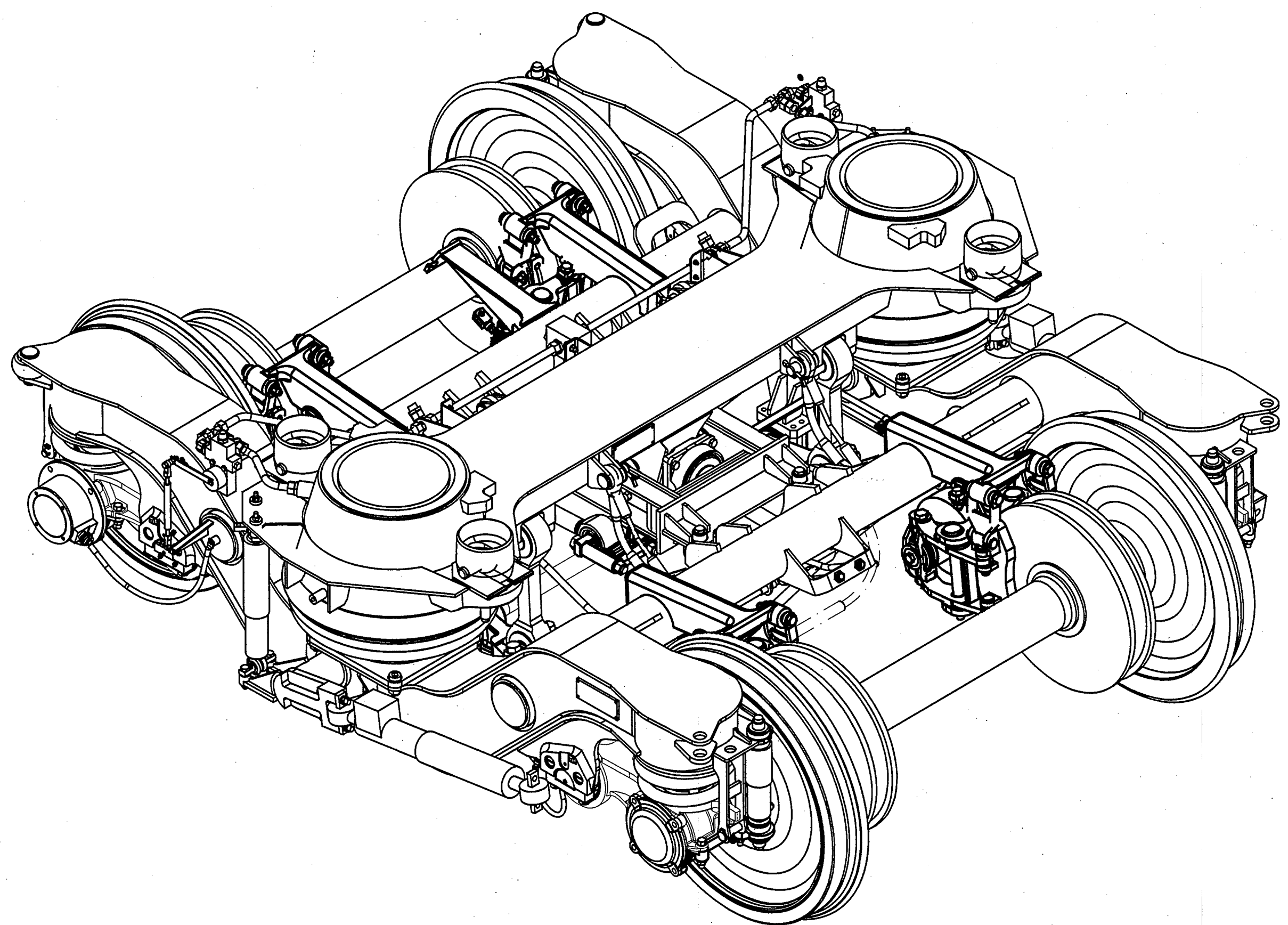
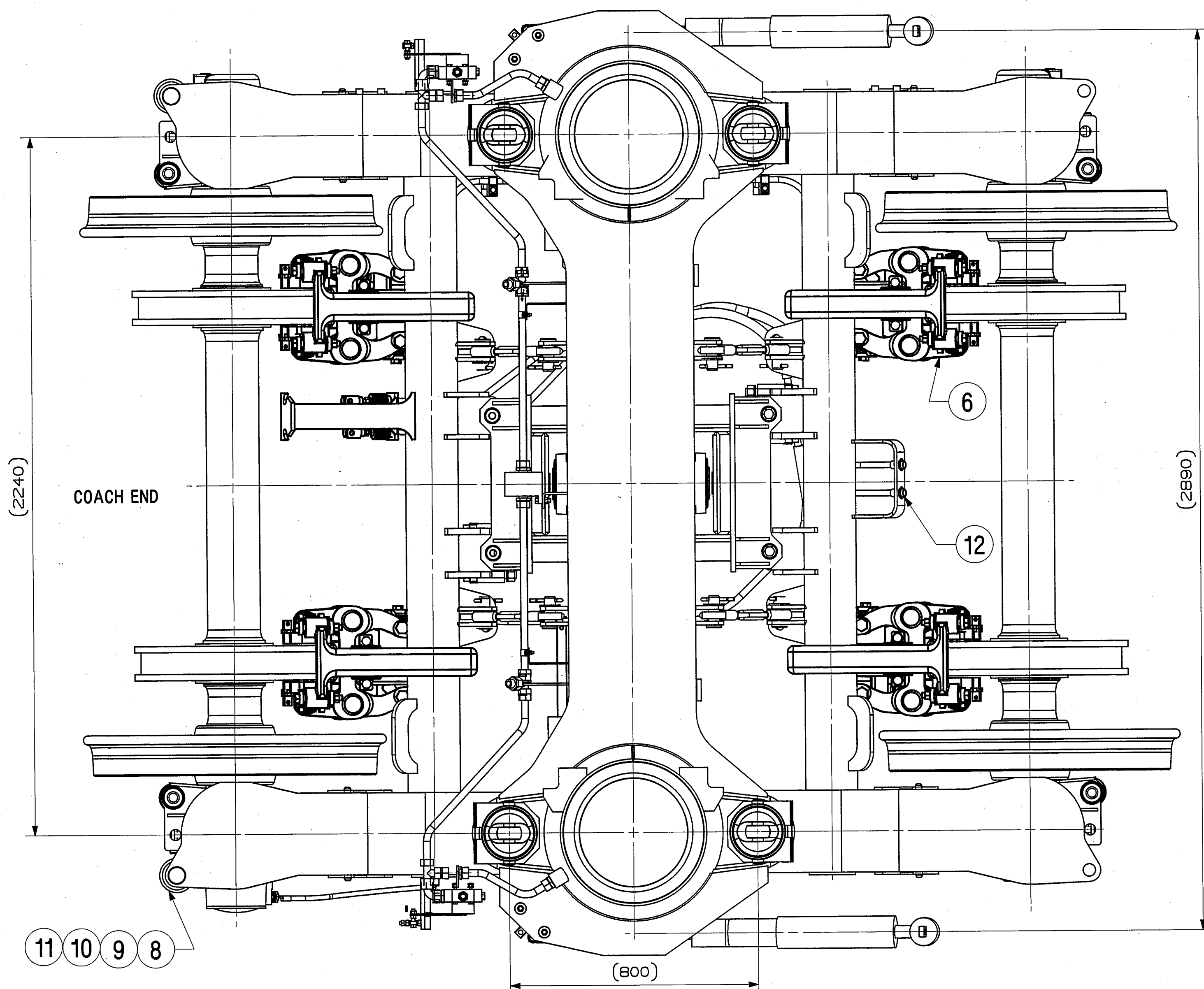
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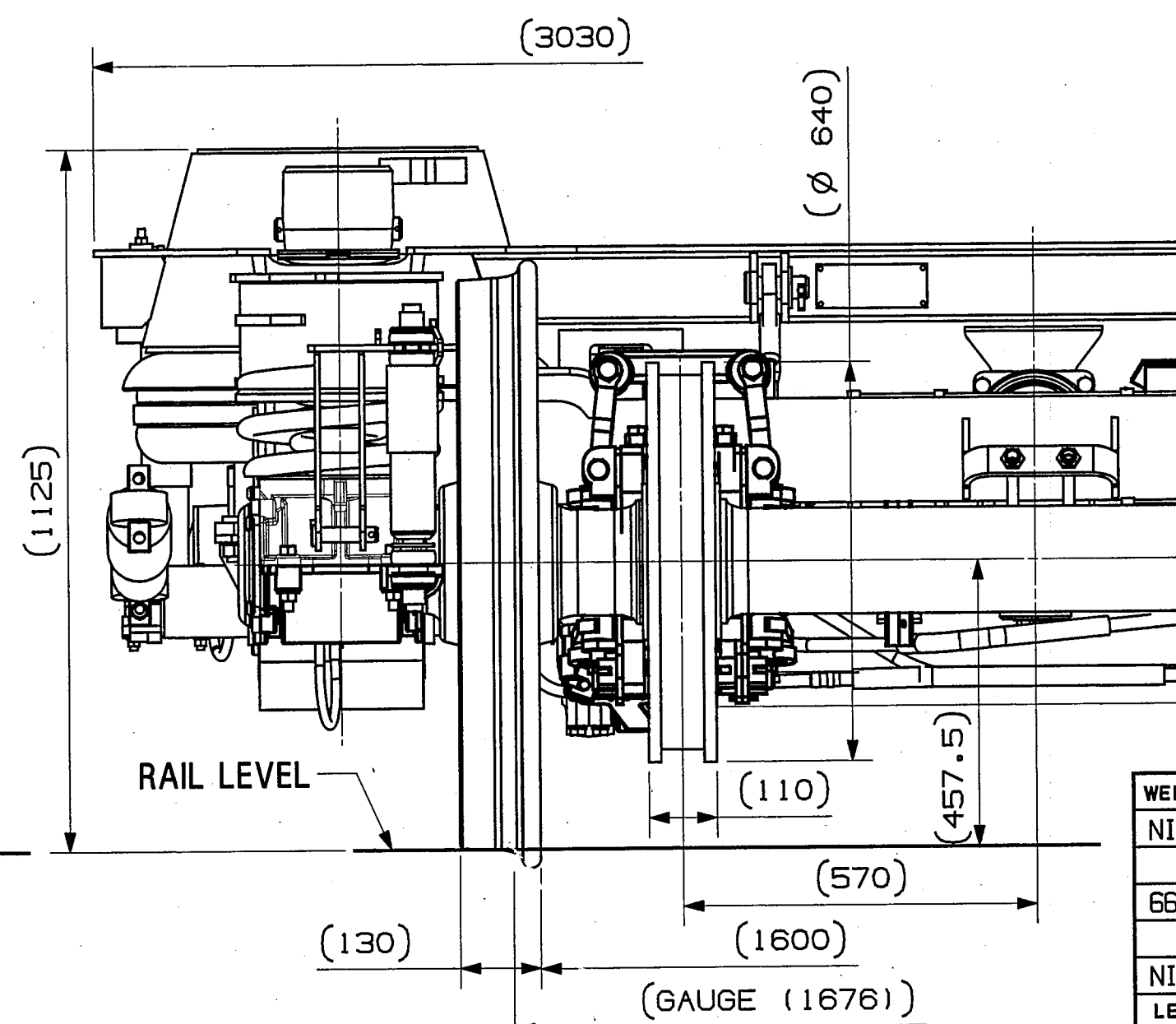
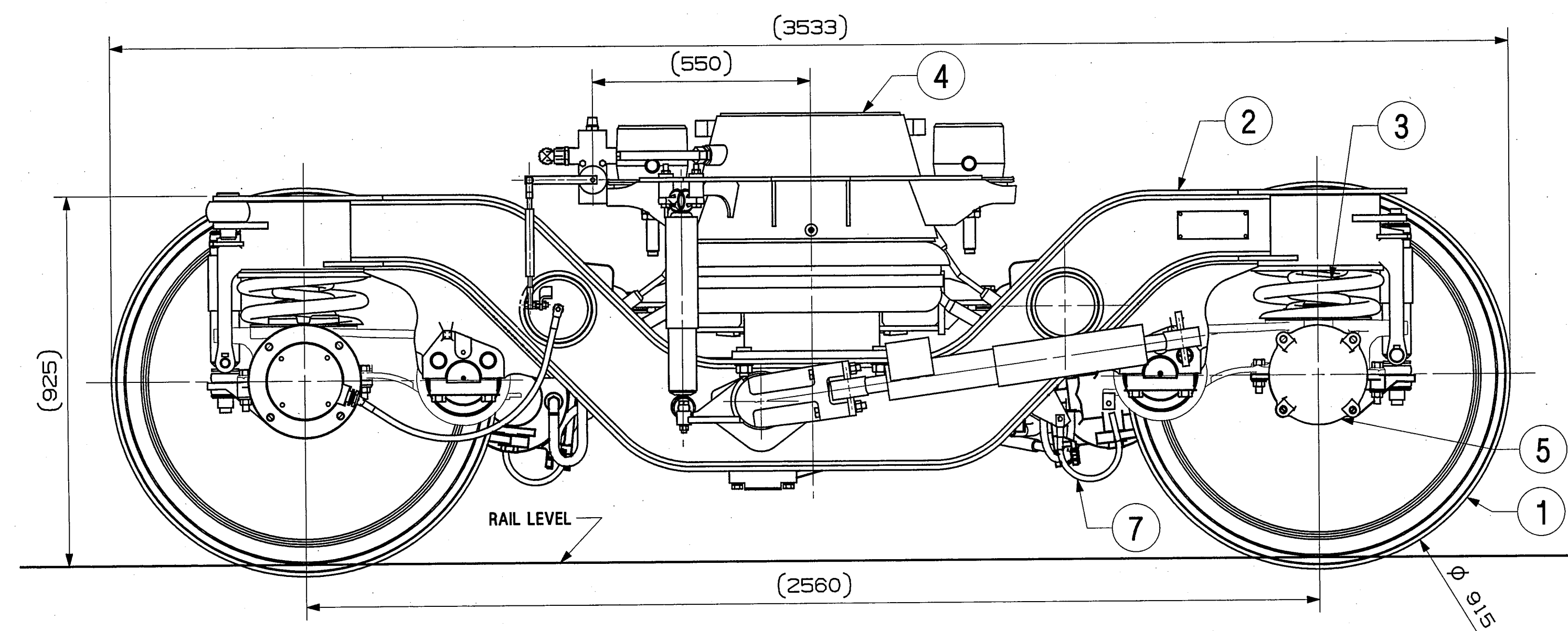
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DATE OF FIRST ISSUE	CGM BY	SCALE	SSB/REC	CHD	DRN	AMIT	AMIT	PL NO.	NIL	DRG.NO.	LW00009	ALT.	0	SIZE A1	SHEET 1/1
28/02/2006		1:10													

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



TFR ISO

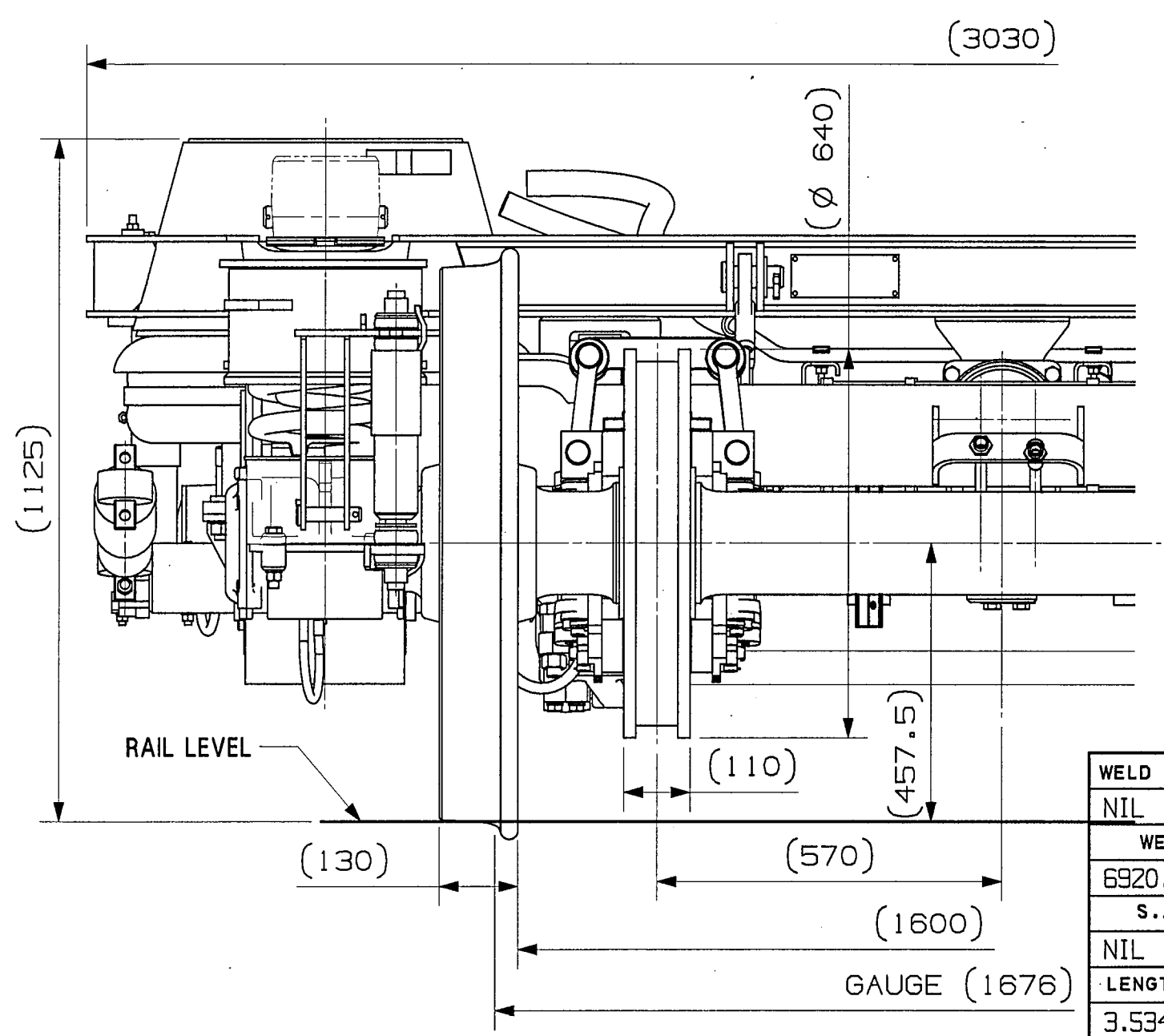
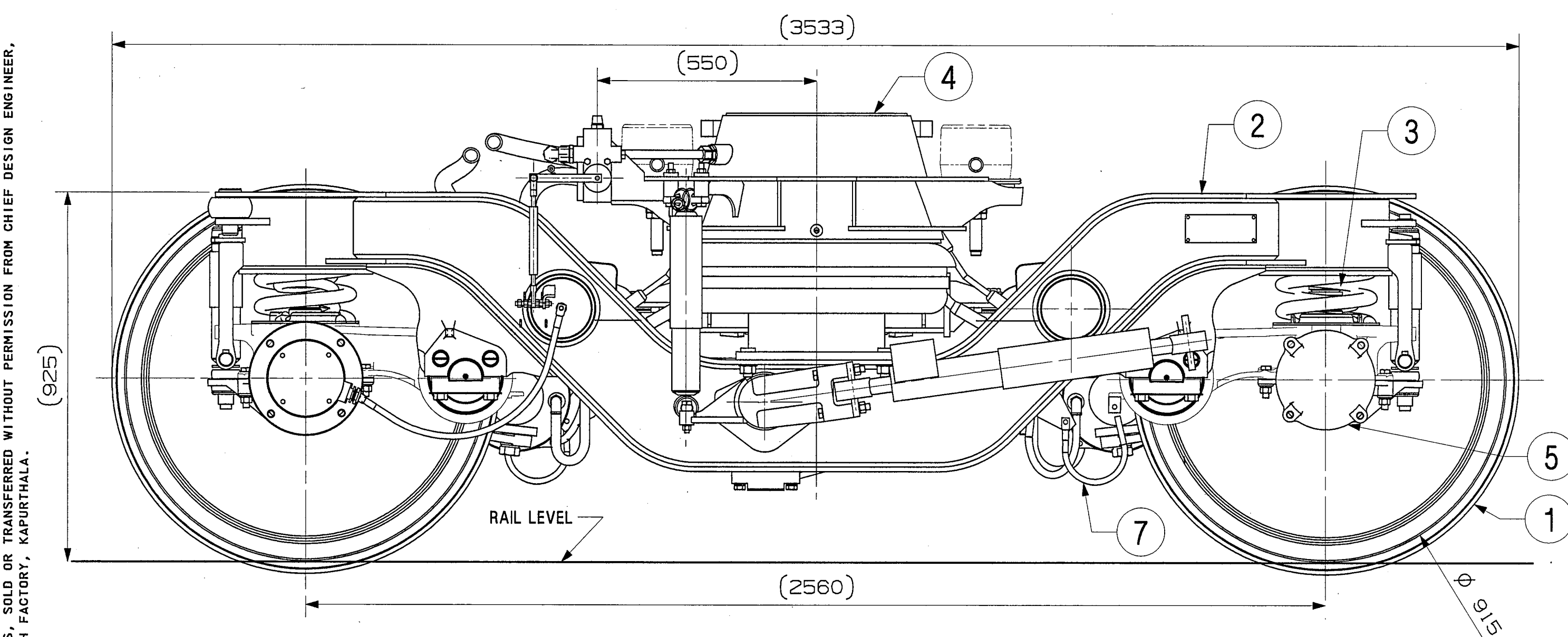
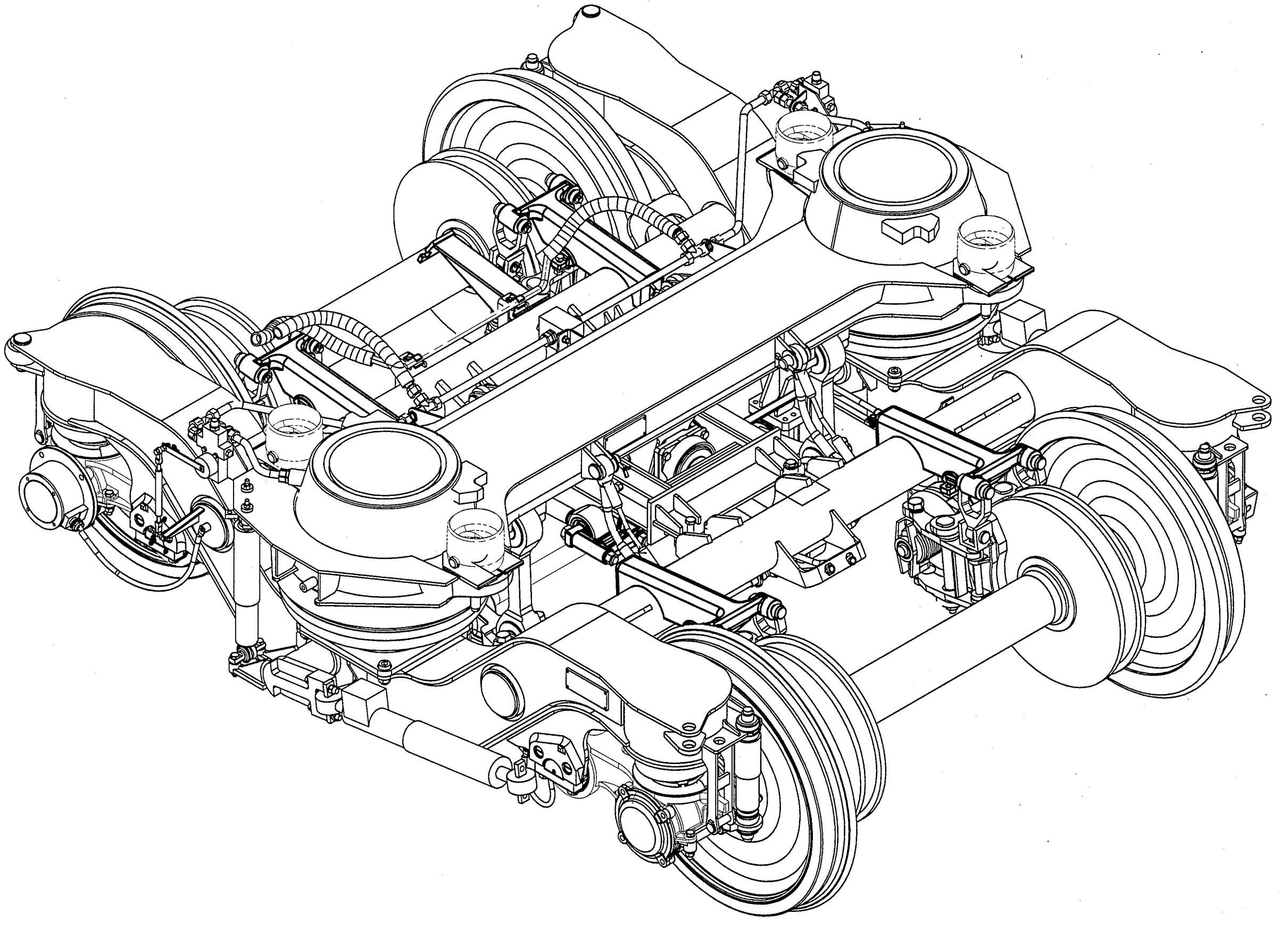
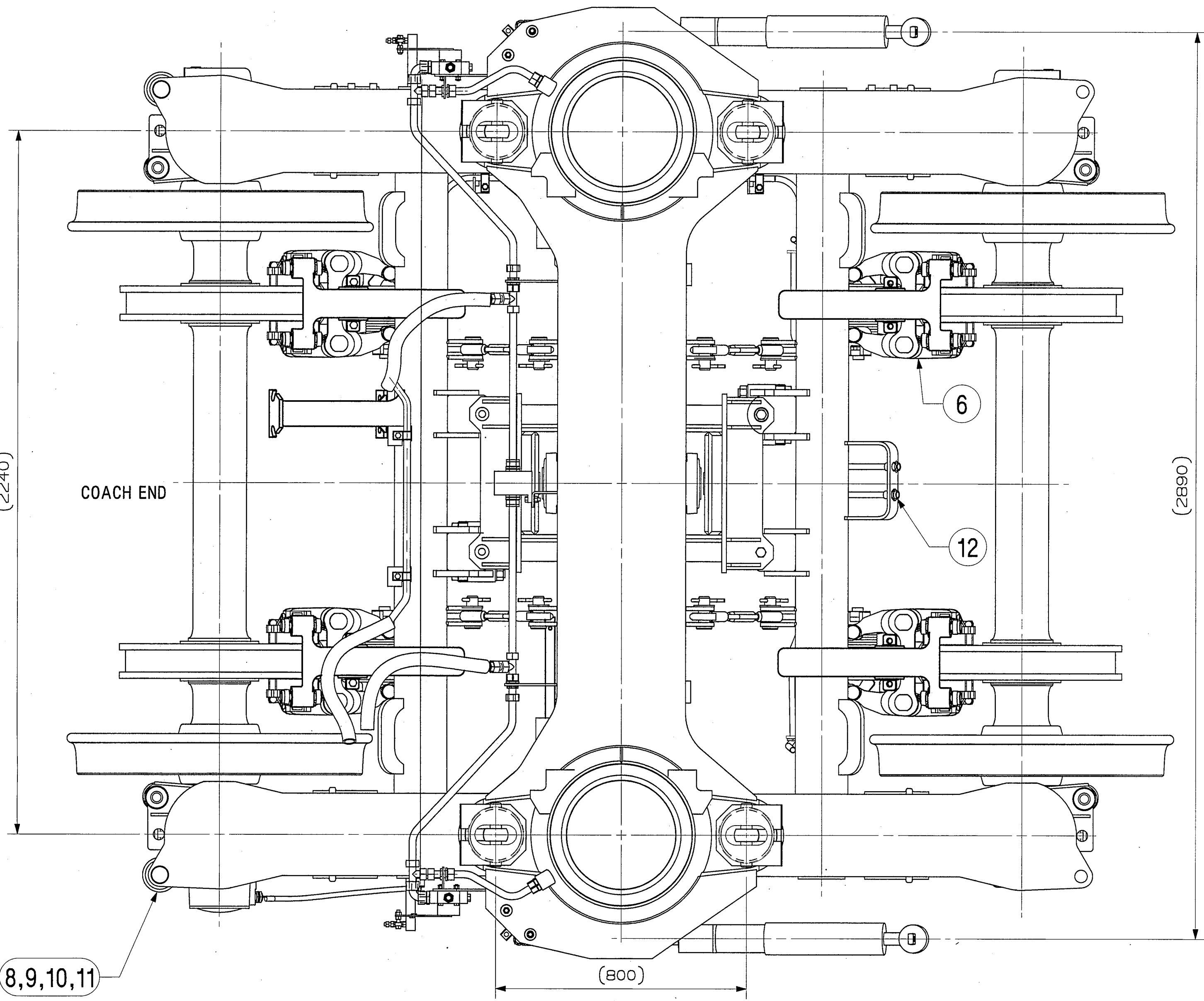


Entered  
Date B  
10 DEC 2010

ITEM	DESCRIPTION & DIMENSIONS	QTY	REF. DRG.	MATL. & SPEC.	REMARKS
13	SUSPENSION DIAGRAMATIC ARRANGEMENT	0	LW90033	NIL	NIL
12	PIPING ARRANGEMENT	1	LW36004	NIL	NIL
11	PLAIN WASHER 41	2	NIL	DIN125-1,ST50	NIL
10	SPLIT PIN 10X63	2	L1HW06	IS: 549-2005	ITEM-14 COATING TO MTS 057
9	PIN	2	LW05124	NIL	NIL
8	CURVE ROLL	2	1267532	NIL	NIL
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.
6	BRAKE EQUIPMENT	1	LL32100	NIL	NIL
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL
4	SECONDARY SUSPENSION ARRGT.	1	LW05004	NIL	NIL
3	PRIMARY SUSPENSION	2	LW01001	NIL	NIL
2	BOGIE FRAME ASSEMBLY	1	LW03003	NIL	NIL
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL

WELD LENGTH	NIL	ITEM	GROUP	DESCRIPTION & DIMENSIONS	QTY	REF. DRG.	MATL. & SPEC.	REMARKS
WEIGHT	6635.0	FILE	Bogie General Arrangement					
S. AREA	NIL	SUPERSEDES: NIL						
LENGTH/B+A	3.533	Bogie General Arrangement						
WIDTH/FH+OK	3.030	FOR SIDE-1 SLR UNDERSLUNG POWER PACK						
HEIGHT	1.154	(WITH HAND BRAKE) WITH AIR SPRING IN SECONDARY SUSPENSION						
RAIL COACH FACTORY, KAPURTHALA				REF. DRG. No. 1267334 VER. 03				
रेल कोच फैक्टरी कपूरथला				IRS		PL NO. NIL		
				ADE/SME		DRG. NO. LR00003		
				DY.CME		ALT. NIL SIZE A1 SHEET 1/1		

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	18/03/2016	H-15	DRG. NO. OF ITEM NO-13 WAS LG90024.	DY.CME-D2 NOTING ON MD23151



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ENTERED  
INTO  
DATA BASE  
21 MAR 2016

ITEM	DESCRIPTION & DIMENSIONS	QTY	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
13	MEASUREMENT SHEET	0	LW90033	NIL	NIL	
12	PIPING ARRANGEMENT	1	LW36004	NIL	NIL	
11	PLAIN WASHER 41	2	NIL	DINI25-1,ST50	NIL	
10	SPLIT PIN 10X63	2	L1HW06	IS: 549-05	ITEM-14 COATING TO MDS 057	
9	PIN	2	LW05124	NIL	NIL	
8	CURVE ROLL	2	1267532	NIL	NIL	
7	EARTHING EQUIPMENT ASSEMBLY	3	1268699	NIL	SCOPE OF SUPPLY/ELEC.	
6	BRAKE EQUIPMENT	1	1268820	NIL	NIL	
5	AXLE BOX LAYOUT	1	1268819	NIL	NIL	
4	SECONDARY SUSPENSION ARRGT.	1	L605108	NIL	NIL	
3	PRIMARY SUSPENSION	2	L601103	NIL	NIL	
2	BOGIE FRAME ASSEMBLY	1	L603001	NIL	NIL	
1	WHEEL & AXLE COMPLETE	2	LW02001	NIL	NIL	

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	M	GROUP	BOGIE GENERAL ARRANGEMENT			SUPERSEDES: LG00004 ALT NIL		
WEIGHT	FILE	\\10.12.17.2\bogie\saru\lg00004a.prt (3D)						
6920.0	KG	BOGIE GENERAL ARRANGEMENT WITH AIR SPRING (140 KN) FOR NON-AC LHB COACHES					SCALE	SSE/REC
S.AREA							1:10	CHD
NIL	M <sup>2</sup>						AMAN	DATE
LENGTH/D+*							DRN	SARU
3.534	M	RAIL COACH FACTORY, KAPURTHALA					REF.DRG.No.	LW00011
WIDTH/TH+*		रेल कोच फैक्टरी कपूरथला					PL NO.	NIL
3.030	M	IRS					DRG.No.	LG00004
HEIGHT		ADE/SME					ALT.	0
1.114	M	BY: CME					SIZE	A1 SHEET 1/1

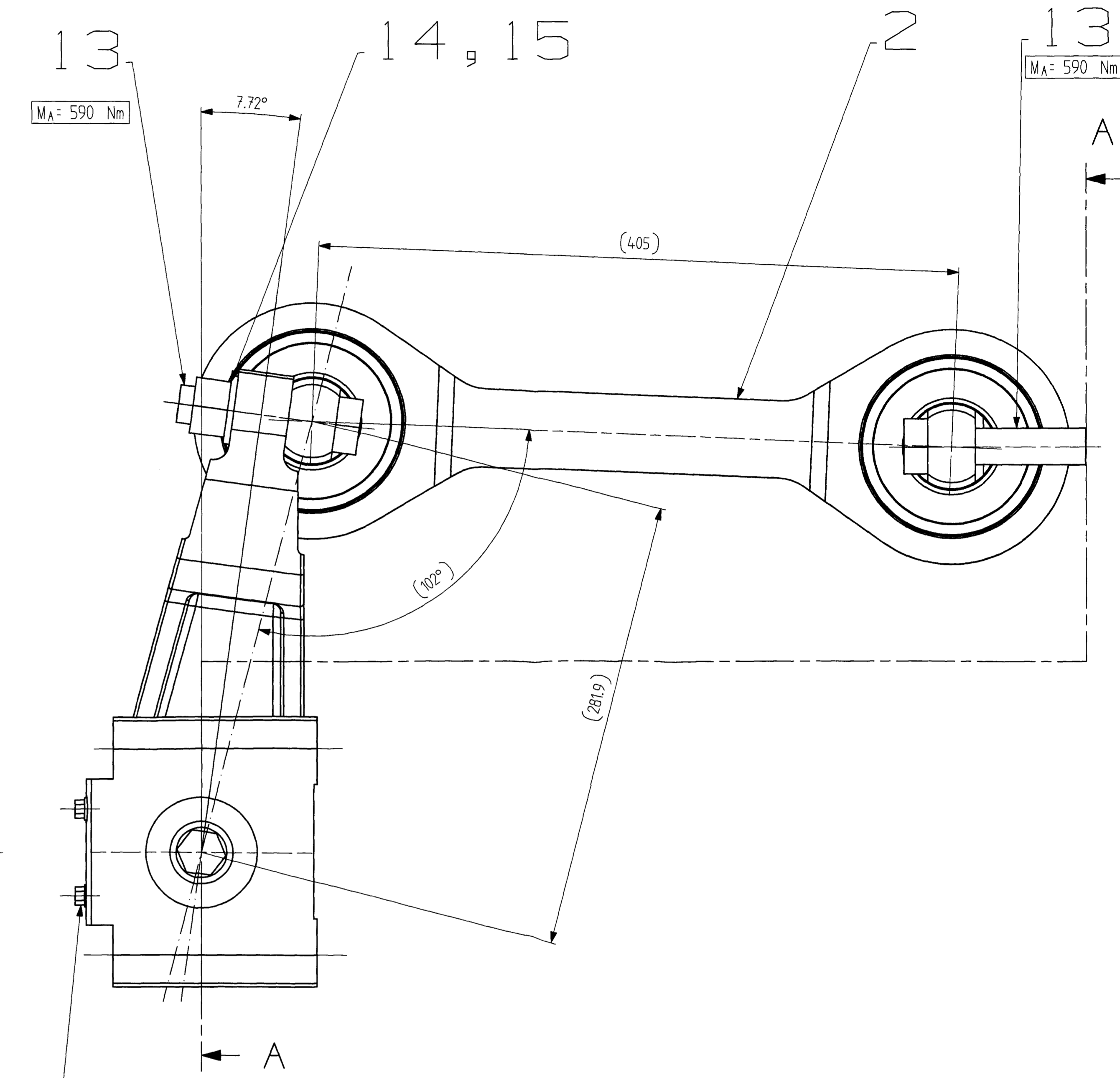
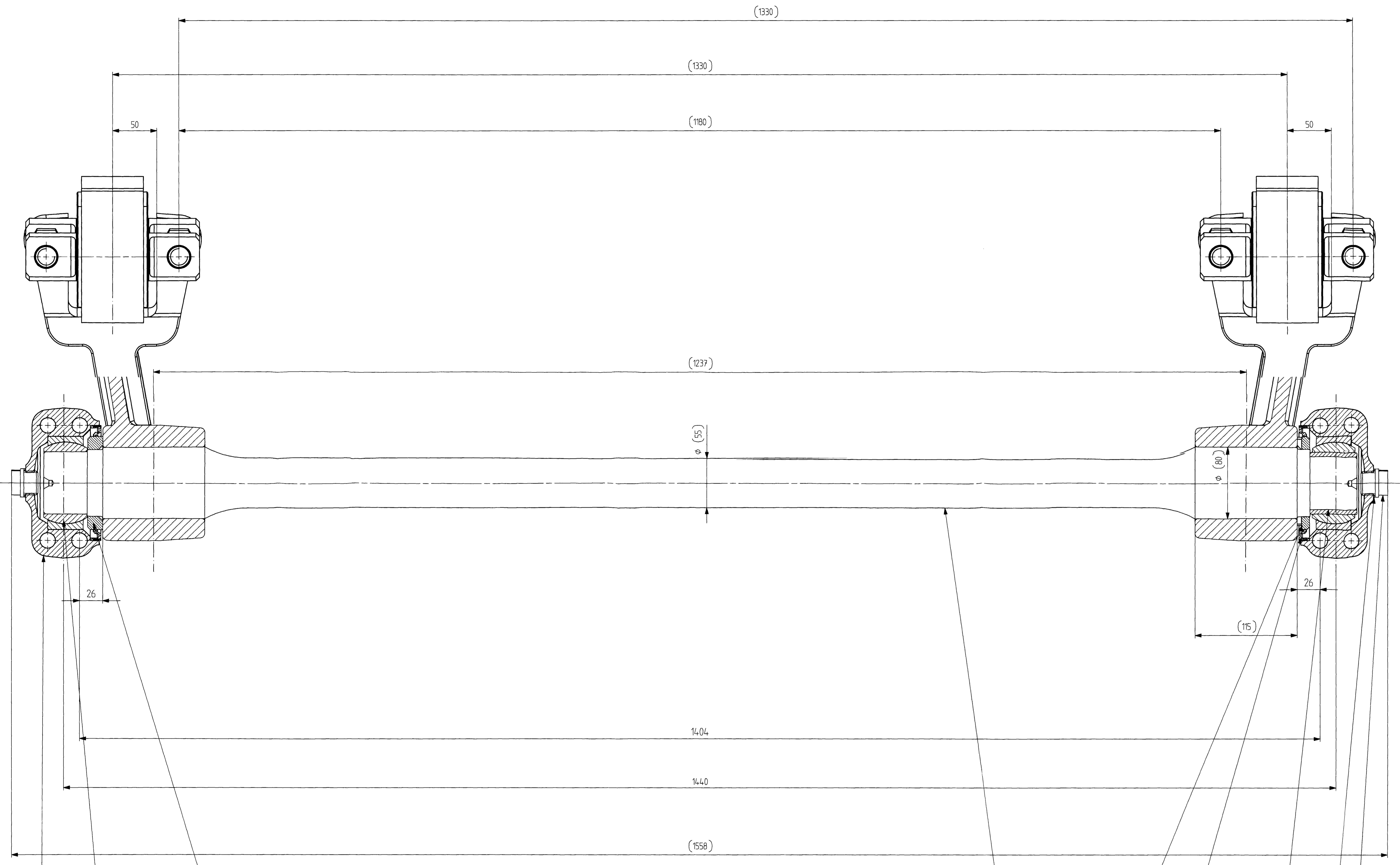
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 10/10/2015 CGM BY

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A - A



3 4 7 1 6 8 5 9 10

11, 12

disc	4	St	U-Sbe 24	15	00543304080003600	0.0308
safety screw	4	St	Ver-Tiersicherung MJ 24	14	00539504080003600	0.1521
screw	8	St	Bkt-Schr M24X100	13	00382004080003662	0.4641
Cu-sealing	2	St	Cu-Dicht-Rg 10/14	12	00625020850001014	0.0005
covering screw	2	St	Bkt-Vschi-Schr M10X1	11	00620204080002201	0.0125
covering screw	2	St	Bkt-Vschi-Schr M27X2	10	00620204080003905	0.125
Cu-sealing	2	St	Cu-Dicht-Rg 27/32	9	00625020850002732	0.0033
swalng	2	St	W-Dicht-Rg A 105/130/12	8	00657555830008678	0.18
distance holder	1	St	Rundteil	7	1 287 515 001	0.53
distance holder	1	St	Rundteil	6	1 288 553 001	0.42
can	1	St	Buechse	5	1 288 554 001	0.45
bearing	2	St	Laegerinheit	4	1 288 555 201	1.55
anti roll bar bracket	2	St	Stabilisator-Aufnahme	3	1 287 518 001	7.2
roll link ass.	2	St	Stabilisator-Gelenkstange	2	1 287 519 201	23
anti roll bar subass.	1	St	Stabilisator	1	1 288 558 201	65.2

Menge	ME	Bezeichnung	Pos	Identifikation	Gew/ME	(kg)
<b>Stabilisator-Anordnung</b>						
anti roll bar ass.						
FIAT-SIG SCHEMENFAHRZEUGE AG						
1267422						
Blatt N. 01						

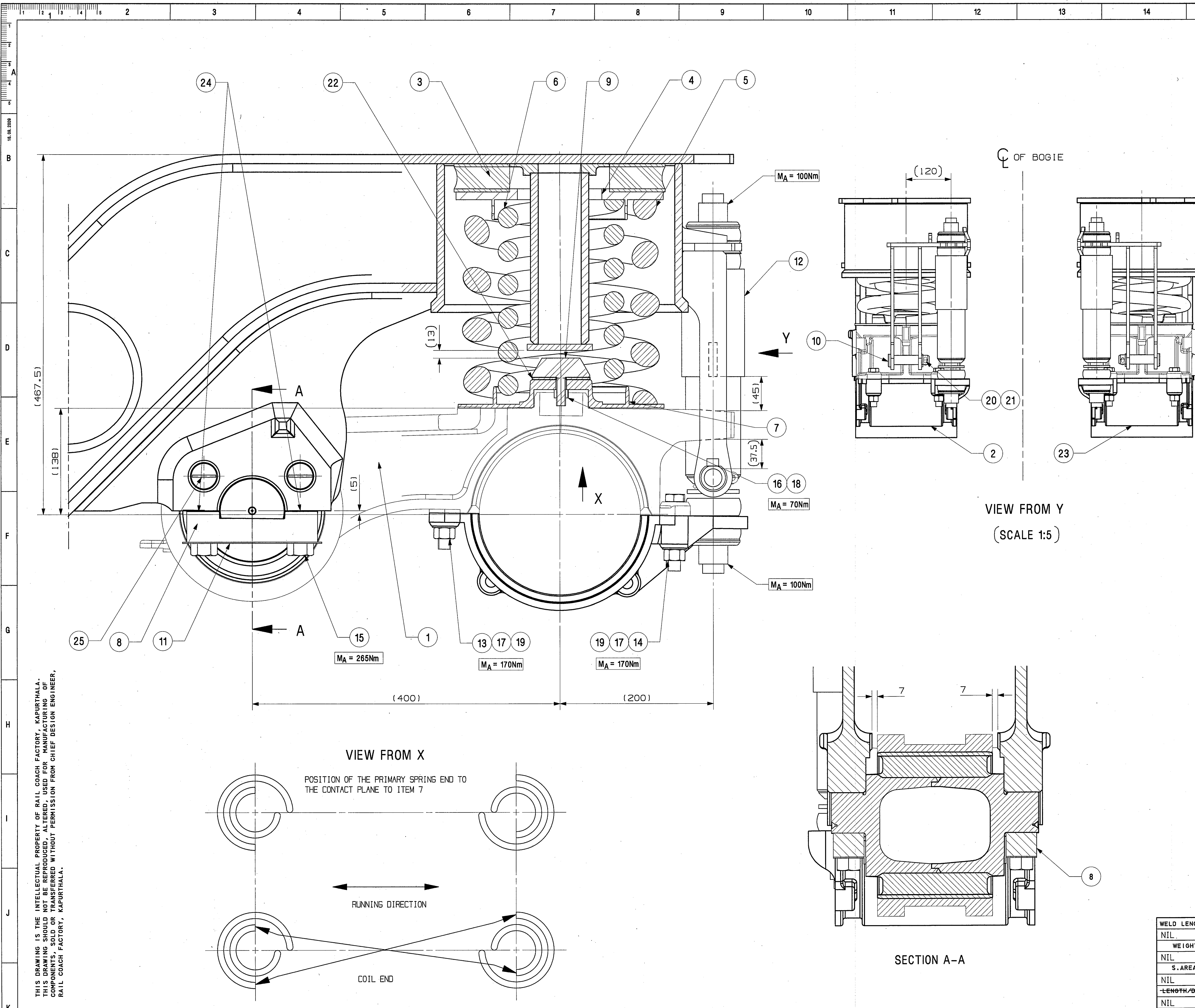












ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
01	28/09/2016	ALL	1. DRAWING NO. FOR ITEM 3,9&10 WERE LW01101,LW01102&1262374. 2. SPEC. UPDATED FOR ITEM 13,14,15,16,17&21. 3. DESCRIPTION REVISED FOR ITEM 16&17.	DY: CME-D1 NOTING ON MD44121

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ENTERED  
INTO  
प्रविष्टि  
DATA BASE  
29 SEP 2016

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
25	LOCKING PIN	8	1227320	NIL	NIL
24	SEALING O-RING 35502000	8	IS: 9975-81 PT-1 TAB-1	IS: 9975-84 PT-2 CL-A	NIL
23	CONTROL ARM LOWER RIGHT	1	1267717	NIL	NIL
22	COMPENSATING RING	2	1227229	NIL	NIL
21	SPLIT PIN 8X45	2	NIL	IS: 549-05, ST 34	COATING TO MDTS 057
20	MACHINED WASHER Z5	2	NIL	IS: 2016-1967 TAB1,STEEL	COATING TO MDTS 057
19	PUNCH WASHER A18	8	LIHW09	IS: 2016-1967 STEEL	ITEM-11 COATING TO MDT5 057
18	SPRING WASHER B12	2	LIHW09	IS: 3063-1934	ITEM-22 COATING TO MDT5 057
17	ALL METAL PREVAILING TORQUE TYPE HEX NUT M16	8	NIL	DIN6325/DIN934 IS: 1367-02,PT-6 10,ASB	NIL
16	ALL METAL PREVAILING TORQUE TYPE HEX NUT M12	2	NIL	DIN6325/DIN934 IS: 1367-02,PT-6 10,ASB	NIL
15	HEX HEAD BOLT M20X100	8	NIL	IS: 1364-02 PT-1 IS: 1367-02 PT-3 10,8 CE	COATING TO MDTS 057
14	HEX HEAD BOLT M16X90	4	NIL	IS: 1364-02 PT-1 IS: 1367-02 PT-3 10,8 CE	COATING TO MDTS 057
13	HEX HEAD BOLT M16X70	4	NIL	IS: 1364-02 PT-1 IS: 1367-02 PT-3 10,8 CE	COATING TO MDTS 057
12	PRIMARY VERTICAL DAMPER	2	LW05102	NIL	NIL
11	LOCKING PLATE	4	1356259	NIL	NIL
10	PIN	2	LW01116	NIL	NIL
9	VERTICAL BUMP STOP	2	1227081	NIL	NIL
8	FIXATION BALL JOINT	4	1227331	NIL	NIL
7	CENTRING DISC	2	1902431	NIL	NIL
6	INNER PRIMARY SPRING	2	1277143	NIL	NIL
5	OUTER PRIMARY SPRING	2	1267411	NIL	NIL
4	CENTRING DISC	2	1262875	NIL	NIL
3	RUBBER PAD	2	1901097	NIL	NIL
2	CONTROL ARM LOWER LEFT	1	1267716	NIL	NIL
1	CONTROL ARM UPPER ASSLY	2	1268845	NIL	NIL

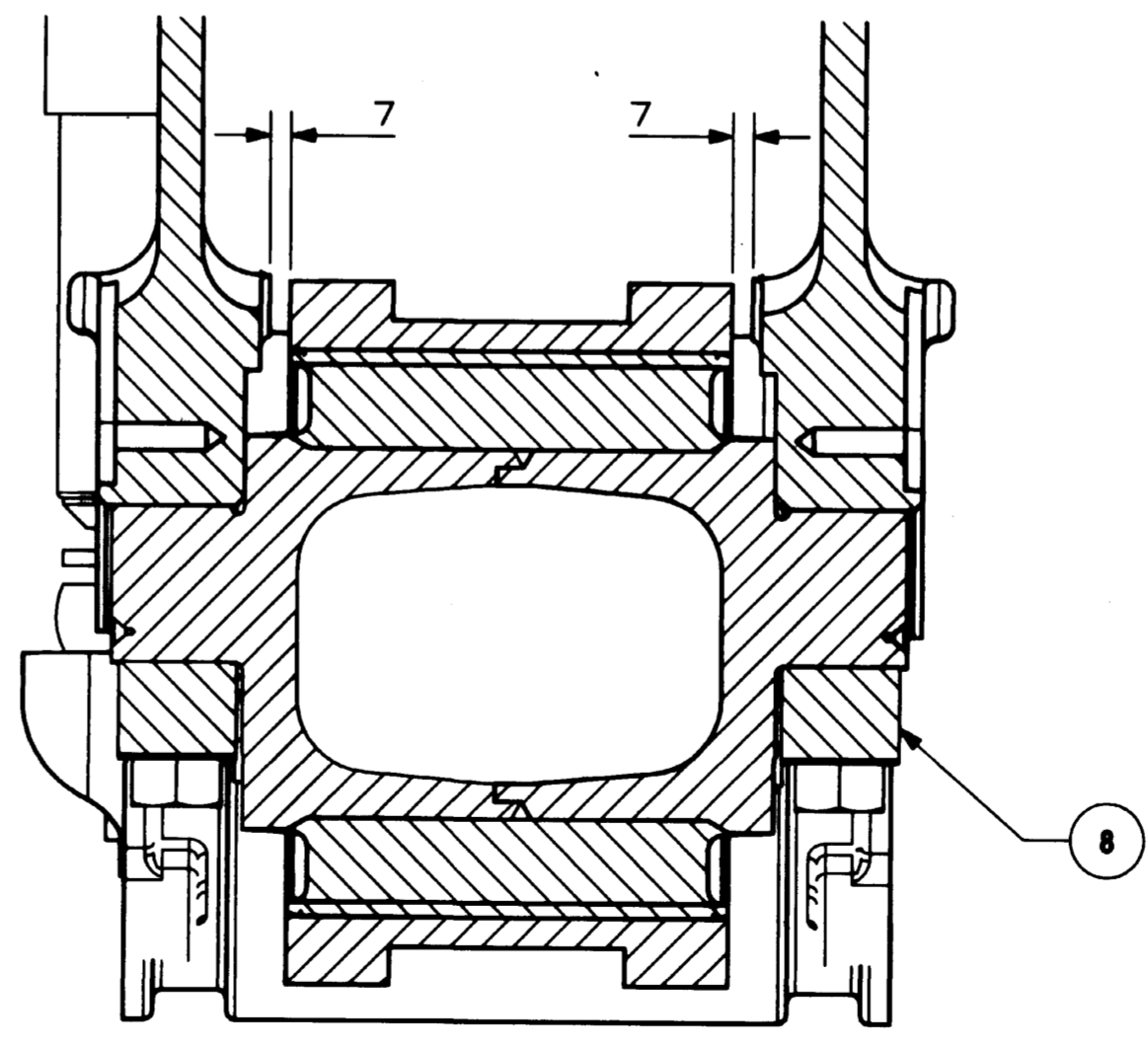
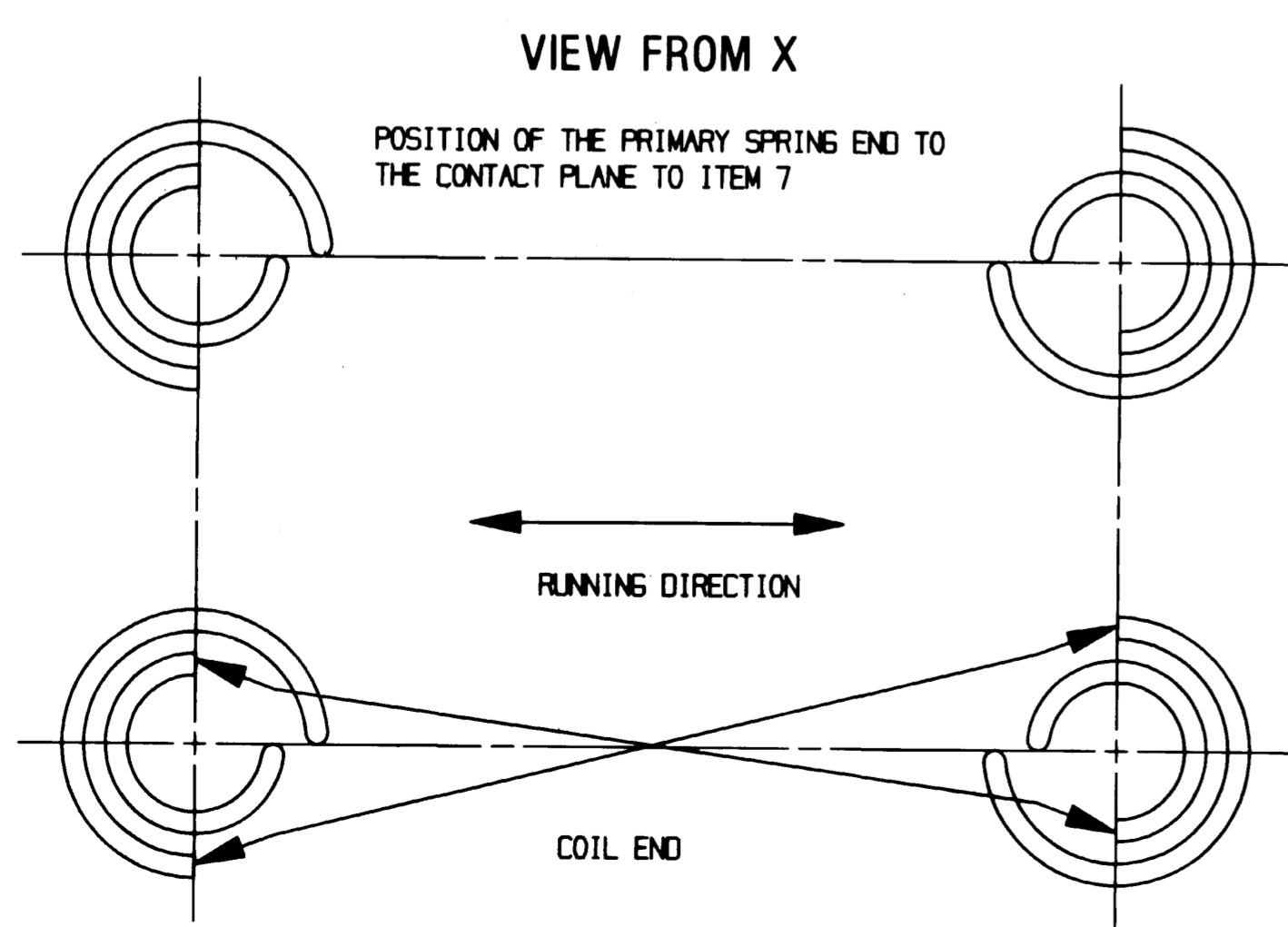
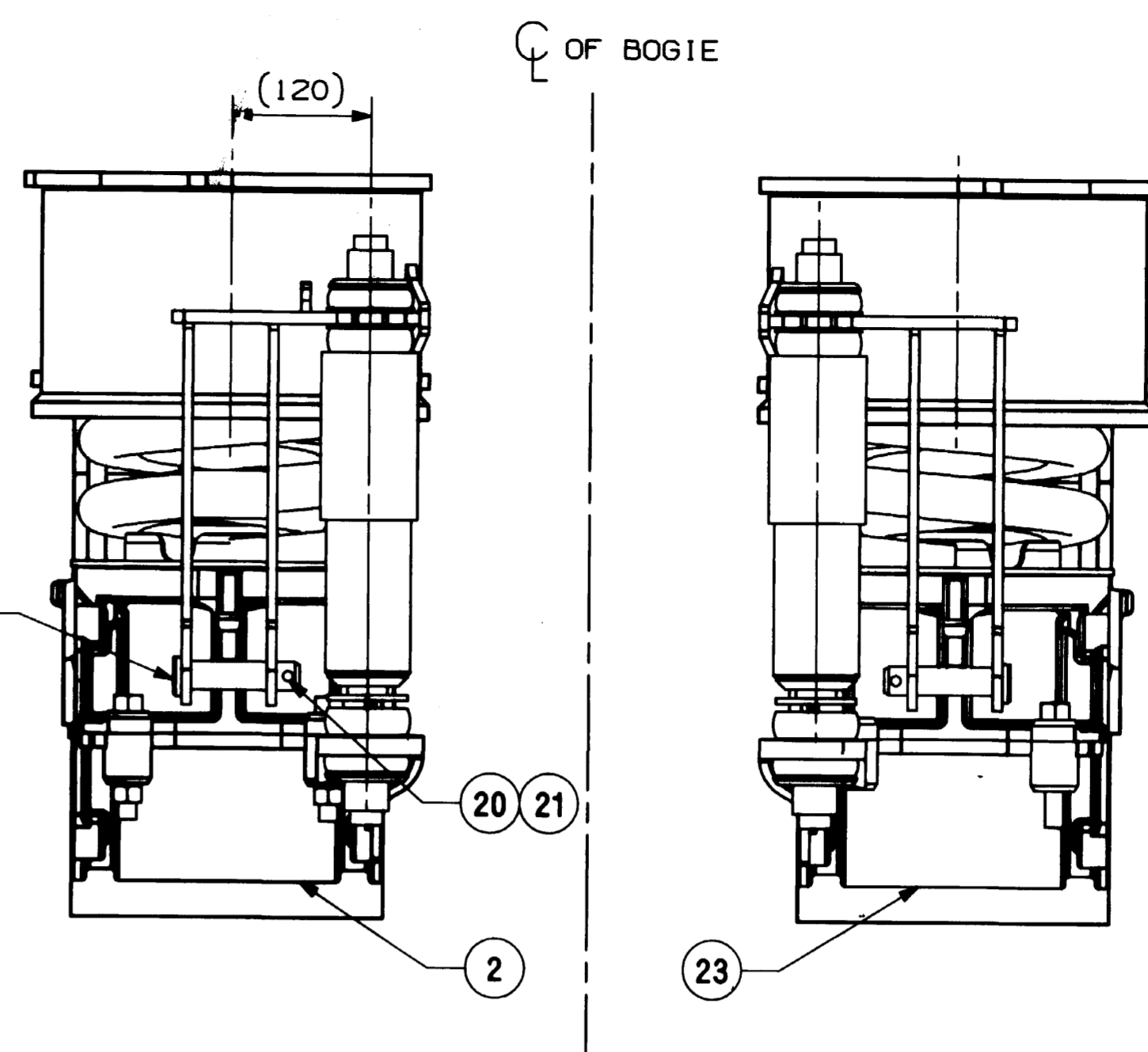
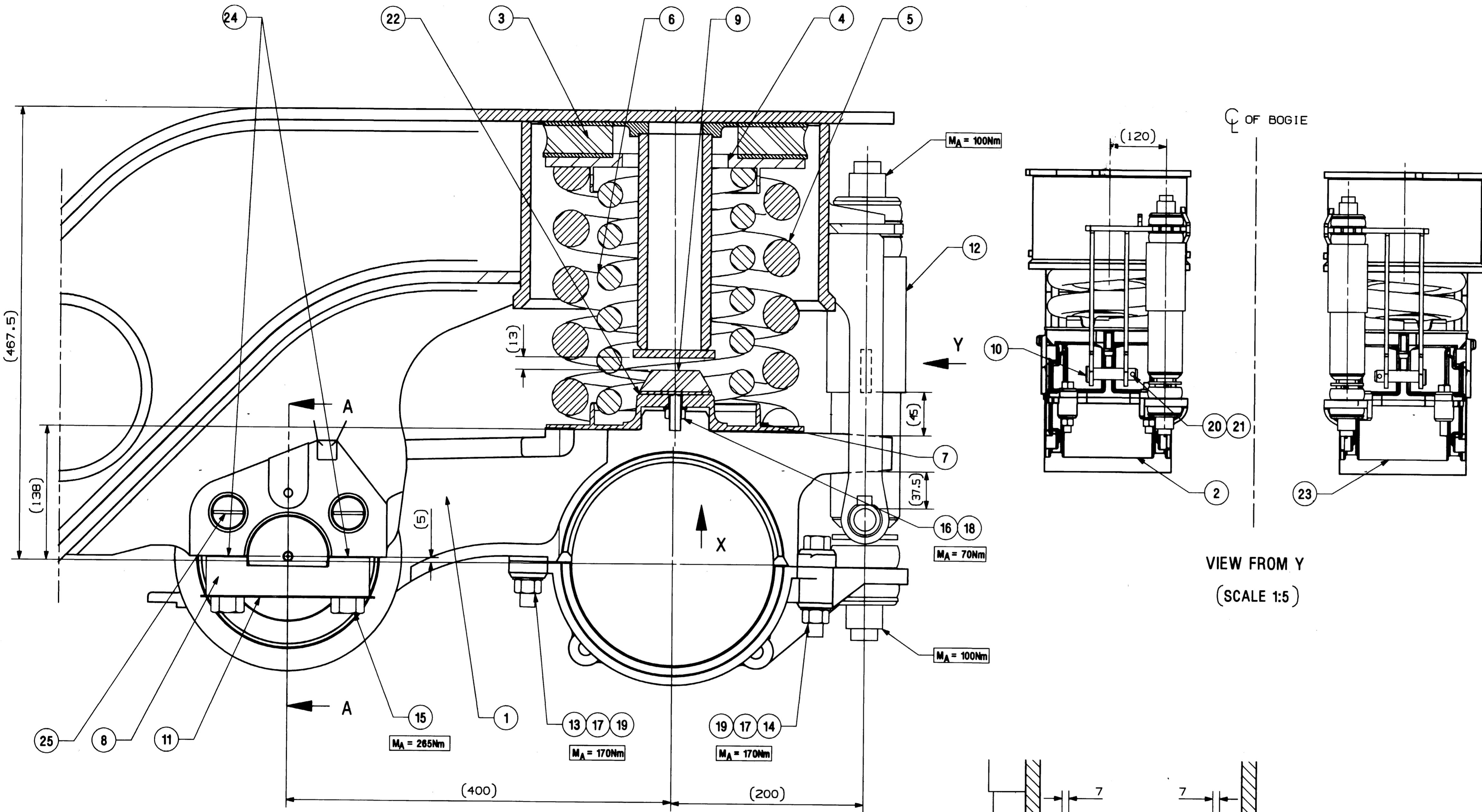
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	PRIMARY SUSPENSION	SUPERSEDES: LW01001	ALT	NIL
WEIGHT	FILE	\\10.12.17.2\bogie\bant\lw01001a.prt				
NIL	KG	PRIMARY SUSPENSION ARRGT.				
S. AREA	MM <sup>2</sup>	FOR ACCN-EOG BOGIE				
LENGTH/DIA	MM	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.	MM	REF.DRG.No: 1268732 VER.07				
HEIGHT	MM	PL NO. NIL				
NIL	M	DRG.NO. LW01001				

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008      DATE OF FIRST ISSUE      25/02/2002      CGM BY

ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



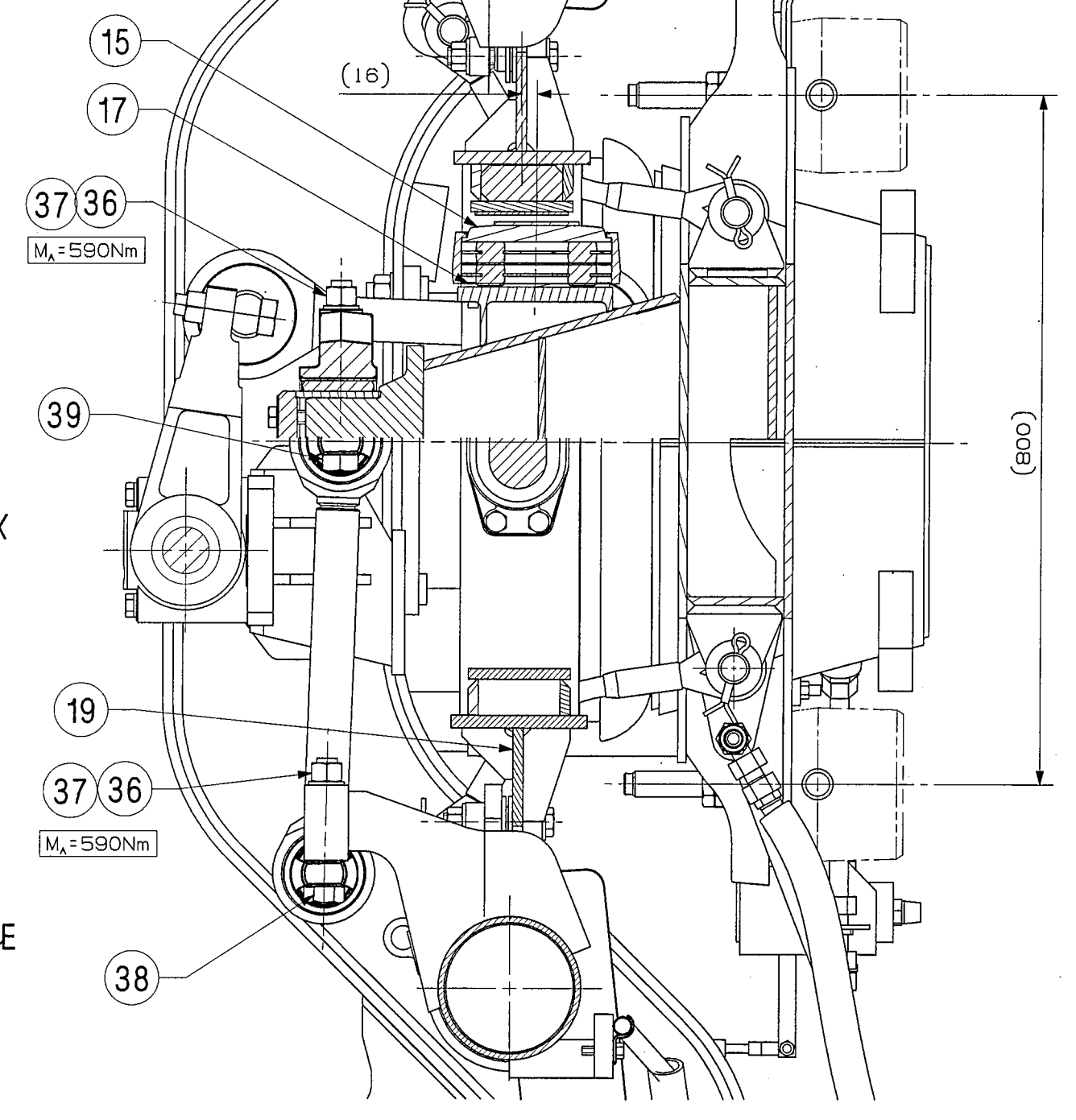
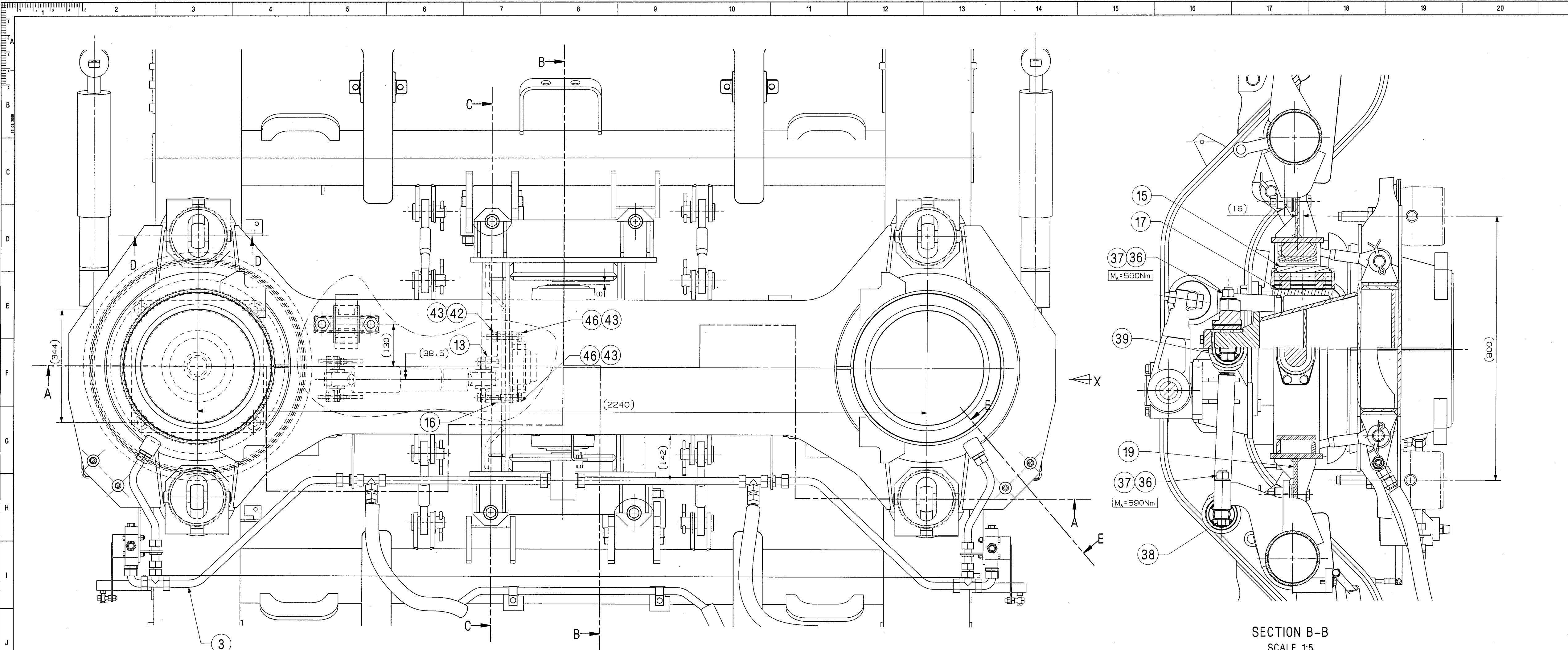
19 SEP 2002

ITEM	DESCRIPTION & DIMENSIONS	QTY	REF. DRG.	MATERIAL	REMARKS
25	LOCKING PIN	8	1227320	NIL	NIL
24	SEALING O-RING 35502000	8	IS: 9975-81 PT-I TAB-1	IS: 9975-84 PT-II CL-A	NIL
23	CONTROL ARM LOWER RIGHT	1	1267717	NIL	NIL
22	COMPENSATING RING	2	1227229	NIL	NIL
21	SPLIT PIN 8X45	2	LIHW06	IS: 549-1974	ITEM-17 COATING TO MTS 087
20	MACHINED WASHER Z5	2	NIL	IS: 2016-1967 TAB1, STEEL	NIL
19	PUNCH WASHER A18	8	LIHW09	IS: 2016-1967 STEEL	ITEM-11 COATING TO MTS 087
18	SPRING WASHER B12	2	LIHW09	IS: 3063-1994	ITEM-22 COATING TO MTS 087
17	SECURITY NUT M16	8	NIL	DIN6325/07.87 B,A3B	NIL
16	SECURITY NUT M12	2	NIL	DIN6325/07.87 B,A3B	NIL
15	HEX HEAD BOLT M20X100	8	LIHW01	IS: 1364 PT.1-92 B,B,B,CE	ITEM-51 COATING TO MTS 087
14	HEX HEAD BOLT M16X90	4	NIL	IS: 1364 PT.1-92 B,B,B,CE	NIL
13	HEX HEAD BOLT M16X70	4	NIL	IS: 1364 PT.1-92 B,B,B,CE	NIL
12	PRIMARY VERTICAL DAMPER	2	LW05102	NIL	NIL
11	LOCKING PLATE	4	1356259	NIL	NIL
10	PIN	2	1262374	NIL	NIL
9	VERTICAL BUMP STOP	2	LW01102	NIL	NIL
8	FIXATION BALL JOINT	4	1227331	NIL	NIL
7	CENTRING DISC	2	1902491	NIL	NIL
6	PRIMARY INNER SPRING	2	LG01101	NIL	NIL
5	PRIMARY OUTER SPRING	2	LG01100	NIL	NIL
4	CENTRING DISC	2	1262875	NIL	NIL
3	TOP RUBBER PAD	2	LW01101	NIL	NIL
2	CONTROL ARM LOWER LEFT	1	1267716	NIL	NIL
1	CONTROL ARM UPPER ASSLY	2	1268845	NIL	NIL

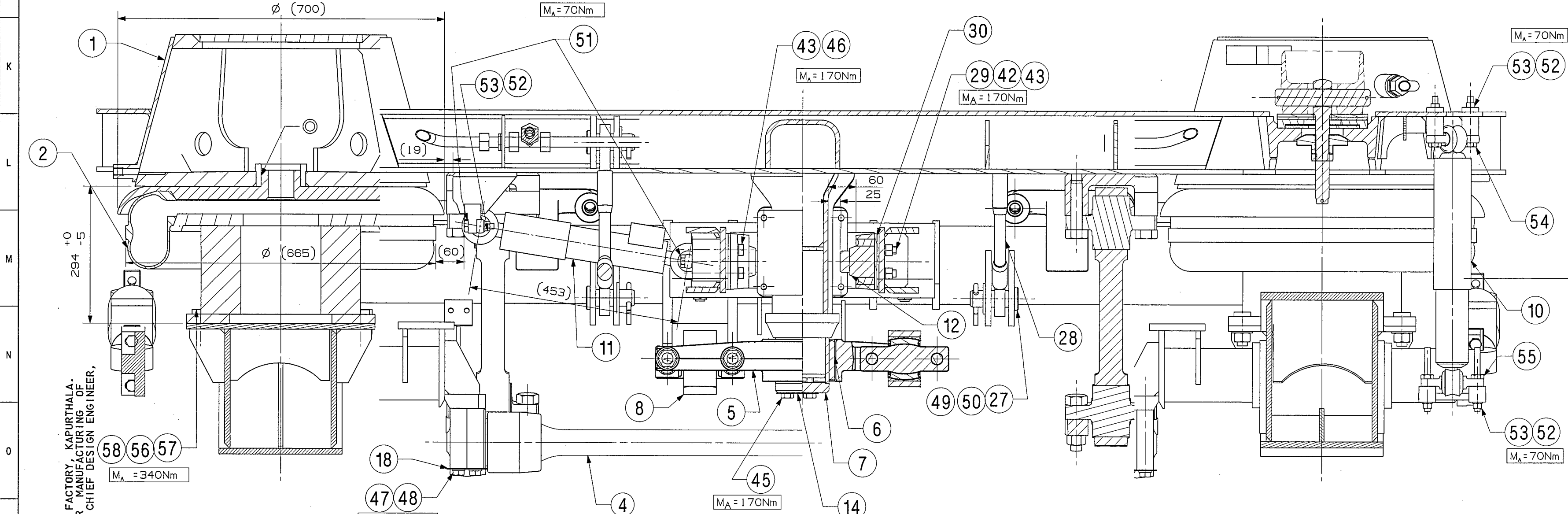
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	REF. DRG.	MATERIAL	REMARKS
NIL	M	PRIMARY SUSPENSION			NIL	
WEIGHT	FILE	/users3/bogie/flat/lq01102.prt				
NIL	KG	PRIMARY SUSPENSION ARRGT. FOR GS BOGIE				
S. AREA	M <sup>2</sup>	RAIL COACH FACTORY, KAPURTHALA				
LENGTH	M	INDIAN RAILWAYS STANDARD				
WIDTH	M	PL NO. 02010239				
HEIGHT	M	DRG. NO. LG01102				
NIL	M	SCALE: 1:2.5				
NIL	M	DATE OF FIRST ISSUE: 09/09/2002				

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 FOR UNTOLERANCED DIMENSIONS REFER MDG0008

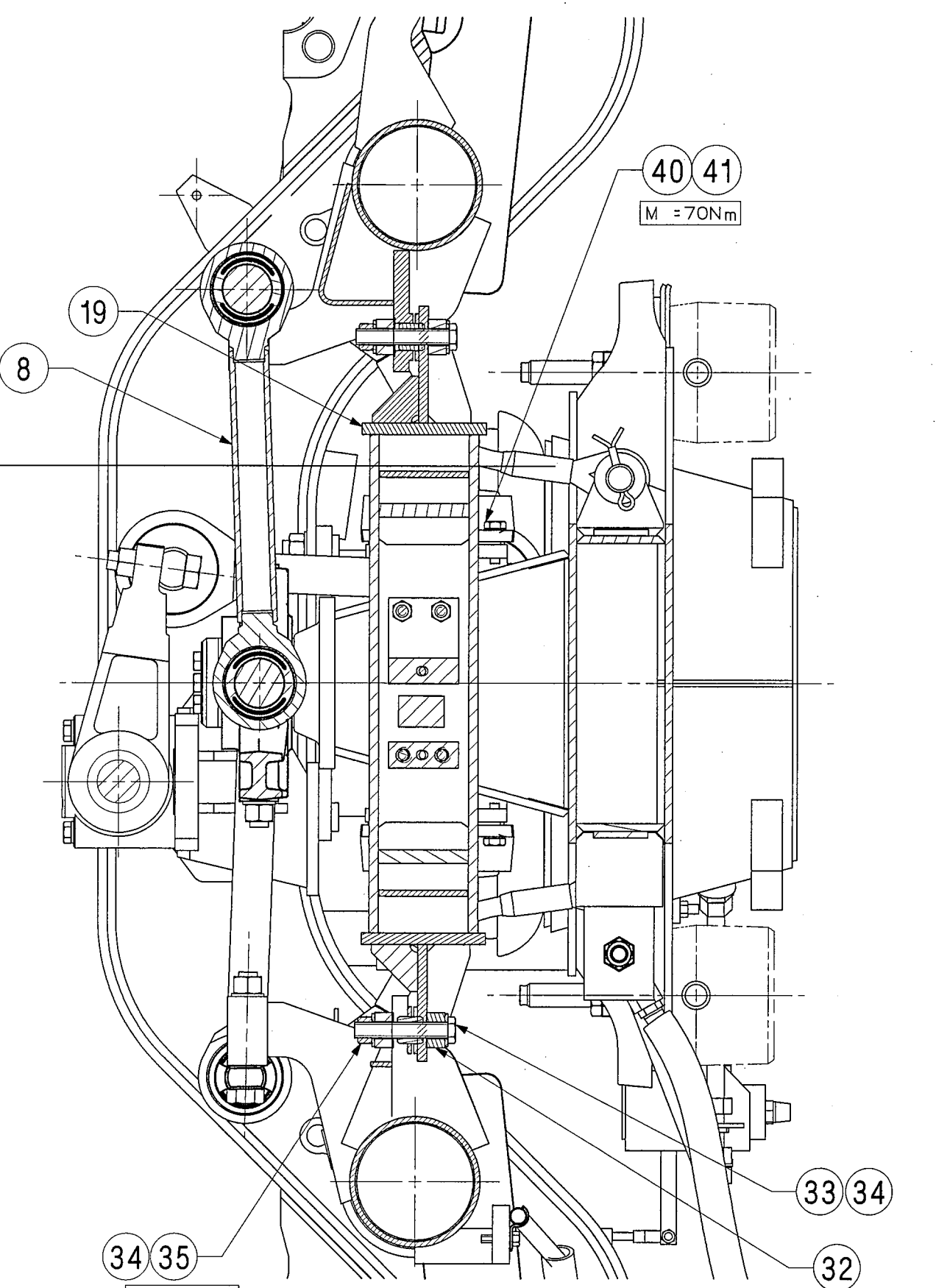
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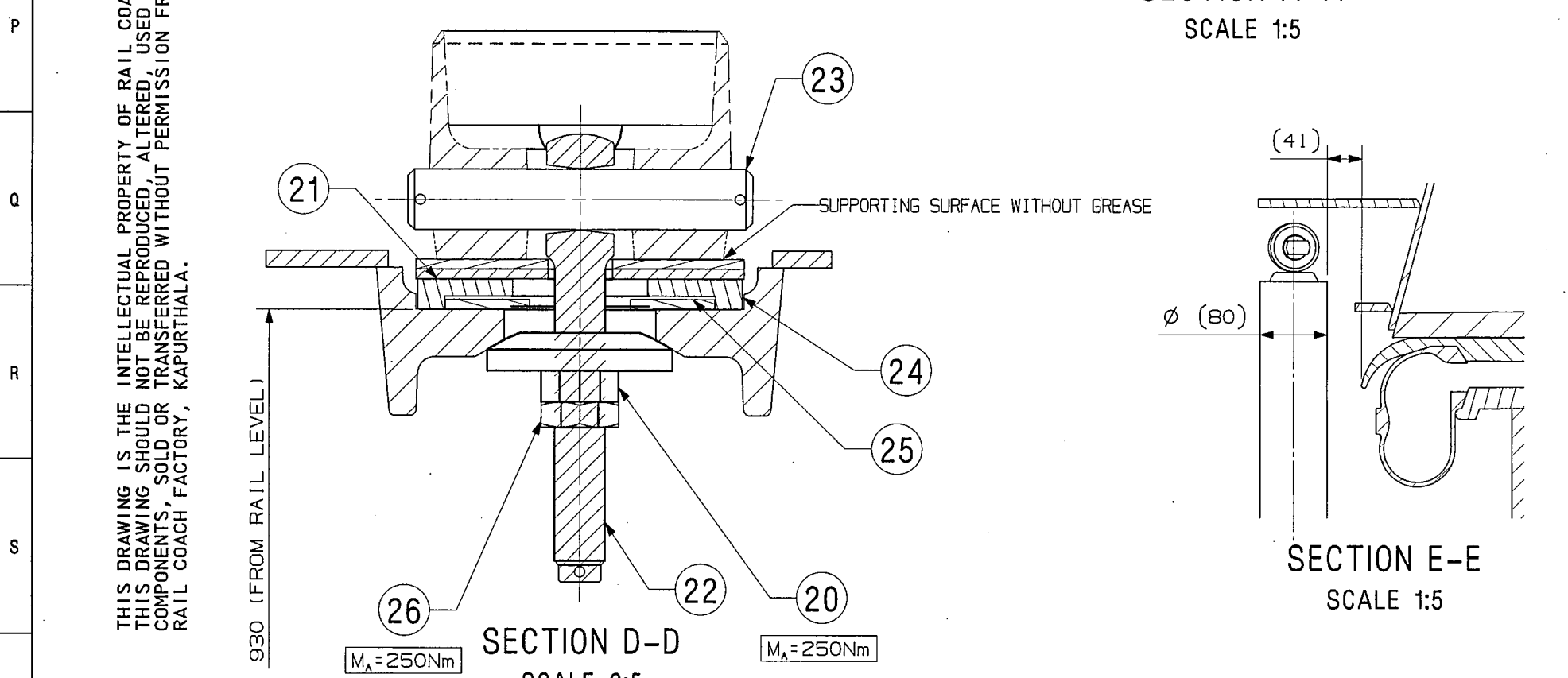
SECTION B-B  
SCALE 1:5



SECTION A-A  
SCALE 1:5

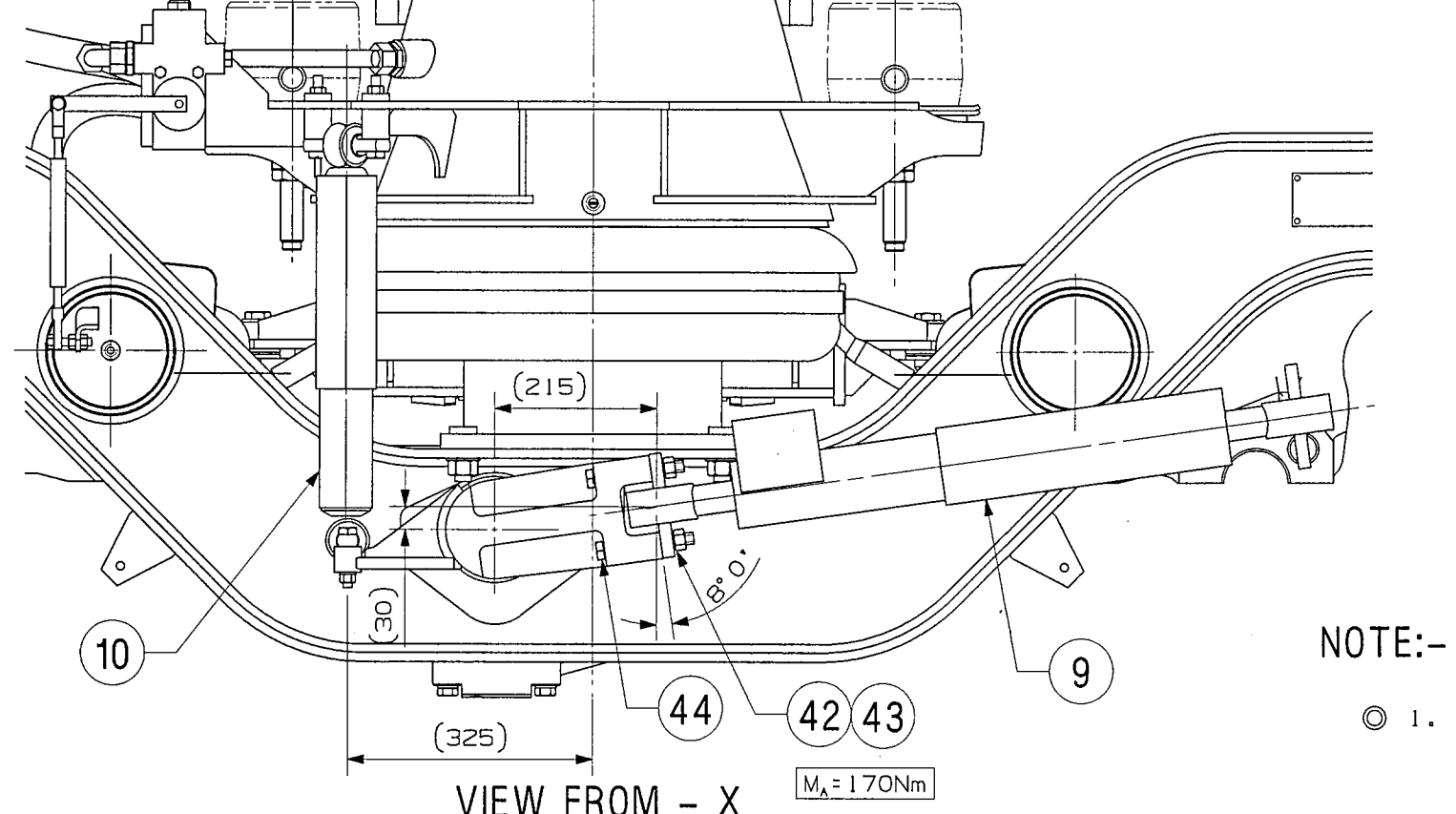


SECTION C-C  
SCALE 1:5



SECTION D-D  
SCALE 2:5

SECTION E-E  
SCALE 1:5



VIEW FROM - X  
SCALE 1:5

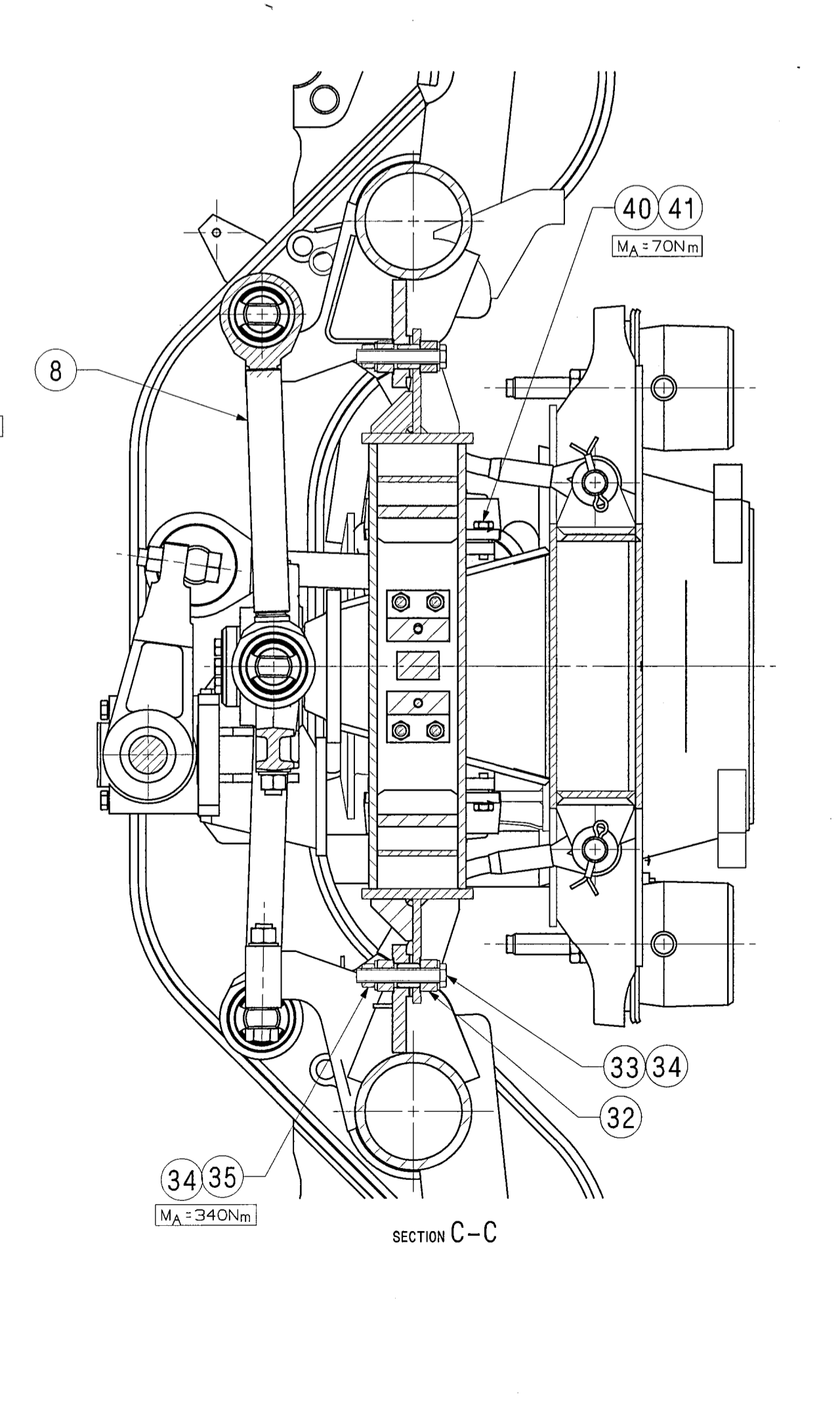
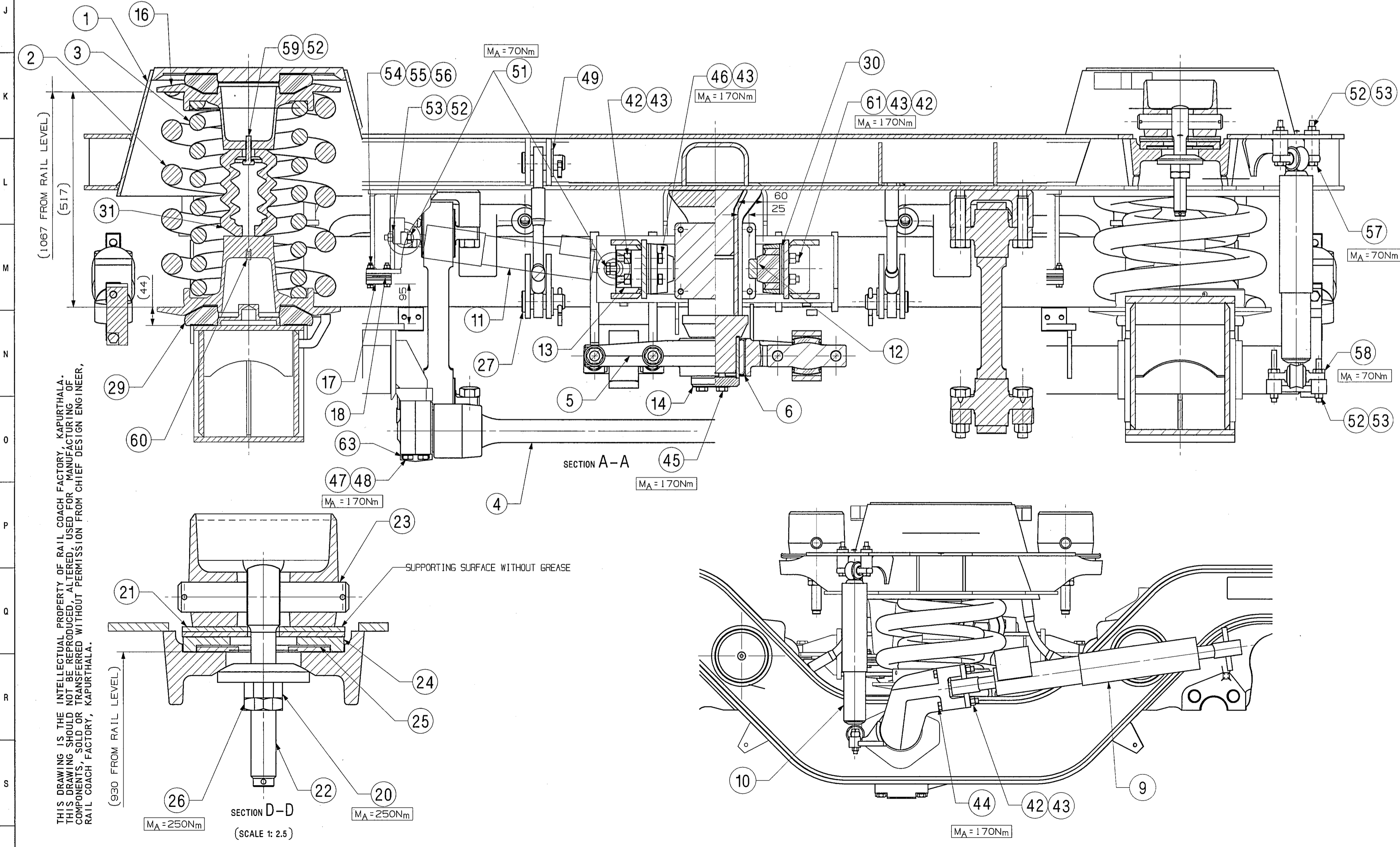
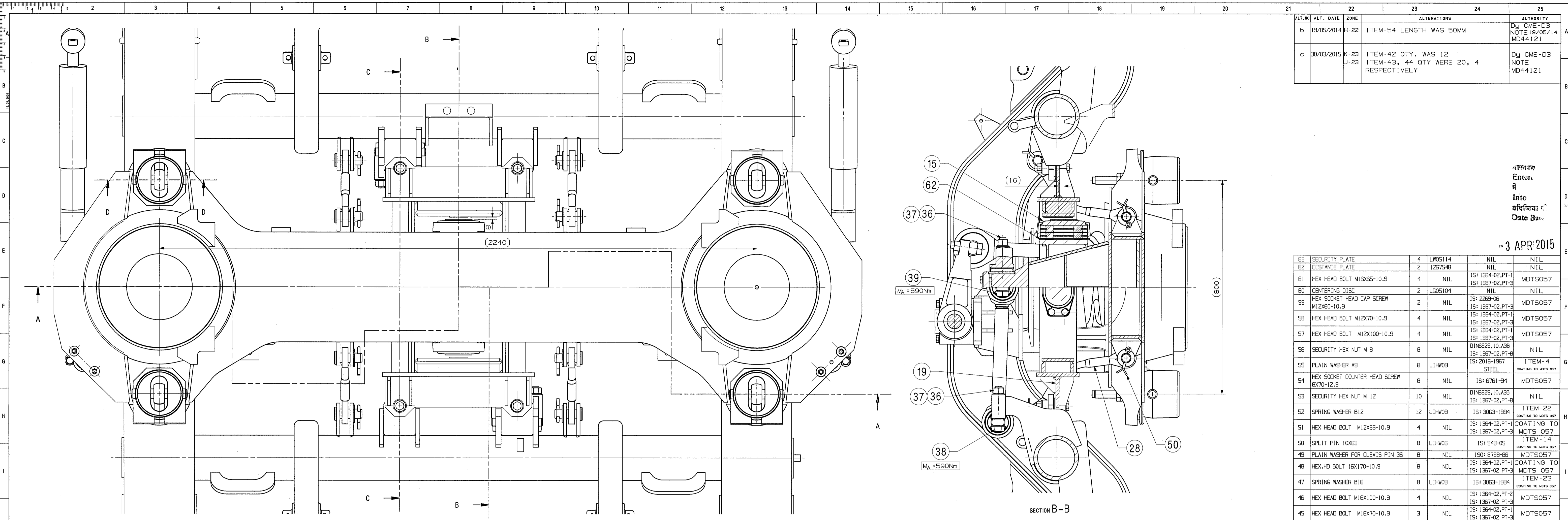
NOTE:-  
1. THE MATING SURFACES OF AIR SPRING SPIGOT AND CORRESPONDING HOLE IN BOGIE BOLSTER SHALL BE THOROUGHLY CLEANED AND ROLLER BEARING GREASE SHALL BE APPLIED ON THE SURFACES FOR EASY ASSEMBLY.

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
1	17/03/2015	M-21	ITEM-31 DELETED.	By CME/D2 NOTE
2	1-21		ITEM-46 QTY WAS 2.	MP40181
				DTD 04/02/16

आकृति  
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INTO  
प्रतिष्ठान  
DATA BASE  
71 MAR 2016

NO.	DESCRIPTION	QTY	UNIT	REMARKS
58	PUNCH WASHER A22	8	LHWO3	IS: 2016-1967 STEEL, MTS 057 TO BE
57	NYLOC NUT M20	8	NIL	IS: 7002-91-10 MTS 057 TO BE
56	HEX SOCKET HD CAP SCREW M20X85-10.9,CE	8	NIL	IS: 2269,MOT5057 TO BE
55	HEX HEAD BOLT M12X100-10.9,CE	4	NIL	IS: 1367,PT-3 COATING TO MDS 057
54	HEX HEAD BOLT M12X100-10.9,CE	4	NIL	IS: 1364,PT-1 COATING TO MDS 057
53	ALL METAL PREVAILING TORQUE TYPE HEX NUT M12	10	NIL	D1N6925, IS: 1367-02,PT-8,10,A38 D1N980V
52	SPRING WASHER B12	12	LHWO3	IS: 3063-1994 ITEM-22 COATING TO MDS 057
51	HEX HEAD BOLT M12X85-10.9,CE	4	NIL	IS: 1364,PT-1 COATING TO MDS 057
50	SPLIT PIN 10X63	8	LHWO6	IS: 549-05 ITEM-14 COATING TO MDS 057
49	PLAIN WASHER 36	8	NIL	IS: 9738/ST52 A 28 NIL
48	HEX HEAD BOLT M16X170-10.9,CE	8	NIL	IS: 1364,PT-1 COATING TO MDS 057
47	SPRING WASHER B16	8	LHWO3	IS: 3063-1994 ITEM-23 COATING TO MDS 057
46	HEX HEAD SCREW M16X100-10.9,CE	4	NIL	IS: 1364,PT-2 COATING TO MDS 057
45	HEX HEAD BOLT M16X100-10.9,CE	3	NIL	IS: 1364,PT-1 COATING TO MDS 057
44	HEX HEAD SCREW M16X120-10.9,CE	8	NIL	IS: 1364,PT-2 COATING TO MDS 057
43	PUNCH WASHER A18	24	LHWO3	IS: 2016-1967 STEEL ITEM-11 COATING TO MDS 057
42	ALL METAL PREVAILING TORQUE TYPE HEX NUT M16	16	NIL	D1N6925, IS: 1367-02,PT-8,10,A38 D1N980V
41	PUNCH WASHER A14	8	LHWO3	IS: 2016-1967 STEEL ITEM-9 COATING TO MDS 057
40	HEX SOCKET HEAD CAP SCREW M12X45-10.9,CE	8	NIL	IS: 2269 COATING TO MDS 057
39	HEX HEAD BOLT M24X200-10.9,CE	4	NIL	IS: 1364,PT-1 COATING TO MDS 057
38	HEX HEAD BOLT M24X150-10.9,CE	4	NIL	IS: 1367,PT-3 COATING TO MDS 057
37	MACHINED WASHER 25	8	NIL	IS: 2016-1967 TAB-1,STEEL COATING TO MDS 057
36	ALL METAL PREVAILING TORQUE TYPE HEX NUT M24	8	NIL	D1N6925, IS: 1367-02,PT-8,10,A38 D1N980V
35	ALL METAL PREVAILING TORQUE TYPE HEX NUT M20	4	NIL	D1N6925, IS: 1367-02,PT-8,10,A38 D1N980V
34	SPRING WASHER B20	8	LHWO3	IS: 3063-1994 ITEM-25 COATING TO MDS 057
33	HEX HEAD BOLT M20X120-10.9,CE	4	NIL	IS: 1364,PT-1 COATING TO MDS 057
32	DISTANCE BUSH	8	L268593	NIL
31	HEX HEAD-SCREW M16X110-10.9,CE	2	NIL	IS: 1364,PT-2 COATING TO MDS 057
30	ADJUSTING SHIM	4	L272066	NIL
29	HEX HEAD BOLT M16X85-10.9,CE	4	NIL	IS: 1364,PT-1 COATING TO MDS 057
28	SAFETY WIRE ROPE ASSLY.	4	LW05105	NIL
27	PIN	8	LW05106	NIL
26	HEX NUT M30-10	4	NIL	IS: 1364,PT-3 COATING TO MDS 057
25	PLATE SPRING 160/120 X 6	4	NIL	ENI.B159-500-V4 V.01N2093 NIL
24	DISC	4	L268599	NIL
23	LINK PIN	4	LW05125	NIL
22	SWINGING LINK PIN	4	L268596	NIL
21	ADJUSTING SHIM FOR BODY SUPPORT	4	L267474	NIL
20	SWINGING NUT	8	L267504	NIL
19	CROSS SECTION	1	L267405	NIL
18	SECURITY PLATE	4	LW05114	NIL
17	STIFFENER	2	L267549	NIL
16	BRACKET FOR LATERAL DAMPER	1	LW05117	NIL
15	LONGITUDINAL STOP ASSLY.	2	L267549	NIL
14	SAFETY PLATE	1	L268843	NIL
13	BRACKET FOR LATERAL DAMPER	1	LW05116	NIL
12	LATERAL BUMP STOP	2	C53973 REFRERD8374	NIL
11	SECONDARY LATERAL DAMPER	1	LW05122	NIL
10	SECONDARY VERTICAL DAMPER	2	L605102	NIL
9	YAW DAMPER	2	LW05103	NIL
8	TRACTION LEVER ASSLY.	2	L267510	NIL
7	DISC	1	L267576	NIL
6	TRACTION CENTRE ELASTIC JOINT	1	REFRERD8397	NIL
5	TRACTION CENTER	1	L267507	NIL
4	ANTIROLL BAR ASSLY.	1	L267422	NIL
3	PNEUMATIC PIPING ARRGT.	1	LW05189	NIL
2	AIR SPRING WITH TOP PLATE 700MM MAX. & BASE PLATE TO DRG NO CG-15081	2	C-K509	NIL
1	BOLSTER	1	LW04001	NIL

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ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
b	19/05/2014	H-22	ITEM-54 LENGTH WAS 50MM	DJ CME-D3 NOTE 19/05/14 MD44121
c	30/03/2015	K-23 J-23	ITEM-42 QTY. WAS 12 ITEM-43, 44 QTY WERE 20, 4 RESPECTIVELY	DJ CME-D3 NOTE MD44121

-3 APR 2015

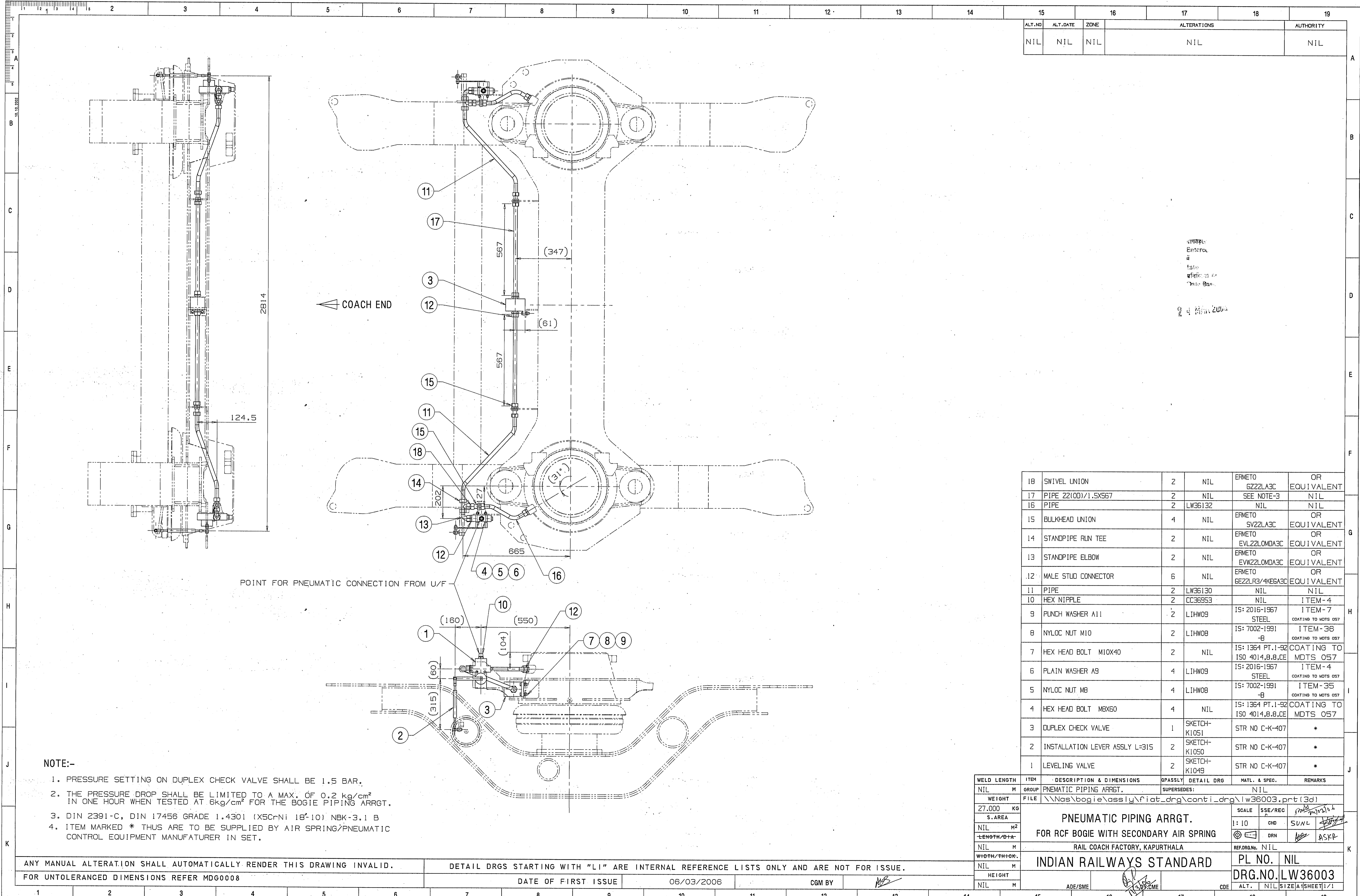
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Date Book

ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
63	SECURITY PLATE	4	LW05114	NIL	NIL
62	DISTANCE PLATE	2	126754B	NIL	NIL
61	HEX HEAD BOLT M16X5-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
60	CENTERING DISC	2	L605104	NIL	NIL
59	HEX SOCKET HEAD CAP SCREW M12X65-10.9	2	NIL	IS: 1367-02, PT-3 IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
58	HEX HEAD BOLT M12X70-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
57	HEX HEAD BOLT M12X100-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
56	SECURITY HEX NUT M 8	8	NIL	DIN6325, 10, A30 IS: 1367-02, PT-6	NIL
55	PLAIN WASHER A9	8	L1HW09	IS: 2016-1567 STEEL	ITEM-4 COATING TO MTS 057
54	HEX SOCKET COUNTER HEAD SCREW 6X70-12.9	8	NIL	IS: 6761-94	MDTS057
53	SECURITY HEX NUT M 12	10	NIL	DIN6325, 10, A30 IS: 1367-02, PT-6	NIL
52	SPRING WASHER B12	12	L1HW09	IS: 3063-1994	ITEM-22 COATING TO MTS 057
51	HEX HEAD BOLT M12X55-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	COATING TO MTS 057 MDTS 057
50	SPLIT PIN 10X63	8	L1HW06	IS: 549-05	ITEM-14 COATING TO MTS 057
49	PLAIN WASHER FOR CLEVIS PIN 36	8	NIL	IS: 8738-86	MDTS057
48	HEX HD BOLT 16X170-10.9	8	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	COATING TO MTS 057 MDTS 057
47	SPRING WASHER B16	8	L1HW09	IS: 3063-1994	ITEM-23 COATING TO MTS 057
46	HEX HEAD BOLT M16X100-10.9	4	NIL	IS: 1364-02, PT-2 IS: 1367-02, PT-3	MDTS057
45	HEX HEAD BOLT M16X70-10.9	3	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
44	HEX HEAD BOLT M16X120-10.9	8	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
43	PUNCH WASHER A18	24	L1HW09	IS: 2016-1567 STEEL	ITEM-11 COATING TO MTS 057
42	SECURITY HEX NUT M 16	16	NIL	IS: 2016-1567 IS: 1367-02, PT-6	NIL
41	PUNCH WASHER A14	8	L1HW09	IS: 2016-1567 STEEL	ITEM-9 COATING TO MTS 057
40	HEX SOCKET HEAD CAP SCREW M12X45-10.9	8	NIL	IS: 2269-06 IS: 1367-02, PT-3	MDTS057
39	HEX HEAD BOLT M24X200-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
38	HEX HEAD BOLT M24X150-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
37	MACHINED WASHER 25	8	NIL	IS: 2016-1567 TAB-1, STEEL	NIL
36	SECURITY HEX NUT M 24	8	NIL	DIN6325, 10, A30 IS: 1367-02, PT-6	NIL
35	SECURITY HEX NUT M 20	4	NIL	DIN6325, 10, A30 IS: 1367-02, PT-6	NIL
34	SPRING WASHER B20	8	L1HW09	IS: 3063-1994	ITEM-25 COATING TO MTS 057
33	HEX HEAD BOLT M20X120-10.9	4	NIL	IS: 1364-02, PT-1 IS: 1367-02, PT-3	MDTS057
32	DISTANCE BUSH	8	1266563	NIL	NIL
31	RUBBER SPRINGS	2	1266695	NIL	NIL
30	ADJUSTING SHIM	4	1272056	NIL	NIL
29	PAD FOR SECONDARY SUSPENSION	4	1503149	NIL	NIL
28	SAFETY WIRE ROPE ASSLY.	4	LW05105	NIL	NIL
27	PIN FOR FIAT IR BOGIE	8	LW05106	NIL	NIL
26	HEX NUT M30-10	4	NIL	IS: 1364-02, PT3 IS: 1367-94, PT-6	MDTS057
25	PLATE SPRING 160/φ 82 X 6	4	NIL	DIN 1721, 500-V40 EN 1.8159	DIN2093
24	CENTERING DISC	4	1266599	NIL	NIL
23	LINK PIN	4	LW05125	NIL	NIL
22	BODY TO BOGIE CONNECTING SWINGING LINK	4	1266596	NIL	NIL
21	ADJUSTING SHIM FOR BODY SUPPORT	8	1267474	NIL	NIL
20	SWINGING NUT	4	1267504	NIL	NIL
19	CROSS SECTION	1	1267405	NIL	NIL
18	DISTANCE PLATE	6	1301351	NIL	NIL
17	STOP PLATE	2	1301352	NIL	NIL
16	CENTERING DISC	2	1268841	NIL	NIL
15	LONGITUDINAL STOP ASSLY.	2	1267549	NIL	NIL
14	SECURITY PLATE	1	1268849	NIL	NIL
13	HORIZONTAL DAMPER BRACKET	2	1267541	NIL	NIL
12	LATERAL BUMP STOP	2	C53973REF PRE08374	NIL	NIL
11	SECONDARY LATERAL DAMPER	1	LW05100	NIL	NIL
10	SECONDARY VERTICAL DAMPER	2	L605102	NIL	NIL
9	YAW DAMPER	2	LW05103	NIL	NIL
8	TRACTION LEVER ASSLY.	2	1267510	NIL	NIL
7	DISC	1	1267576	NIL	NIL
6	TRACTION CENTER ELASTIC JOINT	1	C53973REF PRE08374	NIL	NIL
5	TRACTION CENTER	1	1267507	NIL	NIL
4	ANTIROLL BAR ASSLY.	1	1267422	NIL	NIL
3	SECONDARY SPRING INNER	2	L605100	NIL	NIL
2	SECONDARY SPRING OUTER	2	L605101	NIL	NIL
1	BOLSTER	1	1267420	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	GROUP	SECONDARY SUSPENSION			SUPERSIDES: LG05001 ALT b	
WGT	FILE	\\hs022\boogie\pda\lg05001c.prt(3D)				
119.00	KG	SCALE 1:5				
NIL	AREA	CHD				
NIL	LENGTH	DRN				
NIL	WIDTH	REVISION 1268801 ver-04				
NIL	HEIGHT	FOR FIAT (GS) BOGIE				
NIL	PL NO.	PL NO. NIL				
NIL	DRG NO.	DRG. NO. LG05001				
NIL	ALT.	ALT. c				

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008



ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
18	SWIVEL UNION	2	NIL	ERMETO GZZZLA3C	OR EQUIVALENT
17	PIPE 22(OD)/1.5XS67	2	NIL	SEE NOTE-3	NIL
16	PIPE	2	LW36132	NIL	NIL
15	BULKHEAD UNION	4	NIL	ERMETO SVZZLA3C	OR EQUIVALENT
14	STANDPIPE RUN TEE	2	NIL	ERMETO EVLZZLMDA3C	OR EQUIVALENT
13	STANDPIPE ELBOW	2	NIL	ERMETO EVWZZLMDA3C	OR EQUIVALENT
12	MALE STUD CONNECTOR	6	NIL	ERMETO GEZZLR3/4KEGA3C	OR EQUIVALENT
11	PIPE	2	LW36130	NIL	NIL
10	HEX NIPPLE	2	CC36953	NIL	ITEM-4
9	PUNCH WASHER A11	2	LIHW09	IS: 2016-1967 STEEL	ITEM-7 COATING TO MDT5 057
8	NYLOC NUT M10	2	LIHW08	IS: 7002-1991 -B	ITEM-36 COATING TO MDT5 057
7	HEX HEAD BOLT M10X40	2	NIL	IS: 1364 PT.1-92 ISO 4014.8.8.CE	COATING TO MDT5 057
6	PLAIN WASHER A9	4	LIHW09	IS: 2016-1967 STEEL	ITEM-4 COATING TO MDT5 057
5	NYLOC NUT M8	4	LIHW08	IS: 7002-1991 -B	ITEM-35 COATING TO MDT5 057
4	HEX HEAD BOLT M8X60	4	NIL	IS: 1364 PT.1-92 ISO 4014.8.8.CE	COATING TO MDT5 057
3	DUPLEX CHECK VALVE	1	SKETCH-K1051	STR NO C-K-407	*
2	INSTALLATION LEVER ASSLY L-315	2	SKETCH-K1050	STR NO C-K-407	*
1	LEVELING VALVE	2	SKETCH-K1049	STR NO C-K-407	*

**NOTE:-**

- PRESSURE SETTING ON DUPLEX CHECK VALVE SHALL BE 1.5 BAR.
- THE PRESSURE DROP SHALL BE LIMITED TO A MAX. OF 0.2 kg/cm<sup>2</sup> IN ONE HOUR WHEN TESTED AT 6kg/cm<sup>2</sup> FOR THE BOGIE PIPING ARRGT.
- DIN 2391-C, DIN 17456 GRADE 1.4301 (X5CrNi18-10) NBK-3.1 B
- ITEM MARKED \* THUS ARE TO BE SUPPLIED BY AIR SPRING/PNEUMATIC CONTROL EQUIPMENT MANUFACTURER IN SET.

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	PNEUMATIC PIPING ARRGT.	SUPERSEDES:	NIL		
WEIGHT	FILE	\\nas\bogie\assly\fiat.dwg\cont_i.dwg\lw36003.prt (3d)				
27.000	KG	PNEUMATIC PIPING ARRGT.				
S. AREA		SCALE SSE/REC 1:10 CHD SUNL				
NIL	M <sup>2</sup>	DRN ASKP				
LENGTH	M	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.	M	REF.DRG.No. NIL				
NIL	M	INDIAN RAILWAYS STANDARD				
HEIGHT	M	PL NO. NIL				
NIL	M	DRG.NO. LW36003				
		REF.DRG.No. NIL				
		ALT. NIL				

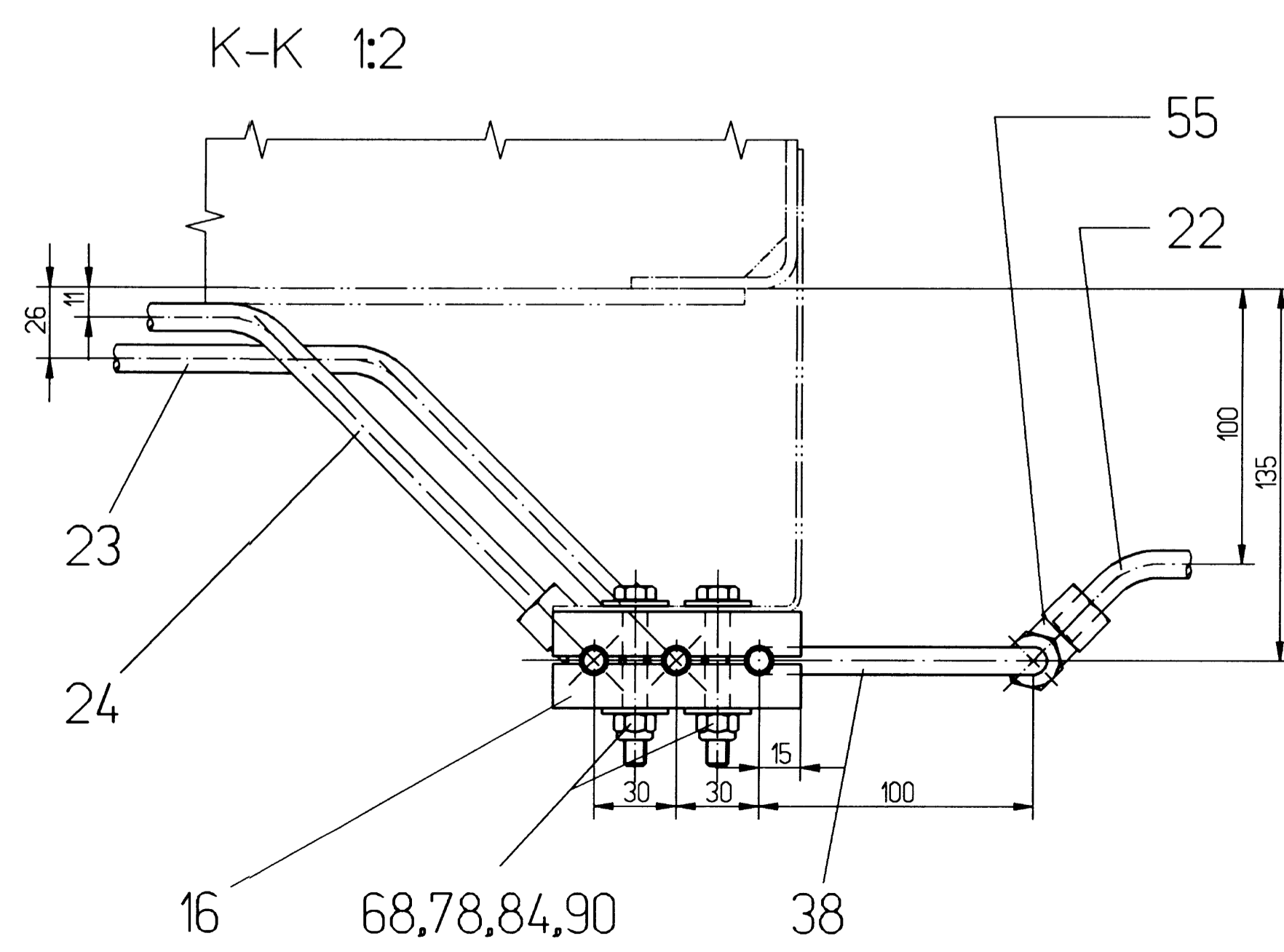
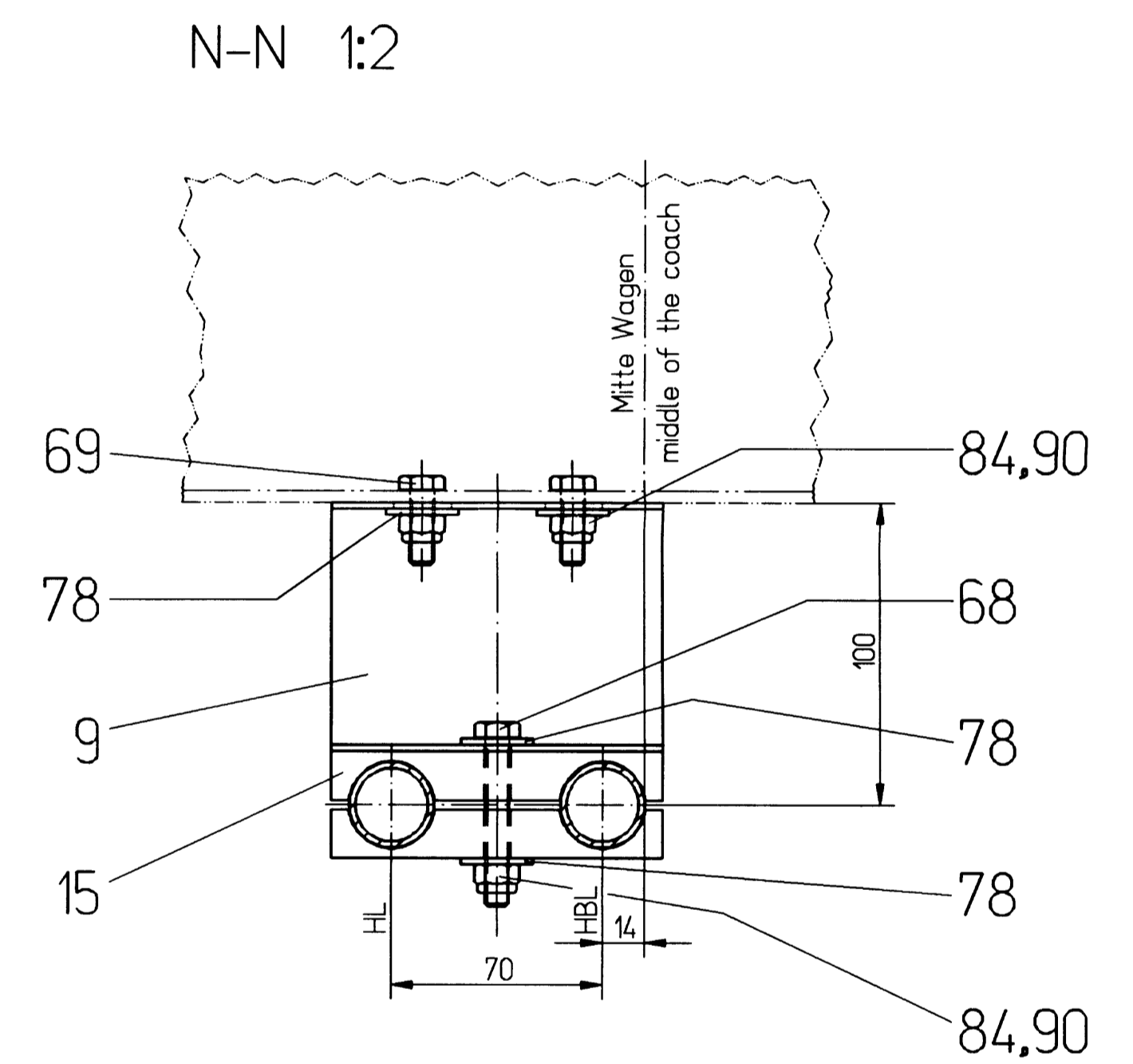
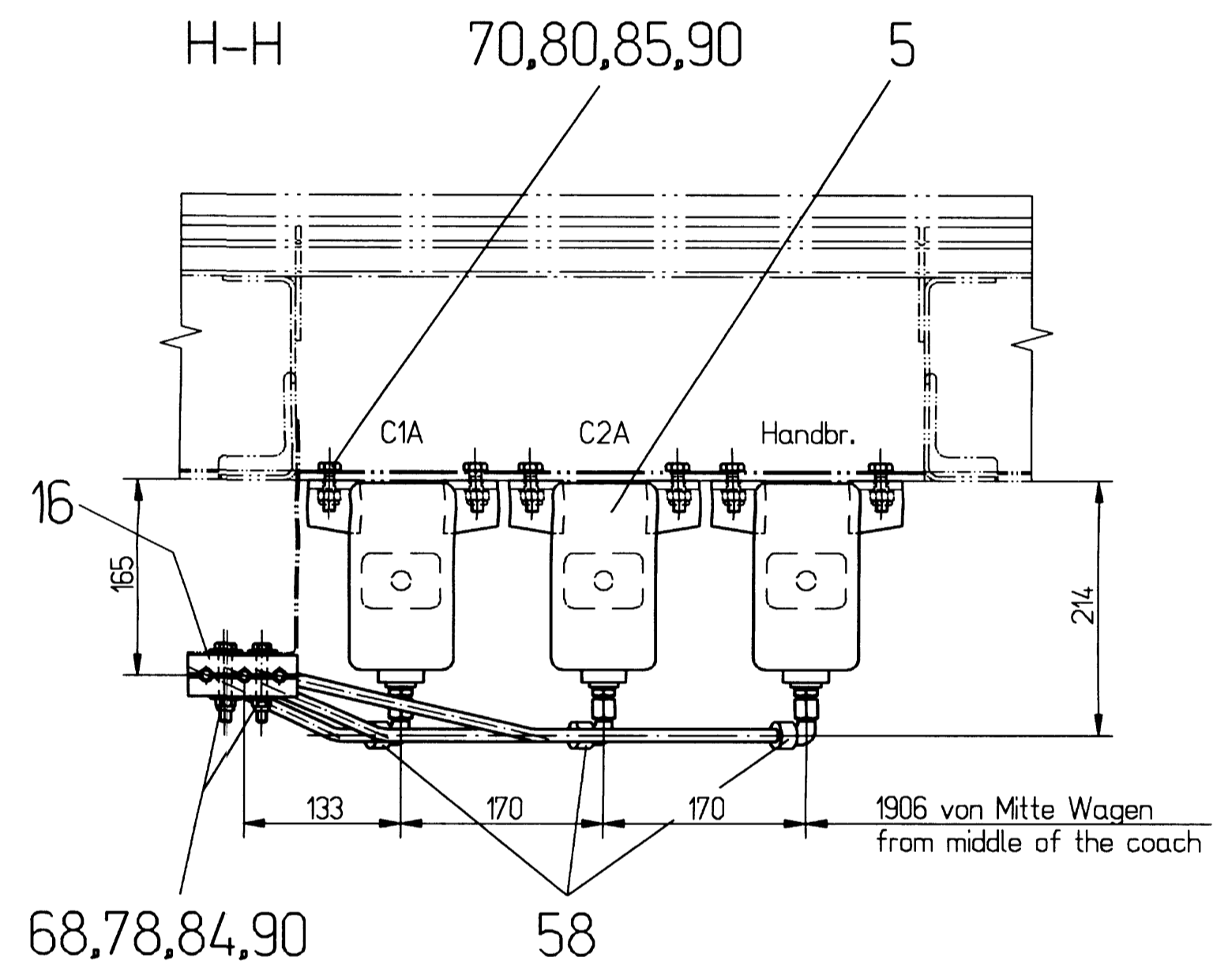
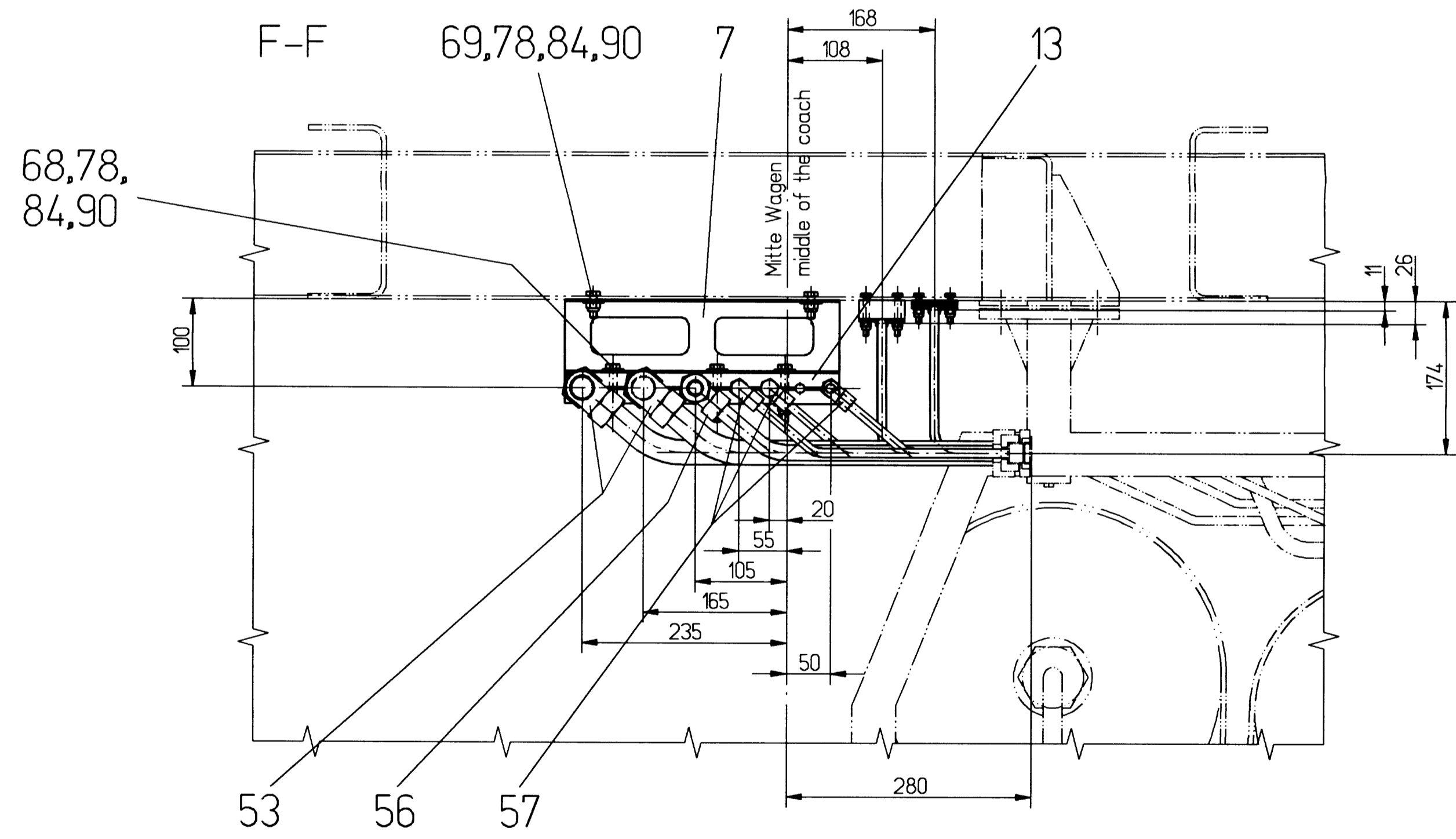
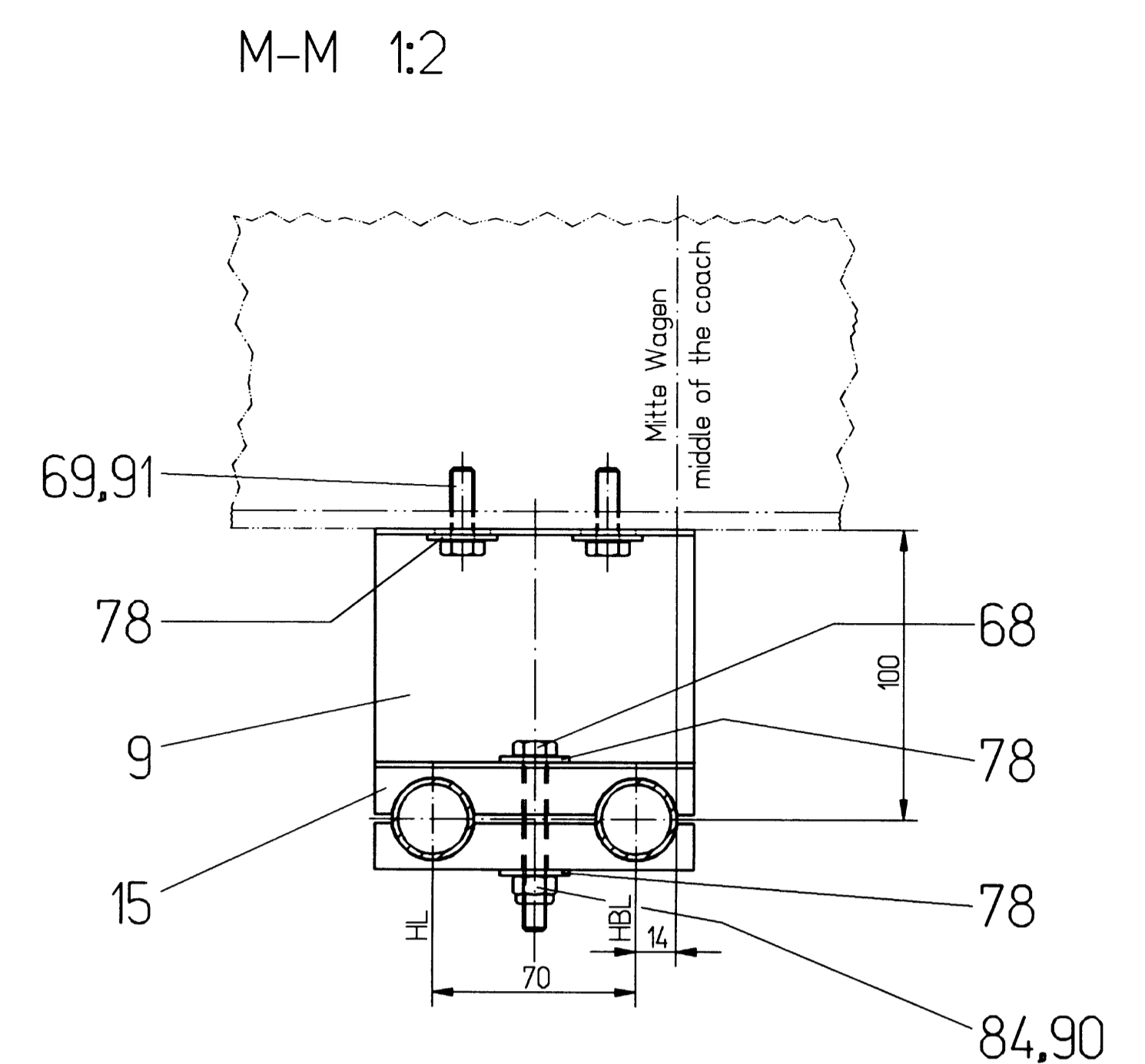
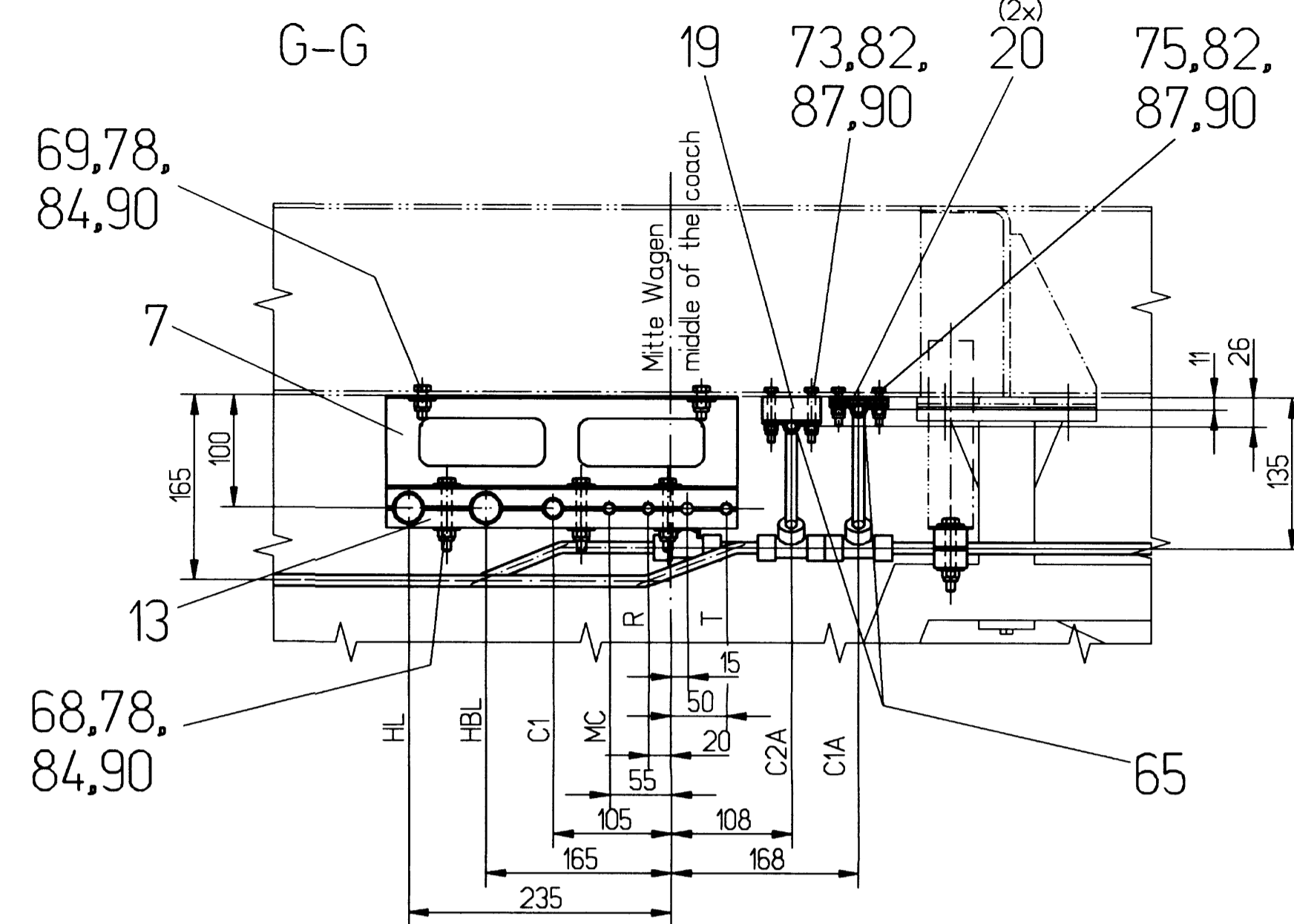
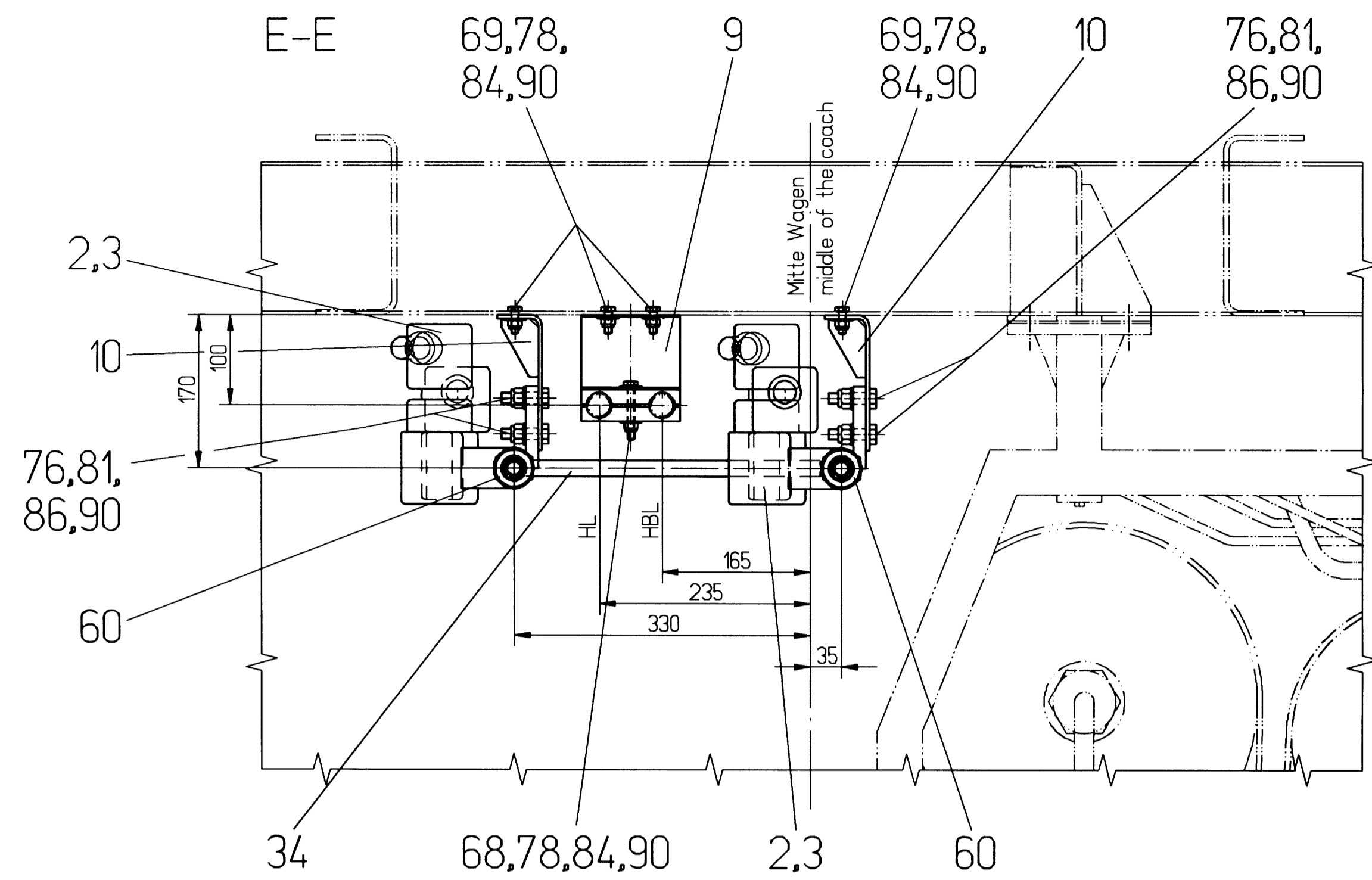
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Alle Schraubenverbindungen aus A2-70 mit Müttern müssen vor dem Einschrauben mit Pos. 90 (Molykote) eingefettet werden.

All screws connections in stainless steel with nuts are to be greased with item 90 (Molykote) before being screwed in.

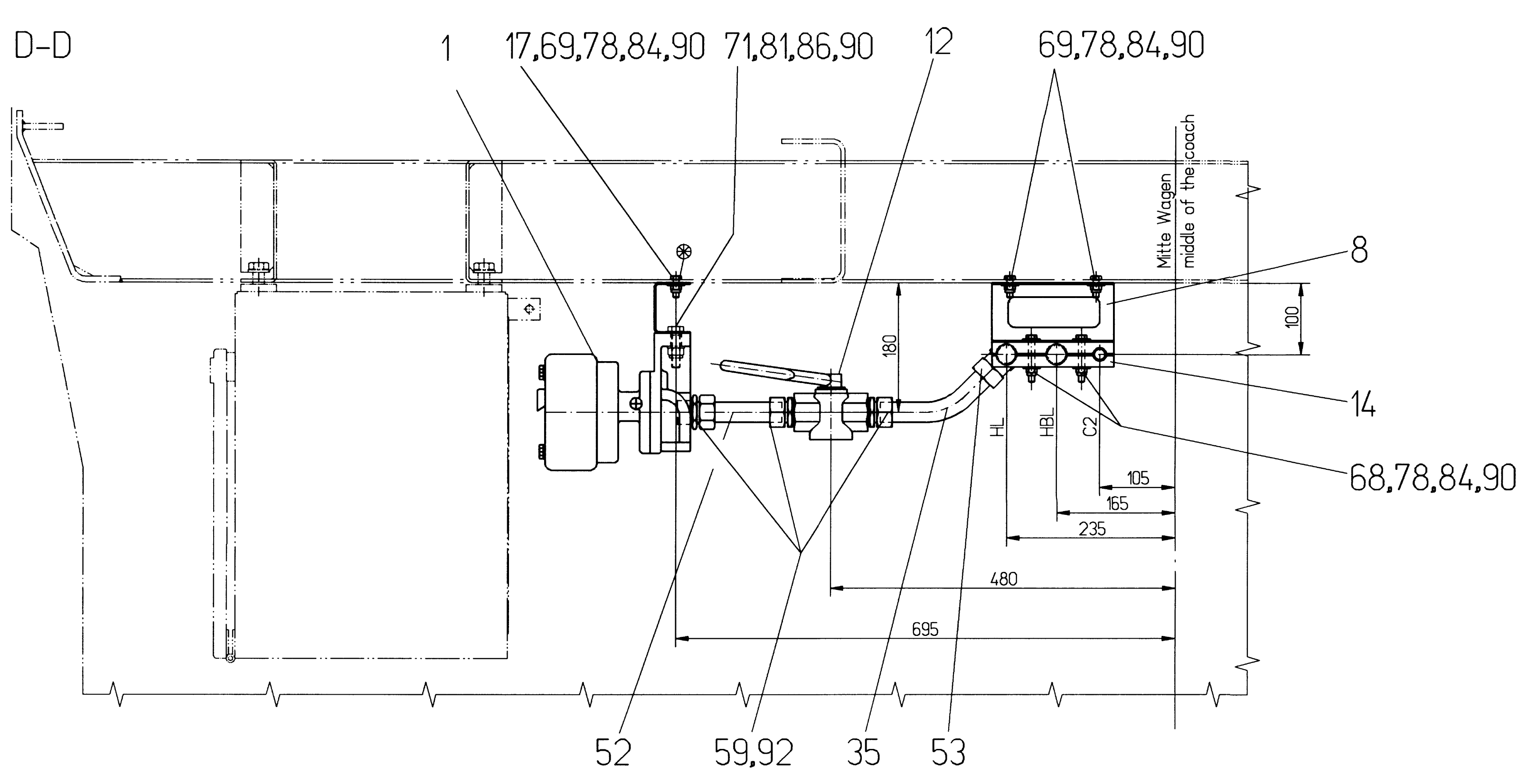
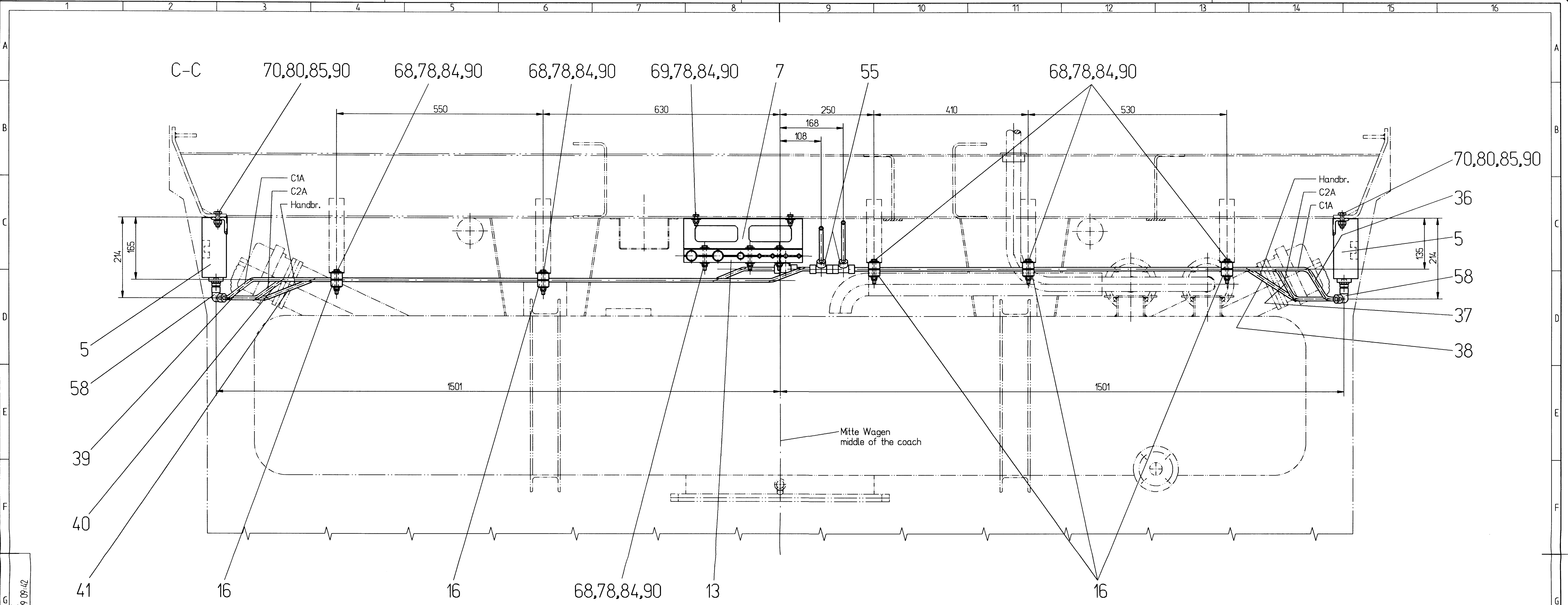
Alle Schneidringverschraubungen im Untergestell nach der Montage mit Pos. 93 und Pos. 94 gestrichen.

All tube fittings in underframe painted with item 93 and item 94 after mounting.

K_0720894_00_B00_04		ZEICHNUNG DARF NUR IM CAD-SYSTEM GEÄNDERT WERDEN	
FERTIGUNGSPLOT		INDIAN RAILWAYS	
Verwendbar für:	Mitte ohne Toleranzangabe ISO 2768-mK	Überflächen DN ISO 802	Material 15
A	Bearb.	Datum	Name
B	Exp.	03.99	Welzel
	Norm.	03.99	Urban
	Fort.	03.99	Welzel
Druckluftbr.Anb.WE2-Mitte		111012.0.09.100.004	
compr.air brake mount.pp-end middle		Boill 04	
ALSTOM LHB GmbH		CAD	
Linien-Hilfsmann-Busch-Strasse		Ent. f.	
Salzgitter-Waldenstedt		Ent. d.	
Zust.	Änderung	Datum	Name

TP3PHE 20.10.99 09:53  
 This drawing is restricted for use in accordance with the terms and conditions of the license agreement for the software technology for all Metall Light High Speed Coaches 60676mm/No.35/DE/Cal/LM/Coach dated 6.03.95 of the Project IR-Coach.  
 Diese Zeichnung darf nur verwendet werden im Zusammenhang mit den Klassen 15 und 16 des Technologietransfervertrages für Leichtbau-Hochgeschwindigkeitswagen aus Metall. Breiten: 60676mm/No.35/DE/Cal/LM/Coach vom 6.03.95 des Projekts Hieszugswagen IR.

PAS-Pape 09\_02\_101 08-16-18 130540 1.000



Alle Schraubenverbindungen aus A2-70 mit Müttern müssen vor dem Einschrauben mit Pos. 90 (Molykote) eingefettet werden.

All screws connections in stainless steel with nuts are to be greased with item 90 (Molykote) before being screwed in.

Alle Schneidringverschraubungen im Untergestell nach der Montage mit Pos. 93 und Pos. 94 gestrichen.

All tube fittings in underframe painted with item 93 and item 94 after mounting.

- ⊗ 9 (2x) bei Montage gebohrt.
- ⊗ 9 (2x) to be drilled at mounting.

TRÖPPE 20.10.99 09:42  
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 Dieses Zeichnung darf nur verwendet werden in Zusammenhang mit den Klauseln 5 und 6 des Technologietransfervertrages für Leichtbau-Hochgeschwindigkeitswagen aus Metall. Breitspur/1676mm/N:35/DE/Call/LM/Coach vom 16.03.95 des Projekts Riesenzugwagen R.

K\_0720894\_00\_B00\_03

FERTIGUNGSPLIT

Verwendbar für:

INDIAN RAILWAYS		Ausgabe		Datum	
Hülle ohne Toleranzangabe: ISO 2768-mK		Mafstab		1:5	
Oberflächen DIN ISO 1302		Bezeichnet		Datum	
A		Bezeichnet		Datum	
B		Bezeichnet		Datum	
C		Bezeichnet		Datum	
D		Bezeichnet		Datum	
E		Bezeichnet		Datum	
F		Bezeichnet		Datum	
G		Bezeichnet		Datum	
H		Bezeichnet		Datum	
I		Bezeichnet		Datum	
J		Bezeichnet		Datum	
K		Bezeichnet		Datum	
L		Bezeichnet		Datum	
M		Bezeichnet		Datum	
N		Bezeichnet		Datum	
O		Bezeichnet		Datum	
P		Bezeichnet		Datum	
Q		Bezeichnet		Datum	
R		Bezeichnet		Datum	
S		Bezeichnet		Datum	
T		Bezeichnet		Datum	
U		Bezeichnet		Datum	
V		Bezeichnet		Datum	
W		Bezeichnet		Datum	
X		Bezeichnet		Datum	
Y		Bezeichnet		Datum	
Z		Bezeichnet		Datum	

Druckluftbr.Anb.WE2-Mitte  
compr.air brake mount.pp-end middle

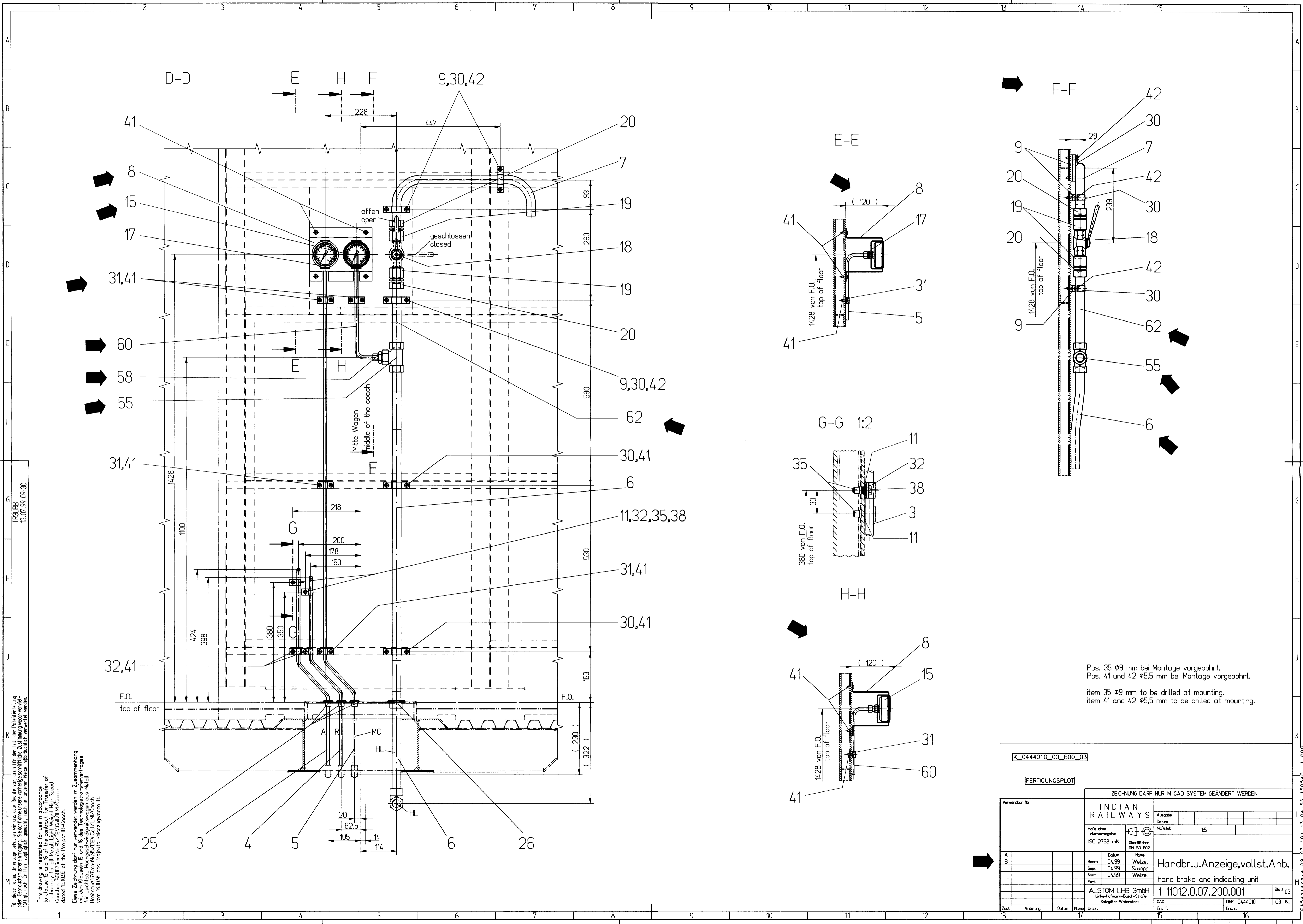
ALSTOM LHB GmbH  
Löhle-Hörmann-Bauhof-Strasse  
Salzgitter-Watenstedt

1 11012.0.09.100.004 Blatt 03

Erst. f. DRF 0720894 Ers. d. 04. BL

PAS 9.02.101.08.16.18 1503540 1.000





TR3URB  
13.07.99 09:30

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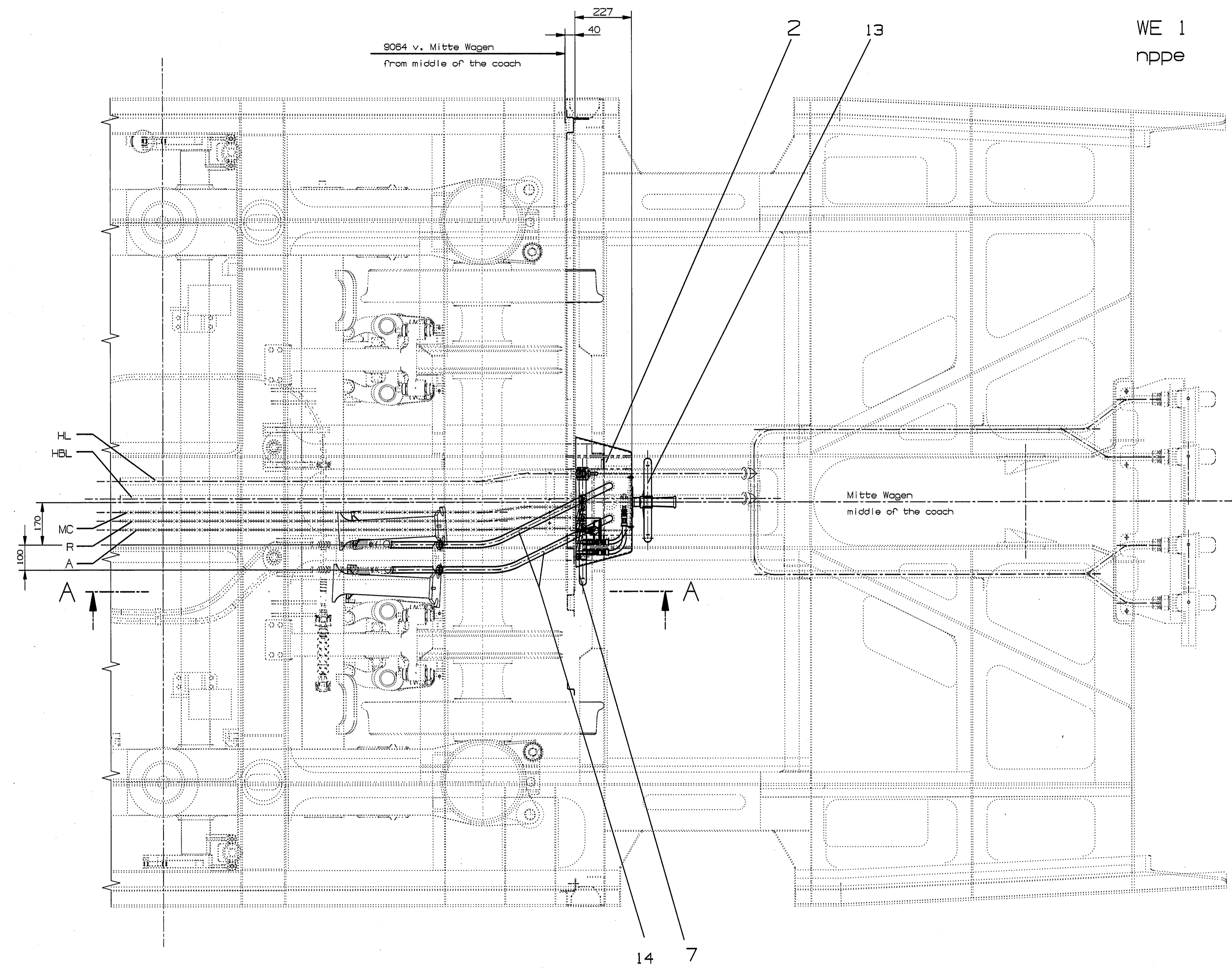
Diese Zeichnung darf nur verwendet werden in Zusammenhang mit den Klauseln 5 und 6 des Technologietransfervertrages für Leichtbau-Hochgeschwindigkeitswagen aus Metall No.05/167mm des Projekts Reisezugwagen R.

Pos. 35  $\phi$ 9 mm bei Montage vorgebohrt.  
Pos. 41 und 42  $\phi$ 5,5 mm bei Montage vorgebohrt.

item 35  $\phi$ 9 mm to be drilled at mounting.  
item 41 and 42  $\phi$ 5,5 mm to be drilled at mounting.

K_0444010_00_B00_03		FERTIGUNGSPLOT	
ZEICHNUNG DARF NUR IM CAD-SYSTEM GEÄNDERT WERDEN			
Verwendbar für:		Ausgabe	
INDIAN RAILWAYS		Datum	
Mafte ohne Toleranzangabe: ISO 2768-mK		Mafstab	
Mafstab		1:5	
Oberflächen EN ISO 302		Name	
A		Datum	
B		Name	
Bearb. 01.99		Welzel	
Gepr. 01.99		Sukopp	
Norm. 01.99		Welzel	
Fert.		Handbr.u.Anzeige,vollst.Anb.	
ALSTOM LH-B GmbH		1 11012.0.07.200.001	
Linke-Hofmann-Busch-Straße		Blatt 03	
Salzgitter-Watenstedt		CAD	
Zust.		Erw. d.	
Änderung		DW 04.4.010	
Datum		Erw. d.	
Usp.		03 BL	

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



WE 1  
nppe

ENTERED  
INTO  
DATA BASE  
20 AUG 2015

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	AIR BRAKE	SUPERSEDES:	11012.0.07.200.001	ALT B	
WEIGHT	FILE	\\ANKT\1 11012.0.07.200.001s1BR.prt (2D)				
65.903	KG					
S.AREA						
NIL	M <sup>2</sup>					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

SCALE		SSE/REC	REMARKS
1:10	CHD	SNDP	
INDIAN RAILWAYS STANDARD		REF.DRG.No.	NIL
RAIL COACH FACTORY, KAPURTHALA		PL NO.	0000000
INDIAN RAILWAYS STANDARD		DRG.NO.	11012.0.07.200.001
ADP/SME	DY.CME	CDE	ALT. BR SIZE   A   SHEET   1/3

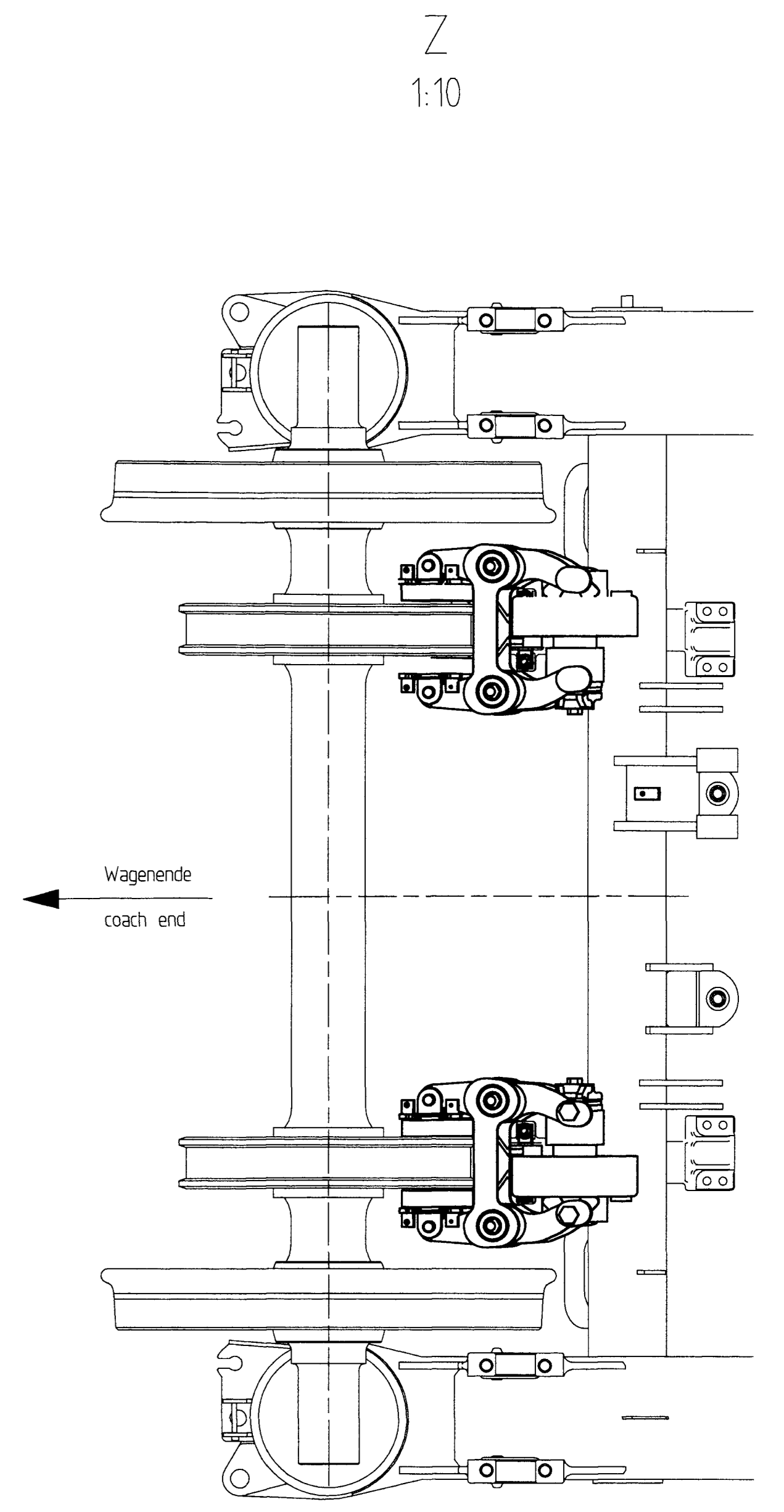
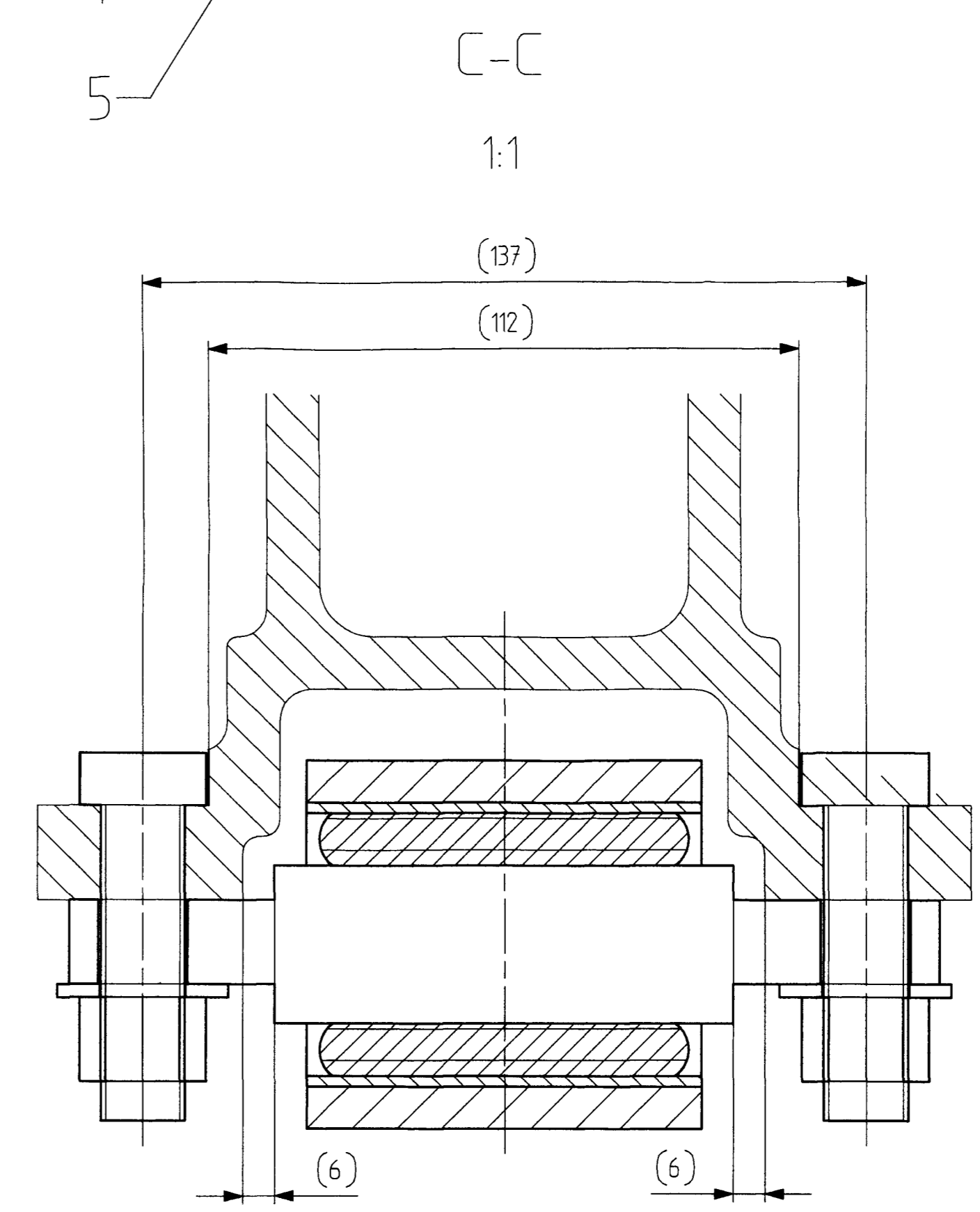
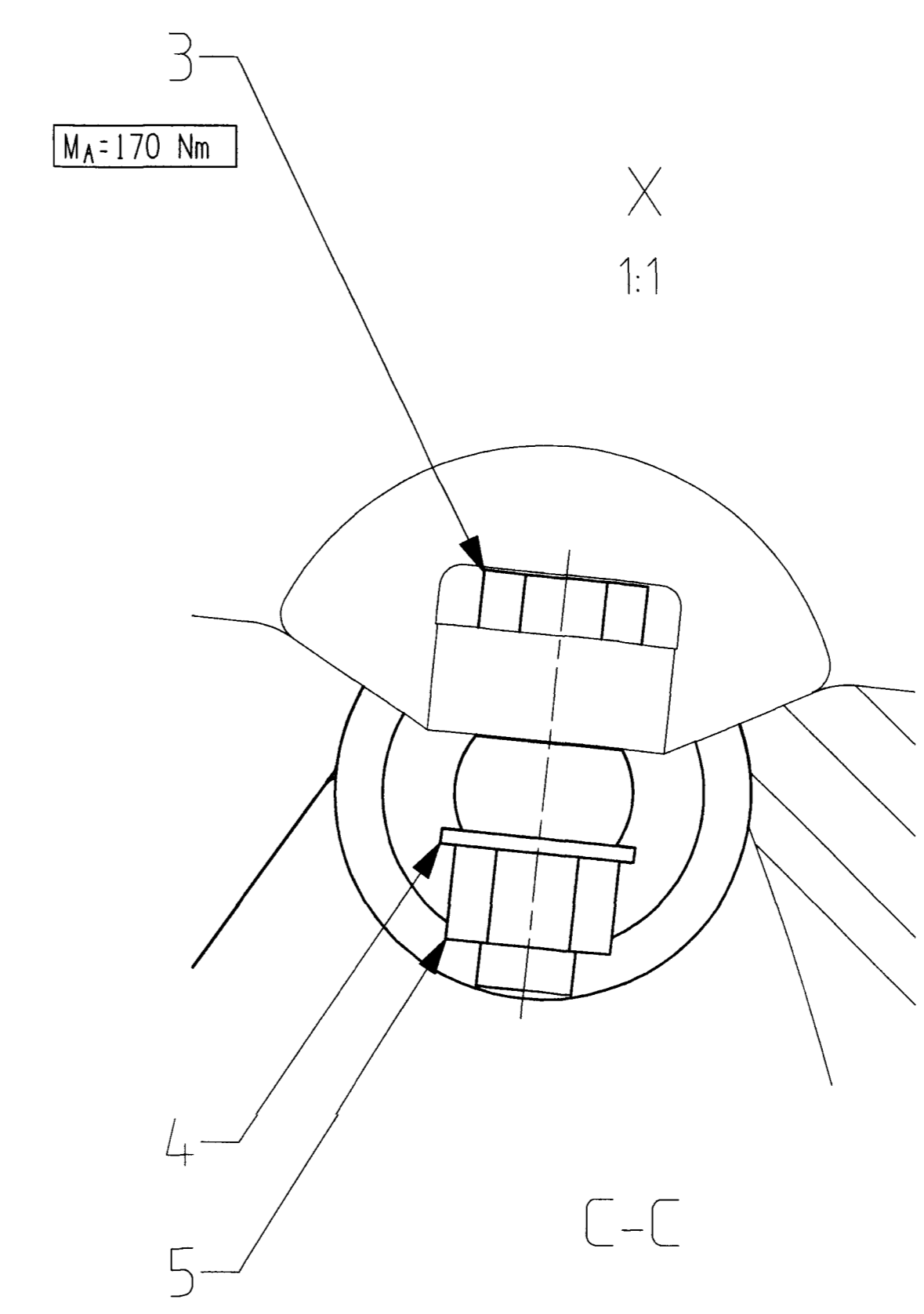
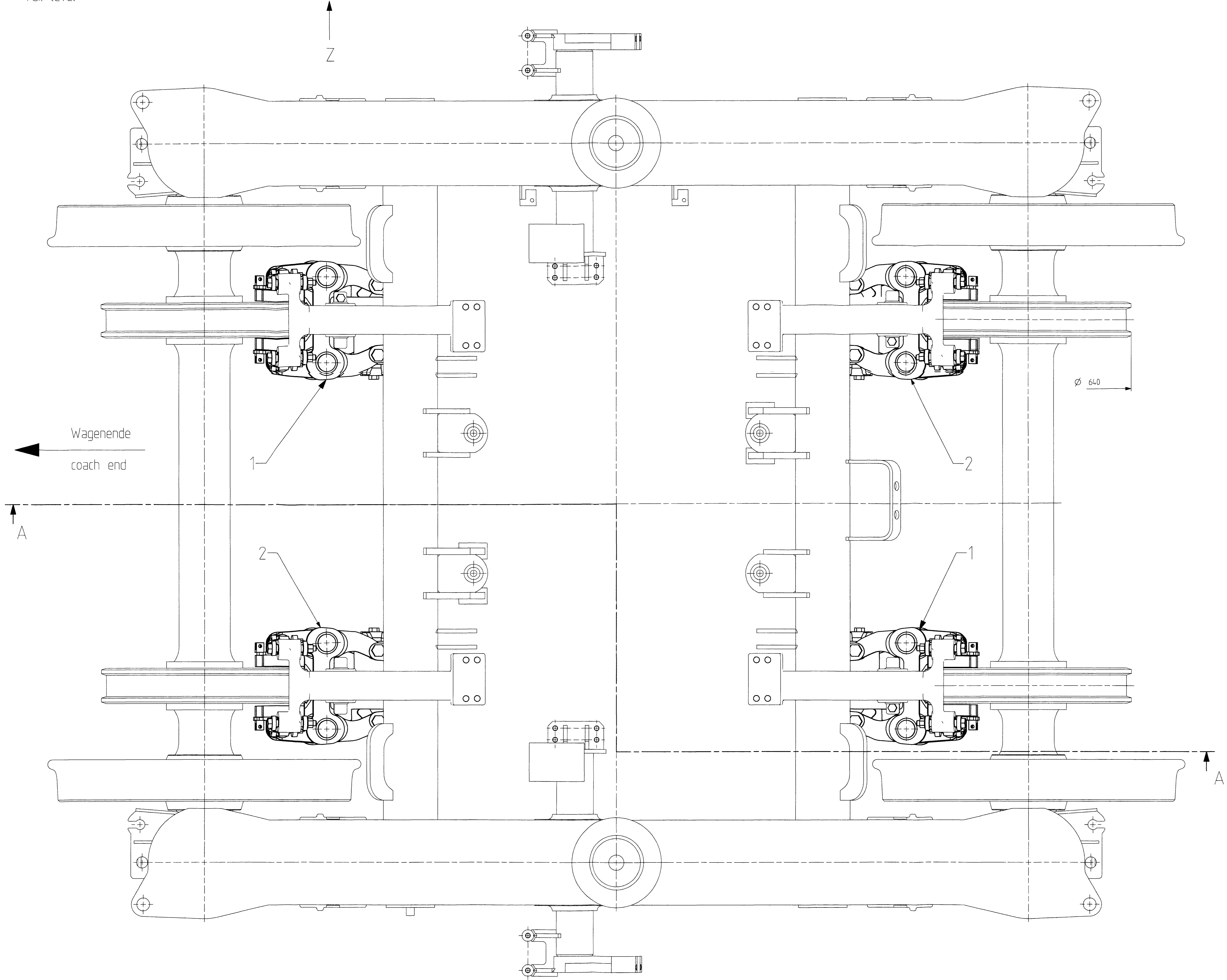
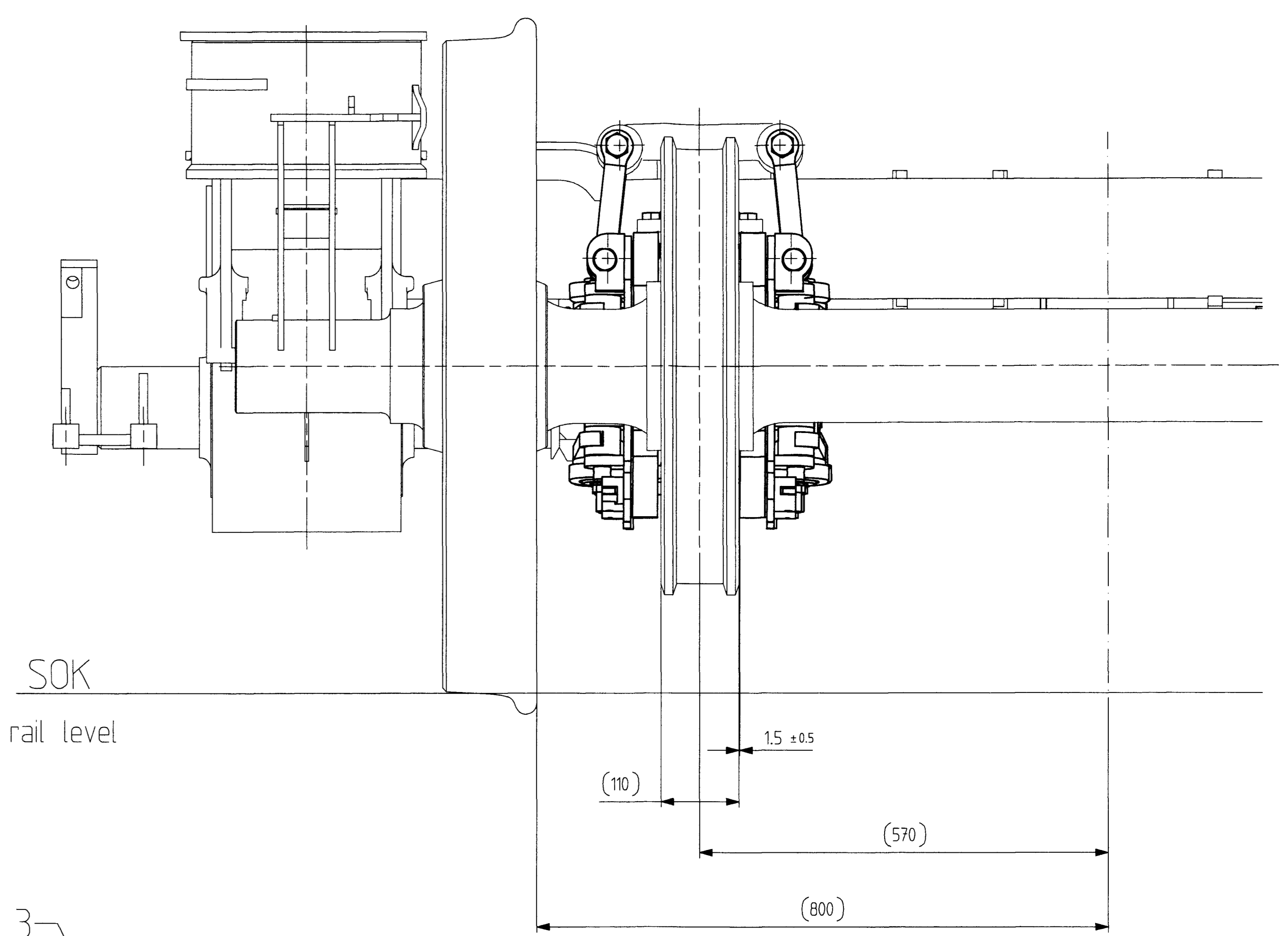
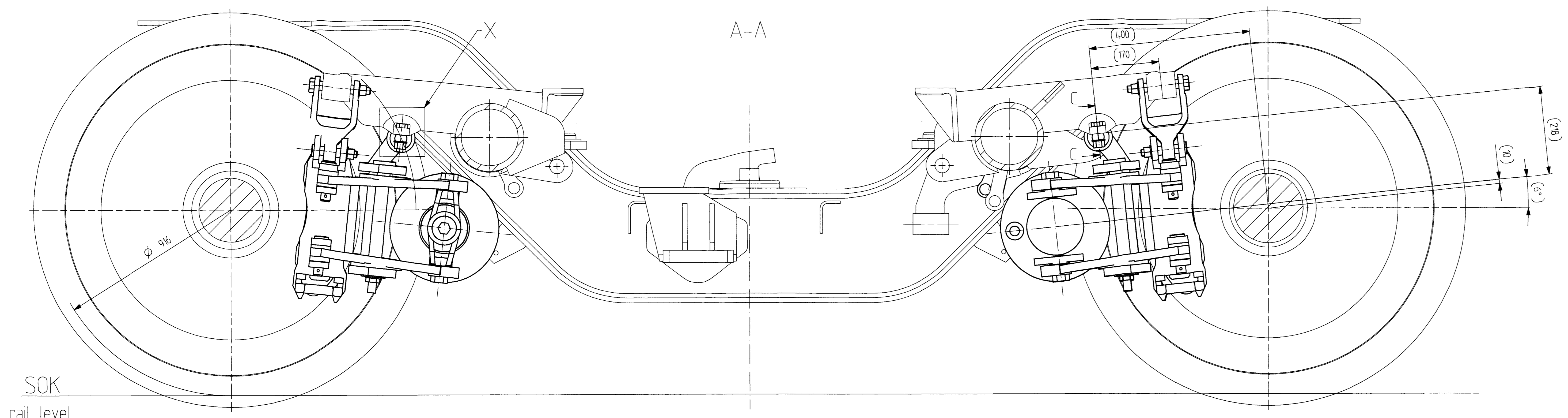
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008      DATE OF FIRST ISSUE      07/10/2002      CGM BY      19/8/105





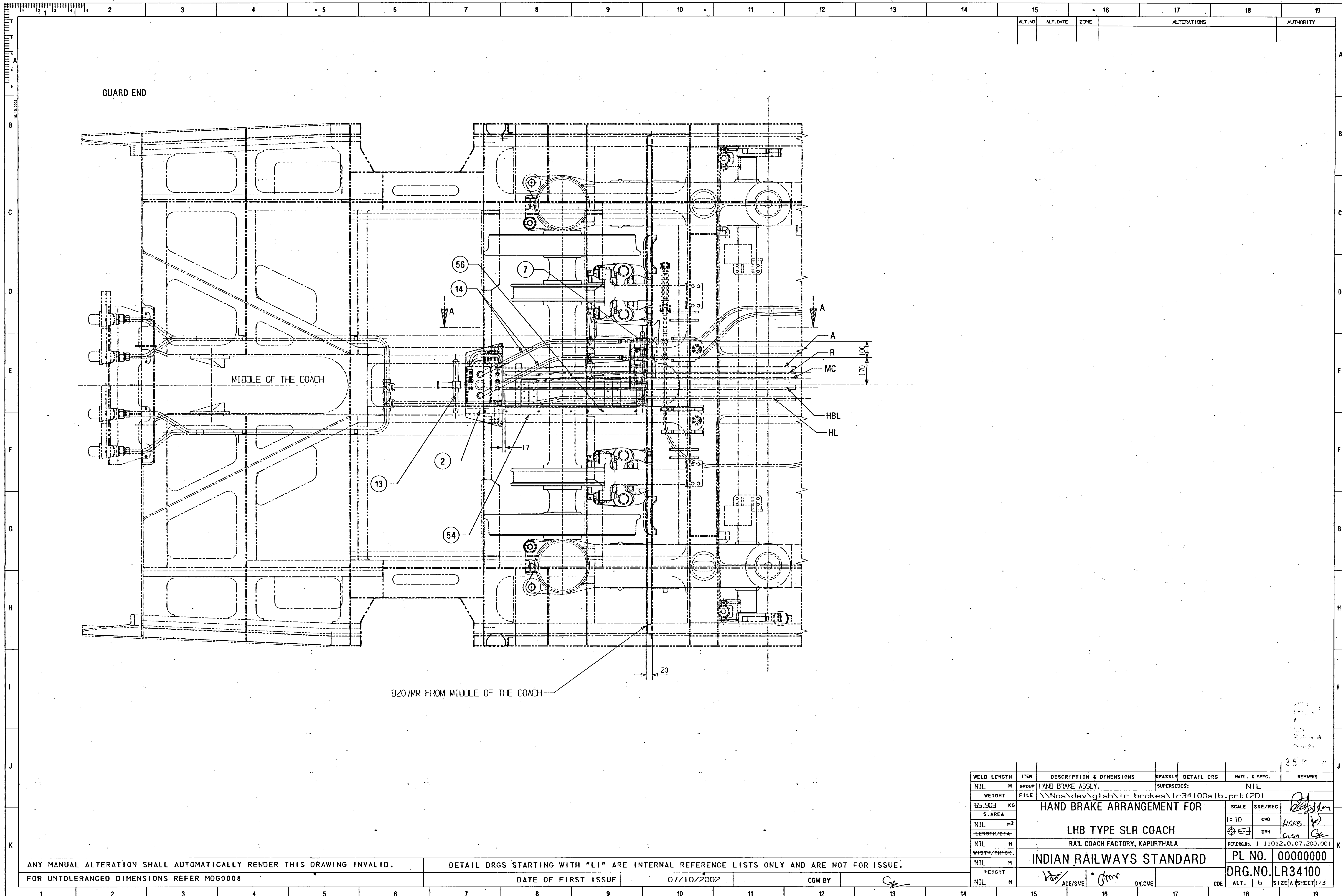




safety nut	8	ST	Verlängerungs-Mutter M16	5	00539504080002900	-
disc	8	ST	Spernkant-Scheibe	4	0055204080002900	-
screw	8	ST	Rkt-Schr M16 x 60	3	00353004080002946	-
break unit	2	ST	Bremszangeneinheit	2	1 267 529 201	-
break unit	2	ST	Bremszangeneinheit	1	1 267 428 201	-

Menge	ME	Bezeichnung	Pos	Identifikation	Gew/ME (kg)
Werkstoff: <span style="float: right;">Gewicht: kg</span>					
Umrangbezeichnung: <b>Bremsausrüstung</b>					
Bremsausrüstung					
System: A0					
Name: FIAT-SIG SCHIENENFAHRZEUGE AG					
1268820					
Ersetzt durch: <span style="float: right;">Ersetzt von:</span>					
Anmerkungen: Datum/Name: 15					
Blatt Nr.: 01					
Zusatz Blatt: 1					

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ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY

GUARD END

MIDDLE OF THE COACH

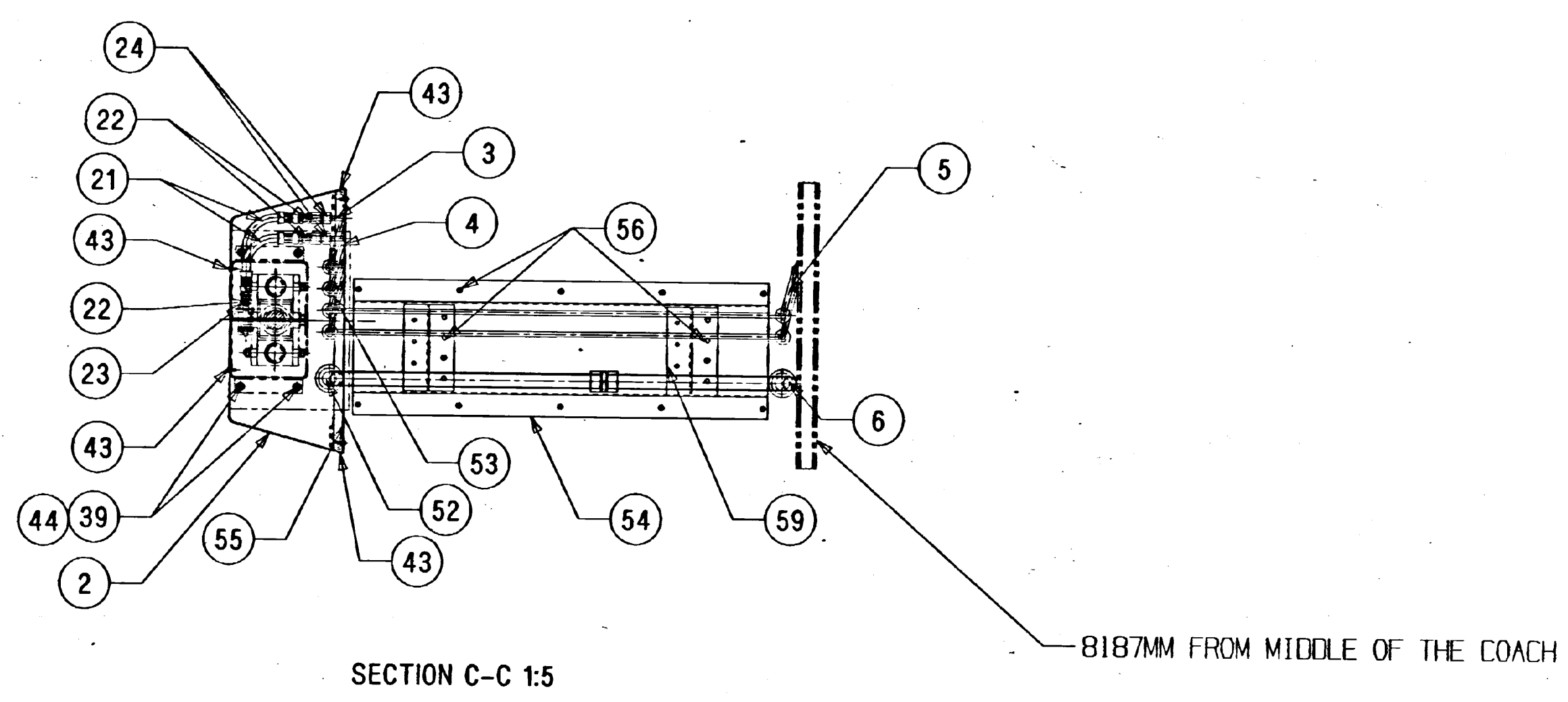
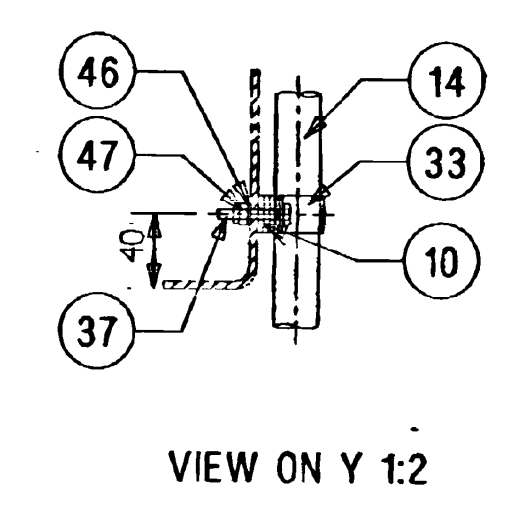
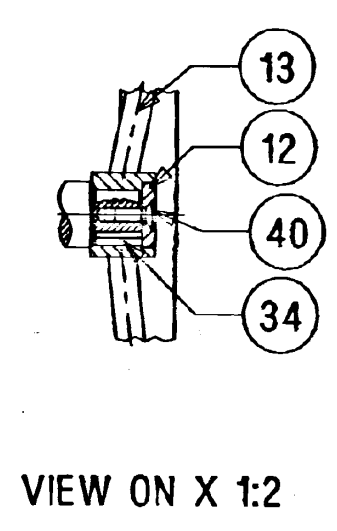
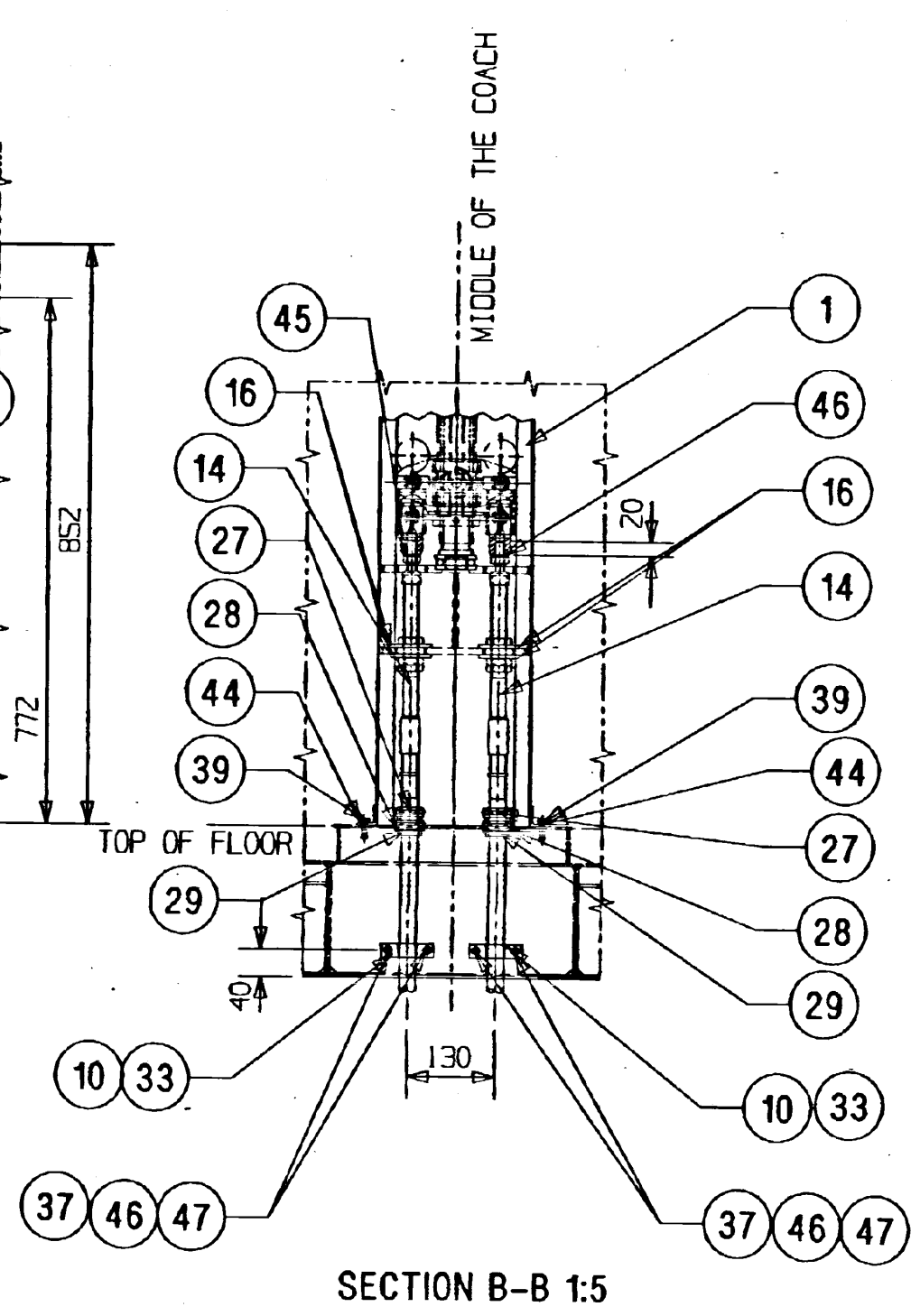
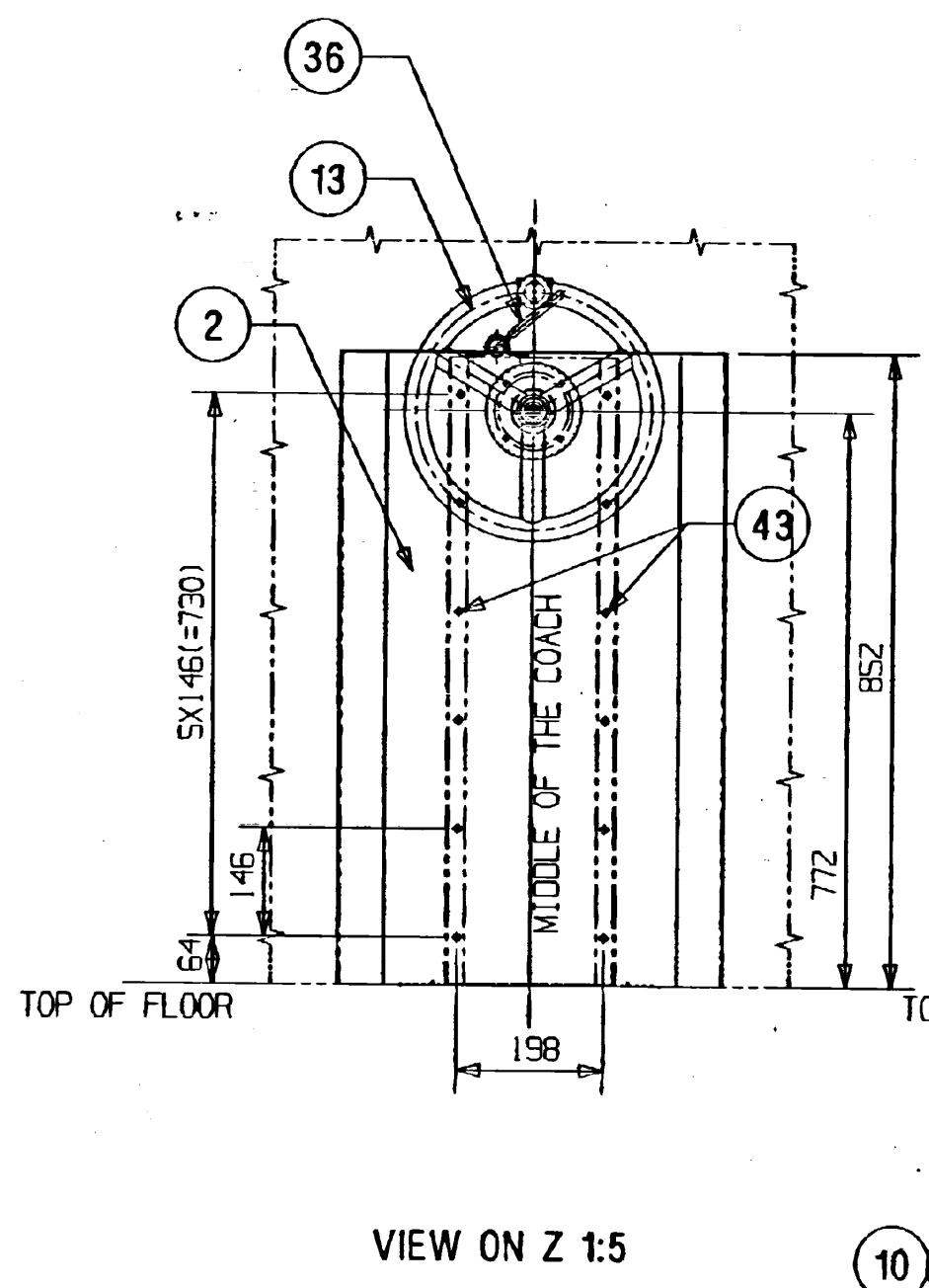
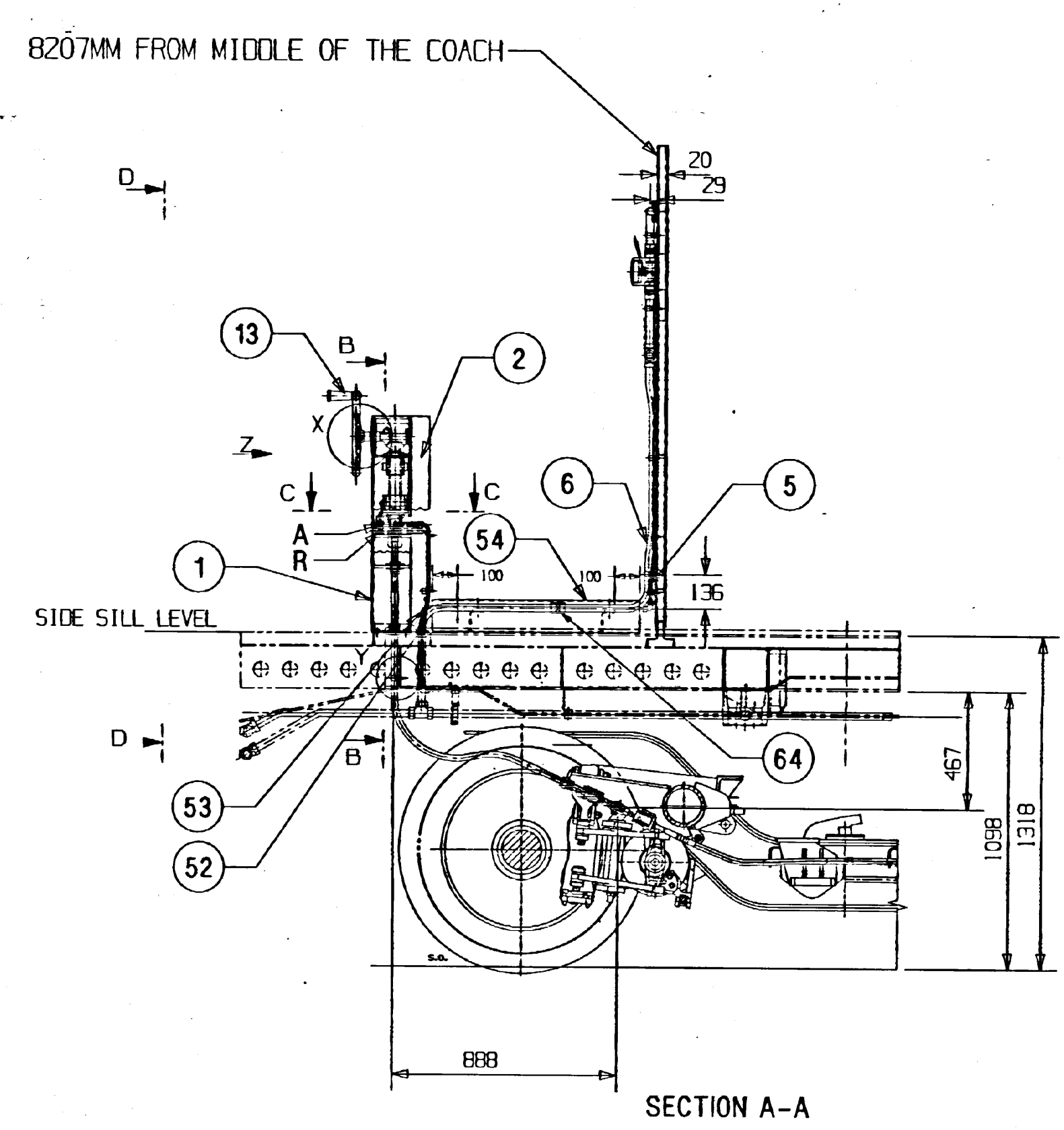
8207MM FROM MIDDLE OF THE COACH

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	HAND BRAKE ASSLY.	SUPERSEDES:		NIL	
WEIGHT	GROUP	FILE	\\Nas\dev\glsh\lr_brakes\lr34100s1b.prt (20)			
65.903	KG	HAND BRAKE ARRANGEMENT FOR		SCALE	SSE/REC	<i>[Signature]</i>
S. AREA	LHB TYPE SLR COACH		I: 10	CHD	HARB	<i>[Signature]</i>
NIL	M2	RAIL COACH FACTORY, KAPURTHALA		DRN	GUSA	<i>[Signature]</i>
LENGTH/DIA	INDIAN RAILWAYS STANDARD		REF.DRG.No. 1 11012-0.07.200.001			
NIL	M	PL NO.	0000000			
WIDTH/THICK.	M	DRG.NO.	LR34100			
NIL	M	ADP/SME	DY.CME	CDE	ALT.	SIZE A/SHEET 1/3

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE 07/10/2002 CGM BY *[Signature]*

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY

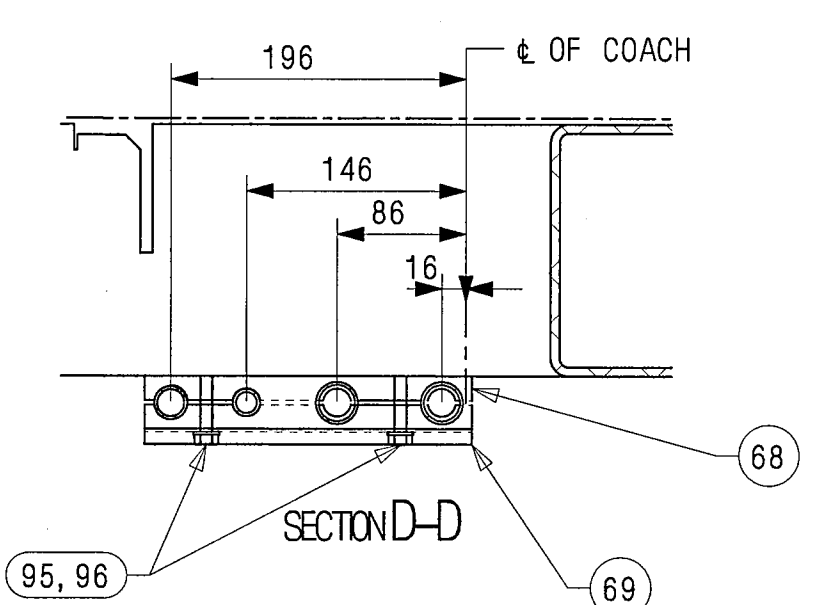
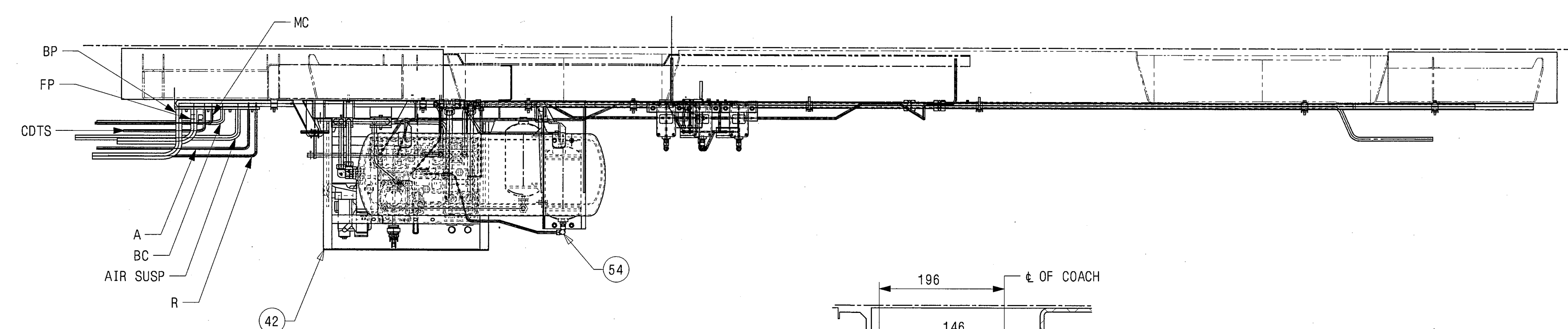
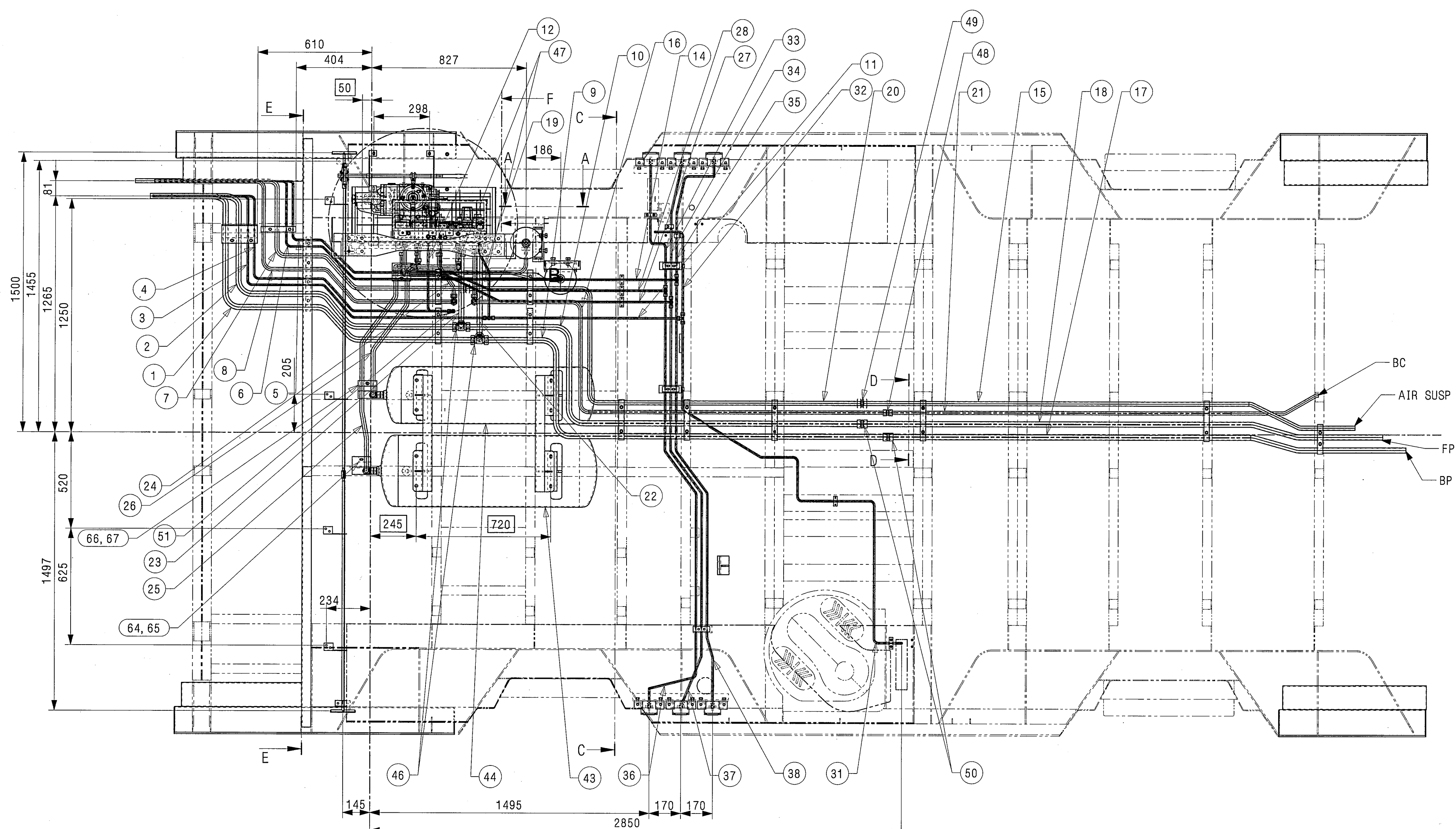


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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE: 07/10/2002  
CGM BY: [Signature]

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	HAND BRAKE ASSLY.	SUPERSEDES:	NIL		
WEIGHT	FILE	\\Nas\dev\glsh\lr_brakes\lr34100s2b.prt (20)				
65.903	KG	HAND BRAKE ARRANGEMENT FOR				
S. AREA		LHB TYPE SLR COACH				
NIL	M	RAIL COACH FACTORY, KAPURTHALA				
LENGTH/DIA		INDIAN RAILWAYS STANDARD				
NIL	M	PL NO. 0000000				
WIDTH/THICK.		DRG.NO. LR34100				
NIL	M	REF DRG No. 1 11012-0-07-200-001				
HEIGHT		ALT. 0 SIZE (A/SHEET) 2/3				





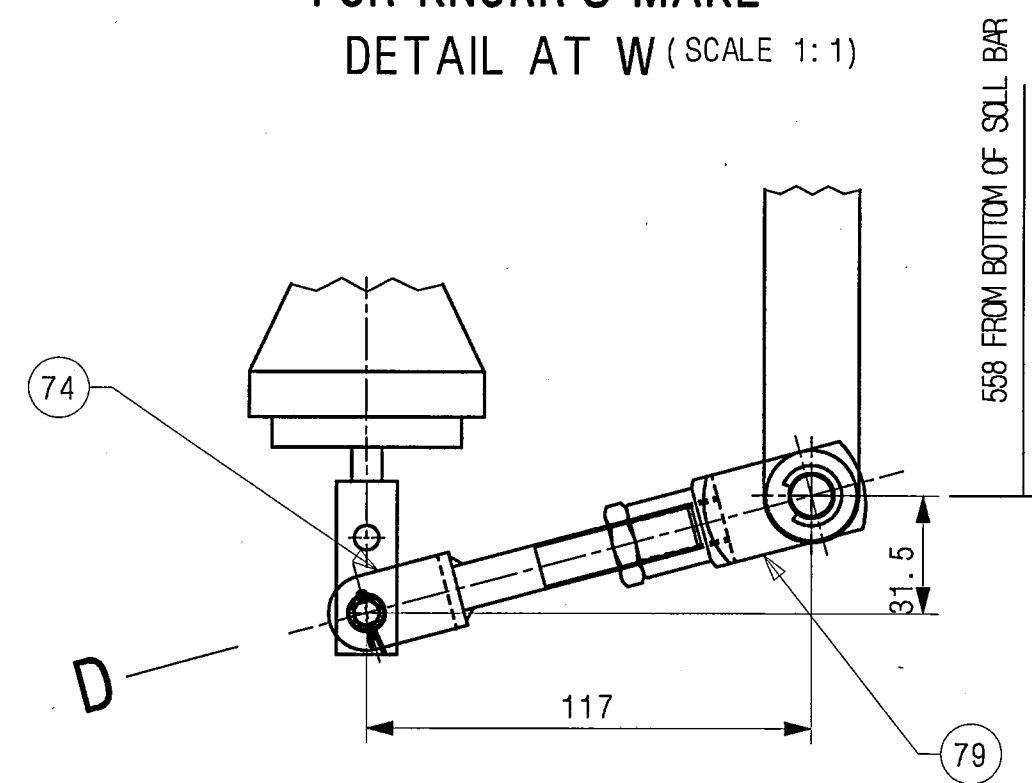
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प्रविष्टि  
 ENTERED  
 INTO  
 प्रविष्टि  
 DATA BASE

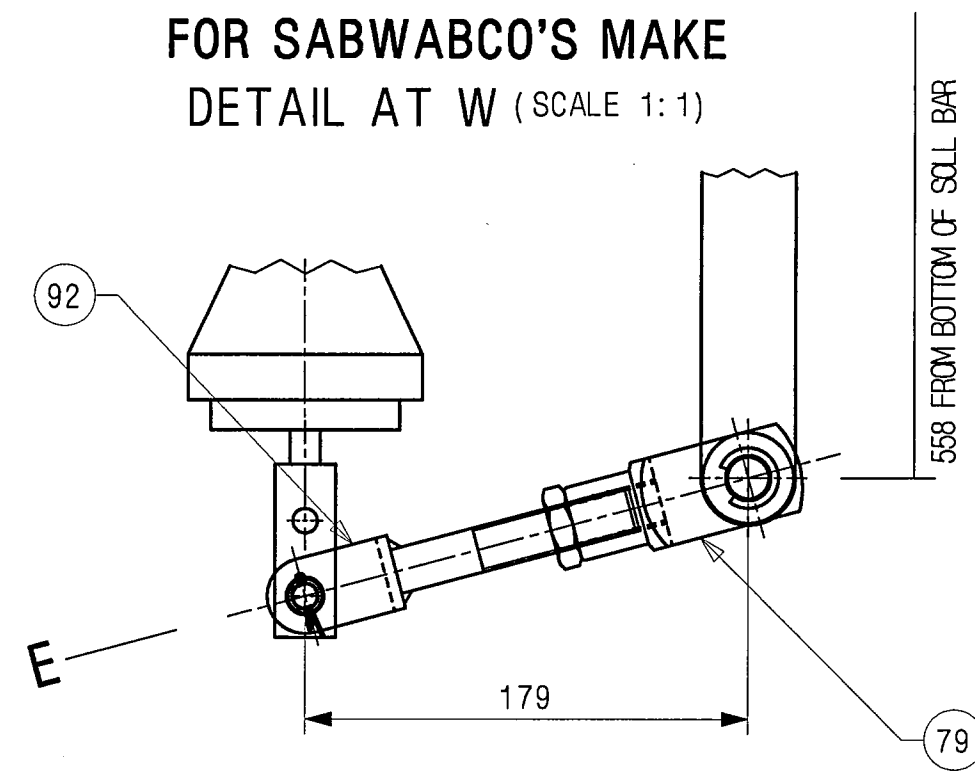
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP AIR BRAKE				SUPERSEDES: LG3610B ALT NIL
		WEIGHT	FILE //ANKT/LR36331s1.prt (3D)			
301.00	KG	S. AREA	SCALE SSE/REC 1:15			
NIL	M <sup>2</sup>	LENGTH/D+A	CHD SNDP			
NIL	M	WIDTH/TH+OK.	DRN ANKT			
NIL	M	HEIGHT	REF.DRG.No. NIL			
NIL	M	ADE/SME	रेलकोच फैक्टरी कपूरथला IRS PL NO. 00000000 DRG.NO. LR36331			
NIL	M	BY.CME	ALT. NIL SIZE 1 SHEET 1/4			

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.     
 DATE OF FIRST ISSUE      10/11/2017      CGM BY      *ANANT*

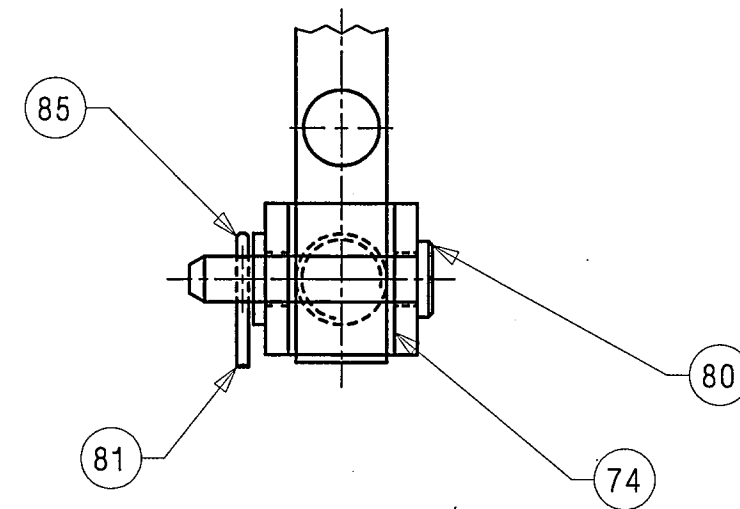
FOR KNORR'S MAKE  
DETAIL AT W (SCALE 1:1)



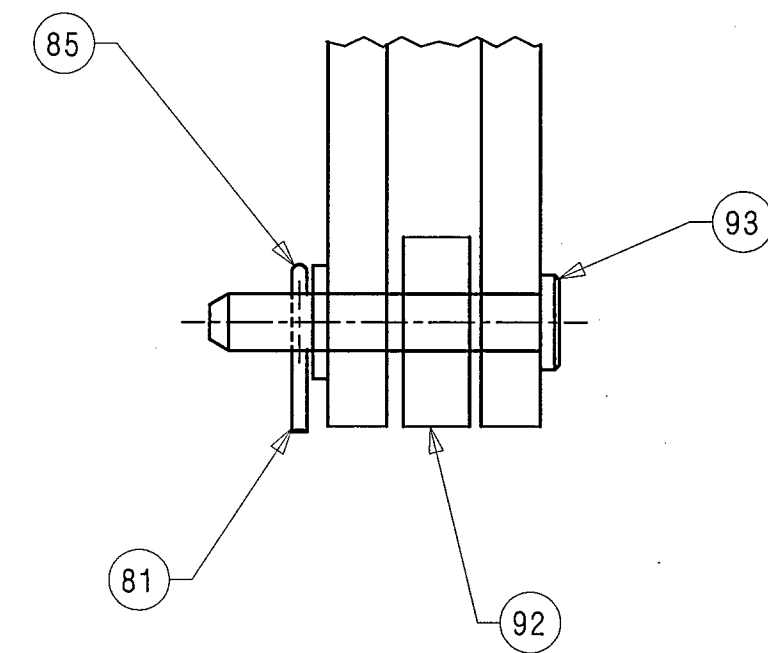
FOR SABWABCO'S MAKE  
DETAIL AT W (SCALE 1:1)



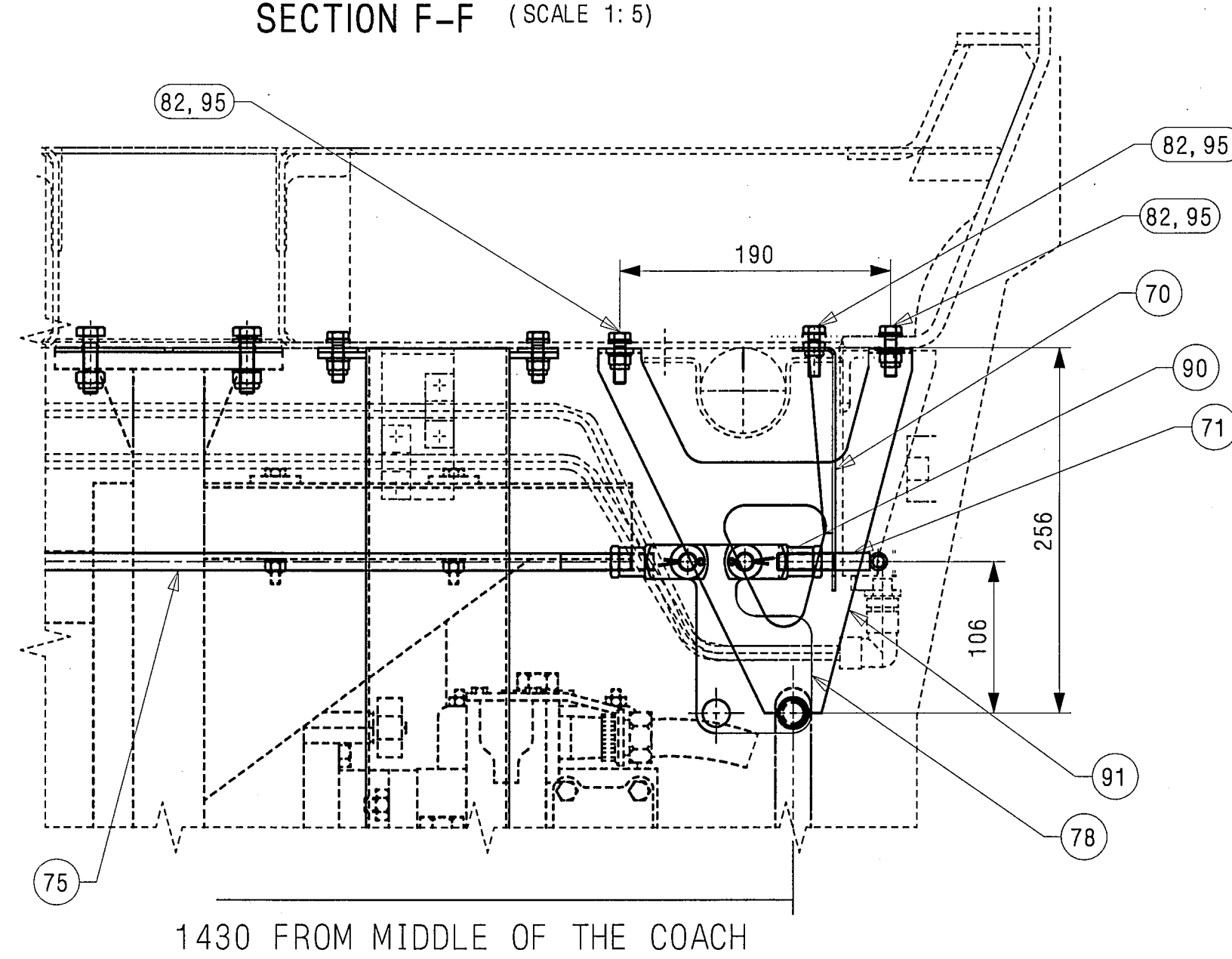
FOR KNORR'S MAKE  
DETAIL AT D (SCALE 1:2)



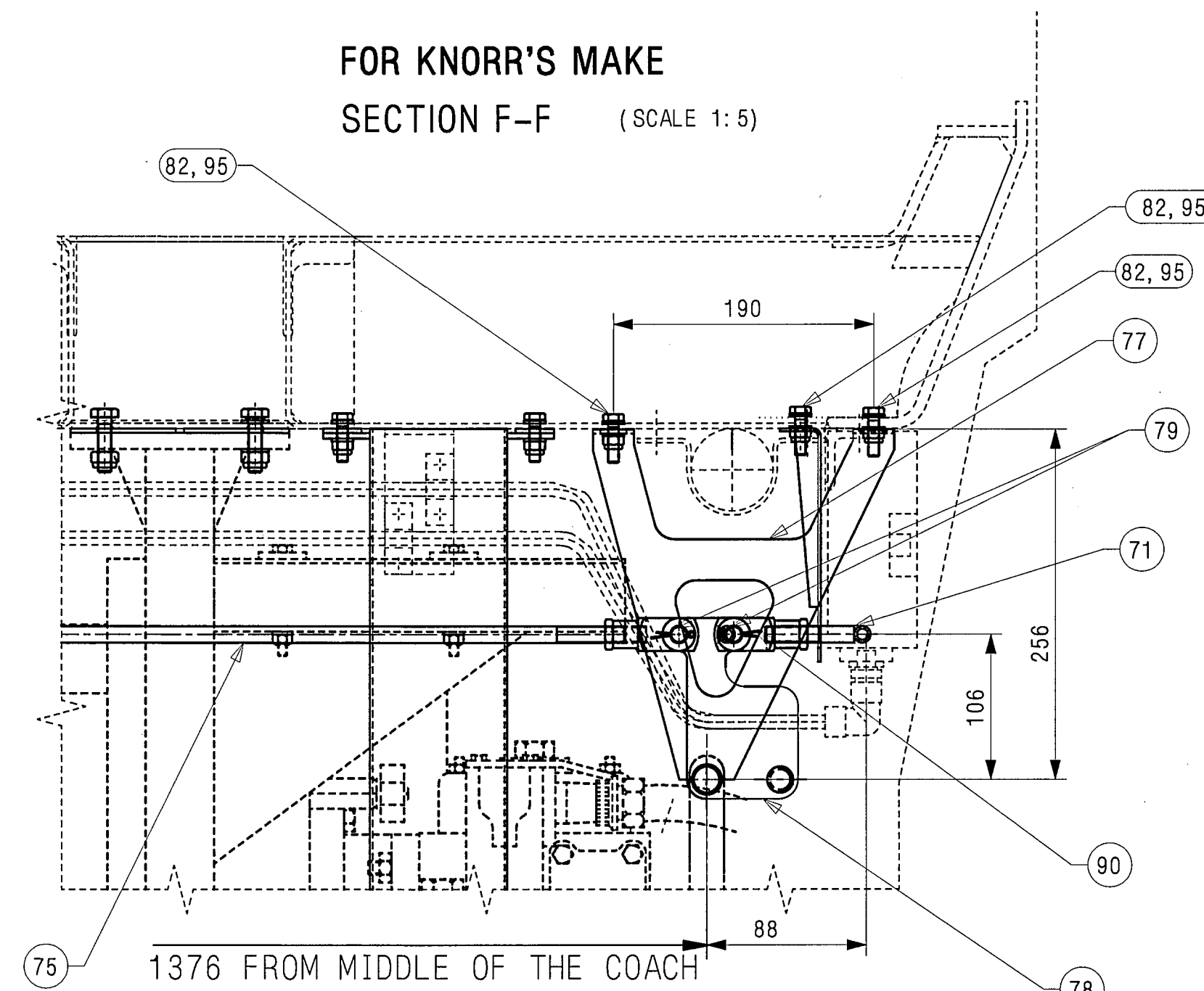
FOR SABWABCO'S MAKE  
DETAIL AT E (SCALE 2:1)



FOR SABWABCO'S MAKE  
SECTION F-F (SCALE 1:5)



FOR KNORR'S MAKE  
SECTION F-F (SCALE 1:5)



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ENTERED  
INTO  
DATA BASE  
18 5 NOV 2017

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP AIR BRAKE				SUPERSEDES: LG36108 ALT NIL
		FILE //ANKT/LR36331s3.prt (3D)				
301.00	KG					
		AIR BRAKE COMPLETE ON U/F FOR DSL R WITH UNDERSLUNG POWERPACK 500 KVA MIDDLE (L.H.B TYPE COACH).				SCALE 1:15 SSE/REC CHD DRN
		RAIL COACH FACTORY, KAPURTHALA				REF.DRG.No. NIL
		रेलकोच फैक्टरी कपूरथला	IRS			PL NO. 00000000 DRG.NO. LR36331
		DATE OF FIRST ISSUE 10/11/2017	CGM BY			ALT. NIL SIZE A1 SHEET 3/4

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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



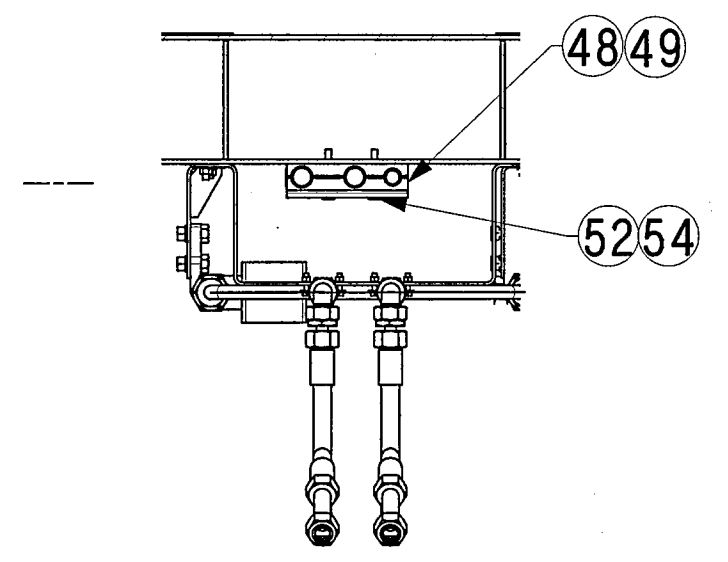
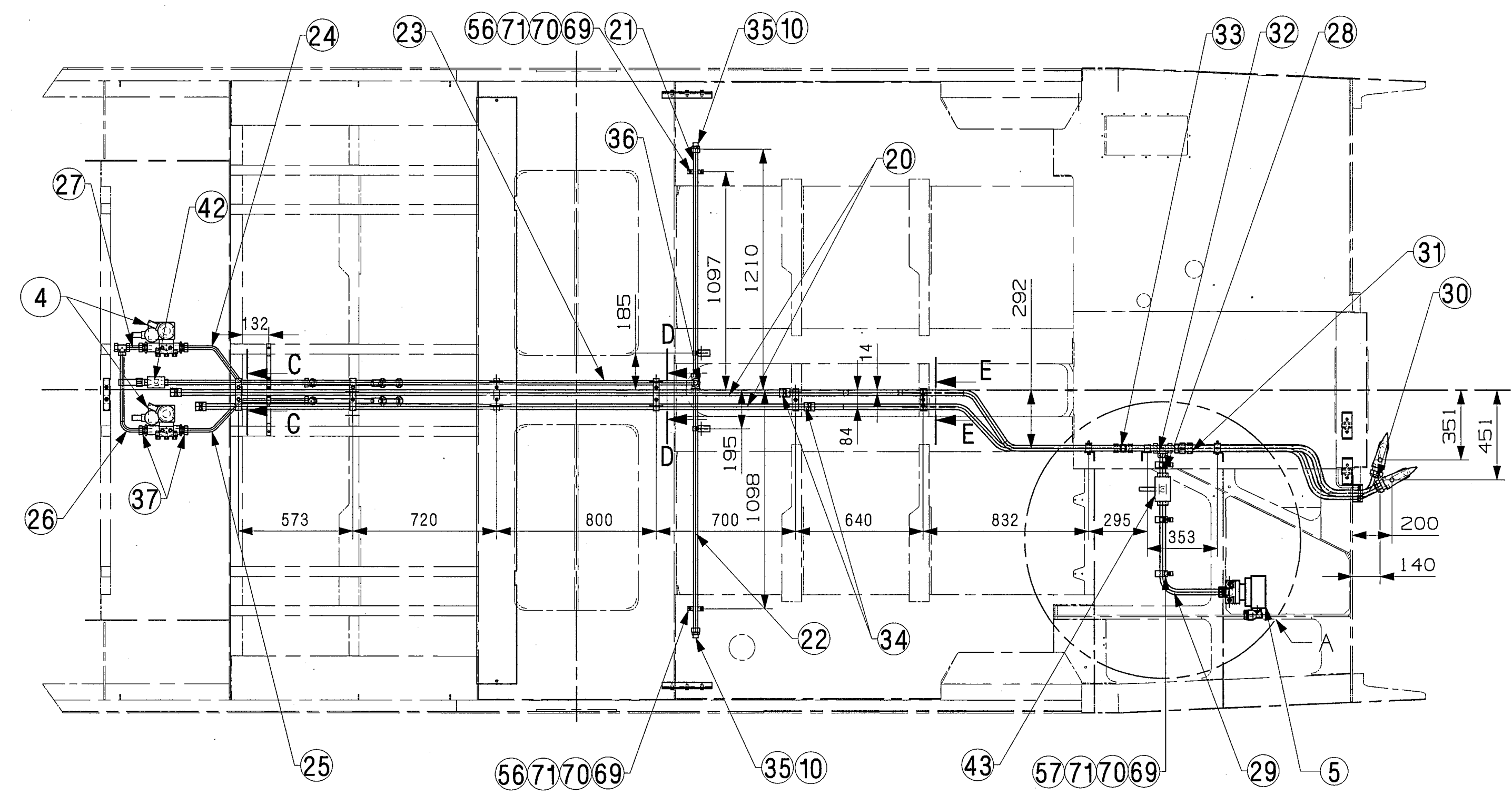


ITEM NO.	DESCRIPTION	QTY	MATERIAL	IS	ITEM	WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MTRL. & SPEC.	REMARKS	ALTERATIONS			AUTHORITY
													ALT.NO	ALT.DATE	ZONE	
103	PIPE CLAMP (13)	2	LW63111	NIL	ITEM-3								NIL	NIL	NIL	NIL
102	STAINLESS STEEL HEX HEAD SCREW M6X25 (A2-70 TO IS: 1367 PT.14-84)	2	LIHWS02	IS: 1364 PT. 2-92, CE	ITEM-6											
101	SPRING WASHER B5	4	LIHW09	IS: 3063-1994	ITEM-18											
100	STAINLESS STEEL MACHINE WASHER A5.3 (A2 TO IS: 1367 PT.14-1984)	12	LIHWS09	IS: 2016-1967 DIN125	ITEM-2	55		ASSEMBLED ADJUSTABLE SWIVEL ELBOW	1	EW18LREDCF	NIL		ERMETO OR EQUIVALENT			
99	STAINLESS STEEL NYLOC NUT M5 (A2-70 TO IS: 1367 PT.14)	12	LIHWS08	IS: 7002-1991 DIN982	ITEM-6	54		ASSEMBLED ADJUSTABLE SWIVEL ELBOW	8	EW10LREDCF	NIL		ERMETO OR EQUIVALENT			
98	STAINLESS STEEL HEX HEAD SCREW M5X25 (A2-70 TO IS: 1367 PT.14-84)	16	LIHWS02	IS: 1364 PT. 2-92, CE	ITEM-2	53		EQUAL ELOBOW	2	W22LCF	NIL		ERMETO OR EQUIVALENT			
97	LIGHT PIPE CLIP (13)	8	LW63110	NIL	ITEM-3	52		EQUAL ELOBOW	2	W18LCF	NIL		ERMETO OR EQUIVALENT			
96	STAINLESS STEEL HEX HEAD SCREW M8X60 (A2-70 TO IS: 1367 PT.14-84)	50	LIHWS02	IS: 1364 PT. 2-92, CE	ITEM-16	51		EQUAL ELOBOW	1	W10LCF	NIL		ERMETO OR EQUIVALENT			
95	SPRING WASHER B8	50	LIHW09	IS: 3063-1994	ITEM-20	50		STRAIGHT UNION	2	NIL	G28LCF		ERMETO OR EQUIVALENT			
94	PACKING	2	LR36422	NIL	NIL	49		STRAIGHT UNION	2	NIL	G22LCF		ERMETO OR EQUIVALENT			
93	CLEVIS PIN B6-C11X35X26	1	IS: 6863-73	A2 TO IS: 1367 (PT-14)-84	FOR SAB BRAKE SYSTEM	48		STRAIGHT UNION	1	NIL	G18LCF		ERMETO OR EQUIVALENT			
92	FORK HEAD	1	LE36138	NIL	FOR SAB BRAKE SYSTEM	47		STRAIGHT UNION	2	NIL	G10LCF		ERMETO OR EQUIVALENT			
91	BRACKET COMPLETE (FOR SAB)	2	LE36134	NIL	FOR SAB BRAKE SYSTEM	46		EQUAL TEE	5	T10LCF	NIL		ERMETO OR EQUIVALENT			
90	STAINLESS STEEL SPLIT PIN 5X28(A2 TO IS: 1367 PT.14-84)	2	LIHWS06	IS: 549-1974	NIL	45		EQUAL TEE	2	T28LCF	NIL		ERMETO OR EQUIVALENT			
89	STAINLESS STEEL HEX THIN NUT M10 (A2-70 TO IS: 1367 PT.14)	2	LIHWS08	ISO: 4035	IS: 1364 PT. 4-92, ISO-4035	COATING TO MDS 057	44		RESERVOR 75LTS.	1	C190964	NIL	SPEC.NO-R 50/2011/CG-04			
88	STAINLESS STEEL NYLOC NUT M10 (A2-70 TO IS: 1367 PT.14)	12	LIHWS08	IS: 7002-1991 DIN982	ITEM-9	COATING TO MDS 057	43		RESERVOR 125LTS.	1	C190963	NIL	SPEC.NO-R 50/2011/CG-04			
87	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS: 1367 PT.14)	50	LIHWS08	IS: 7002-1991 DIN982	ITEM-8	COATING TO MDS 057	42		BRAKE CONTROL PANEL	1	C212422	NIL	SPEC.NO-R 50/2011/CG-04			
86	STAINLESS STEEL MACHINE WASHER A10.5 (A2 TO IS: 1367 PT.14-1984)	12	LIHWS09	IS: 2016-1967 DIN125	ITEM-6	41		RESERVOR 6LTS.	2	C152129	NIL		SPEC.NO-R 50/2011/CG-04			
85	SPRING WASHER B6	2	LIHW09	IS: 3063-1994	ITEM-19	COATING TO MDS 057	40		PIPE 18(OD)X236	1	NIL	DIN2391 C X5CrNi1810	DIN17456, 6-1.4301, NDK 3.1B			
84	STAINLESS STEEL MACHINE WASHER A8.4 (A2 TO IS: 1367 PT.14-1984)	50	LIHWS09	IS: 2016-1967 DIN125	ITEM-5	39		PIPE 22(OD)X73	1	NIL	DIN2391 C X5CrNi1810	DIN17456, 6-1.4301, NDK 3.1B				
83	STAINLESS STEEL HEX HEAD SCREW M10X45 (A2-70 TO IS: 1367 PT.14-84)	12	LIHWS02	IS: 1364 PT. 2-92, CE, DIN933	ITEM-21	COATING TO MDS 057	38		PIPE	1	LR36415	NIL	NIL			
82	STAINLESS STEEL HEX HEAD SCREW M8X25 (A2-70 TO IS: 1367 PT.14-84)	16	LIHWS02	IS: 1364 PT. 2-92, CE	ITEM-11	COATING TO MDS 057	37		PIPE	1	LR36414	NIL	NIL			
81	SPLIT PIN 1.6X12	1	LIHWS06	A2 TO IS: 1367 (PT-14)-84	ITEM-2	IS: 549-1974	36		PIPE	1	LR36413	NIL	NIL			
80	CLEVIS PIN B6-C11X30X23	1	IS: 6863-73	A2 TO IS: 1367 (PT-14)-84	FOR KBI BRAKE SYSTEM	35		PIPE	1	LR36412	NIL	NIL				
79	FORK HEAD COMPLETE	3	LE36122	NIL	NIL	34		PIPE	1	LR36410	NIL	NIL				
78	LEVER COMPLETE	1	LR36423	NIL	NIL	33		PIPE	1	LR36409	NIL	NIL				
77	BRACKET COMPLETE (FOR KBI)	2	3 10113.0, 09.095.056	NIL	FOR KBI BRAKE SYSTEM	32		PIPE	1	LR36408	NIL	NIL				
76	THREAD BUSH	1	4 10113.0, 09.095.065	NIL	NIL	31		PIPE	1	LR36407	NIL	NIL				
75	SLACK	1	3 10113.0, 09.095.053	NIL	NIL	30		PIPE	1	LR36406	NIL	NIL				
74	FORK HEAD	1	3 10113.0, 09.095.062	NIL	FOR KBI BRAKE SYSTEM	29		PIPE	1	LR36405	NIL	NIL				
73	BRACKET	4	3 10113.0, 09.095.043	NIL	NIL	28		PIPE	1	LR36404	NIL	NIL				
72	SLACK COMPLETE	1	LW36222	NIL	NIL	27		PIPE	1	LR36403	NIL	NIL				
71	SLACK COMPLETE	1	LW36220	NIL	NIL	26		PIPE	1	LR36402	NIL	NIL				
70	BRACKET COMPLETE	2	LW36215	NIL	NIL	25		PIPE	1	LR36401	NIL	NIL				
69	CHANNEL	5	LD36421	NIL	NIL	24		PIPE	1	LR36399	NIL	NIL				
68	WOODEN CLIP	5	LD36420	NIL	NIL	23		PIPE	1	LR36398	NIL	NIL				
67	CHANNEL	1	LD36407	NIL	NIL	22		PIPE	1	LR36397	NIL	NIL				
66	WOODEN CLIP	1	LD36406	NIL	NIL	21		PIPE	1	LR36396	NIL	NIL				
65	CHANNEL	2	LG36185	NIL	NIL	20		PIPE	1	LR36395	NIL	NIL				
64	WOODEN CLIP	2	LG36184	NIL	NIL	19		PIPE	1	LR36394	NIL	NIL				
63	CHANNEL	4	LR36419	NIL	NIL	18		PIPE	1	LR36393	NIL	NIL				
62	WOODEN CLIP	4	LR36418	NIL	NIL	17		PIPE	1	LR36392	NIL	NIL				
61	CHANNEL	4	LR36417	NIL	NIL	16		PIPE	1	LR36391	NIL	NIL				
60	WOODEN CLIP	4	LR36416	NIL	NIL	15		PIPE	1	LR36390	NIL	NIL				
59	CHANNEL	3	LP36101	NIL	NIL	14		PIPE	1	LR36389	NIL	NIL				
58	WOODEN CLIP	3	3 11012.0, 09.095.013	NIL	NIL	13		PIPE	1	LR36388	NIL	NIL				
57	INDICATOR	6	I/48102/W-A93736/A	NIL	RDSO/2011 CG-04	12		PIPE	1	LR36387	NIL	NIL				
56	ASSEMBLED ADJUSTABLE SWIVEL ELBOW	2	EW22LREDCF	NIL	ERMETO OR EQUIVALENT	11		PIPE	1	LR36386	NIL	NIL				

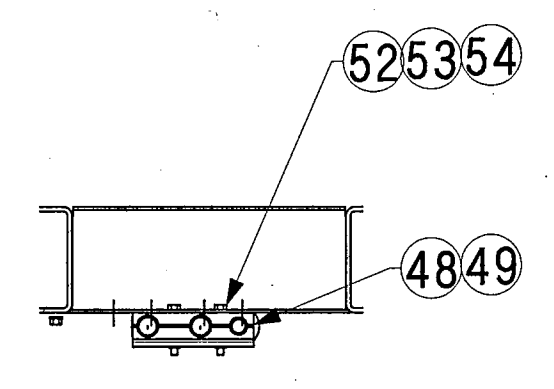
THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RAIL COACH FACTORY, KAPURTHALA. THIS DRAWING SHOULD NOT BE REPRODUCED, ALTERED, USED FOR MANUFACTURING OF COMPONENTS, SOLD OR TRANSFERRED WITHOUT PERMISSION FROM CHIEF DESIGN ENGINEER, RAIL COACH FACTORY, KAPURTHALA.

15 NOV 2017

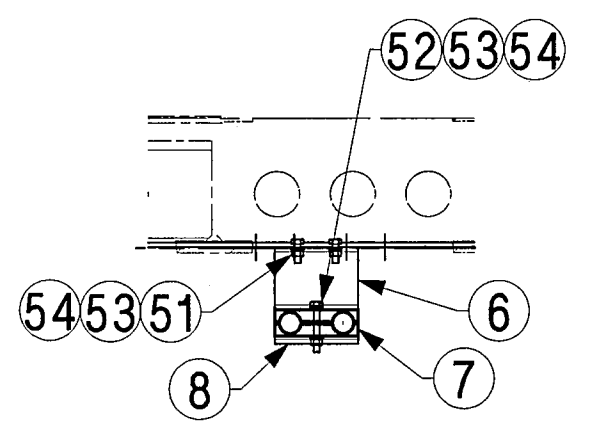
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MTRL. & SPEC.	REMARKS
NIL	M	AIR BRAKE				SUPERSEDES: LG36108 ALT NIL
WEIGHT	FILE	//ANKT/LR36331s4.prt (3D)				
301.00	KG	AIR BRAKE COMPLETE ON U/F FOR				
S.AREA	M <sup>2</sup>	DSLR WITH UNDERSLUNG POWERPACK 500 KVA				
NIL		MIDDLE (L.H.B TYPE COACH).				
LENGTH/DIA	M	RAIL COACH FACTORY, KAPURTHALA				
NIL		REF.DRG.No. NIL				
WIDTH/THICK.	M	रेल कोच फैक्टरी कपूरथला				
NIL		IRS				
HEIGHT	M	PL NO. 0000000				
NIL		DRG.NO. LR36331				
		REF.DRG.No. NIL				
		ALT. NIL SIZE A1 SHEET 4/4				



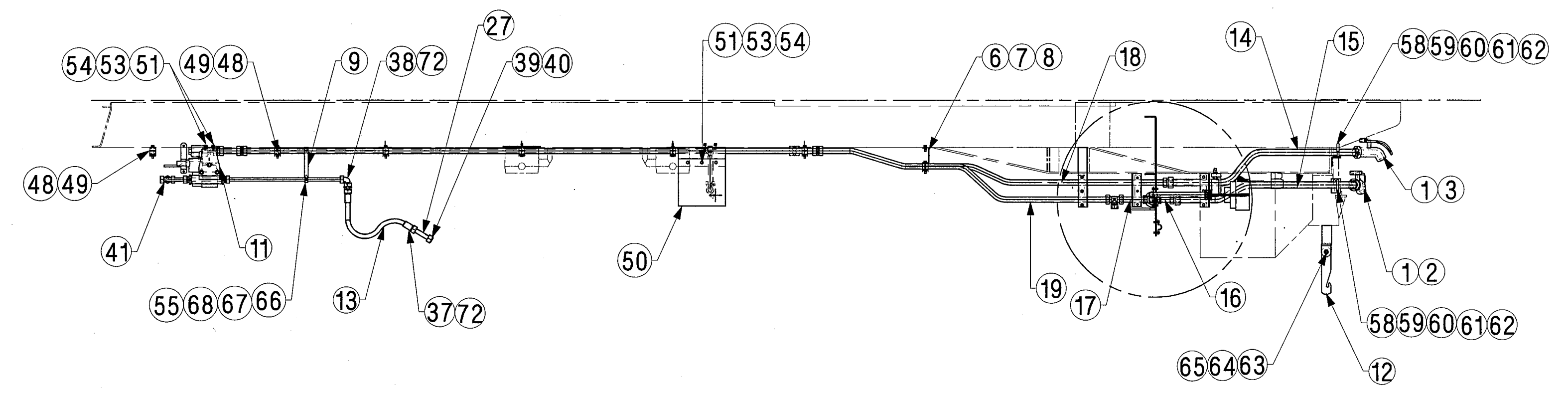
SECTION D-D



SECTION C-C



SECTION E-E



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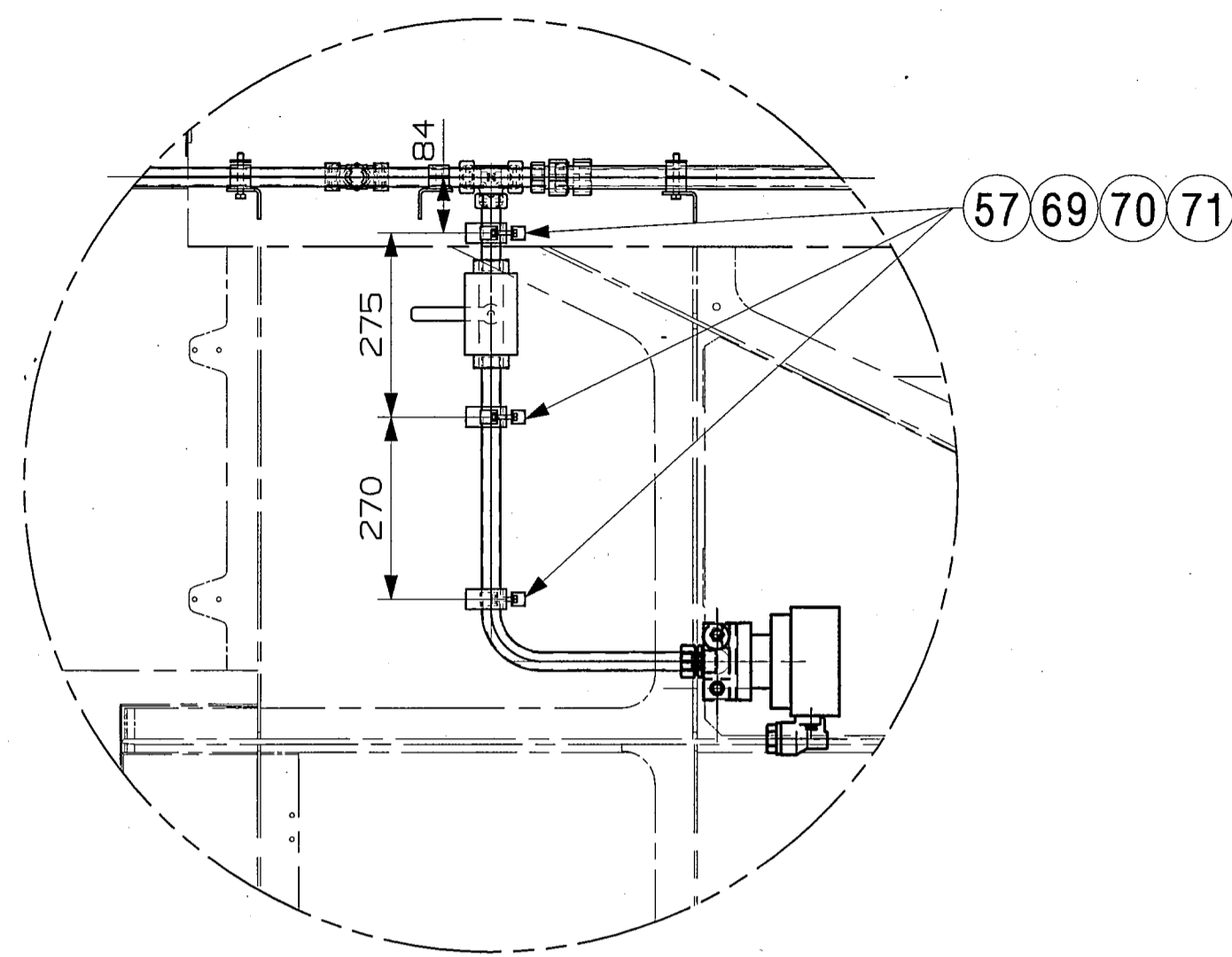
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	SUPERSEDES:		NIL	
WEIGHT	FILE	\\NLR36332.prt (3D)				
NIL	KG	AIR BRAKE ARRANGEMENT ON U/F FOR DSLR UNDERSLUNG (500 KVA) LHB TYPE COACHES (LUGGAGE END)			SCALE	SSE/REC
S.AREA	M <sup>2</sup>				CHD	SNOP
LENGTH/Ø+*	M				DRN	ARVI
NIL	M	RAIL COACH FACTORY, KAPURTHALA			REF.DRG.No.	NIL
WIDTH/TH+OK.	NIL	रेल कोच फैक्टरी कपूरथला		IRS	PL NO.	NIL
HEIGHT	NIL				DRG.NO.	LR36332
NIL	M	ADE/SME	DY.CME	CDE	ALT.	NIL SIZE IS SHEET 1/2

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. DATE OF FIRST ISSUE: 07/11/2017 CGM BY: [Signature]

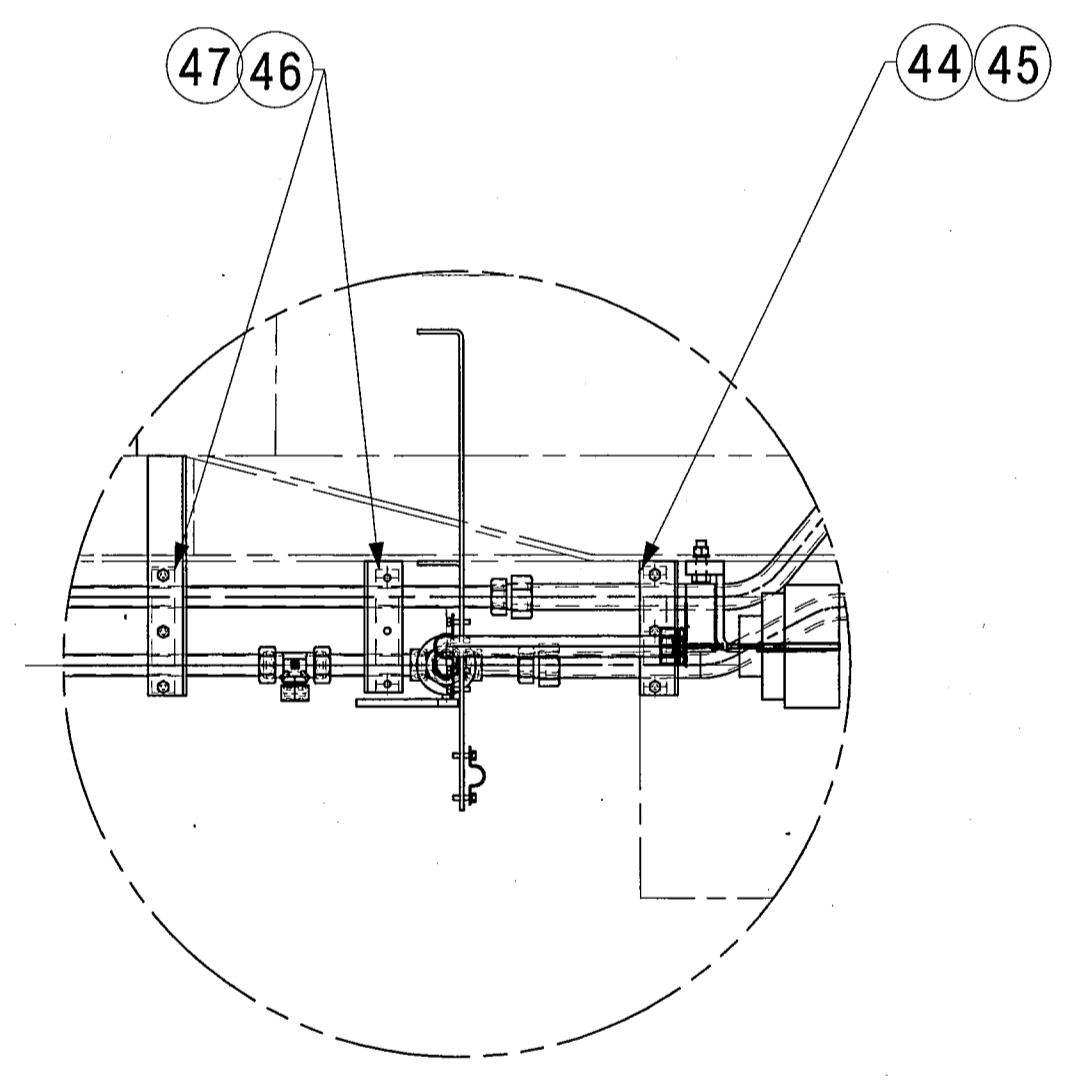
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

43	ISOLATING COCK	1	KH28LCF	NIL	ERMETO OR EQUIVALENT
42	ISOLATING COCK	1	KH22LCF	NIL	ERMETO OR EQUIVALENT
41	EQUAL TEE	1	T18LCF	NIL	ERMETO OR EQUIVALENT
40	PROGRESSIVE RING	2	DPR18LX	NIL	ERMETO OR EQUIVALENT
39	UNION NUT	2	M18LCFX	NIL	ERMETO OR EQUIVALENT
38	ASSEMBLED ADJUSTABLE SWIVEL ELBOW	2	EW18LREDCF	NIL	ERMETO OR EQUIVALENT
37	STRAIGHT MALE STUD FITTING WITH ELASTOMERIC SEAL	6	GE18LREDCF	NIL	ERMETO OR EQUIVALENT
36	EQUAL TEE	1	T22LCF	NIL	ERMETO OR EQUIVALENT
35	MALE STUD CONNECTOR	2	GE22LRCF	NIL	ERMETO OR EQUIVALENT
34	STRAIGHT UNION	4	G28LCF	NIL	ERMETO OR EQUIVALENT
33	TEE REDUCING	1	TR28/22/28 LCF	NIL	ERMETO OR EQUIVALENT
32	EQUAL TEE	1	T28LCF	NIL	ERMETO OR EQUIVALENT
31	FEMALE CONNECTOR	2	GAI22LRCF	NIL	ERMETO OR EQUIVALENT
30	HEX PIPE NUT G1"	2	NIL	STAINLESS STEEL TO Gr. AISI-304	S:3468-199
29	PIPE 28(OD)	1	LR36359	NIL	NIL

28	PIPE 28(OD) X 110	1	NIL	DIN2391C X5CrNi1810	DIN17546 Gr-1.4301NBK3.1B
27	PIPE 18(OD) X 80	1	NIL	DIN2391C X5CrNi1810	DIN17546 Gr-1.4301NBK3.1B
26	PIPE 18(OD)	1	LR36358	NIL	NIL
25	PIPE 18(OD)	1	LR36357	NIL	NIL
24	PIPE 18(OD)	1	LR36356	NIL	NIL
23	PIPE 22(OD)	1	LR36355	NIL	NIL
22	PIPE 22(OD)	1	LR36354	NIL	NIL
21	PIPE 22(OD)	1	LR36353	NIL	NIL
20	PIPE 28(OD) X 3030	2	NIL	DIN2391C X5CrNi1810	DIN17546 Gr-1.4301NBK3.1B
19	BRAKE PIPE 28(OD)	1	LR36352	NIL	NIL
18	FEED PIPE 28(OD)	1	LR36351	NIL	NIL
17	PIPE 28(OD) X 143	1	NIL	DIN2391C X5CrNi1810	DIN17546 Gr-1.4301NBK3.1B
16	PIPE 28(OD) X 82	1	NIL	DIN2391C X5CrNi1810	DIN17546 Gr-1.4301NBK3.1B
15	BRAKE PIPE NB	1	LD36400	NIL	NIL
14	FEED PIPE NB	1	LD36401	NIL	NIL
13	HOSE CONNECTION	2	I140535 I.3.901/4	NIL	RDSO/2011/CG-04
12	HOOK	2	3 10113.0.09.095.012	NIL	NIL
11	BRACKET COMPLETE	2	3 10113.0.09.095.014	NIL	NIL
10	HOSE CONNECTION 20 BORE X 550	2	RDSO/SK-1054	RDSO/SPEC. -C-K407	ITEM-1
9	BRACKET	1	LR36314	NIL	NIL
8	BRACKET	2	LP36100	NIL	NIL
7	PIPE CLIP	2	3 11012.0.09.095.002	NIL	NIL
6	BRACKET	1	3 11012.0.09.095.001	NIL	NIL
5	EMERGENCY BRAKE ACCELERATOR EB3 S/L WITH BRACKET	1	1/89368 2B82102	NIL	RDSO/2011/CG-04
4	ANTI-SKID VALVE	2	C131766	NIL	RDSO/2011/CG-04
3	FEED PIPE COUPLING	1	WD-81027-S-01	NIL	RDSO/2011/CG-04
2	BRAKE COUPLING	1	RDSO/SK-73547	NIL	RDSO/2011/CG-04
1	STOP VALVE	2	I139371 I.2.411/2	NIL	RDSO/2011/CG-04



DETAIL A  
SCALE 1:10



DETAIL B  
SCALE 1:10

72	NYLON WASHER	8	LW36143	NIL	NIL
71	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS:1367 PT.14-1984)	14	LIHWSS09	IS: 2016-1967 DIN125	ITEM-4
70	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS:1367 PT.14)	14	LIHWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MDS 057
69	HEX HEAD SCREW M6X25	14	LIHW02	IS: 1364 PT.2-92 5,6,CE	ITEM-7 COATING TO MDS 057
68	STAINLESS STEEL MACHINE WASHER A5.3 (A2 TO IS:1367 PT.14-1984)	4	LIHWSS09	IS: 2016-1967 DIN125	ITEM-2
67	STAINLESS STEEL NYLOC NUT M5 (A2-70 TO IS:1367 PT.14)	4	LIHWSS08	IS: 7002-1991 DIN982	ITEM-6 COATING TO MDS 057
66	STAINLESS STEEL HEX HEAD SCREW M5X25 (A2-70 TO IS:1367 PT.14-84)	4	LIHWSS02	IS: 1364 PT.2-92 CE	ITEM-2 COATING TO MDS 057
65	STAINLESS STEEL MACHINE WASHER A13 (A2 TO IS:1367 PT.14-1984)	2	LIHWSS09	IS: 2016-1967 DIN125	ITEM-8
64	STAINLESS STEEL NYLOC NUT M12 (A2-70 TO IS:1367 PT.14)	2	LIHWSS08	IS: 7002-1991 DIN982	ITEM-10 COATING TO MDS 057
63	CLEVIS PIN 14H11X30X50	2	NIL	DIN1445	NIL
62	STAINLESS STEEL MACHINE WASHER A10.5 (A2 TO IS:1367 PT.14-1984)	4	LIHWSS09	IS: 2016-1967 DIN125	ITEM-6
61	STAINLESS STEEL NYLOC NUT M10 (A2-70 TO IS:1367 PT.14)	4	LIHWSS08	IS: 7002-1991 DIN982	ITEM-9 COATING TO MDS 057
60	RUBBER PACKING 4X30X70 FOR 25 NB PIPE	2	NIL	MDS-030 PPDMM QUALITY	NIL
59	FRP LINING FOR 25 NB PIPE	2	LW36242	NIL	ITEM-3
58	U CLAMP 25 NB PIPE	2	CC35326	NIL	NIL
57	CLAMP 28(OD)PIPE	3	LW63110	NIL	ITEM-8
56	CLAMP 22(OD)PIPE	4	LW63110	NIL	ITEM-6
55	CLAMP 18(OD)PIPE	2	LW63110	NIL	ITEM-5
54	STAINLESS STEEL MACHINE WASHER A8.4 (A2 TO IS:1367 PT.14-1984)	31	LIHWSS09	IS: 2016-1967 DIN125	ITEM-5
53	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS:1367 PT.14)	31	LIHWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MDS 057
52	STAINLESS STEEL HEX HEAD BOLT M8X55 (A2-70 TO IS:1367 PT.14-84)	21	LIHWSS01	IS: 1364 PT.1-92 CE	ITEM-3 COATING TO MDS 057
51	HEX HEAD SCREW M8X25	14	LIHW02	IS: 1364 PT.2-92 5,6,CE	ITEM-11 COATING TO MDS 057
50	PLATE	2	LW36173	NIL	NIL
49	CHANNEL	5	LD36219	NIL	NIL
48	WOODEN CLIP	5	LD36218	NIL	NIL
47	BRACKET	2	LD36405	NIL	NIL
46	PIPE CLIP	2	LD36404	NIL	NIL
45	BRACKET	1	LD36403	NIL	NIL
44	PIPE CLIP	1	LD36399	NIL	NIL

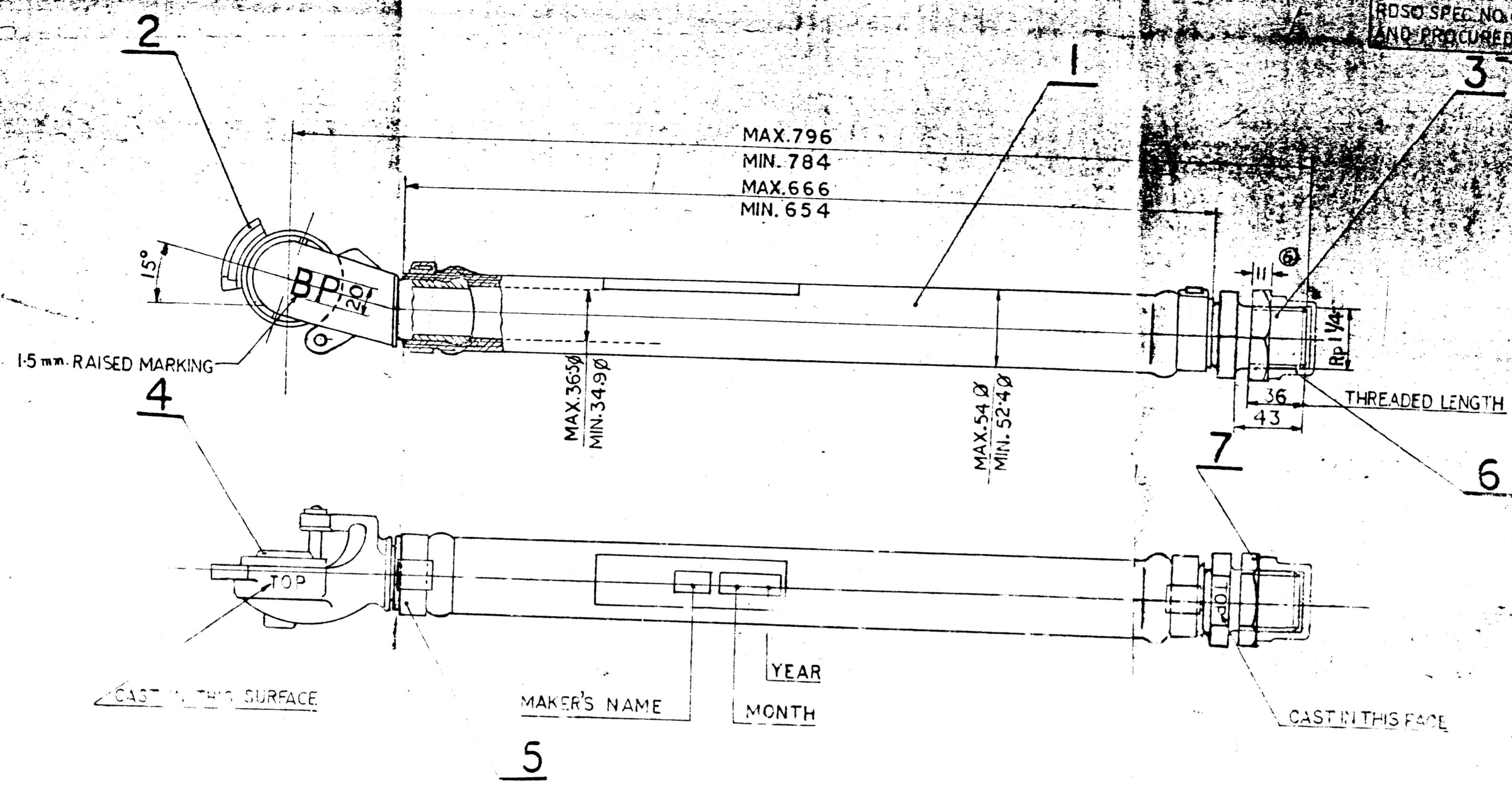
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	SUPERSEDES: NIL			
WEIGHT	KG	FILE	D:\narvi\Luggage End\LR36332.prt			
S.AREA	M2	AIR BRAKE ARRANGEMENT ON U/F FOR DSLR UNDERSLUNG (500 KVA) LHB TYPE COACHES (LUGGAGE END)				
LENGTH/B*TA	M	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.	M	रेल कोच फैक्टरी कपूरथला				
HEIGHT	M	IR S				
NIL	M	PL NO. NIL				
ADE/SME		BY.CME		DRG.NO. LR36332		
CODE		ALT.		NIL SIZE(A) SHEET(Z)		

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 07/11/2017 CGM BY *[Signature]*

ALL ITEMS TO THIS DRG. SHALL ALSO CONFORM TO LATEST R.D.S.O. SPEC. NO. 02-ABR AND SHALL BE MANUFACTURED BY AND PROCURED FROM R.D.S.O. APPROVED SOURCES ONLY.



**NOTE:-**

- WHITE HEART MALLEABLE IRON CASTING TO IS:2107 GR.WM 340 & BLACK HEART MALLEABLE IRON CASTING TO IS:2108 GR.BM 310 ARE PERMISSIBLE ALTERNATIVE MATERIAL FOR COUPLING HEAD & NIPPLE.
- THREADS SHALL BE PARALLEL TO IS 554.
- COUPLING HEAD (ITEM 2), HOSE NIPPLE (ITEM 3) & HOSE CLAMP (ITEM 5) SHALL BE PAINTED WITH MID. BRUNSWICK GREEN PAINT TO IS:CN 226 OF IS: SPECIFICATION 5-1972. & READY MIXED PAINT TO IS: 119.
- MOUNTING OF HOSE PIPE ON COUPLING HEAD & NIPPLE SHALL BE IN ACCORDANCE WITH AAR STANDARDS S-437-78 & S-440-77 & TESTING SHALL BE IN ACCORDANCE WITH AAR STANDARDS S-456-66.
- GAGING OF COUPLING HEAD & GASKET SHALL BE IN ACCORDANCE WITH AAR STANDARDS S-456-72 & 447-70 RESPECTIVELY.
- THE BEADS & SHANKS OF COUPLING HEAD & NIPPLE SHALL BE GAUGED IN ACCORDANCE WITH AAR STANDARDS S-453-47.
- LENGTH OF NIPPLE ON THREADED END & THREADED LENGTH SHALL BE IN ACCORDANCE WITH THOSE INDICATED IN THIS DRAWING.
- REINFORCEMENT OF AT LEAST TWO BRAIDS OF SYNTHETIC FIBRE YARNS INSTEAD OF WRAPPED PLYS OF POLYSTER FABRIC.

ITEM	DESCRIPTION	QTY	REF. DRGS	WT. OF ONE	MAT. & SPEC.	REMARKS
7	HEX. PIPE NUT Rp 1/4	1			STEEL IS: 34 68	
6	THREAD PROTECTION CAP	1			PLASTIC	
5	HOSE CLAMP	2			STAINLESS STEEL TO AISI: 304	
4	GASKET	1			AAPM-602-63	
3	HOSE NIPPLE	1			AAR S-452-74	SEE NOTE 1 & 7
2	COUPLING HEAD IN TYPE	1			AAR S-433-74	SEE NOTE 1
1	HOSE PIPE	1			RUBBER AAR M601-76	SEE NOTE 8

FOR AIR BRAKE ON WAGONS

## AIR BRAKE HOSE COUPLING FOR BRAKE PIPE

SK.73547

B. G. R.D.S.O. GROUP  
M. G. [W]

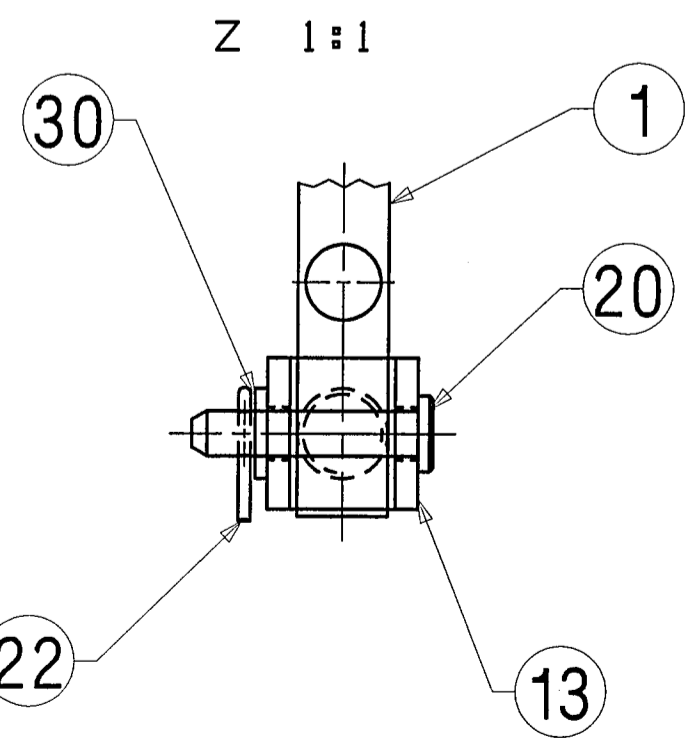
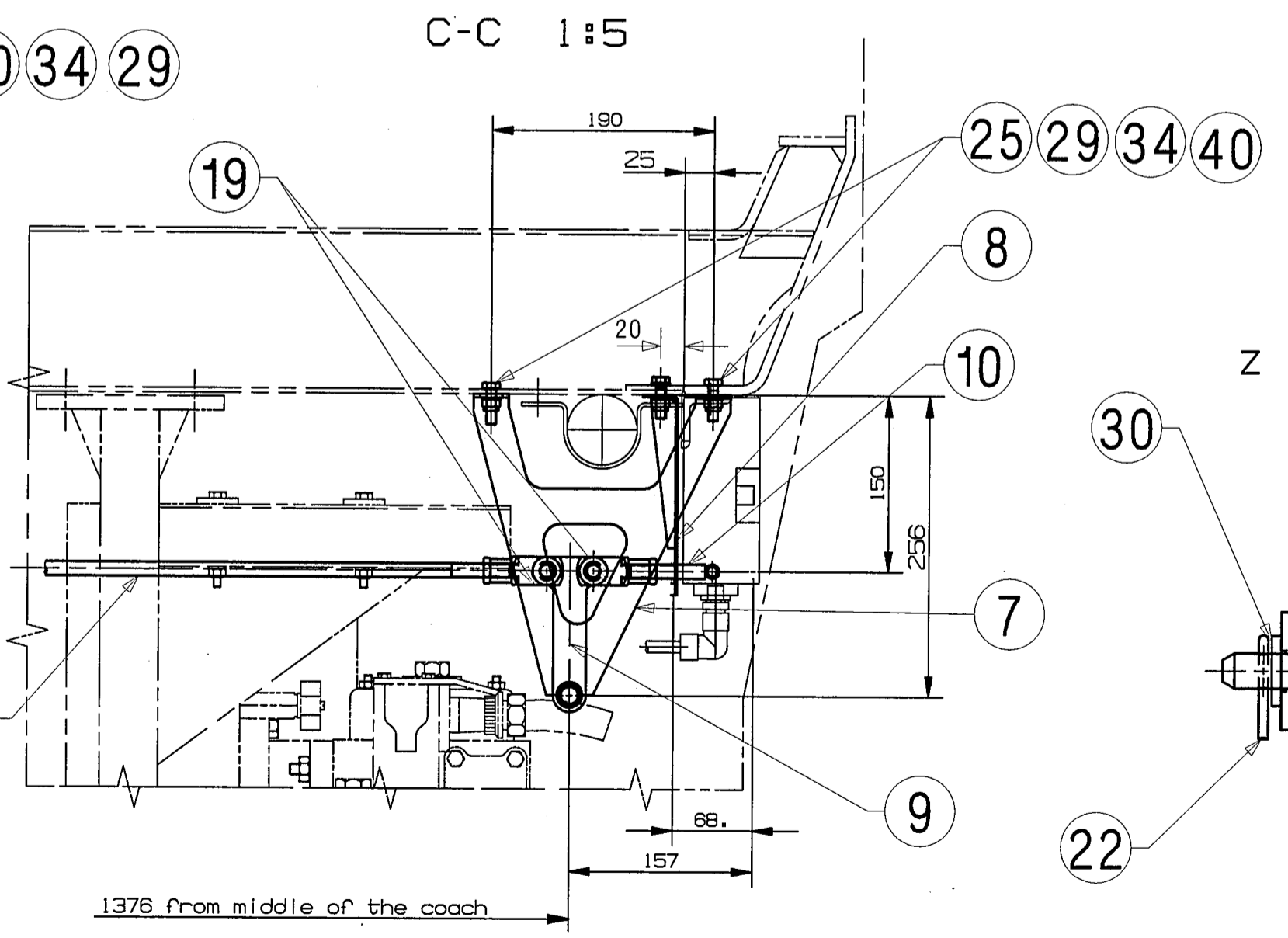
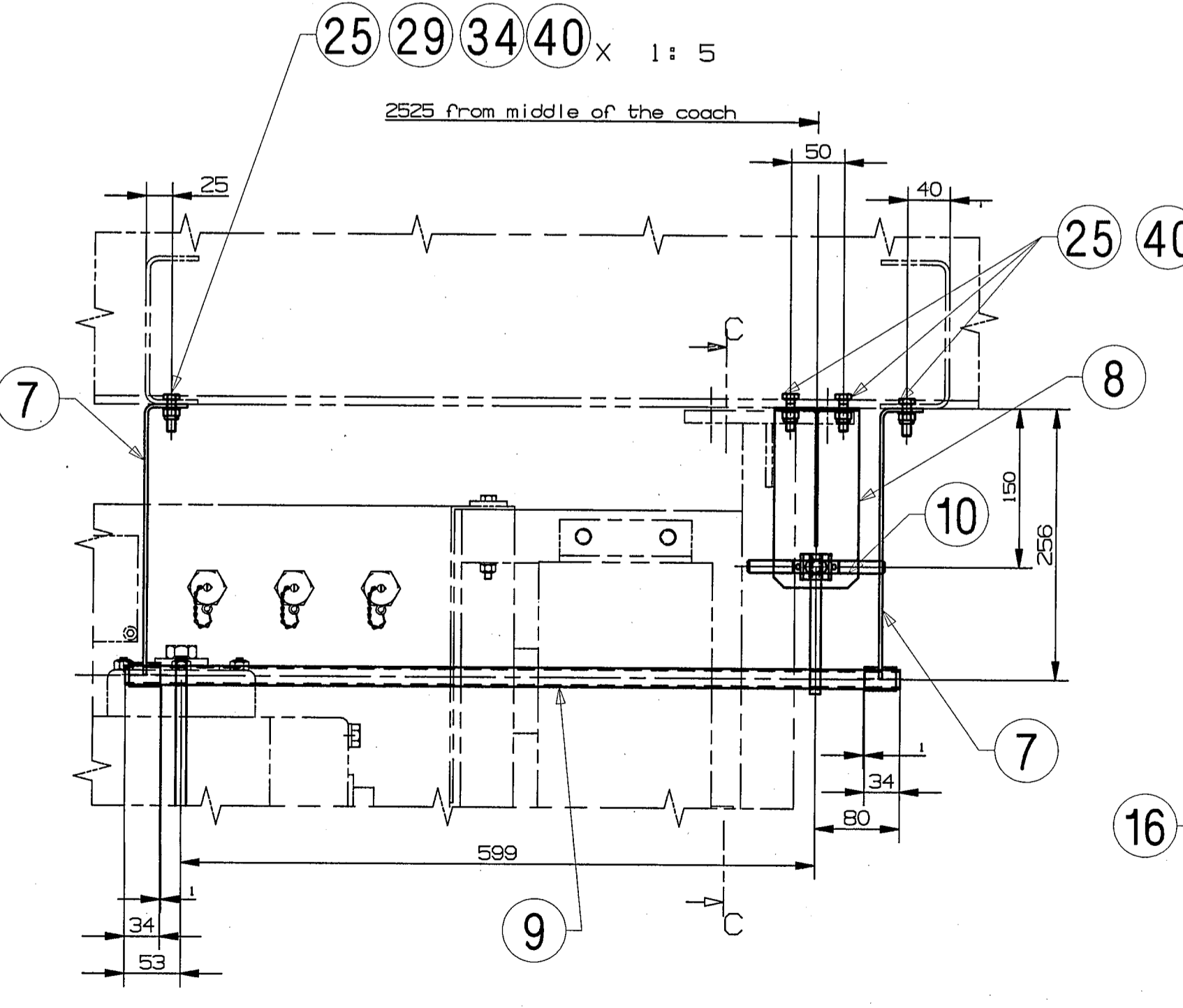
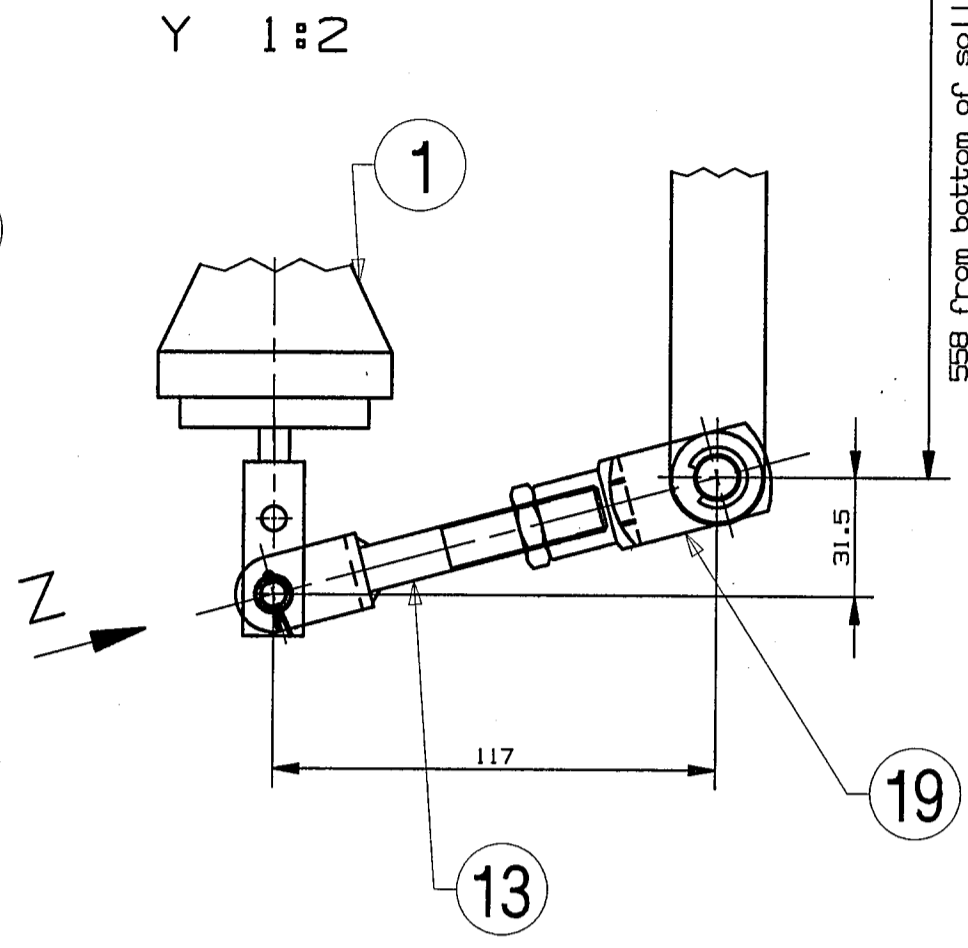
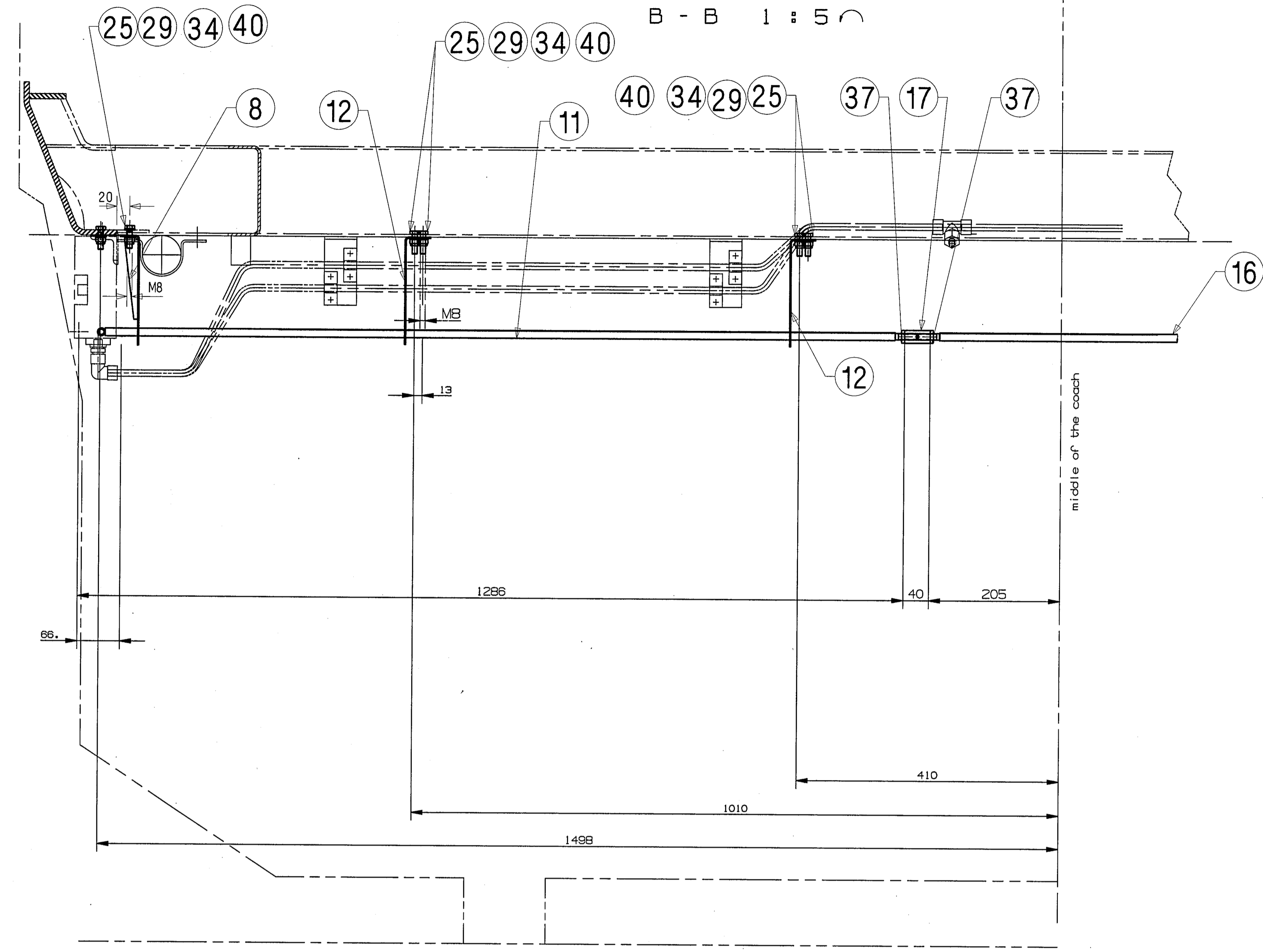
DATE: 2/89  
DATE: 12/91  
DATE: 8/84

ALT.	ITEM	AUTHY	DESCRIPTION	DATE	ALT.	ITEM	DESCRIPTION	DATE
	5	3102	MAT. FOR HOSE CLAMP REVISED	3/99	(E)	86071	DIMENSION 11 WAS 13	0/96
		3102	M.G. ADDED IN TITLE COLUMN.	12/91	(S)	93066	REVISED & REDRAWN	8/84
							DESCRIPTION	

(E) 1 WD-89-101 NOTE 9 ADDED AND ALTERNATE SPEC. DELETED. 2/89

(S) 1 WD-89-112 ALTERNATE SPEC. ADDED. 2/93

FOR OFFICE USE ONLY



ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
α	18/02/2013	ALL	1. SLACK SHORT BY 35 MM FROM BOTH SIDE. 2. THE DRAWING NO OF ITEM NO.8,10,11 WAS 3 10113.0.09.095.047, 3 10113.0.09.095.051 & 3 10113.0.09.095.048 RESP.	CRSE LN.SWR/M/C/ 26LHB 7/1/2013

Enterec  
Date Bas-  
08 MAR 2013

ITEM	QTY	DESCRIPTION	MATERIAL	ITEM NO.
37	2	HEX THIN NUT M10	LIHWSS08	ITEM-5
36	16	NYLOCK NUT M10	LIHWSS08	ITEM-9
34	16	NYLOCK NUT M8	LIHWSS08	ITEM-8
32	32	MACHINED WASHER A10.5	LIHWSS09	ITEM-6
30	1	MACHINED WASHER A6.4	LIHWSS09	ITEM-4
29	16	MACHINED WASHER A8.4	LIHWSS09	ITEM-5
27	16	HEX HEAD SCREW M10 X 45	LIHWSS02	ITEM-21
25	16	HEX HEAD SCREW M8 X 30	LIHWSS02	ITEM-12
22	1	SPLIT PIN 1.6 X 12	LIHWSS06	ITEM-2
20	1	BOLT B6 X 30 X 23	NIL	NIL
19	3	FORK HEAD COMPLETE	NIL	MDTS077
17	1	THREAD BUSH	4 10113.0.0 9.095.065	NIL
16	1	SLACK	3 10113.0.0 9.095.053	NIL
13	1	FORK HEAD	3 10113.0.0 9.095.062	NIL
12	4	BRACKET	3 10113.0.0 9.095.043	NIL
11	1	SLACK COMPLETE	LW36222	NIL
10	1	SLACK COMPLETE	LW36220	NIL
9	1	LEVER COMPLETE	3 10113.0.0 9.095.058	NIL
8	2	BRACKET COMPLETE	LW36215	NIL
7	2	BRACKET COMPLETE	3 10113.0.0 9.095.056	NIL
5	1	PACKING	4 10113.0.0 9.095.013	NIL
4	1	PACKING	4 10113.0.0 9.095.013	NIL
3	1	PACKING	4 10113.0.0 9.095.013	NIL
1	1	BRAKE DEVICE CONTAINER, COMPLETE	NIL	MDTS077

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	AIR BRAKE	SUPERSEDES:	LG36108	ALT	NIL
WEIGHT	FILE	//lg36108s2a.prt (2D)				
301.00	KG					
S.AREA	M2					
NIL	M2					
LENGTH/DIA	M					
NIL	M					
WIDTH/THICK.	M					
NIL	M					
HEIGHT	M					
NIL	M					

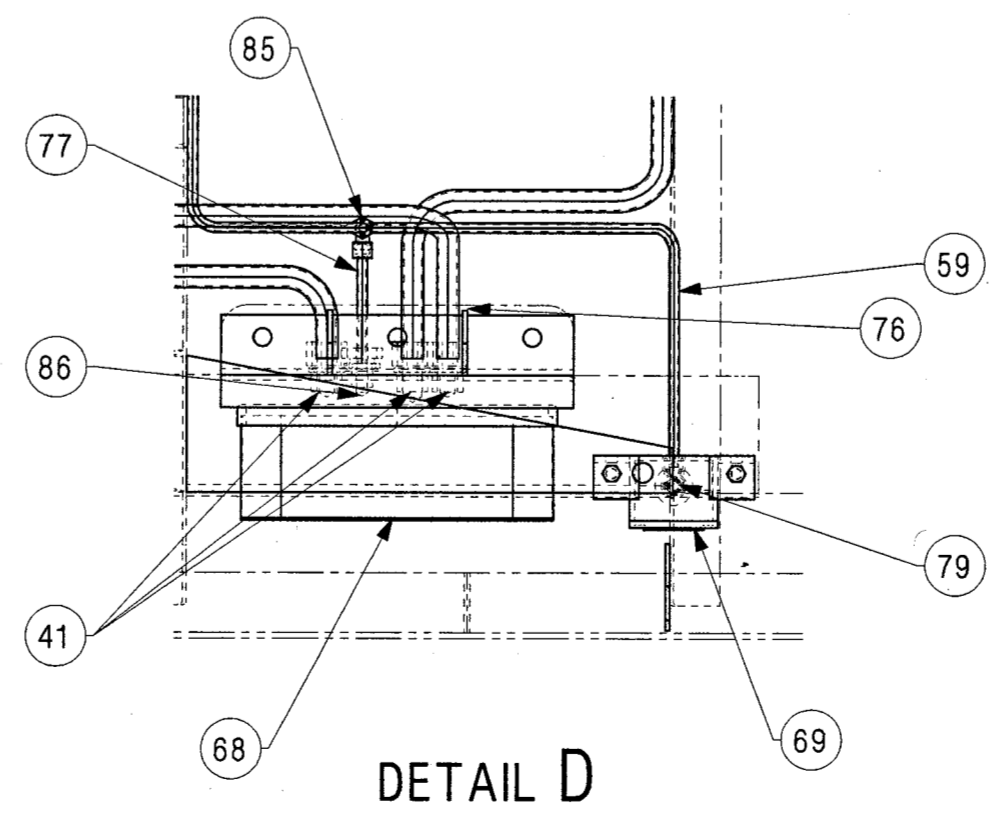
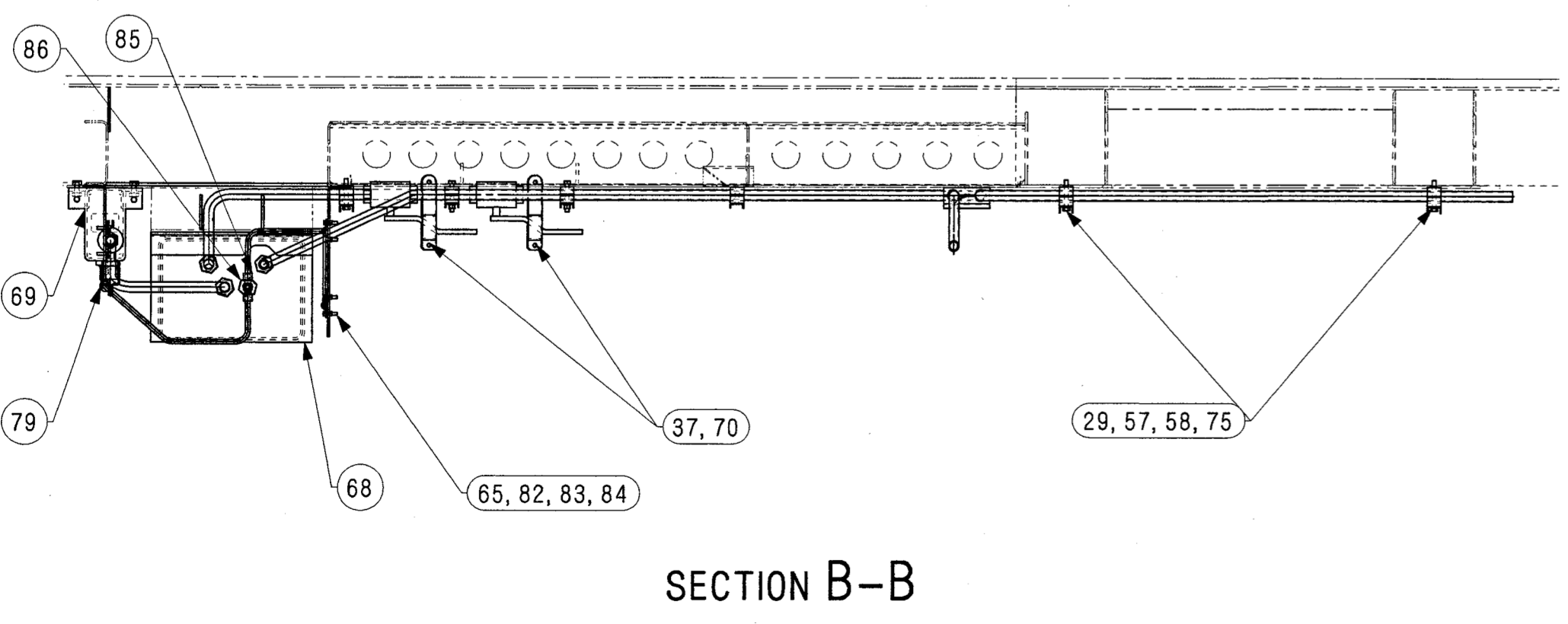
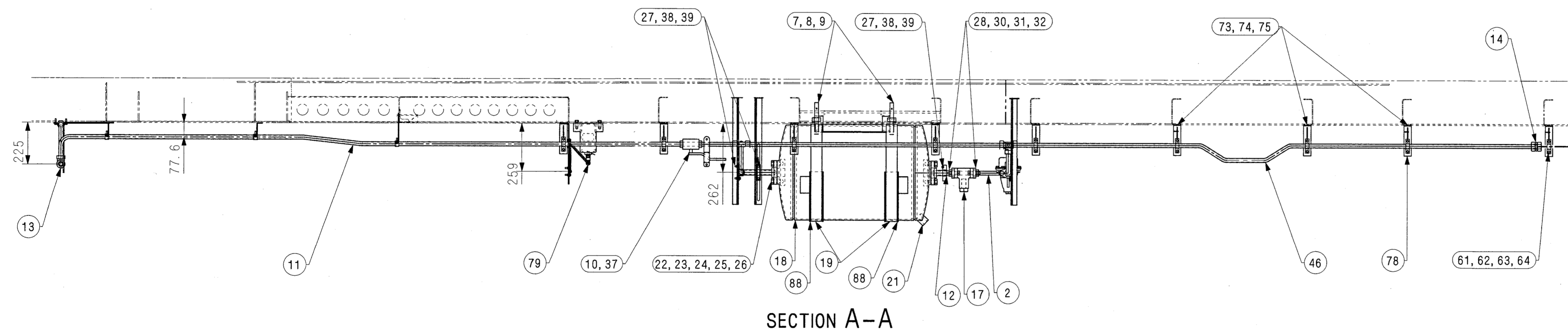
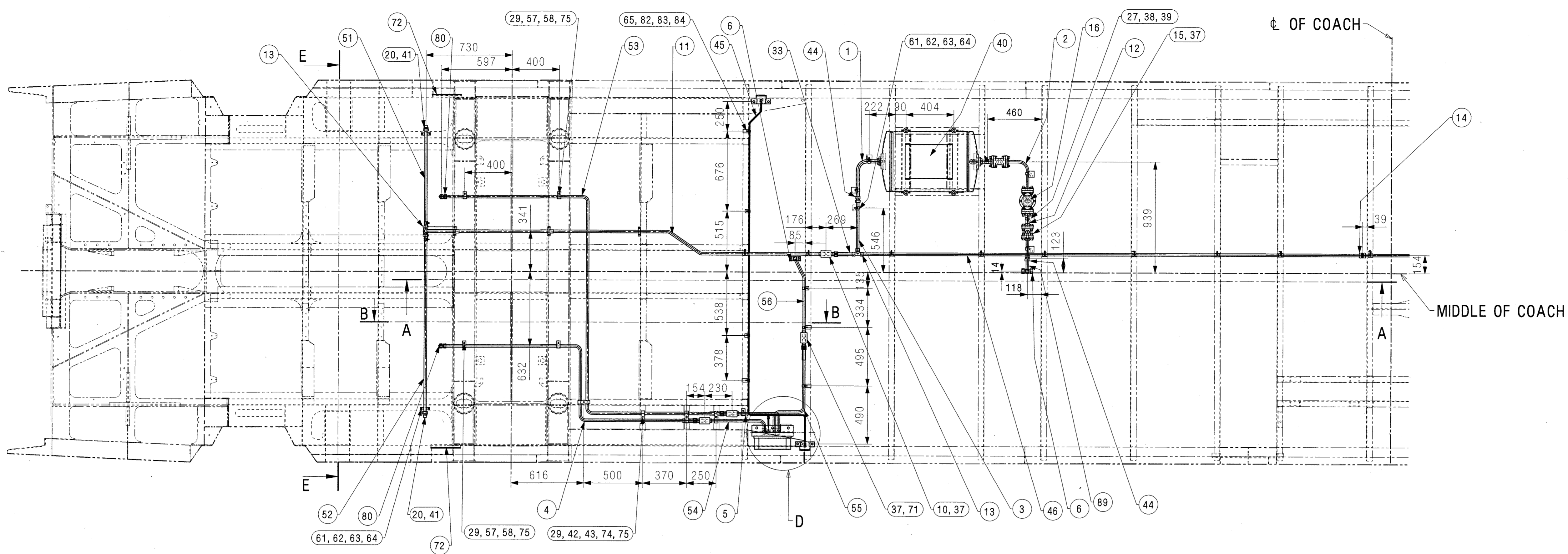
**BRAKE DEVICES MOUNTING**

RAIL COACH FACTORY, KAPURTHALA  
 रेल कोच फैक्टरी कपूरथला  
 IR S  
 PL NO. 00000001  
 DRG.NO. LG36108  
 REF.DRG.No. 1.10113.0.09.0110.001  
 SCALE 1:10  
 SSE/REC  
 CHD  
 DRN  
 DATE 18/02/2013  
 DESIGNED BY  
 CHECKED BY  
 DATE 18/02/2013

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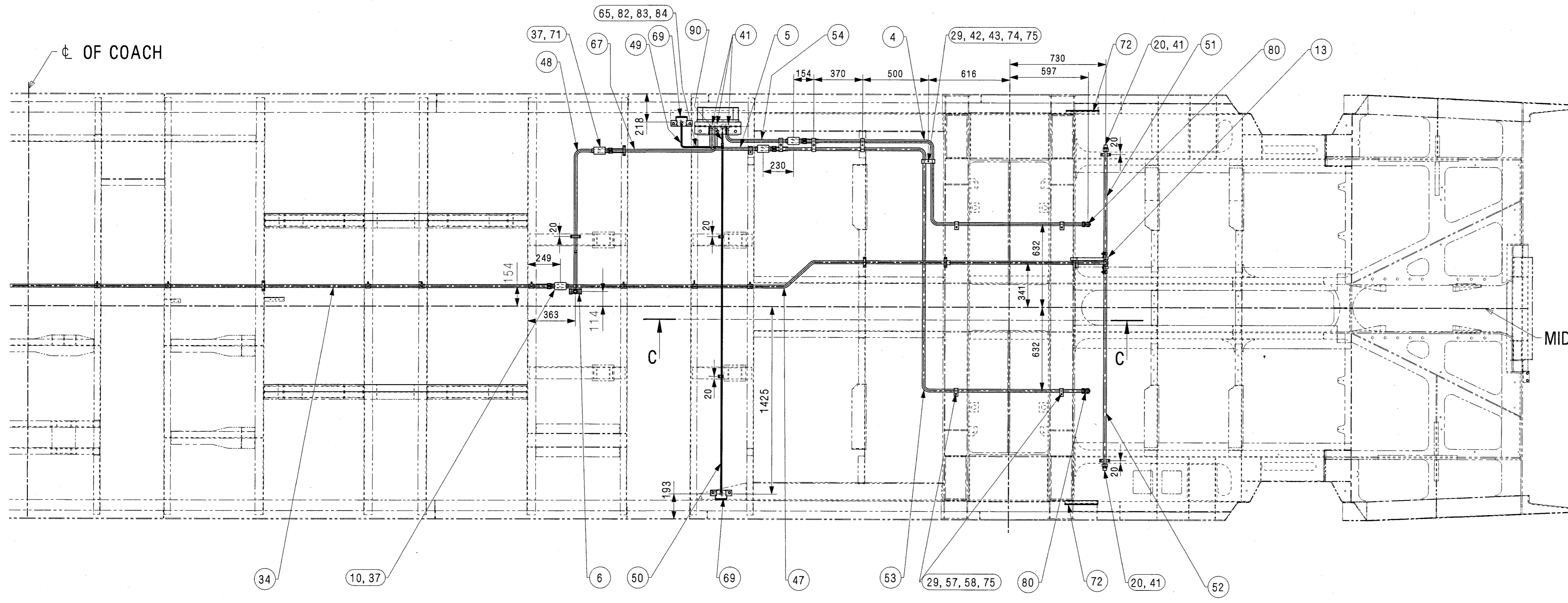


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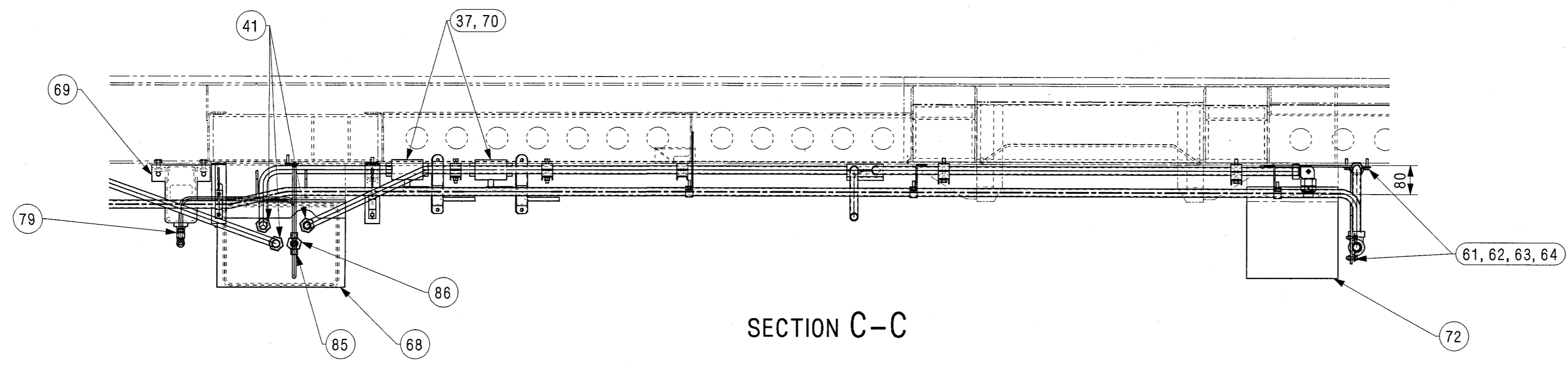
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.			DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.			DATE OF FIRST ISSUE			02/04/2018			CGM BY			Amit Singh 13.7.18		
FOR UNTOLERANCED DIMENSIONS REFER MDG0008																	

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP AIR BRAKE				
		FILE lw36243sta.prt (3D)	SUPERSEDES: LW36243 ALT NIL			
192.00	KG	AIR SUSPENSION & FIBA DEVICE				SCALE
		ARRGT. ON U/F FOR AC/NAC				1:20
		LHB TYPE EOG COACH				CHD
		RAIL COACH FACTORY, KAPURTHALA				DRN
						ANKT
						REF.DRG.No: NIL
		रेलकोच फैक्टरी कपूरथला		IRS	PL NO.	NIL
					DRG.NO.	LW36243
					ALT.	a
					SIZE	A1 SHEET 1/3

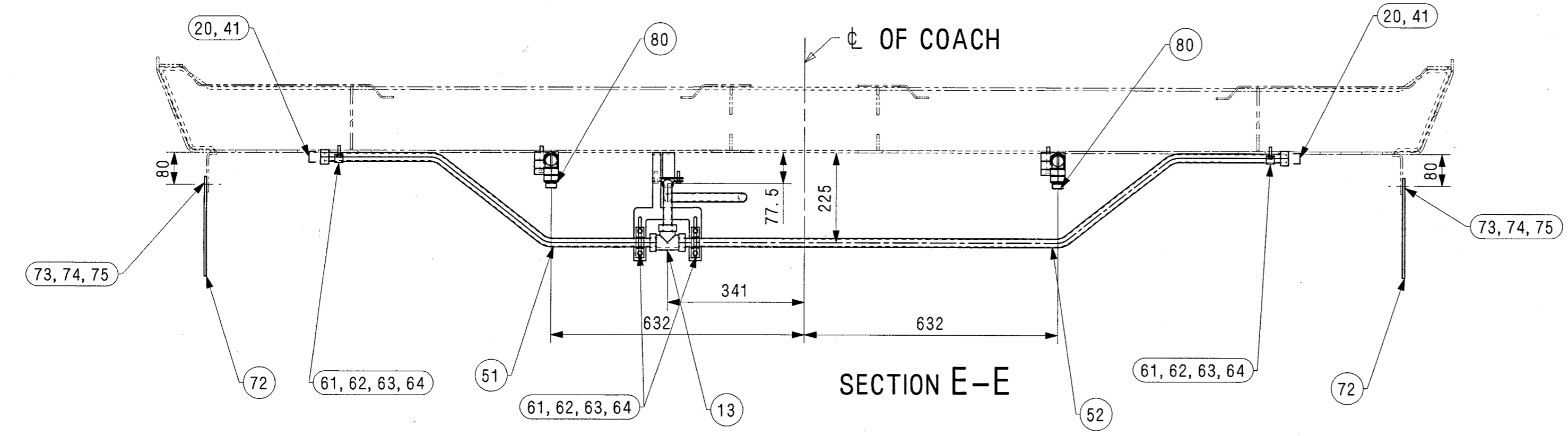




MIDDLE OF COACH



SECTION C-C



SECTION E-E

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ENTERED  
 INTO  
 DATA BASE  
 7 JUL 2018

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 FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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

DATE OF FIRST ISSUE: 02/04/2018  
 CGM BY: *[Signature]*

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	AIR BRAKE				
	GROUP					
	FILE	lw36243s2a.prt (3D)				
192.00	KG					
	S. AREA					
NIL	M <sup>2</sup>					
	LENGTH/DIA					
NIL	M					
	WIDTH/THICK.					
NIL	M					
	HEIGHT					
NIL	M					
	SCALE	1:20				
	CHD					
	DRN					
	ANKT					
	REF.DRG.No.	NIL				
	PL NO.	NIL				
	DRG.No.	LW36243				
	ALT.	a				
	SIZE	A1				
	SHEET	2/3				

THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RAIL COACH FACTORY, KAPURTHALA.  
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 COMPONENTS, SOLD OR TRANSFERRED WITHOUT PERMISSION FROM CHIEF DESIGN ENGINEER,  
 RAIL COACH FACTORY, KAPURTHALA.

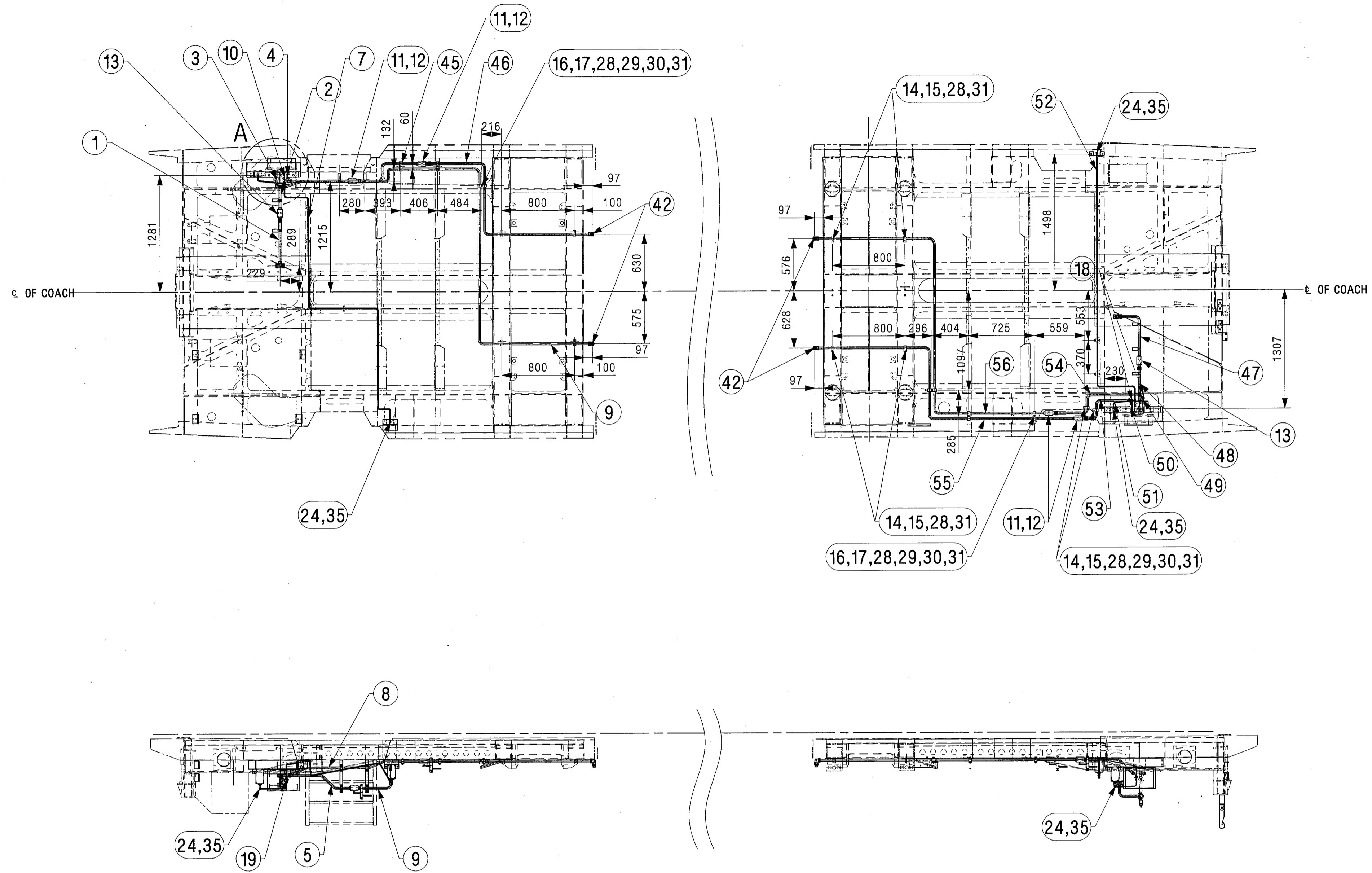
90	PIPE 10(00) X 118	1	NIL	DIN2391C XSC NI 1810	DIN17456 Gr. 1.4501 NBR 3.18
89	PIPE	1	LW36264	NIL	NIL
88	FRP STRIP	2	CC36515	NIL	NIL
87	PIPE ZONB	1	CC36961	NIL	L=155
86	MALE STUD CONNECTOR	2	NIL	GE10LRCF	ERMETO OR EQUIVALENT
85	EQUAL TEE	2	NIL	T10LCF	ERMETO OR EQUIVALENT
84	STAINLESS STEEL MACHINE WASHER AS.3 (A2 TO IS:1367 PT.14-1984)	10	LIHWSS09	IS: 2016-1967 DIN125	ITEM-2
83	STAINLESS STEEL NYLOC NUT M5 (A2-70 TO IS:1367 PT.14)	10	LIHWSS08	IS: 7002-1991 DIN982	ITEM-6 COATING TO MTS 057
82	STAINLESS STEEL HEX HEAD SCREW MSX25 (A2-70 TO IS:1367 PT.14-84)	10	LIHWSS02	IS: 1364 PT.2-92 .CE	ITEM-2 COATING TO MTS 057
81	EQUAL ELBOW	6	NIL	W22LCF	NIL
80	ASSEMBLED ADJUSTABLE SWIVEL ELBOW	4	NIL	EW22LREDCF	ERMETO OR EQUIVALENT
79	ASSEMBLED ADJUSTABLE SWIVEL ELBOW (BSP THREAD)	4	NIL	EW10LREDCF	ERMETO OR EQUIVALENT
78	BRACKET	17	LW11296	NIL	NIL
77	PIPE 10(00) X 105	1	NIL	DIN2391C XSC NI 1810	DIN17456 Gr. 1.4501 NBR 3.18
76	PIPE 22(00) X 113	2	NIL	DIN2391C XSC NI 1810	NIL
75	STAINLESS STEEL MACHINE WASHER AB.4 (A2 TO IS:1367 PT.14-1984)	49	LIHWSS09	IS: 2016-1967 DIN125	ITEM-5
74	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS:1367 PT.14)	47	LIHWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MTS 057
73	STAINLESS STEEL HEX HEAD SCREW MBX25 (A2-70 TO IS:1367 PT.14-84)	29	LIHWSS02	IS: 1364 PT.2-92 .CE	ITEM-11 COATING TO MTS 057
72	PLATE	4	LW36173	NIL	NIL
71	ISOLATING COCK WITHOUT VENT	2	NIL	RDSO/2015/CG-05 KH22LCF	ERMETO OR EQUIVALENT
70	ISOLATING COCK WITH VENT	4	NIL	RDSO/2015/CG-05	ERMETO OR EQUIVALENT
69	INDICATOR	4	NIL	1/48102/A- A93736/A	RDSO / 2015/CG-05
68	FIBA DEVICE	2	NIL	NIL	RDSO / 2015/CG-05
67	PIPE	1	LW36261	NIL	NIL
66	HALF CLAMP	2	LW63111	NIL	ITEM 3
65	FULL CLAMP	5	LW63110	NIL	ITEM 3
64	STAINLESS STEEL MACHINE WASHER AB.4 (A2 TO IS:1367 PT.14-1984)	78	LIHWSS09	IS: 2016-1967 DIN125	ITEM-4
63	STAINLESS STEEL HEX HEAD SCREW MBX25 (A2-70 TO IS:1367 PT.14-84)	78	LIHWSS02	IS: 1364 PT.2-92 .CE	ITEM-6 COATING TO MTS 057
62	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS:1367 PT.14)	78	LIHWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MTS 057
61	FULL CLAMP	38	LW63110	NIL	ITEM 6
60	HALF CLAMP	2	LW63111	NIL	NIL
59	PIPE	1	LW36253	NIL	NIL
58	CHANNEL	10	LD36407	NIL	NIL
57	WOODEN CLIP	10	LD36406	NIL	NIL
56	PIPE	1	LW36252	NIL	NIL
55	PIPE	1	LW36251	NIL	NIL
54	PIPE	2	LW36250	NIL	NIL
53	PIPE	2	LW36247	NIL	NIL
52	PIPE	2	LW36246	NIL	NIL
51	PIPE	2	LW36245	NIL	NIL
50	PIPE	1	LW36260	NIL	NIL
49	PIPE	1	LW36259	NIL	NIL
48	PIPE	1	LW36258	NIL	NIL
47	PIPE	1	LW36257	NIL	NIL
46	PIPE	1	LW36256	NIL	NIL
45	PIPE	1	LW36254	NIL	NIL
44	FEMALE CONNECTOR	2	NIL	GA122LRCF	ERMETO OR EQUIVALENT
43	PIPE CLIP	8	LG36184	NIL	NIL
42	BRACKET	8	LG36185	NIL	NIL
41	MALE STUD CONNECTOR	10	NIL	GE22LRCF	ERMETO OR EQUIVALENT
40	FRP COVER	1	CC36516	NIL	NIL
39	SPRING WASHER B10	12	LIHW09	IS: 3063-1994	ITEM-21 COATING TO MTS 057

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
a	12/07/2018	ALL	ITEM NO. 35, 36, 60, 76 & 81 DELETED. 2. QTY OF ITEM NO. 3, 12, 38, 39, 61, 62, 63, 64, 65, 66, 73, 74, 75, 77, 82, 83 & 84 WAS 2, 3, 10, 10, 42, 88, 88, 88, 4, 4, 31, 39, 57, 2, 4, 4 & 4 RESP. 3. ITEM NO. 87, 88, 89 & 90 ADDED.	SSE/AB/LT No: RCF/F IN/A AB/02/LHB

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	AIR BRAKE		SUPERSIDES: LW36243 ALT NIL	
WEIGHT	FILE	1w36243s3a.prt (3D)			
192.00	KG	AIR SUSPENSION & FIBA DEVICE			
S.AREA		ARRGT. ON U/F FOR AC/NAC			
NIL	M <sup>2</sup>	LHB TYPE EOG COACH			
LENGTH/DIA		RAIL COACH FACTORY, KAPURTHALA			
NIL	M	REF.DRG.No. NIL			
WIDTH/THICK.		रेलकोच फेक्टरी कपूरथला			
NIL	M	IRS			
HEIGHT		PL NO. NIL			
NIL	M	DRG.NO. LW36243			
		ADE/SME			
		DY.CME			
		CDE			

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008      DATE OF FIRST ISSUE      02/04/2018      CGM BY      *Signature*      13.7.18



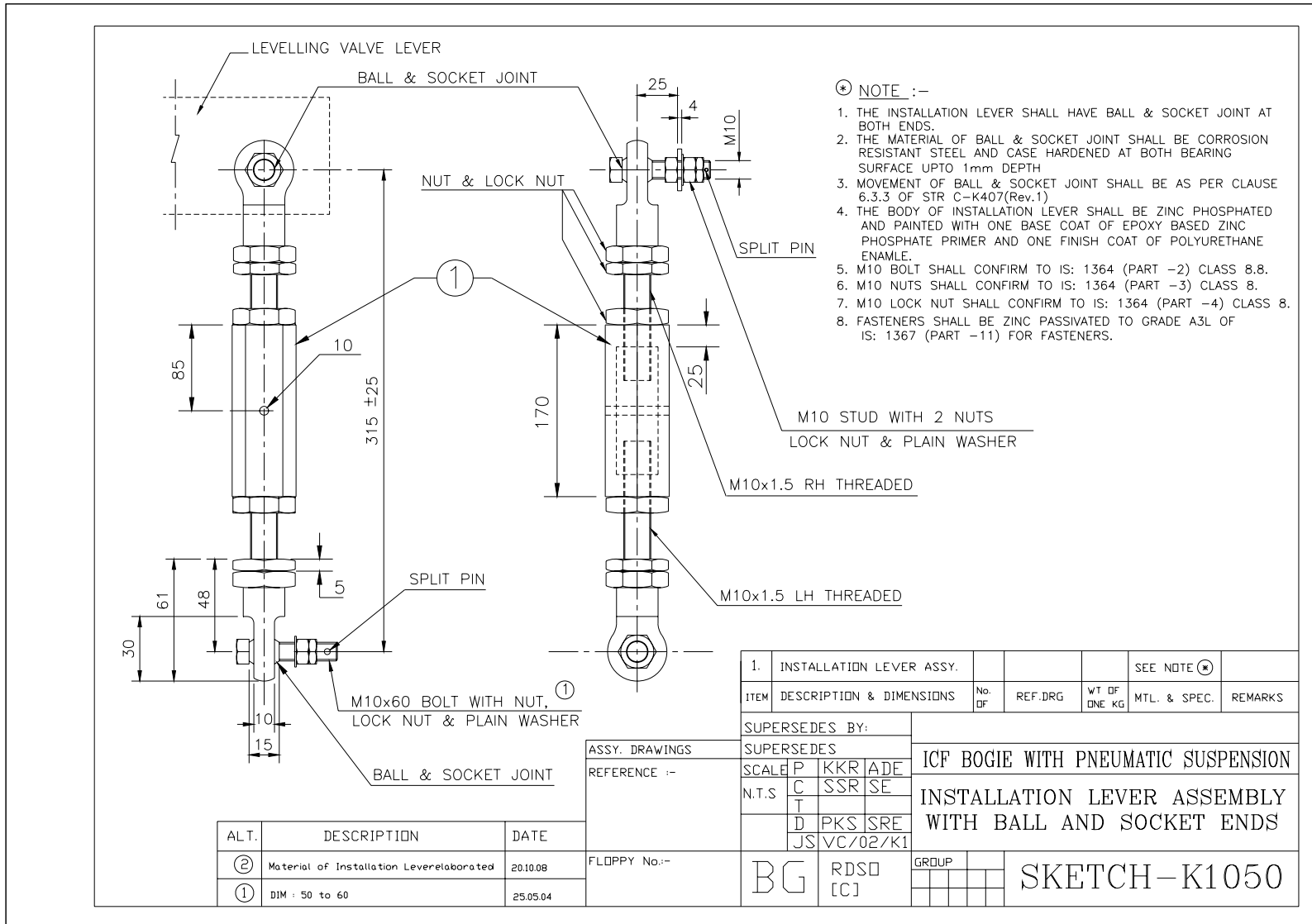
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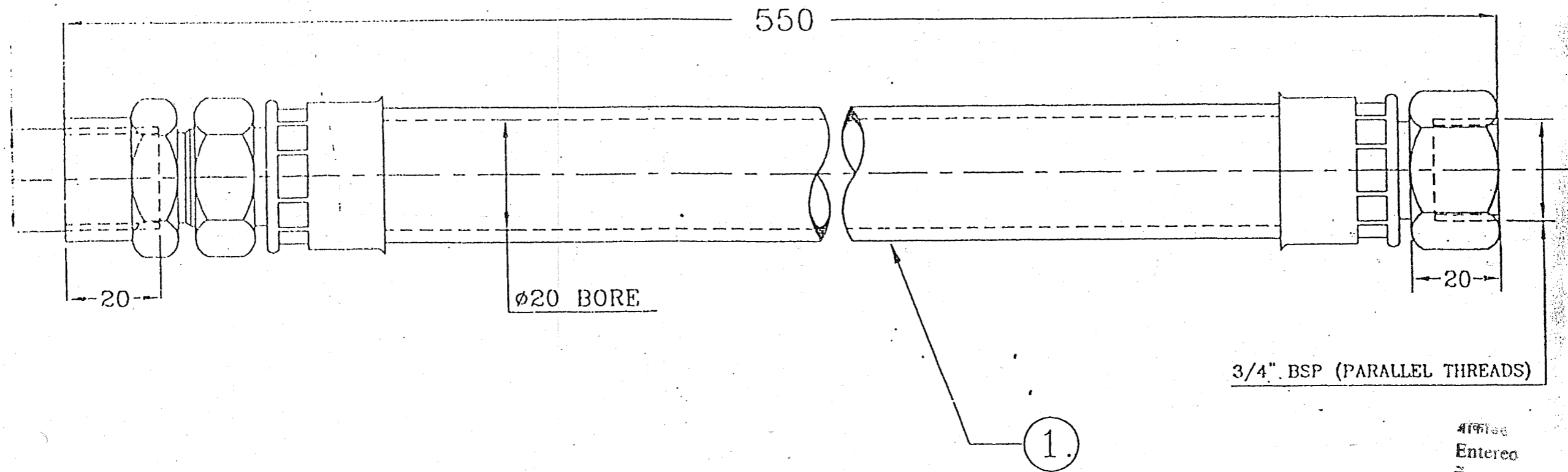
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	M	GROUP AIR BRAKE			NIL		
WEIGHT	FILE	\\LR36333.prt (3D)					
67.000	KG	FIBA DEVICE ARRGT					
S.AREA	ON U/F FOR DSLR WITH UNDERSLUNG					SCALE SSE/REC	
NIL	M <sup>2</sup>	POWER PACK (500KVA)LHB TYPE COACH					1: 30 CHD SNOB
LENGTH/DIA	RAIL COACH FACTORY, KAPURTHALA					DRN ARVI	
NIL	M	REF.ORG.No. NIL					PL NO. NIL
WIDTH/THICK.	रेल कोच फैक्टरी कपूरथला					DRG.NO. LR36333	
NIL	M	ADE/SME					ALT. NIL SIZE   SHEET   1/2
HEIGHT	DY.CME						
NIL	M	CDE					

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3/4" BSP (PARALLEL THREADS)



**NOTE :**

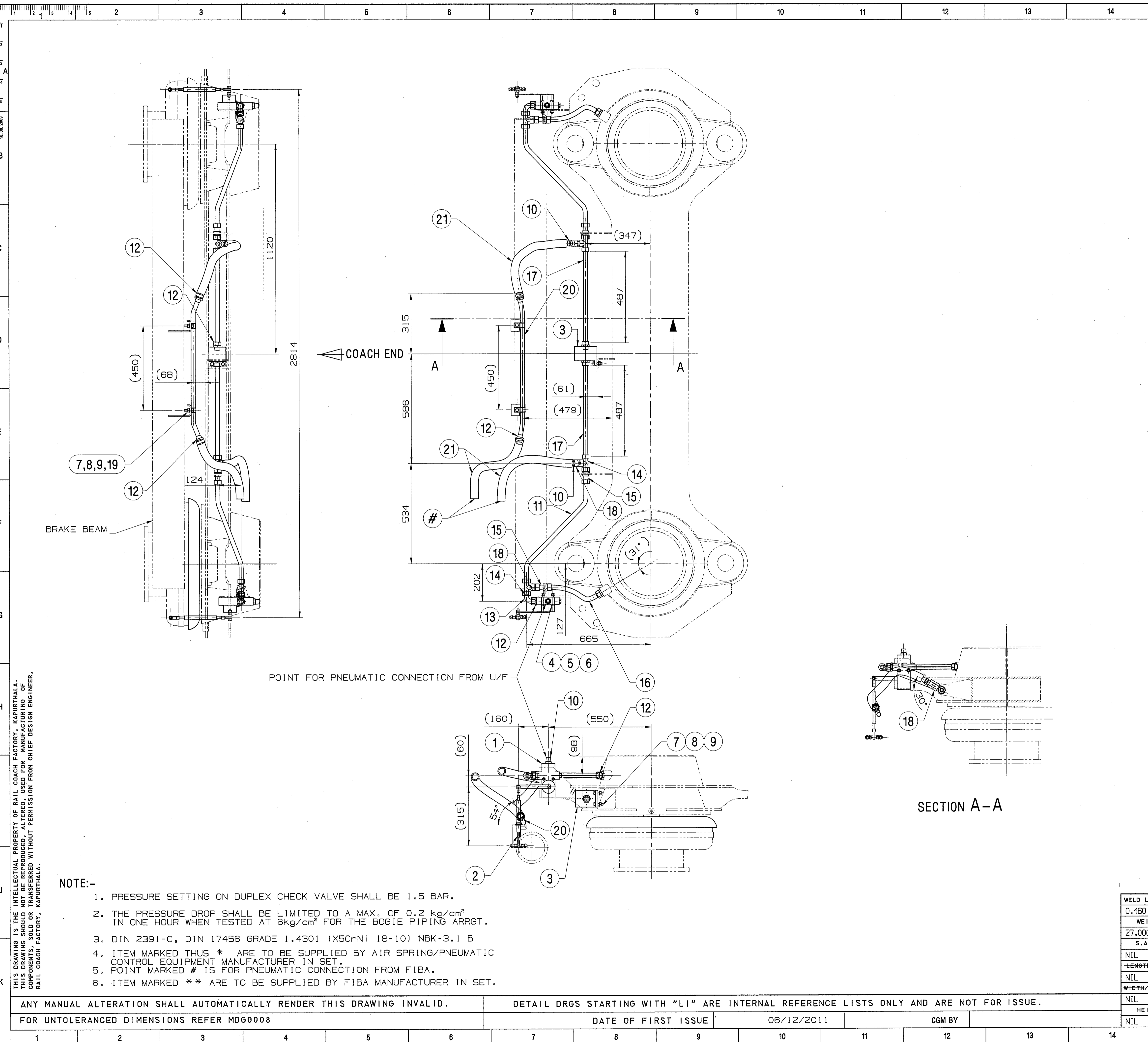
THE HOSE SHALL CONFIRM TO SAE 100 R3

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व  
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प्रविष्टिगत की  
Date No.

03 MAR 2008

ALL DIMENSIONS IN mm.

ITEM	DESCRIPTION & DIMENSIONS	No. OFF	REF.DRG	VT OF D+E KG	SEE NOTE	REMARKS
1	Hose Connection				SEE NOTE	
ASSY. DRAWINGS		SUPERSEDES BY:		ICF BOGIE WITH PNEUMATIC SUSPENSION HOSE CONNECTION FOR AIR SPRING SUSPENSION BOGIES		
REFERENCE :-		SUPERSEDES				
		SCALE	P ADE			
		C SE	T			
		D PKS SRE	JS VC/02/K1			
FLOPPY No:- VC/01/01		BG	RDSO [C]	GRDUP	SKETCH-K1054	



ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
a	15/02/2013	E-6 ALL	DIM 512 WAS 465 ITEM-14 QTY WAS 4 & ITEM 25,26,27 ADDED	MD110025 DT 05/12/11
b	12/10/2013	ALL	PIPE FITTING QTY CHANGED FOR PROPER FITMENT	MD110025 DT 05/12/11
c	23/08/2017	ALL ALL ALL	1. ITEM-16 CHANGED FROM STEEL TO RUBBER HOSE. 2. DESCRIPTION CHANGED FOR ITEM-5 & 8. 3. MATERIAL SPEC. & PROPERTY CLASS UPDATED FOR ITEM-4,5,7 & 8.	DY.CME-D1 NOTING ON MD44121

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DATA BASE  
24 AUG 2017

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
21	HOSE CONNECTION	3	SKETCH-K-1054	RDSO/STR C-K407	**
20	PIPE	1	LW36206	NIL	NIL
19	CLAMP	2	LW63111	NIL	ITEM-6
18	SWIVEL UNION	4	NIL	ERMETO GZ22LCF	OR EQUIVALENT
17	PIPE 22(OD)/1.5X487	2	NIL	SEE NOTE-3	NIL
16	HOSE CONNECTION(3/4" BSP X 270)	2	NIL	NIL	CONFIRM TO SAE 100 R3
15	BULKHEAD UNION	4	NIL	ERMETO SV22LCF	OR EQUIVALENT
14	STANDPIPE RUN TEE	4	NIL	ERMETO EVL22LOMDCF	OR EQUIVALENT
13	STANDPIPE ELBOW	2	NIL	ERMETO EVW22LOMDCF	OR EQUIVALENT
12	MALE STUD CONNECTOR	8	NIL	ERMETO GE22LR3/4KEGCF	OR EQUIVALENT
11	PIPE	2	LW36130	NIL	NIL
10	HEX NIPPLE 20 NI	4	NIL	ISO 4144: 2003 TAB-12	NIL
9	PUNCH WASHER A11	4	LIHW09	IS: 2016-1967 STEEL	ITEM-7 COATING TO MDS 057
8	HEX NUT M10 PREVAILING TORQUE TYPE	4	NIL	DIN 6925/980V, IS:1367-02 PT-8 10, A38	NIL
7	HEX HEAD BOLT M10X40	4	NIL	IS:1364-02, PT-1 IS:1367-02, PT-3 10, 9, C	COATING TO MDS 057
6	PLAIN WASHER A9	4	LIHW09	IS: 2016-1967 STEEL	ITEM-4 COATING TO MDS 057
5	HEX NUT M8 PREVAILING TORQUE TYPE	4	NIL	DIN 6925/980V, IS:1367-02 PT-8 10, A38	NIL
4	HEX HEAD BOLT M8X60	4	NIL	IS:1364-02, PT-1 IS:1367-02, PT-3 10, 9, C	COATING TO MDS 057
3	DUPLEX CHECK VALVE	1	SKETCH-K1051	STR NO C-K-407	*
2	INSTALLATION LEVER ASSLY L-315	2	SKETCH-K1050	STR NO C-K-407	*
1	LEVELING VALVE	2	SKETCH-K1049	STR NO C-K-407	*

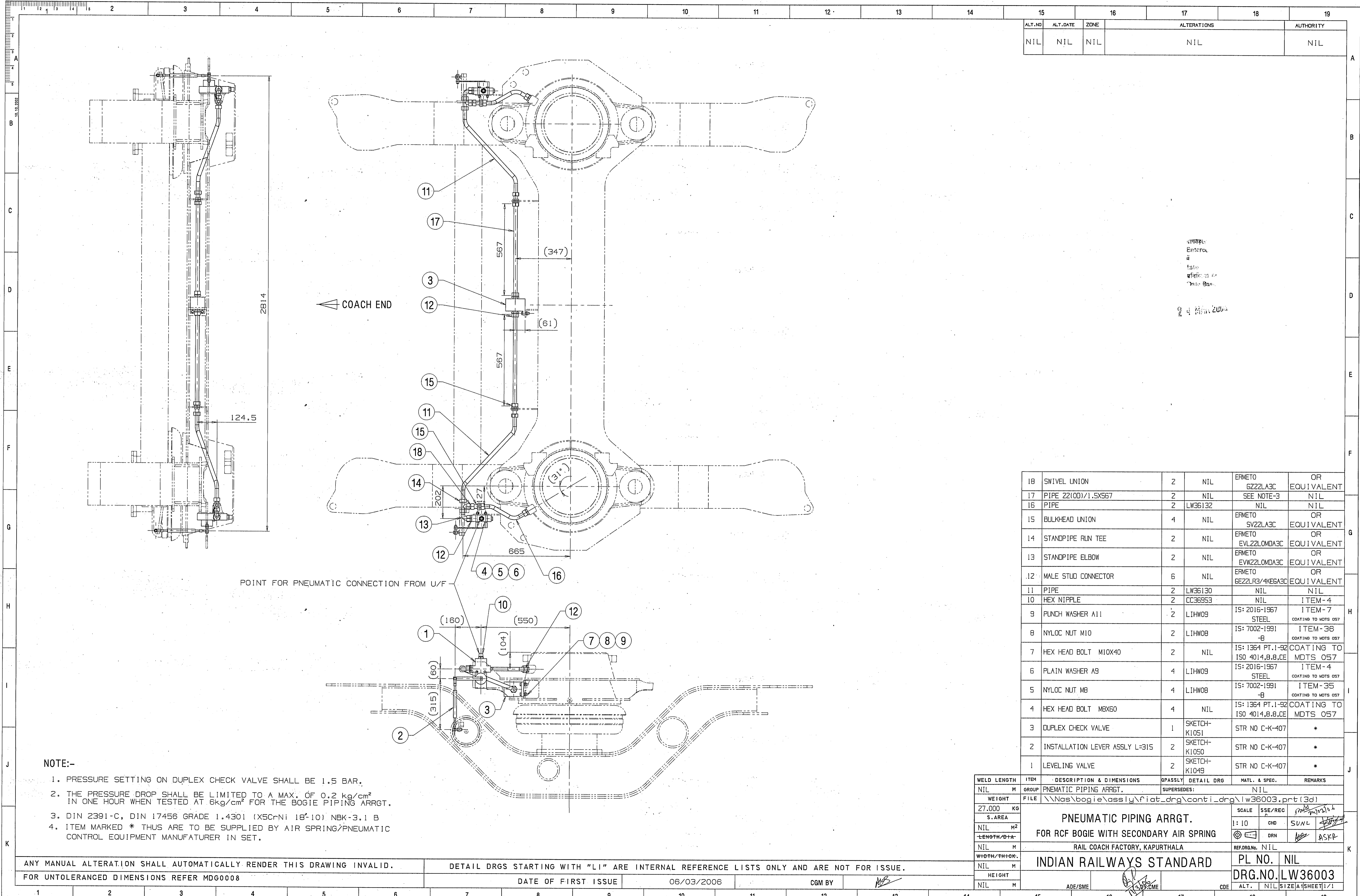
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
0.460	M	GROUP	PNEUMATIC PIPING ARRGT. SUPERSEDES: LW36189 ALT b			
WEIGHT	FILE	\\10.12.17.2\bogie\sudh\lw36189c.prt (3D)				
27.000	KG	PNEUMATIC PIPING ARRGT.			SCALE	SSE/REC
S.AREA	WITH FIBA FOR RCF BOGIE FITTED WITH AIR SPRING IN SECONDARY SUSPENSION					1: 10
NIL	M <sup>2</sup>	RAIL COACH FACTORY, KAPURTHALA			CHD	RAN
NIL	M	REF.DRG.No. NIL			DRN	SUDH
WIDTH/THICK.	रेलकोच फेक्टरी कपूरथला					PL NO. NIL
NIL	M	IRIS			DRG.NO. LW36189	
HEIGHT	ADE/SME					ALT. c
NIL	M	DYE/CME			SIZE A	SHEET 1/1

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**NOTE:-**

- PRESSURE SETTING ON DUPLEX CHECK VALVE SHALL BE 1.5 BAR.
- THE PRESSURE DROP SHALL BE LIMITED TO A MAX. OF 0.2 kg/cm<sup>2</sup> IN ONE HOUR WHEN TESTED AT 6kg/cm<sup>2</sup> FOR THE BOGIE PIPING ARRGT.
- DIN 2391-C, DIN 17456 GRADE 1.4301 (X5CrNi 18-10) NBK-3.1 B
- ITEM MARKED THUS \* ARE TO BE SUPPLIED BY AIR SPRING/PNEUMATIC CONTROL EQUIPMENT MANUFACTURER IN SET.
- POINT MARKED # IS FOR PNEUMATIC CONNECTION FROM FIBA.
- ITEM MARKED \*\* ARE TO BE SUPPLIED BY FIBA MANUFACTURER IN SET.

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008					DATE OF FIRST ISSUE				
					06/12/2011				
					CGM BY				



ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

ITEM	DESCRIPTION & DIMENSIONS	QTY	ALT. NO	REF. NO.	REMARKS
18	SWIVEL UNION	2	NIL	ERMETO GZZZLA3C	OR EQUIVALENT
17	PIPE 22(OD)/1.5XS67	2	NIL	SEE NOTE-3	NIL
16	PIPE	2	LW36132	NIL	NIL
15	BULKHEAD UNION	4	NIL	ERMETO SVZZLA3C	OR EQUIVALENT
14	STANDPIPE RUN TEE	2	NIL	ERMETO EVLZZLMDA3C	OR EQUIVALENT
13	STANDPIPE ELBOW	2	NIL	ERMETO EVWZZLMDA3C	OR EQUIVALENT
12	MALE STUD CONNECTOR	6	NIL	ERMETO GEZZLR3/4KEGA3C	OR EQUIVALENT
11	PIPE	2	LW36130	NIL	NIL
10	HEX NIPPLE	2	CC36953	NIL	ITEM-4
9	PUNCH WASHER A11	2	LIHW09	IS: 2016-1967 STEEL	ITEM-7 COATING TO MDT5 057
8	NYLOC NUT M10	2	LIHW08	IS: 7002-1991 -B	ITEM-36 COATING TO MDT5 057
7	HEX HEAD BOLT M10X40	2	NIL	IS: 1364 PT.1-92 ISO 4014.8.8.CE	COATING TO MDT5 057
6	PLAIN WASHER A9	4	LIHW09	IS: 2016-1967 STEEL	ITEM-4 COATING TO MDT5 057
5	NYLOC NUT M8	4	LIHW08	IS: 7002-1991 -B	ITEM-35 COATING TO MDT5 057
4	HEX HEAD BOLT M8X60	4	NIL	IS: 1364 PT.1-92 ISO 4014.8.8.CE	COATING TO MDT5 057
3	DUPLEX CHECK VALVE	1	SKETCH-K1051	STR NO C-K-407	*
2	INSTALLATION LEVER ASSLY L-315	2	SKETCH-K1050	STR NO C-K-407	*
1	LEVELING VALVE	2	SKETCH-K1049	STR NO C-K-407	*

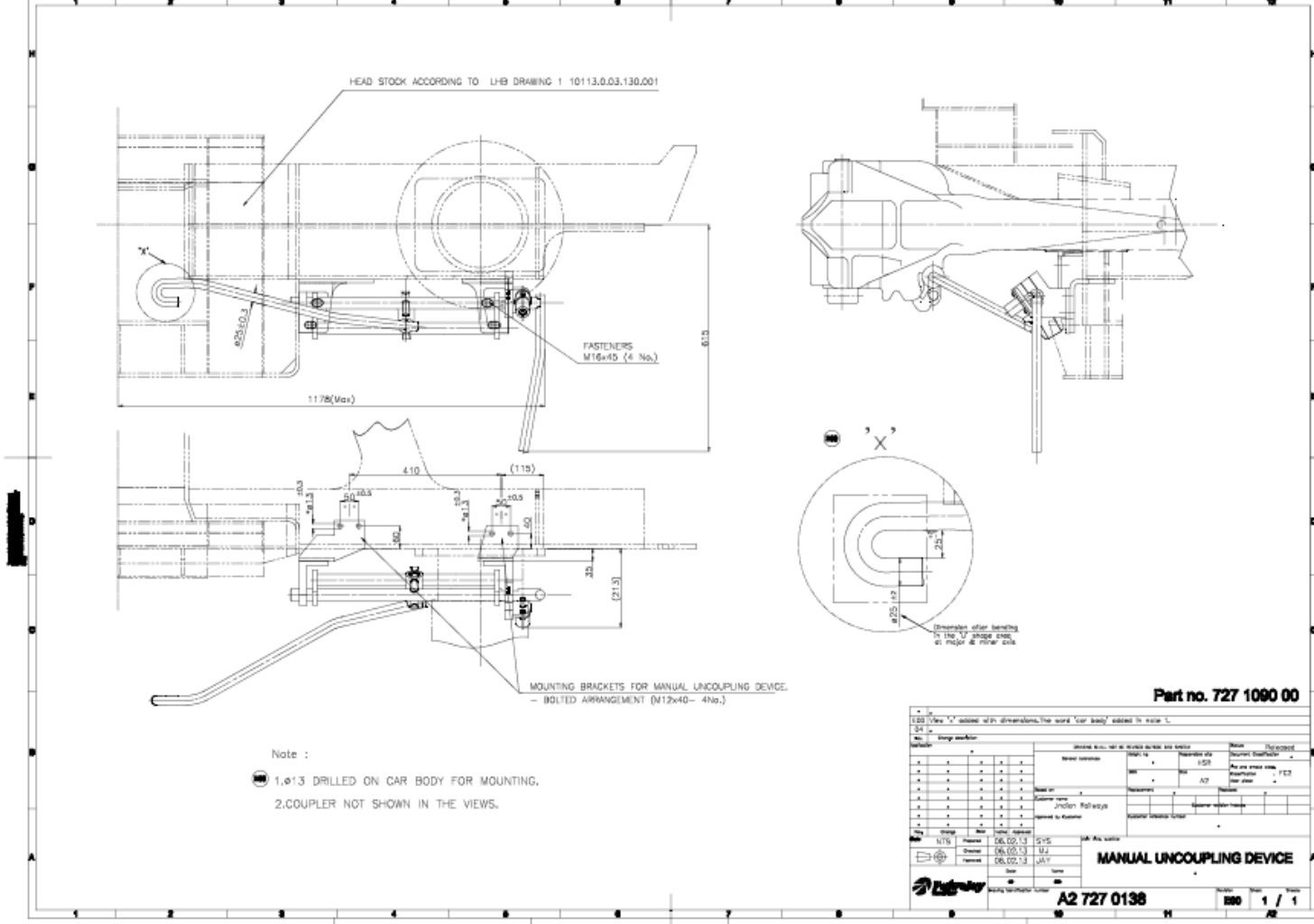
- NOTE:-**
- PRESSURE SETTING ON DUPLEX CHECK VALVE SHALL BE 1.5 BAR.
  - THE PRESSURE DROP SHALL BE LIMITED TO A MAX. OF 0.2 kg/cm<sup>2</sup> IN ONE HOUR WHEN TESTED AT 6kg/cm<sup>2</sup> FOR THE BOGIE PIPING ARRGT.
  - DIN 2391-C, DIN 17456 GRADE 1.4301 (X5CrNi18-10) NBK-3.1 B
  - ITEM MARKED \* THUS ARE TO BE SUPPLIED BY AIR SPRING/PNEUMATIC CONTROL EQUIPMENT MANUFACTURER IN SET.

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	PNEUMATIC PIPING ARRGT.	SUPERSEDES:	NIL		
WEIGHT	FILE	\\nas\bogie\assly\fiat.dwg\cont_i.dwg\lw36003.prt (3d)				
27.000	KG	PNEUMATIC PIPING ARRGT.				
S. AREA		SCALE SSE/REC 1:10 CHD SUNL				
NIL	M <sup>2</sup>	DRN ASKP				
LENGTH	M	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.	M	REF.ORG. NO. NIL				
NIL	M	INDIAN RAILWAYS STANDARD				
HEIGHT	M	PL NO. NIL				
NIL	M	DRG. NO. LW36003				
		ALT. NIL SIZE A SHEET 1/1				

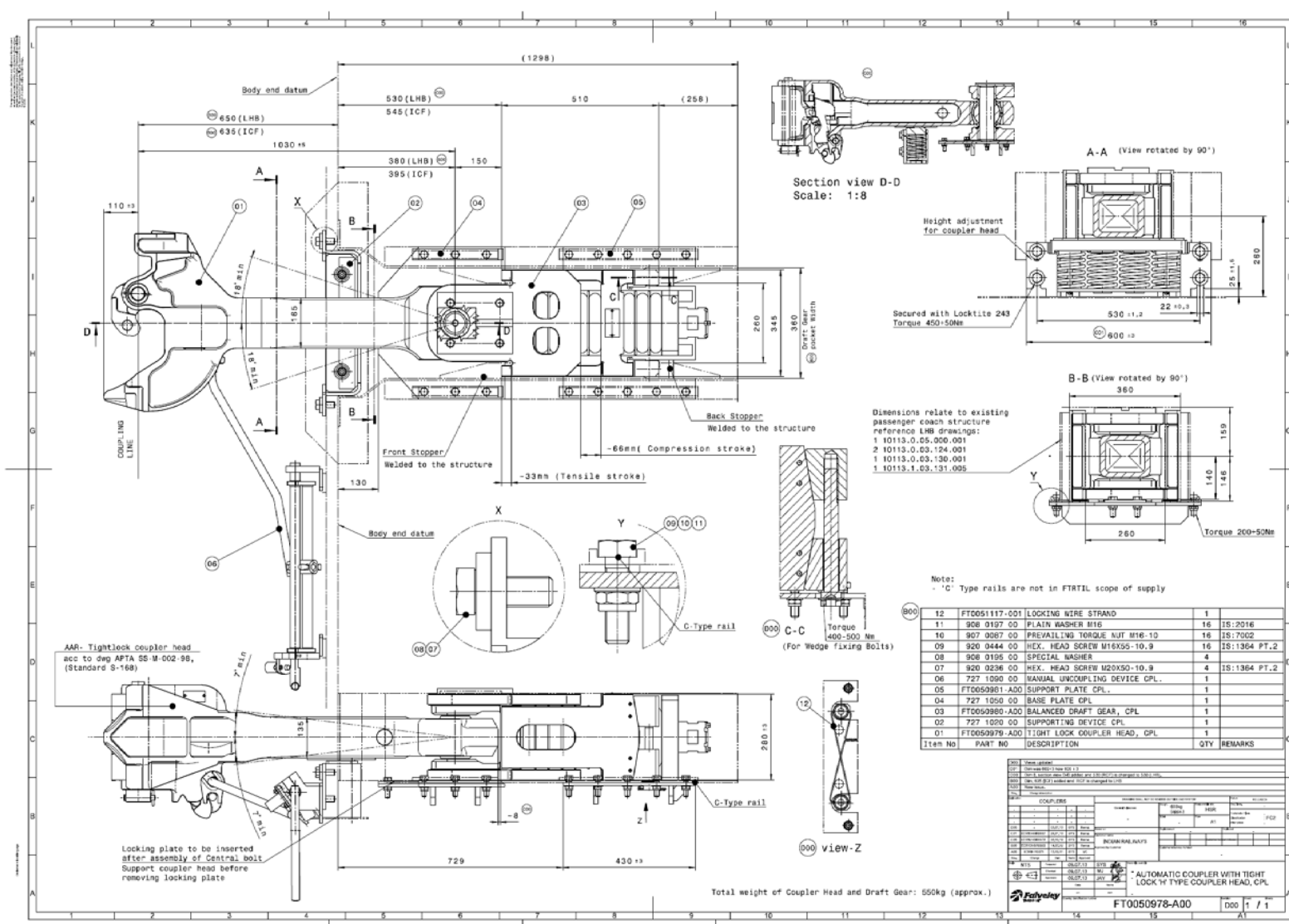
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. DATE OF FIRST ISSUE 06/03/2006 CGM BY



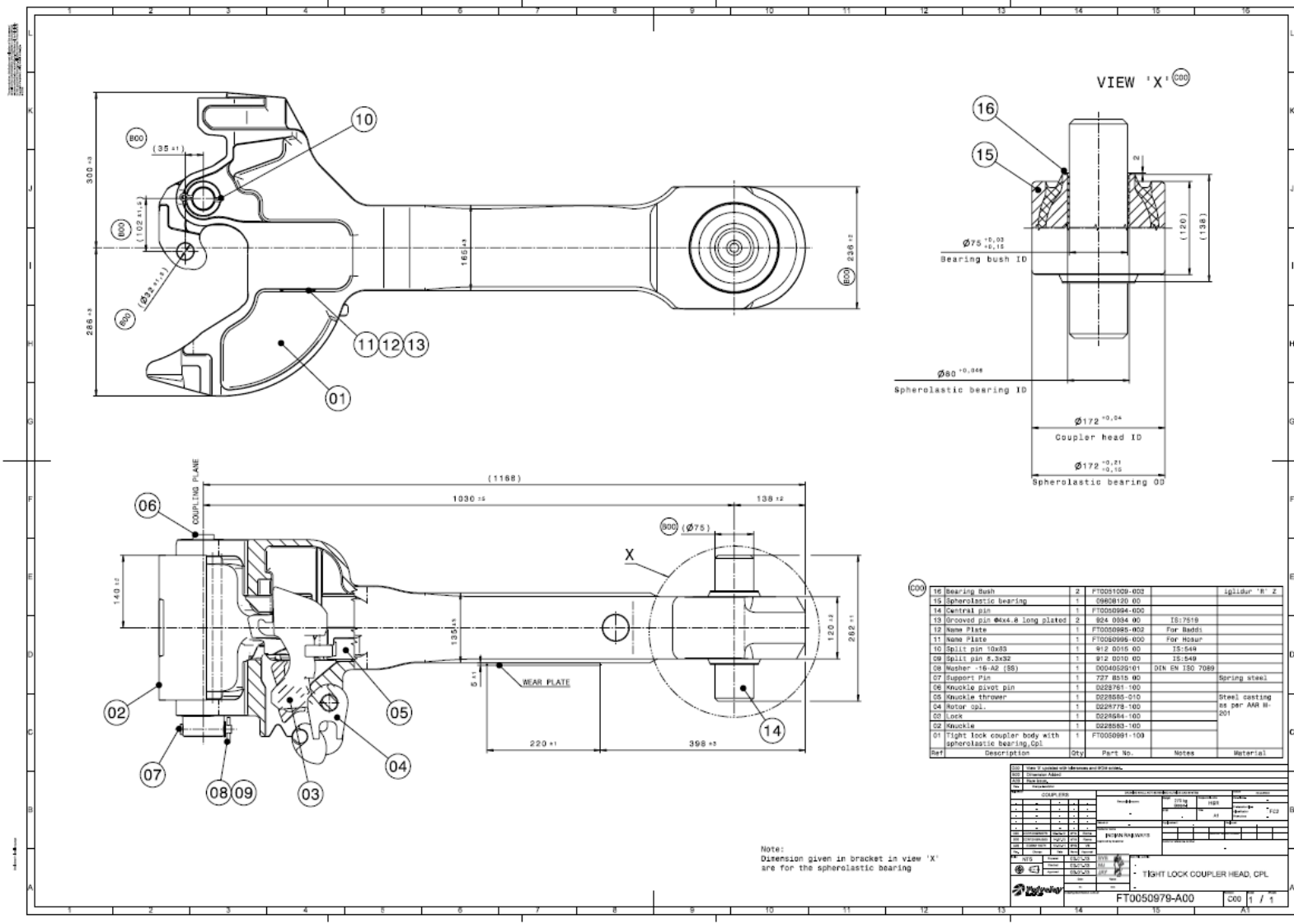
**Annexure 5 : Manual uncoupling device cpl. - (Part no. 727 1090 00)**



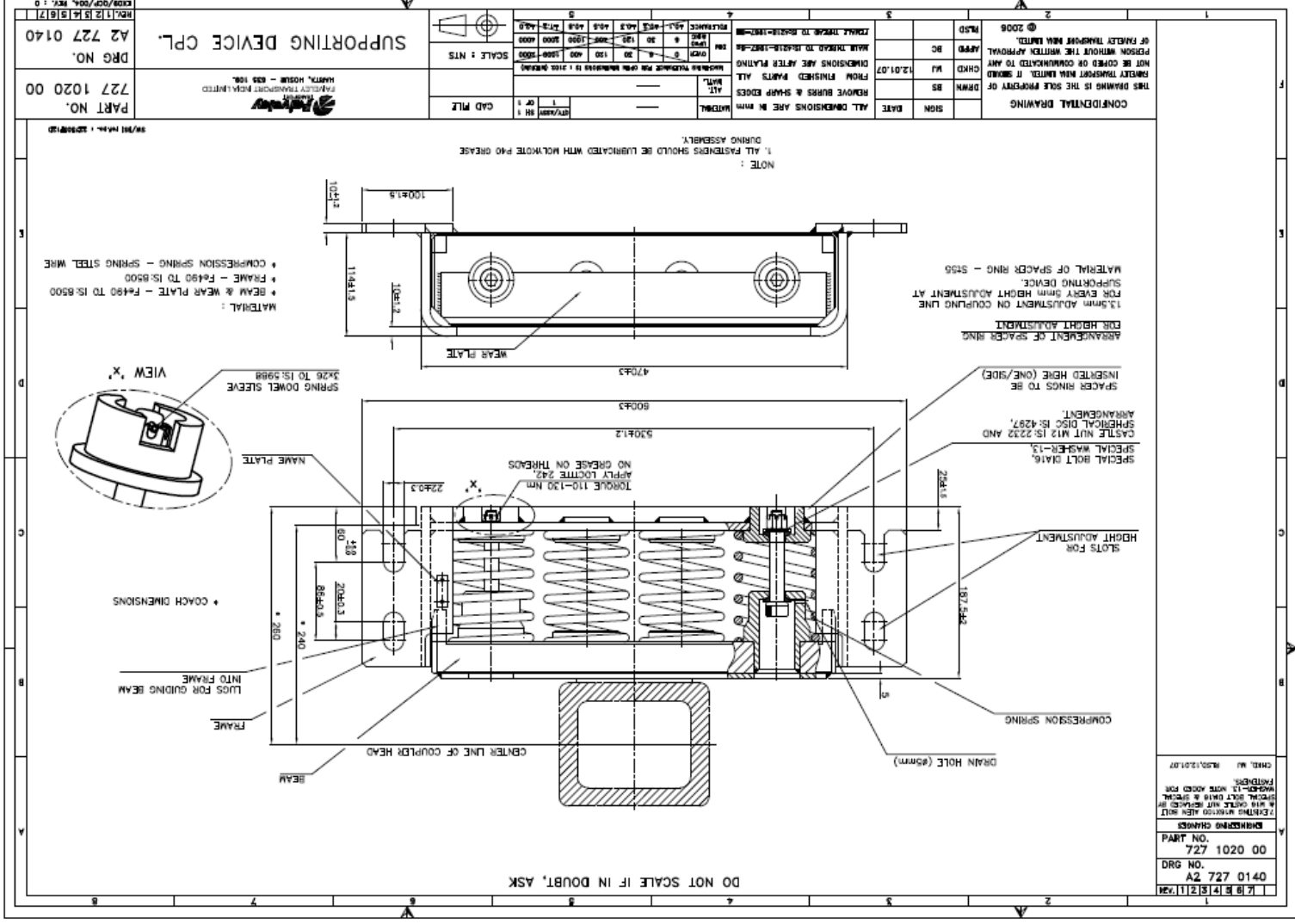
**Annexure 1 : Automatic Coupler with Tight lock Coupler Head cpl. – (Drg. no – FT0050978-A00)**



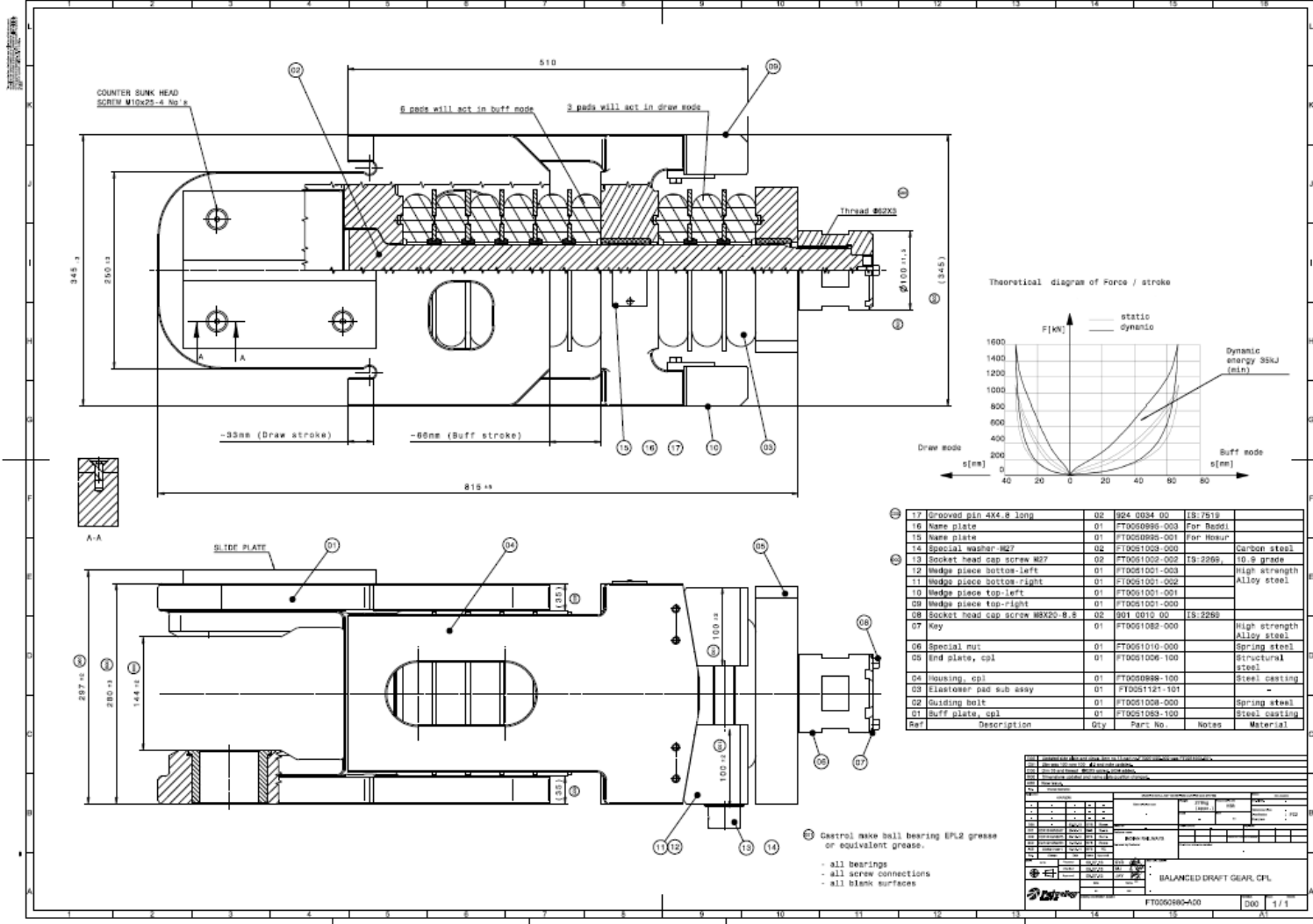
**Annexure 2 : Tight Lock Coupler head cpl. – (Drg. no. FT0050979-A00)**



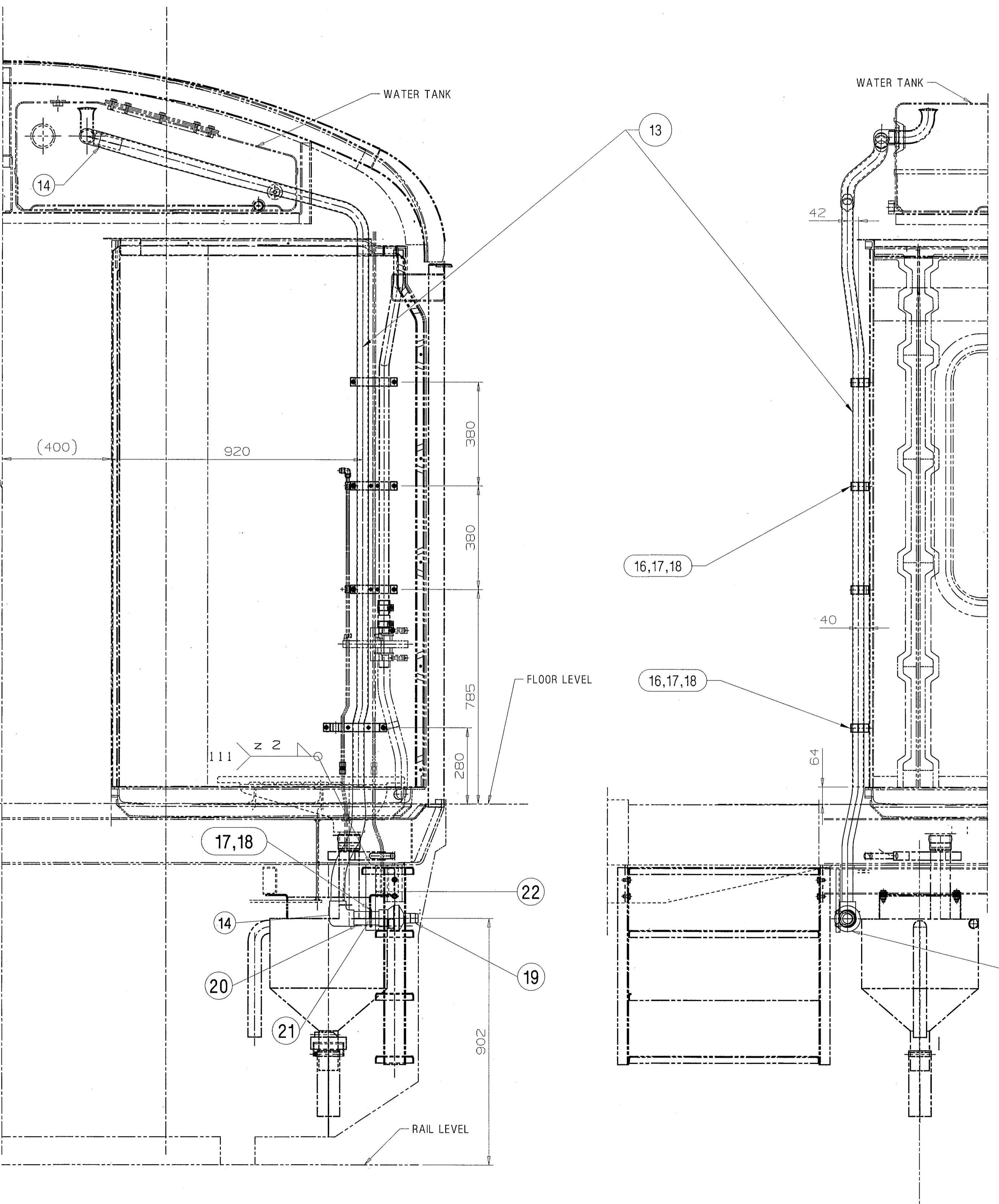
**Annexure 3 : Supporting Device cpl. – (Part no- 727 1020 00)**



**Annexure 4 : Balanced Draft Gear cpl.- (Drg. No.FT0050980-A00)**



THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RAIL COACH FACTORY, KAPURTHALA. THIS DRAWING SHOULD NOT BE REPRODUCED, ALTERED, USED FOR MANUFACTURING OF COMPONENTS, SOLD OR TRANSFERRED WITHOUT PERMISSION FROM CHIEF DESIGN ENGINEER, RAIL COACH FACTORY, KAPURTHALA.



ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
c	24/03/2010	J16, H16 BB, J11 F16 E16 J6 G17	1. ITEM 1,2,3,10,11,12 & 15 DELETED. 2. TOP VIEW & DETAIL AT-X DELETED. 3. ITEMS FROM 11 TO 22 ADDED. 4. NOTE 1 & 2 DELETED AND NOTE 3 TO 6 ADDED. 5. DIM 902 WAS 864. 6. OPA OF ITEMS 14,17,18 WERE 1,4,4 RESPECTIVELY.	MDO90048
d	21/07/2015	G17	1. DRAWING NO. ADDED FOR ITEM-14.	DIC NO. MD150025

NOTE:-

- Ø 8 HOLES ARE TO BE DONE ON THE MOUNTING BRACKET OF RETENTION TANK AS SHOWN IN DETAIL AT-X.
- THIS ANGLE MARKED THUS MAY BE ADJUSTED AT SITE TO AVOID INFRINGEMENT OF SIDE FILLING WITH RETENTION TANK.
- COMPOSITE PIPE SHOULD BE ISI MARKED ALONG WITH OTHER MARKING.
- PIPE FITTINGS SHOULD BE SUPPLIED BY O.E.M. OF ISI MARK COMPOSITE.
- ITEM-22 TO BE WELDED TO SUIT AT SITE.
- FOR DETAILS OF ITEM NO.-19 REFER DRG. NO.-CAMTECH M.COACH WATERING-08-S.

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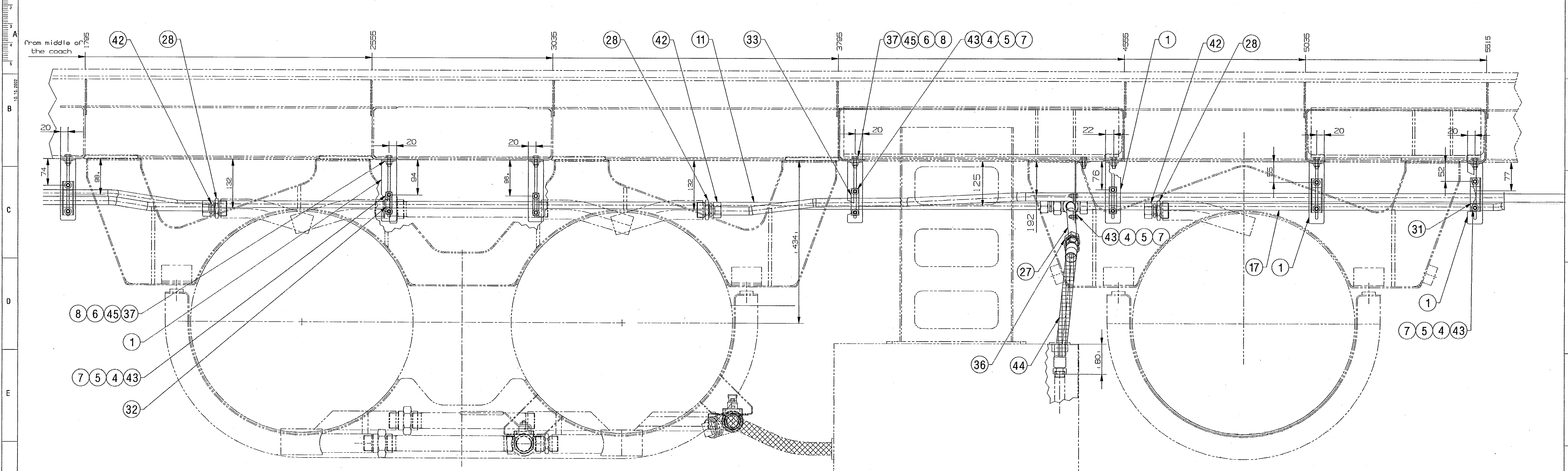
ITEM	DESCRIPTION & DIMENSIONS	QTY	ITEM NO.	IS: / SPEC.	REMARKS
22	ANGLE	2	LE63211	NIL	NIL
21	U-CLAMP	2	LE63210	NIL	NIL
20	STAINLESS STEEL PIPE Ø 48.26 X 2.77 X 135	2	NIL	NIL	NIL
19	MODIFIED COACH WATERING INLET (CONNECTOR WITH STRAINER)	2	NIL	MOTS-203	NIL
18	STAINLESS STEEL HEX NUT M6 (A2-70 TO IS:367 PT-14)	6	L1HWS508	IS: 1364 PT.3-92 ISO-4032	ITEM-2
17	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS:367 PT.14-1984)	6	L1HWS509	IS: 2016-1967 DIN125	ITEM-4
16	HALF CLAMP	4	FJ63143	NIL	NIL
15	COMPOSITE MALE CONNECTOR 3240 X 1 1/2" THREADS	1	NIL	IS: 15450-2004 ANNEXURE-A	NIL
14	COMPOSITE FEMALE ELBOW 3240 X 1 1/2" THREADS	2	LE63241	NIL	NIL
13	COMPOSITE PIPE (PE-AL-PE) SIZE-3240 L-4000	1	NIL	IS: 15450-2004	*
12	NYLOC NUT M6	2	L1HWS508	IS: 7002-91 A2-70	ITEM-8
11	MACHINED WASHER A 0.1	2	L1HWS509	IS: 2016-67 140HV-A2	ITEM-5
10	HEX HEAD SCREW M6X30	2	L1HWS502	IS: 1364(P.T-2)-9 2,A2-70,CE	ITEM-12
9	HOSE CLAMP-55	8	NIL	IS: 4762-84 AISI 304	NIL
8	ELBOW EQUAL BORE 40	1	NIL	IS: 1239(P.T-2)- THREADS TO 92TAB-8AISI 304 ISO 7/1	
7	HOSE Ø 42	1	NIL	DIN 73411 ELASTOMER	L=1000
6	FILLING PIPE	1	LG63130	NIL	NIL
5	HOSE Ø 42	1	NIL	DIN 73411 ELASTOMER	L=550
4	HOSE COUPLING	2	LG63131	NIL	NIL
3	REDUCING ELBOW BORE 50X40	1	NIL	IS: 1239(P.T-2)- THREADS TO 92TAB-9AISI 304 ISO 7/1	
2	RUNNING NIPPLE BORE 50 X 55	1	NIL	IS: 1239(P.T-2)- 92TAB-2AISI 304	NIL
1	FILLING FLAP COMPLETE	1	LG63126	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & IT'S FITTINGS				SUPERSEDES: LG63129 ALT c	
WEIGHT	FILE	\\LG63129d.PRT (2D)					
7.500	KG						
S. AREA	M <sup>2</sup>						
NIL	M <sup>2</sup>						
LENGTH/DIA	M						
NIL	M						
WIDTH/THICK.	M						
NIL	M						
HEIGHT	M						
NIL	M						

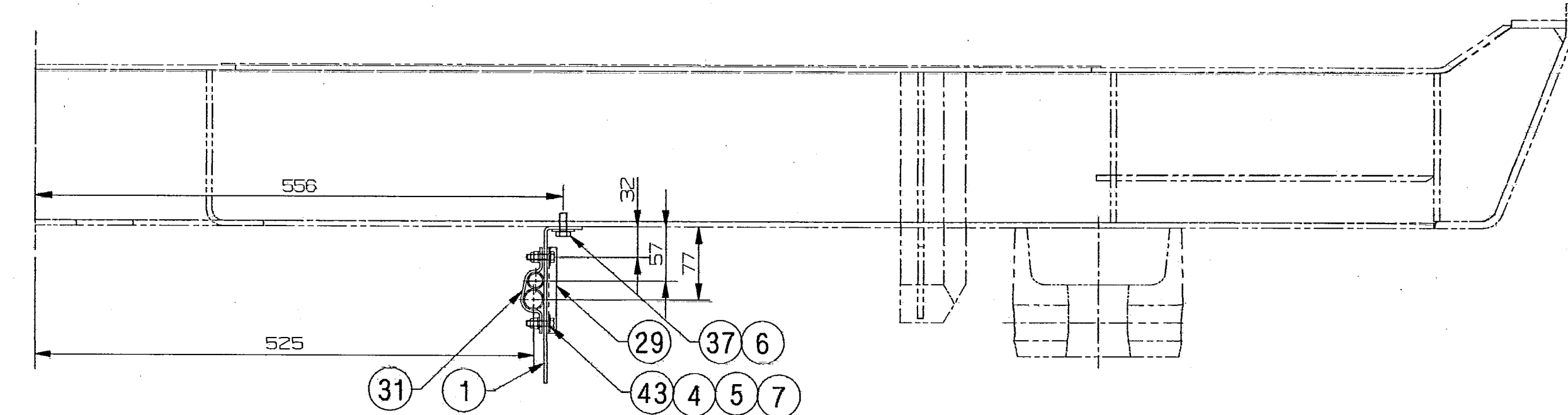
**FILLING CONNECTION**

RAIL COACH FACTORY, KAPURTHALA

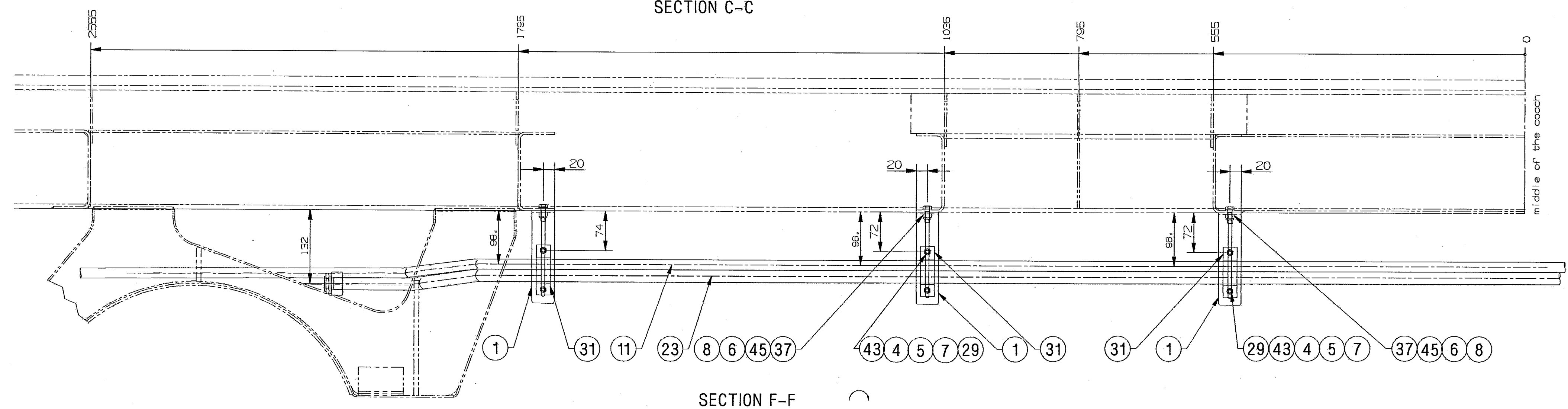
रेल कोच फैक्टरी कपूरथला      IRS      PL NO. 00000000  
 DRG. NO. LG63129  
 SCALE 1:10      SSE/REC      CHD      TPI      DRN      RAVI



SECTION G-G



SECTION C-C



SECTION F-F

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

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ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.  
 FOR UNTOLERANCED DIMENSIONS REFER MDG0008  
 DATE OF FIRST ISSUE 30/10/2001  
 CGM BY [Signature]

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTING	SUPERSEDES: LE63106 ALT a			
WEIGHT	FILE	\\XD:\home\kshk\le63106b.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER UNDER THE COACH		SCALE	SSE/REG	[Signature]
S.AREA	M <sup>2</sup>	FOR AC THREE TIER (EOG) LHB TYPE COACH		1:5	CHD	[Signature]
LENGTH/DIA	M	RAIL COACH FACTORY, KAPURTHALA		DRN	ICSMK	[Signature]
WIDTH/THICK.	M	INDIAN RAILWAYS STANDARD		REF.DRG.No.	10113.0.30.100.004	
HEIGHT	M	PL NO. 01156548		ALT.	b	SIZE/A/SHEET/3/6
NIL	M	DRG.NO. LE63106				

middle of the coach

SECTION A-A

SECTION B-B

SECTION H-H

Note:- All screw connections/ bolt connections, with or without nuts, of stainless steel that are not to be secured with acrylester screw protection (Loctite) have to be greased with molybdenum disulphide (Molykote) prior to be screwed in.

from middle of the coach

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Date

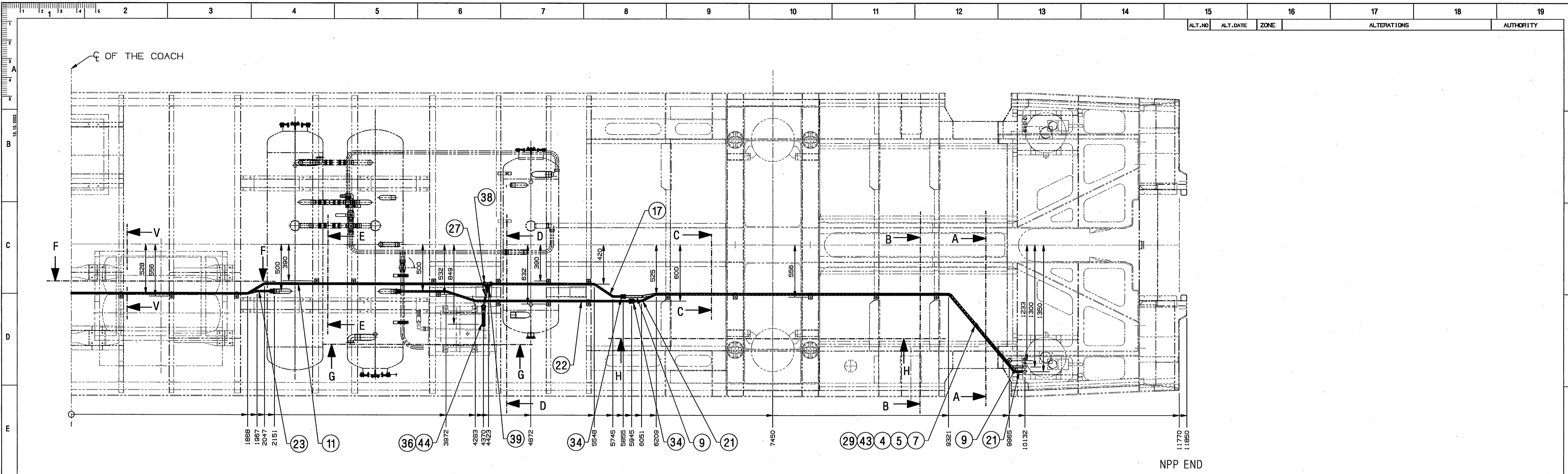
18 DEC 2008

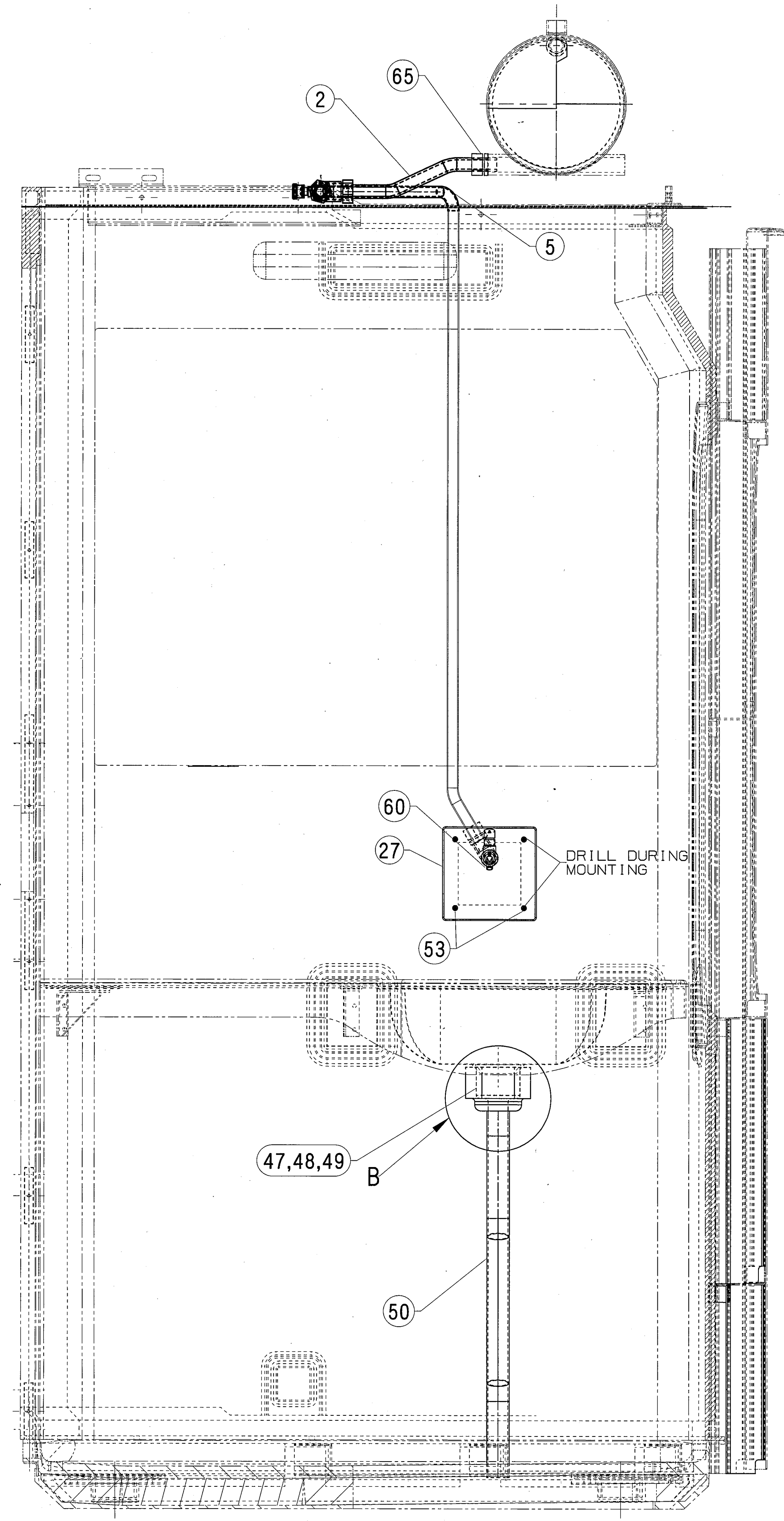
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTING	SUPERSEDES: LE63106 ALT a			
WEIGHT	FILE	\\D:\home\kshk\le63106b.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER UNDER THE COACH FOR AC THREE TIER (EOG) LHB TYPE COACH				
S. AREA	M <sup>2</sup>	RAIL COACH FACTORY, KAPURTHALA				
LENGTH/PIA	M	INDIAN RAILWAYS STANDARD				
WIDTH/THICK.	M	PL NO. 01156548				
HEIGHT	M	DRG.NO. LE63106				
NIL	M	SCALE 1:5				
		REF.DRG.No. 1 10113.0.30.100.004				
		CDE ALT. 6 SIZE A1 SHEET 2/6				

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

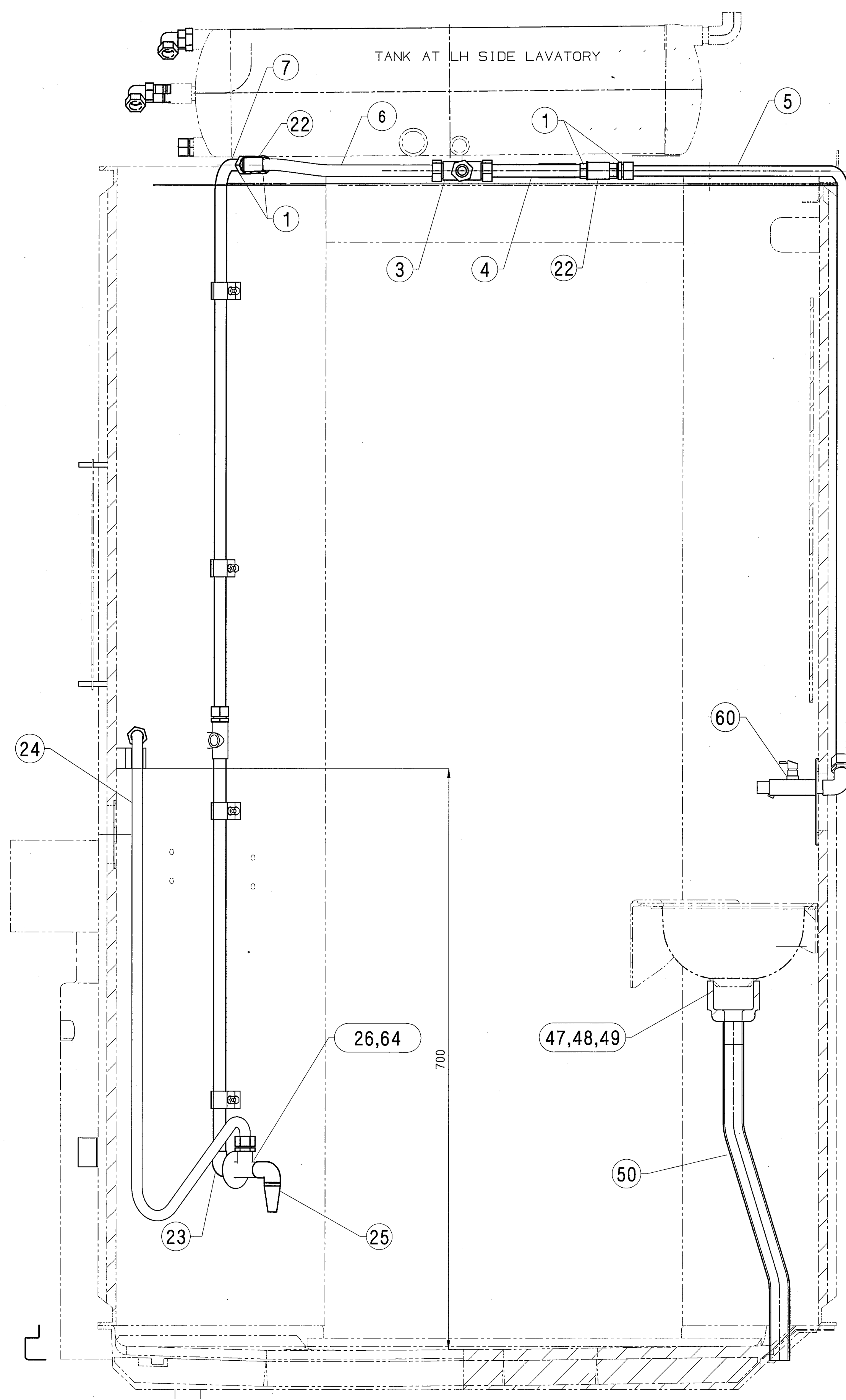
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE 30/10/2001 CGM BY







SECTION G-G



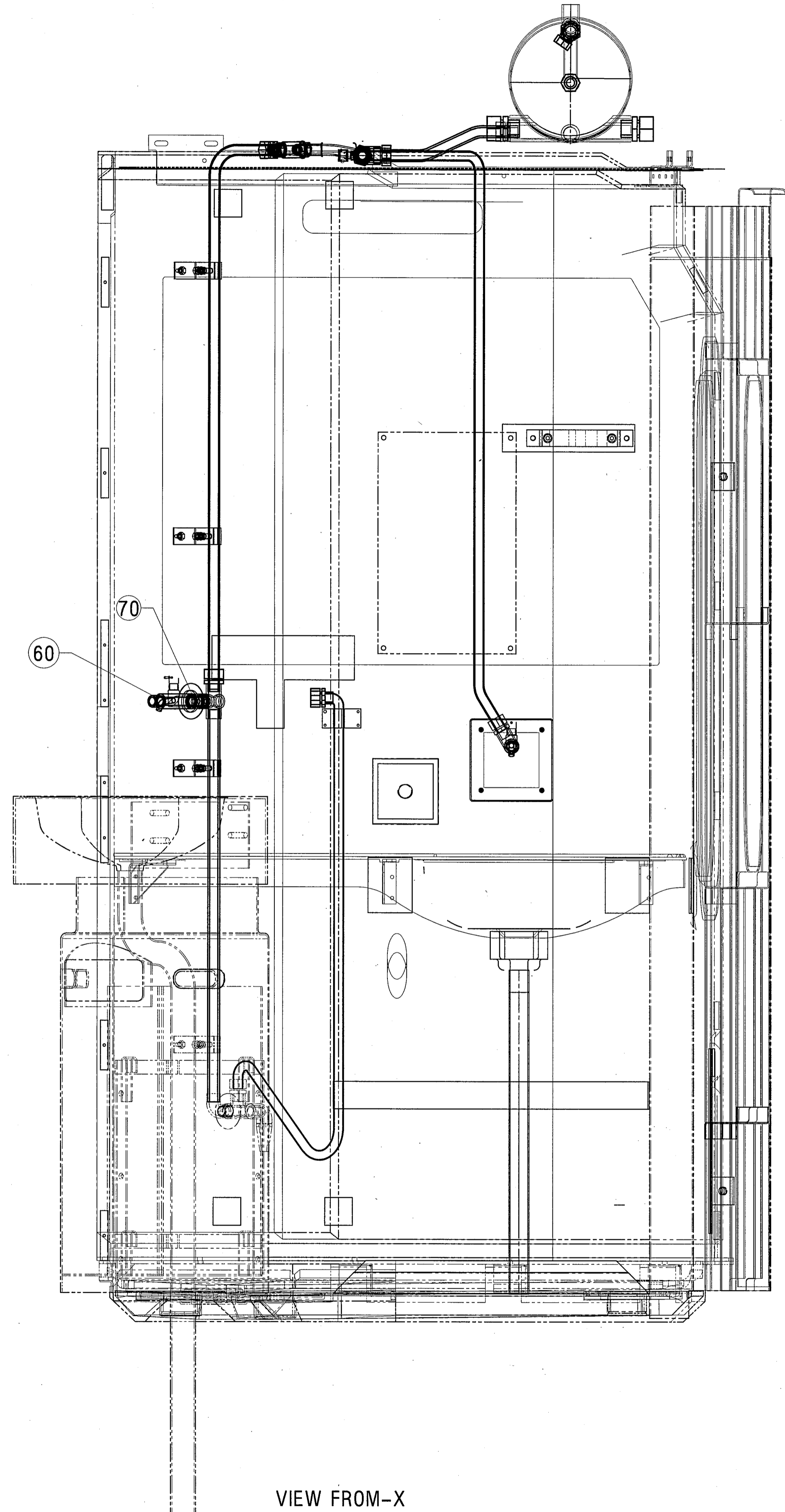
SECTION J-J

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTINGS			SUPERSEDES: LE63157 ALT e	
WEIGHT	FILE	\\1e63157P.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA		AT RH LAVATORY IN LHB TYPE COACH				
NIL	M <sup>2</sup>	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/TH+OK.		REF.DRG.No. NIL				
NIL	M	रेल कोच फैक्टरी कपूरथला			IRS	PL NO. NIL
HEIGHT		ADE/SME			DY.CME	DRG.NO. LE63157
NIL	M	CDE ALT. SIZE A1 SHEET 2/3				

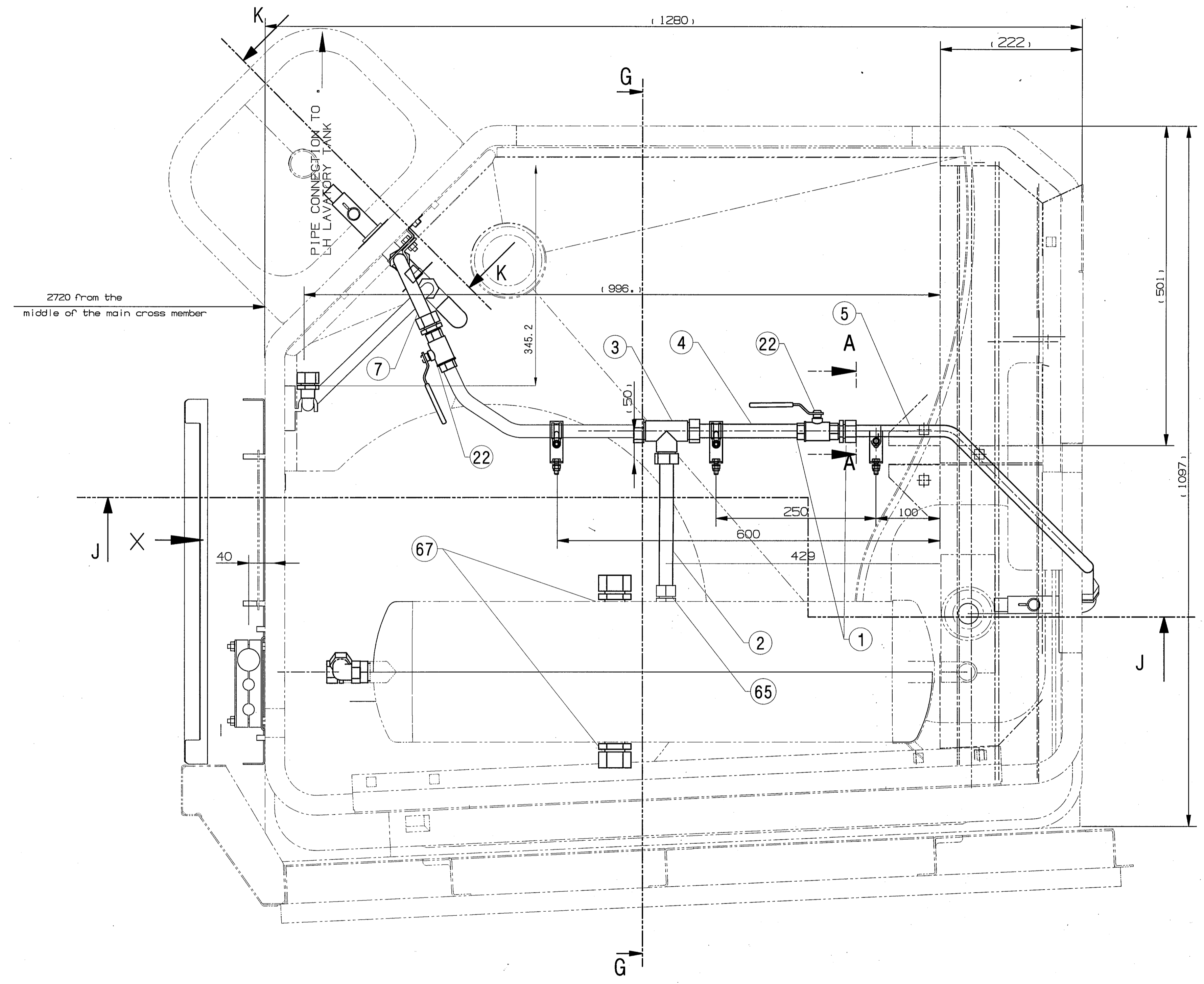
22 JUN 2013

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE: 08/10/2006  
CGM BY: *A/S*



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22 JUN 2013

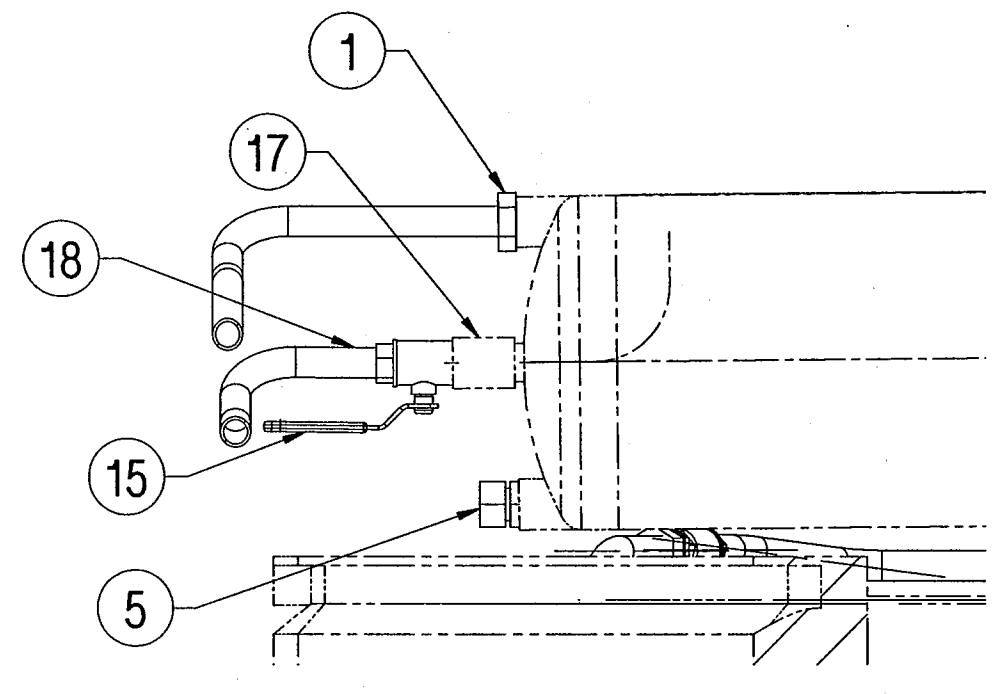
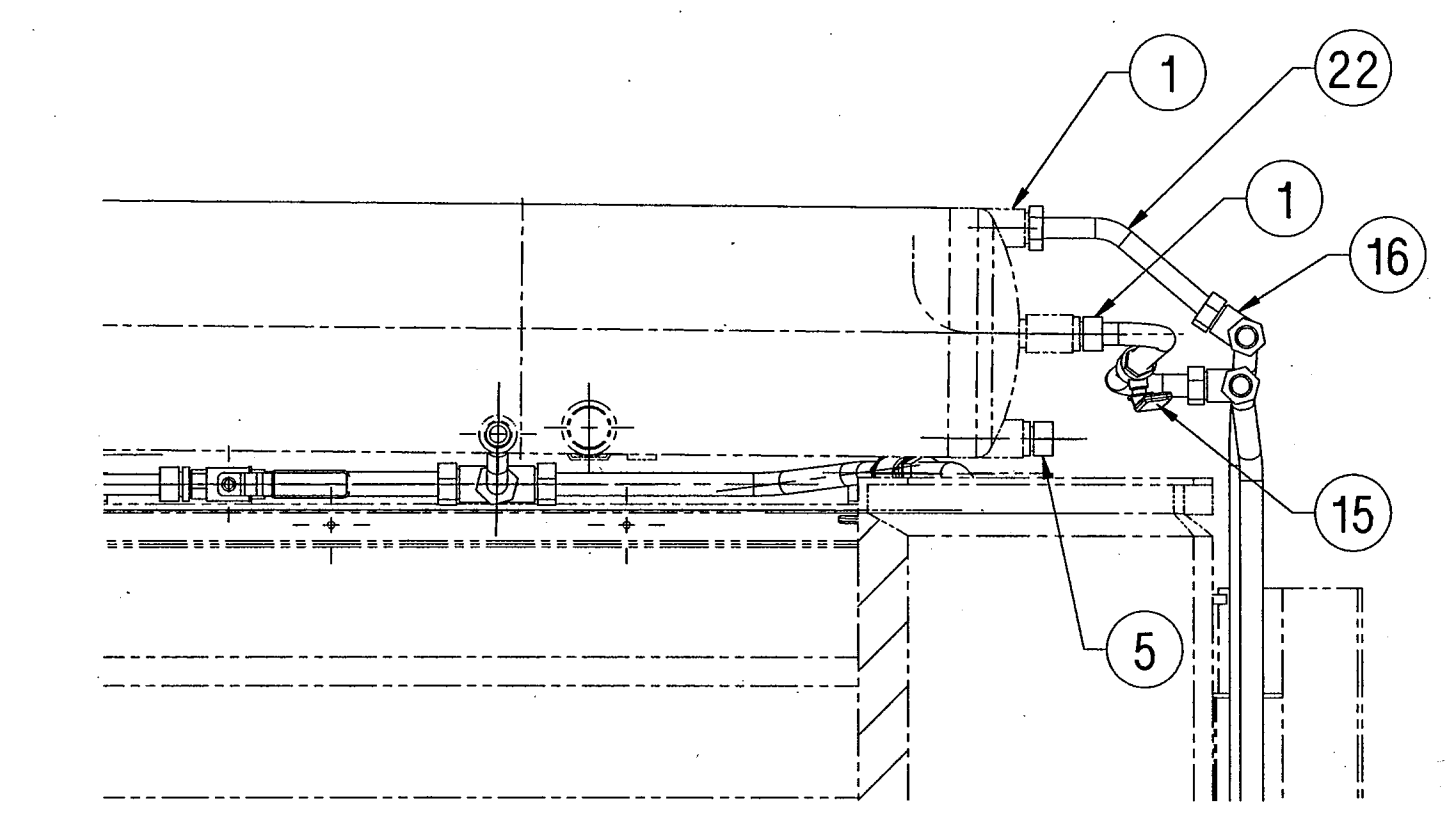
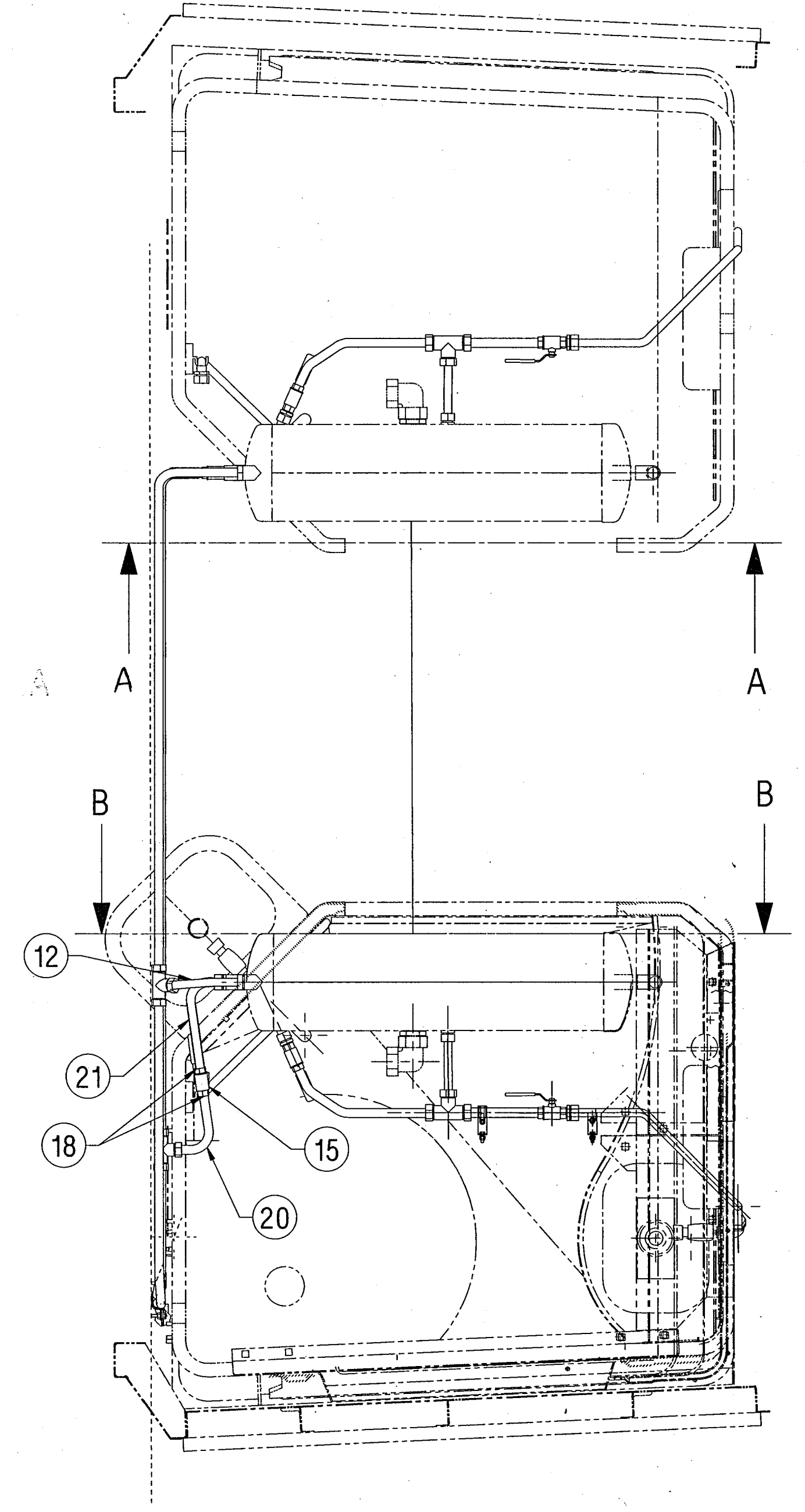
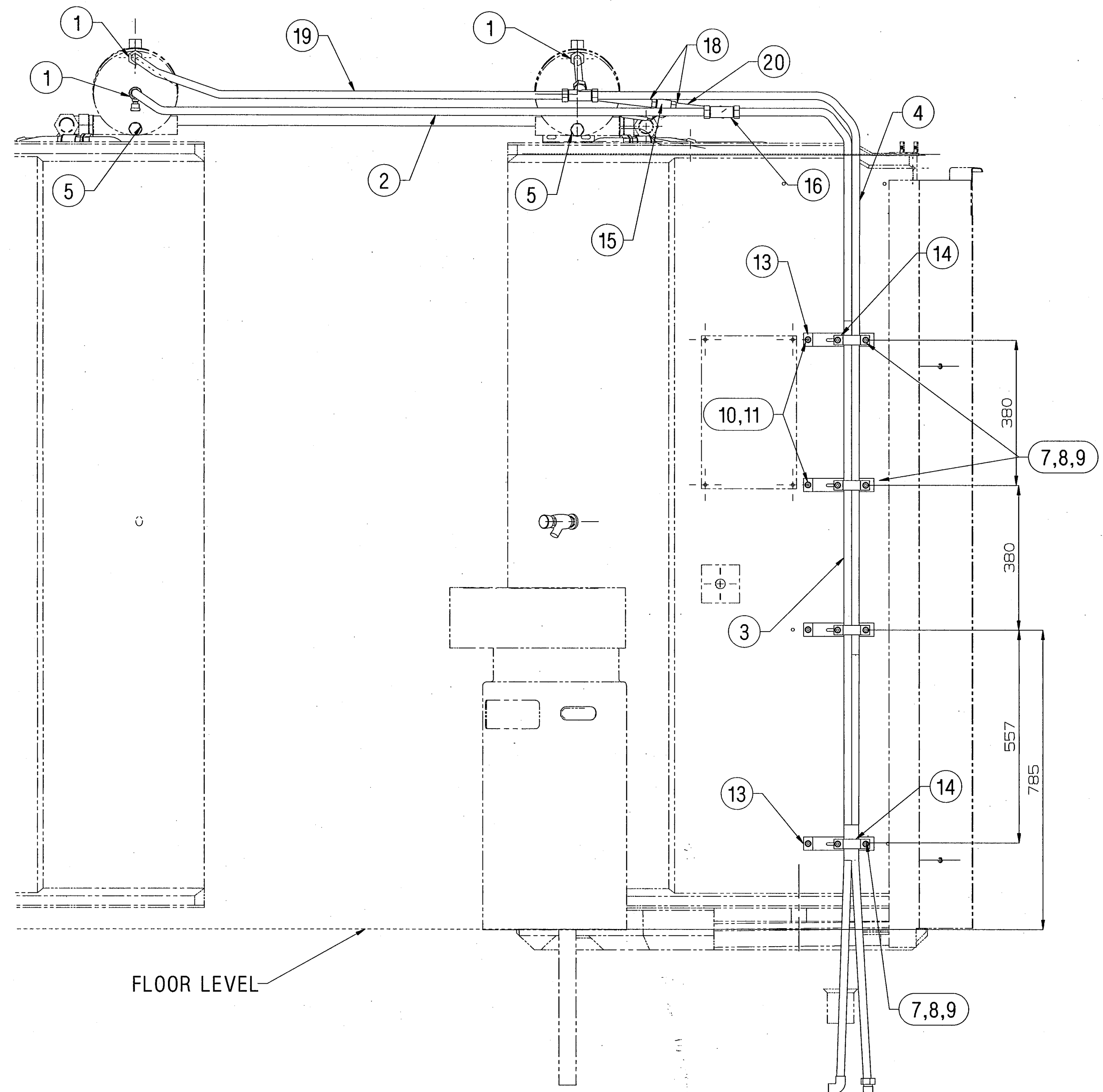
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NIL	M	GROUP LAVATORY & ITS FITTINGS	SUPERSEDES: LE63157 ALT e			
WEIGHT	FILE	\\le63157f.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA		SCALE SSE/REC 1:5 CHD TPSI				
NIL	M <sup>2</sup>	AT RH LAVATORY IN LHB TYPE COACH				
LENGTH/DIA		RAIL COACH FACTORY, KAPURTHALA				
NIL	M	REF.DRG.No. NIL				
WIDTH/THICK.		रेल कोच फैक्टरी कपूरथला				
NIL	M	IRS				
HEIGHT		PL NO. NIL				
NIL	M	DRG.NO. LE63157				
		ADE/SME				
		DY.CME				
		CDE				
		ALT. F SIZE/A/SHEET 1/3				

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

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DATE OF FIRST ISSUE 08/10/2006 CGM BY *Aji*

ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
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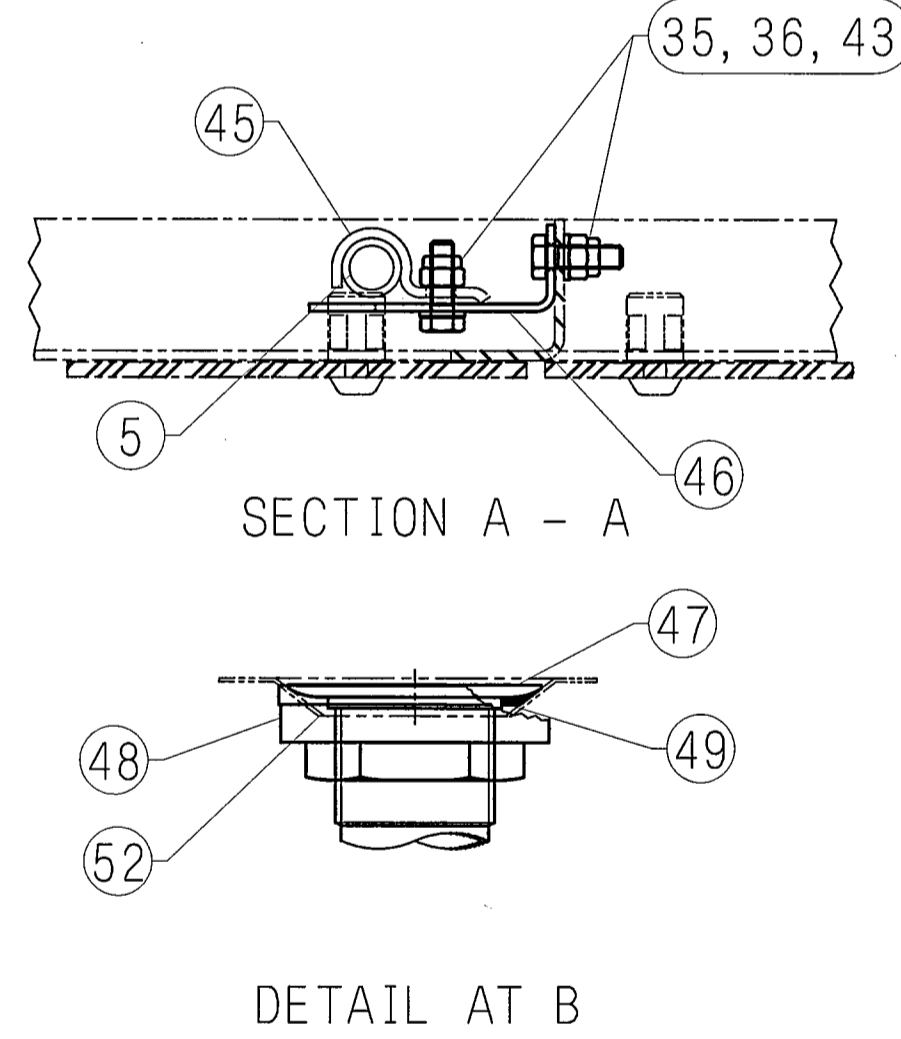
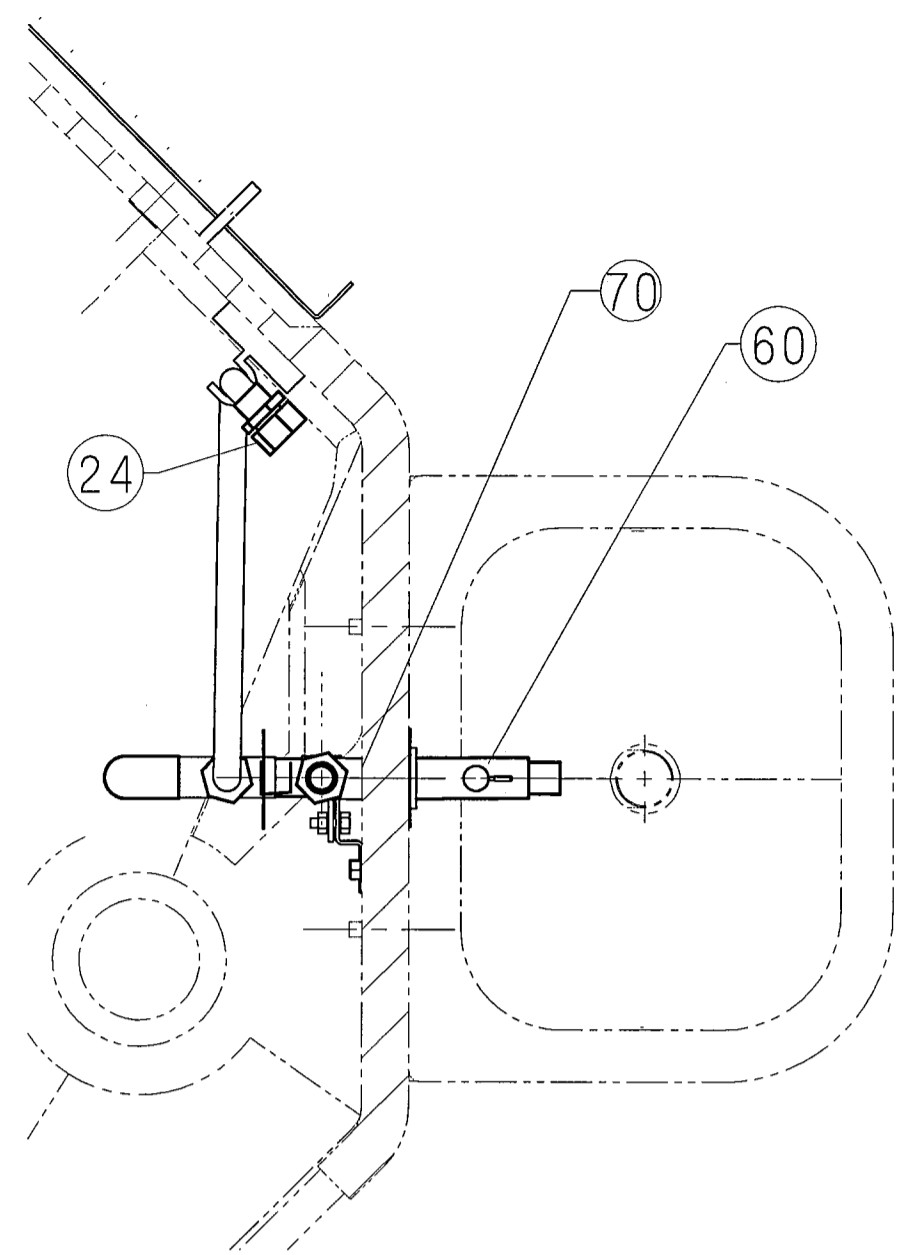
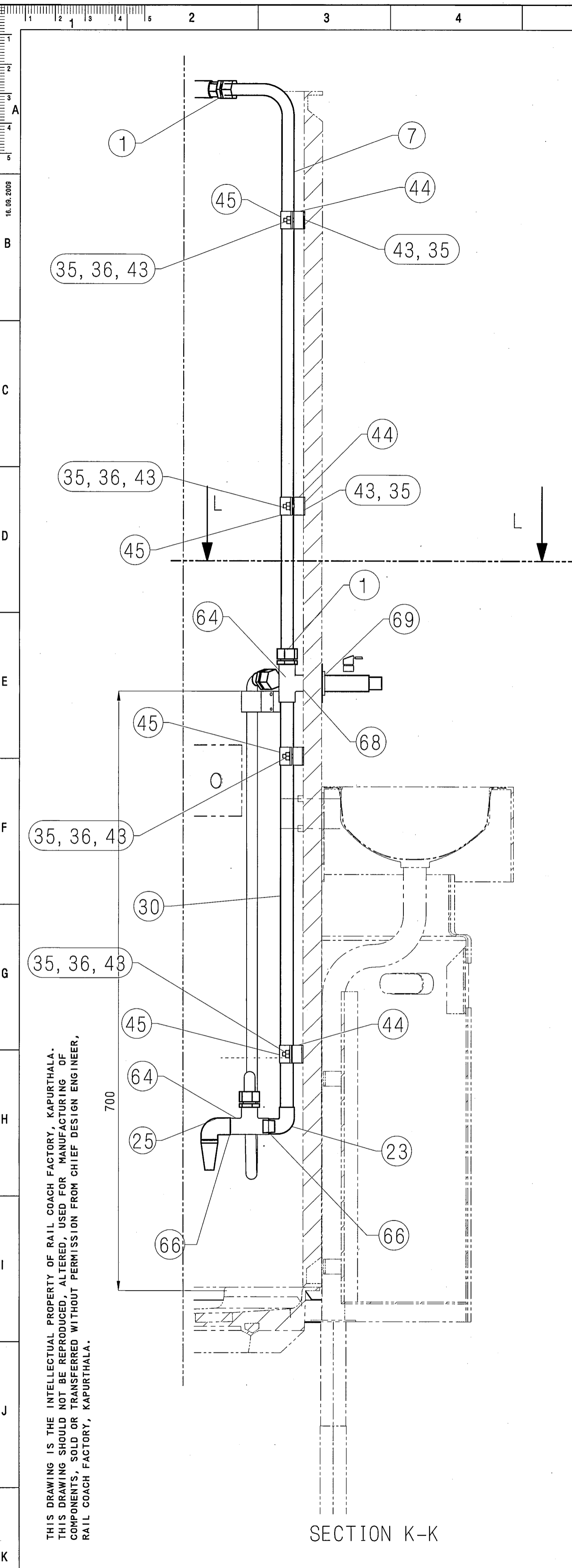


NOTE  
 \* 1. COMPOSITE PIPE SHOULD BE ISI MARKED ALONG WITH OTHER MARKING.

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ITEM	DESCRIPTION & DIMENSIONS	QTY	STANDARD	MATERIAL	REMARKS
21	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=280MM	1	NIL	IS: 15450-2004	*
20	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=200MM	1	NIL	IS: 15450-2004	*
19	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=1400MM	1	NIL	IS: 15450-2004	*
18	MALE THREAD CONNECTOR 1620 X 1/2"	2	LE63222	NIL	NIL
17	REDUCING NIPPLE 3/4" X 1/2"	1	NIL	IS: 1879 87 TAB 7.2 AISI 304	THREADS ISO 7/1
16	EQUAL TEE 1620	2	LE63218	NIL	NIL
15	BALL VALVE 15 BORE	2	LW63106	NIL	NIL
14	CLIP	4	LE63237	NIL	NIL
13	SUPPORTING BRACKET	4	LE63228	NIL	NIL
12	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=225 MM	1	NIL	IS: 15450-2004	*
11	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS:1367 PT.14)	4	LHW5508	IS: 7002-1991 DIN982	ITEM -8 COATING TO MOT'S 057
10	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS:1367 PT.14-1984)	4	LHW5509	IS: 2016-1967 DIN125	ITEM -5
9	STAINLESS STEEL NYLOC NUT M6 A2-70 TO IS:1367 PT-14)	8	LHW5508	IS: 7002-1991 DIN982	ITEM -7 COATING TO MOT'S 057
8	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS:1367 PT. 14-1984)	8	LHW5509	IS: 2016-1967 DIN-125	ITEM -4
7	STAINLESS STEEL HEX HEAD SCREW M6X60 (A2-70 TO IS:1367PT-14-84)	8	LHW5502	IS: 1364 PT.2-92 CE	ITEM -9 COATING TO MOT'S-057
6	FEMALE ELBOW 1620X3/4"	2	LE63235	NIL	NIL
5	PLUG 20 BORE	4	NIL	IS: 1239 (PT.2) 92 TAB 2.0, AISI 304	THREADS ISO 7/1
4	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=3300 MM	1	NIL	IS: 15450-2004	*
3	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=2900MM	1	NIL	IS: 15450-2004	*
2	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=1650MM	1	NIL	IS: 15450-2004	*
1	MALE THREAD CONNECTOR 1620X3/4"	4	LE63230	NIL	NIL

WELD LENGTH	NIL	GROUP	M	SCALE	1:5	DATE	29/09/10
WEIGHT	NIL	FILE	\\1e63227.prt (3D)	SCALE	CHD	DATE	29/09/10
NIL	NIL	FILE	\\1e63227.prt (3D)	SCALE	DRN	DATE	29/09/10
PIPING ARRANGEMENT				SCALE	CHD	DATE	29/09/10
FOR OVERHEAD AUX. WATER TANKS				SCALE	DRN	DATE	29/09/10
RAIL COACH FACTORY, KAPURTHALA				SCALE	DRN	DATE	29/09/10
REF. DRG. NO. NIL				SCALE	DRN	DATE	29/09/10
रेल कोच फैक्टरी कपूरथला				SCALE	DRN	DATE	29/09/10
IRIS				SCALE	DRN	DATE	29/09/10
PL NO. NIL				SCALE	DRN	DATE	29/09/10
DRG. NO. LS63121				SCALE	DRN	DATE	29/09/10
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DRG. NO. LS63121				SCALE	DRN	DATE	29/09/10
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DRG. NO. LS63121				SCALE	DRN	DATE	



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- NOTE:
- ITEM NO. 24, 25 SHOULD BE PROCURED FROM REPUTED BRANDS ONLY. & SURFACE FINISH OF THESE ITEMS SHOULD BE VERY HIGH QUALITY AS THESE ITEMS SHALL BE USED INSIDE COACH AND VISIBLE TO PASSENGERS.
  - COMPOSITE PIPE SHOULD BE ISI MARKED ALONG WITH OTHER MARKING.
  - PIPE FITTINGS SHOULD BE SUPPLIED BY O.E.M. OF ISI MARK COMPOSITE PIPE ONLY.
  - BIB COCK (CAT. NO. 29037) FUSION RANGE OF M/S JAQUAR/MSO-2080 OF M/S MARC/FN0BCCH OF M/S DORSET/HR03 OF M/S ESS/SE-00202 OF AGMECO SUBJECT TO COMPLIANCE OF FIRM WITH CLAUSE 3 TO CLAUSE 7 OF SECTION 'A' OF RDSO/2008/CG-05.
  - REPUTED BRANDS LIKE JAQUAR, KOHLER, ROCA, PARRYWARE OR EQUIVALENT AS APPROVED BY CDE, RCF.

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
g	21/07/2015	J6	1. NOTE-4 UPDATEFD.	DIC NO. MD150025
h	07/03/2017	E-15	1. LENGTH OF ITEM-24 (HEALTH FAUCET) REDUCE FROM 1.5m TO 1.2m.	DIC NO. MD170008

ITEM NO.	DESCRIPTION	QTY	UNIT	IS: / ANNEXURE	ITEM -	REMARKS
40	COMPOSITE FEMALE ELBOW 1620 WITH 3/4" THREADS	1	NIL	IS: 15450 ANNEXURE A	NIL	
39	BRACKET	3	LE63167	NIL	NIL	
38	BRACKET	3	LE63166	NIL	NIL	
37	BRACKET	3	LE63165	NIL	NIL	
36	STAINLESS STEEL NYLOC NUT M6 A2-70 TO IS: 1367 PT-14)	10	L1HWSS08	IS: 7002-1991 DIN982	ITEM -7 COATING TO MTS-057	
35	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS: 1367 PT. 14-1984)	15	L1HWSS09	IS: 2016-1967 DIN-125	ITEM -4	
34	STAINLESS STEEL HEX HEAD SCREW M6X60 (A2-70 TO IS: 1367PT-14-84)	11	L1HWSS02	IS: 1364 PT. 2-92 CE	ITEM -9 COATING TO MTS-057	
33	BRACKET	1	LE63150	NIL	NIL	
32	BRACKET	1	LE63149	NIL	NIL	
31	BRACKET	1	LE63148	NIL	NIL	
30	PIPE Ø 21.34 X 2.77 X 700MM	1	NIL	ASTM A-312 GR. -TP304	ISO THREADS 7/1	
29	TEE EQUAL, SIDE OUTLET 15 BORE	1	NIL	IS: 1239(P2)-92 TAB. -14 AISI304	NIL	
28	BARREL NIPPLE 15 BORE	1	NIL	IS: 1239(P2)-92 TAB. -2 AISI304	NIL	
27	MOUNTING PLATE	2	LE63147	NIL	NIL	
26	PIPE FOR LOTAN FILLER	1	LE63193	NIL	SEE NOTE-1&2	
25	GRAVITY COCK	1	CC63933	NIL	SEE NOTE-1	
24	HEALTH FAUCET 1/2" WITH 1.2 METER HOSE, CRIPPLED ENDS WITH BRASS UNION NUTS AND WITH MOUNTING BRACKET	1	NIL	NIL	#	
23	ELBOW EQUAL 15	2	NIL	IS: 1239(P2)-92 TAB. -8 AISI304	THREADS ISO-7/1	
22	BALL VALVE 1/2"	2	LW63106	NIL	ITEM-3	
21	PIPE	1	LE63146	NIL	NIL	
20	SCREW JOINT	1	NIL	GE22-PL/R3/4KEG	NIL	
19	SCREW JOINT	1	NIL	GE-18PL/R1/2KEG	NIL	
18	COMPOSITE PIPE (PE-AL-PE) SIZE-2532 L=1600MM	1	NIL	IS: 15450-2004	NIL	
17	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=2300MM	1	NIL	IS: 15450-2004	*	
16	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=5000MM	1	NIL	IS: 15450-2004	*	
15	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=3500MM	1	NIL	IS: 15450-2004	*	
14	PLUG 20 BORE	2	NIL	IS: 1239(P2) 92 TAB. -20 AISI304	THREADS ISO 7/1	
13	HEXAGON BUSH 20X15 BORE	1	NIL	IS: 1239(P2) 92 TAB. -27 AISI304	THREADS ISO 7/1	
12	COMPOSITE INTERNAL SEAL ELBOW SIZE-2532	1	NIL	IS: 15450-2004 ANNEXURE A	NIL	
11	COMPOSITE PIPE (PE-AL-PE) SIZE-2532 L=700MM	1	NIL	IS: 15450-2004	NIL	
10	COMPOSITE INTERNAL SEAL MALE STUD CONNECTOR SIZE- 2532 WITH 1 1/4" THREADS	1	NIL	IS: 15450-2004 ANNEXURE A	NIL	
9	EQUAL ELBOW 32 BORE	1	NIL	IS: 1239(P2) 92 TAB. 8 AISI304	NIL	
8	HEX NIPPLE 32 BORE	1	NIL	IS: 1239(P2) 92 TAB. 28 AISI304	NIL	
7	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=1200MM	1	NIL	IS: 15450-2004	*	
6	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=350MM	1	NIL	IS: 15450-2004	*	
5	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=1600MM	1	NIL	IS: 15450-2004	*	
4	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=200MM	1	NIL	IS: 15450-2004	*	
3	EQUAL TEE 1620	1	LE63218	NIL	NIL	
2	COMPOSITE PIPE (PE-AL-PE) SIZE-1620 L=300MM	1	NIL	IS: 15450-2004	*	
1	MALE CONNECTOR 1620 X 1/2"	6	LE63222	NIL	NIL	

WELD LENGTH ITEM DESCRIPTION & DIMENSIONS GPASSLY DETAIL DRG MATL. & SPEC. REMARKS

NIL M GROUP LAVATORY & ITS FITTINGS SUPERSEDES: LE63157 ALT g

WEIGHT FILE \\1663157h.pr1 (3D)

NIL KG S. AREA

NIL M2 LENGTH/HT

NIL M WIDTH/THICK.

NIL M HEIGHT

NIL M

08 MAR 2017

ENTERED INTO DATA BASE

SCALE 1:5 CHD T PSI

PIPE LAYING FOR WATER

AT RH LAVATORY IN LHB TYPE COACH

RAIL COACH FACTORY, KAPURTHALA

रेल कोच फैक्टरी कपूरथला

IR S

PL NO. NIL

DRG.NO. LE63157

REF.DRG.No. NIL

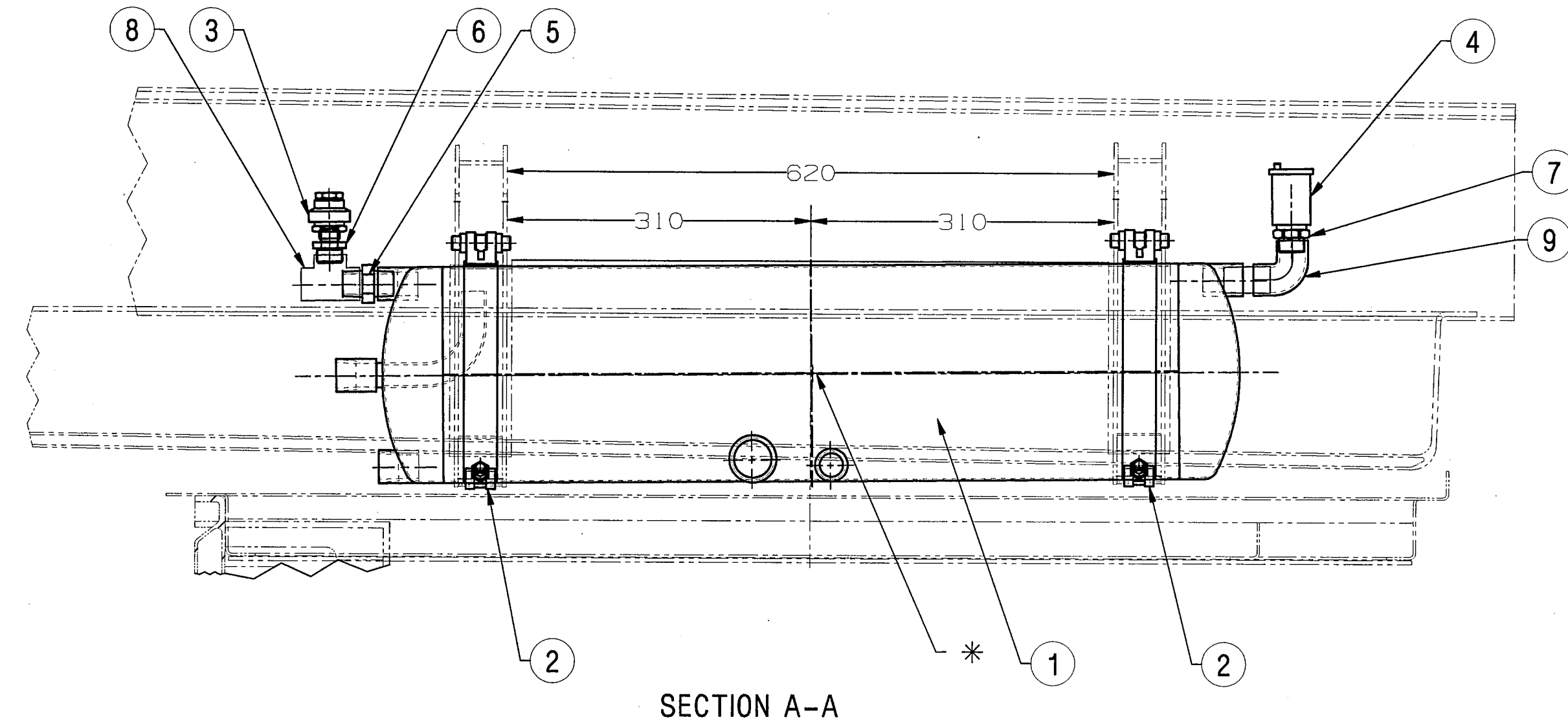
SIZE/A SHEET/3

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

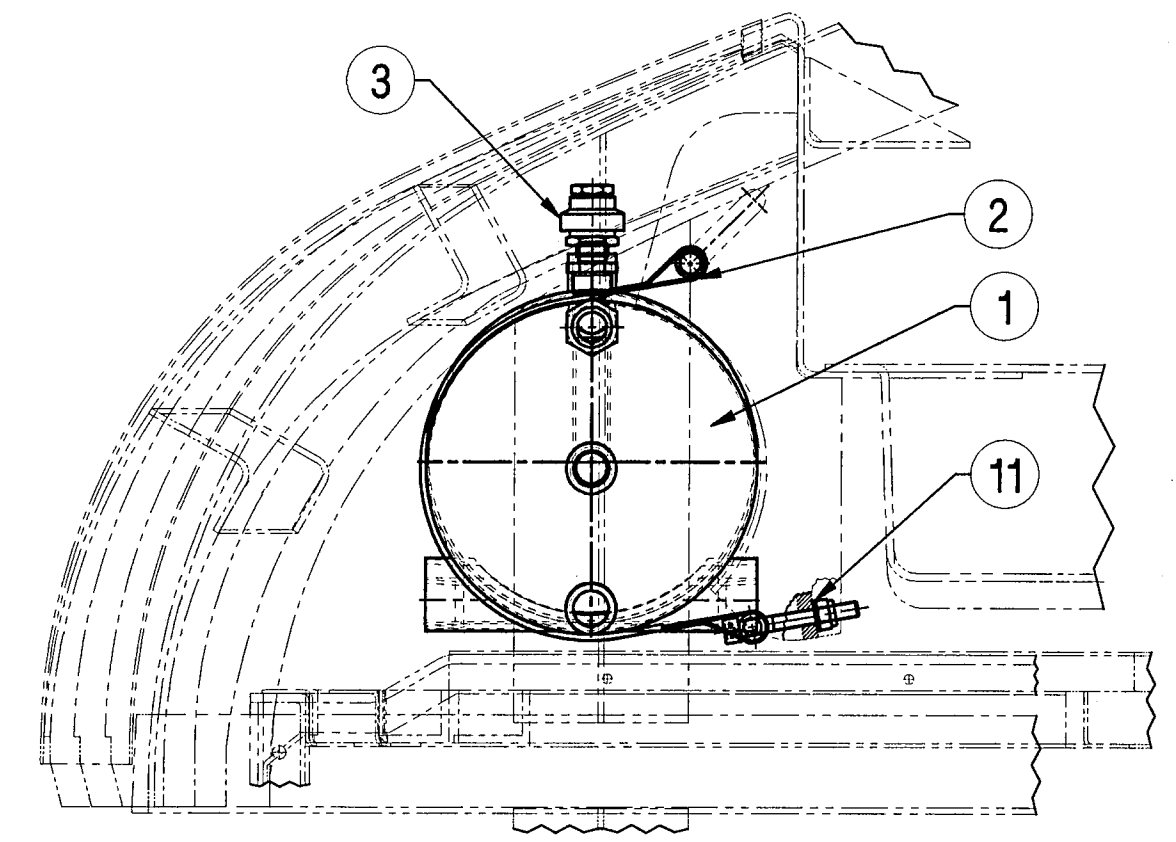
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE 08/10/2006 CGM BY [Signature]

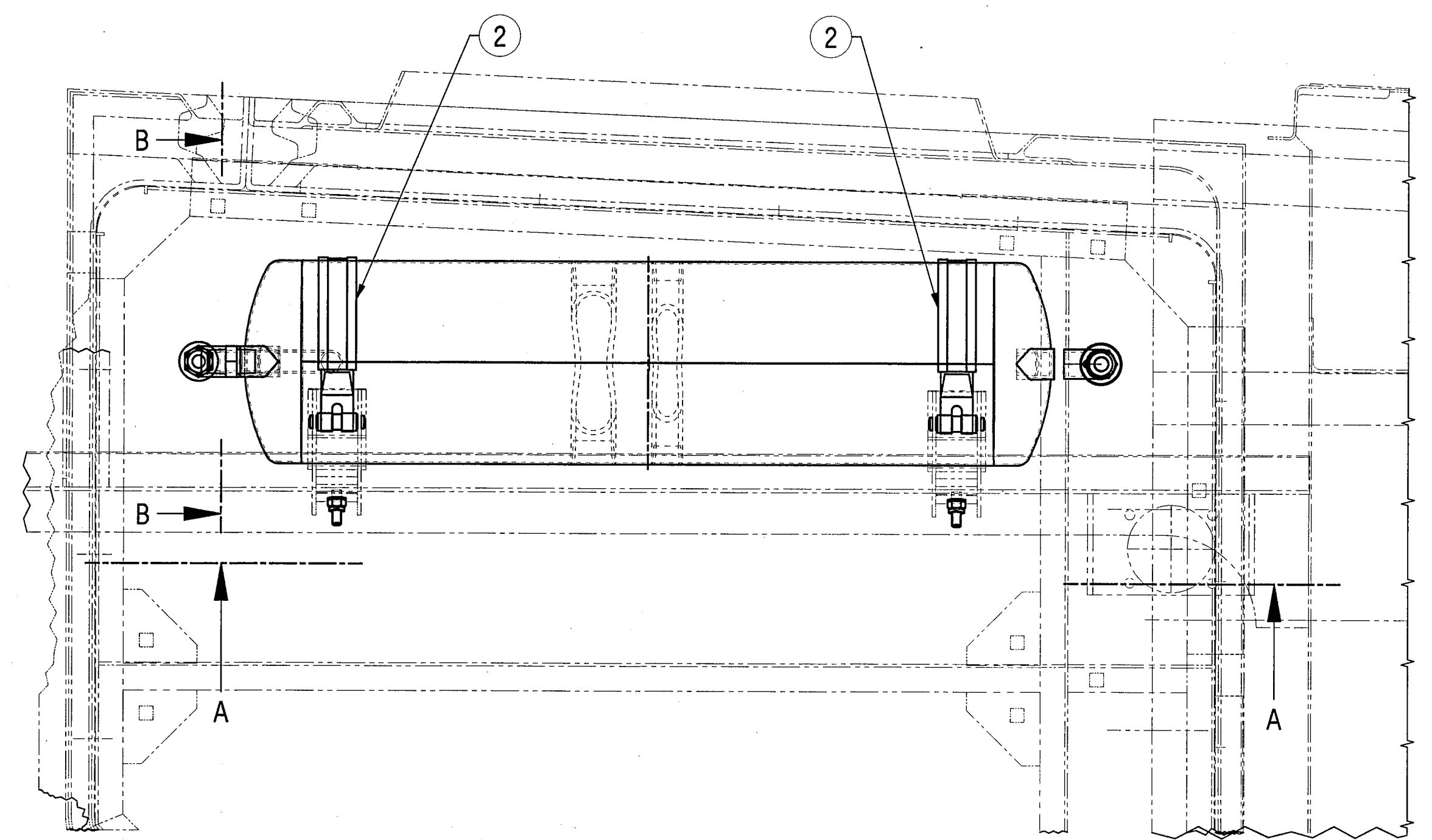
ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
c	21/03/2011	H15 H15 J16	1. ITEM NO. 9 & 10 DELETED. 2. ITEM NO. 12 ADDED. 3.MDTS 093 ADDED IN REMARKS.	DESIGN PROPOSAL VIDE MD46111
d	26/08/2015	I-10 J-16	1. NOTE 8 UPDATED. 2.DESCRPTION OF ITEM NO.4 WAS PURG-O-MAT AUTOMATIC FLOAT AIRVENT VALVE WITH SHUT-OFF VALVE	DIC NO. MD150030



SECTION A-A



SECTION B-B



NOTE:-

- VACCUME VALVE IS A UNIDIRECTIONAL VALVE THAT OPERATES TO RELEASE VACCUME CREATED IN THE TANK BY CONSUMING WATER OF THE TANK.
- PURG-O-MAT AUTOMATIC FLOAT AIR VENT VALVE IS A VALVE THAT RELEASE AIR PRESSURE WITHOUT ANY LEAKAGE OF WATER.
- FOR ALL CONNECTION BETWEEN THE THREADED FITTINGS OF NON CORRODING STEEL THE EXTERNAL THREADS HAVE TO BE WRAPPED WITH HEMP AND COVERED WITH SEALING PASTE; PRODUCT-NEO FERMIT UNIVERSAL OF M/S LERCH & CO.
- ALL OTHER SCREW CONNECTION/BOLT CONNECTION, WITH OR WITHOUT NUTS, OF STAINLESS STEEL ARE TO BE GREASED WITH MOLYKOTE (MOLYBDENUM DISULPHIDE).
- THE CUT-OUT IN WATER TANKS COMPONENTS FOR OUTLETS SHALL BE CUT BY PROFILE CUTTING ONLY.
- THE FOLLOWING TESTS SHALL APPLIED TO PROTOTYPE OF WATER TANK (I) DIMENSIONAL CHECKING, (II) WATER TIGHTNESS (III) AIR TIGHTNESS WITH A AIR PRESSURE OF 50000 Pa (III) TESTING OF STAINLESS STEEL USED FOR MANUFACTURING.
- THE BULK MANUFACTURE SHALL BE UNDERTAKEN ONLY AFTER THE APPROVAL OF PROTOTYPE.
- AIR VENT VALVE AND SHUT-OFF-VALVE CAN BE PROCURED FROM M/S HANS-H.VOSS TULPENWEG 2-25524 ITZEHOE-EDENDORF GERMANY TEL. (04821) 41409 FAX 41014 OR M/S CALEFFI (MINICAL CALEFFI NO 502030/CALEFFI SOLAR, NO 250831).
- WATER TANK SHALL BE MARKED USING STAINLESS STEEL NAME PLATE SIZE 2X80X120 MM SHOWING MAKE, PO DETAIL, DATE OF MANUFACTURING ETC AT \* \* \* MARKED LOCATION OR OTHER SUITABLE LOCATION BY TAG WELDING.

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ENTERED  
INTO  
संशोधन  
DATA BASE  
08 SEP 2015

ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
12	MALE FEMALE ELBOW 20 BORE	1	NIL	IS: 1239-PT2-92 TAB. 15, AISI304	THREAD ISO 7/1
11	MACHINED WASHER A10.5	2	NIL	IS: 2016-1967 140HV-A2	NIL
10	BARREL-NIPPLE 20 BORE X54	1	NIL	IS: 1239-PT2-92 TAB. 2, AISI304	THREAD ISO 7/1
9	ELBOW 90 DEGREE 20 BORE	1	NIL	IS: 1239-PT2-92 TAB. 8, AISI304	THREAD ISO 7/1
8	EQUAL TEE FEMALE THREAD 20 BORE	1	NIL	IS: 1239-PT2-92 TAB. 8, AISI304	THREAD ISO 7/1
7	HEXAGON REDUCTION 3/4"X3/8"	1	NIL	IS: 1879-87 TAB. 7.1, AISI304	THREAD ISO 7/1
6	HEXAGON REDUCTION 20X15 BORE	1	NIL	IS: 1239-PT2-92 TAB. 27, AISI304	THREAD ISO 7/1
5	HEXAGON DOUBLE NIPPLE 20 BORE	1	NIL	IS: 1239-PT2-92 TAB. 28, AISI304	THREAD ISO 7/1
4	AIR VENT VALVE	1	NIL	NIL	SEE NOTE 2 AND 8
3	VACCUME VALVE 61/2"	1	4FWP237.0. 30.046.003	NIL	SEE NOTE 1
2	TAUT BAND WITH RUBBER PROFILE	2	LW63152	NIL	NIL
1	ROOF WATER TANK 30L	1	LW63139	NIL	MDTS-093

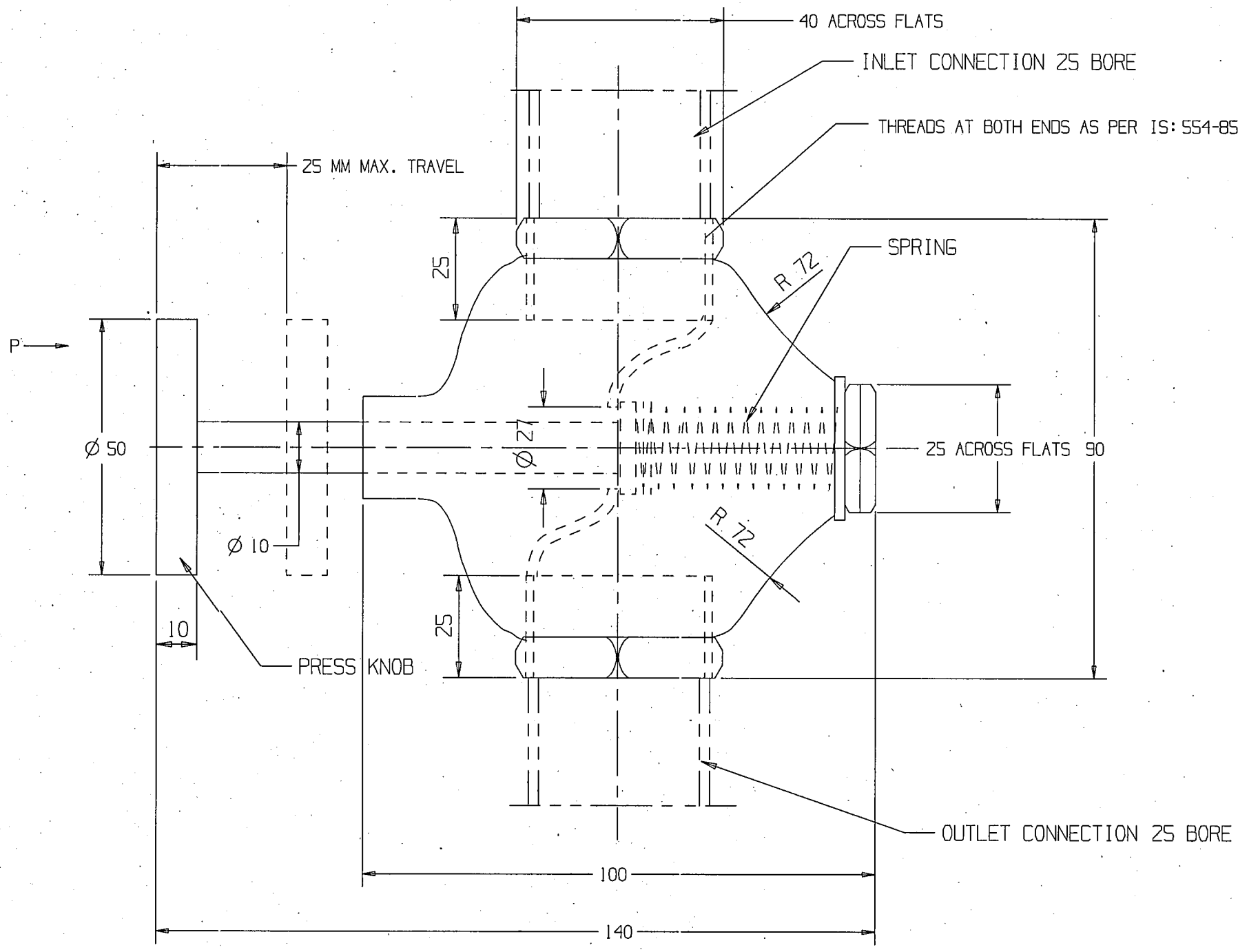
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTING			SUPERSEDES: LW63150 ALT c	
WEIGHT	FILE	//LW63150d.prt (3D)				
NIL	KG	ROOF WATER TANK 30 L				
S.AREA	M <sup>2</sup>	MOUNTING FOR LHB COACHES				
LENGTH/DIA	M	RAIL COACH FACTORY, KAPURTHALA				
WIDTH/THICK.	M	REF.DRG.No. 1 10113.0.30.110.008				
HEIGHT	M	रेल कोच फेक्टरी कपुरथला				
NIL	M	IRS				
		PL NO. 0000000				
		DRG.NO. LW63150				
		ALT. d SIZE A SHEET 1/1				

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DATE OF FIRST ISSUE 15/01/2003 CGM BY *parneet*

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
c	02/07/2012	ALL F-B	1. DIMENSIONS 10,25 & R72 ADDED IN VIEW. 2. WEIGHT WAS NIL.	LETTER NO.-FM 3500
d	10/06/2013	E2	1. IN NOTE -4 ,PRESSURE FORCE 3.5 KG WAS 2.5 KG.	DIC MD130037



NOTE:-

1. ONLY INTERFACE DIMENSIONS ARE GIVEN, SUPPLIER SHOULD GET A SAMPLE APPROVED BY RCF BEFORE BULK SUPPLY, FOR THE FIRST TIME.
2. SUPPLIER'S NAME & DATE OF MANUFACTURING TO BE INDICATED ON THE BODY.
3. NO LEAKAGE OR DRIPPING TO BE OBSERVED WITH A PRESSURE DIFFERENCE OF 2 BARS ACROSS THE VALVE.
4. VALVE TO BE FULLY OPENED AT THE APPLICATION OF PRESSING FORCE OF 3.5 KG. ON THE KNOB.
- \* 5. FOR THE MATERIAL & GENERAL REQUIREMENTS OF VALVE ASSEMBLY REFER IS: 778-84 TAB-1.
- # 6. EXTERNAL SURFACES OF ASSLY. SHALL BE CHROME PLATED TO IS: 1068-93, TAB-3, SERVICE CONDITION NO.2, Cu/Ni10p Cr n.
7. ADHESION OF COATING SHALL BE TESTED BY EITHER FILE TEST OR BY QUENCHING METHOD AS SPECIFIED IN ANNEXURE H & J OF IS: 1068-93.
8. COATED ARTICLES SHALL BE SUBJECTED TO CORROSION TEST GIVEN IN TAB-6 OF IS: 1068-93.
9. THIS COMPONENT IS TO BE USED INSIDE THE COACH, THERE SHOULD BE NO PITTING/CORROSION ON THE SURFACES. ALL WELDS SHOULD BE GROUNDED AND SHARP CORNERS ROUNDED. IT SHOULD HAVE ELEGANT FINISH.

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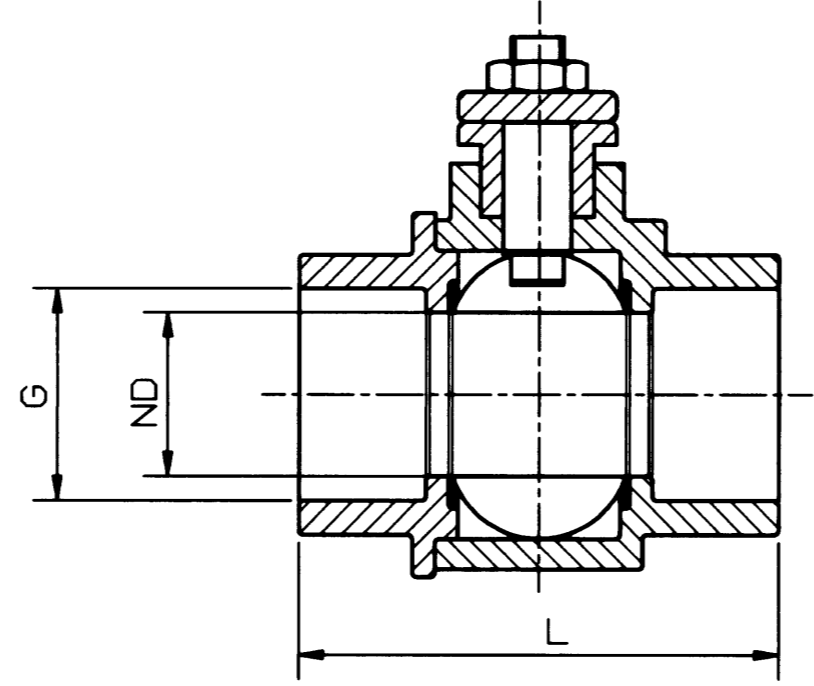
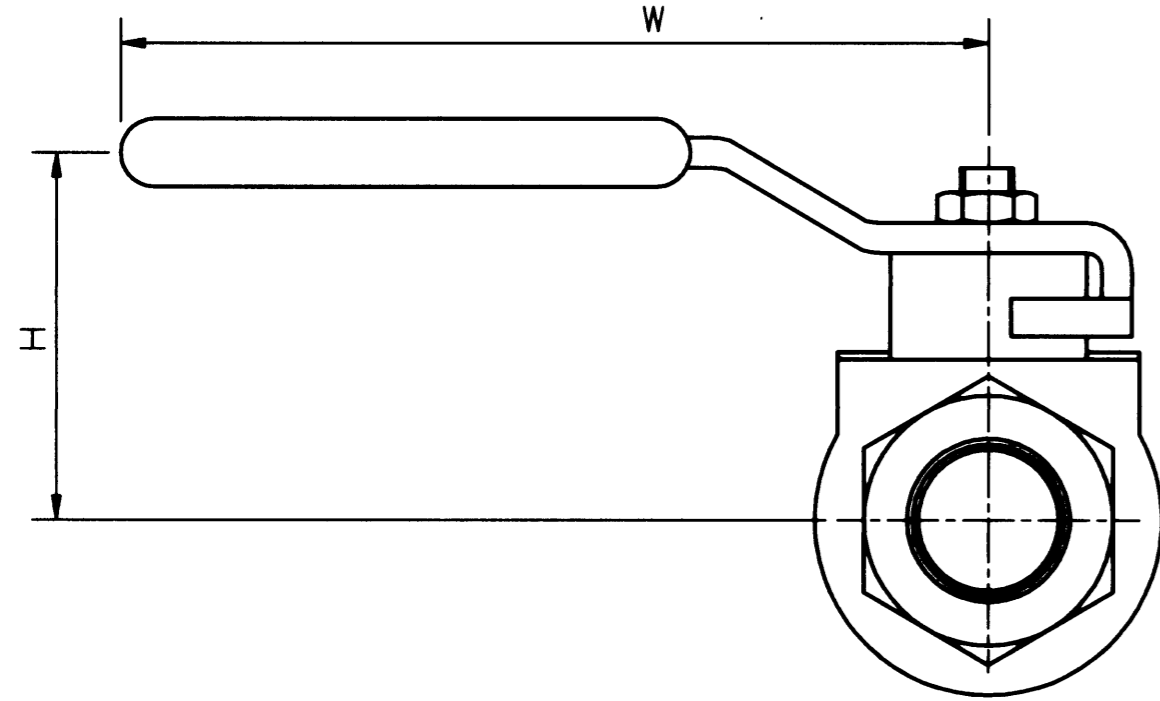
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Into  
Date Book  
8 JUN 2013

WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	LAVATORY & IT'S FITTINGS	SUPERSEDES: CC63805 ALT c			
WEIGHT		FILE	//CC63805d.prt (2D)				
0.600	KG	PUSH TYPE FLUSHING VALVE SCALE: 1:1 SSE/REC: CHD DRN: AVTR REF.DRG.No: NIL RAIL COACH FACTORY, KAPURTHALA रेल कोच फैक्टरी कपूरथला IRS PL NO. NIL DRG.NO. CC63805 ADE/SME: [Signature] DY.CME: [Signature]					
S. AREA							
NIL	M <sup>2</sup>						
LENGTH / DIA							
NIL	M	RAIL COACH FACTORY, KAPURTHALA		REF.DRG.No.	NIL		
WIDTH / THICK		रेल कोच फैक्टरी कपूरथला		IRS	PL NO.	NIL	
NIL	M	रेल कोच फैक्टरी कपूरथला		IRS	DRG.NO.	CC63805	
HEIGHT		ADE/SME: [Signature]		DY.CME: [Signature]	CDE	ALT.	d
NIL	M	ADE/SME: [Signature]		DY.CME: [Signature]	CDE	ALT.	d

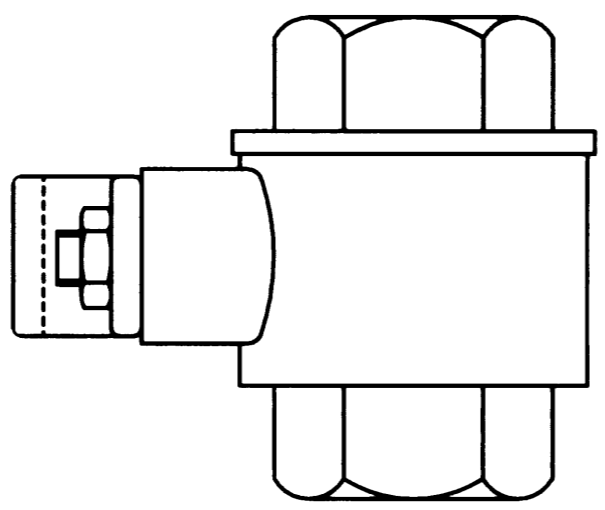
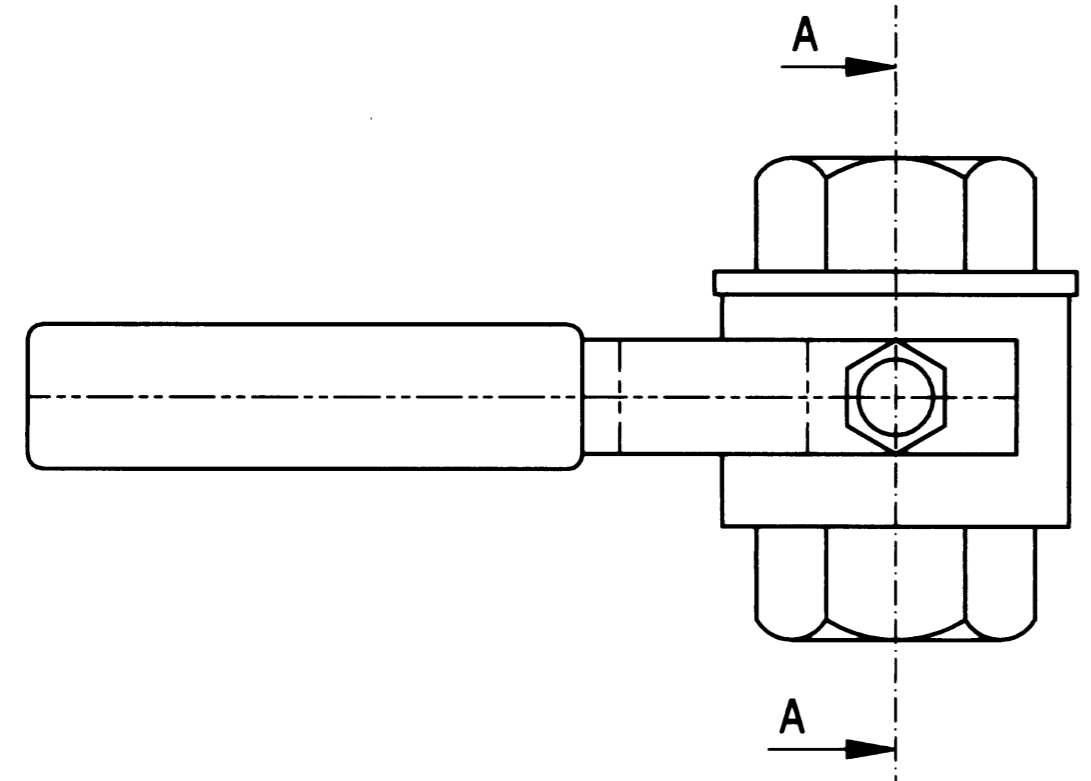
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE  
 ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 04/07/1997 CGM BY [Signature]

9	10	11	12	13
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



SECTION A-A



NOTE:-

1. ALL DIMENSION ARE IN 'MM' EXCEPT OTHERWISE STATED.
2. PRESSURE TIGHTNESS 10KG/CM<sup>2</sup> AND TEST PRESSURE 15 KG/CM<sup>2</sup>.
3. MATERIAL OF BODY, BODY CAP, STEM, GLAND NUT, WASHER, NUT SHALL BE USED OF AISI 304 AND SHOULD BE FREE FROM DEFECTS.
4. HANDLE SHOULD BE OF AISI304 WITH DIP COATED PLASTIC COVER.
5. MATERIAL OF BALL SHALL BE USED OF AISI 316 AND SHOULD BE FREE FROM DEFECTS.
6. SIZE AND FIRM'S IDENTIFICATION MARKING TO BE SUITABLY PROVIDED IN BODY.
7. THREADS 'G' SHALL BE BSP PARALELL CONFORMING TO ISO 7/1 OR IS: 554-85.
8. BALL SEAT, THRUST PACKING, SEALINGS AND 'O' RINGS SHALL BE OF VIRGIN PTFE.
9. TEMPERATURE RANGE OF OPERATION WILL BE 0°C TO MAX. 70°C.
10. THIS DRG. IS FOR TENDER PURPOSE ONLY, SUPPLIER HAS TO BE SUBMIT DETAIL DRG.

ITEM NO.	1	2	3	4	5	6
NOMINAL DIA	8	10	15	20	25	32
THREAD SIZE G	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"
LENTH L MM	55	60	75	80	90	110
HEIGHT H MM	64	64	64	67	83	89
HANDLE W MM	98	98	98	125	125	170
WEIGHT Kg.	0.26	0.28	0.44	0.55	0.96	1.44
TORQUE Nm	6.8	6.9	7	10	17	23

NIL		2 PIECE BALL VALVE BSP THREADED ENDS		NIL	NIL	AISI 304	NIL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS		OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	LAVATORY & ITS FITTING		SUPERSEDES: NIL			
WEIGHT	FILE	/users1/b/lhb/lw/lw63106.prt					
NIL	KG	BALL VALVE				SCALE	1:1
S. AREA						1:1	CHD
NIL	M <sup>2</sup>	FOR SANITARY FACILITIES				DRN	EDS
LENGTH / -DIA						REF.DWG.No.	NIL
NIL	M	RAIL COACH FACTORY, KAPURTHALA				INDIAN RAILWAYS STANDARD	
WIDTH / THICK		INDIAN RAILWAYS STANDARD				PL NO. 00207809	
NIL	M	INDIAN RAILWAYS STANDARD				DRG. NO. LW63106	
HEIGHT		INDIAN RAILWAYS STANDARD				ALT. NIL SIZE A2 SHEET 1/1	
NIL	M	INDIAN RAILWAYS STANDARD				INDIAN RAILWAYS STANDARD	

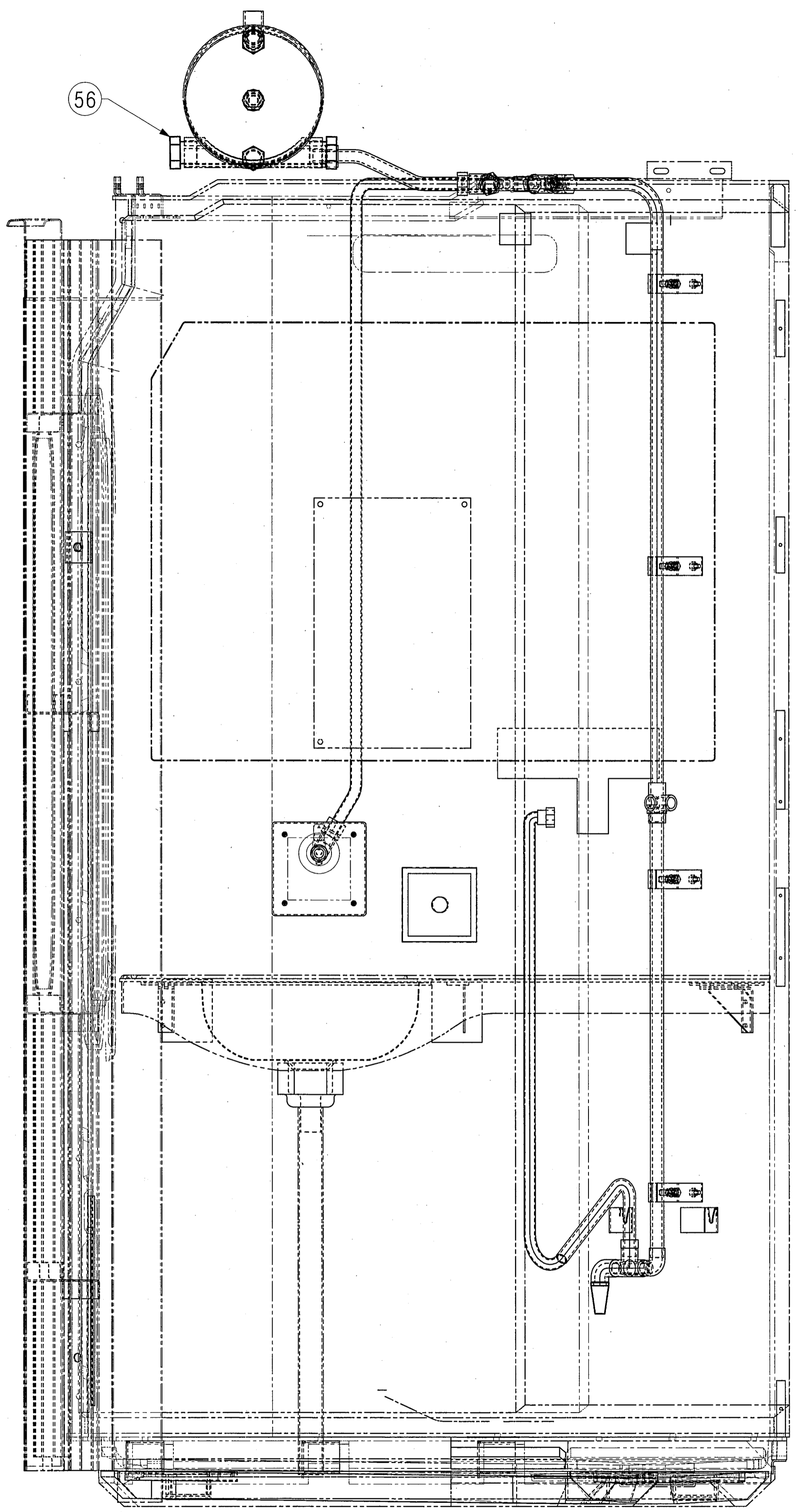
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

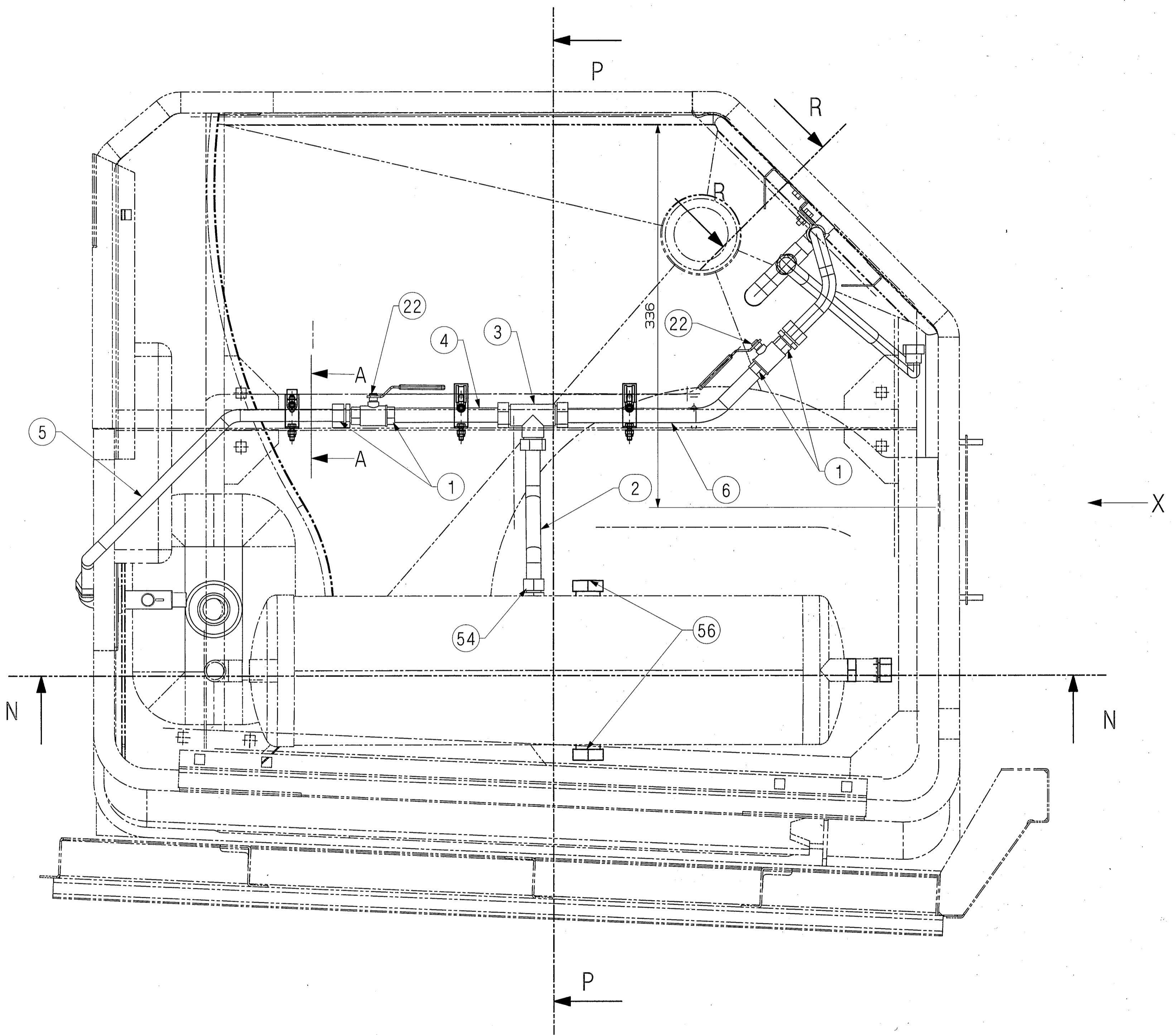
FROZEN

FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 13/10/2001





VIEW FROM X



22 JUN 2013

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTINGS				
		FILE \\LE63160g.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER				
NIL	M <sup>2</sup>	AT LH LAVATORY IN LHB TYPE COACH				
NIL	M	RAIL COACH FACTORY, KAPURTHALA				
NIL	M	रेलकोच फॅक्टरी कपूरथला	IRS			
NIL	M					
NIL	M					

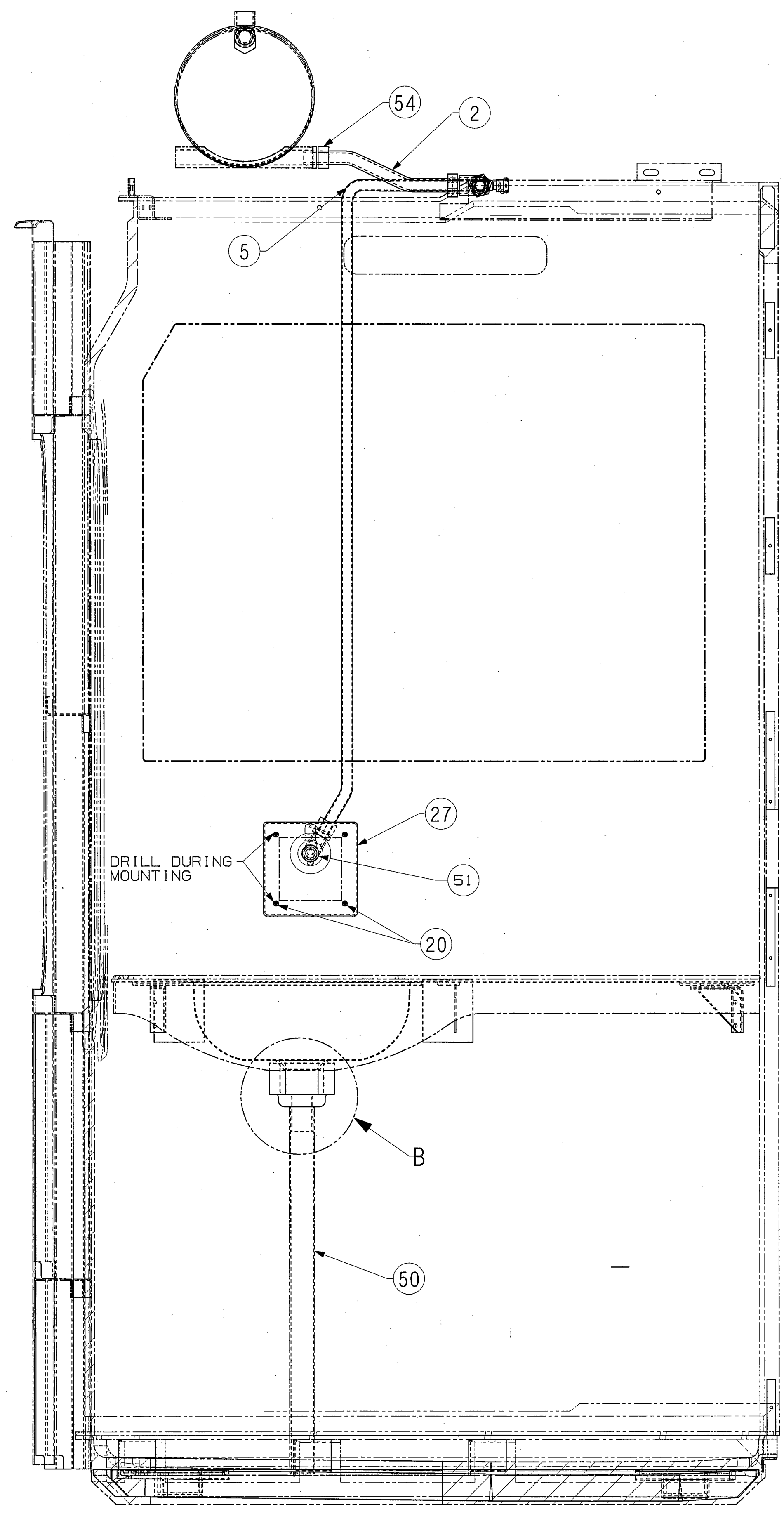
  

SCALE	SSE/REC	CHD	TPSI
		DRN	AVTR
REF.DRG.No.	NIL		
PL NO.	NIL		
DRG.NO.	LE63160		
REF.DRG.No.	ALT.	SIZE	A/SHEET/1/3

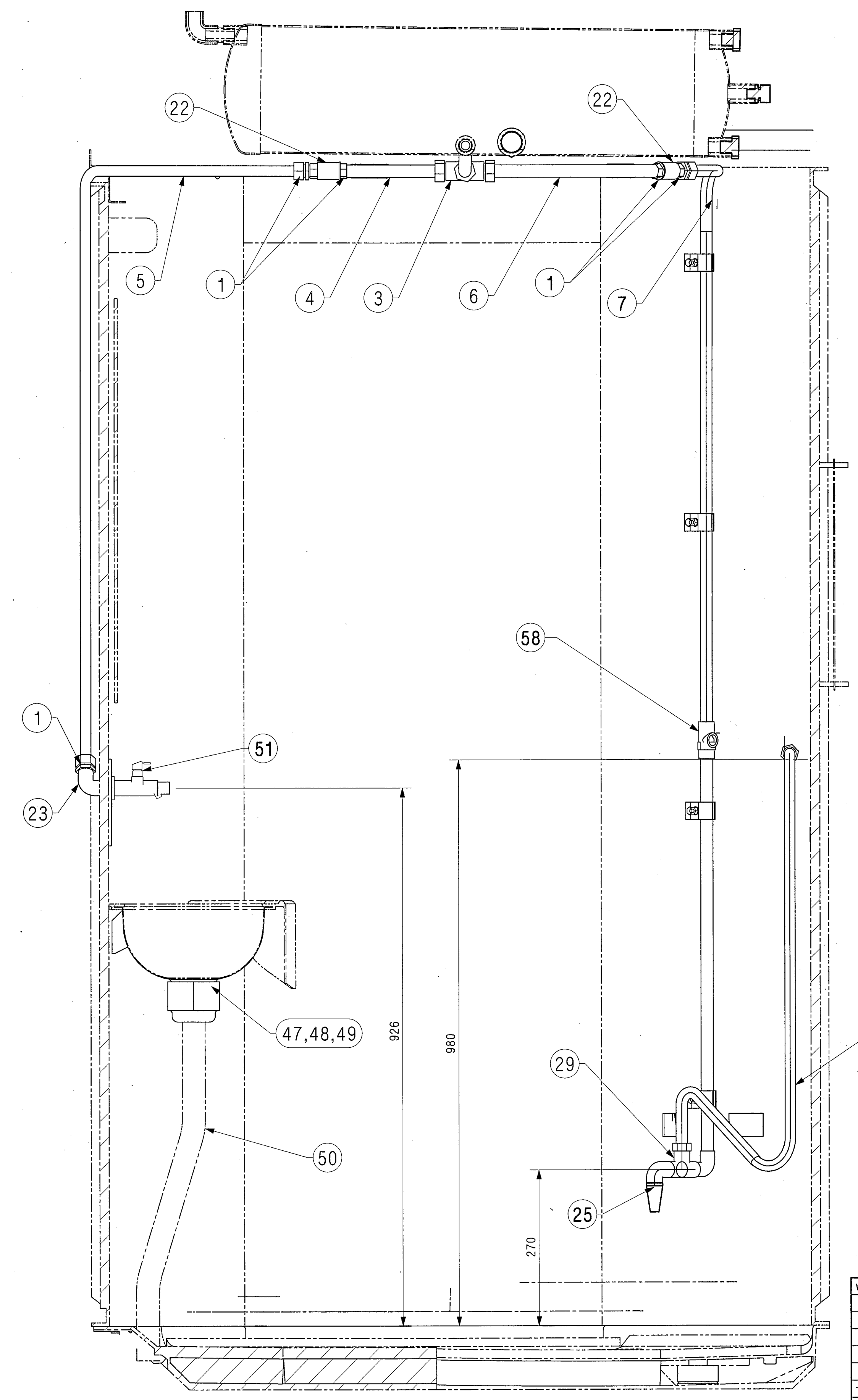
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.  
FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE 13/07/2007 CGM BY *A36*



SECTION P-P



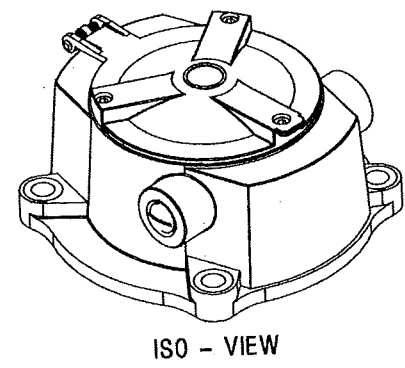
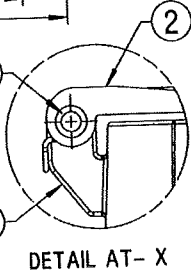
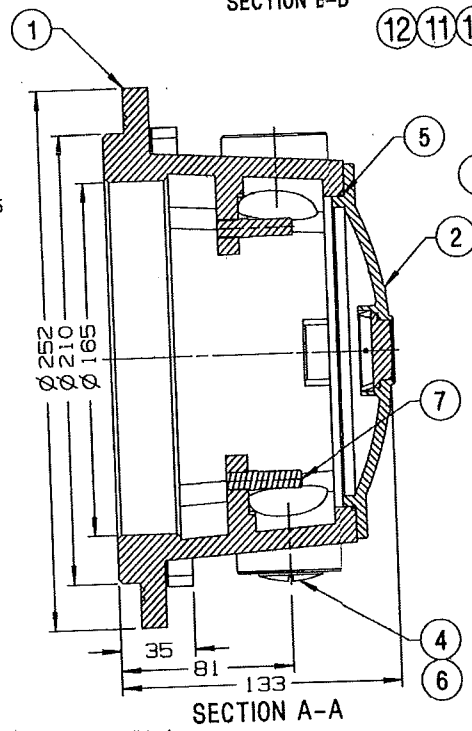
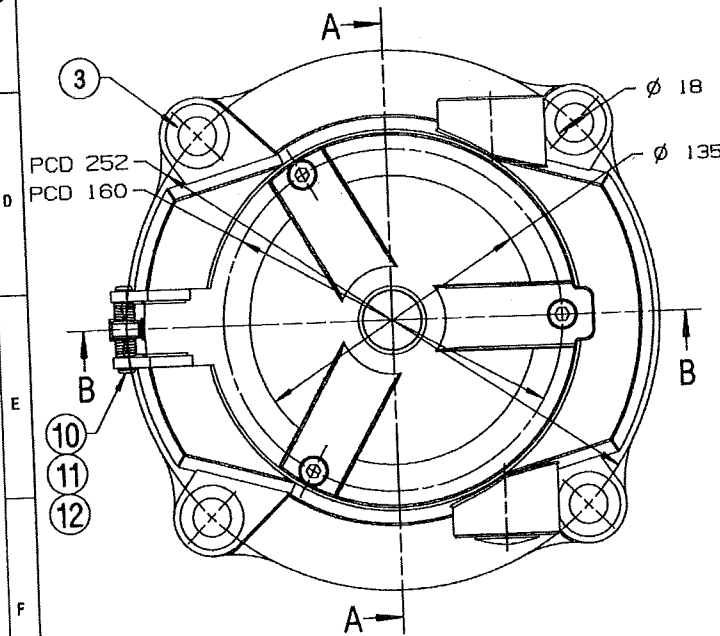
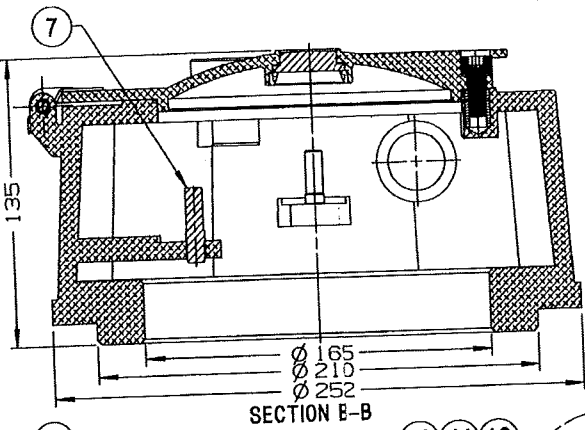
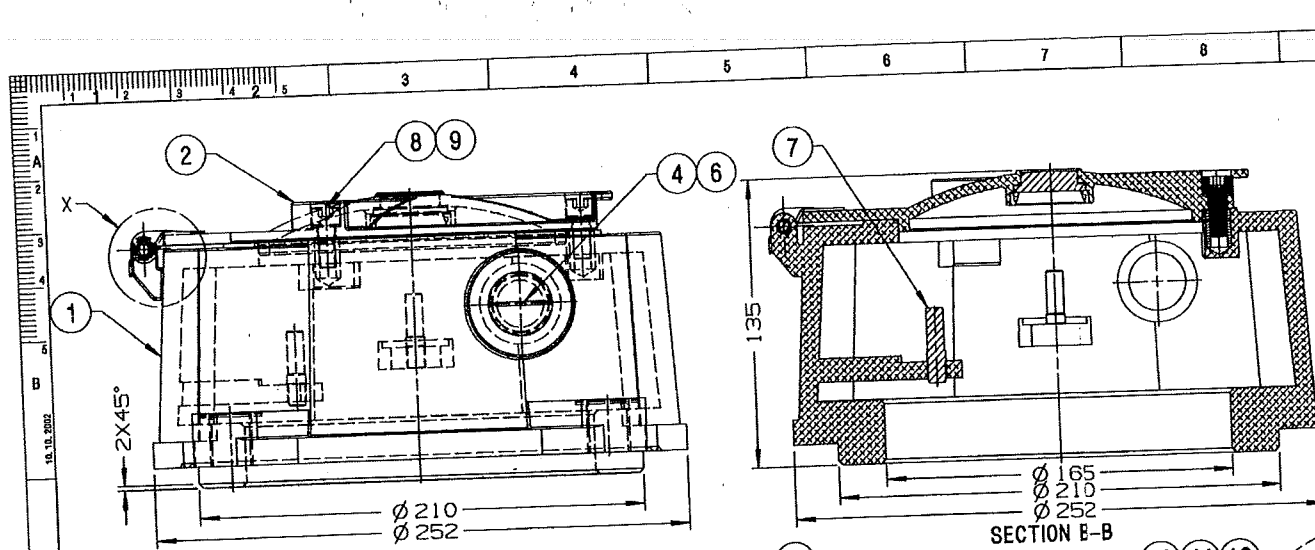
SECTION N-N

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

DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
DATE OF FIRST ISSUE 13/07/2007 CGM BY *ASL*

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP LAVATORY & ITS FITTINGS			SUPERSEDES: LE63160 ALT 1	
WEIGHT	FILE	\\LE63160g.prt (3D)				
NIL	KG	PIPE LAYING FOR WATER				
S. AREA	M <sup>2</sup>	AT LH LAVATORY IN LHB TYPE COACH				
LENGTH/DIA		RAIL COACH FACTORY, KAPURTHALA				
NIL	M	रेलकोच फॅक्टरी कपूरथला				
WIDTH/THICK.		IRS				
NIL	M	PL NO. NIL				
HEIGHT		DRG.NO. LE63160				
NIL	M	REF.DRG.No. NIL				
		ADE/SME				
		DY.CME				
		CDE				
		ALT. g				
		SIZE   SHEET   2/3				

22 JUN 2013  
Enterec  
Date Drawn



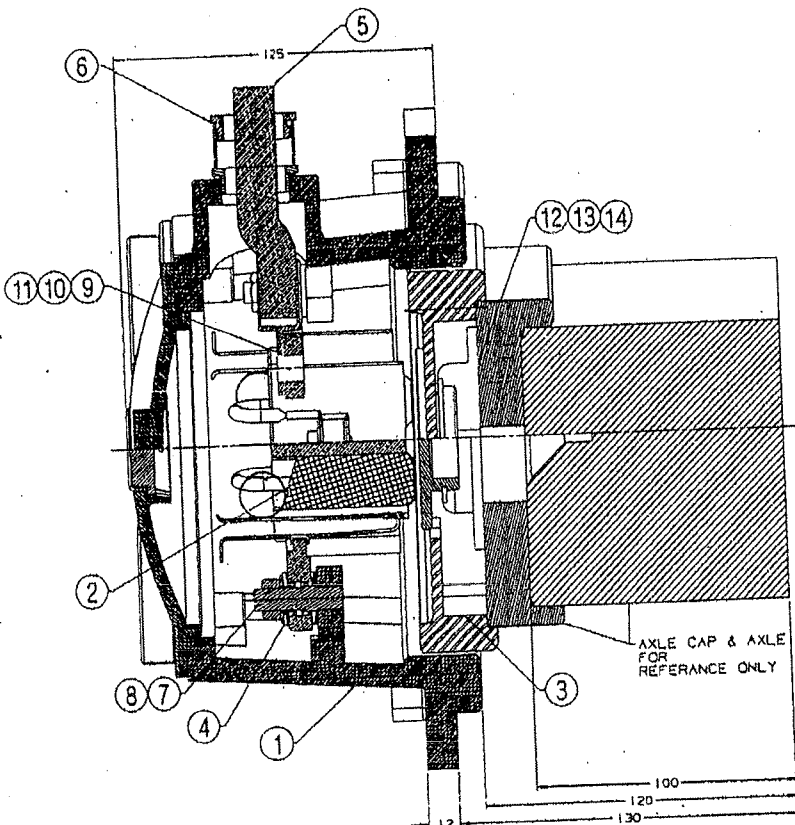
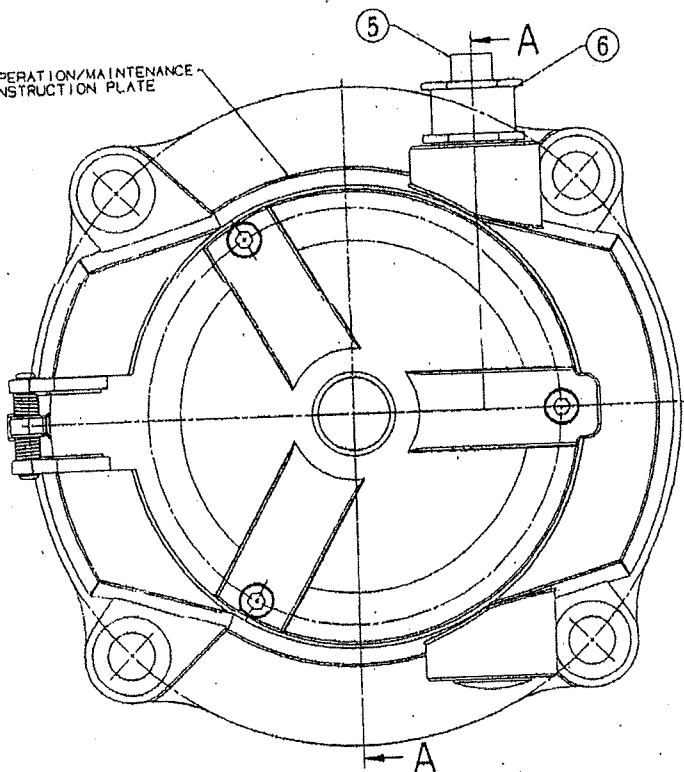
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
a	28/01/2009	ALL	ITEM-10,11 & 12 ADDED AND DRAWING REVISED ACCORDINGLY.	DIC.NO. ED090002
b	19/05/2009	ALL	ITEM-2, DRG. NO. ALTD. FROM LW71234 ALT.-'A' TO LW71234 ALT.-'B'.	DIC.NO. ED090002
c	20/06/2009	ALL	ITEM-2, DRG. NO. ALTD. FROM LW71234 ALT.-'B' TO LW71234 ALT.-'C' AND DRAWING MODIFIED ACCORDINGLY.	DIC.NO. ED090002

ITEM	DESCRIPTION & DIMENSIONS	QTY	REF. DRG. NO.	MATL. & SPEC.	REMARKS
12	COVER PIN	1	LW71354	NIL	NIL
11	COVER HINGE TUBE	1	LW71353	NIL	NIL
10	STEEL SPRING	1	LW71350	NIL	NIL
9	SPRING WASHER M8, ELECTRO GALVANISED	3	IS: 3063-92 TYPE-B	NIL	NIL
8	HEXAGON SOCKET HEAD CAP SCREW M8X20, ELECTRO GALVANISED	3	IS: 2269-95 TABLE-1	NIL	NIL
7	STUD M8X40	3	IS: 1568-75 TYPE-C	15:1367 STAINLESS STEEL	*
6	O - RING Ø 30X2	1	NIL	NEOPRENE RUBBER	60% NEOPRENE & 40% FIBBER
5	O - RING Ø 140X2	1	NIL	NEOPRENE RUBBER	60% NEOPRENE & 40% FIBBER
4	BLANKING PLUG	1	LW71236	NIL	*
3	STAINLESS STEEL BUSH	4	LW71235	NIL	ALT.-'A'
2	COVER	1	LW71234	NIL	ALT.-'C'
1	HOUSING	1	LW71233	NIL	ALT.-'A'

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	REF. DRG. NO.	MATL. & SPEC.	REMARKS
NIL	M	ELECTRICAL		LW71232 ALT 'b'		
WEIGHT	FILE	D:\home\ka.js\LW\wheelset\LW71232c.prt				
NIL	KG	HOUSING COMPLETE FOR EARTHING BRUSH ASSEMBLY (FOR LHB TYPE COACHES)				
S. AREA		RAIL COACH FACTORY, KAPURTHALA				
NIL	M2	INDIAN RAILWAYS STANDARD				
LENGTH / -D+A		RAIL COACH FACTORY, KAPURTHALA				
NIL	M	SCALE: SSE/ED				
WIDTH / THICK		CHD				
NIL	M	DRN				
HEIGHT		REF. DRG. NO. NIL				
NIL	M	PL NO. NIL				
		DRG. NO. LW71232				
		ALT. C SIZE A3 SHEET 1/1				

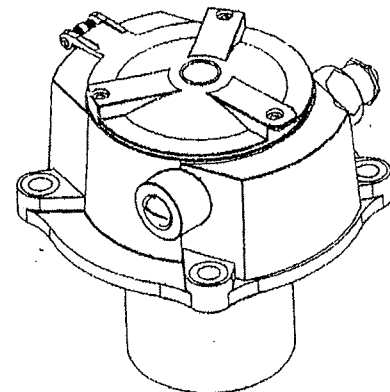
3. ITEM-3 STAINLESS STEEL BUSH TO BE PRESS FITTED IN ITEM-1.  
 \* 2. TO BE SEALED WITH THREAD LOCKING LOCKTITE AFTER ASSEMBLY.  
 NOTE:- 1. ALL DIMENSIONS IN MM.  
 G  
 DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
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 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 27/01/2009

OPERATION/MAINTENANCE INSTRUCTION PLATE



SECTION A-A

DATE	ALTERED BY	REASON	ALTERATIONS	AUTHORITY
28/01/2009	ALL		1. DRAWING MODIFIED & REDRAWN.	DIC. NO. EG090002
14/03/2012	ALL		1. DETAIL DRAWING & MATERIAL SPEC. ADDED FOR ITEM-12.	Dic. No. ED12000
25/05/2012	ALL		1. ITEM-12, DESCRIPTION, DETAIL DRG. AND MATL. & SPEC. REVISED. 2. ITEM-13 & 14 SPRING WASHER & PLAIN WASHER ADDED.	Dic. No. ED120005



ISO - VIEW

ITEM NO.	DESCRIPTION	QTY	IS: 2016-62	IS: 1367	MATERIAL	REMARKS
14	PLAIN WASHER $\phi$ 9	3	IS: 2016-62	IS: 1367	STAINLESS STEEL	NIL
13	SPRING WASHER M8	3	NIL	IS: 3063-1994		TO BE SUPPLIED LOOSE
12	HEX-HEAD SCREW ISO 4017 - M8X25.	3	NIL	IS: 129-HP1-21 2002/10.9 CE		TO BE SUPPLIED LOOSE
11	SPRING WASHER M10	1	IS: 3063-92 11-6	IS: 1367	STAINLESS STEEL	NIL
10	PLAIN WASHER $\phi$ 11	1	IS: 2016-62	IS: 1367	STAINLESS STEEL	NIL
9	HEX-HEAD SCREW M10X20	1	IS: 1364-94 P-1,4,8	IS: 1367	STAINLESS STEEL	
8	PLAIN WASHER $\phi$ 9	3	IS: 2016-62	IS: 1367	STAINLESS STEEL	NIL
7	HEX-HEAD NYLOC NUT M8	3	IS: 1364-94 P-3,4,8	IS: 1367	STAINLESS STEEL	
6	CABLE BOND (IPB81)	1	NIL		BRASS	
5	STAINLESS STEEL BRAIDED EARTHING CABLE	1	LW712-6	NIL		NIL
4	INSULATING BLOCK	6	LW712-4	NIL		NIL
3	RING OILER ASSEMBLY	1	LW712-1	NIL		ALT. - 'A'
2	BUSH HOLDER ASSEMBLY	1	LW712-3	NIL		NIL
1	HOLDING COMPLETE	1	LW712-2	NIL		ALT. - 'C'

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	WELDING METHOD	WELDING SYMBOL	WELDING POSITION	WELDING PROCESS
NIL	N	ELECTRICAL				

WGT	FILE	DESCRIPTION	WGT	FILE	DESCRIPTION
NIL	CO	ARRANGEMENT OF WHEEL SET EARTHING EQUIPMENT (FOR LHB TYPE COACHES)	NIL	CO	
NIL	MP		NIL	MP	
NIL	DR		NIL	DR	
NIL	AS		NIL	AS	

RAJ COACH FACTORY, KAPURTHALA

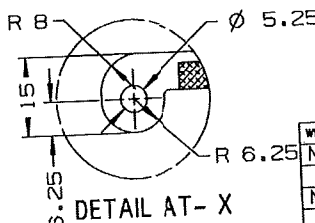
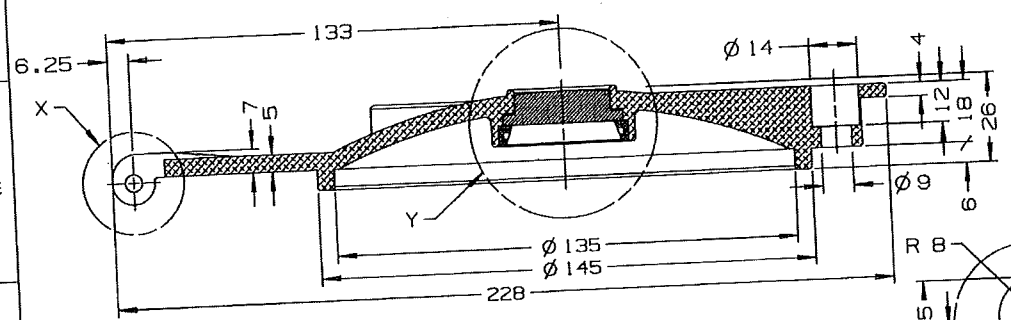
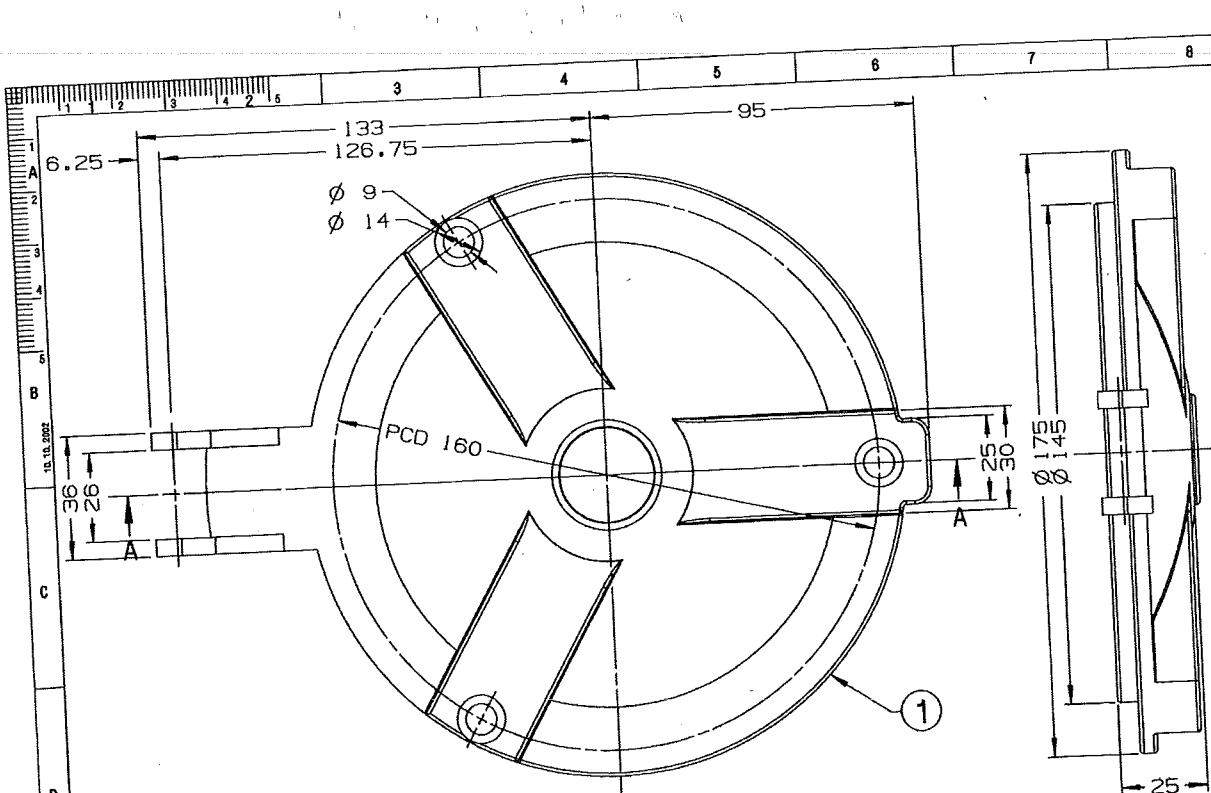
PL NO. NIL  
ORG. NO. LW71231

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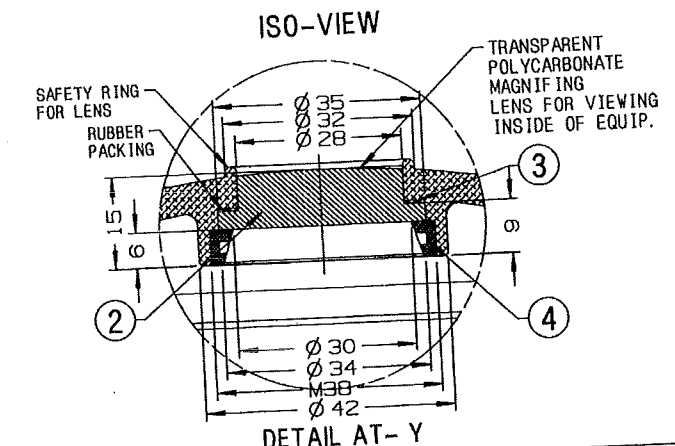
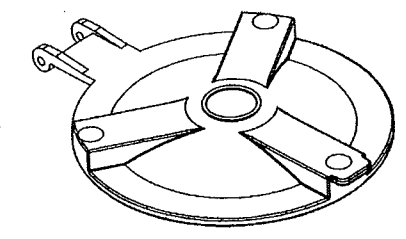
- ITEM-7 TO 13 TO BE PROCURED FROM ROSO APPROVED SOURCES.
- TO BE SEALED WITH THREAD LOCKING LOCKTITE AFTER ASSEMBLY.
- TYPE MRS-21 OF M/S LAPP OR EQUIVALENT OF M/S PMA.
- THE ASSEMBLY SHALL BE POWDER COATED TO RAL7021 GREY (MUNSELL GREY OF M/S BERGERI 40 MICRONS AFTER REQUISITE SURFACE TREATMENT).
- MANUFACTURER'S INSIGNIA/SERIAL NO. SHALL BE PUNCHED/CASTED IN THE ASSEMBLY.

NOTE - 1. ALL DIMENSIONS IN MM.





ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
a	28/01/2009	ALL	HINGE ARRANGEMENT PROVIDED, ITEM-2,3 & 4 ADDED & DRAWING MODIFIED ACCORDINGLY.	DIC.NO. ED090002
b	19/05/2009	ALL	TRANSPARENT INSPECTION WINDOW FOR VISUAL INSPECTION DELETED & DRAWING MODIFIED ACCORDINGLY.	DIC.NO. ED090002
c	18/06/2009	ALL	ITEM-2,3 & 4 ADDED, NOTE-3 ADDED & DRAWING MODIFIED ACCORDINGLY.	DIC.NO. ED090002



ITEM	DESCRIPTION & DIMENSIONS	QTY	UNIT	MATL. & SPEC.	REMARKS
4	SPECIAL NUT	1	NIL	IS: 617 GRADE-4450M	NIL
3	RUBBER PACKING	1	NIL	NEOPRENE RUBBER	60%NEOPRENE, 40%RUBBER
2	LENS	1	NIL	POLYCARBONATE	NIL
1	HINGED COVER	1	NIL	IS: 617 Grade-4450M	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	UNIT	MATL. & SPEC.	REMARKS
NIL	M	GROUP ELECTRICAL				
WEIGHT	FILE	D:\home\kajs\LW\wheel set\lw71234a.prt				
NIL	KG					
S. AREA						
NIL	M <sup>2</sup>					
LENGTH / -DIA						
NIL	M					
WIDTH / THICK						
NIL	M					
HEIGHT						
NIL	M					

**COVER**  
FOR WHEEL SET EARTHING EQUIPMENT  
(FOR LHB TYPE COACHES)

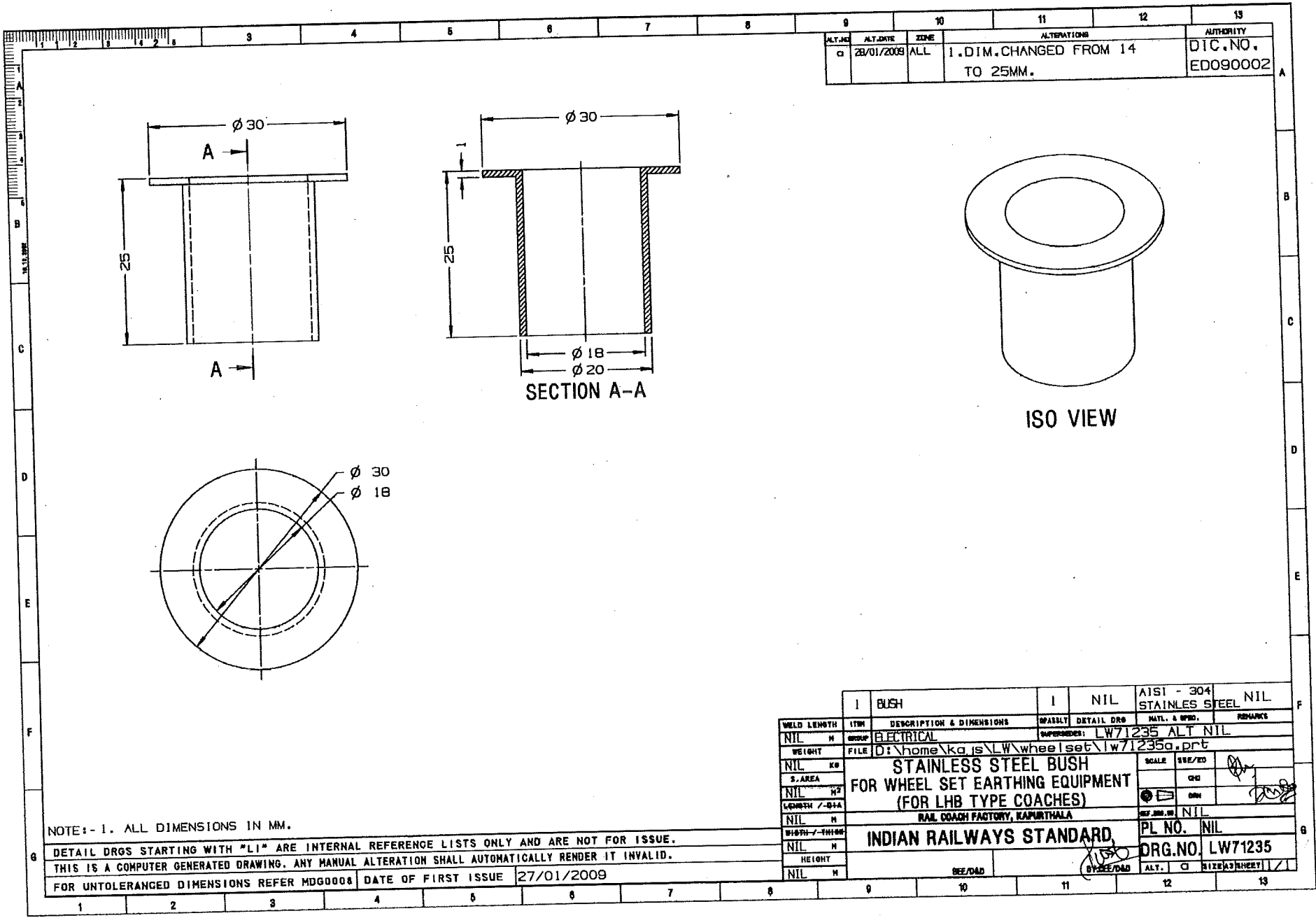
RAIL COACH FACTORY, KAPURTHALA

**INDIAN RAILWAYS STANDARD**

SCALE	SSE/ED	CHD	DRN	REF. ORG. NO.	PL NO.	DRG. NO.	ALT.	SIZE	SHEET	TOTAL
				NIL	NIL	LW71234	C	A3	1/1	1/1

3. ITEM-2 TO 4 TO BE SEALED WITH THREAD LOCKING LOCKTITE AFTER ASSEMBLY.  
2. MANUFACTURER'S INSIGNIA SHALL BE LEGIBLY EMBOSSED ON THE SURFACE OF COVER.  
NOTE:- 1. ALL DIMENSIONS IN MM.  
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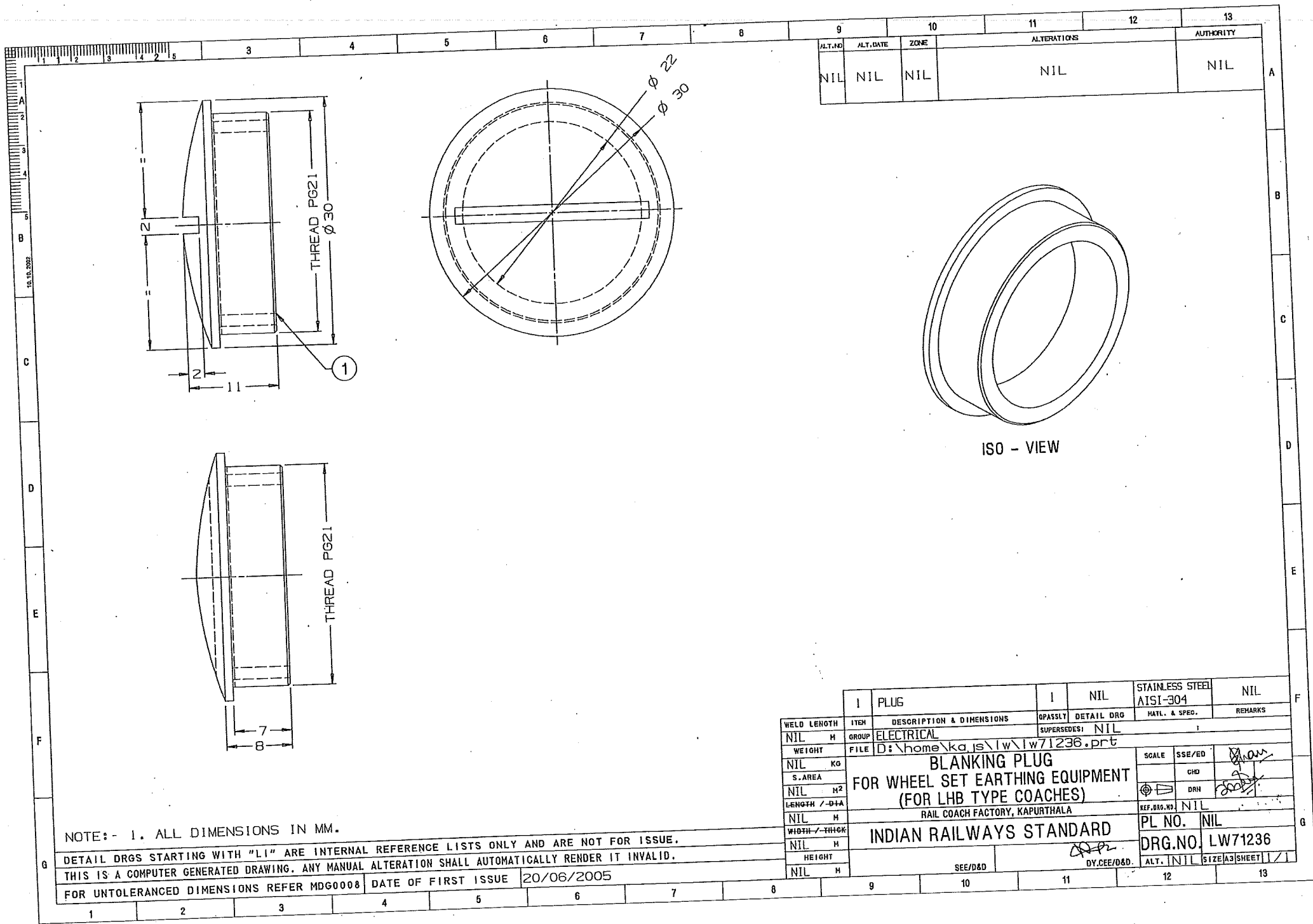
DATE OF FIRST ISSUE	DATE OF FIRST ISSUE
27/01/2009	27/01/2009



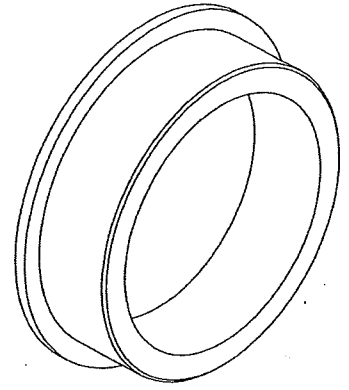
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
01	28/01/2009	ALL	1. DIM. CHANGED FROM 14 TO 25MM.	DIC. NO. ED090002

NOTE:- 1. ALL DIMENSIONS IN MM.  
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 FOR UNTOLERANGED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 27/01/2009

1	BUSH	1	NIL	AISI - 304 STAINLES STEEL	NIL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	PARS/LT	DETAIL DRG	MATL. & QTY.
NIL	M	ELECTRICAL	GROUP	LW71235	ALT NIL
WEIGHT	FILE	D:\home\ka\is\lw\wheel\set\lw71235a.prt			
NIL	KG	SCALE 3/8E/20			
S. AREA	STAINLESS STEEL BUSH FOR WHEEL SET EARTHING EQUIPMENT (FOR LHB TYPE COACHES)				CHK
NIL	M <sup>2</sup>	RAIL COACH FACTORY, KAPURTHALA			
LENGTH / DIA	INDIAN RAILWAYS STANDARD				DRN
NIL	M	PL NO. NIL			
HEIGHT / THICK	ORG. NO. LW71235				REF. NO. 00
NIL	M	ALT. 01 RIZBAJ/RHEEVI			
SEE/DAD	BY/SEE/DAD				



9	10	11	12	13
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

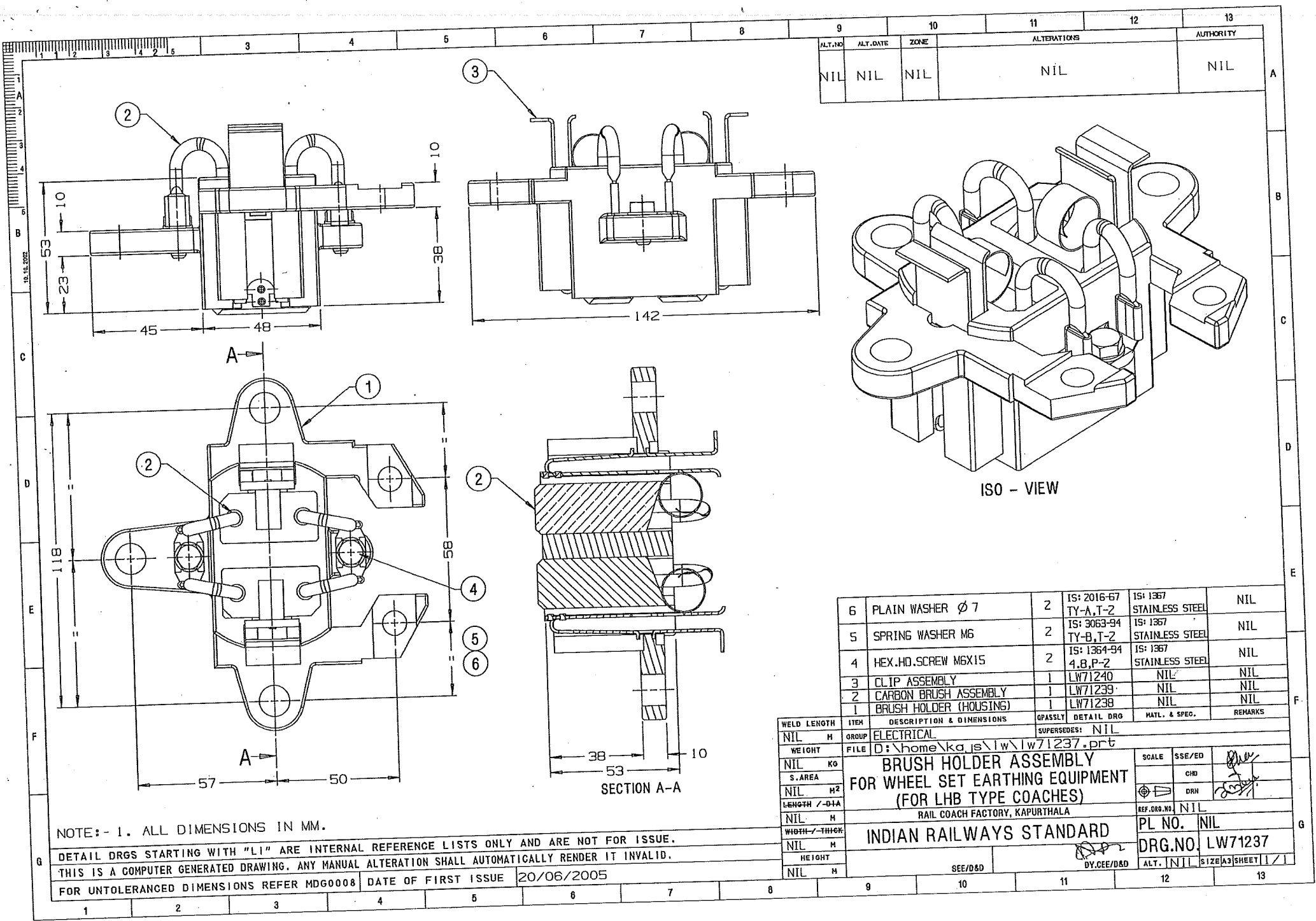


ISO - VIEW

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 FOR UNTOLERANCED DIMENSIONS REFER MDOG0008 DATE OF FIRST ISSUE 20/06/2005

ITEM	DESCRIPTION & DIMENSIONS	OPASSLT	DETAIL DRG	MATERIAL & SPEC.	REMARKS
NIL	ELECTRICAL		NIL	STAINLESS STEEL AISI-304	NIL
FILE	D:\home\ka.js\lw\lw71236.prt				
WEIGHT	SUPERSEDES: NIL				
NIL	BLANKING PLUG			SCALE	SSE/ED
S. AREA	FOR WHEEL SET EARTHING EQUIPMENT			CHD	
NIL	(FOR LHB TYPE COACHES)			DRN	
LENGTH / -D+A	RAIL COACH FACTORY, KAPURTHALA			REF. DRG. NO.	NIL
NIL	INDIAN RAILWAYS STANDARD			PL NO.	NIL
WIDTH / THICK				DRG. NO.	LW71236
NIL	SEE/D&D			ALT.	NIL
HEIGHT	DY.CEE/D&D			SIZE	A3
NIL				SHEET	1/1



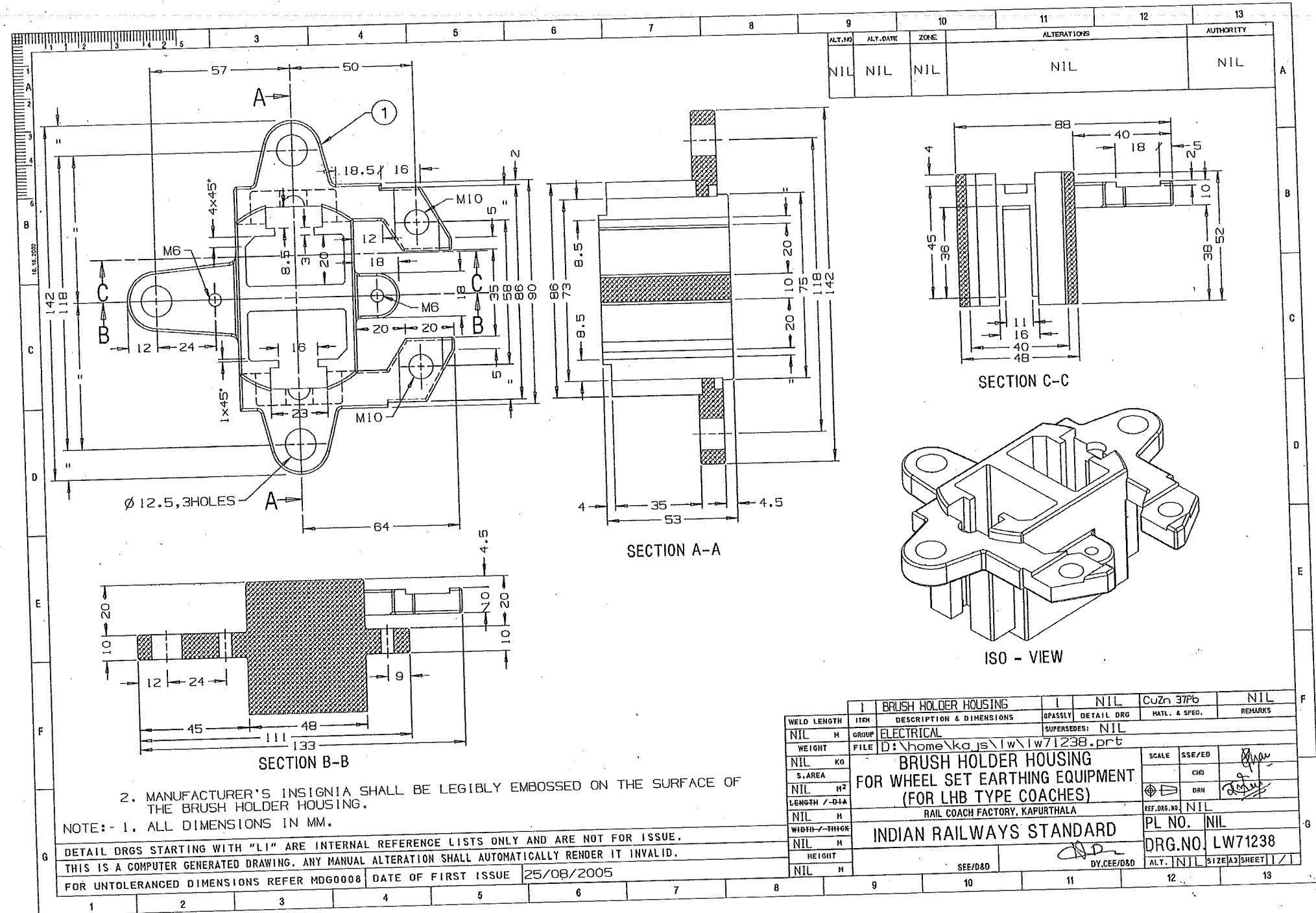


9	10	11	12	13
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

6	PLAIN WASHER $\phi 7$	2	IS: 2016-67 TY-A, T-2	IS: 1367 STAINLESS STEEL	NIL
5	SPRING WASHER M6	2	IS: 3063-94 TY-B, T-2	IS: 1367 STAINLESS STEEL	NIL
4	HEX. HD. SCREW M6X15	2	IS: 1364-94 4.8, P-2	IS: 1367 STAINLESS STEEL	NIL
3	CLIP ASSEMBLY	1	LW71240	NIL	NIL
2	CARBON BRUSH ASSEMBLY	1	LW71239	NIL	NIL
1	BRUSH HOLDER (HOUSING)	1	LW71238	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	H	GROUP	ELECTRICAL				
WEIGHT	FILE	D:\home\ka.js\lw\lw71237.prt				SCALE	SSE/ED
NIL	K0	BRUSH HOLDER ASSEMBLY				CID	
S. AREA	FOR WHEEL SET EARTHING EQUIPMENT				DRN		
NIL	M2	(FOR LHB TYPE COACHES)				REF. DRG. NO.	NIL
LENGTH / -D+A	RAIL COACH FACTORY, KAPURTHALA				PL NO.	NIL	
NIL	H	INDIAN RAILWAYS STANDARD				DRG. NO.	LW71237
WIDTH / -THOR	NIL	SEE/D&D	DY.CEE/D&D		ALT.	NIL	
NIL	H				SIZE	A3	
HEIGHT	NIL				SHEET	1/1	

NOTE:- 1. ALL DIMENSIONS IN MM.  
 G  
 DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
 THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 20/06/2005



2. MANUFACTURER'S INSIGNIA SHALL BE LEGIBLY EMBOSSED ON THE SURFACE OF THE BRUSH HOLDER HOUSING.

NOTE:- 1. ALL DIMENSIONS IN MM.

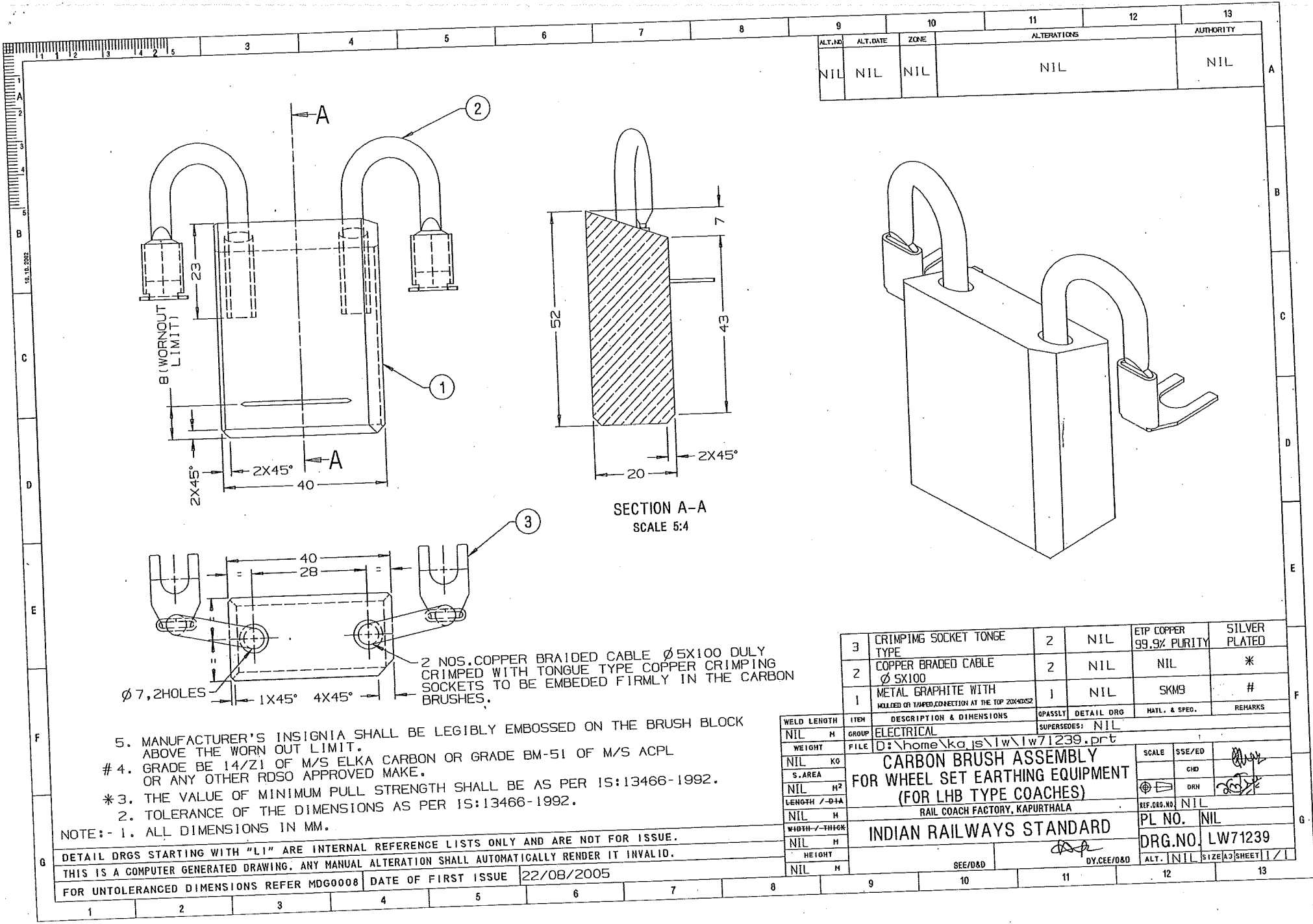
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DATE OF FIRST ISSUE 25/08/2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL ORG	MATL. & SPEC.	REMARKS
NIL	H	GROUP ELECTRICAL				
WEIGHT	FILE	D:\home\ka js\lw\lw71238.prt				
NIL	KG	BRUSH HOLDER HOUSING		SCALE	SSE/ED	
NIL	M <sup>2</sup>	FOR WHEEL SET EARTHING EQUIPMENT (FOR LHB TYPE COACHES)		CHD		
NIL	H	RAIL COACH FACTORY, KAPURTHALA		DRN		
NIL	H	INDIAN RAILWAYS STANDARD		REF. DRG. NO.	NIL	
NIL	H	SEE/D&D		PL NO.	NIL	
NIL	H	DY.CEE/D&D		DRG. NO.	LW71238	
NIL	H			ALT.	NIL	SIZE A3 SHEET 1/1



9	10	11	12	13
ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

SECTION A-A  
SCALE 5:4

3	CRIMPING SOCKET TONGE TYPE	2	NIL	ETP COPPER 99.9% PURITY	SILVER PLATED
2	COPPER BRADED CABLE Ø 5X100	2	NIL	NIL	*
1	METAL GRAPHITE WITH MOLDED ON TANGUED CORRECTION AT THE TOP 20X45X52	1	NIL	SKM9	#

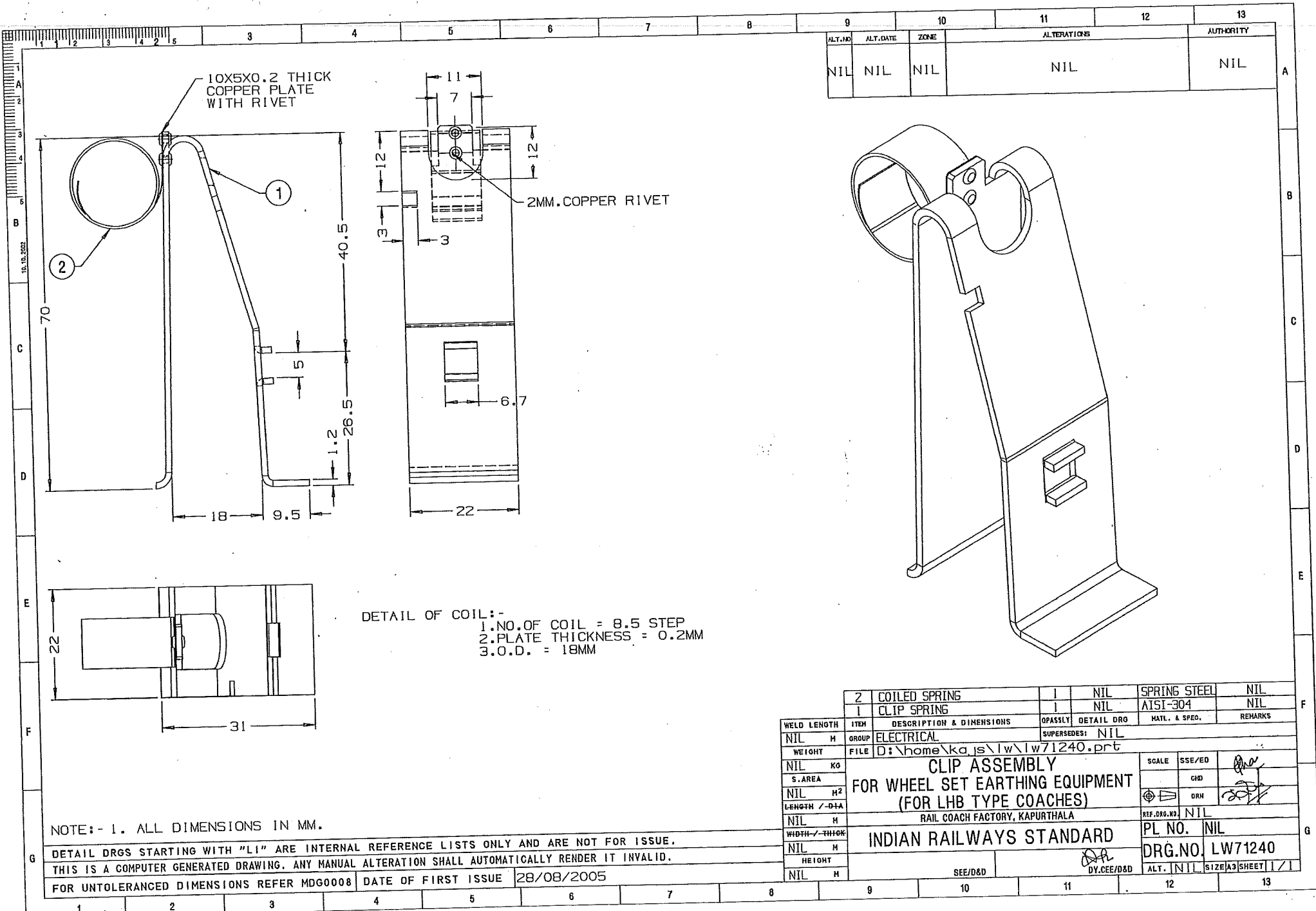
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	ELECTRICAL	SUPERSEDES: NIL			
WEIGHT	FILE	D:\home\ka_is\lw\lw71239.prt				
NIL	KG	CARBON BRUSH ASSEMBLY FOR WHEEL SET EARTHING EQUIPMENT (FOR LHB TYPE COACHES)				
S. AREA		RAIL COACH FACTORY, KAPURTHALA				
NIL	M <sup>2</sup>	INDIAN RAILWAYS STANDARD				
LENGTH / -DIA		PL NO. NIL				
NIL	M	DRG. NO. LW71239				
WIDTH / -THICK		DATE OF FIRST ISSUE 22/08/2005				
NIL	M	SEE/D&D				
HEIGHT		BY:CEE/0&D				
NIL	M	ALT. NIL SIZE A3 SHEET 1/1				

5. MANUFACTURER'S INSIGNIA SHALL BE LEGIBLY EMBOSSED ON THE BRUSH BLOCK ABOVE THE WORN OUT LIMIT.
- # 4. GRADE BE 14/Z1 OF M/S ELKA CARBON OR GRADE BM-51 OF M/S ACPL OR ANY OTHER RDSO APPROVED MAKE.
- \* 3. THE VALUE OF MINIMUM PULL STRENGTH SHALL BE AS PER IS:13466-1992.
2. TOLERANCE OF THE DIMENSIONS AS PER IS:13466-1992.
- NOTE:- 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008



9	10	11	12	13
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

DETAIL OF COIL:-  
 1. NO. OF COIL = 8.5 STEP  
 2. PLATE THICKNESS = 0.2MM  
 3. O.D. = 18MM

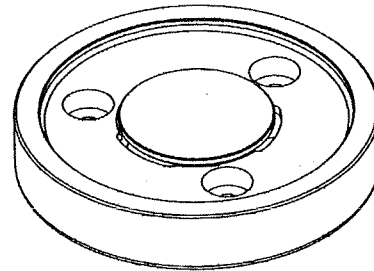
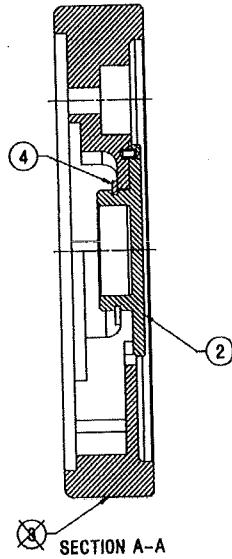
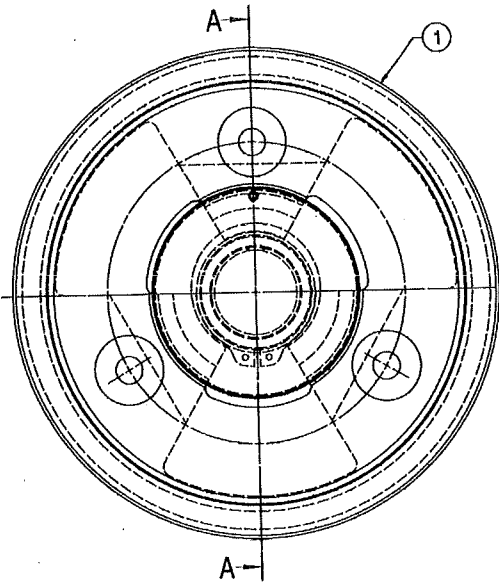
NOTE:- 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/08/2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	1	CLIP SPRING	1	NIL	SPRING STEEL AISI-304	NIL
NIL	2	COILED SPRING	1	NIL	SPRING STEEL AISI-304	NIL
WEIGHT	GROUP	ELECTRICAL	SUPERSEDES: NIL			
FILE	D:\home\ka.js\lw\lw71240.prt					
SCALE	SSE/ED	CLIP ASSEMBLY FOR WHEEL SET EARTHING EQUIPMENT (FOR LHB TYPE COACHES)				DRN
S. AREA	CHD	RAIL COACH FACTORY, KAPURTHALA				REF. DRG. NO. NIL
NIL	DRH	INDIAN RAILWAYS STANDARD				PL NO. NIL
LENGTH / -DIA	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
NIL	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
WIDTH / THICK	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
NIL	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
HEIGHT	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
NIL	DRH	INDIAN RAILWAYS STANDARD				DRG. NO. LW71240
SEE/D&D	DY.CEE/D&D	INDIAN RAILWAYS STANDARD				ALT. NIL SIZE A3 SHEET 1/1

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	28/01/2009	ALL	1. ITEM-3 DELETED & DRAWING REVISED ACCORDINGLY.	DIC.NO. ED090002



ISO-VIEW

4	SECURING RING (AL-10X1.75)	1	IS: 3075	SPRING STEEL	NIL
3	MULTI PIECE OIL RINGS (ASD 165X6X3)	2	NIL	IS: 4454-75 SPRING STEEL	NIL
2	SLIP ASSEMBLY	1	LW71243	NIL	NIL
1	RING OILER	1	LW71242	NIL	ALT.-A

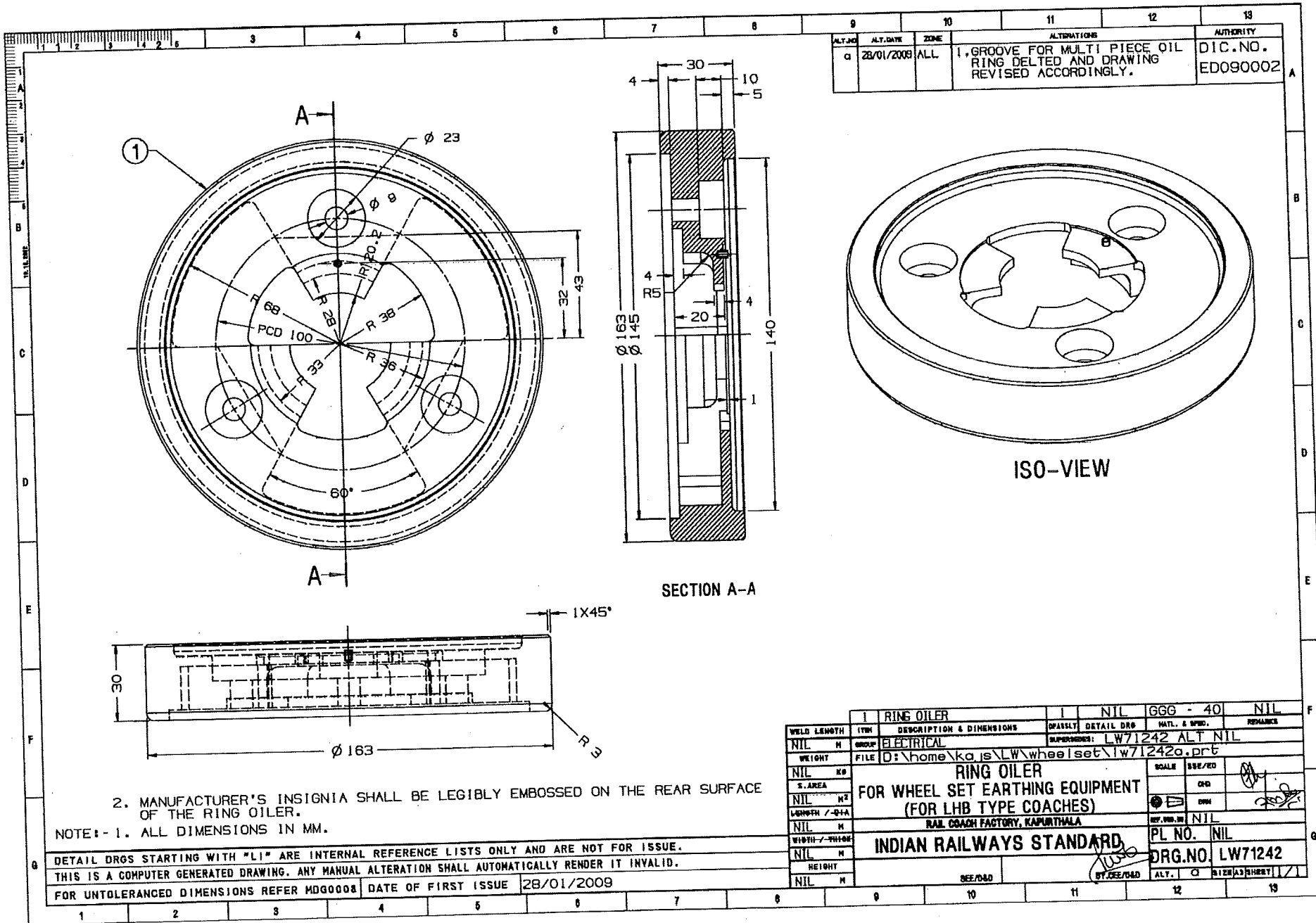
WELD LENGTH	NIL	ITEM	DESCRIPTION & DIMENSIONS	QUANTITY	DETAILS	NATL. & INTL. STANDARDS	REMARKS	
GROUP	NIL	DESCRIPTION	ELECTRICAL	1	LW71241	ALT-NIL		
FILE	D:\home\kajal\Wheeler\set\LW71241a.prt							
WEIGHT	KG	RING OILER ASSEMBLY					SCALE	1:1
S. AREA	MM <sup>2</sup>	FOR WHEEL SET EARTHING EQUIPMENT					CHK	
LENGTH	MM	(FOR LHB TYPE COACHES)					DRN	
NO. OF PARTS	4	RAIL COACH FACTORY, KAPRITHALA					REF. NO.	NIL
INDIAN RAILWAYS STANDARD							PL NO.	NIL
DRG. NO.	LW71241						DRG. NO.	LW71241
DATE OF FIRST ISSUE	28/01/2009						ALT.	0

NOTE:- 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

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FOR UNTOLERANCED DIMENSIONS REFER M0000000 DATE OF FIRST ISSUE 28/01/2009



ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	28/01/2009	ALL	1. GROOVE FOR MULTI PIECE OIL RING DELTED AND DRAWING REVISED ACCORDINGLY.	DIC.NO. ED090002

WELD LENGTH	WTN	DESCRIPTION & DIMENSIONS	DRAWN	DETAIL DRG	MATL. & QTY.	REMARKS
NIL	M	ELECTRICAL		LW71242 ALT NIL		
WEIGHT	KG	FILE D:\home\kajs\LW\wheelset\lw71242a.prt				
NIL	KG	RING OILER				
S. AREA	MM <sup>2</sup>	FOR WHEEL SET EARTHING EQUIPMENT				
NIL	MM <sup>2</sup>	(FOR LHB TYPE COACHES)				
LENGTH / DIA	MM	RAIL COACH FACTORY, KAPURTHALA				
NIL	MM	INDIAN RAILWAYS STANDARD				
WIDTH / THICK	MM					
NIL	MM					
HEIGHT	MM					
NIL	MM					

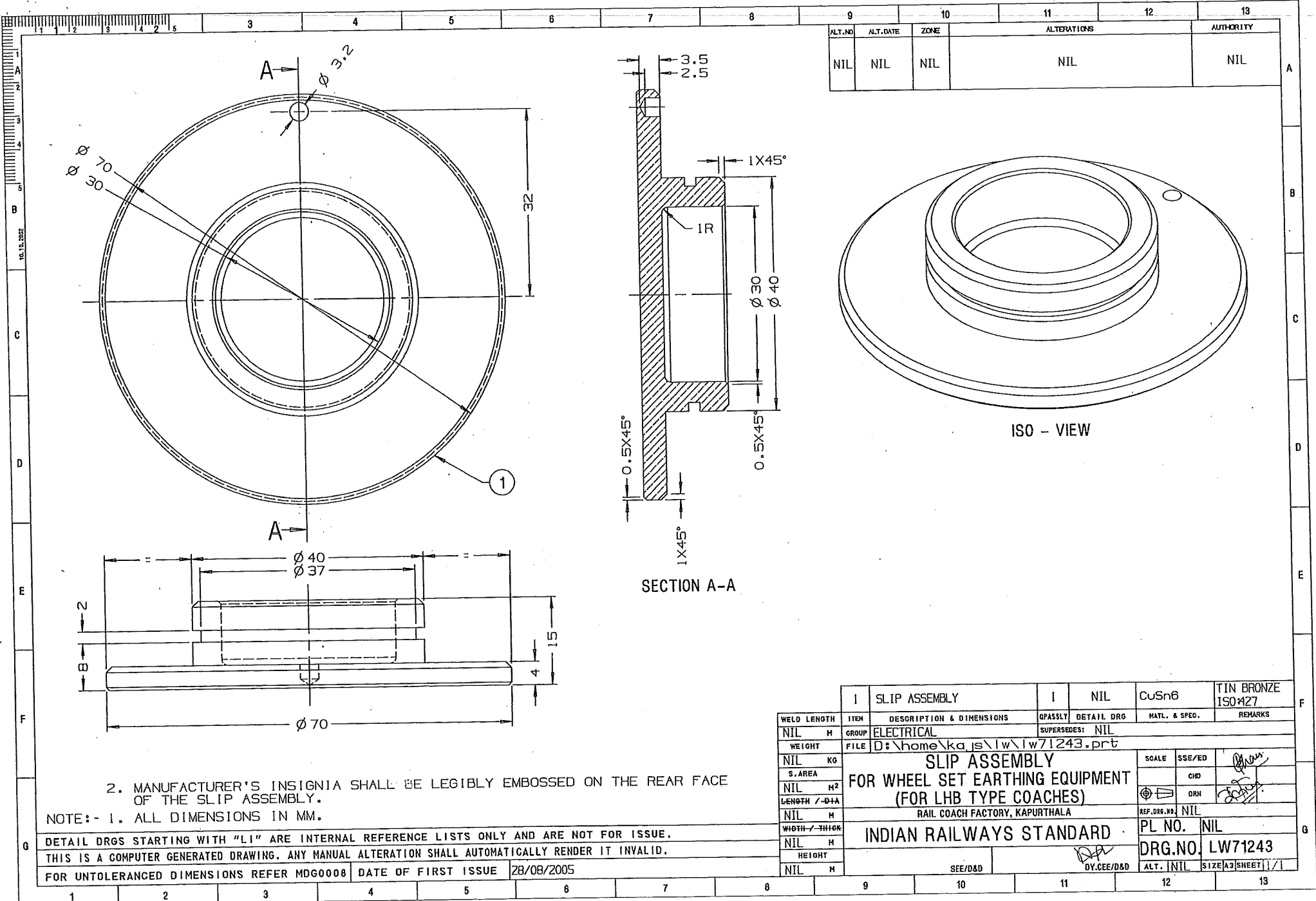
2. MANUFACTURER'S INSIGNIA SHALL BE LEGIBLY EMBOSSED ON THE REAR SURFACE OF THE RING OILER.

NOTE:- 1. ALL DIMENSIONS IN MM.

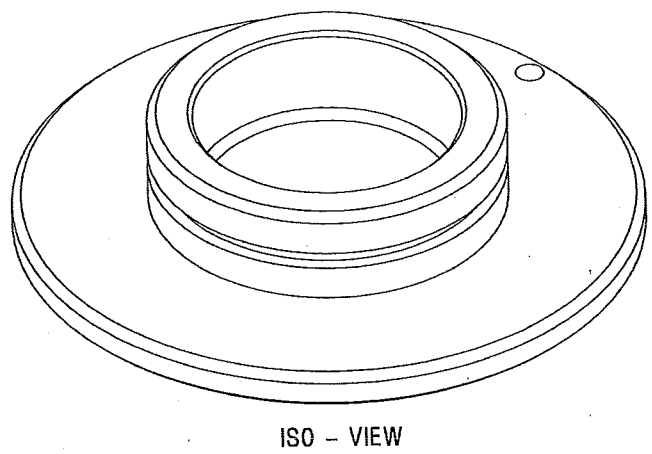
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/01/2009



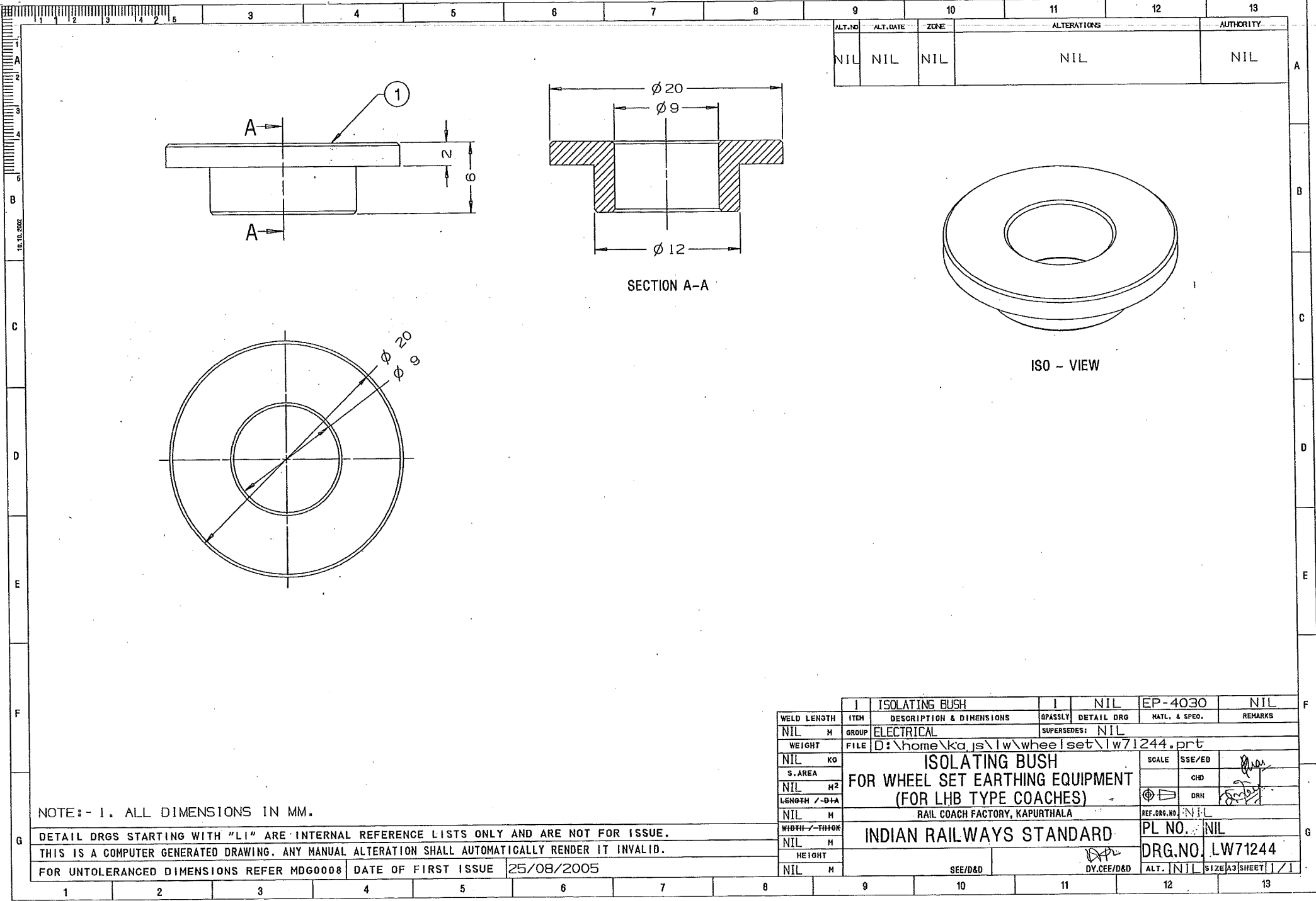
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



1	SLIP ASSEMBLY	1	NIL	CuSn6	TIN BRONZE ISO #27	
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPED.	REMARKS
NIL	M	ELECTRICAL	SUPERSEDES: NIL			
WEIGHT	FILE	D:\home\ka.js\lw\lw71243.prt				
NIL	KG	SLIP ASSEMBLY				SCALE
S. AREA	FOR WHEEL SET EARTHING EQUIPMENT				SSE/ED	
NIL	M <sup>2</sup>	(FOR LHB TYPE COACHES)				CHD
LENGTH / -D+A	RAIL COACH FACTORY, KAPURTHALA				DRN	
NIL	M	INDIAN RAILWAYS STANDARD				REF. DRG. NO.
WIDTH / THICK	PL NO. NIL				NIL	
NIL	M	DRG. NO. LW71243				
HEIGHT	SEE/D&D				DIY.CEE/D&D	ALT. [NIL] SIZE [A3] SHEET [1/1]
NIL	M					

2. MANUFACTURER'S INSIGNIA SHALL BE LEGIBLY EMBOSSED ON THE REAR FACE OF THE SLIP ASSEMBLY.  
 NOTE:- 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
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 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/08/2005



ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

SECTION A-A

ISO - VIEW

1		ISOLATING BUSH	1	NIL	EP-4030	NIL	
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEO.	REMARKS	
NIL	M	ELECTRICAL	SUPERSEDES: NIL				
WEIGHT	FILE	D:\home\kajs\lw\wheel\set\lw71244.prt					
NIL	KG	ISOLATING BUSH				SCALE	
S. AREA	FOR WHEEL SET EARTHING EQUIPMENT				SSE/ED		
NIL	M <sup>2</sup>	(FOR LHB TYPE COACHES)				CHD	
LENGTH / DIA	RAIL COACH FACTORY, KAPURTHALA				DRN		
NIL	M	INDIAN RAILWAYS STANDARD				REF. DRG. NO.	
WIDTH / THOK	INDIAN RAILWAYS STANDARD				PL NO.	NIL	
NIL	M	INDIAN RAILWAYS STANDARD				DRG. NO.	
HEIGHT	INDIAN RAILWAYS STANDARD				SIZE	A3	
NIL	M	INDIAN RAILWAYS STANDARD				SHEET	1/1

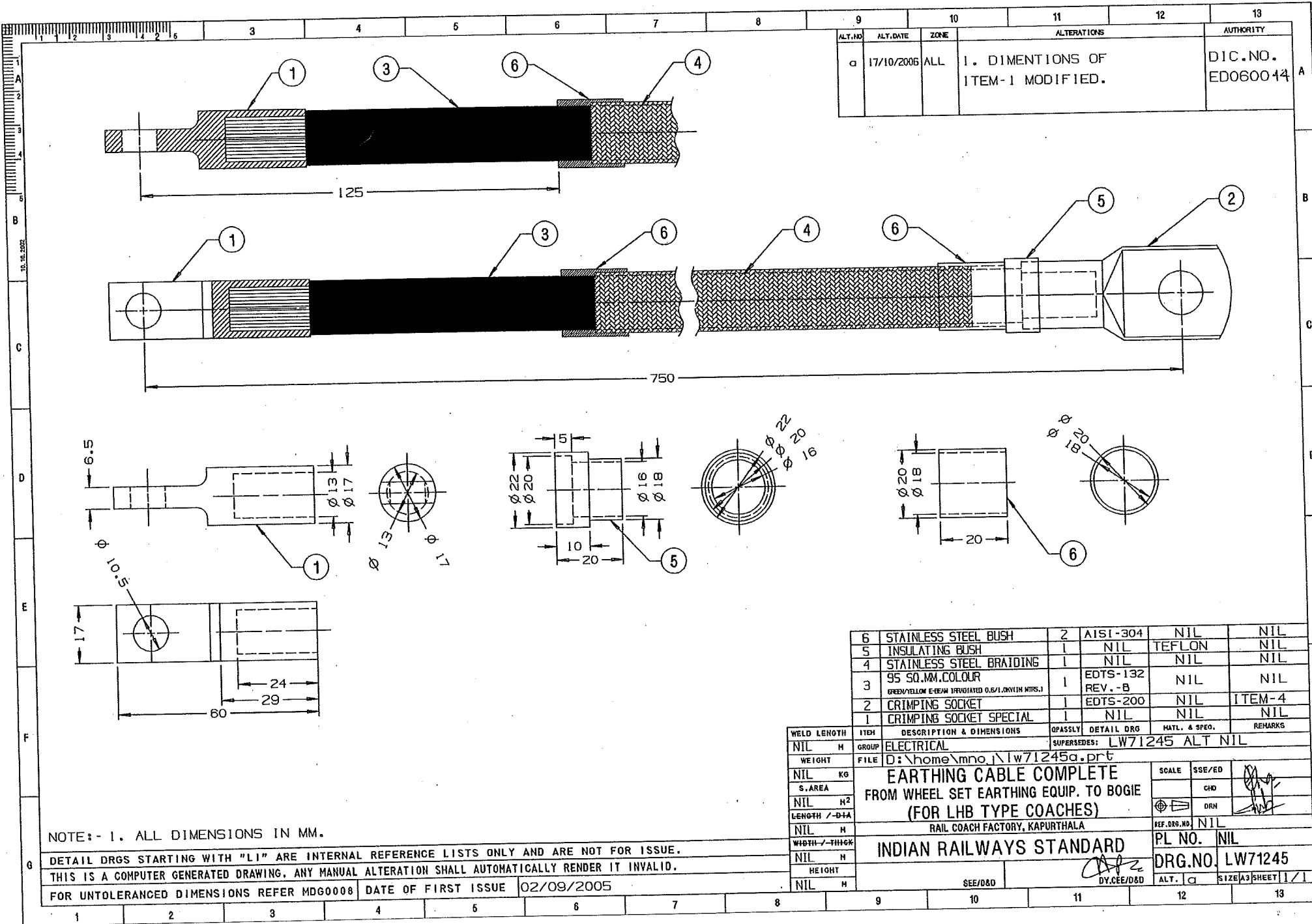
NOTE:- 1. ALL DIMENSIONS IN MM.

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

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 25/08/2005





ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
a	17/10/2005	ALL	1. DIMENSIONS OF ITEM-1 MODIFIED.	DIC.NO. ED060044

ITEM	DESCRIPTION & DIMENSIONS	QTY	MATERIAL	PL. NO.	REMARKS
6	STAINLESS STEEL BUSH	2	AISI-304	NIL	NIL
5	INSULATING BUSH	1	NIL	TEFLON	NIL
4	STAINLESS STEEL BRAIDING	1	NIL	NIL	NIL
3	95 SQ.MM. COLOUR (RED/YELLOW E-BEAN IRADIATED 0.6/1.0KV/1M MTRS.)	1	EDTS-132 REV.-B	NIL	NIL
2	CRIMPING SOCKET	1	EDTS-200	NIL	ITEM-4
1	CRIMPING SOCKET SPECIAL	1	NIL	NIL	NIL

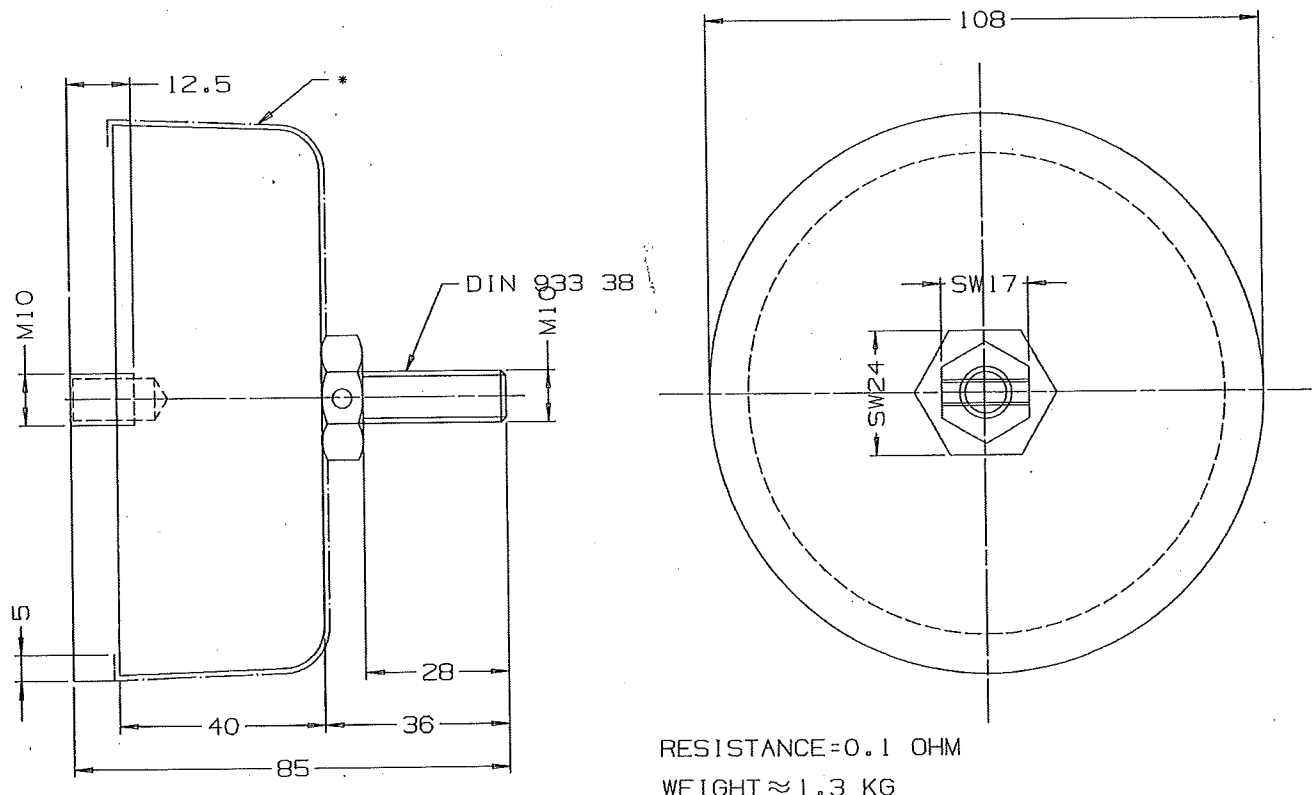
WELD LENGTH	ITEM	GROUP	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	H	ELECTRICAL				
WEIGHT	FILE	SUPERSEDES: LW71245 ALT NIL				
NIL	KG	D:\home\mno\lw71245a.prt				
S. AREA	EARTHING CABLE COMPLETE					
NIL	M <sup>2</sup>	FROM WHEEL SET EARTHING EQUIP. TO BOGIE				
LENGTH /-DIA	(FOR LHB TYPE COACHES)					
NIL	H	RAIL COACH FACTORY, KAPURTHALA				
WIDTH /-THICK	INDIAN RAILWAYS STANDARD					
NIL	H	PL. NO. NIL				
HEIGHT	DRG. NO. LW71245					
NIL	H	SEE/O&D	DY.CEE/O&D	ALT. a	SIZE A3 SHEET 1/1	

NOTE:- 1. ALL DIMENSIONS IN MM.

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 02/09/2005

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



- MANUFACTURER'S INSIGNIA/SERIAL NO. SHALL BE PUNCHED/CASTED IN THE ASSEMBLY.
- THE COLOUR OF THE OUTER BODY SHALL BE MATT BITTER CHOCOLATE OF M/S BERGER PAINT.

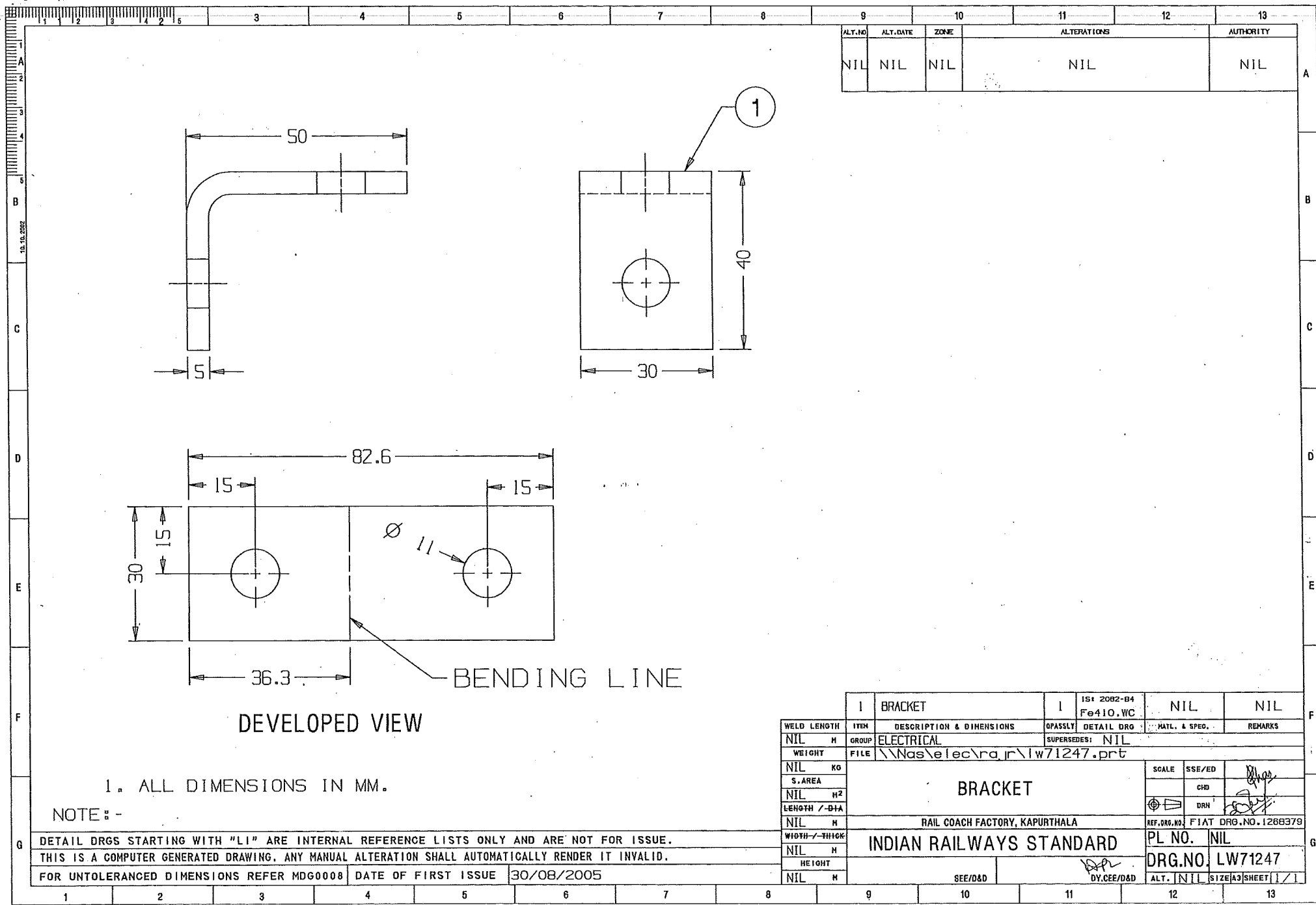
NOTE:- 1. ALL DIMENSIONS IN MM.

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

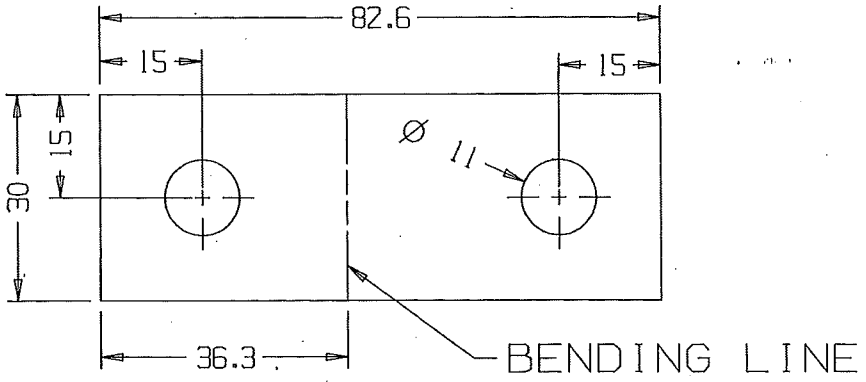
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 30/08/2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	HATL. & SPEC.	REMARKS
NIL	M	ELECTRICAL	SUPERSEDES: NIL			
WEIGHT	FILE	\\Nas\elec\ra_jr\LW71246.prt				
NIL	KG	EARTHING RESISTOR		SCALE	SSE/ED	<i>[Signature]</i>
S. AREA	M <sup>2</sup>	INDIAN RAILWAYS STANDARD		CHD	DRN	<i>[Signature]</i>
LENGTH / -DIA	M	RAIL COACH FACTORY, KAPURTHALA		REF. DRG. NO.	ENOR-AG 1358 277	
WIDTH / -THICK	M	INDIAN RAILWAYS STANDARD		PL NO.	NIL	
NIL	M	SEE/D&D		DRG. NO.	LW71246	
HEIGHT	M	DY.CEE/D&D		ALT.	NIL	SIZE(A) SHEET 1/1



ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



DEVELOPED VIEW

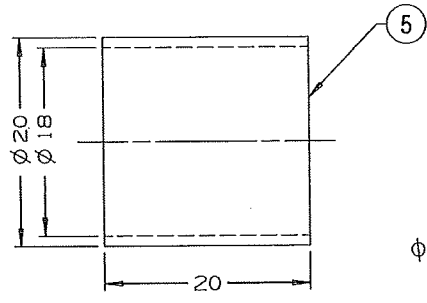
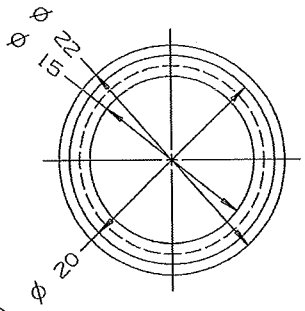
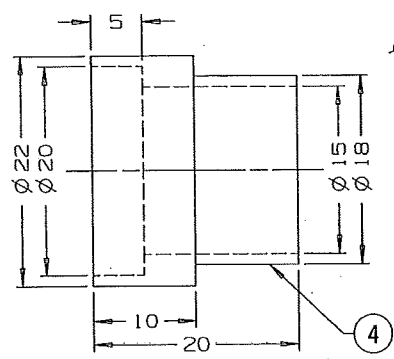
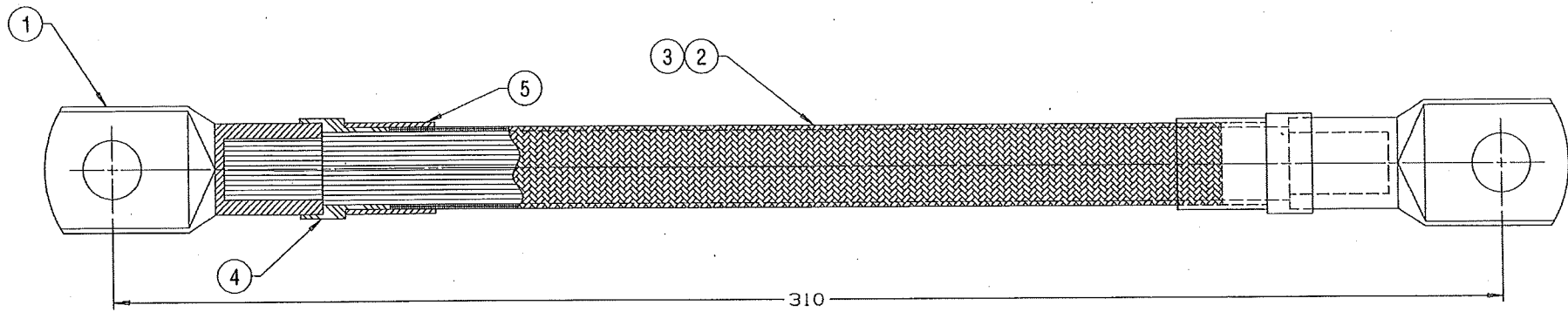
1. ALL DIMENSIONS IN MM.

NOTE :-

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 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 30/08/2005

1	BRACKET	1	IS 2082-B4 Fe410.WC	NIL	NIL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.
NIL	M	ELECTRICAL	SUPERSEDES: NIL		
WEIGHT	FILE	\\Nas\elec\rg\jr\lw71247.prt			
NIL	KG	BRACKET			SCALE
S.AREA	NIL				SSE/ED
NIL	H <sup>2</sup>				CRD
LENGTH / -DIA	NIL				DRN
NIL	M	RAIL COACH FACTORY, KAPURTHALA			REF.DRG.NO. F1AT DRG.NO. 1268379
WIDTH / THICK	NIL	INDIAN RAILWAYS STANDARD			PL NO. NIL
NIL	M				DRG.NO. LW71247
HEIGHT	NIL	SEE/D&D			DY.CEE/D&D
NIL	M				ALT. [NIL] SIZE[A] SHEET [1/1]

9	10	11	12	13
ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



5	STAINLESS STEEL BUSH	2	AISI-304	NIL	NIL
4	INSULATING BUSH	2	NIL	TEFLON	NIL
3	STAINLESS STEEL BRAIDING	1	NIL	NIL	NIL
2	7050.MM.COLOUR GREEN/YELLOW E-GEM (RADIATED CABLE 0.6/1KV (IN WTS.))	1	EDTS-132-REV.-B	NIL	NIL
1	CRIMPING SOCKET	2	EDTS-200	NIL	ITEM-4

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	H	ELECTRICAL	SUPERSEDES: NIL				
WEIGHT	FILE	D:\home\ka.js\lw\wheel\set\LW71248.prt					
NIL	KG	<b>EARTHING CABLE COMPLETE</b> <b>(FOR LHB TYPE COACHES)</b>				SCALE	SSE/ED
NIL	H <sup>2</sup>					CHD	
LENGTH / -Ø+Δ	NIL	RAIL COACH FACTORY, KAPURTHALA				REF. DRG. NO.	NIL
WIDTH / -THICK	NIL	<b>INDIAN RAILWAYS STANDARD</b>				PL NO.	NIL
HEIGHT	NIL	SEE/D&D				DRG. NO.	LW71248
NIL	H	DY.CEE/D&D				ALT.	NIL
						SIZE	A3
						SHEET	1/1

NOTE:- 1. ALL DIMENSIONS IN MM.

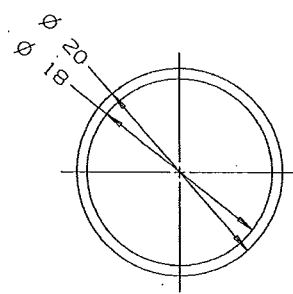
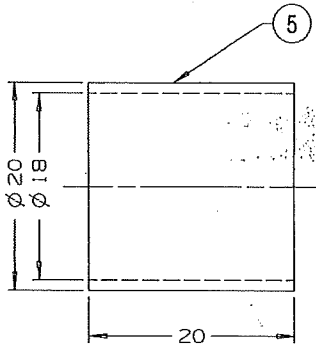
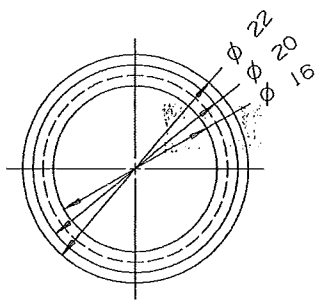
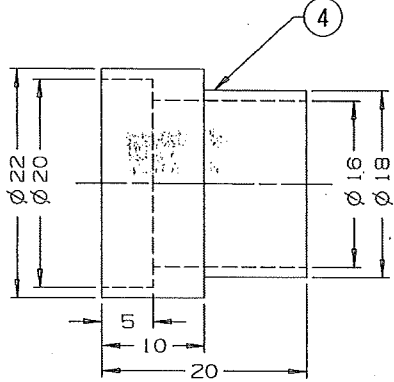
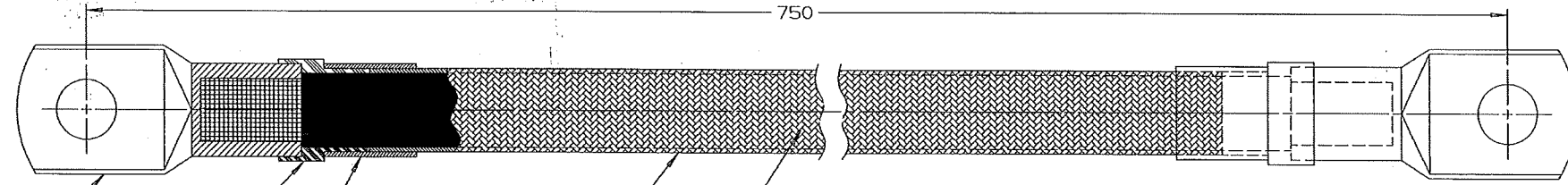
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 02/09/2005

1	2	3	4	5	6	7	8	9	10	11	12	13
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ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



5	STAINLESS STEEL BUSH	2	AISI-304	NIL	NIL
4	INSULATING BUSH	2	NIL	TEFLON	NIL
3	STAINLESS STEEL BRAIDING	1	NIL	NIL	NIL
2	95 50.MM.COLOUR GREEN/ YELLOW E-BEAN IRRADIATED CABLE 0.6/1.0KV (1H MTRS.)	1	EDTS-132 REV.-B	NIL	NIL
1	CRIMPING SOCKET	2	EDTS-200	NIL	ITEM-4

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	H	ELECTRICAL	SUPERSEDES: NIL				
WEIGHT	FILE	D:\home\ka.js\lw\wheel set\LW71249.prt					
NIL	KG	EARTHING CABLE COMPLETE (FOR LHB TYPE COACHES)				SCALE	SSE/ED
S. AREA							
NIL	M <sup>2</sup>	INDIAN RAILWAYS STANDARD				CHD	
LENGTH / -DIA							
NIL	M	RAIL COACH FACTORY, KAPURTHALA				DRN	
WIDTH / -THICK							
NIL	M	INDIAN RAILWAYS STANDARD				REF. DRG. NO.	NIL
HEIGHT							
NIL	M	SEE/D&D				PL. NO.	NIL
		DY.GEE/D&D				DRG. NO.	LW71249
		SEE/D&D				ALT.	NIL
		SEE/D&D				SIZE	A3
		SEE/D&D				SHEET	1 / 1

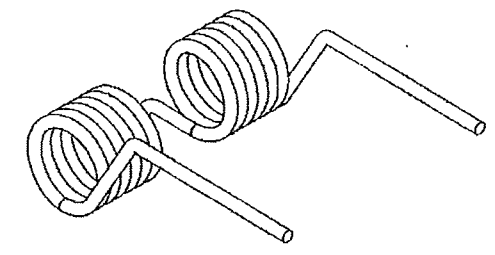
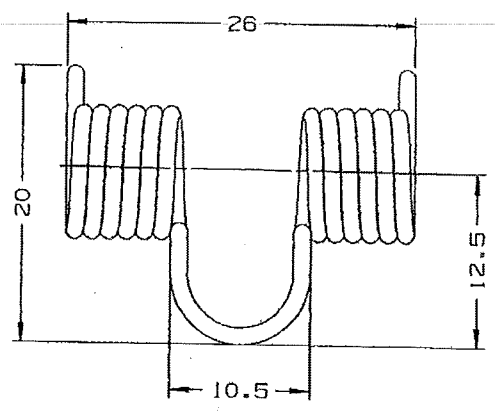
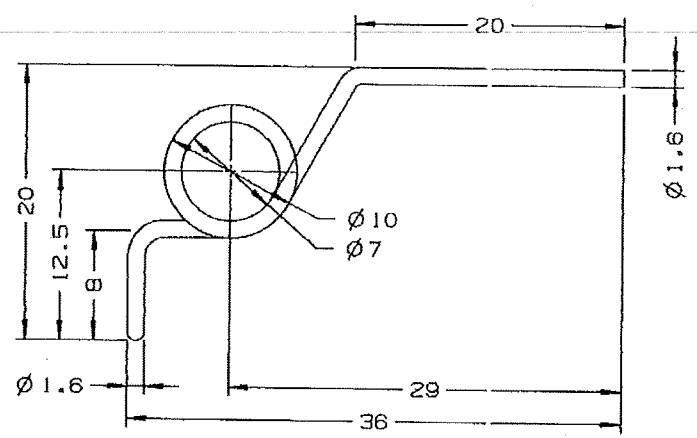
NOTE:- 1. ALL DIMENSIONS IN MM.

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

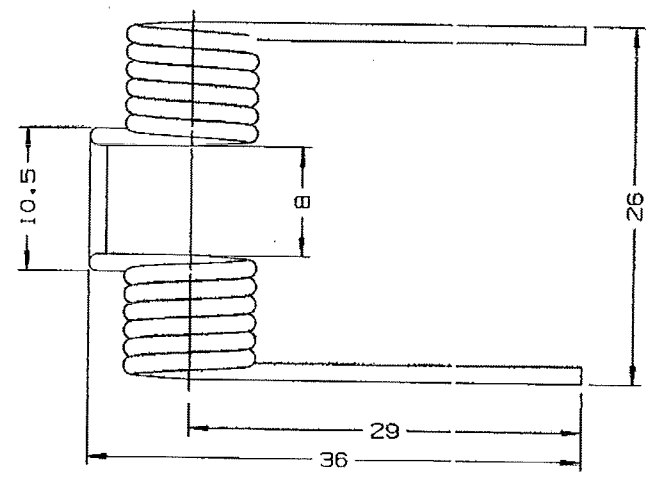
FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 02/09/2005

1  
2  
3  
4  
5  
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7  
8  
9  
10  
11  
12  
13

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	19/05/2009	ALL	1. SPRING WIRE DIA. ALTD. FROM -1.25MM TO -1.60MM AND IN MATL. & SPEC. IS ALTD. FROM IS: 5554 TO IS: 4454-2005.	DIC. NO. ED090002



ISO - VIEW

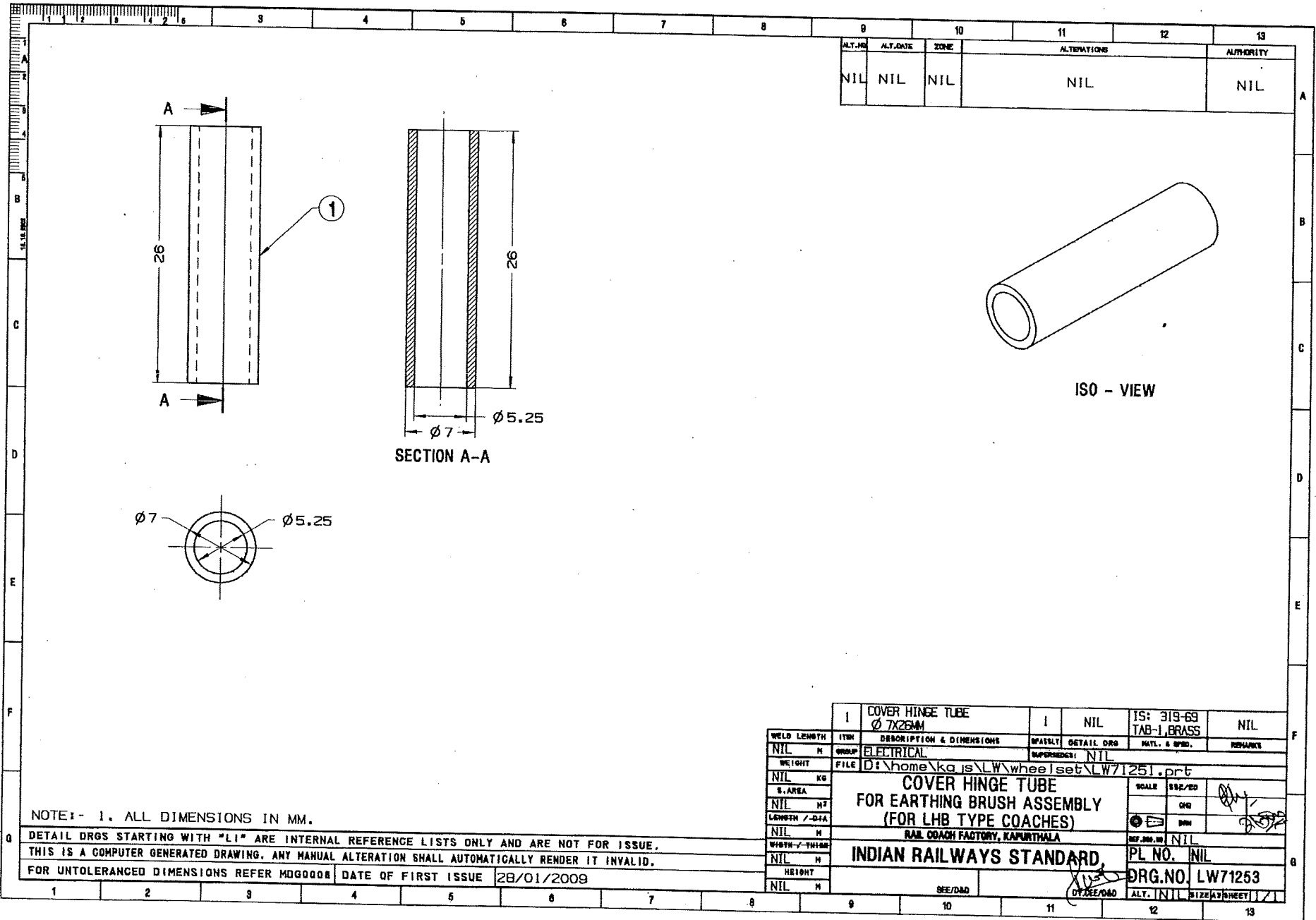


NOTE:- 1. ALL DIMENSIONS IN MM.

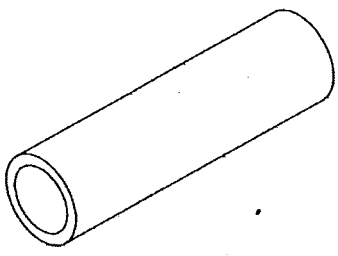
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 19/05/2009

1	STEEL SPRING	1	NIL	IS: 4454-2005 SPRING STEEL	NIL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLT	DETAIL DRG	REMARKS
NIL	M	ELECTRICAL			
WEIGHT	GROUP	FILE	SUPERSEDED: LW71250 ALT NIL		
NIL	KG	D:\home\ka.js\LW\wheelset\LW71250a.prt			
S. AREA	M <sup>2</sup>	SPRING FOR COVER		SCALE	SSE/ED
NIL	M <sup>2</sup>	FOR WHEEL SET EARTHING HOUSING			CHD
LENGTH / DIA	M	(FOR LHB TYPE COACHES)			DRM
NIL	M	RAIL COACH FACTORY, KAPURTHALA		REF. DRG. NO.	NIL
WIDTH / THICK	M	INDIAN RAILWAYS STANDARD		PL NO.	NIL
NIL	M	SEE/DAD		DRG. NO.	LW71250
HEIGHT	M		DY.GEE/D&D	ALT.	SIZE(S) SHEET 1/1
NIL	M				

1 2 3 4 5 6 7 8 9 10 11 12 13



ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



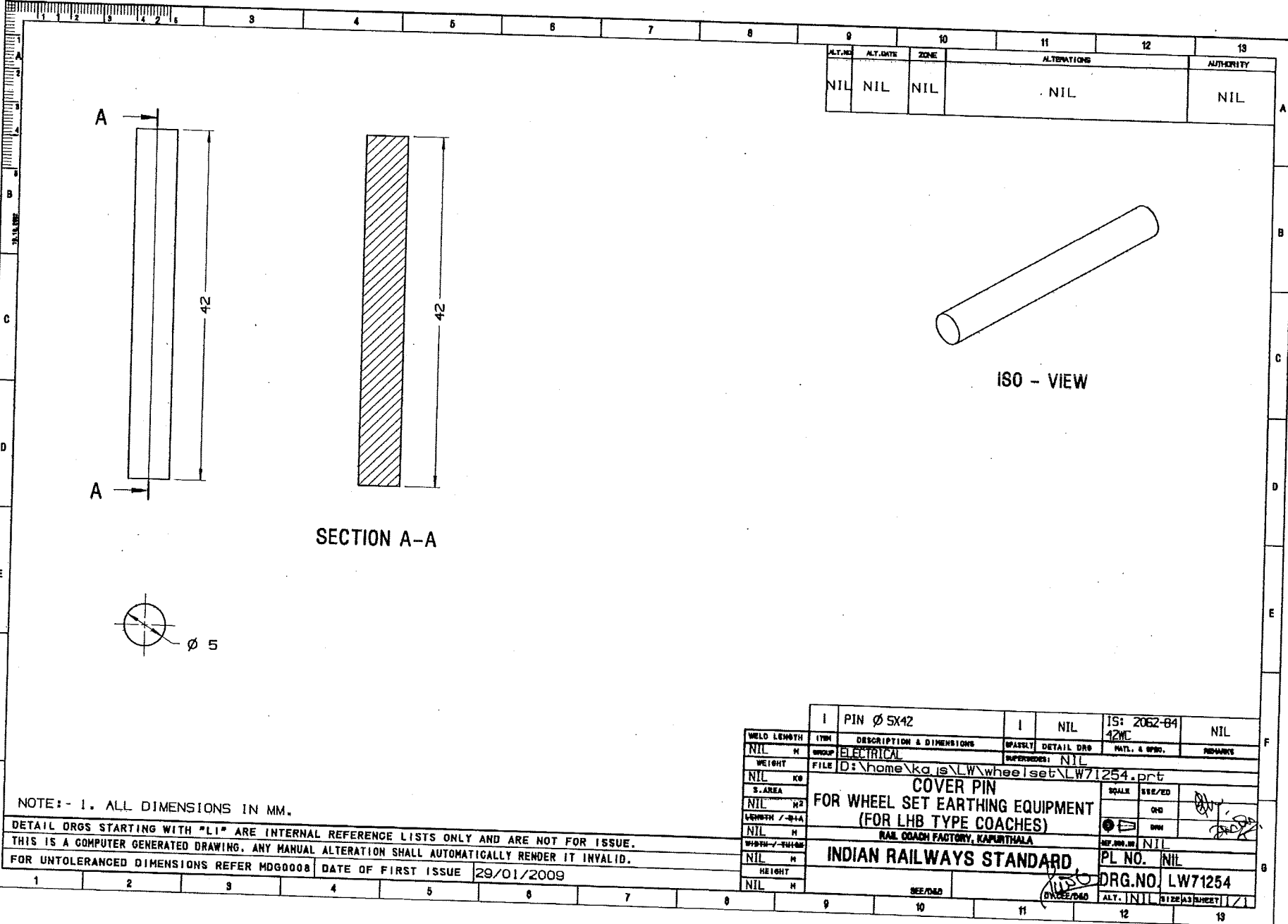
ISO - VIEW

SECTION A-A

1	COVER HINGE TUBE Ø 7X26MM	1	NIL	IS: 319-69 TAB-1, BRASS	NIL
WELD LENGTH	TYM	DESCRIPTION & DIMENSIONS	ASSEMBLY	DETAIL DRG	MATL. & QTY.
NIL	H	ELECTRICAL			REMARKS
WEIGHT	FILE	D:\home\ka.js\LW\wheel\set\LW71251.prt			
NIL	KG	COVER HINGE TUBE FOR EARTHING BRUSH ASSEMBLY (FOR LHB TYPE COACHES)			
S. AREA		RAIL COACH FACTORY, KAPURTHALA			
NIL	M <sup>2</sup>	INDIAN RAILWAYS STANDARD,			
LENGTH / -DIA		PL NO. NIL			
NIL	M	DRG. NO. LW71253			
WIDTH / THICK		SEE/D&D			
NIL	H	ALT. INTL. SIZE (A3) SHEET 1/1			

NOTE:- 1. ALL DIMENSIONS IN MM.

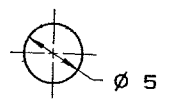
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/01/2009



ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

SECTION A-A

ISO - VIEW

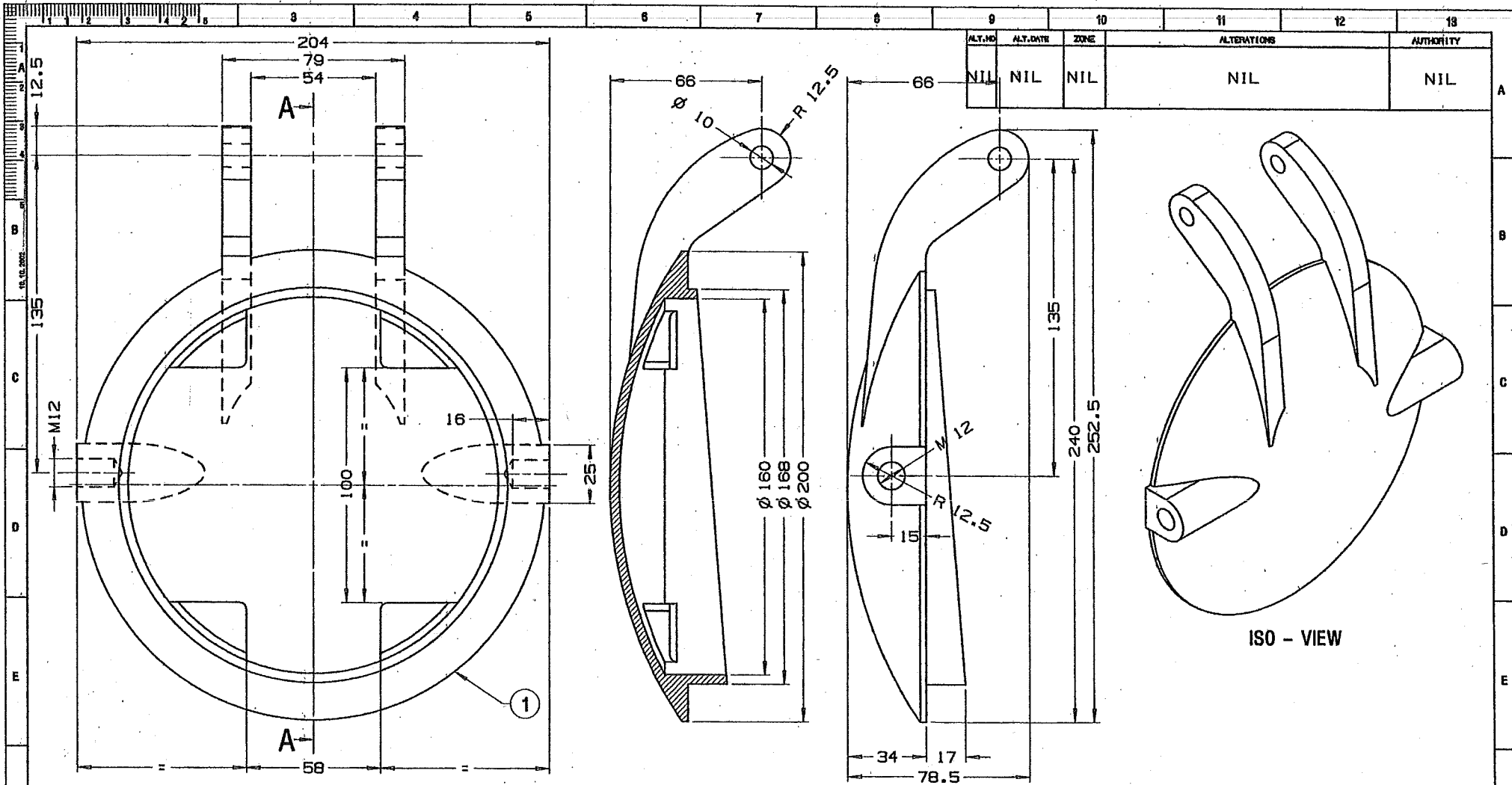


1	PIN Ø 5x42	1	NIL	IS: 2062-84	NIL
WELD LENGTH	17MM	DESCRIPTION & DIMENSIONS	SPASLT	DETAIL DRG	MATL. & QTY.
NIL	M	ELECTRICAL			SUBPARTS
WEIGHT	FILE	D:\home\ka\is\lw\wheelset\LW71254.prt			
NIL	KG	SUPERSEDES: NIL			
S. AREA	MM²	COVER PIN		SCALE	SEE/ED
NIL		FOR WHEEL SET EARTHING EQUIPMENT		QTY	
LENGTH / Ø	Ø	(FOR LHB TYPE COACHES)		QTY	
NIL		RAIL COACH FACTORY, KAPURTHALA		REF. NO.	NIL
WIDTH / SWAG	MM	INDIAN RAILWAYS STANDARD		PL NO.	NIL
NIL				DRG. NO.	LW71254
HEIGHT	MM			ALT.	NIL
NIL				SIZE	A3 SHEET

NOTE:- 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
 THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 29/01/2009





SECTION A-A

ISO - VIEW

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

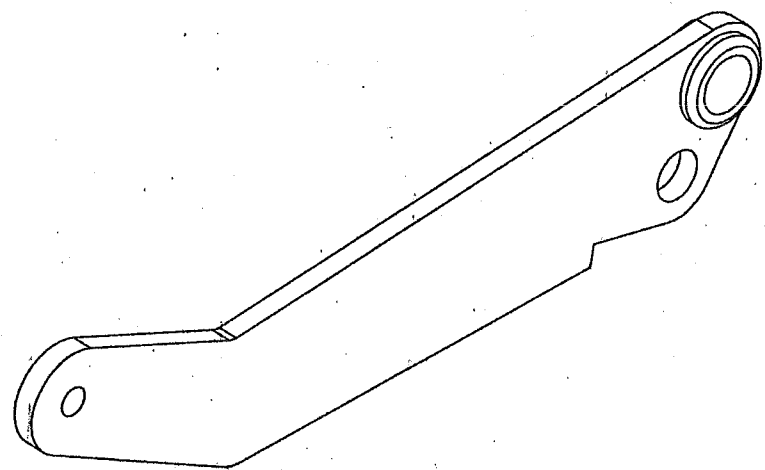
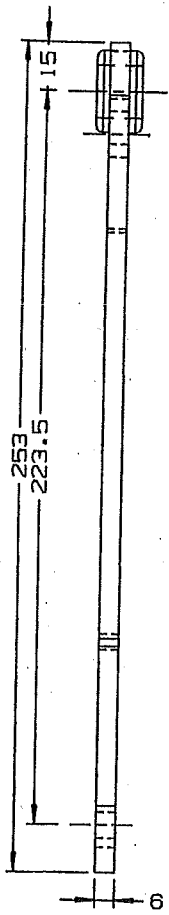
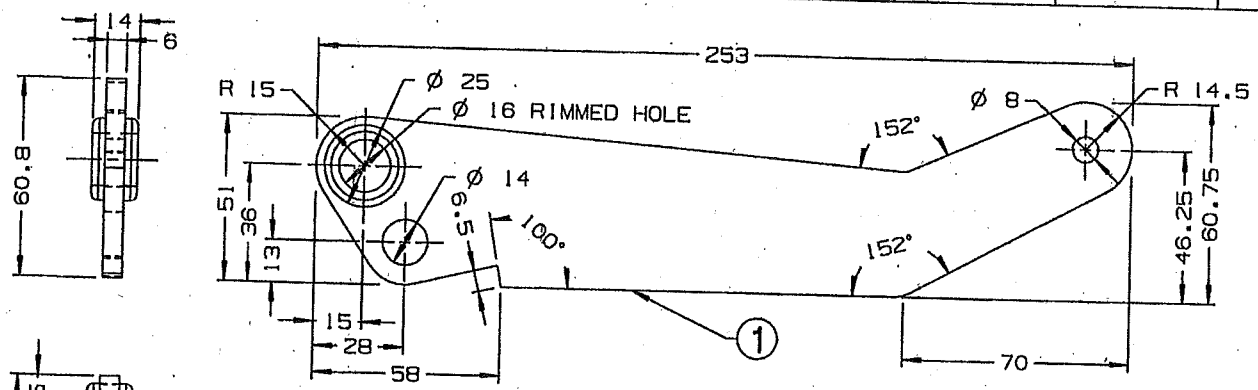
NOTE:- 1. ALL DIMENSIONS IN MM.

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

THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 22/08/2005

1	HINGED COVER	1	NIL	IS: 817-84 GR. - 4800	ALUMINIUM
WELO LENGTH	ITEM	DESCRIPTION & DIMENSIONS	PARTY	DETAIL DRG	MATL. & SPEC.
NIL	M	ELECTRICAL			REMARKS
WEIGHT	GROUP	FILE D:\home\ka_is\lw\zs\LW71350.prt			
NIL	KG	HINGED COVER			
S. AREA	M <sup>2</sup>	(FOR BLIND SOCKET ASSEMBLY)			
NIL		RAIL COACH FACTORY, KAPURTHALA			
LENGTH / DIA	M	INDIAN RAILWAYS STANDARD			
NIL		PL NO. NIL			
WIDTH / THICK	M	DRG. NO. LW71350			
NIL		SEE/D&D			
HEIGHT	M	DY. CEE/D&D			
NIL		ALT. [NIL] SIZE [A3] SHEET [1/1]			



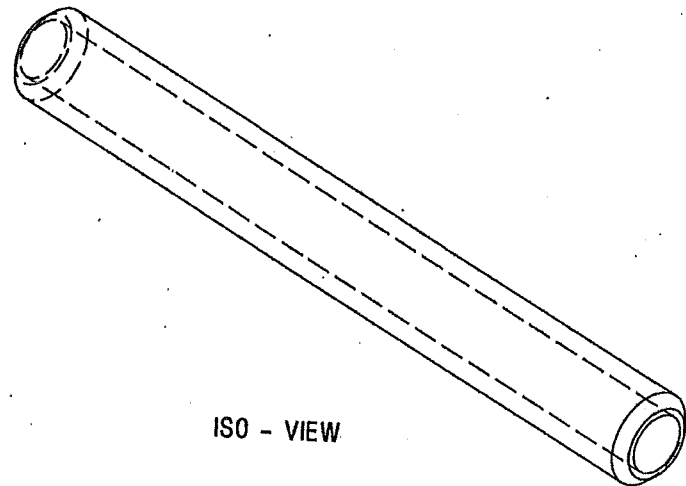
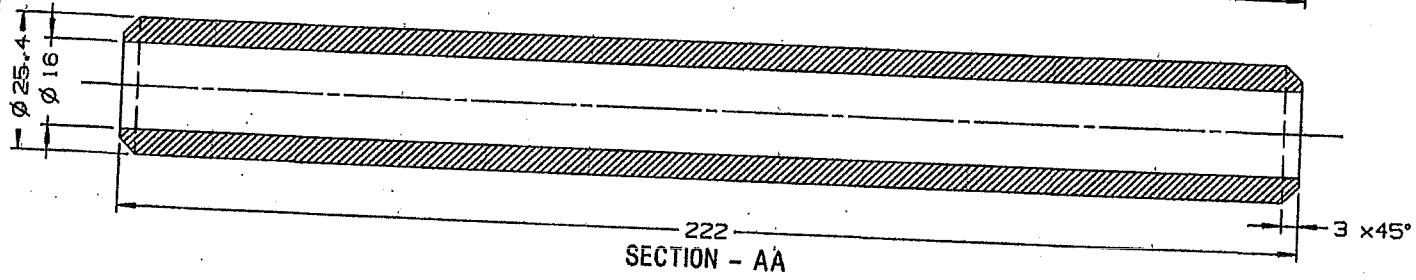
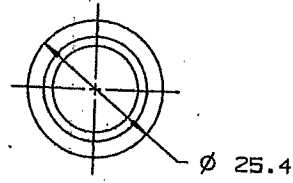
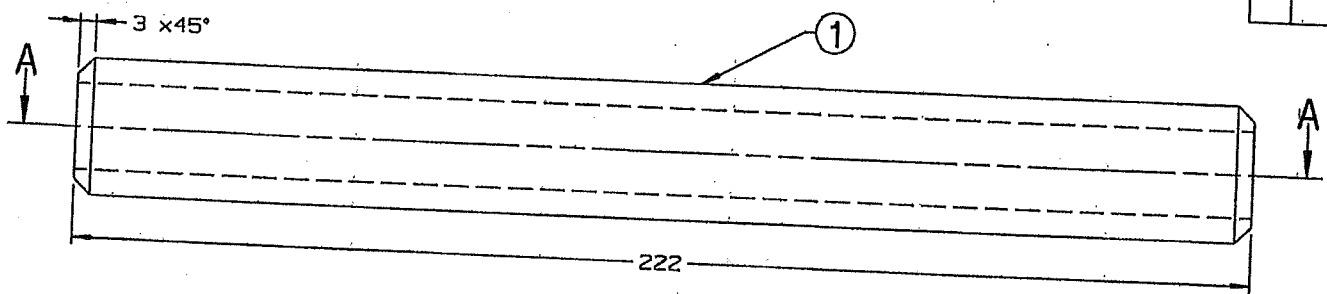
ISO - VIEW

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	20/03/2013	ALL	I. IS: 1264, GR. - DCB-2 BRASS ALTD. TO STAINLESS STEEL IS: 6911-92.	DIC. NO. ED13

1	LEVER ARM	1	NIL	IS: 6911-92 STAINLESS STEEL	STAINLESS STEEL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLT	DETAIL DRG	MATL. & SPEC.
NIL	M	ELECTRICAL			REMARKS
WEIGHT	FILE	D:\home\ka.js\LW\zs\lw71353a.prt			
NIL	KG				
S. AREA		LEVER ARM RIGHT HAND SIDE			
NIL	M <sup>2</sup>				
LENGTH / DIA		SCALE SSE/ED			
NIL	M	DRH			
WIDTH / THICK		RAIL COACH FACTORY, KAPURTHALA			
NIL	M	REF. DRG. NO. NIL			
HEIGHT		रेल कोच फैक्टरी कपूरथला			
NIL	M	IRS			
		PL NO. NIL			
		DRG. NO. LW71353			
		SEE/D&D		DY. CEE/D&D	ALT. 0
					SIZE A3 SHEET 1/1

NOTE:- 1. ALL DIMENSIONS IN MM.  
 2. DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
 3. THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
 4. FOR UNTOLERANCED DIMENSIONS REFER MDG0008  
 5. DATE OF FIRST ISSUE 05/08/2005

ALT.NO.	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
a	20/03/2013	ALL	1. IS:319, BRASS ALTD. TO STAINLESS STEEL IS:6911-92.	DIC.NO. ED13



ISO - VIEW

NOTE:- 1. ALL DIMENSIONS IN MM.  
 0 DETAIL DROS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
 THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
 FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DATE OF FIRST ISSUE 05/08/2005

1	DISTANCE ROD	1	NIL	IS:6911-92	STAINLESS STEEL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLT	DETAIL DRG	MATL. & SPEC.
NIL	M	ELECTRICAL			REMARKS
WEIGHT	GROUP	FILE	SUPERSEDES: LW71354 ALT NIL		
NIL	KG	D:\home\ka.js\LW\zse\lw71354a.prt			
S.AREA	M <sup>2</sup>	LEVER ARM DISTANCE ROD		SCALE	SSE/ED
NIL		RAIL COACH FACTORY, KAPURTHALA		CHD	
LENGTH /-DIA	M	रेल कोच फैक्टरी कपूरथला		DRH	
NIL		IRS		REF. DRG. NO.	NIL
WIDTH /-THICK	M			PL NO.	NIL
NIL				DRG.NO.	LW71354
HEIGHT	M			ALT.	a
NIL		SEE/D&D		SIZE	A3 SHEET 1/1
				DY.CEE/D&D	



ICF/STD-6-4-009



ALTERATION	
ⓑ	09/2003 CONTENTS OF NOTICE REVISED. Sd/- 24/09/03 SSE/D SME/DSD
ⓒ	04/2004 NOTE-1 REVISED. Sd/- SSE/D
ⓓ	09/2006 NOTE-2 & 3 ADDED. NOTE-1 DELETED. Sd/- SSE/D

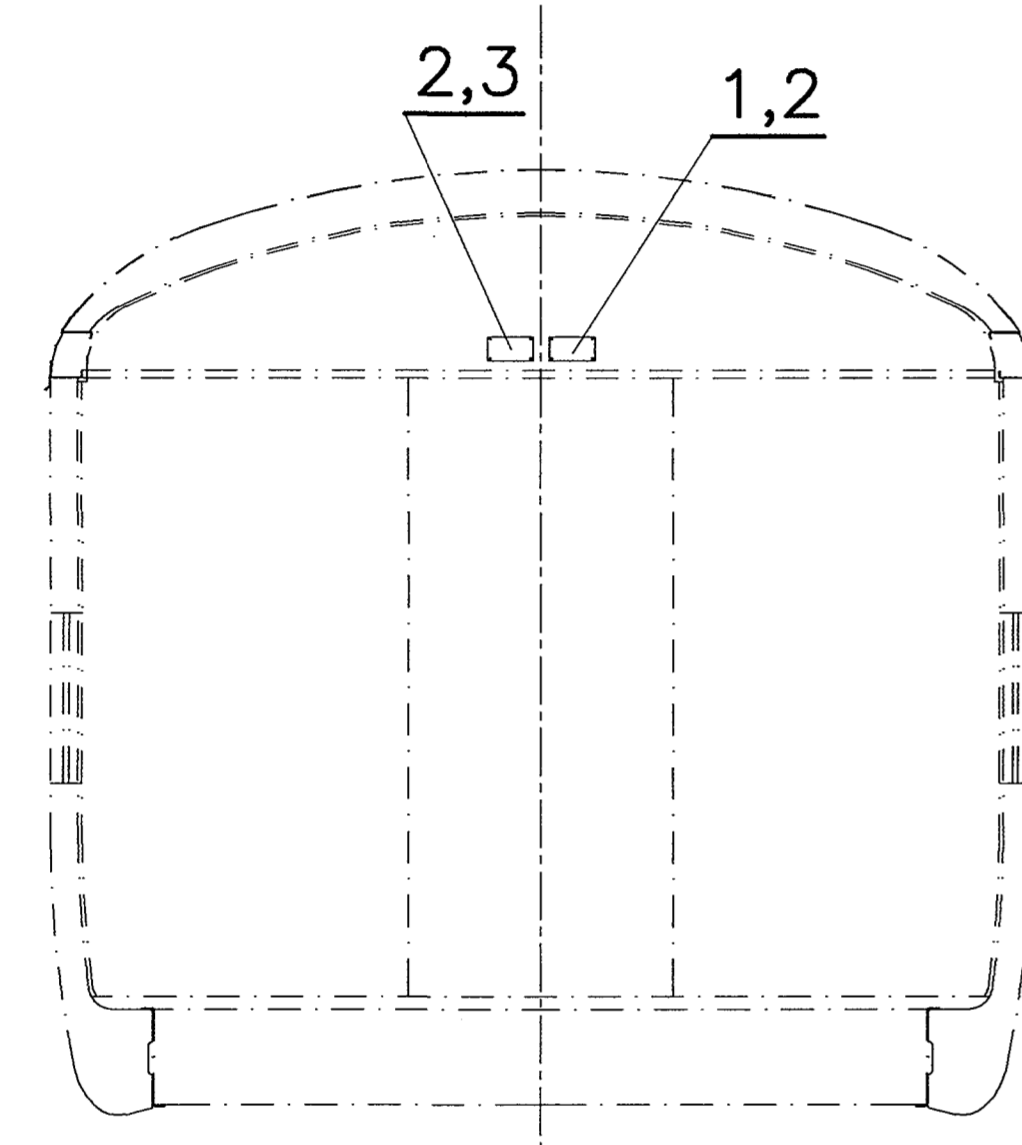
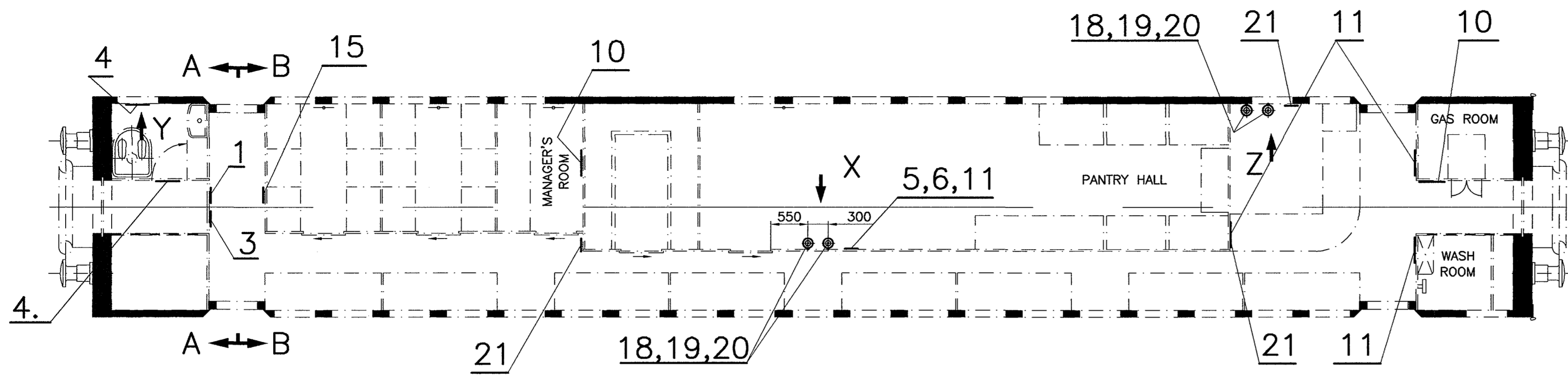
**NOTE:-**

- LETTERS & BORDER LINE IN RED ON WHITE BACKGROUND.
- SUPPLIER NAME / LOGO INDICATING THE MONTH & YEAR OF MANUFACTURE TO BE PRINTED IN THE INDICATED SPACE.

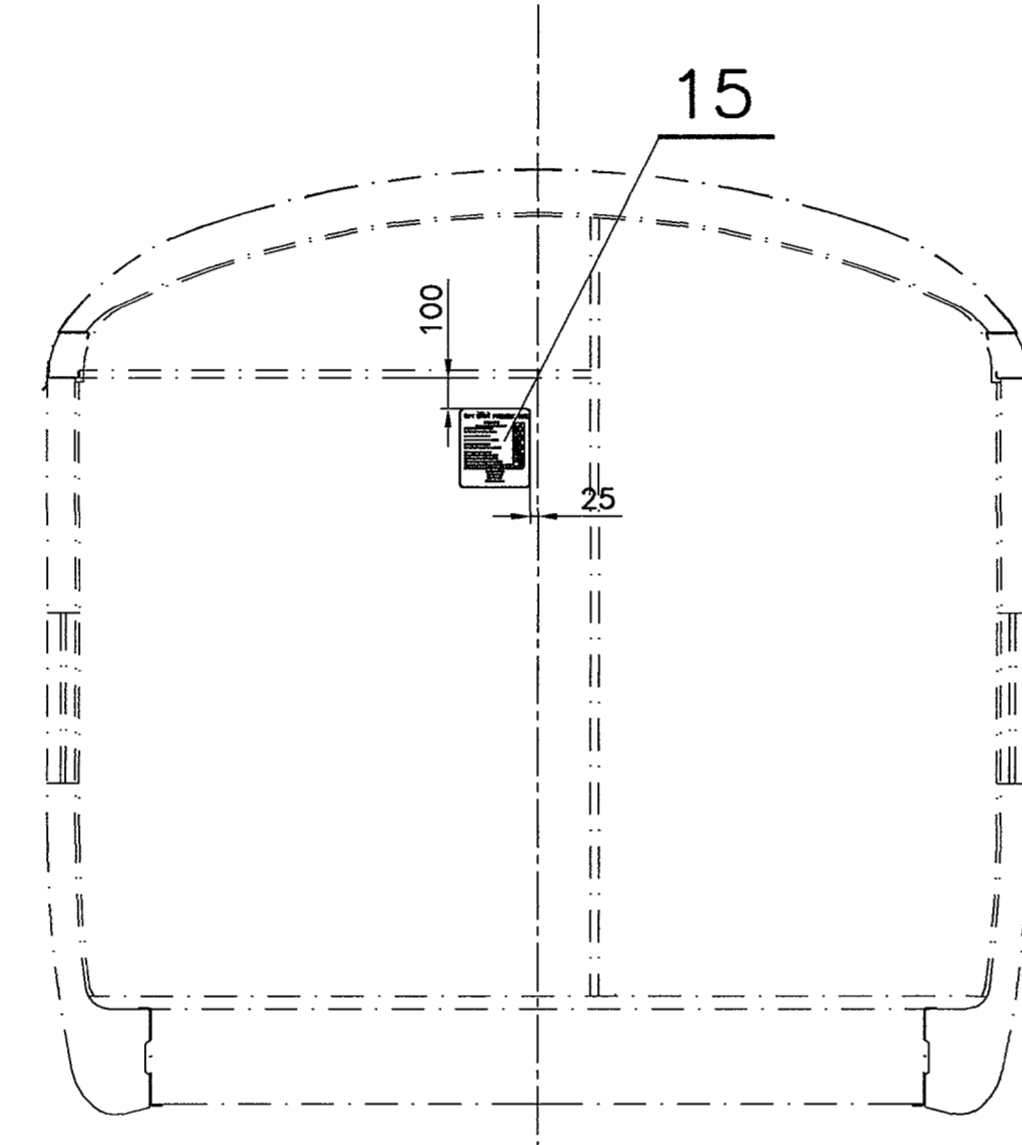
- ⓐ SCN<sub>7</sub>, WG<sub>7</sub>FAC<sub>7</sub>, WFAC<sub>5</sub>, SLR<sub>2</sub>
- Ⓢ GS<sub>5</sub>, SDC<sub>5</sub>
- \* WGSCWAC<sub>7</sub>, WGSCZAC<sub>8</sub>

6	4	3	2	SMOKING PROHIBITED NOTICE	120x170	1	ICF/MD/ SPEC-191.	WEIGHT/UNIT	REMARKS
SLR <sub>2</sub> -6-4-206	WGSCZAC <sub>5</sub> -6-4-501	WFAC <sub>5</sub> -6-4-501	WG <sub>4</sub> FSCWAC <sub>4</sub> -6-4-402	WGSCWAC <sub>4</sub> -6-4-401	SCN <sub>5</sub> -6-4-502	SDC-6-4-002	GS-6-4-002		
ASSEMBLY DRAWINGS				CAD FILE: C:\MD-CAD\140\6-4\009-SD00.DWG.				SUPERSEDED BY:	
DATE OF LATEST ALTN.				DATE OF FIRST ISSUE				SUPERSEDES: ICF/STD-6-4-009 ALT: c/-	
SME/AME				INDIAN RAILWAY STANDARDS				SCALE: 1:1	
DATA CODE NO. 140				SHEET 1 OF 1				SD: <i>Sipath</i> CHD: <i>Valsa Varghese</i> ALT: <i>MILIND M.CHIMURKAR</i> DRN: <i>MILIND M.CHIMURKAR</i>	
ALT				ICF/STD-6-4-009				INTEGRAL COACH FACTORY CHENNAI - 38	

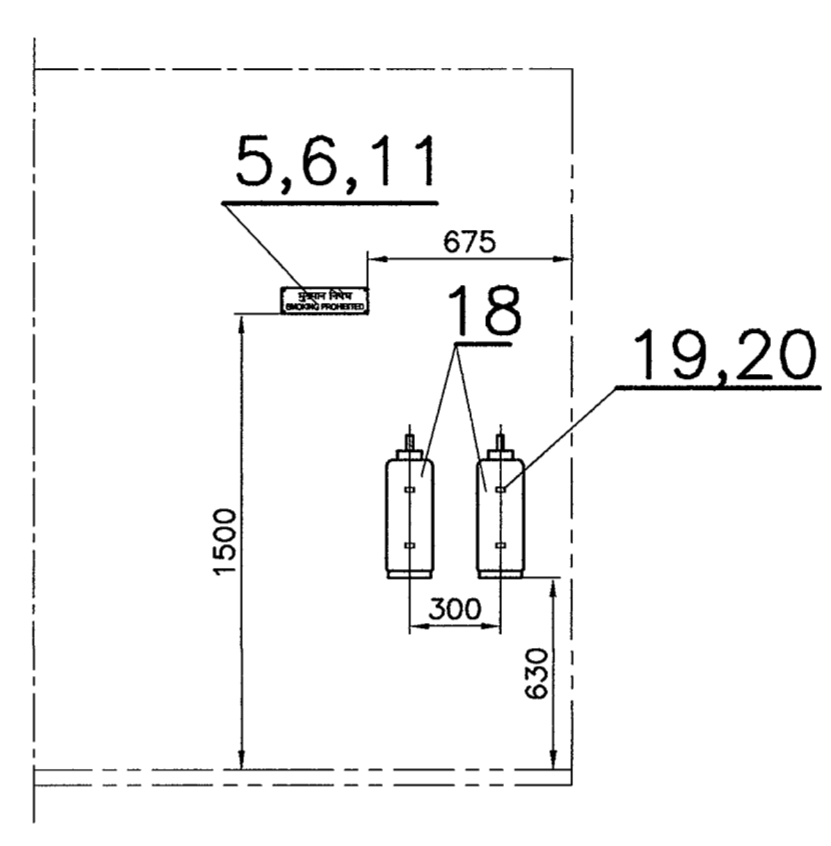
③ 09/05 QTY. FOR ITEMS-5 & 6 ALTD. FROM 16 TO 12. Sd/- SSE/D	② 08/1986 QTY.FOR WCB/C ADDED IN COL-1 WITH ASSY.DRG. NO.WCB/C-9-0-002. SD Sd/-	ROUGH MACHINED FINISH MACHINED FINE FINISH MACHINED	ROUGH CLEANING	ALTERATION ① 01/2003 REF.DRG.FOR ITEM-3 ALTD.FROM GS-6-4-003 TO ICF/STD-6-4-005.QTY. FOR WCB5 ADDED WITH ASSY. DRG.NO.WCB5-9-0-502.MAT. SPEC.FOR ITEM-1 & 11 UPDATED. Sd/- SSE/D ② 09/2004 ITEM-17 DELETED. ITEM-18 TO 20 AND VIEW FROM -Z ADDED.QTY.FOR ITEM-4 ALTD.FROM 1 TO 2. DRAWING REDRAWN IN CAD. Sd/- SSE/D ④ 07/2006 ITEM-21 ADDED. MAT. SPEC. FOR ITEMS-1 & 11 REVISED. Sd/- SSE/D
-----------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------------	----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



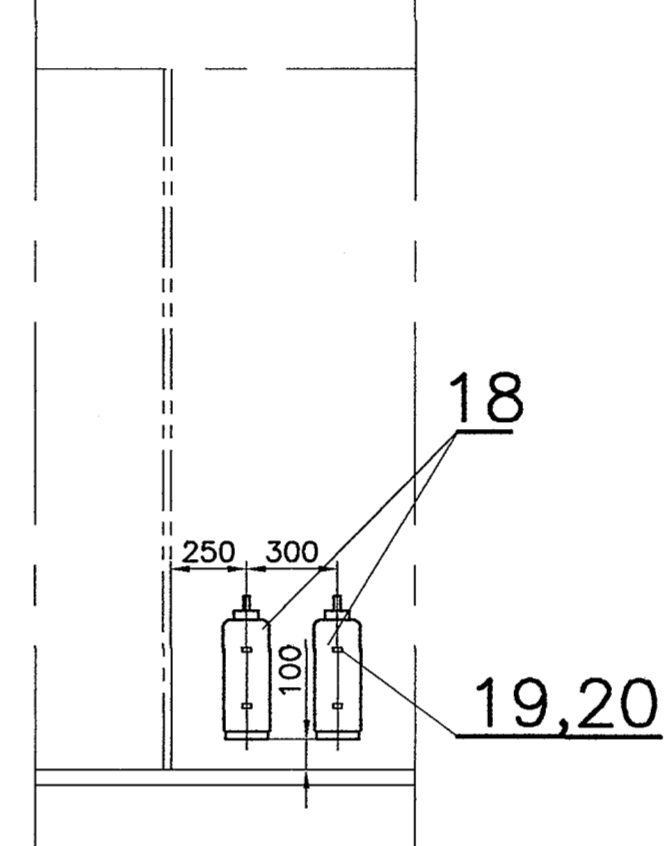
SECTION-AA



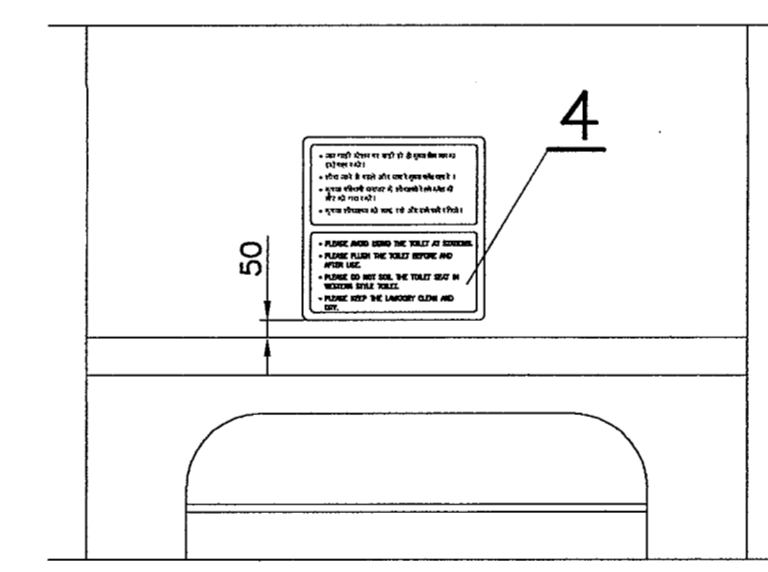
SECTION-BB



VIEW FROM-X

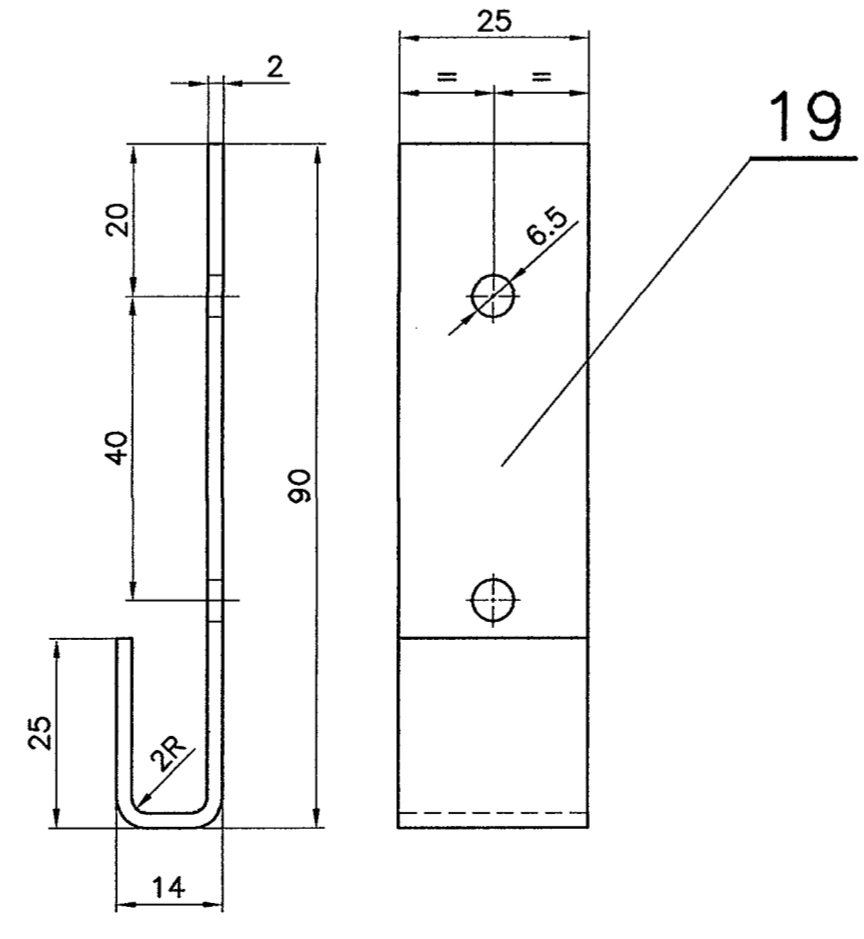
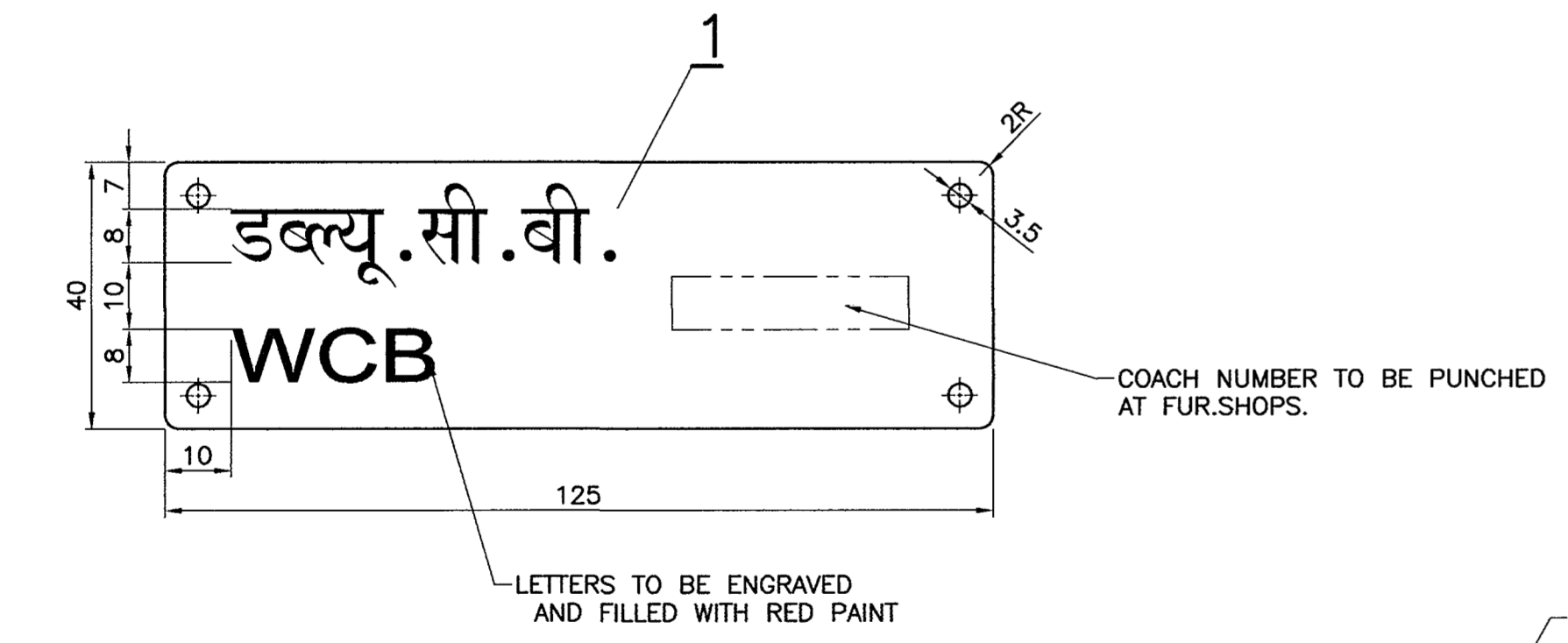


VIEW FROM-Z



VIEW FROM-Y

\* TO BE SUPPLIED ALONG WITH GAS LEAK DETECTION SYSTEM.



NO.OFF	DESCRIPTION AND DIMENSION	ITEM	REF.DRG.	MAT & SPEC	WEIGHT/UNIT	REMARKS
2	ATTENTION & OPERATION STICKERS	21				*
16	PAN HD. TAPP. SCREW ST4.8x25-F	20	IS:7173-89			BRIGHT ZINC PLATED
8	BRACKET 2x25x121	19		ISI-304		FINISH-2D
4	DCP TYPE FIRE EXTINGUISHER	18	IS:2171-85 TABLE-2			REFER UL DESCRIPTION
2	FIRE PREVENTION NOTICE	15	ICF/SK 6-4-265			
4	SMOKING PROHIBITED NOTICE 1.6x85x285	11		IS:737-86		BRIGHT ANODISED
2	IMPORTANT INSTRUCTION NOTICE	10	ICF/SK 6-4-096			
12	PLAIN WASHER 3.4	6	IS:2016-67 T-2 TY-A	IS:737-86 19000		
12	SNAP HEAD RIVET Ø3x10	5	IS:2907-64 T-2 F-1	IS:740-77 19000		
2	NOTICE	4	RDSO/SK 74005			
1	FURNISHING PLATE	3	ICF/STD 6-4-005			
8	PAN HD. TAPP. SCREW ST4.2x13-C	2	IS:7173-89			BRIGHT ZINC PLATED
1	COACH NUMBER PLATE 1.6x40x125	1		IS:737-86		BRIGHT ANODISED

NO.OFF		DESCRIPTION AND DIMENSION		ITEM	REF.DRG.	MAT & SPEC	WEIGHT/UNIT	REMARKS
IV	III	II	I	GROUP: 6-4 INTERIOR EQUIPMENTS AND ACCESSORIES				
SUPERSEDED BY:								WCB-6-4-105,ALT:p/2
LAYOUT OF NOTICES AND LOCATION OF FIRE EXTINGUISHER								
CAD FILE : C:\MD-CAD\039\6-4\105-SQ03.DWG								
DATA CODE NO. 039								INDIAN RAILWAY STANDARDS
SHEET 1 OF 1								INTEGRAL COACH FACTORY CHENNAI-600038
WCB-6-4-105								

WCB5-9-0-502	WCB-9-0-102	ASSEMBLY DRAWING
2J-07-06		
3	2	ALT
DATE OF LATEST ALTN.	DATE OF FIRST ISSUE	SME/D

▽ ROUGH MACHINED	① ROUGH CLEANING	ALTERATIONS
▽▽ FINISH MACHINED		11/2015
▽▽▽ FINE FINISH MACHINED		② 12/2015
		③ 03/2016

NOTE-3 & SEC-AA REVISED. ITEM-9 TO 17 ADDED. ITEM-1 DELETED. VIEWS ALTD. ACCORDINGLY.

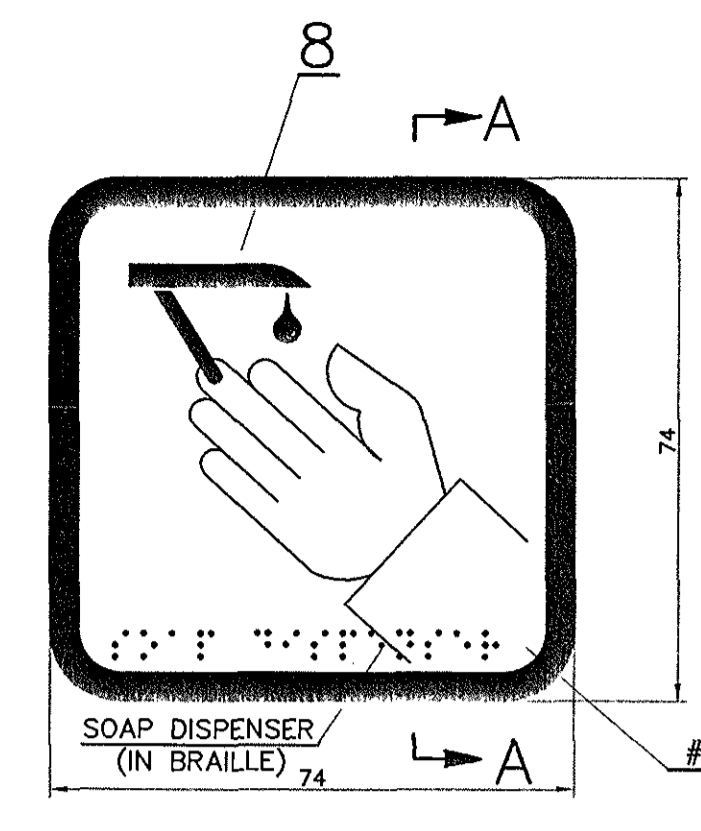
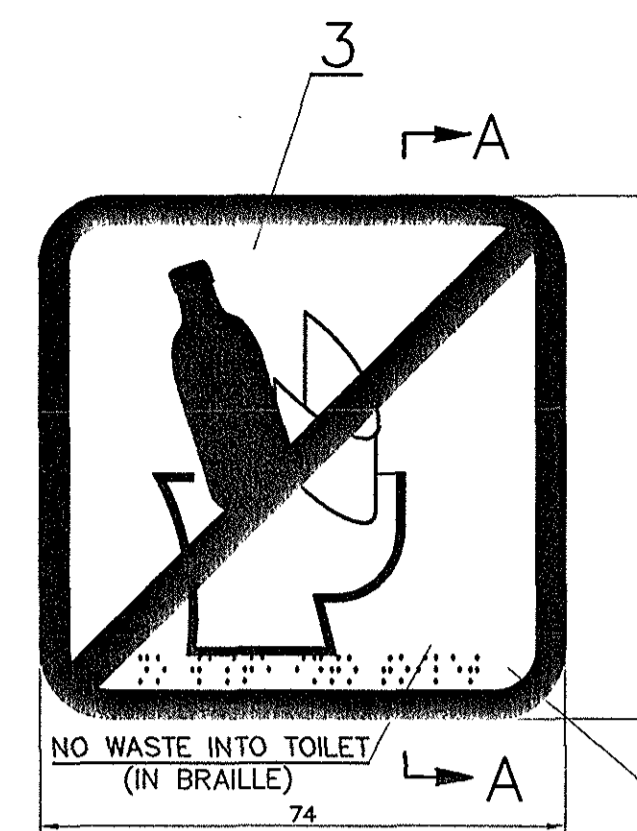
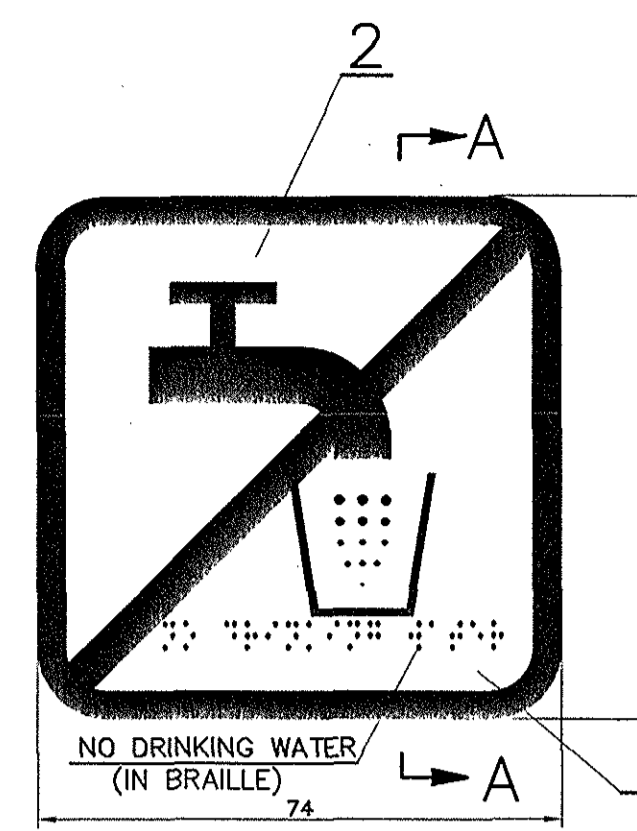
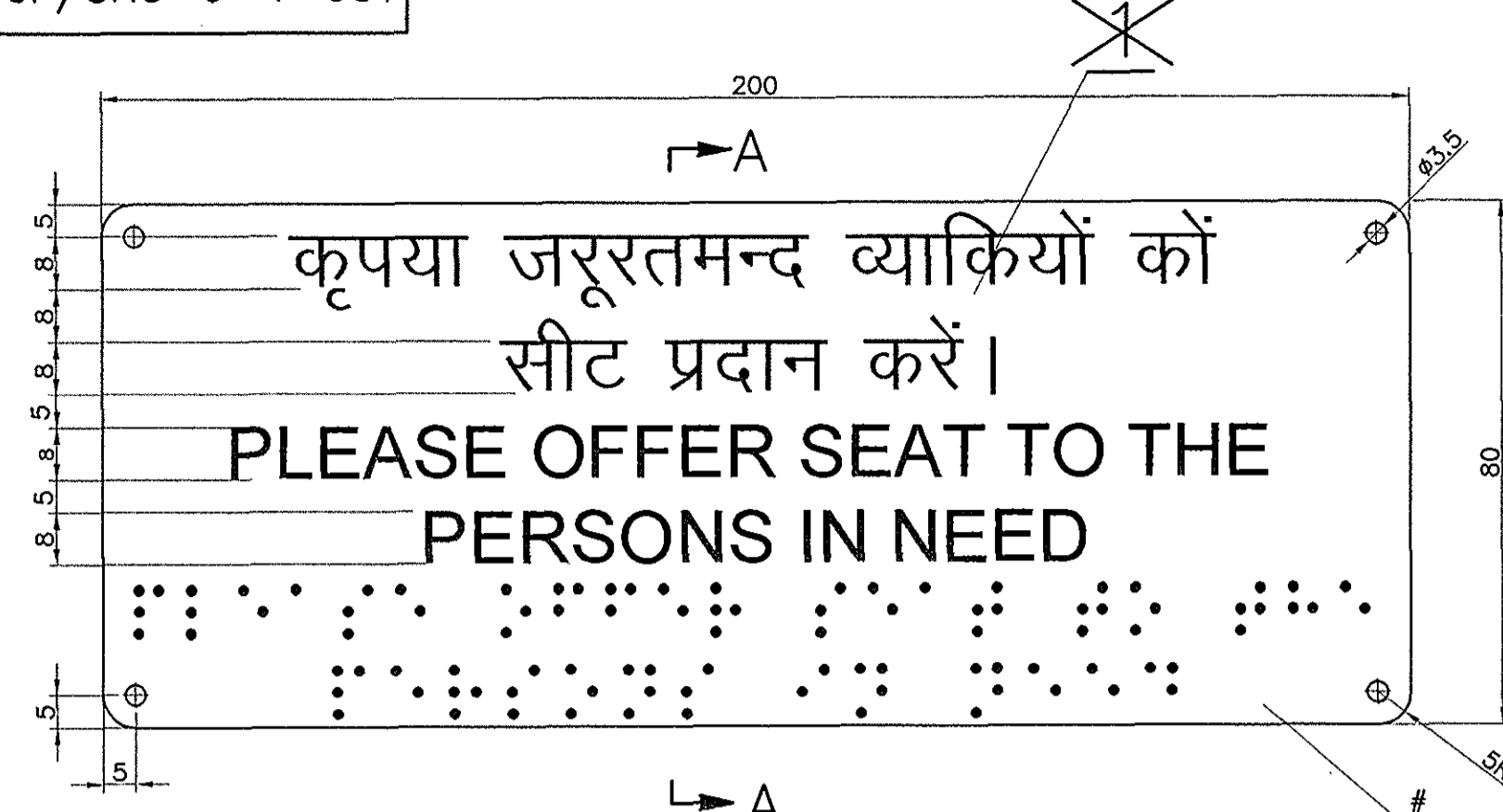
Sd/- Sd/-  
SSE/D SME/DSD

MATERIAL SPECN. OF ITEM-16 CORRECTED TO ICF/MD/SPEC-253.

Sd/- Sd/-  
SSE/D SME/DSD

NOTE-3 REVISED. NOTE-4 DELETED.

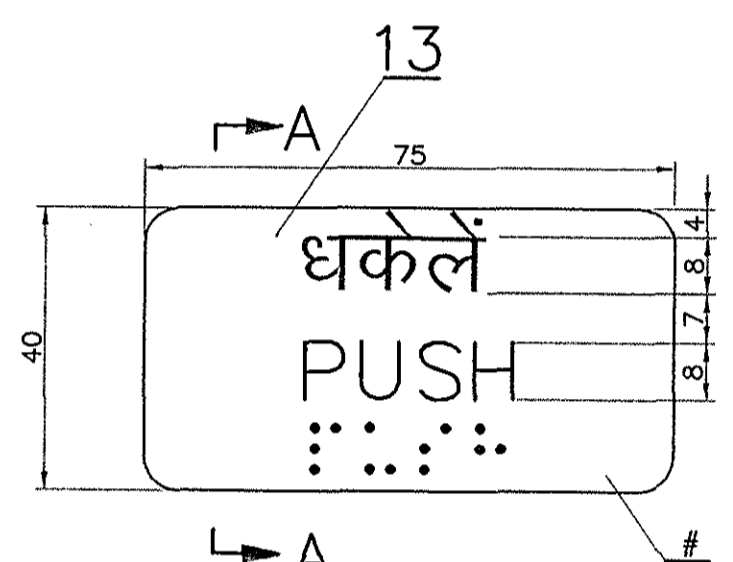
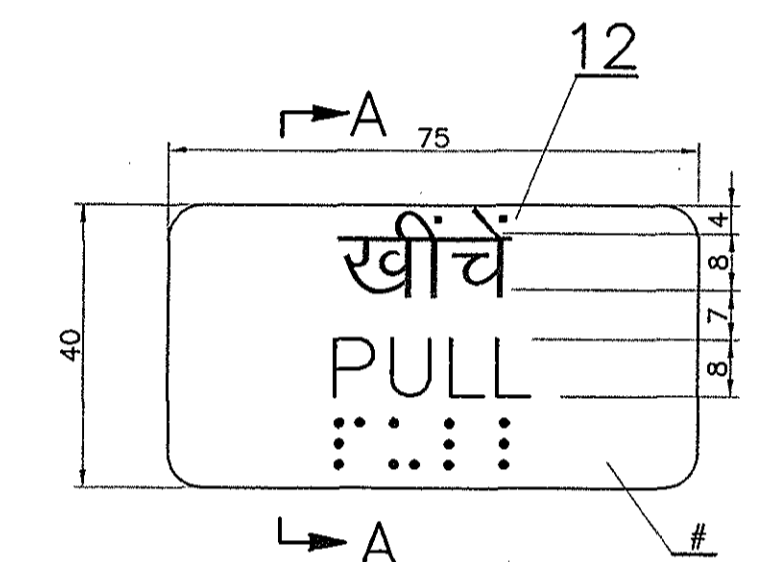
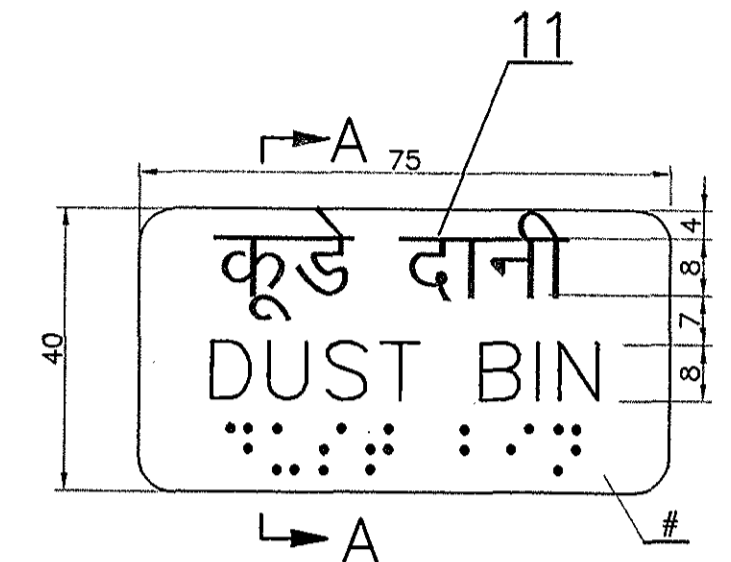
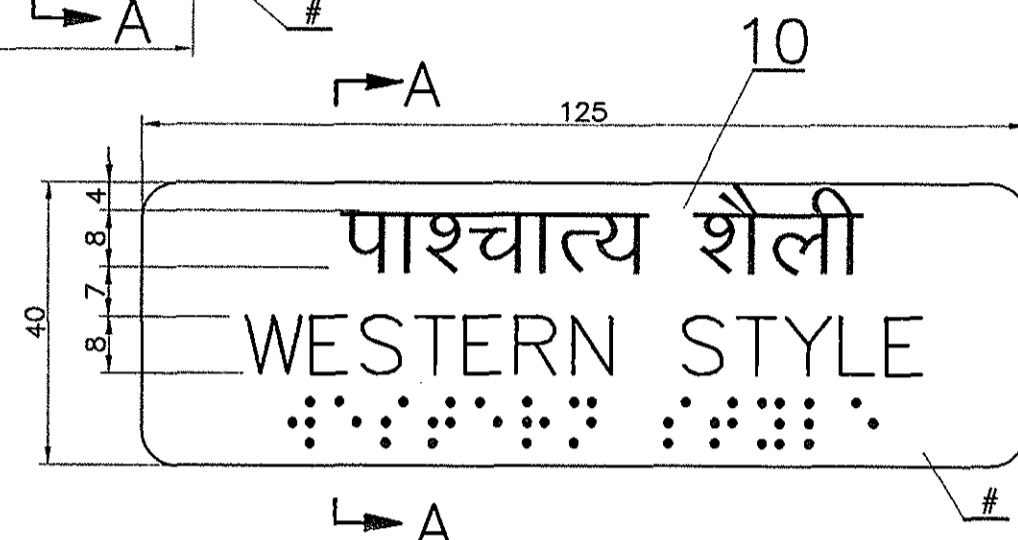
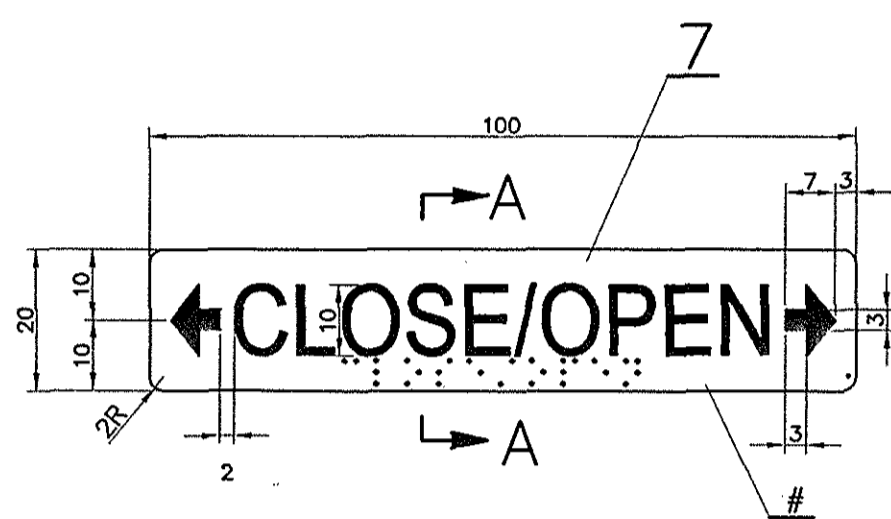
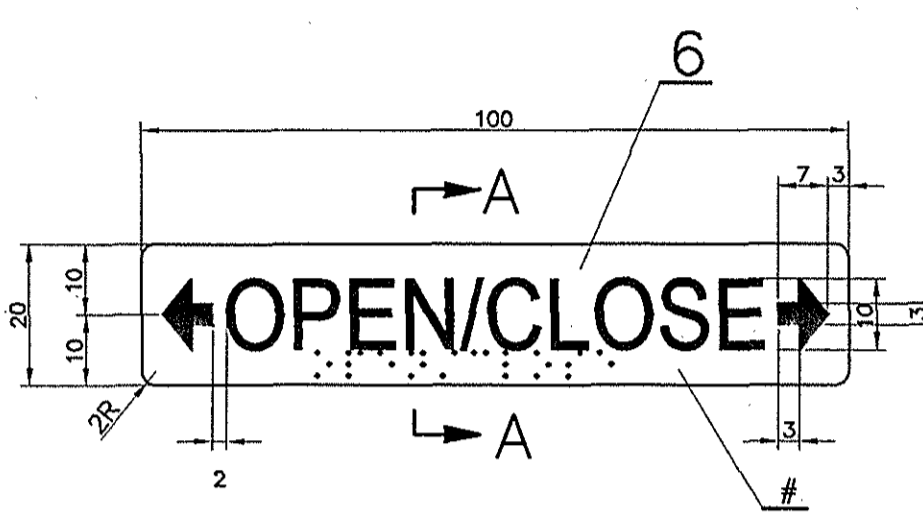
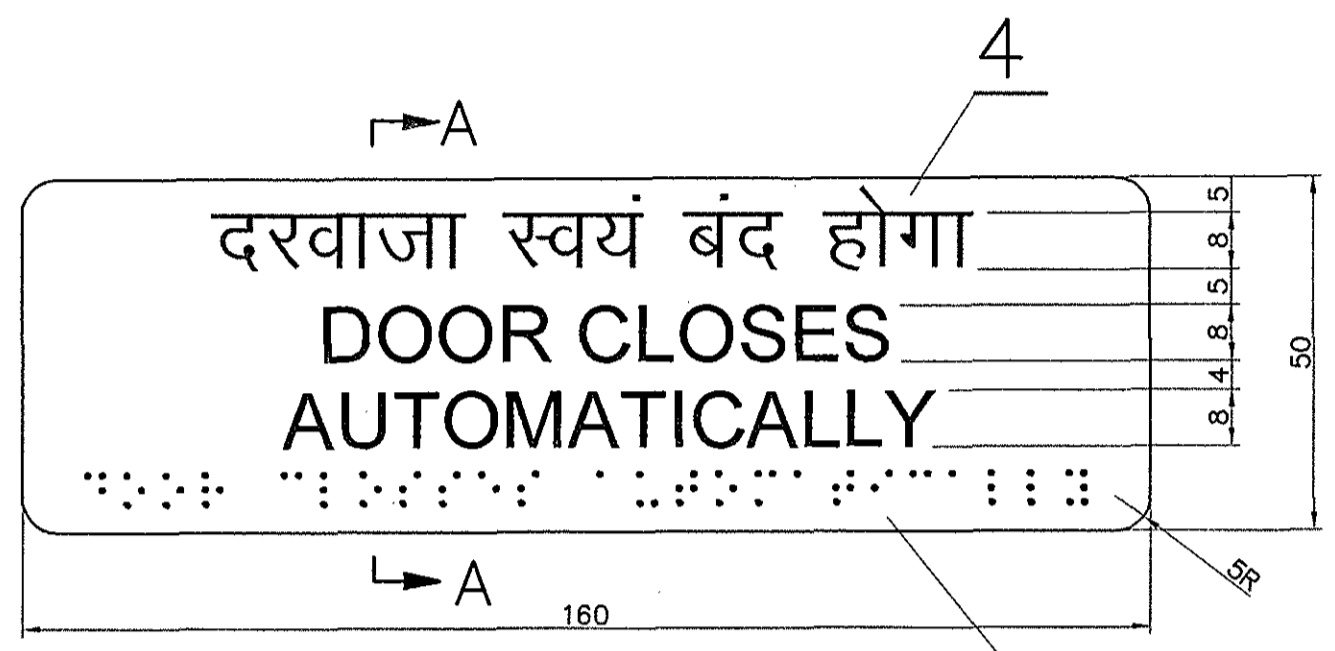
Sd/- Sd/-  
SSE/D SME/DSD



PHOTOSENSITIVE ANODISED ALUMINIUM PLATE

3M 467 STICKER/LABEL

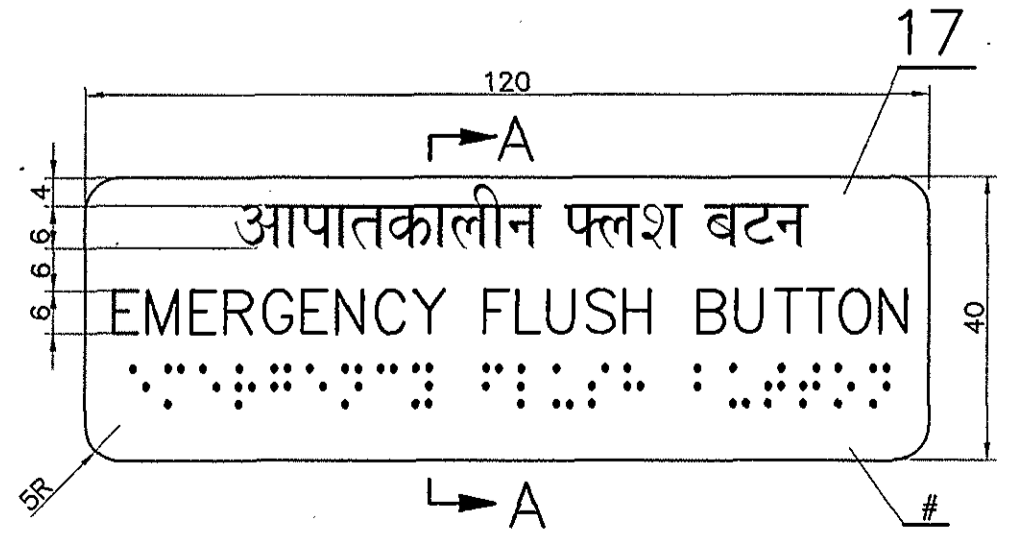
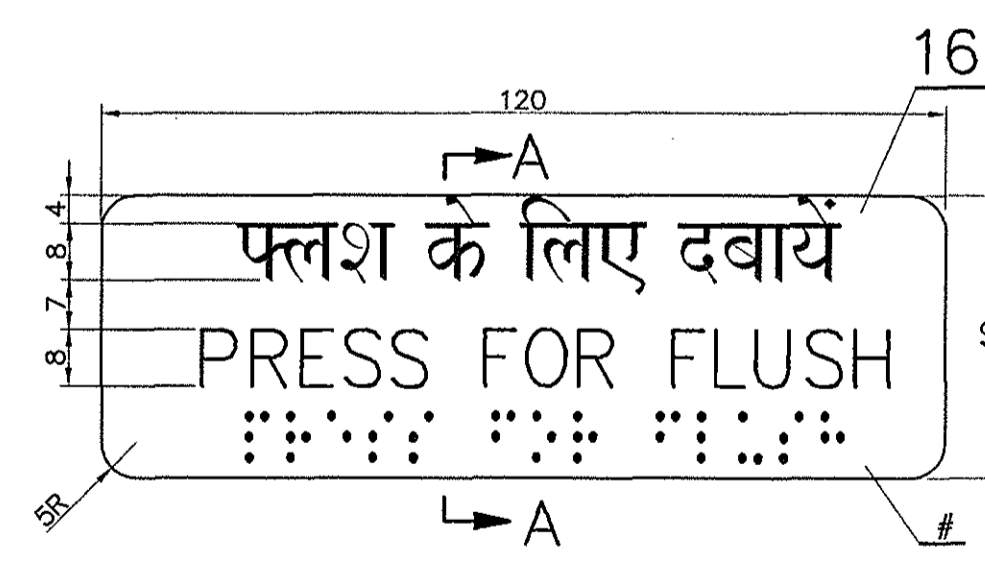
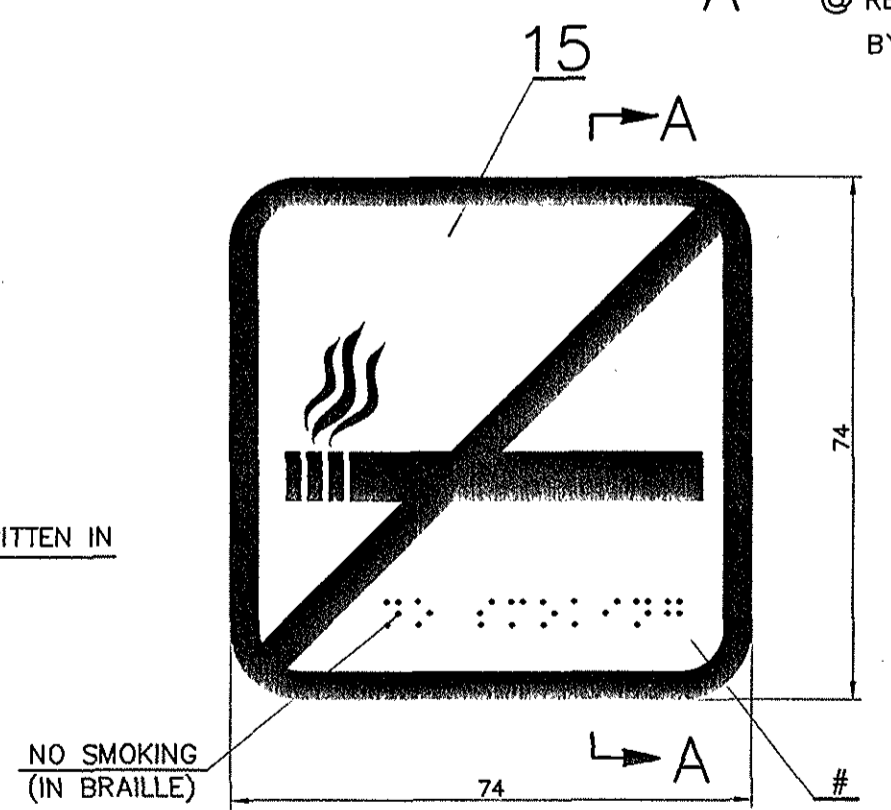
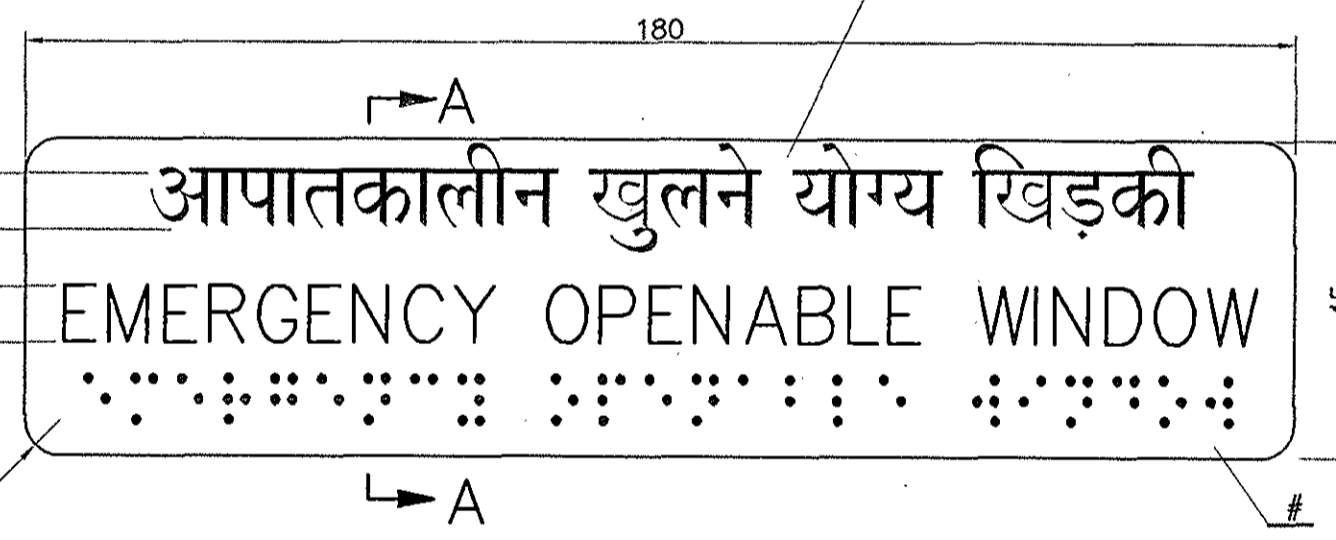
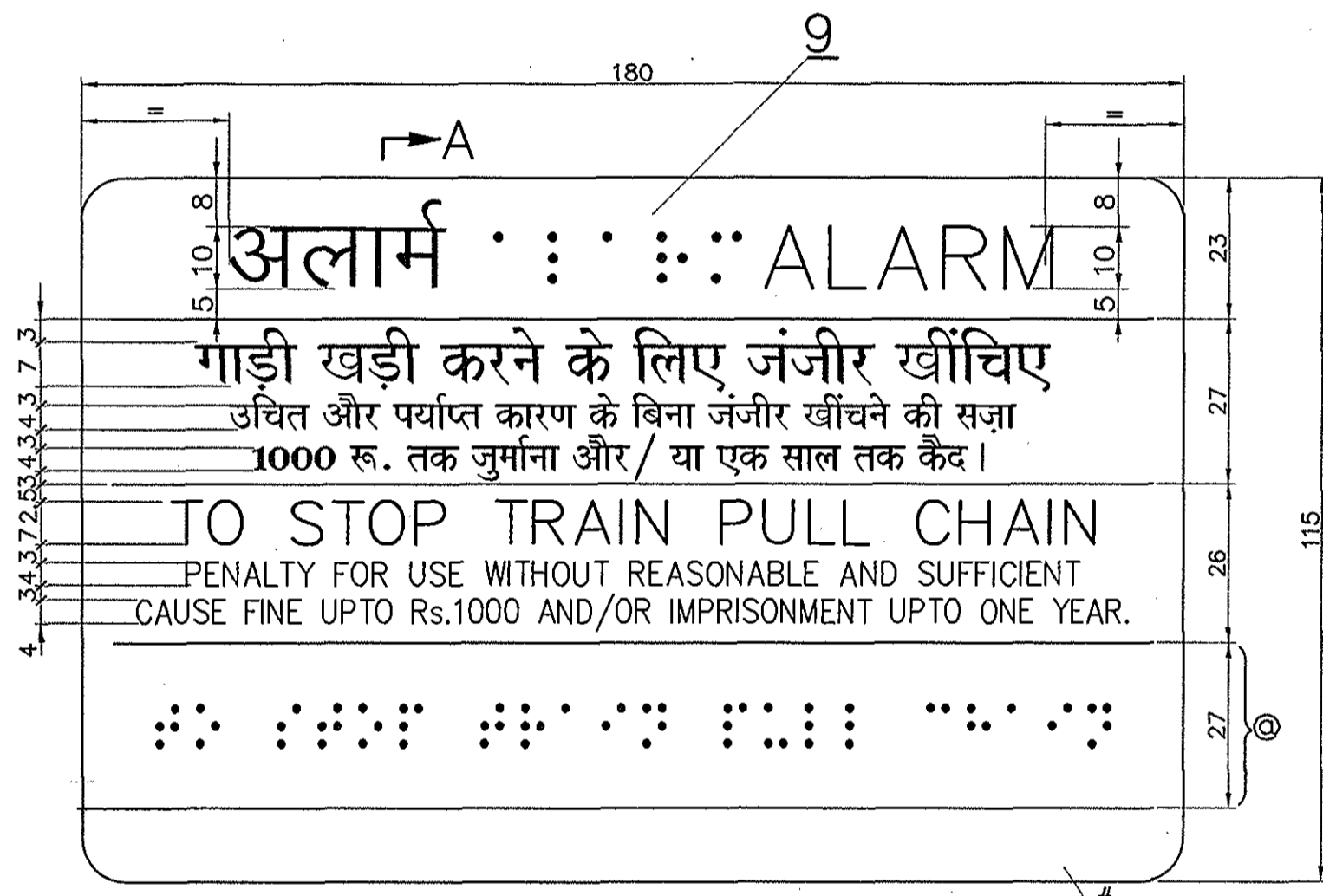
SECTION-AA



**DUTIES OF COACH ATTENDANT**

- TO BE PRESENT IN THE COACH HALF AN HOUR BEFORE THE DEPARTURE OF THE TRAIN AND CHECK THAT ALL INTERNAL FITTINGS IN THE COACH PROVIDED FOR THE CONVENIENCE AND SAFETY OF PASSENGER ARE INTACT AND IN WORKING ORDER AND THAT WATER TANKS HAVE BEEN FILLED AND ALL FITTINGS FOR SUPPLY AND USE OF WATER IN THE BATH ROOMS ARE IN GOOD WORKING ORDER.
- TO CARRY THE LIST OF PASSENGERS TRAVELLING IN HIS COACH AND ACCOMMODATE PASSENGER JOINING ENROUTE UNDER THE DIRECTION/SUPERVISION OF THE CONDUCTOR GUARD OF THE TRAIN.
- TO CHECK TICKETS OF PASSENGERS WHEN THEY FIRST ENTER THE COACH TO OCCUPY BERTHS/SEATS IN THE COACH, IF A TIE CONDUCTOR IS NOT THERE TO EXERCISE THIS CHECK.
- TO ATTEND PERSONALLY TO MINOR ELECTRICAL MECHANICAL DEFECTS DEVELOPING IN THE COACH AND CALL MAINTENANCE STAFF CONCERNED FOR ATTENDING TO OTHER REPAIRS.
- TO KEEP THE COMPARTMENTS LOCKED WHEN THE TRAIN IS ON THE RUN AND OPEN THEM FOR OCCUPATION AS AND WHEN REQUIRED.
- TO KEEP THE SEATS AND BERTHS OF COMPARTMENTS PROPERLY CLEANED AT REGULAR INTERVALS BY PERSONALLY DUSTING THE SAME.
- TO ASSIST PASSENGERS IN OBTAINING FOOD, REFRESHMENT AND LOOK AFTER THEIR CONVENIENCE GENERALLY.
- TO ENSURE THAT BATH ROOMS, COMPARTMENTS, CORRIDORS, WASH BASINS AND MIRRORS ARE CLEANED BY SAFAIWALAS AT REGULAR INTERVALS.
- PREVENT ENTRY OF BEGGERS, HAWKERS AND OTHER UNAUTHORISED PASSENGERS INSIDE THE COACH ESPECIALLY IN CORRIDOR AND TO KEEP THE CORRIDOR AND SPACE NEAR BATH ROOMS FREE FROM OBSTRUCTION.
- TO KEEP THE VESTIBULE DOORS LOCKED BETWEEN 22.00 AND 6.00 HOURS TO PREVENT MISCREANTS FROM ENTERING THE COACH.
- TO KEEP GOOD LOOK OUT ON THE CORRIDOR OF THE COACH FROM THE ATTENDANT'S SEAT PARTICULARLY DURING NIGHT AND NOT TO SLEEP WHILE ON DUTY.
- TO APPEAR IN PROPER UNIFORM AND HAVE NAME BADGES TO BE EASILY IDENTIFIED BY THE TRAVELING PUBLIC.
- SUCH OTHER DUTIES AS MAY BE PRESCRIBED FROM TIME TO TIME.

**DUTIES OF COACH ATTENDANT**  
PLEASE TAKE HELP OF COACH ATTENDANT FOR OBTAINING FOOD, FINDING SEATS AND ROUTES TO TOILETS, EXIT BOARDING AND DE BOARDING, CLEANING, SAFETY AND SECURITY, WATERING IN TOILET, LINEN OR ANY GENERAL NEED DURING THE TRAVEL.



③ REGIONAL LANGUAGES TO BE SPECIFIED BY INDIVIDUAL RAILWAYS.

NOTE:-

- SUPPLIER NAME, MONTH & YEAR OF MANUFACTURE IN SHORT FORM TO BE PRINTED IN THE INDICATED SPACE. TOTAL NUMBER OF LETTERS SHALL NOT EXCEED 6. FONT SIZE SHALL BE 1.5mm MAXIMUM.
- SPACE FOR BRAILLE SCRIPT SHOWN IN THE DRAWING IS ONLY INDICATIVE. IT CAN OVERLAP WITH THE TEXT WHEREVER REQUIRED.
- THE COLOUR OF PICTURE & LETTERING SHALL BE FLUORESCENT RED.
- BACK-GROUND AND LETTERING COLOUR SHADE CAN ALSO BE ADVISED BY PURCHASER WITH APPROVAL OF DESIGN OFFICE.
- ONE PROTOTYPE SAMPLE SHALL BE SUBMITTED FOR APPROVAL BEFORE BULK MANUFACTURE.

QTY	DESCRIPTION & DIMENSION	ITEM	REF.DRGS	MAT.SPEC	WEIGHT/UNIT	REMARKS
17	EMERGENCY FLUSH BUTTON 40x120	17		ICF/MD/SPEC-253		
16	PRESS FOR FLUSH 40x120	16		ICF/MD/SPEC-253		
15	NO SMOKING NOTICE 74x74	15		ICF/MD/SPEC-253		
14	EMERGENCY WINDOW NOTICE 45x180	14		ICF/MD/SPEC-253		
13	"PUSH" NOTICE 40x75	13		ICF/MD/SPEC-253		
12	"PULL" NOTICE 40x75	12		ICF/MD/SPEC-253		
11	"DUST BIN" NOTICE 40x75	11		ICF/MD/SPEC-253		
10	"WESTERN STYLE" NOTICE 40x125	10		ICF/MD/SPEC-253		
9	ALARM & PENALTY NOTICE 115x180	9		ICF/MD/SPEC-253		
8	NOTICE FOR SOAP DISPENSER 74x74	8		ICF/MD/SPEC-253		
7	NOTICE FOR CLOSE/OPEN 20x100	7		ICF/MD/SPEC-253		
6	NOTICE FOR OPEN/CLOSE 20x100	6		ICF/MD/SPEC-253		
5	NOTICE FOR DUTIES OF COACH ATTENDANT 172x275	5		ICF/MD/SPEC-253		
4	NOTICE FOR DOOR CLOSES AUTOMATICALLY 50x160	4		ICF/MD/SPEC-253		
3	NOTICE FOR NO WASTE INTO TOILET 74x74	3		ICF/MD/SPEC-253		
2	NOTICE FOR NO DRINKING WATER 74x74	2		ICF/MD/SPEC-253		
1	NOTICE FOR UNRESERVED COACHES 80x200	1		ICF/MD/SPEC-253		

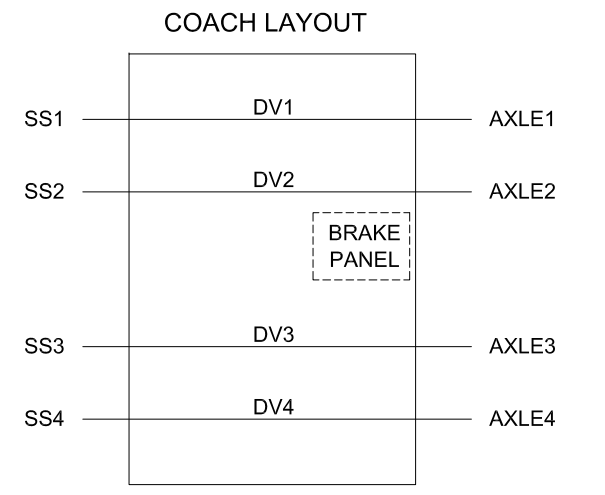
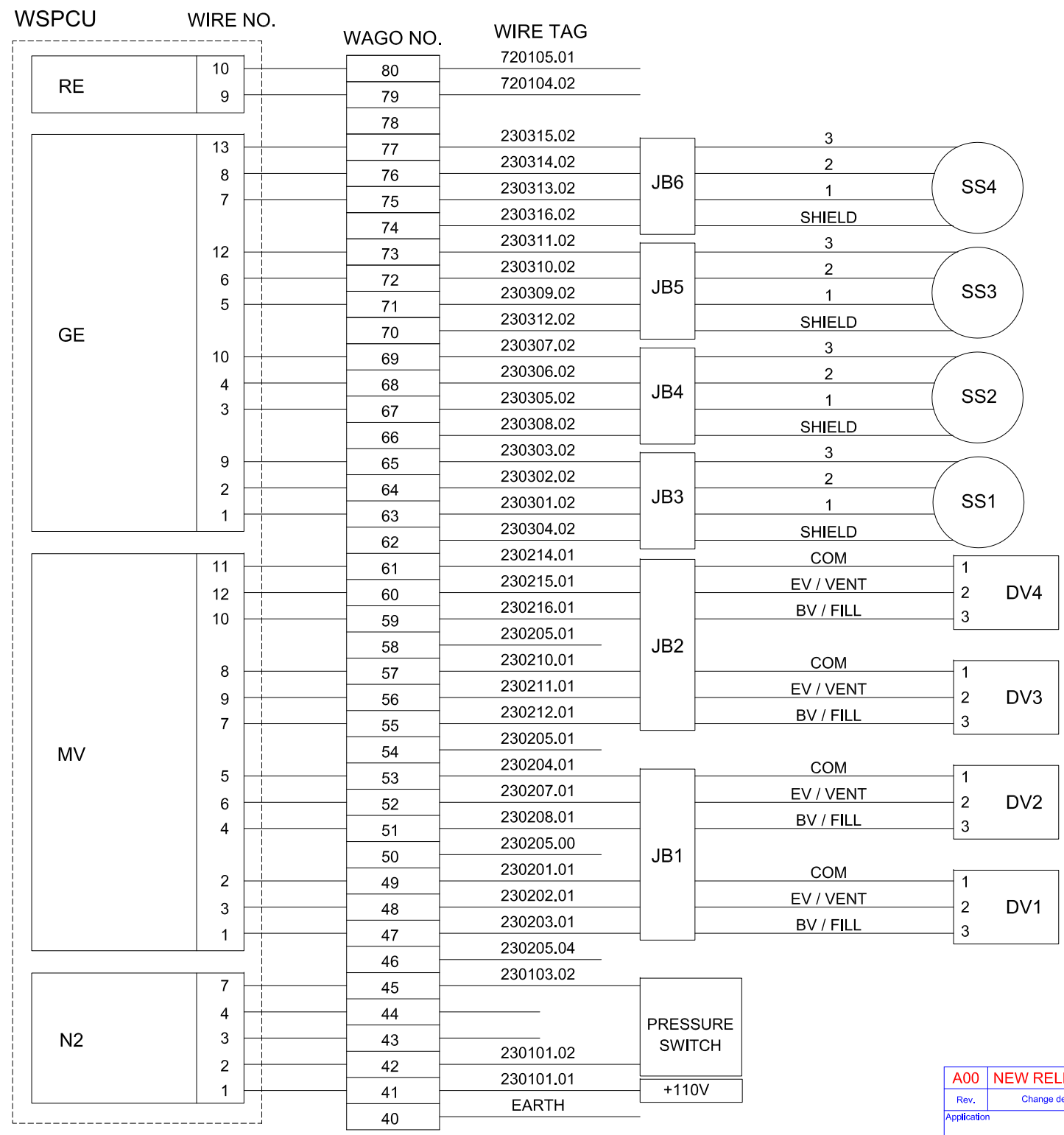
PER ASSY.	PER ASSY.	PER ASSY.	QTY	DESCRIPTION & DIMENSION	ITEM	REF.DRGS	MAT.SPEC	WEIGHT/UNIT	REMARKS	
			3	GROUP: 6-4						
				NOTICES WITH BRAILLE SCRIPT (FOR LHB COACHES)						

ASSEMBLY DRAWINGS	DATA CODE NO.	INDIAN RAILWAY STANDARDS	SHEET	ICF/SK3-6-4-051
31-03-2016	16-07-2015		1 OF 1	





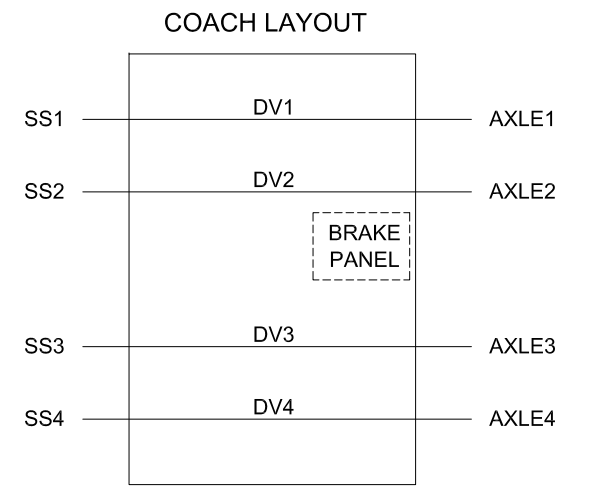
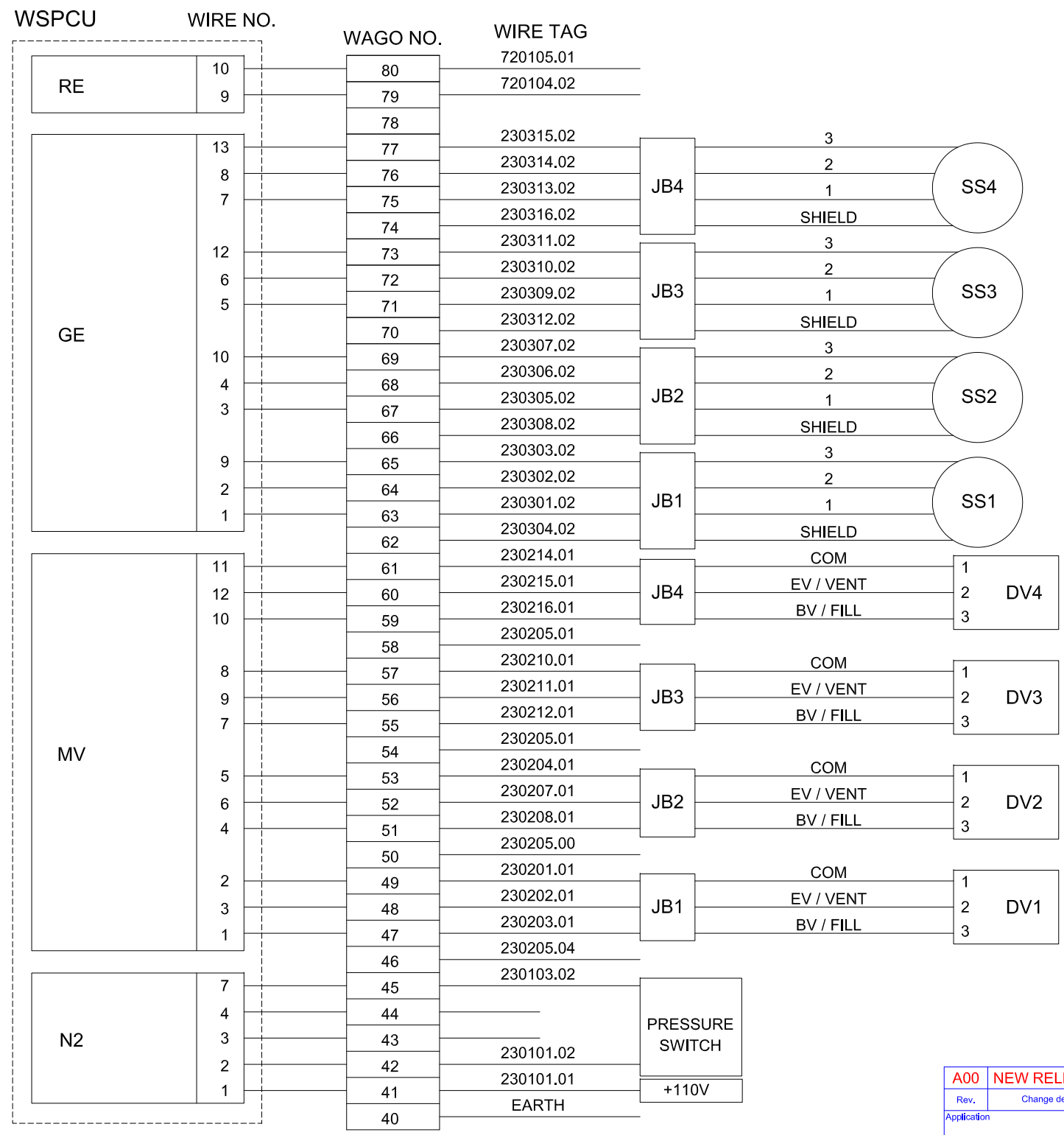




**NOTE:**  
 DV - DUMP VALVE  
 SS - SPEED SENSOR  
 JB - JUNCTION BOX  
 WSPCU - WHEEL SLIDE PROTECTION CONTROL UNIT

<b>A00 NEW RELEASE</b>		DRAWING SHALL NOT BE REVISED OUTSIDE CAD SYSTEM		Status
Rev.	Change description	General tolerances	Weight kg	Responsible site
Application		NA	NA	HSR
			BOM	Size
				A3
		Based on	Replacement	Replaced
		Customer name	Customer revision indexes	
		Approved by Customer	Customer reference number	
Rev.	Change	Date	Name	Approved
Scale	NTS	Prepared	17.12.2019	AMK
		Checked	17.12.2019	GJN
		Approved	17.12.2019	BSH
Main title, subtitle		Date	Name	
<b>WSP WIRING DIAGRAM</b> <b>KES WSP</b>		en	mm	
		Drawing identification number		Revision
		<b>FT0052052-W02</b>		A00
				Sheet 1 / 1
				100

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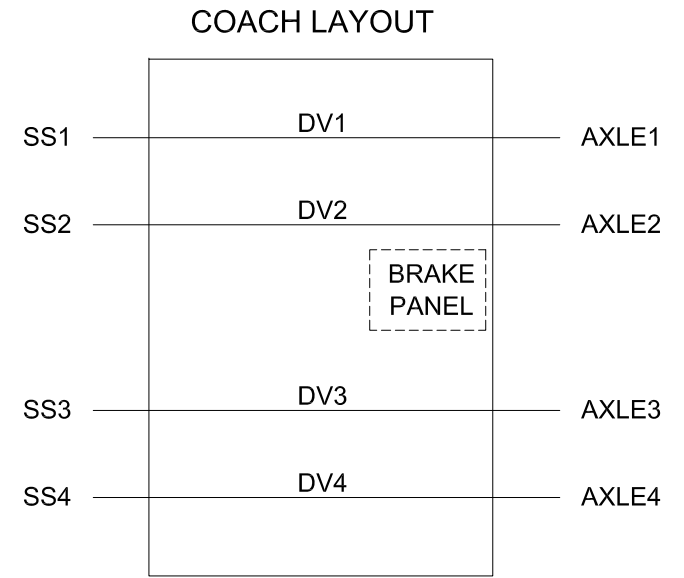
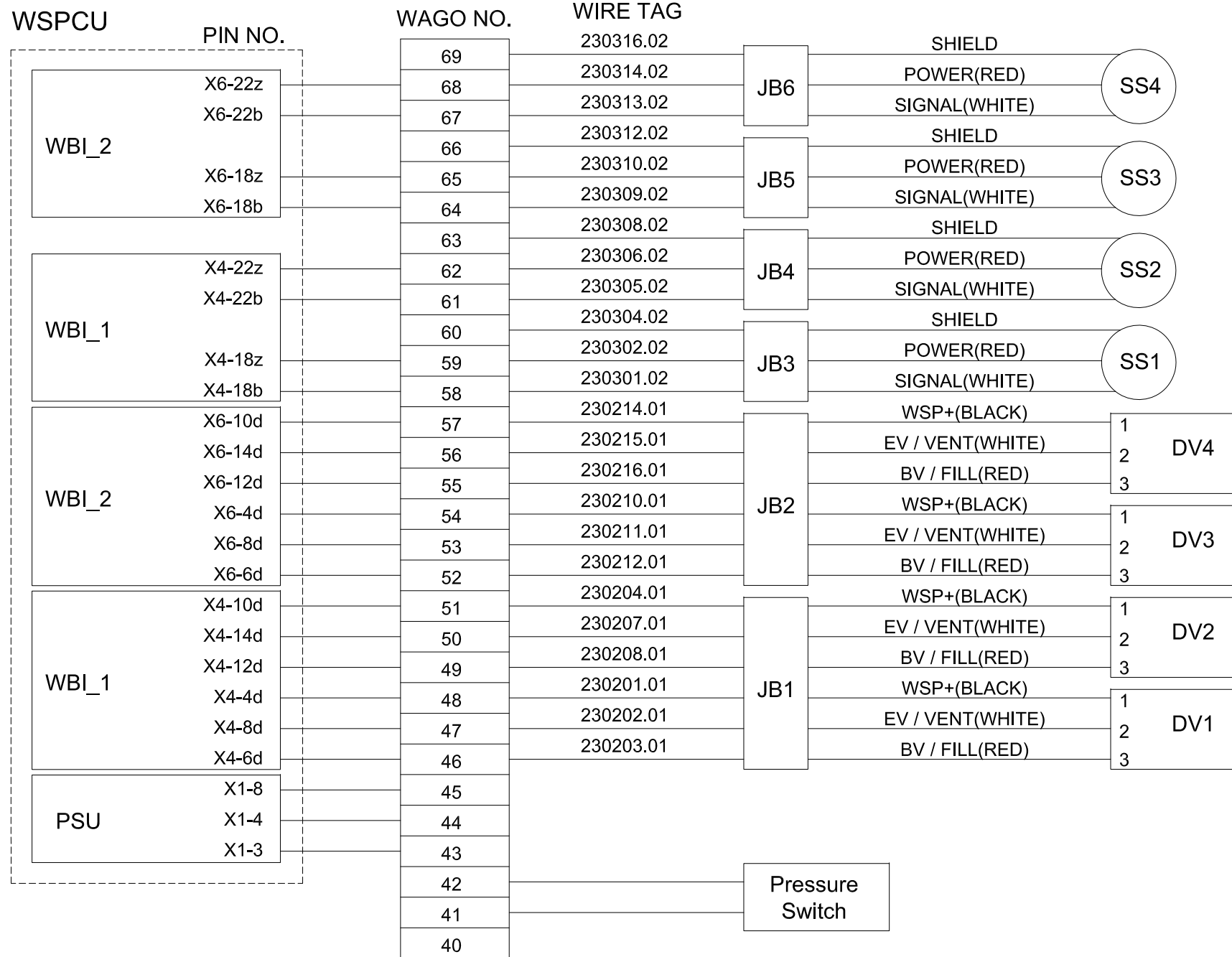


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<b>A00 NEW RELEASE</b>		DRAWING SHALL NOT BE REVISED OUTSIDE CAD SYSTEM		Status
Rev.	Change description	General tolerances	Weight kg	Responsible site
Application		NA	NA	HSR
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		Based on	Replacement	Replaced
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		Approved by Customer		Customer reference number
Rev.	Change	Date	Name	Approved
Scale	NTS	Prepared	11.12.2019	AMK
		Checked	11.12.2019	GJN
		Approved	11.12.2019	BSH
Main title, subtitle		Date	Name	
		en	mm	
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**WSP WIRING DIAGRAM**  
**KES WSP**

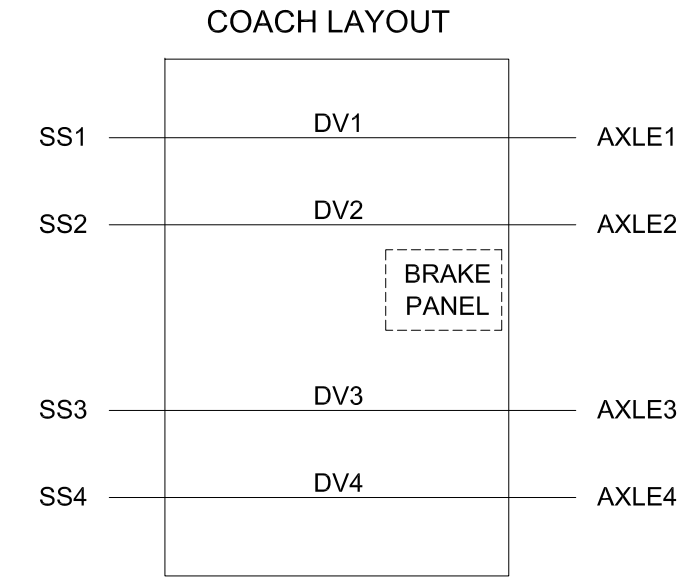
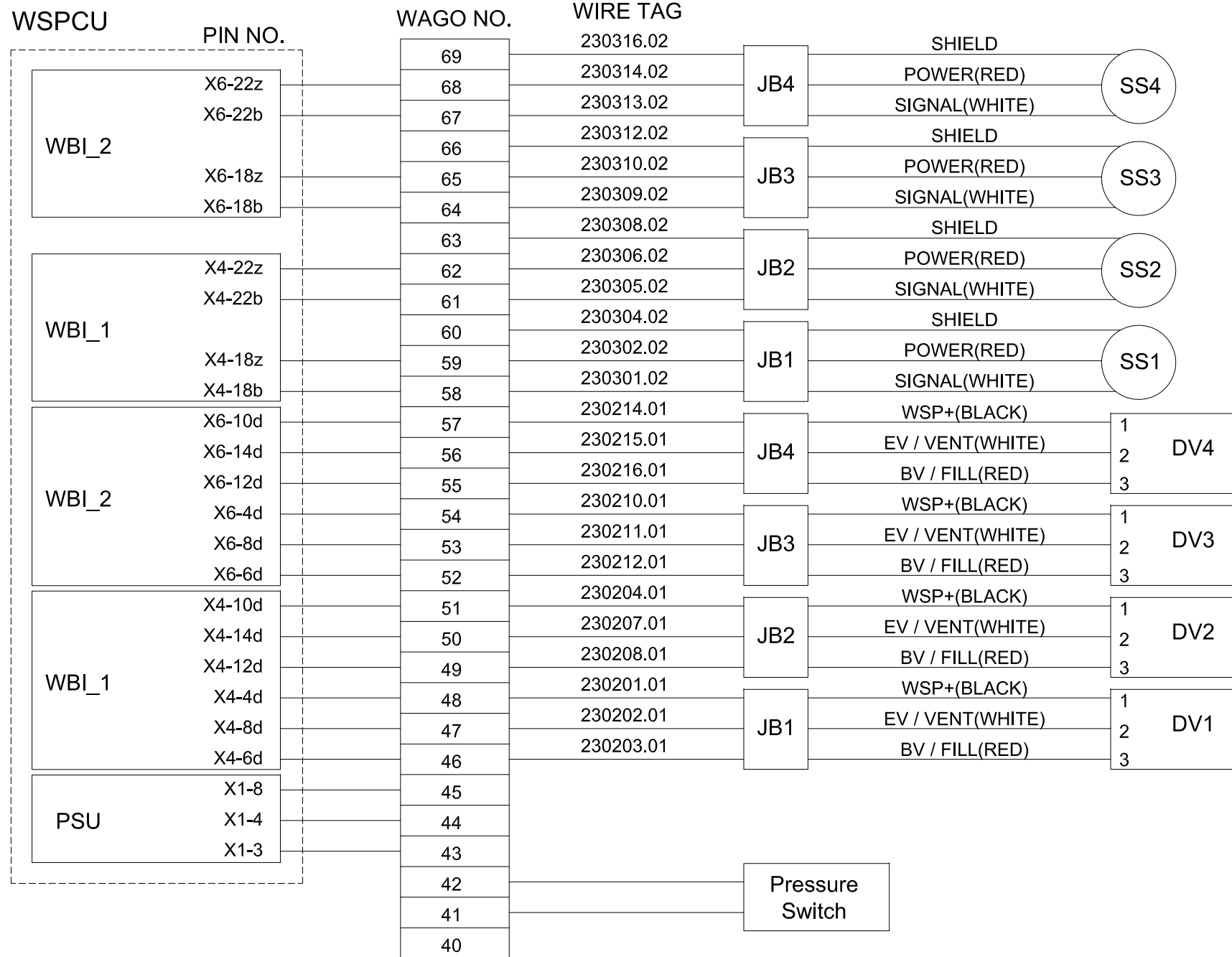
**Faiveley**  
Transport  
A Wabtec Company



NOTE:  
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A00 NEW RELEASE		Application		DRAWING SHALL NOT BE REVISED OUTSIDE CAD SYSTEM		Status	
Rev.	Change description	General tolerances	Weight kg	Responsible site	Document Classification	Fire and smoke class	Classification
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.	.	BOM	.	Size	A3	Wear piece	.
.	.	Based on	.	Replacement	.	Replaced	.
.	.	Customer name	IR	Customer revision indexes	.	.	.
.	.	Approved by Customer	.	Customer reference number	.	.	.
A00	-	17.12.19	AMK	BSH	.	.	.
Rev.	Change	Date	Name	Approved			
Scale	NTS	Prepared	17.12.2019	AMK	Main title, subtitle		
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		en	mm				
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						A00	1 / 1





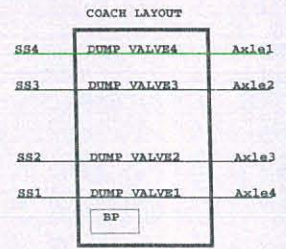
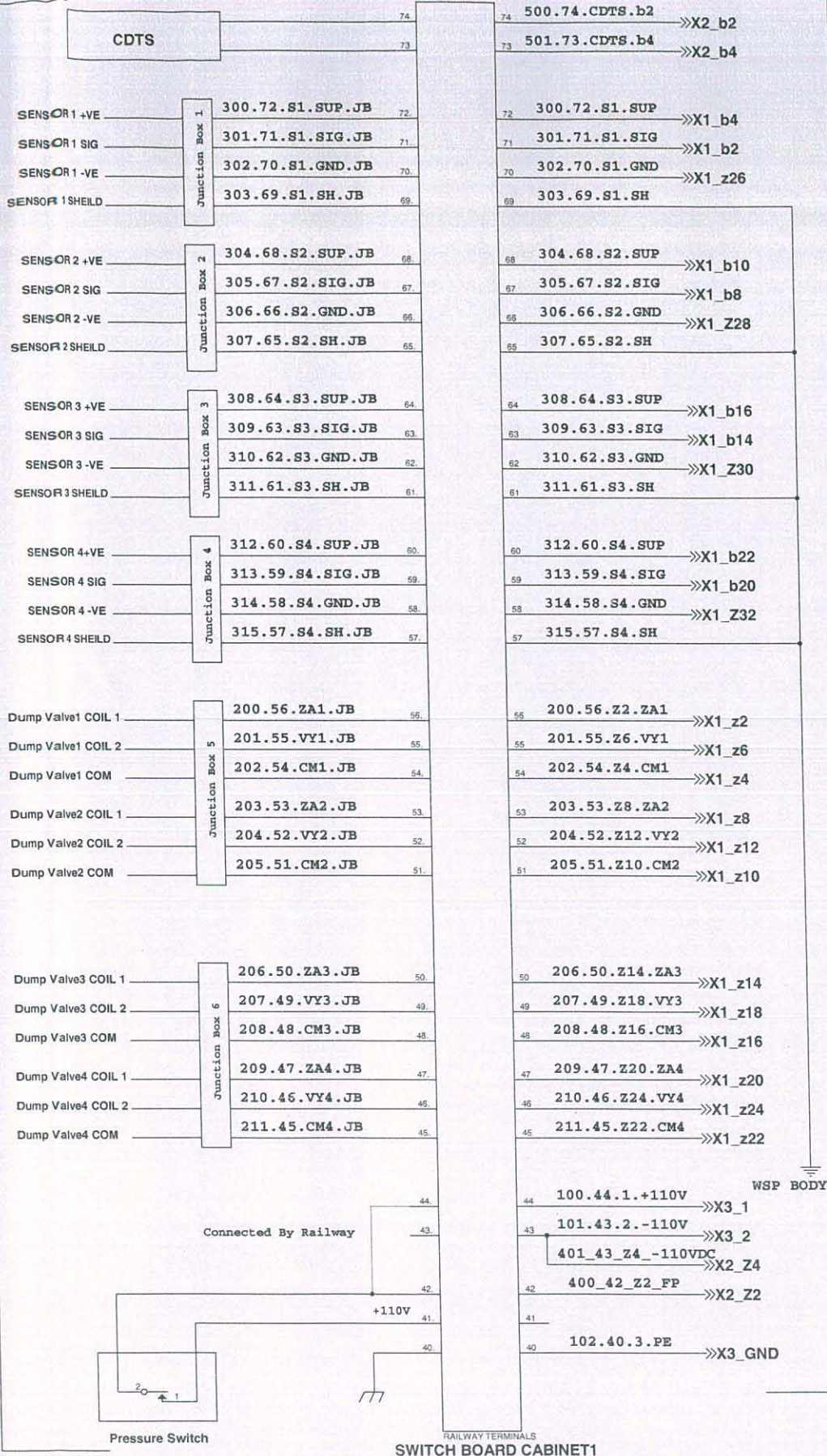
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Rev.	Change description	General tolerances		Weight kg	Responsible site	Document Classification	
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		Based on		Replacement	Replaced		
		Customer name		Customer revision indexes			
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		en	mm				
Drawing identification number				Revision		Sheet	Sheets
FT0052052-W01				A00		1	1



RAILWAY SCOPE OF WIRES

ESCORTS SCOPE OF WIRES



SWITCH BOARD CABINET 1

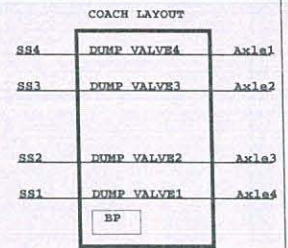
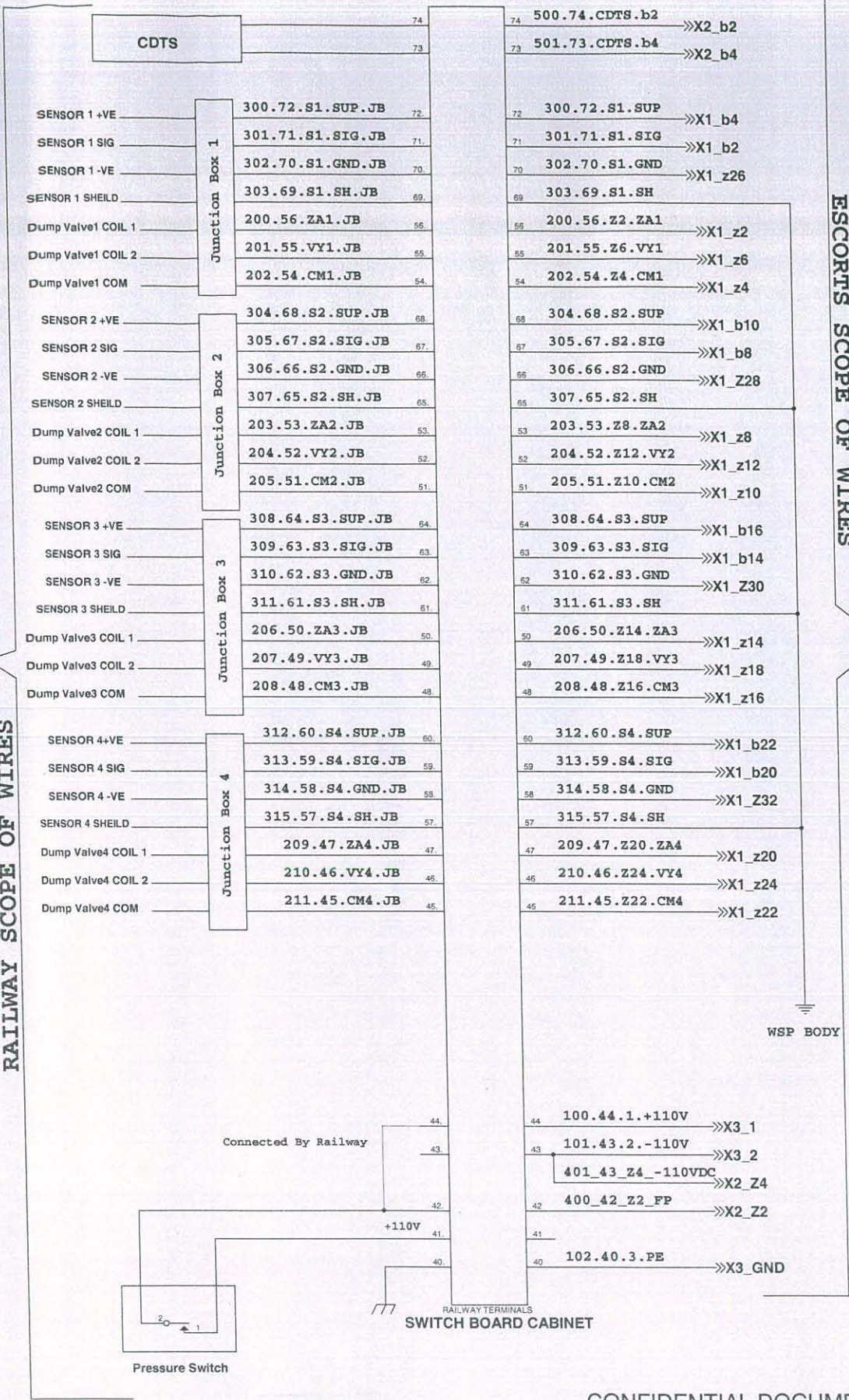
CONFIDENTIAL DOCUMENT, UNAUTHORIZED CIRCULATION IS STRICTLY PROHIBITED



01	PRESSURE SWITCH TO WSP CONNECTION ADDED	ARVIND		25.07.2016
Alt.		Name	Sign	Date
PROJECT		Name	Sign	Date
Axle Mounted Disc Brake System	Prepared By	Prince	[Signature]	19/12/19
	Checked By	Dushyant	[Signature]	19/12/19
	Approved By	S.Reddy	[Signature]	19/12/19
Title:- DISC BRAKE-WIRING DIAGRAM (SWITCH BOARD CABINET)		ESCORTS LIMITED RAILWAY EQUIPMENT DIVISION 115/24, FARIDABAD (INDIA)		
		Drawing No.	Alt.	
		EL01069	1	

RAILWAY SCOPE OF WIRES

ESCORTS SCOPE OF WIRES



WSP BODY

Connected By Railway

RAILWAY TERMINALS SWITCH BOARD CABINET

CONFIDENTIAL DOCUMENT, UNAUTHORIZED CIRCULATION IS STRICTLY PROHIBITED



02	Junction box reduced to 4 from 6 numbers as per new design	Dushyant		18.12.19
01	PRESSURE SWITCH TO WSP CONNECTION ADDED	ARVIND		25.07.2016
Alt.		Name	Sign	Date
PROJECT		Name	Sign	Date
Axle Mounted Disc Brake System	Prepared By	Prince	[Signature]	19/12/19
	Checked By	Dushyant	[Signature]	19/12/19
	Approved By	S. Raddy	[Signature]	19/12/19
Title:-		DISC BRAKE-WIRING DIAGRAM (SWITCH BOARD CABINET)		
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