

20/7/27/1

RAIL COACH FACTORY, KAPURTHALA
(Coach Alteration Instruction)

CAI/RCF/MECH/R-SS/024

MD46251

Date: 19.07.06

1. **Description:** Provision of isolating cock on the branch pipe connecting the brake pipe to the passenger emergency alarm valve and alarm pull boxes in RCF Stainless Steel coaches (Rajdhani Rake)

2. **Drawing No:**

S. No.	Description	Drawing No. & alt
1	Compressed Air Brake Mounting	LW36137 alt. 'a'
2	Isolating Cock	KH28L (Ermeto or equivalent)

3. **Reason for alteration:** In order to facilitate escorting staff an isolating cock has been made on branch pipe connecting the brake pipe to the passenger emergency valve and alarm pull box to isolate the air supply in case of leakage or defect in alarm pull box. RDSO vide letter no MC/LHB/Air Brake dated 02 06 2006 has issued instruction for providing of this isolating cock.

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

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

6. **Special Instructions:**

- a. Fit isolating cock to Ermeto part no KH28L or equivalent (item no 79) as per details given in drawing no LW36137 alt 'a'.


For General Manager (Mech.)

Encls:

RDSO vide letter no MC/LHB/Air Brake dated 02 06 2006 has issued instruction for providing of this isolating cock.

LW36137 alt. 'a'
KH28L

फैक्स/FAX : 91-0522-2458500
91-0522-2450679
तार : रेलमानक, लखनऊ
Telegram : 'RAILMANAK',
Lucknow
टेलीफोन/Tele : 2451200 (PBX)
2450115 (DID)



भारत सरकार & रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226 011

Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011

27/2

No. MC/LHB/Air Brake

एमसी/एलएचबी/ब्रेक

Dated: 02.06.2006

3

The Chief Mechanical Engineer,
Rail Coach Factory,
Kapurthala

सी.एम.ई.
आर.सी.एफ./कपूरथला-144602

14 JUN 2006

Sub: Breakage of brake BP and FP pipes.
Ref: Eastern Central Railways' letter no. ECR/MEC/CHG/403/Pt.I
dated 18.4.2006

ECR vide its letter referred above have reported frequent breakages of BP Metal pipe T joints on LHB Coaches of HWH-NDLS Rajdhani Express. This has resulted into detention of Rajdhani Express trains. It is requested that the issue may be examined and necessary corrective action may be taken so that the problem does not occur in service.

It has also been noticed that there is no provision of isolating cock on the branch pipe connecting the brake pipe to the Passenger emergency Alarm valve & alarm pull boxes. It is requested that one isolating cock may be provided on the branch pipe connecting the brake pipe to the PEAV & alarm pull boxes. This isolating cock is necessary as, the air supply to the passenger alarm pull boxes could be isolated in the event of any leakage or defect in alarm pull box.

A

(Shailendra Singh) (शैलेन्द्र सिंह)
for Director General (Carriage)
कुले महा निदेशक (कैरिज)

Copy to: I) CME/ER in reference to his letter mentioned above. It is requested to make dummy plugs as is being used by NR to plug leakages in case of T joint Failure. The details of the dummy plug and their usage may be collected from Delhi depot of Northern Railway. With the use of dummy use of flexible pipe will not be needed.

II) EDME/Coaching, Railway Board, New Delhi.

(Shailendra Singh)
for Director General (Carriage)

Comp.
Sh. Sandeep
Phdum with
earliest
22/06/06

CME

cc: CAM
CWE

12 Lws 'A' booked
in for w/a. 6
13/2

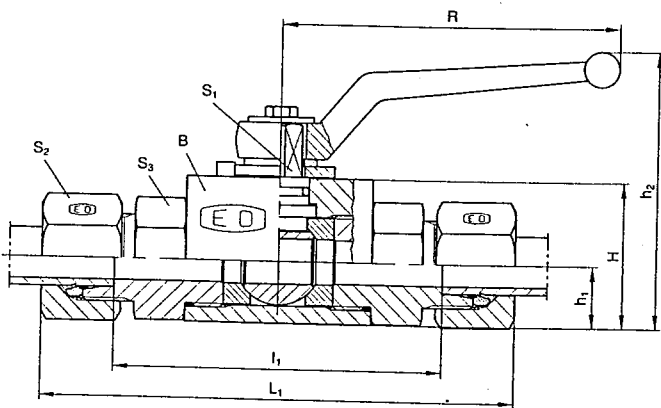
CA ①



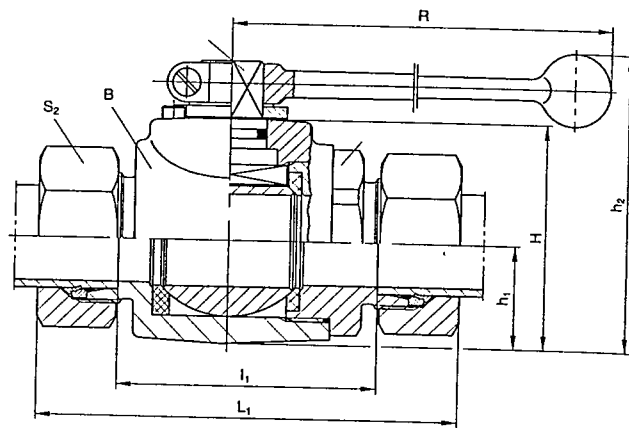
KH 2-way ball valve Steel

EO tube end / EO tube end

Ball valves with tube connections are supplied complete with rings and nuts



DN 4-DN 25



DN 32-DN 40

Series	Tube Ø O.D.	DN	P _{max} (bar)	I ₁	L ₁	B	H	h ₁	h ₂	S ₂	S ₃	S ₁	R	Weight gr./1 piece
L	06	4	315	53	82	20	25	10.0	55.0	14	19	7	76	218
	08	6	315	53	82	20	25	10.0	55.0	17	19	7	76	226
	10	8	315	61	90	30	35	14.5	68.0	19	24	8	100	462
	12	10	315	61	90	30	35	14.5	68.0	22	24	8	100	467
	15	12	315	69	99	35	40	17.0	92.0	27	30	10	112	723
	18	16	315	67	99	45	45	20.0	105.0	32	36	11	166	986
	22	20	160	84	116	45	55	24.0	113.0	36	41	14	187	1389
	28	25	160	93	136	55	60	26.0	118.0	41	50	14	187	1947
	35	25	160	101	144	55	60	26.0	118.0	50	60	17	187	3030
	42	40	160	96	141	85	90	42.5	114.5	60	70	17	240	3578
S	08	4	500	59	88	20	25	10.0	55.0	19	19	7	76	259
	10	6	500	58	90	20	25	10.0	55.0	22	19	7	76	288
	12	8	500	62	94	30	35	14.5	68.0	24	24	8	100	505
	14	10	500	65	100	30	35	14.5	68.0	27	24	8	100	554
	16	12	400	70	106	35	40	17.0	92.0	30	30	10	112	792
	20	16	400	69	112	40	45	20.0	105.0	36	36	11	166	1128
	25	20	315	83	131	45	55	24.0	113.0	46	41	14	187	1721
	30	25	315	93	146	55	60	36.0	118.0	50	50	14	187	2356
	38	32	315	95	156	73	80	36.5	104.5	60	60	17	240	3451

Materials:

Body made of steel, ball of hard chrome plated carbon steel, stem of zinc plated steel.

Seals:

Ball seat machined of POM (Delrin), stem seal of NBR (Perbunan).

Applications:

Suitable for petroleum-based hydraulic fluid, lubricants, fuel oil and air.

Temperature range:

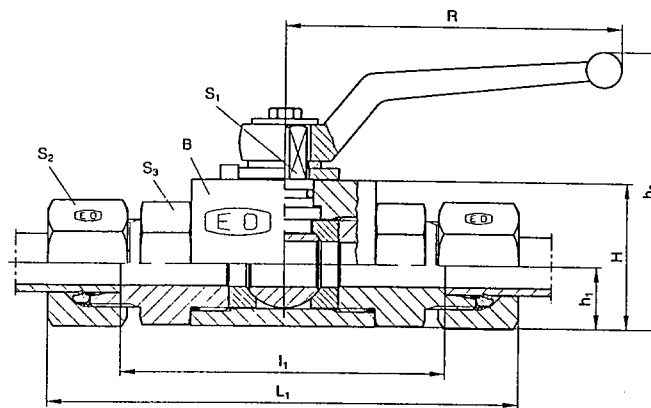
-10 up to +80°C.



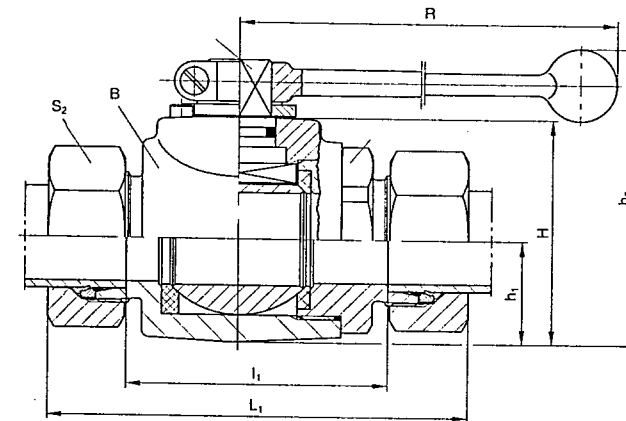
KH 2-way ball valve Steel

EO tube end / EO tube end

Ball valves with tube connections are supplied complete with rings and nuts



DN 4-DN 25



DN 32-DN 40

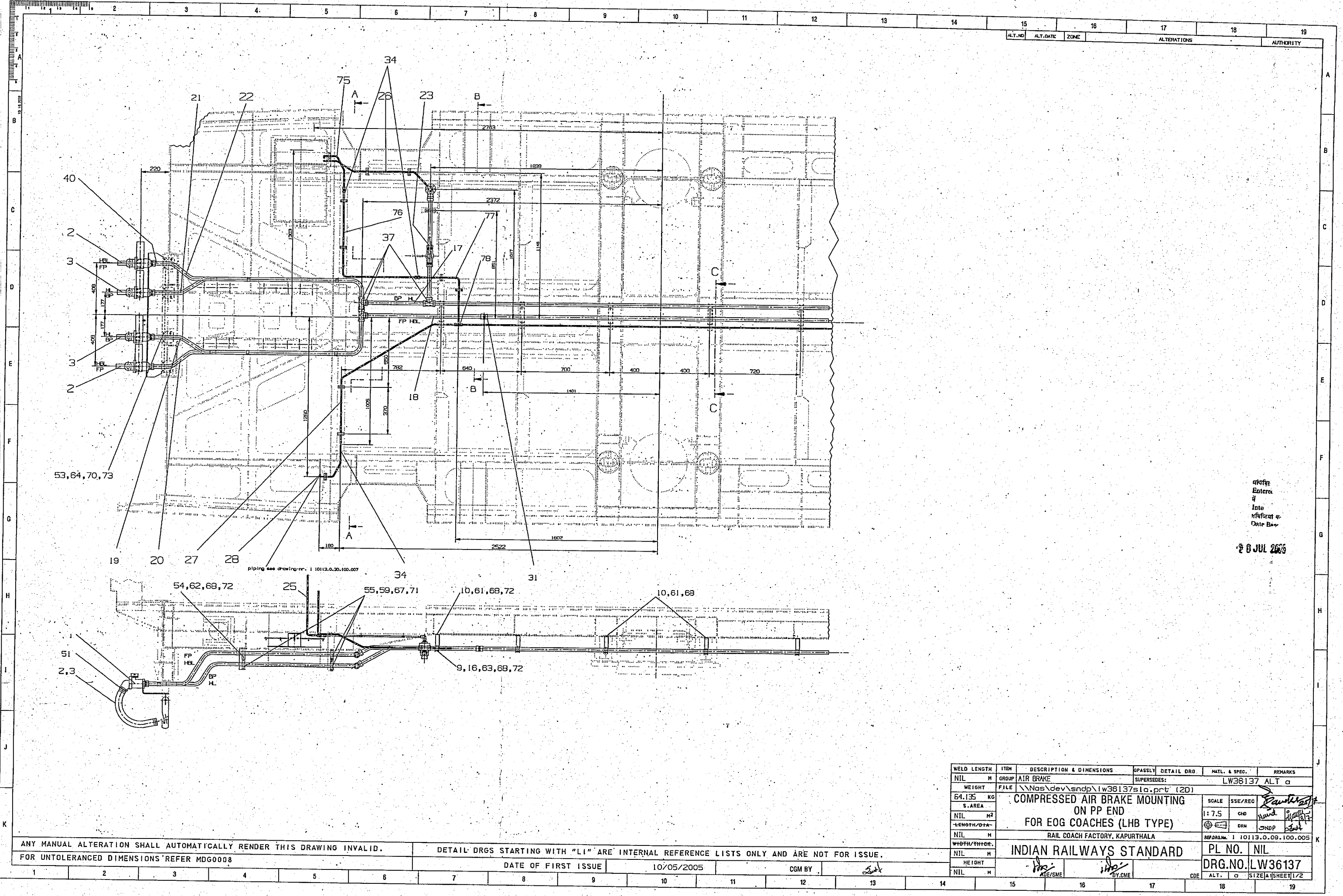
Series	Tube Ø O.D.	Dry Technology EO-2 steel	DPR steel
L	06	KH06ZL	KH06L
	08	KH08ZL	KH08L
	10	KH10ZL	KH10L
	12	KH12ZL	KH12L
	15	KH15ZL	KH15L
	18	KH18ZL	KH18L
	22	KH22ZL	KH22L
	28	KH28ZL	KH28L
	35	KH35ZLDN25	KH35LDN25
	35	KH35ZL	KH35L
S	42	KH42ZLDN25	KH42LDN25
	42	KH42ZL	KH42L
	08	KH08ZS	KH08S
	10	KH10ZS	KH10S
	12	KH12ZS	KH12S
	14	KH14ZS	KH14S
	16	KH16ZS	KH16S
	20	KH20ZS	KH20S
	25	KH25ZS	KH25S
	30	KH30ZS	KH30S
	38	KH38ZSDN25	KH38SDN25
	38	KH38ZS	KH38S

Without nut and ring:

Example →

KH 06LX

KH06LX



नॉटिंग
Entered
by
Date
Date

20 JUL 2005

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	GROUP	DETAIL DRG.	MATL. & SPEC.	REMARKS
NIL	M	AIR BRAKE	GROUP	SUPERSEDES:	LW36137 ALT a	
WEIGHT	FILE	\\Nas\dev\snep\lw36137s1a.prt (2D)				
64.135	KG					
S.AREA						
NIL	M2					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

SCALE	SSE/REG	CHD	DRN	SNOP
1:7.5				

PL NO.	NIL
DRG.NO.	LW36137
ALT.	a
SIZE	A1/SHEET 1/2

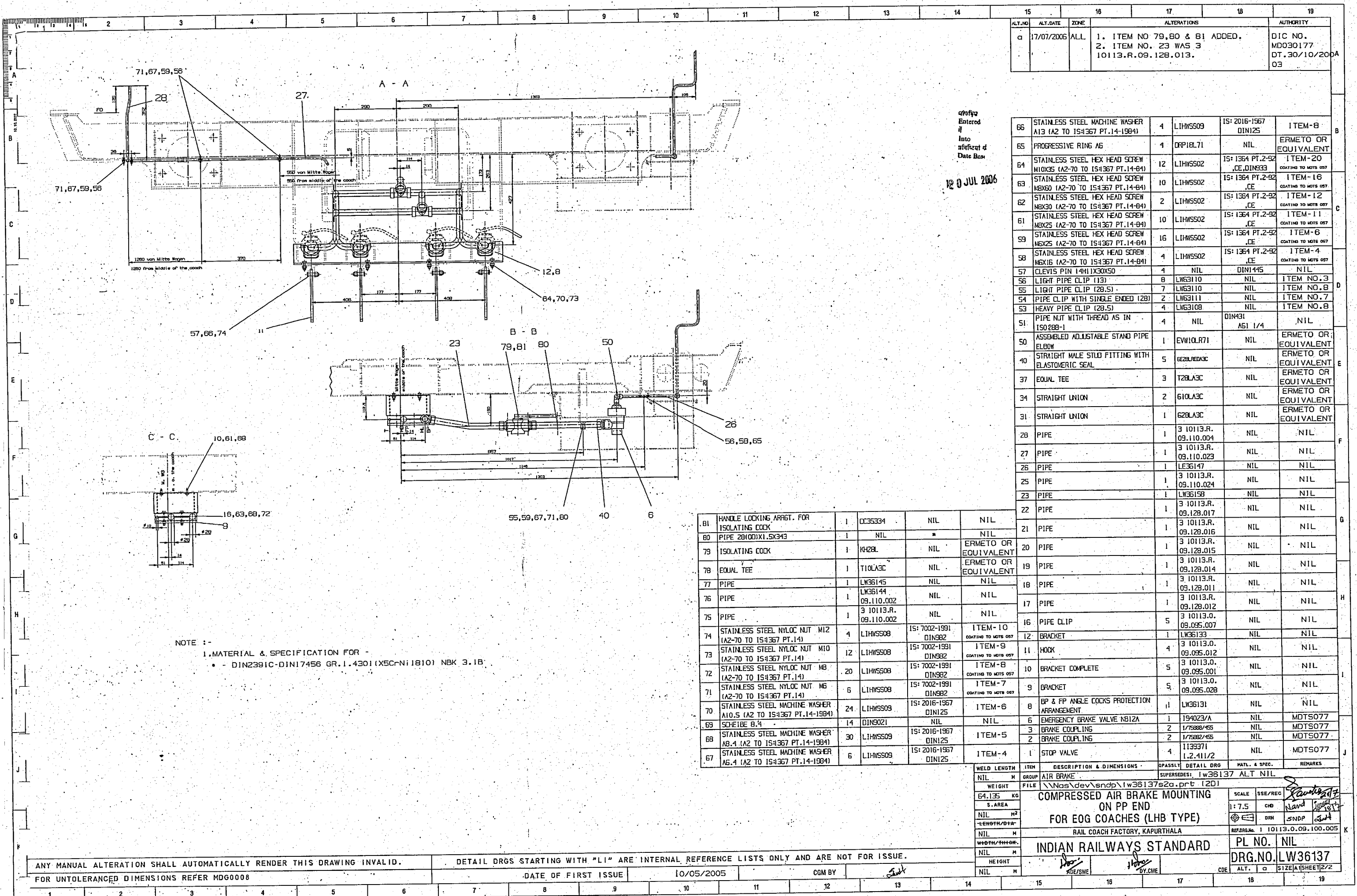
INDIAN RAILWAYS STANDARD

RAIL COACH FACTORY, KAPURTHALA

REF.DWG. 1 10113.0.09.100.005

DATE OF FIRST ISSUE 10/05/2005

CGM BY



NOTE :-
1. MATERIAL & SPECIFICATION FOR -
• DIN2391C-DIN17456 GR.1.4301(X5CrNi1810) NBK 3.1B

81	HANDLE LOCKING ARRET. FOR ISOLATING COCK	1	CC35334	NIL	NIL
80	PIPE 28(OD)X1.5X343	1	NIL	*	NIL
79	ISOLATING COCK	1	KH28L	NIL	ERMETO OR EQUIVALENT
78	EQUAL TEE	1	T10LA3C	NIL	ERMETO OR EQUIVALENT
77	PIPE	1	LW36145	NIL	NIL
76	PIPE	1	LW36144 09.110.002	NIL	NIL
75	PIPE	1	3 10113.R. 09.110.002	NIL	NIL
74	STAINLESS STEEL NYLOC NUT M12 (A2-70 TO IS4367 PT.14)	4	L1HWSS08	IS: 7002-1991 DIN982	ITEM-10 COATING TO MOTS 057
73	STAINLESS STEEL NYLOC NUT M10 (A2-70 TO IS4367 PT.14)	12	L1HWSS08	IS: 7002-1991 DIN982	ITEM-9 COATING TO MOTS 057
72	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS4367 PT.14)	20	L1HWSS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO MOTS 057
71	STAINLESS STEEL NYLOC NUT M6 (A2-70 TO IS4367 PT.14)	6	L1HWSS08	IS: 7002-1991 DIN982	ITEM-7 COATING TO MOTS 057
70	STAINLESS STEEL MACHINE WASHER A10.5 (A2 TO IS4367 PT.14-1984)	24	L1HWSS09	IS: 2016-1967 DIN125	ITEM-6
69	SCHIEBE 8.4	14	DIN9021	NIL	NIL
68	STAINLESS STEEL MACHINE WASHER A8.4 (A2 TO IS4367 PT.14-1984)	30	L1HWSS09	IS: 2016-1967 DIN125	ITEM-5
67	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS4367 PT.14-1984)	6	L1HWSS09	IS: 2016-1967 DIN125	ITEM-4

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
1	17/07/2006	ALL	1. ITEM NO 79,80 & 81 ADDED. 2. ITEM NO. 23 WAS 3 10113.R.09.128.013.	DIC NO. MD030177 DT.30/10/2006 03

66	STAINLESS STEEL MACHINE WASHER A13 (A2 TO IS4367 PT.14-1984)	4	L1HWSS09	IS: 2016-1967 DIN125	ITEM-8
65	PROGRESSIVE RING A6	1	ORP18L71	NIL	ERMETO OR EQUIVALENT
64	STAINLESS STEEL HEX HEAD SCREW M10X35 (A2-70 TO IS4367 PT.14-84)	12	L1HWSS02	IS: 1364 PT.2-92 CE,DIN933	ITEM-20 COATING TO MOTS 057
63	STAINLESS STEEL HEX HEAD SCREW M8X60 (A2-70 TO IS4367 PT.14-84)	10	L1HWSS02	IS: 1364 PT.2-92 CE	ITEM-16 COATING TO MOTS 057
62	STAINLESS STEEL HEX HEAD SCREW M8X30 (A2-70 TO IS4367 PT.14-84)	2	L1HWSS02	IS: 1364 PT.2-92 CE	ITEM-12 COATING TO MOTS 057
61	STAINLESS STEEL HEX HEAD SCREW M8X25 (A2-70 TO IS4367 PT.14-84)	10	L1HWSS02	IS: 1364 PT.2-92 CE	ITEM-11 COATING TO MOTS 057
59	STAINLESS STEEL HEX HEAD SCREW M6X25 (A2-70 TO IS4367 PT.14-84)	16	L1HWSS02	IS: 1364 PT.2-92 CE	ITEM-6 COATING TO MOTS 057
58	STAINLESS STEEL HEX HEAD SCREW M6X16 (A2-70 TO IS4367 PT.14-84)	4	L1HWSS02	IS: 1364 PT.2-92 CE	ITEM-4 COATING TO MOTS 057
57	CLEVIS PIN 14H1X30X50	4	NIL	DIN1445	NIL
56	LIGHT PIPE CLIP (13)	8	LW63110	NIL	ITEM NO.3
55	LIGHT PIPE CLIP (28.5)	7	LW63110	NIL	ITEM NO.8
54	PIPE CLIP WITH SINGLE ENDED (28)	2	LW63111	NIL	ITEM NO.7
53	HEAVY PIPE CLIP (28.5)	4	LW63108	NIL	ITEM NO.8
51	PIPE NUT WITH THREAD AS IN ISO288-1	4	NIL	DIN431 A61 1/4	NIL
50	ASSEMBLED ADJUSTABLE STAND PIPE ELBOW	1	EVW10LR71	NIL	ERMETO OR EQUIVALENT
40	STRAIGHT MALE STUD FITTING WITH ELASTOMERIC SEAL	5	6E28LREDAC	NIL	ERMETO OR EQUIVALENT
37	EQUAL TEE	3	T28LA3C	NIL	ERMETO OR EQUIVALENT
34	STRAIGHT UNION	2	610LA3C	NIL	ERMETO OR EQUIVALENT
31	STRAIGHT UNION	1	628LA3C	NIL	ERMETO OR EQUIVALENT
28	PIPE	1	3 10113.R. 09.110.004	NIL	NIL
27	PIPE	1	3 10113.R. 09.110.023	NIL	NIL
26	PIPE	1	LE36147	NIL	NIL
25	PIPE	1	3 10113.R. 09.110.024	NIL	NIL
23	PIPE	1	LW36159	NIL	NIL
22	PIPE	1	3 10113.R. 09.128.017	NIL	NIL
21	PIPE	1	3 10113.R. 09.128.016	NIL	NIL
20	PIPE	1	3 10113.R. 09.128.015	NIL	NIL
19	PIPE	1	3 10113.R. 09.128.014	NIL	NIL
18	PIPE	1	3 10113.R. 09.128.011	NIL	NIL
17	PIPE	1	3 10113.R. 09.128.012	NIL	NIL
16	PIPE CLIP	5	3 10113.0. 09.095.007	NIL	NIL
12	BRACKET	1	LW36133	NIL	NIL
11	HOCK	4	3 10113.0. 09.095.012	NIL	NIL
10	BRACKET COMPLETE	5	3 10113.0. 09.095.001	NIL	NIL
9	BRACKET	5	3 10113.0. 09.095.028	NIL	NIL
8	BP & FP ANGLE COCKS PROTECTION ARRANGEMENT	1	LW36131	NIL	NIL
6	EMERGENCY BRAKE VALVE NB12A	1	194023/A	NIL	MDTS077
3	BRAKE COUPLING	2	1/75882/455	NIL	MDTS077
2	BRAKE COUPLING	2	1/75882/455	NIL	MDTS077
1	STOP VALVE	4	1139371 1.2.411/2	NIL	MDTS077

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	SPASSLY	DETAIL ORG	MATL. & SPEC.	REMARKS
NIL	M	GROUP AIR BRAKE			1W36137 ALT NIL	
WEIGHT	FILE	\\Nas\dev\snop\1w36137s2a.prt (2D)				
64.135	KG					
S.AREA						
NIL	M ²					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

COMPRESSED AIR BRAKE MOUNTING ON PP END FOR EOG COACHES (LHB TYPE)		SCALE	SSE/REC	DRG	DRN	SNOP
RAIL COACH FACTORY, KAPURTHALA		1:7.5				
INDIAN RAILWAYS STANDARD		PL NO.	NIL			
		DRG.NO.	LW36137			
		REF.DWG. 1	10113.0.09.100.005			
		ALT.	0			
		SIZE	A1			
		SHEET	2/2			

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: 10/05/2005

CGM BY: [Signature]