

2/1

RAIL COACH FACTORY, KAPURTHALA
(Coach Alteration Instruction)

CAI/RCF/MECH/R-SS/002

MD46251

Date: 06.05.06

1. **Description:** Provision of Additional Drain Hole in FRP lavatory module for effective drainage in RCF Stainless Steel coaches.

2. **Drawing No:**

S. No.	Description	Drawing No. & alt
1	Location of additional drain hole	MI004694 alt 'nil'
2	Drainage piping arrangement	MI004693 alt 'nil'
3	Location of drain hole in under frame	LE11284 alt 'b' and LE11285 alt 'b'

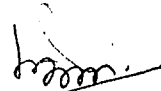
3. **Alteration:** To make the drainage system effective in FRP lavatory module additional drain hole and drainage piping arrangement has been incorporated.

4. **Coach type:** RCF stainless steel AC sleeper and Hot –buffet coaches.

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

6. **Special Instructions:**

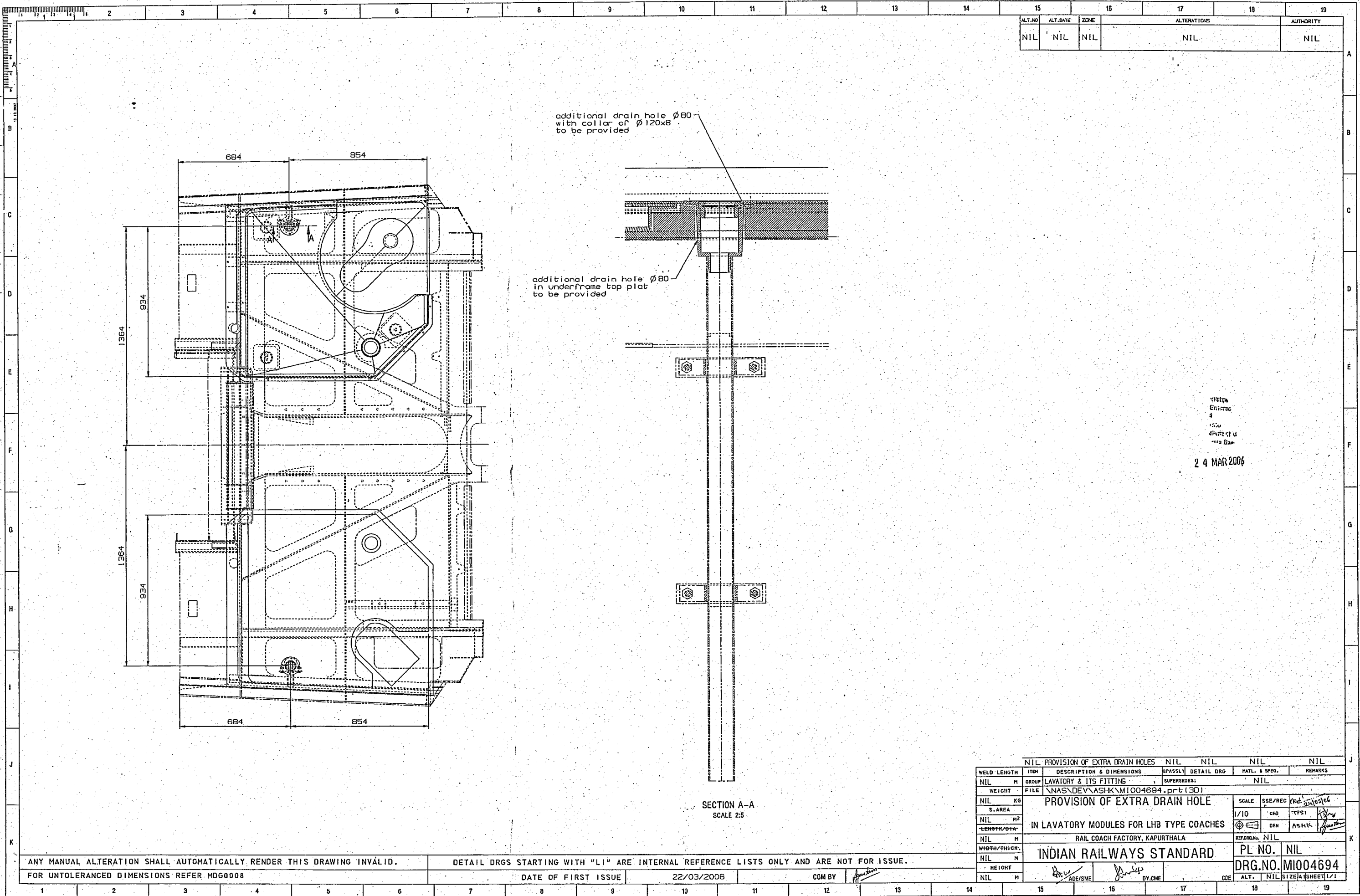
- Cut a through hole of Ø 80mm with collar of Ø 120x8mm for additional drain hole in FRP Lavatory module as per location given in drawing No. MI004694.
- Cut a through hole of Ø 90mm in the head stock sheet as per location given in drawing No. LE11284 alt 'b' and LE11285 alt 'b'.
- Mount drain and drain pipe as per drawing no. MI004693 with adhesive Sika252 or Teroson 92 or Totalseal 42 or 3M55560
- To eliminate water seepage, proper finish to be given to the collar made to match with the floor, by using a suitable FRP compound.
- Use electrode 1.4370/MAG for welding of steel parts.


For General Manager (Mech.)

Encls:

MI004694 alt 'nil'
MI004693 alt 'nil'
LE11284 alt 'b'
LE11285 alt 'b'

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



additional drain hole Ø80
with collar of Ø120x8
to be provided

additional drain hole Ø80
in underframe top plate
to be provided

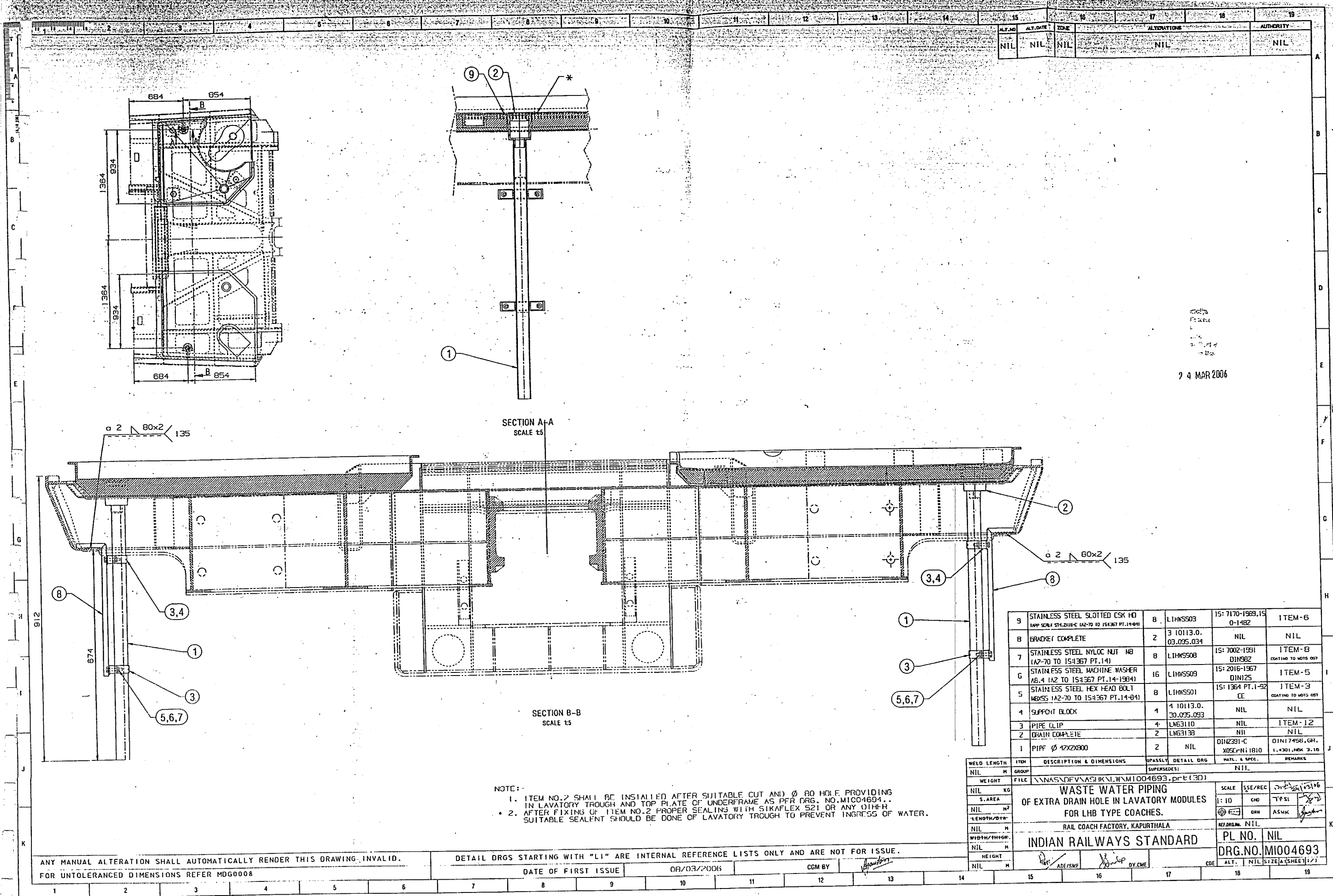
SECTION A-A
SCALE 2:5

24 MAR 2006

NIL PROVISION OF EXTRA DRAIN HOLES				NIL		NIL		NIL	
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS		APPROVAL	DETAIL DRG	MATL. & SPEC.		REMARKS	
NIL	M	GROUP	LAVATORY & ITS FITTING		NIL				
WEIGHT	FILE		\\NAS\DEV\ASHK\M1004694.prt (3D)						
NIL	KG	PROVISION OF EXTRA DRAIN HOLE				SCALE	SSE/REC	DATE 22/03/06	
S.AREA	IN LAVATORY MODULES FOR LHB TYPE COACHES					1/10	CHD	TPS1	FILE
NIL						H2	REF.DWG.		DRN
LENGTH/DIA	RAIL COACH FACTORY, KAPURTHALA								
NIL	M	INDIAN RAILWAYS STANDARD				PL NO.		NIL	
WIDTH/HYDCK					DRG.NO.		M1004694		
NIL	M	ADE/SME		DY.CME		CDE			
HEIGHT					ALT.		NIL	SIZE A	SHEET 1/1
NIL	M								

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 22/03/2006 CGM BY



2 4 MAR 2006

NOTE:-
1. ITEM NO.2 SHALL BE INSTALLED AFTER SUITABLE CUT AND Ø 80 HOLE PROVIDING IN LAVATORY TROUGH AND TOP PLATE OF UNDERFRAME AS PER DRG. NO.M1004694..
2. AFTER FIXING OF ITEM NO.2 PROPER SEALING WITH SIKAFLEX S21 OR ANY OTHER SUITABLE SEALANT SHOULD BE DONE OF LAVATORY TROUGH TO PREVENT INGRESS OF WATER.

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 08/03/2006

CGM BY

ADP/SWF

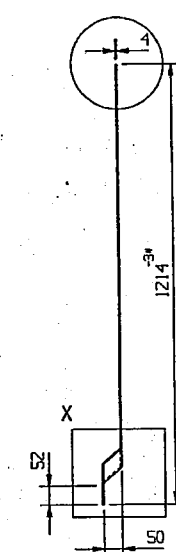
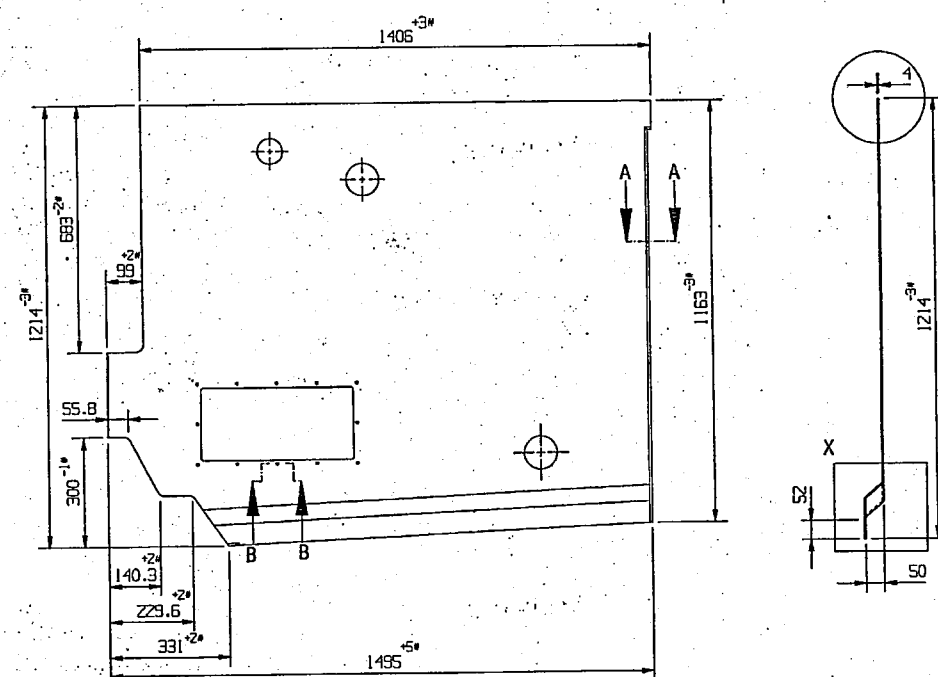
DY.CME

CDE

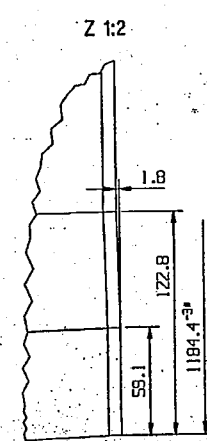
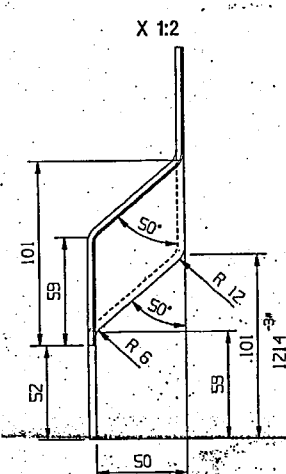
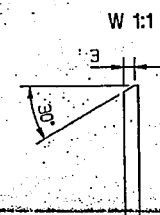
ITEM	DESCRIPTION & DIMENSIONS	QUANTITY	DETAIL DRG	MATL. & SPEC.	REMARKS
9	STAINLESS STEEL SLOTTED CSK HD	8	LIHWS03	IS: 7170-1989, IS 0-1482	ITEM-6
8	BRACKET COMPLETE	2	3 10113.0. 03.035.034	NIL	NIL
7	STAINLESS STEEL NYLOC NUT M8 (A2-70 TO IS4367 PT.14)	8	LIHWS08	IS: 7002-1991 DIN982	ITEM-8 COATING TO M015 C07
6	STAINLESS STEEL MACHINE WASHER A6.4 (A2 TO IS4367 PT.14-1984)	16	LIHWS09	IS: 2016-1967 DIN125	ITEM-5
5	STAINLESS STEEL HEX HEAD BOLT M8X55 (A2-70 TO IS4367 PT.14-84)	8	LIHWS01	IS: 1364 PT.1-92 CE	ITEM-3 COATING TO M015 C07
4	SUPPORT BLOCK	4	4 10113.0. 30.035.033	NIL	NIL
3	PIPE CLIP	4	LMG3110	NIL	ITEM-12
2	DRAIN COMPLETE	2	LMG3138	NIL	NIL
1	PIPE Ø 42X2X900	2	NIL	DIN2391-C X05C-Ni 1810	DIN17456, GR. 1.4301, M0K 3.10

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QUANTITY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP				
WEIGHT	FILE	\\NAS\DEV\AS\K\W\W\1004693.prt (30)				
NIL	KG					
S. AREA						
NIL	M ²					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

WASTE WATER PIPING OF EXTRA DRAIN HOLE IN LAVATORY MODULES FOR LHB TYPE COACHES.				SCALE	SSE/REC	DATE	BY
				1:10	CHD	TPSI	
				DRN	ASWK		
RAIL COACH FACTORY, KAPURTHALA				REF.DWG. NIL			
INDIAN RAILWAYS STANDARD				PL NO. NIL			
				DRG.NO. M1004693			
				ALT. NIL SIZE A1 SHEET 1/1			



Entered
into
evidence of
the fact
12 APR 2006



MANDATORY MANUFACTURING ALLOWANCE.

NIT		SHEET 4X1236X1505		NIT		IRS:M41-97		NIT					
WELD LENGTH		ITEM DESCRIPTION AND DIMENSIONS		OPASSLY DETAIL DRG		MATL. & SPEC.		REMARKS					
NIT		M GROUP UNDERFRAME		SUPERSEDES: LE11284 ALT a									
WEIGHT		FILE //nas/dev/sro/1/e/le11284b.prt (20)											
7.500		NO		TOP FLANGE				SCALE		SSE/REG		12/11/84	
S. AREA								1:10		CHD		harb	
NIT		M2						DRN		sro		12/11/84	
LENGTH		M		1.505				RAIL COACH FACTORY, KAPURTHALA				IR STANDARD	
WIDTH/THICK.		M		SSE/PLG		APLE/S/PLE		DY.CPLE		PL NO.		NIT	
1.236/0.004		M		ADE/SMC		DY.CME		CDE		DRG.NO.		LE11284	
NIT		M								AL.T.		b	
										SIZE A		SHEET 1/1	

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

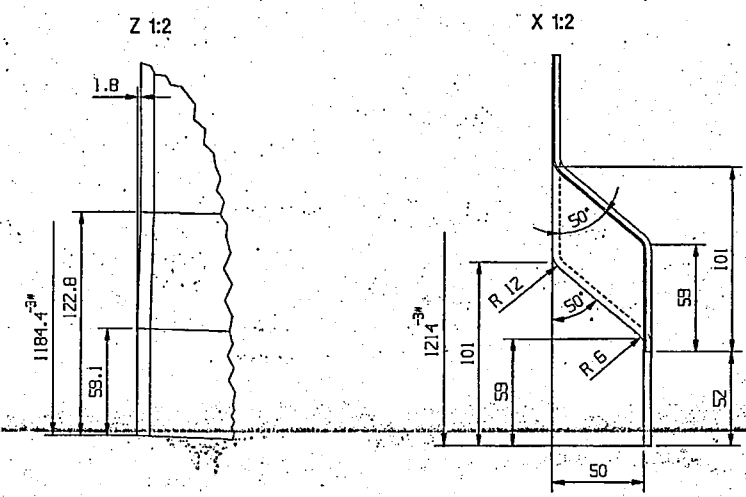
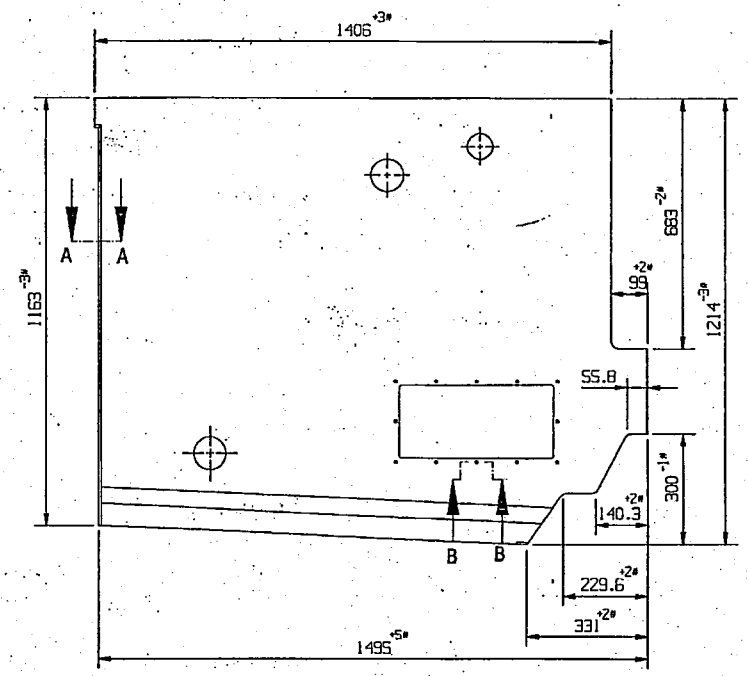
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE

05/09/2003

CGM BY _____

PL NO.	NIL			
DRG.NO.	LE11284			
ALT.	b	SIZE	A	SHEET 1/1



WELD LENGTH		ITEM	DESCRIPTION & DIMENSIONS		SPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	M	GROUP	UNDERFRAME		SUPERSEDES: LE11285 ALT 'a'				
WEIGHT		FILE //Ras/dep/srj/16/16112856.prt1201							
47.500	KG	TOP FLANGE					SCALE	SSE/REQ	12x16
S.AREA							1:10'	CHD	harp
NIL	M ²							DRN	srj
LENGTH/DIA									
1.505	N	RAIL COACH FACTORY, KAPURTHALA IR STANDARD					REFERENCE NO.	NIL	
WIDTH/THICK.		SSE/PLQ	APLE/SPLE		DY.CPLE		PL NO.	NIL	
1.236/0.004M							DRG.NO.	LE11285	
HEIGHT		SSE/PLQ	APLE/SPLE		DY.CPLE		ALT.	SIZE/A SHEET 1/1	
NIL	M	ADE/SME	DY.CME		CDE		b		

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.		DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.			
FOR UNTOLERANCED DIMENSIONS REFER MDG0008		DATE OF FIRST ISSUE	05/09/2003	CGM BY	eks