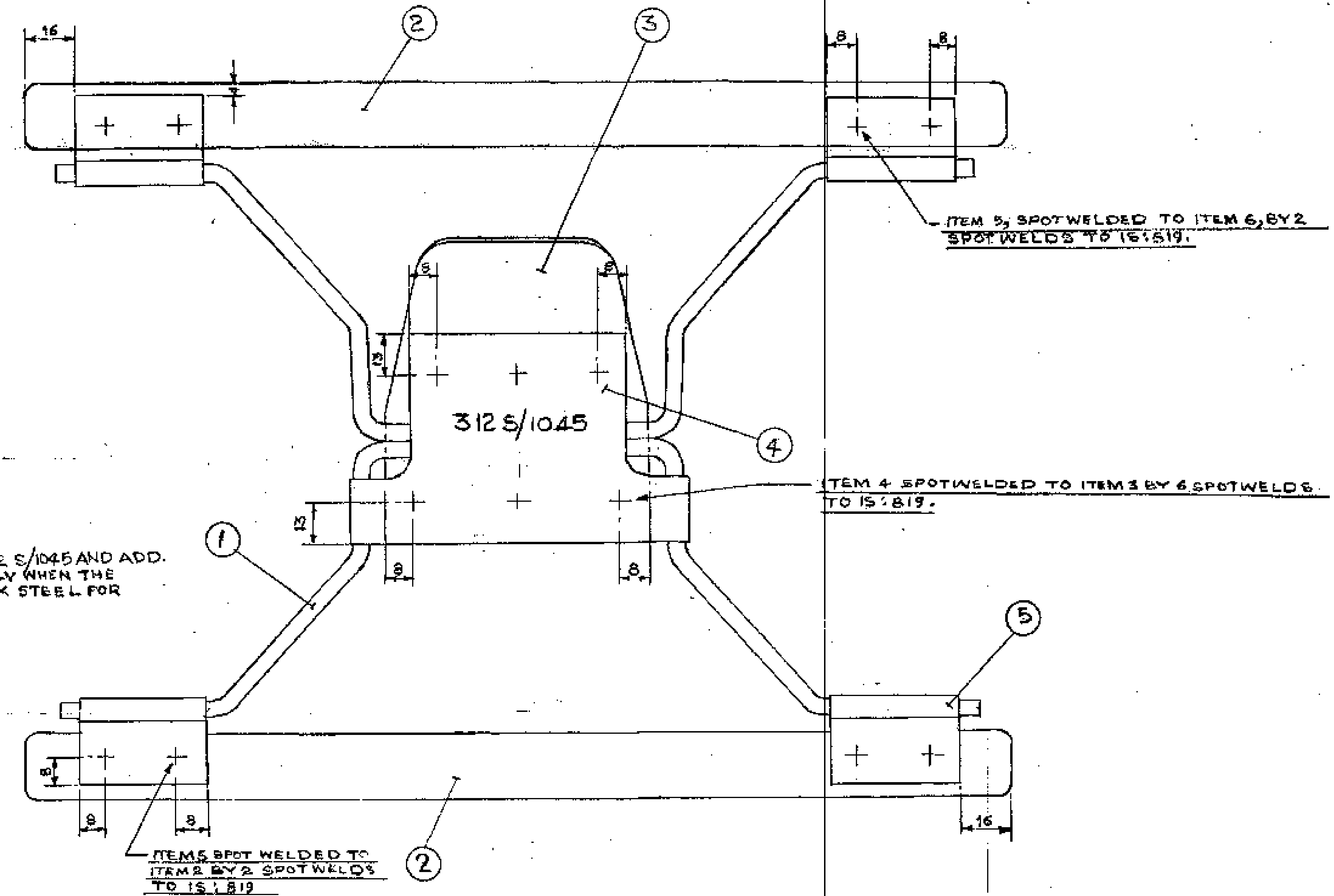
DRG No ARM. 1253 C 27

DRG CONVENTIONS ARE BASED ON IS: 696

SCHEDULE OF COMPONENTS

ITEM No.	DESIGNATION	NO. OFF	DRG. NO.
1	LINK	2	ARM 1253 B28
2	HING PLATE	2	ARM-1253A29
3	HANDLE	1	ARM-1253A30
4	HANDLE PLATE	1	ARM-1253A31
5	HINGE	4	ARM-1253A32



NOTE:— DELETE THE EXISTING SEC. REF. No 312 S/1045 AND ADD. SEC. REF. No. 412 S/4. APPLICABLE ONLY WHEN THE DRAWING IS MEANT FOR MAKING BOX STEEL FOR ROCKET A/C 68 mm. TYPE 'A'.

R. No	DATE	ZONE	BRIEF RECORD	INITIAL
5	12 4/13	-	AMENDED VIDE AL. No 07/2013	
4		-	RETRACED.	
3		-	AMENDED VIDE AL. No 3(5)	Sd/-
2		-	DRG RETRACED WITHOUT CHANGE.	Sd/-
1		-	ORIGINAL	Sd/-

	DATE	INITIAL
DGN		
DRN		
CHD	23	
TCD		
COMP		

SCALE: 1:1

TOL:- TOL EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED.)

DIMENSIONS IN mm.

MATL. SPEC.: STEEL IS:513

SEC REF. NO.

GAUGE SCHD. No.

DRG LIST NO ARM 1253

TITLE

LINK ASSEMBLY.

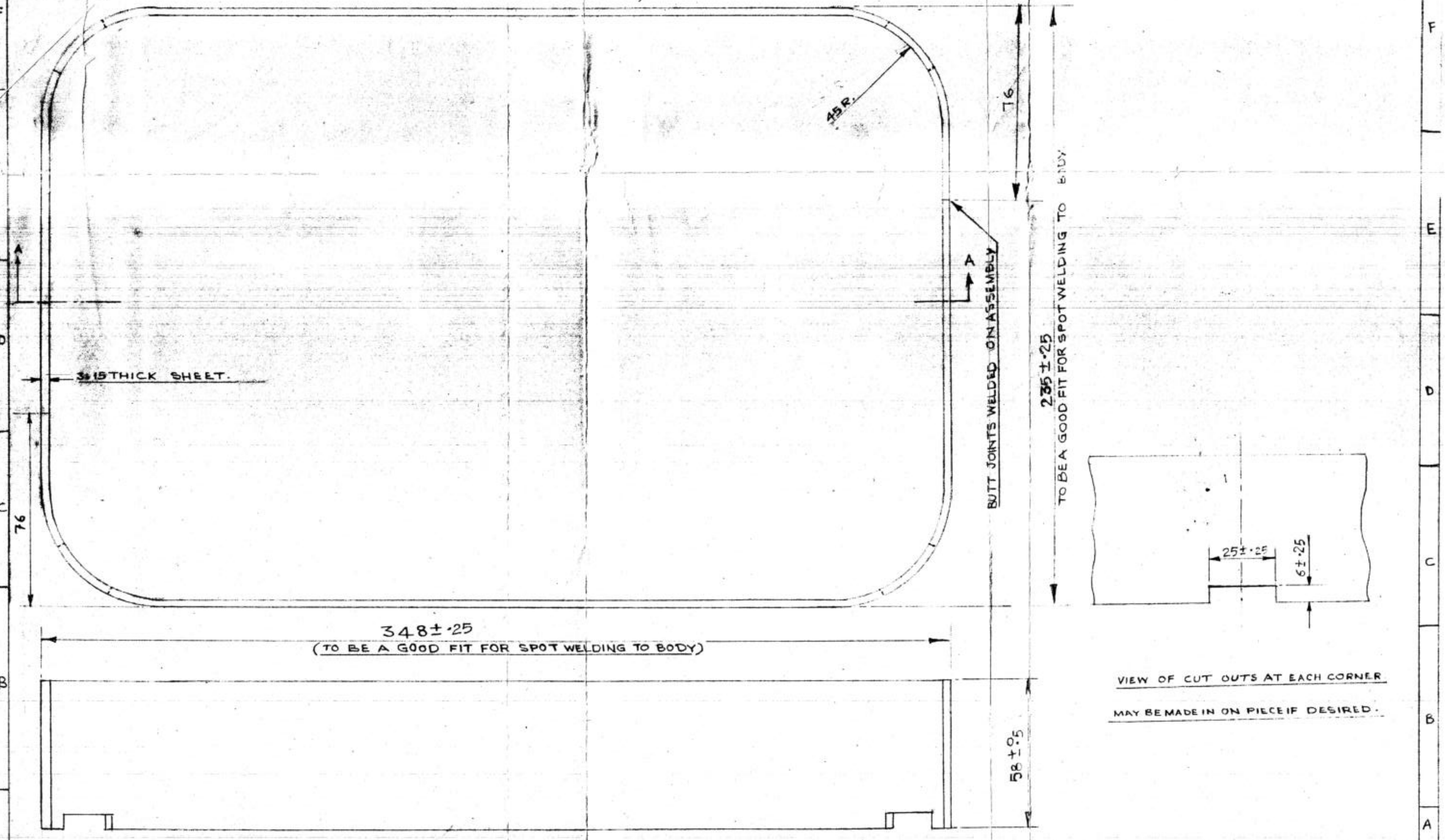
D.T.D & P (AIR) MIN. OF DEFENCE.

APPROVED

DRG. No ARM. 1253 C27

DRG. Nº ARM. 1253 C22

DRAWING CONVENTIONS ARM BASED ON IS: 696.



VIEW OF CUT OUTS AT EACH CORNER

MAY BE MADE IN ON PIECE IF DESIRED.

SECTION A A

PROTECTIVE TREATMENT:-
FOR PROTETIVE TREATMENT SEE DRG NO. ARM 1253 C 18.

R.Nº	DATE ZONE	BRIEF RECORD	INITIAL
4	22 2/76	DRG. RETRACED	
3	28 2/75	DRG RETRACED WITHOUT CHANGE	S.J.
2	5 7/74	REVISED VIDE AL Nº 171	S.J.
1	20 9/75	ORIGINAL ISSUE	S.J.

	DATE	INITIAL	DIMNS ARE IN m m.
DGN			MATL. SPECN. STEEL IS: 1079
DRN			
CHD.	24 7/76		SEC. REF NO
TCD.	24 7/76		GAUGE SCHD. Nº
COMP.			DRG LIST NO. ARM 1253

SCALE: 1:1

TOL: EXCEPT WHER OTHER-WISE [illegible]

TITLE:- **RIM.**

D.T.D & P (AIR)
MIN. OF DEFENCE.

APPROVED
DRG. NO
ARM. 1253 C 22.

S.No	DRAWING No	DESCRIPTION	PART No	No OFF	I.A.F. SEC REF. No	MATL. SPECN.	FOR S.No	ISSUE	REMARKS
1.	ARM.1253 D1	BOX H-60, MK-1 (INDIA) GEN. ARRGT.			312S/1045	(1) GAQA/ARM 41B/IA 1169(10) ~~D.T.D&P.(AIR)/ARM 41A~~		✶2	THIS SPECN. IS TO GUIDE MANUFACTURE & INSPECTION
2.	ARM.1253 C2	SEALING LID ASSEMBLY		1		—	1	✶2	
3.	ARM.1253 C3	LID SUB-ASSLY.		1		—	2	✶2345	
4.	ARM.1253 C4	LID		1		STEEL TO IS: 513	3	✶23	
5	ARM 1253 A5	BRACKET		4		STEEL TO IS: 1079	3	✶2	
6	ARM 1253 A6	LOCKING PLATE		1		STEEL TO IS: 1079	3	✶2	
7	ARM 1253 C7	PRESSURE PLATE SUB-ASSLY.		1		—	2	✶2	
8	ARM 1253 C8	RELEASE BAR		1		STEEL St.42 IS: 1079	7	✶2	
9	ARM 1253 C9	PRESSURE PLATE		1		STEEL TO IS: 1079	7	✶23	
10	ARM 1253 A10	SPIGOT		1		STEEL TO IS: 1570 C20	7	✶2	
11	ARM 1253 A11	BASE PLATE		1		STEEL TO IS: 1079	7	✶2	
12	ARM 1253 A12	STOP		1		STEEL TO IS: 1079	7	✶2	
13	ARM 1253 A13	WASHER		1		BRASS CuZn37 1/2H IS: 410	7	✶2	
14	ARM 1253 C14	ARM		4		STEEL TO IS: 1079	2	✶2	
15	ARM 1253 A15	PIN		8		STEEL TO IS: 1570 C20	2	✶2	

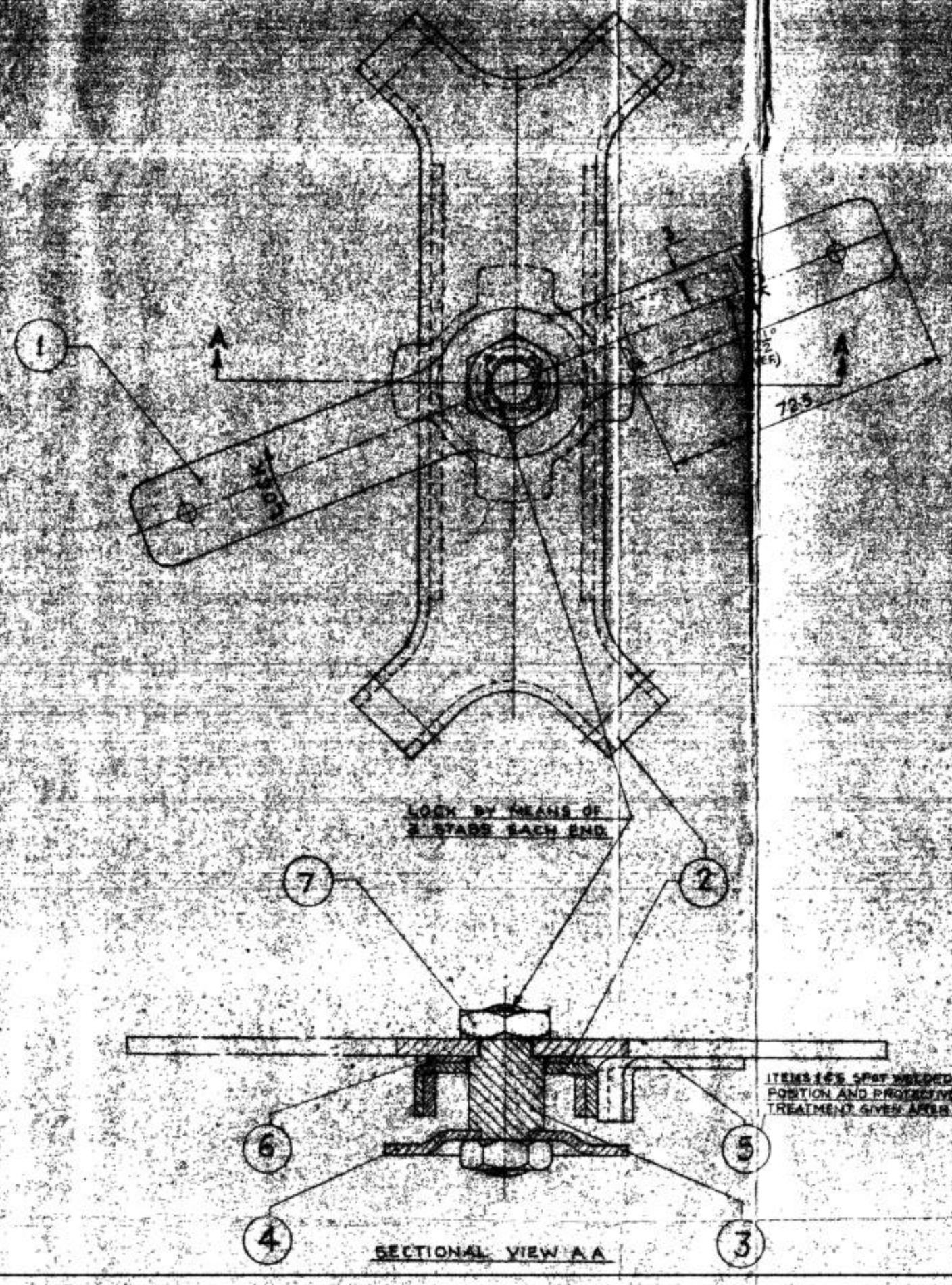
AL. No	R. No	DATE	BRIEF RECORD	INITIAL
8/2002	9	7 3/2002	AMENDED VIDE AL No 8/2002	
9/98	8	3/98	SHEET No. 36, 37 & SCHD ADDED VIDE AL No 9/98	
	7	1-8-96	RETRACED WITHOUT CHANGE	
660	6		ISSUE OF S.No 3 RAISED TO 5	sd/-
	5	22-2-76	RETRACED WITHOUT CANGES	sd/-
182	4	11-10-72	ISSUE OF S.Nos. 9 & 34 RAISED TO 3	sd/-
171	3	8-7-72	ISSUE NOS. OF S.NOS. 1, 2, 3, 5 & 6 TO 16, 18 TO 25, & 28 TO 35 RAISED TO 2 & OF S.No 4, RAISED TO 3	sd/-
100	2	9-11-67	ISSUE OF No 1 RAISED	sd/-
	1	20-9-65	ORIGINAL	sd/-

R.No	DATE	BRIEF RECORD	INITIAL	R.No	DATE	BRIEF RECORD	INITIAL

COMPILED		SEC. REF. No :-	D.T.D & P. (AIR) MINISTRY OF DEFENCE
		STORE SPECN :-	
CHD		ASSY. DRG. No :- ARM1253 D1	APPROVED
TCD		DRG. LIST FOR BOX 'H'-6C, MK.1 (INDIA)	DRG. LIST No ARM1253
COMPARED			
PASSED		SHEET No 1 · NO. OF SHEET 3	

DRG. NO
ARM 1253 C7

DRAWING CONVENTIONS ARE BASED ON IS : 696.



SECTIONAL VIEW A-A

SCHEDULE OF COMPONENTS

ITEM NO.	DESCRIPTION	QTY.	MATL. SPECN.	DRG. NO.	REMARKS
1	RELEASE BAR	1	STEEL TO B.S.P.		
2	PRESSURE PLATE	1			
3	[illegible]	1			
4	BASE PLATE	1			
5	STOP	1			
6	WASHER	1			
7	[illegible]	2	STEEL	NO	[illegible]

PROTECTIVE TREATMENT

ALL COMPONENTS EXCEPT THE STATED COMPONENTS SHALL BE GIVEN THE FOLLOWING PROTECTIVE TREATMENTS:-

(a) PHOSPHATING TO IS : 3618 CLASS 'C'

(b) ONE COAT OF READY MIXED PAINT SPRAYING RED OXIDE ZINC CHROME PRIMING TO SPECN. IS: 2074

(c) SINGLE COAT OF PAINT READY MIXED, AIR DRYING, SEMI-GLOSSY/MATT FINISH, SPRAYING TO SPECN. IS:165 WITH ISE SHADE 220 (OLIVE GREEN) TO SPECN. 18:5.

R.NO.	DATE	ZONE	BRIEF RECORD	INITIAL
4	18 3/74		RETRACED	
3	5 3/71		REVISED VIDE A.L. NO. 116	
2	4 2/71		AMMENDED VIDE A.L. NO. 506	
1	22 7/70		RETRACED WITHOUT CHANGE	
	8 1/70		REVISED VIDE A.L. NO. 171	
	20 1/70		ORIGINAL	

	DATE	INITIAL
DGN.		
DRN.		
CHD.	27 7/71	
TCD.	27 7/71	
COMP.		

DIMENSIONS ARE IN mm
MATL. SPECN. —
SEC. REP. NO.
GAUGE SCHD. NO.
DRG. LIST NO. ARM 1253
SCALE 1:1
TOL.- TOL. EXCEPT WHERE OTHERWISE STATED. TO IS:2102 (MED.)

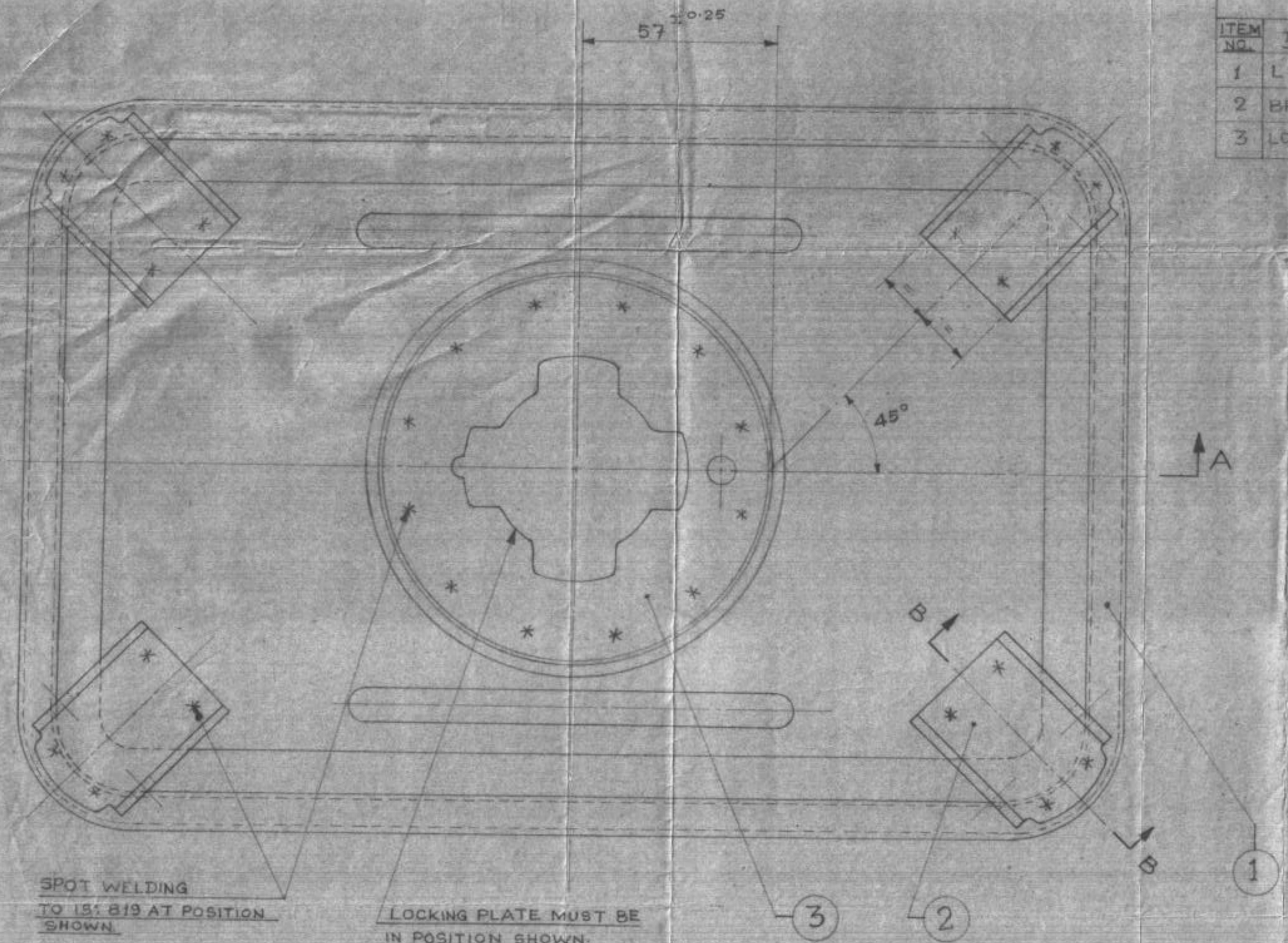
D.T.D & P(AIR)
MINISTRY OF DEFENCE

TITLE:-
PRESSURE PLATE
SUB-ASSEMBLY

APPROVED
DRG. NO.
ARM 1253 C7

DRG. NO.:- ARM 1253 C3

DRAWING CONVENTIONS ARE BASED ON IS: 696.



SCHEDULE OF COMPONENT

ITEM NO.	DESCRIPTION	NO. OFF	DRG. NO.	MATL SPEC.	REMARKS
1	LID	1	ARM1253C1	STEEL IS:513	
2	BRACKET	4	ARM1253A5	STEEL IS:1079	
3	LOCKING PLATE	1	ARM1253A6	STEEL IS:1079	

PROTECTIVE TREATMENT.

THE COMPONENTS OF THE SUB-ASSEMBLY SHALL BE GIVEN THE FOLLOWING PROTECTIVE TREATMENT:

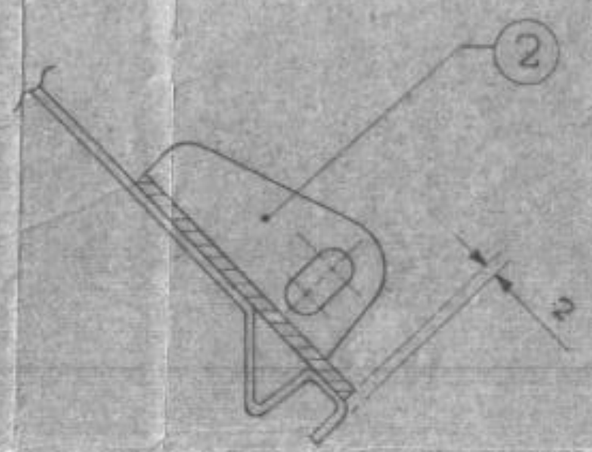
(a) PHOSPHATING TO IS: 3618 CLASS 'C'

(b) ONE COAT OF READY MIXED PAINT SPRAYING RED OXIDE ZINC-CHROME PRIMING TO SPEC. IS: 2074.

(c) SINGLE COAT OF PAINT READY MIXED, AIR DRYING SEMI-GLOSSY/MATT FINISH, SPRAYING TO SPECN. IS: 168 WITH ISC SHADE 220 (OLIVE GREEN) TO SPECN. IS: 5.

ALTERNATIVE TO (a)

ONE COAT OF READY MIXED PAINT DIPPING RED OXIDE. ZINC-CHROME PRIMING TO SPECN. IS: 2074



SECTION - 'BB'

SECTION - 'AA'

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
6	15 7/96	—	RETRACED WITHOUT ANY CHANGE	JN
5	19 7/90		AMMENDED VIDE AL. NO. 680	Sd.
4	6 11/87		AMMENDED VIDE AL. NO. 584.	Sd.
3	22 3/75	—	DRG. RETRACED WITHOUT ANY CHANGE	Sd.
2	3 7/72		REVISED VIDE A.L. NO. 171.	
1	20-3-68	—	ORIGINAL	

	DATE	INITIAL
DGN.		
DRN		
CHD	22 7/96	
TCD	22 7/96	
COMP		

DIMNS. ARE IN mm.
MATL. SPEC.:-
SEC. REF. NO.:-
GAUGE SCHD. NO.:-
DRG. LIST NO.:- ARM1253

SCALE:- 1:1

TOL:- EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED)

TITLE:-
LID
(SUB-ASSEMBLY)

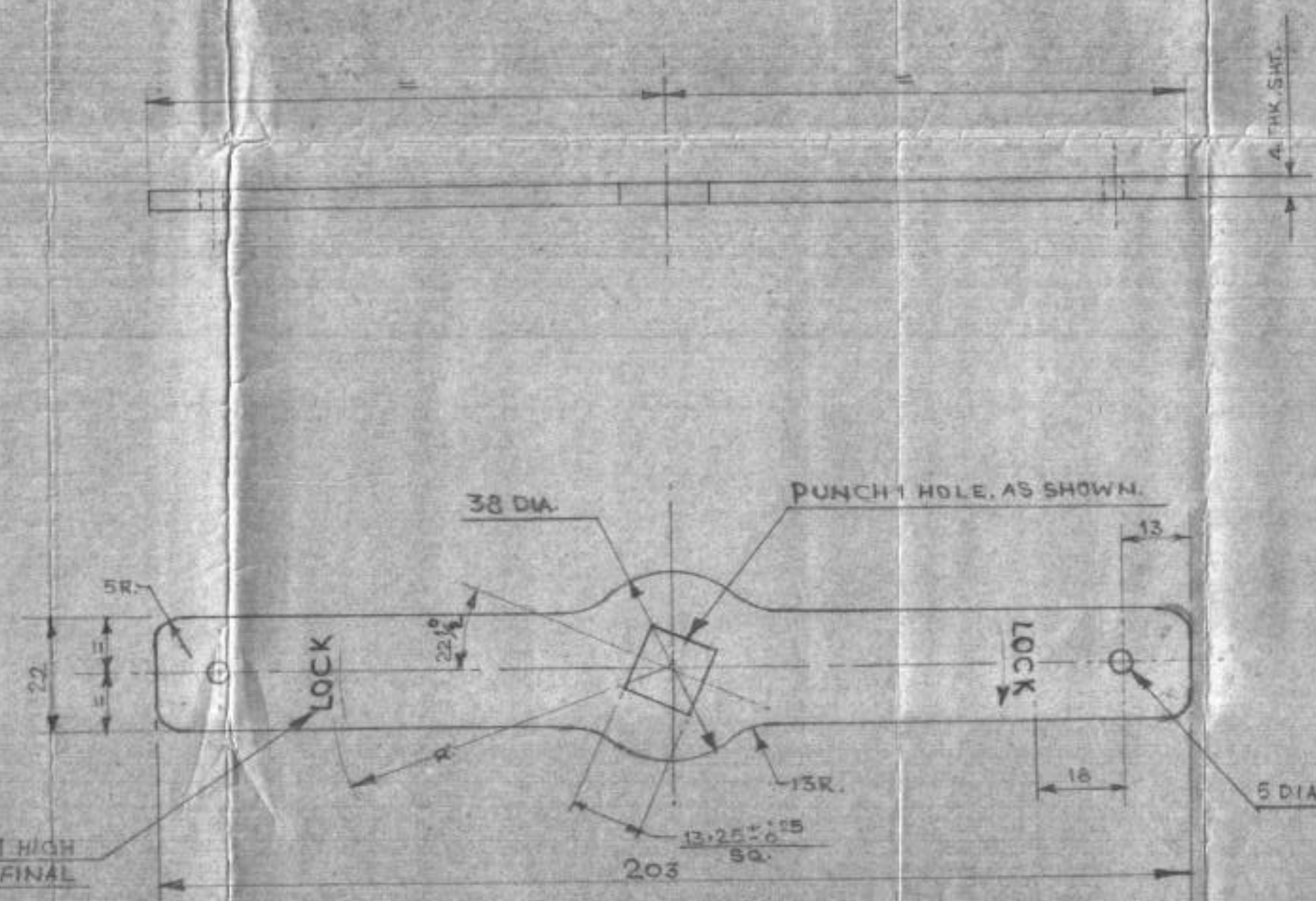
D.T.D. & P. (AIR)
MIN. OF DEFENCE

APPROVED:-

DRG. NO.:-
ARM 1253 C 3.

DRG No:- ARM. 1253 C 8

DRG. CONVENTIONS ARE BASED ON IS: 696



STAMPED IN LETTERS 4MM HIGH AND FILLED IN RED AFTER FINAL PAINT.

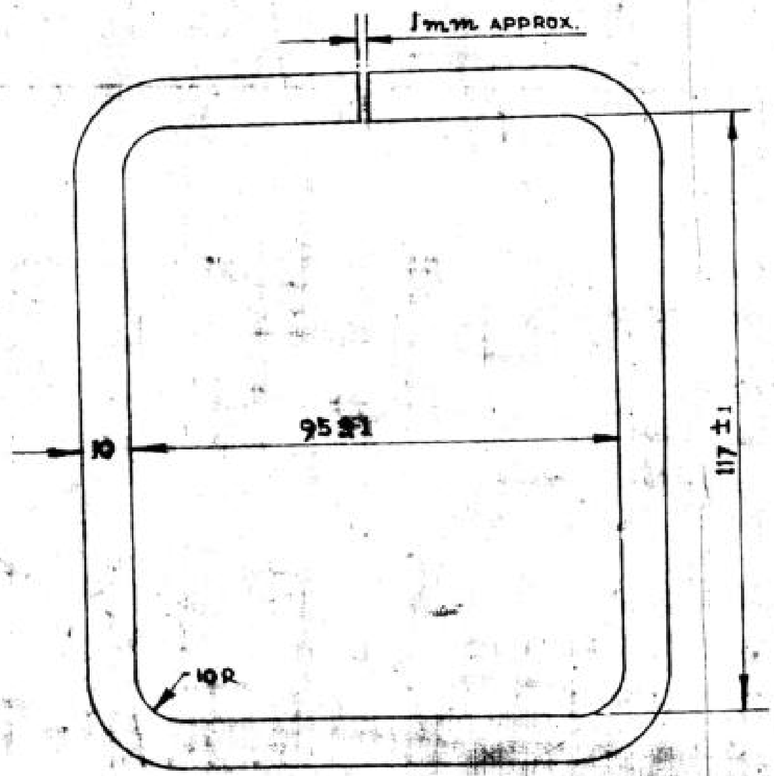
PROTECTIVE TREATMENT:-
FOR PROTECTIVE TREATMENT, SEE DRG. Nº ARM. 1253 C 7

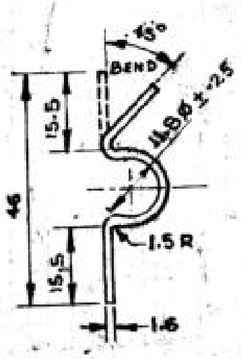
P.N	DATE	ZONE	BRIEF RECORD	INITIAL
4	15.2.96		DRG. RETRACED	Sd/
3	22.3.95		RETRACED WITHOUT ANY CHANGE.	Sd/
2	7.7.93		REVISED VIDE A. N°	Sd/
1	20.8.86		ORIGINAL	Sd/

	DATE	INITIAL	DIMNS. ARE IN mm.	D.T.D & P(AIR)
DGN			MATL SPECN:- STEEL St.42 IS:1077	MIN. OF DEFENCE
DRN				
CHD	16.2.96	Sd/-	SEC. REF NO	
TCD	15.2.96	B.C.	GAUGE SCHD NO.	
COMP			DRG. LIST No ARM. 1253	
SCALE: 1:1			TITLE :- RELEASE BAR	APPROVED
TOL:- TOL EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MEDIUM)				DRG. No. ARM. 1253 C8

FOR EXPLANATION OF DIMENSIONING ETC., SEE IS:696.

THIRD ANGLE PROJECTION.





HANDLE ~~2 OFF~~

MATL. SPECN:- STEEL, IS: 1570 - C 20

CLEAT - 2 OFF

MATL. SPECN. STEEL, IS: 513.

PROTECTIVE TREATMENT :-
FOR PROTECTIVE TREATMENT
SEE DRG. NO. ARM 1253 D18

DIMNS. IN MM.

				27 2/15	3	DRG. RETRACED WITHOUT CHANGE.
				17.1	2	REVISED SIDE AL NO 171
				5 7/12	1	ORIGINAL ISSUE.
AS ABOVE	—	ARM 1253 D18	1:1		28/9/53		
MATL. SPEN	FINISH	ASSY DRG	SCALE	AL NO	DATE	ISSUE	ALTERATIONS

DRAWN BY D&P DRG. OFFICE AND ISSUED BY DT. D&P(AIR) MIN. OF DEFENCE, GOVT. OF INDIA

DRAWN	SD/ UTTAM CHAND
CHECKED	SD/ S.K. GULATI.
TRACED	
CHECKED	
PASSED	
APPROVED	

TITLE:-

HANDLE & CLEAT

IAF SEC. REF. NO.

PART NO

SCHD NO. ARM 1253 SCHD.

FILE NO. DT. D & P. (AIR)/525/26/ARM

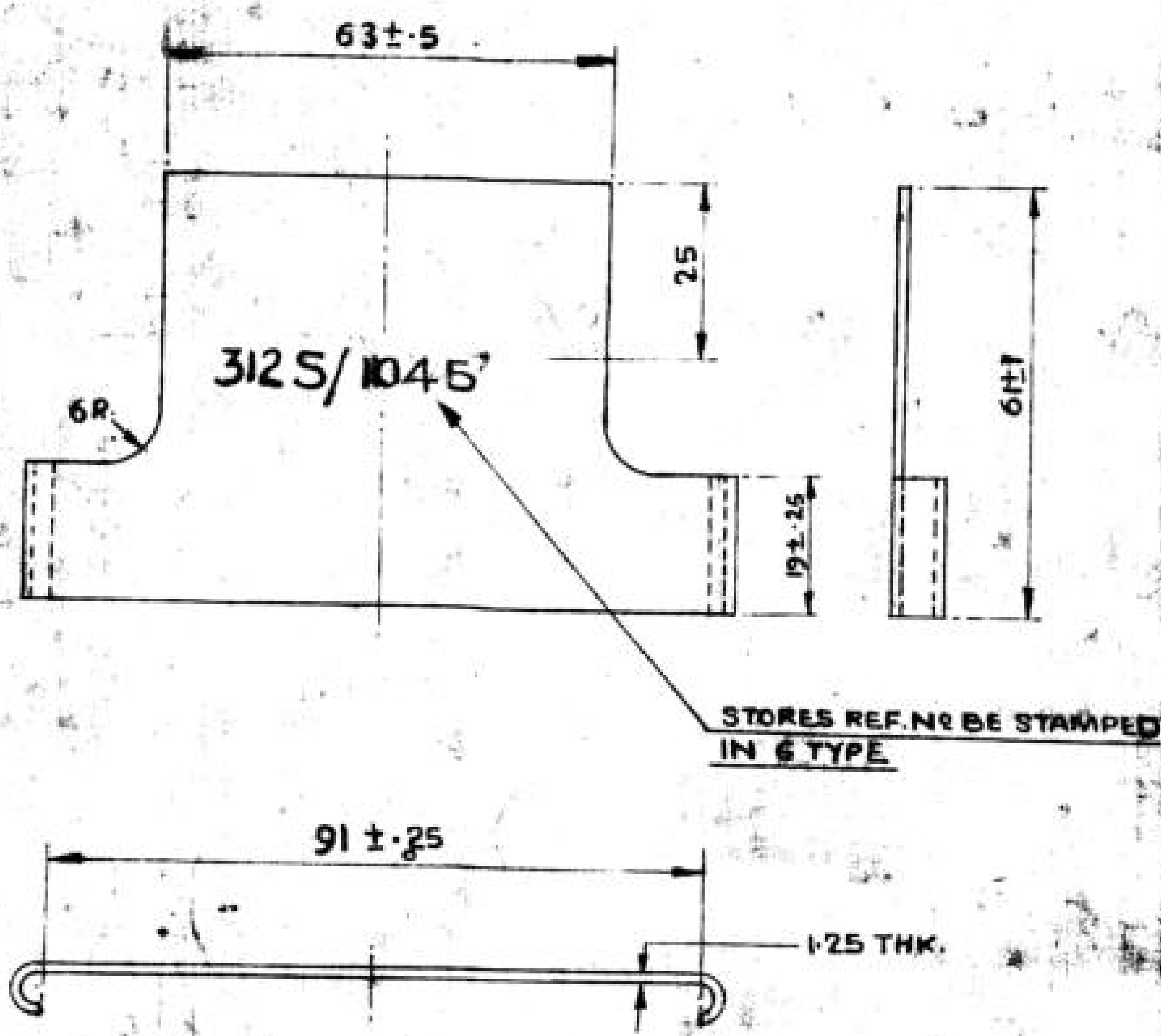
DRG. NO. ARM 1253 B24

SHEET NO. NO. OF SHTS

FOR EXPLANATION OF DIMENSIONING ETC, SEE I.S. 696

(37)

THIRD ANGLE PROJECTION



PROTECTIVE FINISH:-

PHOSPHATING TO IS:3618 CLASS 'C', OILED & STOVED

NOTE:-

DELETE THE EXISTING SEC. REF. NO. 312S/1045 AND ADD. SEC. REF. NO. 412S/4 APPLICABLE ONLY WHEN THE DRAWING IS MEANT FOR MAKING BOX STEEL FOR ROCKET A/C 68 mm TYPE 'A'.

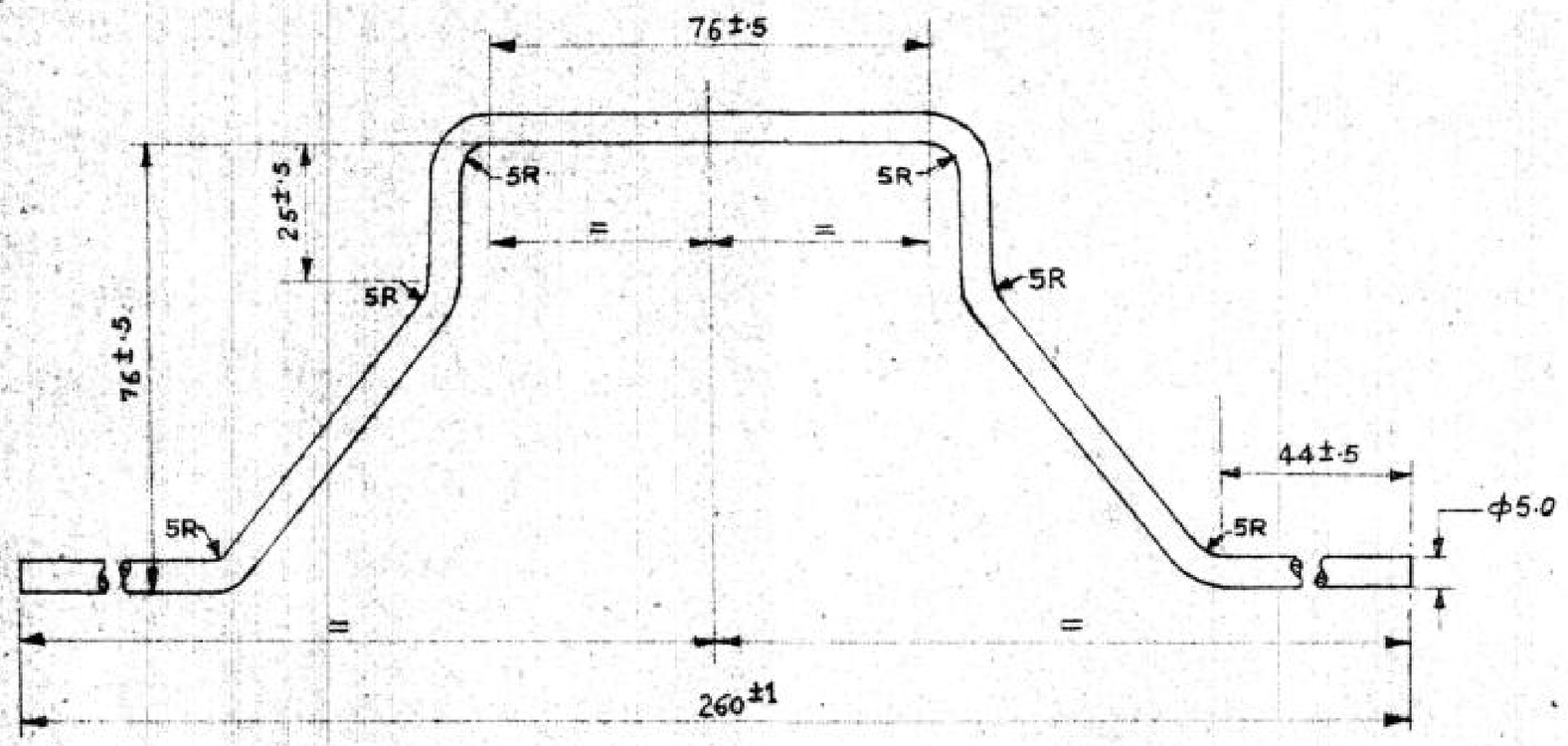
									[illegible]	AMENDED VIDE [illegible]
								[illegible]	3	DRG. RETRACED WITHOUT ANY CHANGE
DRAWN	N.C. GUPTA			DTD(L)/[illegible]	ARM 12535 SCHD		171	5 7/72	2	REVISED VIDE A.L. No 171
CHECKED	S.R. GULATI	I.A.F. SEC. REF. NO.	PART No	FILE No	SCHD. No	1/1		28 9/63	1	ORIGINAL
TRACED	[illegible]	MAT'L SPECN.		FINISH	ARM DRG. No.	SCALE	AL. No.	DATE	ISSUE	ALTERATION
CHECKED	[illegible]	STEEL IS:513		[illegible]	ARM [illegible]	[illegible]				

DRG. NO.
ARM-1253D19
DRAWING CONVENTIONS ARE BASED ON IS: 696
348
TO BE A GOOD FIT FOR SEAM WELDING LID SEATING
54
90
MASH SEAM
SLOT FOR DRAINAGE AT EACH CORNER
304±.5
40
MASH SEAM
45
A
348
SECTION B-B TO BE A GOOD FIT FOR SEAM WELDING TO BOTTOM
235
TO BE A GOOD FIT FOR SEAM WELDING TO LID SEATING
235
TO BE A GOOD FIT FOR SEAM WELDING TO BOTTOM
ALL PANELLING IS 3 DEEP
6R.
45R.
℄ OF BOX
B
NOTE:- BODY MAY BE MADE IN ONE OR TWO PIECES.
PROTECTIVE TREATMENT:- FOR PROTECTIVE TREATMENT SEE DRG NO. ARM-1253D18
JOINT TO BE LAPPED & SEAM WELDED WITH EACH END OF JOINT MASH SEAM WELDED AS SHOWN 6mm SEAM. ALTERNATIVELY JOINT MAY BE BUTT WELDED JOINT MUST BE WATERTIGHT.
SECTION 'A-A'
4 | 1-8-96 | DRG RETRACED
3 | 29-2-75 | DRG RETRACED | Sd/-
2 | 6-7-72 | REVISED VIDE AL No 171 | Sd/-
1 | 26-9-65 | ORIGINAL ISSUE | Sd/-
R.N. | DATE | ZONE | BRIEF RECORD | INITIAL
DATE | INITIAL
DGN
DRN
CMD
TCD
COMP
DIMN IN mm.
MAT'L SPEC. STEEL IS: 513
SEC. REF. No. IAF
GAUGE SCHD
DRG LIST No ARM-1253
SCALE - 1:1
TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MEDIUM)
TITLE:- BODY
D T D & P (AIR)
MIN. OF DEFENCE
APPROVED
DRG. NO.
ARM-1253D19

DRG.No. ARM 1253 B28

DRAWING CONVENTIONS ARE BASED ON IS: 696

(32)



PROTECTIVE FINISH –

PHOSPHATING TO IS:3618 CLASS 'C' OILED & STOVED.

R.No	DATE	ZONE	BRIEF RECORD	INITIAL
4	1-8-96		DRG. RETRACED WITHOUT CHANGE	
3	21-2-75		DRG RETRACED WITHOUT CHANGE	all-
2	5-7-72		REVISED VIDE ALN6.171	all-
1	20-9-65		ORIGINAL	all-

	DATE	INITIAL	
DGN			DIMENSIONS ARE IN mm.
DRN			MATL. SPEC. STEEL IS: 1570 C20
CHD	1		SEC. REF. No.
TCD	11/61		GAUGE & CHD. No.
COMP			DRG. LIST No. ARM 1253

SCALE:- 1:1

TOL:- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED) ±·5

TITLE

LINK

D.T.D & P (AIR)

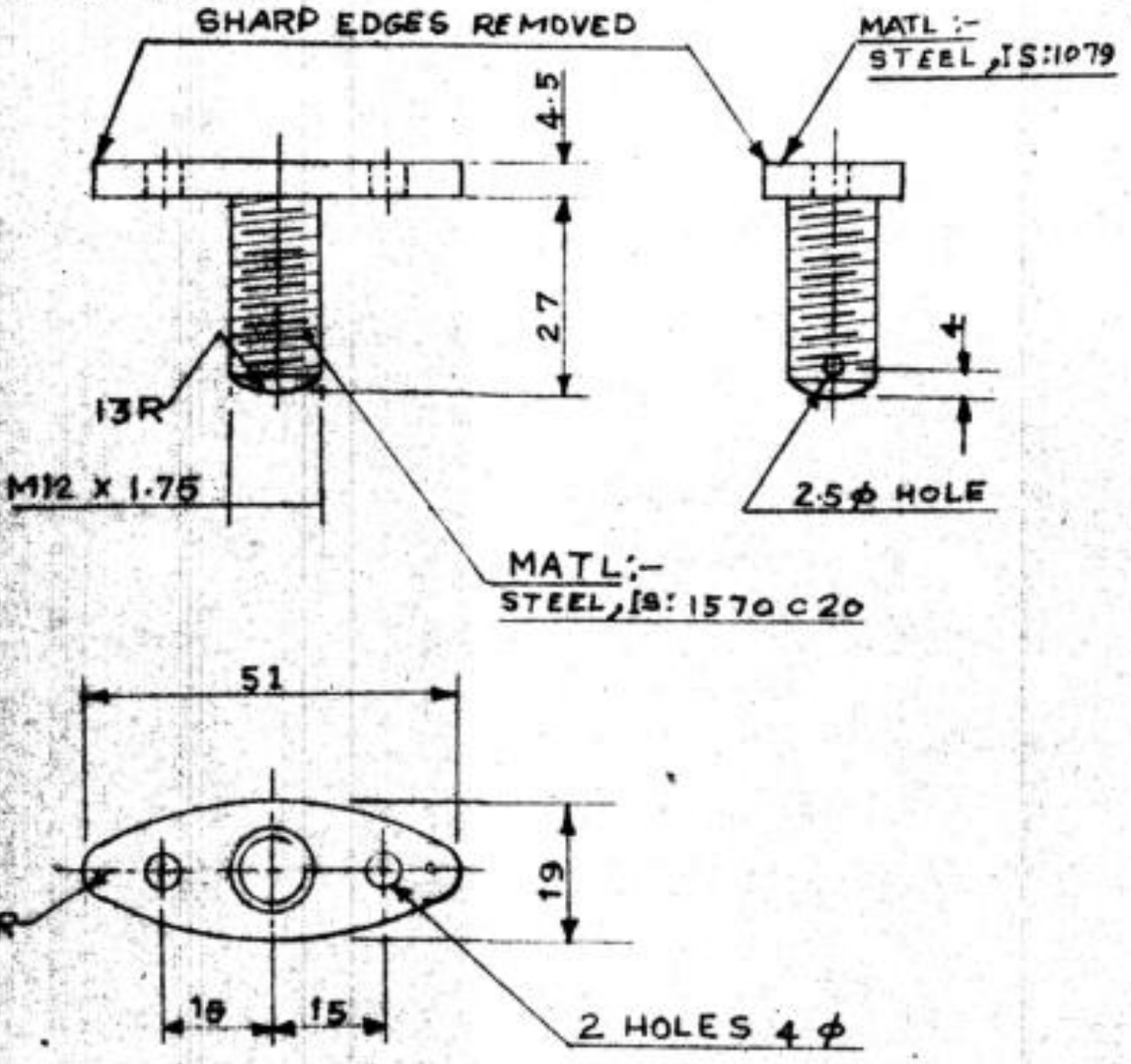
MINISTRY OF DEFENCE

APPROVED

DRG. No. ARM 1253 B28

DRG. No. ARM 1253. A16

DRG. CONVENTIONS ARE BASED ON IS: 696. (20)



HEAD MAY BE INTEGRAL OR WELDED TO THE BODY. TO BE ELECTROGALVANIGED TO SPECN. I.S: 1573 - FE Zn 25 & PASSIVATED TO IS: 1340

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4	1 5/16	-	DRG. RETRACED WITHOUT CHANGE	
3	24 3/75	-	DRG. RETRACED WITHOUT CHANGE	sd/-
2	5 7/72	-	REVISED VIDE A.L. No. 171	sd/-
1	20 9/73	-	ORIGINAL	

PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	21 12/76	
TCD	27-7-96	
COMP.		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

DIMENSIONS ARE IN MM.

MATL. SPEC. AS ABOVE

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE —

BOLT

D.T.D & P. (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG. NO.
ARM 1253 A16

DRG. No. ARM 1253 C2

DRG. CONVENTIONS ARE BASED ON IS: 696

NOTE:- IT IS IMPORTANT THAT THESE TWO PINS BE INSERTED IN THE DIRECTION SHOWN.

RELEASE BAR IN FREE POSITION

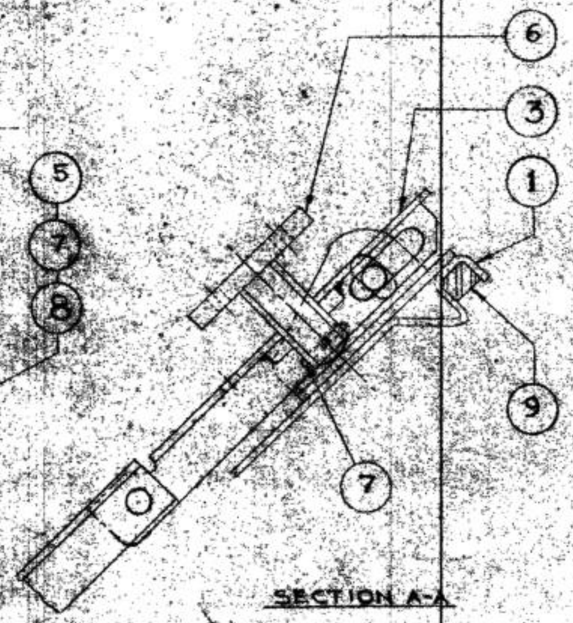
RELEASE BAR IN LOCKED POSITION

LOCK

FREE

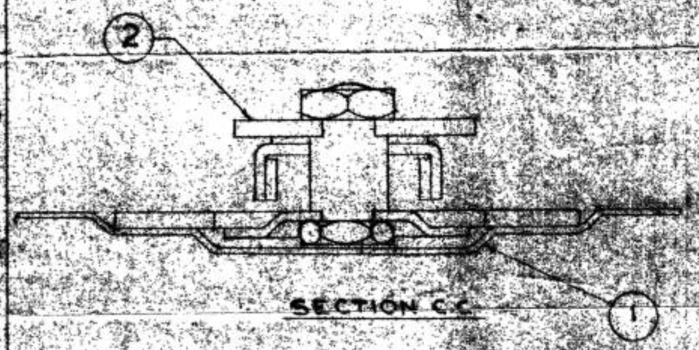
LIST OF COMPONENTS

ITEM No.	DESCRIPTION	No. OFF	DRG. No.	REMARKS
1	LID SUB-ASSEMBLY	1	ARM 1253C3	
2	PRESSURE PLATE SUB-ASSY	1	ARM 1253C7	
3	ARM	4	ARM 1253 B4A	
4	PIN 'A'	4	ARM 1253A15	
5	PIN 'B'	4	ARM 1253A16	
6	BOLT	4	ARM 1253A14	
7	SPLIT COTTER PIN 2·5 X 14 IS: 549	12	N.D.	PLATED
8	PUNCHED WASHER M7 IS:2016	8	N.D.	PLATED
9	RING RUBBER	1	ARM 1253B17	



SECTION A-A

9 RING RUBBER TO BE SECURED BY LEAD FREE RUBBER SOLUTION TO SPEC. C.S. 1187



SECTION C-C

4
7
8

	DATE	INITIAL	
DSN			
DRN			
CHD IN			
TCD			
CHD			

DIMENSIONS ARE IN mm

MATL SPEC.

SPEC. REF. No.

GAUGE SCHED No.

DRG. LIST No. ARM 053

SCALE:- 1:1

TITLE:-

SEALING LID ASSEMBLY

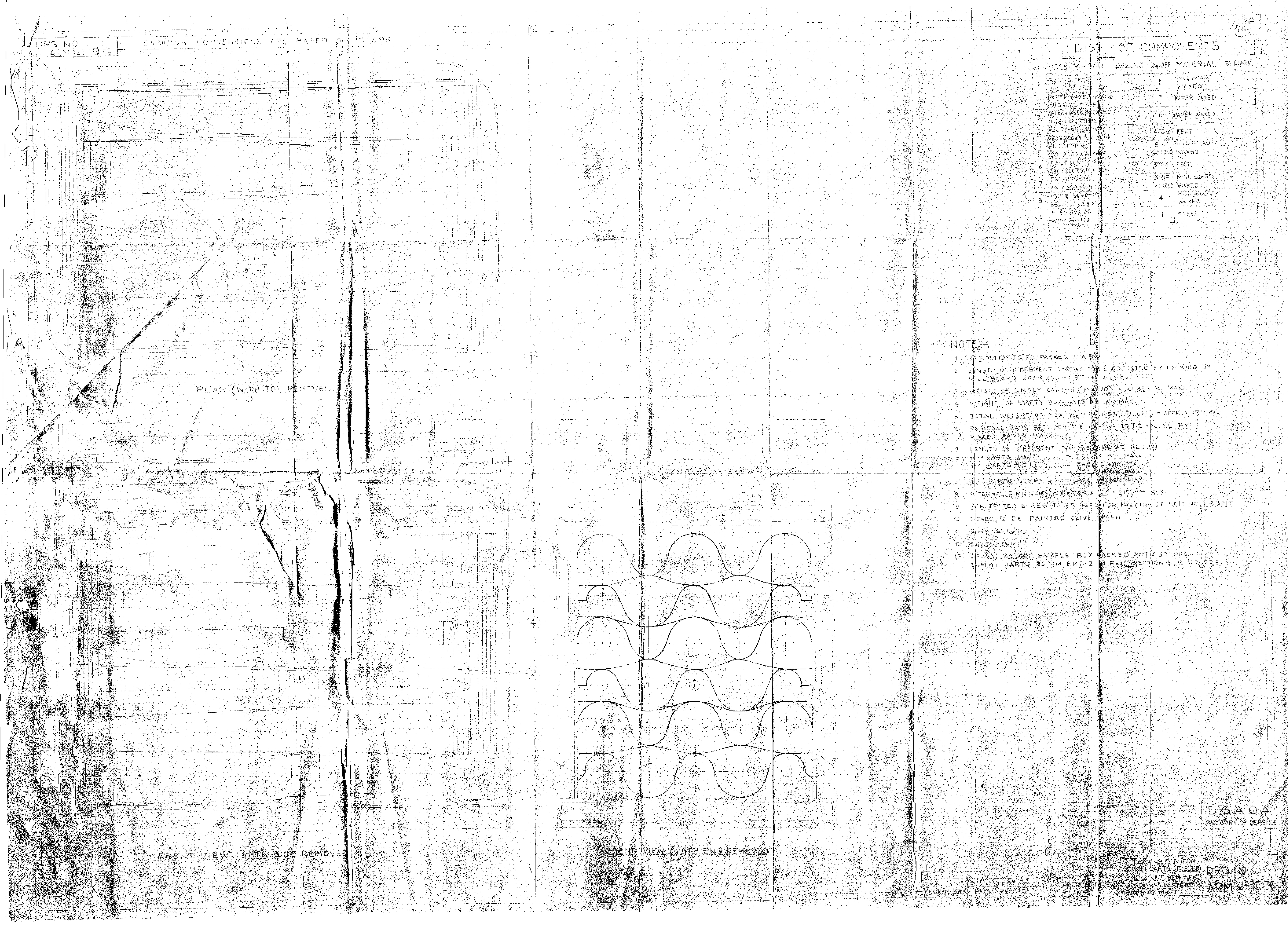
DTD & P (AIR)

MINISTRY OF DEFENCE

APPROVED

DRG. No. ARM 1253 C2

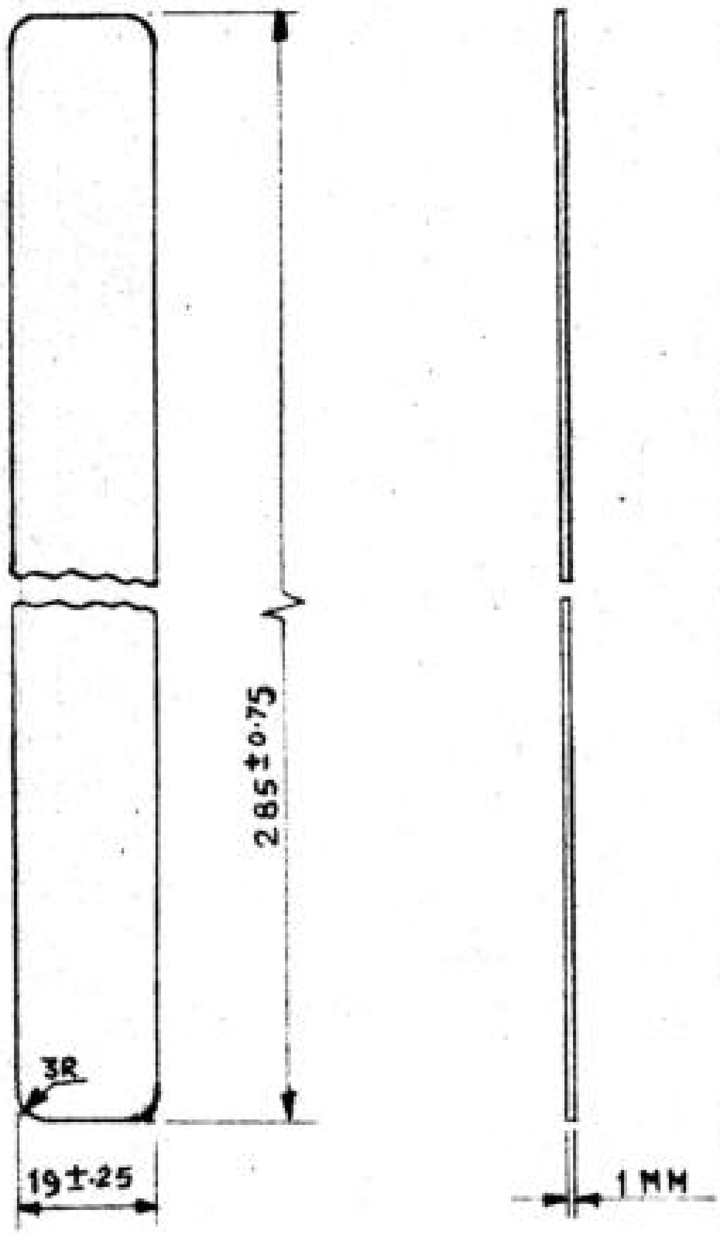
4		-	DRG. ALTERED WITHOUT CHANGE		
3		-	DRG. RETRACED WITHOUT CHANGE		
2		-	REVISED WDE A.L. No 171		
1		-	ORIGINAL		
No.	DATE	SIGN	BRIEF RECORD	WRITTEN	



DRAWING CONVENTIONS ARE BASED ON IS 696
LIST OF COMPONENTS
PLAN (WITH TOP REMOVED)
FRONT VIEW (WITH SIDE REMOVED)
END VIEW (WITH END REMOVED)
NOTE:-
BOXES TO BE PAINTED OLIVE GREEN
DGAQA
DRG. NO

DRG. No.
ARM 1253 A 29

DRG. CONVENTIONS ARE BASED ON IS: 696 (33)



PROTECTIVE FINISH :-

PHOSPHATING TO IS: 3618 CLASS 'C' OILED & STOVED

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4	1/96	-	DRG. RETRACED WITHOUT CHANGE	
3	26 2/79	-	DRG. RETRACED WITHOUT CHANGE	Sd/-
2	5/72	-	REVISED VIDE A.L. No - 171	Sd/-
1	20/65	-	PROV SEALED	

	DATE	INITIAL
DGN		
DRN		
CHD	26 7/96	
TCD	28-7-96	
COMP		

DIMENSIONS ARE IN MM.

MATL. SPEC.
STEEL TO IS: 513

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

D.T.D & P. (A...

MINISTRY OF DEFENCE

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2107 (MED)

TITLE ---
HINGE PLATE

APPROVED

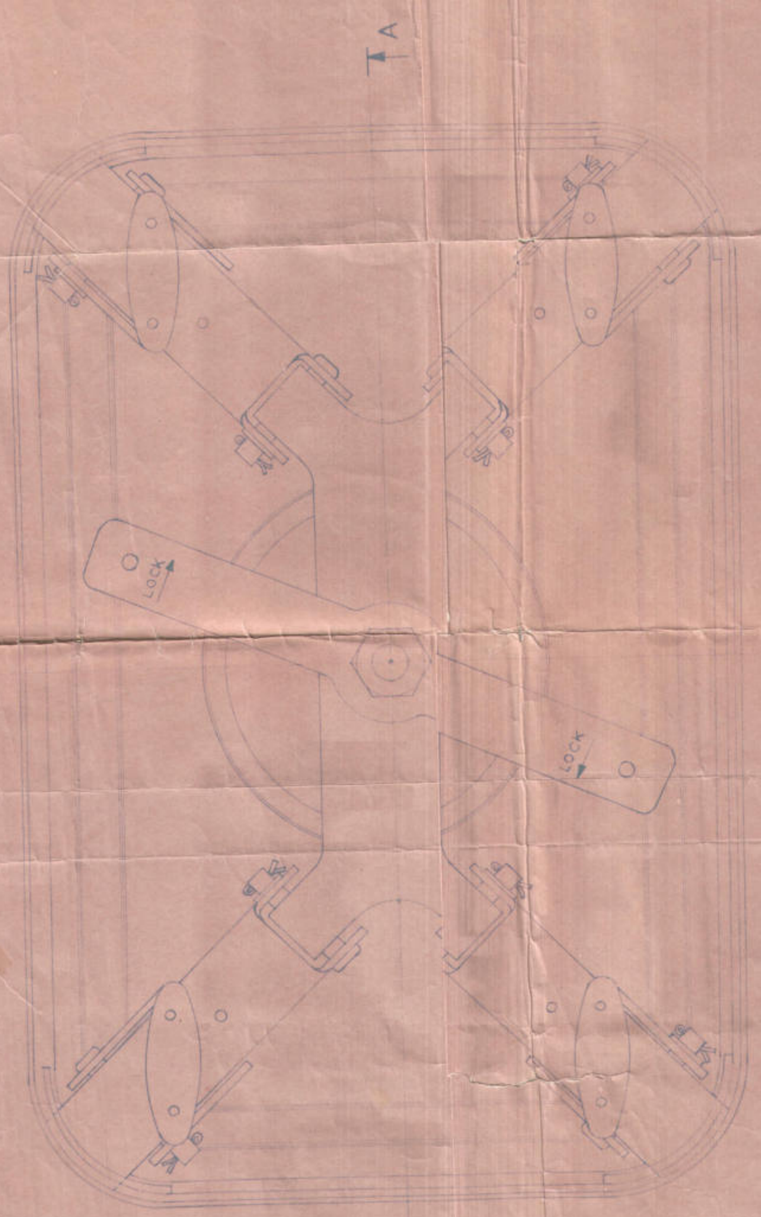
DRG. NO.
ARM 1253 A 29

DRG NO:-
ARM 1253 D1

DRAWING CONVENTIONS ARE BASED ON IS: 696.

SCHEDULE OF COMPONENTS (5)

ITEM NO	DESCRIPTION	NO OFF	DRAWING NO
1	SEALING LID ASSEMBLY	1	ARM 1253 C2
2	BODY ASSEMBLY	1	ARM 1253 D18
3	INNER LID ASSEMBLY	1	ARM 1253 C26



SECTION 'AA'

PROTECTIVE TREATMENT

ALL COMPONENTS EXCEPT INNER LID & PLATED COMPONENTS SHALL BE GIVEN THE FOLLOWING PROTECTIVE TREATMENT

(a) PHOSPHATING TO IS: 3618 CLASS 'C' OR ONE COAT OF READY MIXED PAINT DIPPING RED OXIDE ZINC CHROME PRIMING TO SPECN IS: 2074.

(b) ONE COAT OF PAINT READY MIXED SPRAY RED OXIDE ZINC CHROME PRIMING TO SPEC. IS: 2074

(C) SINGLE COAT OF PAINT READY MIXED AIR DRYING, SEMI-GLOSSY/MATT FINISH SPRAY TO SPEC IS: 168 WITH ISC SHADE 220 (OLIVE GREEN) TO SPEC IS: 5.

ESTD. WEIGHT - 10·43 KG.
STOWAGE DIMENSIONS L. W. D.
(NOT MANUFACTURING) 355 x 241 x 315.

R.NO	DATE	SIGNATURE	BRIEF RECORD	INIT.
6	27-6-96		RETRACED	
5	12-11-91		AMMENDED VIDE A.L.NO. 721	Sd.
4	6-11-87		AMMENDED VIDE A.L. NO. 584	Sd.
3	3-6-75		RETRACED WITHOUT CHANGE	Sd.
2	5-7-73		REVISED VIDE A.L.NO. 171	Sd/-
1	20-3-69		ORIGINAL	Sd/-

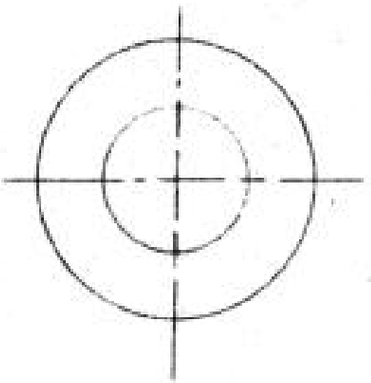
	DATE	INITIAL
DESIGN		
DRN.		
CHD.	27-6-96	
TCD.	27-6-96	
COMP.		

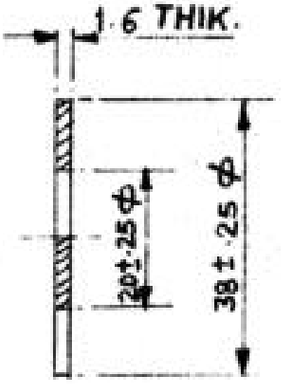
DIMENSIONS ARE IN MM
MATL. SPEC :-
—
SEC. REF. NO. :-
GAUGE SCHD. NO. :-
DRG. LIST NO. :- ARM 1253
SCALE :- 1 : 1
TOL. :- EXCEPT WHERE OTHERWISE STATED TO I.S. 2102 (MED).
TITLE :-
BOX, H 60, MK. 1 (INDIA) GENERAL ARRANGEMENT.

D. T. D. & P. (AIR)
MINISTRY OF DEFENCE

APPROVED :-
DRG NO.
ARM 1253 D1

4	3	2	1
DRG.No. ARM 1253 A13	DRG. CONVENTIONS ARE BASED ON IS: 696.		





R.NO	DATE	ZONE	BRIEF RECORD
4	1 8/76		DRG. RETRACED WITHOUT CHANGE
3	3 6/75		DRG. RETRACED WITHOUT CHANGE
2	5 7/72		REVISED VIDE A.L.No. 171
1	20 9/65	-	PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	27 7/72	
TCD	27-7-16	
COMP.		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

DIMENSIONS ARE IN MM.

MATL. SPEC. BRASS CuZn 37½ H IS:410

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE:—

WASHER

R.NO	DATE	ZONE	BRIEF RECORD

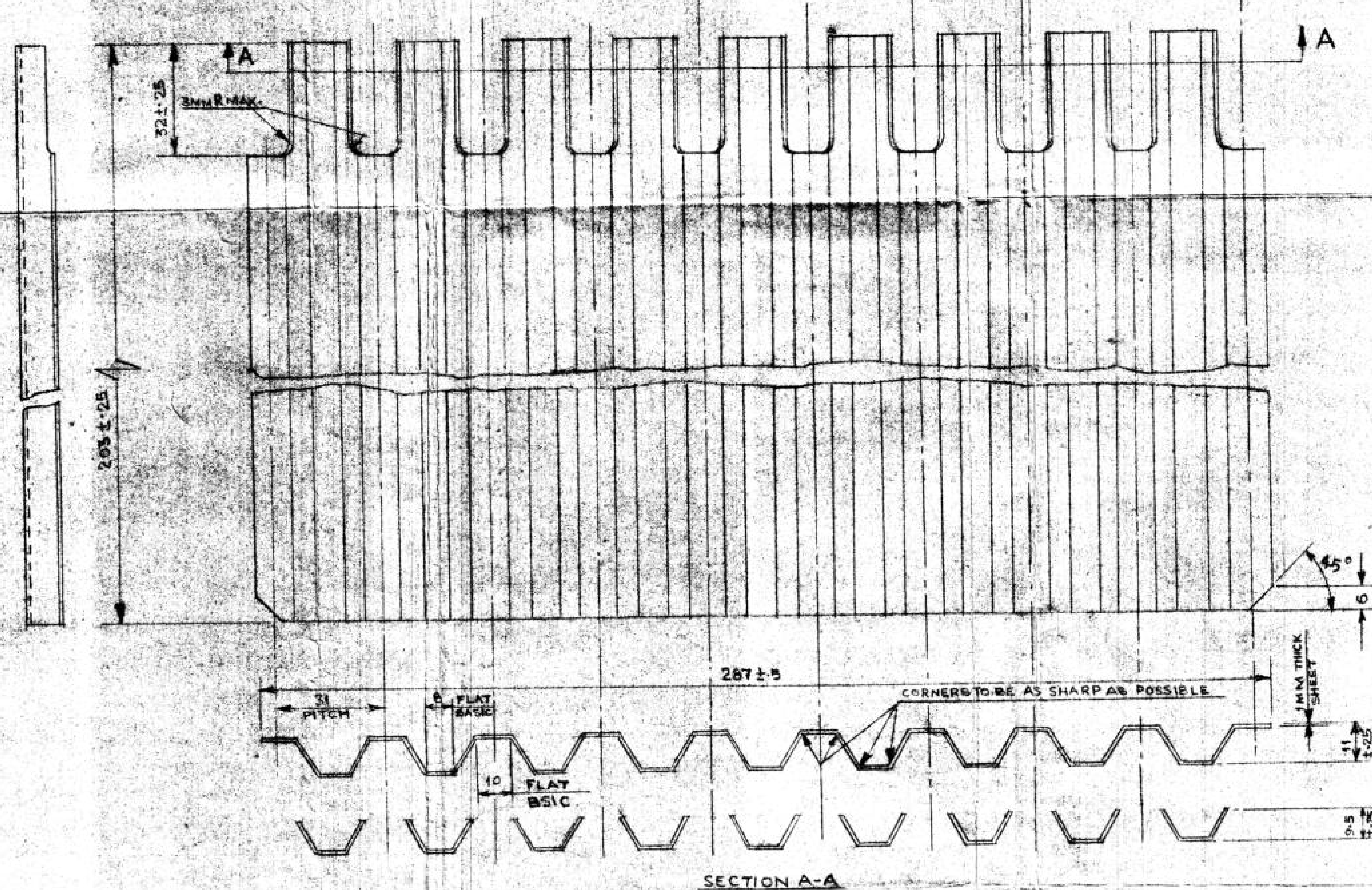
D.T.D & P. (Army)
MINISTRY OF DEFENCE

APPROVED

DRG.NO.
ARM 1253 A13

DRG No. ARM. 1253 C34

DRG. CONVENTIONS ARE BASED ON IS: 696.



PROTECTIVE FINISH:-
PHOSPHATING TO IS:3618 CLASS 'C'
OILED & STOVED
CORRUGATIONS MUST BE WITHIN ±.25 OF THEIR CORRECT LONGITUDINAL POSITION.

R. No	DATE	ZONE	BRIEF RECORD	INITIAL
5			RETRACED	[illegible]
4	24 [illegible]		RETRACED	Sd/-
3	[illegible]		RETRACED VIDE AL No 182	Sd/-
2	5 [illegible]		RETRACED VIDE AL No 171	Sd/-
1	20 [illegible]		ORIGINAL	Sd/-

	DATE	INITIAL	
DSN			
DRN			
CHD	23 [illegible]	[illegible]	
TCD	23 [illegible]	[illegible]	
COMP			

DIMENSIONS IN mm.
MATL:- STEEL IS:513
SEC REF NO
GAUGE SCHD. No ARM 1253
DRG LIST NO. ARM 1253
SCALE:- 1:1
TOL:- TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED)

TITLE
TOP PLATE

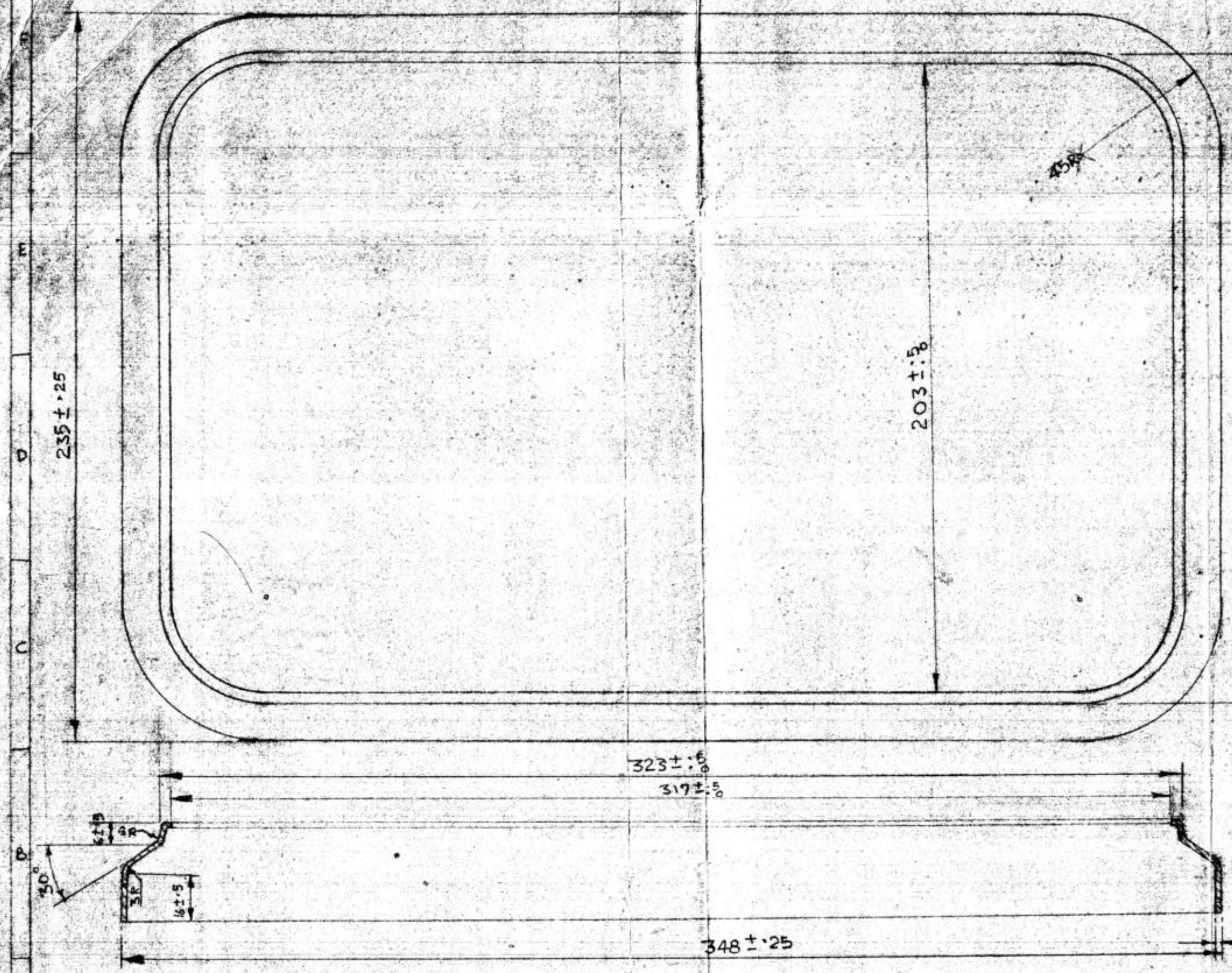
D.T.D & P. (AIR)
MINISTRY OF DEFE

APPROVED

DRG. No
ARM. 1253 C34

DRG. Nº. ARM.1253 C 21

DRAWING CONVENTIONS ARE BASED ON IS: 696



PROTECTIVE TREATMENT:-
FOR PROTECTIVE TREATMENT SEE DRG NO. ARM 1253 D18.

4	7/16		DRG. RETRACED.	
3	6 1/75		DRG. RETRACED WITHOUT CHANGE.	Sd/-
2	5 7/72		REVISED VIDE AL NO. 171	Sd/-
1	2 3/45		ORIGINAL	Sd/-
R.N.	DATE	ZONE	BRIEF RECORD	INITIAL

	DATE	INITIAL
DGN.		
DRN.		
TCG.	29 3/46	
CHD.	24 8/46	
COMP.		

DIMNS ARE IN mm.
MATL. SPECN. STEEL, IS: 513.
SEC REF. NO.
GAUGE SCHD. NO.
DRG. LIST NO. ARM. 1253
SCALE: 1:1
TOL: EXCEPT WHERE OTHERWISE STATED IS 15: 2102 (MED.)

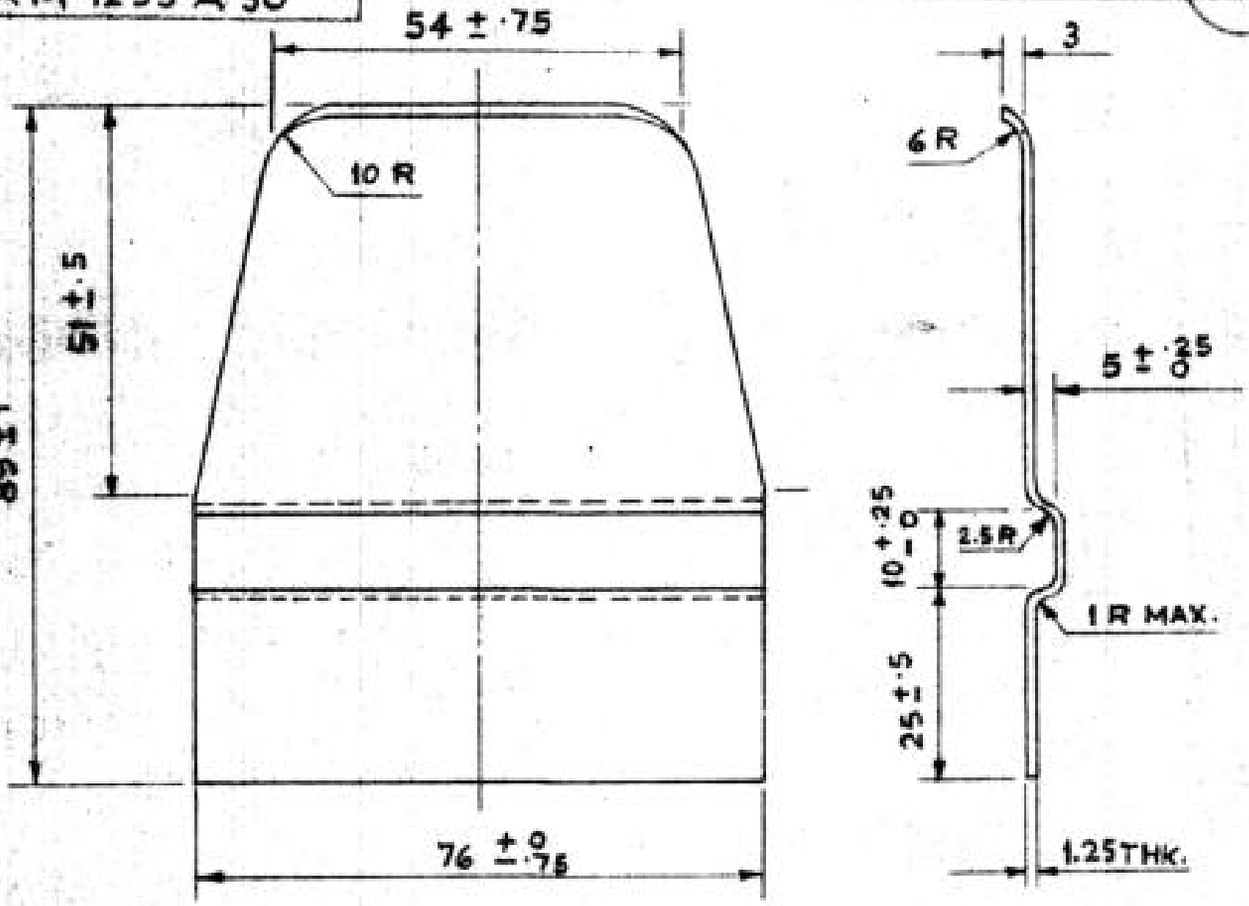
TITLE:-
LID SEATING.

D. T. D. & P(AIR)
MINISTRY OF DEFENCE

APPROVED.

DRG. NO
ARM. 1253 C 21

DRG. No.	DRG. CONVENTIONS ARE BASED ON IS: 696
ARM 1253 A 30	



PROTECTIVE FINISH

PHOSPHATING TO IS: 3618 CLASS 'C'
OILED & STOVED

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4	17 7/94		RETRACE	
3*	24 2/95		DRG RETRACED WITHOUT CHANGE	
2	5 7/72		REVISED VIDE A.L. NO. 171	
1	20 9/65		ORIGINAL	

PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	17 7/96	
TCD	17/7/96	
COMP.		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

DIMENSIONS ARE IN MM.

MATL. SPEC.
STEEL. IS:513

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

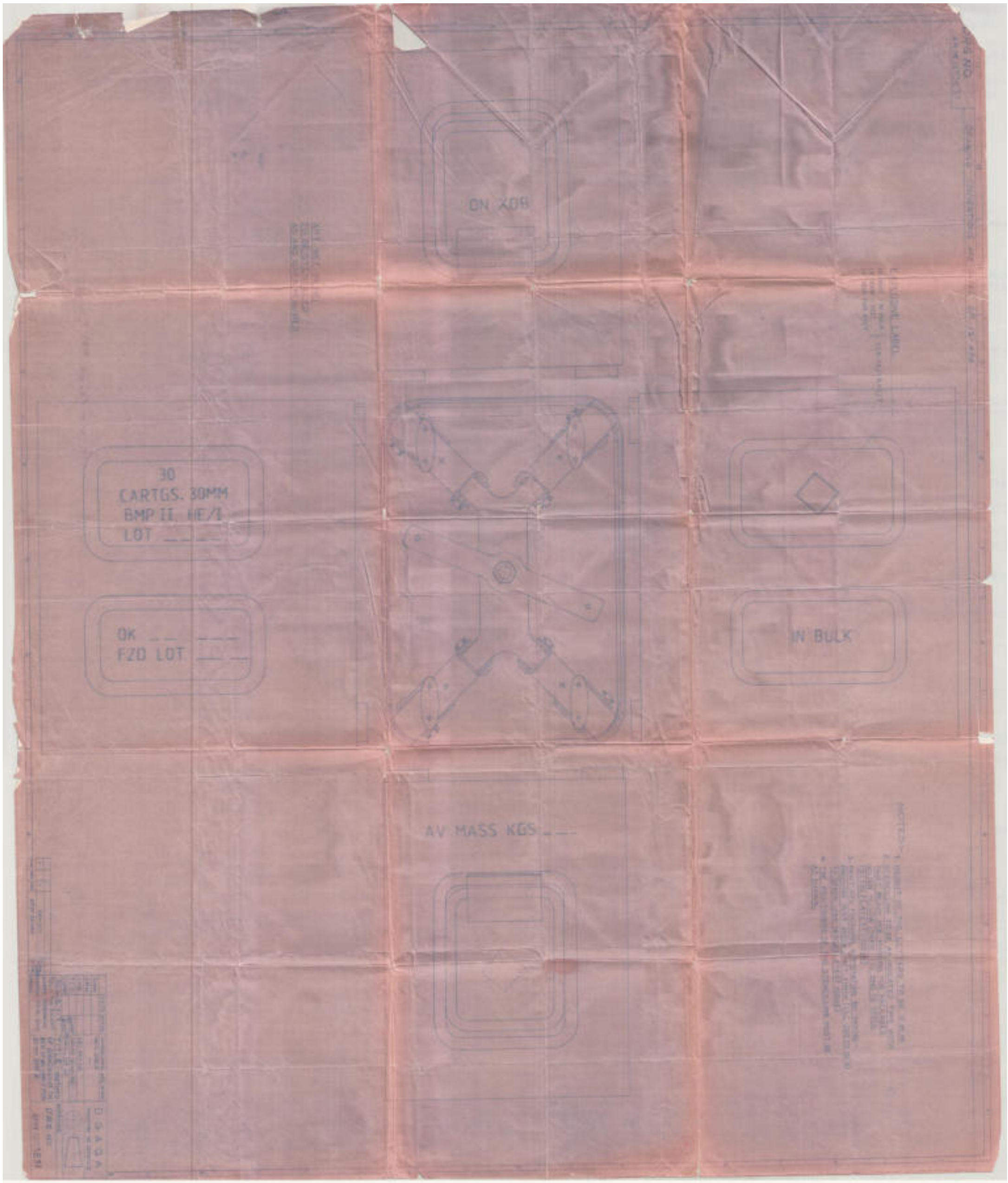
TITLE :-

HANDLE

D.T.D & P (AIR)
MINISTRY OF DEF

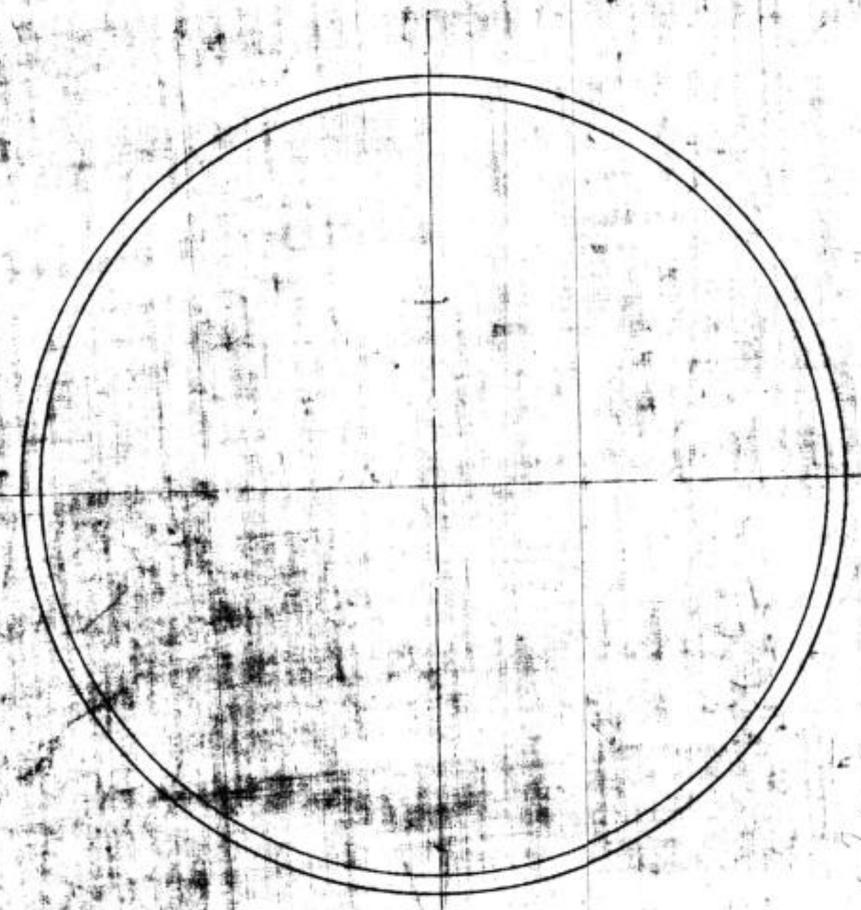
APPROVED

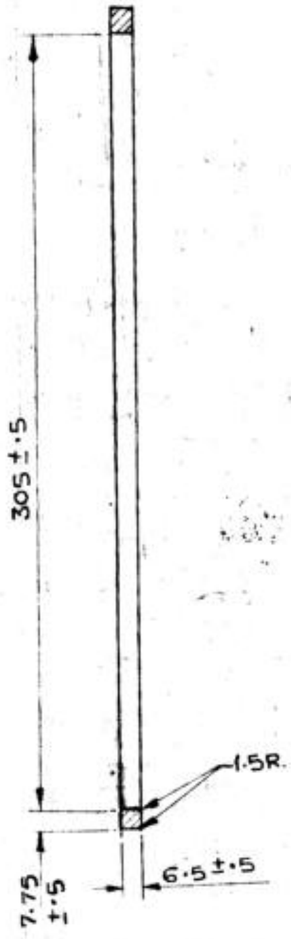
DRG. NO.
ARM 1253 A


30
CARTGS. 30MM
BMP II. HE/I
LOT
OK
FZD LOT
IN BULK
AV MASS KGS

FOR EXPLANATION OF DIMENSIONING ETC., SEE No. G 96

THIRD ANGLE PROJECTION





MATL:-

VULCANIZED RUBBER COMPOUND TO
SPEC. B.S. 1154 COMPOUND Z 13 (52°-60°) Z 60 (56°-65°)

DIMNS. ARE IN mm

						6 5/08	3	DRG. AMENDED VIDE AL No. 11/2208	
						24 2/76	2	DRG. RETRACED WITHOUT CHANGE	
AS STATED	–	ARM 1252 C2	1:2	–		20 9/64	1	ORIGINAL ISSUE	
MATL. SPECN.	FINISH	ASSY. DRG. No.	SCALE	D.C. REF.		DATE	ISSUE	ALTERATION	

DRAWN BY D&PDRG. OFFICE & ISSUED BY D.I.D.&P.(AIR), MIN. OF DEF.	DRN.	N.N. GROVER	TITLE
	CHD	S.K. GULATI	
	TCD		
	CHD		
	PASSED		
	APPD.		

RING, RUBBER

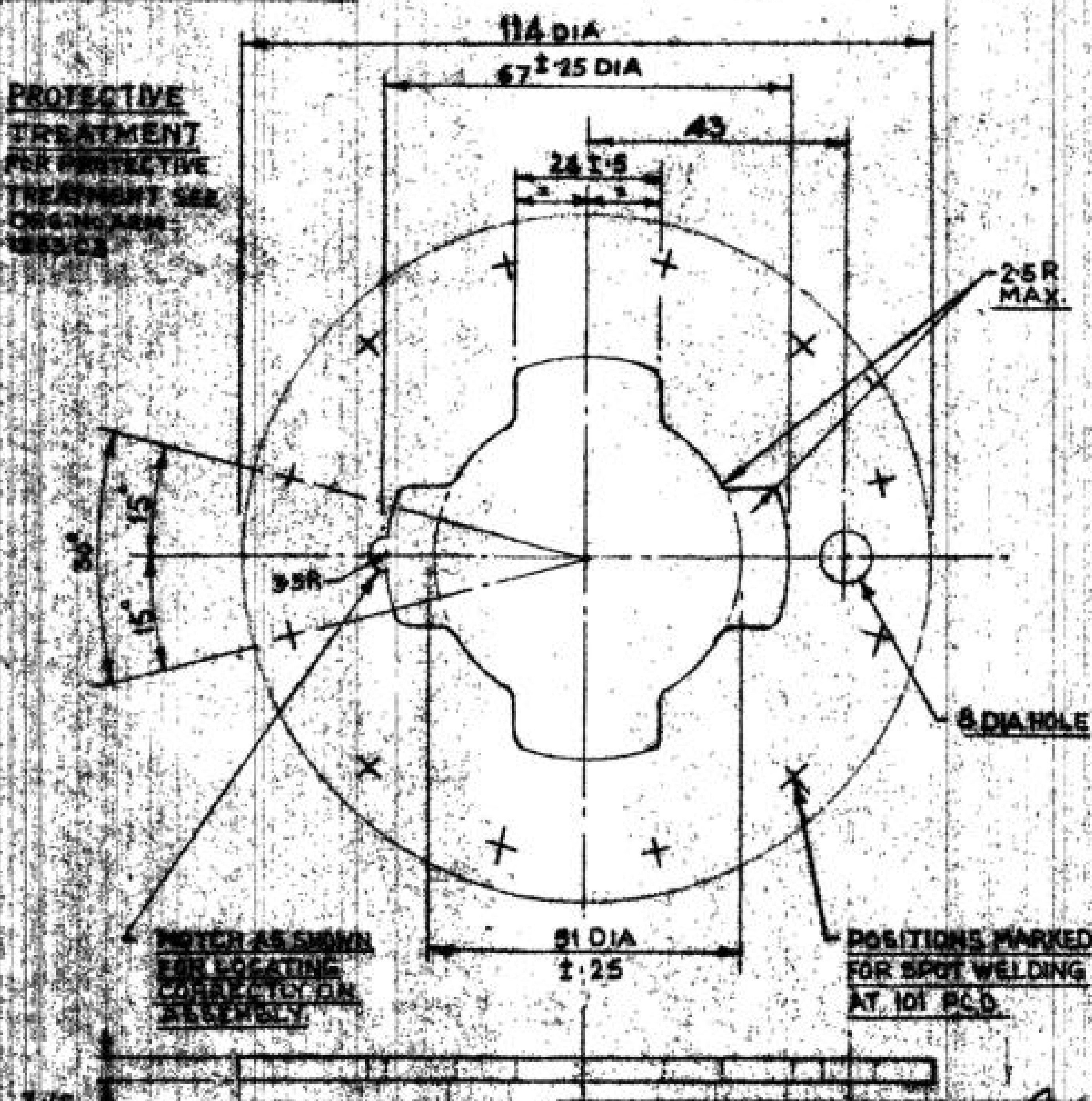
T.A.F. SEC REF. No.	
PART No.	
SCHD.	ARM. 1253 SCHD.
FILE No.	D.I.D.&P.(AIR)/525/20/ARM

DRG. No.
ARM. 1253 B17

SHEET No. | No. OF SHEETS

DRG. No. ARM1253A6

DRG. CONVENTIONS ARE BASED ON IS: 696. (10)



R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4	14/7/[illegible]		DRG. RETRACED [illegible]	

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
3	22/[illegible]	—	DRG. RETRACED.	[illegible]
2	5/7/[illegible]	—	[illegible]	[illegible]
1	20/[illegible]	—	ORIGINAL	[illegible]

	DATE	INITIAL
DGN		
DRN		[illegible]
CHD	16/[illegible]	[illegible]
TCD	[illegible]	[illegible]
COMP		

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL, IS: 1079

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM1253.

D.T.D & P. (AIR)
MINISTRY OF DEFENCE

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED)

TITLE —
LOCKING PLATE

APPROVED

DRG. NO. ARM 1253A6

Special Instruction for Test for Box H-60

Item Code: 6570010000

As per section Six of the specn. No. IA 1169 (n) DC 35576-A Aide Memoire –P/I I , the following test will be carried out in Ordnance Factory Khamaria.

Name of the Test : As per Specification No. IA 1169 (n) DC 35576-A
Sample for -02 Nos Box For Drop Test , Jolt test and Handle test as under :-

(1)**Drop Test** : Page -10

Box will be subjected to drop test from a height of 140 cms on to a concrete floor successively on its base , top ,side and any on corner/ or any other position at the discretion of the Quality Assurance Officer with contents packed inside as per service condition.

After drop test the box will be examined for the following:-

(a) Catches , handles hinges are not damaged to such an extent that they are beyond minor repairs by slight taping with mallet.
(b) Welding should be intact.
(c) Boxes should be easy to open and closed.
(d) Boxes and rounds packed there in should be easily removable.

(2)Jolt Test : Page -10

Boxes will be subjected to Jolt test in a machine having a lift of 50mm and frequency of 60 jolts per minute for 8 hours.

(3)Handle test: Para (i) of Section six Page -4

The box will be tested by the application of a load equal to four times the mass of the filled boxes, on each handle and must be capable of withstanding this test with out showing any signs of defect eight in the box or in the handles. The test mass shall be 180 kg .

(4) Critical examination : -

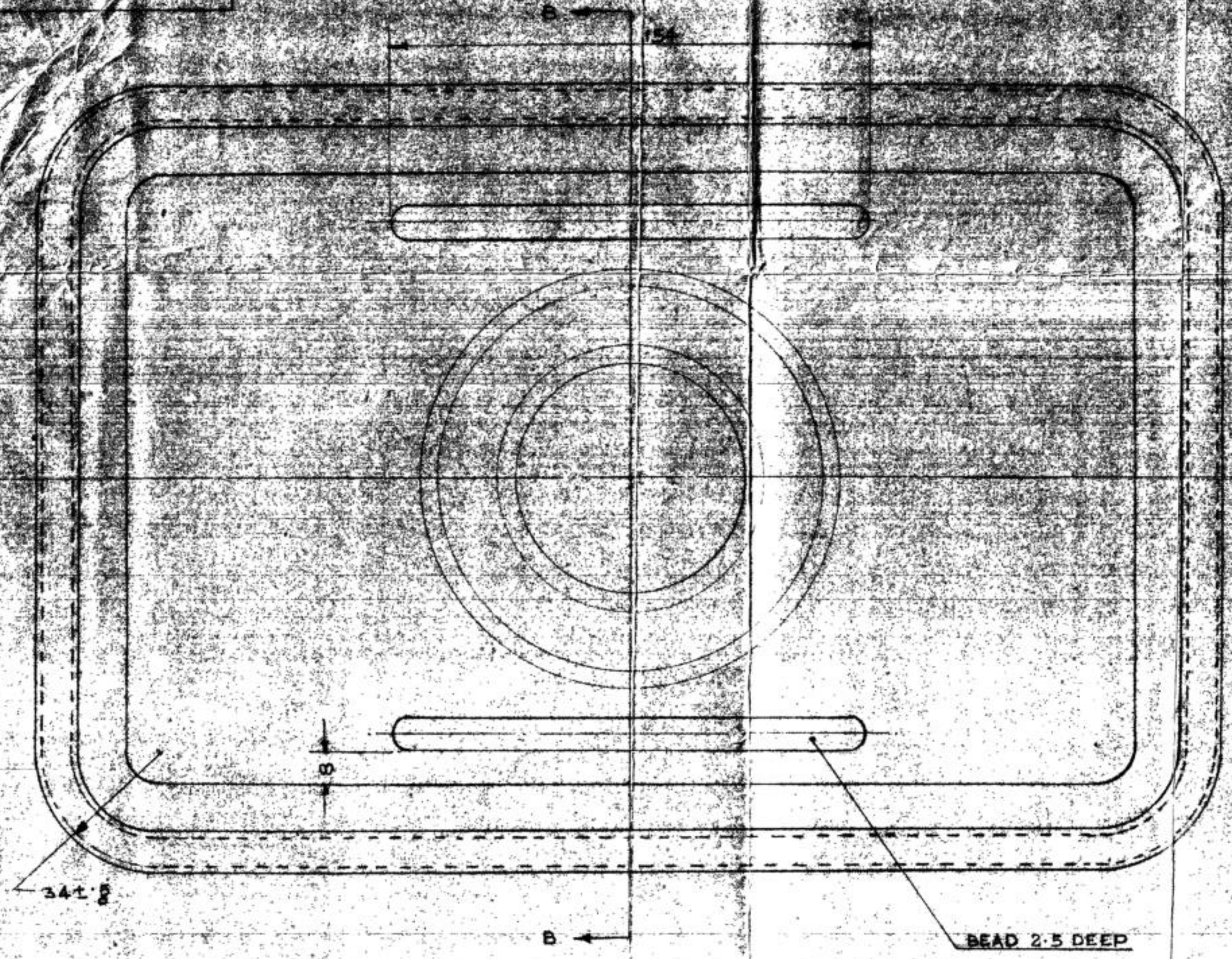
Sample – 02 nos of Box.
As per relevant gauge drawing Dimension of the box will be checked up to satisfactory level.

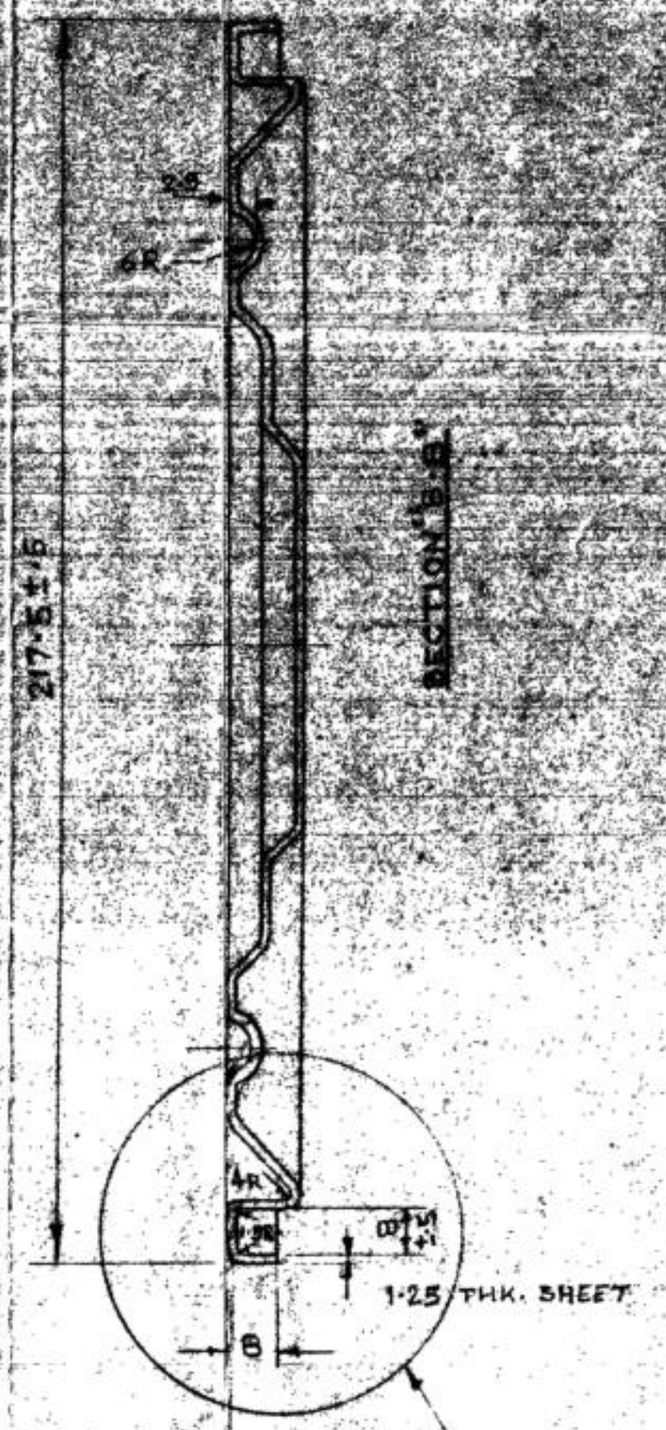
(5)Fitment Trial of Box : Specification No. IA 1169 (n) DC 35576-A

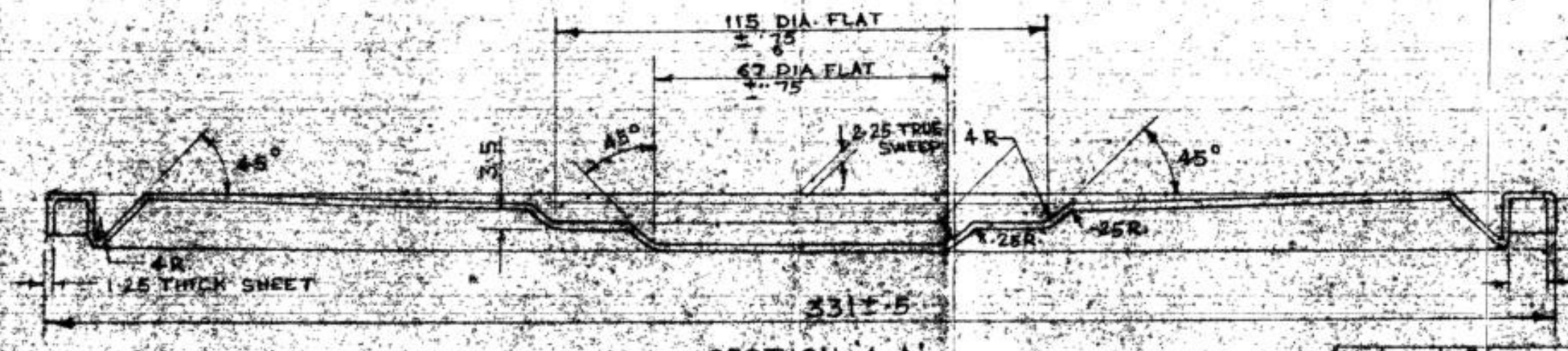
Sample – 02 Nos Box
The following details are to be confirmed in the consignment of Box H- 60 .

(i) **Leak / Vacuum Test:** Para (10) of Section six Page 5
Under any one of these test neither the boy nor the lid shall shown any sign of leakage at any joint and where lid and body are tested together a perfect seal shall be made on the sealing device. The box should be passed in leak/vacuum test.
(ii) The outer surface of box should be smooth & finished.
(iii) Proper visibility of the marking / stenciling to be maintained.
(iv) Inner fitment are properly assembled.
(v) Locking system should be worked easily while the open the box.

ORG NO ARM/1253C4 DRAWING CONVENTIONS ARE BASED ON IS: 696







SECTION A-A'

SWEEP APPLIES ON ALL LONGITUDINAL SECTIONS

PROTECTIVE TREATMENT:-
FOR PROTECTIVE TREATMENT
SEE DRG NO. ARM·1253 C3

RN	ZONE	DATE	BRIEF RECORD	INITIAL
3		26/2/76	DRG RETRACED	
4		24/2/75	RETRACED WITHOUT CHANGE	S.H-
3		5/7/72	REVISED VIDE AL NO. 171	S.H-
2		3/11/67	1·25 THK SHT OF LID WAS 1·5 THK SHT.	S.H-
1		20/9/64	ORIGINAL	S.H-

	DATE	INITIAL
DSN		
DRN		
CHD		
TCD		
COMP		

DIMN. IN m.m.
MATL. SPECN.
STEEL TO IS: [redacted]
SEC. REF NO. 1 A
GAUGE SCHD. NO.
DRG. LIST NO. ARM·1253C3
SCALE:- 1:1
TOL. EXCEPT WHERE OTHERWISE STATED ±.25
TITLE:- LID

DTD&P(A)
MIN. OF DEFEN
APPROVED
DRG. NO.
ARM-1253

DRG. No. ARM 1253 D18 — DRG. CONVENTIONS ARE BASED ON IS: 696

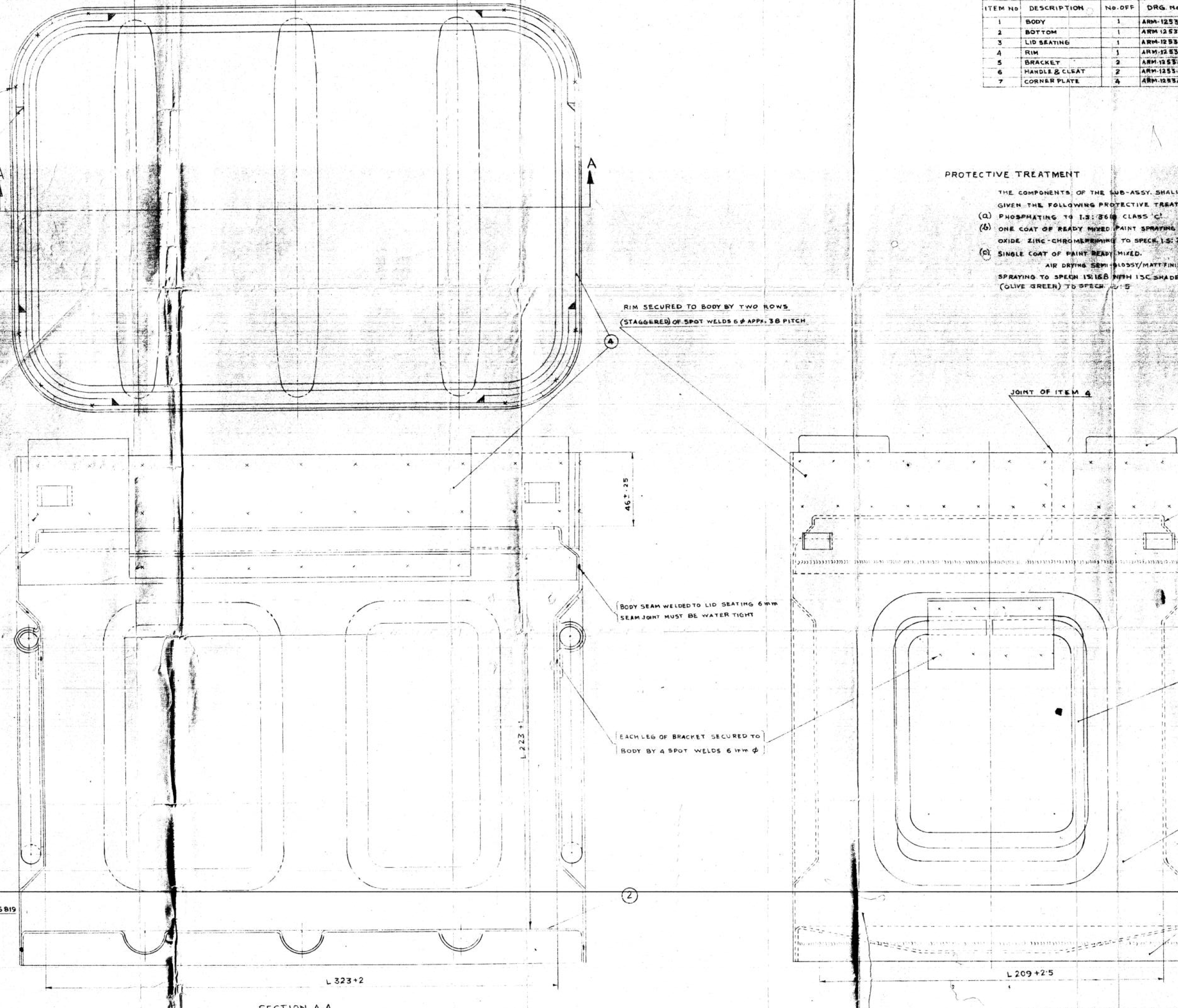
(22)

LIST OF COMPONENTS

ITEM No	DESCRIPTION	No. OFF	DRG. No.	REMARKS
1	BODY	1	ARM-1253 D19	
2	BOTTOM	1	ARM 1253 C20	
3	LID SEATING	1	ARM-1253 C21	
4	RIM	1	ARM-1253 C22	
5	BRACKET	2	ARM-1253 A23	
6	HANDLE & CLEAT	2	ARM-1253 B24	
7	CORNER PLATE	4	ARM-1253 A25	

EACH CORNER PLATE SECURED TO RIM BY 6-6ϕ SPOT WELDS.

ALTERNATIVELY MAY BE FILLET WELDED.



SECTION A-A

EACH LONG BRACKET SECURED BY 6 6ϕ SPOT WELDS

PROTECTIVE TREATMENT

THE COMPONENTS OF THE SUB-ASSY. SHALL BE GIVEN THE FOLLOWING PROTECTIVE TREATMENT:-

(a) PHOSPHATING TO I.S: 3618 CLASS 'C'.
(b) ONE COAT OF READY MIXED PAINT SPRAYING RED OXIDE ZINC-CHROME PRIMING TO SPECN. I.S: 2074
(c) SINGLE COAT OF PAINT READY MIXED. AIR DRYING SEMI-GLOSSY/MATT FINISH SPRAYING TO SPECN IS:168 WITH ISC SHADE 220 (OLIVE GREEN) TO SPECN IS: 5

NOTES:-

SPOT WELDING TO CONFORM TO IS 819

DIMNS. ARE IN mm.

R.No	DATE	ZONE		
5	24-5-96	-	RETRACED WITHOUT CHANGE	Sd/-
4	6-11-87	-	ADDED VIDE AL No. 584	Sd/-
3	24-2-75	-	TRACED WITHOUT CHANGE	Sd/-
2	5-7-72	-	D VIDE AL. No 171	Sd/-
1	20-9-65	-	ISSUE	Sd/-
-	-	-	SEALED	Sd/-
			RECORD	INITIAL

	DATE	INITIAL	
DGN			DIMENSIONS ARE IN mm
DRN			MATL. SPECN.
CHD	24-5-96		SEC. REF. No.
TCD	24-5-96		GAUGE SCHD. No.
COMP			DRG. LIST No ARM 1253
SCALE:- 1:1			TITLE:- BODY (SUB ASSEMBLY)
TOL:- TOL. EXCEPT OTHERWISE STATED TO IS: 2102 (MED.)			

DTD & P (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG. No
ARM 1253 D18

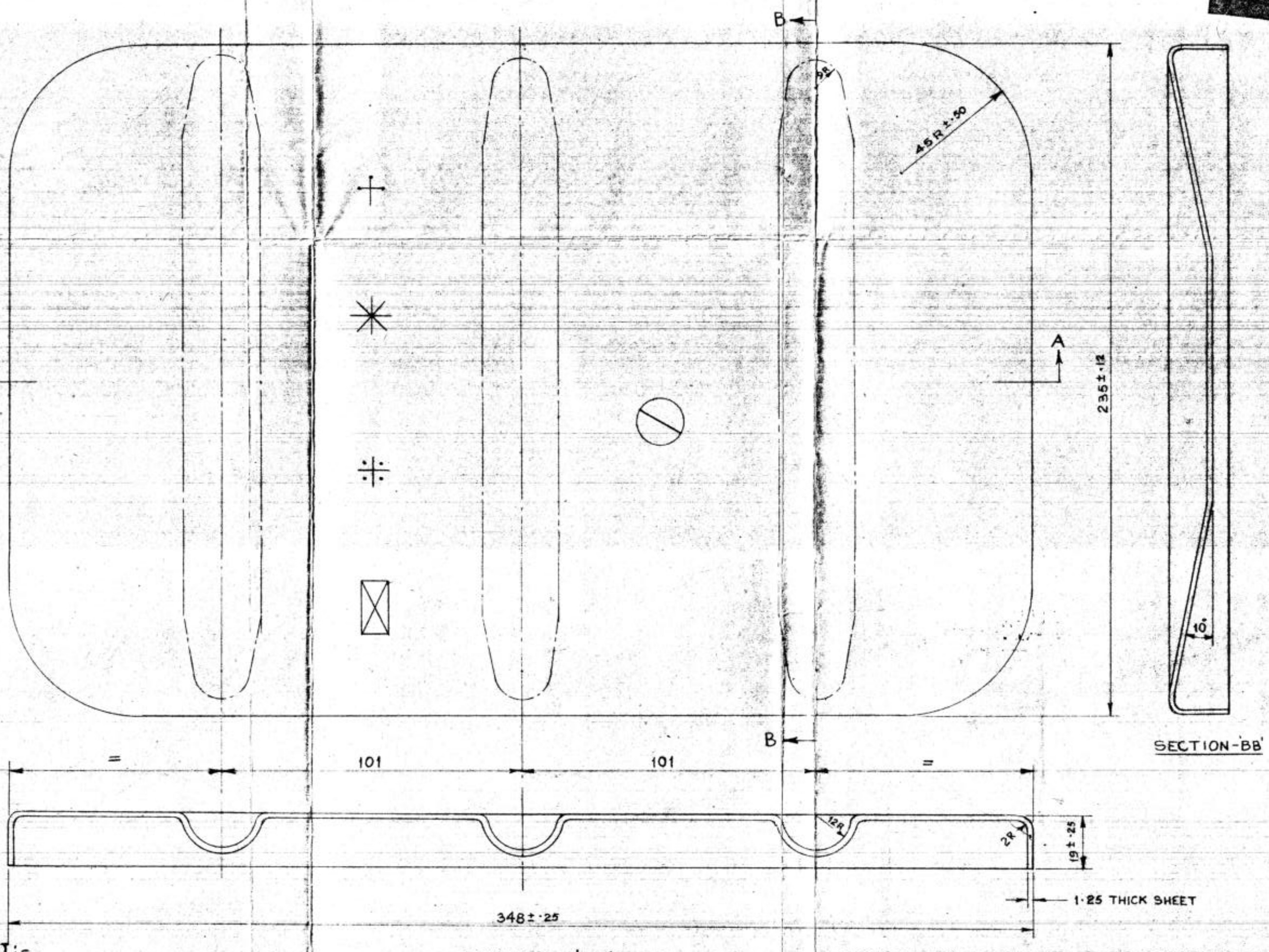
DRG. No. ARM 1253 C 20

DRAWING CONVENTIONS ARE BASED ON IS: 696

MARKING TO BE EMBOSSED IN RECESS IN 12 mm LETTERING.

- SERIAL No. OF BOX AS APPLICABLE
- MARK OF BOX AS APPLICABLE
- CONTRACTORS INITIALS, RECOGNISED TRADE MARK OR APPROVED INSPECTION STAMP
- YEAR OF MANUFACTURE
- STORE REFERANCE No. AS APPLICABLE : 312 S/1045

NOTE:-
DELETE THE EXISTING SEC. REF. No. 312 S/1045 AND ADD SEC. REF. No. 412 S/4 APPLICABLE ONLY WHEN THE DRAWING IS MEANT FOR MAKING BOX STEEL FOR ROCKET A/C 68 mm TYPE 'A'



SECTION - BB'

SECTION - 'A A'

PROTECTIVE TREATMENT:-
FOR PROTECTIVE TREATMENT SEE DRG. No. ARM 1253 D18.

R.No.	ZONE	DATE	BRIEF RECORD	INITIAL
5		23-7-76	RETRACED WITHOUT CHANGE	
4		2-76	AMENDED VIDE AL. No. 319	S.d/-
3		25-2-75	DRG. RETRACED WITHOUT CHANGE	S.d/-
2		5-7-72	REWISED VIDE AL. No 171	S.d/-
1		20-8-69	ORIGINAL	S.d/-

	DATE	INITIAL	DIMENSIONS ARE IN mm
DGN			MATL. SPECN:- STEEL TO IS: 513
DRN			
CHD	23-7-76		SEC. REF. No.
TCD	23-7-76	Laxman	GAUGE SCHD. No.
COMP			DRG. LIST No. ARM 1253

SCALE:- 1:1
TOL:- EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED)

TITLE:-
BOTTOM

D.T.D & P (AIR)
MINISTRY OF DEFENCE

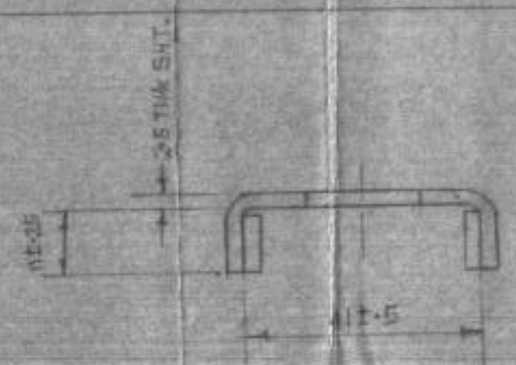
APPROVED:-

DRG. No.
ARM 1253 C 20

DRG. NO. ARM-1253 C9

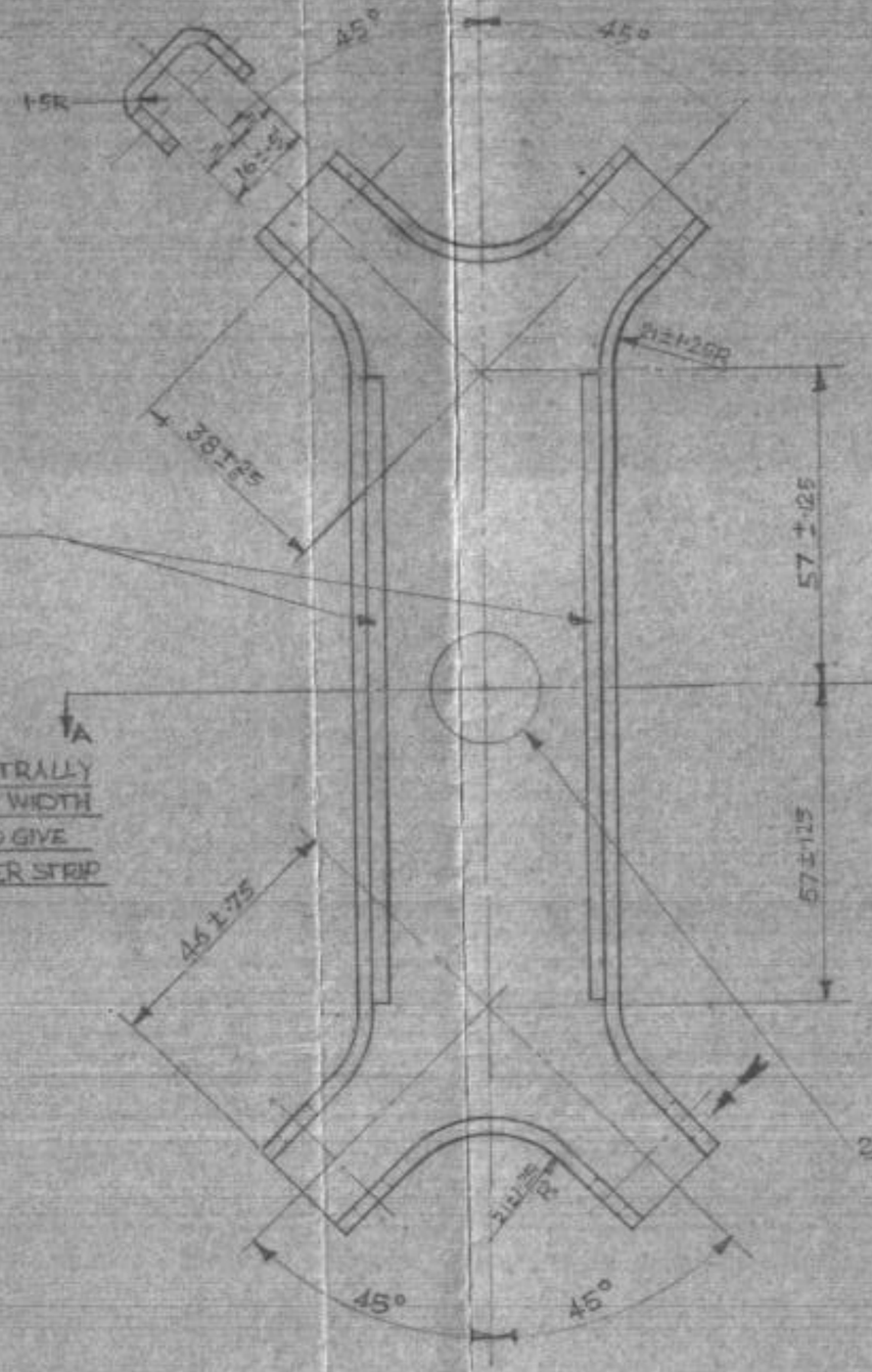
DRAWING CONVENTIONS ARE BASED ON IS: 696

FOR PROTECTIVE TREATMENT
SEE DRG. NO. ARM-1253 C7



SECTION AA

SCRAP VIEW IN
DIRECTION OF ARROW



NOTCH TO SUIT DIE CONDITION
IF REQUIRED. FULL DEPTH TO BE
MAINTAINED NEAR HOLES

5		7/8/71	DRG. RETRACED	S.d/-
4		24/5/71	RETRACED WITHOUT CHANGE	S.d/-
3		11/9/72	RETRACED VIDE AL No 182	S.d/-
2		5/7/72	REVISED VIDE AL No 171	S.d/-
1		20/9/72	PROV SEALED	S.d/-
RN	ZONE	DATE	BRIEF RECORD	INITIAL

		INITIAL
DGN		
DRN		
CHD	23/2/71	
TCD	23/2/71	
CMP		

SCALE - 1:1

TOL. EXCEPT WHERE OTHERWISE STATED

DIMN. IN m.m.

MAT'L. SPEC.
STEEL TO IS: 1079

SEC REF. NO. 1 A F

GAUGE SCHD NO

DRG LIST NO. ARM-1253

TITLE:-
PRESSURE PLATE

DTD & P(AIR)
MIN. OF DEFENCE

APPROVED

DRG. NO.
ARM-1253 C9

FOR EXPLANATION OF DIMENSIONING ETC., SEE IS:696.

THIRD ANGLE PROJECTION.

PROTECTIVE FINISH:—
PHOSPHATING TO IS: 3618 CLASS 'C' OILED & STOVED.

DIMENSIONS IN MM.

A.L. No	DATE	ISSUE	ALTERATION
	5 3/75	3	DRG. RETRACED WITHOUT CHANGE
171	5 7/72	2	REVISED VIDE A.L. No. 171
		1	ORIGINAL

DRAWN	SD/- Sushil Kumar			DTD&P(AIR) 525/20/ARM	ARM 1253C26	
CHECKED	SD/- SH. GULATI	I.A.F. SEC. REF. NO	PART No	FILE No	ASSY. DRG. No	1:1
TRACED	[signature]	MATL. SPEC:		FINISH	SCHD. No	SCALE
CHECKED	[signature]	STEEL TO IS: 513		—	ARM. 1253B0	
PASSED		TITLE:- BOTTOM PLATE TIE PIECE				
APPROVED	[signature]					

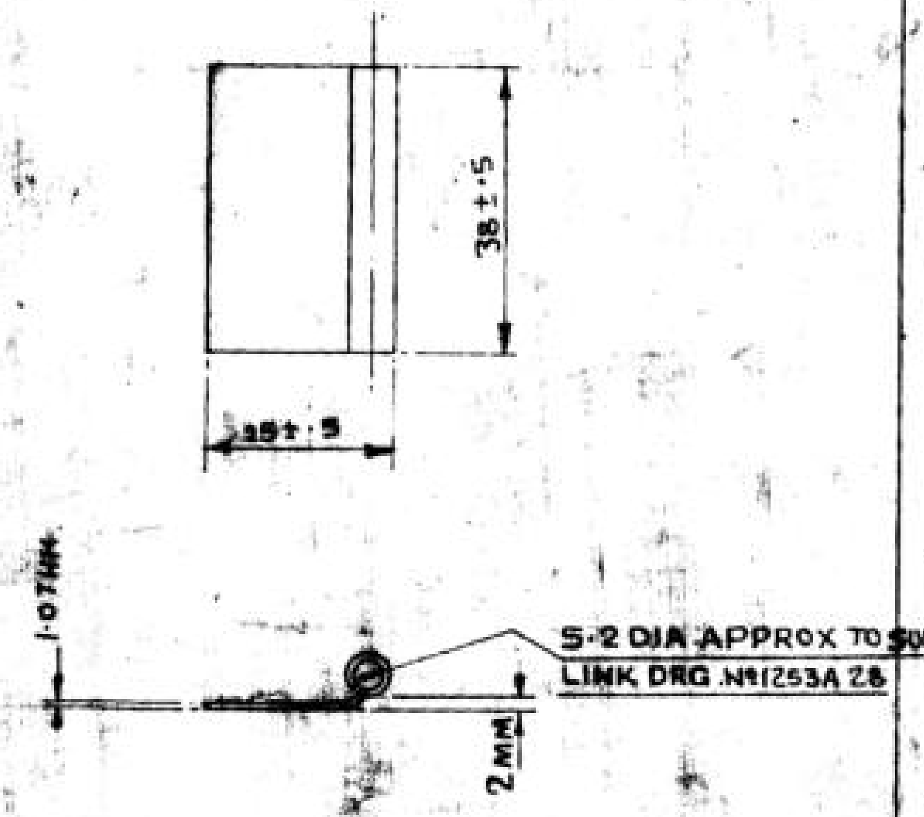
DRG. NO. ARM. 1253 A35

SHT. NO. | NO. OF SHTS.

DRN. BY D&P. DRG. OFFICE & ISSUED BY D.T.D &P. (AIR) MIN. OF DEFENCE.

FOR EXPLANATION OF DIMENSIONING ETC., SEE IS:696. (30)

THIRD ANGLE PROJECTION



PROTECTIVE FINISH:-
PHOSPHATING TO
IS:3618 CLASS 'C'
OILED & STOVED

DIMENSIONS ARE IN MM.

								27 2/75	3	DRG. RETRACED WITHOUT CHANGE
DRAWN	N.C. GUPTA			D.T.D&P(A) 515/20/AFM	ARM 1553 SCH		171	5 2/72	2	REVISED VIDE AL. NO. 171
CHECKED	S.K. GULATI	I.A.F. SEC. REF. NO.		FILE NO	SCH.O.H	1/1		20 8/65	1	ORIGINAL
TRACED	[illegible]	MATL. SPECN.		FINISH	ASSY DRG. NO.	SCALE	AL. NO.	DATE	ISSUE	ALTERATION
CHECKED	[illegible]	STEEL, IS:513		—	ARM 12[illegible]517	DRG. NO.				

S.No	DRAWING NO	DESCRIPTION	PART No	NO OFF	LAR SEC REF NO	MATL. SPECN	FOR No	ISSUE	REMARKS
16	ARM 1253 A16	BOLT		4		STEEL TO IS:1079 & IS:1570 C20	2	1 2	
17	ARM 1253 B17	RING RUBBER		1		RUBBER TO BS.1154	2	1 2	
18	ARM. 1253 D18	BODY SUB-ASSEMBLY		1		—	1	1 2	
19	ARM 1253 B 19	BODY		1		STEEL TO IS: 513	18	1 2	
20	ARM 1253 C20	BOTTOM		1		STEEL TO IS: 513	18	1 2	
21	ARM 1253 C21	LID SEATING		1		STEEL TO IS: 513	18	1 2	
22	ARM 1253 C 22	RIM		1		STEEL TO IS: 1079	18	1 2	
23	ARM 1253 A 23	BRACKET		2		STEEL TO IS: 1079	18	1 2	
24	ARM 1253 B 24	HANDLE AND CLEAT		2 EACH		STEEL TO IS: 513 & IS: 1570 C20	18	1 2	
25	ARM 1253 A 25	CORNER PLATE		4		STEEL TO IS: 1079	18	1 2	
26	ARM 1253 C 26	INNER LID ASSLY		1		—	1	1	
27	ARM 1253 C 27	LINK ASSLY		1		—	26	1	
28	ARM 1253 B 28	LINK		2		STEEL TO IS: 1570 C 20	27	1 2	
29	ARM 1253 A 29	HINGE PLATE		2		STEEL TO IS: 513	27	1 2	
30	ARM 1253 A 30	HANDLE		1		STEEL TO IS: 513	27	1 2	
31	ARM 1253 A 31	HANDLE PLATE		1		STEEL TO IS: 513	27	1 2	
32	ARM 1253 A 32	HINGE		4		STEEL TO IS: 513	27	1 2	
33	ARM 1253 C 33	BOTTOM PLATE		1		STEEL TO IS: 513	26	1 2	
34	ARM 1253 C 34	TOP PLATE		1		STEEL TO IS: 513	26	1 2 3	
35	ARM 1253 A 35	BOTTOM PLATE TIE PIECE		1		STEEL TO IS: 513	26	1 2	

AL. No	R. No	DATE	BRIEF RECORD	INITIAL
	5	31-7-96	RETRACED WITHOUT CANGE	
	4	22-2-75	RETRACED WITHOUT CANGE	
171	3	5-7-72	ISSUE Nos OF S.No 6-1,2,3,5 & 6 TO 25, 27 28 TO 31 RAISED TO 2 & OF S. No 1 RAISED TO 3	
100	2	9-11-67	ISSUE OF S.No 4 RAISED	
	1	20-9-65	ORIGINAL	

R.No	DATE	BRIEF RECORD	INITIAL
COMPILED		SEC. REF. NO	
CHD		STORE SPECN	
TCD		ASSY DRG. NO. ARM 1253 D1	
COMPARED		DRG. LIST FOR BOX 'H' 60 MK. 1 (INDIA)	
PASSED		SHEET NO 2 NO. OF SHEETS 2	

R.No	DATE	BRIEF RECORD	INITIAL

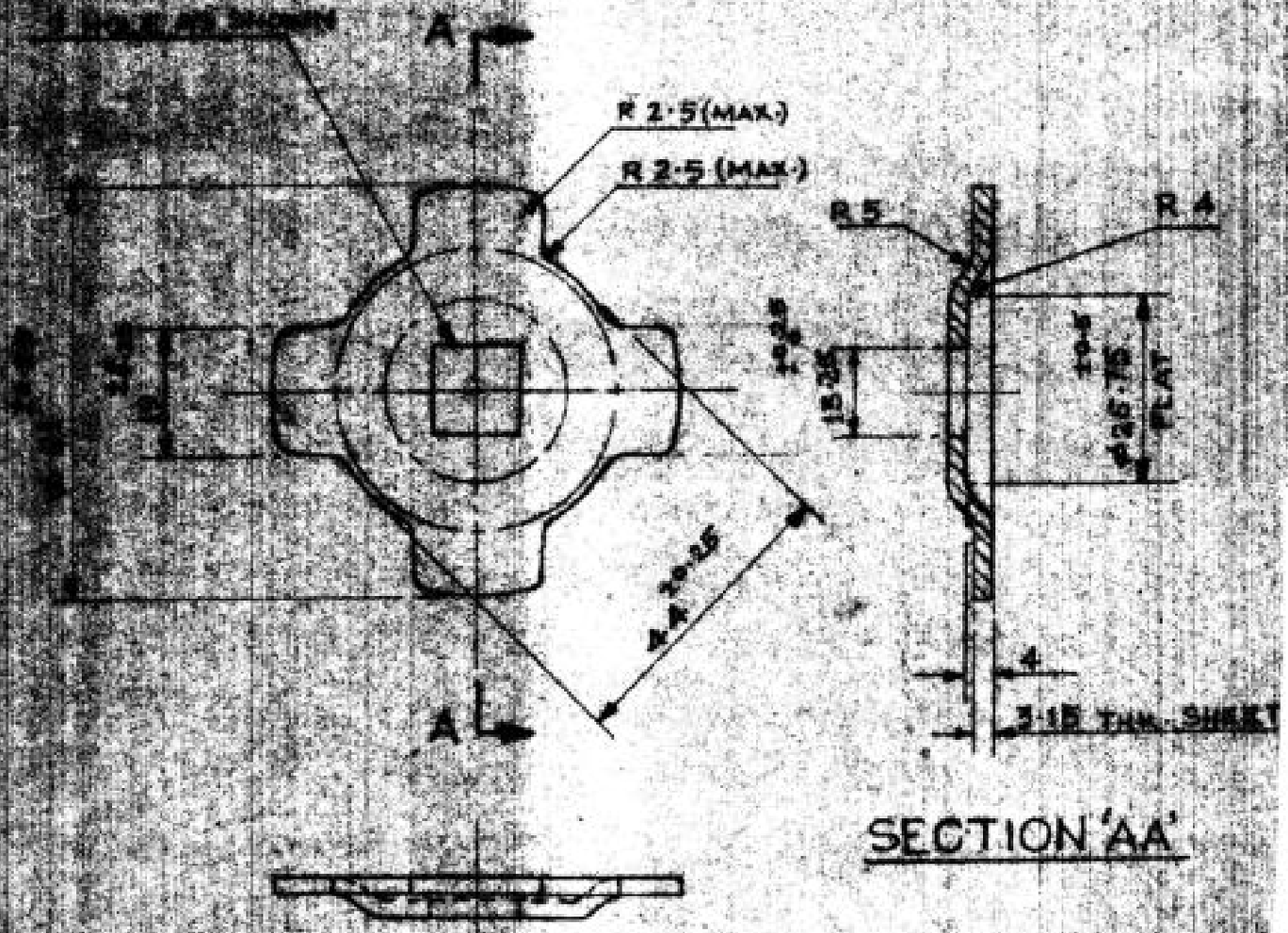
DTD & P (AIR)
MINISTRY OF DEFENCE
APPROVED
DRG. LIST NO
ARM 1253

DRG. NO. ARM 1253 A11

DRG. CONVENTIONS ARE BASED ON IS: 696. (15)

PROTECTIVE TREATMENT

FOR PROTECTIVE TREATMENT SEE DRG. NO. ARM 1253 C7



SECTION 'AA'

R.NO	DATE	ZONE	BRIEF RECORD
4		–	DRG. RETRACED
3		–	DRG. RETRACED WITHOUT CHANGE
2		–	REVISED VIDE AMD. NO. 131.
1		–	PROV. SEALED

INITIAL	R.NO	DATE	ZONE	BRIEF RECORD	INITIAL

	DATE	INITIAL
DSN		
DRN		
CHD		
TCD		
COMP.		

SCALE :- 1 : 1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED.)

DIMENSIONS ARE IN MM.

MATL. SPEC. :- STEEL IS: 1079.

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE :-

BASE PLATE

D.T.D & P. (AIR)

MINISTRY OF DEFENCE

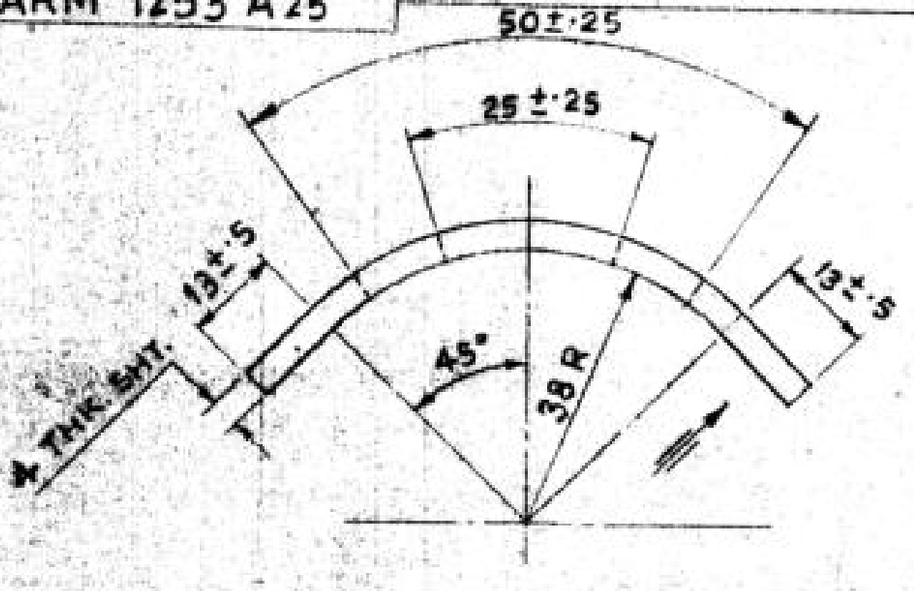
APPROVED

DRG. NO. ARM 1253 A11

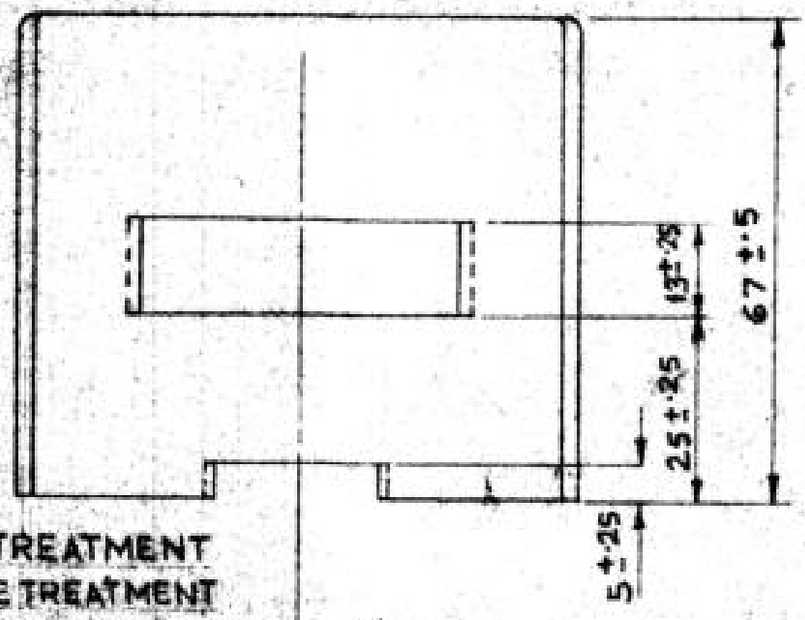
DRG. No.
ARM 1253 A25

DRG. CONVENTIONS ARE BASED ON IS: 696.

29



VIEW IN DIRECTION OF ARROW



PROTECTIVE TREATMENT
FOR PROTECTIVE TREATMENT
SEE DRG. NO. ARM.1253 D18

R.NO	DATE	ZONE	BRIEF RECORD
4	17 7/36		RETRACED
3	27 2/75		DRG RETRACED WITHOUT CHANGE REVISED VIDE A.L. NO. 171
2	5 7/72		
1	20 9/43		ORIGINAL

	DATE	INITIAL
DGN		
DRN		
CHD		
TCD	17/7/96	
COMP	21/11/96	

PROV SEALED
BRIEF RECORD
INITIAL

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

DIMENSIONS ARE IN MM.

MATL. SPEC.
STEEL. IS: 1079

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE :-

CORNER PLATE

D.T.D & P. (AIR)
MINISTRY OF DEFENCE

APPROVED

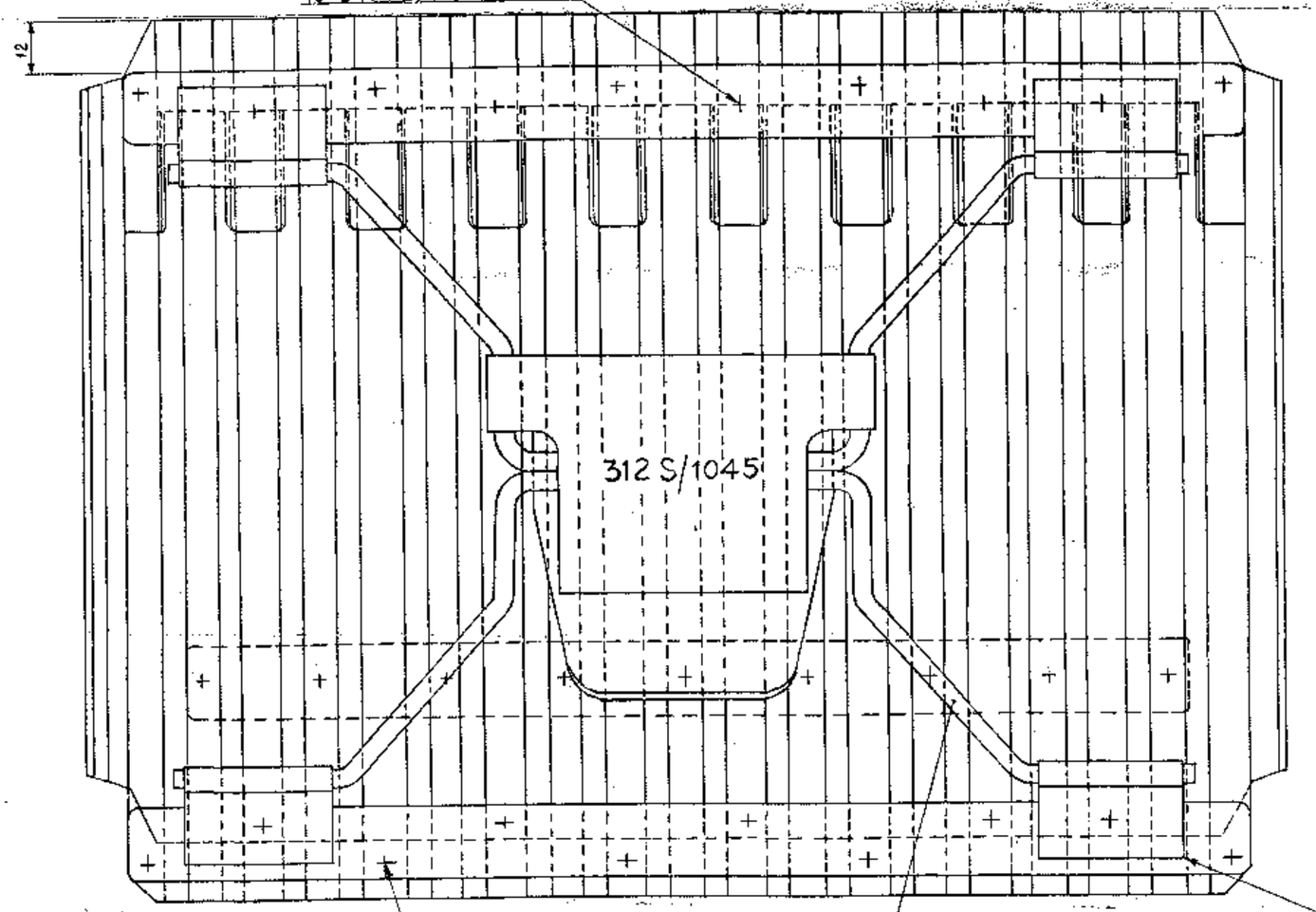
DRG. NO.
ARM 1253 A25

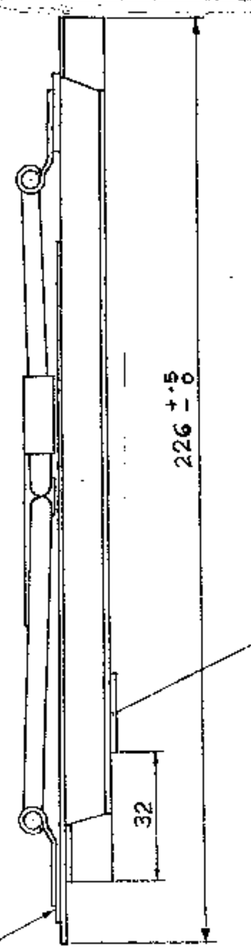
DRG. NO. ARM 1253 C 26

DRAWING CONVENTIONS ARE BASED ON IS: 696.

ITEM No.	DESCRIPTION	NO. OF E.	DRAWING NO.
1	LINK ASSEMBLY	1	ARM 1253 C 27
2	BOTTOM PLATE	1	ARM 1253 C 33
3	TOP PLATE	1	ARM 1253 C 34
4	BOTTOM PLATE TIE PIECE	1	ARM 1253 A 35

ITEM 1 SECURED TO ITEM 2 BY 10-5 MM. DIA. SPOTWELDS

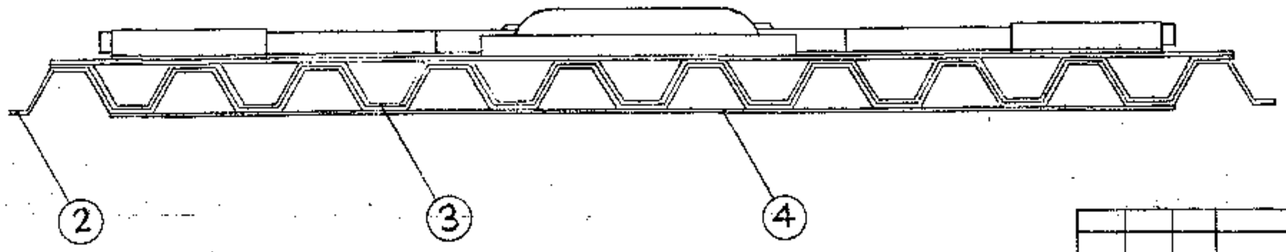




ITEM 4 SECURED TO ITEM 2 BY 9-5 MM DIA. SPOTWELDS. BEFORE ASSEMBLING ITEM 1.

HINGE PLATE TO BE WELDED IN SUCH A MANNER, THAT LID IS FULLY OPEN, WHEN LINK IS FLAT AGAINST TOP PLATE.

SPOT WELDING TO SPECN. IS: 819.



NOTE:-

DELETE THE EXISTING SEC. REF. NO. 312 S/1045 AND ADD SEC. REF. NO. 412 S/4. APPLICABLE ONLY WHEN THE DRAWING IS MEANT FOR MAKING BOX STEEL FOR ROCKET A/C 68 mm. TYPE 'A'.

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
5	12 5/76	-	AMENDED VIDE A.L. No. 07/2012	
4	24 7/46	-	RETRACED	
3	2/78	-	AMENDED VIDE A.L. NO. 319	SH
2	28 2/75	-	DRG. RETRACED WITHOUT CHANGE	SH
1	20 5/75	-	ORIGINAL	SH

	DATE	INITIAL
DGN		
DRN		
CHD	24 2/96	
TCD	24 7/96	
COMP.		

DIMENSIONS ARE IN mm.

MATL. SPECN. —

SEC. REF. NO.

GAUGE SCHD. NO.

DRG. LIST. NO. ARM 1253

SCALE 1:1

TOL. ± TOL. EXCEPT WHERE OTHERWISE STATED. TO IS: 2102 (MED.)

TITLE:-

INNER LID ASSEMBLY

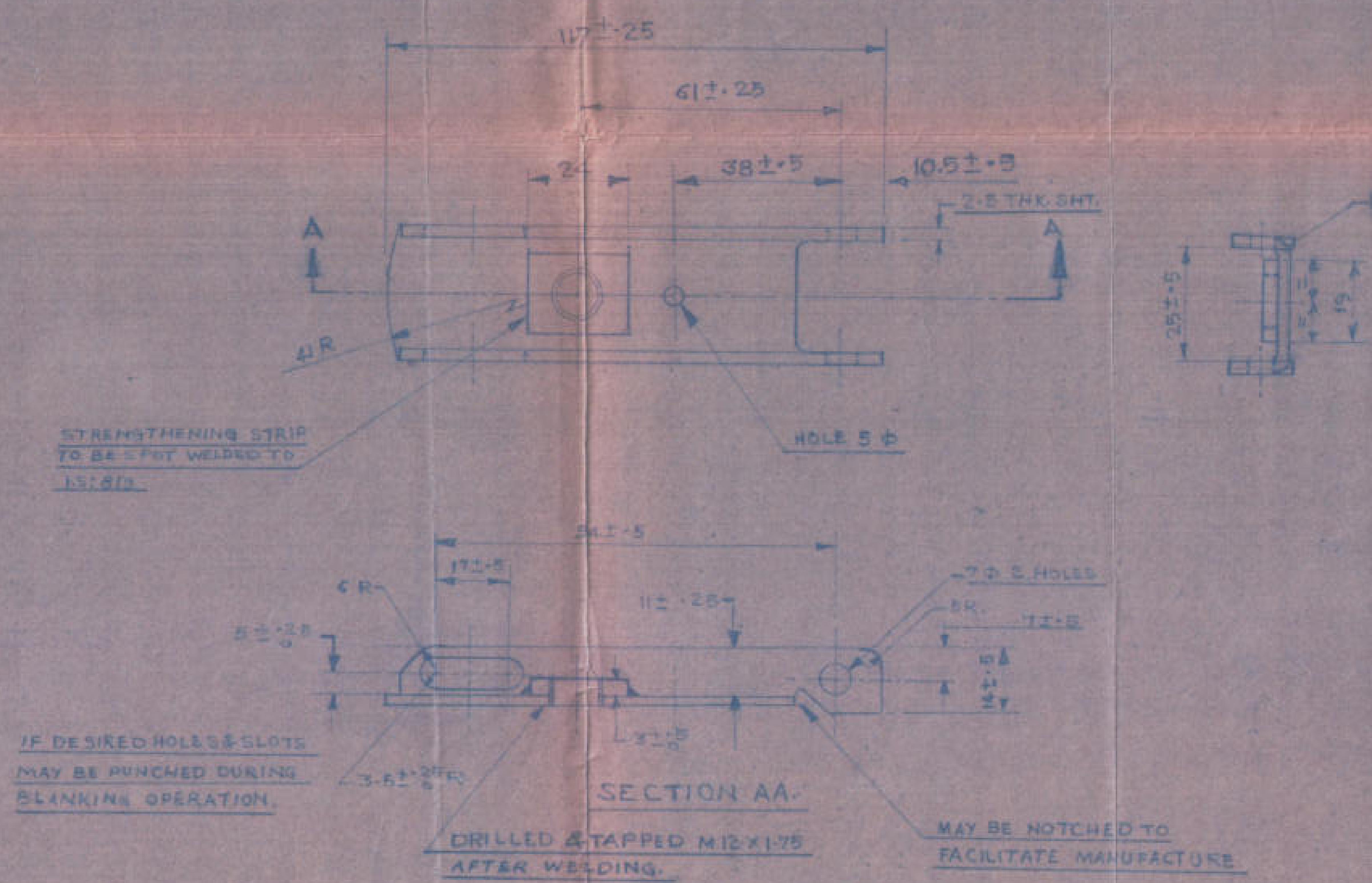
D.T.D & P (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG. NO.
ARM 1253 C 26

DRG. NO. ARM. 1253 C 14

DRG. CONVENTIONS ARE BASED ON IS: 696.



PROTECTIVE TREATMENT:-

(a) PHOSPHATING TO IS: 3618 CLASS 'C'

(b) ONE COAT OF READY MIXED PAINT - SPRAYING - RED OXIDE CHROME PRIMING TO SPECN. IS: 2074.

(c) SINGLE COAT OF PAINT READY MIXED AIR DRYING SEMI-GLOSSY / MATT FINISH. SPRAYING TO SPECN. IS: 168 WITH IS C SHADE 220 (OLIVE GREEN) TO SPECN. IS: 5.

No.	DATE	CONS	BRIEF RECORD	INITIAL
5	7/96		RETRACED	
4	6 11/87		AMMENDED VIDE AL. No. 880	Sd/-
3	24 3/56		DRG. RETRACED WITHOUT CHANGE.	Sd/-
2	5 7/55		REVISED VIDE AL. No. 171	Sd/-
1	20 2/55		ORIGINAL.	Sd/-

	DATE	INITIAL	
DGN			DIMNS. ARE IN mm.
DRN			MATL. SPECN:- STEEL IS: 1079
CHD	1 8/56	[signature]	SECRET No.
TCD	1 8/56	B.H.	GAUGE SCHD. No.
COMP			DRG. LIST NO. ARM. 1253

SCALE:- 1:1

TOL:- TOL. EXCEPT WHERE OTHERWISE STATED TO IS: 2102 (MED)

TITLE:- ARM.

D.T.D & P (AIR) MIN. OF DEFENCE

APPROVED:

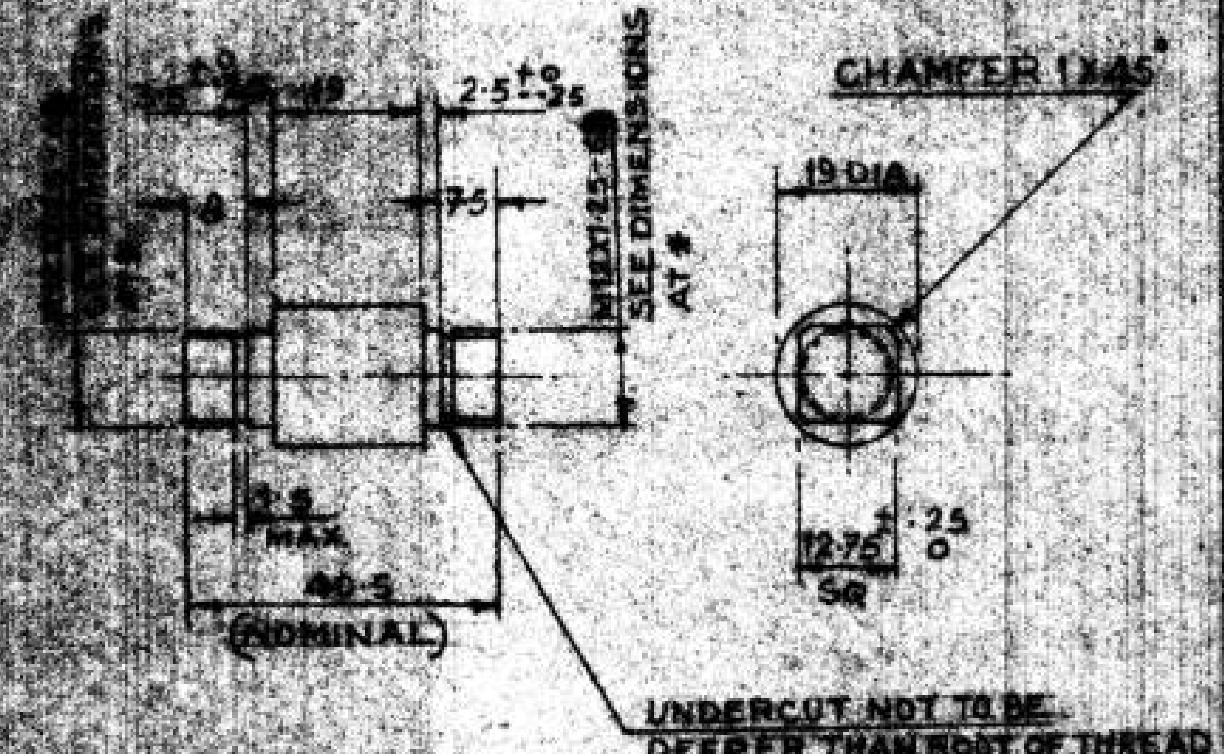
DRG. No. ARM. 1253 C 14.

S.No	DRAWING No	DESCRIPTION	PART No	No OFF	I.A.F SEC. REF. No	MATL. SPECN.	FOR S-No	ISSUE	REMARKS
36	ARM1253 D36	M.O.P. FOR 30 mm CARTG (FILLED) BMP-2 (HE/T, HE/I, AP/T & DUMMY) IN STEEL BOX H-60 MK-1	—	—		—		1	
37	ARM 1253 E 37	METHOD OF STENCILLING ON BOX H-60-MK-1 FOR 30mm BMP-II	—			—		1	

—	2 3/10	ORIGINAL					
R.No	DATE	BRIEF RECORD	INITIAL	R.No	DATE	BRIEF RECORD	INITIAL
COMPILED		SEC.REF.No:-				DTD&P (AIR) MINISTRY OF DEFENCE	
CHD		STORE SPECN:-					
TCD		ASSY.DRG.No:- ARM 1253 D1				APPROVED	
COMPARED		DRG. LIST FOR BOX 'H' 60, MK.1 (INDIA)				DRG.LIST No ARM 1253	
PASSED		SHEET No 3	No OF SHEET 3				

DRG. No. ARM 1253 A10

DRG. CONVENTIONS ARE BASED ON IS: 696. (14)



PROTECTIVE FINISH

TO BE ELECTROGALVANISED TO SPEC. [illegible] Fe Zn 25 AND PASSIVATED TO IS: [illegible]

LIMITS FOR M12x1.25-6g THREAD

	MAX	MIN
MAJOR DIA	11.972	11.760
PITCH DIA	11.160	11.028
MINOR DIA	10.[illegible]	10.216

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4	[illegible]	—	REVISED VIDE [illegible]	[illegible]
3	[illegible]	—	RETAILED	
2	[illegible]	—	REVISED VIDE [illegible]	[illegible]
1	[illegible]	—	ORIGINAL	[illegible]

	DATE	INITIAL
DRN		
TRD		
CHD	[illegible]	[illegible]
T.C.D	[illegible]	[illegible]
APPD		

SCALE 1:1

TOL ±0.1 EXCEPT WHERE OTHERWISE STATED TO IS: 2102

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL, IS: 1570-C20

SEC. REF. NO.

GAUGE SCND. NO.

DRG. LIST. NO. ARM 1253

TITLE — SPIGOT

D.T.D & P. (AIR)

MINISTRY OF DEFENCE

APPROVED

DRG. NO. ARM 1253 A10

D.C. 35576-A

IA 1169 (Jan '72)
Supersedes I.A. 726-K (1)

THIS SPECIFICATION IS THE PROPERTY OF THE DIRECTOR GENERAL OF QUALITY ASSURANCE AND MUST BE RETURNED TO THE CONTROLLER OF QUALITY ASSURANCE (AMMUNITION), CONTROLLERATE OF QUALITY ASSURANACE (AMMUNITION), KIRKEE, PUNE 411 003 ON DEMAND.

This specification, or any patterns, drawings, or other information issued in connection therewith, may only be used for specific enquiries, tenders or orders placed by competent authority. It is not to be used for any other purpose whatsoever without the sanction of the Director General of Quality Assurance.

LAND SERVICES

GENERAL SPECIFICATION TO GOVERN THE MANUFACTURE REPAIR AND QUALITY ASSURANCE OF WATERTIGHT AND NON-WATERTIGHT STEEL AMMUNITION PACKAGES AND THEIR COMPONENTS.

Approved 30 May 1978

O. P. C. SECTION
E. CHAMARIA, JABALPUR
25-5-79

SECTION ONE — GENERAL

1. Any question relating to this specification, other specifications referred to herein, or to the drawings should be referred to CQA (A), Kirkee or other Quality Assurance Officer duly authorised to act on behalf of him hereafter called Quality Assurance Authority and Quality Assurance Officer respectively.

2. (a) Where specifications are quoted, the current issue is implied.

(d) Materials, their specifications and the office from which these specifications are obtainable are given below :—

	Material	*Specn No.*	*Obtainable from*
(i)	Steel Sheet or strips	IS : 1079 — [illegible] IS : 513 — [illegible] BS : 1449	Indian Standards Institution, Manak Bhavan, 9, Mathura Road, New Delhi – 1.
(ii)	Bar Steel	IS : 2073	– do –
(iii)	Spring Steel	BS : 1449	– do –
(iv)	Rubber	IND/MB/584 (F)	The Controller, Controllerate of Quality Assurance (Military Explosives), Aundh Road, Kirkee, Pune – 3.
(v)	Timber	IA : (00) (F)	CQA (A), Kirkee, Pune – 3.
(vi)	Paint	IS : 168 – [illegible] (amended upto date) (for air drying) JSS-16302 (for stoving)	ISI, New Delhi–1. CQA (MB), Kirkee, Pune–3.
(vii)	Galvanising	BS : 729, Pt. 1	ISI, New Delhi – 1.
(viii)	Phosphating	JSS 0465-01-1988	CQA (A), Kirkee, Pune – 3.
(ix)	Sprayed metal coating	BS : 2569, Pt. I	ISI, New Delhi – 1.
(x)	Wire Steel	IS : 280 – [illegible]	ISI, New Delhi – 1.
(xi)	Red Oxide Zinc Chrome Primer	JSS 1-63 05 (b)	CQA (MB), Kirkee, Pune – 3.

Note :— Reference in this specification to any other specification or documents means, in any tender or contract, the edition current at the date of such tender or order.

3. The dimensions, construction, assembling and marking of the ammunition packages or boxes (hereinafter referred to as packages) and their component parts are to be in accordance with the drawings issued to govern the supply of the stores.

4. Where the drawing or specification permits a choice of alternative materials or forms for particular components, the Manufacturer is required to notify the Quality Assurance Officer, in writing, which of the permitted alternative he chooses to produce. If the choice of alternative is changed during the course of the order the Manufacturer shall again notify the Quality Assurance Officer of such change.

5. Special attention is called to any notes on the drawing.

6. Any sample sent to the manufacturer must be taken as a general guide only.

7. Neither the stores nor any component part may be built up or repaired in any way not provided for by the drawing or this specification, unless authorised by the Quality Assurance Officer.

8. The Manufacturer must provide the Quality Assurance Officer with copies of all sub-orders in connection with his order as soon as they are placed.

9. The Manufacturer must notify the Quality Assurance Officer when he (or his Sub-Manufacturers) is in a position to start work. On receipt of this notification from the Manufacturer the Quality Assurance Officer may arrange to be represented at the Works of the latter or at those of his Sub-Manufacturers.

10. Where tests are laid down in this specification or elsewhere for any of the materials to be used, the Quality Assurance Officer may require that such materials shall not be taken into use until accepted by him as satisfactory for the purpose intended, and may require the bulk to be bonded or sealed until the results of the tests are known.

11. The Manufacturer will be required to supply, free of charge the necessary material for test and analysis. Such material will be selected by the Quality Assurance Officer or his representative. The Quality Assurance Officer will inform the Manufacturer to what extent testing of materials will be carried out. He may, if considered necessary during the progress of a order, vary the quantity of material taken for test.

12. Where component parts are issued to the Manufacturer, these will be in good condition on issue, while in his possession be kept in that condition. The Manufacturer shall guarantee the due return of the component parts sent to him and shall be responsible to their full value for all loss of damage from whatever happening there to whilst in possession or control of himself, his servants or agents.

13. The Manufacturer will be required to carry out, free of charge, the work of assembly of the packages or component parts taken for test under the provisions of this specification, or otherwise as stipulated elsewhere as a condition of acceptance. He shall provide, free of charge, the sample welds referred to in para 5, section Four. The material so expended shall be held at the disposal of the Government as represented by the Quality Assurance Officer.

SECTION TWO — MATERIALS

1. Materials must conform to the requirements laid down in their relevant specification or as otherwise specified herein.

2. Sheet or strip steel employed is to be of a suitable quality to withstand breaking or cracking, the pressing, folding and assembling operations called for by the construction shown on the drawing. All sheets or strips shall comply with :-

(a) IS : 1079 Crade St. 34 hot rolled and annealed.

or

(b) IS : 513 Cold rolled and annealed.
Best surface type 'D'.

or

(c) BS : 1449 Pt. 3A-CS 4 Cold rolled and annealed.

or

(d) BS : 1449 Pt. 3A - HS 4A, hot rolled and annealed.

3. Hot steel employed in the Manufacture of parts such as handles, collers, tie-rods, etc. must conform to IS : 2073-(1), DES C20 or as quoted on the relevant drawings.

4. Spring steel shall comply with all the requirements of BS 1449 Bn 42F unless otherwise specified on the relevant drawing.

5. Wire steel used in the manufacture of clips, catches, hinges etc. must conform to IS : 280 half hard bright.

6. Rubber sealing rings and pads are to conform to IND/ME/584 Class 'A' unless otherwise stated on the drawings or elsewhere and to be secured in the positions called for on the appropriate drawing in accordance with instructions on the drawings. Samples of adhesives to be used to secure rings/pads should be approved by CQA (MP), Kirkee.

7. Timber or plywood required for fittings shall conform to the requirements of specification IA 1001 where applicable. Timber components of non-water-tight packages shall be impregnated with approved preservative salts; components for water-tight packages shall not be impregnated.

SECTION THREE — MANUFACTURE AND ASSEMBLY

1. The various parts of the package are to be formed and assembled as shown on the drawing. The dimensions and methods of securing them in position as laid down in particulars shall be strictly adhered to.

2. The steel or metal fittings when called for, must be well finished and a good fit, the holes in the diaphragms of packages so fitted are to be well shaped and in correct alignment when assembled, and free from raw edges and burrs.

3. The corners and joints of boxes must be closed completely. Rivets must be a tight fit and riveted to the satisfaction of the Quality Assurance Officer. Handle grips if present, must be in good condition when finally accepted. Steel handles shall move freely and shall fall flush with the sides of the package when not in use.

4. Any loose components which need selective assembly will be assembled by the manufacturer to the satisfaction of the Quality Assurance Officer.

5. Parts which are to be joined by welding are to be so formed that when assembled the surfaces to be welded are in close contact so that the welded joint is not under stress. Particular care will be taken that the nature number and size of welds are strictly adhered to.

6. Where a watertight lapped seam is to be made, width of overlap must be as shown on the drawing. Where no dimension is laid down, care is to be taken that sufficient width of overlap is provided to ensure that the welded joint is watertight.

7. Spot welds, where called for, are to be correctly positioned as shown on the drawings. In particular, the distance of the welds from the edges of fittings etc. is to be strictly complied with.

8. Particular care is to be taken that the seting for lids of watertight packages is fixed truly at right angles to the axis of the body, so that the pressure on the securing device causes even pressure all round on the rubber seal.

9. The rubber sealing washer (where employed) is to be assembled in its supporting channel and efficiently secured as stated in the drawing or with the material called for in Section Two Para 3 of this specification.

10. Immediately prior to despatch, all rubber components should be given a light covering of french chalk or other approved material.

SECTION FOUR — WELDING

1. All metal surfaces to be welded must be thoroughly clean and free from scale, rust or oil.

2. All welding machines employed must be equipped with a device giving fully automatic control of the welding current under all workshop conditions and this device must be in use at all times when work on the order is proceeding. Means must also be provided for setting the welding pressure to a given value which is within the pressure range of the machine and for verifying that this pressure is maintained within ± 10% during the working cycle.

3. The manufacturer must make suitable arrangements to supervise his machines so that they are at all times maintained in such condition as will ensure the required standard of quality of welds.

4. The manufacturer must supply his welding operators with a process schedule setting forth :—

(*a*) The manner and order of making the welds.

(*b*) Particulars of tip changing and maintenance.

(*c*) Particulars of preparation of routine tests and methods of recording results.

(*d*) A standard specimen for comparison purposes.

A copy of the process schedule must be supplied to the QAO's representative, [illegible] amendments thereto, which may subsequently be agreed as necessary. The manufacturer's record tests must, at all times, be available for Quality Assurance by the QAO's representatives.

5. If required by the Quality Assurance Officer the manufacturer shall before beginning work anytime during which work on the order is proceeding, produce sample welds on strips of the material in order that the condition of the machine and reliability of the operator may be check examination and testing apart of welds.

6. Appendix hereto contains instructions for the guidance of manufacturers in controlling technique and upkeep of equipments manufacturers will be deemed to have agreed to adopt the recommended procedure on any order governed by this specification, unless prior notice has been given Quality Assurance Officer in writing, of their intention to depart wholly or in part, from procedure and giving full details of the alternative methods proposed to be adopted.

SECTION FIVE — MARKING

1. The packages are to be marked, by embossing or impressing with the particulars as cr. the relevant drawings. The positions of the marking must not depart from those shown

SECTION SIX — TESTING

1. The package will be tested by the application of a load equal to four times the mass filled package, on each handle (when present), and must be capable of withstanding this test showing any signs of defect either in the package or in the handles. Where no filled mass on the drawing, the test mass shall be 100 kg.

2. A percentage of the completed packages may, at the discretion of the Quality Assurance Officer be taken for testing to distraction to determine that the welding is satisfactory.

3. Test welds (when routine or otherwise) from any particular machine shall be made conditions approximating as closely as possible to those experienced in production.

4. Spring steel clips : The clips when manufactured from spring steel wire will be tested as follows for the quality of welding.

A percentage of the clips will be subjected to a minimum load of 35 kg for 30 seconds on the arms of the clips by any suitable method. The clips should not show any signs of failure.

5. On tearing open the test samples the welds will only be considered satisfactory if a slug or strip is torn from one of the components.

6. All lids for water tight packages must be pressure tested before painting. Those embodying a rubber sealing washer must be painted before assembly.

7. All bodies for watertight package must be pressure tested before painting: the sealing rings are to be removed before and replaced after painting the packages bodies.

8. A minimum of 5% complete watertight packages with their correct lids must be tested for leakage, after final painting and assembly by immersion in water heated to 35°-15 °C. for a period of not less than 90 seconds. The lid being closed and secured by normal method.

9. The pressure test for watertight packages is to be carried out by the Manufacturer's staff in the presence of a representative of the Quality Assurance Officer as follows :-

By an internal air pressure not less than 20·6 kPa not exceeding 34·3 kPa. For this test the lid will be replaced by a similar one which is fitted with an adapter to convey air under pressure into the package. The lid will be separately tested under similar pressure when held in suitable clamp. The test shall either be carried out under water or if loss of pressure can be observed on a mercury column, or other approved gauge. The test shall be applied for not less than 30 seconds during which period no loss of pressure shall be indicated.

10. Under any one of these tests neither the body nor the lid shall shown any sign of leakage at any joint, and where lid and body are tested together a perfect seal shall be made on the sealing device.

11. Packages must be properly dried after immersion.

12. Package should be jolted for 8 hrs on a jolting machine having a lift of 50 mm and frequency of 60 jolts per minute. After jolt test packages will be drop tested. After drop test watertight packages should withstand leak proof test as per para 9 Section six...(k).

SECTION SEVEN -- RUSTPROOFING AND PAINTING

1. Unless otherwise specified in order or elsewhere, the packages are to be delivered painted with paint specified in the order and will approximate to one of the following colours given in Indian Standard Schedule of colours No. IS : 5.

Olive Green	...	Colour No. 220
Light Brunswick Green	...	Colour No. 225
Signal Red	...	Colour No. 537

2. Before painting the Manufacturer shall arrange for the packages to be adequately treated to secure freedom from scale, rust or corrosion and no packages which fails to satisfy the Quality Assurance Officer in this respect or which is dirty shall be allowed to forward for rust proofing or painting. The package must not be contaminated with grease or oil

WATERTIGHT PACKAGES (BOXES & CONTAINERS)

3. After closing and inspection the body and lid are to be galvanised or phosphatised or painted with red oxide zinc chrome primer or sprayed with aluminium (thickness of aluminium spray 0·15 mm) in accordance with specification BS : 729 Pt I or ISS 0465-01-1988 (class of phosphating is class II) or ISS 1-63-05 or BS : 2569 Pt I respectively.

NON WATERTIGHT PACKAGES

4. After cleaning and inspection the packages are to be galvanised or phosphatised or painted with red oxide zinc chrome primer or aluminium sprayed (thickness of aluminium spray 0·15 mm) in accordance with specification BS : 729 Pt I or ISS 0465-01-1988 (class of phosphating is class II) or ISS 1-63-05 or BS : 2569 Pt I respectively.

5. If galvanising is adopted, the package and all steel fittings are to be galvanised either before or after assembly, the stage at which galvanising is carried out being at discretion of the Manufacturer. If phosphating or aluminium spraying is adopted the package and all metal fittings are to be phosphatised or aluminium sprayed after assembly.

PAINTING PACKAGES

6. After rust proofing and Q.A. the packages will be painted internally and externally with a coat of specified paint. The Paint must be applied evenly and each coat must be thoroughly dry before the application of the next coat.

7. Paint may be applied by brushing, spraying or dipping, except that brushing or spraying is not to be used when the package is fitted with diaphragms or other fittings with concealed surfaces. As soon as the order is placed the Manufacturer must state the method he proposes to employ. When dipping is employed the Manufacturer must also state in the sub-order placed for paint the viscosity at which he intends to work his tanks, which must be maintained during use at the viscosity declared. The mixing of paints from different paint manufacturers will not be permitted.

8. The paint shall comply with the requirements of specn IS-163 (amended to date) or ISS : 16302 (for stoving). The paint is to be obtained from the Manufacturer in a consistency appropriate to the method of application employed, and no thinners are to be added for any purpose other than the replacement of evaporation losses or to produce the required viscosity of the dipping tanks. The thinners used must be those supplied by the paint manufacturer for use with each particular type of paint.

9. Immediately before use the paint must be thoroughly stirred and agitated (by any suitable means) in the containers so that all the pigment is uniformly dispersed throughout the medium and no sediment remains on the bottom of the container. Periodical stirring of the paint in the containers must be carried out if necessary during the day to ensure that the material is maintained in a uniform consistency throughout painting operations.

10. If dipping is employed, care must be taken to ensure that the paint reaches all internal surfaces. Accumulation of paint due to faulty draining must be avoided.

11. Before despatch, the paint on the packages must be thoroughly dried and must be to the satisfaction of the Quality Assurance Officer.

12. Any screw threads or working parts of the hinges etc. must be free from paint and well greased.

13. The lids and any components not secured to the body by a fixed fastening are to be separately painted before assembly.

14. Sealing rings and sealing washers must not be shot blasted painted or subjected to the stoving [illegible].

13. Air drying paints may be used for the purpose of 'touching up' small areas of damaged paint or surfaces which show slight discrepancies.

SECTION EIGHT — REPAIR OF PACKAGES

1. The provisions of all the foregoing Sections shall apply except in so far as they are clearly applicable to new manufacture only.

2. Packages shall be emptied of any containers or packing pieces, which shall be sorted, segregated and reported for disposal instructions.

3. The Manufacturer shall sort the packages and segregate those unsuitable for repair, which will be reported for disposal instructions.

4. The packages shall be cleaned, and all rust and water stains shall be removed, by an approved process. The Manufacturer must inform the Quality Assurance Officer of the process he proposes to use and obtain his approval before commencing production. After cleaning and completely de-rusting inside and out, the packages shall be inspected by a representative of the Quality Assurance Officer before any further work is done.

5. All large dents and distortions shall be removed to the satisfaction of the Quality Assurance Officer Complete removal of dents will not usually be necessary, but any small dents which remain must not interfere with the correct functioning of fittings, the opening, closing, and securing of the package or to the insertion and removal of the stores to be packed.

6. Cracks must be welded up, and punctures covered with plates welded on, to the satisfaction of the Quality Assurance Officer.

7. Broken or damaged fittings are to be removed and replaced. Missing components are also to be replaced. Components for repair will be obtained as far as possible from packages not worth repair.

8. Any new component supplied by the Manufacturer must conform to the relevant drawing, and be secured to the package in the manner laid down in the drawings.

9. Fittings which are broken away from their attachments are to be re-secured in a suitable manner to the satisfaction of the Quality Assurance Officer.

10. Rivets shall be tightened to the satisfaction of the Quality Assurance Officer or renewed; missing rivets shall be replaced.

11. New fittings are to be well finished and filed, and where necessary are to be assembled in correct alignment. Raw edges and burrs from whatever cause are to be removed to the satisfaction of the Quality Assurance Officer.

12. All non-watertight packages are where called for, to be provided with drainage and ventilation holes drilled in the positions shown in the drawing.

13. Rubber sealing ring of watertight packages shall be removed and new ones provided. They shall be secured as shown in the drawing or with adhesive to the current approved specification.

14. The packages shall be rustproofed and painted, as provided in Section Seven. Brushing may be used as an alternative to dipping or spraying. If packages have been previously rustproofed and the metallized or phosphated surface is still maintained these packages shall be painted as provided in Section Seven. Air drying paints may be used to paint small areas after removal of patches of rust or scale, and to repair damaged paint.

15. The packages shall be tested as specified in Section Six of this specification.

16. The packages are to be stencilled with initials of the repairing Manufacturer and the year of repair, in a position agreed with the Quality Assurance Officer.

SECTION NINE — QUALITY ASSURANCE

1. The packages and components will be subject to Quality Assurance at any stage of the process of manufacture or repair and after delivery. Acceptance at an intermediate stage does not necessarily imply that the article on potentially acceptable in the finished state.

2. The Quality Assurance Officer may at his discretion, take during the progress of the order, samples of any of the materials used in manufacture for the purpose of analysis or testing.

3. Any package component or fitting, which at any stage fails to conform to the stipulated requirements and is not to the satisfaction of the Quality Assurance Officer will rejected. Those stores in which departures can be rectified may be brought up to the approved design by the Manufacturer and be resubmitted for examination.

4. To permit of the foregoing Quality Assurance the Quality Assurance Officer, shall as a condition of the order, have a right of entry into the works of the Manufacturer and/or the works of any sub. Manufacturer where work on the order is in progress.

5. The manufacturer will submit for acceptance the material, components or assemblies called for in the order in suitably sized batches. The amount of material or number of units that comprise a batch will be decided by the Quality Assurance Officer after consultation with Manufacturer. If the QAO's examination of a proportion of a batch of material, components or assemblies submitted to him reveals departures from the drawings and/or specification the whole batch may be rejected. At the discretion of the Quality Assurance Officer a rejected batch may be resubmitted to him provided that the Manufacturer has examined all the units therein and eliminated any defective.

SECTION TEN — PACKING

1. The stores shall be packed for delivery in accordance with the terms of the order.

2. Not-withstanding the conditions for packing prescribed by the order, the Manufacturers shall be responsible that the stores are packed in containers which will prevent damage in transport or in storage and which are so marked that the stores may be readily recognised and identified with the order on which they are supplied.

Revised and approved

Sd/ x x x
(LH SHAW)
DSS
for CONTROLLER OF QUALITY ASSURANCE (AMN)

Dated 30 May 1978

Notes :- (i) This specification is to be returned to the Controller, Controllerate of Quality Assurance (Amn) Kirkee, Pune-3, immediately on submission of tender or completion of order.

(ii) This specification only holds good for the particular order for which it was issued.

Correct copy of the sealed specification at this date.

(A-M-PATHALE)
DY. ASSISTANT CONTROLLER
for CONTROLLER OF QUALITY ASSURANCE (A&N)

Kirkee, Pune-411 003.

Dated 31 MAY 1979

APPENDIX I TO SPECIFICATION 1A 1169

(*See* Section 4)

WELDING

1. SEAM WELDING

(*a*) The working face of the electrode must be maintained flat, smooth and clean. The width must not be allowed to increase more than 20% above the initial width which the machine was set up to work. Filing of wheels is not permitted.

(*b*) A gauge should be provided for checking the width of the electrode working face.

(*c*) Test welds should be made as follows on strips of the material being used :—

At the commencement of each shift. Each time the electrodes are changed or dressed. At two hourly intervals during each shift. Or as other agreed upon.

2. SPOT WELDING

(*a*) The diameter of the electrode tips, or of the one tip in the case where a pad type of electrode is used must not be allowed to increase more than 20% above the initial value with which the machine was set up to work.

(*b*) A gauge should be provided for checking this.

(*c*) When the maximum permitted diameter has been reached, the tip or tips must be changed or dressed. Filing of the tips is not permitted.

(*d*) Test welds should be made at the commencement of each shift and before and after tips have been changed or dressed.

APPENDIX 'J' TO SPECIFICATION 1A 1169

(*See* Section 2, Clause 5)

Instructions for the use of rubber Resin Cement when sticking non-intercellular rubber and ber rubber pads and packing strips to steel packages.

GENERAL

(*a*) Cleanliness is essential at all times.

(*b*) Surface to be stuck together must be clean and dry.

(*c*) An even and adequate coat of cement must be used on each surface. The amount of surface which can be covered per litre is 2·2 to 2·4m². So far the two surfaces a litre is required for every 1·1 to 1·2m² of non-intercellular or other rubber.

INSTRUCTIONS

(*a*) The temperature of the shop in which the work is carried out should not be less than 289·15 k.

(*b*) The cement must be well stirred prior to use.

(*c*) The cleanliness and dryness of the surface of the rubber and the metal will be ensured by wiping them thoroughly with a clean rag moistened with trichloroethylene.

Note :— To ensure that the rag is clean and free from grease, it will be changed.

(d) Apply an even coat of the cement adhesive to both rubber and metal surface ensuring that the area of metal covered is slightly larger than that of the rubber.

(e) Allow to dry. Drying time will depend on the shop conditions but should not be less than 15 minutes nor more than 35 minutes.

(f) When the cement adhesive is properly dry the two surfaces should be pressed together and rolled to ensure that no air is trapped in the joint.

Note :— No stress should be applied to the joint for 24 hours.

AIDE MEMOIRE —P/11

Specification IA 1169 for steel boxes/carriers will be read in conjunction with the following :—

A Steel boxes (other than those which are air tight) and carriers packed as per service condition will be subjected to jolting and individually drop tested thereafter ...(k)

DROP TEST

One box/carrier per lot will be subjected to drop test from a height of 140 cms on to a concrete floor, successively on its base, top, side and any on corner/or any other position at the discretion of the Quality Assurance Officer with contents packed inside as per Service condition.

After drop test the box/carrier will be examined for the following :—

(i) Catches, handles, hinges are not damaged to such an extent that they are beyond minor repairs by slight tapping with mallet.

(ii) Welding should be intact.

(iii) Boxes/carriers should be easy to open and close.

(iv) Containers/Liners/Cylinders/Boxes and rounds packed therein should be easily removable.

B Hermetically sealed boxes with contents packed as per service conditions will be subjected to jolt and drop test (in their outer package as applicable)...(k) followed by leak test.

JOLT TEST

Boxes will be subjected to jolt test in a machine having a lift of 50 mm and frequency of 60 jolts per minute for 8 hours. The boxes after jolt test as above should withstand leak test in accordance with specification IA 1169, Section Six Clause 8.

Revised and approved

Sd/ x x x
(LH SHAW)

for CONTROLLER OF QUALITY ASSURANCE (AMN)

Dated 30 May 1978

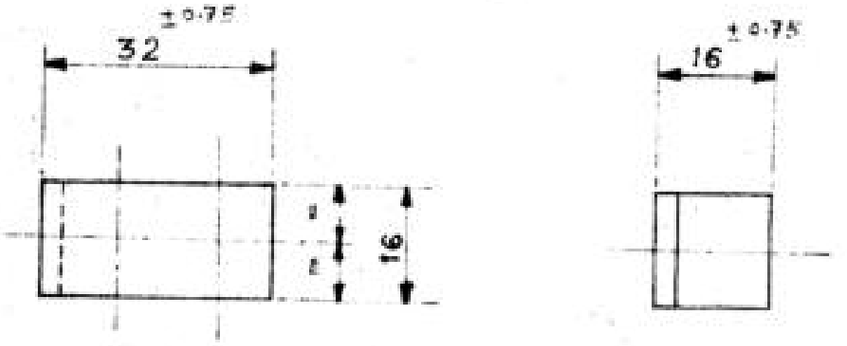
Certified correct copy of approved Aide Memoire at this date.

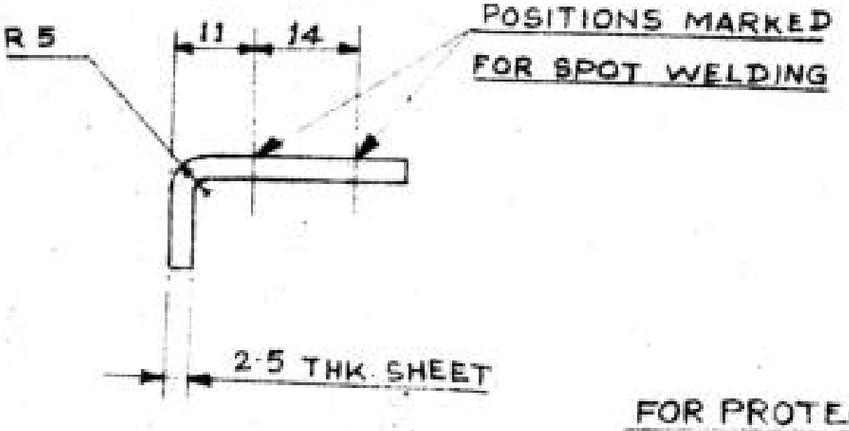
for CONTROLLER OF QUALITY ASSURANCE (AMN)

DATED:

DRG. No.
ARM 1253A12

DRG. CONVENTIONS ARE BASED ON I.S. 696 (1)





FOR PROTECTIVE TREATMENT
SEE DRG. NO. ARM 1253 C7.

R.NO	DATE	ZONE	BRIEF RECORD
4.	23 7/96	–	DRG. RETRACED
3.	8 5/96	–	DRG. RETRACED WITHOUT CHANGE
2.	6 7/92	–	REVISED VIDE A.L-NO. 171.
1.	20 9/85	–	PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	23 7/96	
TCD	23 7/96	
COMP		

SCALE :- 1 : 1

TOL :- TOL EXCEPT WHERE OTHERWISE STATED IS 15:2102 (1ED)

R.NO	DATE	ZONE	BRIEF RECORD
INITIAL			

DIMENSIONS ARE IN MM.

MATL. SPEC. :- STEEL IS: 1079.

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE :-

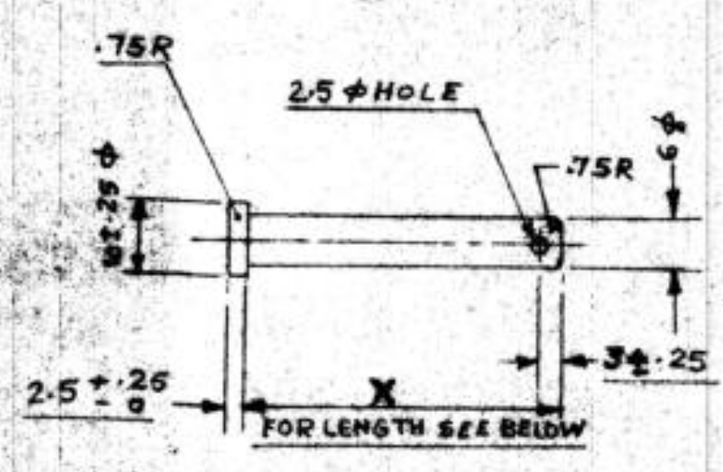
STOP

D.T.D & P (ARM)
MINISTRY OF DEFENCE

APPROVED

DRG. NO.
ARM 1253A12

DRG. No.	DRG. CONVENTIONS ARE BASED ON I S: 696.	19
ARM 1253 A15		



LENGTH - X

PIN "A" ITEM 4 - 38±.5

PIN "B" ITEM 5 - 45±.5

TO BE ELECTROGALVANISED TO SPECN. IS:1573 - FE Zn 25 & PASSIVATED TO IS : 1340

R.NO	DATE	ZONE	BRIEF RECORD
4	1 8/96	-	DRG. RETRACED WITHOUT CHANGE
3	24 2/95	-	DRG. RETRACED WITH OUT CHANGE
2	3 7/92	-	REVISED VIDE A.L. No - 171
1	20 3/88	-	PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	26.7.96	
TCD	26-7-96	
COMP.		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

INITIAL	R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
	4				

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL TO IS:1570 - C20

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM1253

TITLE —

PIN

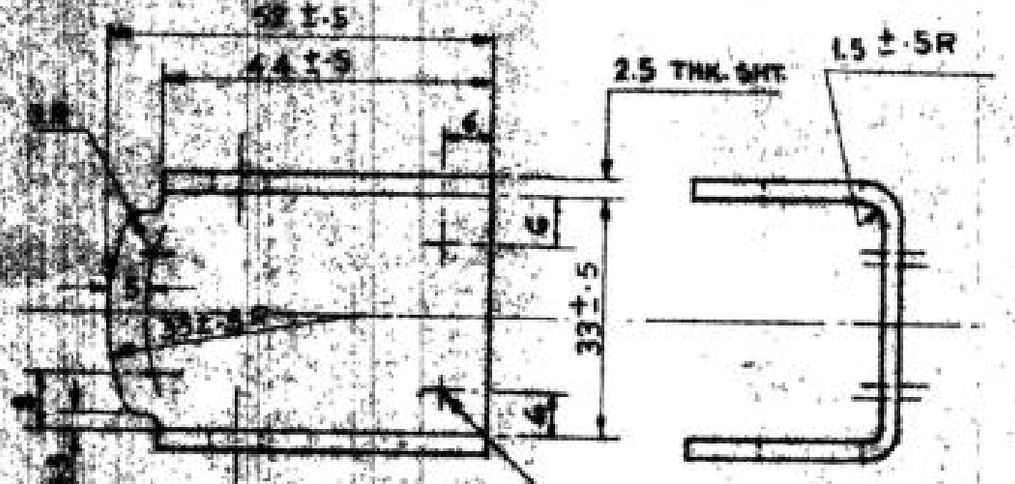
D.T.D & P. (AIR)
MINISTRY OF DEFENCE

APPROVED

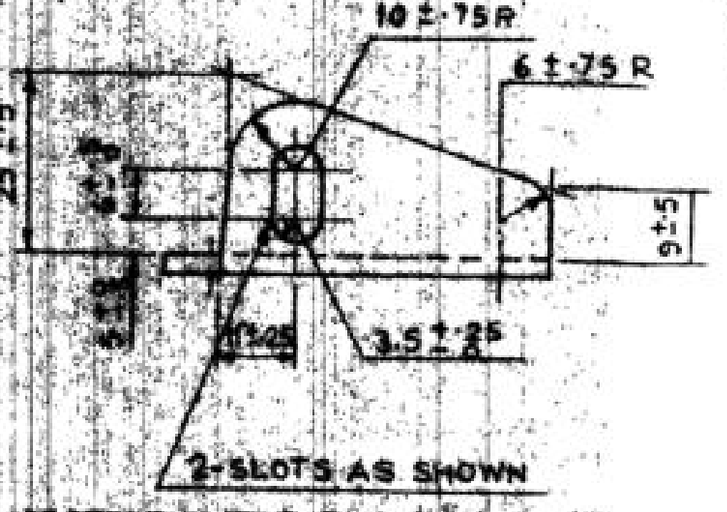
DRG. NO.
ARM 1253 A15

DRG. No. ARM 1253 A5

DRG. CONVENTIONS ARE BASED ON IS: 696.



4 POSITIONS MARKED AS SHOWN FOR SPOT WELDING.



2 SLOTS AS SHOWN

PROTECTIVE TREATMENT.
FOR PROTECTIVE TREATMENT SEE DRG. NO. ARM 1253 C1

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3	22 3/16		DRG. RETRACED WITHOUT CHANGE
2	5 7/32		REVISED VIDE A.C. NO. 171
1	20 3/16		ORIGINAL

R.NO	DATE	ZONE	PROV SEALED BRIEF RECORD	INITIAL

	DATE	INITIAL
DGN		
DRN		
CHD		
TCD		
COMP		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL - IS: 1079

SPEC. REF. NO.

GAUGE SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE :-

BRACKET

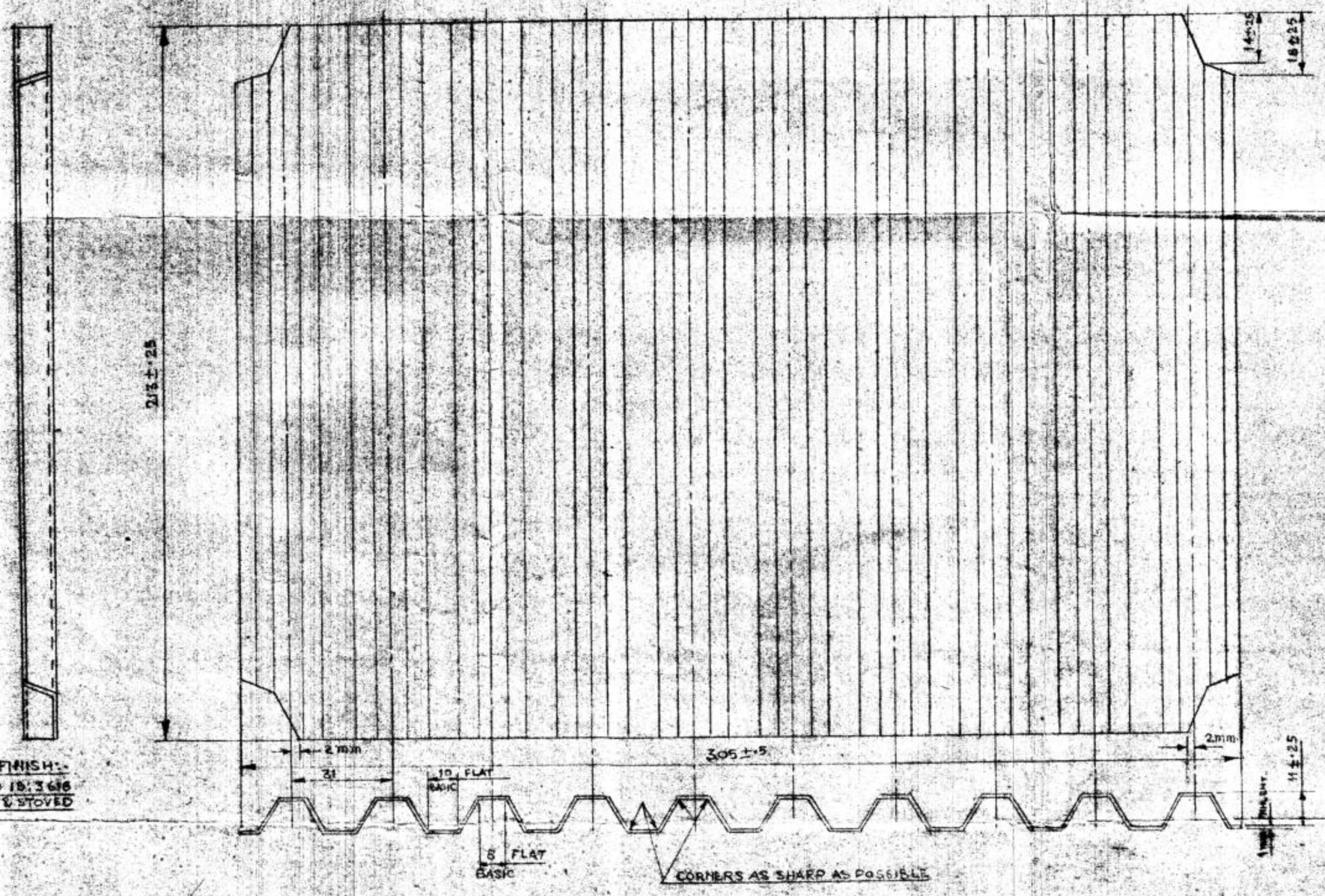
D.T.D. & P. (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG. NO. ARM 1253 A5

DRG. Nº ARM. 1253 C 33

DRG. CONVENTIONS ARE BASED ON IS: 696



PROTECTIVE FINISH:-
PHOSPHATING TO IS: 3618
CLASS 'C' OILED & STOVED

CORRUGATIONS MUST BE WITHIN ± .25 OF THEIR CORRECT LONGITUDINAL POSITION.

R Nº	DATE	ZONE	BRIEF RECORD	INITIAL
4			RETRACED	
3			PAR RETRACED WITHOUT CHANGE	
2			REVISED AL No 171	
1			ORIGINAL.	

	DATE	INITIAL	DIMENSIONS IN mm.
DRN			MATL. SPEC. STEEL IS: 513
DES			
CHD			SEC. REF. No.
TCD			GAUGES CHD No
COMP			DRG LIST No ARM 1253
SCALE:- 1/1			TITLE
TOL:- TOL EXCEPT WHERE OTHERWISE STATED			BOTTOM PLATE

D T D & P (AIR)
MIN OF DEFENCE

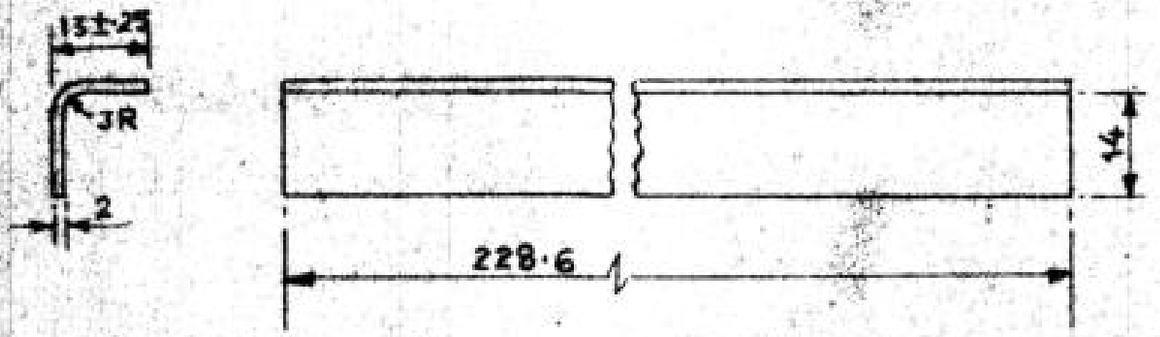
APPROVED

DRG Nº
ARM. 1253 C 33

4	3	2	1

DRG.No. ARM-1253 A-23

DRG. CONVENTIONS ARE BASED ON IS: 696. (27)



PROTECTIVE TREATMENT

FOR PROTECTIVE TREATMENT SEE DRG.No. ARM 1253 D18

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3	21 4/73	-	DRG. RETRACED WITHOUT CHANGE	sd/-
2	5 2/72	-	REVISED VIDE A.L No. 171	sd/-
1	20 1/71	-	PROV SEALED	

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
4				

	DATE	INITIAL
DGN		
DRN		
CHD	21-7-71	
TCD	27-7-71	
COMP		

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL IS:1079

SEC.REF.NO.

GAUGE.SCHD.NO.

DRG.LIST.NO. ARM 1253

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (MED)

TITLE —

BRACKET

D.T.D & P. (AHR)
MINISTRY OF DEFENCE

APPROVED

DRG.NO.
ARM-1253 A 23