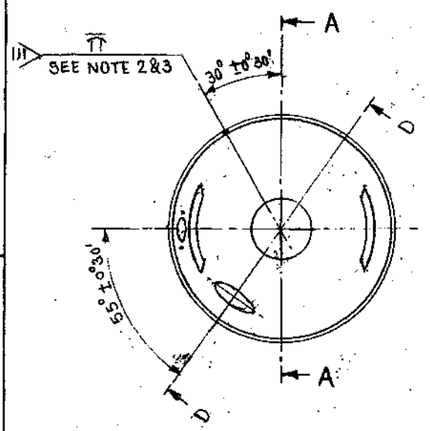
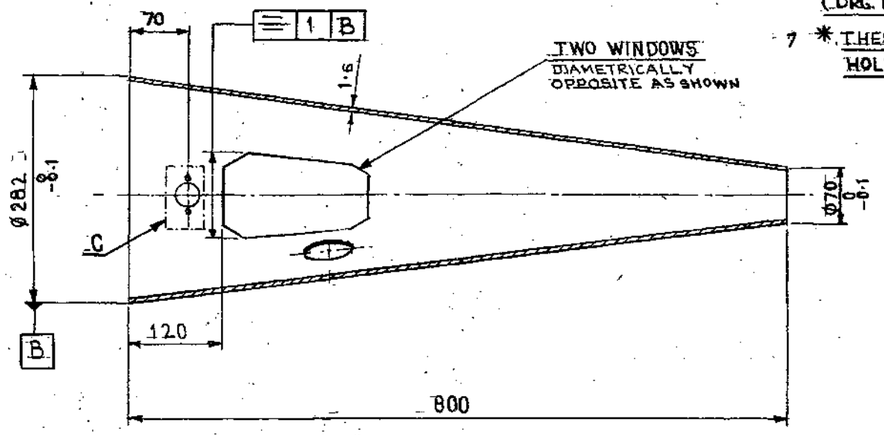
DRAWING CONVENTIONS CONFORM TO IS: [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/COARSE/FINE CLASS TO IS: 2102

PART No.
DET No. 3 | SHTS. | SHTS. No.
DRG. No. ARDE 9501-03

NOTES:—

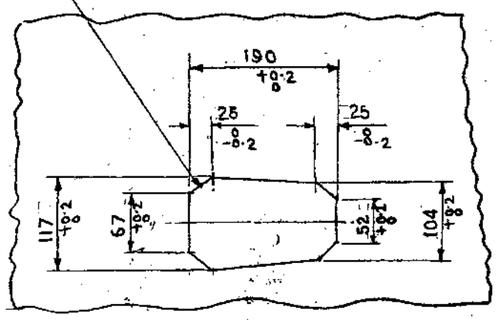
1 ALL SHARP EDGES AND BURRS ARE TO BE REMOVED.
2 WELDING SYMBOLS ARE IN ACCORDANCE WITH IS: 813.
3 STRAIGHT WELDING TO FORM CONE IS TO BE SUITABLY CHOSEN.
4 PROCEDURE OF WELDING TO MEET TO IS: 823.
5 SURFACE OF THE ROLLED CONE SHOULD BE UNIFORM AND SHOULD BE FREE FROM DENTS.
6 ALL DIMNS. ARE TO BE CHECKED AFTER "CONE BODY WELDING ASSY" (DRG. No ARDE 9501-03/2)
7 * THESE HOLES ARE TO BE DRILLED IN CONJUNCTION WITH HOLES ON "GROMET" (DRG NO ARDE 9501-03/14)



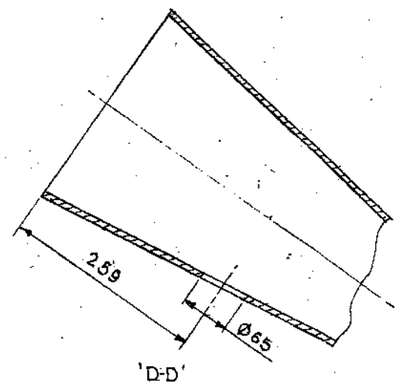


A-A

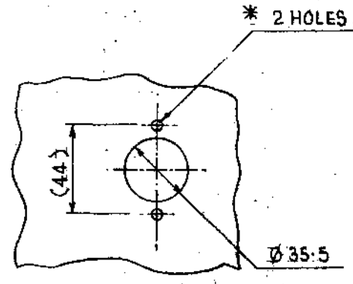
WINDOW TO BE MADE BY
DIE & PUNCH ONLY.



WINDOW DETAILS
VIEW ON DEVELOPMENT



'D-D'
(TO INDICATE LOCATION OF HOLE)



ENLARGED VIEW AT 'C'

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. [redacted] CHD. [redacted] TRD. COMP.
CD PASSED
APPROVED (C.E.) (R.PERUMAL) FOR DIRECTOR
MATL: STEEL TO IS:1079 St.34
PROTECTIVE FINISH: PHOSPHATED TO IS: 3618 CLASS B

SCALE: 1:5
EST MASS:
GAUGE SCHD:
DATE: 10-7-99

ASSY DRG. ARDE 9501-03/2
DESIGN AUTHORITY
ARDE PUNE-411 021

DRG. No. ARDE 9501-03
DET. No. 3 | SHTS. | SHT No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE:

CONE BODY

(13)

1	2	3	4

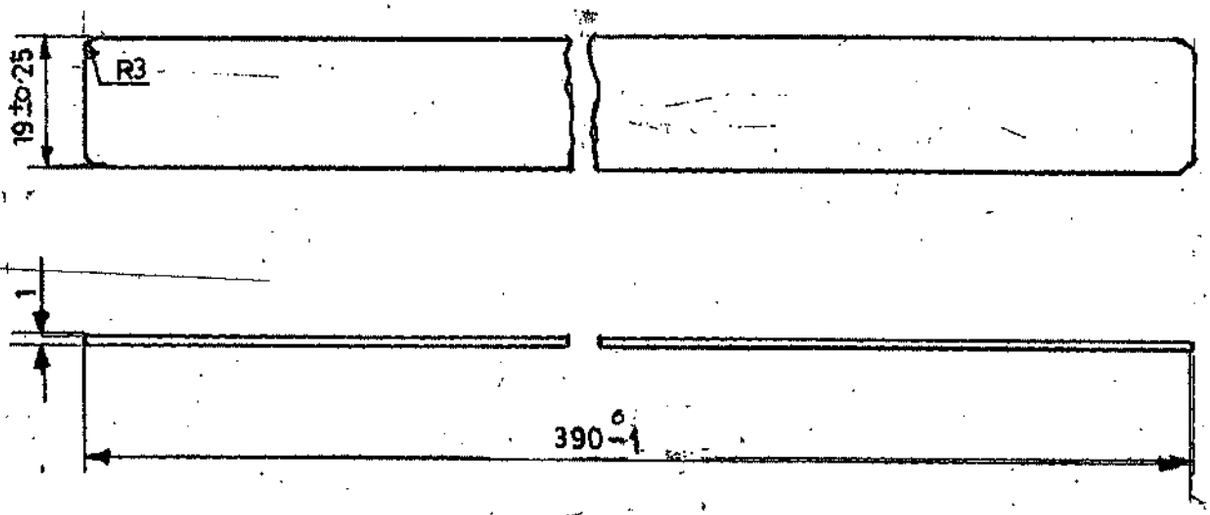
DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/[redacted] CLASS TO IS : 2102

PART No.

DET No. 10 | SHTS. | SHTS. No.

DRG. No. ARDE 2283



PROTECTIVE FINISH :—

PHOSPHATING TO IS 3618 CLASS 'B' OILED & STOVED

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV) 01 Nov 96 CRE (AA)

DRN. SMP	CHD.	TRD.	COMP.
CD	PASSED	SCALE : 1 : 1	
APPROVED	FOR DIRECTOR	EST MASS:	
		GAUGE SCHD :	
		DATE : 28-6-96	

MATL : STEEL TO SPEC IS : 513 Gd. 'O'
ANNEALED CONDITION

PROTECTIVE FINISH : AS ABOVE

TITLE :

HINGE PLATE

ASSY DRG. ARDE 2283/5

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 2283

DET. No. 10 | SHTS. | SHT. No.

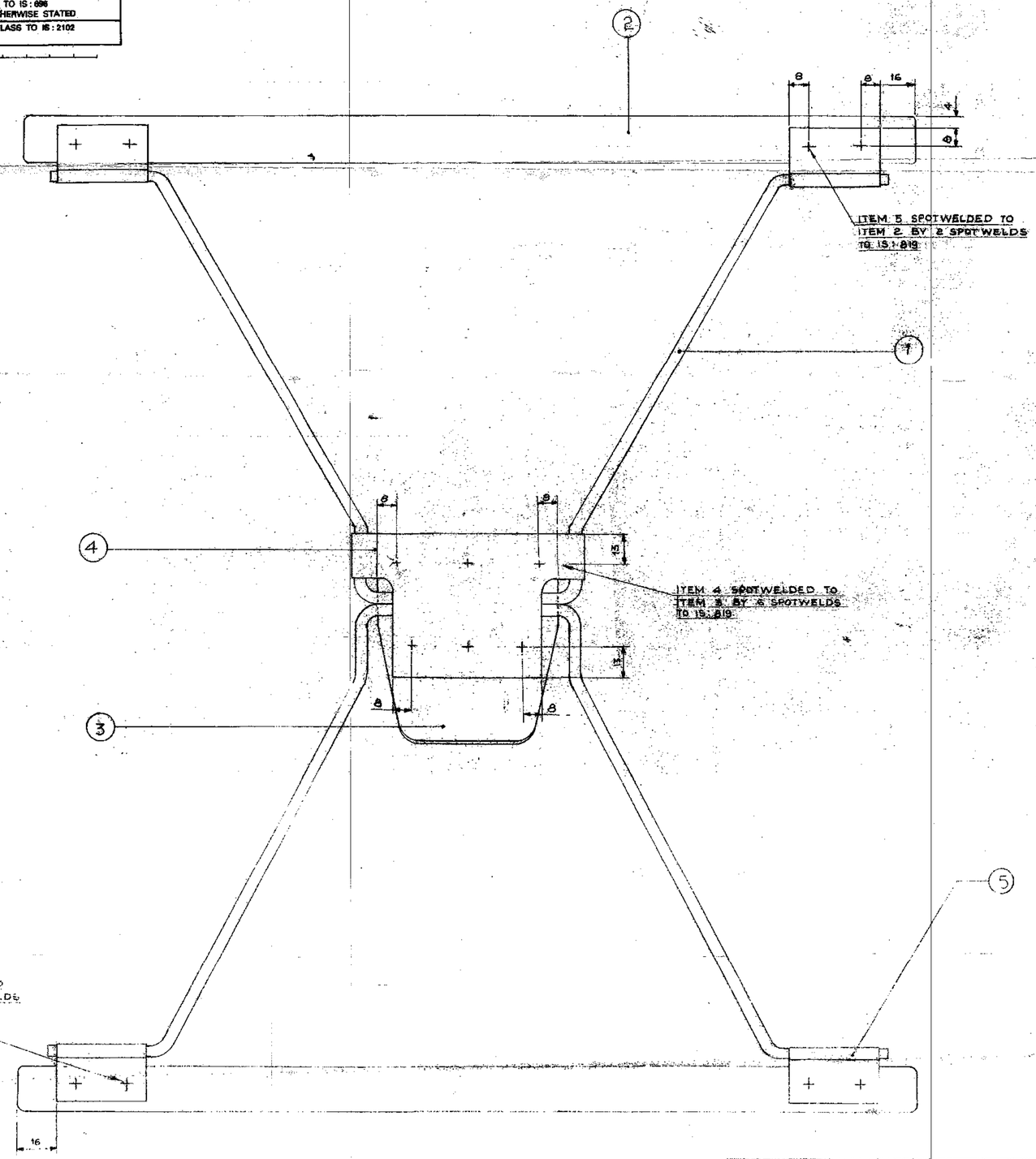
PART No.

D. S. CAT. No.

A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/COURSE/FINE CLASS TO IS : 2102

DRG. No. ARDE 2283
PART No.
DET No. 5 SHTS. SHT.No.



LIST OF COMPONENTS

ITEM No.	DESCRIPTION	DRG No.	DET No.	PART No.	No. OFF
1	LINK	ARDE 2283	9		2
2	HINGE PLATE	ARDE 2283	13		2
3	HANDLE	ARDE 2283	11		1
4	HANDLE PLATE	ARDE 2283	12		1
5	HINGE	ARDE 2283	10		4

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO	SIGN
DRG SEALED (PROV)					CRE(AA)		

CHD. RI COMP.
APPROVED DATE : 28-6-56
MATL :
PROTECTIVE FINISH :

ASSY DRG ARDE 2283 SHT4.
DESIGN AUTHORITY
ARDE PUNE - 411021

DRG. No. ARDE 2283
DET. No. 5 SHTS. SHT.No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE :

LINK ASSY

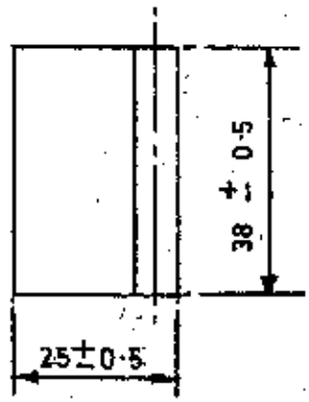
(15)

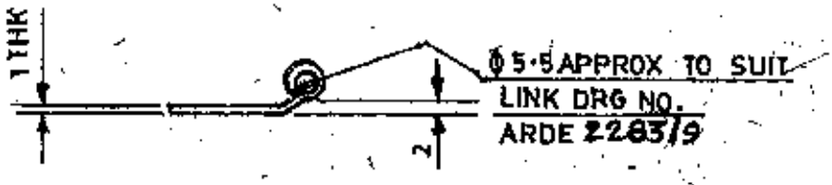
1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS: 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM CLASS TO IS: 2102

DRG. No. ARDE 2283 | DET. No. 13 | SHTS. | SHTS. No. | PART No.





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

NOTE :— DRG BASED ON ARM 1253 A32.

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV) 01 NOV 96 CRE (AA)

DRN. SMP	CHD.	TRD.	COMP.
CD	PASSED	SCALE: 1:1	
APPROVED	FOR DIRECTOR	EST MASS:	
		GAUGE SCHD:	
		DATE: 28-6-96	

ASSY DRG. ARDE 2283/5

DESIGN AUTHORITY
ARDE · PUNE - 411 021

MATL: STEEL TO SPEC. IS:513 Gd.'O'
ANNEALED CONDITION

PROTECTIVE FINISH: AS ABOVE

TITLE:

HINGE

DRG. No.
ARDE 2283

DET. No. 13 | SHTS. | SHT. No.

PART No.

D. S. CAT. No.

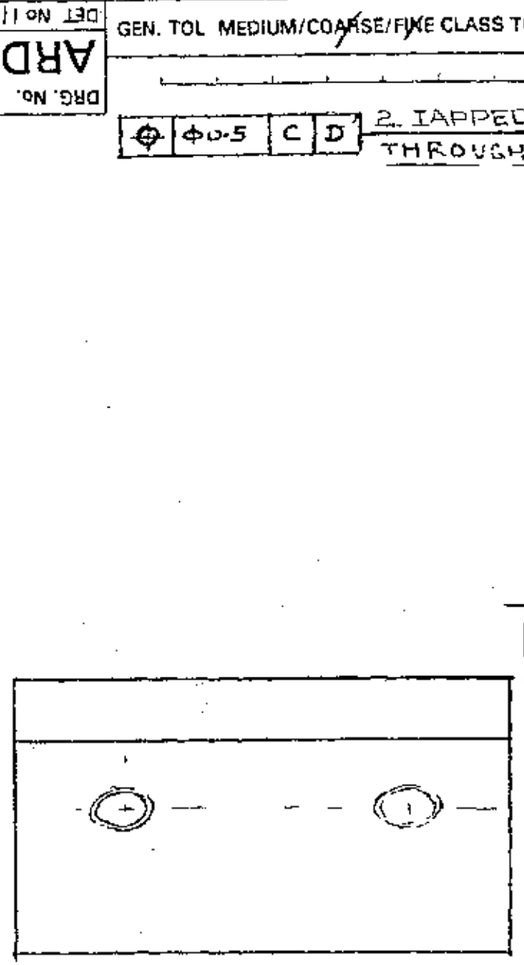
A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS
DIMNS ARE IN m m UNLESS OTHERWISE STATED
GEN. TOL MEDIUM/COARSE/FINE CLASS TO IS : 2102

DRG. No. ARDE 9501-03
PART No.
DET No 11 | SHTS. | SHTS No

NOTE- ALL SHARP EDGES AND BURRS ARE TO BE REMOVED

⌖ Ø0.5 C D 2. TAPPED HOLES M6 THROUGH



R NO.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. V V B | CHD | TRD. | COMP.
CD | PASSED | SCALE : 2 : 1
EST MASS :
APPROVED FOR DIRECTOR | GAUGE SCHD :
DATE : 28-1-94

MATL STEEL TO IS: 2004 CLASS 2/2A NORMALISED
CONDITION IS: 2062 Fe 410 WB
PROTECTIVE FINISH PHOSPHATED TO IS: 3618 CLASS 'B'

ASSY DRG ARDE 9501-03/2
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03
DET. No. 11 | SHTS. | SHT. No.
PART No.
D S CAT No
A.H.S.P.

TITLE:

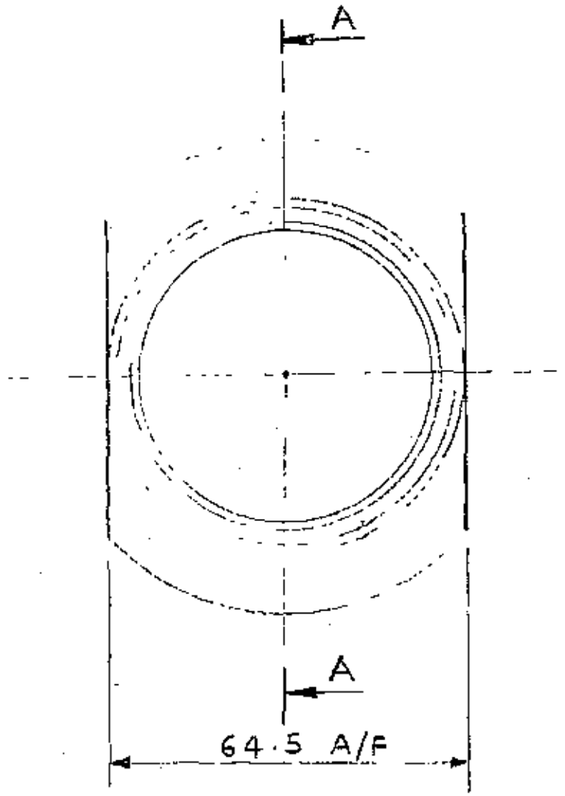
BRACKET

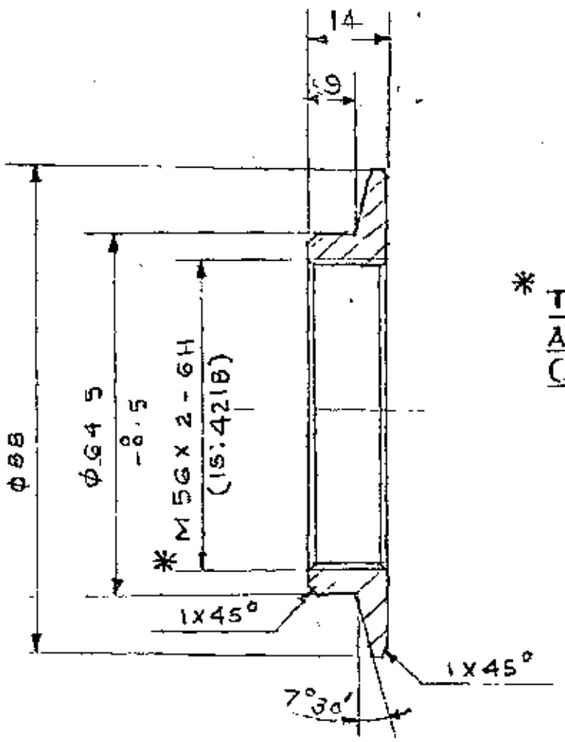
12

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN TOL MEDIUM/COARSE/FINE CLASS TO IS : 2102

DRG. No	DET No. 12	SHTS.	SHTS. No.	PART No.
ARDE 9501-03				

NOTE- ALL SHARP EDGES AND BURRS ARE TO BE REMOVED





SECTION 'A-A'

* THIS DIMENSION IS TO BE CHECKED AFTER WELDING TO THE CONE BODY (DRG No. ARDE 9501-03/2)

R. NO.	DATE.	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE (AA)	19 APR 2000		

DRN. V V B.	CHD.	TRD.	COMP.
CD	PASSED	SCALE. 1:1	
		EST MASS.	
APPROVED FOR DIRECTOR		GAUGE SCHD :	
		DATE 18-2-94	

MATL. STEEL TO IS 2004 CLASS 2/2A NORMALISED CONDITION OR IS: 2062 Fe 410 W B
PROTECTIVE FINISH. PHOSPHATED TO IS: 3618 CLASS B

ASSY DRG ARDE 9501-03/2
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03

DET No. 12	SHTS.	SHT. No.

PART No
D.S CAT No
A H.S P

TITLE.

FLEXIBLE DRIVE ADAPTOR

DRAWING CONVENTIONS CONFORM TO IS : ~~696~~

DIMNS ARE IN m m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS : 2102

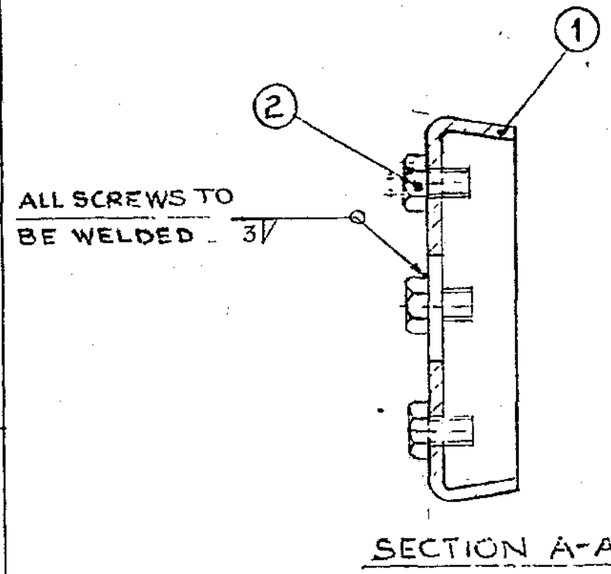
PART No.

DET. No. 7 | SHTS. | SHTS. No.

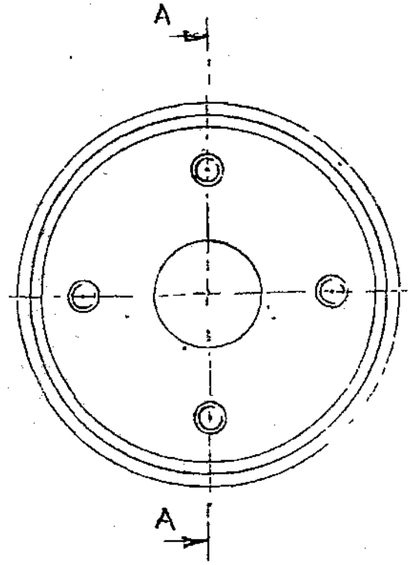
DRG. No. ARDE 9501-03

LIST OF COMPONENTS

ITEM No.	NOMENCLATURE	No. OFF	MATL	DRG No.	DET No	PART No.
1	END COVER	1		ARDE 9501-03	8	
2	HEX. HD SCREW M6 X 1-12 LONG IS: 1363 (PART-2)	4	STEEL	N D	—	



SECTION A-A



R NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR. 2000		

DRN. CR Phatak | CHD. | TRD. | COMP.

CD | PASSED | SCALE : 1 : 1

EST MASS :

APPROVED | GAUGE SCHD :

FOR DIRECTOR | DATE : 10-7-1995

MATL :

PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03/2

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. **ARDE 9501-03**

DET. No. 7 | SHTS | SHT. No

PART No.

D.S.CAT.No.

A.H.S P.

TITLE.

END COVER ASSY

8

DRAWING CONVENTIONS CONFORM TO IS : 696

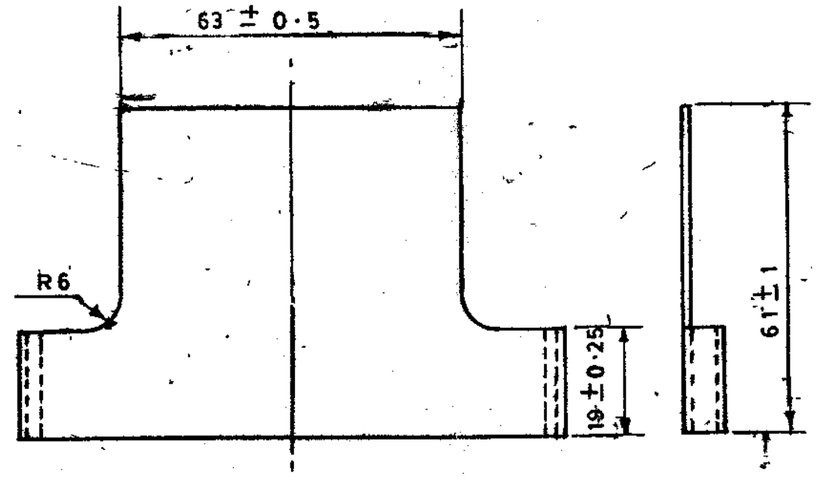
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

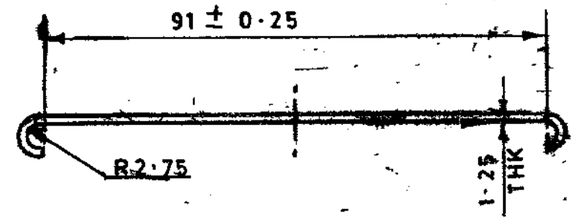
GEN. TOL. MEDIUM/[redacted] GLASS TO IS : 2102

DRG. No. ARDE 2283

PART No.

DET No. 12 | SHTS. | SHT. No.





PROTECTIVE FINISH:—

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

NOTES:—

DRG. BASED ON DRG. NO. ARM. 1253 A 31.

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV) 01 NOV 96 CRE (AA)

DRN. S M P | CHD. | TRD. S.M.P | COMP.

CD | PASSED | SCALE: 1:1

APPROVED | FOR DIRECTOR | EST MASS:

GAUGE SCHD:

DATE: 28-6-96

MATL: STEEL TO SPEC IS: 513 Gd. 'O' ANNEALED CONDITION

PROTECTIVE FINISH: AS ABOVE

ASSY DRG. ARDE/2283/5

DESIGN AUTHORITY

ARDE PUNE - 411021

DRG. No. ARDE 2283

DET. No. 12 | SHTS. | SHT. No.

PART No.

D. S. CAT. No.

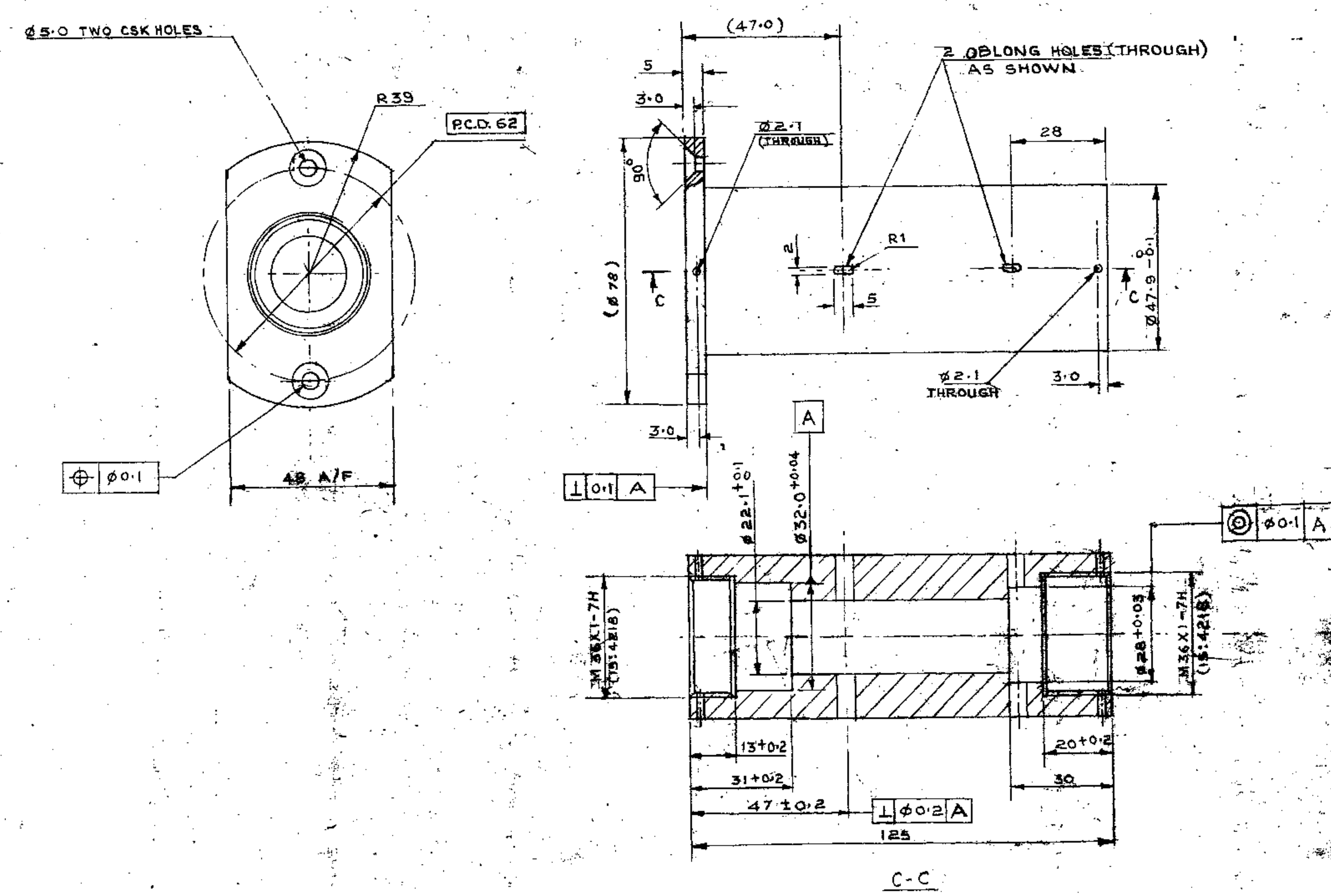
A.H.S.P.

TITLE:

HANDEL PLATE

DRG. No. ARDE 9501-03	DRAWING CONVENTIONS CONFORM TO IS:
DET. No. 16 / SHTS. / SHTS. No. / PART No.	DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
	GEN. TOL. MEDIUM/COURSE/FINE CLASS TO IS : 2102

NOTES:- ALL SHARP EDGES & BURRS ARE TO BE REMOVED



R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GQ
[redacted]						
					SIGN	

DRG SEALED (PROV) RD, RCMA(4A) 25 SEP 2001

DRN.	CHKD.	TRD.
CD	PASSED	SCALE: 1:1
		EST. MASS:
		GAUGE SCHD:
		DATE: 31-10-1995
MATL:		
PROTECTIVE FINISH: ANODISED TO IS: 1868 AC 25		

ASSY DRG. No. ARDE 9501-03	COMP.
DESIGN AUTHORITY	
ARDE PUNE-411 021	
DRG. No. ARDE 9501-03	
DET. No. 16	SHTS. / SHT. No.
PART No.	
D. S. CAT. No.	
A.H.S.P.	

TITLE:

HOUSING

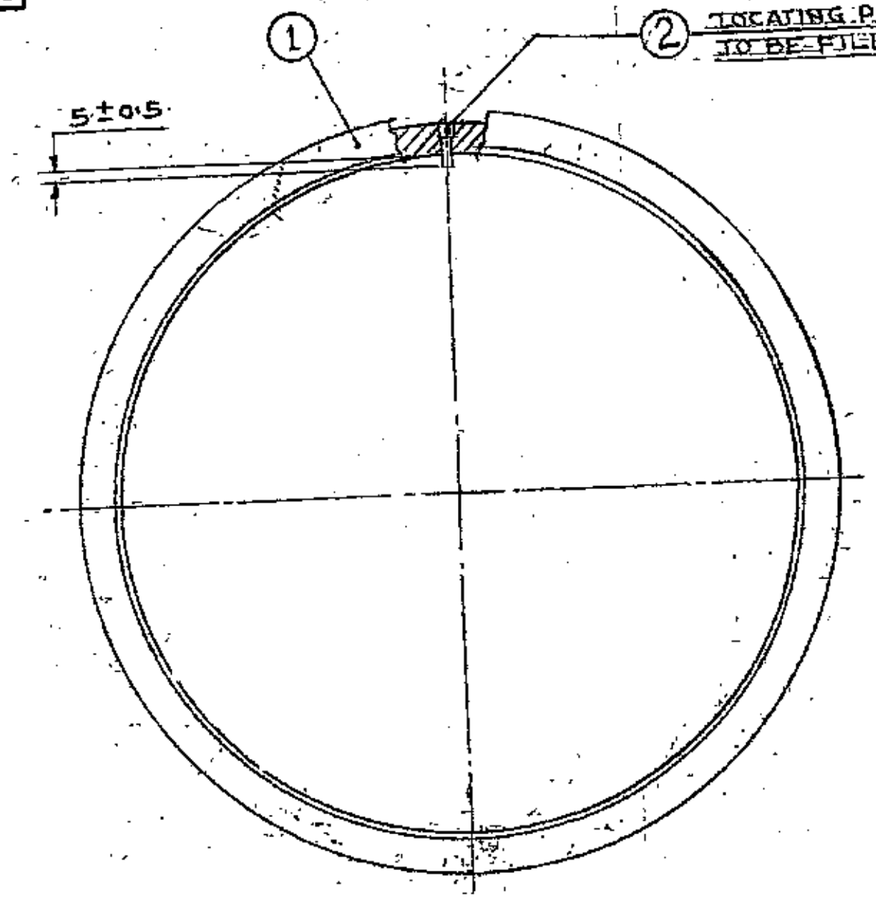
19

DRAWING CONVENTIONS CONFORM TO IS: [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/ COARSE/ FINE CLASS TO IS : 2102

DRG. No. ARDE 9501-03
DET No. 4 | SHTS. | SHTS. No.
PART No.

LIST OF COMPONENTS

ITEM No	NOMENCLATURE	No OFF	MATL	DRG. No	DET. No	PART No
1	CONE RING	1		ARDE 9501-03	5	
2	LOCATING PIN			ARDE 9501-03	6	



2 LOCATING PIN TO BE PRESS FIT. RECESS ABOVE PIN HEAD TO BE FILLED BY WELDING & GRINDING FLUSH.

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. [redacted] CHD. [redacted] TRD. COMP.
CD [redacted] PASSED [redacted] SCALE: 1:2
APPROVED [redacted] FOR DIRECTOR DATE: 7-1-54
EST. MASS:
GAUGE SCHD:
MATL:
PROTECTIVE FINISH:

ASSY DRG. ARDE 9501-07 / 2
DESIGN AUTHORITY
ARDE PUNE - 411021
DRG. No ARDE 9501-03
DET. No. 4 | SHTS. | SHT. No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE:

CONE RING ASSY.

(5)

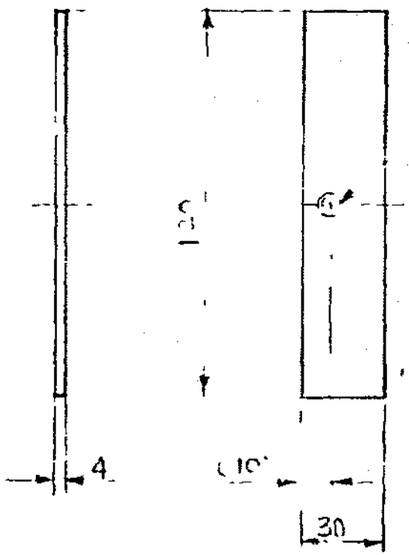
DRAWING CONVENTIONS CONFORM TO IS

GEN TOL MEDIUM/COARSE/FINE CLASS TO IS . 2102

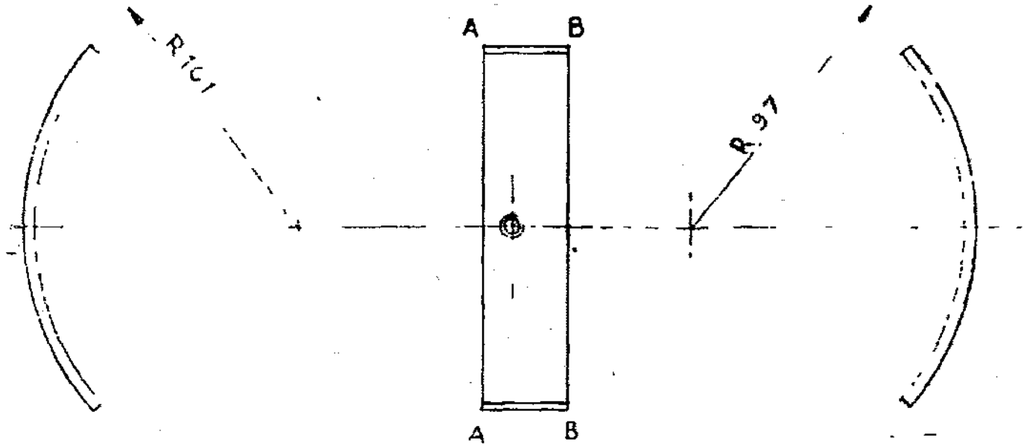
DRG No ARDE 9501-03

SHTS. SHTS.No. DET No 10

NOTE :— ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



VIEW ON DEVELOPMENT



FACE A A

FACE B B

VIEW AFTER FORMING

R. NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			Jai m Sharma CRE(AA)		19 APR 2000	

DRN C.R.Phatak | CHD. S. | TRD | COMP.

CD | PASSED | SCALE . 1:2

APPROVED | FOR DIRECTOR | EST MASS :

GAUGE SCHD :

DATE . 28-1-94

MATL . STEEL TO IS: 1079, St 34

PROTECTIVE FINISH . PHOSPHATED TO IS: 3618, CLASS 'B'

ASSY DRG ARDE 9501-03/2

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 9501-03

DET No 10 | SHTS. | SHT. No.

PART No.

D.S CAT.No.

A.H.S P.

TITLE

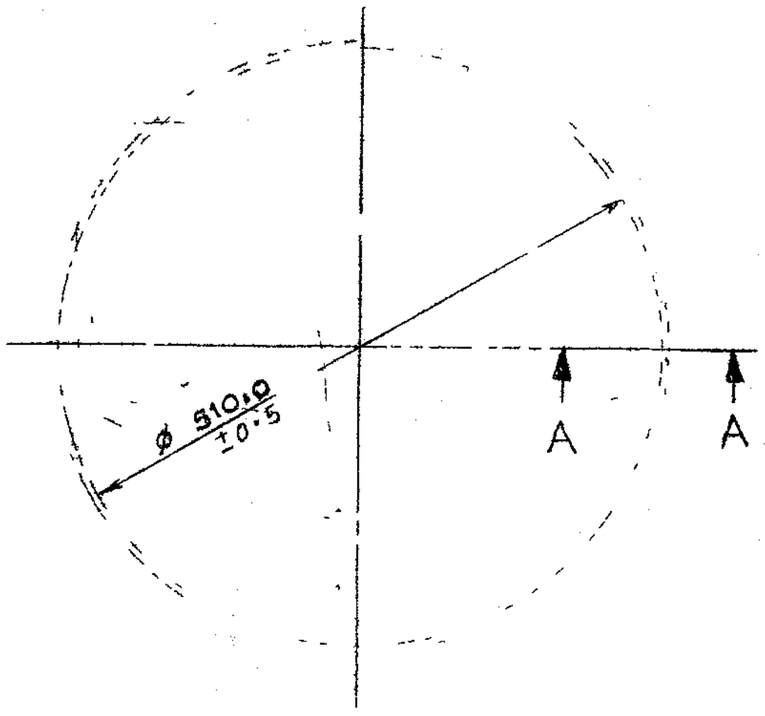
PANEL SUPPORT SMALL

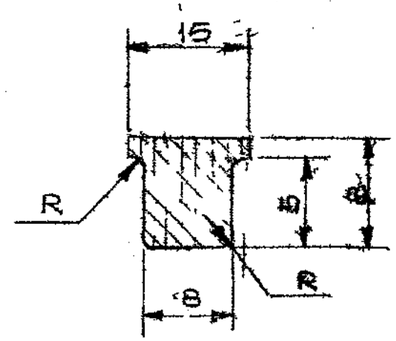
GRG CONVENTIONS CONFORM TO IS 696
DIM. ARE IN mm
GEN. TOL MEDIUM CLASS TO IS 2102

DRG No. ARDE 2039
PART No
DET No II | SHTS | SHT No

NOTE

RING TO BE FREE FROM FLASH.
PRESERVED IN TALKDUST, TO BE COATED
WITH SILICON GREASE BEFORE ASSY





PART SECTION 'A-A'
(SCALE 2:1)

MATL
NEOPRENE RUBBER TO SPEC IN/ME/884
(PROV.) HARDNESS 50 TO 55

R. No	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GD
					SIGN	
ORG SCALED						

DRN [illegible] CHD [illegible] TRD | COMP
PASSED [illegible] SCALE 1:5
APPROVED [illegible] FOR DIRECTOR EST WEIGHT
GAUGE SCHD
DATE 15-7-86
MATL AS ABOVE
PROTECTIVE FINISH

ASSY DRG ARDE 2039 SHT 4
DESIGN AUTHORITY
ARDE PUNE-21
DRG No
ARDE 2039
DET No II | SHTS | SHT No
PART No
D & CAT No
ATTSP

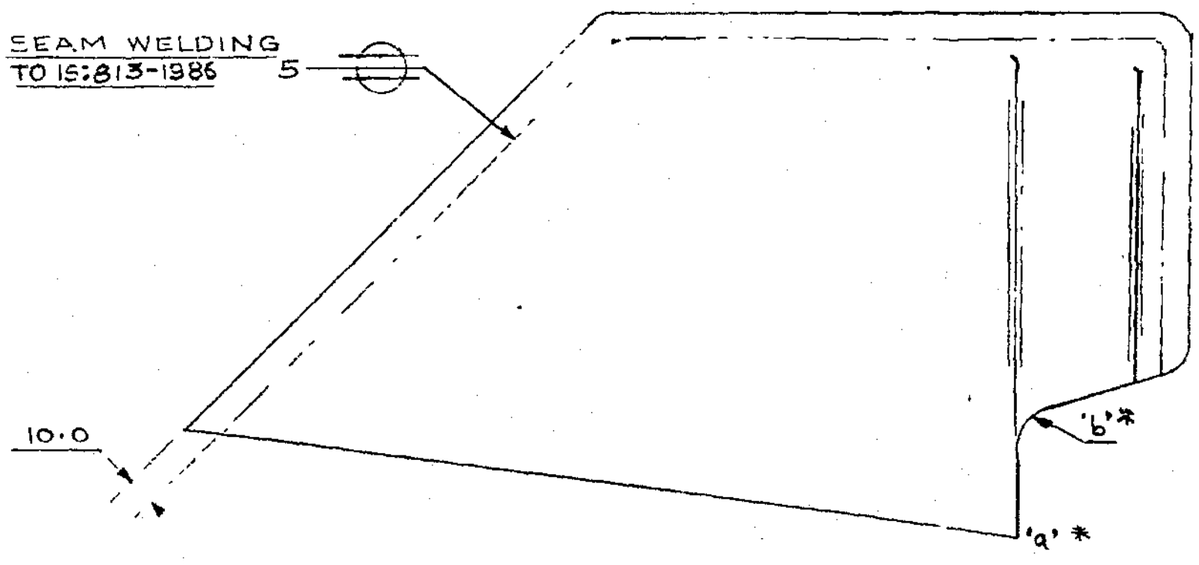
RING RUBBER

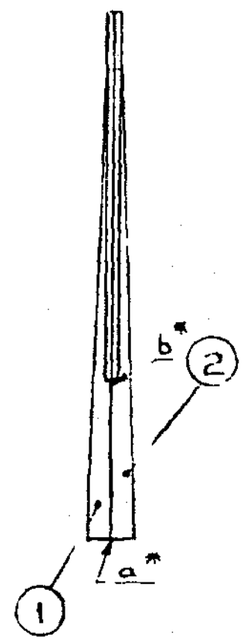
DRAWING CONVENTIONS CONFORM TO IS ·
DIMNS ARE IN m m UNLESS OTHERWISE STATED
GEN TOL MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS 2102

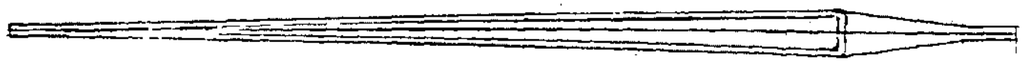
DRG. No ARDE 9501-03
DET. No 13 | 3 SHTS. | SHT. No 1
PART No

LIST OF COMPONENTS

ITEM No.	NOMENCLATURE	No. off	MATL	DRG No.	DET No.	PART No.
1	FIN LEFT	1	-	ARDE 9501-03	13/2	-
2	FIN RIGHT	1	-	" "	13/3	-







* BUTT WELDING ALONG a-b
(TO BE GROUND FLUSH AFTER BUTT WELDING)

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD SIGN	GO
DRG SEALED (PROV.)			Jain in Jain CRE(AA)		19 APR 2000	

DRN C R Phatak | CHD. | TRD | COMP.
CD | PASSED | SCALE : 1:2
APPROVED FOR DIRECTOR | EST MASS : | GAUGE SCHD : | DATE 23-5-1996
MATL .
PROTECTIVE FINISH :

ASSY DRG ARDE 9501-03/2
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG No.
ARDE 9501-03
DET. No 13 | SHTS 3 | SHT. No. 1.
PART No
D S.CAT.No
A H S P. (14)

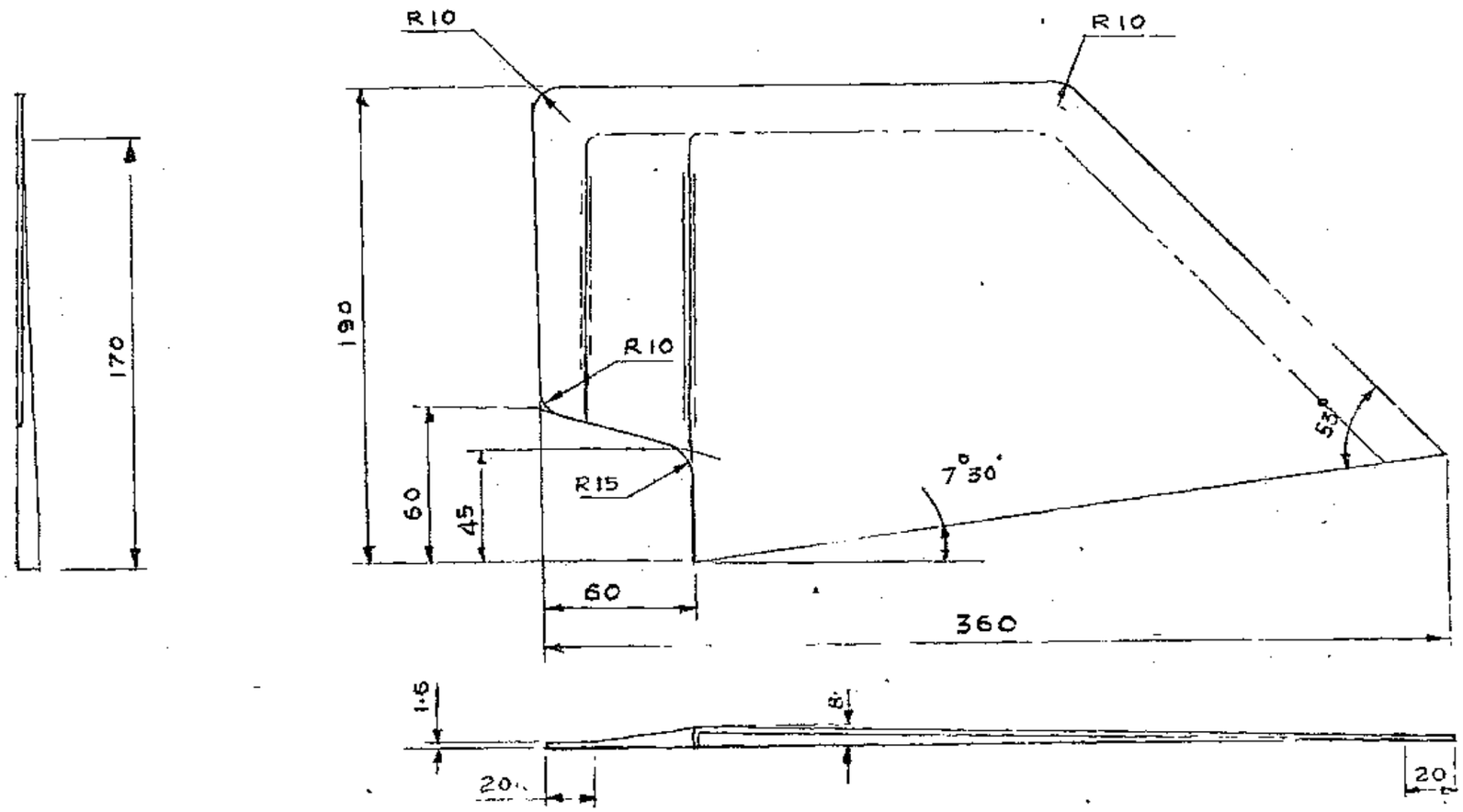
TITLE

FIN ASSY
(WELDING)

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN TOL MEDIUM/COARSE/FINE CLASS TO IS : 2102

NOTE:- ALL SHARP EDGES & BURRS ARE TO BE REMOVED.

DRG No ARDE 9501-03
DET. No. 13 | 3 SHTS | SHT.No. 3
PART No.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR. 2000		

DRN. C R Phatak | CHD. [redacted] | TRD. | COMP.
CD [redacted] | PASSED [redacted] | SCALE : 1 : 2
APPROVED [redacted] FOR DIRECTOR | EST MASS :
GAUGE SCHD :
DATE . 23-5-1996
MATL : STEEL TO IS: 1079. St-34
PROTECTIVE FINISH : PHOSPHATED TO IS: 3618 CLASS 'B'

ASSY DRG. ARDE 9501-03 / 13 SHT 1
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03
DET. No. 13 | SHTS 3 | SHT. No 3
PART No.
D.S.CAT.No
A H.S.P.

TITLE:
FIN_RIGHT

DRAWING CONVENTIONS CONFORM TO IS: [illegible]	
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED	
GEN. TOL. MEDIUM/[illegible] CLASS TO IS: 2102	

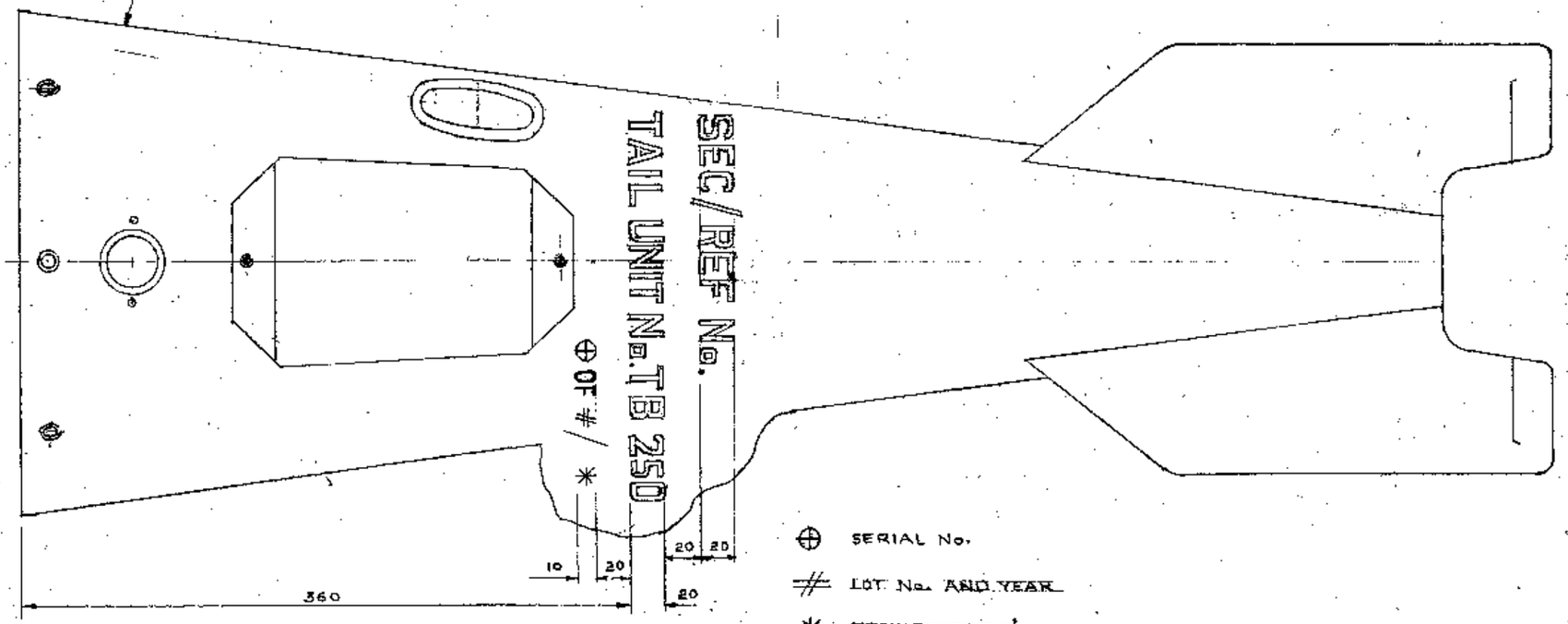
PART No. | DET No. 1 | SHTS. | SHTS. No.

ORG No. ARDE 9501-03

NOTES:-

1) OMIT PAINT FROM ALL SCREW THREADS & HOLES.
2) FIRST COAT :- PAINT, PRE-TREATMENT PRIMER (ETCHING PRIMER) TYPE SPRAYING TO SPECN DEF STAN 80-15/1.
3) SECOND COAT :- PAINT, PRIMING CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR RED OXIDE (No.446) TO IS:5
4) THIRD COAT :- PAINT FINISHING, CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR DEEP BRONZE GREEN (No.224) TO IS:5
5) ALL COATS OF PAINTS TO BE APPLIED ALL OVER INTERNALLY AND EXTERNALLY.
6) ALL THE MARKINGS ON THE TAIL CONE TO BE STENCILLED/SCREEN PRINTED WITH PAINT, FINISHING, CHLORINATED RUBBER, TYPE BRUSHING TO SPECN. DEF STAN 80-72/1, COLOUR CANARY YELLOW (No.309) TO IS:5.
7) FOR METHOD OF APPLICATION AND TESTS FOR SUITABILITY OF THE PAINTS, REFER PARA 6:7.4 OF SPECIFICATION No. ARDE/SPECN/613.

CONE BODY WELDING ASSY. (ARDE 9501-03/2)



⊕ SERIAL No.
// LOT No. AND YEAR
✳ MANUFACTURERS EMBLEM

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV.) CRE(AA) 19 APR 2000

DRNC. R.PHATAK CHD. PASSED TRD. COMP.
CD W/S APPROVED FOR DIRECTOR
SCALE: 1:2
EST MASS:
GAUGE &CHD:
DATE: 7-9-99
MATL:
PROTECTIVE FINISH:

ASSY DRG. ARDE 9501-03
DESIGN AUTHORITY
ARDE PUNE-411 021

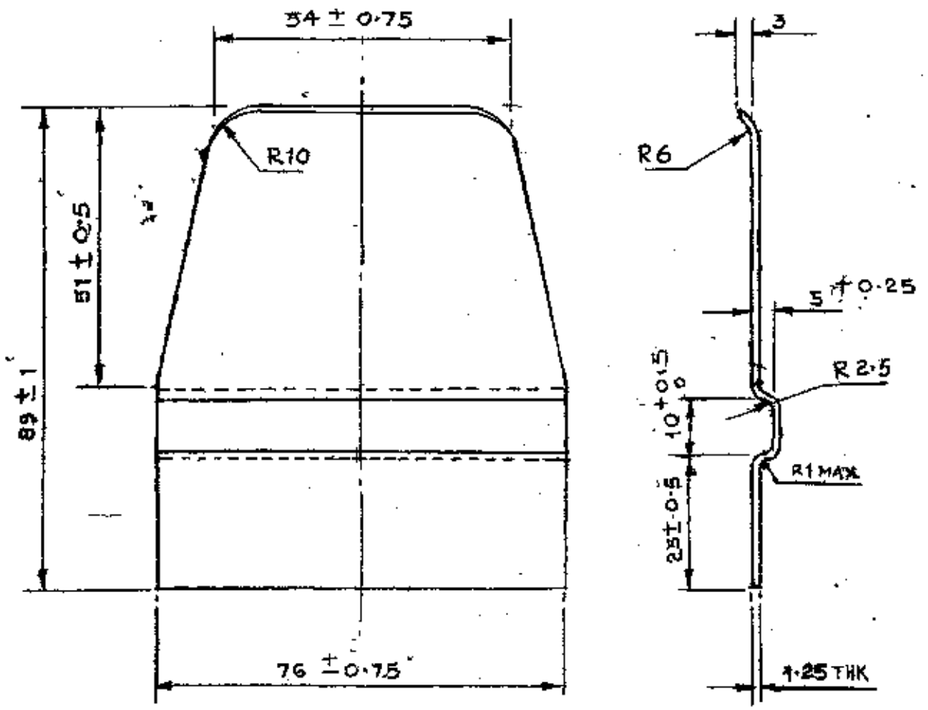
DRG. No. ARDE 9501-03
DET. No. 1 | SHTS. | SHT. No.
PART No.
D.S. CAT. No.
A.H.S.P.

TITLE:

CONE BODY ASSY
PAINTING & STENCILLING

DRAWING CONVENTIONS CONFORM TO IS: 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL.- MEDIUM/[illegible] CLASS TO IS: 2102

DRG. No. ARDE 2283
PART No.
DET No. 11 SHTS. SHTS. No.



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

NOTE
DRG BASED ON DRG No ARM 1253A30

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV)					CRE(AA)	

DRN. S.M.P. | CHD. [illegible] | TRD. | COMP.
CD | PASSED [illegible] | SCALE: 1:1
EST MASS:
APPROVED [illegible] FOR DIRECTOR | GAUGE SCHD:
DATE: 28.6.96
MATL: STEEL TO SPEC. IS: 513, Gd. 'O' ANNEALED CONDITION.
PROTECTIVE FINISH: AS ABOVE

ASSY DRG. No. ARDE 2283/5
DESIGN AUTHORITY
ARDE PUNE - 411021
DRG. No. ARDE 2283
DET. No. 11 | SHTS. | SHT. No.
PART No.
D.S. CAT. No.
A.H.S.P.

TITLE:

HANDLE

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS 2102

PART no.

DET.No. 8 | SHTS. | SHTS. No.

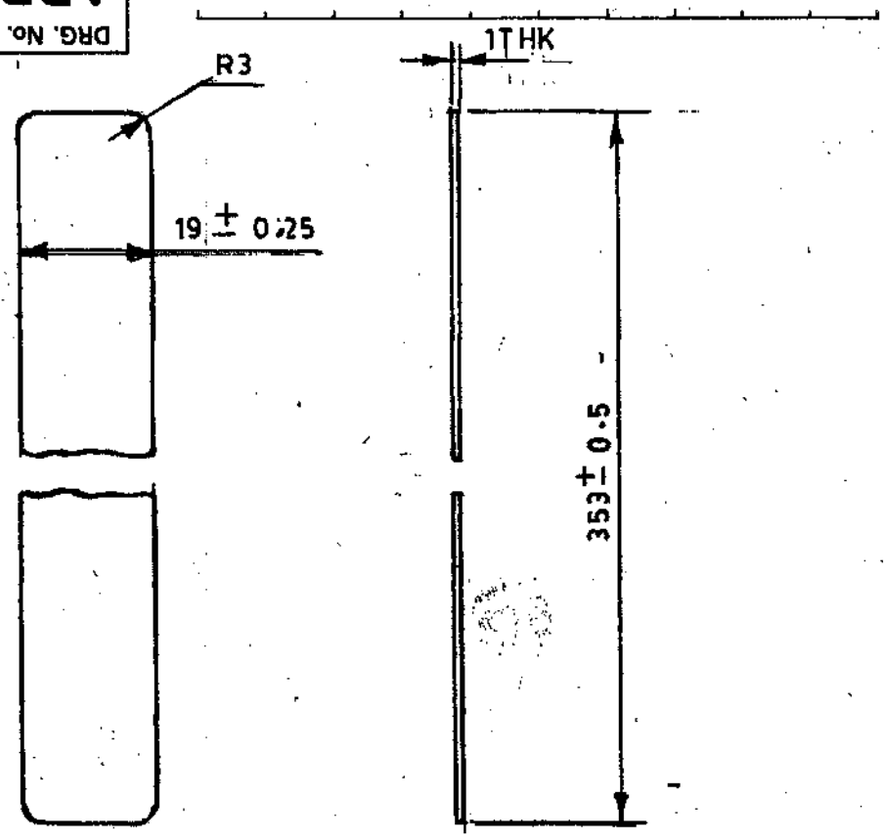
DRG. No. ARDE 2283

D

C

B

A



PROTECTIVE FINISH :—

PHOSPHATING TO SPEC-IS:3618 CLASS 'B' OILED & STOVED.

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV) 01 NOV 96 CRE (AA)

DRN. SMP	CHD.	TRD.	COMP.	ASSY. DRG. ARDE 2283 SHTS 4
CD	PASSED	SCALE : 1:1		DESIGN AUTHORITY
		EST. MASS:		ARDE PUNE-411 021
APPROVED	FOR DIRECTOR	GAUGE SCHD :		
		DATE : 28·6·96		

MATL : STEEL TO SPEC-IS:513 Gr.O'
ANNEALED CONDITION

PROTECTIVE FINISH : AS ABOVE

TITLE :

BOTTOM PLATE TIE PIECE

DRG. No. ARDE 2283

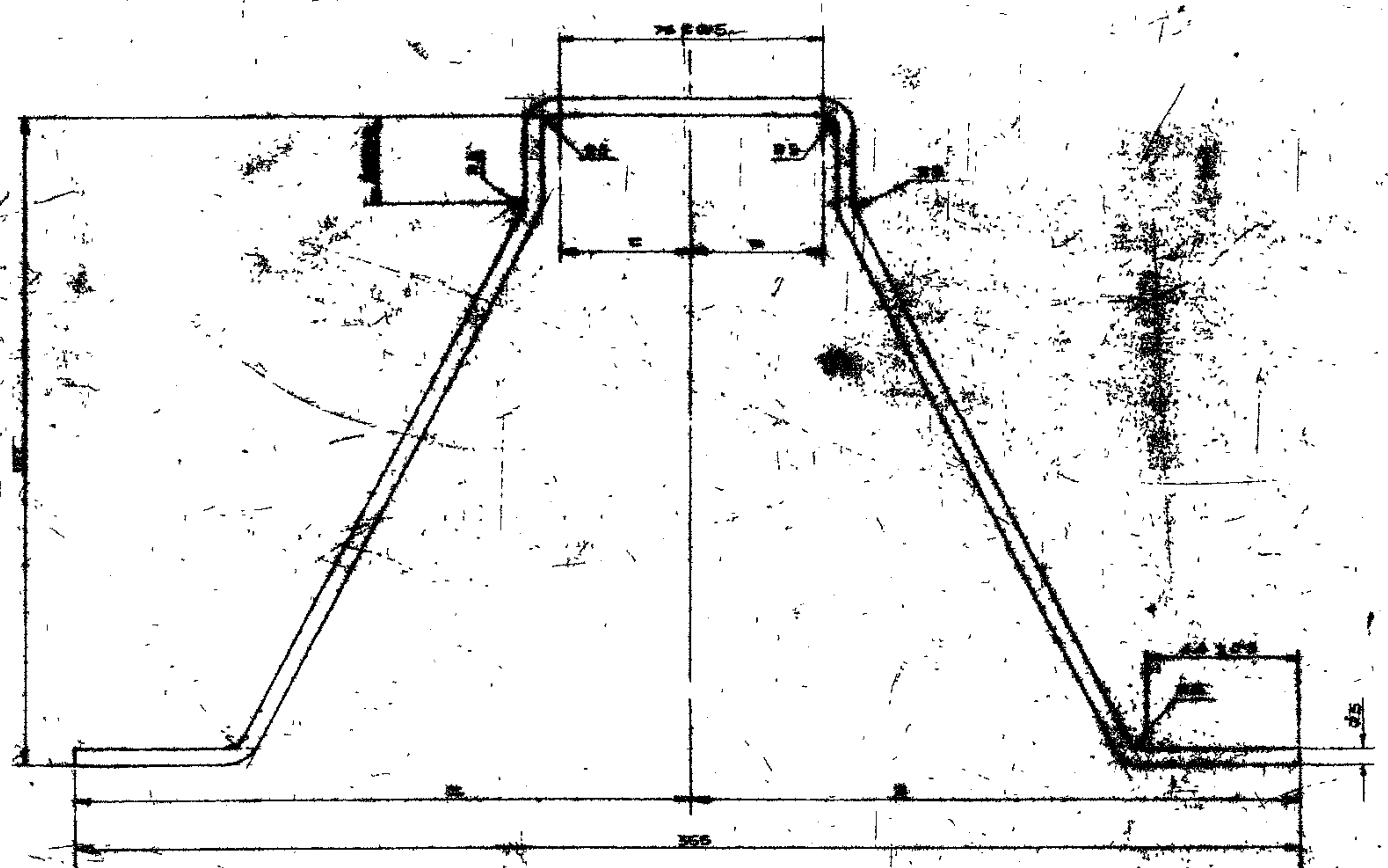
DET. No. 8	SHTS.	SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS 696
DIMNS ARE IN mm UNLESS OTHERWISE STATED
GEN. TOL. COARSE CLASS TO IS 2102



PROTECTIVE FINISH: PHOSPHATING TO IS: 5618 CLASS B; OILED AND STOVED

R NO.	DATE	AUTHORITY	BRIEF RECORD	ZONE

DRG SEALED (PROV) 01 NOV 96

TBD. COMP
SCALE 1/1
EST MASS;
GAUGE SCHD
DATE: 28-6-96
MATL: STEEL TO SPEC. IS: 1570 Gd C-20
PROTECTIVE FINISH. AS ABOVE

ASSY DRG ARDE 226318
DESIGN AUTHORITY
ARDE PUNE-411021

TITLE
LINK

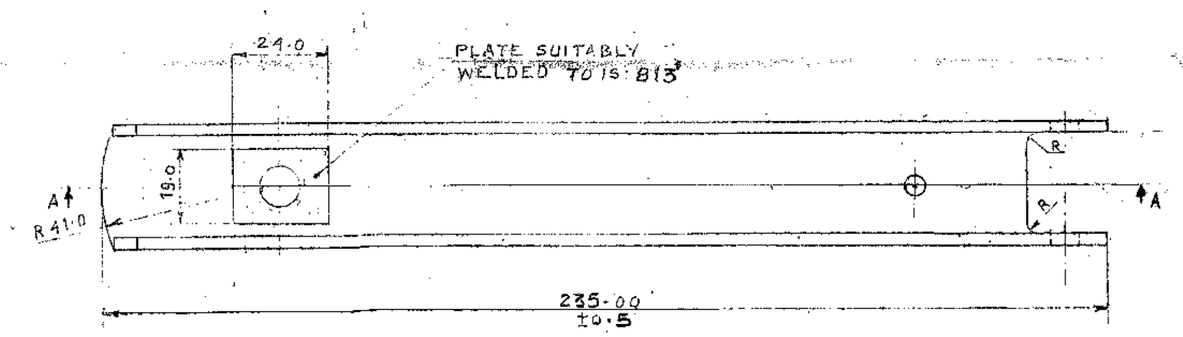
DRG No
ARDE 2283
DET No. 9 SHTS.
PART No
D.S CAT No.
A.H.S.P

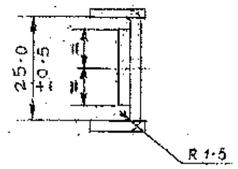
DRG CONVENTIONS CONFORM TO IS: 696
DIM. ARE IN mm
GEN. TOL. MEDIUM CLASS TO IS: 2102

DRG NO ARDE 2039
DET. No. 12 | SHTS | SHT No
PART NO

NOTE :-
ALL SHARP EDGES & BURRS ARE TO BE REMOVED.

MATL :-
MILD STEEL 2.5mm THICK TO SPEC IS: 1079-Gd
ST 34 HOT ROLLED & ANNEALED.





PROTECTIVE FINISH :-
a) PHOSPHATED TO SPEC IS: 3618 CLASS A 1.

SECTION AA

ARM

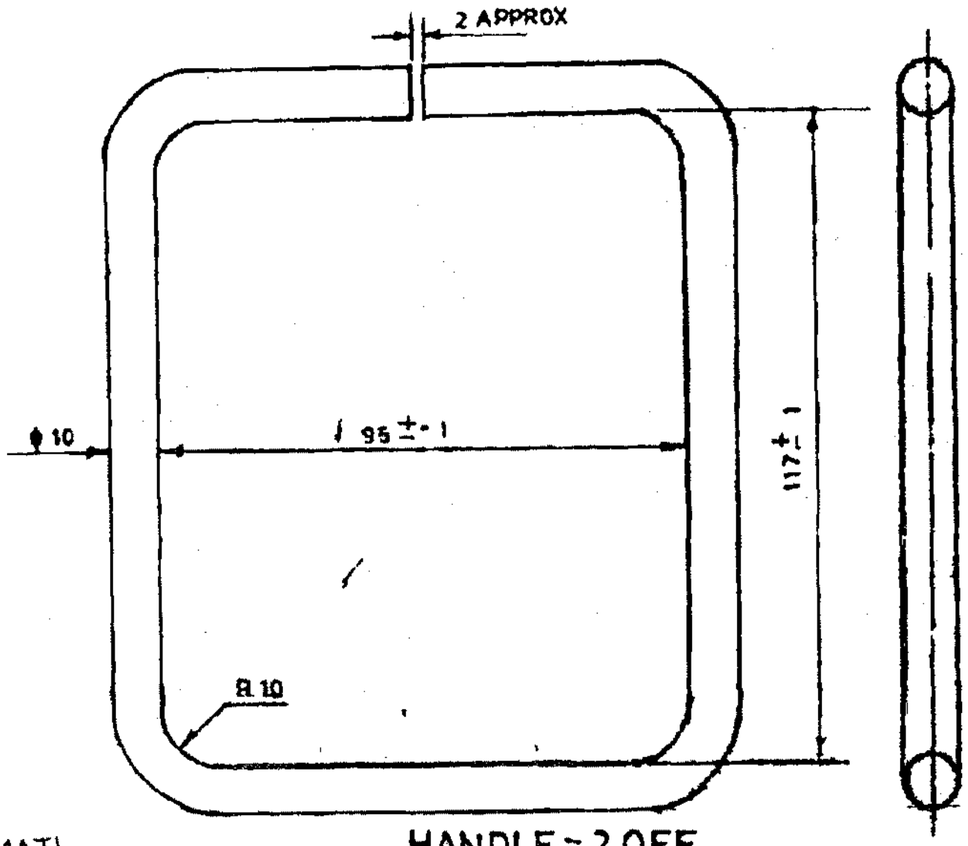
R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	C.D	G.O SIGN
DRN: SEALED						

DRN: CHD | TRD | COMP
C.D PASSED | SCALE :- 1:1
APPROVED | EST WEIGHT :-
FOR DIRECTOR | GAUGE SCHD
DATE :- 15-7-86
MATL :- AS ABOVE
PROTECTIVE FINISH :- AS ABOVE

ASSY DRG ARDE 2039 SHT 4
DESIGN AUTHORITY
ARDE, PUNE-21
DRG No
ARDE 2039
DET. No 12 | SHTS | SHT No
PART No
D.S CAT No
AHSP

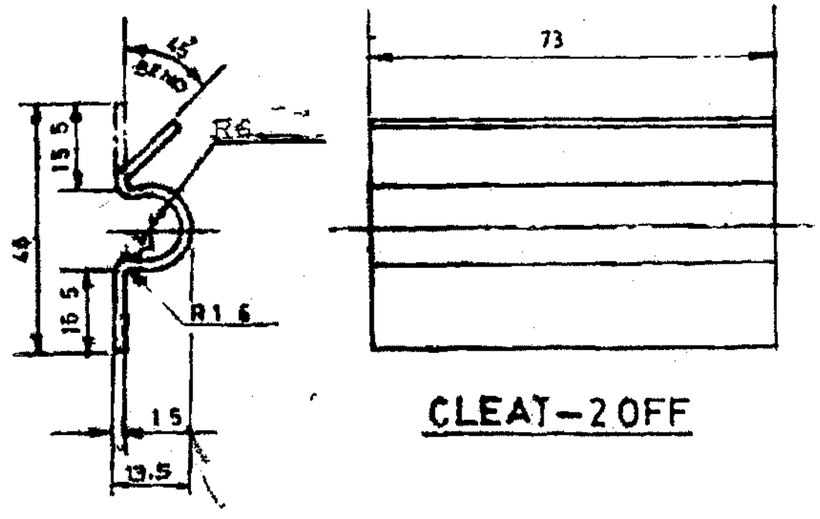
DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m'm. UNLESS OTHERWISE STATED
GEN TOL. MEDIUM/[illegible] CLASS TO IS : 2102

PART No.
DET No. 4 | SHTS | SHTS No.
DRG. No. ARDE 2283



HANDLE - 2 OFF

MATL
STEEL TO IS 1570 - C 2[illegible]



CLEAT - 2 OFF

MATL — STEEL TO IS 513 Gd 'O' ANNEALED CONDITION

PROTECTIVE FINISH FOR HANDLE & CLEAT

PHOSPHATING TO IS 3618 CLASS 'B' OILED & SIZED.

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	BD
						SIGN

DRG SEALED (PROV) 01 Nov 96

DRN SMP | CHD. [illegible] | TRD | COMP
CD | PASSED [illegible] | SCALE 1:1
EST MASS
APPROVED [illegible] FOR DIRECTOR | GAUGE SCHD
DATE 28 6 96

MATL AS ABOVE

PROTECTIVE FINISH AS ABOVE

ASSY DRG ARDE 2283 SHTS 4

DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG No
ARDE 2283

DET No 4	SHTS	SHT No.

PART No

D.B.CAT.No

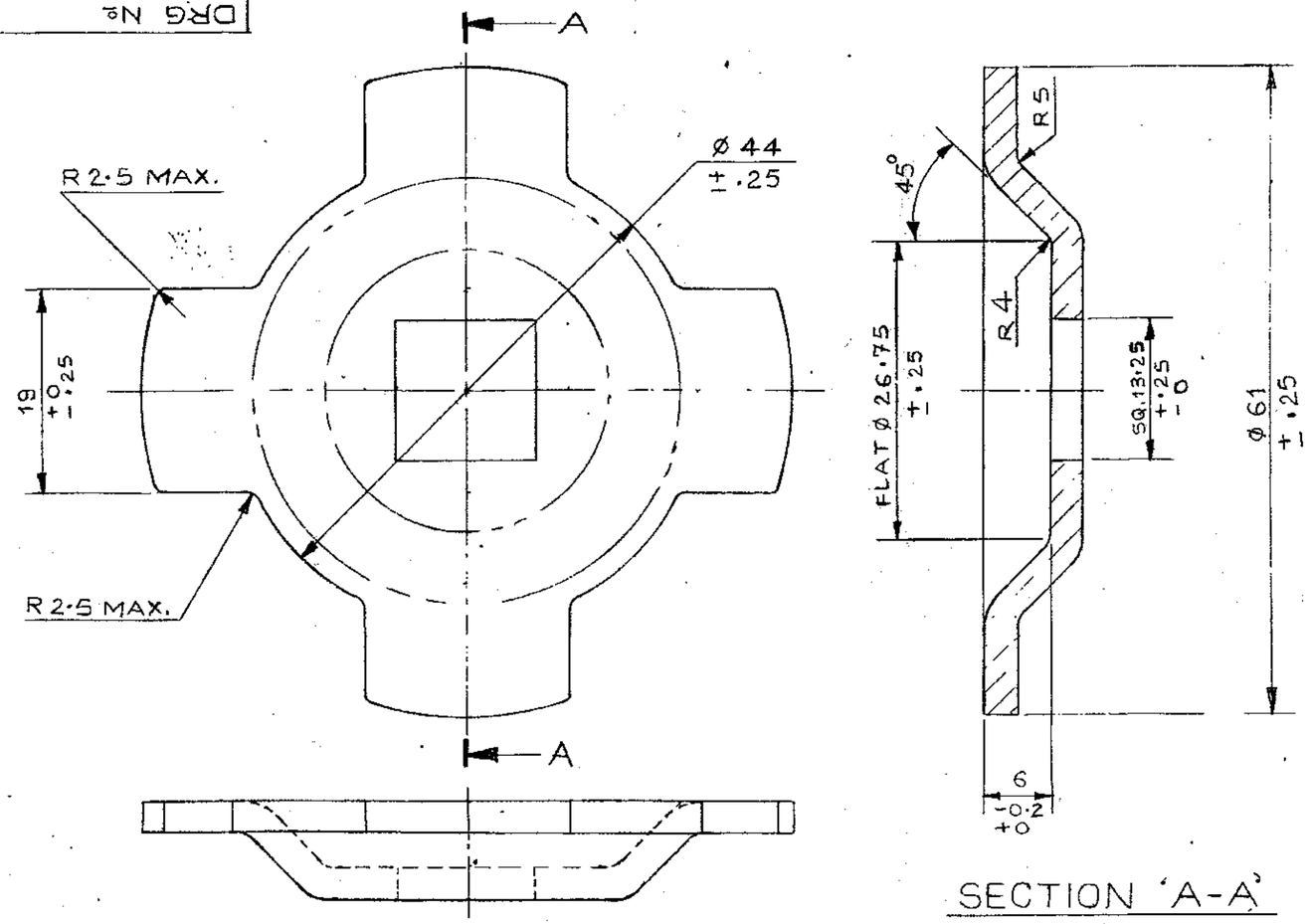
A.H.B.P

TITLE

HANDLE & CLEAT

DRG CONVENTIONS CONFORM TO IS: 696.
DIMNS ARE IN mm.
GEN. TOL :- MEDIUM CLASS TO IS: 2102.

DRG No. ARDE 2039
DET No 19 | SHTS | SHT No.
PART No.



SECTION 'A-A'

MATL :-

MILD STEEL SHEET 2·5 mm. THICK TO SPEC. IS: 1079 Gd ST-34 HOT ROLLED & ANNEALED.

PROTECTIVE FINISH :-

PHOSPHATED TO SPEC. IS: 3618. CLASS A1.

NOTE :-

ALL SHARP EDGES & BURRS ARE TO BE REMOVED.

R No	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
1	19-4-88		AMENDED VIDE AL-NO-600			

DRG SEALED Prov — CRECAS

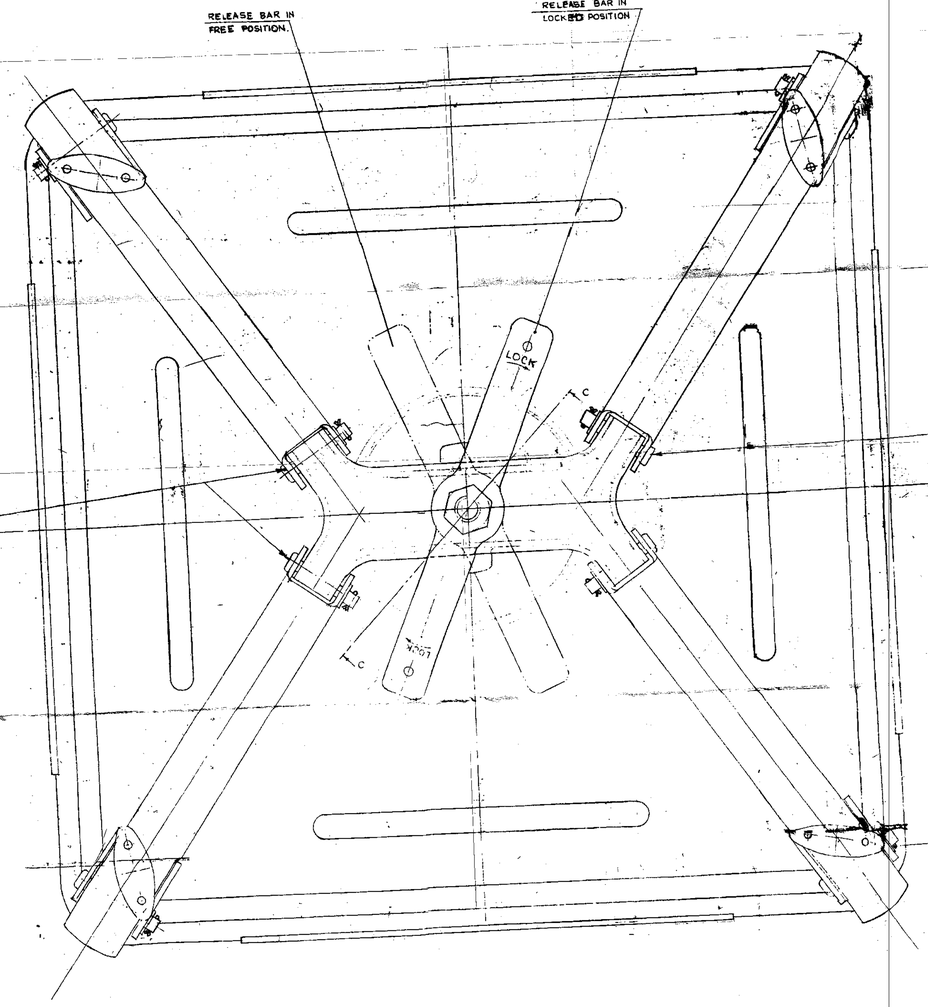
DRN : SLL | CHD | TRD | COMP
CD | PASSED | SCALE : 2 : 1
APPROVED | EST MASS
FOR DIRECTOR | GAUGE SCHD
DATE : 15-7-86
MATL :- AS. ABOVE
PROTECTIVE FINISH :- AS ABOVE

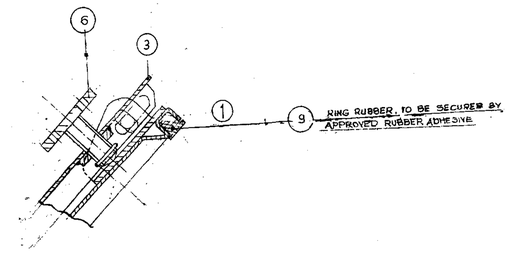
ASSY DRG. ARDE 2039/9
DESIGN AUTHORITY
ARDE PUNE 21

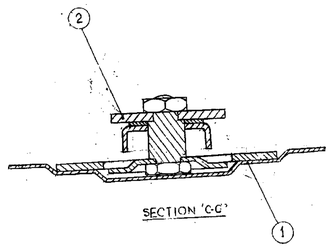
DRG No
ARDE 2039
DET No 19 | SHTS | SHT No
PART No
DS CAT No
AHSP

BASE PLATE

S.No.	NOMENCLATURE			
1	LID (WELDING ASSY)	1	ARDE	
2	PRESSURE PLATE SUB ASSY	1	ARDE	
3	ARM	4	ARDE	
4	PIN 'A'	4	ARDE	
5	PIN 'B'	4	ARDE	
6	BOLT	4		
7	SPLIT COTTER PIN 2.5/16 IS: 549	12	MD. PLATED	
8	PLAIN WASHER SUP IS: 2016	8	MD. PLATED	
9	RING, RUBBER	1	ARDE	







SECTION 'CC'

PART SECTION 'A-A'

PROTECTIVE FINISH

a) PHOSPHATED TO IS:3618 CLASS A1.

b) TO BE PAINTED EXTERNALLY AND INTERNALLY WITH ONE COAT OF READY MIXED PAINT AIR DRYING MATT FOR GENERAL PURPOSES RED OXIDE (18C-446 TO IS:5) BRUSHING/SPRAYING/DIPPING TO SPEC. IS:158.

c) TO BE PAINTED EXTERNALLY & INTERNALLY WITH ONE COAT OF READY MIXED PAINT, SEMI GLOSS/MATT FINISH, OLIVEGREEN TO SPECN. IS: 108 WITH ISC SHADE 220 OF SPECN. NO 5

			DRN DSS	CHD	TRD DSS COMP
			CD	PASSED	SCALE 1/1
					EST WEIGHT
			APPROVED		GAUGE SCHD
				FOR DIRECTOR	DATE 15-7-86
1	17-8-87	DRG AMENDED VIDE ALMS 386			
R IN	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD QO MATL
DRG SEALED					PROTECTIVE FINISH AS ABOVE

ASSY DRG ARDE 2053.SHT2
DESIGN AUTHORITY
ARDE PUNE-21
DRG No. ARDE 2039
DET No. 4 UNITS UNIT No. 4
PART No
D.S. CAT No
AHSP

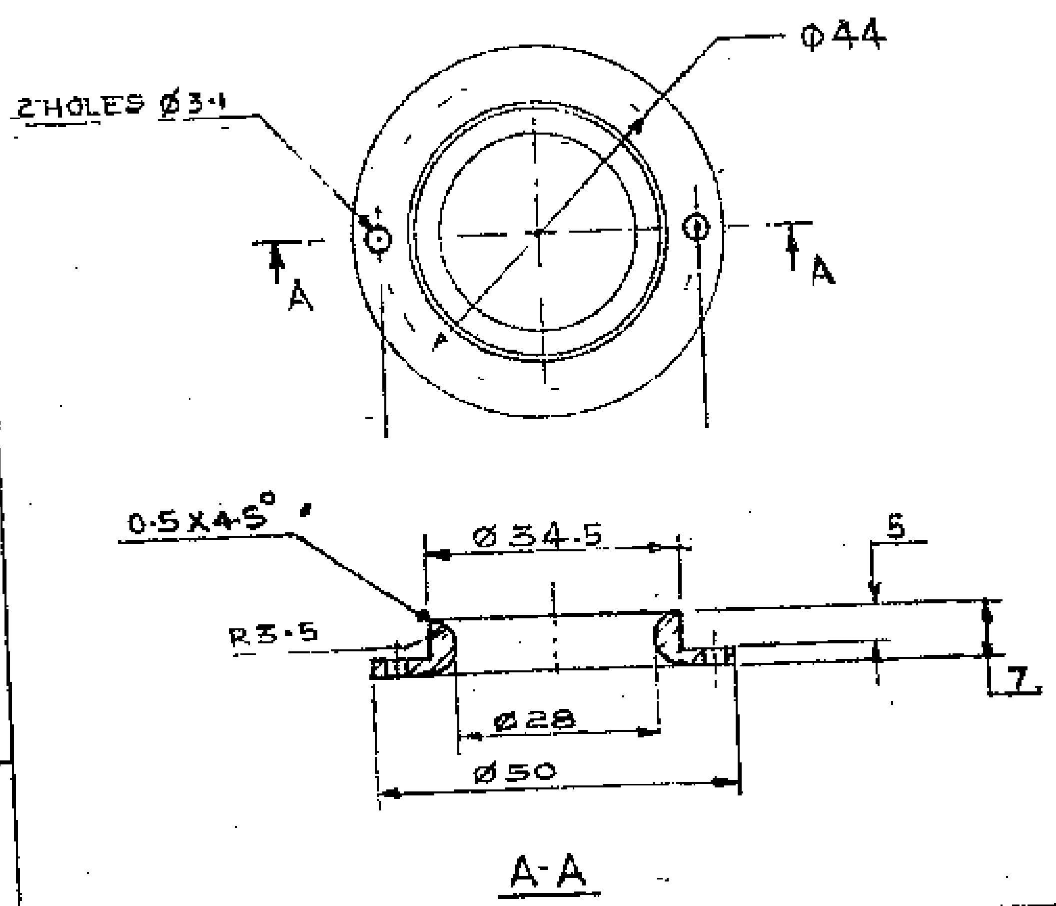
SEALING LID-ASSEMBLY

DRG. No. ARDE 9501-03 | DET.No.14 | SHTS: | SHTS. No. | PART no.

DRAWING CONVENTIONS CONFORM TO IS :
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / CLASS TO IS 2102

NOTE :- ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



R. NO	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV.) [signature] CRE(AA) 19 APR 2000

DRN. C R. Phatak	CHD. [signature]	TRD.	COMP.
CD [signature]	PASSED/ [signature]	SCALE : 1:1	
APPROVED CR (Engg) [signature] DIRECTOR		EST. MASS:	
		GAUGE SCHD :	
		DATE : 17-7-1995	

ASSY. DRG. ARDE 9501-03 /2

DESIGN AUTHORITY

ARDE PUNE-411 021

MATL : BRASS TO IS: 319 ANY CONDITION.

PROTECTIVE FINISH :

TITLE :

GROMET

DRG. No. ARDE 9501-03

DET. No. 14 | SHTS. | SHT. No.

PART No.

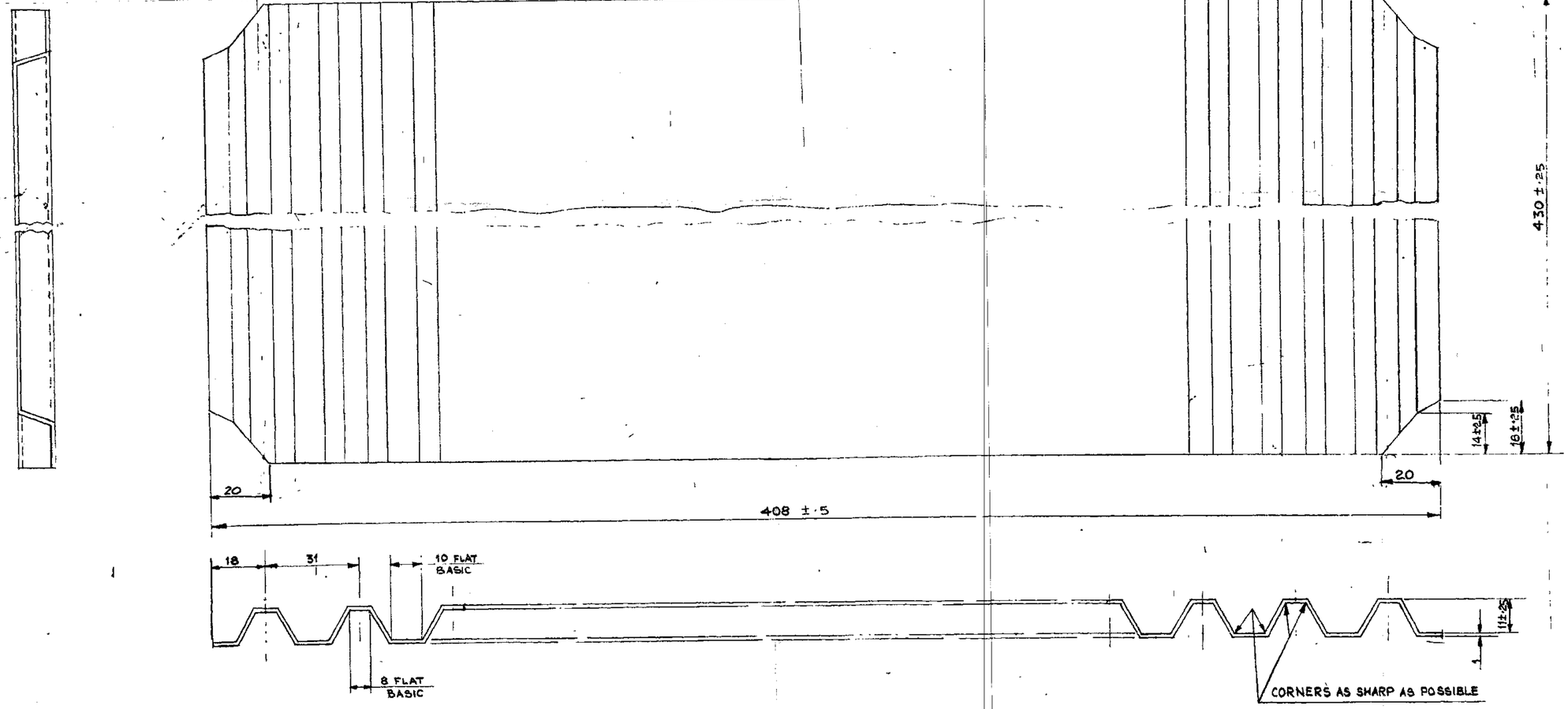
D.S.CAT.No.

A.H.S.P.

17

DRAWING CONVENTIONS CONFORM TO IS 696
DIMNS ARE IN m m. UNLESS OTHERWISE STATED
GEN TOL MEDIUM [redacted] CLASS TO IS 2102

DRG No ARDE 2283 | DET No 6 | SHTS | SHTS No | PART No



NOTE :—

CORRUGATION MUST BE WITHIN ±0·25 OF THEIR CORRECT LONGITUDINAL POSITION.

PROTECTIVE FINISH :- PHOSPHATING TO IS:3618 CLASS 'B' OILED AND STOVED.

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV) 01 NOV 96 CRE (AA)

DRN [redacted] CHD [redacted] TRD COMP
CD PASSED SCALE 1·1
EST MASS:
APPROVED FOR DIRECTOR GAUGE SCHD
DATE 28.6.96
MATL STEEL TO SPEC. IS: 513 Gd. 'O' ANNEALED CONDITION
PROTECTIVE FINISH. AS ABOVE.

ASSY DRG ARDE 2283, SHT 4
DESIGN AUTHORITY
ARDE PUNE-411 021

DRG No ARDE 2283
DET No 6 | SHTS | SHT No
PART No
D S CAT No
AHSP

TITLE

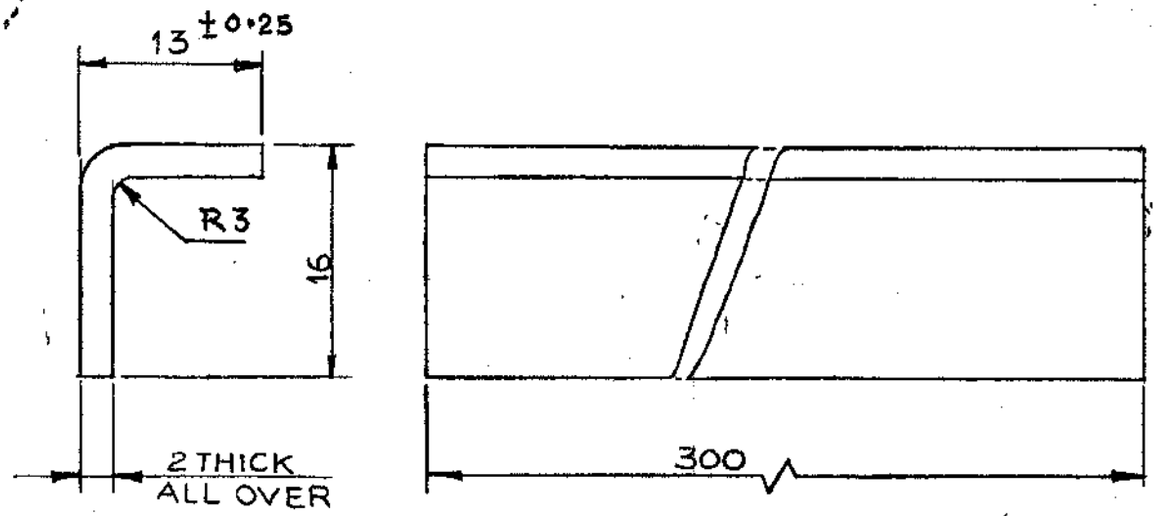
BOTTOM PLATE

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / [redacted] CLASS TO IS 2102

DRG. No. ARDE 2283

PART no. | DET. No. | SHTS. | SHTS. No.



MATL :— MILD STEEL TO SPEC. IS: 1079, Gd 'O'
ANNEALED CONDITION

PROTECTIVE TREATMENT

PHOSPHATING TO IS: 3618 CLASS 'B'

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD SIGN	GO

DRG. SEALED (PROV) [signature] 01 Nov 96 CRE (AA)

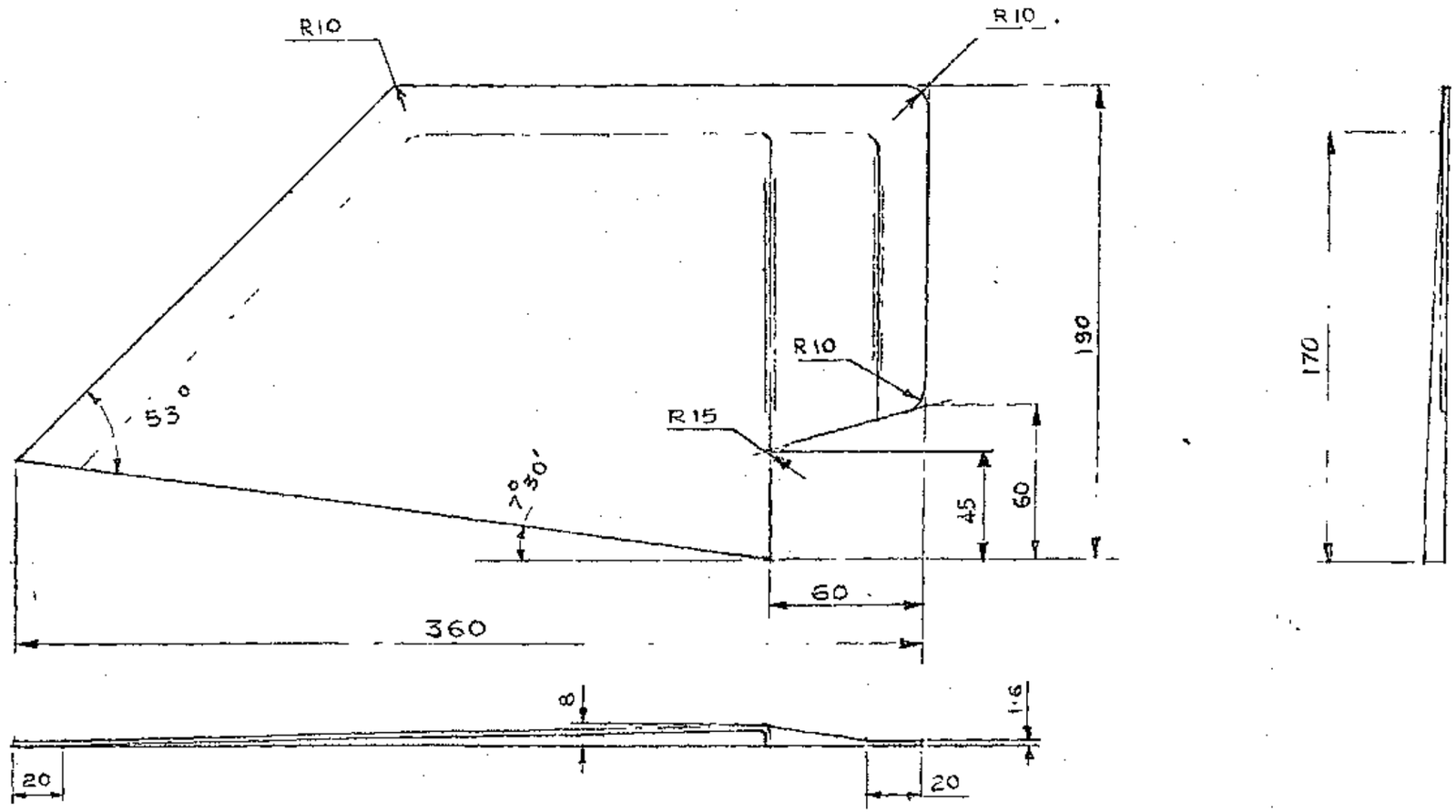
DRN. S.L.L	CHD. [signature]	TRD. COMP.	ASSY. DRG. ARDE 2283, SHT 3
CD	PASSED [signature]	SCALE : 2:1	DESIGN AUTHORITY
		EST. MASS:	ARDE PUNE-411 021
APPROVED	[signature] FOR DIRECTOR	GAUGE SCHD :	
		DATE : 28-6-96	
MATL : AS ABOVE			
PROTECTIVE FINISH : AS ABOVE			DRG. No. ARDE 2283
TITLE : BRACKET			DET. No. 3 | SHTS. | SHT. No.
			PART No.
			D.S.CAT.No.
			A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS - [illegible]
DIMNS ARE IN m m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS - 2102

PART No | DET. No. 13 | 3 SHTS | SHTS No. 2

DRG No. ARDE 9501-03

NOTE : ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



R NO.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO SIGN

DRG SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. C R Phelke CHD. TRD. COMP.
CD PASSED
APPROVED FOR DIRECTOR
SCALE : 1:2
EST MASS :
GAUGE SCHD :
DATE : 23-5-96
MATL : STEEL T.O IS:1079 St-34
PROTECTIVE FINISH : PHOSPHATED TO IS:3618 CLASS 'B'

ASSY DRG ARDE 9501-03 / 3 SHTS
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03
DET. No. 13 | SHTS. 3 | SHT No 2
PART No.
D S.CAT No.
A H.S.P

TITLE.

FIN LEFT

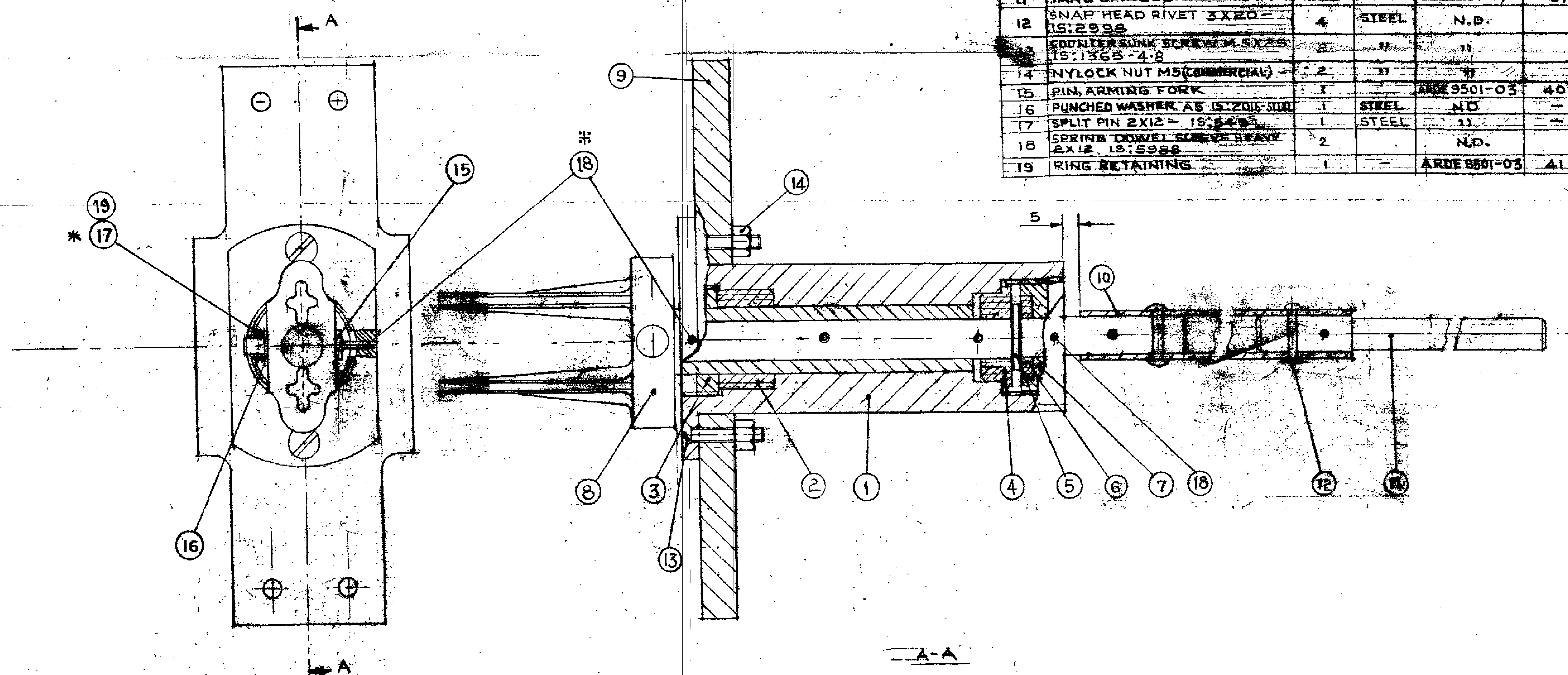
PART No.	DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DET No. 15 SHTS. SHTS No.	DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
ARDE 9501-03 (DRG. No.)	GEN. TOL. MEDIUM/COURSE/FINE CLASS TO IS : 2102

NOTES :-

1. CLOSING PLUG FRONT BEARING (ITEM No 3) & CLOSING PLUG, REAR BEARING (ITEM No 7) TO BE UNSCREWED BY UPTO ONE FOURTH TURN FROM THE FULLY SCREWED-IN POSITION & ENSURE FREE ROTATION OF ARMING FORK (ITEM No 8) & FORK SPINDLE (ITEM No 5)
2. ALIGN THE SLOT OF THE CLOSING PLUGS (ITEM No 3 & ITEM No 7) WITH THE HOLE ON THE HOUSING (ITEM No 1) FOR THE ASSEMBLY OF SPRING DOWEL SLEEVE (ITEM No 18)
3. ALL STANDARD COMPONENTS (EXCEPT NYLOCK NUT, ITEM No 14) TO BE CADMIUM PLATED TO IS: 1572, Cd12, BEFORE ASSEMBLY.

LIST OF COMPONENTS

ITEM No	NOMENCLATURE	No OFF	MATL	DRG No.	DET No
1	HOUSING	1		ARDE 9501-03	16
2	FORK BEARING FRONT	1		" "	24
3	CLOSING PLUG FRONT BEARING	1		" "	25
4	FORK BEARING REAR	1		" "	26
5	FORK SPINDLE	1		" "	17
6	BEARING WASHER	1		" "	19
7	CLOSING PLUG, REAR BEARING	1		" "	23
8	ARMING FORK	1		" "	18
9	BOTTOM PLATE	1		" "	22
10	ARMING TUBE	1		" "	20
11	VANE SPINDLE	1		" "	21
12	SNAP HEAD RIVET 3X20 - IS:2998	4	STEEL	N.D.	
13	COUNTERSUNK SCREW M5X25 IS:1365-4.8	2	"	"	
14	NYLOCK NUT M5 (COMMERCIAL)	2	"	"	
15	PIN, ARMING FORK	1		ARDE 9501-03	40
16	PUNCHED WASHER A5 IS:2016-STEEL	1	STEEL	ND	—
17	SPLIT PIN 2X12 - IS:549	1	STEEL	"	—
18	SPRING DOWEL SLEEVE HEAVY 2X12 IS:5988	2		N.D.	
19	RING RETAINING	1	—	ARDE 9501-03	41



* ITEM No. 17 SPLIT PIN TO BE REPLACED BY ITEM No. 19 RING RETAINING TO DRG No. ARDE 9501-03 DET No. 41 IN FINAL ASSY.

⁂ ITEM No. 18 SPRING DOWEL SLEEVE TO BE ASSEMBLED AFTER ENSURING FREE ROTATION OF THE ARMING FORK AND FORK SPINDLE IN ASSEMBLY.

R. NO.	DATE:	AUTHORITY	BRIEF RECORD.	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)		19 APR 2000	

DRN. / CHD. / CD / PASSED / APPROVED / FOR DIRECTOR

TRD. / COMP. / SCALE: 1:1 / DET MASS: / GAUGE SCHD: / DATE: 27-11-1996

MATL:

PROTECTIVE FINISH:

ASSY DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE-411 021

ARDE 9501-03

DET No. 15 SHTS. SHT No.

TITLE:

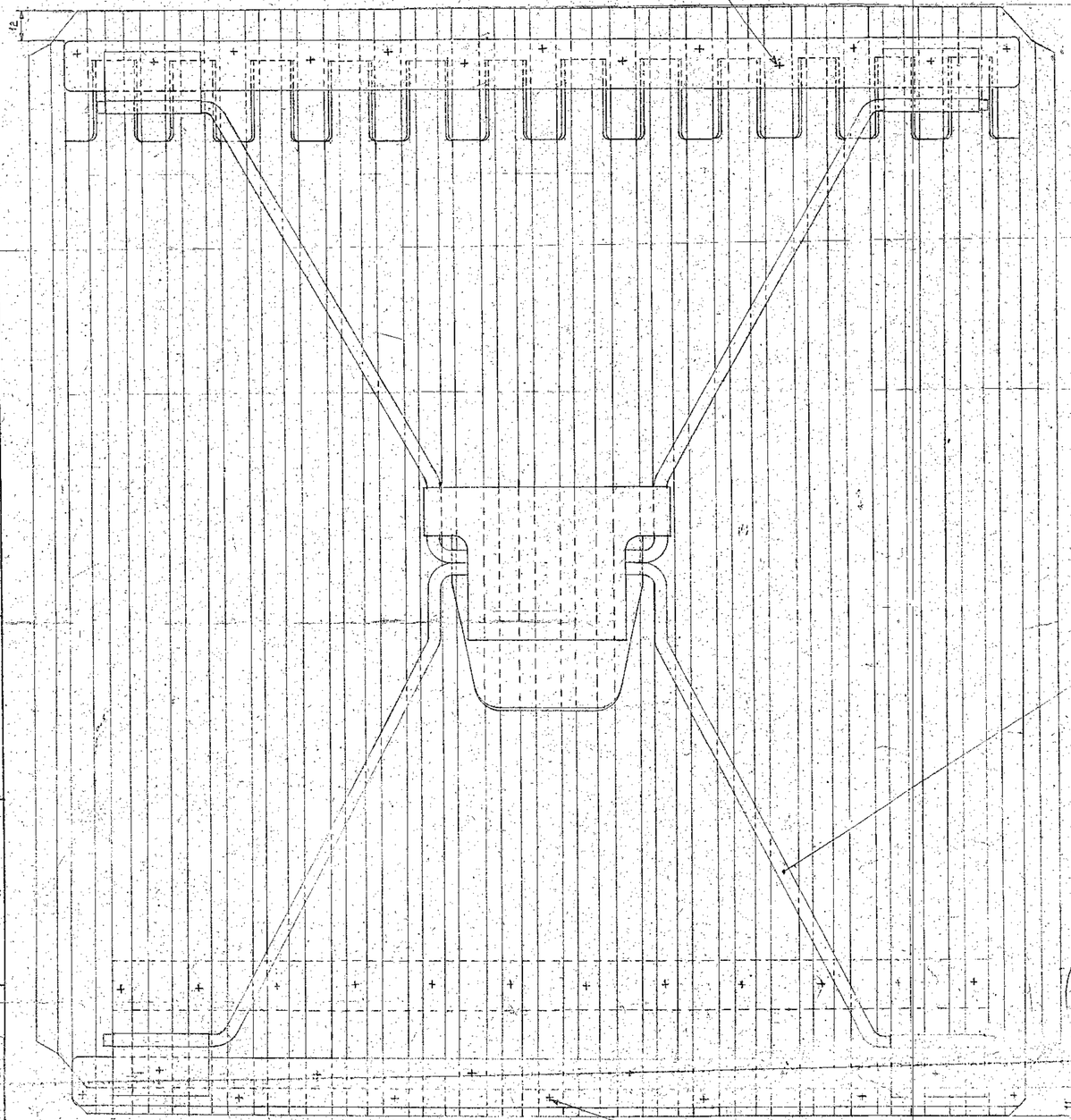
ARMING FORK ASSY.

DRAWING CONVENTIONS CONFORM TO IS:696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. ±.....0/COURSE/FINE CLASS TO IS:2102

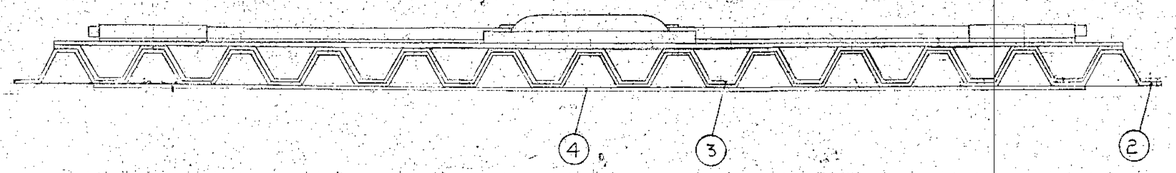
DRG. No. ARDE 2283 | PART No. | DET No. | SHTS. 4 | SHT. No. 2

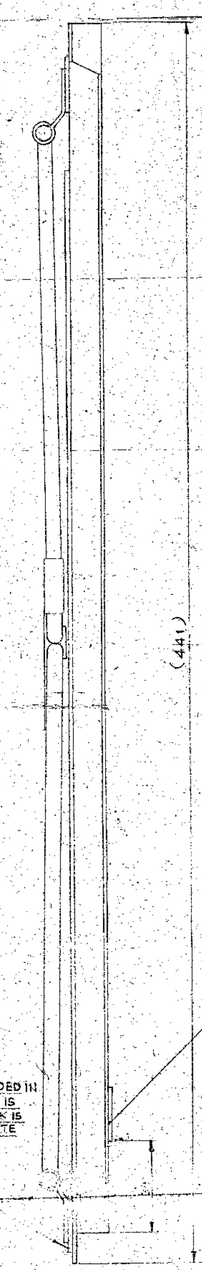
(12)

ITEM No. 1 SECURED TO ITEM No. 2
BY 13 SPOT WELDS Ø 5



ITEM No. 1 SECURED TO ITEM No. 3 BY
13 SPOT WELDS Ø 4.





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

ITEM No. 4 SECURED TO ITEM No. 2 BY 12 SPOT WELDS Ø 5 BEFORE ASSEMBLING ITEM No. 1

SPOT WELDING TO SPEC. IS: 819.

LIST OF COMPONENTS

SR No.	DESCRIPTION	DRG No.	SET No.	PART No.	No. OFF
1	LINK ASSY	ARDE 2283	5		1
2	BOTTOM PLATE	ARDE 2283	6		1
3	TOP PLATE	ARDE 2283	7		1
4	BOTTOM PLATE TIE PIECE	ARDE 2283	8		1

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN:	
DRG SEALED (PROV)					CRE (AA)	

DRN. | CHD. | TRD. | COMP.
CD | PASSED | SCALE: 1:1
APPROVED | CONTROLLER | EST. MASS:
MATL: | DIRECTOR | GAUGE SCHD:
PROTECTIVE FINISH: PHOSPHATED TO SPEC IS:3618, CL B | DATE: 28.6.96

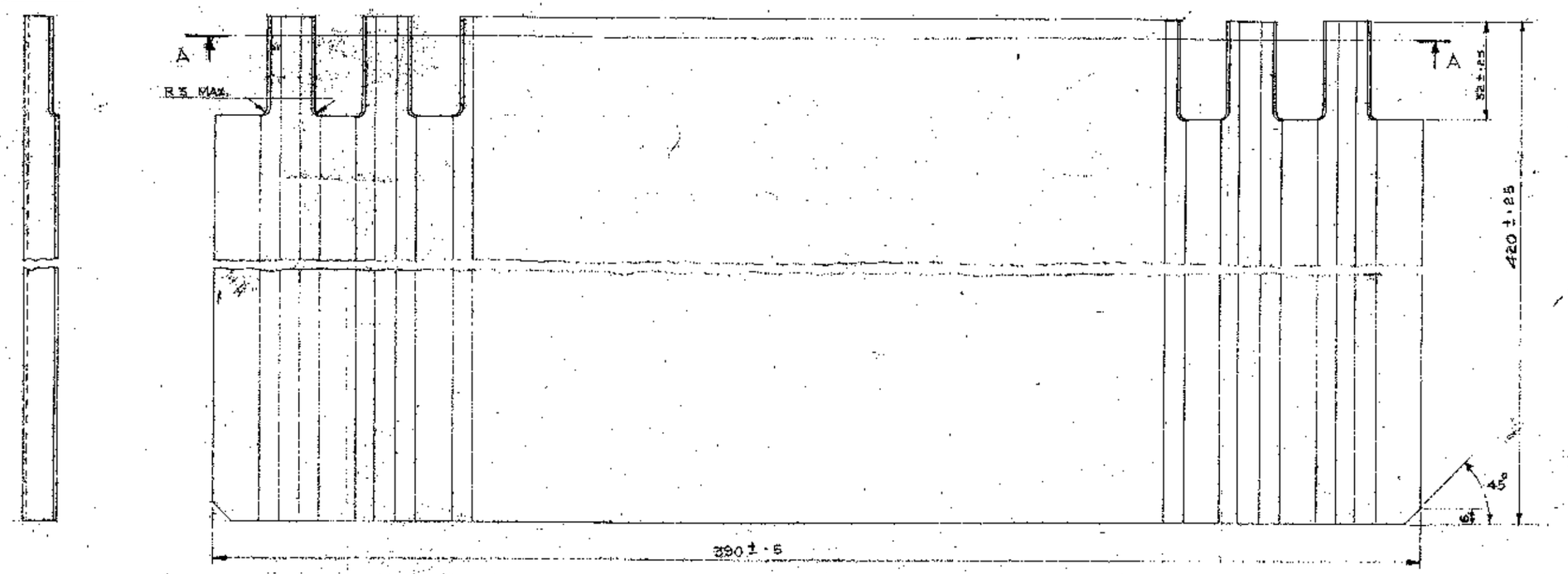
ASSY DRG. ARDE 2283, SHT 2
DESIGN AUTHORITY
ARDE PUNE - 411021

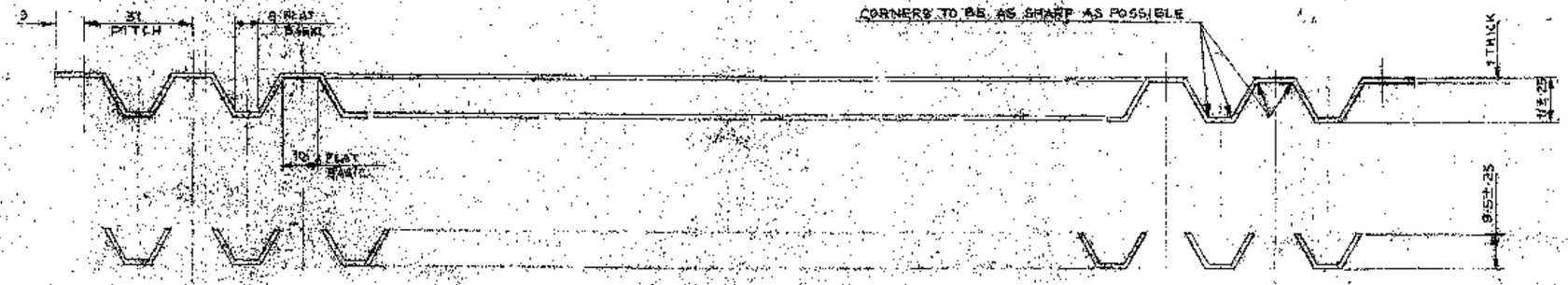
INNER LID ASSY

DRG. No. ARDE 2283
DET. No. | SHTS. 4 | SHT. No. 4
PART No.
D. S. CAT. No.
A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM [redacted] CLASS TO IS : 2102

DRG. No. ARDE 2283
PART No.
DET No. 7 | SHTS. | SHTS. No.





SECTION-AA

NOTE:-
CORRUGATIONS MUST BE WITHIN ± 0.25 OF THEIR CORRECT LONGITUDINAL POSITION.

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

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO	SIGN

ORG SEALED (PROV) [redacted] 01 Nov 96 CRE(AA)

DRN. [redacted] CHD. [redacted] TRD. COMP.
CD. PASSED [redacted]
APPROVED [redacted]
SCALE: 1:1
EST MASS:
GAUGE SCHD:
DATE: 28-6-96
MATL: STEEL TO SPEC. IS : 513. GR.D* ANNEALED CONDITION.
PROTECTIVE FINISH: AS ABOVE

ASSY. ORG. ARDE 2283, SHT 4.
DESIGN AUTHORITY
ARDE PUNE-411 021

DRG. No. ARDE 2283
DET. No. 7 | SHTS. | SHT. No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE

TOP PLATE

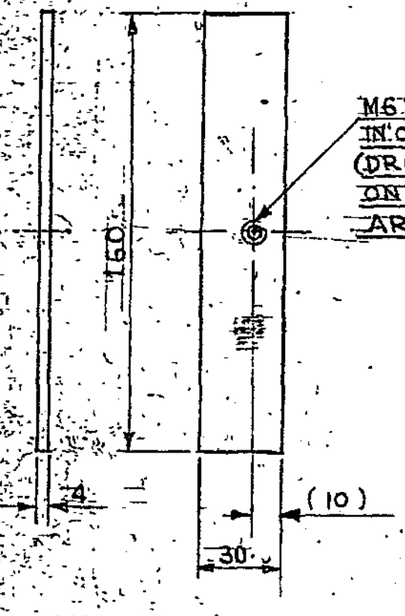
DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/COARSE/FINE CLASS TO IS : 2102.

PART No.

DET. No. 9	SHTS:	SHTS.No.

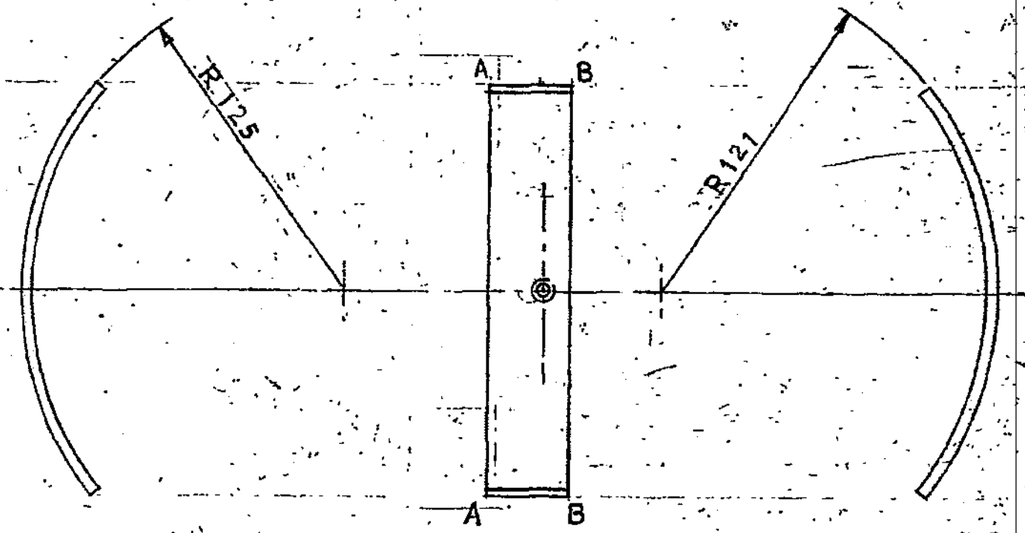
DRG. No. ARDE 9501-03

NOTE:- ALL SHARP EDGES & BURR'S ARE TO BE REMOVED.



M6 X 1, TO BE DRILLED & TAPPED IN CONJUNCTION WITH PANEL (DRG. No ARDE 9501-03/34/36 ON CONE BODY ASSY (DRG. No ARDE 9501-03/2)

VIEW ON DEVELOPMENT.



FACE A A

FACE B B

VIEW AFTER FORMING

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD SIGN	GO
DRG SEALED (PROV.)			CRE(AA)	19 APR. 2000		

DRN. C.R. Phatak | CHD. S.[illegible] | TRD. | COMP.
CD [signature] | PASSED [signature]
APPROVED [signature] FOR DIRECTOR
SCALE : 1 : 2
EST MASS :
GAUGE SCHD :
DATE : 28-1-94
MATL : STEEL TO IS : 1079 St 34
PROTECTIVE FINISH : PHOSPHATED TO IS : 3618, C1 6

ASSY DRG. ARDE 9501-03/2
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03

DET. No. 9	SHTS.	SHT. No.

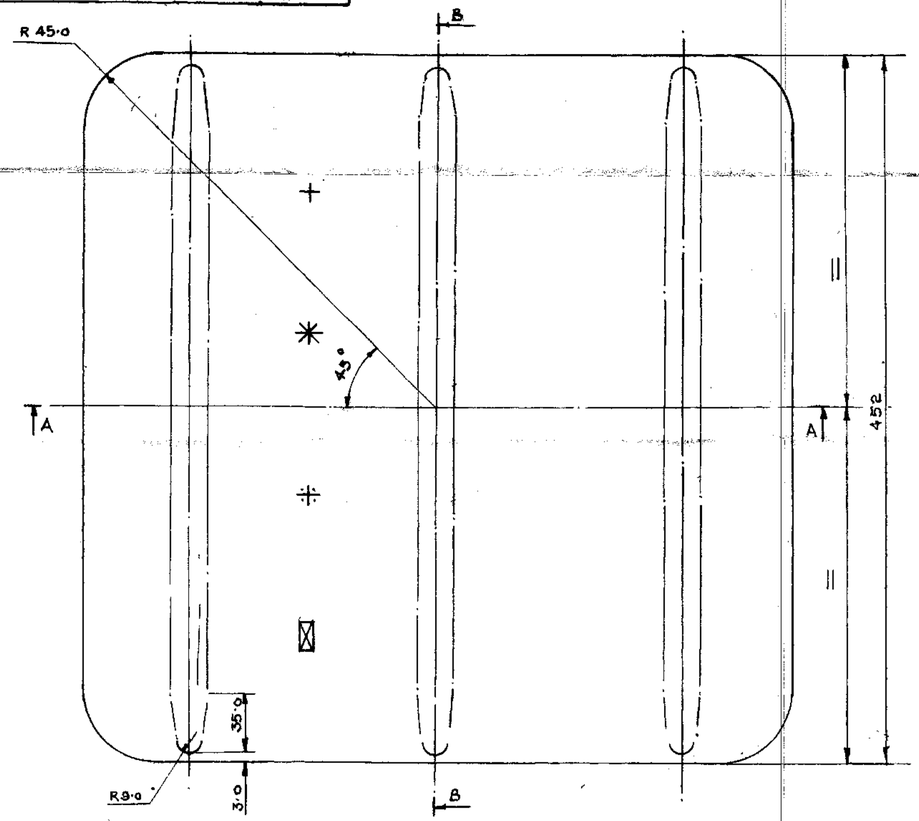
PART No.
D.S.CAT.No.
A.H.S.P.

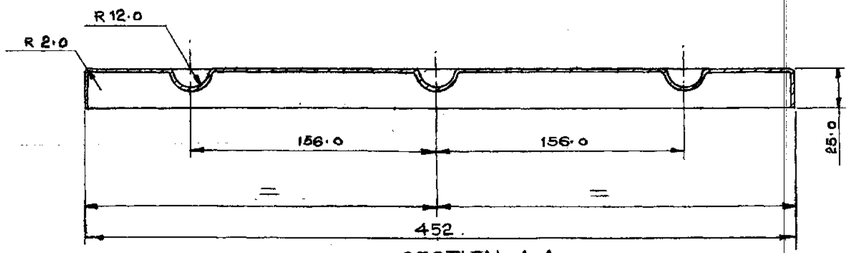
TITLE:

PANEL SUPPORT LARGE

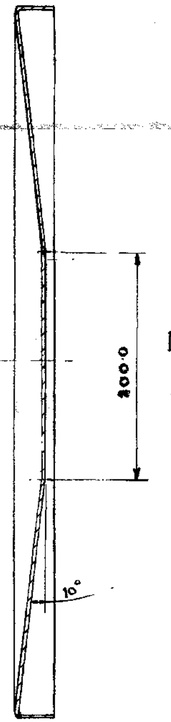
DRG CONVENTIONS CONFORM TO IS: 696
DIM ARE IN mm
GEN TOL - MEDIUM CLASS TO IS: 2102

ARDE 2039





SECTION A-A



SECTION-B.B

NOTE :-
ALL SHARP EDGES & [illegible] ARE TO BE REMOVED

MATL :-
MILD STEEL 1.25 mm THICK SHOULD CONFORM TO ANY ONE OF THE FOLLOWING SPEC,
1. IS: [illegible] Gd ST IN HOT ROLLED AND ANNEALED
2. IS: [illegible] COLD ROLLED AND ANNEALED TYPE 'D' BEST SURFACE

PROTECTIVE TREATMENT :-
PHOSPHATED TO SPEC IS: 3618 CLASS A1

MARKING TO BE EMBOSSED/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

R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO SIGN
DRG. SEALED						

DRN DSS | CHD | TRD SVC | COMP
CD Prakash | PASSED
APPROVED [illegible] FOR DIRECTOR
MATL :- AS ABOVE
PROTECTIVE FINISH :- AS ABOVE
SCALE 1/2
TEST WEIGHT
GAUGE
DATE

BOTTOM

ASSY DRG ARDE 2039 SHT 4
DESIGN AUTHORITY
ARDE PUNE-21
DRG No.
ARDE 2039
DET No 7 | SHTS | SHT No.
PART No.
DS CAT No.
AHSP

DRG CONVENTIONS CONFORM TO IS: 696
DIM ARE IN mm
GEN TOL MEDIUM CLASS TO IS: 2102

DRG No. ARDE 2039 | SHTS 1 SHT No. | DET No. 2 | PART No.

ITEM No.	NOMENCLATURE	No. OFF	MATL	DRG No.	DET No.	PART No.
1	LID	1		ARDE 2035	3	
2	BRACKET	4		ARM 1253 AB		
3	LOCKING PLATE	1		" " 46		

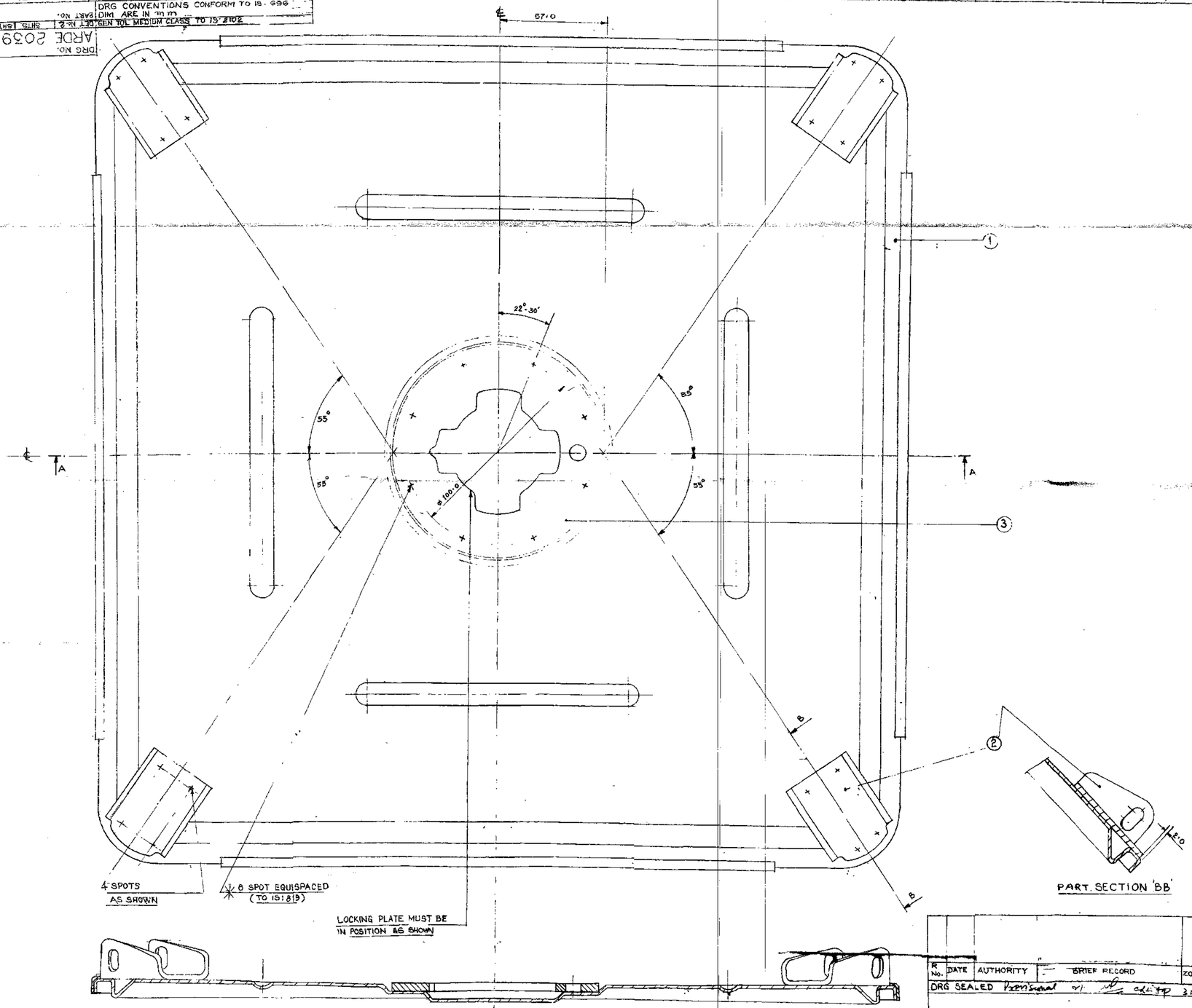
PROTECTIVE TREATMENT

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

a) PHOSPHATED TO SPEC IS: 3618 CLASS A-1

NOTE

ALL WELDING JOINTS SHOULD BE AS PER TO SPEC IS: 816.



SECTION AA

PART SECTION BB

R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
DRG SEALED Provisional					SIGN	

DRN D.S.S | CHD | TRD. SVG | COMP
CD fresh | PASSED | SCALE 1:1
APPROVED | for DIRECTOR | TBT WEIGHT
GAUGE SCHD
DATE 15.7.86

MATL
PROTECTIVE FINISH - AS ABOVE

ASSY DRG ARDE 2039. SHT 4
DESIGN AUTHORITY
ARDE. PUNE-21

DRG NO. ARDE 2039
DET No. 2 | SHTS | SHT No.
PART No.:
D S CAT No.
AHSP

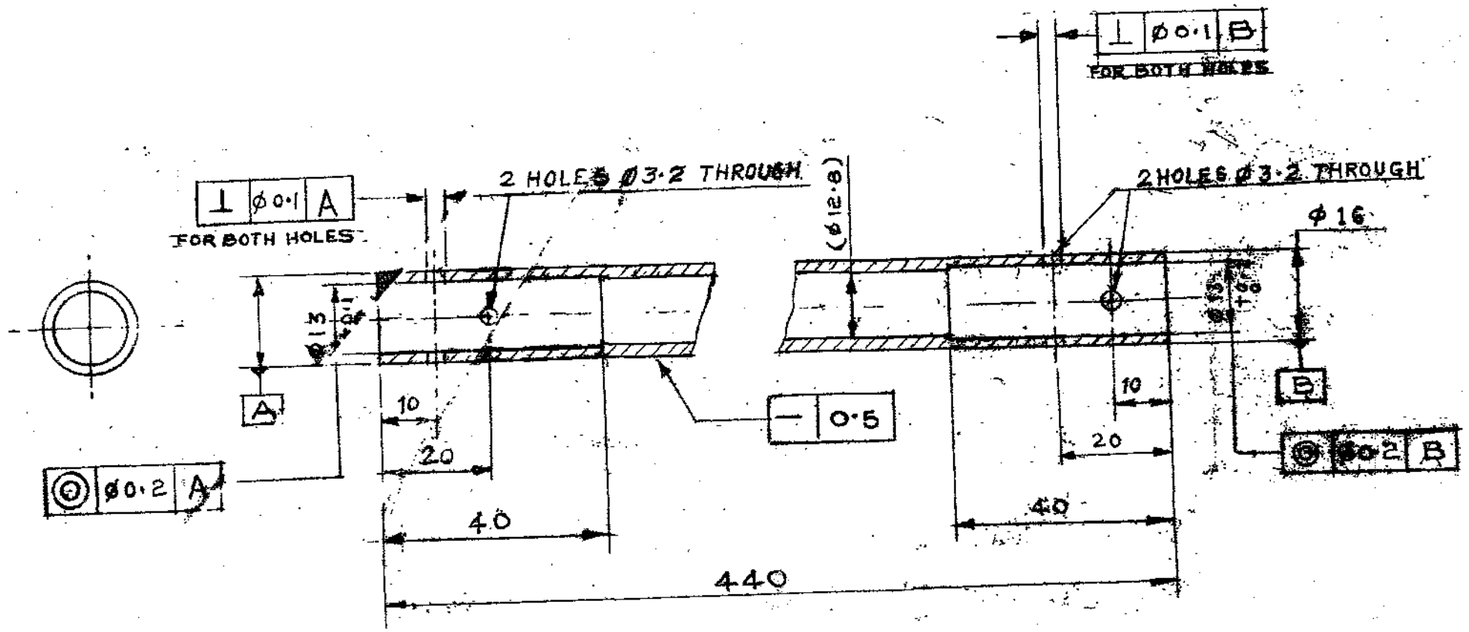
LID (WELDING ASSY.)

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS : 2102

DRG. No.	SHTS.	SHTS.No.
ARDE 9501-03		

PART No.	DET. No.20	SHTS.	SHTS.No.

NOTE:
ALL SHARP EDGES & BURRS ARE TO BE REMOVED



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
●	[redacted]	[redacted]	[redacted]			

DRG SEALED (PROV) RD, AGMA(AA) 25 SEP 2001

DRN DESHMUKH CHD. TL
CD PASSED
APPROVED IOR DIRECTOR
MATL : AL. ALLOY TUBE TO IS:738 WITH TENSILE STRENGTH OF 200 MPa (MIN)
PROTECTIVE FINISH : ANODISED TO IS: 1868 Gd AC 10

TRD. COMP.
SCALE : 1 : 1
EST MASS :
GAUGE SCHD :
DATE : 21-3-94

ARDE PUNE - 411 021

ISSUE 1
DRG. No. ARDE 9501-03
DET. No. 20 SHTS. SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

TITLE:

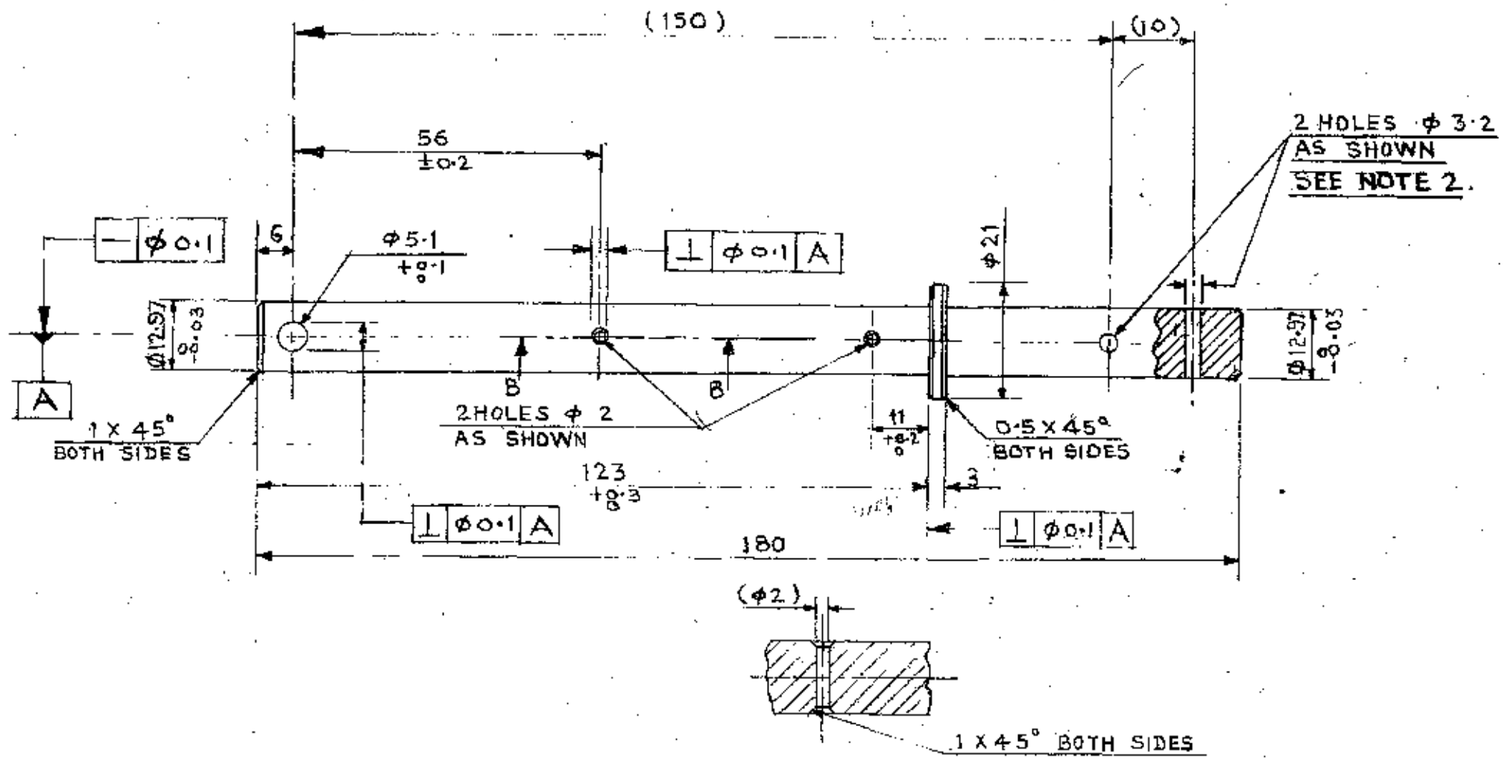
ARMING TUBE

DRAWING CONVENTIONS CONFORM TO IS : [illegible]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS : 2102

DRG. No. ARDE 9501-03
DET. No. 17 | SHTS. | SHTS. No.
PART No.

NOTES:—

1) ALL SHARP EDGES & BURRS ARE TO BE REMOVED.
2) 2 HOLE Ø 3·2 TO BE DRILLED IN CONJUNCTION WITH HOLES OF ARMING TUBE (DRG NO ARDE 9501-03/20).



B - B.

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. DESHMUKH | CHD. | TRD. | COMP.
CD | PASSED
SCALE : 1 : 1
EST MASS :
APPROVED (R. PERUMAL) FOR DIRECTOR
GAUGE SCHD :
DATE : 29 - 10 - 96
MATL : STAINLESS STEEL TO IS: 6603 WITH Cr CONTENT 15 % MIN
PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03/15
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03
DET. No. 17 | SHTS. | SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

TITLE:

FORK SPINDLE

NOTE

ALL SHARP EDGES AND BURRS ARE TO BE REMOVED

MATERIAL

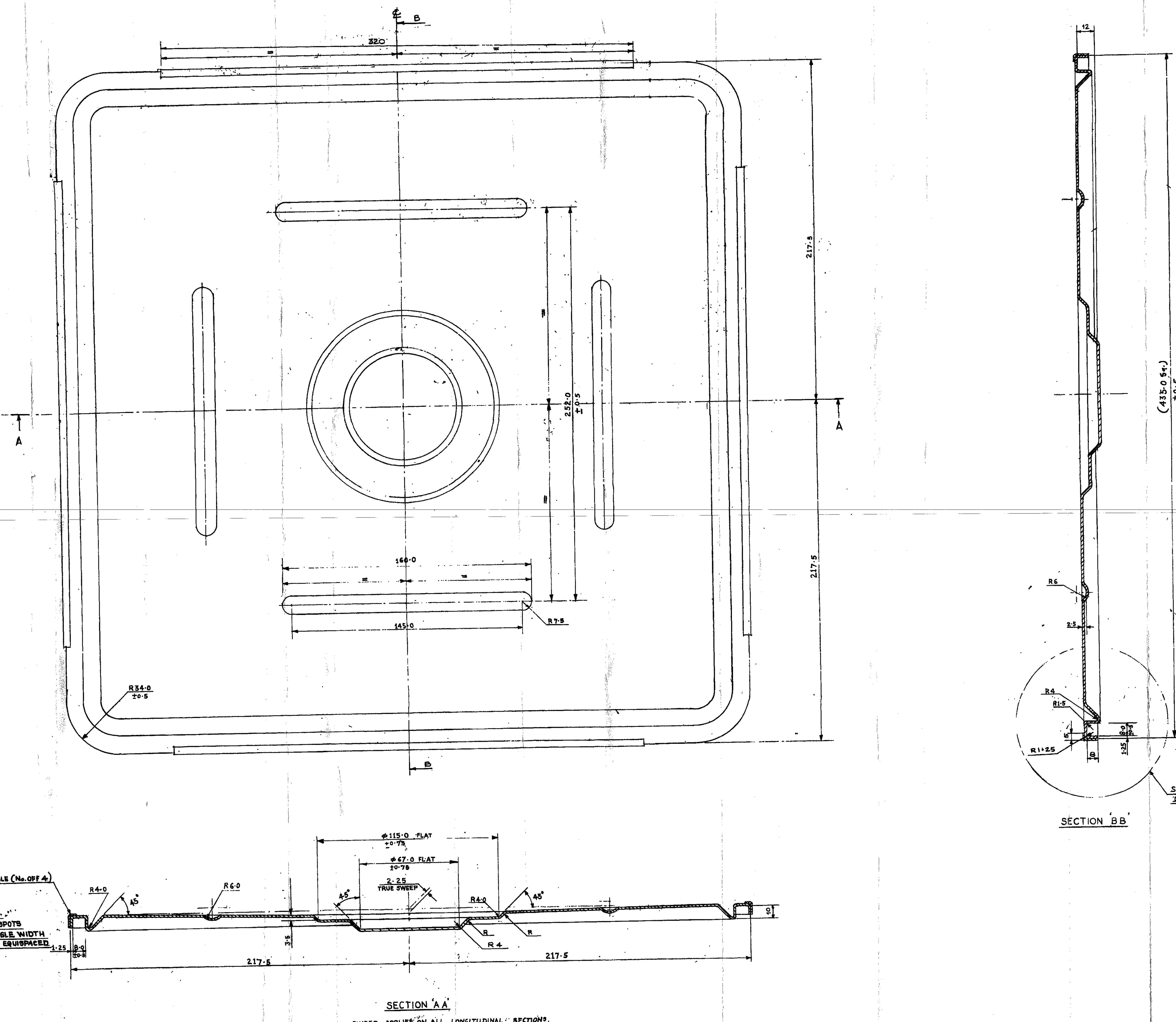
MILD STEEL 1·25 m m THICK SHOULD CONFORM TO ANY ONE OF THE FOLLOWING SPEC.

IS: 1079-63 Gd. ST 34 HOT ROLLED AND ANNEALED

IS: 513-63 COLD ROLLED AND ANNEALED TYPE 'D' BEST SURFACE

PROTECTIVE TREATMENT

PHOSPHATED TO SPEC IS: 3618 CLASS A1.



8 X 8 X 320 X 1·25 THICK STRENGTHENING ANGLE (No. OFF 4) TO BE SPOT WELDED TO IS: 819

EXCEPT 1) SPOT DIA 5 mm

2) EDGE DISTANCE TO BE MAX.

OBTAINABLE BY POSITIONING SPOTS CENTRALLY IN RELATION TO ANGLE WIDTH

3) PITCH TO BE SUCH AS TO GET 9 EQUISPACED SPOTS PER ANGLE

LID

DRN B.V.T.	CHD	TRD	COMP	ASSY DRG ARDE 2035 SHT 4
CD	PASSED	SCALE 1:1		DESIGN AUTHORITY ARDE PUNE-21
APPROVED FOR DIRECTOR		EST WEIGHT		
		GAUGE SCHD		
		DATE 15-7-86		
MATL - AS ABOVE				DRG No ARDE 2039
PROTECTIVE FINISH - AS ABOVE				DET No 3 SHTS SHT No
				PART No
				DS CAT No
				AHSP

R No	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD GO SIGN
DRG SEALED PROVISIONAL					

DRG CONVENTIONS CONFORM TO IS: 696

DIM ARE IN mm

GEN TOL MEDIUM CLASS TO IS: 2102

DRG No ARDE 2039

DRG CONVENTIONS CONFORM TO IS: G 12
DIM ARE IN mm
GEN TOL MEDIUM CLASS TO IS: 2102

PART Nº	DET Nº 9	SHTS	SHT Nº

DRG. Nº ARDE 2039

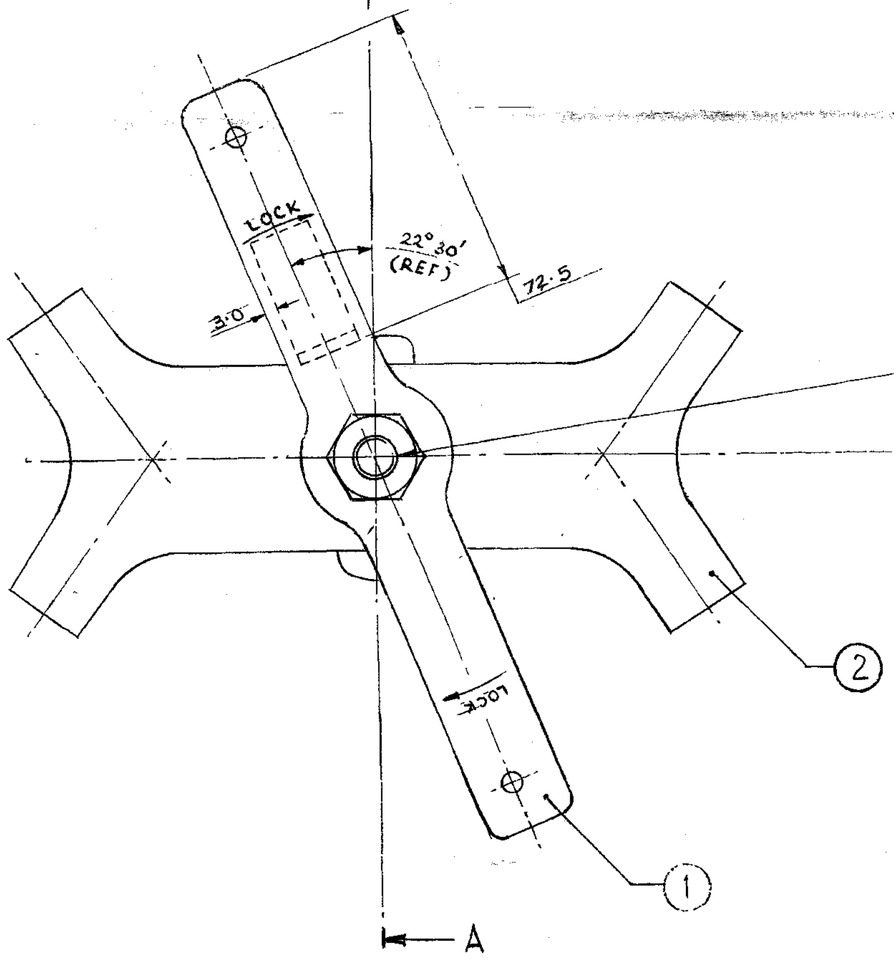
NOTES:-

1 ITEMS 1 & 5 SPOT WELDED IN POSITION & PROTECTIVE TREATMENT GIVEN AFTER WELDING.

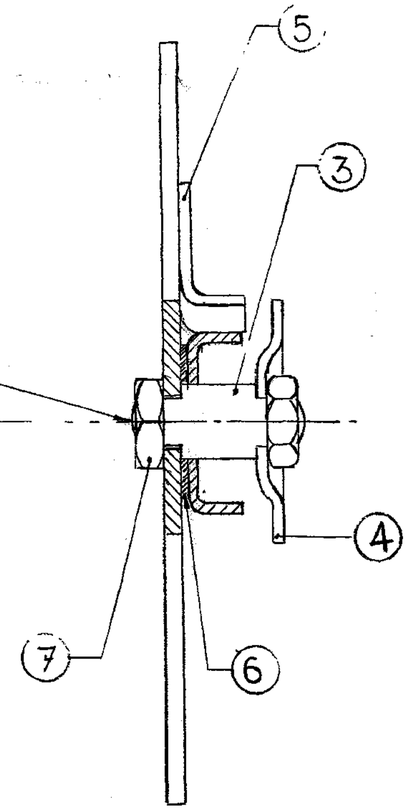
2 ALL WELDING JOINTS SHOULD BE AS PER TO SPEC. IS: 813

LIST OF COMPONENTS

ITEM Nº	NOMENCLATURE	NO OFF	DRG Nº	DET NO	MAIL	PART Nº
1	RELEASE BAR	1	ARM 1253 (B8)			
2	PRESSURE PLATE	1	ARDE 2039	10		
3	SPIGOT	1	ARM 1253 A-10			
4	BASE PLATE	1	ARDE 2039	19		
5	STOP	1	ARM 1253 A-12			
6	WASHER	1	ARM 1253 A-13			
7	HEX. LOCK NUT M12 X 1·25 TO SPEC IS:1364	2	N.D. (PLATED)			



LOCK BY MEANS OF 3 STABS EACH END



SECTION 'AA'

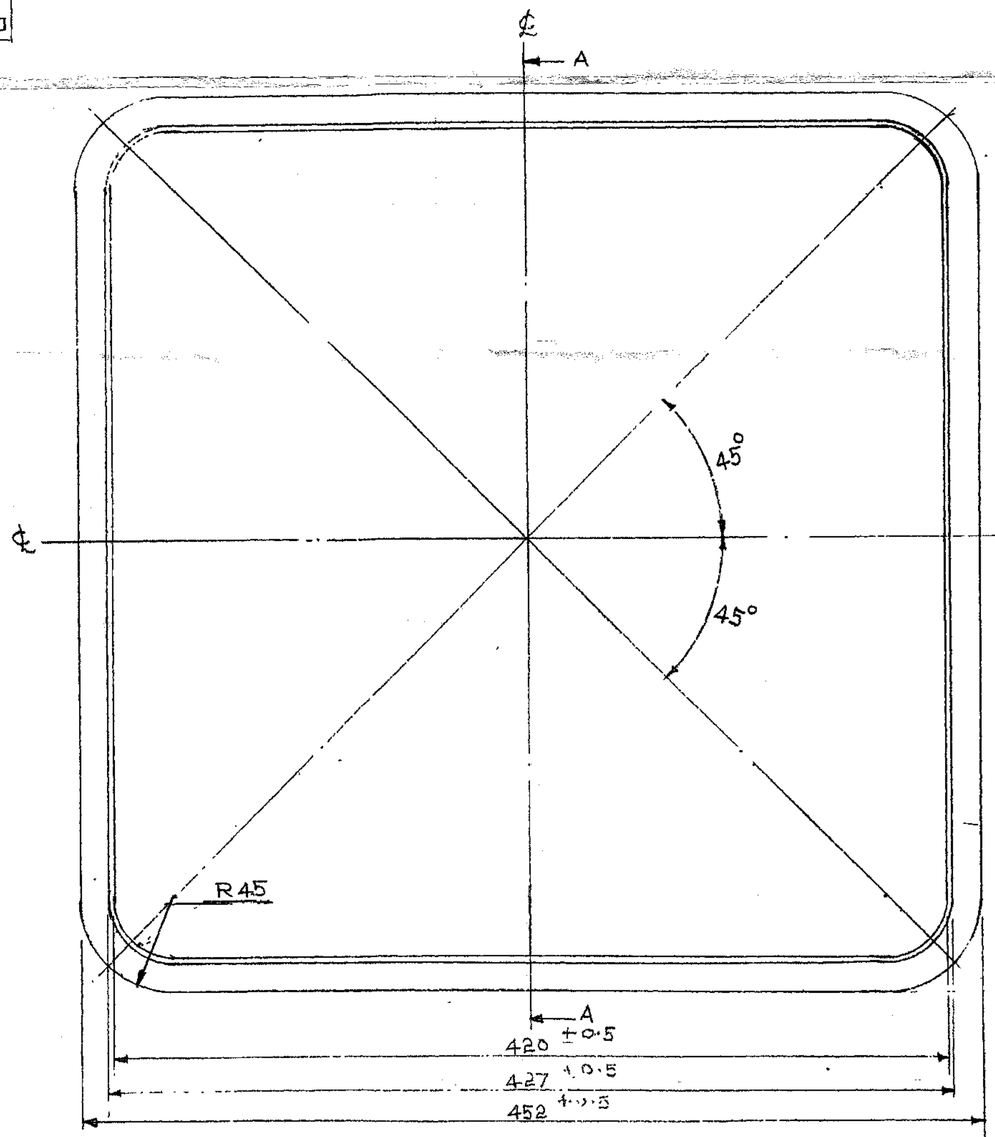
R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO SIGN
			SCALED for		31 Jul 87	

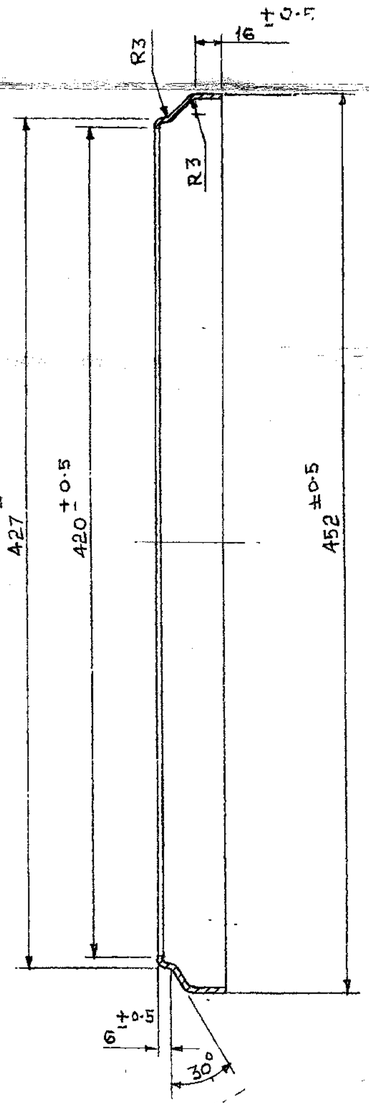
DRN. DSS | CHD | TRD | COMP
CD | PASSED | SCALE - 1:1
APPROVED FOR DIRECTOR | GAUGE SCHD | EST. WEIGHT | DATE 15-7-86
MATL -
PROTECTIVE FINISH PHOSPHATED TO IS: 3618, CLASS A1

ASSY. DRG ARDE 2039, SHT 4
DESIGN AUTHORITY
ARDE PUNE-21
DRG. Nº ARDE 2039
DET. Nº 9 | SHTS | SHT. Nº
PART. Nº
DS. CAT. Nº
AHSP

PRESSURE PLATE-SUB ASSY.

PART No	DRG CONVENTIONS CONFORM TO IS: 696
DET No 4 | SHTS | SHT No	DIMNS ARE IN mm
DRG No ARDE 2039	GEN TOL- MEDIUM CLASS TO IS-2102





SECTION A-A

NOTE :—

ALL SHARP EDGES AND BURRS ARE TO BE REMOVED

MATL :—

MILD STEEL 1·25mm THICK SHOULD CONFORM TO ANY ONE OF THE FOLLOWING SPEC.

1) IS:1079-63 Gd. ST 34 HOT ROLLED AND ANNEALED
2) IS:513-63 COLD ROLLED AND ANNEALED TYPE 'D' BEST SURFACE

PROTECTIVE FINISH :—

PHOSPHATED TO SPEC IS:3618 CLASS-A1

R No	DATE	AUTHORITY		ZONE	CD	GO
1	9-5-03		AMENDED VIDE AL No 12/2003	C-7		
			BRIEF RECORD		SIGN	

DRG SEALED Prov

DRN DSS	CHD	TRD RMN | COMP	ASSY DRG ARDE 2039, SHT 3
CD	PASSED	SCALE 1:2	DESIGN AUTHORITY
APPROVED FOR DIRECTOR		EST WEIGHT	ARDE PUNE-21
MATL – AS ABOVE		GAUGE SCHD	
PROTECTIVE FINISH – AS ABOVE		DATE 15-7-86	DRG No. ARDE 2039
			DET No 4 | SHTS | SHT No
			PART No
			DS CAT No
			AHSP

LID SEATING

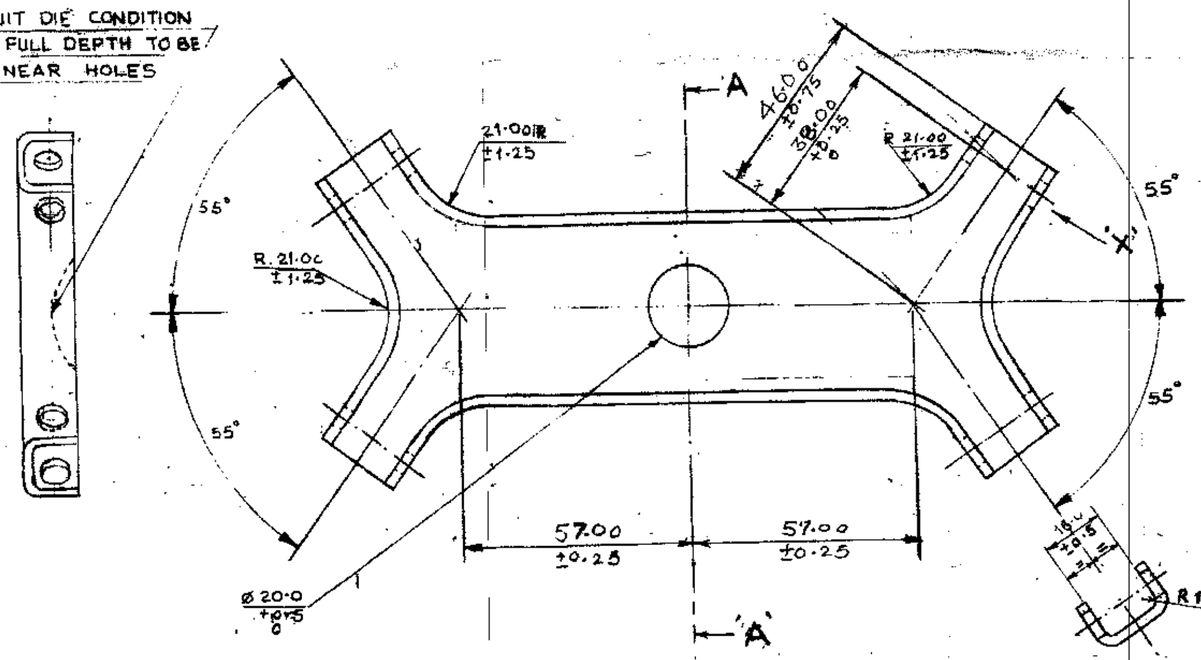
DRG CONVENTIONS CONFORM TO IS:696	PART No
DIM. ARE IN m m.	DET No.10 / SHTS / SHT No
GEN TOL. MEDIUM CLASS TO IS:2102	

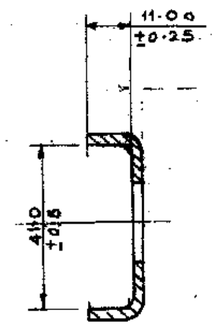
DRG No ARDE 2039

NOTE :- ALL SHARP EDGES & BURRS ARE TO BE REMOVED

MATERIAL :-
MILD STEEL 6mm THICK TO SPEC. IS:1079- Gd
St 34 HOT ROLLED AND ANNEALED.

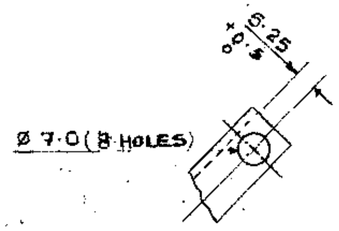
NOTCH TO SUIT DIE CONDITION IF REQUIRED FULL DEPTH TO BE MAINTAINED NEAR HOLES





PART SECTION 'A-A'

PROTECTIVE FINISH :-
a) PHOSPHATED TO SPEC. IS:3618 CLASS A1.



SCRAP VIEW IN DIRECTION OF ARROW 'X'

R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	C D	G O
DRG SEALED					SIGN	

DRN DSS	CHD	TRD DSS	COMP
C D	PASSED	SCALE :- 1:1	
APPROVED FOR DIRECTOR		EST WEIGHT	
		GAUGE SCHD	
		DATE 15-7-86	
MATL AS ABOVE			
PROTECTIVE FINISH :- AS ABOVE			

ASSY DRG. ARDE 2039/1
DESIGN AUTHORITY
ARDE PUNE-21
DRG No.
ARDE 2039
DET No.10 | SHTS | SHT No
PART No.
D.S CAT No.
AHSP

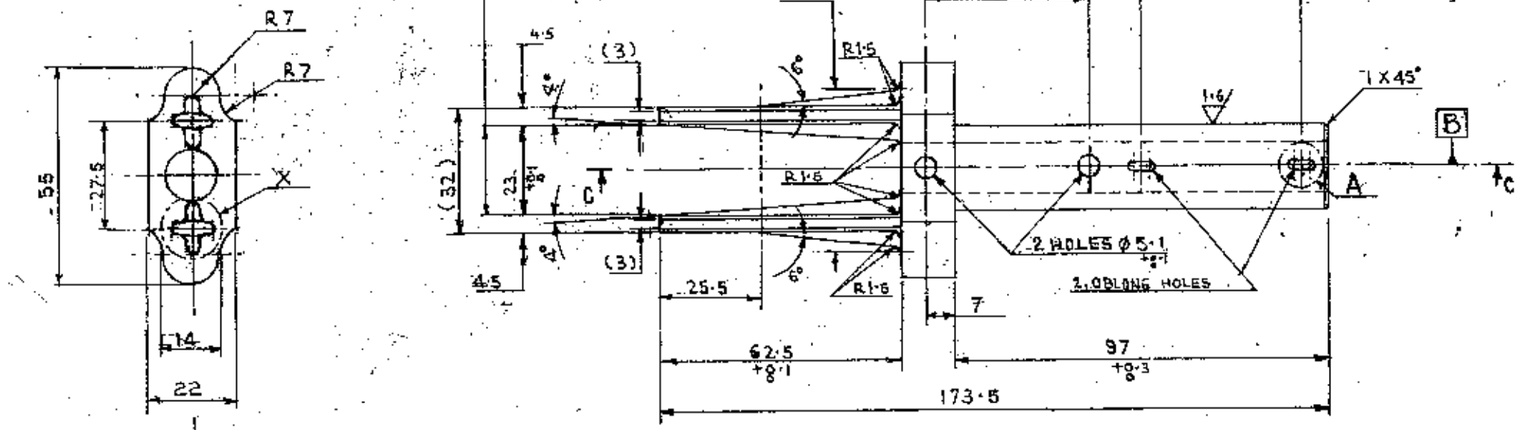
PRESSURE PLATE

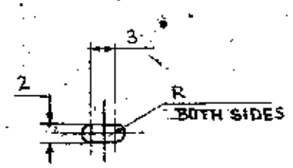
DRAWING CONVENTIONS CONFORM TO IS: [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/[redacted] CLASS TO IS: 2102

PART No. | DET No.1& | SHTS. | SHTS. No.

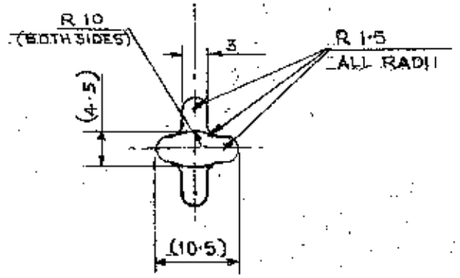
DRG. No. ARDE 9501-03

NOTES –
1. ALL SHARP EDGES & BURRS ARE TO BE REMOVED.
2. TO BE PRESSURE DIE CAST OR MACHINED.

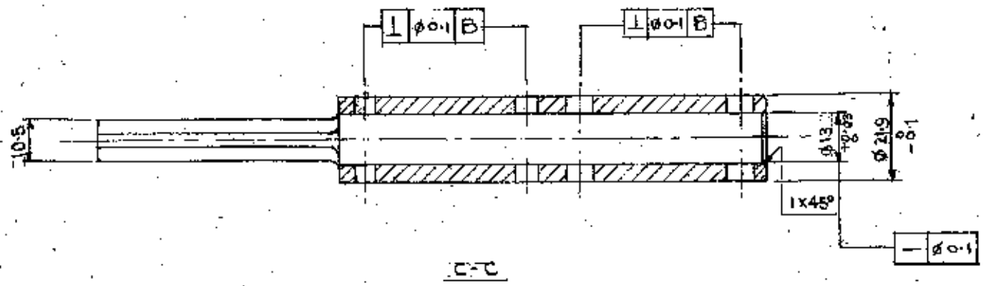




ENLARGED VIEW 'A'
SCALE: 2:1



DIMENSIONAL VIEW AT 'X'
SCALE: 2:1



C-C

MATL. AL. ALLOY TO IS:733 WITH TENSILE STRENGTH OF 200 MPa (MIN) OR ALUMINIUM ALLOY 4600 CONDITION 'M' OR AL. ALLOY 4420 CONDITION 'M' TO IS: 617-1975

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GD SIGN
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. CD | CHD. PASSED | TRD. | COMP.
APPROVED for General | SCALE: 1:1 | EST MASS: | GAUGE SCHD: | DATE: 1-11-96
MATL: AS ABOVE
PROTECTIVE FINISH:

ASSY DRG. ARDE 9501-03
DESIGN AUTHORITY:
ARDE PUNE-411 021

TITLE:

ARMING FORK

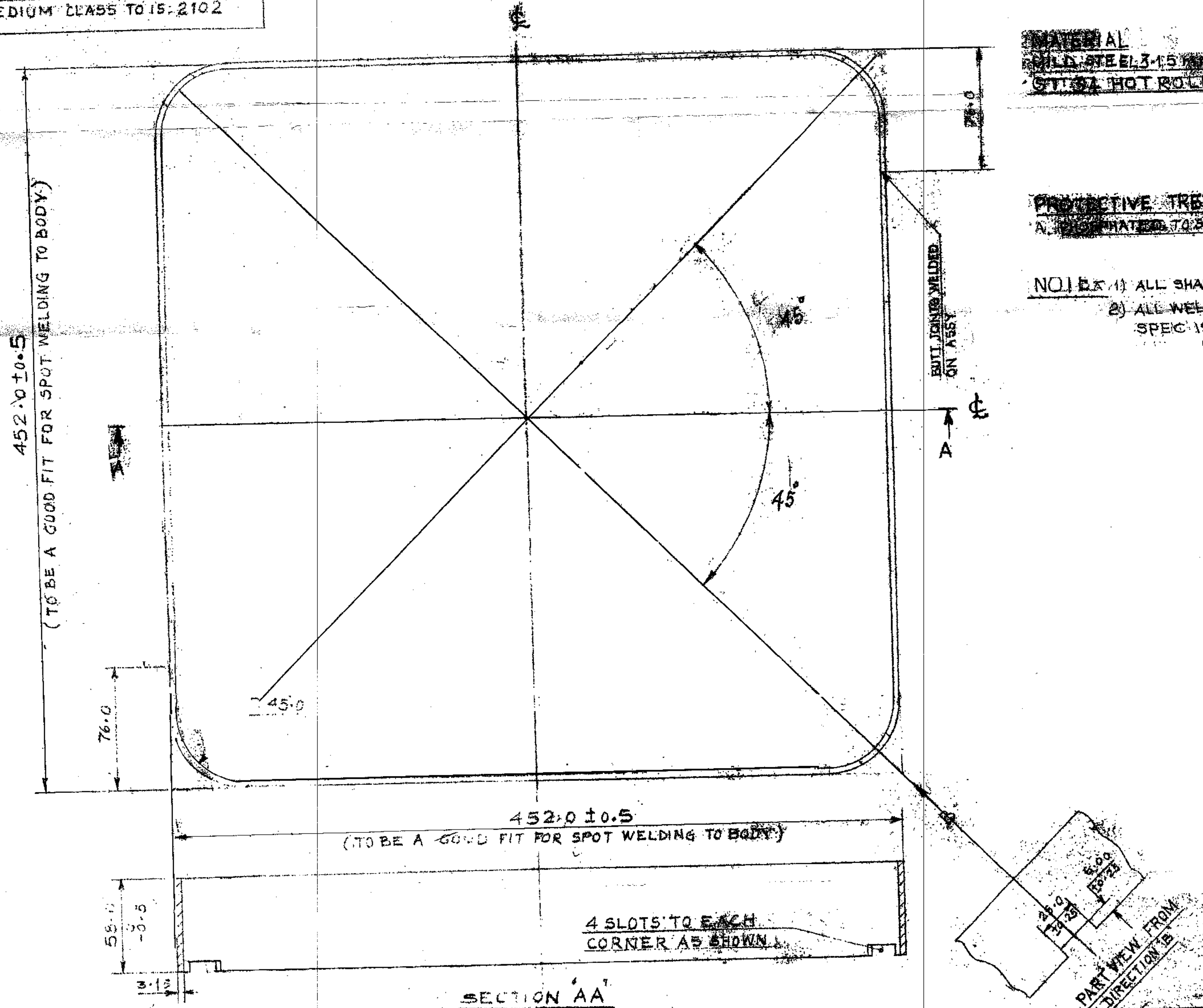
DRG. No. ARDE 950-03
DET. No.(s) | SHTS. | SHTS. No.
PART No.
M.E.S.L. No.
SHEET

DRG CONVENTIONS CONFORM TO IS:696
DIM. ARE IN mm
GEN. TOL. MEDIUM CLASS TO IS:2102

MATERIAL
MILD STEEL 3.15 mm THICK TO SPEC IS:1079 Gd. ST 34 HOT ROLLED & ANNEALED.

PROTECTIVE TREATMENT
A. PHOSPHATED TO SPEC IS:3618 CLASS A1.

NOTES: 1) ALL SHARP EDGES & BURRS ARE TO BE REMOVED.
2) ALL WELDING JOINTS SHOULD BE AS PER TO SPEC IS:813.



MAY BE MADE IN ONE PIECE IF DESIRED

DRN	CHD	TRD	COMP
T.O	PASSED	SCALE: 1:2	
APPROVED FOR DIRECTOR		EST. WEIGHT:	
		GAUGE SCHD	
		DATE: 15-7-86	
MATL: AS ABOVE			
PROTECTIVE FINISH: AS ABOVE			

R No	DATE	AUTHORITY	BRIEF RECORD	ZONE	T.O. SIGN	G.O.

DRG SEALED

ASSY DRG/ARDE 2038
DESIGN AUTHORITY ARDE, PUNE-21

DRG No. ARDE 2039
DETAILS SHTS SHT No.
PART No.
D.S. CAT. No.
AHSP

RIM

DRAWING CONVENTIONS CONFORM TO IS . ~~685~~

DIMNS ARE IN m m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/~~coarse~~/~~fine~~ CLASS TO IS : 2102

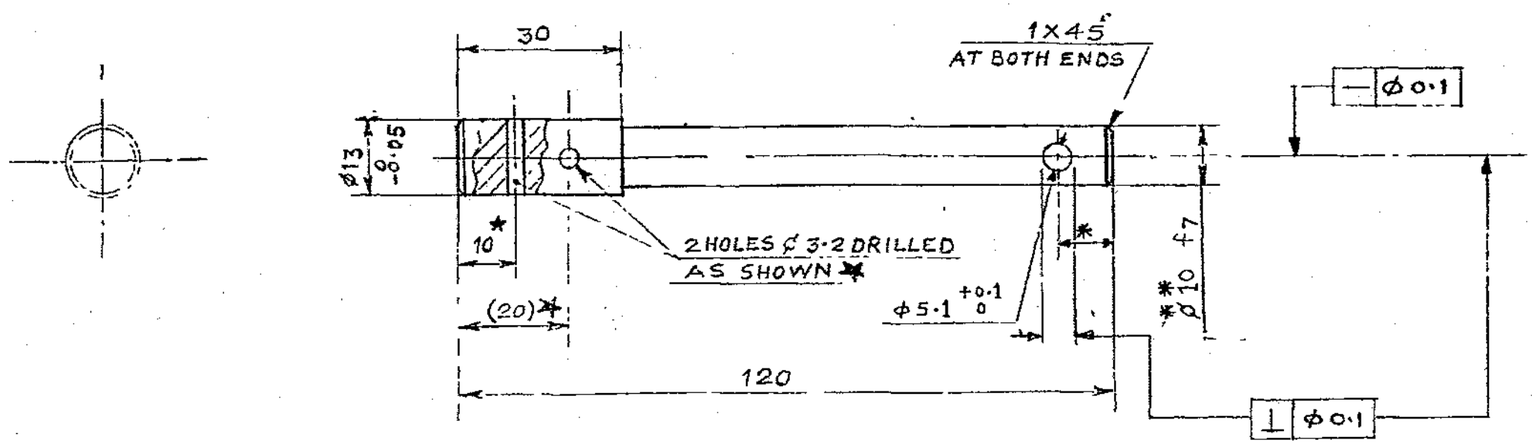
DRG. No.	DET. No. 21	SHTS.	SHTS No.	PART No.
ARDE 9501-03				

NOTE :-

ALL SHARP EDGES & BURRS ARE TO BE REM. VED

* TO BE DRILLED IN ASSEMBLY (ARDE 9501-03)

✱ TO BE MARKED AND DRILLED IN CONJUNCTION WITH ARMING TUBE (ARDE 9501-03/20)'



* * ⌀10 f7
-15 μ
-28 μ

R NO.	DATE.	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. DESHMUKH | CHD | TRD. | COMP.

CD | PASSED | SCALE : 1:1

APPROVED FOR DIRECTOR | EST MASS :

GAUGE SCHD :

DATE : 21-3-94

MATL : STAINLESS STEEL TO IS : 6603 WITH Cr CONTENT 15 % MIN

PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03/15

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 9501-03

DET. No. 21	SHTS.	SHT. No

PART No.

D S CAT. No.

A H.S.P.

TITLE:

VANE SPINDLE

DRAWING CONVENTIONS CONFORM TO IS
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

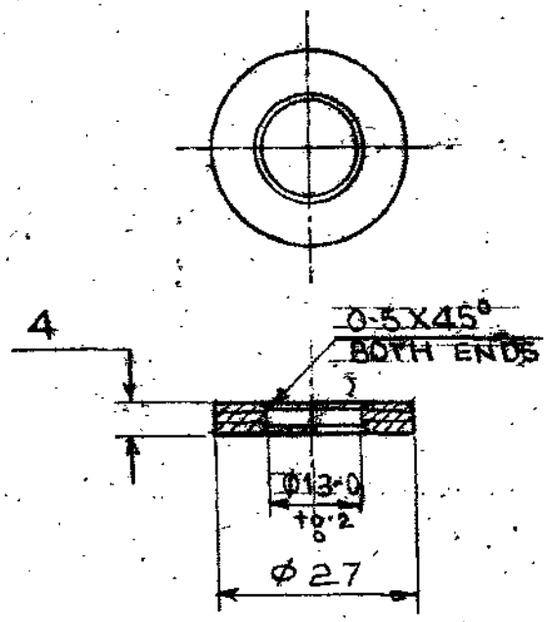
GEN. TOL. MEDIUM / COARSE/FINE CLASS

PART no.

DET. No. 19 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

NOTE: ALL FLASHES AND EXCESS MATL TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GD
					SIGN	
1	23-10-01		AMENDED VIDE AL. NO. 26/2001			

DRG. SEALED (PROV.) CRE(AA) 19 APR. 2000

DRN. CHD. TRD. COMP.

CD PASSED SCALE : 1:1

APPROVED EST. MASS:

FOR DIRECTOR GAUGE SCHD :

DATE : 29-10-96

MATL : "PTFE TO ASTM D 1710-96 TYPE I/TYPE II, GRADE 1, CLASS A"

PROTECTIVE FINISH :

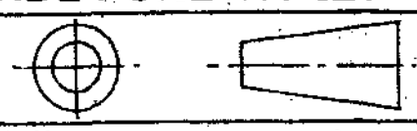
TITLE :

BEARING WASHER

ASSY. DRG. ARDE 9501-03/15

DESIGN AUTHORITY

ARDE PUNE-411 021



DRG. No. ARDE 9501-03

DET. No. 19 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS

DIMNS ARE IN m m UNLESS OTHERWISE STATED

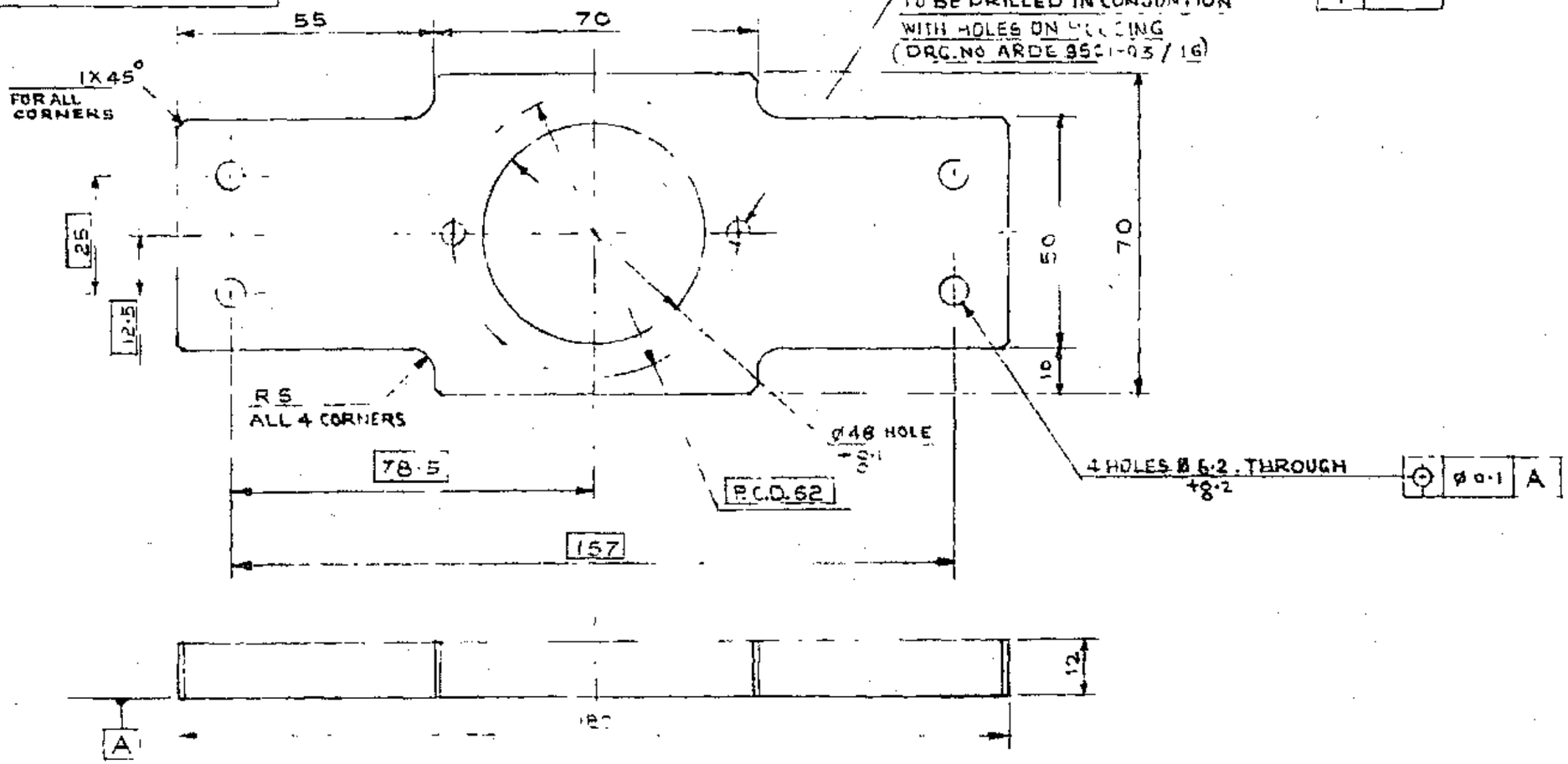
GEN TOL MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS 2102

PART No

DET No 22 SHTS SHTS No

DRG No ARDE 9501-03

NOTE :- ALL SHARP EDGES AND BURRS ARE TO BE REMOVED



R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)		19 APR 2000	

DRN. B K D	CHD	TRD.	COMP
CD	PASSED	SCALE : 1:1	
APPROVED FOR DIRECTOR		EST MASS :	
		GAUGE SCHD :	
		DATE . 8/11/94	

MATL ALUMINIUM ALLOY TO IS: 733 WITH TENSILE STRENGTH 200MPa (MIN)

PROTECTIVE FINISH ANODISED TO IS: 1868 AC 25

TITLE

BOTTOM PLATE

ASSY DRG ARDE 9501 03/15

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No.

ARDE 950.-03

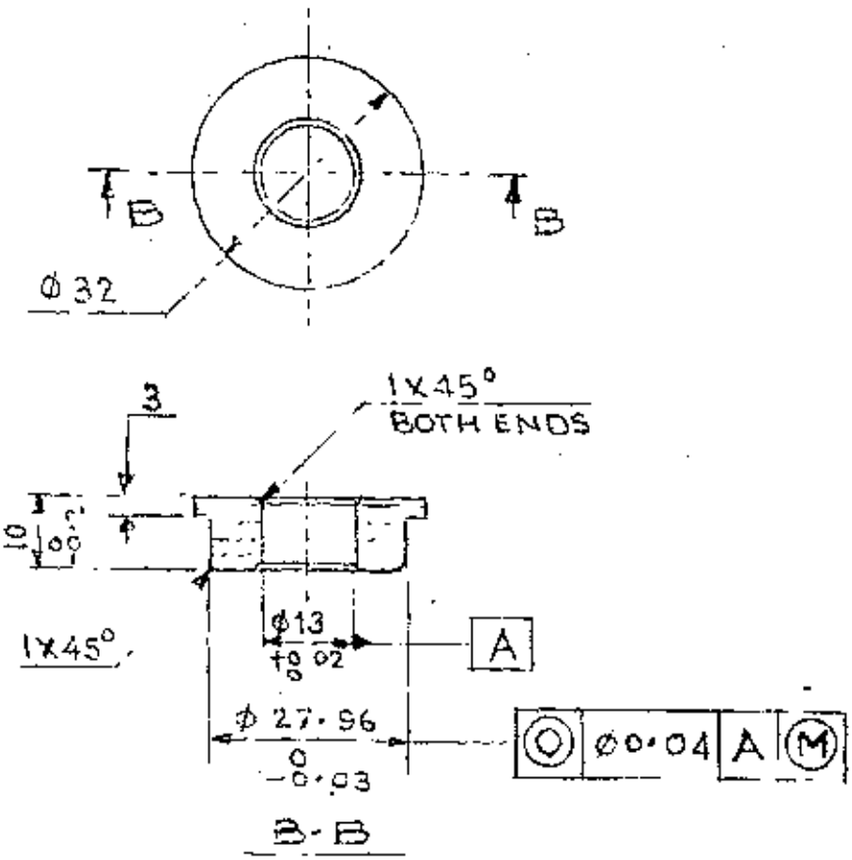
DET. No. 22	SHTS	SHT. No

PART No

D S CAT No.

A H.S.P

PART no.	DRAWING CONVENTIONS CONFORM TO IS [redacted]		
	DIMNS ARE IN m m	UNLESS OTHERWISE STATED	
SHTS No	DET.No.26	SHTS.	GEN TOL. MEDIUM / COARSE/FINE CLASS TO IS 2102
DRG. No	ARDE 9501-03		



R NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
1	23-10-01		AMENDED VIDE AL NO. 26/2001			

DRG SEALED (PROV.) CRE(AA) 19 APR 2000

DRN	CHD.	TRD COMP	ASSY DRG. ARDE 9501-03 / 15
CD	PASSED	SCALE : 1:1	DESIGN AUTHORITY
		EST. MASS :	ARDE PUNE-411 021
APPROVED FOR DIRECTOR		GAUGE SCHD :	
		DATE 28-10-96	

MATL : "PTFE TO ASTM D 1710-96 TYPE I / TYPE II, GRADE 1, CLASS A"

PROTECTIVE FINISH :

TITLE :

FORK BEARING REAR

DRG No	ARDE 9501-03	
DET No. 26	SHTS.	SHT. No.
PART No.		
D.S CAT.No		
A H S P.		

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [illegible]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS 2102

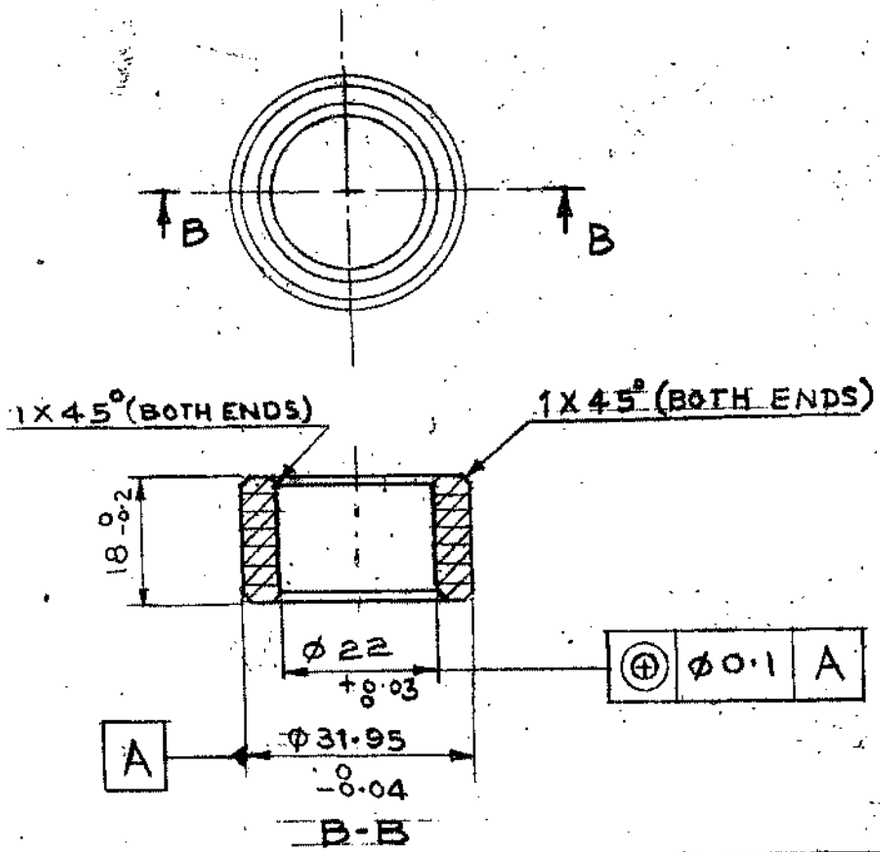
PART No.
DET. No. 24 SHTS.
SHTS. No.
DRG. No. ARDE 9501-03

D

NOTE :- ALL FLASHES & EXCESS MATERIAL TO BE REMOVED.

C

B



B-B

A

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO / SIGN
1	23-10-01		AMENDED VIDE AL.NO. 26/2001			

DRG. SEALED (PROV.) Seen in Form CRE(AA) 19 APR 2000

DRN. C R Phatak	CHD.	TRD.	COMP.
CD	PASSED	SCALE : 1 : 1	
APPROVED FOR DIRECTOR		EST. MASS:	
		GAUGE SCHD :	
		DATE : 29-10-1996	

ASSY. DRG. ARDE 9501-03/15

DESIGN AUTHORITY

ARDE PUNE-411 021

MATL : "PTFE TO ASTM D1710-96 TYPE I/TYPE II, GRADE 1, CLASS A"

PROTECTIVE FINISH :

TITLE :

FORK BEARING FRONT

DRG. No. ARDE 9501-03

DET. No. 24 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

27

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / [redacted] CLASS TO IS 2102

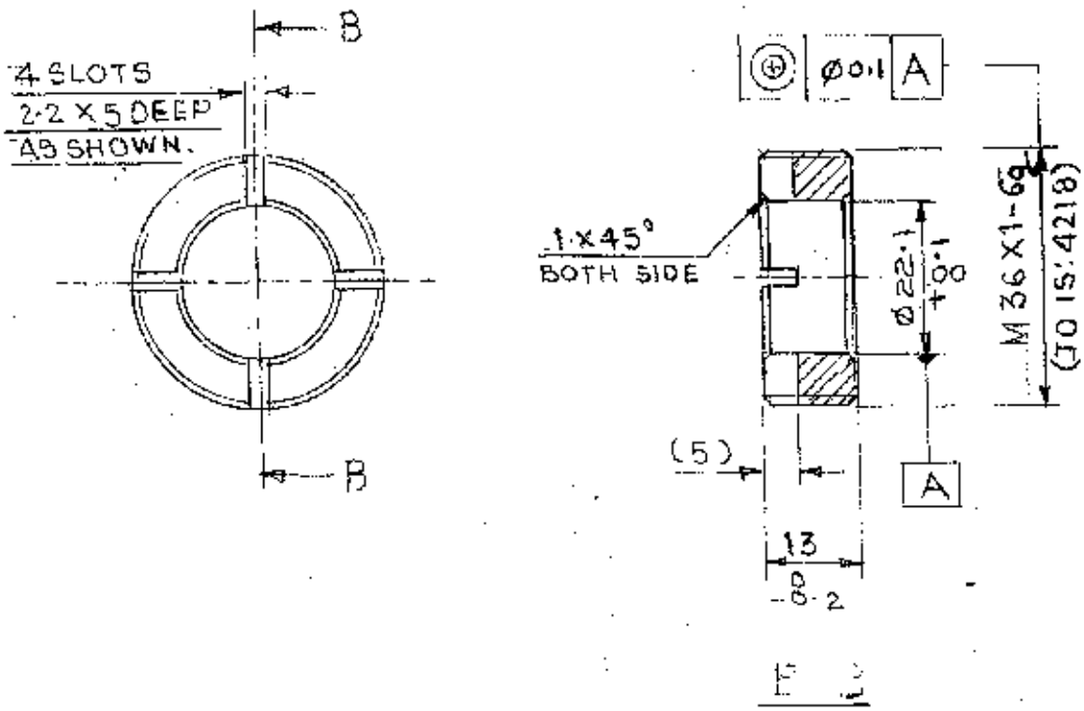
PART No.

DET.No.25 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

D

NOTE :—
ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



C

B

A

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD / SIGN	GO

DRG. SEALED (PROV.) for in Charge CRE(AA) 9 APR 2000

DRN. C.R.P.	CHD.	TRD.	COMP.
CD	PASSED	SCALE : 1:1	
APPROVED FOR DIRECTOR		EST. MASS:	
		GAUGE SCHD :	
		DATE : 15/11/96	

ASSY. DRG. ARDE 9501-03 /15

DESIGN AUTHORITY

ARDE PUNE-411 021

MATL : ALUMINIUM ALLOY TO IS: 733 WITH TENSILE STRENGTH 200 MPa (MIN)

PROTECTIVE FINISH : ANODISED TO IS: 1868 AC 25

TITLE :

CLOSING PLUG FRONT BEARING

DRG. No. ARDE 9501-03

DET. No. 25 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

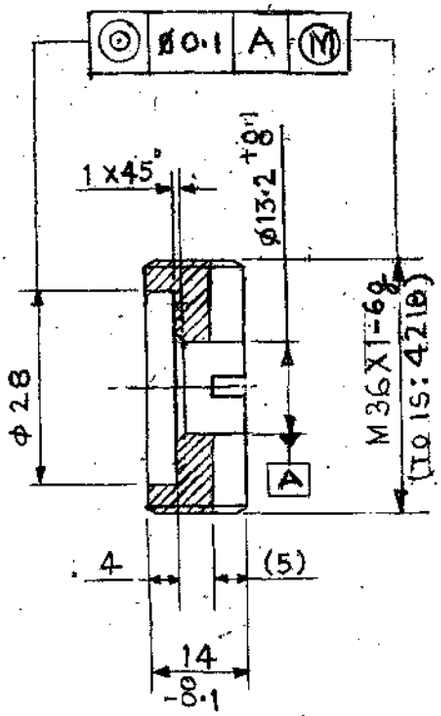
2

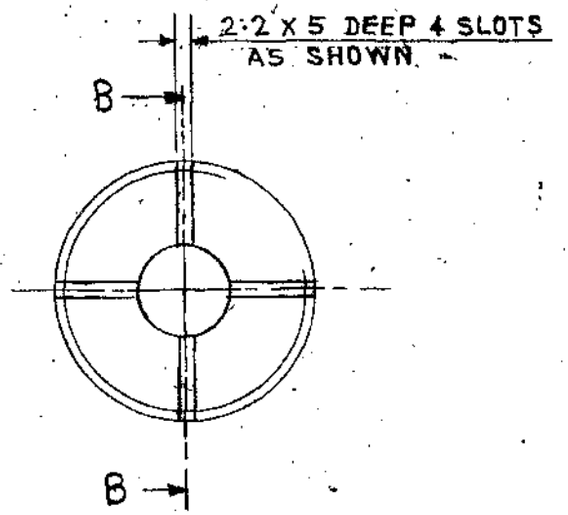
1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM / COARSE/FINE CLASS TO IS 2102

PART No.
DET. No. 23 | SHTS. | SHTS. No.
DRG. No. ARDE 9501-03

NOTE: ALL SHARP EDGES AND BURRS ARE TO BE REMOVED.





R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD / SIGN	GO

DRG. SEALED (PROV.) for in Charge CRE(AA) 19 APR 2000

DRN. DESHMUKH | CHD. | TRD. | COMP.

CD | PASSED | SCALE : 1 : 1 | EST. MASS:

APPROVED FOR DIRECTOR | GAUGE SCHD : | DATE : 30 - 10 - 96

MATL : AL. ALLOY TO IS: 733 WITH TENSILE STRENGTH 200 MPa (MIN)

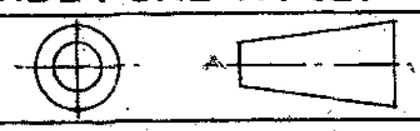
PROTECTIVE FINISH : ANODISING TO IS: 1868 AC 25

TITLE :

CLOSING PLUG
(REAR BEARING)

ASSY. DRG. ARDE 9501-03/15

DESIGN AUTHORITY
ARDE PUNE-411 021



DRG. No. **ARDE 9501-03**

DET. No. 23	SHTS.	SHT. No.

PART No.

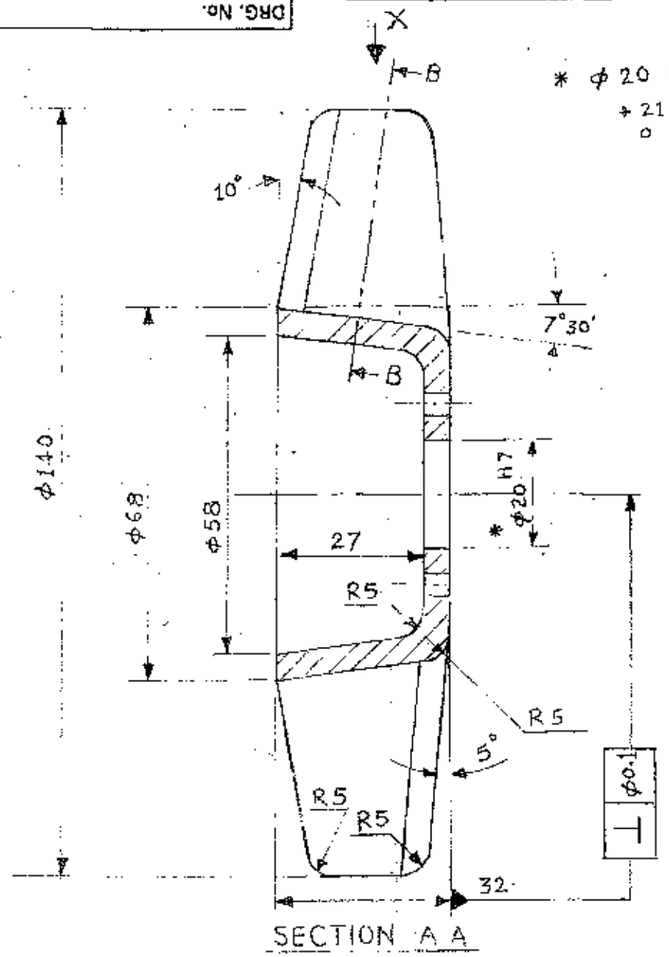
D.S.CAT.No.

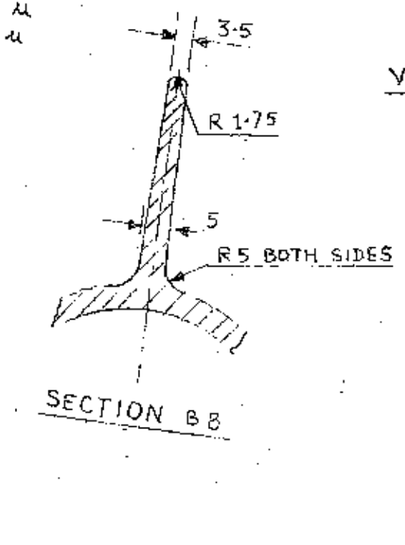
A.H.S.P.

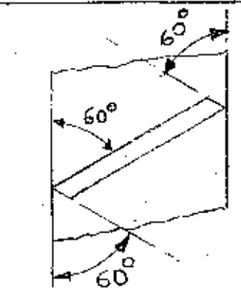
DRAWING CONVENTIONS CONFORM TO IS : [illegible]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/~~COARSE~~/~~FINE~~ CLASS TO IS : 2102

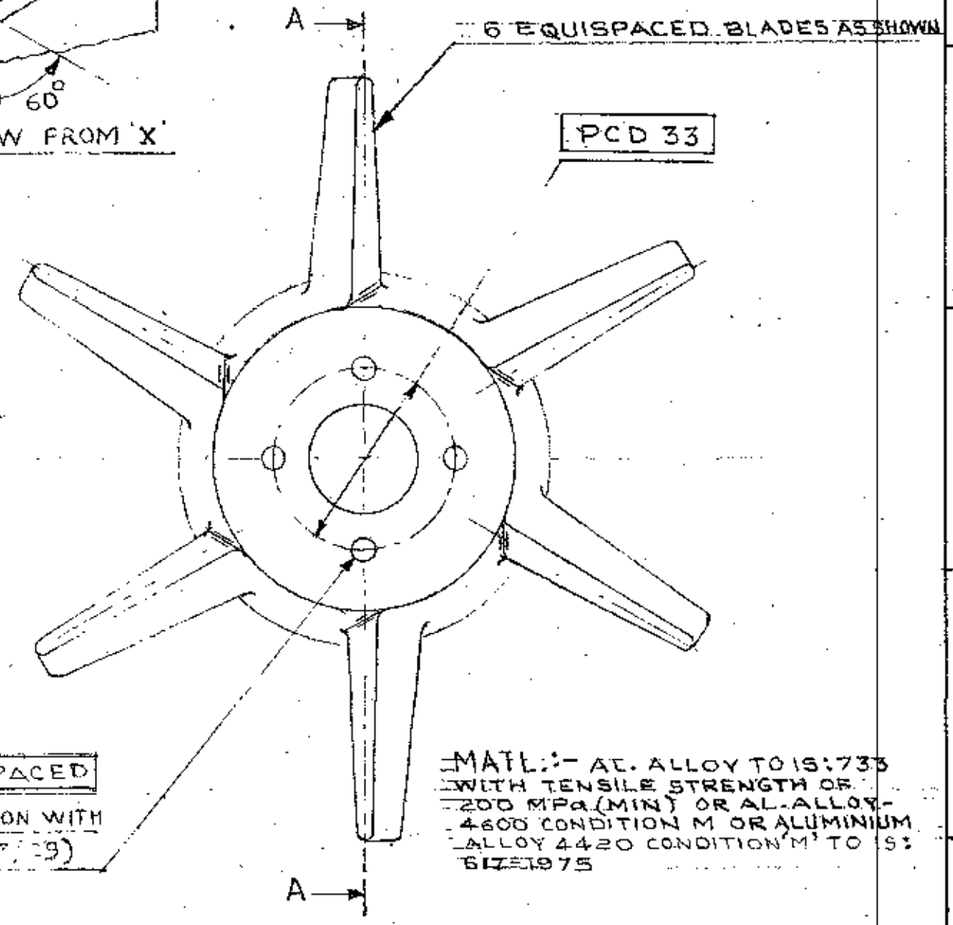
DRG. No. ARDE 9501-03
PART No.
DET. No. 30 | SHTS. | SHT.S.No.

NOTE: 1) ALL SHARP EDGES AND BURRS ARE TO BE REMOVED
2) TO BE PRESSURE DIE CAST OR MACHINED









4 HOLES φ 4·2 EQUISPACED
(TO BE DRILLED IN CONJUNCTION WITH BUSH VANE (ARDE 9501-27/29)

MATL:- AL. ALLOY TO IS:733 WITH TENSILE STRENGTH OF 200 MPa (MIN) OR AL-ALLOY-4600 CONDITION M OR ALUMINIUM ALLOY 4420 CONDITION 'M' TO IS: 617-1975

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)	19 APR 2000		

DRN. DESHMUKH	CHD. [illegible]	TRD.	COMP.
CD	PASSED	SCALE : 1 : 1	
APPROVED	FOR DIRECTOR	EST MASS :	
		GAUGE SCHD :	
		DATE : 23 - 3 - 94	
MATL : AS ABOVE			
PROTECTIVE FINISH : ANODISED TO IS: 1868 Gd Ac 10			

ASSY DRG. ARDE 9501-03/29
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No. ARDE 9501-03
DET. No. 30 | SHTS. | SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

TITLE:

VANE

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS 2102

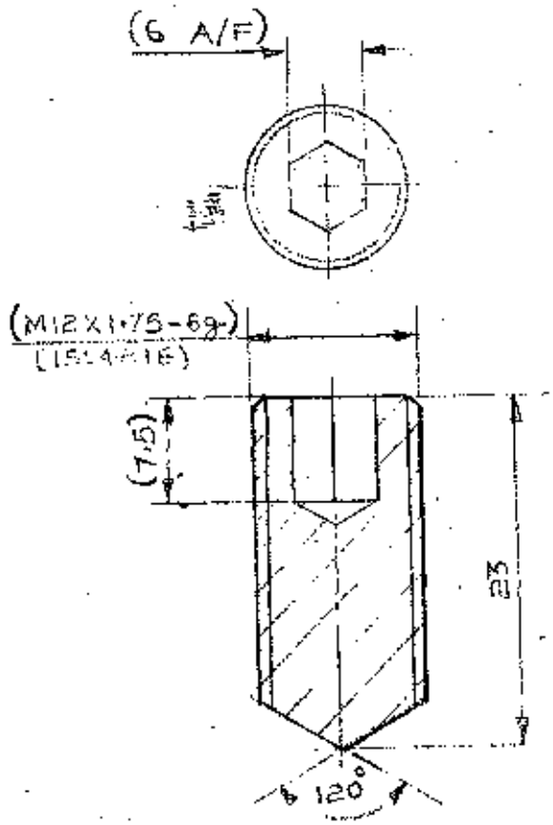
PART no.

DET. No. 38 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

D

NOTE :- TO BE MACHINED FROM HEX SOCKET SET SCREW TO IS: 6094.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO. SIGN

DRG. SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. C R Phatak	CHD.	TRD. / COMP.	ASSY. DRG. ARDE 9501-03
CD	PASSED	SCALE : 2 : 1	DESIGN AUTHORITY
APPROVED FOR DIRECTOR		EST. MASS:	ARDE PUNE-411 021
		GAUGE SCHD :	
		DATE : 30-4-1994	

MATL : STEEL TO PROPERTY CLASS 45 H TO IS: 1367

PROTECTIVE FINISH : CADMIUM PLATED TO IS: 1572 Cd 12.

TITLE :

STUD

DRG. No. ARDE 9501-03

DET. No. 38 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS :
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

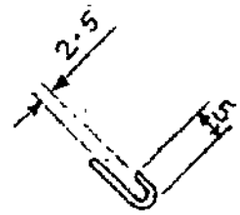
GEN. TOL. MEDIUM / CLASS TO IS 2102

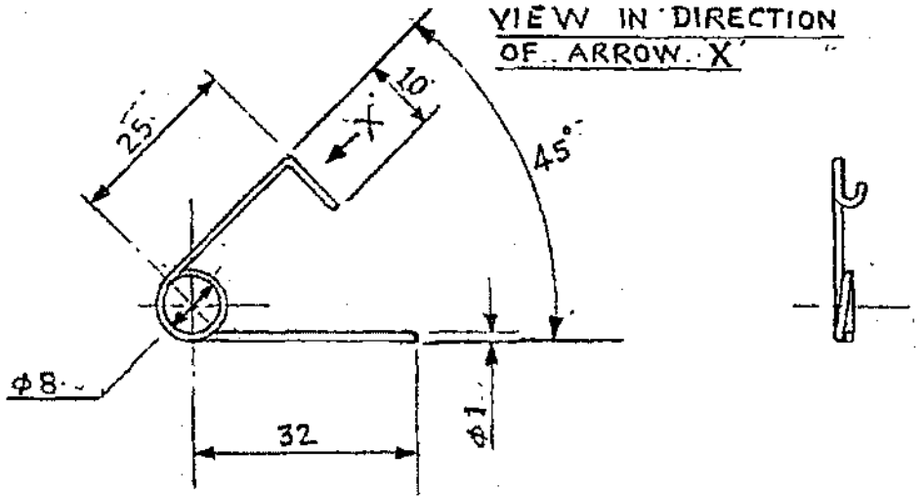
PART no.

DET. No. 33 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

NOTE :- ALL SHARP EDGES AND BURRS ARE TO BE REMOVED.





PROTECTIVE FINISH :- CADMIUM PLATED TO SPEC IS: 1572 - 1968 WITH CLASSIFICATION Cd-12

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED. (PROV.) for in Terms CRE(AA) 19 APR 2000

DRN. B K D.	CHD.	TRD.	COMP.
CD	PASSED	SCALE : 1 : 1	
APPROVED CR. (T. THOMAS) FOR DIRECTOR		EST. MASS:	
		GAUGE SCHD :	
		DATE : 30 - 3 - 94.	

MATL : SPRING STEEL WIRE TO SPEC IS: 4454 - 1967 Pt 1 Gd-2

PROTECTIVE FINISH : AS ABOVE.

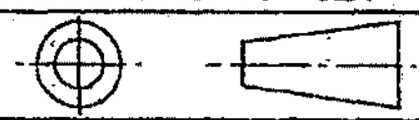
TITLE :

CLIP RETAINING

ASSY. DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE-411 021



DRG. No. **ARDE 9501-03**

DET. No. 33 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS : ~~696~~

DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/~~COARSE/FINE~~ CLASS TO IS : 2102

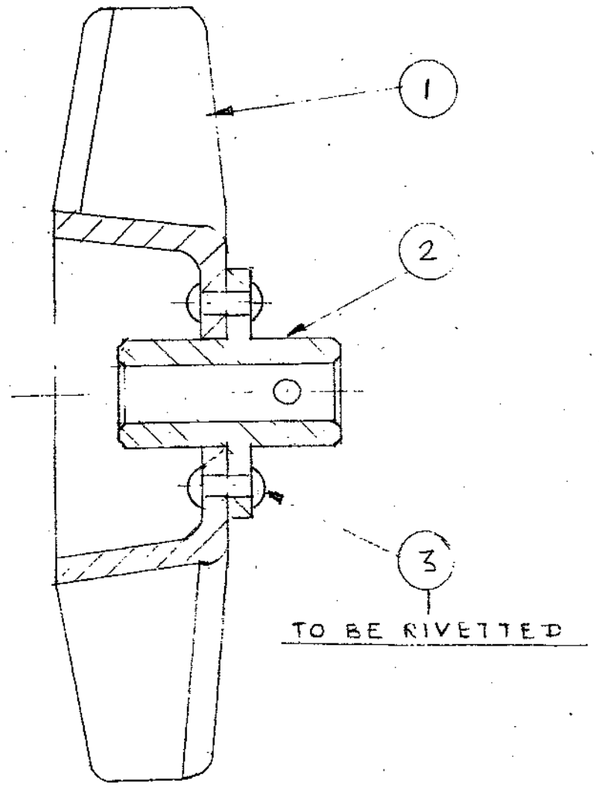
DRG. No. ARDE 9501-03

PART No.

DET. No 29 | SHTS. | SHT.No.

LIST OF COMPONENTS

ITEM No	NOMENCLATURE	No OFF	MATL	DRG No	DET No	PART No
1	VANE	1		ARDE 9501-03	30	
2	BUSH VANE	1		" "	31	
3	~~SNAP HEAD RIVET 4X15~~ IS: 2907 ALUMINIUM	4	Al	ND*		



NOTES :-

1) FIRST COAT : PAINT, PRE-TREATMENT PRIMER (ETCHING PRIMER) TYPE SPRAYING TO SPECN DEF STAN 80-15/1.
2) SECOND COAT : PAINT, PRIMING, CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR RED OXIDE (No. 446) TO IS:5
3) THIRD COAT :- PAINT, FINISHING, CHLORINATED RUBBER TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR DEEP BRONZE GREEN (No 224) TO IS:5
4) ALL COATS OF PAINTS TO BE APPLIED ALL OVER INTERNALLY AND EXTERNALLY EXCEPT HOLES AND I.D. OF BUSH VANE.
5) FOR METHOD OF APPLICATION AND TESTS FOR SUITABILITY OF THE PAINTS REFER PARA 6.7.1 OF SPECIFICATION No. ARDE/SPECN/613.

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. VLB | CHD. | TRD. | COMP.

CD | PASSED | SCALE : 1:1

EST MASS :

APPROVED FOR DIRECTOR | GAUGE SCHD :

DATE : 29-10-96

MATL :

PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 9501-03

DET. No. 29 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

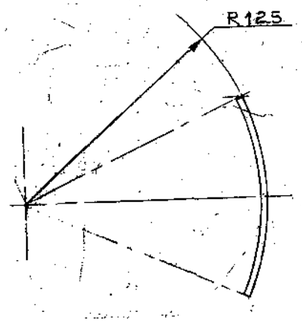
A.H.S.P.

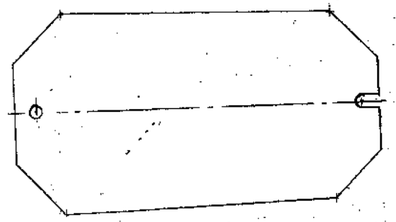
TITLE:

VANE ASSY.

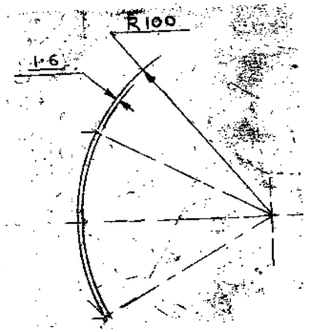
DRAWING CONVENTIONS CONFORM TO IS:
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/COARSE/FINE CLASS TO IS:2102

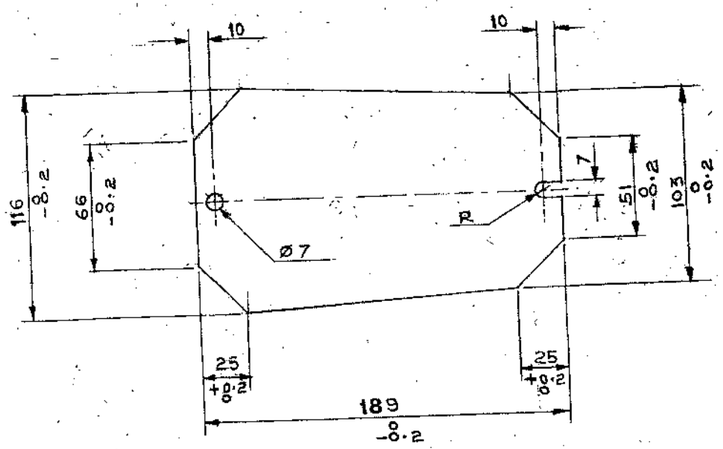
ARDE 9501-03





VIEW AFTER FORMING





VIEW ON DEVELOPMENT

NOTES:—

1. ALL SHARP EDGES & BURRS ARE TO BE REMOVED.
2. TO BE PHOSPHATED TO IS: 3618 CLASS B
3. AFTER PHOSPHATING, TO BE PAINTED BOTH SIDES, OMIT PAINT FROM HOLES
4. FIRST COAT :- PAINT, PRE-TREATMENT PRIMER(ETCHING PRIMER) TYPE SPRAYING TO SPECN DEF STAN 80-15/1.
5. SECOND COAT: PAINT, PRIMING CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR RED OXIDE (No. 446) TO IS: 5
6. THIRD COAT :- PAINT, FINISHING, CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR DEEP BRONZE GREEN (No. 224) TO IS:5
7. ALL COATS OF PAINTS TO BE APPLIED ALL OVER ON BOTH SIDES.
8. FOR METHOD OF APPLICATION AND TEST'S FOR SUITABILITY OF THE PAINTS, REFER PARA 6·7·1 OF SPECIFICATION No. ARDE/SPECN/613

R. NO.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO SIGN
			DRG SEALED (PROV.)		CRECAA	19 APR 2000

DRN. CHKD & PASSED CD APPROVED
TRD. SCALE N.S. TEST WEIGHT GAUGE SCHD. DATE 19-04-2000
MATL: STEEL TO IS 1079 Gr St 24
PROTECTIVE FINISH: PAINT AS PER NOTES

ARDE 9501-03
DET. No 24 SHTS

PANEL I

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

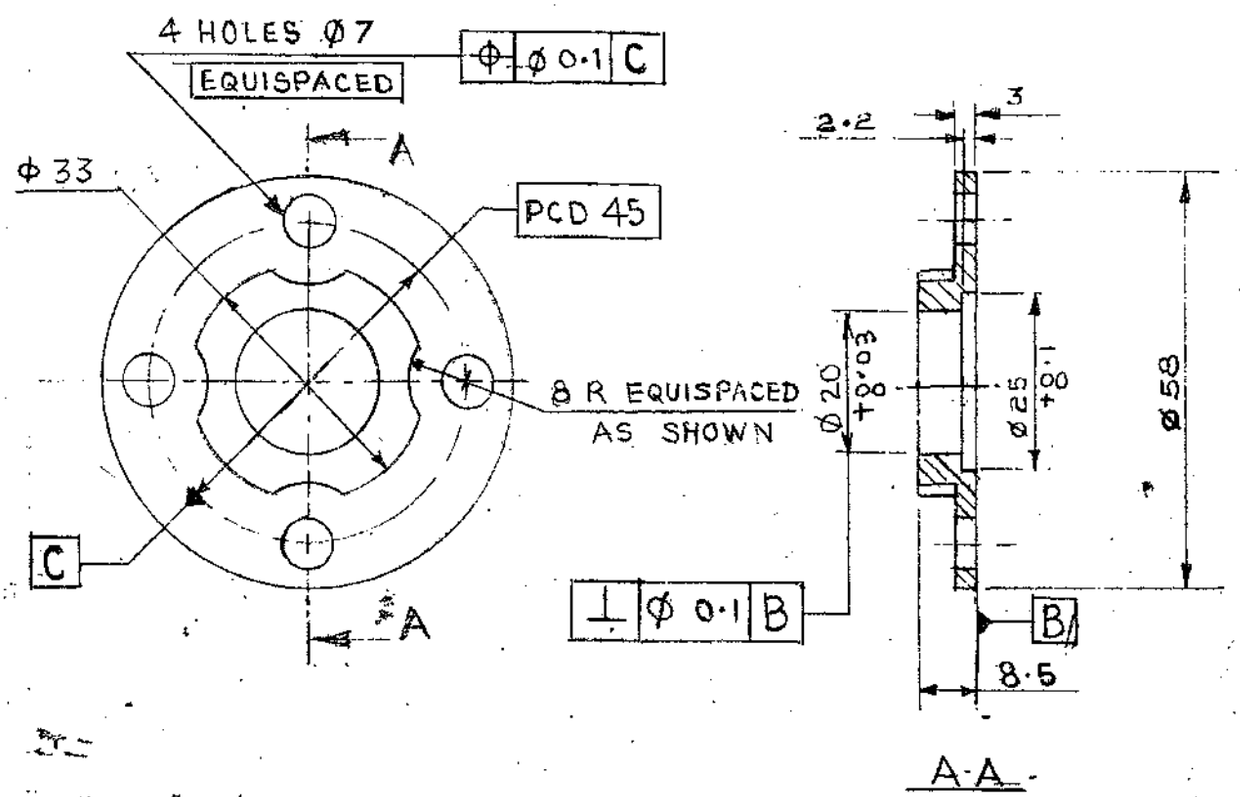
GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS 2102

PART no.

DET. No. 28 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

NOTE:- ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) CRE(AA) 19 APR. 2000

DRN. C.R. Phatak	CHD.	TRD.	COMP.	ASSY. DRG. ARDE 9501-03
CD	PASSED	SCALE : 1 : 1		DESIGN AUTHORITY
APPROVED FOR DIRECTOR		EST. MASS:		ARDE PUNE-411 021
		GAUGE SCHD :		
		DATE : 4-7-1995		

MATL : AL. ALLOY TO IS: 733 WITH TENSILE STRENGTH 200 N/mm² (MIN)

PROTECTIVE FINISH : ANODISED TO IS: 1868 gd AC 25

TITLE :

SPINDLE BEARING HOUSING

DRG. No. ARDE 9501-03

DET. No. 28 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

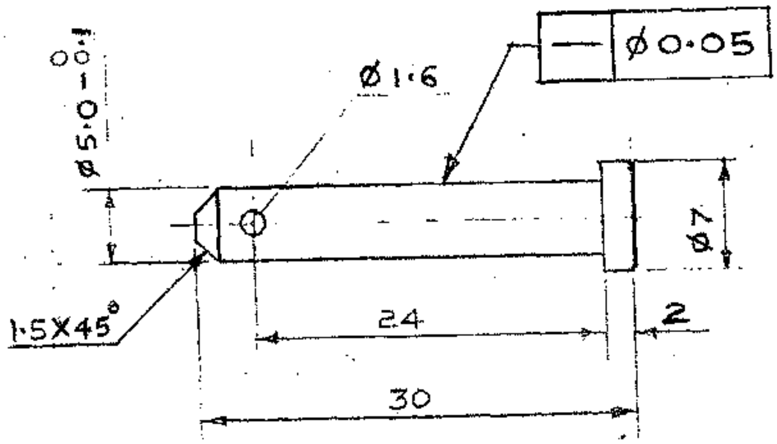
1	2	3	4

DRG. No. ARDE 9501-03
DET. No. 32 | SHTS. | SHTS. No.
PART no.

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS 2102

NOTE:- ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) [signature] CRE(AA) 19 APR 2000

DRN. C R Phatak	CHD. [signature]	TRD.	COMP.	ASSY. DRG. ARDE 9501-03
CD [signature]	PASSED [signature]	SCALE : 2:1		DESIGN AUTHORITY
		EST. MASS:		ARDE PUNE-411 021
APPROVED [signature] FOR DIRECTOR		GAUGE SCHD :		
		DATE : 30-2-94		

MATL : STAINLESS STEEL TO IS:6603 WITH Cr. CONTENT 15% MIN.

PROTECTIVE FINISH :

TITLE :

PIN VANE

DRG. No.
ARDE 9501-03

DET. No. 32	SHTS.	SHT. No.

PART No.

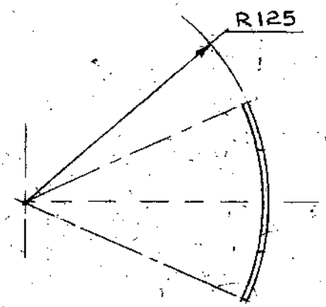
D.S.CAT.No.

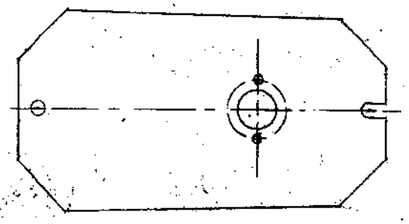
A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS: [illegible]
DIMS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/COURSE/FINE CLASS TO IS: 2102

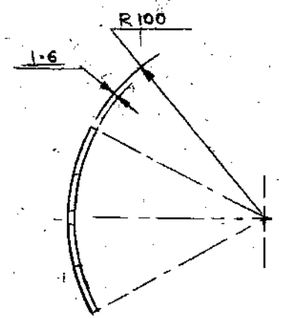
DRG No. ARDE 9501-03

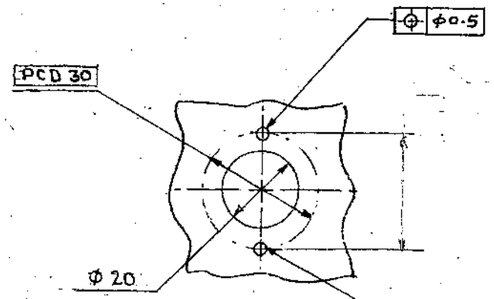
NOTE - ALL SHARP EDGES & BURRS ARE TO BE REMOVED.





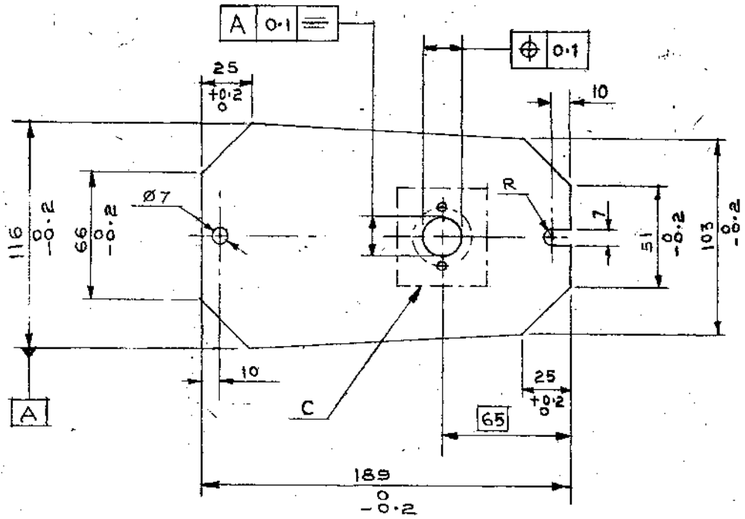
VIEW AFTER FORMING



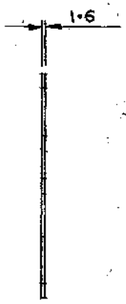


VIEW AT 'C'
SCALE-1:1

2 HOLES ϕ 3·1 TO BE DRILLED IN CONJUCTION WITH THE HOLES ON ARMING WIRE GUIDE (DRG.No ARDE 9501-03/37)



VIEW ON DEVELOPMENT



R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)		CRE(AA)			19 APR 2000	

DRN: [illegible] CHD. [illegible] TRD. COMP.
CD [illegible] PASSED [illegible]
APPROVED [illegible] FOR DIRECTOR
MATL: STEEL TO IS: 1079 St 34
PROTECTIVE FINISH: PHOSPHATED TO IS: 3618 CLASS 'B'

ASSY DRG. ARDE 9501-03/35
DESIGN AUTHORITY
ARDE PUNE-411 021
SCALE: 1:2
EST MASS:
GAUGE SCHD:
DATE: 17-7-1995

DRG. No. ARDE 9501-03
DET. No 36 | SHTS. | SHT.No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE:

PANEL II

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

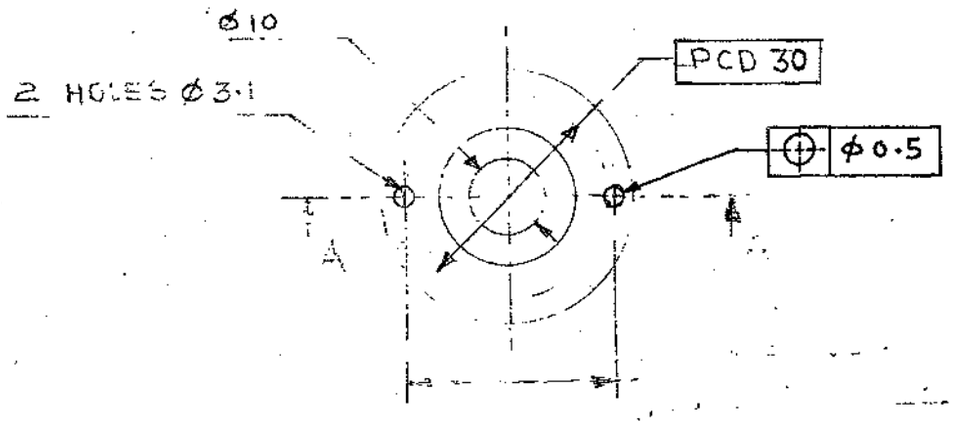
PART no.

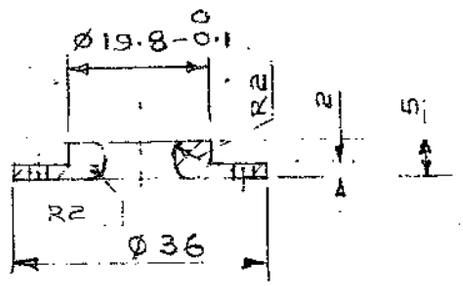
DET. No. 37 | SHTS. | SHTS. No.

GEN. TOL. MEDIUM / ~~COARSE~~/~~FINE~~ CLASS TO IS 2102

DRG. No. ARDE 9501-03

NOTE :- ALL SHARP EDGES & BURR'S ARE TO BE REMOVED.





A-A

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. C.R.Phatak	CHD.	TRD.	COMP.	ASSY. DRG. ARDE 9501-03/35
CD	PASSED	SCALE : 1:1		DESIGN AUTHORITY
		EST. MASS:		ARDE PUNE-411 021
APPROVED FOR DIRECTOR		GAUGE SCHD :		
		DATE : 17-7-1985		

MATL : BRASS TO IS: 319 ANY CONDITION

PROTECTIVE FINISH :

TITLE :

ARMING WIRE GUIDE

DRG. No. ARDE 9501-03

DET. No. 37 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

40

1	2	3	4

PART no.

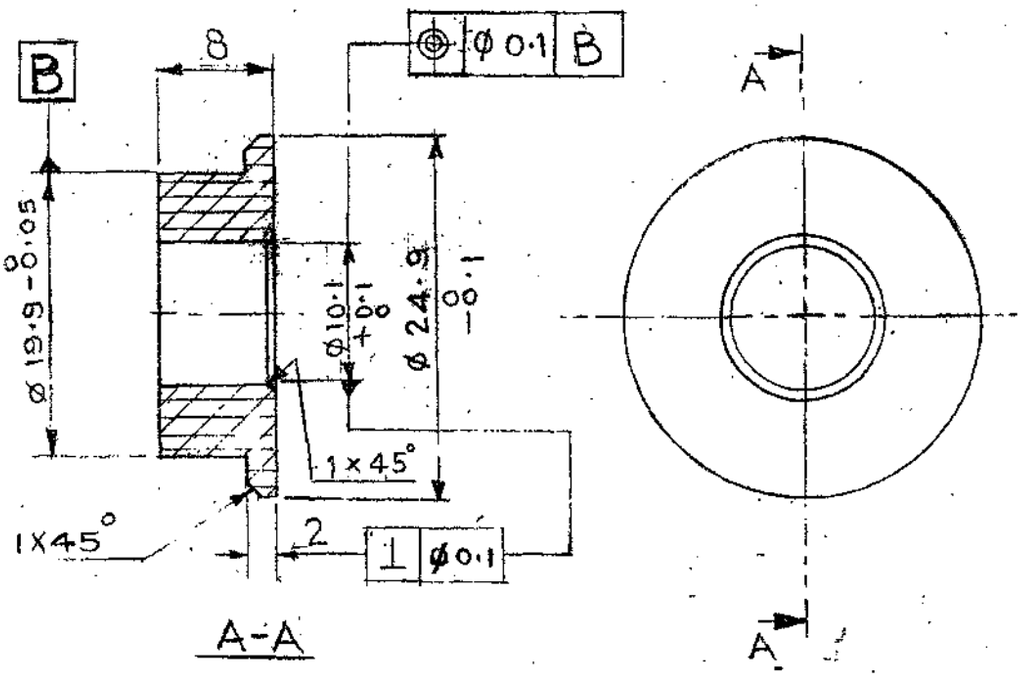
DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

DET.No.27 | SHTS. | SHTS. No.

GEN. TOL. MEDIUM. / ~~COARSE~~/~~FINE~~ CLASS TO IS 2102

DRG. No. ARDE 9501-03

NOTE: ALL FLASHES & EXCESS OF MATL. TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
1	23-10-01		AMENDED VIDE AL. NO. 26/2001			

DRG. SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. C.R. Phatak | CHD. | TRD. | COMP. | ASSY. DRG. ARDE 9501-03

CD | PASSED | SCALE : 2 : 1 | DESIGN AUTHORITY

EST. MASS:

APPROVED FOR DIRECTOR | GAUGE SCHD : | ARDE PUNE-411 021

DATE : 5-7-1985

MATL : "PTFE TO ASTM D 1710-96 TYPE I/TYPE II, GRADE 1, CLASS A"

PROTECTIVE FINISH :

TITLE :

SPINDLE BEARING

DRG. No. ARDE 9501-03

DET. No. 27 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

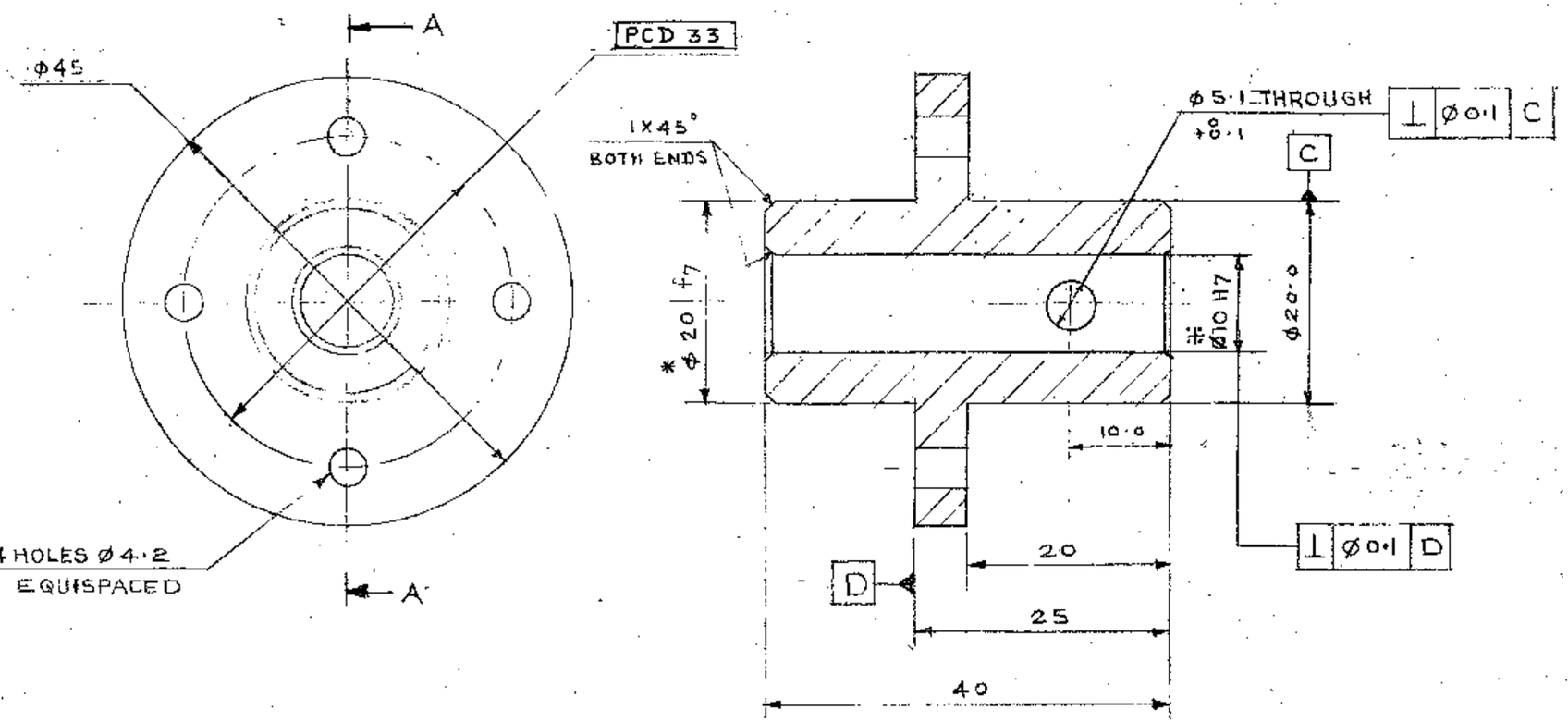
A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS : ###
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/~~COARSE/FINE~~ CLASS TO IS : 2102

DRG. No. ARDE 9501-03
PART No.
DET. No. 31 | SHTS. | SHT. No.

NOTE - ALL SHARP EDGES & BURRS ARE TO BE REMOVED.

* ϕ 20 f_7 : $-20\ \mu$, $-41\ \mu$; # ϕ 10 H_7 : $+15\ \mu$, $0\ \mu$



SECTION A-A

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)		19 APR 2000	

DRN. VVR | CHD. [illegible] | TRD. | COMP.
CD [signature] | PASSED [signature] | SCALE : 2:1
EST MASS :
APPROVED [signature] FOR DIRECTOR | GAUGE SCHD :
DATE : 29-10-96
MATL : Al ALLOY TO IS : 733 WITH TENSILE STRENGTH 200 MPa (MIN)
PROTECTIVE FINISH : ANODISED TO IS : 1868 Gd A c10

ASSY DRG. ARDE 9501-03/29
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No.
ARDE 9501-03
DET. No. 31 | SHTS. | SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

TITLE:

BUSH VANE

1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

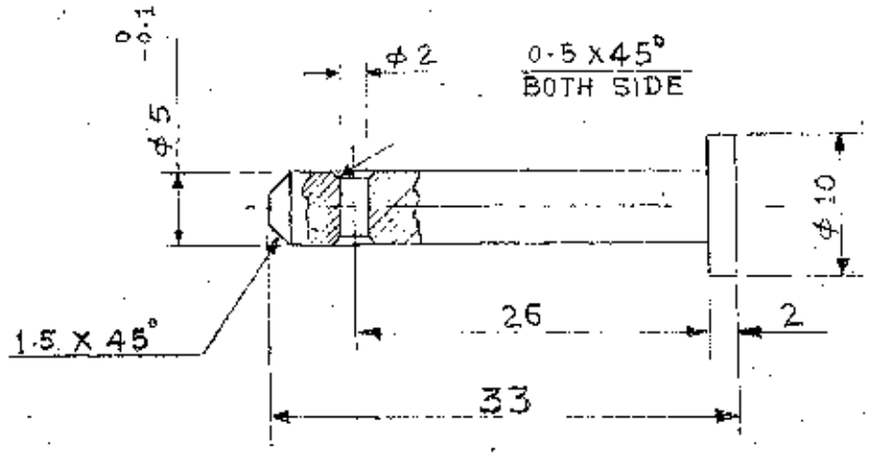
GEN. TOL. MEDIUM / ~~COARSE/FINE~~ CLASS TO IS: 2102

PART No.

DET. No. 40 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

NOTE :- ALL SHARP EDGES AND BURRS ARE TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) CRE(AA) 19 APR 2000

DRN. DESHMUKH | CHD. | TRD. | COMP.

CD | PASSED | SCALE : 2 : 1

APPROVED (R.PERUMAL) FOR DIRECTOR | EST. MASS:

GAUGE SCHD :

DATE : 13 - 12 - 96

MATL : STAINLESS STEEL TO IS:6603 WITH Cr. CONTENT 15 % MIN.

PROTECTIVE FINISH : ------

TITLE :

PIN, ARMING FORK

ASSY. DRG. ARDE 9501-03/15

DESIGN AUTHORITY

ARDE PUNE-411 021

DRG. No. **ARDE 9501-03**

DET. No. 40 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

DRAWING CONVENTIONS CONFORM TO IS :

DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/COARSE/FINE CLASS TO IS : 2102

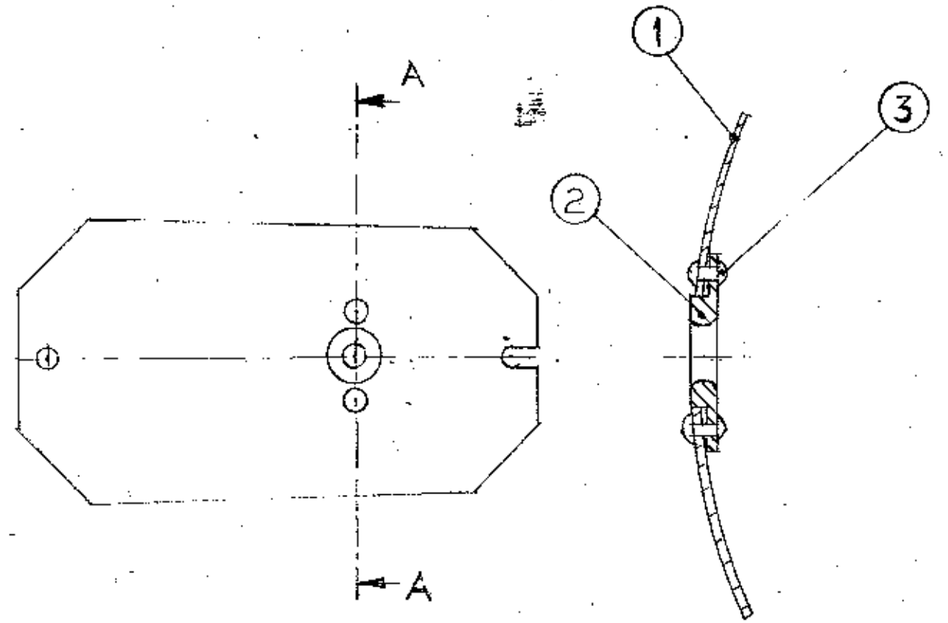
DRG. No.	DET. No.	SHTS.	SHT. No.	PART No.
ARDE 9501-03	35			

LIST OF COMPONENTS

ITEM No.	NOMENCLATURE	No. OFF	MATL	DRG No.	DET No.	PART No.
1	PANEL II	1		ARDE 9501-03	36	
2	ARMING WIRE GUIDE	1		" "	37	
3	SNAP HEAD RIVET 3X10 IS: 2998	2	STEEL	ND	—	

NOTES :-

1. TO BE PAINTED BOTH SIDES, OMIT PAINT FROM HOLES.
2. FIRST COAT : PAINT, PRE-TREATMENT PRIMER (ETCHING PRIMER) TYPE SPRAYING TO SPECN DEF STAN 80-15/1.
3. SECOND COAT: PAINT, PRIMING, CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1. COLOUR RED OXIDE (No. 446) TO IS: 5.
4. THIRD COAT : PAINT, FINISHING, CHLORINATED RUBBER, TYPE SPRAYING TO SPECN DEF STAN 80-72/1, COLOUR DEEP BRONZE GREEN (No. 224) TO IS: 5.
5. ALL COATS OF PAINTS TO BE APPLIED ALL OVER ON BOTH SIDES.
6. FOR METHOD OF APPLICATION AND TESTS FOR SUITABILITY OF THE PAINTS, REFER PARA 6·7·1 OF SPECIFICATION No. ARDE/SPECN/613.



SECTION A-A
(ENLARGED)

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)		19 APR 2000	

DRN. C.R.Phatak CHD

CD PASSED

APPROVED (R.PERUMAL) SCE for FOR DIRECTOR

TRD. COMP.

SCALE : 1 : 2

EST MASS :

GAUGE SCHD :

DATE : 3-10-1996

MATL :

PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 9501-03

DET. No. 35	SHTS.	SHT. No.

PART No.

D.S.CAT.No.

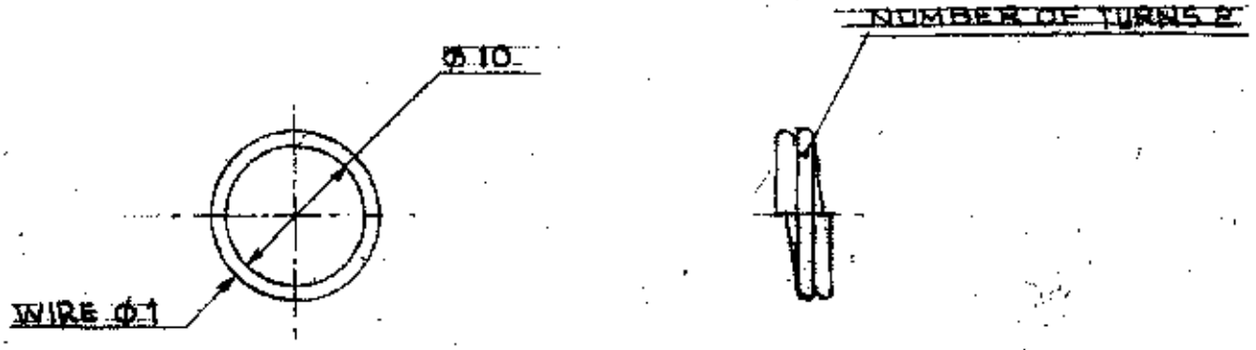
A.H.S.P.

TITLE:

PANEL II AND ARMING WIRE GUIDE ASSY.

PART No.	DRAWING CONVENTIONS CONFORM TO IS [redacted]		
	DIMNS ARE IN m.m. UNLESS OTHERWISE STATED		
DET. No. 44	SHTS.	SHTS. No.	
GEN. TOL. MEDIUM / [redacted] CLASS TO IS 2102			
DRG. No. ARDE 9501-03			

NOTE :— ALL SHARP EDGES & BURRS ARE TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) CRE(AA) 19 APR 2000

DRN.	CHD.	TRD. COMP.	ASSY. DRG. ARDE 9501-03/42
CD	PASSED	SCALE : 2 : 1	DESIGN AUTHORITY
		EST. MASS:	ARDE PUNE-411 021
APPROVED	FOR DIRECTOR	GAUGE SCHD :	
		DATE : 10-11-99	

MATL : SPRING STEEL TO IS 4454 Pt. 1. Gd. 2

PROTECTIVE FINISH : CADMIUM PLATED TO IS 1572 Cd 8

TITLE :

RING FOR WARNING FLAG

DRG. No. ARDE 9501-03

DET. No. 44 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

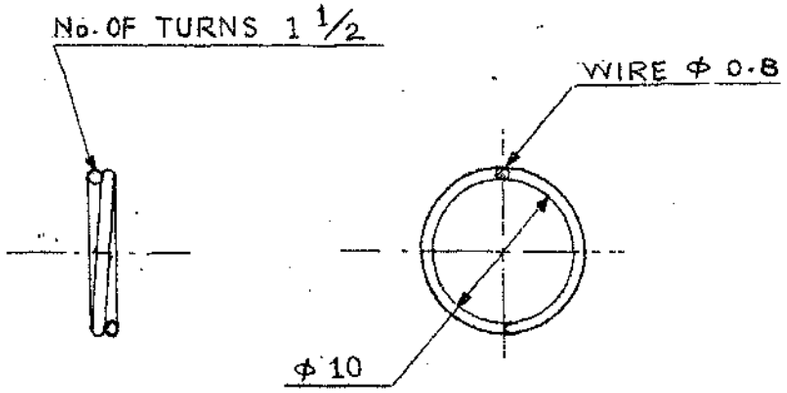
1	2	3	4

DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / ~~COARSE/FINE CLASS~~ TO IS 2102

DRG. No. ARDE 9501-03 | PART no.
DET.No. 41 | SHTS. | SHTS. No.

NOTE: ALL SHARP EDGES AND BURRS ARE TO BE REMOVED.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) Sd/- CRE(AA) 19 APR 2000

DRN. DESHMUKH	CHD.	TRD.	COMP.	ASSY. DRG. ARDE 9501-15
CD	PASSED	SCALE : 2 : 1		DESIGN AUTHORITY
		EST. MASS:		ARDE PUNE-411 021
APPROVED (R. PERUMAL) Sc'E' FOR DIRECTOR		GAUGE SCHD :		
		DATE : 16 - 12 - 96		

MATL : SPRING STEEL WIRE TO IS : 4454
Pt 1 Gd - 2

PROTECTIVE FINISH : CADMIUM PLATING TO IS:1572 Cd 12

TITLE :

RING RETAINING

DRG. No. ARDE 9501-03

DET. No. 41	SHTS.	SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

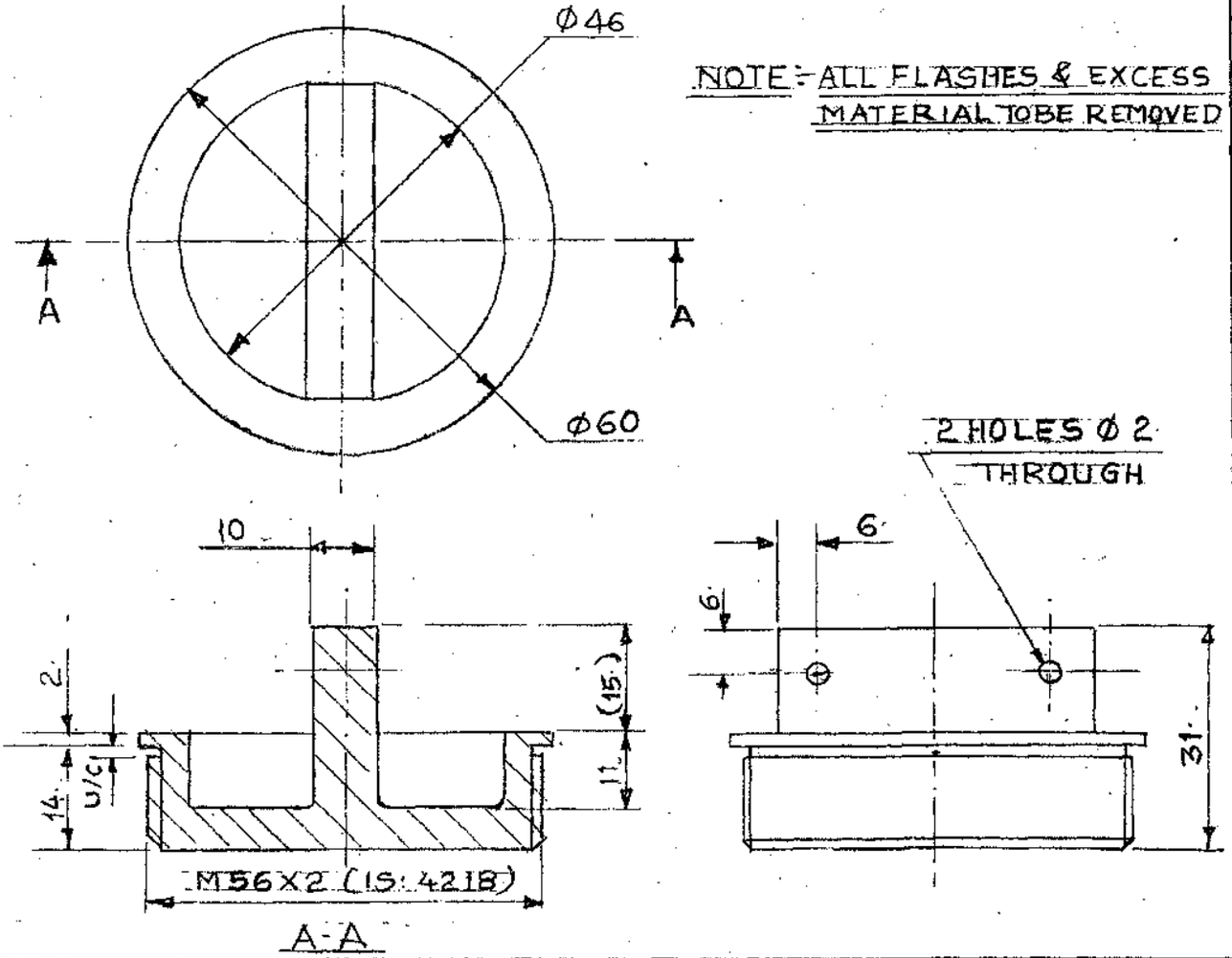
DRAWING CONVENTIONS CONFORM TO IS : [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM / ~~COARSE~~/~~FINE~~ CLASS TO IS 2102

PART No.

DET.No.39 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03



A-A

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	

DRG. SEALED (PROV.) Saf in Form CRE(AA) 19 APR 2000

DRN. GNG	CHD.	TRD. DYD	COMP.
CD	PASSED	SCALE : 1:1	
APPROVED	FOR DIRECTOR	EST. MASS:	
		GAUGE SCHD :	
		DATE : 30-4-94	

ASSY. DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE-411 021

MATL : PVC / POLYTHENE OF ANY COLOUR

PROTECTIVE FINISH :

TITLE :

ADAPTOR BLANKING

DRG. No. ARDE 9501-03

DET. No. 39	SHTS.	SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

A2

DRAWING CONVENTIONS CONFORM TO IS [redacted]

DIMNS ARE IN m.m. UNLESS OTHERWISE STATED

GEN. TOL. MEDIUM/[redacted] CLASS TO IS : 2102

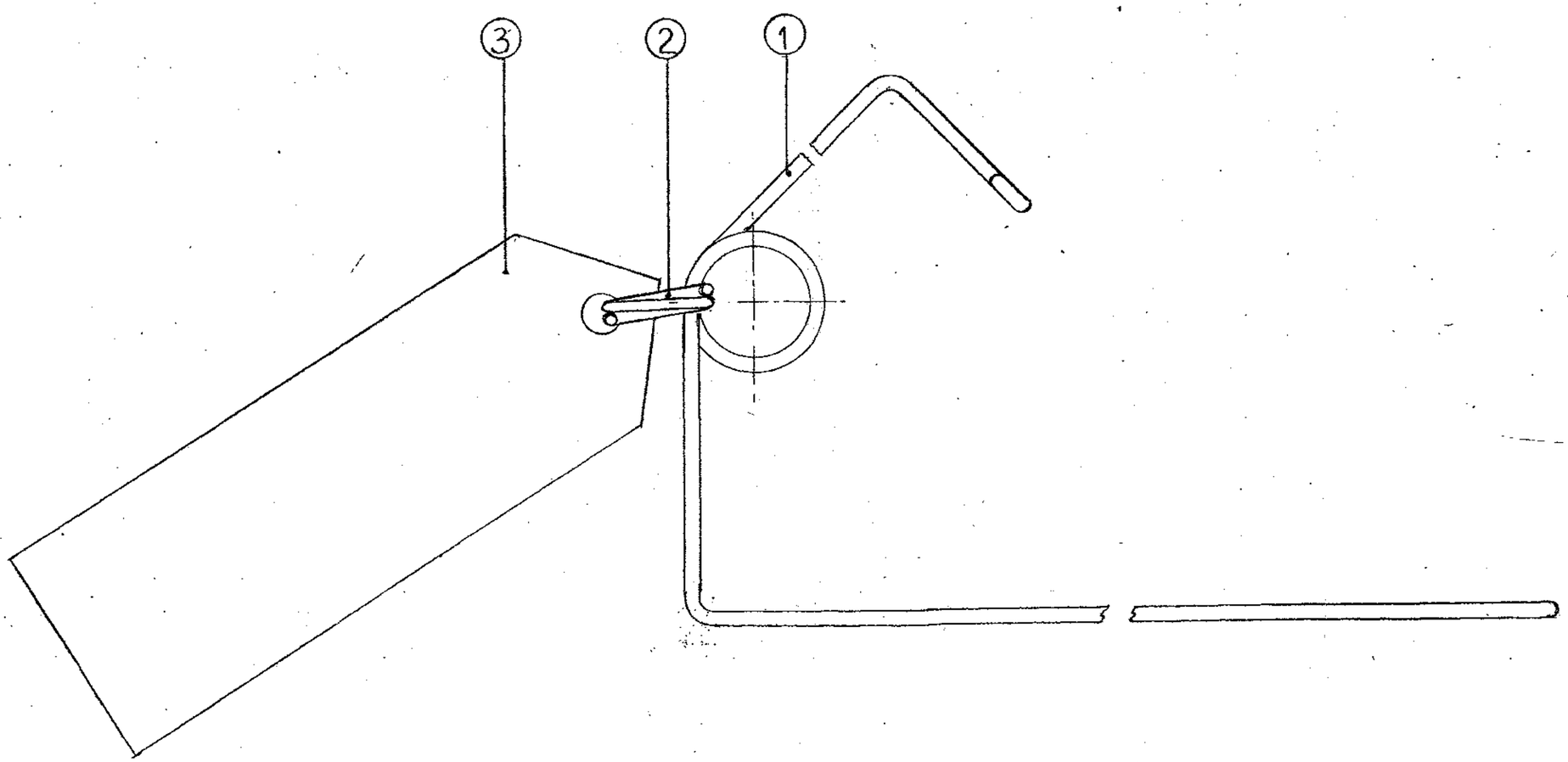
PART No.

DET. No 42 | SHTS. | SHTS. No.

DRG. No. ARDE 9501-03

LIST OF COMPONENTS

ITEM No	NOMENCLATURE	No OFF	MATL	DRG. No	DET. No	PART. No
1	CLIP TRANSIT	1		ARDE 9501-03	43	
2	RING FOR WARNING FLAG	1		" "	44	
3	WARNING FLAG	1		" "	45	



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			for CRE(AA)		19 APR 2000	

DRN. [redacted] CHD. [redacted]

CD [redacted] PASSED [redacted]

APPROVED [redacted] FOR DIRECTOR

TRD. | COMP.

SCALE : 2:1

EST MASS :

GAUGE SCHD :

DATE : 10-11-99

MATL :

PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-03

DESIGN AUTHORITY

ARDE PUNE - 411 021

DRG. No. ARDE 9501-03

DET. No. 42 | SHTS. | SHT. No.

PART No.

D.S.CAT.No.

A.H.S.P.

TITLE:

CLIP TRANSIT ASSY.

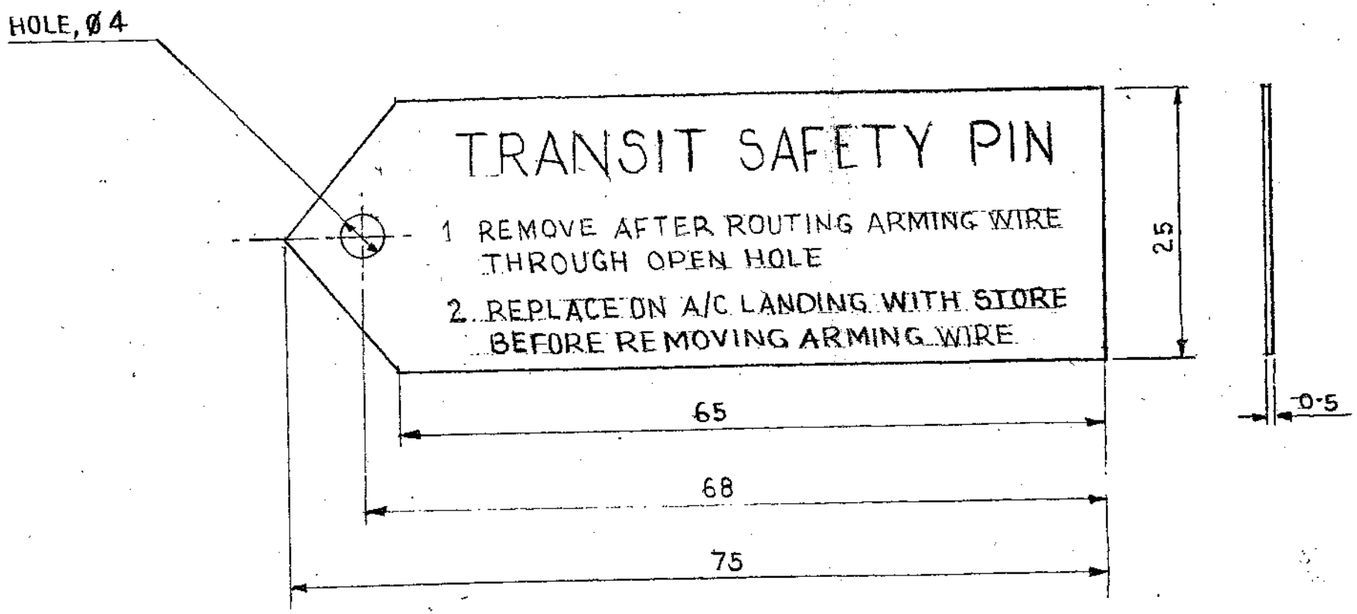
DRAWING CONVENTIONS CONFORM TO IS [redacted]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/[redacted] CLASS TO IS : 2102

DRG. No. ARDE 9501-03
PART No.
DET. No 45 | SHTS. | SHTS. No.

NOTE :- ALL SHARP EDGES & BURRS ARE TO BE REMOVED.

PROTECTIVE FINISH :- TO BE ANODISED SIGNAL RED COLOUR GRADE AC TO TO IS: 1868, LEAVING THE LETTERS WHITE.

LETTER SIZE :- I. TITLE : 4 mm
II. MATTER : 2 mm



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)		CRE(AA)	19 APR 2000			

DRN. [redacted] CHD. [redacted] TRD. COMP.
CD PASSED SCALE : 2:1
APPROVED FOR DIRECTOR EST MASS :
GAUGE SCHD :
DATE : 10-11-99

MATL : ALUMINIUM ALLOY SHEET TO IS: 737 ANY GRADE / ANY CONDITION
PROTECTIVE FINISH : AS ABOVE

ASSY DRG. ARDE 9501-03/42
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No. ARDE 9501-03
DET. No. 45 | SHTS. | SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

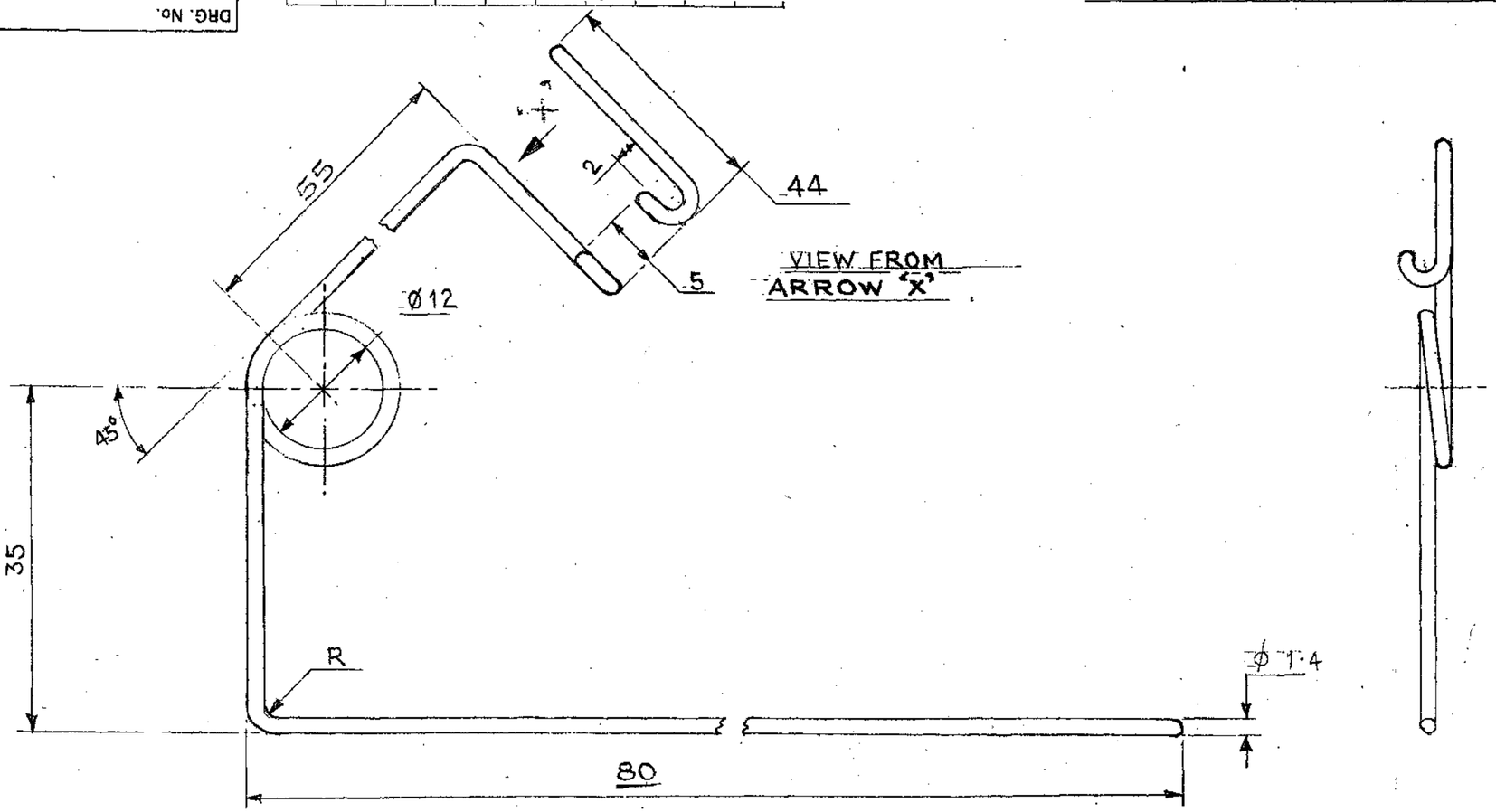
TITLE:

WARNING FLAG

DRAWING CONVENTIONS CONFORM TO IS : [illegible]
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. MEDIUM/[illegible] CLASS TO IS : 2102

DRG. No. ARDE 9501-03
DET. No. 43 | SHTS. | SHT. No.
PART No.

NOTES:
1. ALL SHARP EDGES & BURRS ARE TO BE REMOVED.
2. AFTER CADMIUM PLATING THE PART SHOULD BE BAKED IMMEDIATELY AT 205°C FOR 8 TO 10 HOURS.



R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)			CRE(AA)		19 APR 2000	

DRN. CHD. TRD. COMP.
CD PASSED SCALE : 2:1
EST MASS :
APPROVED FOR DIRECTOR GAUGE SCHD :
DATE : 10-11-99
MATL : SPRING STEEL WIRE TO IS: 4454 Pt I Gd 2.
PROTECTIVE FINISH : CADMIUM PLATED TO IS: 1572 Cd 8

ASSY DRG. ARDE 9501-03/42
DESIGN AUTHORITY
ARDE PUNE - 411 021

DRG. No. ARDE 9501-03
DET. No. 43 | SHTS. | SHT. No.
PART No.
D.S.CAT.No.
A.H.S.P.

TITLE:

CLIP TRANSIT

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMENSIONS ARE IN m m. UNLESS OTHERWISE STATED
GLASS [redacted] CHAPSO [redacted] CLASS TO IS : 2102

ARDE 9501 - 05

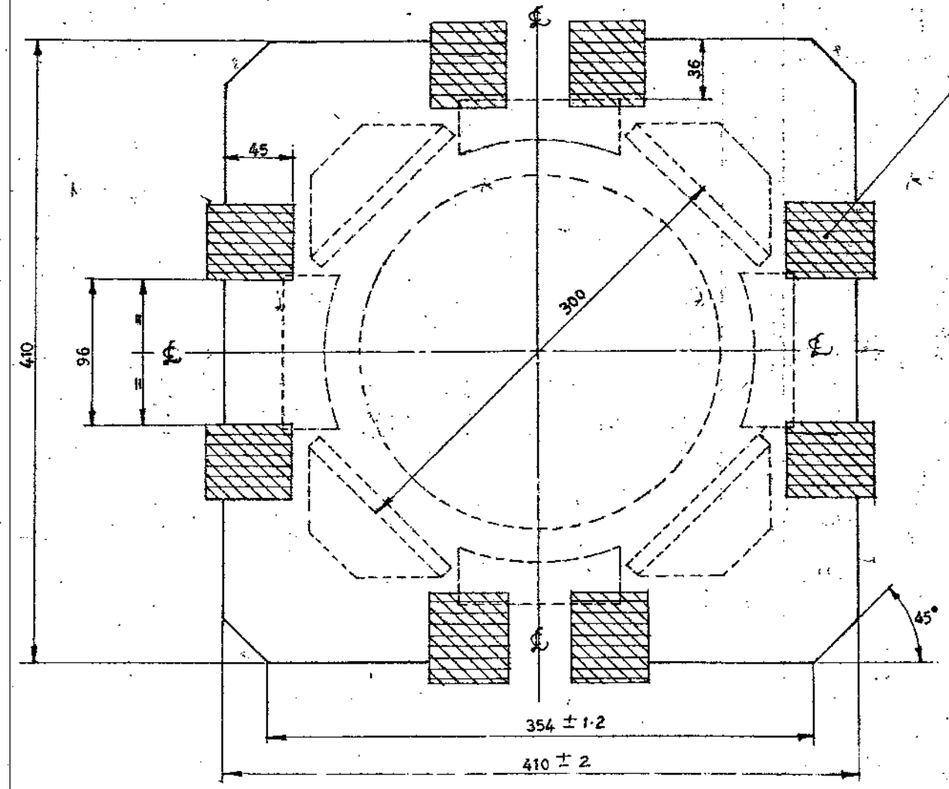
PIECE POLYETHYLENE-I
SIZE : Ø 232 X 25THK. (QTY-1)
TO BE STUCK TO PLYWOOD WITH APPROVED ADHESIVE AS SHOWN

PIECE POLYETHYLENE-II
TO BE STUCK TO PLYWOOD WITH APPROVED ADHESIVE AS SHOWN

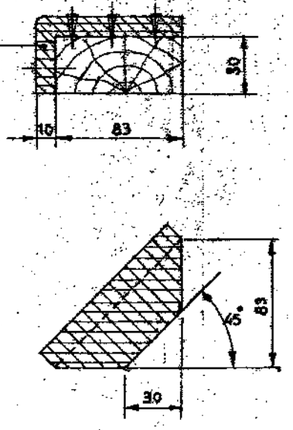
PIECE WOOD-I
EACH SECURED TO PLYWOOD BY 2 WOOD SCREWS MS C'SK HD Ø 3-45 X 35 LONG TO SPEC IS : 6760 AS SHOWN.

PIECE FELT (QTY-8)
SIZE : 95 X 50 X 10THK TO SPEC IS : 1719 (PROOFED MEDIUM HARD) TO BE STUCK TO PLYWOOD WITH APPROVED ADHESIVE, FOLDED BACK AND NAILED BY 4 NAILS Ø 1-8 X 30 LONG CLINCHED FROM OTHER END AS SHOWN TO SPEC IS : 723-1972

12 THK PLYWOOD



PIECE FELT TO THE SIZE OF PIECE WOOD TO SPEC. IS: 1719 (PROOFED MEDIUM HARD) TO BE STUCK TO PLYWOOD WITH APPROVED ADHESIVE AND NAILED BY 8 NAILS Ø 1·6 X 20 LONG TO SPEC. IS : 723-1972



PIECE WOOD-I (QTY-4)
(SCALE : 1 : 2)

MATL :-

1) PIECE WOOD-I

TIMBER SHOWN IN APPENDIX 'A' OF SPEC. IND/ME/883 (PROV.)

2) PLYWOOD

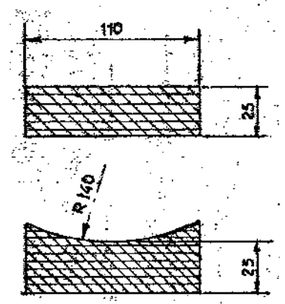
PLYWOOD MOISTURE PROOF TO SPEC IS:303-1989 GRADE : BWR

VARNISHING

TO BE COATED ALL OVER WITH SHELLAC VARNISH APC-224 OR APC-225 TO SPEC. JSS: 8010-63

3) PIECE POLYETHYLENE I & II

EXPANDED POLYETHYLENE FOAM TO DENSITY 35 TO 40 Kg/m³



PIECE POLYETHYLENE-II (QTY-4)
(SCALE : 1 : 2)

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD SIGN	GO
1	10/7/06		ISSUE-A			
DRG SEALED (PROV.)			RL, RCMA(AA) 13/9/05			

DRN Suresh. CHD PASSED TRO COMP
CD SCALE :- 1 : 2·5
APPROVED. FOR DIRECTOR EST MASS
GAUGE SCHD :
DATE :- 13/9/05
MATL :- AS ABOVE
PROTECTIVE FINISH :-

ASSY DRG ARDE 9501-05, SHT. 2
DESIGN AUTHORITY
ARDE PUNE - 411 021

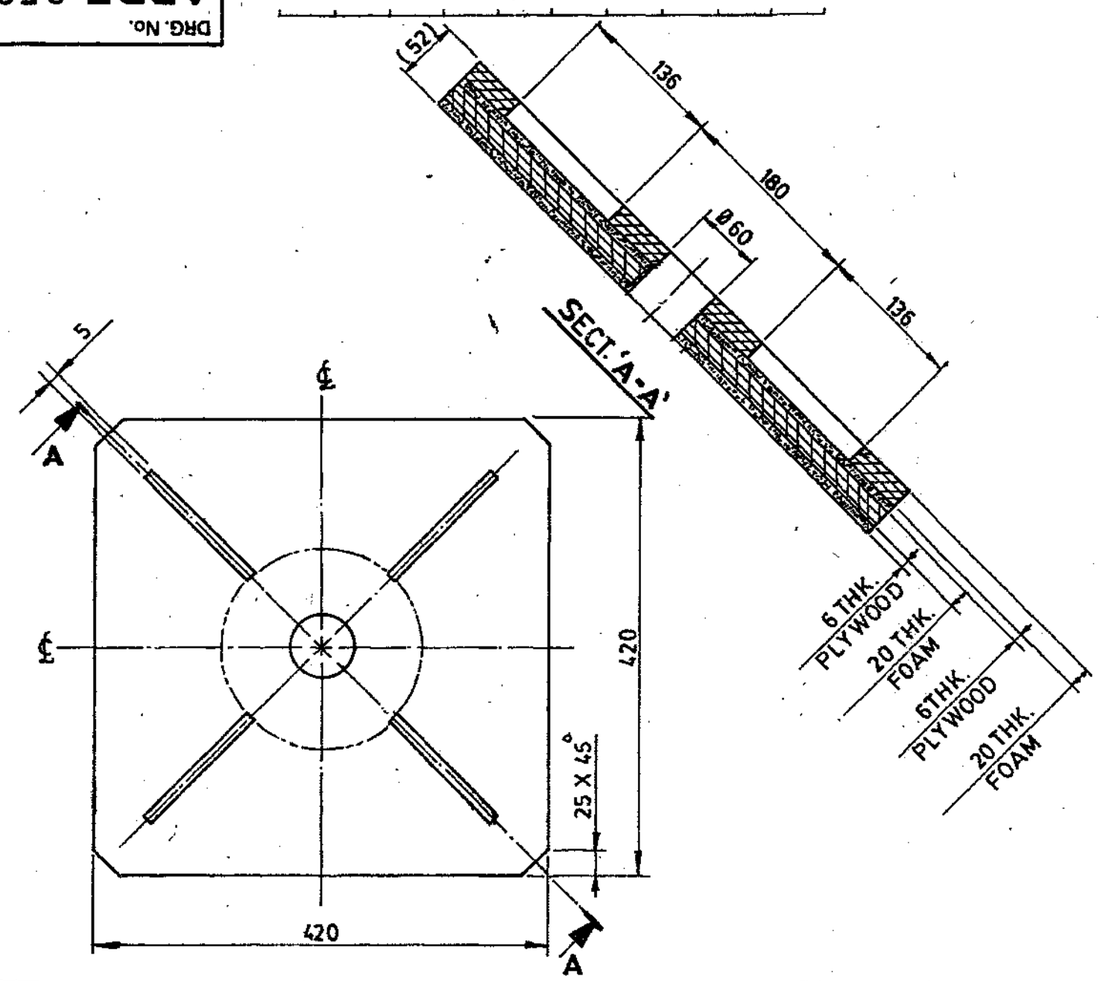
ORG No. ARDE 9501-05
DET. No. 2 | SHTS. | SHT. No.
PART NO.
D.S.CAT No.
A.H.S.P.

TITLE

PIECE PACKING TOP-I

DRAWING CONVENTIONS CONFORM TO IS : 696
DIMNS ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. ~~MEDIUM~~/ COARSE/~~FINE~~ CLASS TO IS : 2102

DRG. No. ARDE 9501-05 | PART No.
DET No. 1 | SHTS. | SHTS. No.



MATL :—

FOAM :—
CROSSLINKED POLYETHYLENE FOAM TO DENSITY 80 ± 5 Kg/m³

PLYWOOD :—
PLYWOOD TO SPEC. IS : 303-89, GRADE : BWR. TO BE COATED ALL OVER WITH SHELLAC VARNISH APC 224 OR APC 225 TO SPEC. JSS : 8010-63.

NOTE :—
PLYWOOD PIECES TO BE STUCK TO FOAM WITH APPROVED ADHESIVE AS SHOWN.

R. NO.	DATE :	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
					SIGN	
DRG SEALED (PROV.)		Few in Found	CRE(AA)	08MAY2000		

DRN. Suresh | CHD. | TRD. | COMP.
CD | PASSED | SCALE : 1:5
APPROVED FOR DIRECTOR | EST MASS :
GAUGE SCHD :
DATE : 4-1-2000
MATL : AS ABOVE
PROTECTIVE FINISH :

ASSY DRG. ARDE 9501-05, SHT-2
DESIGN AUTHORITY
ARDE PUNE - 411021

DRG. No. ARDE 9501-05
DET. No. 1 | SHTS. | SHT. No.
PART No.
D. S. CAT. No.
A.H.S.P.

TITLE :

PIECE PACKING BOTTOM

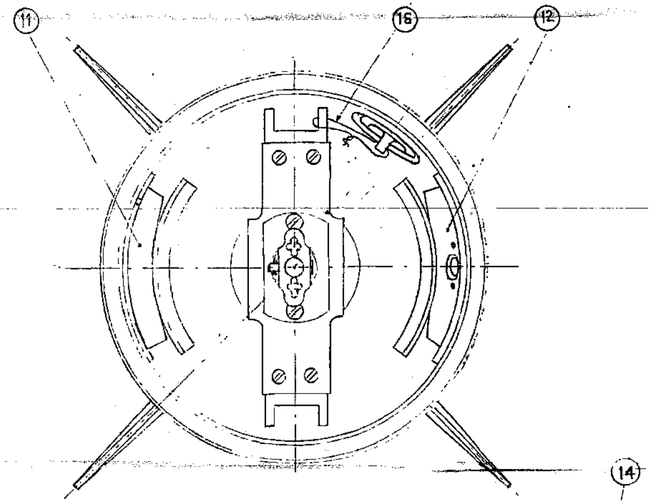
DRAWING CONVENTIONS CONFORM TO IS:
DIMNS. ARE IN m.m. UNLESS OTHERWISE STATED
GEN. TOL. 'MEDIUM' CLASS TO IS: 2102

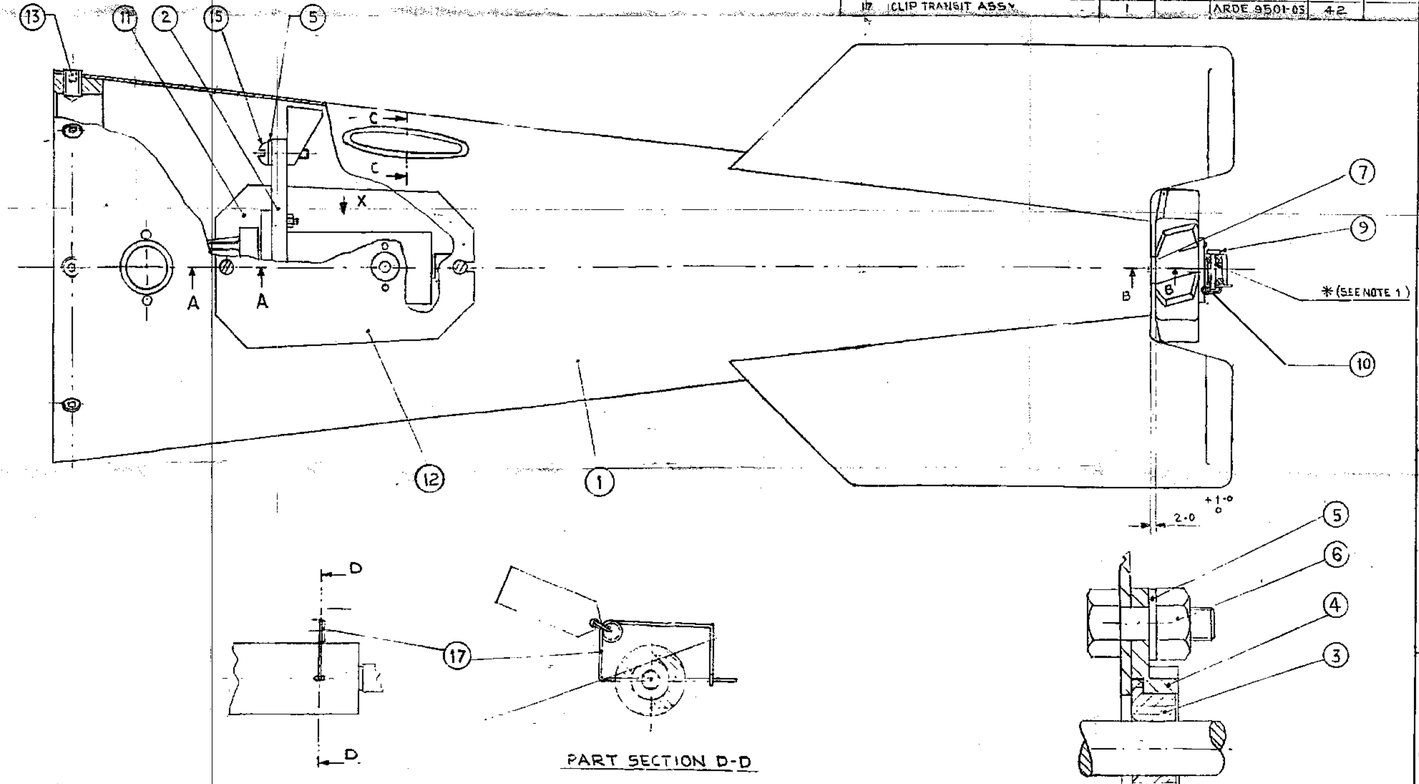
PART No.	DET No.	SHTS.	SHTS. No.
	ARDE 9501-03		

DRG. No.

LIST OF COMPONENTS

ITEM No.	NOMENCLATURE	No. OFF	MATL	DRG. No.	DET. No	PART No
1	CONE BODY ASSY (PAINTING & STENCILLING)	1		ARDE 9501-03	1	
2	ARMING FORK ASSY	1		" " "	15	
3	SPINDLE BEARING	1		" " "	27	
4	SPINDLE BEARING HOUSING	1		" " "	28	
5	SPRING LOCKWASHER B6-IS:3063 CHROMATE COATED.	12		N.D	—	
6	HEX NUT M6X1-IS:1364 (PART 3)-B	4		N.D	—	
7	VANE ASSY.	1		ARDE 9501-03	29	
8	ROUND HEAD MACHINE SCREW M6X1.0 LONG	4		N.D.	—	
9	PIN VANE	1		ARDE 9501-03	32	
10	CLIP RETAINING	1		" " "	33	
11	PANEL I	1		" " "	34	
12	PANEL II & ARMING WIRE GUIDE ASSY.	1		" " "	35	
13	STUD	8		" " "	38	
14	ADAPTOR BLANKING	1		" " "	39	
15	ROUND HEAD MACHINE SCREW M4X1.0 LONG STEEL	4		N.D.	—	
16	STAINLESS STEEL WIRE 0.05 mm DIA X 200 mm LONG TO IS: 6528 ANY GRADE OF ANY CONDITION	—		N.D	—	
17	CLIP TRANSIT ASSY	1		ARDE 9501-03	42	





A-A
SCALE 1:1

C-C

VIEW FROM ARROW 'X'

PART SECTION D-D

B-B
ENLARGED VIEW SCALE 2:1

NOTES:-

1) ~~THE VANE SPINDLE TO BE DRIVEN ON ASSEMBLY~~ ENSURING A C/F OF 2 TO 3 mm BETWEEN CONE AND VANE ASSY (ARDE 9501-02/28) AS SHOWN AFTER ASSEMBLING THE ARMING FORK ASSEMBLY (ARDE 9501-03/15) WITH CONE BODY ASSY.
2) ALL STANDARD COMPONENTS (EXCEPT ITEM No. 16.) TO BE CADMIUM PLATED TO IS: 1572, CH 12, BEFORE ASSY.
3) GREASE TO IS: 507 TO BE APPLIED IN TAPPED HOLES OF CONE RING AND FLEXIBLE DRIVE ADAPTOR BEFORE ASSEMBLY OF STUDS (ITEM No. 13) AND ADAPTOR BLANKING (ITEM No. 14).

R. NO.	DATE:	AUTHORITY	BRIEF RECORD	ZONE	CD	CD SIGN
DRG SEALED (PROV.)			ERE (AA)	19 APR 2000		

DRN. DESIGNED	CHD.	TRD. 1 COMP.
CD	PASSED	SCALE: 1:2
APPROVED		EST MASS:
		GAUGE SCHD.
MATL.		DATE: 21-12-98
PROTECTIVE FINISH:		

ASSY DRG.
DESIGN AUTHORITY
ARDE PUNE - 411021

DRG. No.
ARDE 9501-03

DET. No.	SHTS.	SHT. No.
PART No.		

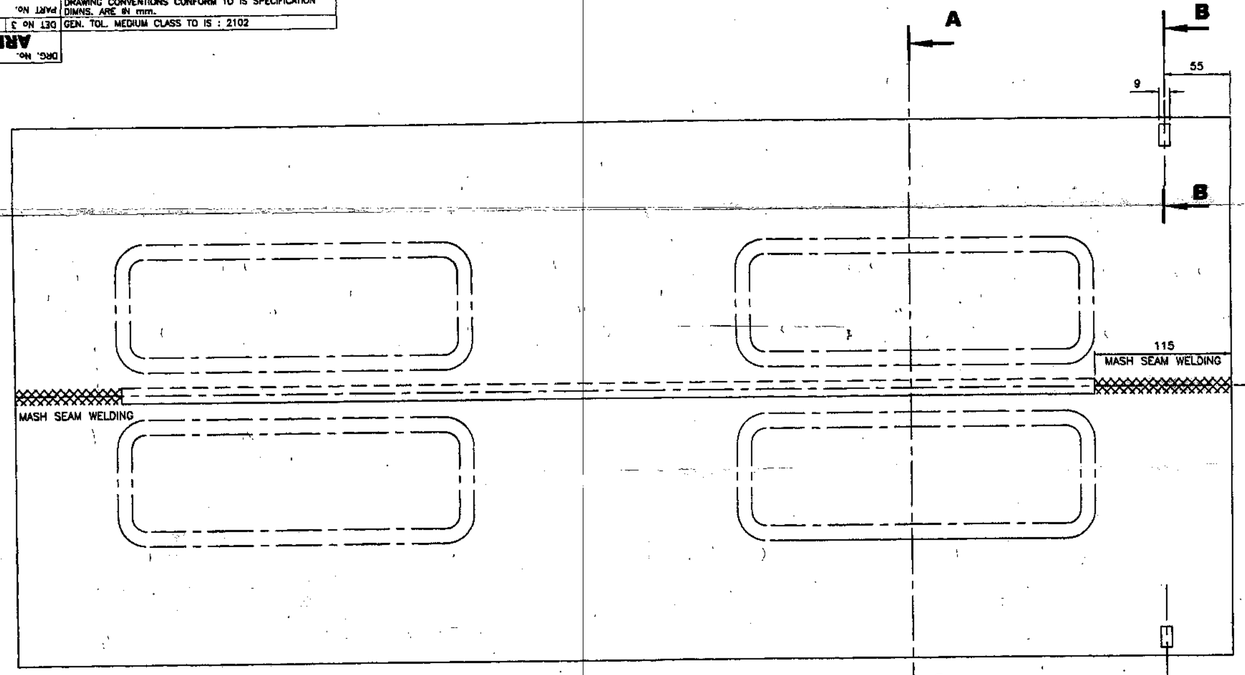
D.S. CAT. No.
A.H.S.P.

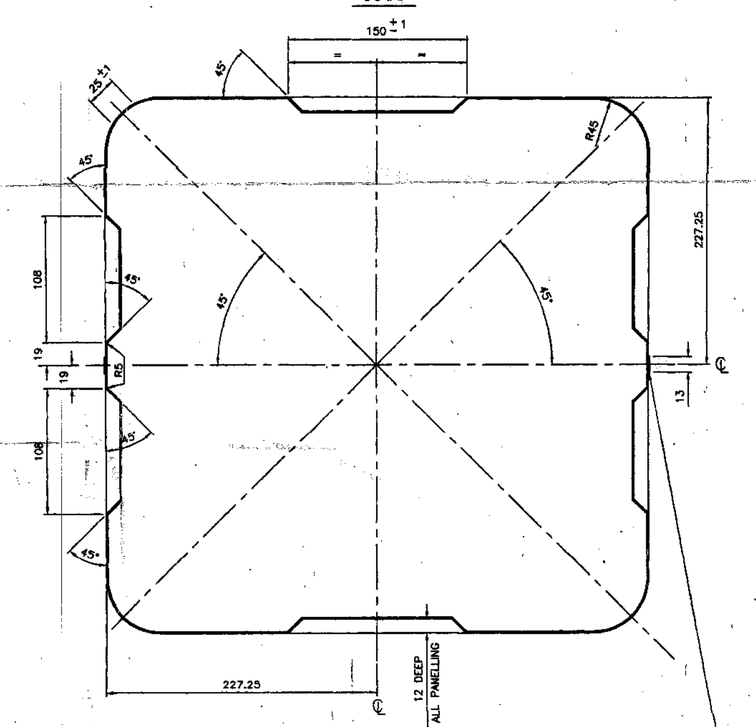
TITLE:

TAIL UNIT No. TB-250

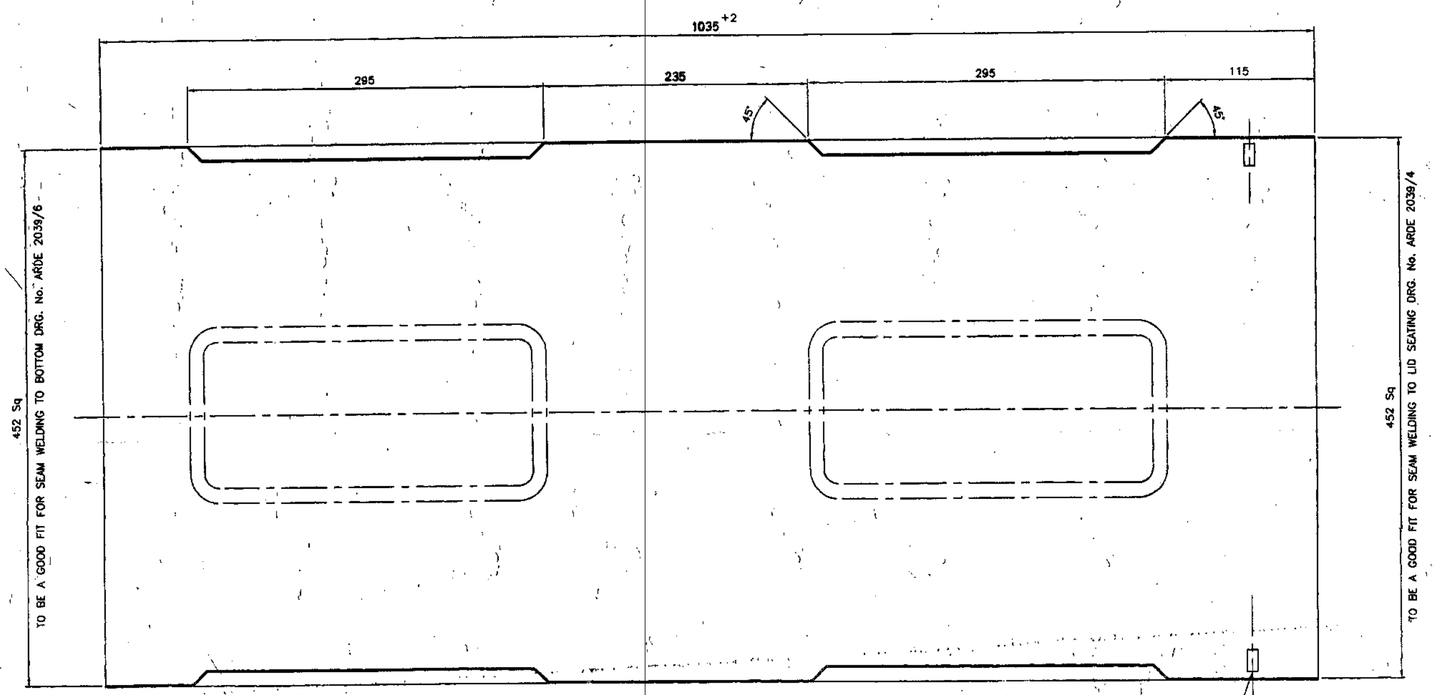
DRAWING CONVENTIONS CONFORM TO IS SPECIFICATION
DIMNS. ARE IN mm.
GEN. TOL. MEDIUM CLASS TO IS : 2102

DRG. No. ARDE 9501-05 | PART No. | DET No 3 | SHTS | SHT

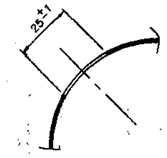




JOINTS TO BE LAPPED AND SEAM WELDED WITH EACH END
OF JOINTS MASH SEAM WELDED AS SHOWN. 6mm SEAM JOINTS MUST BE WATERTIGHT.



B-B
2:1



NOTES :-

i) BODY MAY BE MADE IN ONE OR TWO PIECES.
i) ALL WELDING JOINTS SHOULD BE AS PER SPEC. IS: 813.

MATERIAL:-

MILD STEEL 1.25 mm THICK SHOULD CONFORM ANY ONE OF THE FOLLOWING SPEC.
1) IS: 1079 HOT ROLLED AND ANNEALED Gd. D.
2) IS: 513 COLD ROLLED AND ANNEALED TYPE D BEST SURFACE.

PROTECTIVE TREATMENT :-

PHOSPHATING TO SPEC. IS:3618 CLASS B.

R. No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
2	31/01/08		AMENDED VIDE AL. No. 07/2008	E.F-9.10		
1	10/3/05		ISSUE - A			

DRG SEALED (PROV) [illegible] R.D, RCNIA(HQ) 13/9/05

DRN: Suresh | CHD | TRD | COMP
CD | PASSED [illegible] | SCALE: 1:2
APPROVED [illegible] FOR DIRECTOR | EST MASS:
Y.K. | MATL: AS ABOVE. | GAUGE SCHD:
SIGN | PROTECTIVE FINISH: | DATE: 10/3/05

ASSY DRG. ARDE 9501-05, SHT - 3
DESIGN AUTHORITY
ARDE PUNE-21

DRG No.
ARDE 9501-05
DET No 3 | SHTS | SHT No.
PART No.
D.S.CAT. No.
A.H.S.P.

TITLE:

BODY

DRAWING CONVENTIONS CONFORM TO IS: 696			
DIMNS. ARE IN mm UNLESS OTHERWISE STATED			
GEN TOL: MEDIUM	COARSE	FINE	CLASS TO IS: 2102

DRG. NO. ARDE 9501-05
DET NO. | SHTS-3 | SHTS NO 2

MATERIAL FOR :-

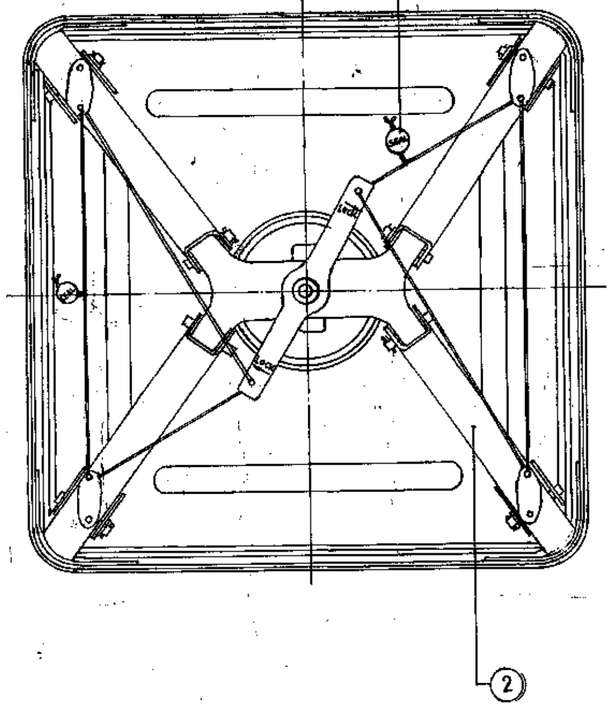
ITEM No. ⑥
PLYWOOD TO SPEC. IS : 303 - 89 GRADE: BWR.
TO BE COATED ALL OVER WITH SHELLAC
VARNISH APC-224 OR APC-225
TO SPEC. JSS : 8010-63

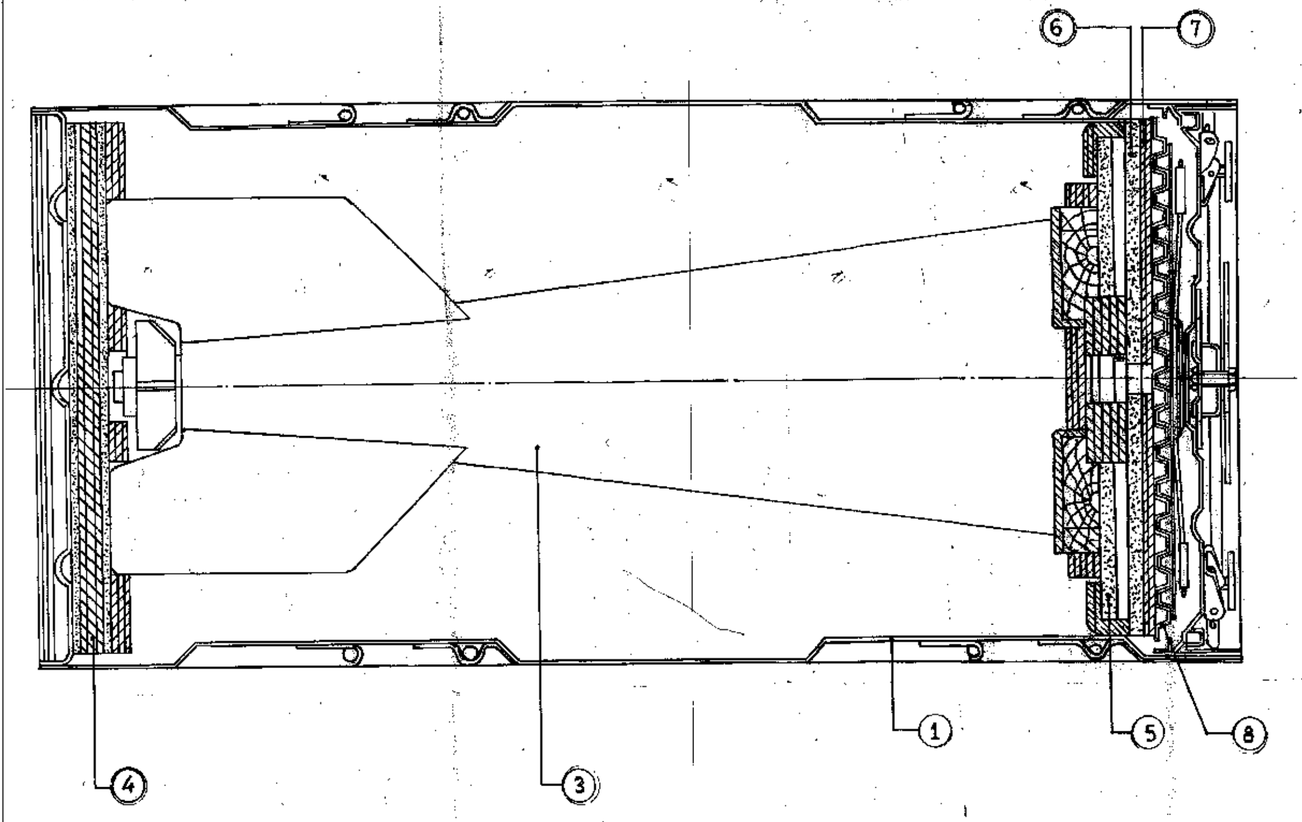
ITEM No. ⑦
EXPANDED POLYETHYLENE FOAM TO
DENSITY 80± 8 Kg/M³

WHEN PACKED AFTER PUTTING IN PACKER'S LABEL WIRE STEEL SOFT GALVANISED Ø1 OR 1·25 X 850 LONG TO SPEC. IS: 280, TO BE PASSED THROUGH HOLES TWISTED AND SEALED WITH SEAL LEAD Ø10 WHICH IS STAMPED WITH INSPECTOR'S MONOGRAM. THE ENDS OF WIRE TO BE LEFT LONG ENOUGH TO ENABLE UNTWISTING BY HAND.

ITEM LIST

ITEM No.	DESCRIPTION	DRG. No	OPT No	PART No	No OFF
1	BODY (WELDING ASSY)	ARDE 9501-05	SHT-3		1
2	SEALING LID ASSY	ARDE 2039	SHT-4		1
3	TAIL UNIT No TB-250 FOR BOMB 250 Kg HSLD.	ARDE 9501-03			1
4	PIECE PACKING BOTTOM	ARDE 9501-05	1		1
5	PIECE PACKING TOP - I	ARDE 9501-05	2		1
6	PIECE PACKING TOP - II SIZE : 420 X 420 X 12 THK Ø25 HOLE AT CENTRE	ND.			1
7	PIECE PACKING TOP - III SIZE 420 X 420 X 10 THK. Ø25 HOLE AT CENTRE.	ND			1
8	INNER LID ASSY	ARDE 2283	SHT-4		1





FOR METHOD OF PAINTING & STENCILLING SEE DRG. No. ARDE 9501-05, SHT-1

R. NO	DATE	AUTHORITY	BRIEF DETAILS	ZONE	CD	GRID
1	10/3/05		ISSUE-A			

DRN. CHD. TPD. COMP.
SCALE: 1:2·5
EST. MASS
APPROVED DATE: 10/3/05
MATL.
PROTECTIVE FINISH

DRAWN/TRACED/CHECKED RD, RCMR(AA) 13/3/05

METHOD OF PACKING FOR

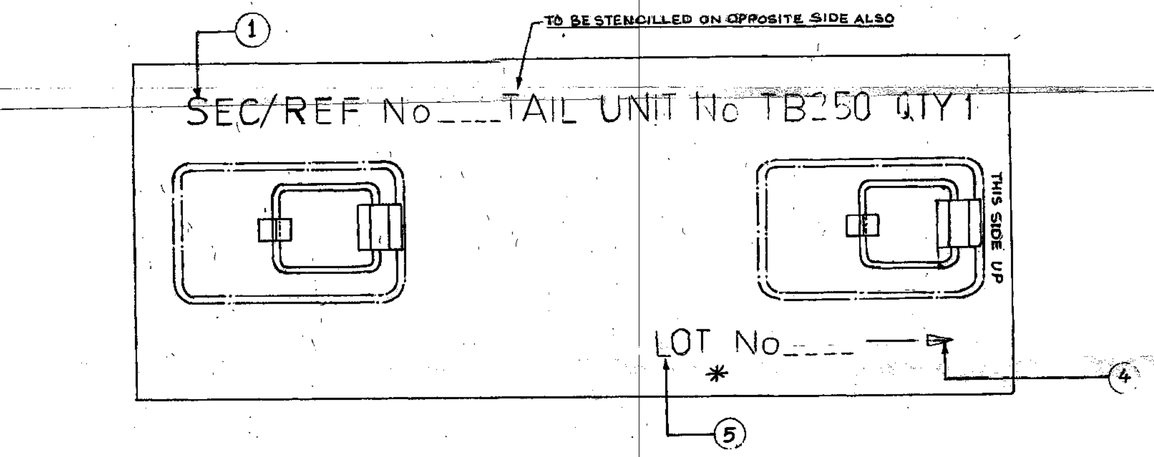
BOX STEEL No. 1 MK 1 TO HOLD ONE TAIL UNIT No. TB 250

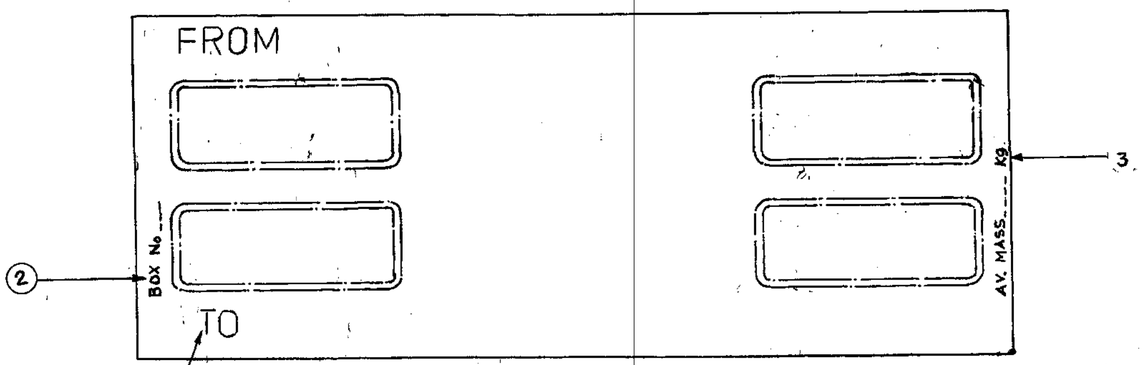
ARDE PUNE-411021

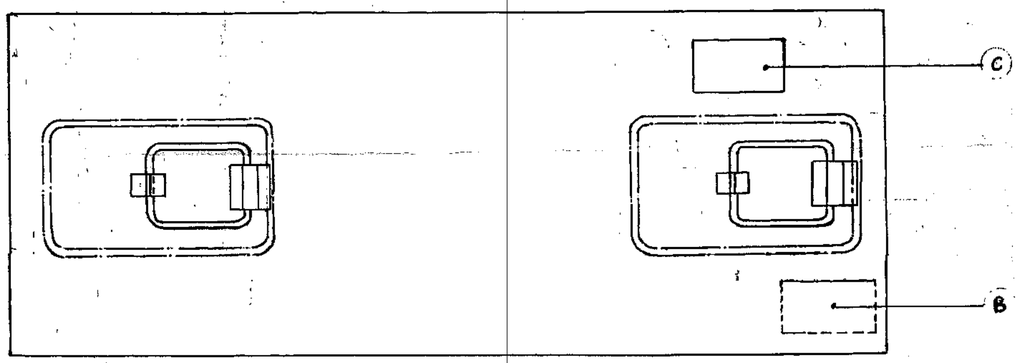
DRG. NO. ARDE 9501-05
DET. No. | SHTS. 3 | SHT NO. 2
PART NO.
D.S.CAT. NO.
AHSP

DRG CONVENTIONS CONFORM TO IS: 696.
DIMNS ARE IN mm UNLESS OTHERWISE STATED
GEN. TOL: MEDIUM / COARSE / FINE CLASS
TO IS: 2102.

DRG No ARDE 9501-05
PART No
DET No
LOT No SHTS 3 SHT 1







NOTES

FOR PAINTING NOTE REFER DRAWING ARDE 2283, SHT 3
MARKING TO BE IN 12 mm LETTERING EXCEPT OTHERWISE STATED WITH PAINT FINISHING CHLORINATED RUBBER TYPE BRUSHING TO SPEC. DEF. STAN 80-72/1 COLOUR CANARY YELLOW (No. 309) TO 1515

1. MARKING ON ALL SIDES TO BE IN 30 mm TO 40 mm LETTERING.
2. PACKAGE SERIAL No. OF FILLED BOX.
3. AVERAGE MASS OF FILLED BOX.
4. ARROW SHOWING POSITION OF STACKING OF THE BOX TO BE STENCILLED IN COLOUR WHITE TO SPEC IS: 158 TO SUITABLE SIZE ON OPPOSITE SIDE ALSO.
5. LOT No.

B. PACKER'S LABEL No. L566A TO BE AFFIXED TO UNDERSIDE OF LID.

C. ADDRESS LABEL No IA 108 TO BE AFFIXED ON LID.

LABELS TO BE AFFIXED TO THE BOX WITH APPROVED ADHESIVE AND THOSE ON EXTERIOR TO BE COATED WITH VARNISH LABEL AMMN TO SPEC. JSS: 8810-23.

* APPROVED INITIALS OF MANUFACTURER.

FOR METHOD OF PACKING SEE DRG No ARDE [illegible]

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	GO
1	16/3/05		[illegible]		SI-11	
DRG SEALED	(PROV.)		ND, RCMA(AA)	13/9/05		

DRN KYG | CHD | TRD. | COMP.
CD | PASSED | SCALE: N.T.S
APPROVED | EST MASS
MATL:- | GAUGE SCHD:-
DATE 10/7/05
PROTECTIVE FINISH:-

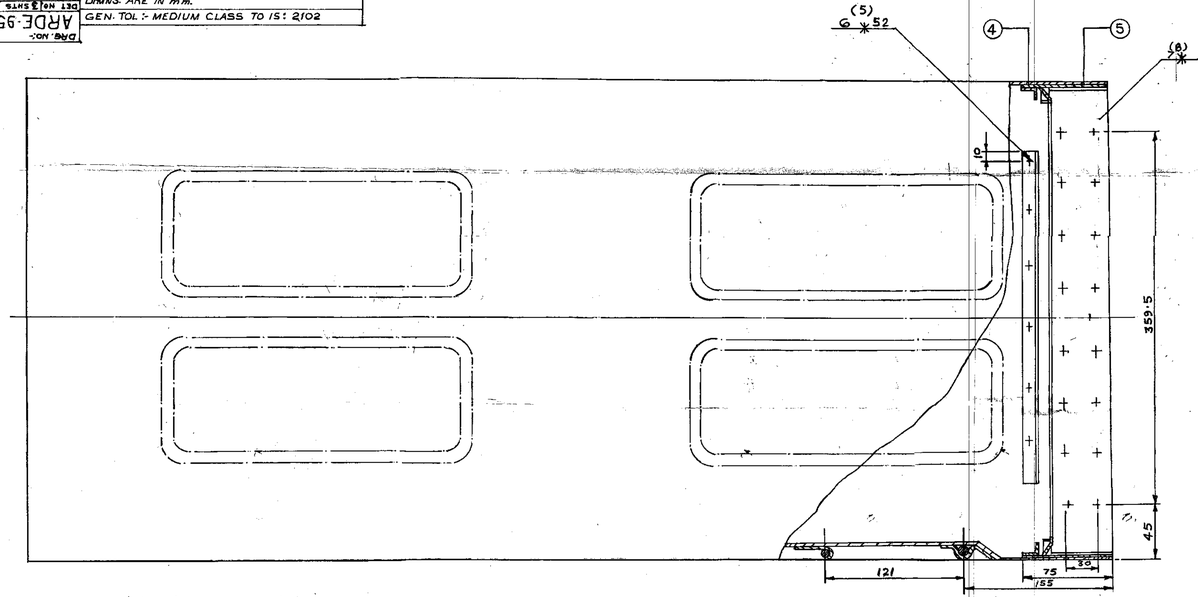
ASSY DRG
DESIGN AUTHORITY
ARDE PUNE-411021
DRG No ARDE-9501-05
DET No | SHTS - 3 | SHT No 1
PART No.
D.S CAT No
A.M.B.P.

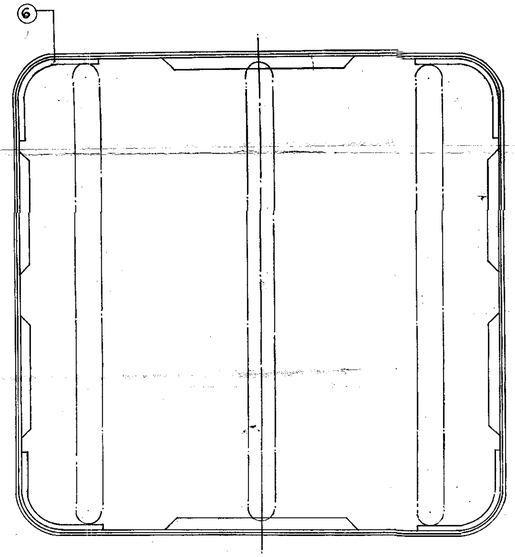
METHOD OF PAINTING & STENCILLING FOR-

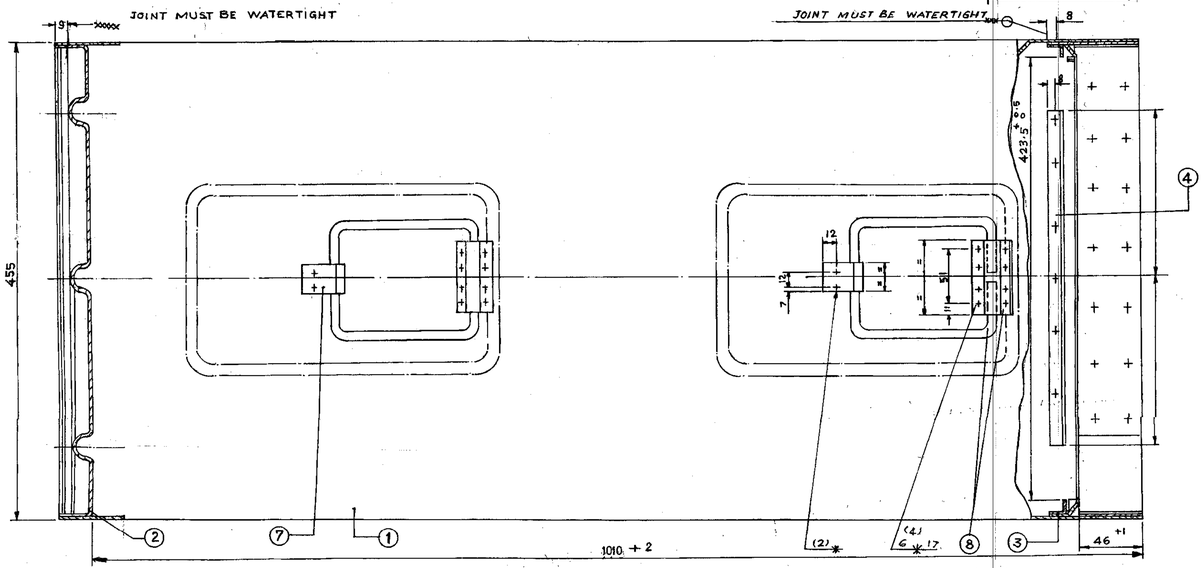
BOX STEEL No.1 MK 1 TO HOLD 1 TAIL UNIT No. TB 250

DRG. NO:- ARDE-9501-05 | DET NO & SHTS | SHT NO 3 | PART NO:-

DRG. CONVENTIONS CONFORM TO IS: 696.
DIMNS. ARE IN mm.
GEN. TOL :- MEDIUM CLASS TO IS: 2102







LIST OF COMPONENTS

ITEM NO.	DESCRIPTION	DRG. NO.	DET NO.	PART NO.	NO. OFF
1	BODY	ARDE 9501-05	3	—	1
2	BOTTOM	ARDE 2039	7	—	1
3	LID SEATING	ARDE 2039	4	—	1
4	BRACKET	ARDE 2283	3	—	4
5	RIM	ARDE 2039	5	—	1
6	CORNER PLATE	ARDE 1248	2	—	4
7	CLIP	ARDE 1248	3 OR 4	—	4
8	HANDLE AND CLEAT	ARDE 2283	4		4

PAINTING :-

FIRST COAT :- PAINT, PRE-TREATMENT PRIMER (ETCHING PRIMER) TYPE SPRAYING TO SPECN. DEF STAN 80-151/1
SECOND COAT :- PAINT. PRIMING. CHLORINATED RUBBER. TYPE SPRAYING TO SPECN. DEF STAN 80-72/1. COLOUR RED OXIDE (No 446) TO IS: 5
THIRD COAT :- PAINT. FINISHING. CHLORINATED RUBBER TYPE SPRAYING TO SPECN. DEF. STAN. 80-72/1, COLOUR DEEP BRONZE GREEN (No 224) TO IS: 5
ALL COATS OF PAINTS TO BE APPLIED ALL OVER INTERNALLY & EXTERNALLY FOR METHOD OF APPLICATION AND TESTS FOR SUITABILITY OF THE PAINTS REFER PARA 4.9 OF SPECIFICATION NO. ARDE I SPEC/1500.

PROTECTIVE FINISH :- PHOSPHATIING TO SPEC. IS: 3618 CLASS 'A'

NOTES i) ALL WELDING JOINTS SHOULD BE AS PER SPEC. IS:- 813
ii) BOX TO BE TESTED AND INSPECTED TO SPEC. I.A. 1169
iii) WELDING TO CONFORM TO IS: 9595

R.NO.	DATE	AUTHORITY	ZONE	SIGN
2	31/10/08	AMENDED VIDE AL.NO. 07/2008	A-12	
1	10/5/05	ISSUE-3		
R.NO.	DATE	AUTHORITY	ZONE	SIGN
DRG. SEALED (PROV)		13/9/05 RDS, RCMN(AA)		

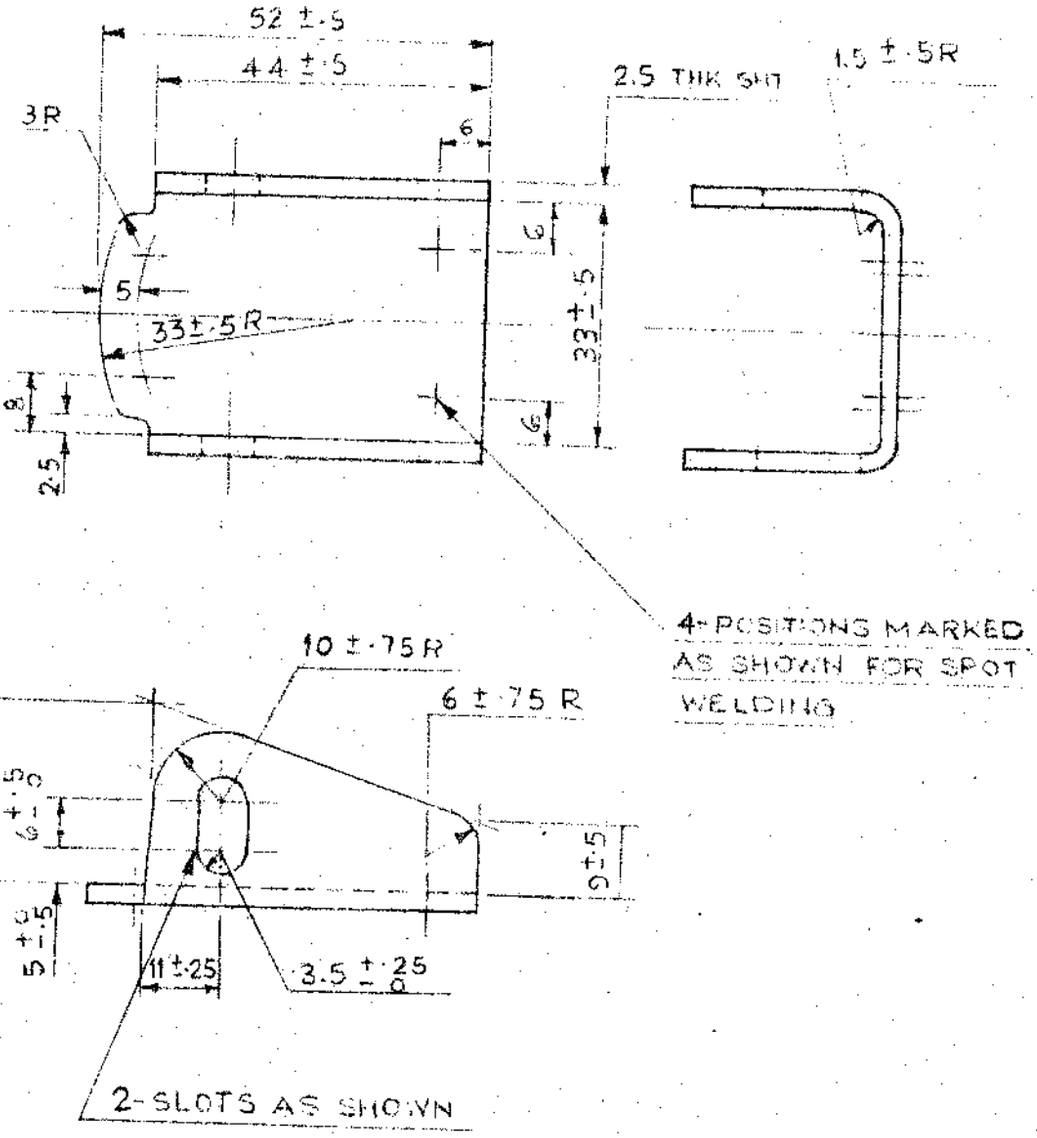
DRN. SLC | CHD CD | PASSED | TRD | COMP
SCALE: 1/2
TEST MASS
GAUGE SEND
A.I.R.V.E.D. FOR DIN(LT.)
DATE. 10/5/05
MATL:-
PROTECTIVE FINISH AS ABOVE

BODY
(WELDING ASSY)

A3 by DRG ARDE 9501-05, SHT 2
DESIGN AUTHORITY
ARDE PUNE - 21

DRG NO.
ARDE 9501-05
DET NO. | SHTS. 3 | SHT NO 3
PART NO:-
D.S.CAT. NO.
AHSP

DRG. No.	DRG. CONVENTIONS ARE BASED ON IS: 696.
ARM 1253 A5	



PROTECTIVE TREATMENT.

FOR PROTECTIVE TREATMENT SEE DRG. No. ARM 1253 C3

4	12 7/66		RETRACED
3	22 2/75		DRG. RETRACED WITHOUT CHANGE
2	5 7/72		REVISED VIDE AL. No. 171
1	20 9/65		ORIGINAL

PROV SEALED								
R.NO	DATE	ZONE	BRIEF RECORD	INITIAL	R.NO	DATE	ZONE	BRIEF RECORD	INITIAL

	DATE	INITIAL
DGN		
DRN		
CHD	12 7/66	
TCD	12/7/66	
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. (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG. NO.
ARM 1253 A5

(23)

RESTRICTED

A.R.D.E. 141
ए. आर. डी. ई १४१

प्र तिलिपी संख्या
Copy No._____

भारत सरकार

Government of India

रक्षा मंत्रालय

Ministry of Defence

अनुसंधान तथा विकास संगठन

Research & Development Organisation

ARDE/SPECN/613

SPECIFICATION
FOR
MANUFACTURE, ASSEMBLY AND QUALITY ASSURANCE
OF
TAIL UNIT NO. TB250

Issued By

आयुध अनुसंधान तथा विकास संस्थापन, पाषाण, पुणे ४११०२१

ARMAMENT RESEARCH & DEVELOPMENT ESTABLISHMENT

PASHAN, PUNE - 411021.

RESTRICTED

MINISTRY OF DEFENCE

RESEARCH & DEVELOPMENT ORGANISATION

SPECIFICATION

FOR

MANUFACTURE, ASSEMBLY AND QUALITY ASSURANCE

OF

TAIL UNIT NO. TB250

0. FOREWORD

0.1 This specification is the property of the Ministry of Defence and must be returned to the Department from which it is issued immediately after the tender has been declined or on completion of the contract or on demand.

0.2 This specification or any other information issued in connection therewith may only be given for specific enquiries, tenders or orders placed by a competent authority on behalf of the Ministry of Defence. It is not to be used for any other purpose whatsoever without the express written sanction of the DGAQA, New Delhi. Any enquiries regarding this specification should be addressed to the Inspecting Authority named in the tender or contract. This specification is:

Issued by :

The Director
Armament Research & Development Establishment
Research & Development Organisation
Ministry of Defence
Pashan, PUNE - 411 021

Sealed by :

The Chief Resident Engineer (AA)
Regional Centre for Military Airworthiness(AA)
Ministry of Defence
Pashan, PUNE - 411 021

Obtainable from :

The Director
Directorate General Aeronautical Quality Assurance
Ministry of Defence
DHQ PO NEW DELHI - 110 011

1. SCOPE

1.1 This specification governs the manufacture, assembly and quality assurance of Tail Unit No. TB250 consisting of Tail Cone and Arming Mechanism.

2. DOCUMENTS

2.1 **Applicable document** - The following documents of issue in effect on date of invitation for bids or request for proposal, or finalising the contract form a part of this document to the extent specified herein:

Drawing - **ARDE 9501-03** - **Tail Unit No. TB250**
- **ARDE 1947 Det 73** - **Kit Arming and Fuzing**

2.2 **Related document** -

Drawing - **ARDE 9501-05** - **Package for Tail Unit No. TB250**

2.3 Copies of drawings and specification required can be obtained from the agency mentioned under "**Obtainable from**" at **0.2** or as directed by the contract.

3. TERMINOLOGY

3.1 For the purpose of this document, the following terms and their explanations shall apply.

3.2 **Item** - The individual component of the Tail Unit No. TB250 including standard component such as screw etc.

3.3 **Store** - The resulting final product on assembly/integration of individual items governed by applicable document, being Tail Unit No. TB250.

3.4 **Lot** - The term lot used here and elsewhere in applicable document shall be understood to be defined as an essentially homogeneous collection of units of products from which representative sample (see below) is drawn and inspected to determine conformance with applicable requirements. Homogeneity shall be considered to exist provided the lot has been produced by one manufacturer, in one unchanged process in accordance with the same drawing, same drawing revision, same specification and same specification revision. Change to the process, specification or drawing, not affecting safety, performance, interchangeability or storage, as determined by the inspection agency, shall not be deemed to alter the homogeneity of an inspection lot.

3.5 **Lot Size** - The number of items in a lot is taken to be 200 for the purpose of mechanical testing. However, no restriction is imposed on lot size of items offered for inspection as long as items constituting the lot satisfy the characteristics of lot

mentioned at para 3.4.

3.6 **Sample** - Group of items drawn at random from a lot under consideration. The sample selected shall represent only that quantity of units from which the sample was drawn and shall not be construed to represent any prior or subsequent quantities presented for inspection.

4. REQUIREMENTS

4.1 This specification shall be read in conjunction with drawing no. **ARDE 9501-03** and the relevant contract requirements. All parts must be manufactured strictly in accordance with the limits and dimensions thereon and as required by this specification. Any question relating to the drawings or specification should be referred to the Inspection Authority mentioned in the contract.

4.2 No components/parts shall be built up or repaired in any way not provided for by the drawings or this specification unless authorised, in writing, by the indentor or any other agency authorised by the indentor.

4.3 Where the specification or drawing permits a choice of alternative materials, the manufacturer is required to notify the Inspecting Officer, in writing, which of the permitted alternatives he chooses. If the choice of the alternative is changed during the course of manufacture, the manufacturer shall obtain the prior permission of the Inspecting Officer before such a change over.

4.4 The contractor may subcontract the manufacture of subassemblies or part thereof with the prior permission and approval of the Inspecting Officer.

4.5 Whenever reference is made to any specification/document in this specification, the latest issue is implied unless otherwise stated.

4.6 A list of relevant specifications referred to herein is given in **Appendix 'A'** to this specification.

4.7 Unless otherwise stated in the contract, the contractor is also required to supply all paints, varnishes and other preservatives called for on the drawings or by this specification.

4.8 Any sample which may be supplied to the contractor shall be taken as a general guide to assembly only and not as an indication of workmanship or dimensions.

5. MATERIALS & COMPONENTS

5.1 The tail unit consists of all the components listed in the

schedule of parts issued with the drawing No. ARDE 9501-03 and all must be supplied by the contractor unless otherwise stated in the contract.

5.2 All materials used in the manufacture of the store shall have been accepted as satisfactory by the Inspecting Officer before being taken into use. No mechanical work, heat treatment or other operation which may modify their physical properties may be carried out on the materials after they have been submitted for test, unless so required by the drawings or authorised by the Inspecting Officer.

5.3 Where materials to the specifications called for cannot be obtained, materials to other specifications giving equivalent physical properties may be used if authorised in writing by the Inspecting Officer who may require alternative materials to be subjected to such additional tests as he may direct before acceptance. The Inspecting Officer shall permit such a change in materials or material condition in consultation with and with the approval of RCMA (AA)/ARDE, PUNE.

5.4 All materials used in the manufacture of the store shall comply with the requirements of the material specifications quoted on the relevant drawings.

6. MANUFACTURING PROCESS

6.1 General Workmanship - Machined components are to be finish machined to conform to the surface finish and dimensions called for on the relevant drawings. All rags and burrs are to be removed as they are formed when cutting or drilling operations are carried out on components or assemblies. Failure to do this may result in incorrect functioning of the systems.

6.1.1 The radii of bends in sheets and pressings shall not be less than that shown on the relevant drawings. Cracked components or components which show signs of crack after bending or forming shall be rejected.

6.1.2 All components are to be clean and dry, free from grease or oil of any kind. Where the protective finish or paint has been removed during machining or assembly, the affected area is to be treated locally with the appropriate finish as agreed by the Inspecting Officer.

6.1.3 Rolled, pressed and flow-turned sheet parts shall have uniform curvatures free from tool marks, dents or non-uniform local thickness and other defects.

6.2 Rolling - Cone rolling is to be carried out by means of taper rollers, and tack and final weldings and cone smoothening are to be carried out by means of suitable fixtures/mandrel, duly approved by the Inspecting Officer.

6.3 **Casting** Arming Fork and Vane are to be manufactured by

means of pressure die casting. Casting parameters such as molten metal temperature, type of die, speed of ladling, die temperature, casting temperature, locking force of die, plunger force, plunger speed, die coolant, die face lubricant and die temperature cycle time etc shall be established to obtain clean and smooth casting free from defects such as void, cracks, cold shut, segregation, inclusions etc, and these parameters on yeilding satisfactory castings (vide 10.5.2 and 10.5.3) shall be frozen and maintained throughout the casting process. The allowances for machining, where machining is required, shall be the minimum possible without leaving evidence of cast surface.

6.3.1 Alternatively Arming Fork and Vane may be manufactured by machining from bar stock of specified material.

6.4 Welding

6.4.1 **Welding fixtures** - Cone Ring, Brackets, End Cover and Fin assemblies are to be welded to the Cone Body using suitable welding fixtures. Necessary welding fixtures shall be designed with utmost care, with the approval of the Inspecting Officer for locating and welding these components without any distortion to obtain the geometric tolerances specified in the drawings.

6.4.2 **Fusion Welding** - Fusion welding shall be carried out by metallic arc process in accordance with the relevant specifications given in the drawings. All welding operators shall have been checked and approved according to Section 4 of IS:817 as competent to carry out welding with the materials shown in the drawings to produce consistently high quality welds. The welders shall also undergo 'Periodic Control Test' at regular intervals of six months as laid down in the above specification in case the duration of the contract exceeds six months.

6.4.2.1 All fusion welding shall be carried out in such a manner as to ensure that the welds are of good, clean metal, free from cracks, gas holes, slag inclusions and all other impurities. The surfaces of the welds shall have an even contour and regular finish and shall indicate proper fusion with and penetration of the parent metal. Inspection of welding during preliminary, in process and final stages, shall be carried out in accordance with IS:822. All welded components having welds showing cracks or cavities or blow holes shall be rejected. However, with the prior approval of the Inspecting Officer, defective components may be re-welded and re-submitted for approval.

6.4.3 **Seam Welding** - Fins are to be seam welded as per IS:1261. Approved machines shall be used for seam welding giving adequate control of wheel speed, pressure and current interruptions. Careful attention shall be paid to the shape and width of the tread of the wheel and alignment of the top and bottom wheels. Where necessary, fixtures shall be provided to maintain the components in correct relationship during welding. Great care shall be taken to ensure clean metal surface, free from scales, rust, phosphate coating, paint or dirt. Where components are

phosphated/painted prior to seam welding, the planned weld region shall be marked precisely and the phosphate/paint coating over the region so marked shall be removed by suitable abrasive process. After seam welding is completed, all scales shall be removed from the component over the region of the roller path and this region shall be immediately coated with primer/protective coating specified in the drawing to avoid rusting.

6.5 **Pressings** - Pressed components are to have bent radii not less than that required by the relevant drawings. Bent and fabricated components of steel sheet which show evidence of cracks after forming are to be rejected.

6.6 **Riveting** - Only rivets of the specified materials shall be used. All rivet holes shall be drilled to the correct size to suit the rivet being used. All burrs and chips shall be removed from the holes and from the joints in between the components being rivetted.

6.6.1 All rivets shall be formed with full heads. The rivet length called for on the drawings may be varied with the prior consent of the Inspecting Officer.

6.6.2 All driven rivets shall be inspected to ensure that the riveting is satisfactory in all respects. Particular care shall be taken so that the sheets are not damaged or weakened by the riveting and that rivet heads are neither distorted nor cracked. All joints that do not comply with the Inspector's requirements shall be rejected but if authorised by the Inspector, defective rivets may be removed and the rectified components or assembly re-submitted for approval.

6.7 **Protective finish**- All protective processes are to be carried out in accordance with the specifications quoted in the relevant drawings. Any treated component which is not to the satisfaction of the Inspecting Officer is to be rejected. Rejected components may, with the agreement of the Inspecting Officer, be rectified by the contractor and re-submitted for acceptance.

6.7.1 The paints specified in the drawings are to be applied by spraying. Method of application and tests for suitability of the paints shall be governed by the requirements laid down at **Appendix 'B'** and **Appendix 'C'**. Where a multi coat system is specified, the undercoat shall be thoroughly set before the subsequent coat is applied.

6.7.2 All painting operations shall be carried out in clean and dry conditions. Condensation of moisture before and during application shall be avoided and dust excluded. All paints shall adhere firmly and present a smooth coat free from cracks, flaws, and thin patches. Care shall be taken to avoid accumulation of paint at any point. Parts which have to be free from paint shall efficiently be masked in such a way that adjacent painted surfaces are not damaged on removal of the mask.

6.7.3 **Stencilling** - After stencilling/screen printing, the paint shall be allowed to dry for not less than 72 hours before undertaking packing.

7. QUALITY ASSURANCE PROVISIONS

7.1 **General** - The Contractor shall offer free of charge all the specimen/test pieces, duly machined, if required, for testing/checking of raw materials and arrange testing/checking of these specimen/test pieces at the testing agency duly approved by the Inspecting Officer. When finished or partly finished stores or components are expended or damaged in tests, re-tests or examinations as stipulated in the specification or elsewhere as a condition of acceptance, the contractor supplying the stores will be required to supply, replace or repair, free of charge, the stores so damaged or expended which become the property of the Government.

7.2 **Responsibility of Contractor**- The Contractor shall undertake cent percent inspection of the items before offering the same to the Inspecting Officer for acceptance, and maintain detailed records. Contractor's documentation shall include details of raw material source, its mechanical properties and chemical composition. The document shall be comprehensive including the entire raw material flow history with details of successive operations performed on it at his various production facilities. It is the responsibility of the prime contractor to ensure maintenance of such documents by his subcontractor(s) if subcontracting is resorted to. Such documents shall be made available for scrutiny of the Inspecting Officer on demand.

7.2.1 **Submission of items/store** - At the time of submitting each completed lot of item for acceptance of the Inspecting Officer, the contractor shall supply the following information accompanied by a certificate attesting that the information provided is correct and applicable to the items/store being submitted.

(a) A statement that the lot complies with all of the quality assurance provisions specified in this and applicable documents.

(b) A statement that all the materials purchased by the contractor meet the requirements and that certificates of conformance are available for review/scrutiny.

(c) A statement that only the material, bonded and cleared by the Inspector, is used for the lot of items being offered and that no deviation/change in the process of manufacture as permitted earlier has been made.

(d) Number of items in the lot.

(e) Date submitted.

The certificate shall be signed by a responsible agent of the contractor.

7.2.2 The contractor may also submit items with dimensional and geometric deviations for concessional acceptance by the Inspecting Officer. When such request is made, the contractor shall submit along with the details of items and related deviations, causative factors, already identified by him, leading to such deviations along with the details of remedial action. He shall also provide a guarantee that such concessional acceptance shall not be sought by him subsequently. However the acceptance of deviated components will depend on the discretion of Inspecting Officer.

7.3 The Inspecting Officer is at liberty to perform inspection of items for dimensional and geometric feature either on the basis of sampling plan or 100 per cent inspection of items as deemed necessary. Such decision to adopt either of above inspection procedures shall be based on, whether or not, in the opinion of the Inspecting Officer, the items offered for inspection are eligible to qualify to constitute a lot and the production process is sustained to yield consistent quality.

7.4 **Gauges and fixtures** - During all stages of manufacture and assembly, all components shall be subjected to examination, gauging and, where necessary, testing. The contractor shall supply at his own cost all the necessary gauges as listed in Appendix 'D' and necessary test fixtures as required by this specification. He shall also offer central facilities for inspection of components, if manufactured by various sub-contractors.

8. ASSEMBLY

8.1 Tail Cone Assembly

8.1.1 The Tail Cone assembly has dimensional restrictions and is, therefore, to be built with the aid of assembly fixture which is also to be used to control the geometric tolerances. The fixture required is to be designed by the contractor in consultation with the Inspecting Officer who will approve it.

8.1.2 When the assembly is complete, the Cone Body Welding Assembly shall conform in all respects with the relevant drawing and with the following requirements:-

(a) The drawing requirements for concentricity, parallelism and squareness of the cone and fins with the datum faces or diameters shall strictly be observed.

(b) Excessive variation of the cone shape from the nominal right circular conical frustum and

discontinuity in profile of the cone or fins more than that is permissible as per relevant drawings shall be avoided. Correction of irregularity by planishing after welding shall only be allowed by agreement with the Inspecting Officer and by the means approved by him.

(c) Symmetry of extremity of the fins, the alignment of fins in relation to the longitudinal axis and the angular relation of fins with each other shall be strictly maintained as per the drawing requirements and shall be checked by means of a suitable gauge.

(d) The working surfaces of all moving parts shall be free from paints and the order of application of the specified finishes shall be arranged to ensure this.

(e) On the completion of assembly, the cone shall be free from metal particles, swarf, dirt and other foreign bodies. No work shall be done during manufacture or assembly which might result in such metal particles etc., becoming lodged inside the tail cone. Failure to observe this requirement might result in operational failure of the tail unit. The inside diameter of the tail cone ring shall conform to the dimension given on the component drawing after all assembly is complete.

8.2 Arming Fork Assembly

8.2.1 Arming Fork Assembly consists mainly of Bottom Plate, Housing, Fork Spindle, Arming Fork, Bearings and Closing Plugs. After assembly of the Arming Fork Assembly to the tail unit it shall comply with the following requirements:

(a) After assembly is complete, the gap between the Vane from the rear end of the Tail Unit shall be within the tolerances shown on the drawing.

(b) The Arming Fork Assembly shall be concentric with the cone axis and shall rotate freely. The concentricity of Arming Fork shall be checked using appropriate apparatus approved by the Inspecting Officer.

9. FUNCTIONAL CHECKS

9.1 General - In addition to dimensional checks of the components as per the relevant drawings, the Tail Cone and Arming Fork Assembly shall be checked in the assembled condition for their functional features and for free rotation of the Arming Fork Assembly.

10. MECHANICAL TESTING

10.1 Samples, test set up and facilities for all the tests specified in this specification shall be provided by the Contractor, free of cost, to the Inspecting Authority.

10.2 **Raw material** - The entire raw material required for the manufacture of the store shall be procured, as far as possible, at one stretch and offered for acceptance by the Inspecting Officer. These materials shall be subjected to the appropriate tests given in the material specification quoted in the drawings together with any specified requirements given thereon. The preparation of test pieces and method of testing for sheets, billets, bars and forgings used in the manufacture of the components shall comply with the conditions laid down in the relevant specifications.

10.3 **Casting** - The Arming Fork and Vane shall be manufactured by pressure die casting.

10.3.1 **Chemical analysis** - At the start of production, the Inspector may, at his discretion, require full chemical analysis of the material taken from the crucible or ladle from which the castings are poured as per IS:504. The number and type of test samples shall be agreed between the Inspecting Officer and the Contractor but after satisfactory control of the material has been achieved, such tests may be omitted, as per the discretion of Inspecting Officer.

10.3.2 **Mechanical tests** - Tensile tests in accordance with IS:1816 shall be carried out on test pieces representing the beginning and end of each cast or of each batch of fifty castings, whichever is applicable. If either of these test pieces fails to meet the specification requirements, two further test pieces representing the same cast or batch shall be selected. If any one of these test pieces fails to meet the requirements, the castings represented thereby shall be rejected. When the Inspecting Officer considers that satisfactory control of the casting process has been achieved, he may, at his discretion, reduce the number of tensile tests to not less than 0.25% of the castings produced with a minimum of two.

10.4 **Tail Cone** - Minimum qty. 8 tail cones from each lot of 200 or less with all the welding operations completed and without painting, shall be subjected to liquid penetrant test as per IS:822 and IS:3658 for detection of surface defects such as surface cracks and blow holes, along the welded surface. The tests shall be carried out on tail cones as soon as all welding operations are completed. All the sample tail cones shall be free from the above surface defects. If any one tail cone exhibits surface defect on its welded portions, the entire lot of tail cones shall be subjected to liquid penetrant test and the tail cones with weld surface defects shall be segregated. These defective tail cones may be rectified and re-welded, with the permission of the Inspecting Officer and submitted for subsequent liquid penetrant test.

10.5 Load Test

10.5.1 Tail Cone Assembly - Minimum quantity of two Tail Cone Assemblies, selected at random, from each lot of 200, complete in all respects without painting shall be subjected to load test as outlined in Appendix'E'. The Tail Cone Assembly shall have been checked for absence of weld surface defects. The Tail Cone Assembly shall be attached to the fixture having the profile of the bomb base, as shown in the above appendix, with the help of 8 Studs. A uniformly distributed load of 5500 N (2750 N on each fin) shall be applied simultaneously to both of two diametrically opposite fins, kept parallel to the ground. The load may be applied hydraulically, pneumatically or by means of suspended dead weights or by any other means approved by the Inspecting Officer, at the specified location and sustained for a period of 15 minutes. The fins deformed by 11 mm at the edge. Upon removal of the load, the deflection (permanent set) of each fin, measured perpendicular to and from the initial plane of symmetry of the fin at the specified location 'Z', shall not exceed 5 mm. In case the deflection exceeds 5 mm, a further random sample of 2 Tail Cone Assemblies from the same lot, free from weld surface defects, shall be subjected to load test. Deflection of any fin exceeding 5 mm at location 'Z' in any of the tail cones under test shall entail rejection of the entire lot of 200 Tail Cone Assemblies. Fracture of any fir during load testing at any stage shall also result in total rejection of the lot under question.

10.5.2 Vane -The vane shall be subjected to the following tests:

10.5.2.1 Spin test - At the commencement of production, first 5 Vanes shall be subjected to spin test by revolving each Vane at 8000 rpm for a period of 5 minutes in suitable fixture coupled to an electric motor. Though the motor characteristics are unimportant, it is essential that the duration of spin of 5 minutes shall be reckoned from the instant the motor attains the above specified rpm. Due safety precaution shall be taken to arrest any disintegrated pieces flying away from the revolving Vane. Any physical disintegration of any part of the Vane or any sign of impending disintegration, manifested by the presence of cracks, detected visually or under a magnifying apparatus (power of magnification min. 15), shall result in rejection of the entire lot of Vane represented by the samples.

10.5.2.2 Shear test - The entire samples of Vane which have undergone spin test satisfactorily, shall be subjected to shear test in a universal testing machine using the fixture described in Appendix 'F'. Each Vane shall withstand a minimum load of 20 KN. Failure of any one sample to meet the above load requirement shall result in non-approval of casting technique by the Inspecting Officer. The Contractor is required to re-assess/match the casting parameters (vide para 6.3) and offer fresh samples.

i Amended vide RCMA(AA) Letter no RCMA(AA)/14-10/5/Tech. dt. 29.4.10

14/5/10

10.5.2.3 When the casting process has been stabilised and satisfactory results obtained, 3% of the total quantity of the Vanes produced with a minimum of 3 and a maximum of 12, whichever is higher, shall be subjected to spin test followed by shear test. The samples shall be so selected at random so as to represent the first, middle and last casting of each batch. Upon failure of any one of the Vanes in any of the above tests, a second sample of the same size shall be tested and if any of the second sample also fails, the entire lot of Vanes represented by the above sample shall be rejected.

10.5.3 **Arming Fork** - A sample 3% of the total quantity of the Arming Forks produced, with a minimum of 3 and a maximum of 12, whichever is higher, shall be subjected to load test in a universal testing machine or any other suitable machine by application of loads using the fixture as given in **Appendix 'G'**. The Arming Fork shall withstand a minimum load of 400 N.

11. MARKING

11.1 Marking and labelling on the Tail Cone Assembly are to be carried out as per relevant drawings.

11.2 All punch markings are to be carried out before applying protective finishes.

12. PACKING AND SUPPLY

12.1 The complete store after inspection and approval of the Inspecting Officer shall be packed by the Contractor in a suitable container/package. It is the Contractor's responsibility to ensure that the stores are delivered without damage.

12.2 The following are to be ensured while packing :-

(a) During packing the Tail Cone, the Studs shall be screwed fully inside the Cone Ring, to be flush with the tail cone surface.

(b) The Arming Mechanism shall be kept in the locked condition.

13. APPROVAL FOR INITIAL PRODUCTION

13.1 The manufacturer shall submit a detailed process sheet indicating check points/test stages with gauges, instruments and test set up proposed to be provided by the manufacturer for approval by the Inspecting Officer before commencement of bulk production.

13.2 The Contractor shall also submit one complete unit as per **Drawing No. ARDE 9501-03** manufactured by full production tools, jigs and fixtures, to the Inspecting Officer for approval before bulk production is proceeded with. Such approval shall not be given until the store has been examined by Inspecting Officer specified in the contract. No further production may be undertaken by the Contractor until this approval is given.

03/2/2000

(R VIJAYAPPAN)
SCIENTIST 'B'
PROJECT OFFICER

APPROVED

(A RANGABASHYAM)
CMDE
JOINT DIRECTOR (MUNITION-III)

PROV. SEALED BY

(JK JAIN)
SCIENTIST 'E'
CHIEF RESIDENT ENGINEER (AIR ARMT)
19 Apr 2000

APPENDIX 'A'

LIST OF RELEVANT SPECIFICATIONS

Sl.No.	Specn.No.		Title
1.	IS:5	-	Colours for ready mixed paint and enamel
2.	IS:319	-	Free cutting brass bars,rods and sections
3.	IS:504	-	Methods of chemical analysis of aluminium and its alloys
4.	IS:507	-	General Purpose Grease for defence application
5.	IS:549	-	Split pins
6.	IS:617	-	Aluminium and aluminium alloy ingots and castings for general engineering purposes
7.	IS:733	-	Wrought aluminium and aluminium alloy bars, rods and sections for general engineering purposes
8.	IS:738	-	Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes
9.	IS:813	-	Scheme of symbols for welding.
10.	IS:817	-	Code of practice for training and testing metal arc welders.
11.	IS:822	-	Code of procedure for inspection of welds.
12.	IS:1079	-	Hot rolled carbon steel sheets and strips
13.	IS:1261	-	Code of practice for seam welding in mild steel.
14.	IS:1363(Pt2)	-	Hexagon head screw
15.	IS:1364(Pt3)	-	Hexagon nut
16.	IS:1365	-	Slotted countersunk head screw
17.	IS:1367(PtV)	-	Technical supply conditions for threaded steel fasteners-Mechanical properties and test methods
18.	IS:1572		Electroplated coating of cadmium on iron and steel.
19.	IS:1608		Mechanical testing of metals-tensile testing

APPENDIX 'A' (contd)

20.	IS:1868	-	Anodic coating on aluminium and its alloys
21.	IS:2004	-	Carbon steel forgings for general engineering purposes
22.	IS:2016	-	Punched washer
23.	IS:2062	-	Steel for general structural purposes
24.	IS:2907	-	Non ferrous rivets
25.	IS:2998	-	Cold forged steel rivets for cold closing
26.	IS:3063	-	Single coil rectangular section spring lock washers
27.	IS:3618	-	Phosphate treatment of iron and steel for protection against corrosion.
28.	IS:3658	-	Code for practice for liquid penetrant flaw detection.
29.	IS:4218	-	ISO metric screw threads.
30.	IS:4454	-	Steel wires for cold formed springs.
31.	IS:5988	-	Spring dowel sleeve
32.	IS:6094	-	Hexagon socket set screws
33.	IS:6528	-	Stainless steel wire
34.	IS:6603	-	Stainless steel bars and flats
35.	IS:9595	-	Recommendations for metal arc welding of carbon and carbon manganese steels.
36.	DEF STAN 80-15/1	-	Paint, Pre-Treatment Primer (Etching Primer)
37.	DEF STAN 80-72/1	-	Paint System Chlorinated Rubber
38.	ASTM D 1710-96		STANDARD SPECIFICATION FOR POLYTETRA-FLUORO ETHYLENE (PTFE) ROD AND HEAVY WALLED TUBING

Amended vide: ARDE letter no ARDE/7/1/85 Tech Air dt 25/6/2001
and RCMA(AA)/1440/5/Tech/dt 27th Sept 2001

23/10/01

APPENDIX 'B'

METHOD OF APPLICATION OF CHLORINATED RUBBER PAINT SYSTEM

1. PAINT SYSTEM

First coat : Paint, Pre-treatment Primer (Etching Primer)
Second coat : Paint, Priming, Chlorinated Rubber
Third coat : Paint, Finishing, Chlorinated Rubber

2. SPECIFICATION

2.1 Paint, Pre-treatment Primer (Etching Primer) shall conform to DEF STAN 80-15/1.

2.2 Both Chlorinated Rubber Paints shall conform to requirement of specification DEF STAN 80-72/1 as well as " Test for ascertaining suitability of Chlorinated Rubber Paints with cadmium plated components" (Appendix 'C'). While procuring paints, mode of application (brushing/spraying) should be specified.

3. SURFACE PREPARATION

3.1 The surface should be cleaned to remove old deposits and abraded with zero grade emery paper. Finally it should be cleaned with 2% solution of Labolene (M/s. Glaxo India Ltd.) in water and rinsed with fresh water. After thorough drying, first coat of paint system shall be applied. In no case, cleaned surface shall be left overnight without application of first coat.

4. MODE OF APPLICATION

4.1 Paints shall be applied as per mode of application mentioned in the specification while procuring the paint.

5. INTERVAL BETWEEN TWO COATS

5.1 A maximum of 24 hours is allowed between first and second coats. There is no maximum time limit for application of third coat. Surface should be cleaned to remove dust etc before application.

6. DRYING PERIOD

6.1 After application of third coat, the painted components shall be dried for a **minimum** period of 72 hours in dust free environment.

APPENDIX 'C'

TEST FOR ASCERTAINING SUITABILITY OF CHLORINATED RUBBER PAINTS WITH CADMIUM PLATED COMPONENTS

1. SCOPE

The test prescribes the method for ascertaining suitability of Chlorinated Rubber Paint System (as per specification DEF STAN 80-72/1). A cadmium plated specimen is kept for 10 days in a closed container which has been freshly painted internally with the above paint system.

2. MATERIALS

(a) A container with lid made from burnished mild steel or aluminium, capacity , 1 litre - 2 Nos.
(Paint containers, 1 litre, are considered suitable for this purpose).

(b) Cadmium plated mild steel specimen, 6 mm dia x 20 mm long, plating thickness , 10-15 microns - 2 Nos.

3. PROCEDURE

3.1 Apply the Paint System, one coat of Etch Primer, one coat of Chlorinated Rubber Primer followed by one coat of Chlorinated Rubber Finishing Paint to the internal surface of one container at an interval of 24 hrs. Painted surface should be allowed to dry for 48 hrs.

3.2 Store cadmium plated specimen in a watch glass (uncovered), one each in painted and unpainted containers with tightly closed lid for a period of 10 days.

3.3 At the end of test period, specimen from each container is removed carefully. If the specimen, kept in painted container, does not show white deposit on its surface and has appearance similar to the specimen kept in unpainted container, the Paint System is considered suitable for use on containers / components along with cadmium plated parts.

APPENDIX 'D'

GAUGE SCHEDULE FOR TAIL UNIT NO. TB250

1. TAIL UNIT No.TB 250 (DRG. NO. ARDE 9501-03)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	2 + 1	D2	Limit Gauge

2. CONE BODY ASSEMBLY PAINTING & STENCILING DRAWING (DRG No. ARDE 9501-03 DET No.1)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	Stencilling/Screen Printing		Visual

3. CONE BODY WELDING ASSEMBLY (DRG No. ARDE 9501-03 DET No.2)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	13	F12	Limit Gauge
2	ø 249 + 0.2	D12	Plug Go/No Go Gauge
3	M12 x 1.75 - 6H	F11	Thread plug Go/No Go Gauge
4	20	D9 & D11	Limit Gauge
5	216 ± 0.5	C11	-do-
6	157 ± 0.2	D10	-do-
7	22 deg 30'	G10	Fixture
8	Angular location of fins	B4 to G4	-do-
9	450	E1	Limit Gauge
10	M6 X 1	C9	Thread plug go/No Go Gauge
11	All geometrical features	-	Fixture

4. CONE BODY (DRG No. ARDE 9501-03 DET No.3)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	800	D4	Limit Gauge
2	120.0	D5	Limit Gauge
3	ø282.0-0.1	E6	Snap Go/No Go Gauge
4	1.6	E5	Limit Gauge
5	70.0	E5	Limit Gauge
6	Window Dimensions	C7	Die and Punch
7	259	C5	Limit Gauge
8	ø65	B5	Plug Go/No Go Gauge
9	ø35.5	E5	-do-
10	ø3.1	D1	-do-
11	55 deg ± 30'	D8	Fixture

Appendix 'D'(contd)

5. CONE RING ASSEMBLY (DRG No. ARDE 9501-03 DET No.4)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	5 ± 0.5	E7	Limit Gauge

6. CONE RING (DRG No. ARDE 9501-03 DET No.5)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 278.7-0.2	D4	Snap Go/No Go Gauge
2	ø 249 + 0.2	D3	Plug Go/No Go Gauge
3	35.0	F4	Limit Gauge
4	7 deg 30'	E3	Profile Gauge
5	30	E2	Limit Gauge
6	ø 6.0 +0.01	E1	Plug Go/No Go Gauge
7	ø 4.2+0.1	D2	-do-
8	6.5	D1	Limit Gauge
9	2x45 deg	C4	Visual

7. LOCATING PIN (DRG No. ARDE 9501-03 DET No.6)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø6.02 -0.01	C3	Snap Go/No Go Gauge
2	18.0 -0.2	B3	Limit Gauge
3	12.0+0.2	B3	Limit Gauge
4	ø4.2-0.1	B3	Snap Go/No Go Gauge
5	1X45 deg	B2	Visual

8. END COVER (DRG No. ARDE 9501-03 DET No.8)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø20	D7	Plug Go/No Go Gauge
2	2.0	C7	Limit Gauge
3	17 -0.1	C7	Limit Gauge
4	7 deg 30'	E6	Profile Gauge
5	ø6.2+0.1	E3	Plug Go/No Go Gauge
6	ø 45.0	E3	Position Gauge

9. PANEL SUPPORT LARGE (DRG No. ARDE 9501-03 DET No.9)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	4.0	C8	Limit Gauge
2	50	C7	-do-
3	160.0	D8	-do-
4	R 125	E4	Radius Gauge

Appendix 'D'(contd)

5	R 121	E2	Radius Gauge

10. PANEL SUPPORT SMALL (DRG No. ARDE 9501-03 DET No.10)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	4.0	C8	Limit Gauge
2	30	C7	-do-
3	120.0	D7	-do-
4	R 101	E4	Radius Gauge
5	R 97	E2	-do-

11. BRACKET (DRG No. ARDE 9501-03 DET No.11)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	25	E5	Position Gauge
2	40	F4	Limit Gauge
3	30	F4	Position Gauge
4	35	E3	Limit Gauge
5	45	E3	--DO--
6	15	D3	--DO--
7	25	C3	--DO--
8	7 deg 30'± 30'	C3	Profile Gauge
9	M6	E5	Thread Plug Go/No Go Gauge

12. FLEXIBLE DRIVE ADAPTER (DRG No. ARDE 9501-03 DET No.12)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	64.5	C7	Limit Gauge
2	14	F4	--DO--
3	9	E4	--DO--
4	ø88	D5	Snap Go/No Go Gauge
5	ø64.5-0.5	D4	--DO--
6	M56x2-6H	D4	Thread Plug Go/No Go Gauge
7	7 deg 30'	C4	Profile Gauge

13. FIN LEFT (DRG No. ARDE 9501-03 DET No.13 SHT NO 2)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	360	C6	Limit Gauge
2	7 deg 30'	C5	Profile Gauge
3	60	C4	Limit Gauge
4	190	D3	--DO--
5	8	C5	--DO--
6	1.6	C3	--DO--

Appendix 'D'(contd)

7	53 deg	D7	Profile Gauge

14. FIN RIGHT (DRG No. ARDE 9501-03 DET No.13 SHT NO 3)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	360	C4	Limit Gauge
2	7 deg 30'	C4	Profile Gauge
3	60	C5	Limit Gauge
4	190	D6	--DO--
5	8	C4	--DO--
6	1.6	C6	--DO--
7	53 deg	D2	Profile Gauge

15. GROMET (DRG No. ARDE 9501-03 DET No.14)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø50	A2	Snap Go/No Go gauge
2	ø28	B2	Plug Go/No Go Gauge
3	R 3.5	B2	Radius gauge
4	ø 34.5	B2	Snap Go/No Go gauge
5	5	B3	Limit gauge
6	7	B4	---do----
7	ø3.1	C1	Plug Go/No Go Gauge
8	44 PCD	C3	Position Gauge

16. ARMING FORK ASSEMBLY(DRG No. ARDE 9501-03 DET No.15)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	5	D3	Limit Gauge

17. HOUSING (DRG No. ARDE 9501-03 DET No.16)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 5	F8	Plug Go/No Go Gauge
2	R 39	E7	Radius Gauge
3	48 A/F	D7	Limit Gauge
4	62	E6	Position Gauge
5	5	E6	Limit Gauge
6	3	E6	-do-
7	28	E4	Position Gauge
8	ø 2.1	D4 & E6	Plug Go/No Go Gauge
9	3	D4 & D6	Position Gauge
10	ø 47.9 -0.1	D4	Ring Go/No Go Gauge
11	M36 x 1-7H	C4 & C6	Thread Plug Go/No Go Gauge
12	15 + 0.2	C6	Limit Gauge
13	31 + 0.2	B5	-do-

Appendix 'D'(contd)

14	47 ± 0.2	B5	Limit Gauge
15	125	B5	Limit Gauge
16	30	B4	-do-
17	20 + 0.2	B4	-do-
18	ø 28 + 0.03	C4	Plug Go/No Go Gauge
19	2 Oblong holes	E4	-do-
20	Geometrical tolerances	-	Fixture

18. FORK SPINDLE (DRG No. ARDE 9501-03 DET No.17)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	56 ± 0.2	E6	Position Gauge
2	6	D7	-do-
3	ø 5.1	D6	Plug Go/No Go Gauge
4	ø 12.97 - 0.03	D3 & D7	Ring Go/No Go Gauge
5	ø 21	D4	Snap Go/No Go Gauge
6	11 + 0.2	D4	Position Gauge
7	123 + 0.3	C5	Limit Gauge
8	180	C5	-do-
9	3	C4	-do-
10	ø 3.2	E2	Plug Go/No Go Gauge
11	ø 2	C6	-do-
12	Geometrical tolerances	-	Fixture

19. ARMING FORK (DRG No. ARDE 9501-03 DET No.18)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	R 10 (both sides)	D8	Radius Gauge
2	55	E8	Limit Gauge
3	22	D8	-do-
4	4.5	E6	Profile Gauge
5	23 + 0.1	E6	-do-
6	4.5	D6	-do-
7	4 deg	D6 & E6	-do-
8	98 ± 0.2	F4	Position Gauge
9	56 ± 0.2	F4	-do-
10	42 ± 0.2	E4	-do-
11	2	E2	Plug Go/No Go Gauge
12	25.5	D6	Limit Gauge
13	62.5 + 0.1	D5	-do-
14	7	D5	Position Gauge
15	97 + 0.3	D4	Limit Gauge
16	173.5	D5	-do-
17	ø 5.2	D4	Plug Go/No Go Gauge
18	ø 13 + 0.03	C3	Plug Go/No Go Gauge
19	ø 21.9 - 0.1	C3	Ring Go/No Go Gauge
20	10.5	C6	Limit Gauge
21	Surface finish 1.6	E4	Instrument/Comparator

Appendix 'D'(contd)

22	Geometrical tolerances	-	Fixture

20. BEARING WASHER (DRG No. ARDE 9501-03 DET No.19)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	4	B1	Limit Gauge
2	ø 27	B2	Snap Go/No Go Gauge
3	ø 13 + 0.2	B2	Plug Go/No Go Gauge
4	0.5 x 45 deg	B2	Visual

21. ARMING TUBE (DRG No. ARDE 9501-03 DET No.20)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	440	D5	Limit Gauge
2	ø 13 + 0.1	D3	Plug Go/No Go Gauge
3	ø 16	D3	Snap Go/No Go Gauge
4	10	D3 & D6	Position Gauge
5	20	D3 & D6	-do-
6	Holes ø 3.2	D6 & D3	Plug Go/No Go Gauge
7	Geometrical tol.	-	Fixture

22. VANE SPINDLE (DRG No. ARDE 9501-03 DET No.21)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 13 - 0.05	D5	Snap Go/No Go Gauge
2	30	E5	Limit Gauge
3	120	C4	-do-
4	ø 5.1 + 0.1	D3	Plug Go/No Go Gauge
5	ø 10 f7	D3	Snap Go/No Go Gauge
6	Geometrical tolerances	-	Fixture

23. BOTTOM PLATE (DRG No. ARDE 9501-03 DET No.22)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	180	B6	Limit Gauge
2	70	C6 & E3	-do-
3	50	E4	-do-
4	55	D7	-do-
5	10	D4	-do-
6	25 ± 0.1	E8	Position Gauge
7	62	D6	-do-
8	Holes ø 5.2	F4	Plug Go/No Go Gauge
9	Holes ø 6.2 ± 0.2	D4	-do-
10	ø 48 ± 0.1	F6	-do-
11	Geometrical tolerances	-	Fixture

Appendix 'D'(contd)

12	12	C4	Limit Gauge

24. CLOSING PLUG (REAR BEARING) (DRG No. ARDE 9501-03 DET No.23)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 28	B1	Plug Go/No Go Gauge
2	4	B1	Limit Gauge
3	14 - 0.1	A1	-do-
4	ø 13.2 + 0.1	C2	Plug Go/No Go Gauge
5	M36 x 1-6g	B2	Thread Ring Go/No Go Gauge
6	2.2	C3	Slip Gauge
7	5	C3	Limit Gauge
8	Geometrical tolerances	-	Fixture

25. FORK BEARING FRONT (DRG No. ARDE 9501-03 DET No.24)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	18 -0.2	B2	Limit Gauge
2	ø 22 + 0.03	B2	Plug Go/No Go Gauge
3	ø 31.95 - 0.04	A2	Ring Go/No Go Gauge
4	1 x 45 deg	B2 & B3	Visual
5	Geometrical tolerances	B3	Fixture

26. CLOSING PLUG (FRONT BEARING) (DRG No. ARDE 9501-03 DET No.25)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	13 - 0.2	B3	Limit Gauge
2	ø 22.1 + 0.1	B4	Plug Go/No Go gauge
3	M36 x 1 - 6g	B4	Thread Ring Go/No Go Gauge
4	2.2	C1	Slip Gauge
5	5	C1	Limit Gauge
6	Geometrical tolerances	-	Fixture

27. FORK BEARING REAR (DRG No. ARDE 9501-03 DET No.26)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	10 - 0.2	B2	Limit Gauge
2	3	B2	-do-
3	ø 27.96 - 0.03	A2	Ring Go/No Go Gauge
4	ø 32	C2	Snap Go/No Go Gauge
5	ø 13 + 0.02	B2	Plug Go/No Go Gauge
6	1 x 45 deg	B2	Visual
7	Geometrical tolerances	-	Fixture

Appendix 'D'(contd)

28. SPINDLE BEARING (DRG No. ARDE 9501-03 DET No.27)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 19.9 - 0.05	C1	Ring Go/No Go Gauge
2	8	C2	Limit Gauge
3	2	B2	-do-
4	ø 10.1 + 0.1	C2	Plug Go/No Go Gauge
5	ø 24.9 - 0.1	C3	Snap Go/No Go Gauge
6	1 x 45 deg	B2	Visual
7	Geometrical tolerances	-	Fixture

29. SPINDLE BEARING HOUSING (DRG No. ARDE 9501-03 DET No.28)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 33	C1	Snap Go/No Go Gauge
2	ø 7	C2	Plug Go/No Go Gauge
3	PCD 45	C2	Position Gauge
4	8 R	C2	Radius Gauge
5	ø 20 + 0.03	C3	Plug Go/No Go Gauge
6	3	C4	Limit Gauge
7	2.2	C3	-do-
8	ø 58	C4	Snap Go/No Go Gauge
9	ø 25 + 0.1	C4	Plug Go/No Go Gauge
10	8.5	B4	Limit Gauge
11	Geometrical tolerances	-	Fixture

30. VANE (DRG No. ARDE 9501-03 DET No.30)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 140	D8	Snap Go/No Go Gauge
2	ø 68	D8	-do-
3	ø 58	D7	Taper Gauge
4	10 deg	E7	Profile Gauge
5	7 deg 30'	E6	-do-
6	ø 20 H7	D6	Plug Go/No Go Gauge
7	5 deg	C7	Profile Gauge
8	27	D7	Limit Gauge
9	32	B6	Limit Gauge
10	R 5	C7, D7 & D5	Radius Gauge
11	R 1.75	E5	-do-
12	3.5	E5	Taper Gauge
13	5	E5	-do-
14	60 deg	E4 & F4	Profile Gauge
15	PCD 33	E2	Position Gauge
16	ø 4.2	C4	Plug Go/No Go Gauge
17	Geometrical tolerances	-	Fixture

Appendix 'D'(contd)

31. BUSH VANE (DRG No. ARDE 9501-03 DET No.31)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 45	E7	Snap Go/No Go Gauge
2	ø 20 f7	D5	Ring Go/No Go Gauge
3	ø 20	D2	Snap Go/No Go Gauge
4	33 PCD	E5	Position Gauge
5	ø 4.2	C7	Plug Go/No Go Gauge
6	1 x 45 deg	E5	Visual
7	40	C4	Limit Gauge
8	25	C4	-do-
9	20	C3	-do-
10	10	C3	Position Gauge
11	ø 5.1 + 0.1	E3	Plug Go/No Go Gauge
12	ø 10 H7	D3	-do-
13	Geometrical tolerances	-	Fixture

32. PIN VANE (DRG No. ARDE 9501-03 DET No.32)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 5 - 0.1	C1	Snap Go/No Go Gauge
2	ø 1.6	C2	Plug Go/No Go Gauge
3	ø 7	C3	Snap Go/No Go Gauge
4	2	B2	Limit Gauge
5	24	B2	Position Gauge
6	30	B2	Limit Gauge
7	1.5 x 45 deg	B1	Visual
8	Geometrical tolerances	-	Fixture

33. CLIP RETAINING (DRG No. ARDE 9501-03 DET No.33)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 8	B1	Plug Go/No Go Gauge
2	25	B1	Position Gauge
3	10	B2	Limit Gauge
4	32	B2	Position Gauge
5	ø 1	B2	Snap Go/No Go Gauge
6	45 deg	B2	Profile Gauge
7	2.5	C2	Slip Gauge
8	5	C3	Limit Gauge

34. PANEL I (DRG No. ARDE 9501-03 DET No.34)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 7	C5	Plug Go/No Go Gauge
2	10	D5	Position Gauge
3	10	D3	-do-

Appendix 'D'(contd)

4	7	D3	Slip Gauge
5	R 125	F6	Radius Gauge
6	R 100	F2	-do-
7	1.6	D2	Limit Gauge
8	All other dim	-	Die & Punch

35. PANEL II (DRG No. ARDE 9501-03 DET No.36)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 7	C5	Plug Go/No Go Gauge
2	10	C5	Position Gauge
3	10	D3	-do-
4	7	D3	Slip Gauge
5	R 125	E6	Radius Gauge
6	R 100	F2	-do-
7	1.6	D2	Limit Gauge
8	ø 20	C8	Plug Go/No Go Gauge
9	PCD 30	D8	Position Gauge
10	ø 3.1	C7	Plug Go/No Go Gauge
11	65	C3	Position Gauge
12	All other dim	-	Die & Punch

36. ARMING WIRE GUIDE (DRG No. ARDE 9501-03 DET No.37)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	ø 3.1	C1	Plug Go/No Go gauge
2	ø 10	C2	-do-
3	PCD 30	C3	Position Gauge
4	ø 19.8 - 0.1	B2	Snap Go/No Go Gauge
5	ø 36	A2	-do-
6	2	B3	Limit Gauge
7	5	B3	-do-
8	R 2	B3	Radius Gauge
9	Geometrical tolerances	-	Fixture

37. STUD (DRG No. ARDE 9501-03 DET No.38)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	23	B2	Limit Gauge
2	M 12 x 1.75 - 6g	C2	Thread Ring Go/No Go Gauge
3	120 deg	A2	Profile Gauge

38. ADAPTOR BLANKING (DRG No. ARDE 9501-03 DET No.39)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	M 56 x 2	A2	Thread Ring Go/No Go Gauge

Appendix 'D'(contd)

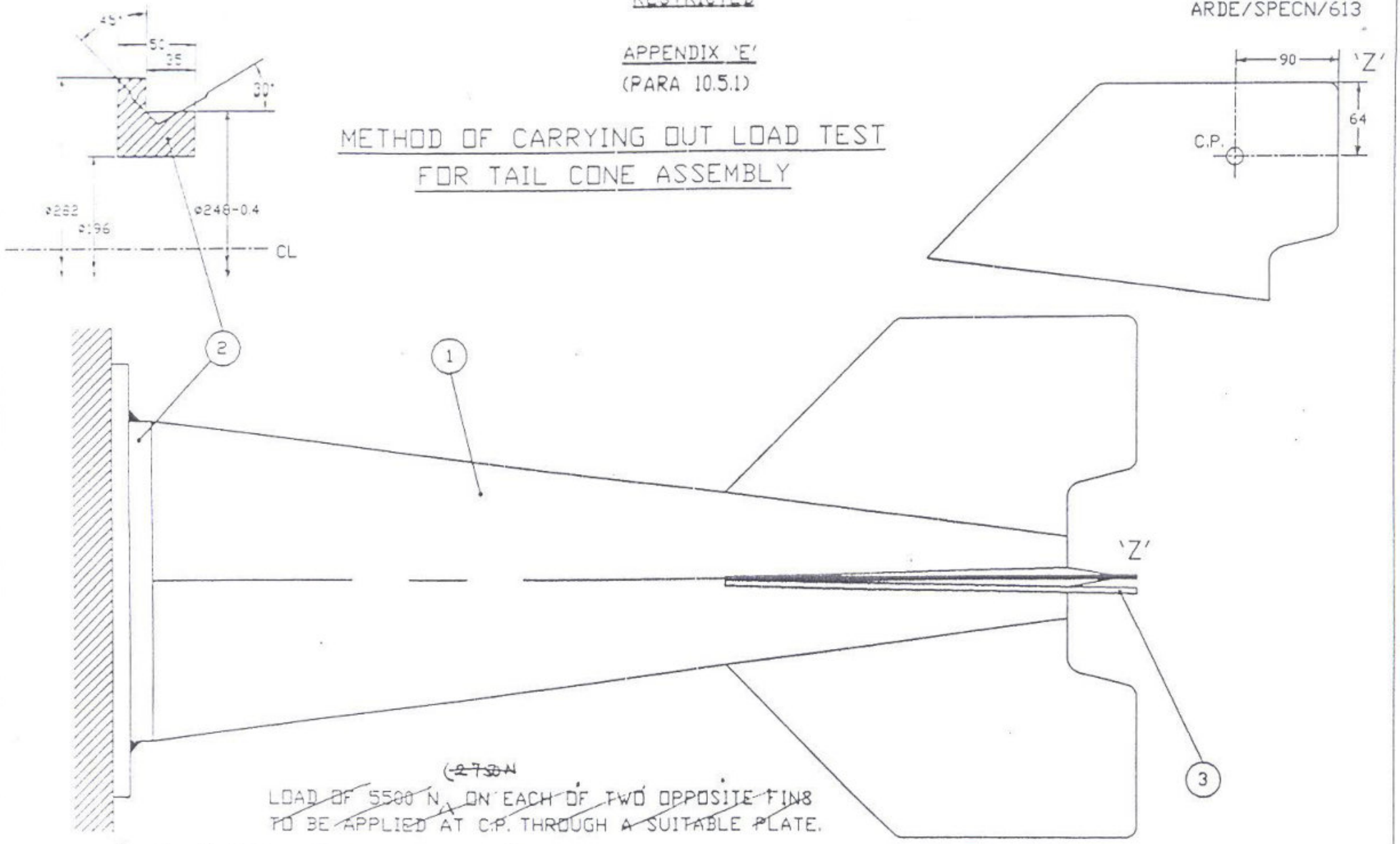
43. WARNING FLAG (DRG No. ARDE 9501-03 DET No.45)

Sl.No.	Drawing dim/Features	Zone	Method of Inspection/Gauge
1	0.5	C3	Limit Gauge
2	All other dimensions	-	Die & Punch

RESTRICTED

APPENDIX 'E'
(PARA 10.5.1)

METHOD OF CARRYING OUT LOAD TEST FOR TAIL CONE ASSEMBLY



~~(2750N~~
LOAD ~~OF~~ 5500 N ~~ON EACH OF TWO OPPOSITE FINS~~ TO BE ~~APPLIED~~ AT C.P. THROUGH ~~A~~ SUITABLE ~~PLATE.~~

LOAD of 5500N (2750 N on each fin) on both of two opposite fins to be applied at C.P. through a suitable plate.

1. TAIL CONE ASSY. UNDER TEST
2. BOMB BASE (MATL: STEEL TO IS 5517 40C10S18 OR B.S. 970 En 8)
3. STEEL PLATE (COVERING ENTIRE FIN PROFILE)

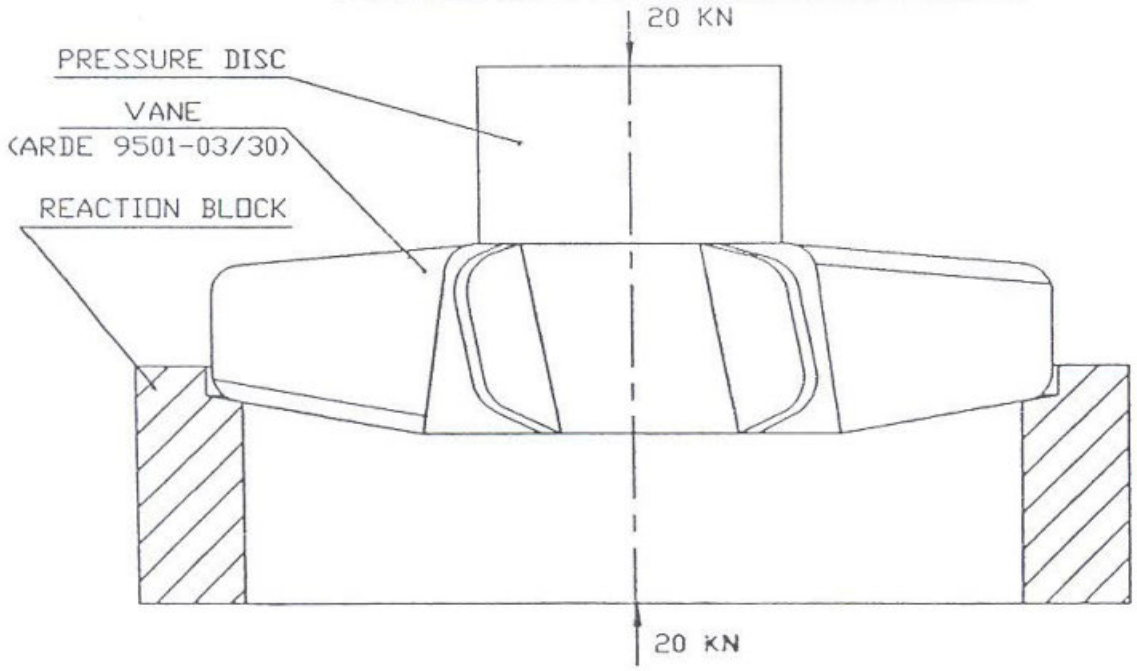
ALL DIM ARE IN mm

Amended vide RCMA(AA) letter no RESTRICTED
RCMA(AA)/1440/5/Tech dt 29.4.10

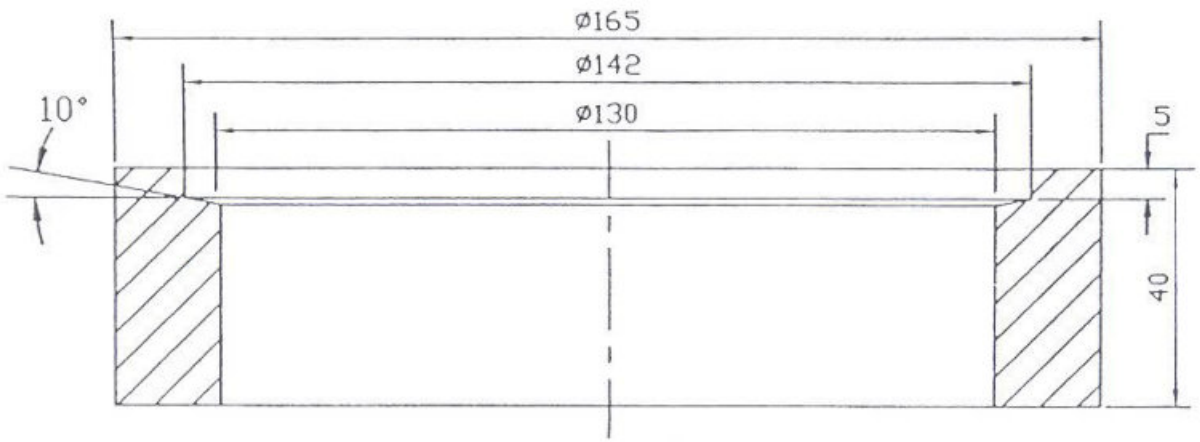
APPENDIX 'F'

(PARA 10.5.2.2)

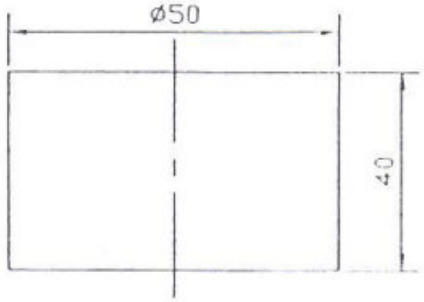
METHOD OF TESTING OF VANE



VANE TEST FIXTURE



REACTION BLOCK

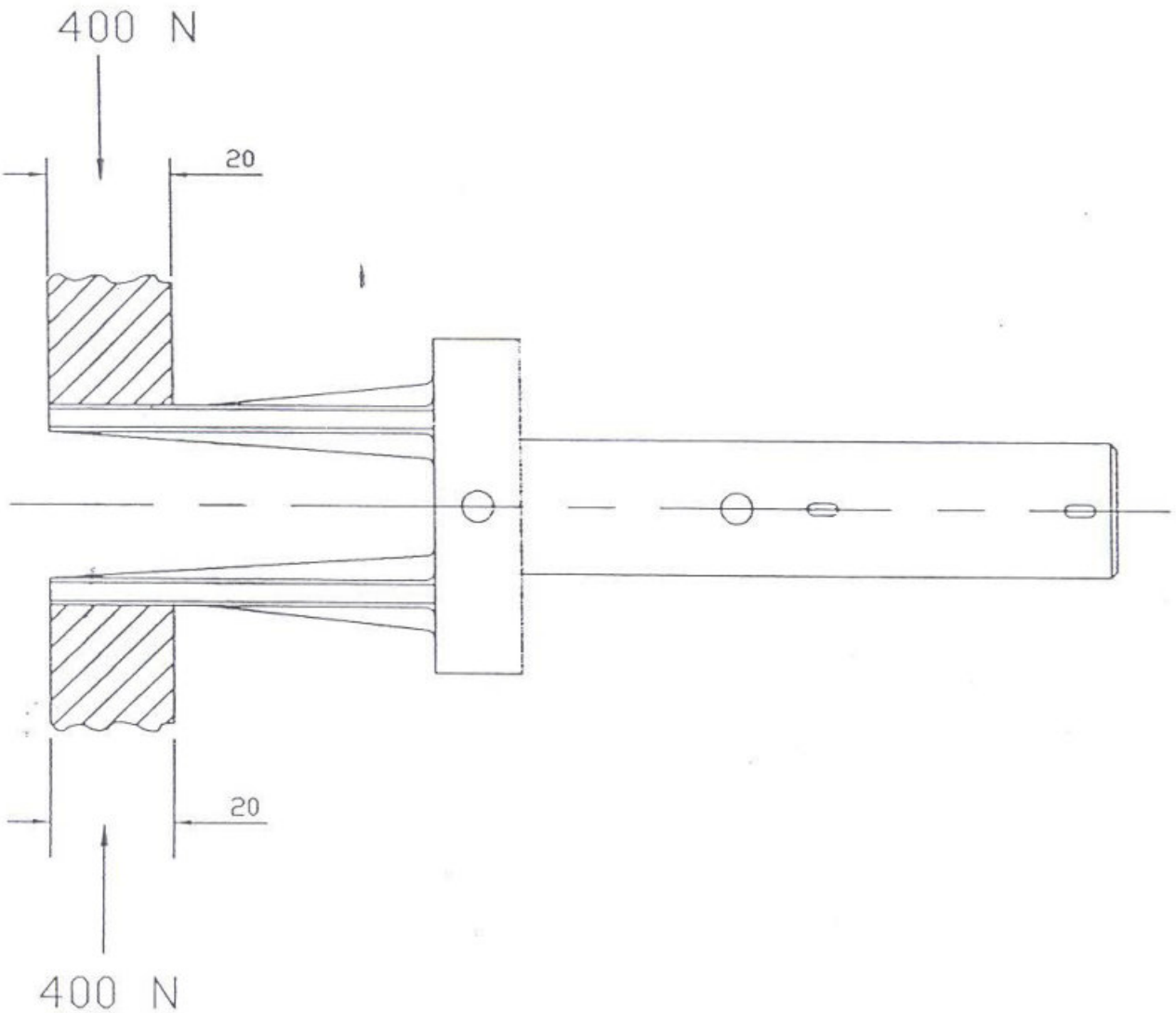


PRESSURE DISC

ALL DIM ARE IN mm
MATL : STEEL

APPENDIX 'G'
(PARA 10.5.3)

METHOD OF TESTING OF ARMING FORK

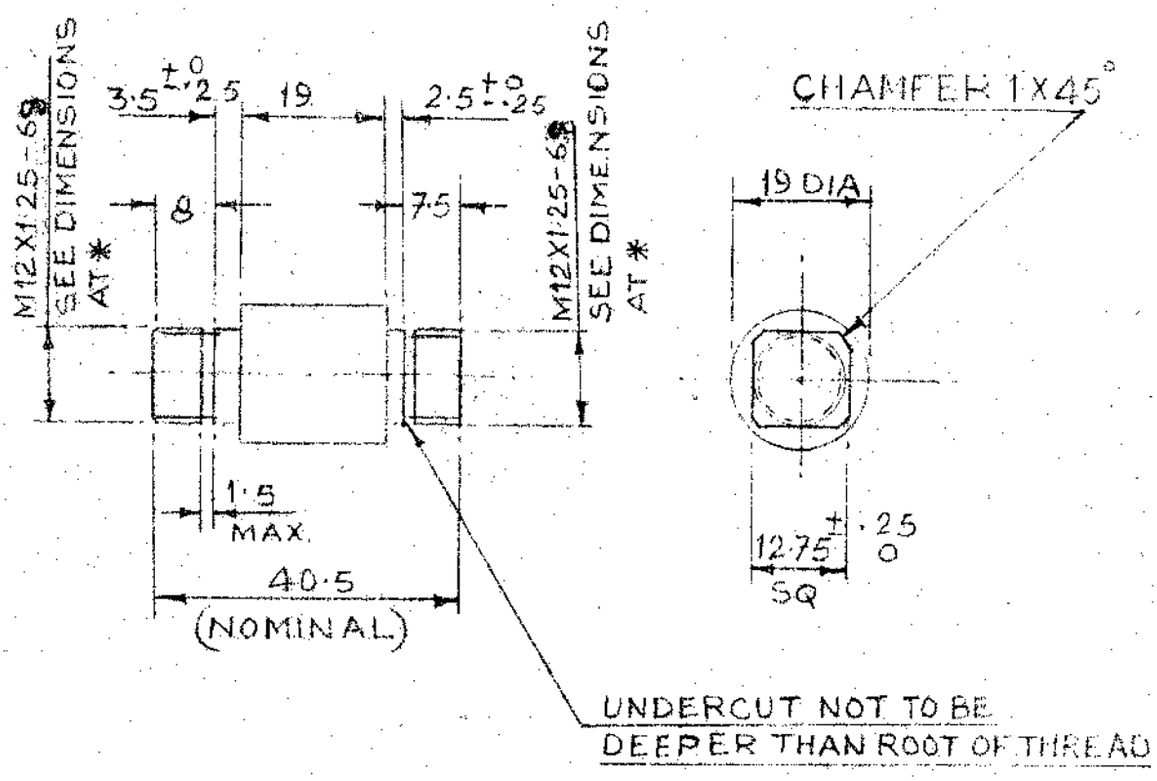


ALL DIM ARE IN mm

4	3	2	1

DRG.No. ARM 1253 A10

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



PROTECTIVE FINISH

TO BE ELECTROGALVANISED TO SPEC. IS:1573-FE Zn 25 AND PASSIVATED TO IS:1340

* LIMITS FOR M12X1·25-6g THREAD

	MAX.	MIN.
MAJOR DIA	11·972	11·760
PITCH DIA	11·160	11·028
MINOR DIA	10·436	10·216

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
5	18 7/96		RETRACED WITH OUT CHANGE	
4	5 9/93	—	REVISED VIDE A.L.No. 716	Sd/-
3	22 3/75	—	RETRACED	
2	5 7/72	—	REVISED VIDE A.L. No 171	
1	20 9/65	—	ORIGINAL	

	DATE	INITIAL
DGN		
DRN		
CHD	18 7/96	
TCD	18 7/96	
COMP.		

SCALE :- 1:1

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

DIMENSIONS ARE IN MM.

MATL. SPEC. STEEL, IS: 1570 - C20

SEC. REF. NO.

GAUGE. SCHD. NO.

DRG. LIST. NO. ARM 1253

TITLE —

SPIGOT

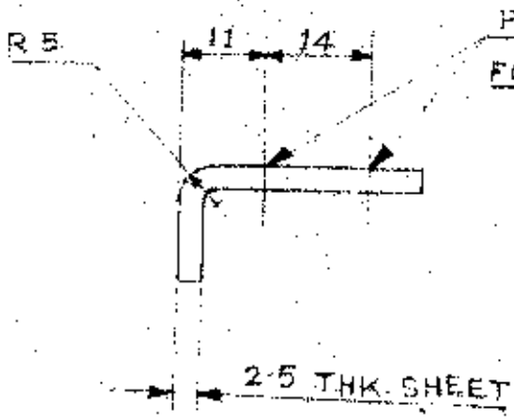
D.T.D & P. (AIR)
MINISTRY OF DEFENCE

APPROVED

DRG.NO. ARM 1253A10

ARM 1253A12

DRG. CONVENTIONS ARE BASED ON I.S: 696 (10)



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

4.	23 7/96	–	DRG. RETRACED
3.	3 6/96	–	DRG. RETRACED WITHOUT CHANGE
2.	5 1/32	–	REVISED VIDE A.L. NO. 171.
1.	20 9/65	–	CHECKED SEALED

DRAWN RECORD
DATE INITIAL
DES
DRN
CHD 23 7/67
CHK 23/96
COMP

SCALE — 1 : 1

TOLERANCES UNLESS OTHERWISE STATED (±0.5)

INITIAL R NO DATE ZONE

DIMENSIONS ARE IN MM.

MATL. SPEC. :- STEEL IS: 1079.

SEC. REF. NO.

GAUGE SCHD. NO.

DRG. LIST NO. ARM 1253

TITLE —

STOP

DRAWING RECORD

D.T.O. & P. (A)

MINISTRY OF (DEF)

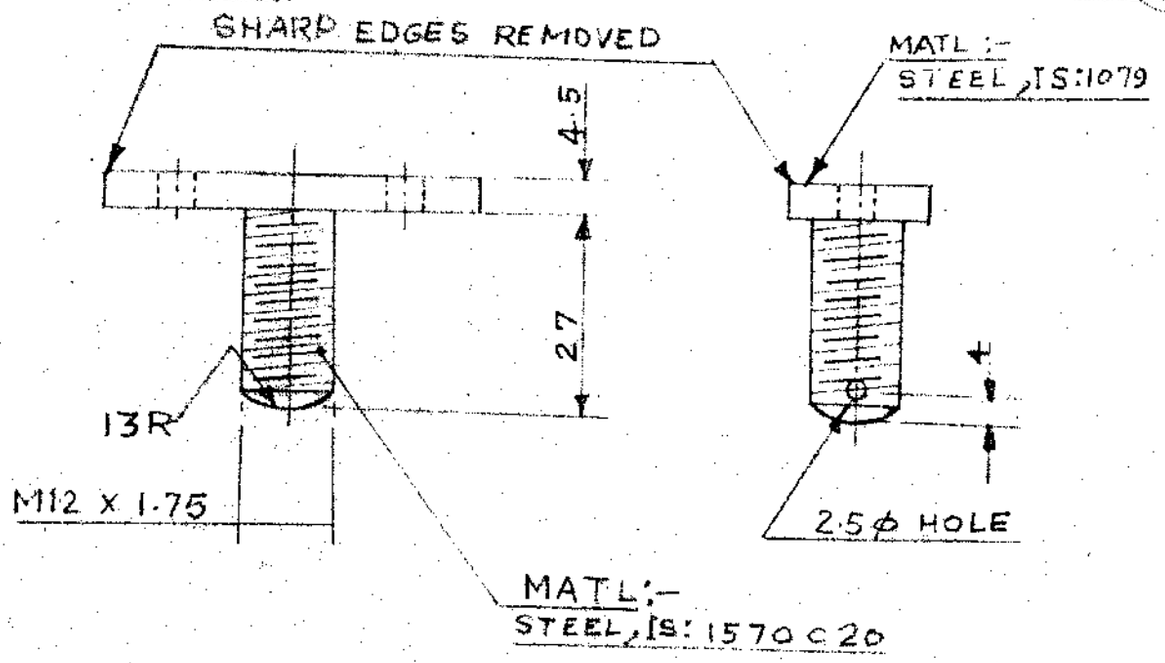
APPROVED

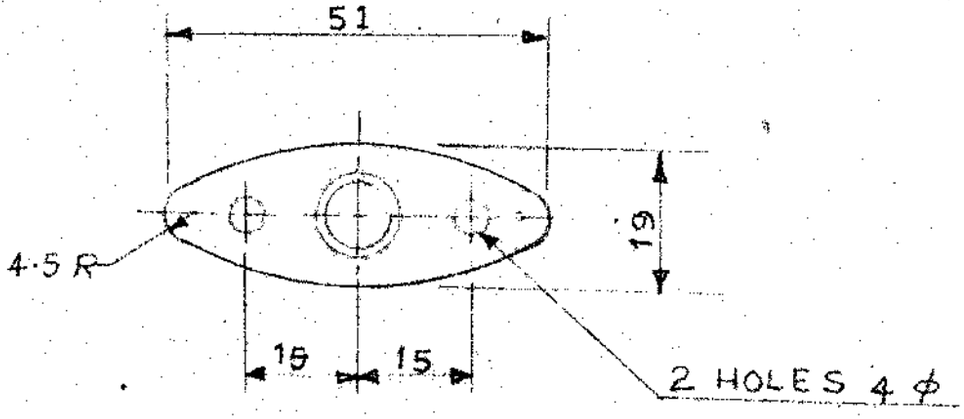
DRG NO.

ARM 1253A12

ARM 1253. A16

DRG. CONVENTIONS ARE BASED ON I.S: 696. (2.0)





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

4	$1\frac{8}{96}$	-	DRG. RETRACED WITHOUT CHANGE	
3	$24\frac{2}{75}$	-	DRG. RETRACED WITHOUT CHANGE	sd/-
2	$5\frac{7}{72}$		REVISED VIDE A.L. No. 171	sd/-
1	$20\frac{9}{25}$	-	ORIGINAL	

NO	DATE	ZONE	BRIEF RECORD	INITIAL
			PROV SEALED	

	DATE	INITIAL
DGH		
DRN		
CHD	21 7/96	
TCD	27-7-96	
COMP.		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED TO IS:2102 (M1)

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

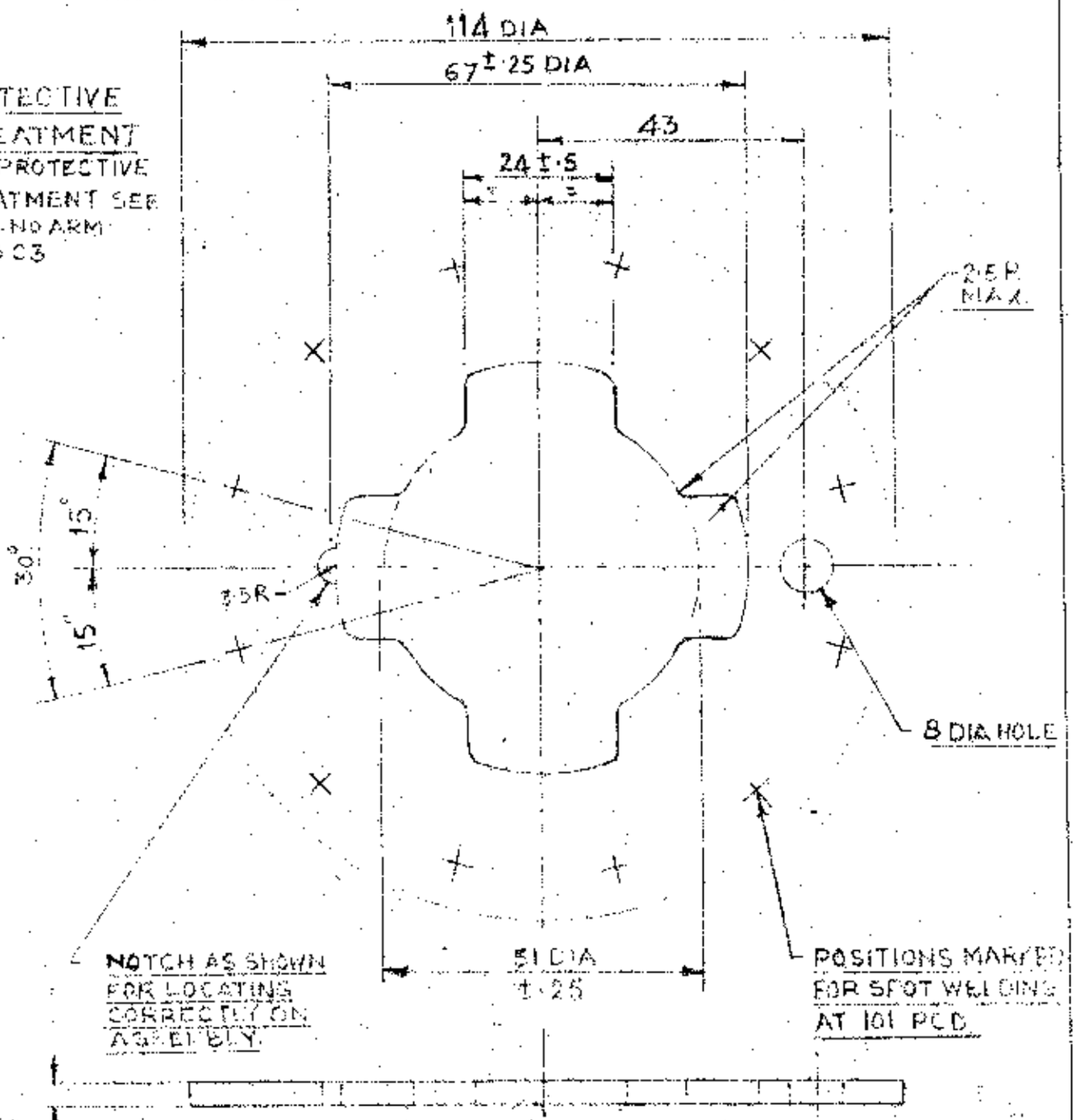
APPROVED

DRG. NO.

ARM 1253 A16

DRG.No. ARM 1253 A6

DRG. CONVENTIONS ARE BASED ON I S: 696.



3.15 THK. BIT.

R.NO	DATE	ZONE	BRIEF RECORD	INITIAL	R.NO	DATE	ZONE	BRIEF RECORD	INITIAL
					2	5 7/72	—	DRG RETRACED REVISED VIDE A.L. NO 171	
4	16 7/96		DRG RETRACED WITHOUT CHANGE		1	26 9/55	—	ORIGINAL	

	DATE	INITIAL	DIMENSIONS ARE IN MM.
DGN			MATL. SPEC. STEEL, IS: 1079
DRN			
CHD	16 7/96		SEC. REF. NO.
TCD	16 7/96		GAUGE. SCHD. NO.
COMP.			DRG. LIST. NO. ARM 1253

SCALE :- 1 : 1

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

TITLE —

LOCKING PLATE

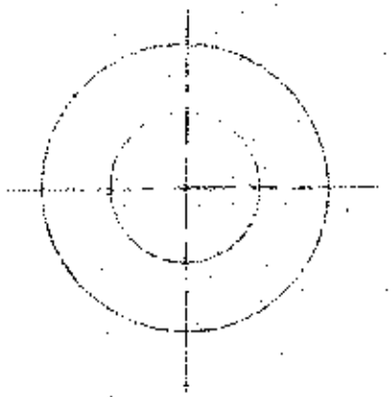
D.T.D & P. (AIR)
MINISTRY OF DEFENCE

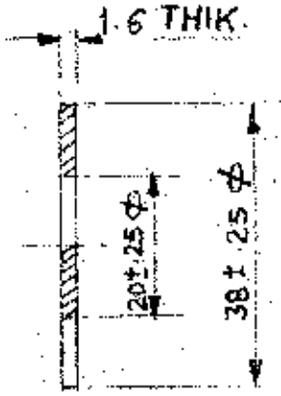
APPROVED

DRG.NO. ARM 1253 A6

DRG. No.
ARM 1253 A13

DRG. CONVENTIONS ARE BASED ON I.S: 696. (1/2)





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

REVS	DATE	ZONE	BRIEF RECORD	INITIAL	R.NO	DATE	ZONE
			DATE	INITIAL			
DES.							
DRN.							
CHK.	27 7/65						
APP.	22-7-96						
PROV.							

BRIEF HISTORY

D.I.D & P.

MINISTRY OF

DIMENSIONS ARE IN MM.

MATL. SPEC. BRASS
Cu Zn 37½ H IS:410

SEC. REF. NO.

GAUGE SCHD. NO.

DRG. LIST. NO. ARM 1253

SCALE :- 1:1

TOL. :- TOLERANCES

UNLESS OTHERWISE STATED TO IS:

TITLE:-

WASHER

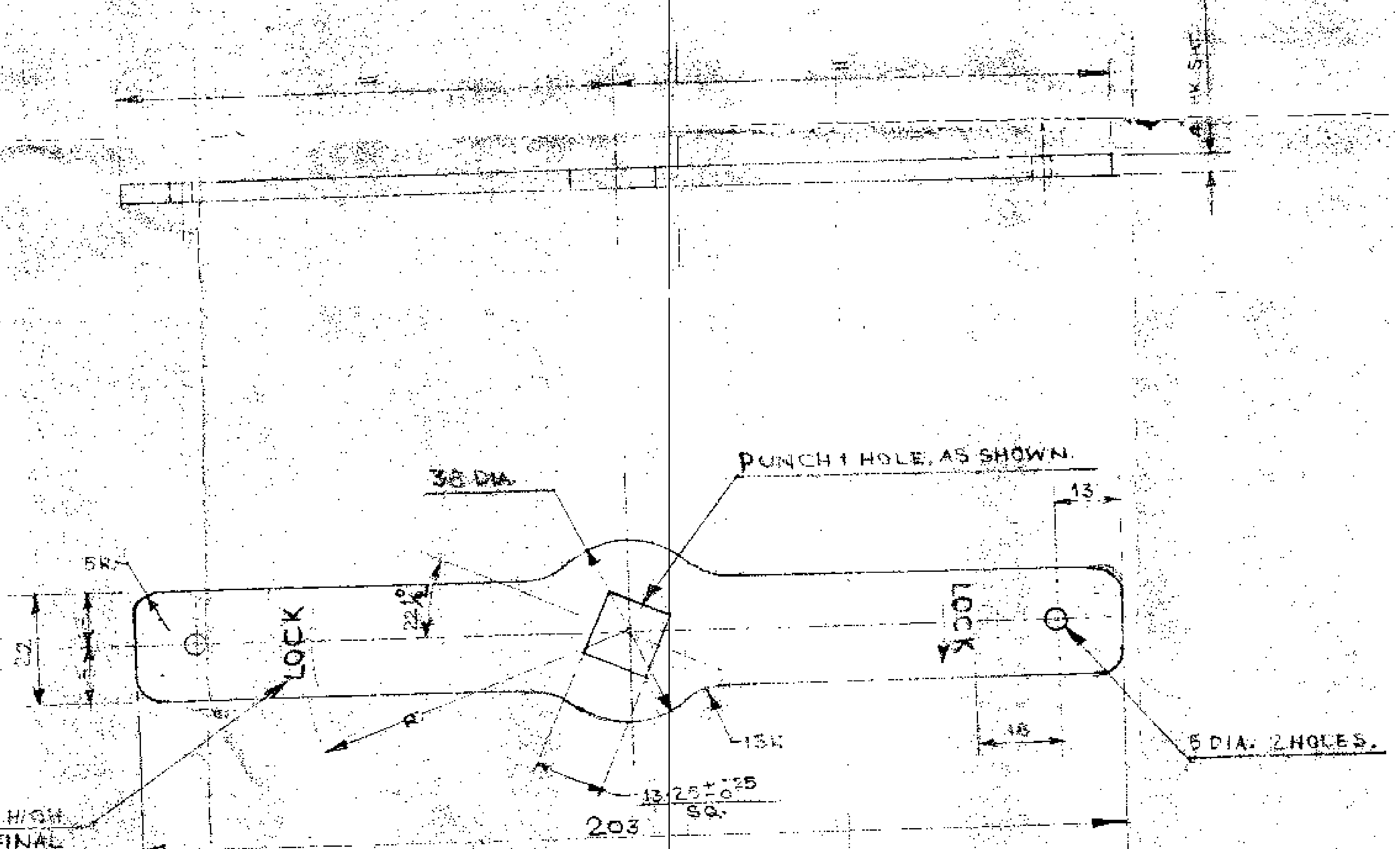
APPROVED

DRG. NO.

ARM 1253 A13

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

4	15/7/96		DRG. RETRACED	Sd/
3	22/2/15		RETRACED WITHOUT ANY CHANGE	Sd/
	1/7/73		REVISED VIDE A.L. No	Sd/
1	20/		ORIGINAL	Sd/
RN	DATE	ZONE	BRIEF RECORD	INITIAL

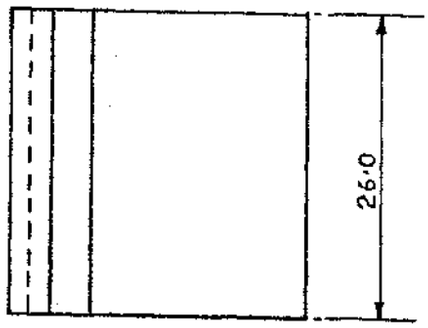
	DATE	INITIAL		
DGN			DIMNS. ARE IN mm. MATL SPECN: STEEL St.42 IS 1079	D.T.D & P(AIR) MIN. OF DEFENCE
DRN				
CHD			SEC. REF. No	
TCD			GAUGE SCHD. NO	
COMP			DRG LIST No ARM 1253	APPROVED
SCALE 1:1			TITLE:- RELEASE EAR	DRG. No: ARM. 1253 C8
TOL:- TOL EXCEPT WHERE OTHERWISE STATED TO				

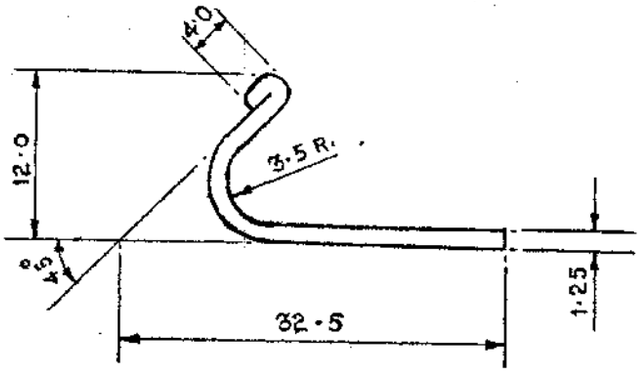
TAIL UNIT NO. TB-250

Sl. No.	Nomenclature/ Drawing Designation	Drawing/Part. No.
1	TAIL UNIT NO TB – 250	ARDE 9501 – 03
2	CONE BODY ASSEMBLY PAINTING & STENCILLING	ARDE 9501 – 03 DET No. 1
3	CONE BODY	ARDE 9501 – 03 DET No. 3
4	CONE RING ASSEMBLY	ARDE 9501 – 03 DET No. 4
5	END COVER ASSEMBLY	ARDE 9501 – 03 DET No. 7
6	PANEL SUPPORT LARGE	ARDE 9501 – 03 DET No. 9
7	PANEL SUPPORT SMALL	ARDE 9501 – 03 DET No. 10
8	BRACKET	ARDE 9501 – 03 DET No. 11
9	FLEXIBLE DRIVE ADAPTOR	ARDE 9501 – 03 DET No. 12
10	FIN ASSEMBLY	ARDE 9501 – 03 DET No. 13 SHT No. 1
11	FIN LEFT	ARDE 9501 – 03 DET No. 13 SHT No. 2
12	FIN RIGHT	ARDE 9501 – 03 DET No. 13 SHT No. 3
13	GROMET	ARDE 9501 – 03 DET No. 14
14	ARMING FORK ASSEMBLY	ARDE 9501 – 03 DET No. 15
15	HOUSING	ARDE 9501 – 03 DET No. 16
16	FORK SPINDLE	ARDE 9501 – 03 DET No. 17
17	ARMING FORK	ARDE 9501 – 03 DET No. 18
18	BEARING WASHER	ARDE 9501 – 03 DET No. 19
19	ARMING TUBE	ARDE 9501 – 03 DET No. 20
20	VANE SPINDLE	ARDE 9501 – 03 DET No. 21
21	BOTTOM PLATE	ARDE 9501 – 03 DET No. 22
22	CLOSING PLUG (REAR BEARING)	ARDE 9501 – 03 DET No. 23
23	FORK BEARING FRONT	ARDE 9501 – 03 DET No. 24
24	CLOSING PLUG FRONT BEARING	ARDE 9501 – 03 DET No. 25
25	FORK BEARING REAR	ARDE 9501 – 03 DET No. 26
26	SPINDLE BEARING	ARDE 9501 – 03 DET No. 27
27	SPINDLE BEARING HOUSING	ARDE 9501 – 03 DET No. 28
28	VANE ASSEMBLY	ARDE 9501 – 03 DET No. 29
29	VANE	ARDE 9501 – 03 DET No. 30
30	BUSH VANE	ARDE 9501 – 03 DET No. 31
31	PIN VANE	ARDE 9501 – 03 DET No. 32
32	CLIP RETAINING	ARDE 9501 – 03 DET No. 33
33	PANEL I	ARDE 9501 – 03 DET No. 34
34	PANEL II & ARMING WIRE GUIDE ASSY	ARDE 9501 – 03 DET No. 35
35	PANEL II	ARDE 9501 – 03 DET No. 36
36	ARMING WIRE GUIDE	ARDE 9501 – 03 DET No. 37
37	STUD	ARDE 9501 – 03 DET No. 38
38	ADAPTOR BLANKING	ARDE 9501 – 03 DET No. 39
39	PIN, ARMING FORK	ARDE 9501 – 03 DET No. 40
40	RING RETAINING	ARDE 9501 – 03 DET No. 41
41	CLIP TRANSIT ASSEMBLY	ARDE 9501 – 03 DET No. 42
42	CLIP TRANSIT	ARDE 9501 – 03 DET No. 43
43	RING FOR WARNING FLAG	ARDE 9501 – 03 DET No. 44
44	WARNING FLAG	ARDE 9501 – 03 DET No. 45

	Box Steel No. 1 MK 1 To Hold 1 Tail Unit No. TB 250	
1	Method of Painting & Stencilling for Box Steel No. 1 MK-1 To Hold 1 Tail Unit No. TB 250	ARDE 9501-05 Sht No. 1
2	Method of Packing for Box Steel No. 1 MK-1 To Hold 1 Tail Unit No. TB 250	ARDE 9501-05 Sht No. 2
3	Body (Welding Assy)	ARDE 9501-05 Sht No. 3
4	Piece Packing Bottom	ARDE 9501-05 Det No. 1
5	Piece Packing Top - I	ARDE 9501-05 Det No. 2
6	Body	ARDE 9501-05 Det No. 3
7	Sealing Lid - Assembly	ARDE 2039 Sht No. 4
8	Lid (Welding Assy)	ARDE 2039 Det No. 2
9	Lid	ARDE 2039 Det No. 3
10	BRACKET	ARM 1253 A5
11	LOCKING PLATE	ARM 1253 A6
12	Pressure Plate - Sub Assy	ARDE 2039 Det No. 9
13	RELEASE BAR	ARM 1253 C8
14	Pressure Plate	ARDE 2039 Det No. 10
15	SPIGOT	ARM 1253 A10
16	Base Plate	ARDE 2039 Det No. 19
17	STOP	ARM 1253 A12
18	WASHER	ARM 1253 A13
19	ARM	ARDE 2039 Det No. 12
20	PIN	ARM 1253 A15
21	BOLT	ARM 1253 A16
22	Ring Rubber	ARDE 2039 Det No. 11
23	Inner Lid Assy	ARDE 2283 Sht No. 4
24	Handle And Cleat	ARDE 2283 Det No. 4
25	Link Assy	ARDE 2283 Det No. 5
26	Link	ARDE 2283 Det No. 9
27	Hinge Plate	ARDE 2283 Det No. 10
28	Handle	ARDE 2283 Det No. 11
29	Handel Plate	ARDE 2283 Det No. 12
30	Hinge	ARDE 2283 Det No. 13
31	Bottom Plate	ARDE 2283 Det No. 6
32	Top Plate	ARDE 2283 Det No. 7
33	Bottom Plate Tie Piece	ARDE 2283 Det No. 8
34	Lid Seating	ARDE 2039 Det No. 4
35	Rim	ARDE 2039 Det No. 5
36	Bottom	ARDE 2039 Det No. 7
37	Bracket	ARDE 2283 Det No. 3
38	Corner Plate	ARDE 1248 Det No. 2
39	Clip	ARDE 1248 Det No. 3
40	Alternative Clip	ARDE 1248 Det No. 4

PART No	FOR EXPLANATION OF DIMENSIONING, ETC., SEE ARDE NOTE SRT. No.1 THIRD ANGLE PROJECTION. DIMENSIONS ARE IN MILLIMETRES.





MATERIAL :—

M.S. TO SPEC: IS: 513 - TYPE 'O' OR
IS - 1570, C-20 COLD ROLLED.

				ASSY. DRG. ARDE 1248/1, SHT. 1	
				INSP INSTRS	
				DRAWN	CHECKED / TRACED / TRN CHD
				S.S.A.	Gurmohan
				CHIEF D'MAN Sd-	GROUP OFFICER Sd-
26-4-77	—		DRG. RE-TRACED	APPROVED Sd- FOR DIRECTOR	
DATE AUTHORITY	ZONE		NATURE SIG.		
AMENDMENTS				DATE :- 3-11-73	
SEALED				ARDE 1248	
MATERIAL AS ABOVE				DETAIL No. 3	
PROTECTIVE FINISH				PART No.	
ESTIMATED WEIGHT					
SCALE 2:1					
CLIP				ARDE, PASHAN, PUNE-21	

1	2	3	4

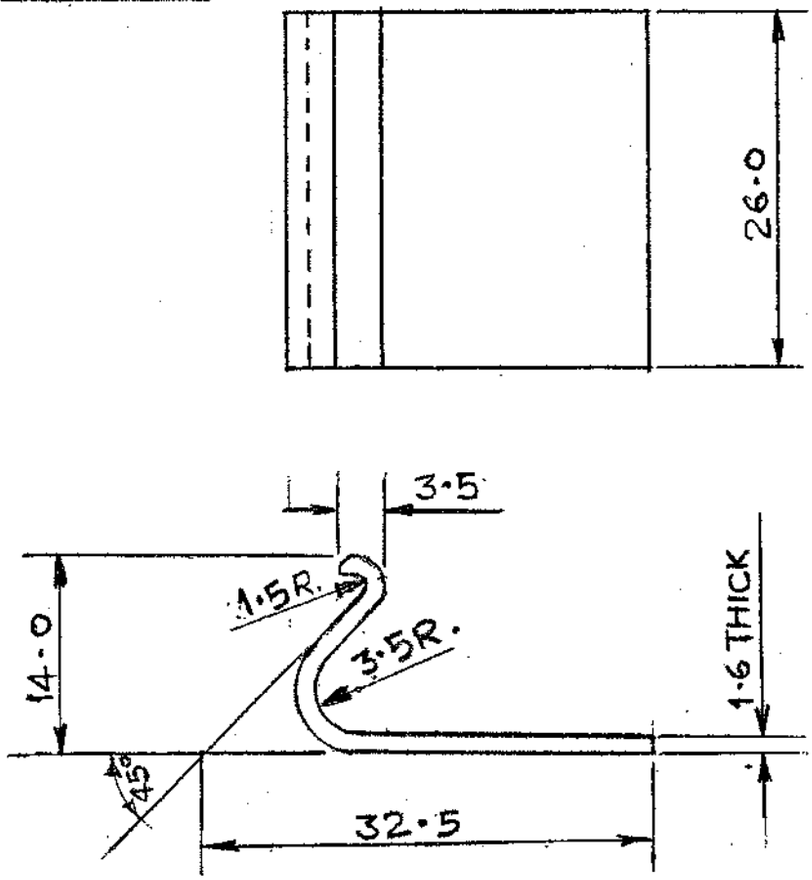
FOR EXPLANATION OF DIMENSIONING, ETC., SEE ARDE NOTE SHEET No. 1

DIMENSIONS ARE IN MILLIMETRES.

DRG NO. ARDE 1248

DET No. 4 | SHTS | SHTS No.

PART No.



BASED ON SK. No. ARM21/730F D.T.D & P(AIR) MINISTRY OF DEFENCE

R NO	DATE	AUTHORTY	BRIEF RECORD	ZONE	CD	GO
1	20 12 32		RETRACED			

SIGN.

DRG. SEALED (PROV)

DRN. I. sd/-	CHD sd/-	TRD BC Mon	COMP.	ASSY DRG ARDE 1248/1 SHT. 1
C D sd/-	PASSED sd/-	SCALE: 2:1		DESIGN AUTHORTY
		EST MASS:		ARDE PUNE-411021
APPROVED		GAUGE SCHD.		
		DATE:		

MATL:- STEEL TO IS:1570, C-20, COLD ROLLED-SHEET.

PROTECTIVE FINISH:-

TITLE:-

ALTERNATIVE CLIP

DRG. NO. ARDE 1248

DET. No 4 | SHTS | SHT NO.

PART No

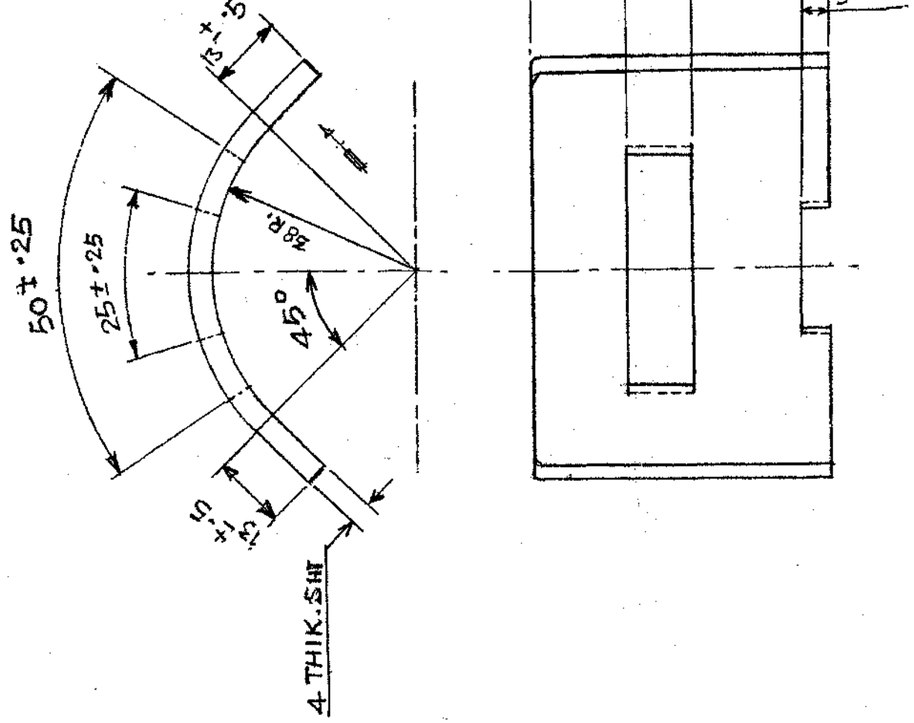
D.S. CAT. No

A.H.S.P.

FOR EXPLANATION OF DIMENSIONING ETC. SEE ARDE NOTE SHEET NO. 1
DIMNS ARE IN mm.

DRG No ARDE 1248 | SHTS No | SHTS | DET No 2

VIEW IN DIRECTION OF ARROW.



IMP:- BASED ON ARM DRG. NO 1253 A 25
HEIGHT OF PLATE REDUCED FROM 67 TO 55

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE	SIGN CD	SIGN GO
1	20/11/64		DRG RETRACED			

DRG SEALED (PROV)

DRN: NCK. | CHD. SK | TRD | COMP.
CD
APPROVED
SCALE :- 1:1
EST MASS:
GAUGE SCHD.
DATE:
MATL:- STEEL TO SPEC. B.S. 1449 EN 2 A.
PROTECTIVE FINISH:- SEE DRG NO. ARM 1253 D 18

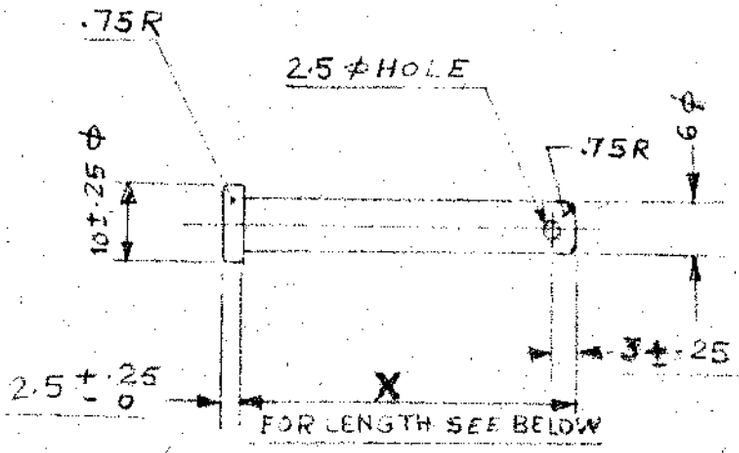
ASSY. DRG. ARDE 2269/2
DESIGN AUTHORITY
ARDE PUNE 411021

DRG No. ARDE 1248
DET No 2 | SHTS | SHT. No
PART No.
D.S. CAT. NO.
A.H.S.P.

CORNER PLATE

DRG. No.
ARM 1253 A15

DRG. CONVENTIONS ARE BASED ON IS: 696. (1)



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

NO	DATE	ZONE	BRIEF RECORD
4	1 8/96	-	DRG. RETRACED WITHOUT CHANGE
3	24 2/75	-	DRG. RETRACED WITH OUT CHANGE
2	5 7/72	-	REVISED VIDE A.L. No - 171
1	20 9/73	-	PROV SEALED

	DATE	INITIAL
DGN		
DRN		
CHD	26 7/96	
TCD	26-7-96	
COMT		

SCALE :- 1:1

TOL :- TOL. EXCEPT WHERE OTHERWISE STATED IS 2102

INITIAL	R.NO	DATE	ZONE
	4		

DIMENSIONS ARE IN MM.

MATL. SPEC.
STEEL TO IS:1570 - C20

SEC. REF. NO.

GAUGE SCHD. NO.

ORG. LIST. NO. ARM1253

TITLE —

PIN

BRIEF RECORD

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

APPROVED

DRG. NO
ARM 1253 A15