

GOVERNMENT OF INDIA
(MINISTRY OF DEFENCE)

Prov. Specn M
DMSRDE/T2GS/95/426(1)

Provisional Specification No.
DMSRDET&GS.95.426(1)
Drawing - 15 Plates attached

SPECIFICATION FOR BAG CARRYING RESCUE

1. THIS SPECIFICATION CONSISTS OF SIX PAGES.
2. THIS SPECIFICATION IS INTENDED TO GUIDE PURCHASE, INSPECTION AND MANUFACTURE OF BAG CARRYING RESCUE AGAINST DEFENCE REQUIREMENT.
3. THIS SPECIFICATION OR ANY OTHER INFORMATION ISSUED IN CONNECTION THEREWITH SHALL ONLY BE USED FOR SPECIFIC ORDER PLACED BY THE COMPETENT AUTHORITY. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT ANY EXPRESS WRITTEN SANCTION OF THE APPROPRIATE AUTHORITY.
4. ALL CLAUSES IN THIS SPECIFICATION SHALL BE COMPLIED WITHIN EVERY RESPECT, IRRESPECTIVE OF SOURCE OF SUPPLY OF THE MATERIAL.
5. IN CASE OF ANY DISCREPANCY BETWEEN THIS SPECIFICATION AND ANY SAMPLE OR PATTERN, THIS SPECIFICATION TOGETHER WITH THE ATTACHED DRAWINGS WILL BE TAKEN AS CORRECT.
6. WHEREVER A REFERENCE TO ANY OTHER SPECIFICATION/DRAWINGS OCCURS IN THIS SPECIFICATION, IT SHALL BE TAKEN AS A REFERENCE TO THE LATEST VERSION OF THAT SPECIFICATION/DRAWING EXISTING AT TIME OF FINALISATION OF A CONTRACT.

ISSUED BY
THE DIRECTOR
DEFENCE MATERIALS AND STORES,
RESEARCH AND DEVELOPMENT ESTABLISHMENT
DMSRDE PO
G.T. ROAD, KANPUR-208 013

PRICE: RS. 100/-

1. SCOPE

- 1.1 This specification covers the requirement of Bag Carrying Rescue. The bag is intended to be used for evacuation of casualties during rescue operation of troops in Glacier/Extreme Cold Region.

2. SEALED SAMPLE

- 2.1 The Bag Carrying Rescue shall conform in every respect to the terms and conditions of this specification. In workmanship, finish and in all other respects, it shall conform to the sealed sample held in the custody of controlling authority.

3. MATERIALS

- 3.1 The bag shall be manufactured from the materials mentioned below.

MATERIALS

1. Nylon Fabric 220 g OG 100 cm Wide Water & Oil Repellent
2. Nylon Fabric 250 g PU Coated 120 cm OG
3. Nylon Webbing 44mm Thin OG

PARTICULARS

As per provisional specification no. DMSRDE/T&GS/96/431(b)

As per provisional specification no. DMSRDE/T&GS/89/377(c) with following additional requirements.

- a) The fabric shall be in OG shade in place of disruptive printed.
 - b) Resistance to low temperature (on exposure at $-20 \pm 1^\circ \text{C}$ for 6 hours) - No stiffness, No brittleness
- Type 1 of IS:4727 with additional requirements of colour fastness

- a) To washing
 - i) Change in colour : Rating 4 - IS:764
: or better
 - ii) Staining on Nylon:
- b) To rubbing
 - i) Dry : Rating 4 - IS:766
 - ii) Wet : or better
- c) To perspiration
 - i) Change in colour : Rating 4 - IS:971
 - ii) Staining on Nylon: or better

4. Nylon Webbing 30 mm Thick

As per appendix

5. Nylon Webbing 20 mm Thick

As per Provisional specification no. DMSRDE/T&GS/87/338 except that colour fastness properties shall be as under.

a) To Light : Rating 5 or better IS:2454

b) To washing
i) Change in colour : Rating - IS:764
ii) Staining on nylon : 4 or better

c) To rubbing
i) Dry : Rating - IS:766
ii) Wet : 4 or better

d) To perspiration : Rating : IS:971
i) Change in colour : 4 or better
ii) Staining on nylon: better

6. Slide Fastener Plastic Heavy Duty OG (closed end one way with single puller) IS: 141S1

7. 'D' Ring 30 mm dia Nickle plated As per plate no 11 attached

8. Triangular Ring Nickle Plated As per plate no 12 attached

9. Eyelet Aluminium Alloy No 24 with Washer IS:4084

10. Rivet and Washer Iron Nickle plated. As per plate no 13 attached

11. Leather Washer As per plate no. 13 attached

12. Hook Iron Nickle Plated As per plate no 13 attached

13. Cord - Nylon 1785 'N'
Breaking Load, O.G.

JSS 4020-9 except for shade which will be OG dyed with disperse or acid type dye. The colour fastness properties shall be as under:-

- a) To Light - Rating 5 or - IS:2454 better
- b) To Washing - Rating 4 or - IS:764 better

14. Rope Nylon Hawserlaid 8 mm Dia
Undyed

JSS 4020 - 1 for construction, material and breaking strength

15. Nylon Sewing Thread OG
For Aerospace purpose

IS:4229 (Variety H)

4. DIMENSIONS

4.1 The bag shall conform to the dimension as laid down in the attached drawing.

5. MANUFACTURE

5.1 The Bag Carrying Rescue shall be manufactured as per details given in the enclosed drawing. The coated side of the Nylon Fabric 250 gsm PU Coated OG shall be kept inside of the bag.

6. WORKMANSHIP AND FINISH

6.1 In appearance, shape, workmanship and finish and in all other respects not defined in the specification, the bag shall conform to the scaled pattern held in the custody of the Controlling Authority.

7. STITCHING

7.1 The bag shall be machine stitched with the lock stitches regulated at 30 to 40 stitches per decimeter with even tension. The ends of threads shall be securely fastened off and loose threads shall be trimmed off.

8. MARKING

8.1 Each Bag Carrying Rescue shall be provided with a white cloth satin label 6x4 cm securely stitched at the space and position as shown in the attached drawing. The label shall be printed with the manufacture's name, initial or trade mark together with the year of manufacture, nomenclature and cat. No. of the store using suitable ink duly approved by the inspector.

9. PACKING

IS

9. PACKING

- 9.1 The bag shall be packed as per details given below:
- 9.2 Each bag shall be properly folded and two such bags shall be placed one over the other and tied with Twine Jute 3 ply (conforming to IS:1921) and kept inside a bag of polyethylene Film 0.04 mm (conforming to IS: 2508) or polypropylene Film 0.0375 mm (conforming to IS:2508 Pt II) to form a unit pack. Five such unit packs shall then be wrapped with an inner layer of kraft paper (conforming to IS:1937) and outer layer of Cloth 'C' Heavy (conforming to IS: 3751) or an equivalent hessian cloth previously approved by the Inspector to form a bale. The bale shall be properly and securely stitched with a double Jute Twine 3 Ply with not less than 5 stitches per dm taking care not to pierce the inner wrappings during stitching. Sufficient hessian cloth shall be pulled out at each corners to form 'ears' of about 15 cm in length.
- 9.3 Before despatch each bale shall be legibly and indelibly marked to indicate the following details:-
- Nomenclature and cat. no. of the store.
 - Quantity packed in numbers.
 - Lot and serial no.
 - Month and year of packing.
 - Name and trade mark of the manufacturer.
 - Gross weight of the bale in Kg.
 - AT No. and date.
 - Name and address of the consignee.

10. PRE-INSPECTION

- 10.1 Before tendering the store to the Government Inspector the supplier will carry out a thorough check/pre-inspection of each delivery to satisfy himself that the stores fully conform to this specification and the sealed sample. In case the pre-inspection is un-satisfactory, the stores may be rejected out right by inspector.

11. SAMPLING AND CRITERIA FOR CONFORMITY

- 11.1 The quantity of Bag Carrying Rescue offered against on despatch note shall constitute a lot.
- 11.2 The conformity of a lot to the requirement of the standard shall be determined on the basis of tests/examination carried out on Bag Carrying Rescue selected from the lot.

11.3. The no. of Bag Carrying Residue to be selected at random for examination shall be in conformity with the table given below:-

Lot size	Visual Inspection		Destructive tests	
	Sample Size	Acceptance No.	Sample Size	Acceptance No.
1- 50	8	0	3	0
51- 100	10	1	5	0
101- 150	20	1	5	0
151- 300	32	2	13	1
301- 500	50	3	13	1
501- 1000	80	5	13	1
1001- 3000	125	7	13	1
3001- 10000	200	10	20	2

11.4. For assuring himself about the quality of the basic materials the inspecting officer will exercise his option to draw stage control samples of different materials for laboratory testing.

12. CRITERIA OF CONFORMITY OF BULK SAMPLE

12.1. All samples when tested for physical and chemical tests as per relevant specifications shall conform to stipulated standard.

13. BULK INSPECTION

13.1. The lot when examined for visual inspection as per clause 11.3 shall conform to the requirement given therein.

14. WARRANTY CLAUSE

14.1. The store supplied against the order shall be deemed to bear a warranty of the contractor against defective materials/workmanship and performance for a period of 12 months from the date of receipt of the stores at consignees depot. If during this period the stores supplied are found by the consignee to be so defective, the same shall be replaced immediately with serviceable stores without any charge or cost.

Station Kanpur

P. J. Shukla
DIRECTOR

DEFENCE MATERIALS AND STORES

RESEARCH & DEVELOPMENT ESTABLISHMENT

DMSRDE POST OFFICE
KANPUR-208 013

Dated



APPENDIX

NYLON WEB 30 mm O.G. THICK

Sl. No.	Characteristics	Requirements	Method of tests
1.	Width, 'Cm'	30±1	IS:1954
2.	Roll length 'm'	100 m or as ordered	
3.	Mass/100 m 'g'	4300±5%	IS:1964 (Method 'A')
4.	Total No of ends	133	
5.	No of Picks/dm	110±5	IS:1963
6.	Denier of yarn		
	Warp	2070	IS:3442
	Wefl	2100	
7.	Tenacity of Yarn 'gpd'		
	Warp	5 min	IS:4910 (Part II)
	Wefl	4 min	
8.	Colour fastness to		
	i) Light	Rating 5 or better	IS:2454
	ii) Washing		
	a) Change in shade	Rating 4 or better	IS:764
	b) Staining on nylon		
	iii) Rubbing		
	a) Dry	Rating 4 or better	IS:766
	b) Wet		
	iv) Perspiration		
	a) Change in colour	Rating 4 or better	IS:971
	b) Staining on Nylon		
9.	PH value of aqueous extract	6.0-8.5	IS:1390
10.	Nature of fibre	Polyamide	IS:667 or any suitable method

(15)

PROVSPECN. No. DMSRDE/T & GS/95/426(a)

BAG CARRYING RESCUE INDEX

15-PLATES
1 PLATE

S.No.	NOMENCLATURE	PLATE No.
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FIRST-ANGLE PROJECTION

DIMENSIONS IN CM. SCALE:

DRAWN BY

Prasad

CHECKED BY

TS

APPROVED BY

B...

14

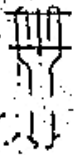
BAG CARRYING RESCUE

(FRONT VIEW)

SECTION-BB

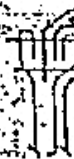


SECTION-CC



LABEL

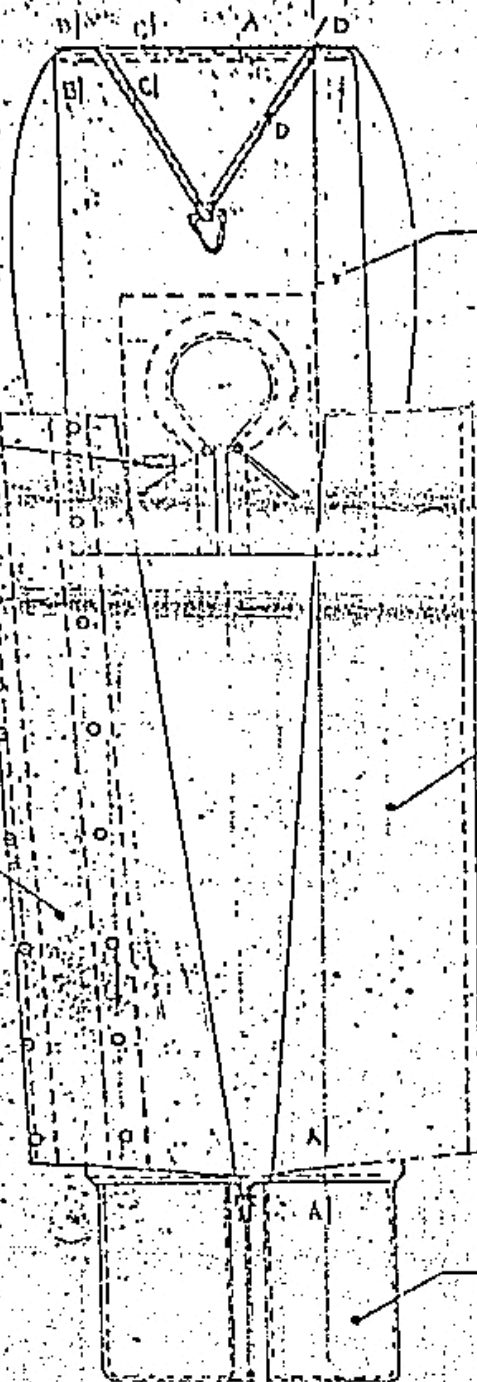
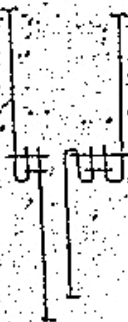
SECTION-DD



WEDGING
MTL 5

RIGHT FLAP
(SEE PLATE-5)

SECTION-AA



NECK PORTION
(SEE PLATE-3)

LEFT FLAP
(SEE PLATE-4)

FOOT PORTION
(SEE PLATE-6)

FIRST ANGLE PROJECTION

DIMENSIONS IN CM	DRAWN BY	CHECKED BY	PASSED BY	APPROVED
	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

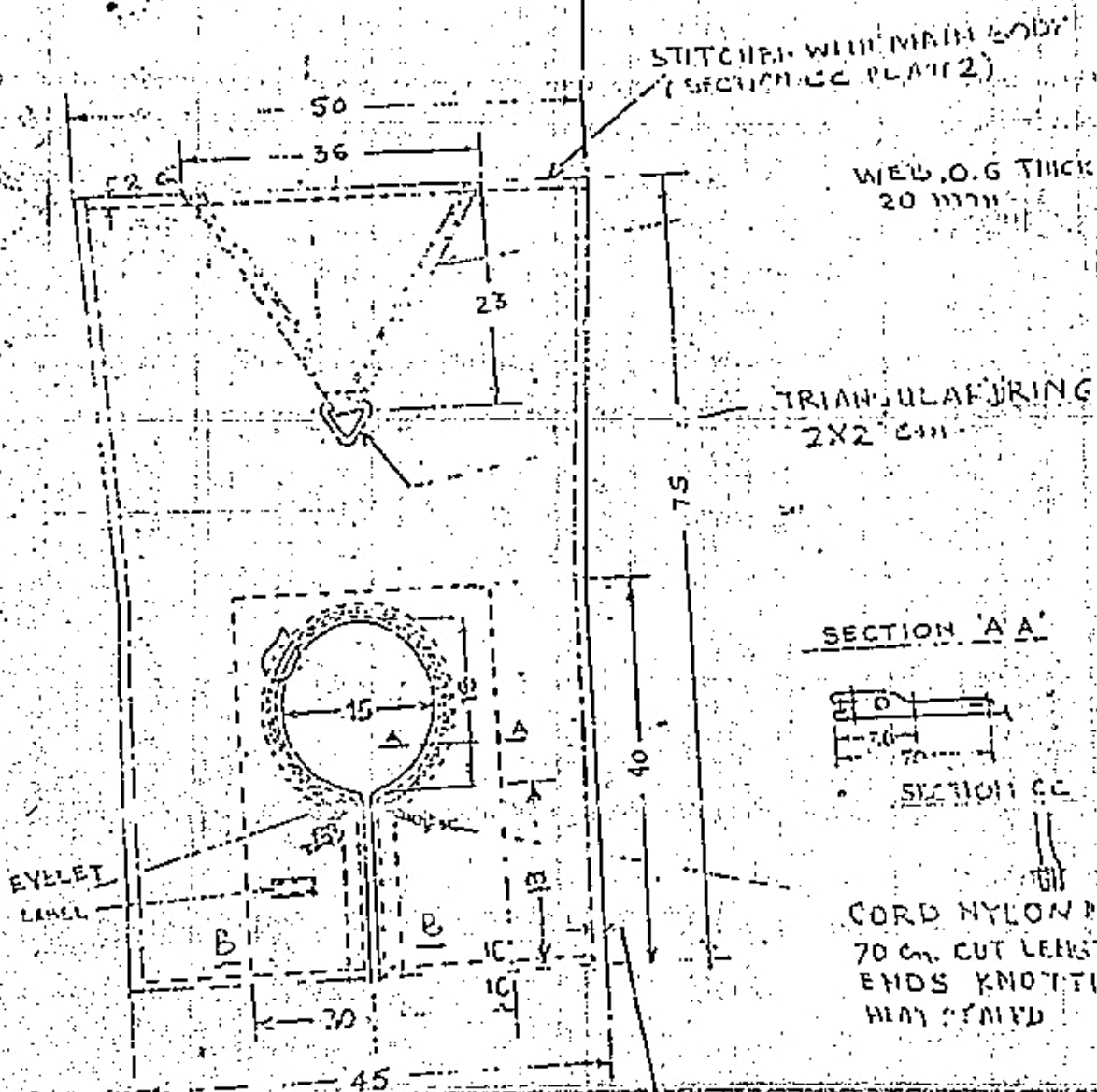
13

PROSPECT No. DMORDR/T & GS/95/1260

15 PAGES
PAGE 3

BAG CARRYING RESCUE

(NECK PORTION)



PROJECTION DIMENSIONS IN CM

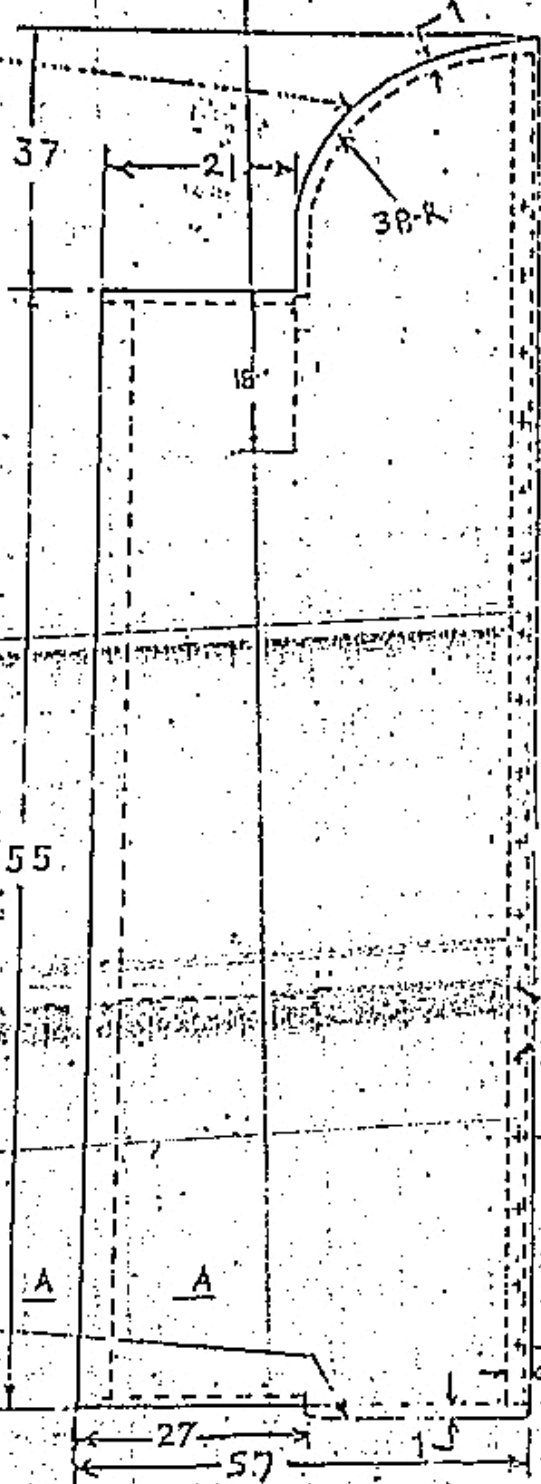
(12)

PROV SPECN: NO DIMS/DRAWN/TAGS/ISS/AR/CAS

15 PLATES
PLATE-4

BAG CARRYING RESCUE (LEFT FLAP)

STITCHED WITH
NECK PORTION



20

38-R

37

21

18

165

155

CENTRE POINTS
FOR EYELETS
EQUALLY
SPACED.
EYELETS WILL
BE FIXED IN
ASSEMBLY.

STITCHED WITH
FOOT PORTION

A

A

27

57

2 cm FOR TURN IN

SECTION-AA



FIRST-ANGLE PROJECTION	DRAWN BY	CHECKED BY	PASSED BY	APPROVED
DIMENSIONS IN C.M.	SCALE - 1:10			

(11)

15-10
PLATE 5

PROV. SPECN. No. DMSRDE/TIGS/98/426 (C)
BAG CARRYING RESCUER
(RIGHT FLAP)

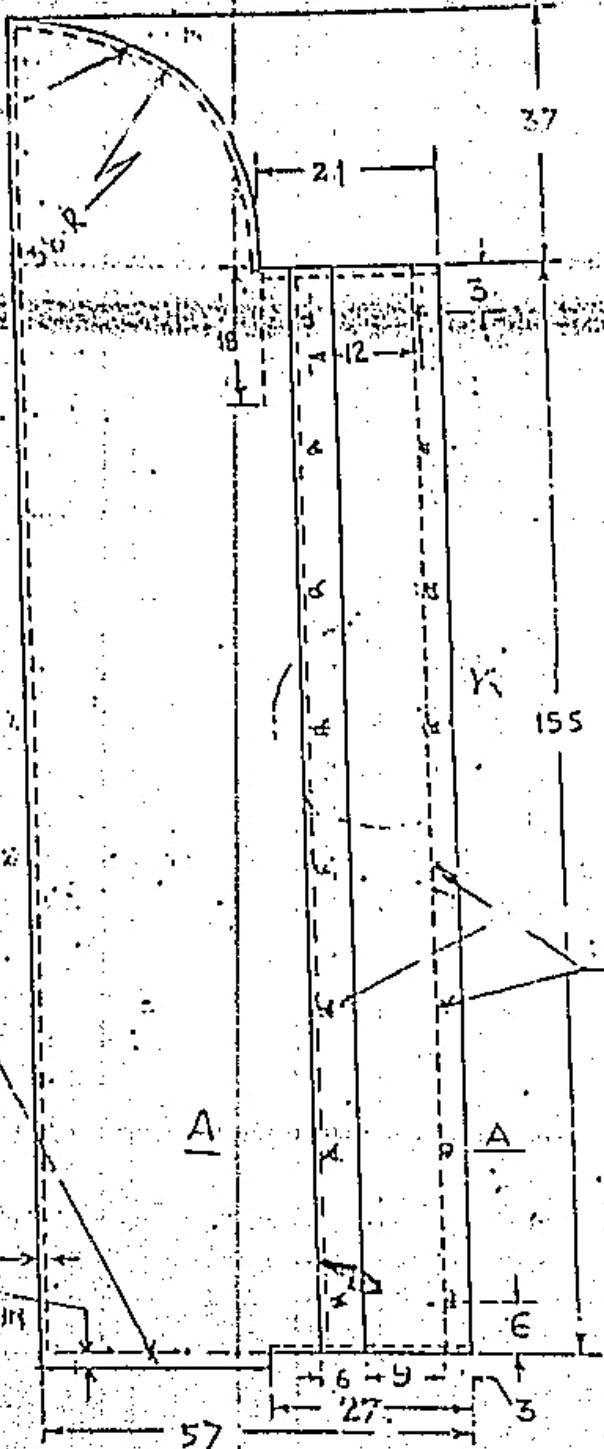
STITCHED WITH
NECK PORTION

STITCHED WITH
FOOT PORTION

ENLARGEMENT

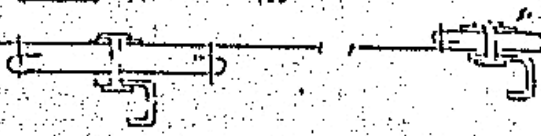
16-HOOK WITH 50
EQUALLY SPACED

WASHER 1.5 DIA.



SECTION-AA

FIRST ANGLE PROJECTION
DIMENSIONS IN Cms



PROV. SPECN: NO DMSRDE/TGGS/93/426 (10)

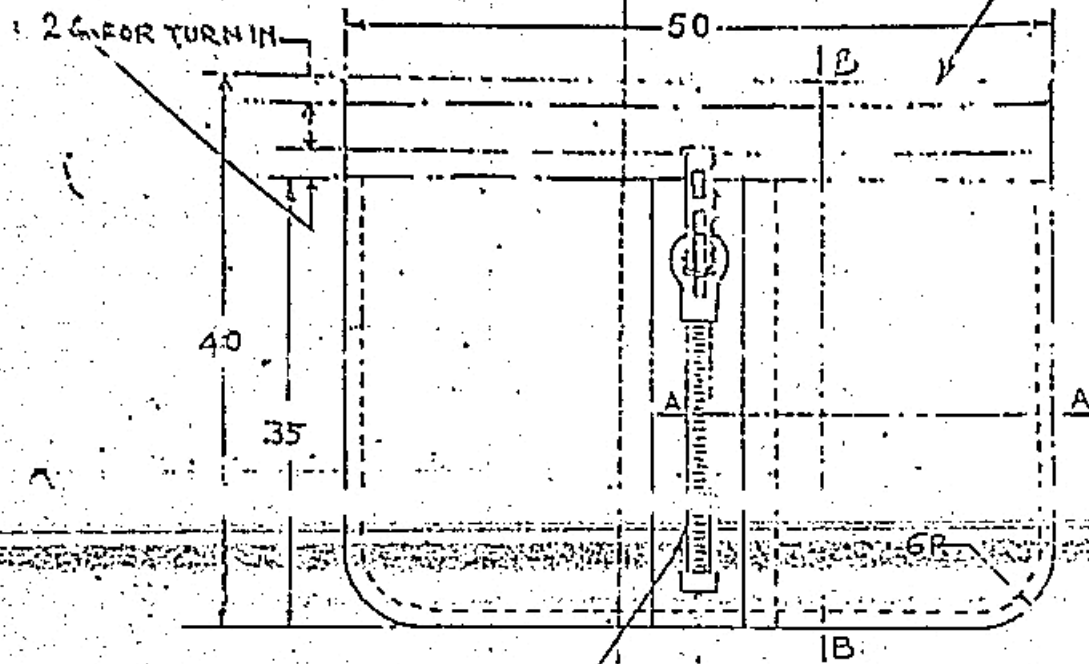
(10)

15 PLATES
PLATE-6

BAG CARRYING RESOL.

(FOOT PROJECTION)

STITCHED VIEW MAIN BODY (SECTION AA)



SECTION

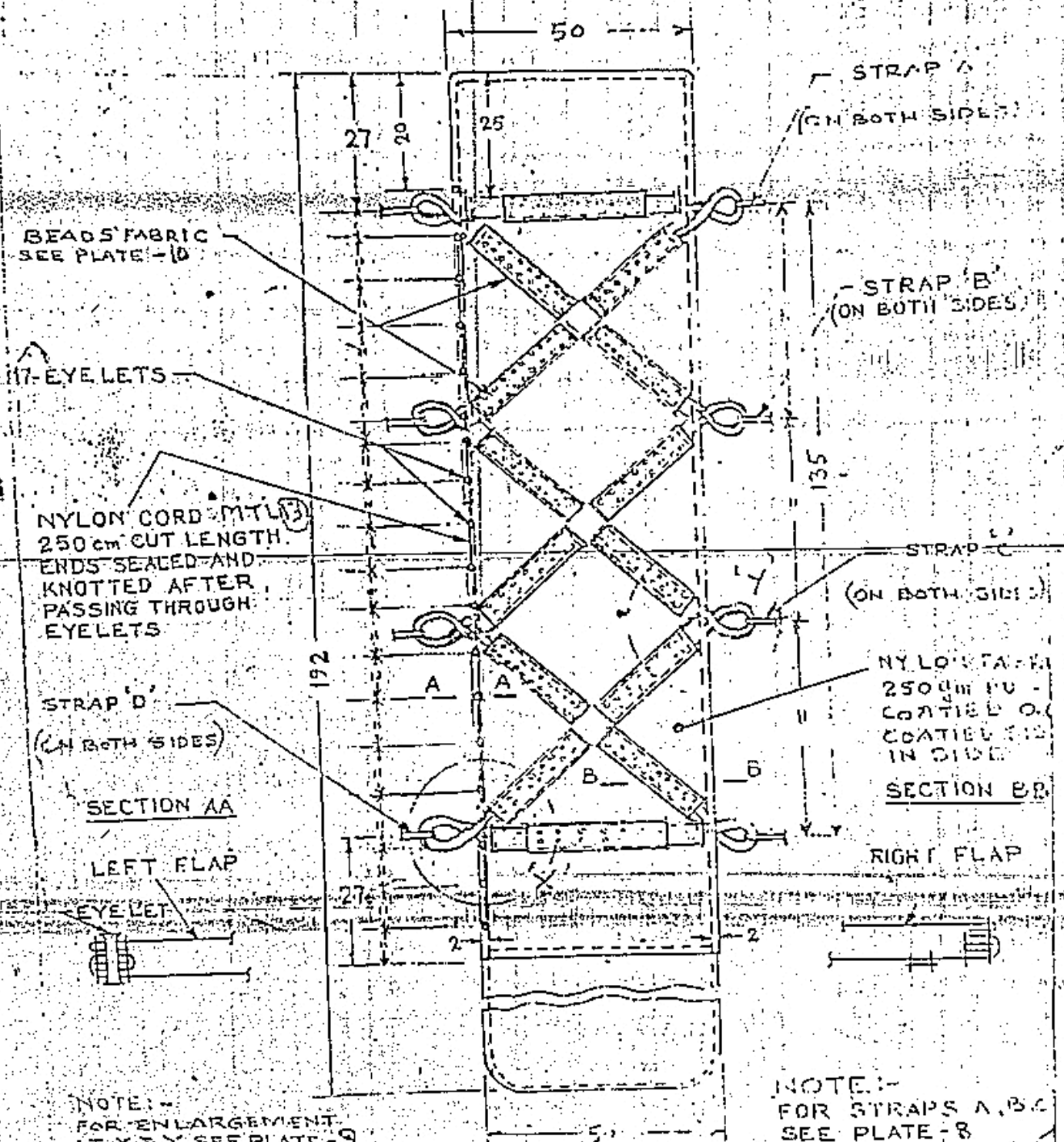
SECTION-AA

ZIP FASTENER MIL (5)

FIRST ANGLE PROJECTION

DIMENSIONS IN C.M.	DRAWN BY <i>[Signature]</i>	CHECKED BY <i>[Signature]</i>	PASSED BY <i>[Signature]</i>	APPROVED BY <i>[Signature]</i>
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BAG CARRYING RESCUE (BACK VIEW)



BEADS FABRIC
SEE PLATE 10

17 EYELETS

NYLON CORD (M.T.L.)
250cm CUT LENGTH
ENDS SEALED AND
KNOTTED AFTER
PASSING THROUGH
EYELETS

STRAP D
(ON BOTH SIDES)

SECTION AA

LEFT FLAP

EYELET

NOTE: -
FOR ENLARGEMENT
AT X & Y SEE PLATE 9

STRAP A
(ON BOTH SIDES)

STRAP B
(ON BOTH SIDES)

STRAP C
(ON BOTH SIDES)

NYLON TAPE
250cm PU
COATED O.
COATED 1/2
IN SIDE
SECTION BB

RIGHT FLAP

NOTE: -
FOR STRAPS A, B, C
SEE PLATE 8

FIRST ANGLE PROJECTION DRAWN BY [unclear] BY [unclear] 2.5

SPEC. N. O. APPROVED 25/12/66 (a)
 BAG CARRYING RESCUE

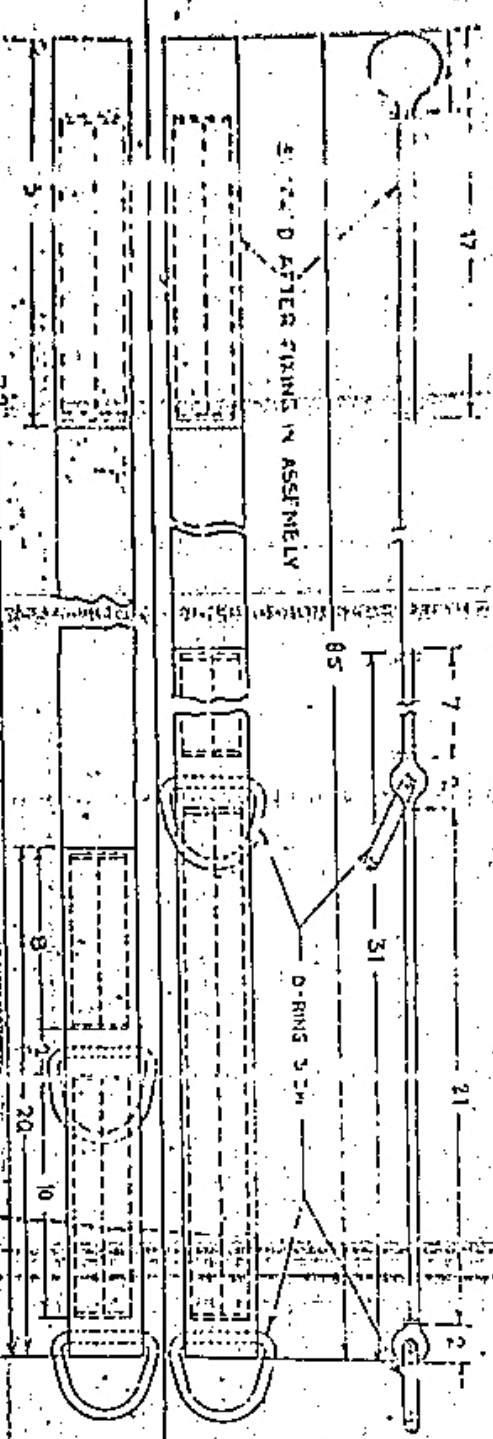
STRAP A

2-OFF

5-PLATES
 PLATE-6

5. 100 D AFTER FRINGE IN ASSEMBLY

D-RINGS 3.25"



STRAP D

STRAP B & C
 2-OFF (REACH)

100 D AFTER FRINGE IN ASSEMBLY

D-RING 3.50"

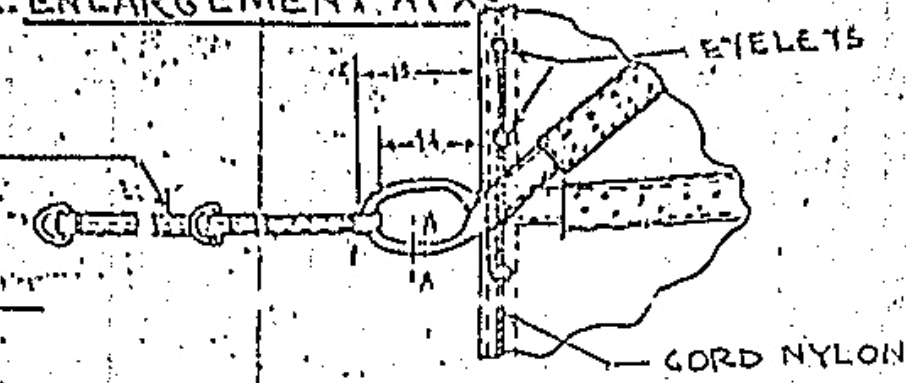
MEMO OF BSM/7-66

DESIGNER	PROJECT	CHECKED BY	PASSAC BY	APPROVED
MEYER				
DRIVEN BY				

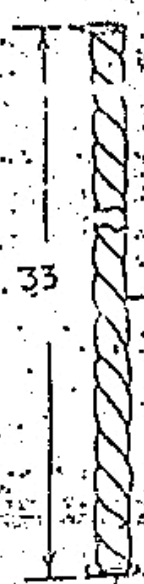
BAG CARRYING RESCUE

ENLARGEMENT AT X (THIS HAS BEEN SHOWN IN PLATE NO. 7)

STRAP D
(SEE DETAIL PLATE No. 8)



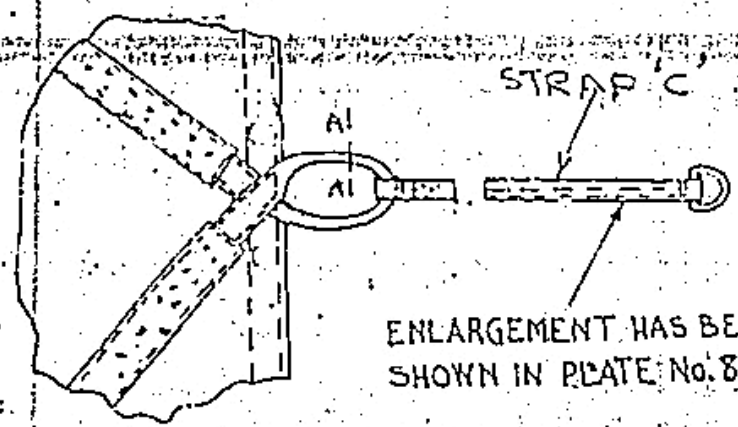
SECTION AA



WEAVING MTL'S

ENLARGEMENT AT Y

ENDE WHIPPED
AND SEALED



DIMENSIONS IN CM

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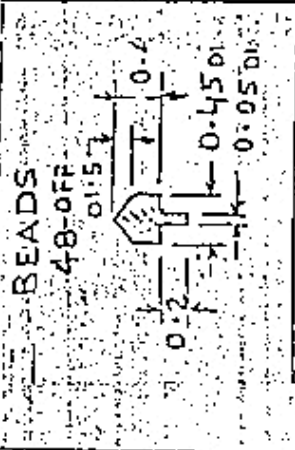
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APPROVED
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10 5 15 1 3 4 26 (3)

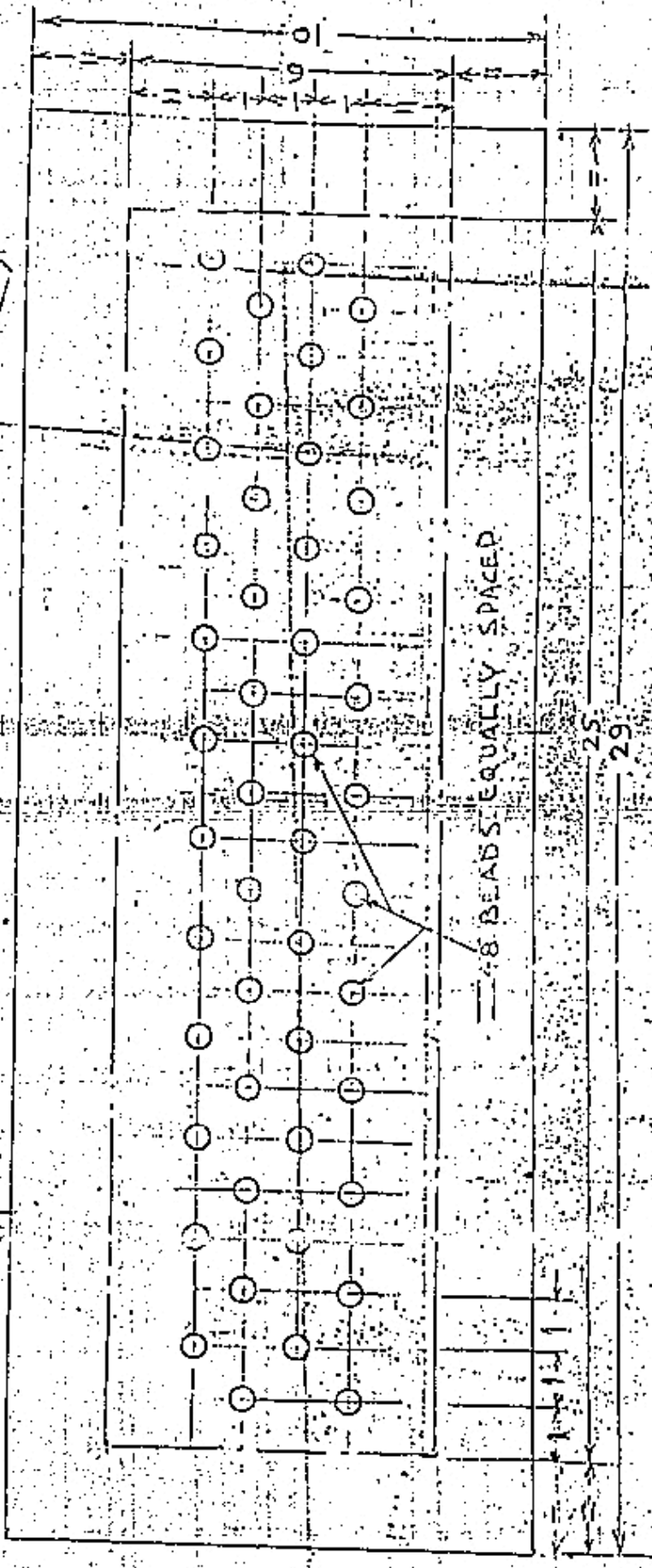
BAG CARRYING RESCUE

FABRIC PIECE EMBEDDED WITH NYLON/POLYPROPYLENE BEADS



14-OFF

SECTION AA



DIMENSIONS IN CMM	DRAWN BY	CHECKED BY	PASSED BY	APPROVED
	HML/S/UVAS			

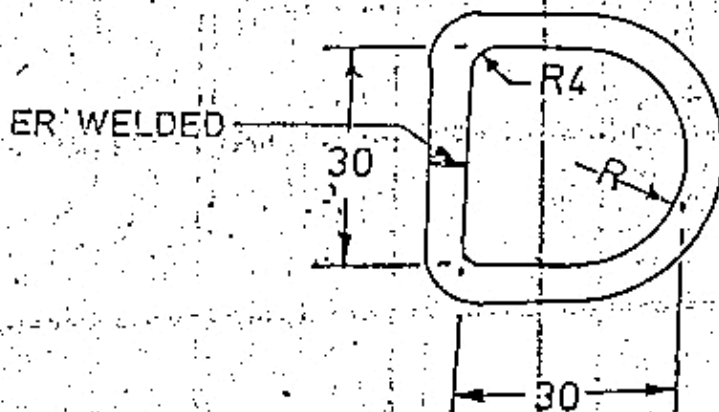
PROV. SPECN NO. DMSRDE/T&GS/95/426 (a)

15-PLATES
PLATE-11

D' RING

MATERIAL: ALLOY STEEL 5mm WIRE CONFORMING TO GRADE 37Mn2 OF IS : 1570/150M 36 (EN-15) OF B.S. 970 OR EN - 19 OF B.S. 1970 (HARDNESS 311/375/BHN).

FINISH: D' SHALL BE NICKLE AND CHROMIUM PLATED CONFORMING TO SERVICE GRADE No. 4 CLASSIFICATION No. S Ni 40-p Cr.f OF IS : 1068



PROOF LOAD : MIN 500 Kg WHEN TESTED ALONG AND PERPENDICULAR DIRECTIONS TO THE PLANE OF WELDING.

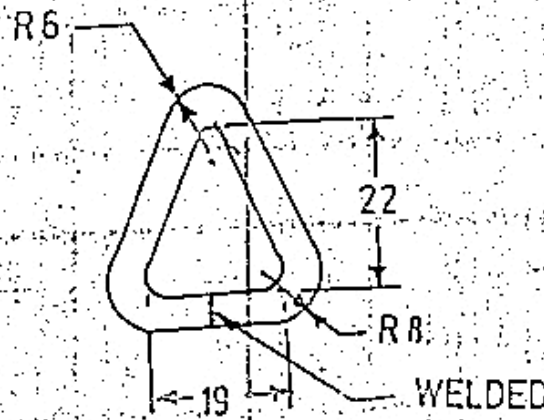
DMSRDE, KANPUR			
FIRST ANGLE PROJECTION		DRAWN	CHECKED
DIMENSIONS IN mm		KLREDDY	APPROVED
scale : 1:1			

TRIANGULAR RING

MATERIAL: ALLOY STEEL 5mm WIRE CONFORMING TO GRADE 37Mn2 OF IS : 1570/150M 36 (EN-15) OF B.S. 970 OR EN - 19 OF B.S. 1970 (HARDNESS 311/375/BHN).

FINISH: TRIANGULAR RING SHALL BE NICKLE AND CHROMIUM PLATED CONFORMING TO SERVICE GRADE No. 4 CLASSIFICATION No. S Ni 40 p Cr.r OF IS : 1068

PROOF LOAD: MIN 500kg. WHEN TESTED ALONG AND PERPENDICULAR DIRECTIONS TO THE PLANE OF WELDING.



DMSRDE, KANPUR		DRAWN KLREDDY	CHECKED	APPROVED
FIRST ANGLE PROJECTION				
DIMENSIONS IN mm	SCALE : 1:1			

PROV. SPECN. No. DMSRDE/T&GS/95/426 (a)

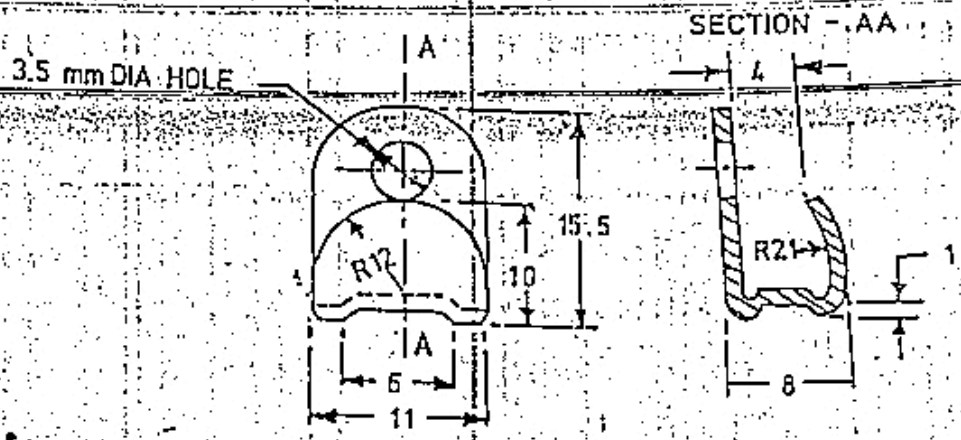
15 - PLATES
PLATE - 13

HOOK STAINLESS STEEL

MATERIAL : SS SHEET 1mm THICK

CONFORMING TO GRADE X 07 Cr Ni 9 OF IS : 5522

①



STEEL WASHER

MATERIAL : M.S. SHEET

③



LEATHER WASHER

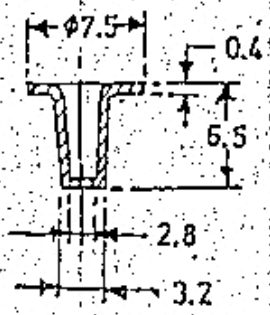
MATERIAL : LEATHER

②



MALE PORTION OF RIVET

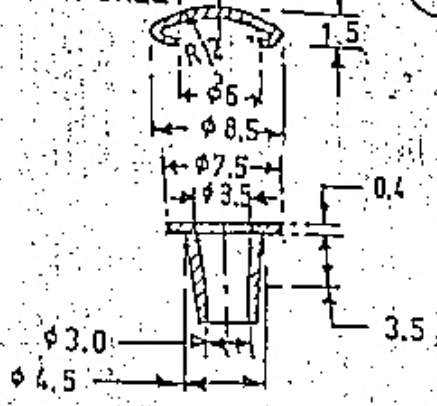
⑤



FEMALE PORTION OF RIVET

MATL : S.S. SHEET

④



DMSRDE, KANPUR

FIRST ANGLE PROJECTION

DRAWN

CHECKED

APPROVED

DIMENSIONS IN mm

SCALE 2:1

KL REDDY

[Signature]

[Signature]

PROV. SPECN. NO: DMSRDET&GS/95/426(a)

15 PLATES

BAG CARRYING RESCUE

PLATE -11

LIST OF MATERIALS

S.No.	MATERIALS	PARTICULARS
1.	Nylon Fabric 220 g Water & Oil Repellent	As per prov. specn. no. DMSRDET&GS/96/431(b)
2.	Nylon Fabric 250 g PU Coated 120 cm Wide OG	As per prov. specn. no. DMSRDET&GS/89/377(c) with following additional requirements: a) The fabric shall be in OG shade in place of disruptive printed b) Resistance to low temperature (on exposure at $-20 \pm 1^\circ \text{C}$ for 6 hours) - No stiffness, no brittleness.
3.	Nylon Webbing 30 mm Thick OG	Type 1 of IS:4727 with additional requirements of colour fastness: a) To washing i) Change in colour Rating 4 IS:764 ii) Staining on Nylon or better b) To rubbing i) Dry Rating 4 or better IS: 766 ii) Wet c) To perspiration i) Change in colour Rating 4 or better IS: 971 ii) Staining on Nylon
4.	Nylon Webbing 30 mm Thick OG	As per appendix
5.	Nylon Webbing 20 mm Thick OG	As per prov. specn. no. DMSRDET&GS/87/338 except that colour fastness properties shall be as under: a) To light - Rating 5 or better IS 2454 b) To washing i) Change in colour Rating 4 IS:764 ii) Staining on Nylon or better c) To rubbing
		i) Dry Rating 4 or better IS: 766 ii) Wet d) To perspiration i) Change in colour Rating 4 or better IS: 971 ii) Staining on Nylon

BAG CARRYING RESCUE

LIST OF MATERIALS

6.	Slide Fastener Plastic Heavy Duty OG (closed end one way with single puller)	IS : 14181
7.	'D' Ring 30 mm Dia Nickel Plated	As per plate no. 11 attached
8.	Triangular Ring Nickel Plated	As per plate no. 12 attached
9.	Eyelet Aluminium Alloy No. 24 with Washer	IS : 4084
10.	Revit and Washer Iron Nickel Plated	As per plate no. 13 attached
11.	Leather Washer	As per plate no. 13 attached
12.	Hook Iron Nickel Plated	As per plate no. 13 attached
13.	Cord Nylon 1785 'N' Breaking Load OG	JSS : 4020 - 9 except for shade which will be OG dyed with disperse or acid type dye. The colour fastness properties shall be as under : a) To Light - Rating 5 or better IS : 2454 b) To Washing - Rating 4 or better IS : 764
14.	Rope Nylon Hawserlaid 8 mm Dia Undyed	JSS : 4020 - 1 for construction, material and breaking strength
15.	Nylon Sewing Thread OG for Aerospace Purpose	IS : 4229 (Variety H ₁)