

DRAWING CONVENTIONS CONFORM TO ANSI/AIAA-017-1991

GEN. TOL. - LESS THAN 50 mm  $\pm 2$  mm  
51 mm UP TO 250 mm  $\pm 3$  mm

DRG. No. ADDRDE/1164/A8

SHEET 106 OF 109

MACHINE STITCHING WITH MATERIAL 'a' 3-4 STITCHES PER C.M.

MATERIAL 'a'

SECTION Y-Y

SECTION X-X

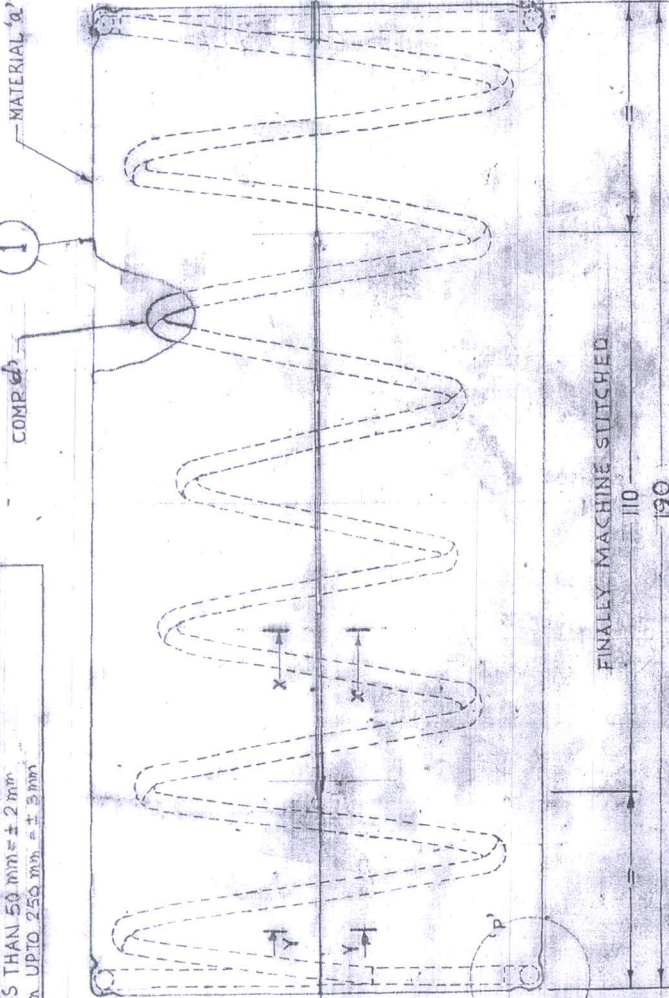
COMP 'a'

ROUND HAND STITCHED WITH MATERIAL 'b' 3 TO 4 STRANDS

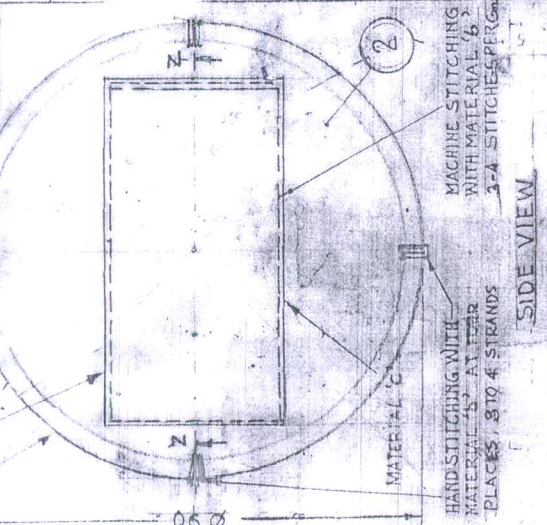
DETAIL A-A'

FINALLY MACHINE STITCHED

110  
190



IDENTIFICATION LABEL SIZE (70 X 35) mm TO BE MACHINE STITCHED AND TO BE MARKED WITH NOMENCLATURE OF THE STORE CAT. No. MANUFACTURER'S NAME OR RECOGNIZED TRADE MARK, YEAR OF MANUFACTURE AND INSPECTOR'S STAMP WITH HIS MATERIAL 'c'



SIDE VIEW

e	INK MARKING TEXTILE BLOCK	IND/SL/SERIS	AS PER SHEET No. 109 OF ADDRDE/1164/A8 (1)(b)
d	HELICAL SPRING	AS PER APPROVED. SAND	
c	LABEL CLOTH	154225-1992	
b	THREAD SEWING NYLON (L-2) 35 HOG/B2	ADDRDE/EGN/1984/23	
a	DUCK NYLON 230 gm. O.G	ADDRDE/SPECN/1984/23(a)	
SRL	NOMENCLATURE	DETAIL/REF.	SPECN./DRG No

1	HELICAL SPRING	109
2	END PIECE	108
1	DEVELOPMENT OF MAIN BODY	107
1	ASSEMBLY AND LIST OF MATERIALS	106
	NOMENCLATURE	NO OFF SHEETS

LIST OF MATERIALS/COMPONENTS

b	18-12-18 QMS/PGP/AS/EP/57/B	AMENDED AS PER CHANGE SHEET No. 168
a	19-7-24 PAS/AS/EP/57/B/A	CHANGE OF SPECN./DRG. No. COMP. 'd'
R	DATE	BRIEF RECORD
N	NO.	

DRN	CHD
TRD	COMP
	SCALE: 1:1
	DIMENSIONS IN MILLIMETRES

DETAIL INDEX

DRG. O/C PAS  
PASSED

APPROVED

DR

DIR. DIRECTOR

DESIGN AUTHORITY

ADRDE, AGRA

DRG. No.

ADDRDE/1164/A8 (1)(b)

SHEET 106 OF 109

DRD/1967/24

HELICAL SPRING  
(15 A/1292 PARACHUTE BMK-41 KIRAN AIRCRAFT)

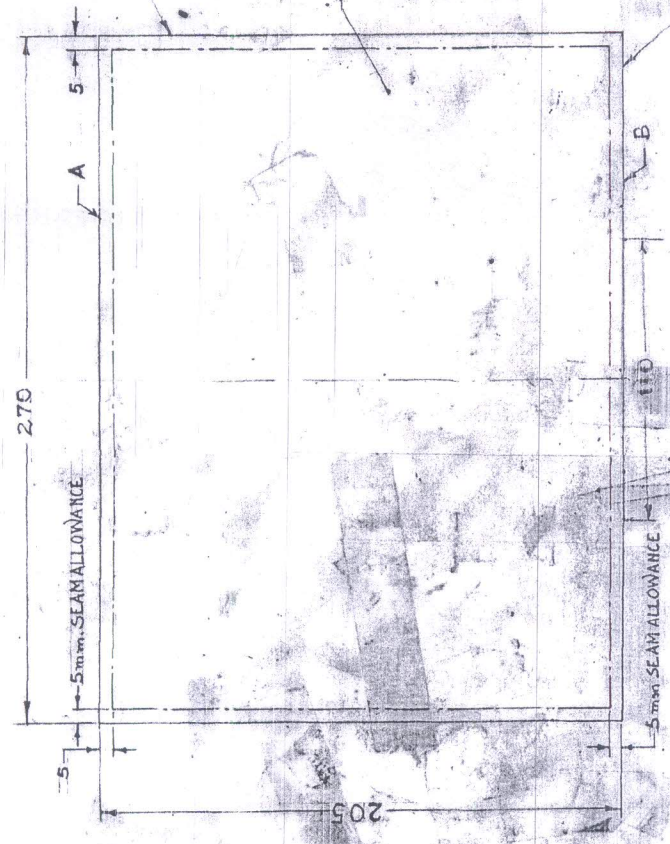


DRAWING CONVENTIONS CONFORM TO ANSI/AIAA 017-1971

GEN. TOL: - LESS THAN 50mm  $\pm 0.2$ mm 251 UPTO 750mm  $\pm 0.3$ mm  
 51mm UPTO 250mm  $\pm 0.3$ mm

DRG. No. ADDRDE/1164/SAB

SHEET 107 OF 109



FIRST OPERATION

BOTH THE ENDS TO BE MACHINE STITCHED WITH THE END PIECE DETAIL 2 TO FORM A CYLINDRICAL SHAPE.

MATERIAL 'a'

SECOND OPERATION

BOTH THE SIDES 'A' & 'B' TO BE MACHINE STITCHED WITH MATERIAL 'b' 3-4 STITCHES PER CM, LEAVING 10mm UNSTITCHED FOR INSERTION COMP 'd'.

DEVELOPMENT OF MAIN BODY

1-OFF

DRG. D/C	CHKD. BY	DRG. D/C
PASSED	COMP	PASSED
APPROVED		DH
DESIGN AUTHORITY		ADRDE, AGRA.
DRG. No.		ADRDE/1164/A8(10)
SHEET 107 OF 109		

R. No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	DRG. D/C

SCALE: 1:2  
 DIMENSIONS IN MILLIMETRES

HELICAL SPRING

(15A/1292 PARACHUTE BMK-41 KIRAN (PART))

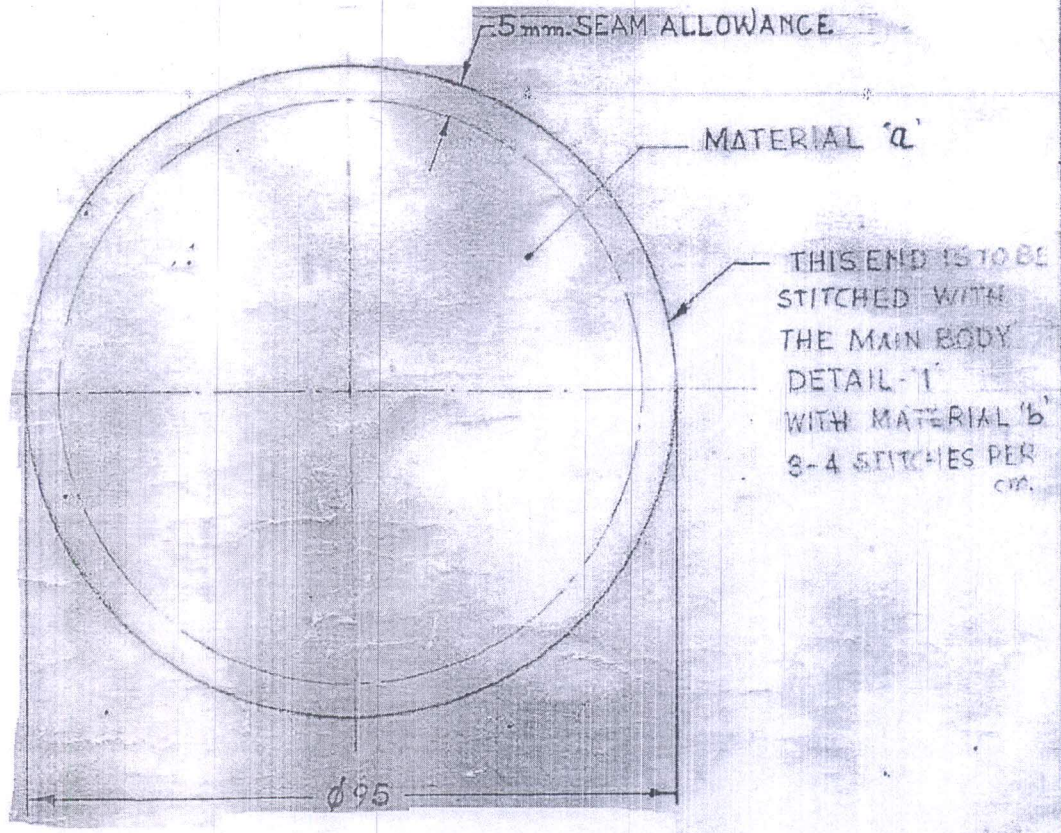


6 5 4 3 2

1991/12/24/1164/AG8 SHEET 108 OF 109  
 DRAWING CONVENTIONS CONFORM TO ANSI/ASME Y14.5-1991  
 GEN TOL: LESS THAN 50 mm = ± 2 mm  
 51 mm UPTO 250 mm = ± 3 mm

DRG. No. ADDRDE/1164/AG8

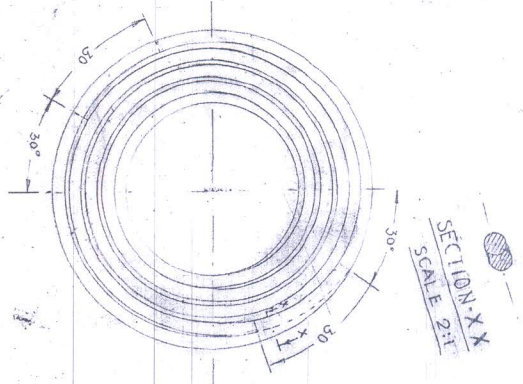
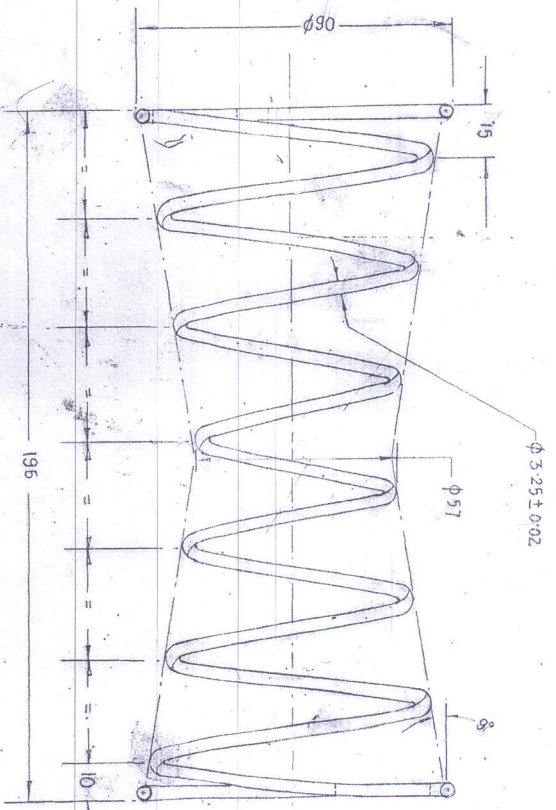
2



END PIECE  
 2-OFF

DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	DRG O/C
		DRN. <i>[Signature]</i>			PRO. OFF <i>[Signature]</i>
		TRD			PASSED <i>[Signature]</i>
					DH
		SCALE: 1:1			APPROVED <i>[Signature]</i>
		DIMENSIONS IN mm.			DIRECTOR
HELICAL SPRING			DESIGN AUTHORITY		
5A/1292 PARACHUTE BMK-211			ADRDE, AGRA		
KIRAN AIRCRAFT			DRG. No. ADDRDE/1164/AG8 (b)		
			SHEET 108 OF 109		





MATERIAL: STEEL SPRING MUSIC WIRE  $\phi 3.25$  mm  
TO SPEC. No. BS: 1408 M 1964

WORKMANSHIP: JOINTS AT TOP AND BOTTOM TO BE BRAZED

FINISH: THE SPRING SHOULD BE CADMIUM PLATED TO A MINIMUM THICKNESS OF 0.02 mm AND CHROMATE PASSIVATED AS PER SPEC IS: 1572-1968

EMBRITILEMENT RELEASE: SPRINGS AFTER CADMIUM PLATING AND PRIOR TO CHROMATE PASSIVATION SHALL BE MAINTAINED AT A TEMPERATURE OF 150°C TO 200°C FOR HALF AN HOUR MIN. TO REMOVE HYDROGEN EMBRITILEMENT

COMPRESSION TEST: THE SPRING COMPRESSED FULLY UNDER A LOAD OF NOT LESS THAN 225.6N (23kg) AND NOT MORE THAN 245.2N (25kg) AFTER BEING MAINTAINED IN FULLY COMPRESSED POSITION UNDER SUCH LOAD FOR A PERIOD OF 10 MINUTES. IT SHALL SHOW NO SIGN OF PERMANENT SET ON COMPLETE WITHDRAWAL OF LOAD AND THE JOINTS SHALL BE REMAIN UNDAUNAGED IN THIS TEST MAY BE CARRIED OUT ON EACH SPRING EITHER BEFORE OR AFTER PLATING

TOLERANCES:  $\pm 0.4$  mm EXCEPT WHERE OTHERWISE SPECIFIED

NOTE: ALL THE SHARP EDGES TO BE ROUNDED OFF.

SPRING



DATE	AUTHORITY	BRIEF RECORD	ZONE	C.D.	GO.	SCALE	TRD	CONP	CHKD	PRO OFF
		HELICAL SPRING								
(15A/1292... PARACHUTE BMK-41 KIRAN AIRCRAFT)										
DESIGN AUTHORITY										
DRG. NO.										
ADDRESS / 1164 LA-8 (M)										
SHEET 199 OF 109										