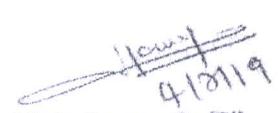
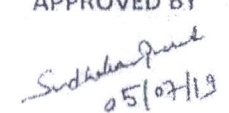

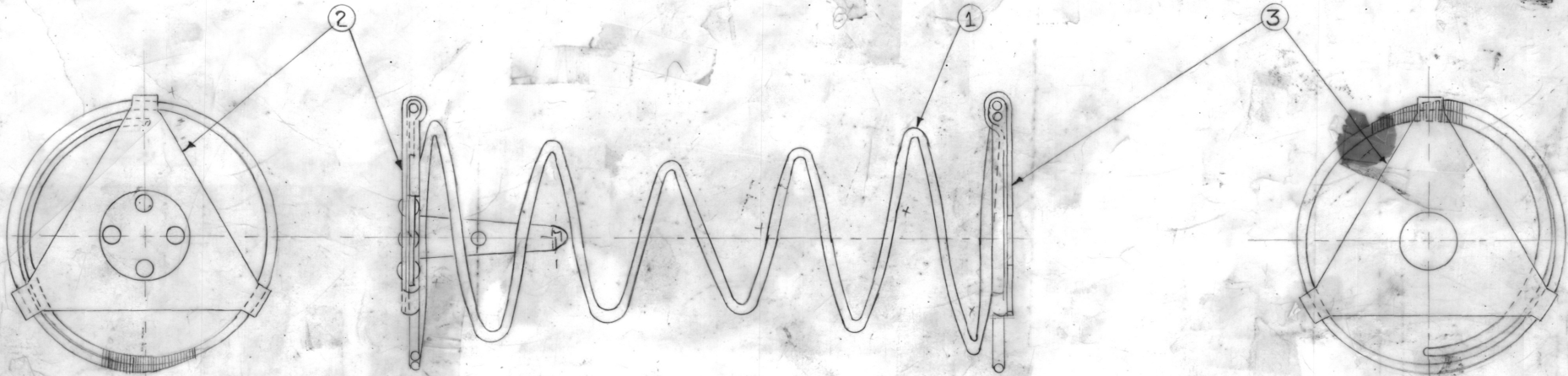


CHANGE SHEET No.: 200	DRAWING CHANGE SHEET			AFFECTED DRG. NO. ADRDE/1197-A-3/SA-2 (b)
DATE: 25.06.2019	DRAWING TITLE: EJECTOR SPRING (PILOT PARACHUTE FOR JAGUAR AIRCRAFT)			NEW DRG. NO. ADRDE/1197-A-3/SA-2 (c) SHEET -1 of 1
SL. No.	SHEET No./ LOCATION	EXISTING	AMENDED	REASON
1.	Sheet No. 1 of 5 (Detail index)		Added 4A	Added new sheet 4A to show the detail of Cone.
2.	Sheet No. 4 of 5	Detail of Cone	Deleted	Existing detail of Cone shown on Sheet No.-4 was wrong, Hence existing detail deleted.
3.	Sheet No. 4 of 5		Note:- See Sheet No. 4A For detail of Cone	
4.	Sheet No. 4A of 5		Showing detail of Cone	Added new sheet no. 4A to show the correct details of Cone.
PREPARED BY  4/07/19 (Vipin Kumar, Sc 'E')		APPROVED BY  05/07/19 (Sudhakar Prasad, Sc 'E')		VETTED BY  26/09/2019 RCMA (K)
AERIAL DELIVERY RESEARCH AND DEVELOPMENT ESTABLISHMENT MINISTRY OF DEFENCE AGRA CANTT				





COIL SPRING
ASSEMBLY

5	3	UPPER PLATE	1
4		DETAIL OF BASE PLATE & CONE	1
3	2	BASE PLATE	1
2	1	SPRING	1
1		ASSEMBLY	
SHEET No	DTL No	NOMENCLATURE	No OFF

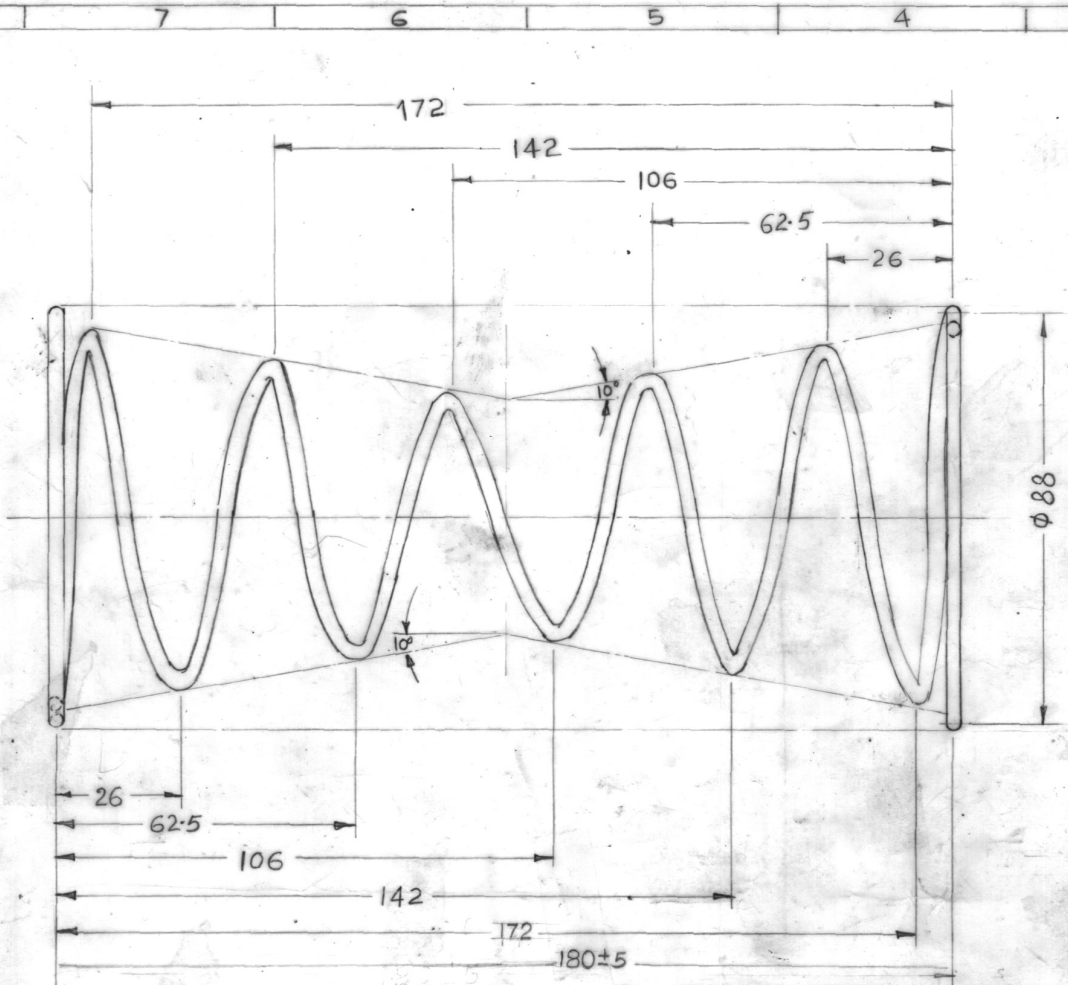
DETAIL INDEX

R NO	DATE	AUTHORITY	BRIEF RECORD	ZONE CD	DRD
------	------	-----------	--------------	---------	-----

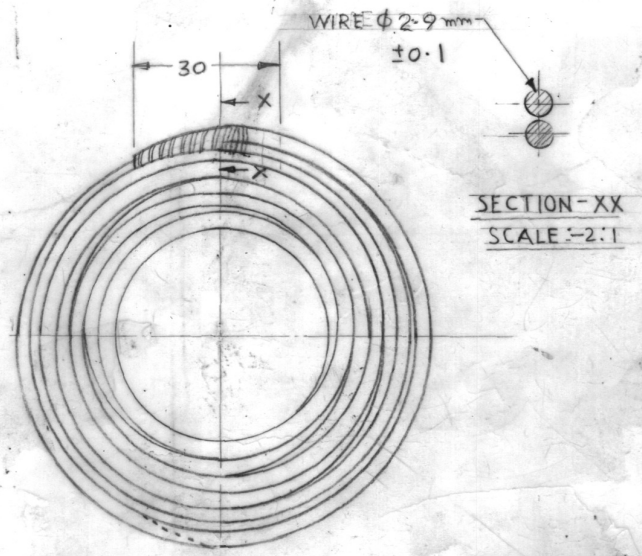
DRN <i>Ex</i>	CHD <i>al</i>	DRG OIC <i>al</i>	PRO OFFR.
TRD	COMP	PASSED	<i>Sully</i> 25/1/96
		APPROVED	DH
SCALE: 1:1	DIMENSIONS IN mm		
DIRECTOR			

EJECTOR SPRING
(PILOT PARACHUTE FOR JAGUAR)

DESIGN AUTHORITY
ADRDE, AGRA
DRG NO
ADRDE/1197/3/SA 2 (b)
SHEET 1 OF 5



TOLERANCES:- ±0.4 mm EXCEPT WHERE OTHERWISE SPECIFIED
 NOTE:- ALL THE SHARP EDGES TO BE ROUNDED OFF.



MATERIAL:- HIGH CARBON STEEL WIRE GRADE-I AS PER I.S 4454 (PART I)-1975

COMPRESSION TEST:- THE SPRING COMPRESSED FULLY UNDER A LOAD OF NOT LESS THAN 12 kg 18±6 kg. @

PLATING:- THE SPRING SHOULD BE CADMIUM PLATED TO A MINIMUM THICKNESS OF 0.012 mm AND CHROMATE PASSIVATED AS PER SPE. IS: 1572-1968.

SPRING
1-OFF

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

20/11/66

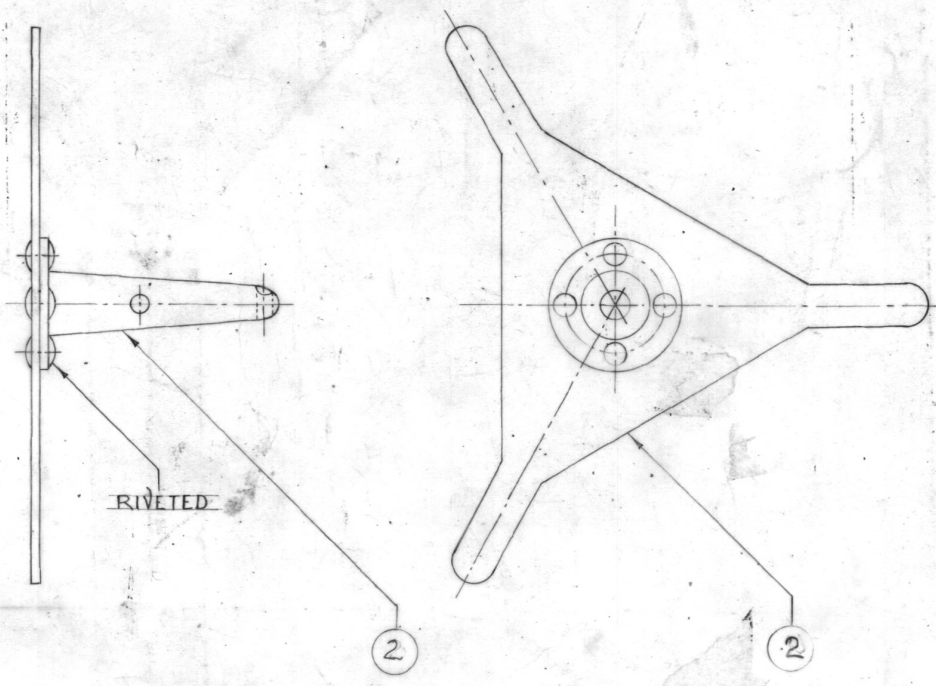
Q	07-12-05	CH. SH. No. 15	18±6kg INSTEAD OF 12kg.	C.1-2	nt	dl
R No	DATE	AUTHORITY	BRIEF RECORD	ZONE	o/c	(HEAD) D.A.

DRN <i>Cham</i>	CHD <i>α</i>	DRG O/C <i>g</i>	PROJ. OFFER.
TRD <i>Cham</i>	COMP	PASSED	
		<i>22/6/96</i>	DH
SCALE:- 1:1		APPROVED	
DIMENSIONS IN mm		<i>25/6/96</i> DIRECTOR	

EJECTOR SPRING
(PILOT PARACHUTE FOR JAGUAR A/C)

DESIGN AUTHORITY
ADRDE, AGRA
DRG No
ADRDE/1197-A3/SA-2 (A/B)
SHEET 2 OF 5

2

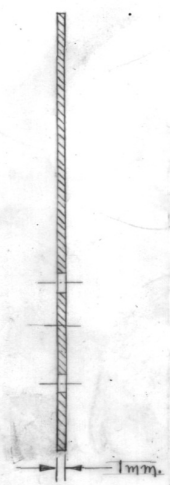
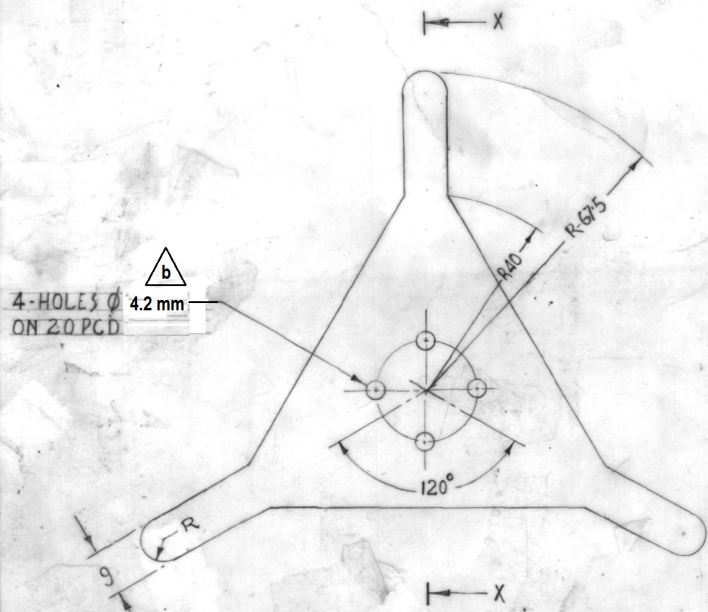


BASE PLATE
1-OFF

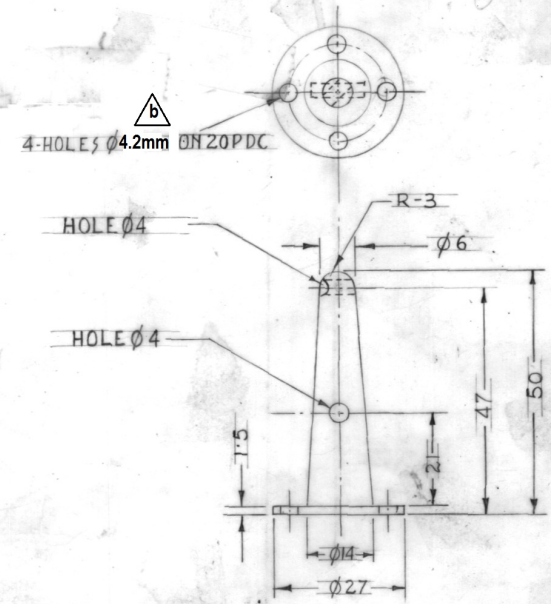
R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	O/C
DRN. <i>SR</i>	TRD <i>Quilla</i>	PROJ. OFF <i>Quilla</i>	DRG O/C <i>Jobb</i>			
CHD	COMP	PASSED	<i>12/16/96</i>			
			APPROVED			
SCALE: -1:1						
DIMENSIONS IN mm						
						D.H.
						<i>25/1/96</i> DIRECTOR

EJECTOR SPRING
(PILOT PARACHUTE FOR JAGUAR A/C)

DESIGN AUTHORITY
ADRDE, AGRA
DRG. No.
ADRDE/1197-A-3/SA 2(a)(b)
SHEET 3 OF 5



SECTION-XX



DETAIL OF BASE PLATE & CONE

MATERIAL: - LOW CARBON STEEL STRIP GRADE ORDINARY.
AS PER IS: 4030-1973

PLATING: - CADMIUM PLATED TO A MINIMUM THICKNESS,
0.012 mm AND CHROMATE PASSIVATED
AS PER IS: 1572-1968.

1-OFF EACH

MATERIAL: - MARTENSITIC STAINLESS STEEL GRADE: AISI-431
AS PER ASTM - A 276- 89a

RIVET: - ALUMINUM RIVET HIGH GRADE
SNAP HEAD RIVET 4 X 8 GRADE 2 IS : 2998

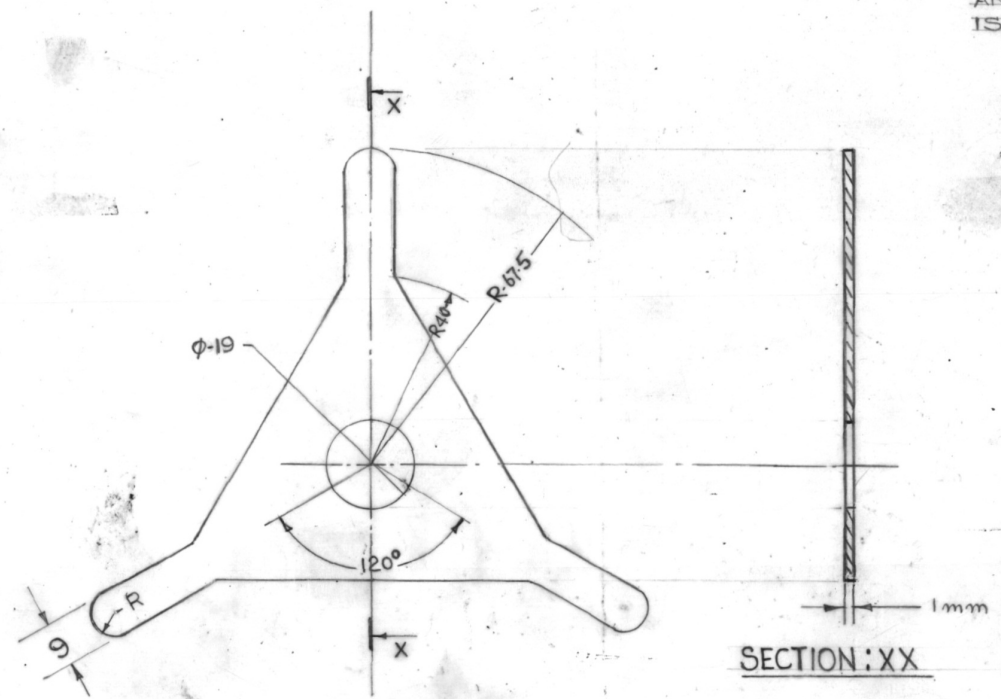
DRN <i>Cham</i>	TRD <i>Cham</i>	DRG O/C <i>90</i>	PROJ. OFFER <i>Gulab</i>
CHD <i>α</i>	COMP	PASSED <i>Per...</i>	<i>32/10/16</i>
		APPROVED <i>Gulab</i>	
		D.H.	
SCALE: - 1:1		DIRECTOR	
DIMENSIONS IN mm		DESIGN AUTHORITY	
		ADRDE, AGRA	
		DRG. No.	
		ADRDE/1197-A-3/5A2(7)(b)	
		SHEET 4 OF 5	

b	04-04-18	ADRDE/QMS/PG/PAS/245	RIVET MATERIAL MENTIONED			
R No.	DATE	AUTHORITY	BRIEF RECOR	ZONE	CD	O/C

EJECTOR SPRING
(PILOT PARACHUTE FOR JAGUAR A/C)

3

MATERIAL:- LOW CARBON STEEL STRIP GRADE ORDINARY
AS PER IS: 4030-1973
PLATING:- CADMIUM PLATED MINIMUM THICKNESS 0.12mm
AND CHROMATE PASSIVATED AS PER
IS: 1572-1968



UPPER PLATE
1-OFF

DRN:	TRD <i>[Signature]</i>	PROJ.OFF <i>[Signature]</i>	DRG O/c <i>[Signature]</i>
CHD:	COMP*	PASSED	<i>[Signature]</i>
		D.H.	
SCALE: 1:1		APPROVED	
DIMENSIONS IN mm		<i>[Signature]</i> 25/6/96	

R No.	DATE	AUTHORITY	BRIEF RECORD	ZONE	CD	O/c

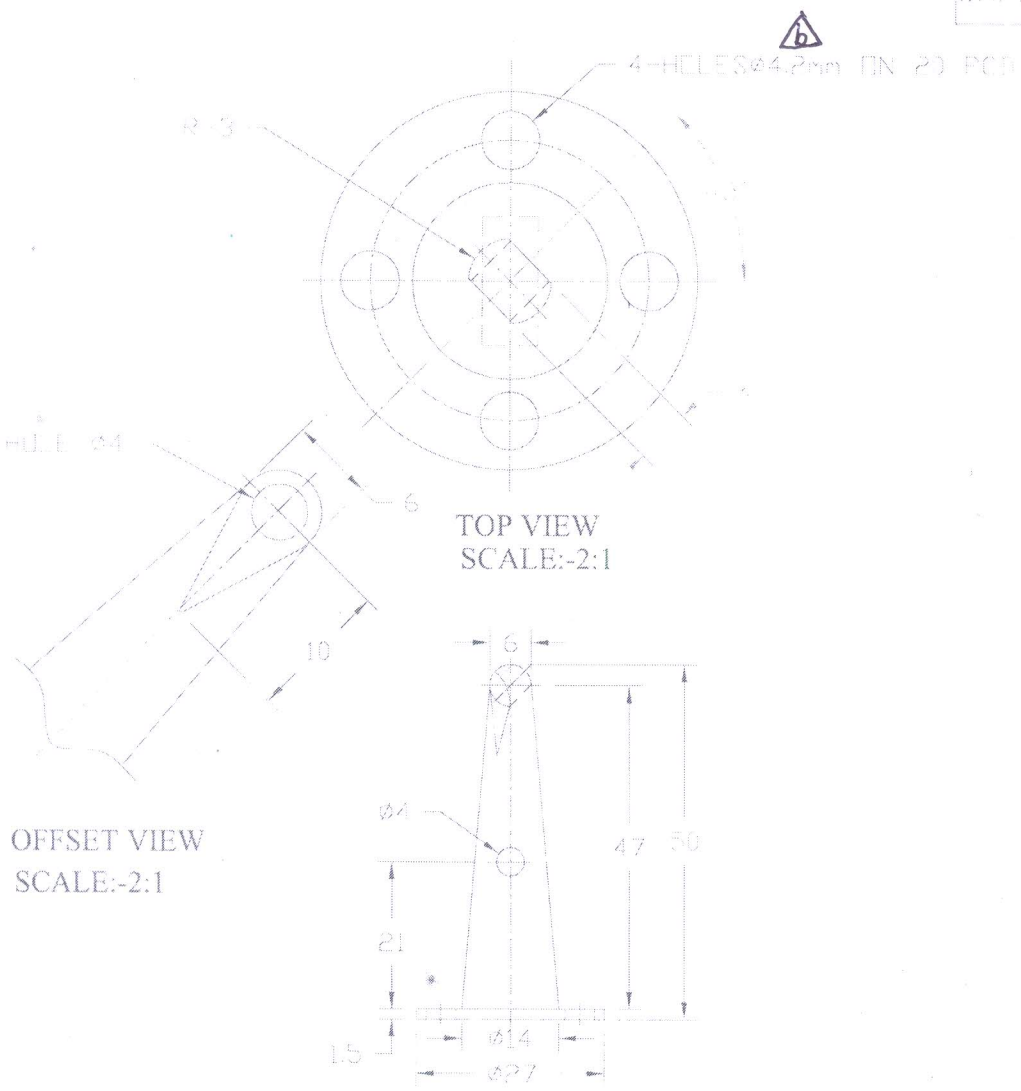
DIRECTOR

DESIGN AUTHORITY
ADRDE, AGRA

DRG. No.
ADRDE/1197-A.3/SA-2 (a/b)

SHEET 5 OF 5

EJECTOR SPRING
(PILOT PARACHUTE FOR JAGUAR A/C)



TOP VIEW
SCALE:-2:1

OFFSET VIEW
SCALE:-2:1

FRONT VIEW

MATERIAL:- MARTENSITIC STAINLESS STEEL
GRADE-AISI-431 AS PER ASTM-
A276-89a

RIVIT:- SNAP HEAD RIVIT 4X8 GRADE 2
IS:2998

△: Added Sheet No.-4A

1-OFF

Rev.No	DATE	ZLINE	AUTHORITY	BRIEF RECORD			□ T/C	HEAD
				DRN.	NIRTI		CAD	GROUP
SCALE:-1 : 1			A D R D E AGRA	DRN.	NIRTI	PRJ.DIR/GRUP DIR		
DIMENSIONS IN mm			GROUP:- PAS	CHD.	NIRTI	APPROVE D		
TOL:- IS: 2102 (pl-1 MEDIUM)			CONE EJECTOR SPRING PILOT PARACHUTE FOR JAGUAR A/C			PRJ.DIR/GRUP DIR		
MATERIAL:- AS ABOVE						DRG No		
FINISH:-						ADRDE/1197-A 3/SA 2(c)		
HEAT TREATMENT:-								