

DS CAT No.

1015-012568

DRG CONVENTIONS CONFORM TO IS:696.

DIMENSIONS ARE IN mm.

TOLS. FOR UNTOLERANCED LINEAR DIMNS. IS:2102 (MED. CL)

NOM SIZE & FIT	DEVIATION
Ø52 e8	-0.106 -0.060
Ø36 e8	-0.089 -0.050

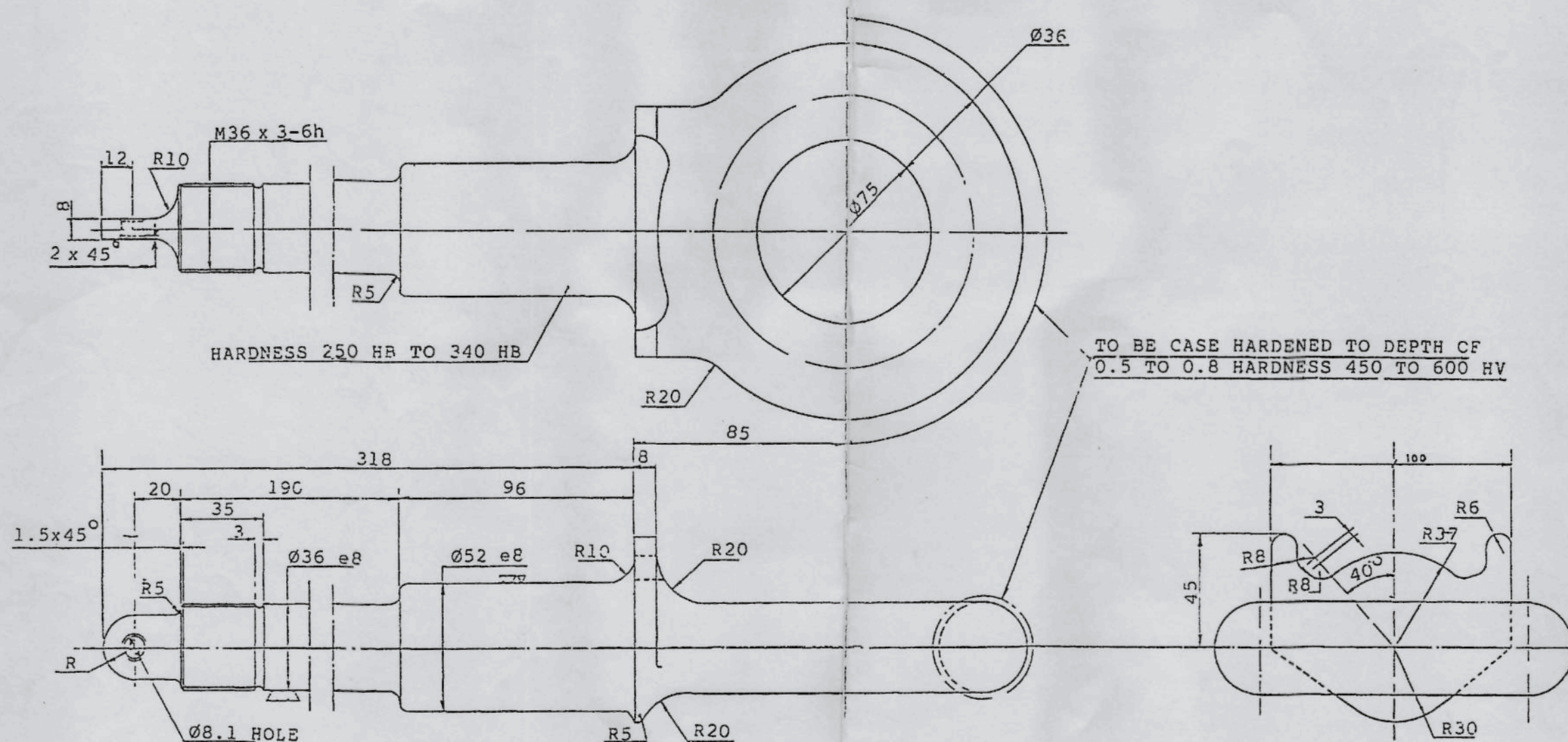
THREADS CONFORM TO IS:4218

UNTOLERANCED SHAFTS -0.2mm

UNTOLERANCED HOLES + 0.2mm

UNTOLERANCED ANGLES GIVEN IN

DEGREE ONLY ± 30 MINUTES.



MATERIAL:-IS:4367-1991-13Ni 13Cr.3

CASE HARDENED TO (RS-60) OF IS:4432

PROTECTIVE FINISH:-TO BE PHOSPHATED AS PER JSS-0465-01:1988, CLASS-II, FINISH (i)

18844-W PROV SEALING CANCELLED &
03-01-04 DRG SEALED17827-W
13-12-93 DRG SEALED PROV18825-W
2-12-03 HINDI NOMEN ADDED

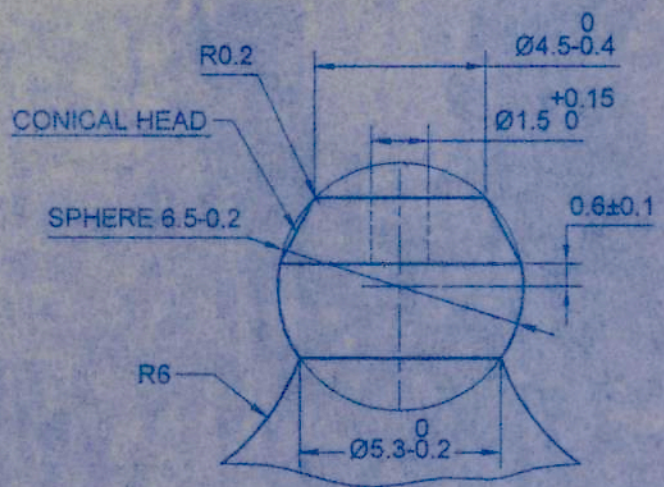
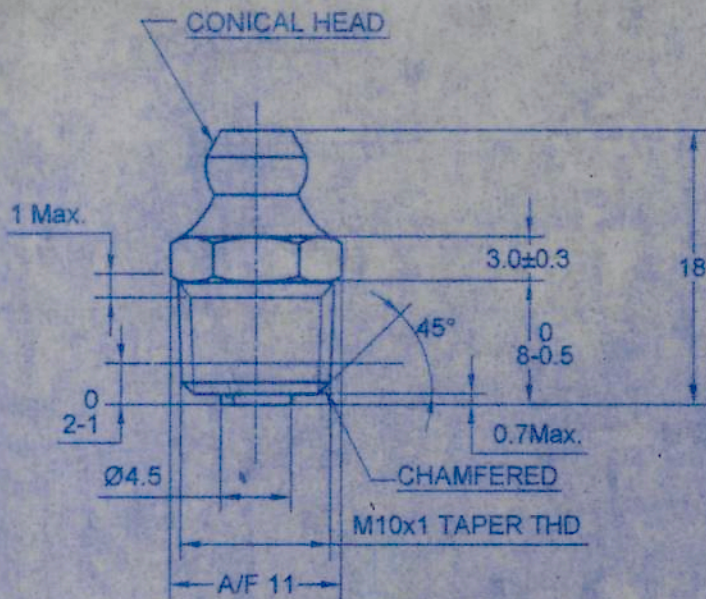
CHIEF D'FAN	ASSY DRG IFL526A	CQA (W) JABALPUR
DC	ESTD MASS	DESIGN No. ASSY DRG No
DRG. SEALED 18844-W 03-01-04	DATE 18.9.82	ILG-2402/1 ILG-2401/2A
FOR CQA (W)	SCALE - NTS	PART No.
DRN	CHD	IFL8241
DO CQA (W)		DS CAT No.
		1015-012568

आई टोइंग EYE TOWING

10-12-12 19292-W

DS CAT No. AMENDED.

REDUCED AT CQA (W) JABALPUR
PREPARED BY S. K. Jadhav
DATE 5.1.94
J.S. 3



NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. THIS IS AN UNSEALED DRG. PRODUCTION HAS NOT BEEN CARRIED OUT TO THIS DRG.
3. PROTOTYPE SAMPLE SHOULD BE GOT APPROVED FROM CQAV BEFORE START OF BULK PRODUCTION.
4. NIPPLES SHALL BE PLATED WITH EITHER ZINC OR CADMIUM.
5. GREASE NIPPLE CONFORMS ALL REQUIREMENTS & TESTS TO IS:4009 (PT-II)-81.



STEEL CONFORMING PROPERTY CLASS 4.8 TO IS:1367-67		D.C.(I)	NATURE
MATERIAL		AMENDMENTS	
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION IS:4218-76	STAMP OR ETCH PART No. MNFR'S NAME & YEAR OF MANUFACTURE	
SCALE:- 1:1 & 5:1	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED MEDIUM TO IS:2102 (PT-I) -1980	PERTAINS TO :-	
DRG. NOT TO BE SCALED.			
FIRST ANGLE PROJECTION	NIPPLE GREASE CONICAL HEAD STRAIGHT 10mm C.Q.A.(V) DRG. No. LV6/MT1-4730-000059		
ORIGINAL DATE :- 12-10-09			
DRN. <i>gali</i> TCD. <i>Beth</i>			
CHD. <i>gali</i> C.D/MAN <i>gali</i>			
ACQA			
DCQA <i>gali</i>			
CONTROLLERATE OF QUALITY ASSURANCE (VEHICLES)			

4	3	2	1					
PART No/D S CAT No		DRG CONVENTIONS CONFORM TO IS:696						
D 5315-048872		DIMNS ARE IN mm UNLESS OTHERWISE STATED						
		TOLERANCES FOR UNTOLERANCED LINEAR DIMNS						
		ABOVE	-	6	30	120	315	1000
UPTO	6	30	120	315	1000	2000	4000	-
TOLS	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3

NOTE:-

UNTOLERANCED ANGLE GIVEN IN
DEGREE ONLY ± 30 MINUTES

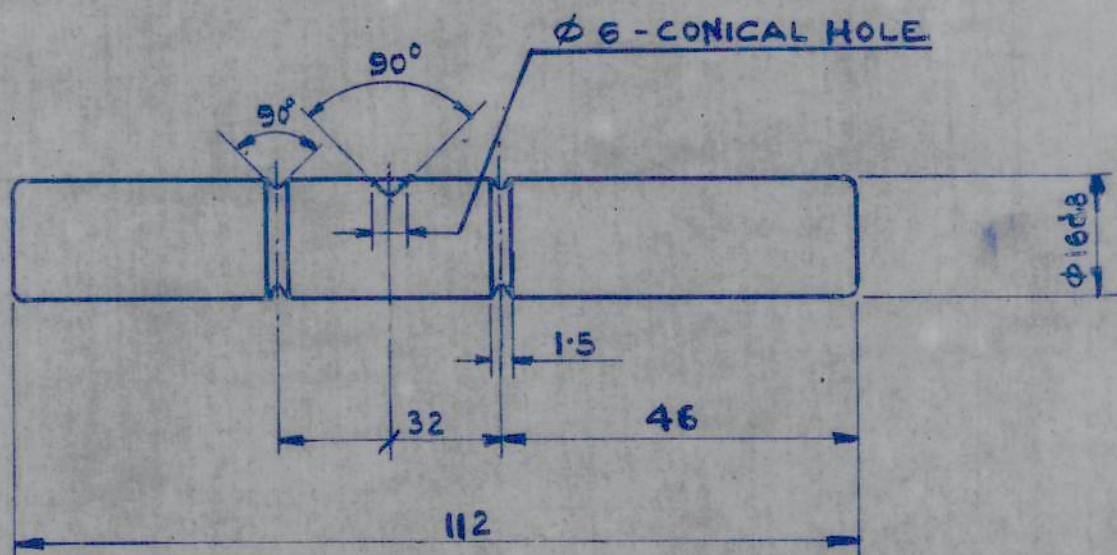
NOM SIZE & FIT

DEVIATION

Φ 16d, B

-0.077

-0.050



NOTE:-

TO BE PHOSPHATED AS PER J 55:0465-01:1988, CLASS II, FINISH (d)

MATERIAL:- IS:7283 (1974) WITH MATL IS:5517-1978-40C8

AS ROLLED/NORMALISED.

IS:5517-1993 GD 40C8 AS ROLLED/NORMALISED OR BS:970, PT-I-1983 GD 080 M40 NORMALISED

9 ² / ₁₇	19574-W	MATL. AMENDED.	APR 10/11/87	DESIGN AHSP	FOR O.I./C
10-12-12	19292-W	NOMEN, HINDI & DSCAT No AMENDED	27/3/87	F/M DRG	GUN DEV. TEAM
2 ¹² / ₅₃	18825-W	HINDI NOMEN ADDED			
2-12-03	18825-W	HINDI NOMEN ADDED			
25-3-92	30823-GRAW-W4	PROT. FINISH NOTE AMENDED			
5-11-85		CLOTH NEG PREPARED			
DATE	AUTHORITY	ZONE	NATURE	SIG AHSP	SIG DO
AMENDMENTS					
DRG SEALED:- 18844-W 03-01-04					
SCALE:- 1:1 ESTD MASS DATE:- 14-9-76					
MATL:- AS ABOVE					
ASSY DRG IFL-526 A					
PIN, GROOVED, HEADLESS					
DS CAT No 5315-048872					

(QA(W) JABALPUR

DRAWN CHD

TRACED:- RRR/HL CHD

C/D'MAN

DO

AHSP

FORCQA(W)

DESIGN No ASSY DRG

ILG 2407 ILG-2401/2A

PART No

IFL-8246

DS CAT No

5315-048872

PART No/DS CAT No

5310-236061

DRG CONVENTIONS CONFORM TO IS: 696
DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED

TOLERANCES FOR UNTOLERANCED LINEAR DIMENSIONS

ABOVE LPTO	-	6	30	120	315	1000	2000	4000
TOLS	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3

NOTE:-

THREADS CONFORM TO IS: 4218.

UNTOLERANCED ANGLES GIVEN IN DEGREE ONLY ± 30 MINUTES.

6 SLOTS EQUISPACED

M36 x 3

A/F 55

A/C 53.5

50 ϕ

7

15°

13

20

PROT. FINISH:-

TO BE PHOSPHATED AS PER SPECN. ISS: 0465-01: 1988, CLASS II, 

FINISH (J)

DESIGN AHSP

6/2/87
F/M DRG.FOR O.I/C
GUN DEV. TEAM

CQA(W) JABALPUR

DRAWN

CHD

TRACED:-

CHD

C/D'MAN

DO

AHSP

DESIGN No

ASSY. DRG. No.

ILG 2403

PART No

IFL-8242

DS CAT No

5310-236061

10-12-12 19292-W NOMEN, HINDI & DS CAT No. AMENDED

25/3/92 30823-1 CQA(W) 44 PROT. FINISH NOTE AMENDED.

7-11-85 CLOTH NEG PREPARED

DATE AUTHORITY ZONE NATURE

AMENDMENTS

DRG SEALED :- 18844-W

03-01-04

DO CQA(W)

SCALE:- 1:1

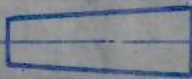
ESTD MASS

DATE:- 19-7-77

MATERIAL:- IS: 5517-40 Ni6 Cr4 Mo 3 (RS-63)

ASSY DRG

IFL-526A



NUT CASTELLATED HEXAGON

नट कास्टलेटेड हेक्सागॉन

18844-W PROV SEALING CANCELLED &
03-01-04 DRG SEALED17827-W DRG SEALED PROV
13-12-93



“L70 GUN”

**QUALITY ASSURANCE PLAN/ACCEPTANCE TEST
PROCEDURE**

OF

Item code 9077100218
Drawing No. IFL 526A

GUN CARRIAGE FACTORY
A GOVT. OF INDIA ENTERPRISES, MINISTRY OF DEFENCE
(A UNIT OF ADVANCED WEAPONS AND EQUIPMENT INDIA LTD)

RESTRICTED

QAP/ATP

This quality plan is a general guide to meet the quality requirements of product. It consists of applicable procedures (describing production processes, inspection & testing instructions), applicable workmanship standards, the measurement tolerances acceptable, the description of material standards and so forth. It also mentions the list of documents, test certificates that will be submitted by firm to GCF along with finished component.

1. **Nomenclature & Drawing No.** : EYE TRAIL ASSY.
DRG.NO. IFL-526 A

2. **Method of manufacture & Inspection schedule** :

S. NO.	Sequence of operation/ process/functional check/inspection	Remark (Sample plan or any other applicable instructions)
1	FIT ASSEMBLE ALL DETAIL AS PER DRG.	ASSY SHOULD CONFIRM ACCEPTANCE TEST
2	ACCEPTANCE TEST	

3.0 Inspection: Following methodology is to be followed for inspection.

3.1 Mode of Inspection & Sample Size/Selection:

- (a) **At Firm Premises**: Inspection by the manufacturer for 100% quantities of lot size.
- (b) **At receipt End**: Inspection by MID/QC (GCF Rep.) at receipt at GCF. Sample selection as per existing IS standard 2500 part-II, 1965.
- (c) Acceptance as per Chemical composition and Mechanical properties /performance Test/ Fitment Trial/ Practical Trial/ Any other functional requirement.
- (d) Firm should offer raw materials first, then after clearance of raw materials by GCF only carry out manufacturing of item.

4. Submission of Documents:

Following documents should be submitted along with finished product:

- (4.1) Acceptance test report after functional trial.
- (4.2) NABL/Govt. approved Lab certificate required for material.

Date:-20/03/2023


Approved By
Controlling Officer
(QC Section)


Prepared By
JWM/SC

DS CAT No

3120-104715

DRG CONVENTIONS CONFORM TO IS: 696

DIMNS ARE IN MM UNLESS OTHERWISE STATED

TOLERANCES FOR UNTOLERANCED LINEAR DIMNS

ABOVE UPTO	6	30	120	315	1000	2000	4000
TOLS	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2

NOTE :-

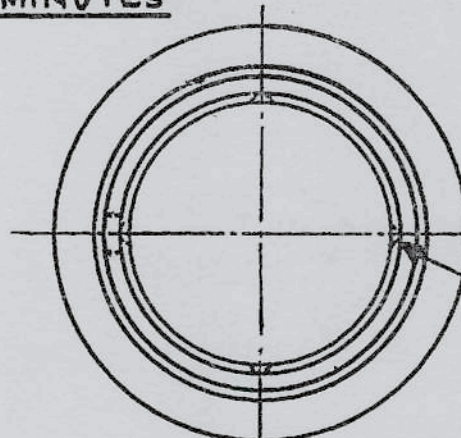
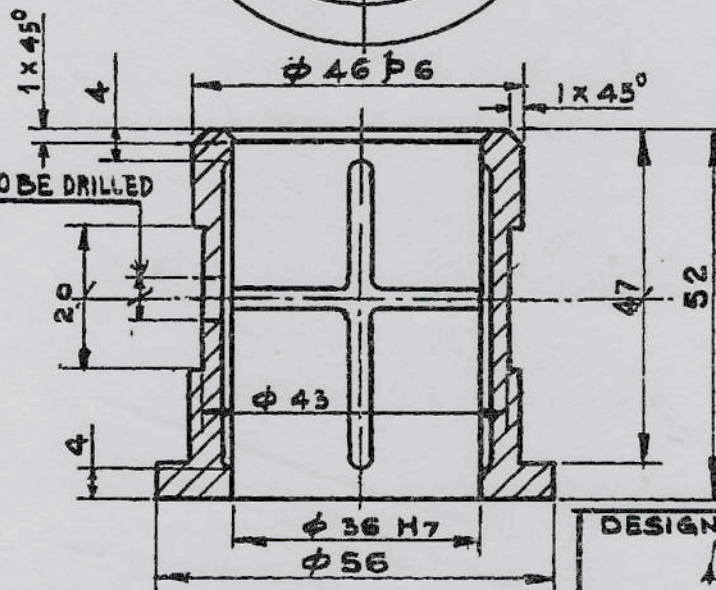
UNTOLERANCED SHAFTS - 0.2 mm

UNTOLERANCED HOLES ± 0.2 mm

UNTOLERANCED ANGLES GIVEN IN DEGREE

ONLY ± 30 MINUTES

NOM. SIZE & FITS

 $\phi 46$ p 6 ± 0.042 ± 0.026 $\phi 36$ H 7 ± 0.025 ± 0  $\phi 5$ HOLE TO BE DRILLED
ON ASSY

DESIGN ANSP

FOR. O.H.
GUN DEV. TEAM.

10/12/12	19292-W	NOMEN, HINDI & DS CAT No AMENDED
03/04/13	18844-W	PROV SEALING CANCELLED & DRG SEALED
12/03/13	17827-W	DRG SEALED PROV
4-11-85		CLOTH NEG PREPARED

DATE	AUTHORITY	ZONE	NATURE	SIG. ANSP	STG. DO
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AMENDMENTS

DRG SEALED:-18844-W

DT-03-1-04

DO CQA(W)

SCALE:-1:1

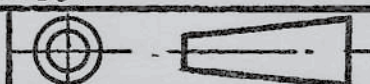
ESTD MASS

DATE:-18-7-77

MATERIAL:-IS: 7011-1985.

ASSY DRG

IFL 526 A



BUSHING, SLEEVE

बुशिंग स्लीव

CQA(W) JABALPUR

DRAWN

CHD

TRACED:-R.K.H.

CHD

C/D'MAN

ANSP

FOR CQA(W)

DESIGN No

ILG - 2404

ASSY. DRG No

ILG-2401/2A

PART No

IFL 8243

DS CAT No

3120-104715

8	7	6	5	4	3	2	1																																																	
D S CAT No. 3120-104734		DRG CONVENTIONS CONFORM TO IS : 696 DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED TOLERANCES FOR UNTOLERANCED LINEAR DIMENSIONS <table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <tr> <th>ABOVE UP TO</th> <th>- 6</th> <th>6 30</th> <th>30 120</th> <th>120 315</th> <th>315 1000</th> <th>1000 2000</th> <th>2000 4000</th> <th>4000 -</th> </tr> <tr> <td>TOLS</td> <td>± 0.1</td> <td>± 0.2</td> <td>± 0.3</td> <td>± 0.5</td> <td>± 0.8</td> <td>± 1.2</td> <td>± 2</td> <td>± 3</td> </tr> </table>						ABOVE UP TO	- 6	6 30	30 120	120 315	315 1000	1000 2000	2000 4000	4000 -	TOLS	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3																															
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NOTE :- UNTOLERANCED SHAFTS - 0.2 mm UNTOLERANCED HOLES + 0.2 mm UNTOLERANCED ANGLE GIVEN IN DEGREE ONLY ± 30 MINUTES		4-OIL GROOVES EQUISPACED 2 WIDE 0.6 DEEP Ø 5 HOLE TO BE DRILLED ON ASSY																																																						
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3-3-17	DATE	AUTHORITY	ZONE	AMENDMENTS	SIG AHSP	SIG. DO																																																		
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3120-104734																																																								

* OLD DSCAT NO 3120-001370
PTC

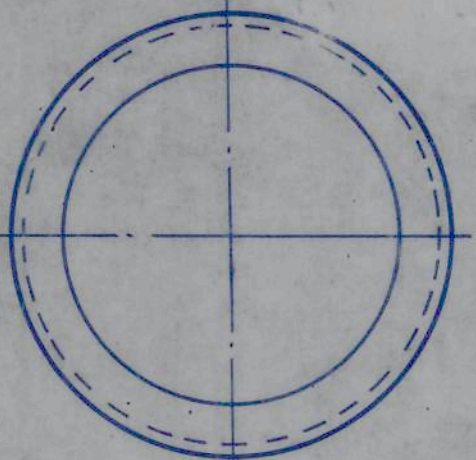
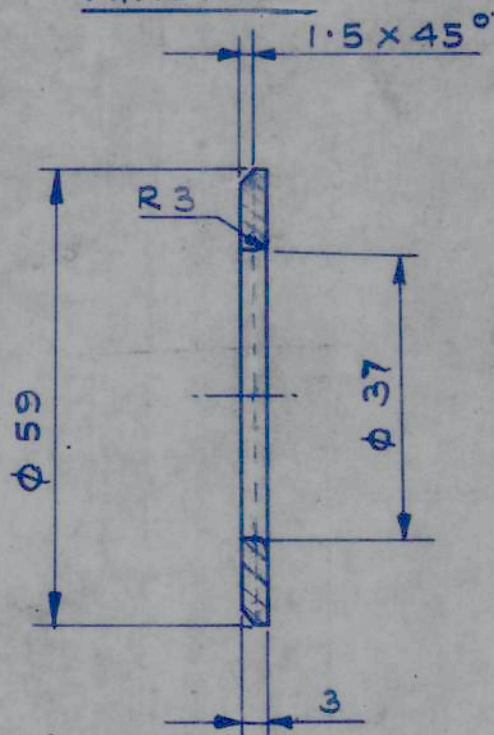
PART No / DS CAT No

5310-236060

DRG CONVENTIONS CONFORM TO IS:696
DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED

TOLERANCE FOR UNTOLERANCED LINEAR DIMN

ABOVE UP TO	6	30	120	315	1000	2000	4000
TOLE	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 3

NOTE :-UNTOLERANCED SHAFT -0.2mmUNTOLERANCED HOLE +0.2mmUNTOLERANCED ANGLE GIVEN IN DEGREE ONLY ± 30
MINUTESNOTE :- TO BE PHOSPHATED
AS PER SPEC. JSS:0465-01:
1988, CLASS II, FINISH (J)

09/02/17 19574-W MATL. AMENDED

10/12/12 19292-W NOMEN, HINDI & DS CAT No. AMENDED

03/01/04 18844-W PROV SEALING CANCELLED & DRG SEALED

13/12/93 17827-W DRG SEALED PROV

25/3/92 30823-CQAW-WA NOTE REG. PHOSPHATING AMENDED

11-11-85 CLOTH NEG PREPARED

DATE AUTHORITY ZONE NATURE AHSP DO

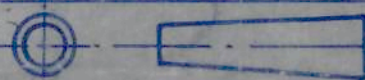
AMENDMENTS

SIG

DRG SEALED :- 18844-W 03-01-04 CQA(W)

SCALE :- 1:1 ESTD MASS :- DATE :- 25-1-77

MATL :- 15-226-1975 IS:2062-2011 GD E 250 A

ASSY DRG
IFL - 526 A

WASHER, FLAT,

वाशर फ्लेट

DESIGN AHSP

F/M DRG.

FOR D.O./C.
GUN DEV. TEAM.

CQA(W) JABALPUR

DRN :-

CHD :-

TCD :-

CHD :-

C/D MAN

AHSP

FOR CQA(W)

DESIGN No

ASSY DRG

ILG-2401/241 LG - 2408

PART No

IFL - 8247

DS CAT No

5310-236060

IFL-526 A

DIMENSIONS ARE IN mm.

TOLS. FOR UNTOLERANCED LINEAR DIMNS. IS:2102 (MED. CL).

THREAD CONFORM TO IS:4218.

4730-000059-2
NIPPLE GREASE CONICAL HEAD
STRAIGHT 10 mm (IS:4009)

5315-048872

GRUB. SCREW 'C' M6 x 15 IS:2388
P 6.6-PHOSPHATED 1

1015-012568

5310-236061

WASHER, FLAT, MACHINED STEEL,
PHOSPHATED 37 (IS:2016 & 2073-C14)-4

5315-000942

PIN, COTTER, SPLIT STEEL,	
5 x 71 LONG (IS:549)	1

Ø 5.2 HOLE TO BE DRILLED IN
POSITION.

GRUB SCREW 'C' M6 x 6
IS:2388 P-6.6 PHOSPHATED—1

SECTION- A-A

5360-040398-

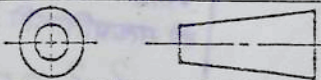
3120-104715

3120-104734

5310-236060-

PREP. BY W. Gibson CHECKED BY K. A. Nelson DATE 2-11-93.

ZONE	C/2, B/4, D/5, D/5, E/5, D/2,	
10-12-12	19292-W	DISCAT No. AMENDED.
18844-W	PROV. SEALING CANCELLED &	
03-1-04	DRG. SEALED.	
17827-W		
13-12-93	DRG. SEALED PROV.	
18825-W	HINDI NOMEN	
2-12-03	ADDED	

CHIEF D'MAN	ASSY DRG	CQA (W) JABALPUR
DO	IFL 131 MA	
AHSP	ESTD MASS	DESIGN No. ASSY DRG
FOR CQA(W)	DATE 24.12.82	ILG2401/2A ILG-1400/1MA
DRG. SEALED:- 13344-W	SCALE - NTS	PART No.
DT. 03-1-04	DRN	IFL 526 A
DO CQA(W)	CHD	DS CAT. No.
EYE TRAIL ASSY. आई ट्रेल		
संसेम्बली		

8	7	6	5	4	3	2	1
DS CAT No. 5360-040398		DRG CONVENTIONS CONFORM TO IS : 696 DIMNS ARE IN mm UNLESS OTHERWISE STATED					

TOTAL No. OF COIL _____ $8\frac{1}{2}$

No. OF EFFECTIVE COILS _____ 7

WIRE DIA _____ 7 mm

WOUND _____ R H

ONE COIL AT EACH END TO BE CLOSED IN & GROUND

SQUARE TO AXIS LEAVING $\frac{3}{4}$ COIL NON EFFECTIVE

TEST NOTE :-

COMPRESSION TEST AS PER BS : 1726 Pt 1

100% FOR FIRST 20 SPRINGS & 10% FOR REMAINING

PRODUCTION OR AS ORDERED BY AHSP

SPRING TO CONFORM TO BS : 1726 Pt 1

CATAGORY III CLASS 'B'

09.02.17 19574-W 22-11-13 MATL. AMENDED SCANNED & PRINTED WITHOUT CHANGE SIG. AHSP SIG. DO					DRAWN:- SCANNED:- PKA HOS CHD:- CHD- GSN DO ASSY DRG:- IFL 526 A DATE:- SCALE:- 1 : 1 ESTD mass:-					CQA(W), JABALPUR				
PREV DC Nos:- 17827-W, 18825-W, 18844-W & 19292-W DT 10-12-12 DRG SEALED:- 18844-W DT 03-01-04					MATERIAL:- IS-4454 Pt 1 GRADE 3-1975 IS:4454-2001 (PT-1) GDE DH PROTECTIVE FINISH:- TO BE PHOSPHATED AS PER JSS : 0465 - 01 : 1988, CLASS II, FINISH (j)									
DATE AUTHORITY ZONE AMENDMENTS					SPRING HELICAL COMPRESSION स्प्रिंग हेलीकल कम्प्रेसन					DESIGN No. ILG - 2406 ASSY DRG No. ILG - 2401 / 2A				
					DO CQA(W)					PART No. IFL 8245 DS CAT No. 5360-040398				