

ST 100/111

~~TOOLING.~~

TOOLS

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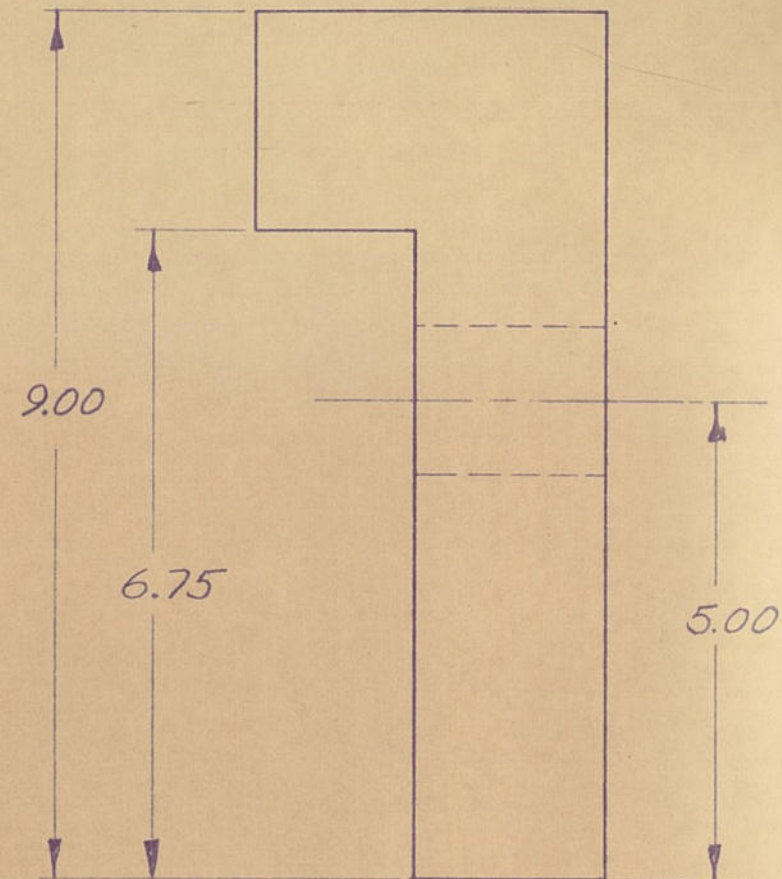
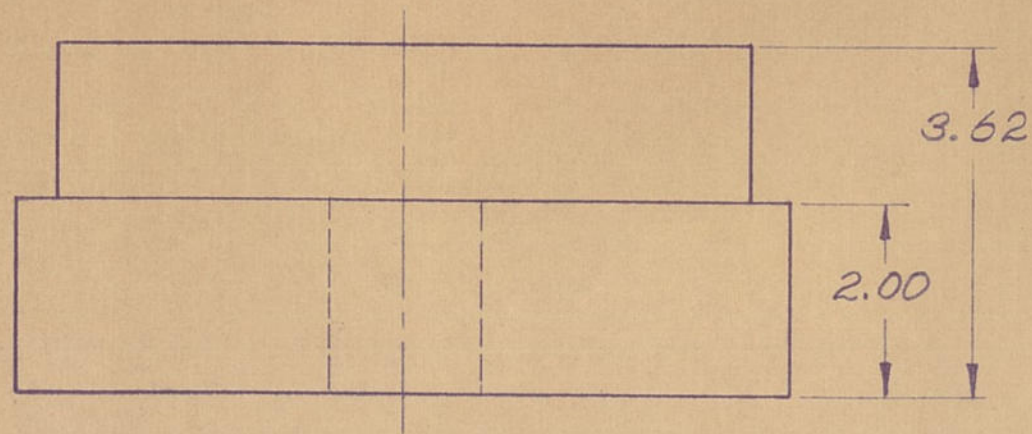
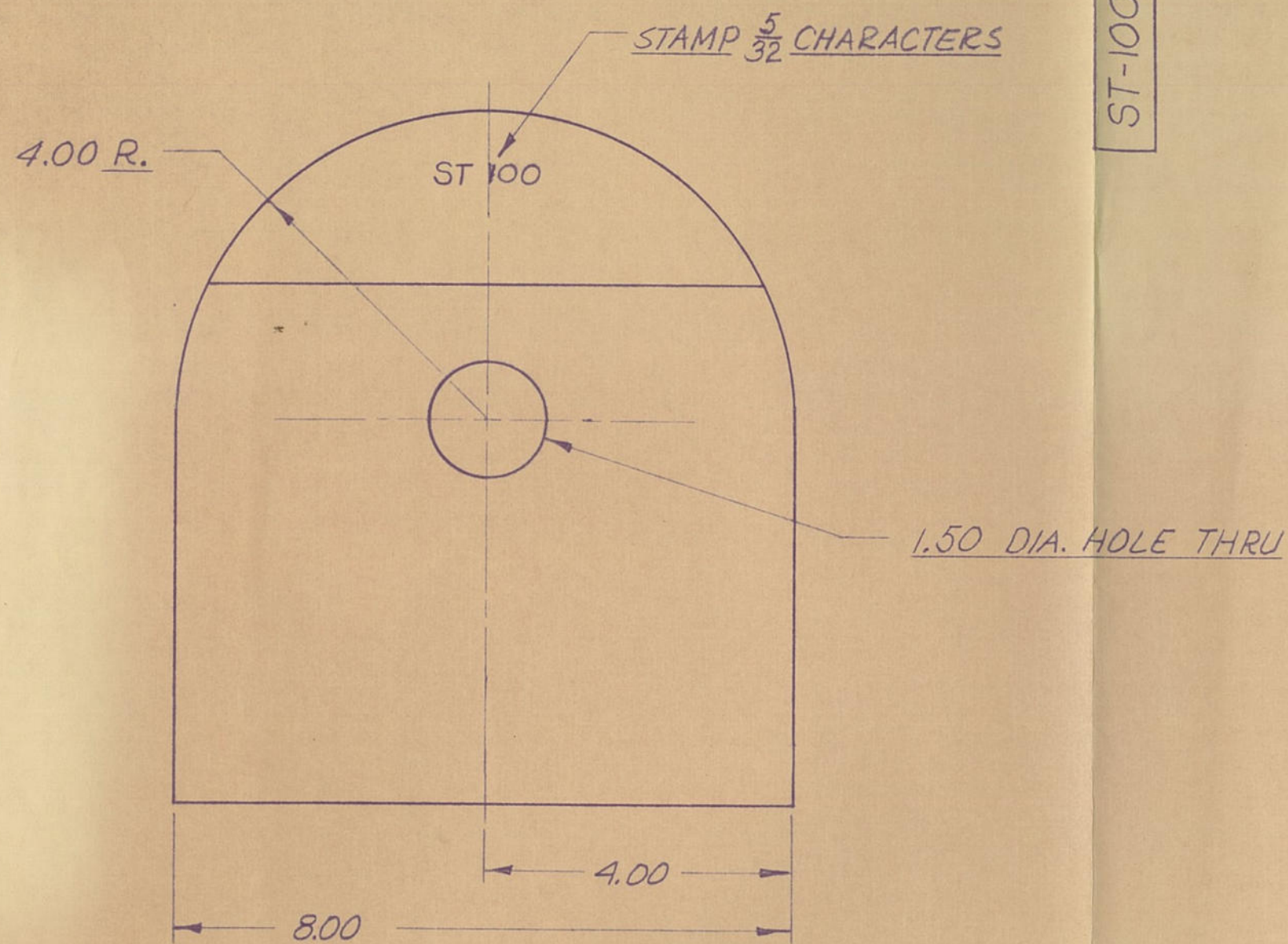
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ST-100

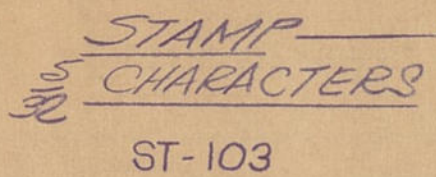


NOTE:

MAKE FROM PHILLIPINE MAHOGANY

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON				NOTED		NONE		NONE	
FRACTIONS	DECIMALS			ANGLES	TITLE BENCH BLOCK				
±	.X	.XX	.XXX	±					
±	±.1	±.03	±.010	±	PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA				
MACHINED FINISH				MICROINCHES RMS					
SCALE 1/2 x SIZE		DRAWN BY	N	D	L. BENNETT	CHECKED BY	N	D	ST-100
					5-2-63			5-2-63	

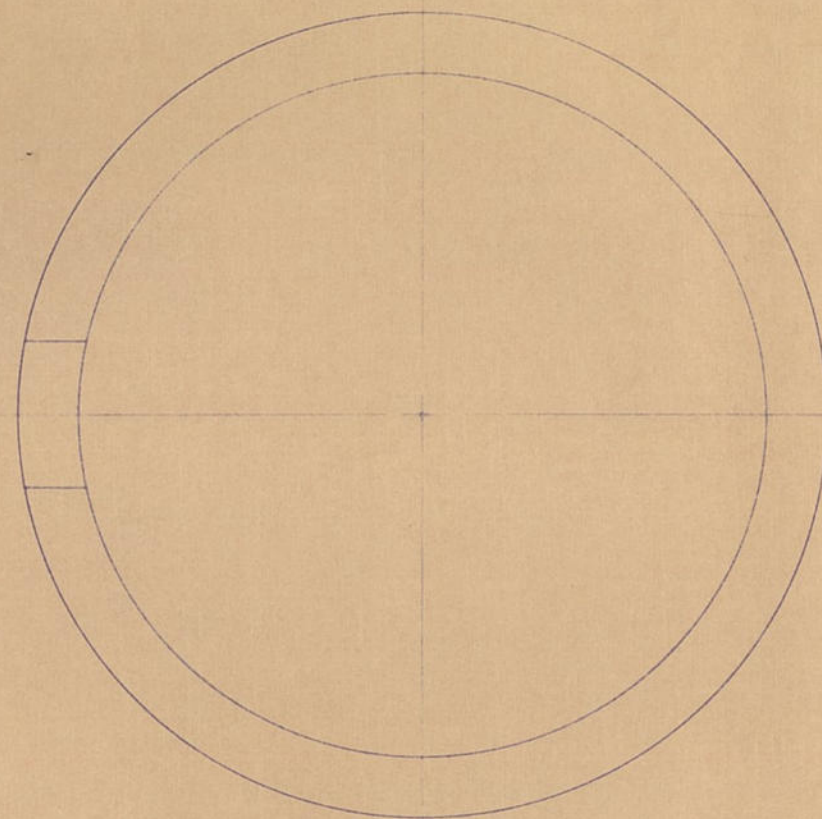
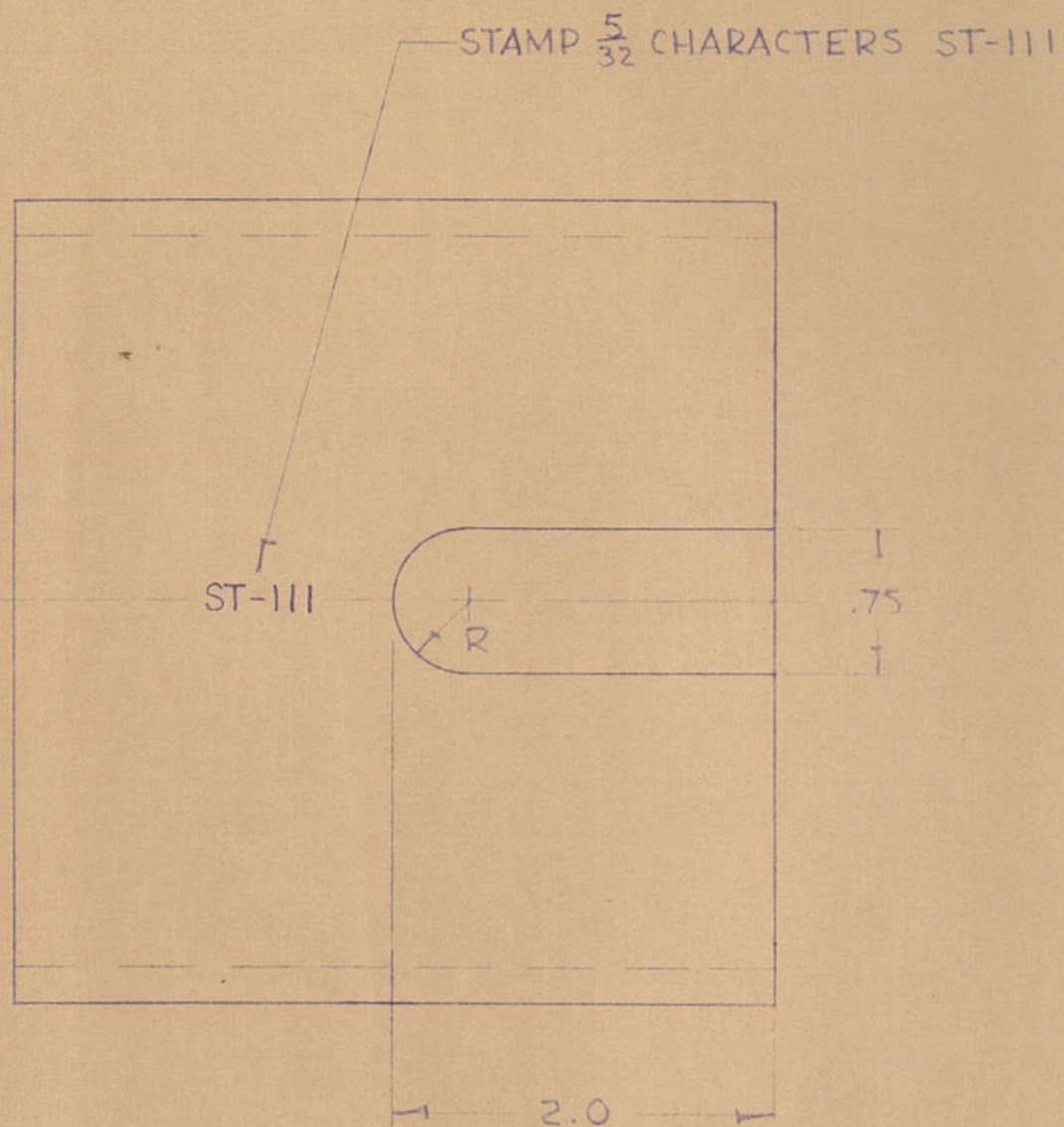
ST-103.1



GENERAL NOTES:

UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION			HEAT TREATMENT			FINISH		
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES $\pm$.X .XX .XXX $\pm$ $\pm .1$ $\pm .03$ $\pm .010$ $\pm$			NOTED						CAD. PLATE		
MACHINED FINISH 9 MICROINCHES RMS 125 ✓			TITLE <u>BASE -</u> <u>BRG. SUPPORT</u>						PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA		
SCALE FULL		DRAWN BY		N R. FALK	CHECKED BY		N JCV	ST-103.1			
		D		7-17-62	D		8-20-62				

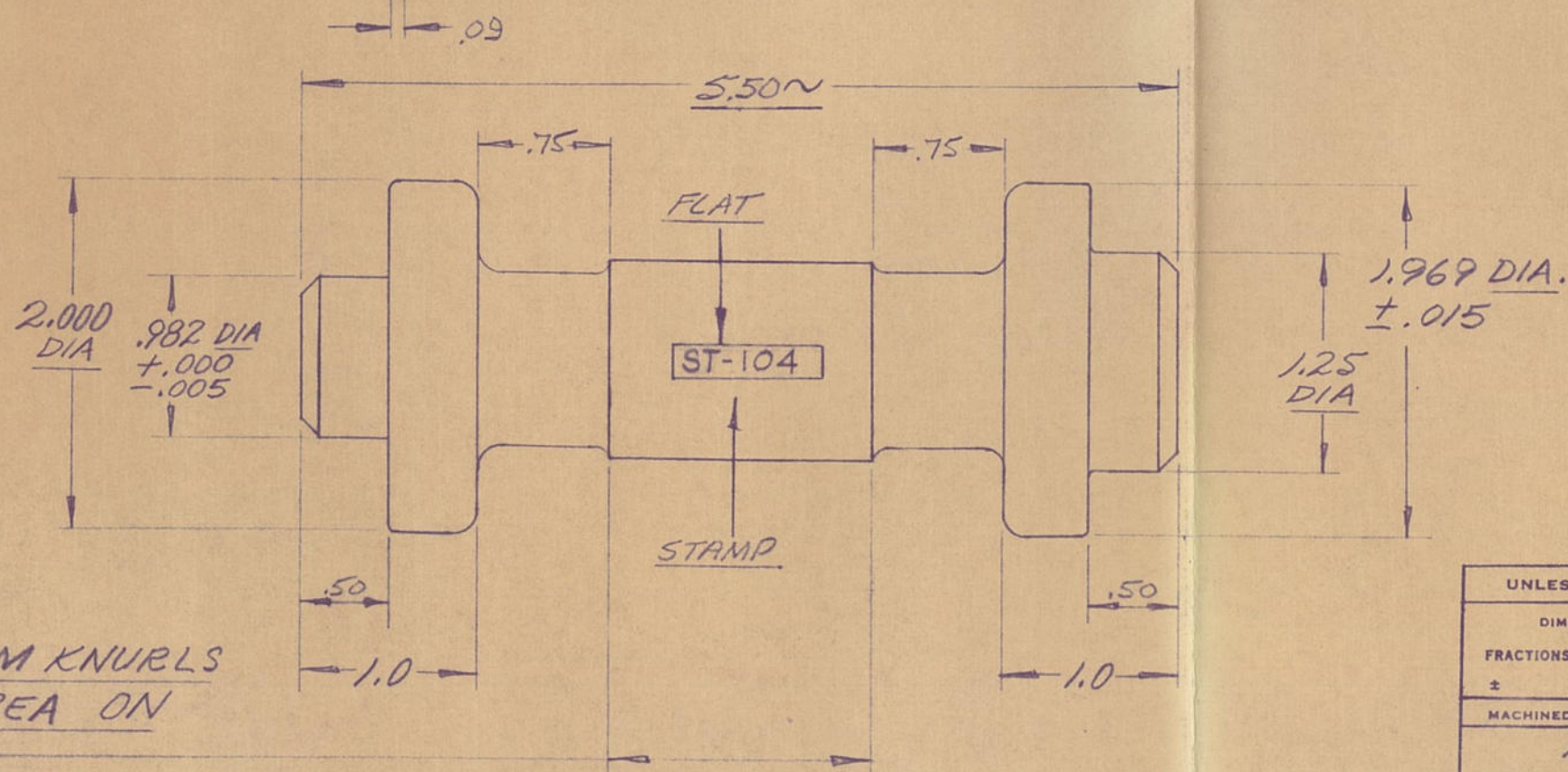
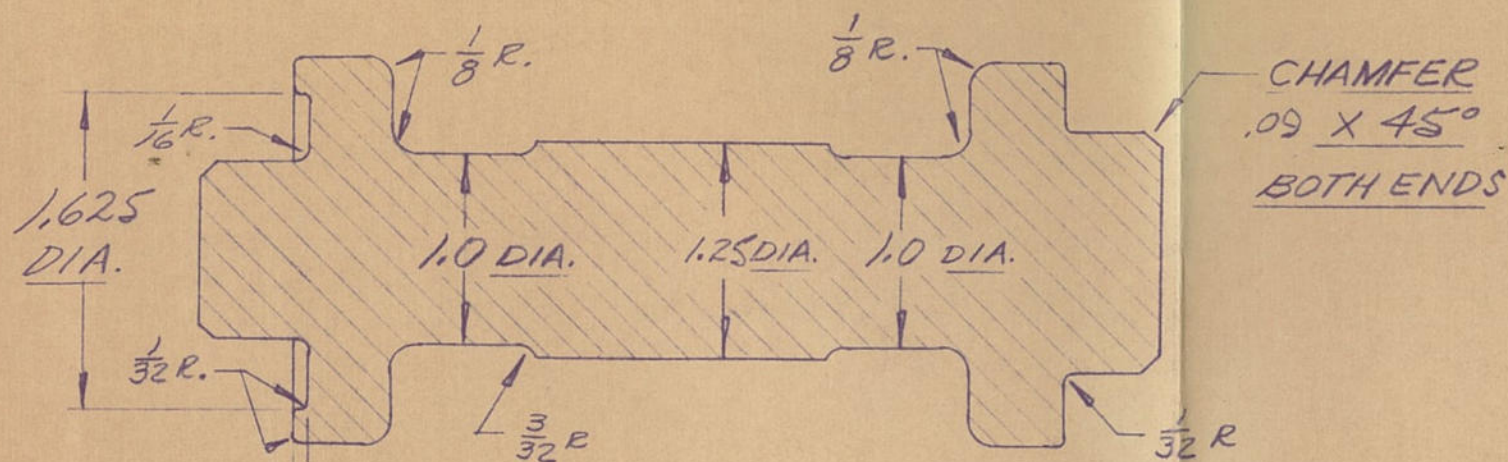
ST-103.1 A



1. NEXT ASSY ST-III
NOTE :

UNLESS OTHERWISE SPECIFIED				MAKE FROM ST-103.1																		
DIMENSIONS ARE IN INCHES TOLERANCE ON				MATL. SPECIFICATION		HEAT TREATMENT		FINISH														
<table border="1"> <tr> <th>FRACTIONS</th> <th colspan="3">DECIMALS</th> <th>ANGLES</th> </tr> <tr> <td>$\pm \frac{1}{32}$</td> <td>.X</td> <td>.XX</td> <td>.XXX</td> <td></td> </tr> <tr> <td></td> <td>$\pm .01$</td> <td>$\pm .005$</td> <td>$\pm .001$</td> <td></td> </tr> </table>				FRACTIONS	DECIMALS			ANGLES	$\pm \frac{1}{32}$	.X	.XX	.XXX			$\pm .01$	$\pm .005$	$\pm .001$		TITLE		PAXTON PRODUCTS	
FRACTIONS	DECIMALS			ANGLES																		
$\pm \frac{1}{32}$	.X	.XX	.XXX																			
	$\pm .01$	$\pm .005$	$\pm .001$																			
MACHINED FINISH MICROINCHES RMS				BASE- OUTER BRG SUPPORT		929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA																
SCALE 1/1		DRAWN BY	N D	20-MAY-66		CHECKED BY	N D	ST-103.1 A														

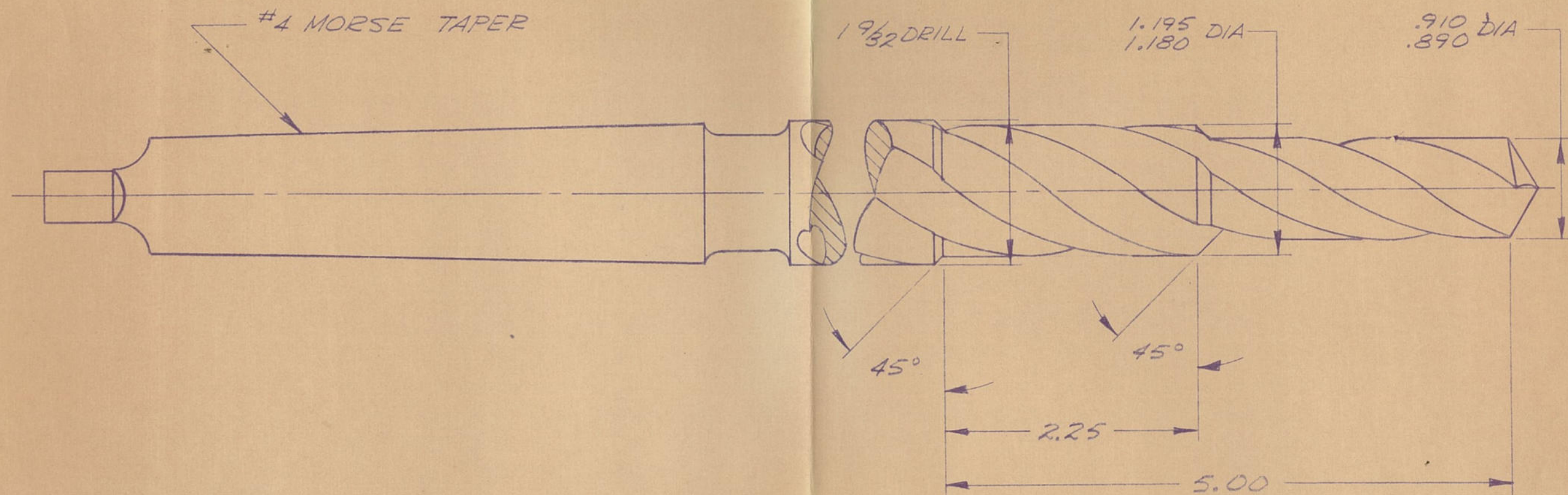
ST-104



MEDIUM KNURLS
 THIS AREA ON
 DIA.

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION	HEAT TREATMENT	FINISH
DIMENSIONS ARE IN INCHES TOLERANCE ON				C.R.S.	AS ROLLED	CAD PLATE
FRACTIONS	.X	DECIMALS	ANGLES	TITLE		
$\pm$	$\pm .1$	$\pm .03$ $\pm .010$	$\pm$	SEAL & BEARING		
MACHINED FINISH				TOOL		
125				PAXTON PRODUCTS		
				929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA		
SCALE FULL				DRAWN BY	N D	ST-104
				R. FALK	7/9/62	
				CHECKED BY	N D	
				JW	8-20-62	

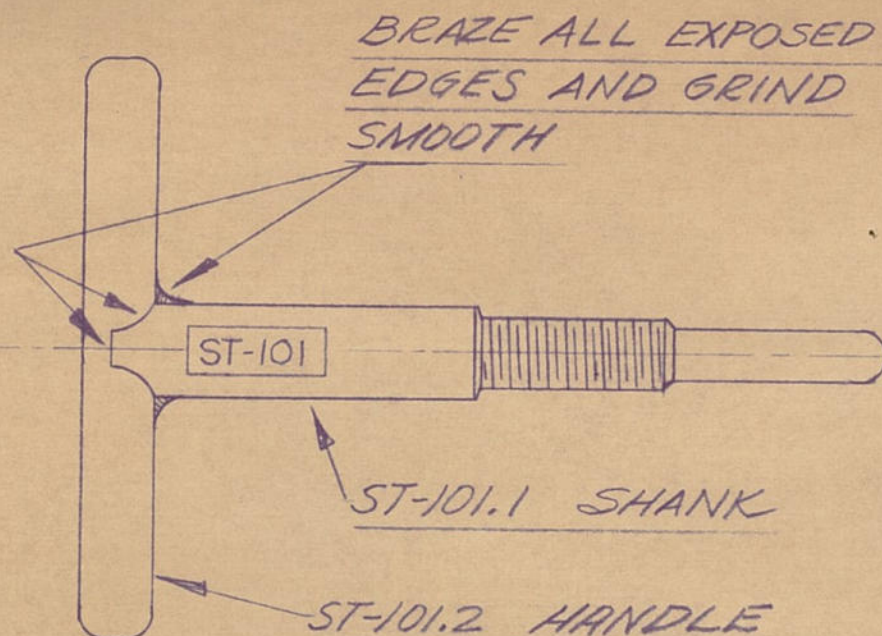
57-108



1. MAKE FROM $1 \frac{9}{32}$ DIA HSS DRILL
NOTE!

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± .X .XX .XXX ±.1 ±.03 ±.010 ±				NOTED		—		—	
				TITLE					
MACHINED FINISH MICROINCHES RMS				FORM TOOL				PAXTON PRODUCTS	
								929 OLYMPIC BLVD.	
								SANTA MONICA	
								CALIFORNIA	
SCALE 1/1		DRAWN BY	N D	CHECKED BY		N D	57-108		

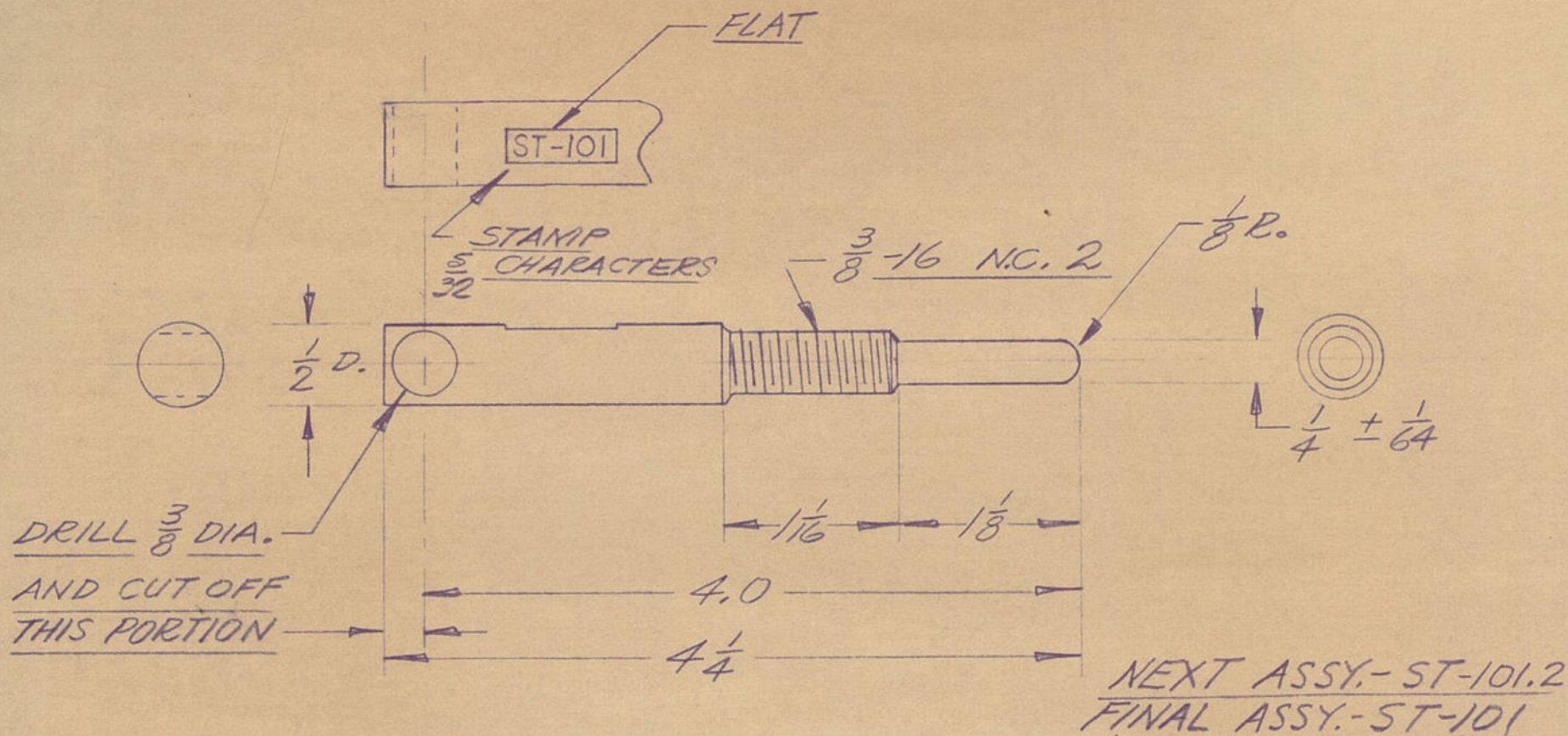
ST-101

NOTES

1. TO BE FREE OF
ALL SHARP EDGES,
GRIND MARKS, ETC.

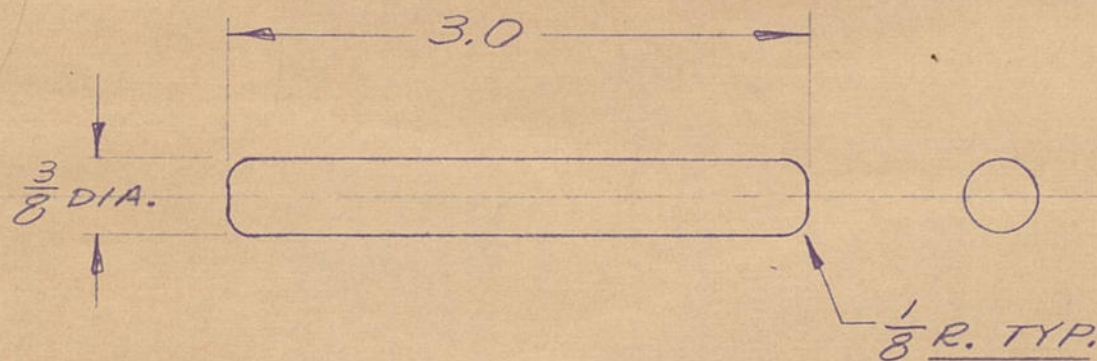
UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION		HEAT TREATMENT		FINISH		
DIMENSIONS ARE IN INCHES TOLERANCE ON			C.R.S.				CAD. PLATE		
FRACTIONS	DECIMALS	ANGLES	TITLE <u>IMPELLER</u> <u>PULLER</u> SH. 1 OF 3			PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
±	.X ±.1 .XX ±.03 .XXX ±.010	±							
MACHINED FINISH MICROINCHES RMS									
SCALE <u>FULL</u>		DRAWN BY	N D	R. FALK 6-20-62		CHECKED BY	N D	<u>JUN</u> 5-2-63	
								ST-101	

ST-101.1



UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION		HEAT TREATMENT		FINISH			
DIMENSIONS ARE IN INCHES TOLERANCE ON			C.R.S.							
FRACTIONS	DECIMALS		TITLE		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA					
±	.X ±.1	.XX ±.03	.XXX ±.010	±					SHANK - IMPELLER PULLER	
MACHINED FINISH MICROINCHES RMS										
SCALE FULL			DRAWN BY	N D	R. FALK 6-20-62	CHECKED BY	N D	ST-101.1		
					</					

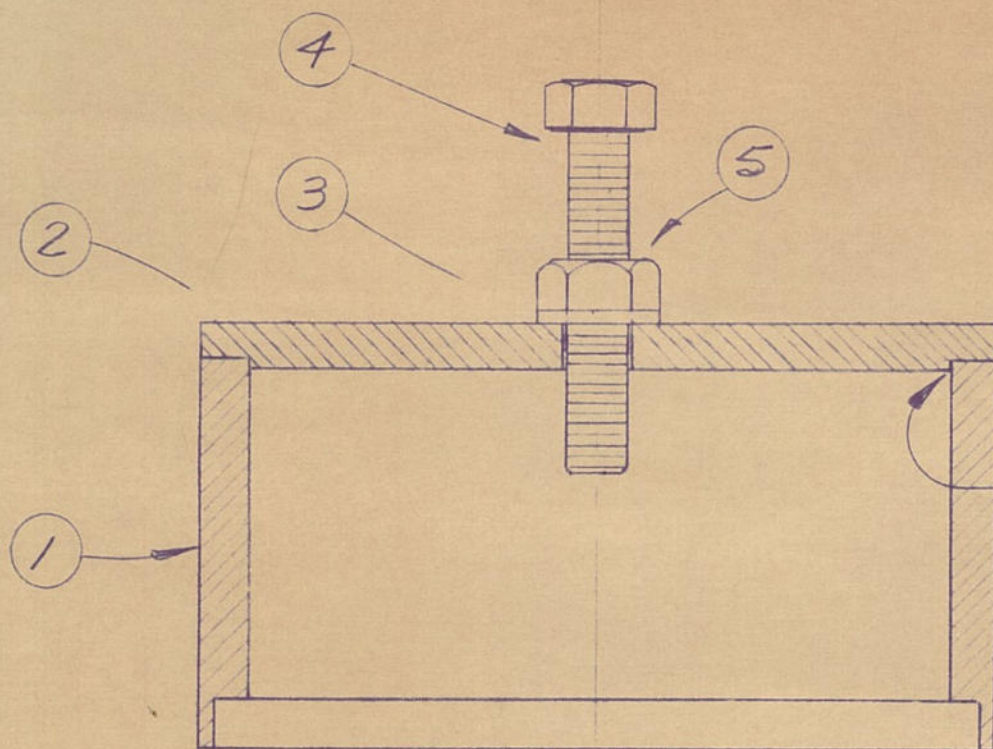
ST-101.2



NEXT ASSY.- ST-101.1
FINAL ASSY.- ST-101

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± .X .XX .XXX ± ±.1 ±.03 ±.010 ±				C.R.S.					
MACHINED FINISH MICROINCHES RMS				TITLE		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
				HANDLE IMPELLER PULLER SH. 3 of 3					
SCALE FULL		DRAWN BY	N	R. FALK	CHECKED BY	N	JLV	ST-101.2	
		D		6-20-62	D		5-2-63		

ST-102



- ① ST-102.1 RING
 ② ST-102.2 BAR
 ③ ST-102.5 WASHER
 ④ ST-102.3 SCREW
 ⑤ ST-102.4 NUT

FIT .005 - .010 LOOSE

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± ±.1 ±.03 ±.010 ±									
MACHINED FINISH MICROINCHES RMS				TITLE <u>TOOL -</u> <u>OUTER RACE</u> <u>REMOVAL</u>				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	
SCALE <u>FULL</u>		DRAWN BY	N D	<u>E. FALK</u> <u>7/6/62</u>		CHECKED BY	N D	<u>5-2-63</u> <u>ST-102</u>	

ST-102.1

BREAK EDGES



4.25 DIA.

4.015 D.
±.010

3.80 D.

ST-102

STAMP
5
32 CHARACTERS

MAT'L - 4.25 O.D

1/4 WALL (3.75 I.D.)

WELDED STEEL TUBE

2.0

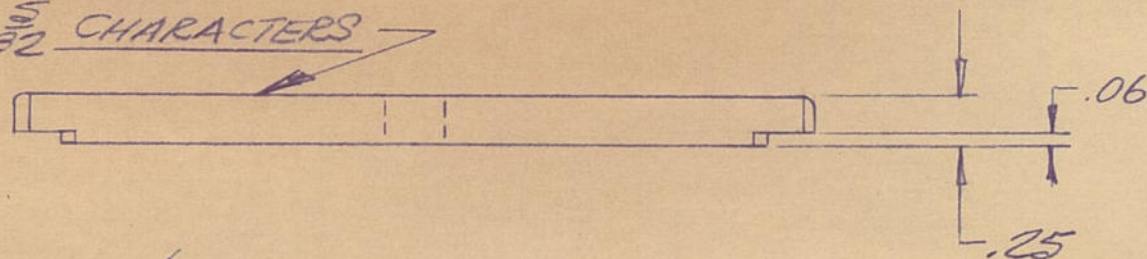
UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON			SAE 1015		AS DRAWN		CAD PLATE	
FRACTIONS			DECIMALS		ANGLES		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	
±			.X .XX .XXX		±			
±.1 ±.03 ±.010			±					
MACHINED FINISH			25 MICROINCHES RMS					
			TITLE					
			RING					
			BRG. HSG. SUPPORT					
			</					

ST-102.2

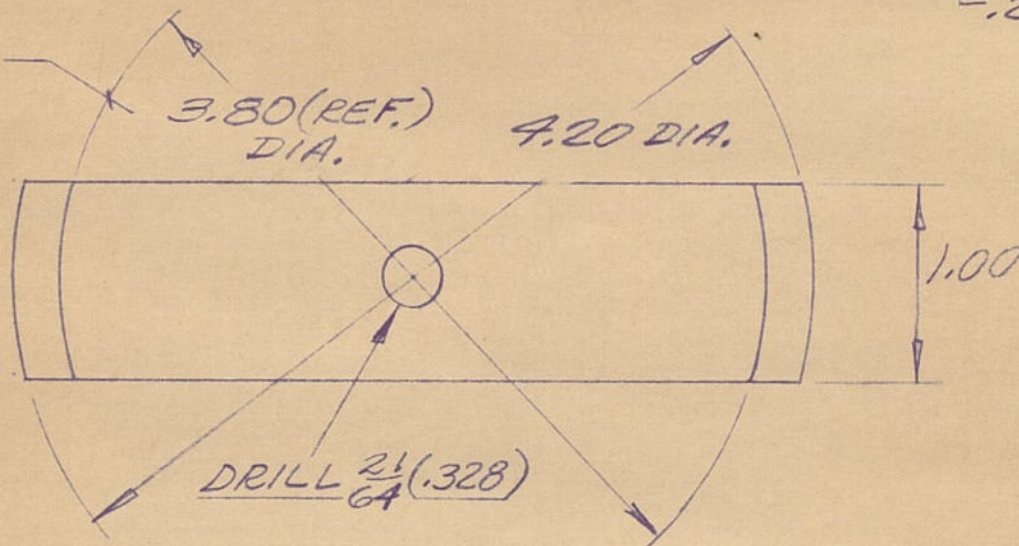
STAMP

ST-102

32 CHARACTERS



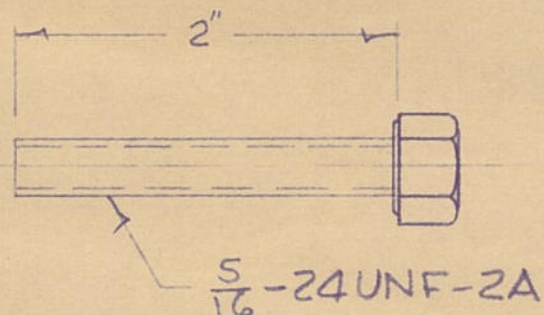
FIT THIS DIA TO
ST-102.1 RING
AS SHOWN ON
DWG. ST-102



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH					
DIMENSIONS ARE IN INCHES TOLERANCE ON				CRS		AS ROLLED		CAD. PLATE.					
FRACTIONS		DECIMALS		ANGLES		TITLE FLAT BAR							
±		.X ±.1 .XX ±.03 .XXX ±.010		±									
MACHINED FINISH				MICROINCHES RMS		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA							
SCALE FULL		DRAWN BY		N D	R. FALK 7/6/62		CHECKED BY		N D	JW 8-20-62		ST-102.2	

REV 12/8/65 Bcr

ST-102.3 1

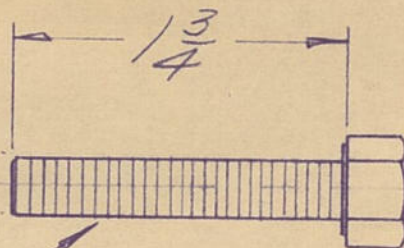


REF-103335 HEX HD CAP SCREW

CAD PLATE

UNLESS OTHERWISE SPECIFIED		MATL. SPECIFICATION	HEAT TREATMENT	FINISH
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS: .X .XX .XXX $\pm 1/32$ $\pm .01$ $\pm .003$ DECIMALS ANGLES MACHINED FINISH MICROINCHES RMS		PAXTON PRODUCTS DIVISION OF STUDEBAKER INDUSTRIES, INC.		
DRAWN <i>CONNORZ</i> CHECKED		TITLE SCREW- HEX HD CAP		
DATE 12/8/65 DATE		SCALE 1/1	SH. OF —	ST-102.3 1

ST-102.3



5/16 - 24 UNF - 2A

REF - 103333 HEX HD. CAP SCREW

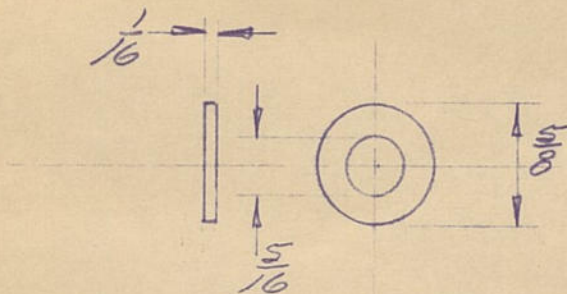
UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS: .X .XX .XXX ANGLES ± ±.1 ±.03 ±.010 ±								CAP PLATE	
MACHINED FINISH MICROINCHES RMS				TITLE <u>SCREW -</u> <u>HEX HD. CAP</u>				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	
SCALE <u>FULL</u>		DRAWN BY N <u>E. FALK</u> D <u>7-6-62</u>	CHECKED BY N <u>JW</u> D <u>5-2-63</u>	ST-102.3					

ST-102.4

 $\frac{5}{16}$ -24 UNF-2BREF-101357 HEX NUT, $\frac{5}{16}$ -24

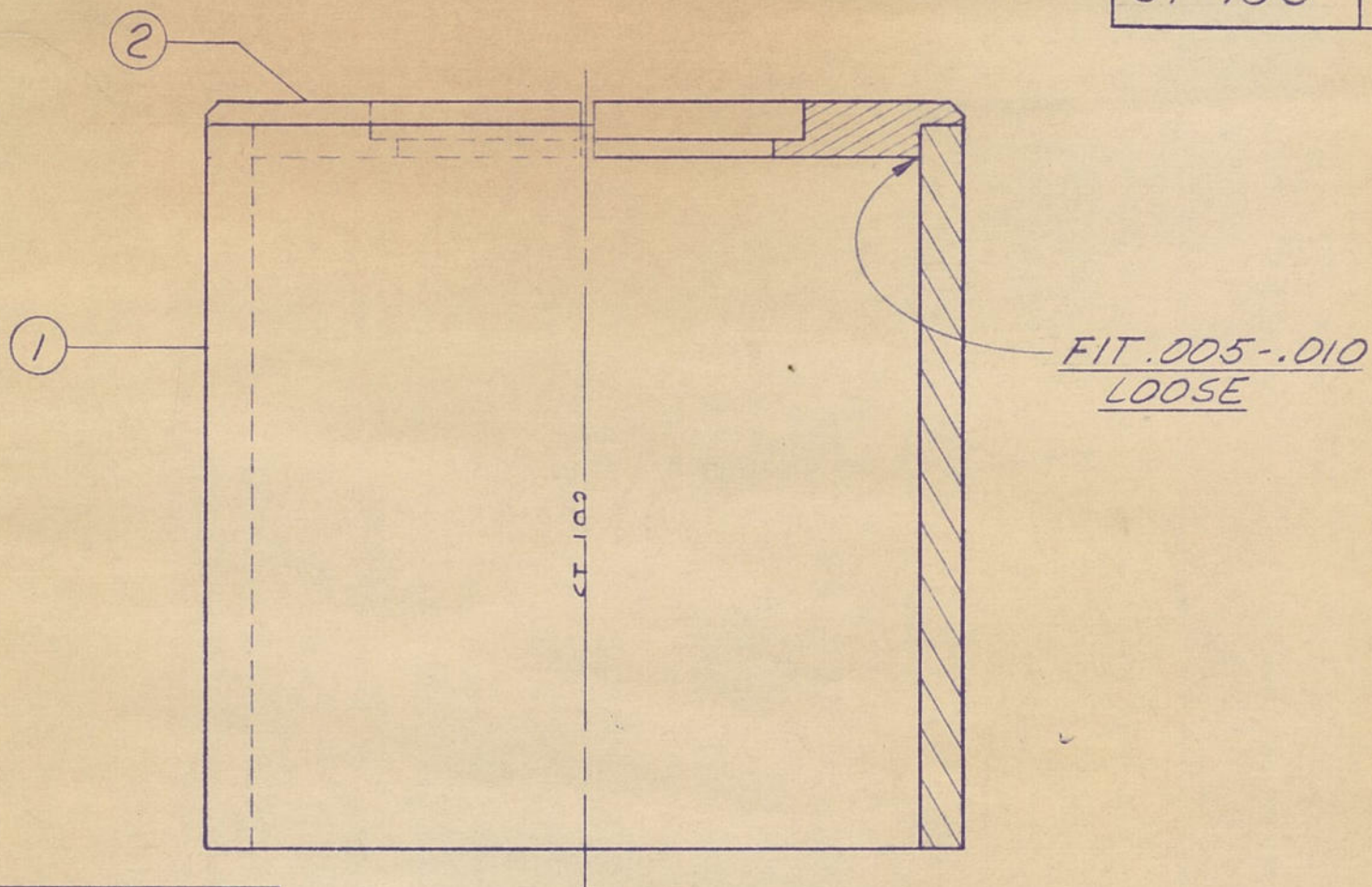
UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± .X .XX .XXX ± ±.1 ±.03 ±.010 ±				TITLE				CAD PLATE	
MACHINED FINISH MICROINCHES RMS				NUT-HEX				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	
SCALE FULL		DRAWN BY	N D	R. FALK 7/6/62	CHECKED BY	N D	JUN 5-1-63	ST-102.4	

ST-102.5

REF-100350 WASHER, PLAIN- $\frac{5}{16}$

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS: .X .XX .XXX ± ±.1 ±.03 ±.010 ± ANGLES ± MICROINCHES RMS				STEEL				CAD PLATE	
MACHINED FINISH				TITLE		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
				WASHER PLAIN FLAT					
SCALE FULL		DRAWN BY	N	R. FALK	CHECKED BY	N	SW	ST-102.5	
		D		7/6/62	D		5-2-63		

ST-103

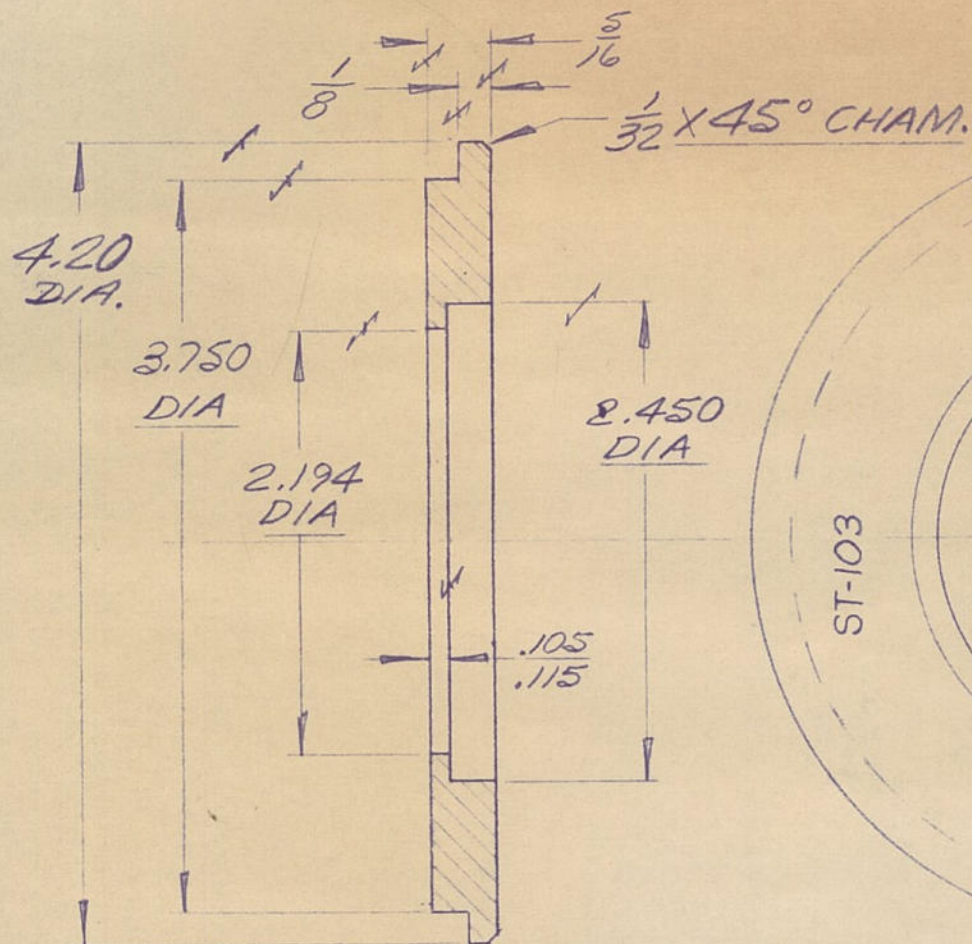


Nº	REQ	PART Nº	DESCRIPTION
1	1	ST 103.1	BASE
2	PAIR	ST 103.2	TOP PLATES

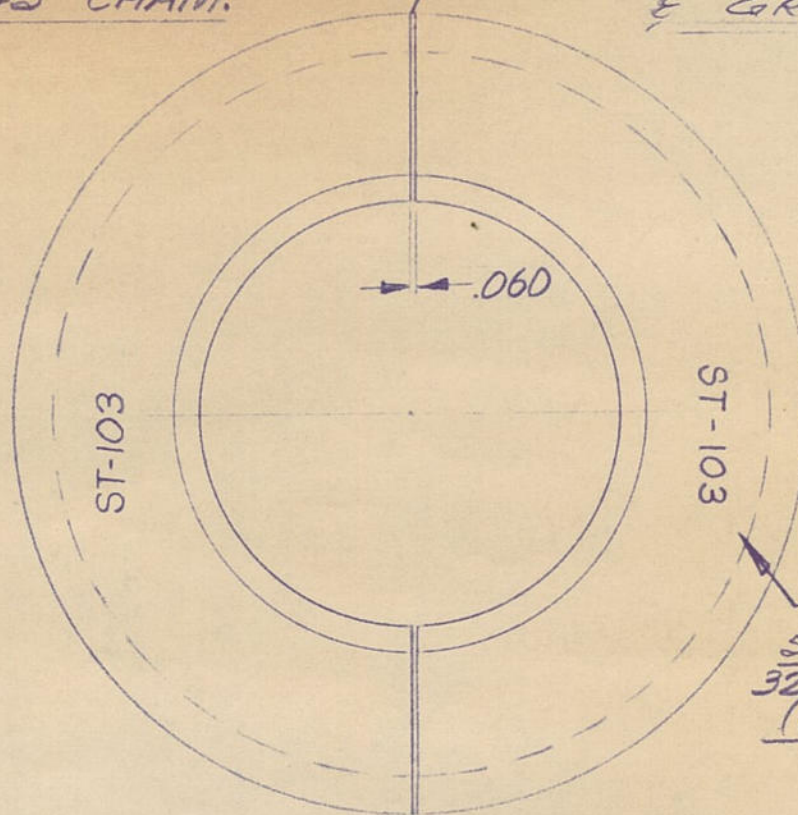
UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION	HEAT TREATMENT	FINISH
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS .X .XX .XXX ANGLES ± ±.1 ±.03 ±.010 ±			TITLE		
MACHINED FINISH MICROINCHES RMS			<u>BEARING</u> <u>SUPPORT</u>		
SCALE FULL			DRAWN BY L. BENNETT D 5-2-63		
			CHECKED BY JAN D 5-2-63		
			ST-103		

PAXTON PRODUCTS
 929 OLYMPIC BLVD.
 SANTA MONICA
 CALIFORNIA

ST-103.2



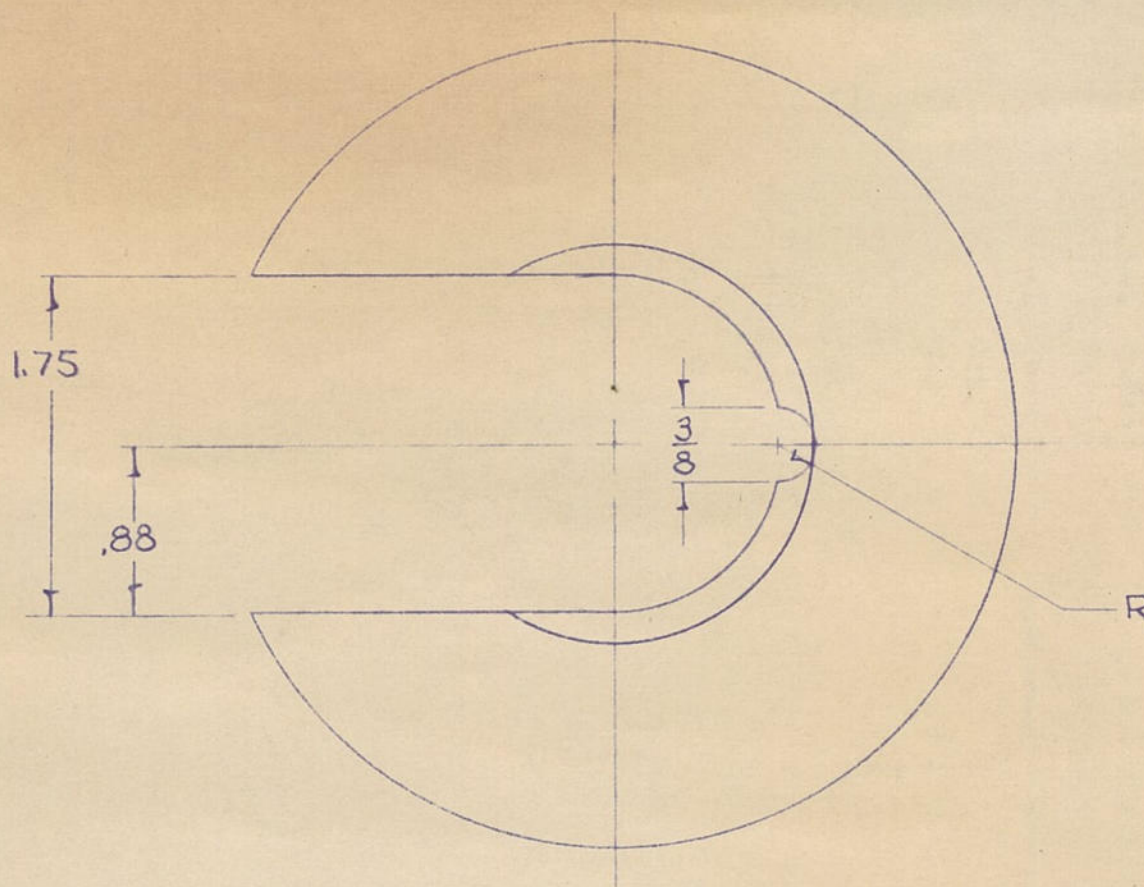
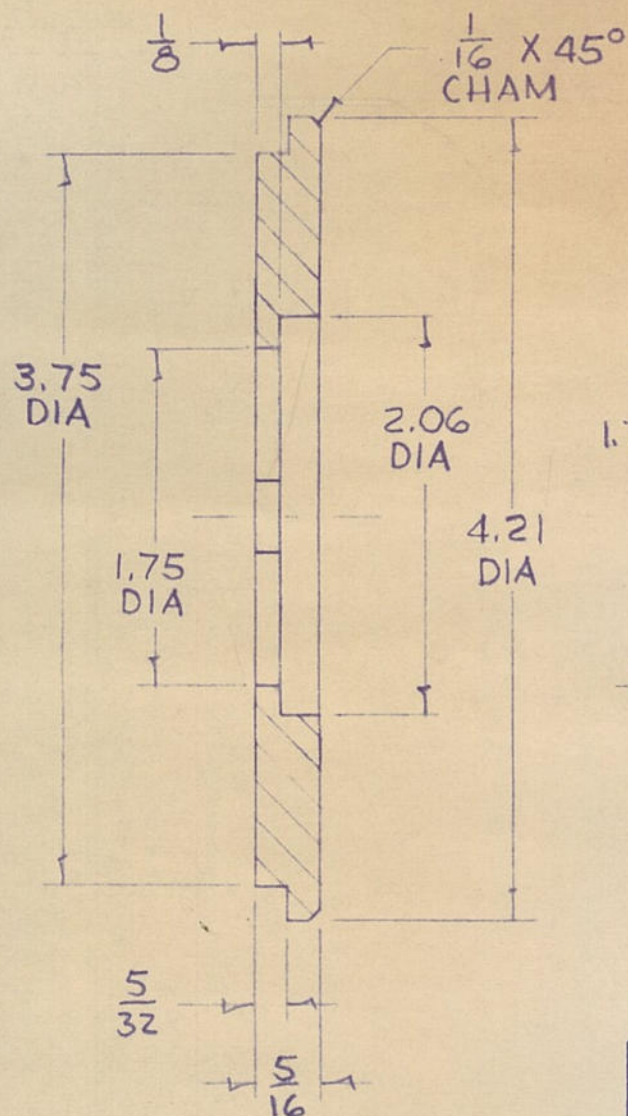
AFTER MACHINING -
CUT IN HALF
& GRIND



STAMP
 $\frac{5}{32}$ CHARACTERS
(TYP-2)

UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION				HEAT TREATMENT				FINISH			
DIMENSIONS ARE IN INCHES TOLERANCE ON								CAD PLATE							
FRACTIONS		DECIMALS				ANGLES		TITLE BRG. SUPPORT TOP PLATES							
±		.X .XX .XXX ±.1 ±.03 ±.010				±									
MACHINED FINISH				MICROINCHES RMS				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA							
SCALE FULL				DRAWN BY		N R. FALK		N Jm		ST-103.2					
						D 7-18-62		D 8-20-62							

ST-103.2 A



UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCE ON

FRACTIONS	DECIMALS	ANGLES
$\pm \frac{1}{32}$	$\pm .01$	$\pm 1^\circ$

MACHINED FINISH MICROINCHES RMS

125

DRAWN *Bo*

DATE 20 MAY 66

CHECKED

DATE

CRS

MATL. SPECIFICATION

HEAT TREATMENT

CAD PLATE

FINISH

PAXTON PRODUCTS

DIVISION OF STUDEBAKER INDUSTRIES, INC.

TITLE

PLATE -
OUTER BRG SUPPORT

SCALE

1/1

SH.

OF

ST-103.2

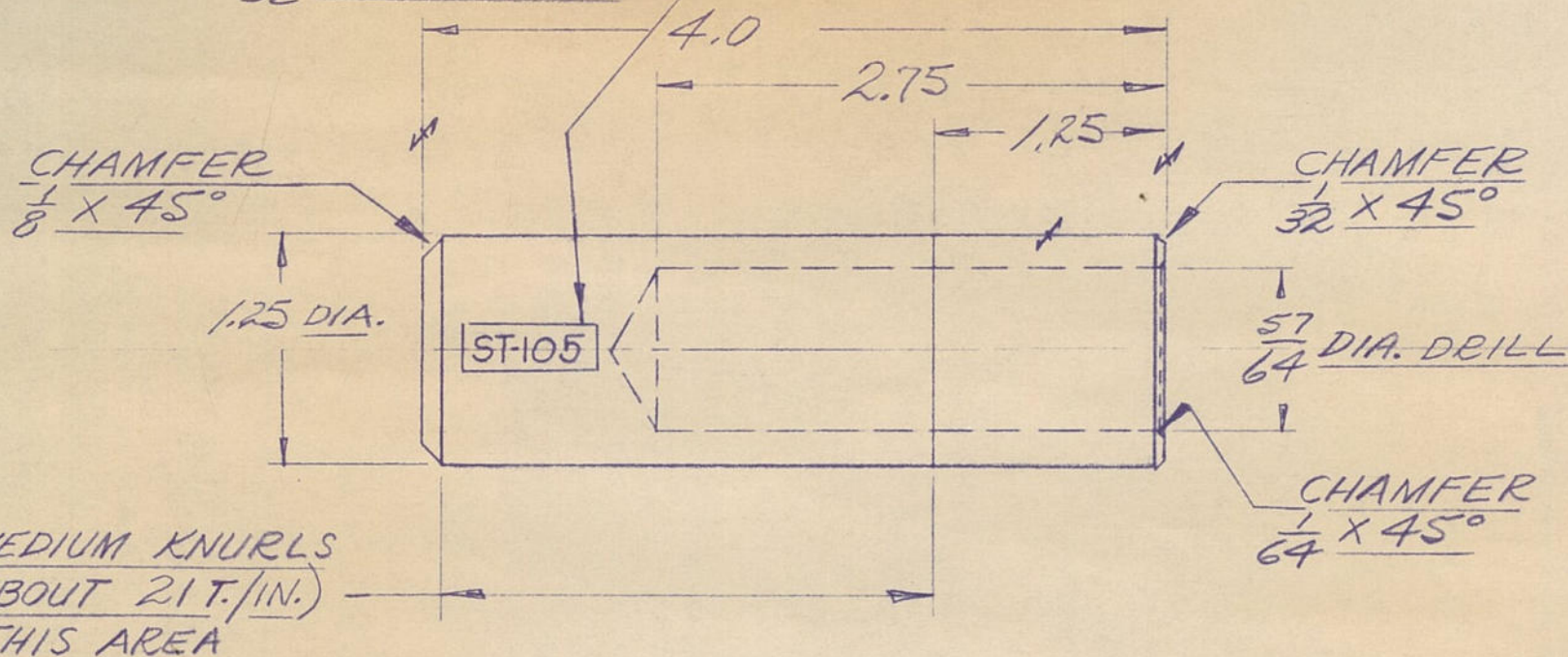
A

1. NEXT ASSY ST-III

NOTE:

ST-105

AFTER KNURLING,
GRIND FLAT AND
STAMP, $\frac{5}{32}$ CHARACTERS



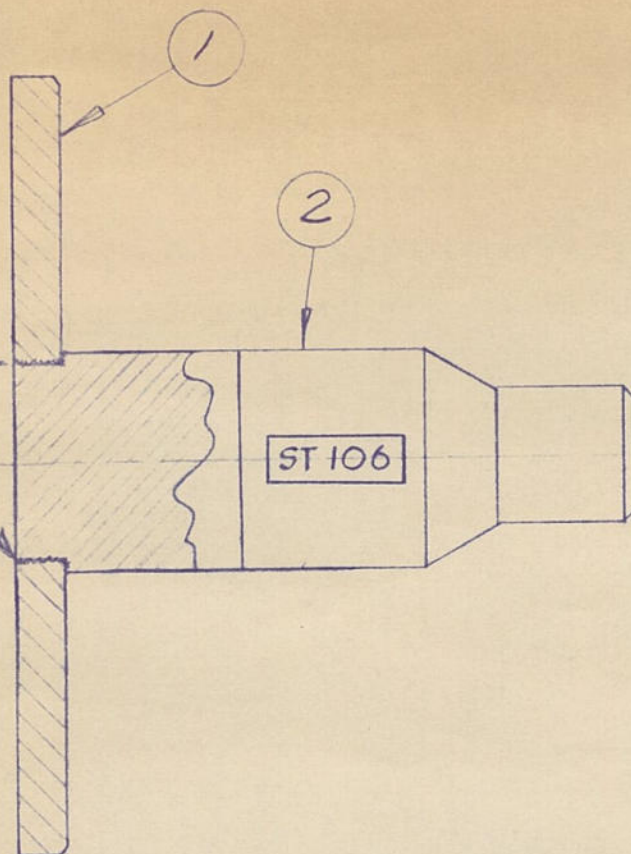
UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON				C.R.S.		AS ROLLED		CAD PLATE.	
FRACTIONS		DECIMALS		ANGLES		TITLE <u>SEAT TOOL</u> <u>OUTER MAIN BRG.</u>			
±		.X ±.1 .XX ±.03 .XXX ±.010		±					
MACHINED FINISH <u>1/25</u> MICROINCHES RMS						PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
SCALE <u>FULL</u>		DRAWN BY	N D	R. FALK 6-25-62		CHECKED BY	N D	JW 8-20-62	
								ST-105	

ST-106

① ST-106.2

② ST-106.1

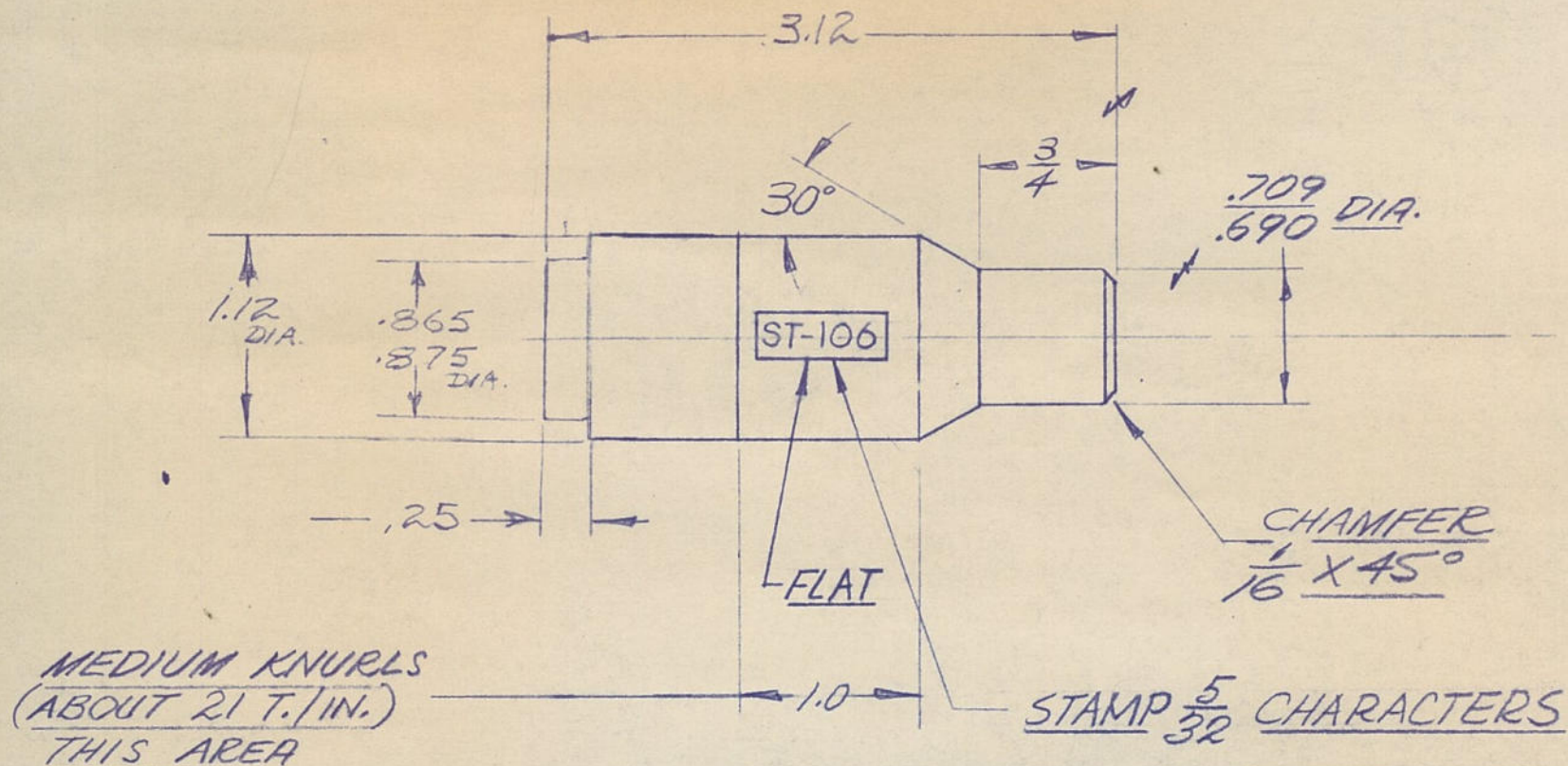
FURNACE BRAZE
OR
SILVER SOLDER



TO BE FLAT AND
SQUARE WITH ϕ
WITHIN $0^{\circ}30'$

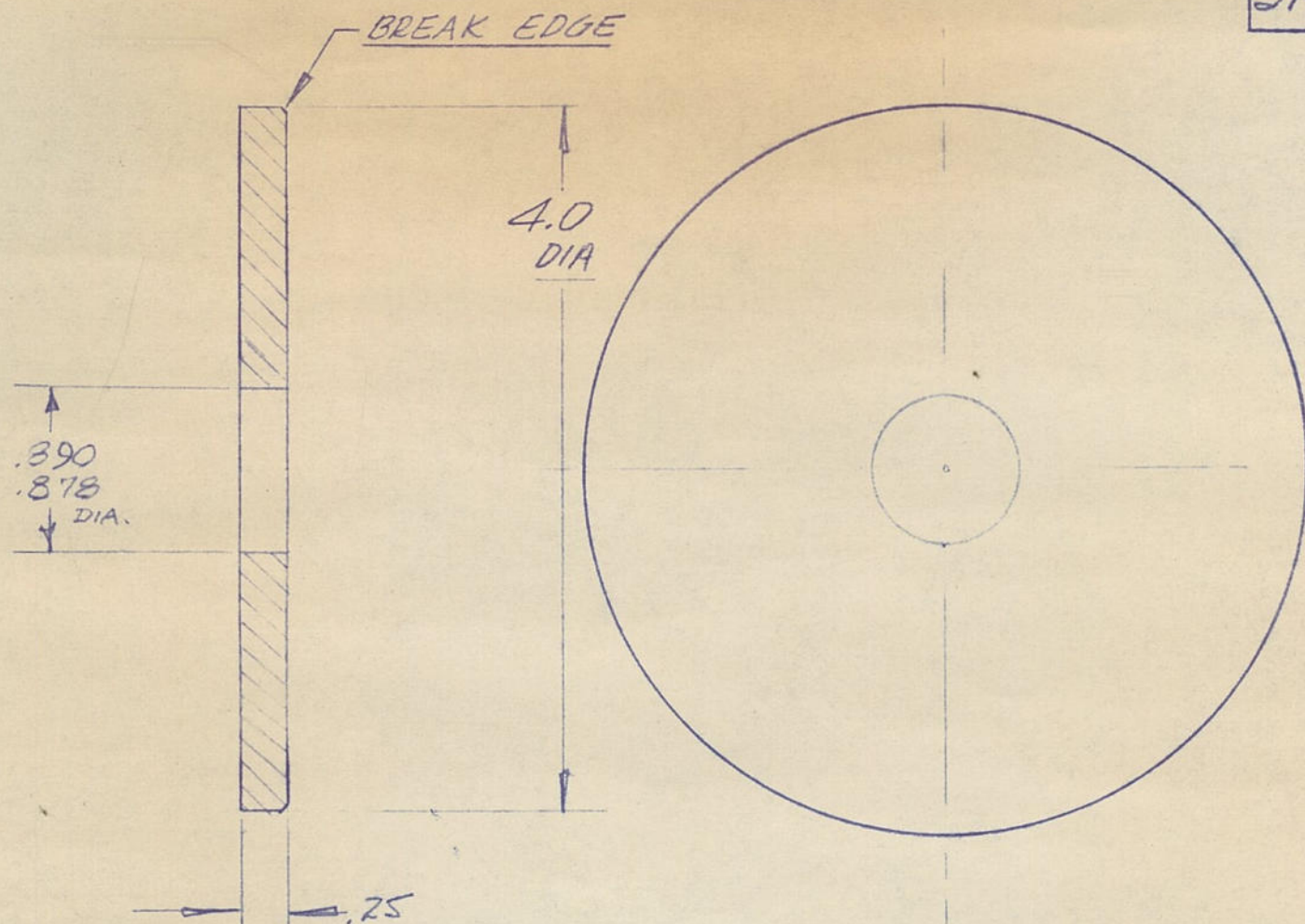
UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION	HEAT TREATMENT	FINISH
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± .X .XX .XXX ± ±.1 ±.03 ±.010 ±			CAD PLATE		
MACHINED FINISH MICROINCHES RMS			TITLE SUPPORT TOOL INPUT SHAFT SH. 1 OF 3		
SCALE <i>FULL</i>			PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA		
DRAWN BY N <i>R. FALK</i> D <i>7-16-62</i>			CHECKED BY N <i>JW</i> D <i>5-2-63</i>		
			ST-106		

ST-106.1



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON				C.R.S.		AS ROLLED		CAD. PLATE	
FRACTIONS		DECIMALS		ANGLES		TITLE SUPPORT TOOL INPUT SHAFT SH. 2 OF 3			
±		.X ±.1		.XX ±.03					
MACHINED FINISH ¹ / ₂₅ MICROINCHES RMS				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA					
SCALE FULL		DRAWN BY	N D	R. FALK 6-25-62		CHECKED BY	N D	JCK 8-20-62	
								ST-106.1	

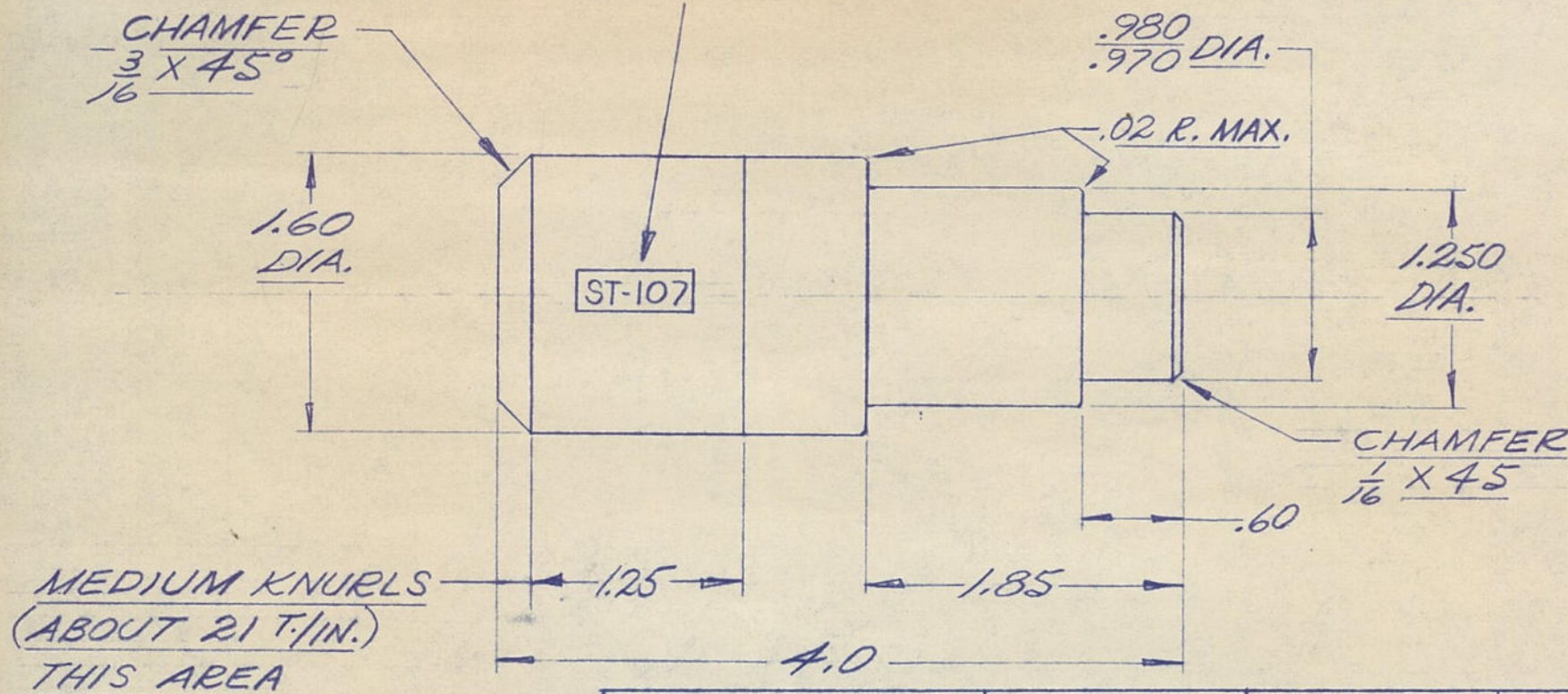
ST-106.2



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS: DECIMALS ANGLES ± .X .XX .XXX ± .1 ±.03 ±.010 ± 30' MACHINED FINISH 75 MICROINCHES RMS				C.R.S.		AS ROLLED		CAD. PLATE	
				TITLE SUPPORT TOOL INPUT SHAFT SH. 3 OF 3					
SCALE FULL		DRAWN BY	N D	E. FALK 7-16-62		CHECKED BY	N D	JW 8-20-62	
								ST-106.2	
								PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	

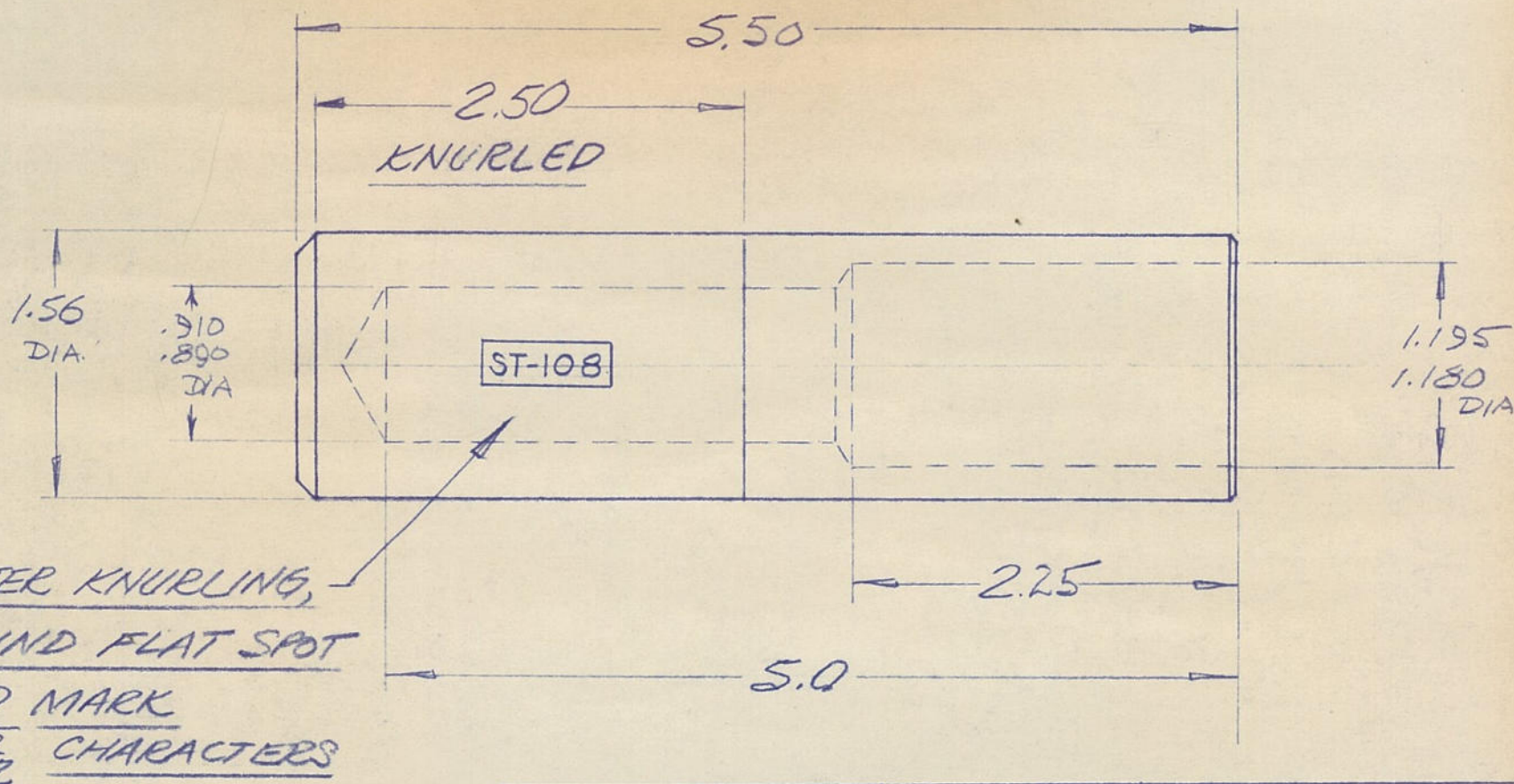
ST-107

AFTER KNURLING -
GRIND FLAT SPOT
AND MARK: $\frac{5}{32}$ CHARACTERS



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON				C. R. S.		AS ROLLED		CAD PLATE	
FRACTIONS		DECIMALS		ANGLES		TITLE <u>DRIVE TOOL</u> <u>BRG & SEAL</u> <u>REMOVAL</u>			
±		.X ±.1 .XX ±.03 .XXX ±.010		±					
MACHINED FINISH $\frac{1}{25}$ MICROINCHES RMS						PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
SCALE <u>FULL</u>		DRAWN BY	N D	R. FALK 6-28-62		CHECKED BY	N D	Jew 8/20/62 ST-107	

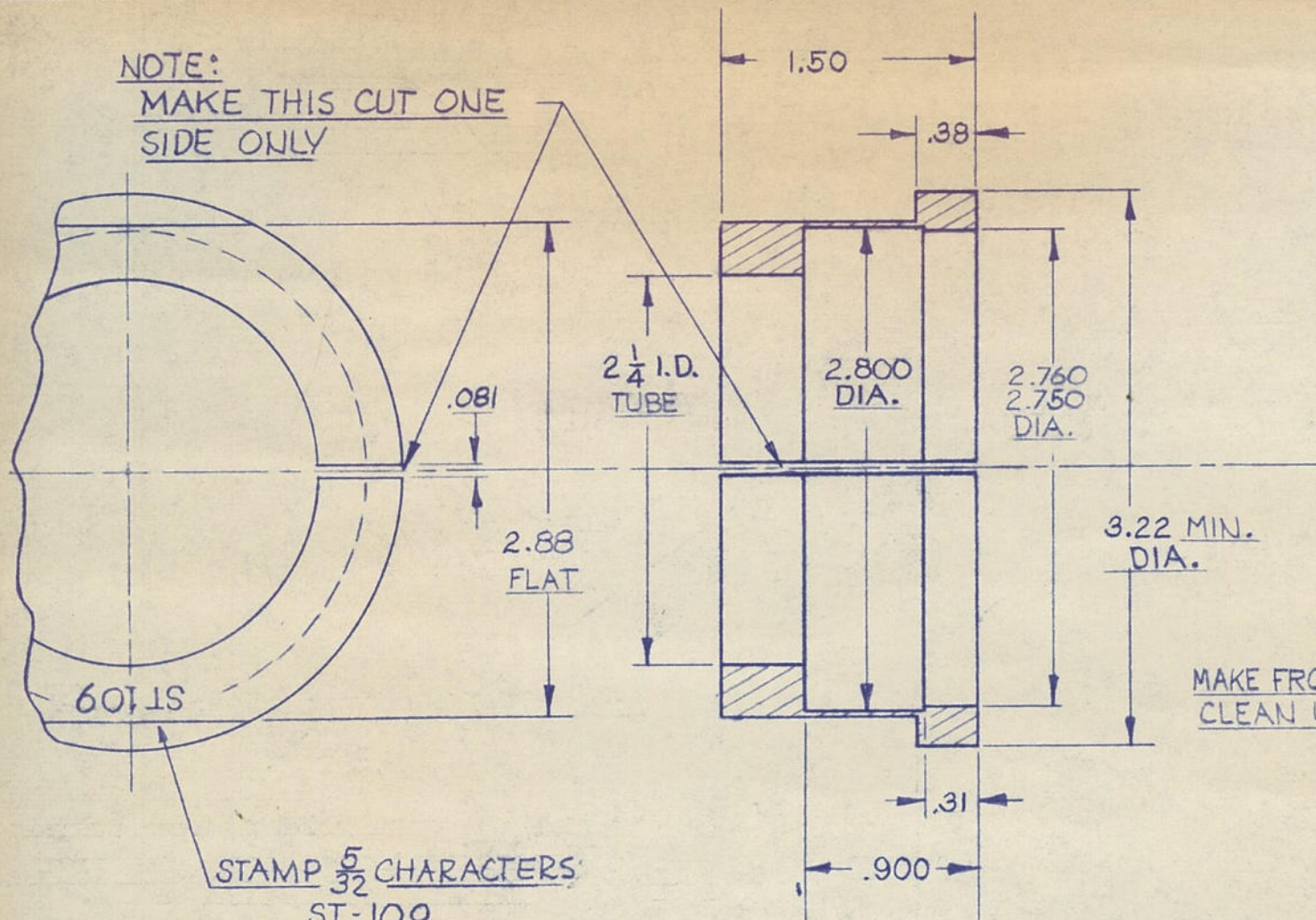
ST-108



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON				C.R.S.		AS ROLLED		CAD PLATE	
FRACTIONS		DECIMALS		ANGLES		TITLE <u>SEAT TOOL</u> <u>INNER MAIN BRG.</u>			
.X ±		.XX .XXX ±.1 ±.03 ±.010		±					
MACHINED FINISH				MICROINCHES RMS		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA			
SCALE <u>FULL</u>		DRAWN BY		N D		R. FALK 7-16-62		CHECKED BY	
				N D		JEN 8-20-62		ST-108	

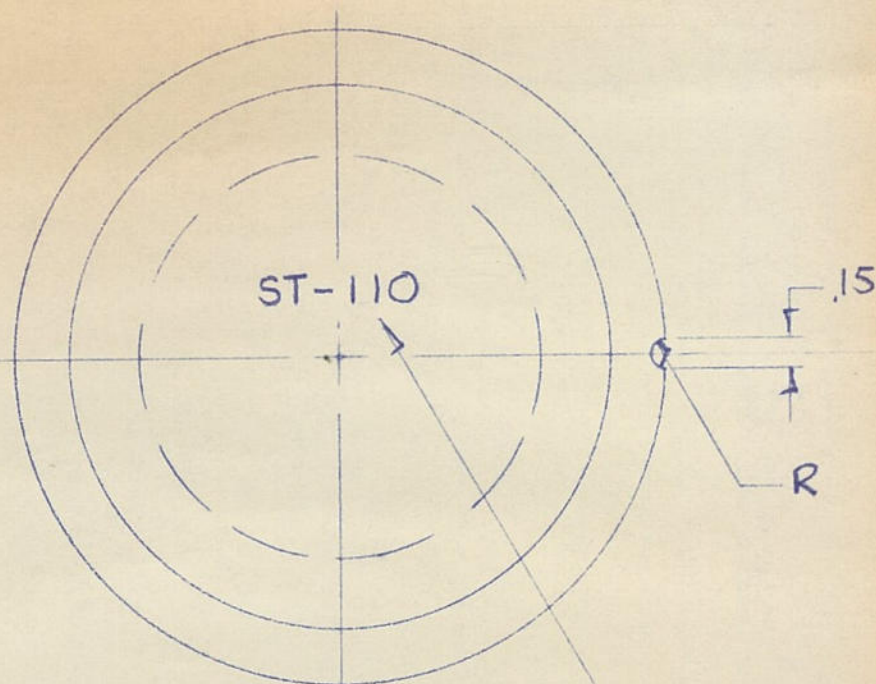
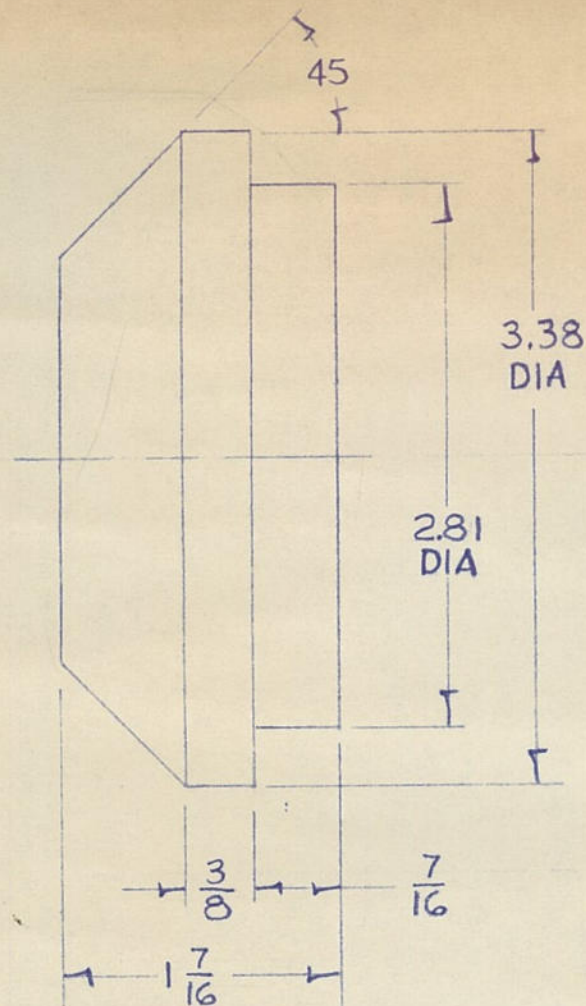
ST-109

NOTE:

MAKE THIS CUT ONE
SIDE ONLY

UNLESS OTHERWISE SPECIFIED			MATL. SPECIFICATION		HEAT TREATMENT		FINISH	
DIMENSIONS ARE IN INCHES TOLERANCE ON			2024 ALUM.		T-6		HARD ANODIZE	
FRACTIONS			DECIMALS		ANGLES		PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA	
±			.X ±.1 .XX ±.03 .XXX ±.010		±			
MACHINED FINISH			MICROINCHES RMS					
			TITLE					
			TOOL BALL DRIVER HOLDING FIXTURE					
SCALE FULL			DRAWN BY		N D		L. BENNETT 3-4-63	
			CHECKED BY		N D		ST-109	

ST-110

STAMP $\frac{5}{32}$
CHARACTERS

UNLESS OTHERWISE SPECIFIED				
DIMENSIONS ARE IN INCHES TOLERANCE ON				
FRACTIONS	DECIMALS		ANGLES	
$\pm \frac{1}{32}$	.X $\pm .1$	.XX $\pm .01$	.XXX $\pm .003$	$\pm$
MACHINED FINISH		MICROINCHES RMS		
125				
DRAWN Rc		DATE 5/26/66		
CHECKED		DATE		

ALUM

MATL. SPECIFICATION

HEAT TREATMENT

FINISH

PAXTON PRODUCTS

DIVISION OF STUDEBAKER INDUSTRIES, INC.

TITLE

BALL RACE TOOL

SCALE

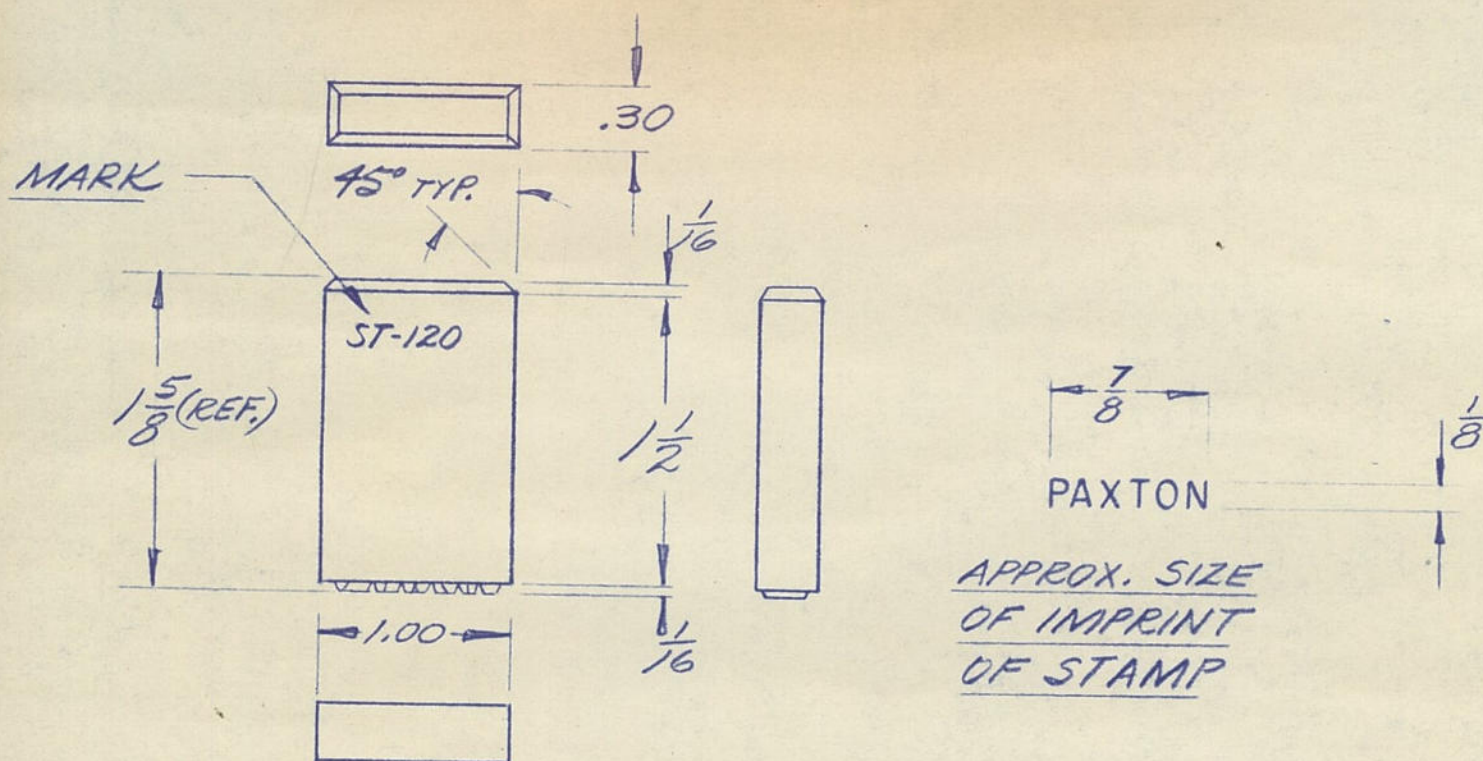
1/1

SH.

OF

ST-110

ST-120



UNLESS OTHERWISE SPECIFIED				MATL. SPECIFICATION	HEAT TREATMENT	FINISH
DIMENSIONS ARE IN INCHES TOLERANCE ON FRACTIONS DECIMALS ANGLES ± .X .XX .XXX ± .1 ± .03 ± .010 ±				TITLE		
MACHINED FINISH MICROINCHES RMS				TOOL STAMP "PAXTON"		
				PAXTON PRODUCTS 929 OLYMPIC BLVD. SANTA MONICA CALIFORNIA		
SCALE FULL		DRAWN BY	N E. FALK	CHECKED BY	N J. W.	ST-120
		D	7/9/62	D	5-2-63	