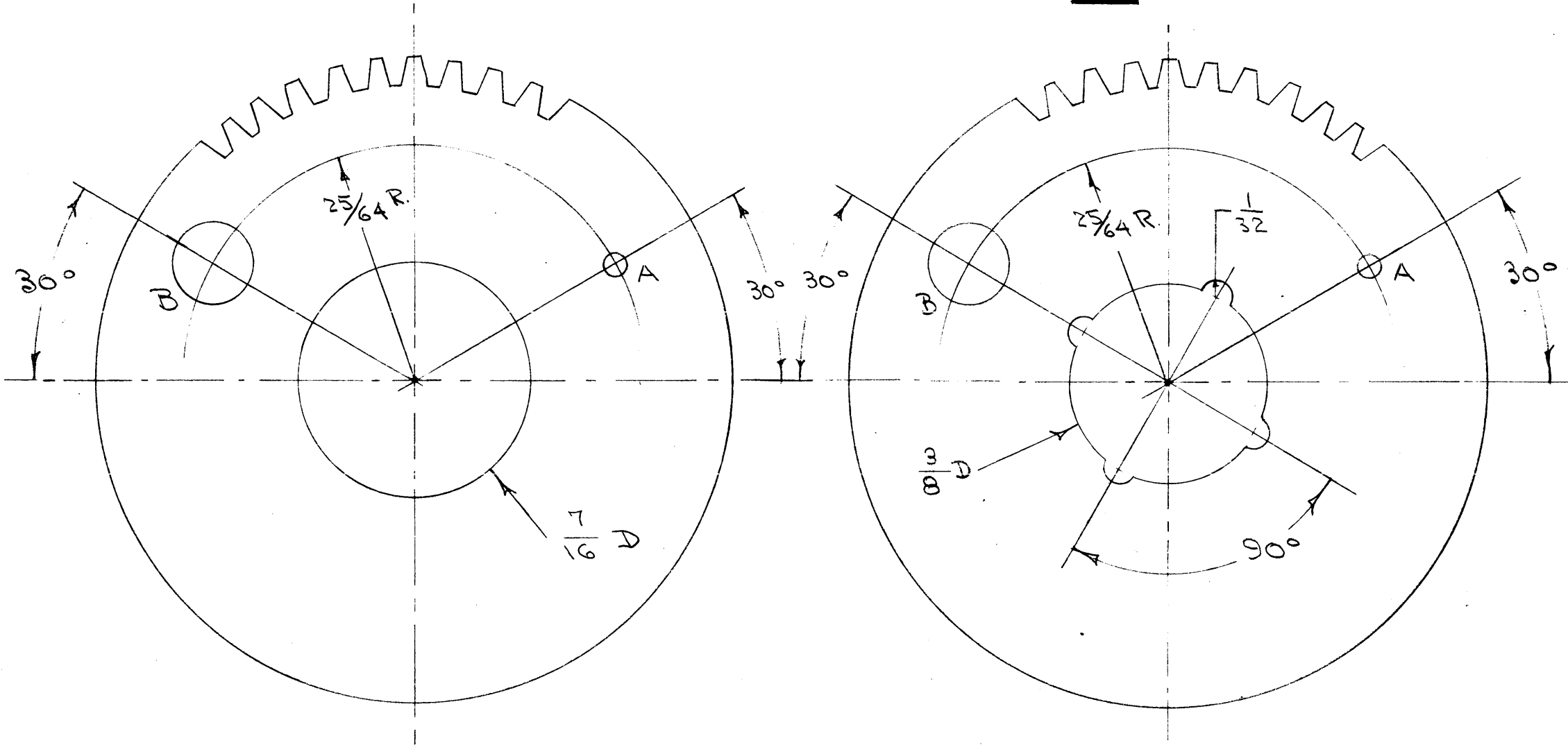


FOUND DESIRABLE TO CHANGE ANY TOLERANCE
OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY
THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETER-
MINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION.
REMOVE ALL BURRS AND SHARP EDGES

GR-119 A

A - 3/64 (.046) D.
B - 5/32 (.156) D.



55 TEETH
48 PITCH
14 1/2° PRESSURE ANGLE
1.1458 P.D.
(COMMERCIAL CLASS 3 TOL.)

FREE GEAR
GR-119-1

FIXED GEAR
GR-119-2

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
	.064	THE TECHNICAL MATERIEL CORP.	
	STOCK SIZE	MAMARONECK. NEW YORK	
ALUMINUM		GEARS, FREE & FIXED	
MATERIAL	WEIGHT PER PC.		
2AS-TA			
TYPE & TEMPER		ADD. 4-14-55	
HEAT TREAT. SPEC.		DRAWN	ELEC. DES. APP. MECH. DES. APP.
YELLOW IRIDITE		CHECKED	FINAL APPROVAL
FINISH & SPEC. NO.			GR-119

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
A	1	CLASS 3 TOL. ADDED	5-14-55	1	PB	ODS	NSC

TOLERANCES: DEC. DIM. ±, FRAC. DIM. ± 1/64, ANGULAR DIM. ± 1/16

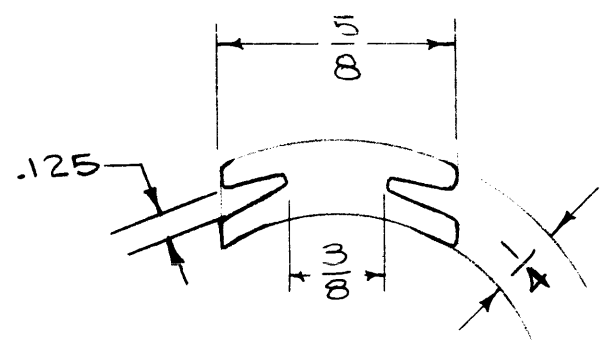
SCALE: DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.

REQ. PER UNIT: MODEL, PROJECT NO., ASS'Y. NO., DATE

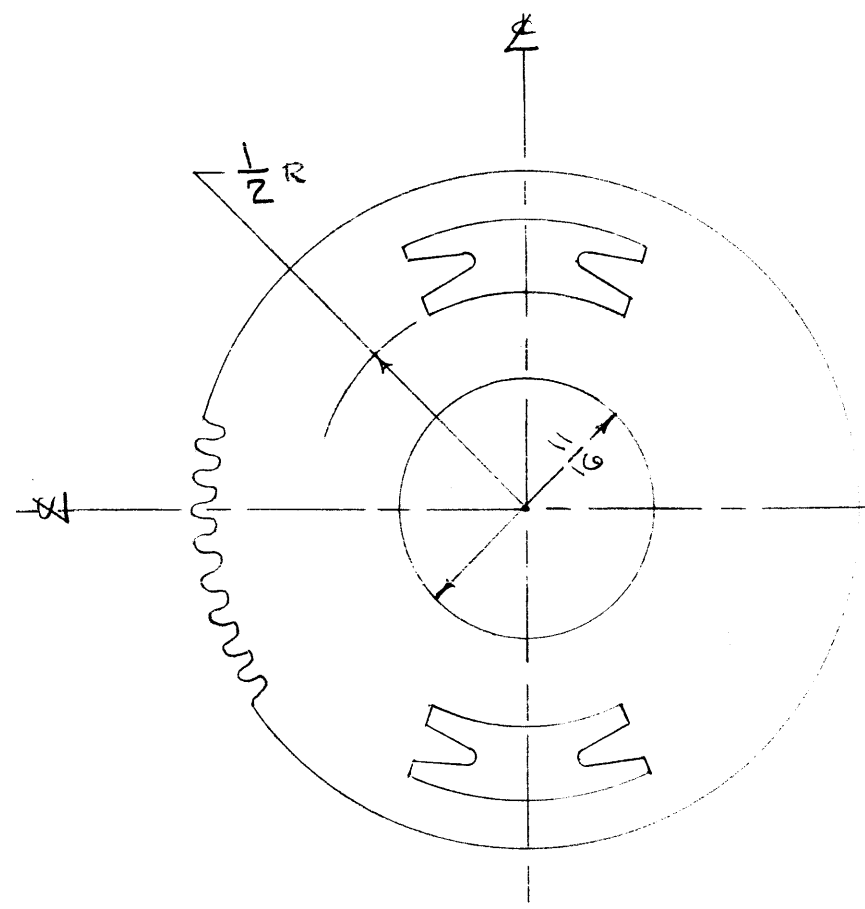
IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

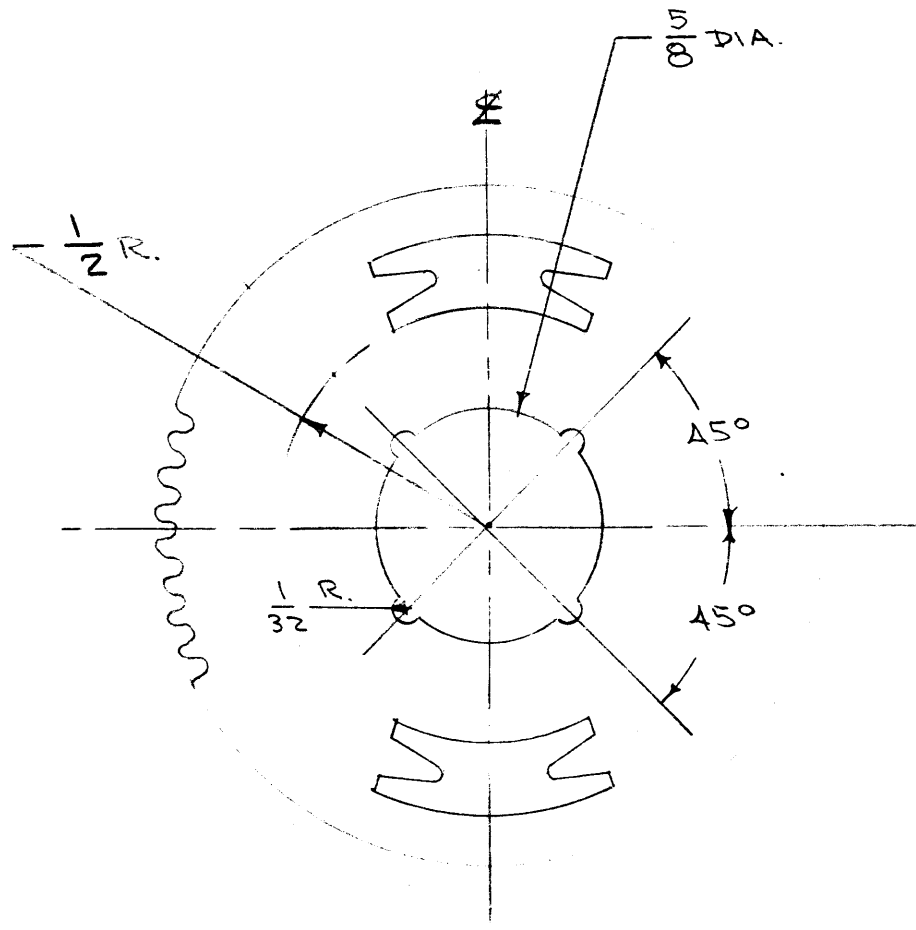
GR-120 B



CUTOUT DETAIL
DIM. FOR REF. ONLY.



GR-120-1
FREE GEAR



GR-120-2
FIXED GEAR

PITCH - 48
PRESSURE ANGLE - 14 1/2°
TEETH - 84
PITCH DIA. - 13/4"
ANTI BACKLASH TYPE
(COMMERCIAL CLASS 3 TOL.)

REF: NEW JERSEY GEAR. MFG. WKS.

B	1	1/2 R. WAS Ø.16 R. CUTOUT DETAIL REV.	12/1/57	2	16	JAD	W
A	1	CLASS 3 TOL. ADDED	5/16/55	1	PB	W	W
ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE: #				
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± 1/6 A ANGULAR DIM. ±		DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.				

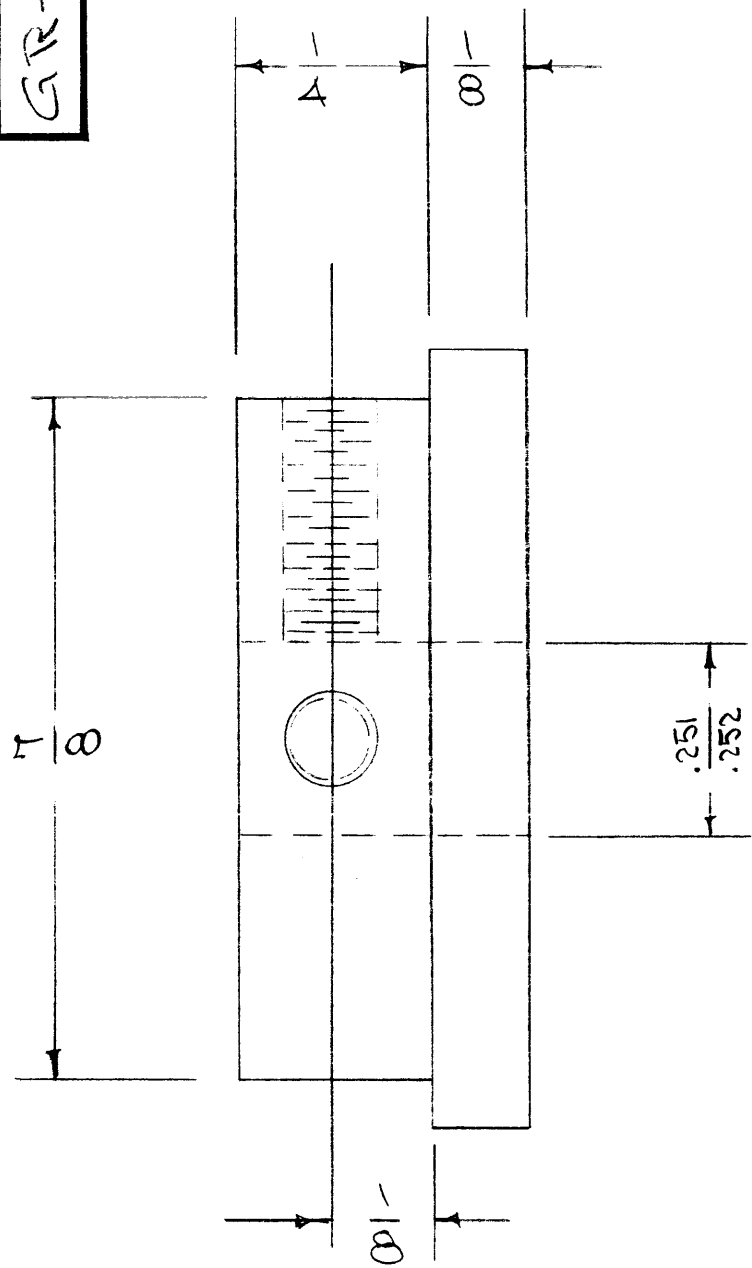
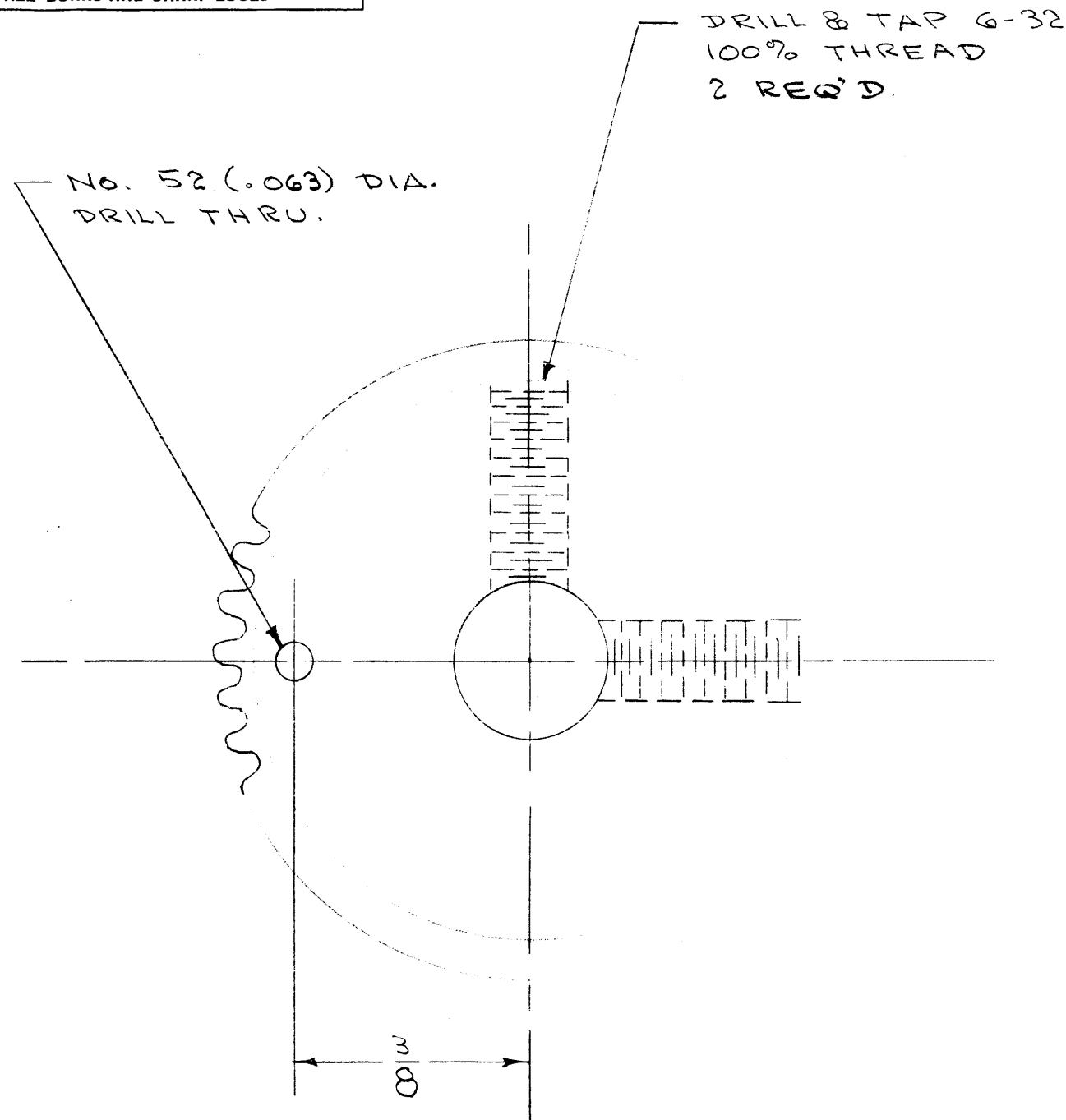
REQ. PER UNIT	MODEL	PROJECT NO.	ASSY. NO.	DATE
USED ON				

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
		Ø.032	THE TECHNICAL MATERIEL CORP. MAMARONECK. NEW YORK	
		STOCK SIZE		
		ALUMINUM #	GEARS, FREE & FIXED	
		MATERIAL		
		2 A S T 3		
		TYPE & TEMPER	C.D.D. 4-25-55	W
			DRAWN	ELEC. DES. APP. MECH. DES. APP.
			CHECKED	FINAL APPROVAL
		HEAT TREAT. SPEC.		
		YELLOW ANODIZE		
		FINISH & SPEC. NO.		
			GR-120	B

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

GR-121 A



PITCH - 48
PRESSURE ANGLE - 14 1/2°
TEETH - 48
PITCH DIA. - 1"
(COMMERCIAL CLASS 3 TOL.)

CLASS 3 TOL. ADDED		5/16/55	1	MB	WJ
CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES		SCALE: H			
±.005		DRILL, PUNCH, COMMERCIAL STOCK			
±1/64		SIZES AND MANUFACTURERS			
M. ±		TOLERANCES ARE NOT INCLUDED.			

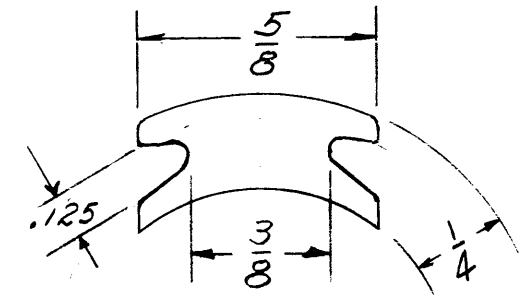
2	GPR	297		4-26-55
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK. NEW YORK	
STOCK SIZE		GEAR, NYLON	
NYLON		GPR	
MATERIAL	WEIGHT PER PC.	GPR	
TYPE & TEMPER		CDD. 4-26-55	###
HEAT TREAT. SPEC.		WJ	
FINISH & SPEC. NO.		G.T.O	
		CHECKED	FINAL APPROVAL
		GR-121 A	

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

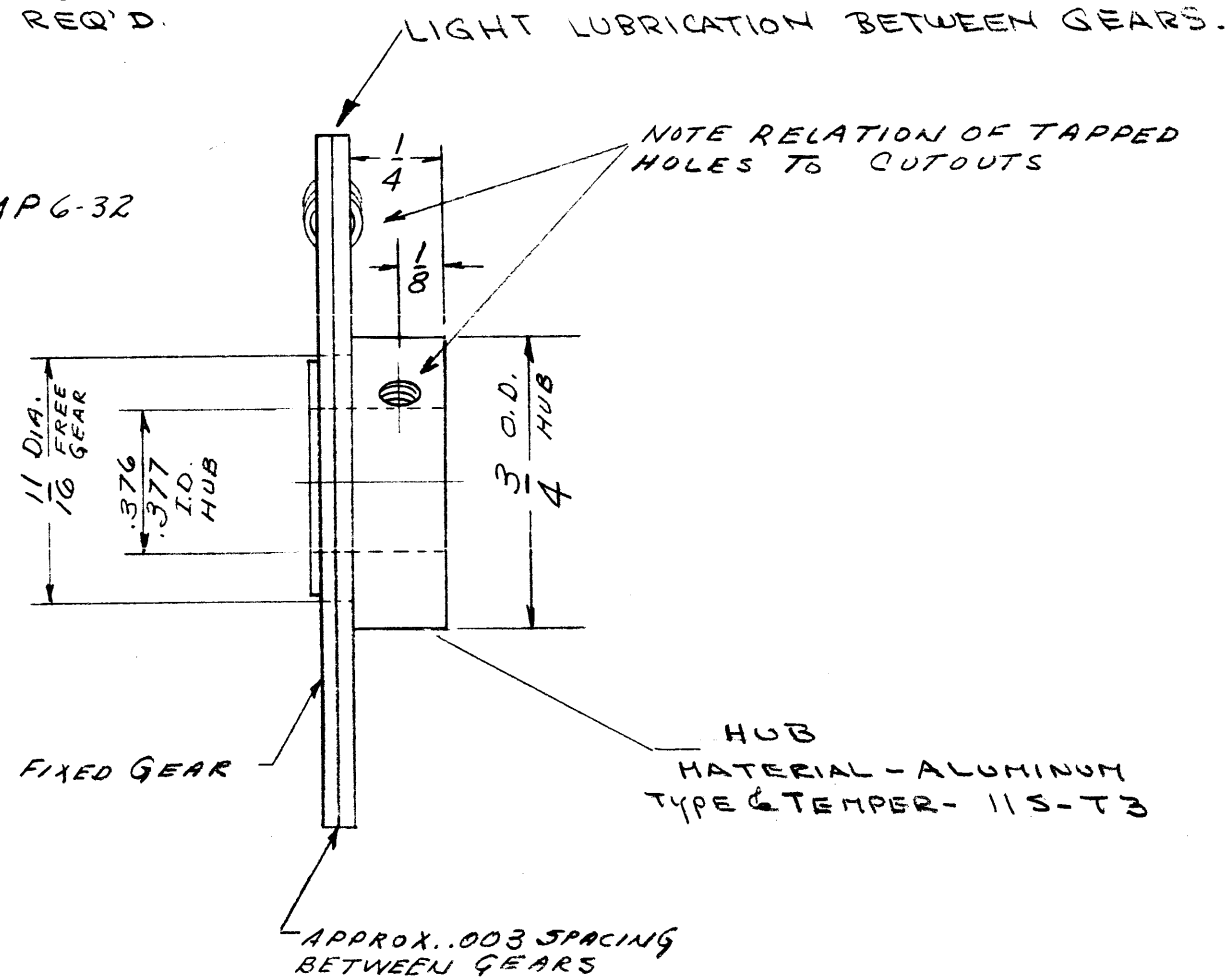
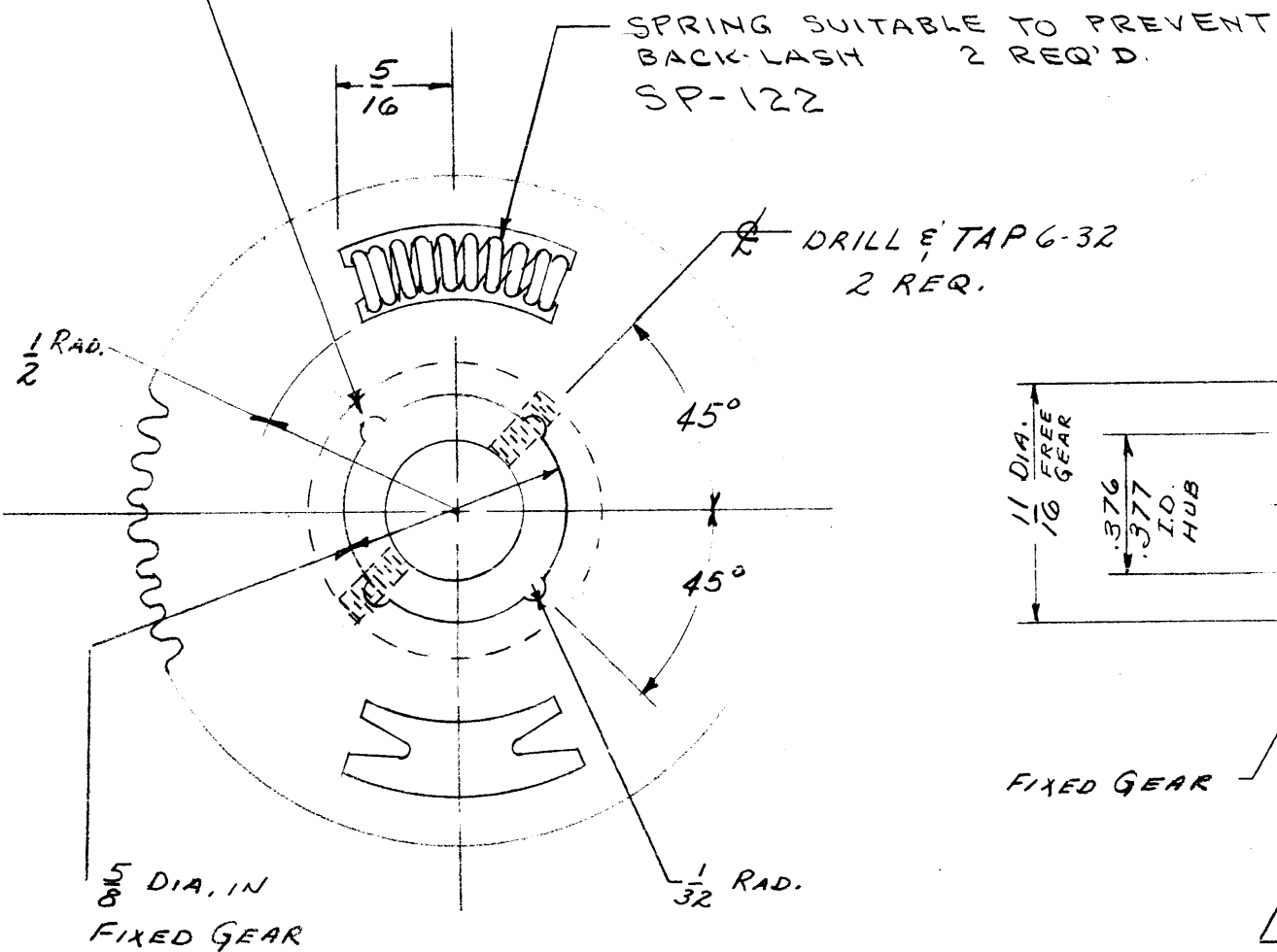
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

GR-122



CUTOUT DETAIL
DIMENSION FOR REF. ONLY

CRIMP (4 CUTOUTS ON FIXED GEAR ONLY)



PITCH DIA - 1 3/4"
 PITCH - 48
 NO. OF TEETH - 84
 PRESSURE OF ANGLE - 14 1/2°
 COMM. CLASS 3 TOL.
 TYPE - ANTI-BACKLASH.

REF. N.I. GEAR WORKS

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
	.032 THK EACH GEAR		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	ALUMINUM		SPLIT GEAR ASSY.	
	24S-T3		GPR.	
			CDD. 4-25-55	
			DRAWN	ELEC. DES. APP. MECH. DES. APP.
			CHECKED	FINAL APPROVAL
			HEAT TREAT. SPEC.	
			YELLOW ANODIZE	
			FINISH & SPEC. NO.	

CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
C	4/3/58	3	AMC	JHR	CPA
B	8/1/58	2	CSO	PHL	WPC
A	7/19/58	1	CSO	JHR	WPC

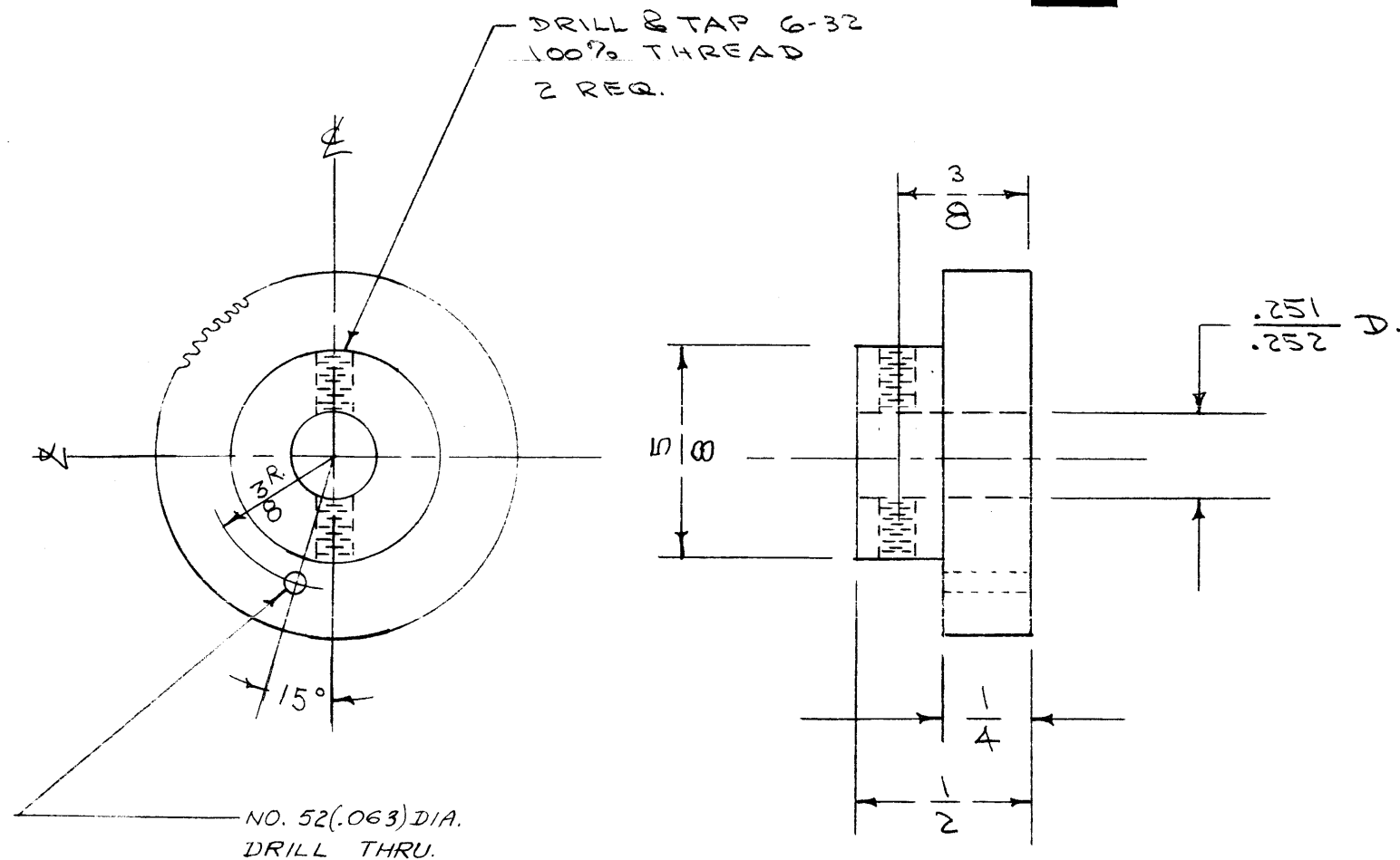
TOLERANCES: ± 1/64
 SCALE: DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.
 RE. PER UNIT: 2 GPR
 MODEL: 297
 PROJECT NO.: 4-25-55
 ASS'Y. NO.:
 DATE:

USED ON

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

GR-123 A



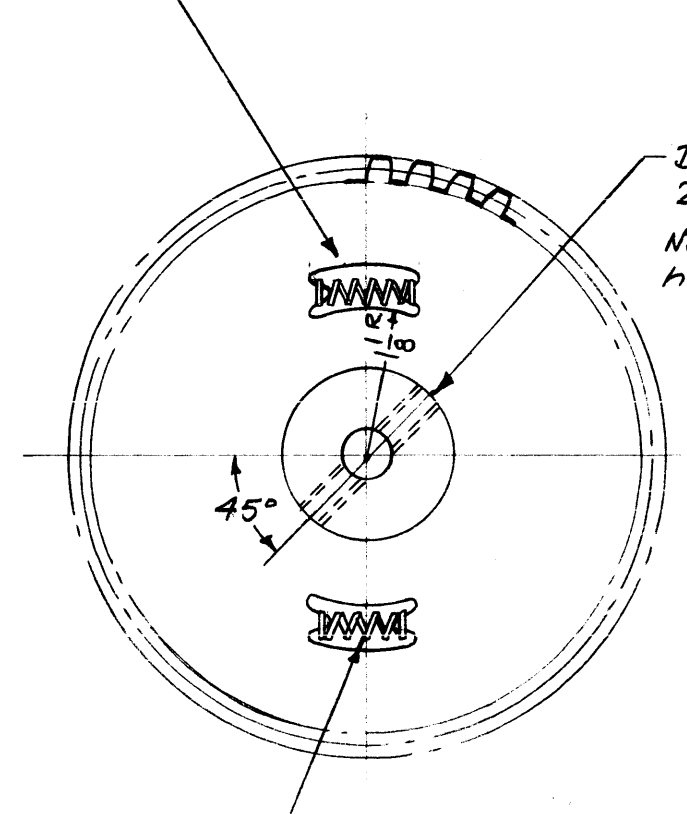
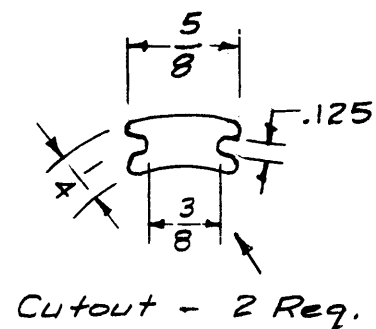
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
			THE TECHNICAL MATERIEL CORP.	
			MAMARONECK, NEW YORK	
STOCK SIZE			GEAR, DIAL DRIVE	
ALUMINUM			GPR	
MATERIAL			24S T3	
WEIGHT PER PC.			6-30-55	
TYPE & TEMPER			GPR	
			DRAWN	
			ELEC. DES. APP.	
			MECH. DES. APP.	
HEAT TREAT. SPEC.			G.T.O.	
YELLOW ANODIZE			CHECKED	
FINISH & SPEC. NO.			FINAL APPROVAL	
			GR-123 A	

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
A	1	#52 HOLE ROTATED 75°	9-1-55	1	16	WPC	WPC

TOLERANCES	SCALE:
ALL OTHERS DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.

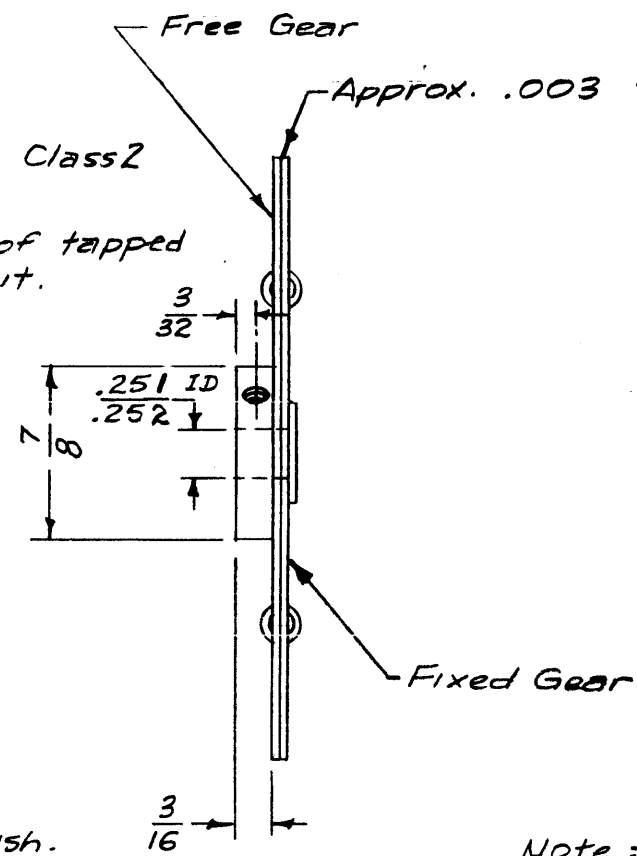
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
2	GPR			6-30-55

GR-135



Dr. & Tap 6-32 Class 2
2 Req.
Note relation of tapped holes to cutout.

Spring suitable to prevent backlash.
(2 Req.) Spring must not bind.
Use TMC SP-122



Pitch Dia. — 3.000"
Pitch — 48
No. of Teeth — 144
Pressure Angle — 14 1/2°
Comm. Class 3 Tol.
Type - Anti-backlash

Note: Lubricate lightly between gears.

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THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, NEW YORK

Ref. - N. J. Gear Works

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
B	1	FINISH WAS YELLOW ANODIZE.	12-29-64	13185	2.F.	@	[Signature]
A	1	Comp. Rev.	12/1/57	1	16	[Signature]	[Signature]

TOLERANCES		SCALE: 2-805
DEC. DIM. ±	MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.	
FRAC. DIM. ± 1/64	REMOVE ALL BURRS AND SHARP EDGES	
ANGULAR DIM. ±		

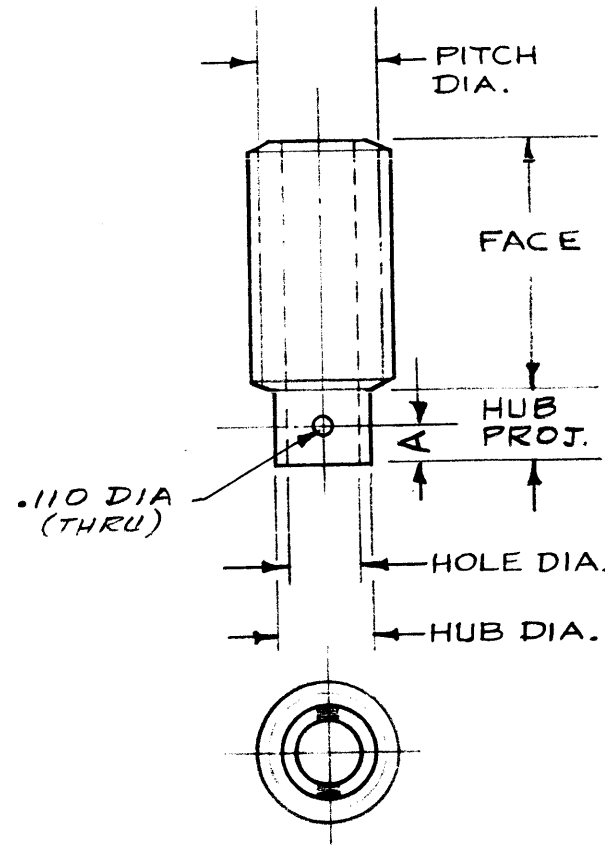
1	SBE-3	AP-100	A-1517	11-30-59
1	SBE-142			7-23-57
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
.032 THK (each gear)		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK GEAR, SPLIT, 3" P.D. SBE-1	
STOCK SIZE			
Aluminum			
MATERIAL			
245 T3		H	[Signature]
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
S404 YELLOW IRIDITE		[Signature]	[Signature]
FINISH & SPEC. NO.	ELEC. DES. APP.	MECH. DES. APP.	FINAL APPROVAL
			GR-135 B

C	TMC NO.	MFG. NO.	PITCH	PITCH DIA.	FACE	HOLE	HUB DIA.	HUB PROJ.		LEAD	LEAD ANGLE	PRESSURE ANGLE	NO. OF THREADS	THREAD TYPE	FINISH See chart	RE TMC MATING GEAR
								Proj	A							
	GR-143-1	QVH	16	.625	1"	1/4	.46	1/4	1/8	.7854	21° 48'	20°	4	RIGHT HAND	A	GR-142,144
	GR-143-2	HQVH	16	.625	1"	5/16	.46	1/4	1/8	.7854	21° 48'	20°	4	RIGHT HAND	B	GR-142,144
	GR-143-3	GQVH	16	.625	1"	5/16	.46	1/4	1/8	.7854	21° 48'	20°	4	RIGHT HAND	C	GR-142,144
	GR-143-4	HQVH	17	.670	1"	5/16	.46	1/4	1/8	.787	68° 12'	20°	4	RIGHT HAND	B	GR-216

GR-143

A	NO FINISH
B	THREADS POLISHED BUT NOT GROUND
C	THREADS POLISHED AND GROUND



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MAMARONECK, NEW YORK

STANDARD DRAWING

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
C	2	ON FIN. CHART LETT. C & B ADD. GR-143-4 ADDED	9.29.64	12482	hbs	@	
B	1	HUB PROJ. CLARIFIED	6/5/59		hde		
A	1	REDRAWN - CHARTS ADDED. GR-143-2 WAS GR-143	5/18/59	1046	16	hde	

TOLERANCES: DEC. DIM. ±, FRAC. DIM. ±, ANGULAR DIM. ±

SCALE: 5-401-15

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

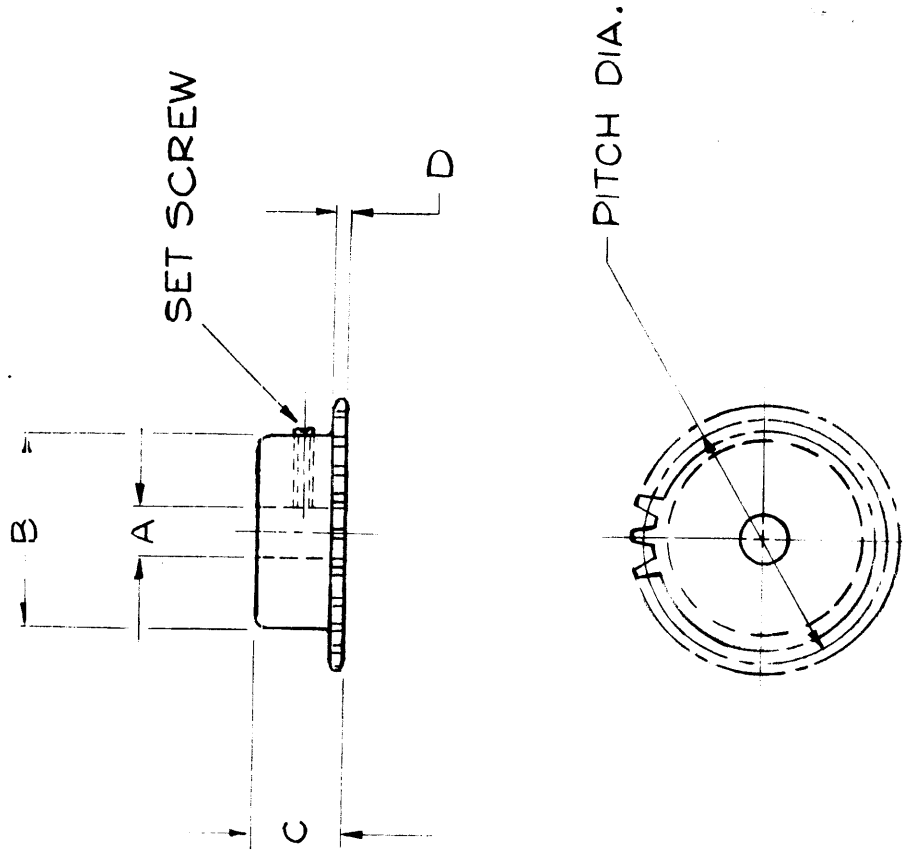
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
				5-18-59

USED ON

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	STAINLESS STEEL	GEAR, WORM	
		5/18/59	
		GR-143	C

TMC PART NO.	MFG. PART NO.	TEETH	PITCH DIA.	A	B	C	D	STYLE
GR-147-1	K-2510	10	.81	1/4	5/8*	5/8	.110	Plain
GR-147-2	K-2512	12	.97	5/16	3/4*	5/8	.110	Plain
GR-147-3	K-2515	15	1.20	5/16	3/4	5/8	.110	Plain
GR-147-4	K-2516	16	1.28	5/16	13/16	5/8	.110	Plain
GR-147-5	K-2517	17	1.36	5/16	29/32	5/8	.110	Plain
GR-147-6	K-2518	18	1.44	3/8	1"	5/8	.110	Plain
GR-147-7	K-2519	19	1.52	3/8	1-1/16	5/8	.110	Plain
GR-147-8	K-2520	20	1.60	3/8	1-5/32	5/8	.110	Plain
GR-147-9	K-2530	30	2.39	3/8	1-3/8	5/8	.110	Plain
GR-147-10	K-2536	36	2.87	1/2#	1-3/8	5/8	.110	Plain
GR-147-11	K-2540	40	3.19	1/2#	1-3/8	5/8	.110	Plain
GR-147-12	K-2548	48	3.82	1/2#	1-3/8	5/8	.110	Plain
GR-147-13	K-2554	54	4.30	1/2#	1-3/8	5/8	.110	Plain
GR-147-14	K-2560	60	4.78	1/2#	1-3/8	5/8	.110	Plain
GR-147-15	K-2572	72	5.73	1/2#	1-3/8	5/8	.110	Plain

* Has recessed groove in hub for chain clearance
 # This is maximum hole for these inserted hub sprockets



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ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES						
SCALE: 5/401-15						
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES						
DEC. DIM. ±						
FRACTIONAL DIM. ±						
ANGULAR DIM. ±						

FORM 1 9-A

REQ. PER UNIT	MODEL	PROJECT NO.	ASSY. NO.	DATE
				2-18-60

USED ON

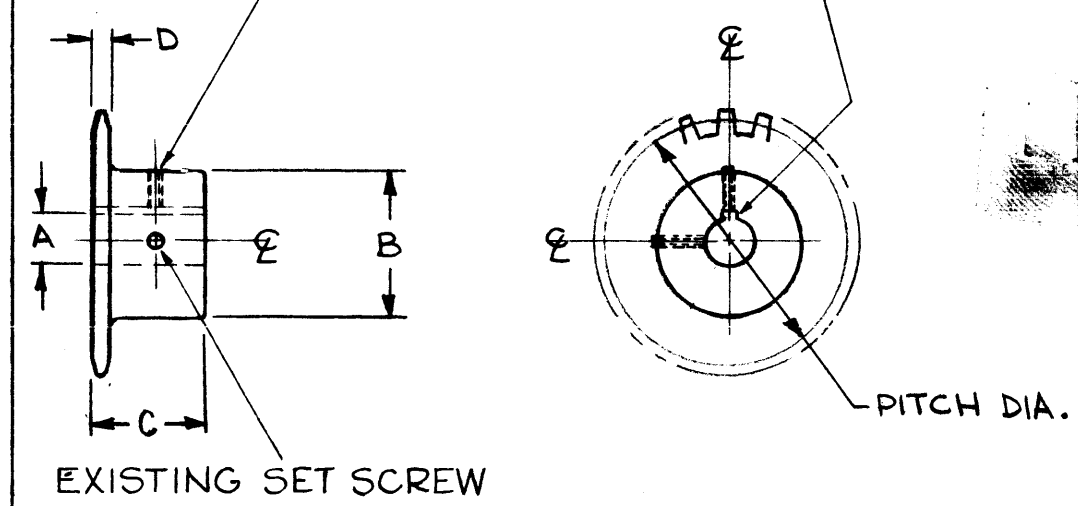
REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
STEEL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		SPROCKET	
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
		J.C. Biele	A.W.
FINISH & SPEC. NO.			

GR-148 E

TRC PART NO	MFG PART NO	TEETH	PITCH DIA	A	B	C	D	STYLE	REQ PER 40K
GR148-1	K-2520 (MOD.)	20	1.60	1/2	1-5/32	5/8	.110	PLAIN	5
↑ -2	K-2540 (MOD.)	40	3.19	1/2	1-3/8	5/8	.110	↑	1
↓ -3	K-2560 (MOD.)	60	4.78	1/2	1-3/8	5/8	.110	↓	NONE
GR148-4	K-2530 (MOD.)	30	2.39	1/2	1-3/8	5/8	.110	PLAIN	NONE

DRILL & TAP 8-32 ON SAME Q AS EXISTING SET SCREW.

+0.005
.125-.000
WIDE BY
1/16 DEEP
KEYWAY.



REPRODUCING THIS DRAWING

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MAMARONECK, NEW YORK

STANDARD DRAWING

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
E	1	COMPLETELY REVISED	7/2/62	11918	<i>J. C. Biele</i>	<i>J. C. Biele</i>	<i>J. C. Biele</i>
TOLERANCES			SCALE: S 401-15 (K2520, 40, 60)				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				
FRAC. DIM. ±							
AN ULAR DIM. ±							

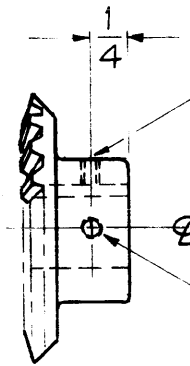
~	GPT 40K	
REQ. PER UNIT	MODEL	PROJ

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	STOCK SIZE		
	STEEL	SPROCKETS	
	MATERIAL		
		J.C. Biele	<i>J. C. Biele</i>
2-18-60	TYPE & TEMPER	DRAWN	
	5135 NICKEL PLATE	CHECKED	
	.001		
	FINISH & SPEC. NO.	ELEC. DES. APP.	MECH. DES. APP.
			GR-148 E

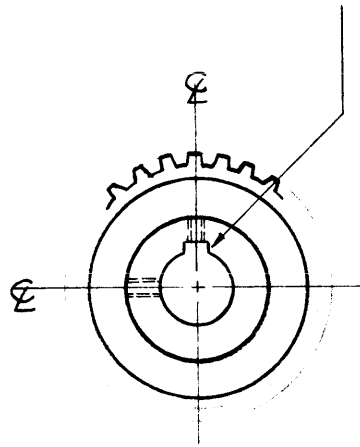
GR-150 A

GR-150-1

DRILL & TAP 8-32
2 REQ.

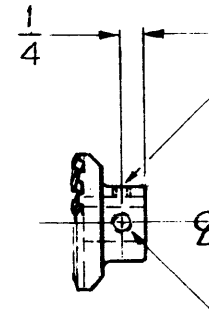


1/8 WIDE BY 1/16 DEEP
KEYWAY.

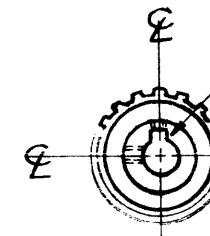


GR-150-2

DRILL & TAP 8-32
2 REQ.



1/8 WIDE BY 1/16
DEEP KEYWAY



NOTICE TO PERSONS RECEIVING THIS DRAWING

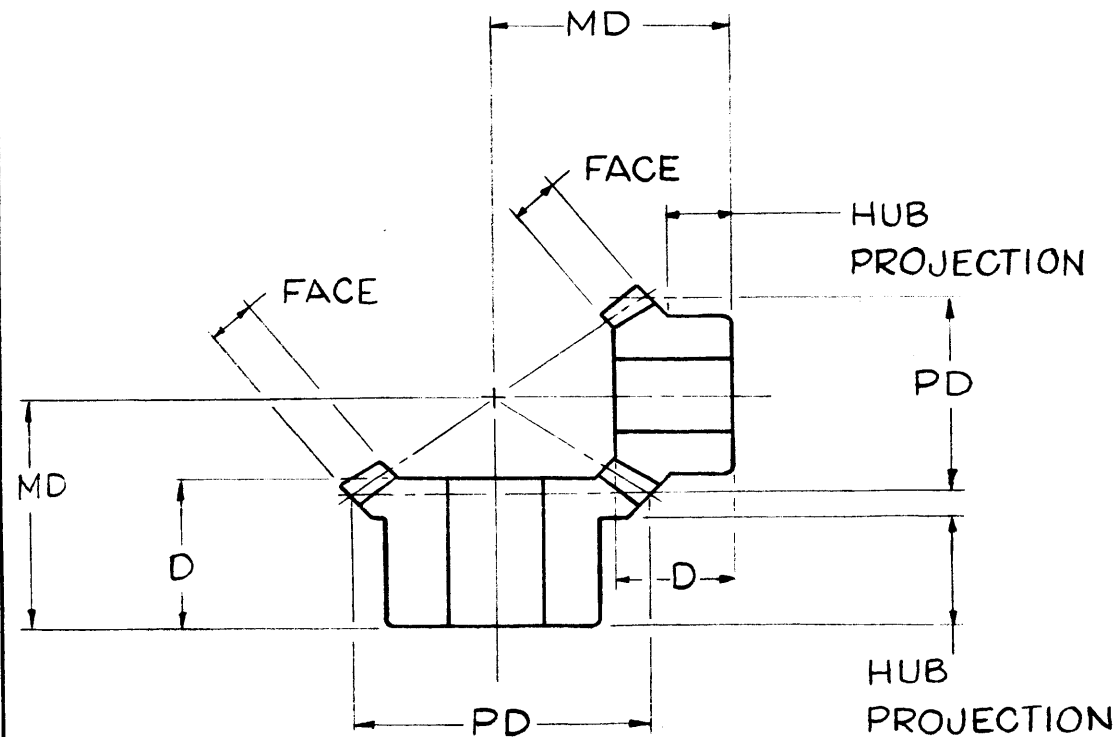
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MAMARONECK, NEW YORK

TMC PART NO.	MFG PART NO.	MAT'L	PITCH DIA.	PITCH	TEETH	FACE	HOLE	D DIM.	MD DIM.	HUB DIA.	HUB PROJ.
GR150-1	L146YG MODIFIED	STEEL	1.500	16	24	.25	1/2"	3/4"	1-3/16	1-1/8	9/16
GR150-2	L146YP MODIFIED	STEEL	1.000	16	16	.25	3/8"	47/64	1-1/4	13/16	7/16

NO LONGER USED
USE GR-141-1 & 2 FOR GPT-40K



REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
STOCK SIZE		GEAR AND BEVEL PINION	
MATERIAL		J.C. Biele	
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
A	1	No Longer Used Note Added	3-2-61	4310	RU	JCB	[Signature]

TOLERANCES: SCALE: S-401-15 (L146Y)

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

3 SETS GPT40K

REQ. PER UNIT: USED ON

2-18-60

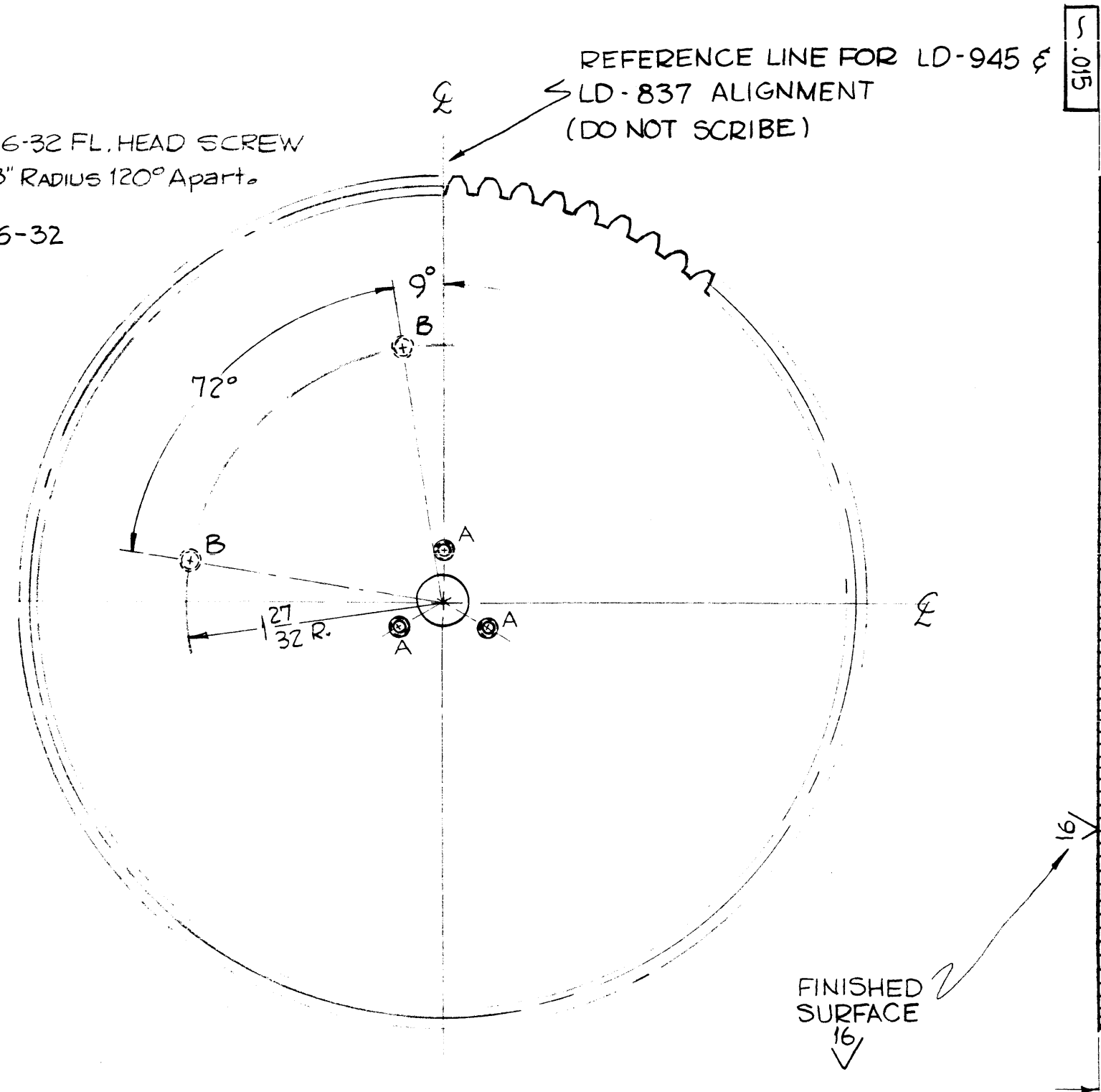
GR-150 A

GR-161 D

HOLES

A ~ Dr. & Cts'k For 6-32 FL. HEAD SCREW
3 HOLES ON 3/8" RADIUS 120° Apart.

B ~ Dr. & Tap for 6-32



PITCH DIA. 6"
PITCH 48
NO OF TEETH 288
FACE .125
BORE .375^{+0.002}_{-0.000}
PRESSURE \angle 14 1/2°

NOTE: FLATNESS TOL.
MUST BE FLAT TO
WITHIN .015 - AS SHOWN

THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N.Y.

LD-945 (FOR CHG-2 ONLY)
REF - TMC DWG. NO. LD-837 (FOR CHG-1 ONLY)

D	1	CHG-2 Ref added	7-18-61	-	JCS	W.A.	
C	1	3/32 Deep from Rear of Gear deleted in "B" hole.	12-28-60	3834	RU	JCS	JCS
B	3	REF. LD-837 Added	12-8-60	3676	DDM	JCS	JCS
	2	@ "B" Holes Added					
	1	Finish Added					
A	1	NOTE ADDED	9-29-60	3106	CS	JCS	JCS

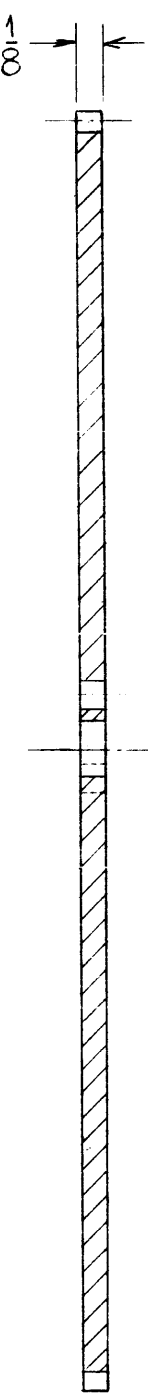
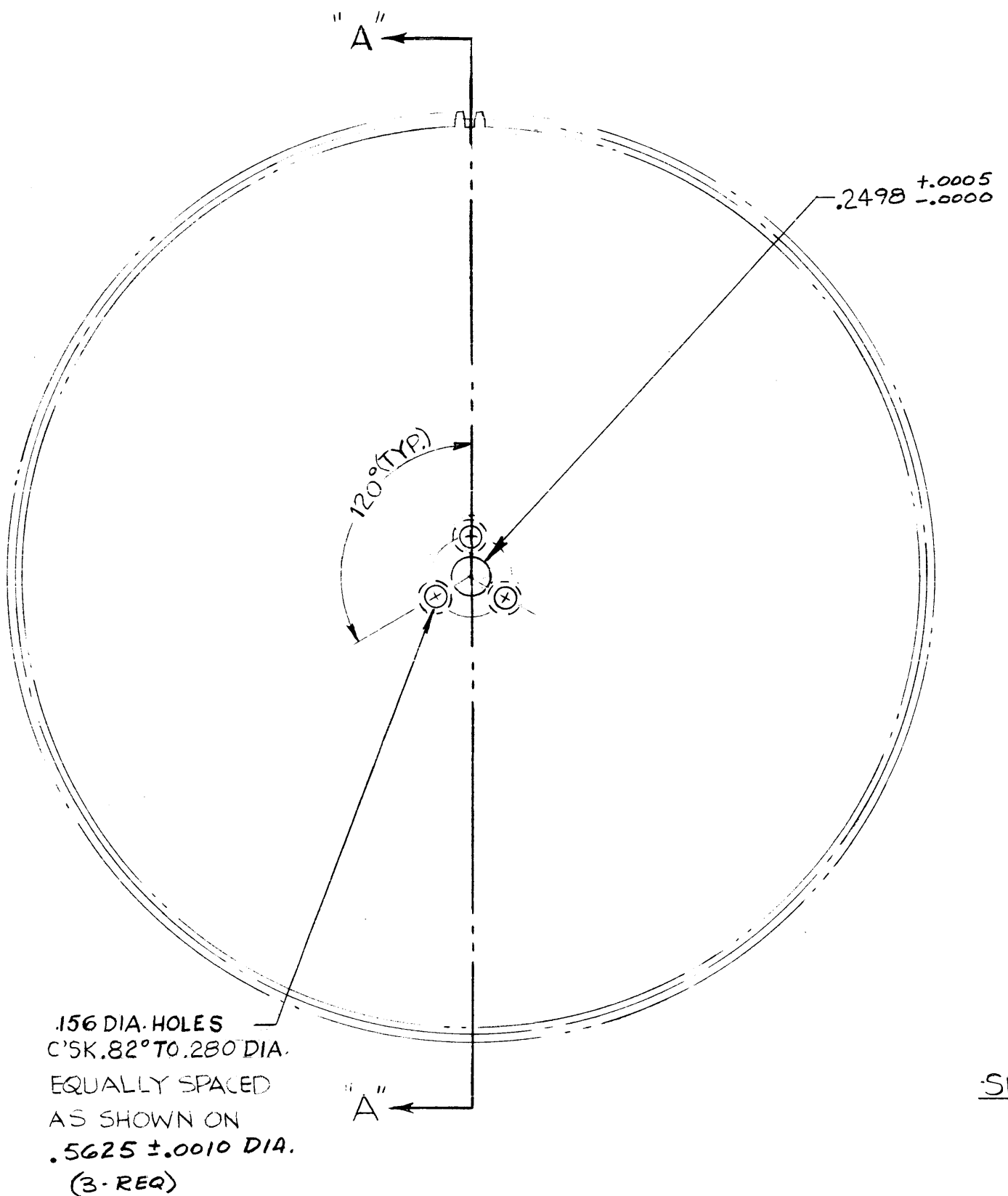
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. \pm			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.				
FRAC. DIM. \pm 1/64			REMOVE ALL BURRS AND SHARP EDGES				
ANGULAR DIM. \pm							

REQ. PER UNIT	MODEL	PROJECT NO.	ASSY. NO.	DATE
1	CHG-2	GEAR ASS'Y		7-18-61
1	CHG-1	GEAR ASS'Y		9-16-60
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
.125		THE TECHNICAL MATERIEL CORP.	
STOCK SIZE		MAMARONECK, NEW YORK	
ALUMINUM		DIAL, GEAR	
MATERIAL			
2024-T3			
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
5404 YELLOW IRIDITE			
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.
		GR-161	D

GR-173

REVISIONS					
SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD
A	DIMS. COMPLETELY CLARIFIED	11-29-62	9757	EB	JWA
B	C'SK. 82° TO .280 DIA. ADDED	4/29/64	11325	A.M.	@



~ SPECIFICATIONS ~
 NO. OF TEETH = 416
 DIAMETRAL PITCH = 64
 PITCH DIAMETER = 6.500
 PRESSURE ANGLE = 20°
 FACE _____ = 1/8

NOTE:
 YELLOW IRIDITE BEFORE TEETH
 ARE CUT.

REF: LD-1059, LD-1060

156 DIA. HOLES
 C'SK. 82° TO .280 DIA.
 EQUALLY SPACED
 AS SHOWN ON
 .5625 ± .0010 DIA.
 (3-REQ)

NOTES

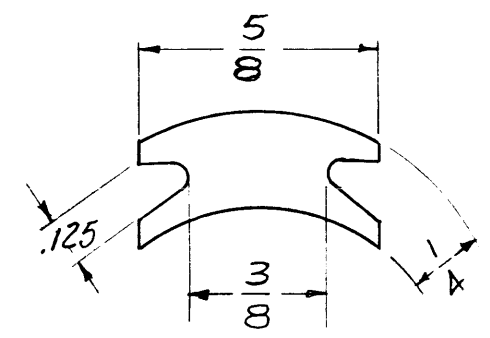
2	GPR-92	
Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE	
THE CONTENTS OF THIS DRAWING ARE THE EXCLUSIVE PROPERTY OF THE TECHNICAL MATERIEL CORP. ITS UNAUTHORIZED USE OR REPRODUCTION IN WHOLE OR IN PART IS STRICTLY FORBIDDEN.		

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
GELLMAN LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
1/8 THK. ALUMINUM			GEAR, SPUR	
FINISH			TITLE	
YELLOW IRIDITE			GEAR, SPUR	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES				
DRAWN		DATE	FINAL APPROVAL	
V.R.R.		6-15-62	JWA BP	
CHECKED		DATE	DATE	
JWA		10/29/62		
ELECT. DES.		DATE	GR-173	
MECH. DES.		DATE	B	
JWP		10/29/62	SHEET	
TOLERANCES		REV. LTR.		
.X ± .05 ± 1/64				
.XX ± .01 ANGLES ± 0° 30'				
.XXX ± .005				

GR-174

REVISIONS

SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
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CUTOUT DETAIL
DIMENSION FOR REF. ONLY

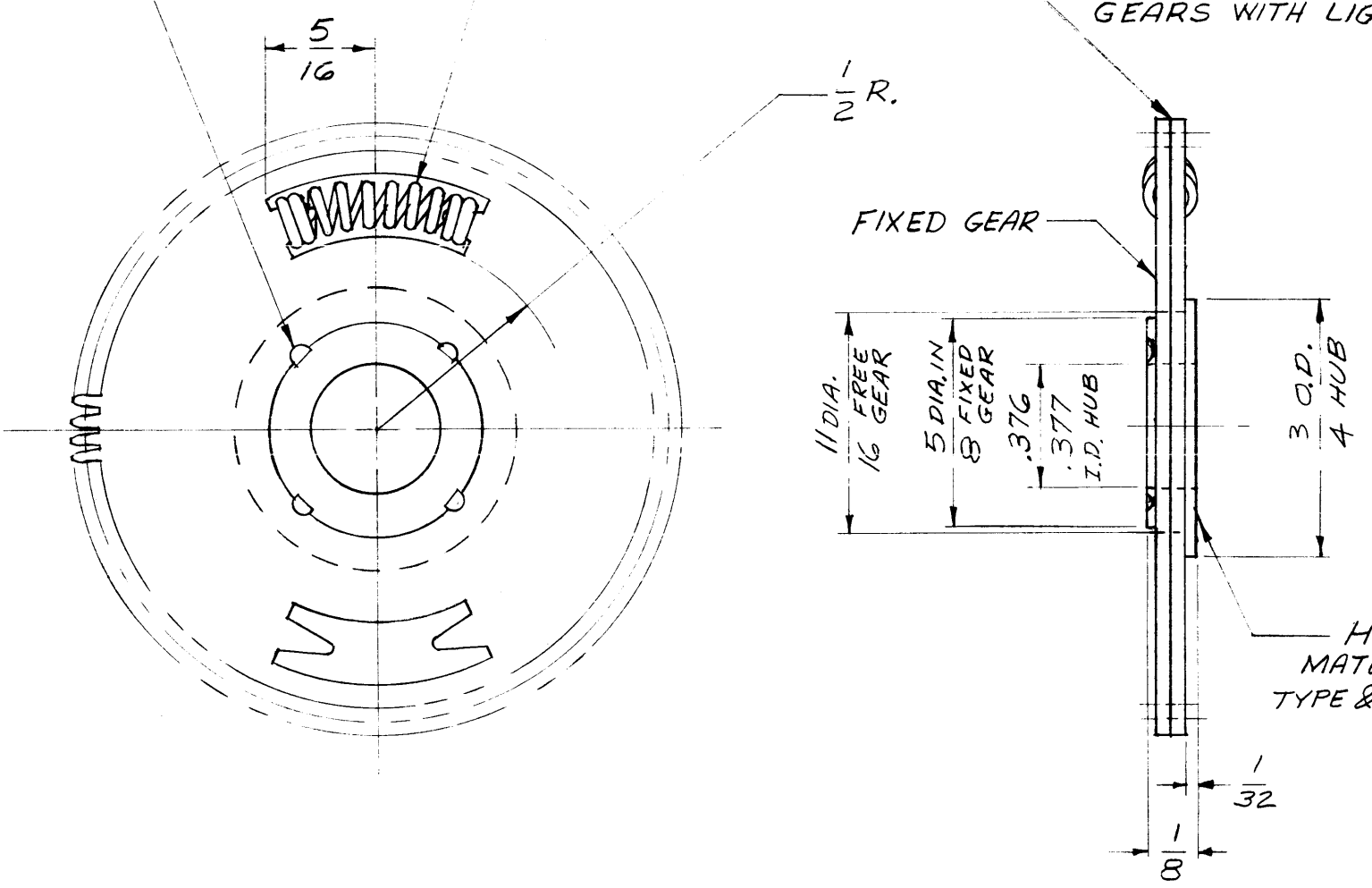
~ SPECIFICATIONS ~

- NO. OF TEETH = 84
- DIAMETRAL PITCH = 48
- PITCH DIA. = 1.750
- PRESSURE ANGLE = 20°
- COMM. CLASS 3 TOL.
- TYPE - ANTI-BACKLASH

CRIMP (4 CUTOUTS ON FIXED GEAR ONLY)

SPRING SUITABLE TO PREVENT BACK-LASH 2 REQ'D SP-122

APPROX. .003 SPACING BETWEEN GEARS WITH LIGHT LUBRICATION.



HUB
MATERIAL - ALUMINUM
TYPE & TEMPER - 115-T3

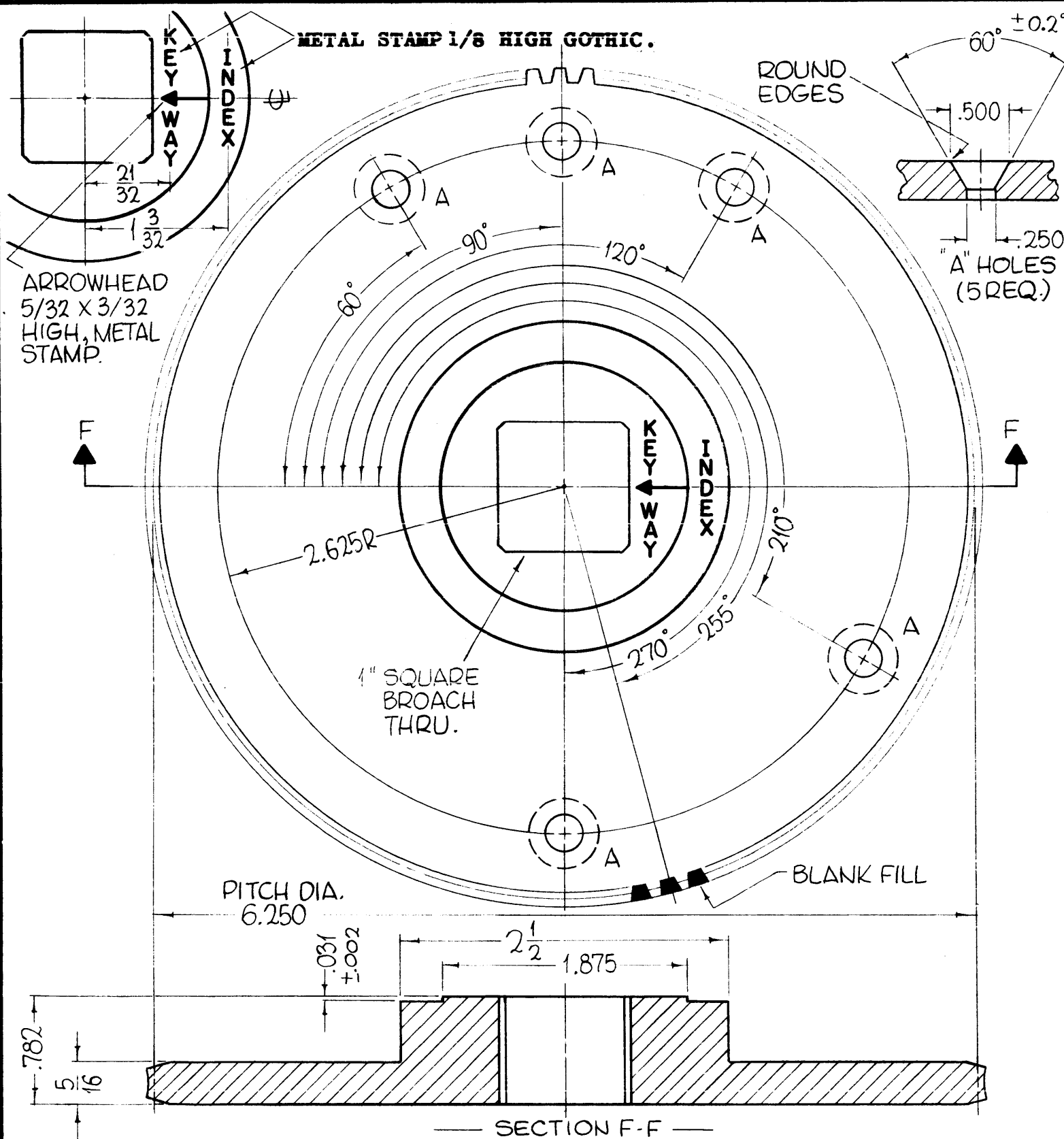
REF. N. J. GEAR WORKS

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
LIST OF MATERIAL				
MATERIAL .032 THK EACH GEAR ALUMINUM 245-T3			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH ANODIZE			TITLE SPLIT GEAR ASSY.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES			DRAWN W.S.	DATE 5/21/02
			CHECKED JST	DATE 10/29/02
			ELECT. DES.	DATE
			MECH. DES. M6	DATE 10/29/02
			GR-174	
			SHEET	REV. LTR.

2	GPR-92	
Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE	

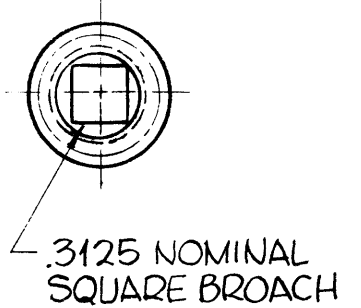
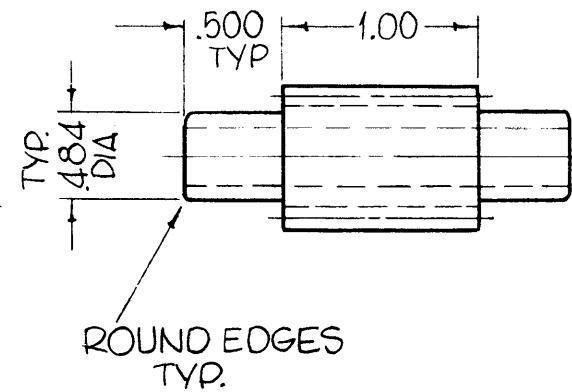
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NOTES



GR-188

REVISIONS					
SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD APPD
0	ORIGINAL RELEASE FOR PRODUCTION	3-6-64			



GR-188-2
 PITCH DIA. -.625
 PITCH-16
 THREAD-SINGLE, LEFT HAND
 PRESSURE \angle - 14-1/2°

MAT'L- STAINLESS STEEL # 303
 FINISH- S104-PASSIVATE

GR-188-1
 PITCH DIA. - 6.250 — MAT'L- STAINLESS STEEL #303
 PITCH - 16 — FINISH- S104-PASSIVATE
 THREADS - SINGLE, LEFT HAND
 NO. OF TEETH - 100
 PRESSURE \angle - 14-1/2°
 FACE - 5/16

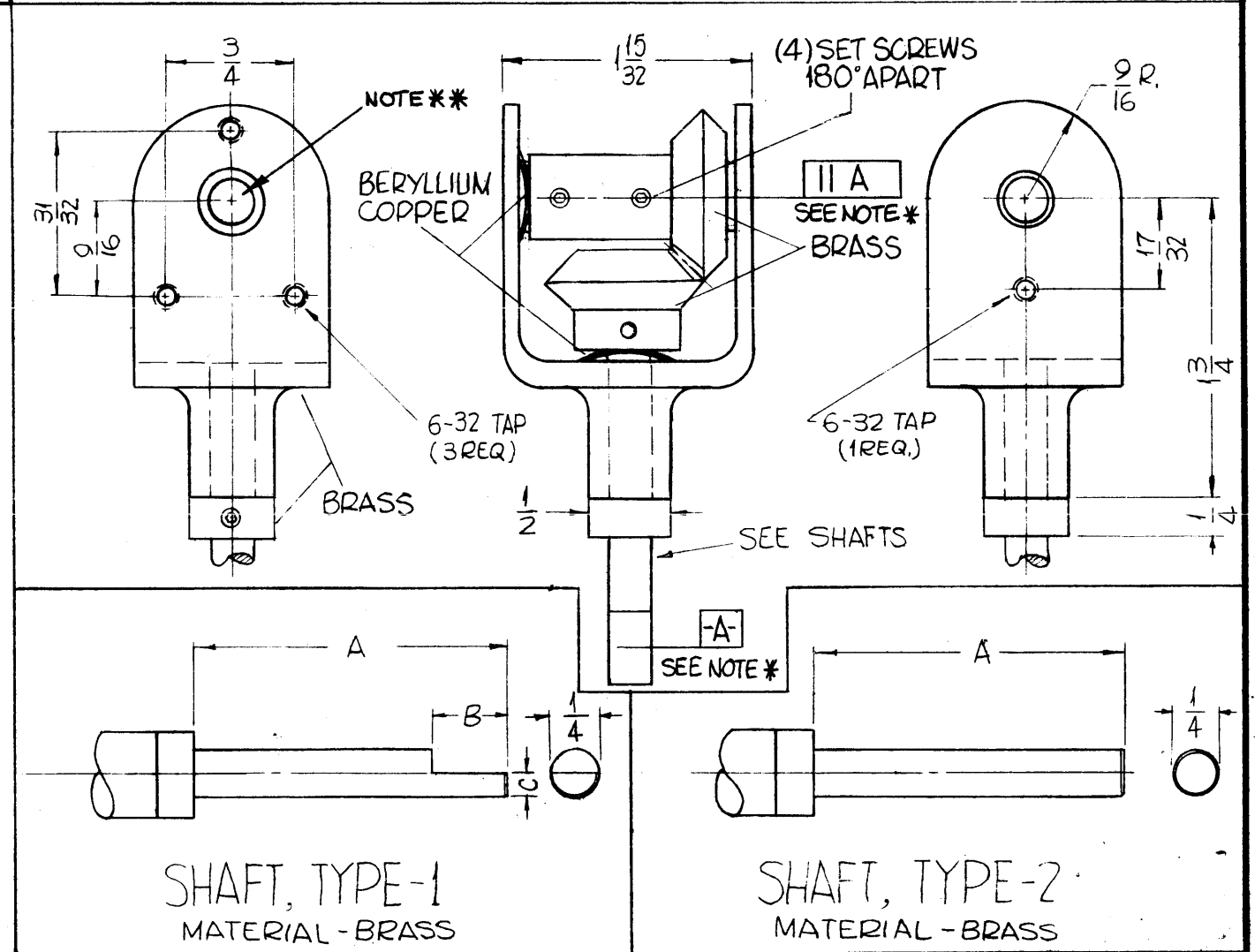
1 EACH	GPT-200K(AS123)	A-2681
Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE A	S401-15 (D1147) MODIFIED
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REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
F. BUDETTI LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			TITLE GEAR, WORM WHEEL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES			DRAWN Gianfilippo	DATE 3-6-64
DECIMALS .X ± .05 .XX ± .01 .XXX ± .05			CHECKED J.A.	DATE 3/6/64
FRACTIONS ± 1/64 ANGLES ± 0° 30'			ELECT. DES. J.B.	DATE 3/6/64
TOLERANCES			MECH. DES. J.B.	DATE 3/6/64
			FINAL APPROVAL R.C.	DATE 4/22/64
			GR-188	0
			SHEET	REV. LTR.

TMC NO.	USED ON	SHAFT TYPE	SHAFT DIMENSIONS		
			A	B	C
GR-189-1	TTR-10A	TYPE 1	1-3/32	23/32	.125 ^{+0.000} _{-0.005}
GR-189-2	AT-105	TYPE 2	1	—	—

A
GR-189

REVISIONS						
SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
x5	GR-189-2 ADDED	4-6-64				
x6	NOTE * ADDED, S401-194 REF FOR MFG. ADDED					
0	ORIGINAL RELEASE FOR PRODUCTION	6-1-64	0	A.M.		
A	NOTE ** & CALLOUT "NOTE **" ADDED	10.29.64	12795	AB		JXC



NOTE *
SET SCREWS MUST BE PARALLEL IN RELATION TO FLAT ON SHAFT AS SHOWN.

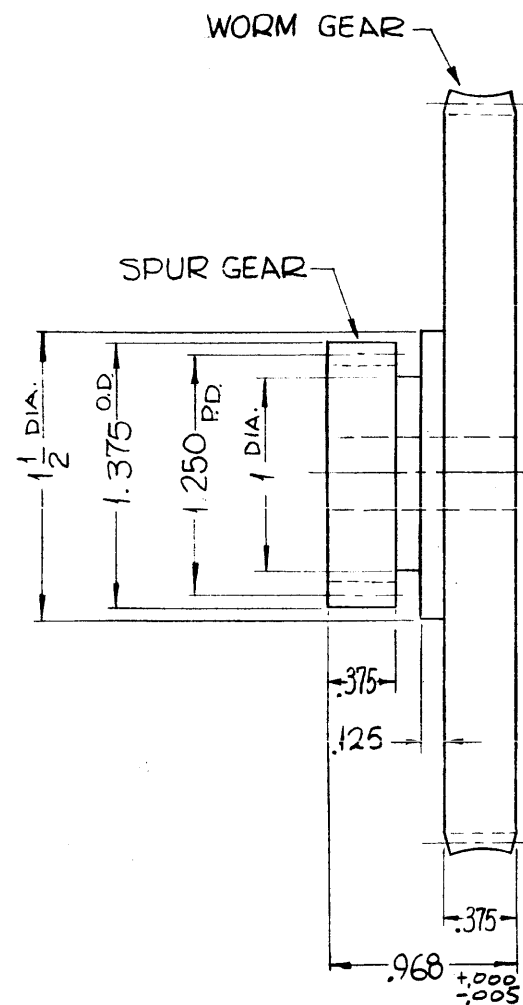
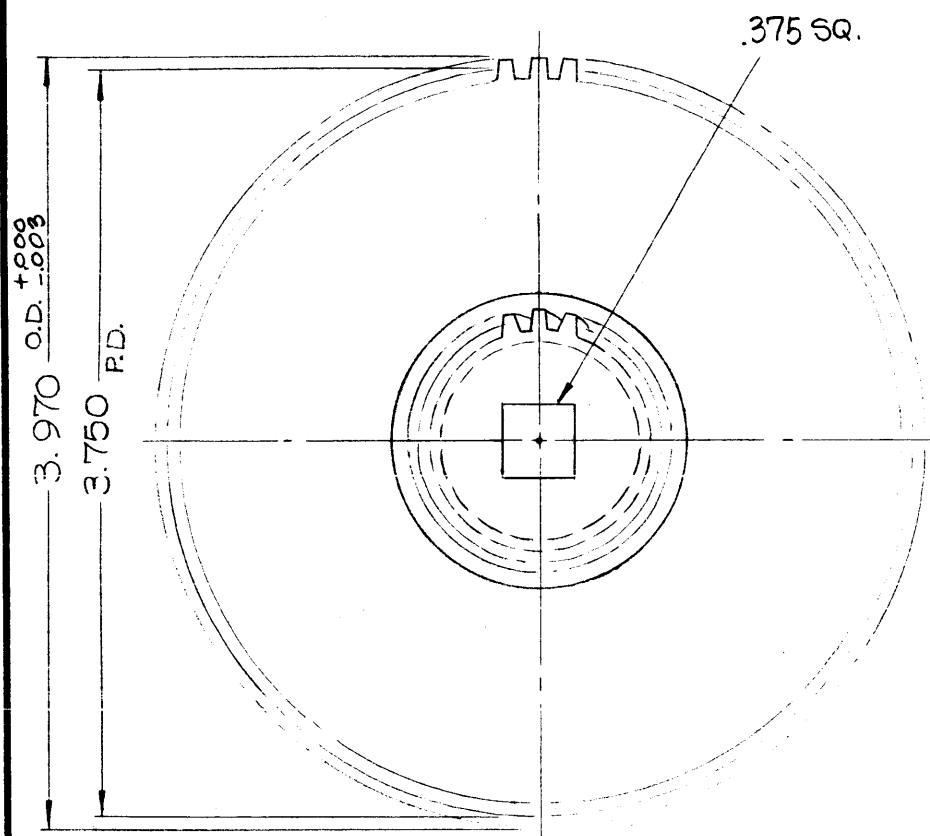
NOTE **
HOLE DIA. ON GEAR BUSHING TO BE .253^{+0.003}_{-0.000} AFTER FINISHING

NOTES

Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE C	S401-194

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REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
F. BUDETTI LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			TITLE GEAR DRIVE, RIGHT ANGLE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES			DRAWN SRG	DATE 4-11-63
DECIMALS .X ± .05 .XX ± .01 .XXX ± .005			CHECKED aa	DATE 3/9/64
FRACTI NS ± 1/64 ANGLES ± 0° 30'			ELECT. DES. JB	DATE 3/6/64
TOLERANCES			MECH. DES. Kac	DATE 3/6/64
FINAL APPROVAL GR-189				DATE A
SHEET				REV. LTR.



SPECIFICATIONS:
 WORM GEAR-
 P.D. - 3.750
 PITCH - 16
 PRESS. $\angle 14\frac{1}{2}^\circ$
 TEETH - 60
 SINGLE THREAD,
 RT. HAND

SPUR GEAR-
 P.D. - 1.250
 PITCH - 16
 TEETH - 20
 PRESS. $\angle 20^\circ$
 RT. HAND

WORM & SPUR GEAR WHEEL
 GR-193-1
 MATERIAL - STAINLESS STEEL, #303
 1 REQ./UNIT REF.
 FINISH - S104 - PASSIVATE

GR-193-1

NOTES

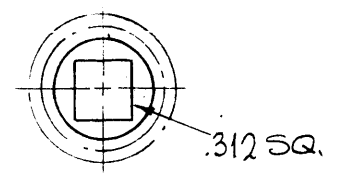
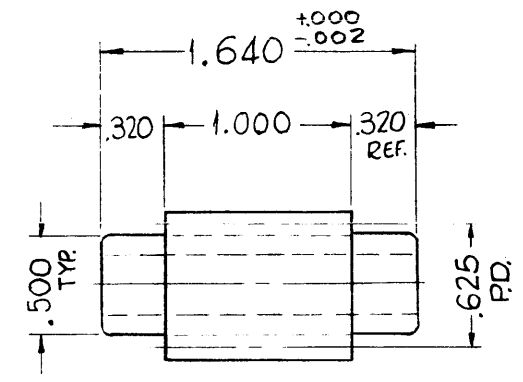
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Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
1	GPT-200K (AX-395)	A-3242
1	GPT-200K (AX-395)	A-3239
1	GPT-200K (AX-395)	A-3236
SCALE	CODE	
1"=1"	A	

GR-193

REVISIONS

SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
X1	DIM. 968 WAS 1.000	2-10-64				
O	ORIGINAL RELEASE FOR PRODUCTION	3-2-64				



SPECIFICATIONS:
 P.D. ~ .625
 PITCH - 16
 PRESS. $\angle 14\frac{1}{2}^\circ$
 SINGLE THREAD
 RT. HAND

WORM GEAR
 GR-193-2
 MATERIAL - STAINLESS STEEL, #303
 1 REQ./UNIT REF.
 FINISH - S104 - PASSIVATE

GR-193-2

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
F. BUDETTI LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			TITLE GEARS, WORMS & SPUR	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES			DRAWN SRG	DATE 8-21-63
			CHECKED aa g/b	DATE 3-2-64
			DES. DES. 7B	DATE
			MECH. DES. 156	DATE
DECIMALS .X \pm .05 .XX \pm .01 .XXX \pm .005			FINAL APPROVAL RDL	
FRACTIONS $\pm 1/64$ ANGLES $\pm 0^\circ 30'$			DATE	
TOLERANCES			SHEET	
			REV. LTR.	

