

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS ARE TO BE ROUNDED UP TO THE NEXT HIGHER DECIMAL PLACE. DIMENSIONS ON FRACTIONS ARE TO BE ROUNDED UP TO THE NEXT HIGHER FRACTION. DIMENSIONS ON ANGLES ARE TO BE ROUNDED UP TO THE NEXT HIGHER MINUTE. DIMENSIONS ON ROUNDS ARE TO BE ROUNDED UP TO THE NEXT HIGHER THIRD. DIMENSIONS ON HOLES ARE TO BE ROUNDED UP TO THE NEXT HIGHER THIRD. DIMENSIONS ON TOLERANCES ARE TO BE ROUNDED UP TO THE NEXT HIGHER DECIMAL PLACE.

*FOR INFORMATION ONLY, CONTRACTOR MAY AT HIS OPTION DEVIATE FROM THESE PROCESS DETAILS.

WIRE ITEM	DESCRIPTION	LENGTH (INCHES)	NO. OF PLACES	TOTAL LENGTH	SLEEVING REQ'D (Y/N)	NOTE
A 71	WIRE MW-C24(7)U BRN	5	1	5	NONE	
B 71	BRN	4 3/4		4 3/4		
C 72	BLK	3 3/4		3 3/4		
D 73	RED	5		5		
E 74	YEL	4		4		
F 72	BLK	3		3		
G 75	GRN	4		4		
H 76	ORN	2 1/2		2 1/2		
J 77	WIRE #16	2		2		4
K 77	WIRE #16	1 3/4		1 3/4		4

- NOTES:
- SUPPLIER FOR: (OR APPROVED EQUIVALENT)
ITEMS 29, 30, 31, 32, 33, 34, 35, & 36: OHMITE MFG CO, SKOKIE, ILLINOIS
ITEM 37: ERIE RESISTOR CORP, ERIE, PA
ITEMS 35 & 38: ARCO ELECTRONICS INC, CHICAGO, ILL.
ITEM 39: ASTRON CORP, EAST NEWARK, N. J.
ITEM 40: RADIO MATERIALS CORP, CHICAGO, ILL.
ITEMS 41 & 42: RADIO CORP OF AMERICA, CHICAGO ILL.
ITEMS 43, 44 & 51: CINCH MFG CO, CHICAGO, ILL.
ITEM 45: BIRNBACH RADIO CO, INC, NEW YORK, N. Y.
ITEMS 46 & 47: AMPHENOL ELECTRONICS CORP, CHICAGO ILL.
ITEM 48: WHITSO CO INC, SHILLER PARK, ILLINOIS
ITEMS 49, 50 & 57: SHAKEPROOF, DIVISION OF ILLINOIS TOOL WORKS ELGIN, ILLINOIS
ITEMS 52 & 53: SAMUEL HARRIS & CO, CHICAGO, ILLINOIS
ITEMS 54, 55, 56, 58 & 78: HERCULES FASTENER CO, CHICAGO, ILL.
ITEM 59: ELASTIC STOP NUT CORP OF AMERICA, UNION, N. J.
ITEM 60: PARKER-KALON INC, CLIFTON, N. Y.
ITEMS 61, 62 & 63: WALDES-KOHINOOR INC, LONG ISLAND CITY, N. Y.
ITEM 64: DIELECTRIC MATERIALS CO, CHICAGO, ILLINOIS
ITEMS 65, 66, 67 & 69: BENTLY-HARRIS MFG CO, CONSHOHOCKEN, PENN
ITEM 79: IRVINGTON, DIV MINNESOTA MINING & MFG CO, IRVINGTON, N. J.
 - ELECTRICAL CONNECTIONS SHALL BE SOLDERED USING ITEM 70
 - LETTERED LEADS ARE JUMPER WIRE (SEE TABLE "A") SHOWN BY SINGLE LINE, LETTERED AT BOTH ENDS FOR CLARIFICATION
 - WIRE SHALL BE TYPE S, DRAWN AND ANNEALED, TINNED PER SPEC MIL-W-3861.
 - RUN WIRES LOOSE AND DRESSED BACK AGAINST THE CHASSIS IN THE MOST CONVENIENT MANNER.
 - USE ITEMS 66 & 72 TO INSULATE JUMPERS C & F WHERE INDICATED ITEM 65 TO INSULATE JUMPERS A & B WHERE INDICATED USE ITEM 67 ON JUMPER D, ITEM 74 ON JUMPER "E", & ITEM 75 ON JUMPER G.
 - WIRE LENGTHS INDICATED IN MATL LIST ARE PRELIMINARY AND SHALL BE CUT TO PROPER LENGTH IN ASSEMBLY.

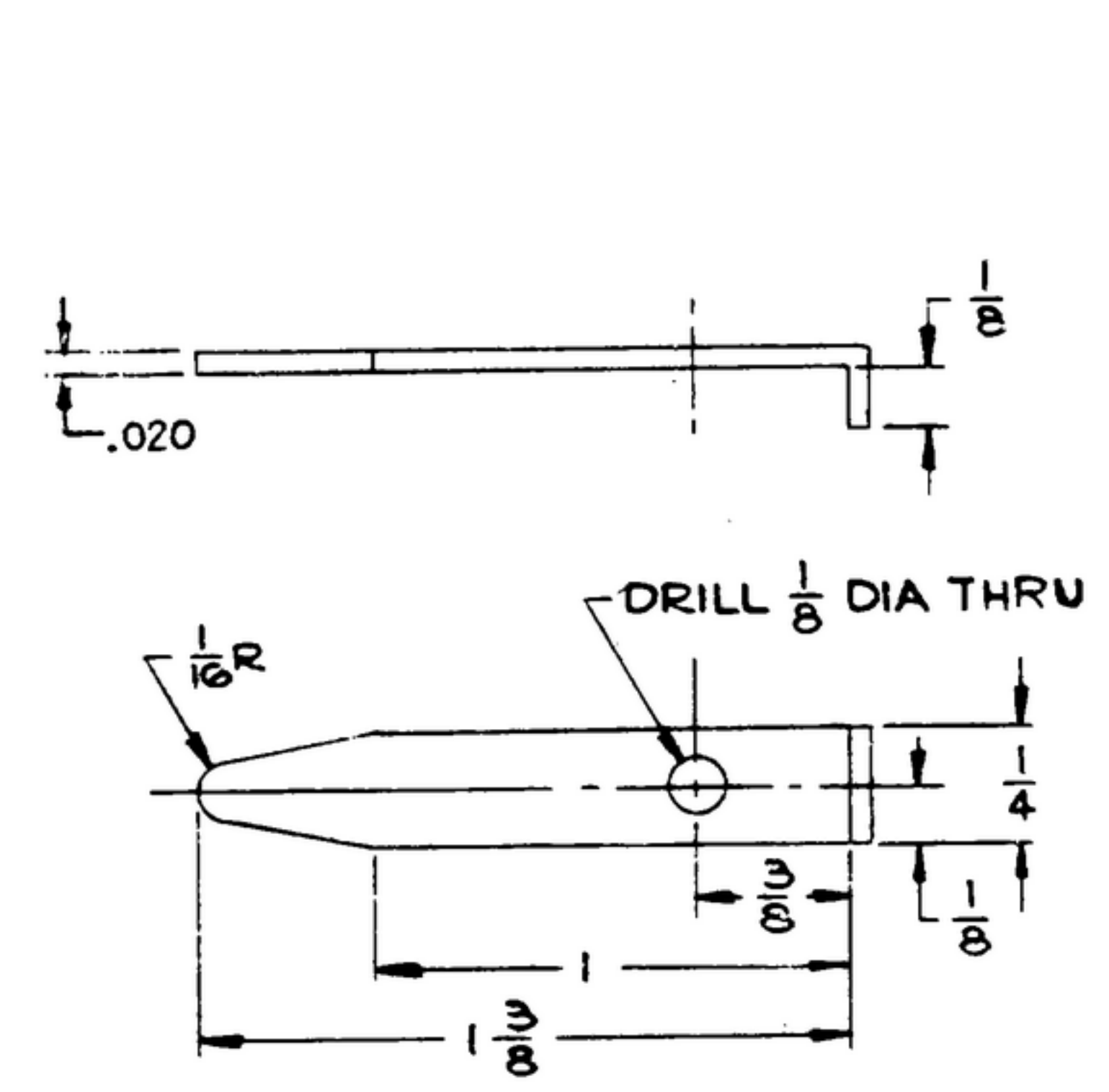
ITEM	QTY	SIG	PART NO.	DESCRIPTION	MATL-FIN	FIN SIZE OR SPEC	SHT	NOTES
79	AS REQ'D		-79	SLEEVING #12	VINYL		2	1
78	3		-78	MS, (#3-56x3/16 SLOT. RH)	STL-CAD PL		2	1
77	3 3/4		-77	#16			2	4
76	2 1/2		-76	MW-C24(7)U3			2	
75	4		-75	MW-C24(7)U5			2	
74	4		-74	MW-C24(7)U4			2	
73	5		-73	MW-C24(7)U2			2	
72	6 3/4		-72	MW-C24(7)U0			2	
71	9 3/4		-71	WIRE, MW-C24(7)U1	MIL-W-76		2	
70			-70	SOLDER .062 DIA	QQ-5-571		2	1
				S60WARP3				
69			-69	SLV #11 BH-1151 (GRN)			2	1
68	AS REQ'D		-68	SLV #11 BH-1151 (YEL)			2	1
67			-67	(RED)			2	1
66			-66	(BLK)			2	1
65			-65	SLV #11 BH-1151 (BRN)			2	1
64	RE AS		-64	TUBING #18 (GRN)			2	1

ITEM	QTY	SIG	PART NO.	DESCRIPTION	MATL	FIN SIZE OR SPEC	SHT	NOTES
63	2		-63	#5100-18			2	1
62	1		-62	#5103-37			2	1
61	2		-61	RING, RET #5100-12			2	1
60	2		-60	SCR, (#2x3/16 LG RH SELF-TAPPING TYPE Z)			2	1
59	2		-59	NUT, CLINCH #C2-62			2	1
58	5		-58	NUT, (#4-40x3/32 HEX)			2	1
57	9		-57	LK WASH., (#4 INT TOOTH)			2	1
				#1204-00				
56	1		-56	MS, (#4-40x3/16 LG SLOT. FH)			2	1
55	4		-55	MS, (#4-40x3/8 LG SLOT. RH)			2	1
54	20		-54	MS, (#4-40x3/16 LG SLOT. BIND. HEAD)	STL-CAD PL		2	1
53	2		-53	SCR #10-32x3 LG HEX SCH CAP	CH STL		2	1
52	6		-52	SCR, (#6-32x1/2 LG HEX SCH CAP)	CH STL		2	1
51	2		-51	STRAPNUT #1060			2	1
50	4		-50	LUG, #12550			2	1
49	1		-49	LUG, #2101-06-00			2	1
48	4		-48	TERM. STANDOFF #3AI-AI			2	1
47	1		-47	CONNECTOR AN/UG-447/U			2	1
46	1		-46	CONNECTOR #126-217			2	1
45	1		-45	JACK, TIP #407 (GRN)			2	1
44	2		-44	SHIELD, TUBE #8674			2	1
43	2		-43	SOCKET #13723			2	1
42	1		-42	TUBE 68A6	MIL-E-1		2	1
41	1		-41	TUBE 6C4	MIL-E-1		2	1
40	3		-40	#B-10000			2	1
39	1		-39	.05 UF			2	1
38	1		-38	#CM-15-E-101-J			2	1
37	1		-37	CAPACITOR 5 UUF #N7 50K			2	1
36	1		-36	RESISTOR 22000 1/2W 5% MIL-R-11			2	1
35	1		-35	CAP. CM-15-C-120-J			2	1
34	1		-34	27000 1/2W 5%			2	1
33	1		-33	22K 1W 5%			2	1
32	1		-32	33K 1W 5%			2	1
31	1		-31	12000 1/2W 5%			2	1
30	1		-30	68K 1/2W 5%			2	1
29	1		-29	390K 1/2W 10%			2	1
28	1		-28	RESISTOR 150K 1/2W 5% MIL-R-11			2	1
27	1		-27	NAMEPLATE 3x1 7/16			7	
26	3		-26	SPRING 13/16x.020			4	
25	1		-25	KNOB 5/8x1/4			4	
24	1		-24	HN 1/2x.1875			7	
23	1		-23	DIAL 1/5 1/6x3/8			5	
22	1		-22	SPACER 1.495x.312			5	
21	1		-21	DIAL 1 1/5 1/6x1/4			4	
20	1		-20	SUPPORT 1 1/11 1/6x3/4			5	
19	1		-19	SCREW 2 1/16x3/16			4	
18	1		-18	CLAMP 1x3/4			6	
17	1		-17	COLLAR 3/4x7/16			5	
16	1		-16	WASHER 3/8x.191x1/4			5	
15	1		-15	SHAFT 3 7/8x.187			6	
14	1		-14	SPRING 7/8x.016			4	
13	1		-13	CHASSIS 4x2 1/2x.074			3	
12	1		-12	BASE 8x6x3/8			5	
11	1		-11	BLOCK 3/4x1 5/16			7	
10	1		-10	SCREW 7/8x.370			7	
9	1		-9	WASHER 5/8x.380			7	
8	1		-8	KNOB 1x1 1/8			7	
7	1		-7	CLAMP 1/2x1.188			7	
6	1		-6	HOLDER 2 3/4x2			7	
5	1		-5	COVER 4x2 1/2x.074			5	
4	1		-4	CONTACT 1 3/8x1/4			7	
3	1		-3	KNOB 1 DIA			6	
2	1		-2	SPRING 1/25x.1 1/16			4	
1	3		-1	PIN .125x.1 1/16			4	

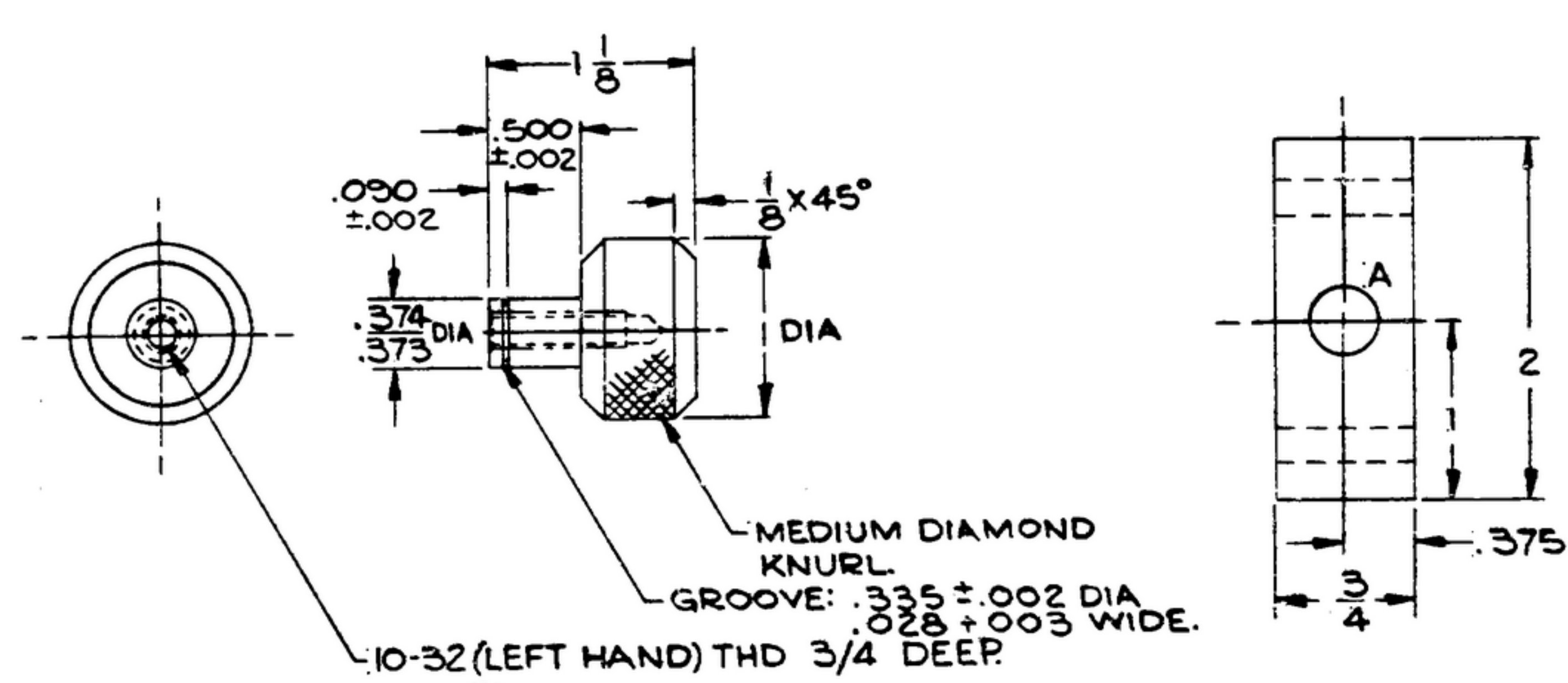
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES ±1/64 ±.010 ±1°		MOTOROLA-INC. ORDER NO. 14-58-PC-58 A1 SIGNAL CORPS		DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES	
DRAWN J.J.L.		REVIEWED XXX		FORT MONMOUTH NEW JERSEY	
DATE 25 JUN 58		APPROVED		SM-D-58790	
NEXT ASSY USED ON		CHECKED W.J.P. 14 JAN 59		SHEET 1 OF 3 SHEETS	
MOTOROLA-APPL		APPLICATION		WHEN REFERRING TO THIS DRAWING STATE DRAWING NO., APPLICABLE ISSUE SYMBOL, IF ANY, AND DATE.	

ORIG SYM	ISS A	REVISIONS	17 OCT 58
SYM	DESCRIPTION	DATE	APPROVAL

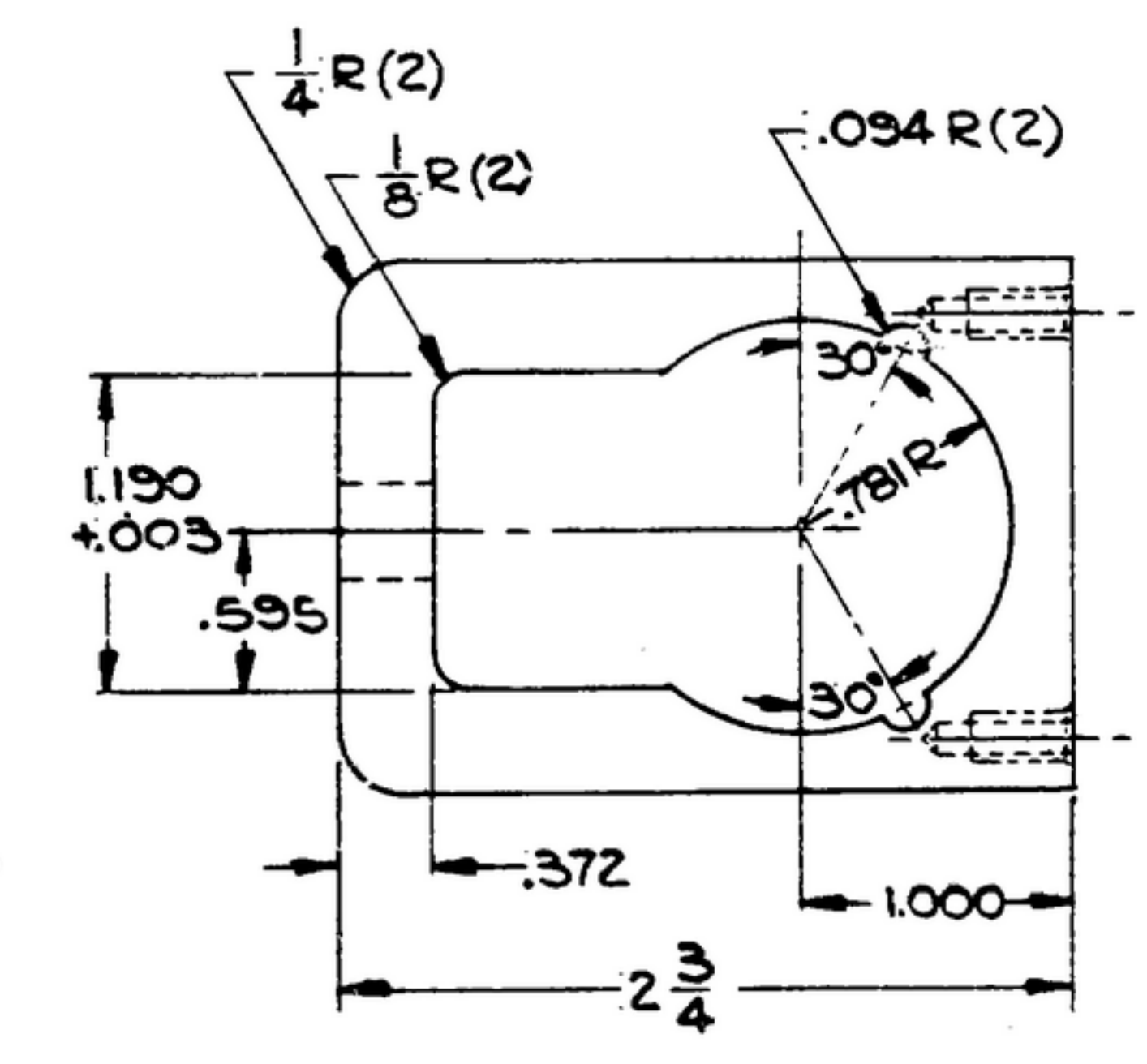
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④ CONTACT SCALE 2/1
MATL: PHOSPHOR BRONZE, COMPA
PER SPEC QQ-P-330.

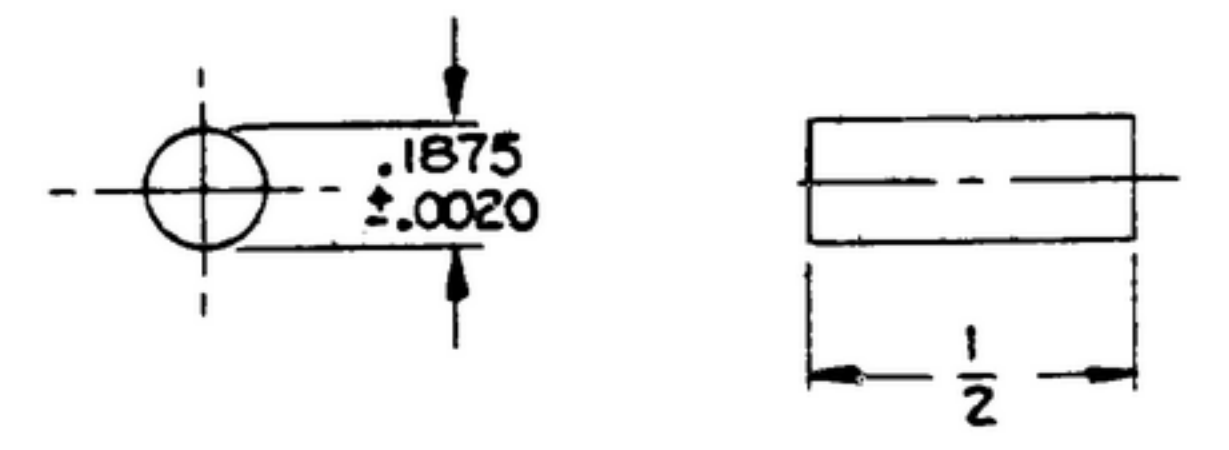


⑤ KNOB SCALE 1/1
MATL: AL ALLOY 2024, TEMPERT 36
PER SPEC QQ-5-355.
FINISH: ANODIZE PER SPEC MIL-A-8625.

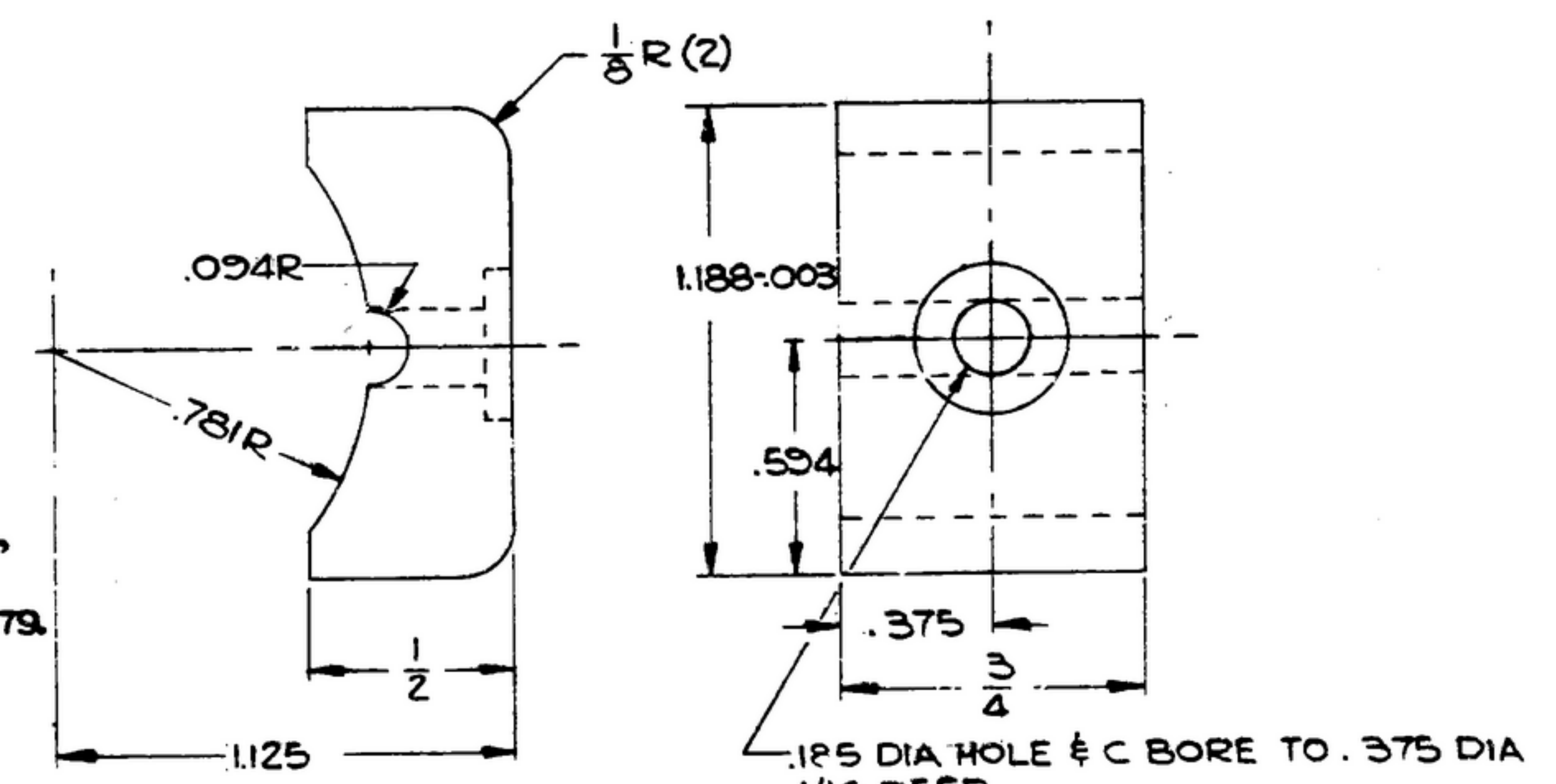


⑥ HOLDER SCALE 1/1
MATL: LINEN BAKELITE

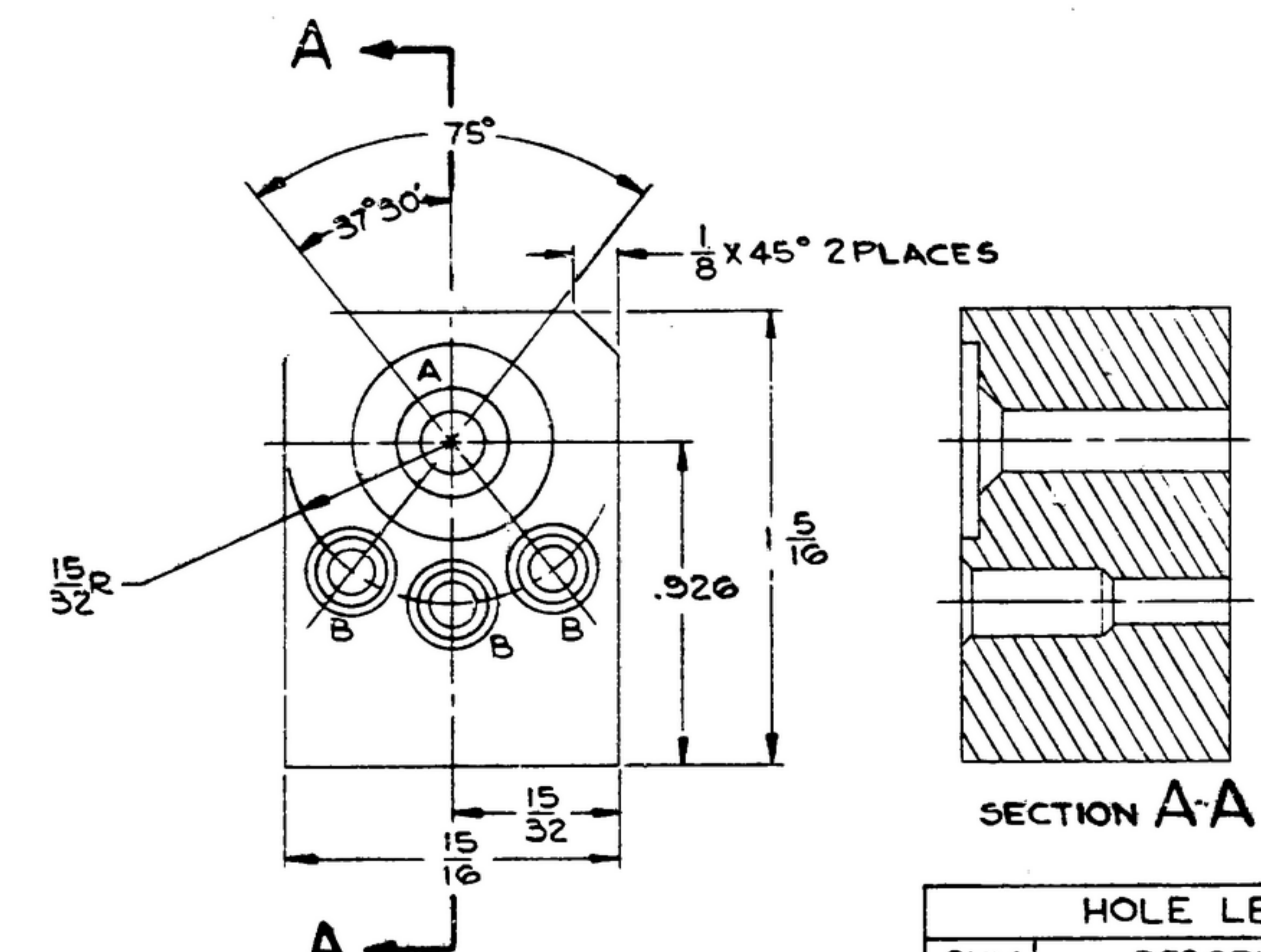
HOLE LEGEND		
SYM	DESCRIPTION	QTY
A	REAM .375 DIA	1
B	TAP 8-32 THD 3/8 DEEP	2



②④ PIN SCALE 2/1
MATL: TOOL STEEL GRADE 3, CL FS-WH-10,
FORM ROUND DRILL ROD, COND 5A.
FINISH: GRIND & POLISH PER SPEC QQ-5-00773.

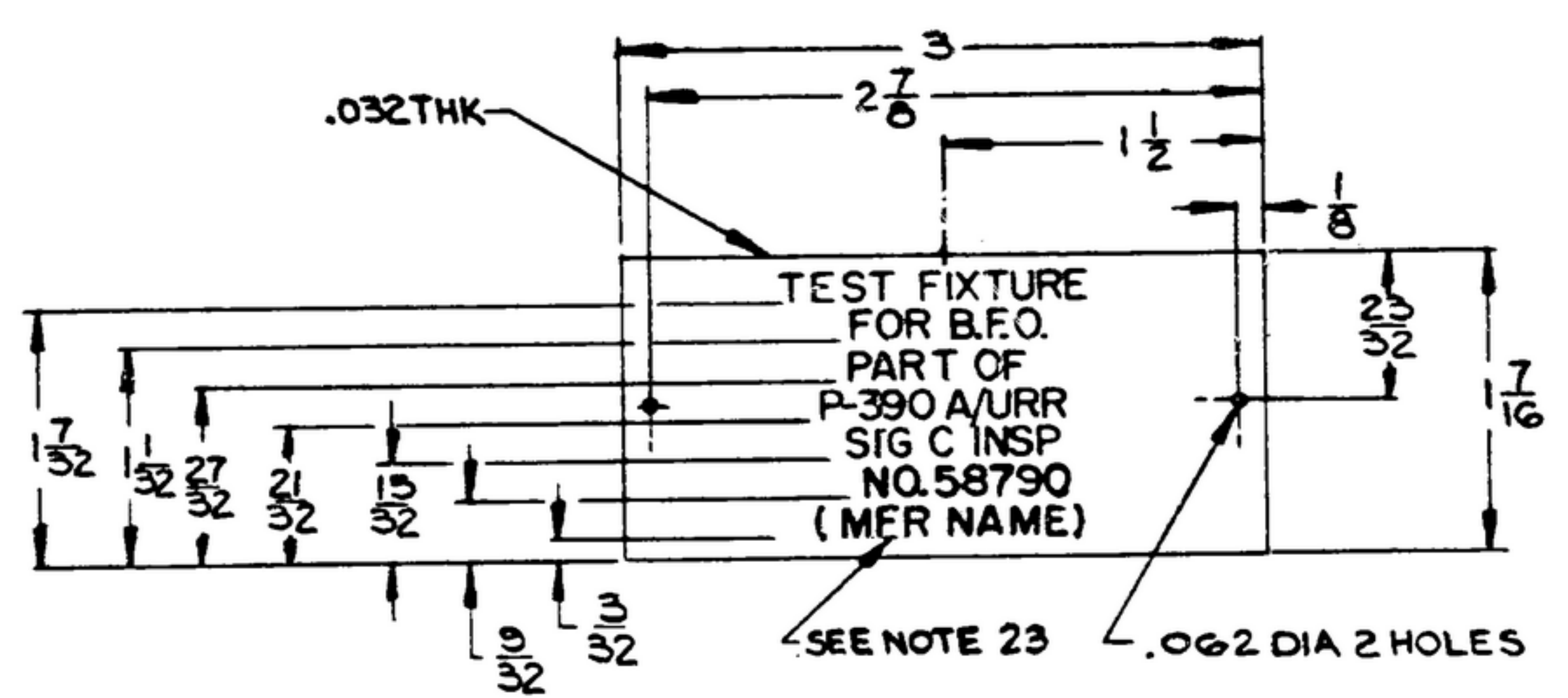


⑦ CLAMP SCALE 2/1
MATL: LINEN BAKELITE



HOLE LEGEND		
SYM	DESCRIPTION	QTY
A	.190 DIA THRU; C BORE TO 3/16 DIA 3/64 DEEP; C SINK @ 90° TO 5/16 DEEP	1
B	.128 DIA THRU; .191 DIA 3/8 DEEP; C SINK 90° TO 1/4 DIA.	3
C	DRILL & TAP FOR 10-32 "HELICOIL" INSERT 3/8 DEEP	2

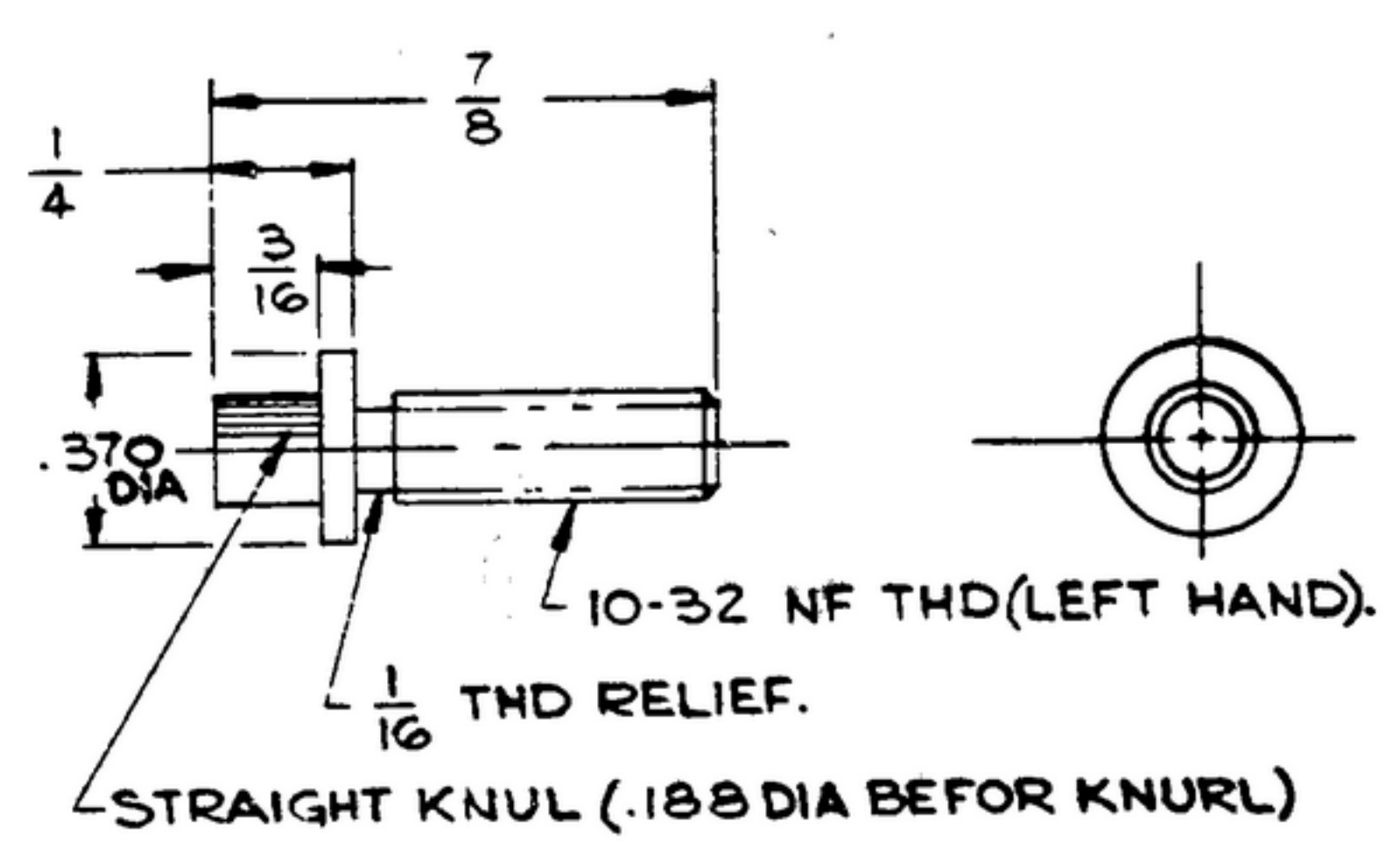
①① BLOCK SCALE 2/1
MATL: TEFLON



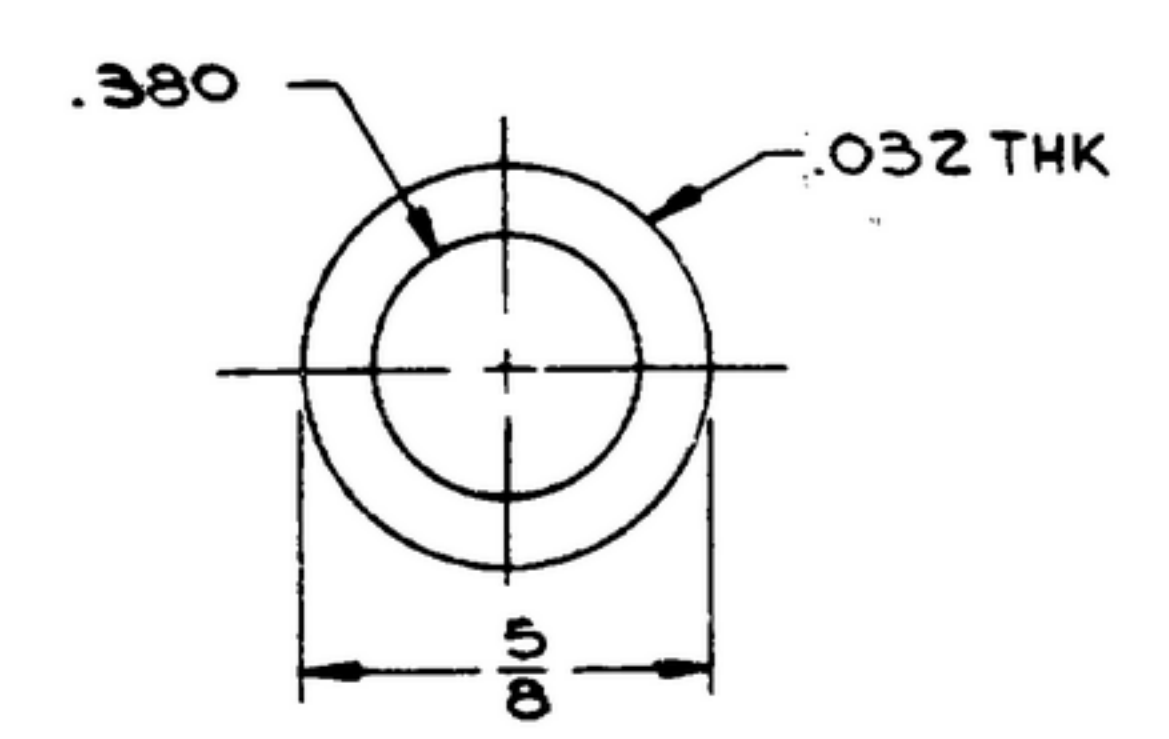
②⑦ NAMEPLATE SCALE 1/1

MATL: AL ALY 5052, TEMPER H-34 PER SPEC QQ-A-310.
FINISH: ZINC PLATE CL 2, TYPE II PER SPEC QQ-Z-325.

METAL STAMP CHARACTERS IN VERTICAL GOTHIC STYLE, 1/8 HIGH CHARACTERS, SPACED AND CENTERED AS SHOWN. AFTER FINISH HAS DRIED FILL CHARACTERS WITH P511B, PER SPEC MIL-F-14072.



②⑩ SCREW SCALE 2/1
MATL: CRESS COMP 3035, PHYS CONDA, SURFACE COND F PER SPEC MIL-S-7720.
FINISH: CAD PL TYPE II, CL I PER SPEC QQ-P-416.



⑨ WASHER SCALE 2/1
MATL: NAVAL BRASS, ROUND ROD, COMP 1, COND 1/2 HARD PER SPEC QQ-B-636.

- NOTES:
- 22. PARTS TO BE CLEAN & FREE OF BURRS, CHIPS, CRACKS & SHARP EDGES.
 - 23. MFR NAME SHALL READ MOTOROLA INC. SIZE & LOCATION AS SHOWN.
 - 24. SCREW THREADS ARE PER FED. SERV HNDK H-28.

REF ID	PART NO.	DESCRIPTION	MATL	MATL SPEC
SEE TABLE FOR PART NO. LIST OF MATERIAL				
UNLESS OTHERWISE SPECIFIED				
DIMENSIONS ARE IN INCHES				
TOLERANCES ON FRACTIONS DECIMALS ANGLES				
± 1/64 ± .005 ± 1°				
DRAWN E.D.H.				
DATE 25 JULY 58				
CHECKED W.J.P. 16 JAN 59				
DATE 25 JULY 58				
APPROVED [Signature]				
MOTOROLA-APPL APPLICATION				
MOTOROLA INC. ORDER NO. 14385-FC-5B-A1 SIGNAL CORPS				
REVIEWED [Signature]				
A-PROVED				
NEXT ASSY USED ON				
NEXT ASSY USED ON				
SCALE				
WHEN REFERRING TO THIS DRAWING STATE DRAWING NO., APPLICABLE ISSUE SYMBOL, IF ANY, AND DATE.				

TEST FIXTURE ASSEMBLY (B.F.O.)

DEPARTMENT OF THE ARMY
SIGNAL CORPS ENGINEERING
LABORATORIES

FORT MONMOUTH NEW JERSEY

SM-D-58790
SHEET 7 OF 8 SHEETS

