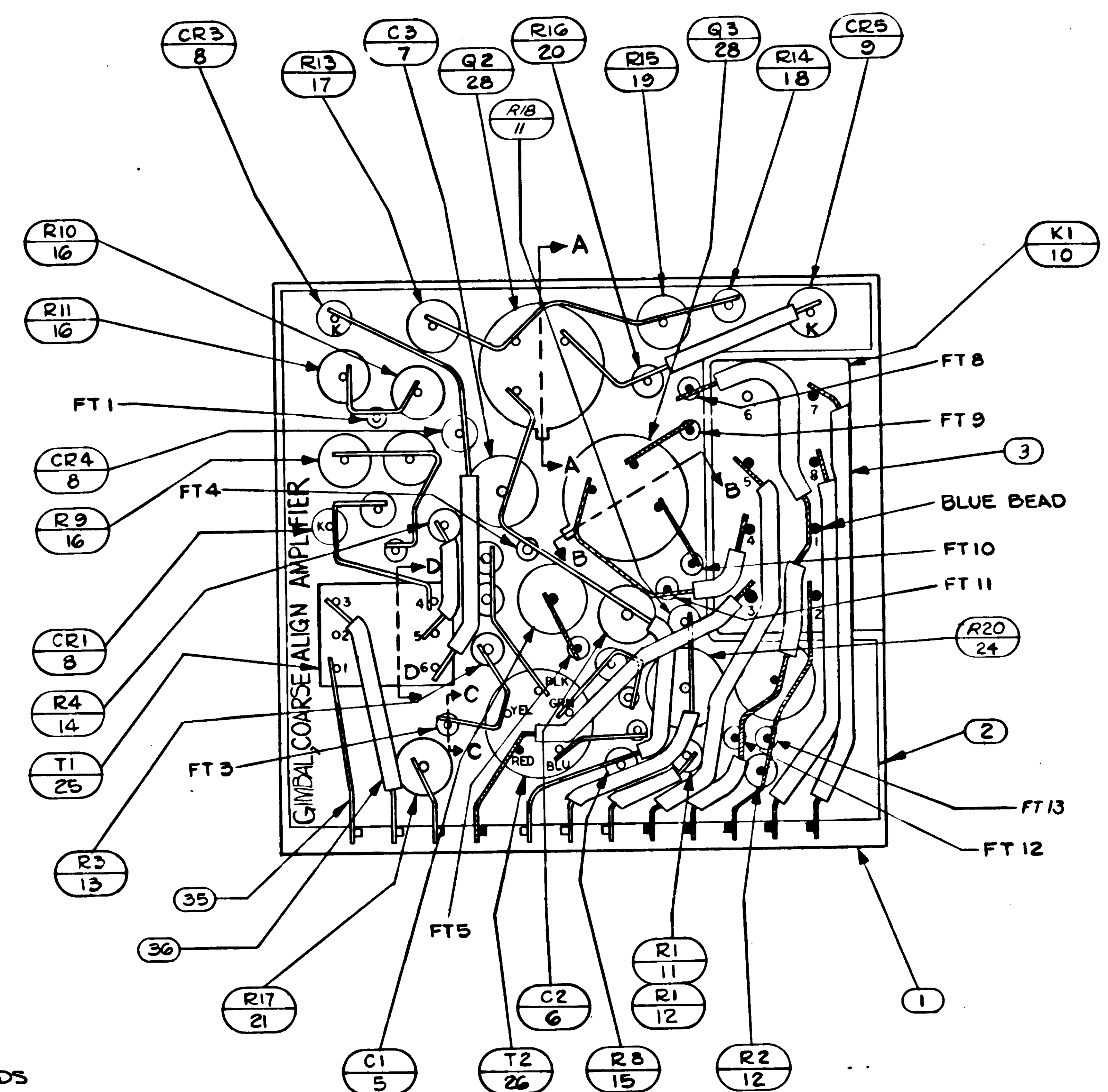


SCALE 2:1

APPLICABLE DASH NO.



- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- UNLESS OTHERWISE SPECIFIED: WIRING SHALL MEET THE REQUIREMENTS OF ND 1002069.
- ENCAPSULATE MODULE PER ND1002002 (BLACK POLYURETHANE FOAM) UNLESS OTHERWISE SPECIFIED PERIPHERAL ENCAPSULANT DIMENSIONS MAY EXCEED THE NOMINAL HEATSINK WIDTH AND LENGTH DIMENSIONS BY A MAXIMUM OF .005. WHEN THE HEATSINK OUTLINE EXCEEDS THE ENCAPSULANT OUTLINE, THE MAXIMUM DIMENSION BETWEEN ANY HEATSINK SURFACE AND ITS RESPECTIVE ENCAPSULANT SURFACE SHALL NOT EXCEED .015. REMOVE ALL FLASHING
- MARK PIN NUMBERS .100 HIGH (WHITE) AND ALL OTHER CHARACTERS .140 HIGH (WHITE) PER ND1002019 AND SERIALIZE PER ND 1002023. CENTRALIZE AS SHOWN.
- AREA TO BE FREE OF ENCAPSULATING COMPOUND
- USE AS REQUIRED
- ON ITEMS (2), (3) AND (4):
 'K' INDICATES CATHODE SIDE OF DIODE
 FT () INDICATES FEED THRU
 'C' INDICATES COLLECTOR LEAD OF TRANSISTOR
 B - BASE
 E - EMITTER
 C - COLLECTOR
 C() - MULTI-STAGE TRANSISTOR
 B() - BASE
 E() - EMITTER
- WHITE DOT AND CLEAR WIRING INDICATES LOWER LEVEL WIRING. BLACK DOT AND CROSS-HATCHED WIRING INDICATES UPPER LEVEL WIRING.
- TYPICAL SLEEVING FOR CR1 THRU CR4 R1 THRU R8, R14, R16 AND R18
- MUST MEET REQUIREMENTS OF ND1002136
- TORQUE TO 4 ± 1 IN-LB FOR ASSY OF ITEM 10
- ALL CONNECTIONS TO BE MADE BY WELDING PER ND1002005
- BOND ITEM (40) TO ITEM (31) PER ND1002237.
- COMPONENTS TO BE CEMENTED IN PLACE PER ND 1002009 METHOD C AND CENTRALIZED
- USE MIL-1-631 TYPE F, FORM U, GRADE C, CLASS I, CATEGORY I, ONE PLACE ONLY. BOND IN PLACE PER ND1002004, TYPE I PROCEDURE PER ND 1007041.
- FILL PER ND 1002117

19. CLEAN MODULE WHERE POSSIBLE PRIOR TO BONDING OF WAFER BOARDS AND APPLICATION OF PRIMER BY DEGREASING WITH FREON AND ISO-PROPYL ALCOHOL. ADHESIVE AND COATING MATERIAL PER ND1002187 TYPE I. PRIMER TO CONSIST OF SIX PARTS BY VOLUME OF 1012504-1 AND ONE PART BY VOLUME OF 1012504-2. APPLY MATERIAL AND PRIMER AS INDICATED IN TABLE I.

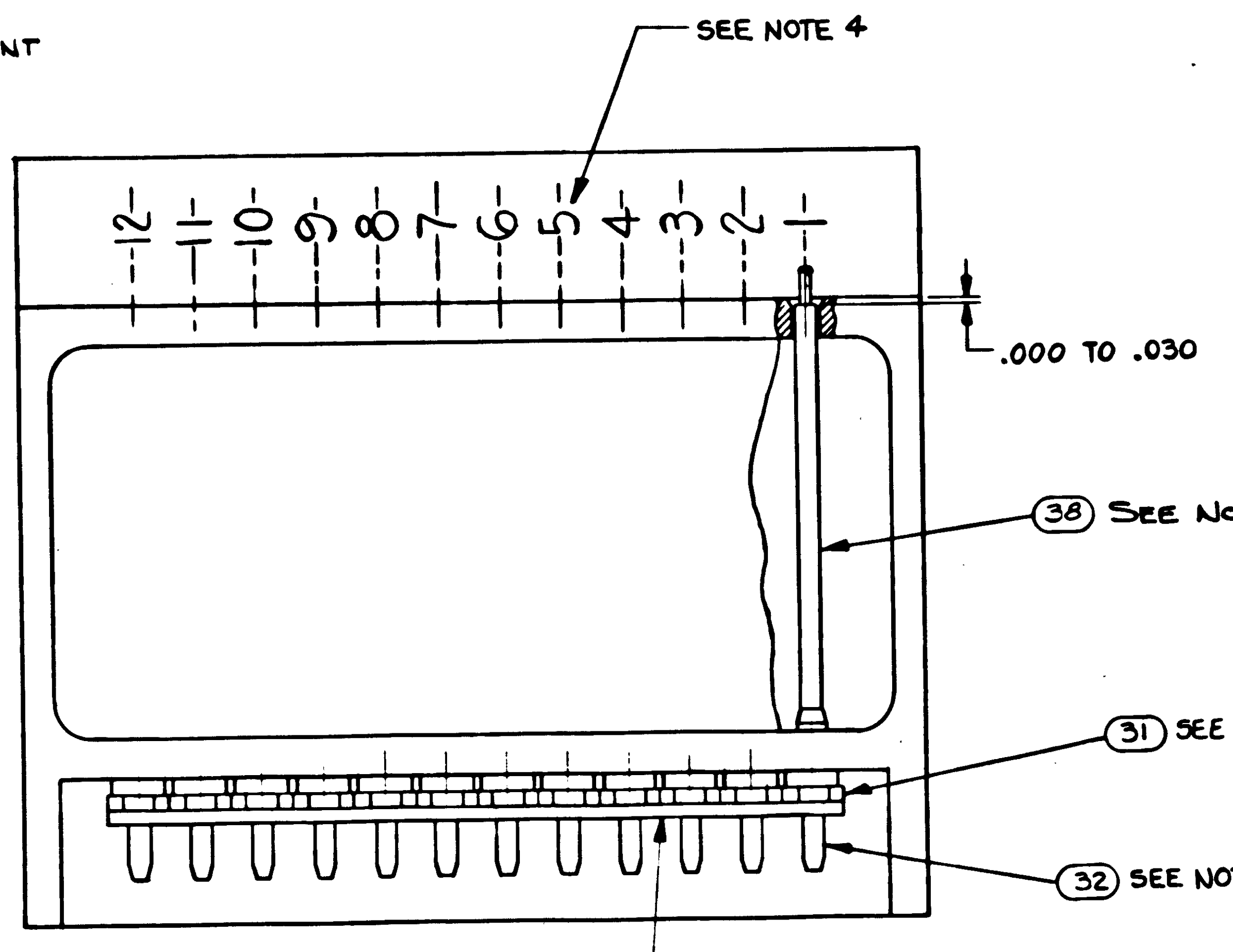


TABLE I

CONFIGURATION	MAT	BOND BETWEEN WAFER AND HEATSINK	TOP OF WAFER AT PERIMETER	HEATSINK-FOAM CONTACT SURFACE ADJACENT TO HEATSINK EXTERNAL SURFACE
WAFER & FLAT HEATSINK	ADHESIVE	.12 MIN 100% OF PERIMETER .25 MIN 80% OF PERIMETER	.25 MIN 100% OF PERIMETER	N/A
WAFER AND ADJACENT VERTICAL HEATSINK SURFACE	ADHESIVE	CORNER FILLET & VERTICAL SURFACE TO WITHIN .03 ± .03 OF EXTERNAL SURFACE	.25 MIN 100% OF PERIMETER	N/A
HEATSINK FOAM CONTACT SURFACE PERIMETER	PRIMER	N/A	N/A	.25 MIN WIDTH OR TOTAL AVAILABLE ON 90% OF PERIMETER TO WITHIN .03 TO .06 OF EXTERNAL EDGE

QTY	UOM	ITEM NO	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION
1	1	40	1008540-12	GASKET, CONNECTOR MINIATURE
AR	AR	39	MIL-1-631	INSULATION, SLEEVING 22 GA
AR	AR	38	1006776-20	INSULATION SLEEVING
AR	AR	37	1006777-8	WIRE, ELEC.
AR	AR	36	1006776-21	INSULATION SLEEVING
AR	AR	35	1006777-1	WIRE, ELEC.
2	2	34	1008070-5	WASHER- FLAT
2	2	33	MS20341-4A	NUT- HEX
12	12	32	1006782-5	CONTACT, WRAPOST MALE MINAT.
12	12	31	1006775	INSULATOR, WRAPOST MALE MINAT
3	3	30	1008025-2	INSULATOR, BUSHING
AR	AR	29	1006776-22	INSULATION SLEEVING
2	2	28	1010270	TRANSISTOR
1	1	27	1010252-1	TRANSISTOR
1	1	26	1010326	TRANSFORMER
2	2	25	1010329-1	TRANSFORMER
2	2	24	1010278-7	RESISTOR, FIXED
1	1	23	1010345-1	TRANSISTOR
2	2	22	MS35338-78	WASHER, LOCK
1	1	21	1010364-543	RESISTOR, FIXED
1	1	20	1006750-56	RESISTOR
1	1	19	1010364-765	RESISTOR, FIXED
1	1	18	1010369-105	RESISTOR, FIXED
1	1	17	1010364-579	RESISTOR, FIXED
4	4	16	1010364-443	RESISTOR, FIXED
1	1	15	1006750-43	RESISTOR
1	1	14	1006750-48	RESISTOR
2	2	13	1010369-97	RESISTOR, FIXED
4	3	12	1006750-73	RESISTOR
1	2	11	1006750-80	RESISTOR
1	1	10	1010353-1	RELAY, ELECTROMAGNETIC
1	1	9	1010372-22	DIODE, SEMICONDUCTOR DEVICE
4	4	8	1010392-1	DIODE, SEMICONDUCTOR DEVICE
1	1	7	1010279-232	CAPACITOR, FIXED
1	1	6	1010279-228	CAPACITOR, FIXED
1	1	5	1010264-15	CAPACITOR, FIXED
1	1	4	1015692	INSULATOR
1	1	3	1015690	INSULATOR
1	1	2	1015691	INSULATOR
1	1	1	1015689	HEATSINK

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON

FRACTIONS DECIMALS ANGLES
 + - .XX ± .005 + -
 - - .XX ± .02 - -

1007541

APPLICABLE DASH NO.

THE ASSEMBLY PART NUMBER IS THE DRAWING NUMBER AND THE DASH NUMBER THAT APPLIES

CONTRACT NAS 9-497

INSTRUMENTATION LAB
 SPACECRAFT CENTER
 HOUSTON TEXAS

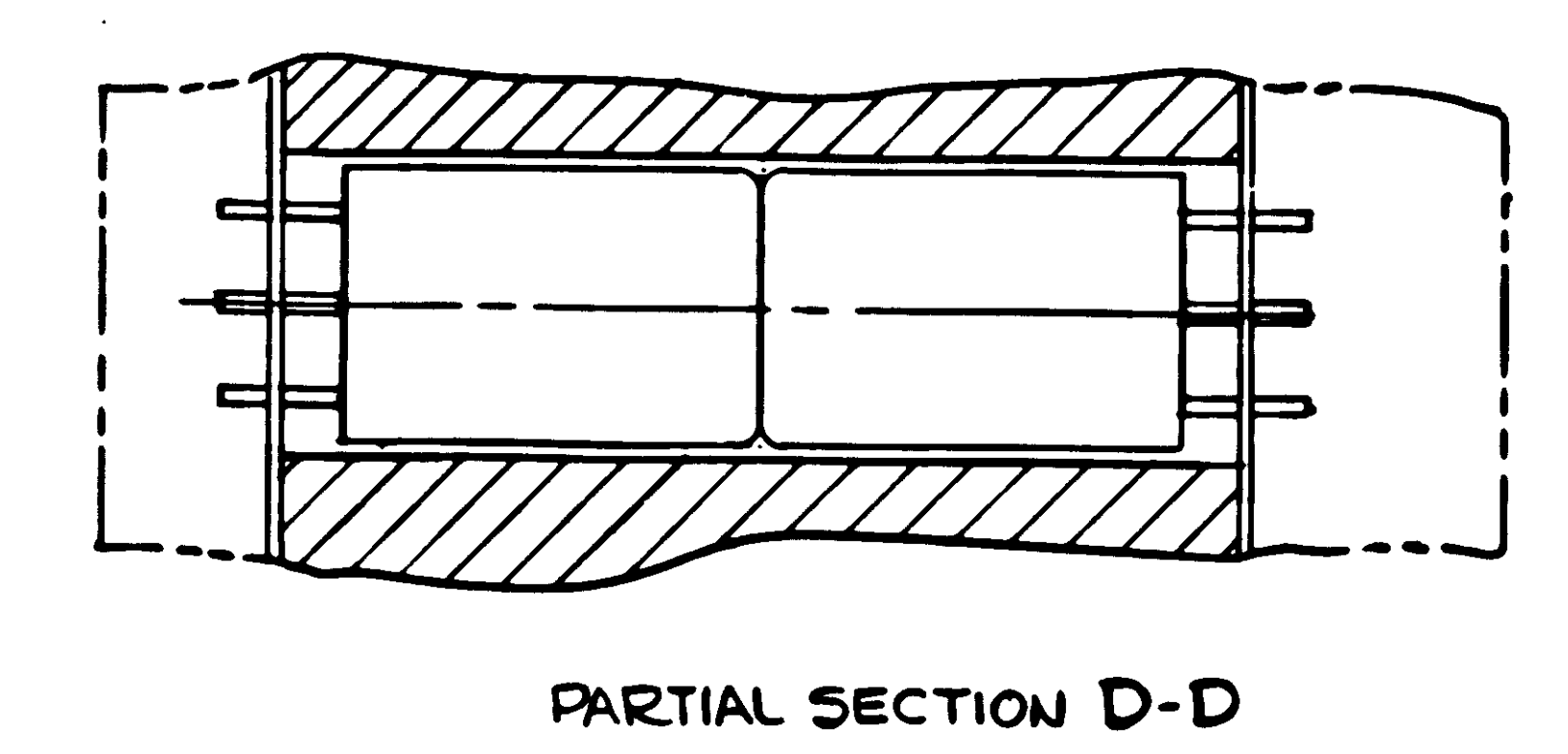
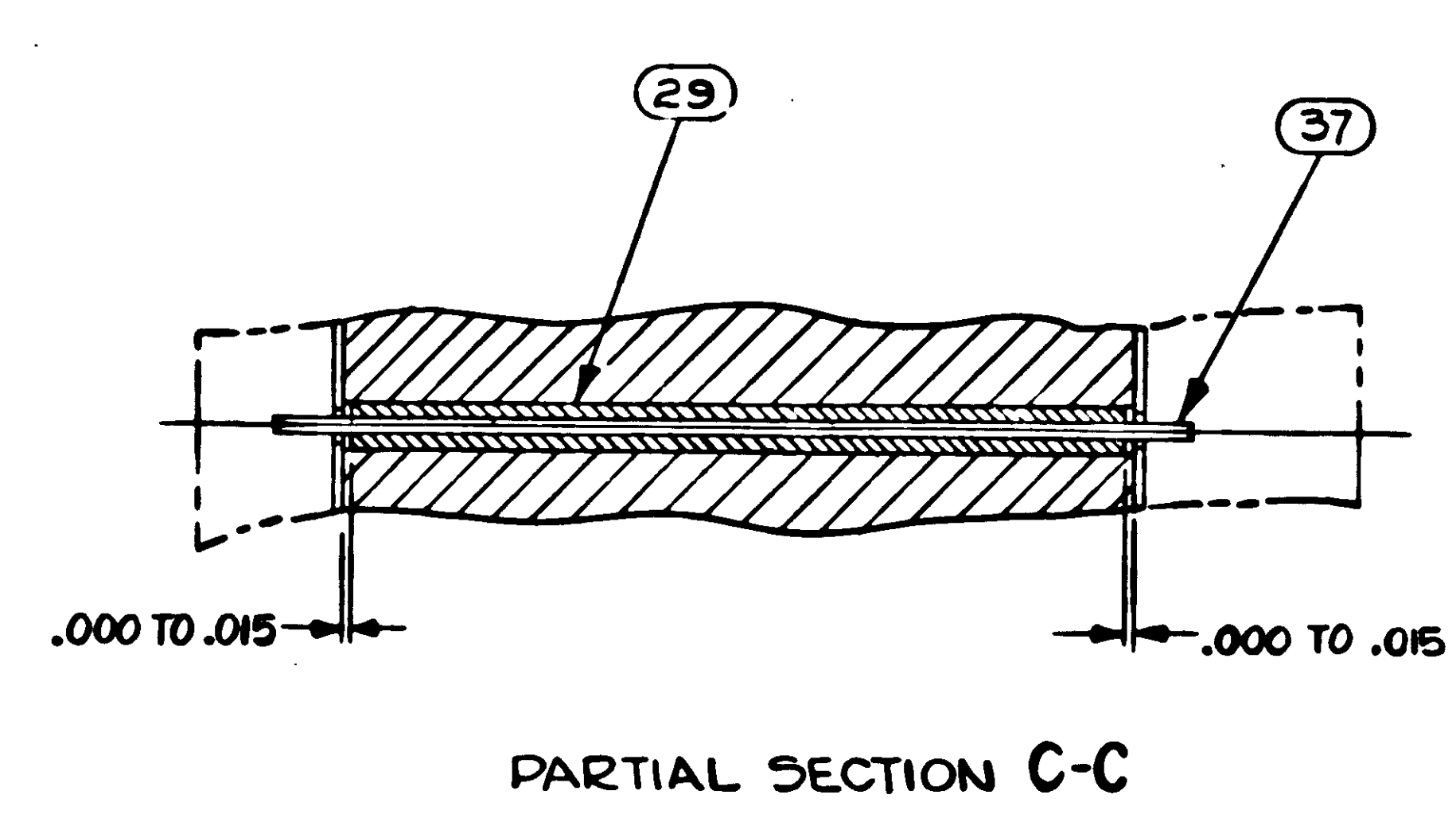
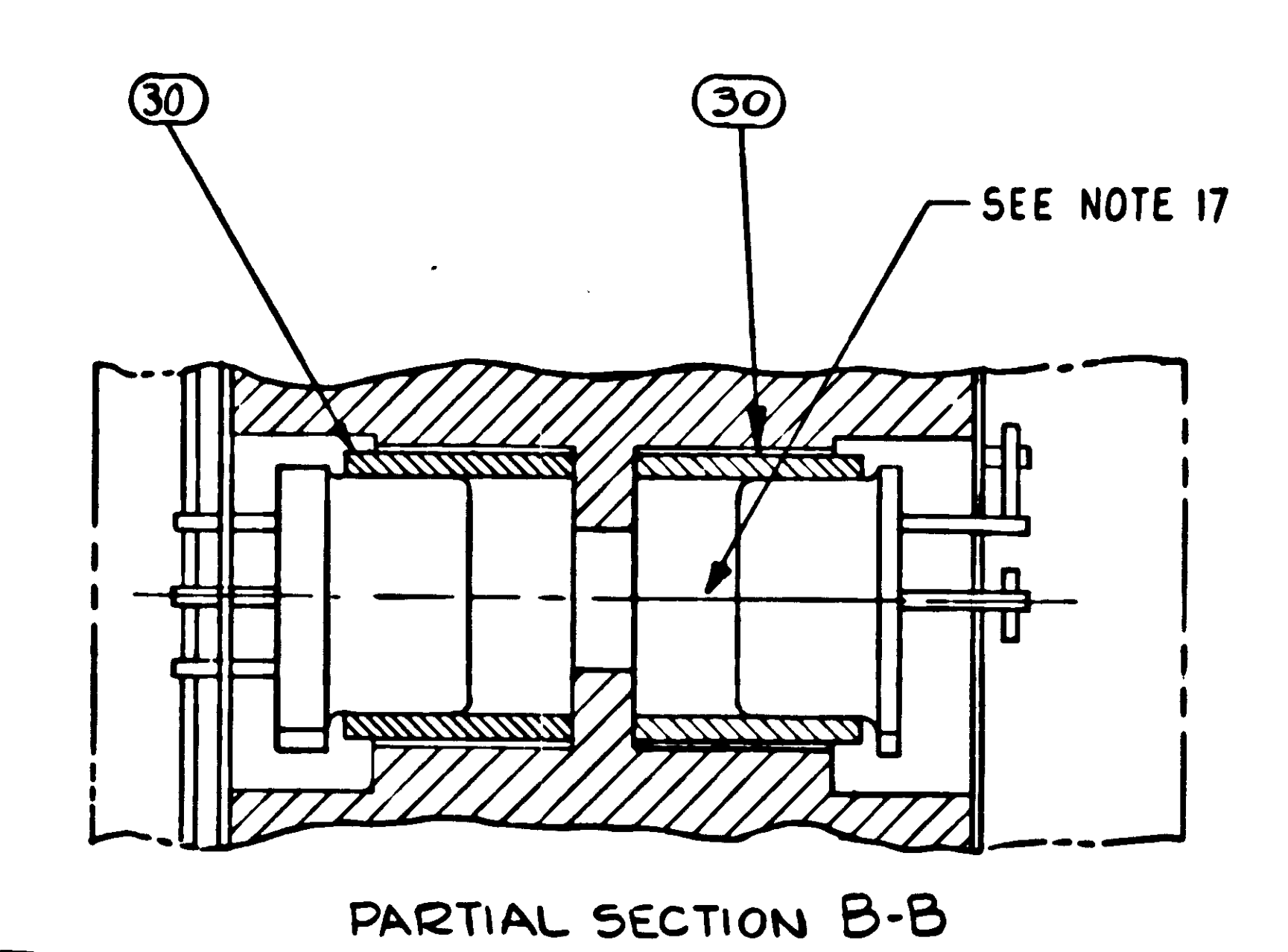
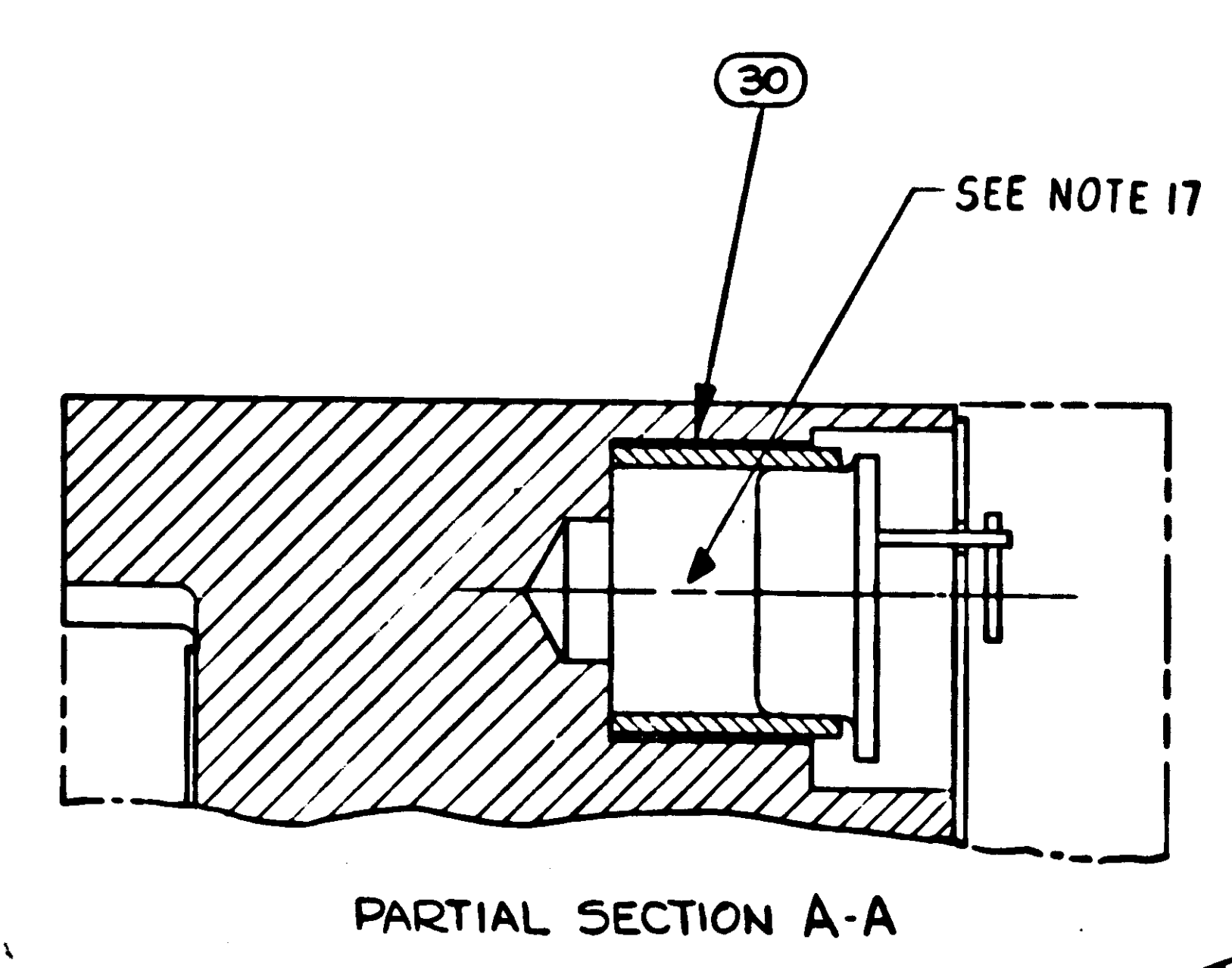
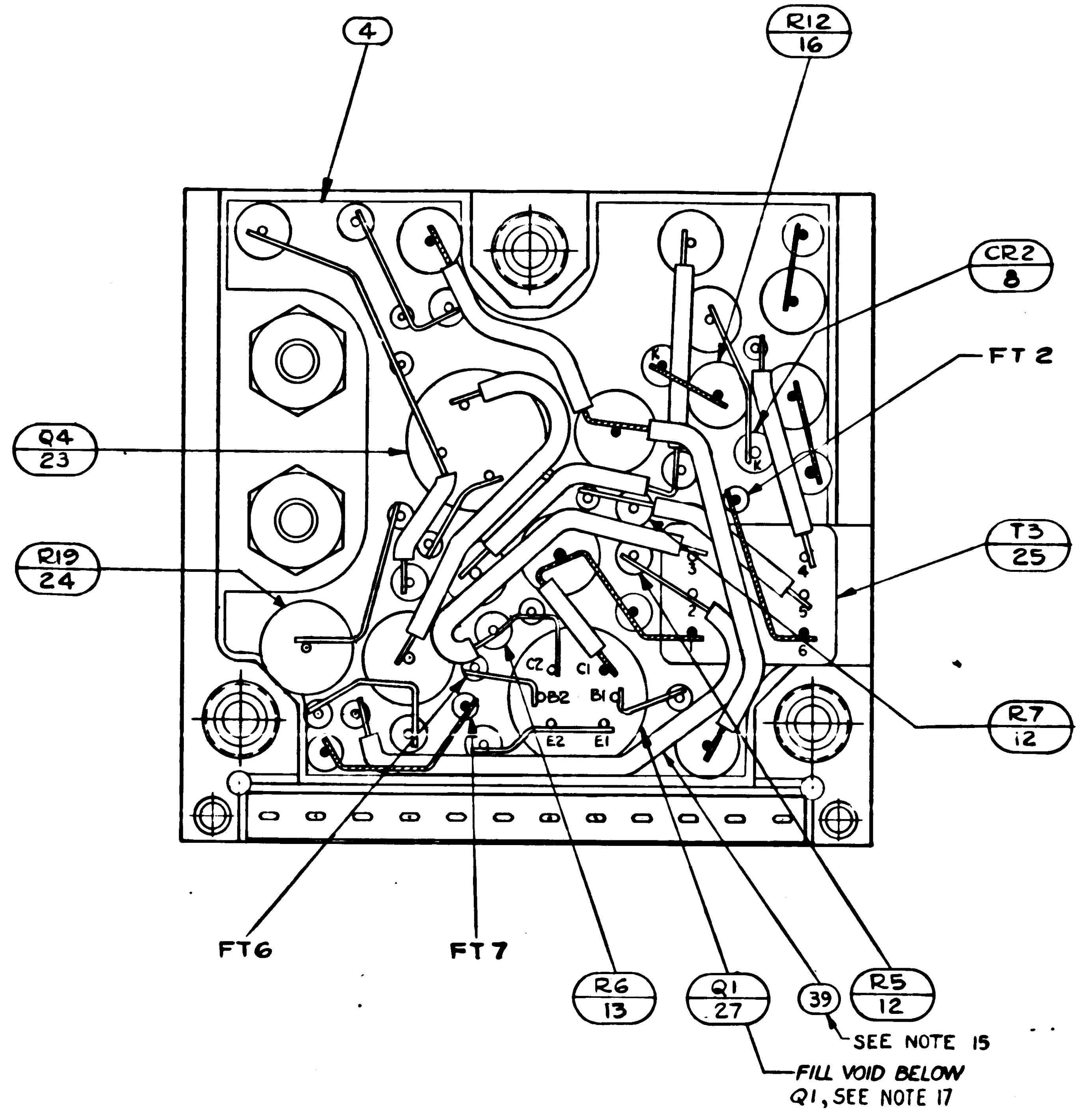
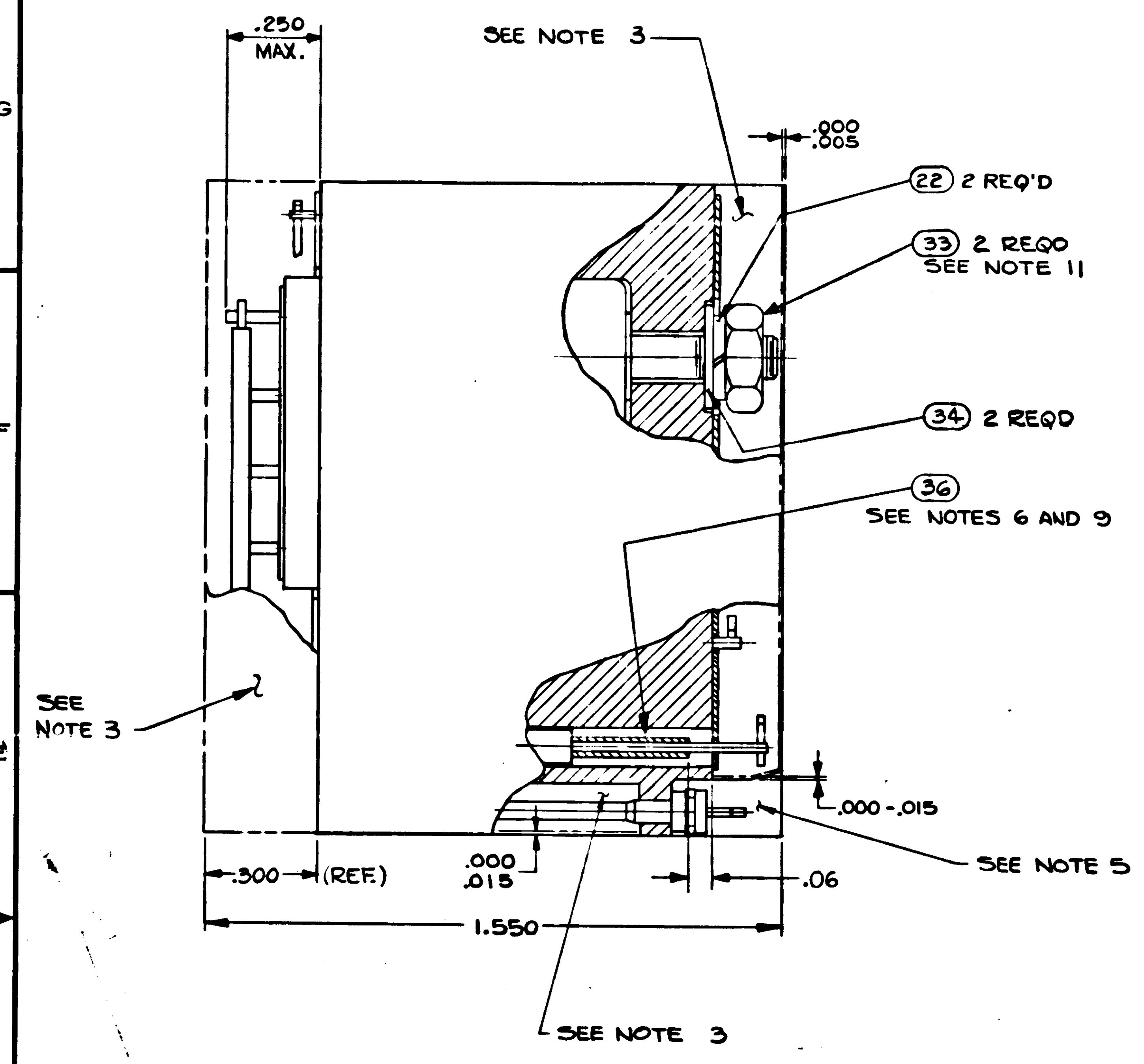
DATE: 27 APR 64
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 APPROVAL: [Signature]

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SCALE: 2:1

SHEET 1 OF 2

REVISIONS				
SYM	DESCRIPTION	DATE	APPD	BY
A	REVISED PER TDRR 17331	15 MAR 65	GM	64
B	REVISED PER TDRR 19403	2 JUN 65	GM	65



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON	INSTRUMENTATION LAB HOUSTON TEXAS	MANAGED SPACECRAFT CENTER HOUSTON TEXAS
FRACTIONS DECIMALS ANGLES + + +	DRAWN: <i>Original</i> 14 MAR 64 CHECKED: <i>Edmond</i> 27 MAR 64 APPROVAL: <i>[Signature]</i>	GIMBAL COARSE ALIGN AMPLIFIER MODULE ASSY
DO NOT SCALE THIS DRAWING	NASA APPROVAL: <i>[Signature]</i> MIL APPROVAL: <i>[Signature]</i>	CODE IDENT NO. 80230 SIZE E SCALE 5:1
MATERIAL	CONTRACT NAS 9-497	1007541 SHEET 2 OF 2