

REVISIONS				
REV	DESCRIPTION	DATE	BY	APPD
A	REVISED PER TDRR 17381	12/65	GM	
B	REVISED PER TDRR 17403	2/66		
C	REVISED PER TDRR 19429	3/66		
D	REVISED PER TDRR 19507	4/66		
E	REVISED PER TDRR 20143	5/66		
F	REVISED PER TDRR 22945	6/66		
G	REVISED PER TDRR 23889	7/66		
H	REVISED PER TDRR 26397	23 FEB 67		
J	REVISED PER TDRR 26375	28 FEB 67		

TABLE I

CONFIGURATION	BOND BETWEEN WAFER AND HEATSINK	TOP OF WAFER ADJACENT TO HEATSINK EXTER SURFACE	HEATSINK-FOAM CONTACT SURFACE ADJACENT TO HEATSINK EXTER SURFACE
WAFER & FLAT HEATSINK	100% OF AREA TO BE BONDING SURFACE FROM EXTERNAL HEATSINK SURFACE	100% OF AREA TO BE BONDING SURFACE FROM EXTERNAL MODULE SURFACE	N/A
WAFER AND ADJACENT VERTICAL HEATSINK SURFACE	CORNER FILLET AND VERTICAL SURFACE TO WITHIN .03 ± .03 OF EXTERNAL SURFACE	100% OF AREA TO BE BONDING SURFACE FROM EXTERNAL MODULE SURFACE	N/A
HEATSINK FOAM CONTACT SURFACE PERIMETER	N/A	N/A	.25 MIN WIDTH OR TOTAL AVAILABLE ON 90% OF PERIMETER WITHIN .03 ± .03 OF EXTERNAL SURFACE

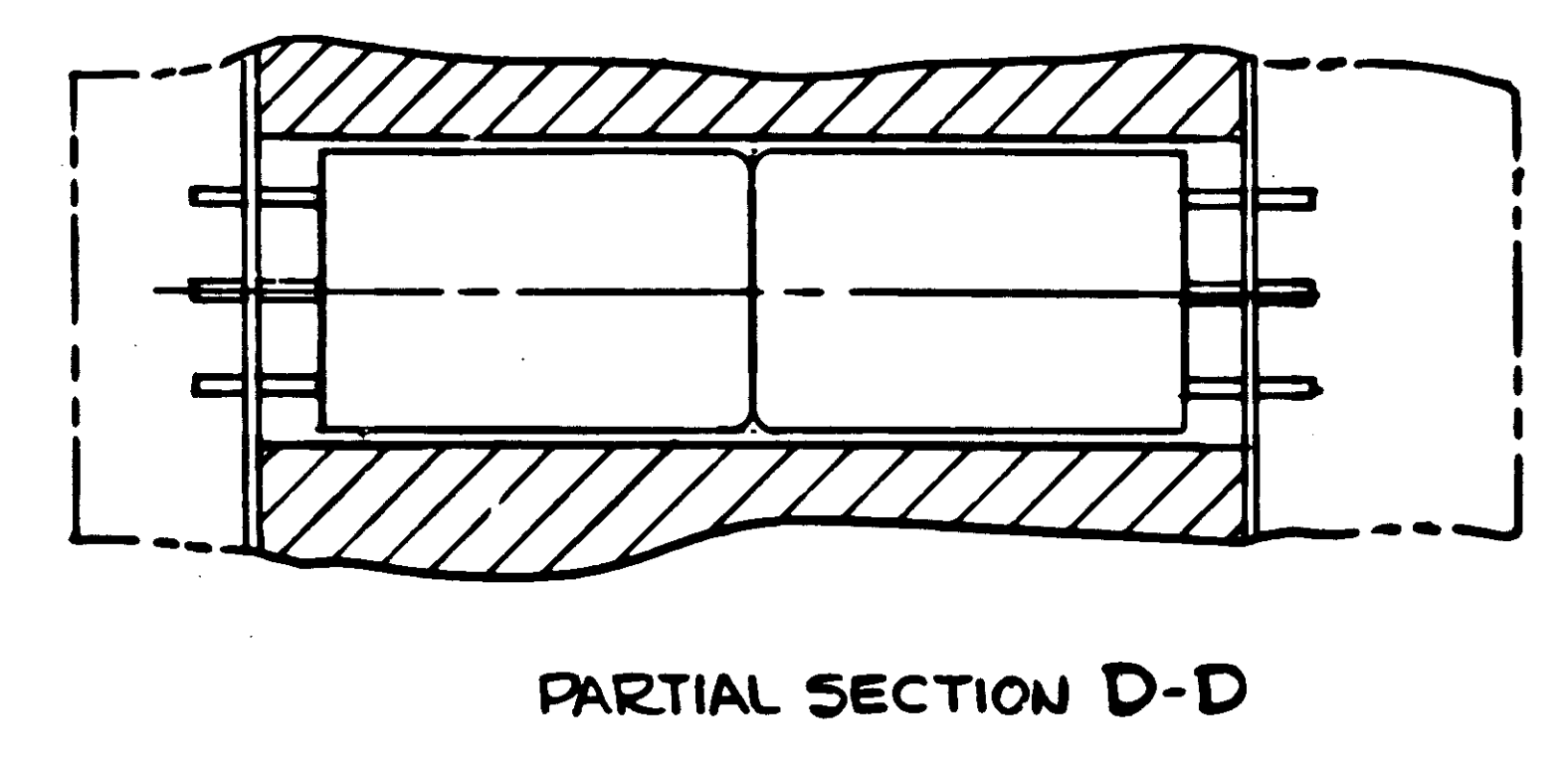
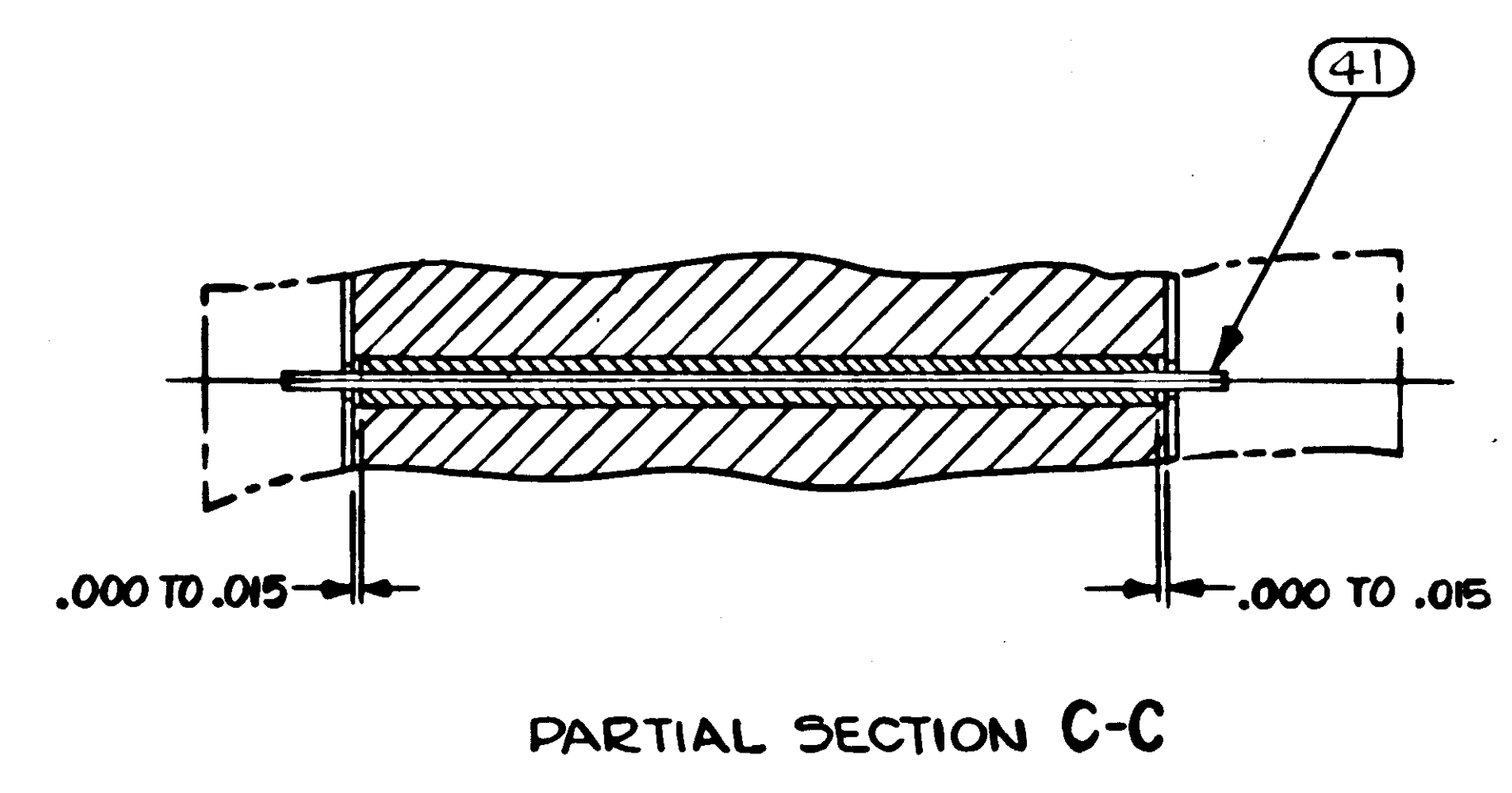
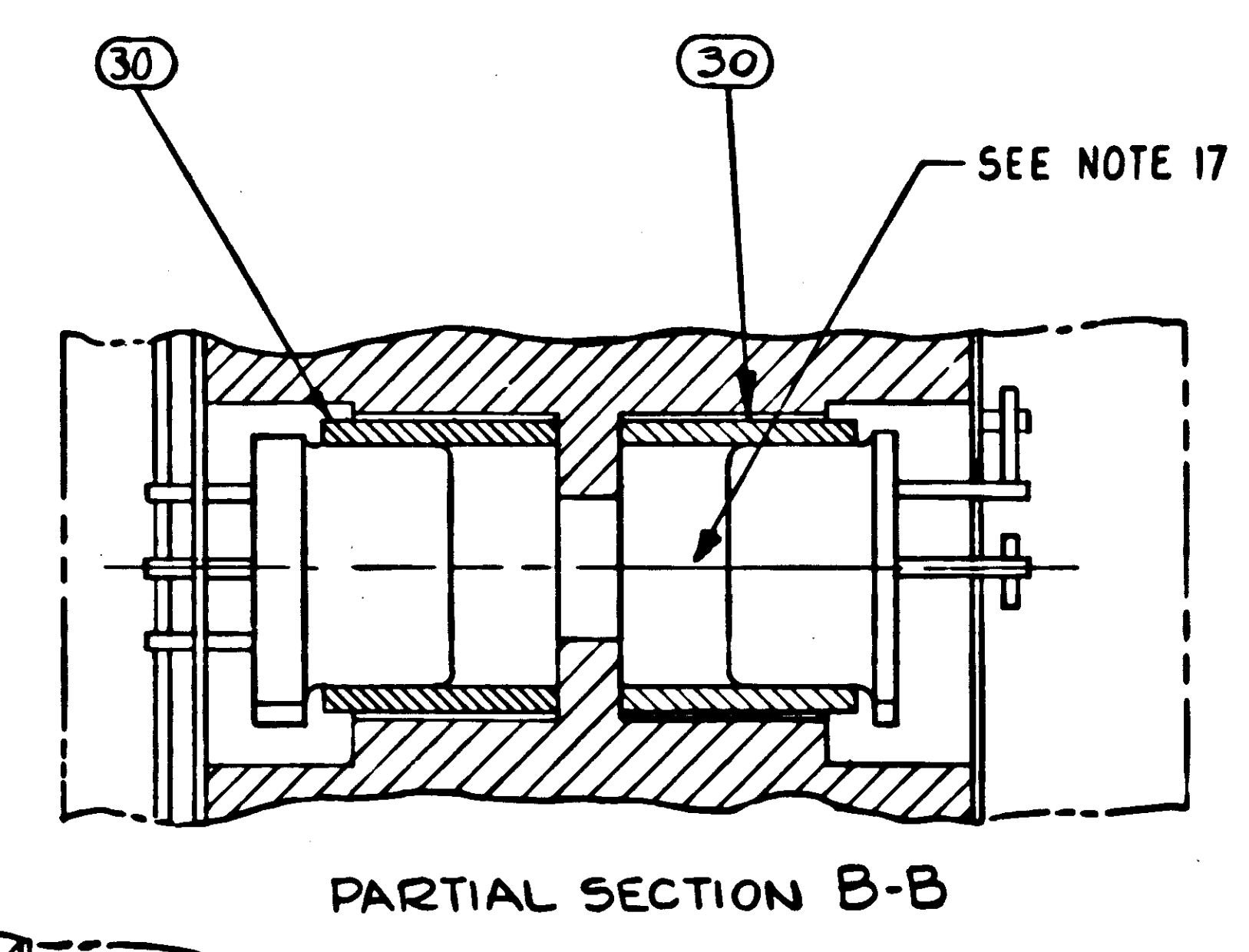
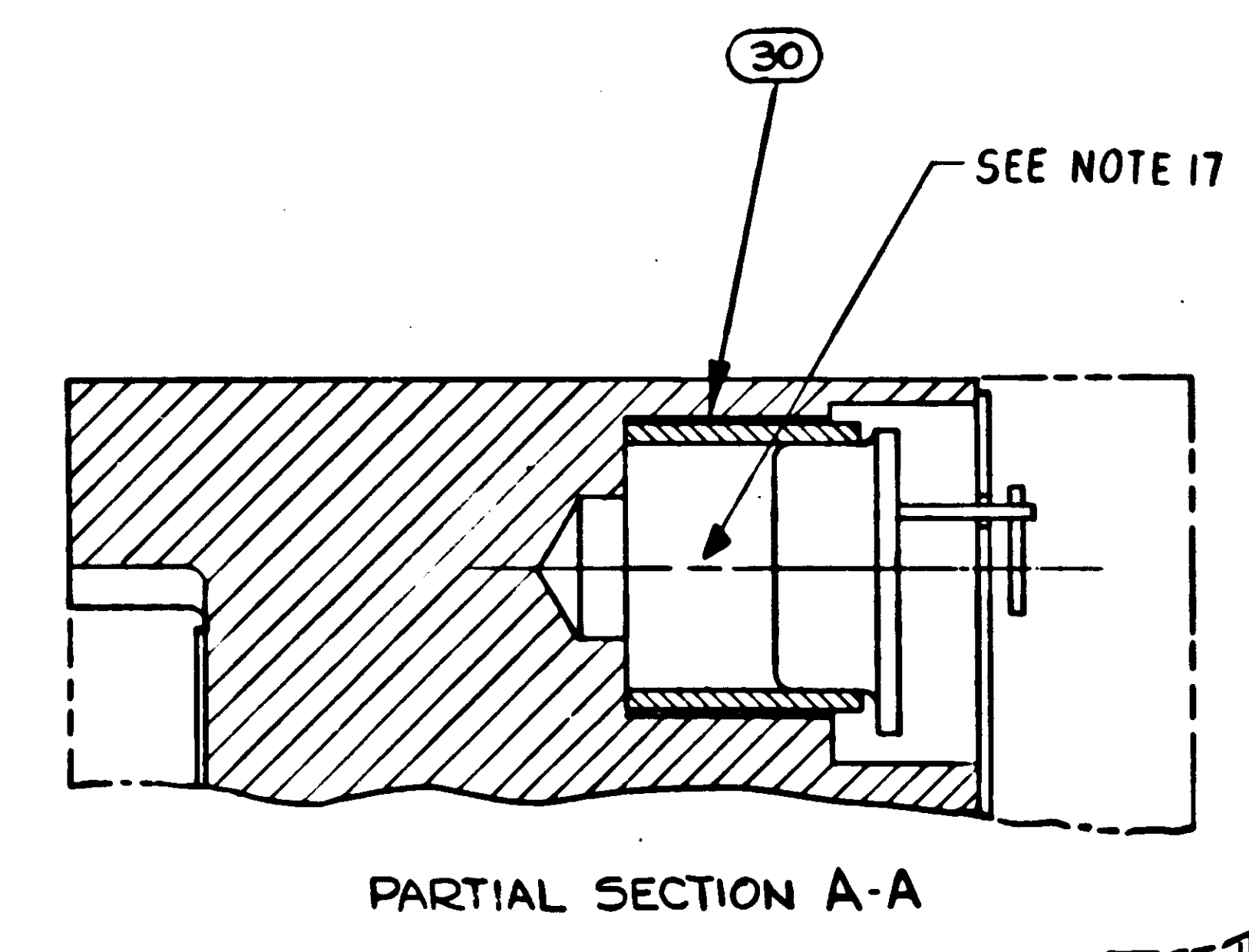
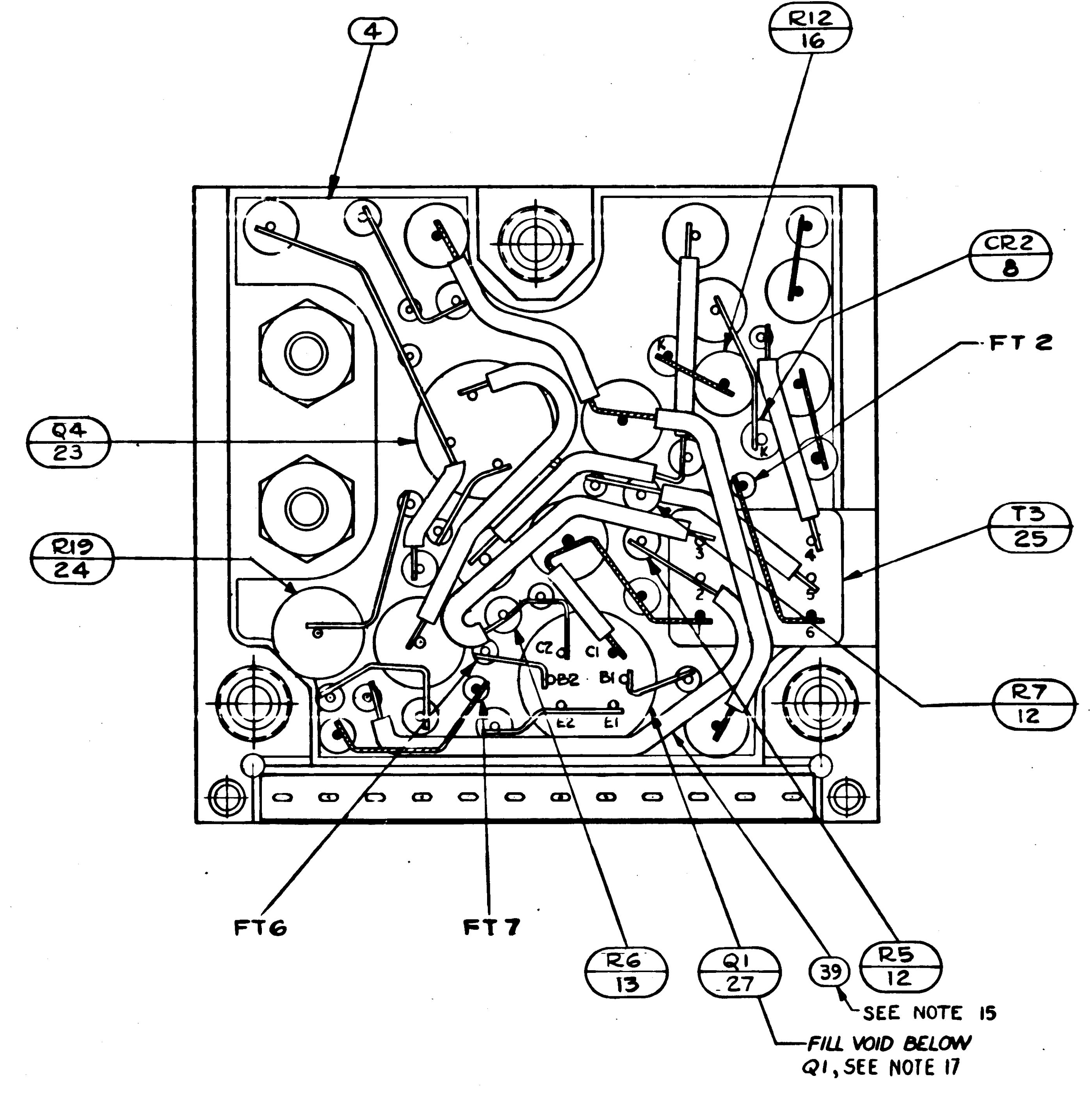
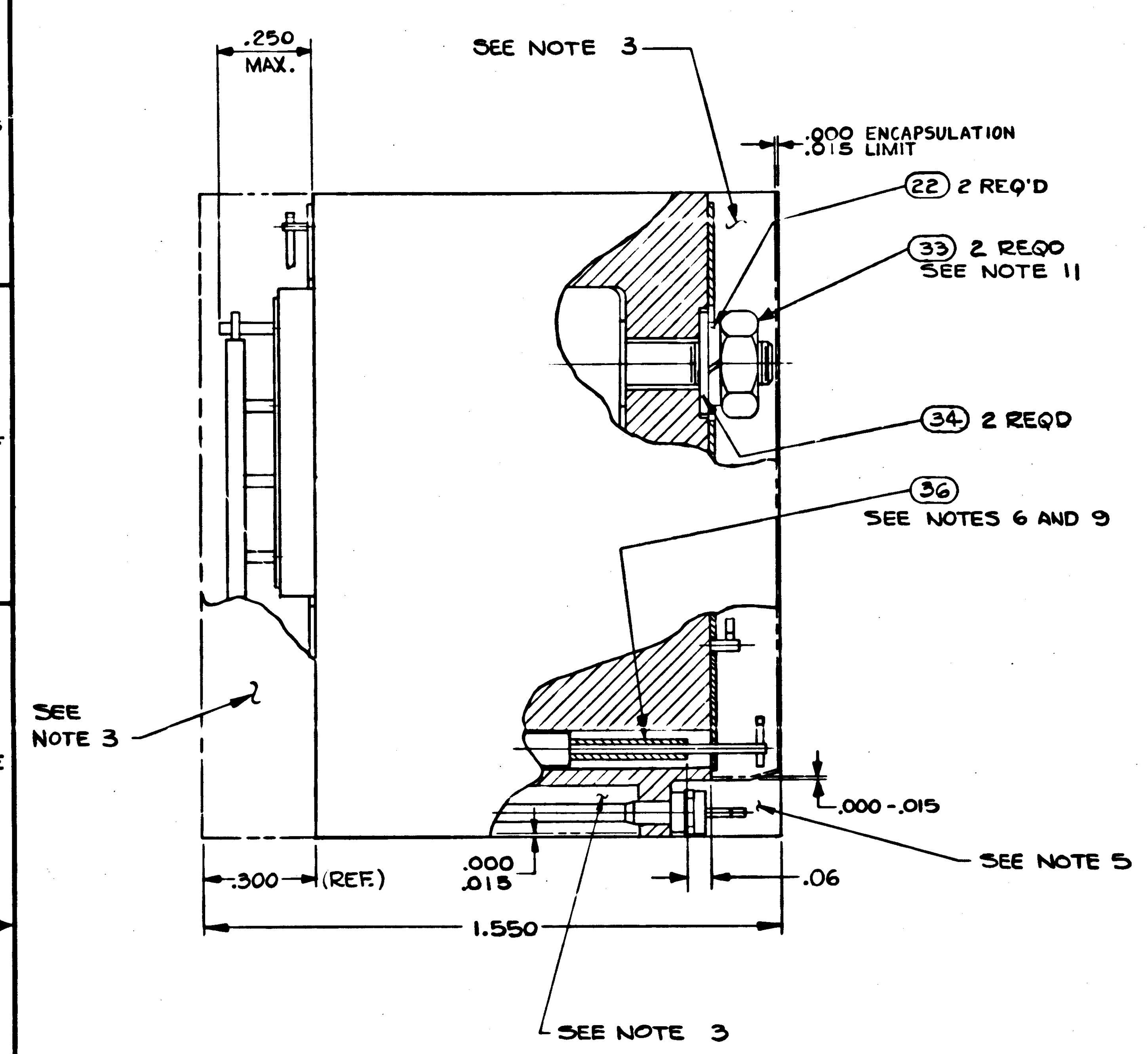
- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- UNLESS OTHERWISE SPECIFIED: WIRING SHALL MEET THE REQUIREMENTS OF ND 1002069.
- ENCAPSULATE MODULE PER ND 1002002 (BLACK POLYURETHANE FOAM) UNLESS OTHERWISE SPECIFIED PERIPHERAL ENCAPSULANT DIMENSIONS MAY EXCEED THE NOMINAL 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 ND 1002019 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 " " 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 ND 1002136
- TORQUE TO 4 ± 1 IN-LB FOR ASSY OF ITEM 10
- ALL CONNECTIONS TO BE MADE BY WELDING PER ND 1002005
- BOND ITEM (40) TO ITEM (31) PER ND 1002237.
- COMPONENTS TO BE CEMENTED IN PLACE PER ND 1002009 METHOD J AND CENTRALIZED.
- USE MIL-I-631 TYPE F, FORM U, GRADE C, CLASS I, CATEGORY I, ONE PLACE ONLY. BOND IN PLACE PER ND 1002004, TYPE I PROCEDURE PER ND 1007041.
- FILL PER ND 1002117
- BOND A .25 MIN WIDE PERIMETER OF THE TOP AND BOTTOM INSULATORS TO THE HEATSINK AND COAT A .25 MIN WIDE PERIMETER ON THE OUTSIDE SURFACE OF THE INSULATORS PER ND 1002187 TYPE I.

- CLEAN MODULE WHERE POSSIBLE PRIOR TO BONDING OF WAFER BOARDS AND APPLICATION OF COATING MATERIAL BY DEGREASING WITH FREON AND ISO-PROPYL ALCOHOL ADHESIVE AND COATING MATERIAL PER ND 1002187 TYPE I. APPLY MATERIAL AND COATING AS INDICATED IN TABLE I.
- EXCEPT FOR MODULE MOUNTING SURFACE. PAINT ALL SURFACES PER ND 1002279 USING 1010992 PRIMER AND 1008809-4 PAINT. CONNECTOR PIN BLADES AND INSULATORS TO BE FREE OF PAINT.
- CLEAN MODULE WHERE POSSIBLE BY DEGREASING WITH FREON & ISO-PROPYL ALCOHOL PRIOR TO ENCAPSULATION.
- MOISTUREPROOF PER ND 1002292 AS REQUIRED BY ITEM NO. (42) USING INSULATION TAPE IN ACCORDANCE WITH SCD 1008866 AND POLYURETHANE COATING PER SCD 1008867 AFTER PAINTING AND STENCILLING.

QTY	REF	DESCRIPTION	UNIT
42	SEE NOTE 22	MOISTUREPROOFING	
41	1010848-2	WIRE-ELECTRICAL NICKEL	
40	1008540-12	GASKET, CONNECTOR MINATURE	
39	MIL-I-631	INSULATION, SLEEVING 22 GA	
38	1006776-20	INSULATION SLEEVING	
37	1006776-20	WIRE, ELEC	
36	1006776-21	INSULATION SLEEVING	
35	1006776-1	WIRE, ELEC	
34	1008070-5	WASHER-FLAT	
33	MS20341-4A	NUT-HEX	
32	1006782-5	CONTACT, WRAPOST MALE MINJAT	
31	1006775	INSULATOR, WRAPOST MALE MINJAT	
30	1008025-2	INSULATOR, BUSHING	
29	1006776-22	INSULATION SLEEVING	
28	1010270	TRANSISTOR	
27	1010252-1	TRANSISTOR	
26	1010326	TRANSFORMER	
25	1010329-1	TRANSFORMER	
24	1010278-7	RESISTOR, FIXED	
23	1010345-1	TRANSISTOR	
22	MS35338-78	WASHER, LOCK	
21	1010364-545	RESISTOR, FIXED	
20	1006750-56	RESISTOR	
19	1010364-765	RESISTOR, FIXED	
18	1010369-105	RESISTOR, FIXED	
17	1010364-579	RESISTOR, FIXED	
16	1010364-443	RESISTOR, FIXED	
15	1006750-43	RESISTOR	
14	1006750-48	RESISTOR	
13	1010369-97	RESISTOR, FIXED	
12	1006750-73	RESISTOR	
11	1006750-60	RESISTOR	
10	1010353-1	RELAY, ELECTROMAGNETIC	
9	1010372-22	DIODE, SEMICONDUCTOR DEVICE	
8	1010392-1	DIODE, SEMICONDUCTOR DEVICE	
7	1010279-232	CAPACITOR, FIXED	
6	1010279-228	CAPACITOR, FIXED	
5	1010264-15	CAPACITOR, FIXED	
4	1015692	INSULATOR	
3	1015690	INSULATOR	
2	1015691	INSULATOR	
1	1015689	HEATSINK	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON			INSTRUMENTATION LAB CENTER		DRAWN BY		CHECKED BY		APPROVAL	
FRACTIONS	DECIMALS	ANGLES	DATE	BY	DATE	BY	DATE	BY	DATE	BY
± .XX ± .005 ±			1007541		1007541					
± .XX ± .02 ±										
DO NOT SCALE THIS DRAWING			MATERIAL		NBA APPROVAL		INT APPROVAL		CONTRACT	
NEXT ASSY USED ON			APPLICABLE DASH NO.		SCALE		SHEET		OF	
THE ASSEMBLY PART NUMBER IS THE DRAWING NUMBER AND THE DASH NUMBER THAT APPLIES			CONTRACT		SCALE		SHEET		OF	
			1007541		80230 E		1007541		1 OF 2	

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPD
Δ		REVISED PER TDRR 17331	10 MAR 65	GM
B		REVISED PER TDRR 19403	2 JUN 65	GM
C		REVISED PER TDRR 19429	3 JUN 65	GM
D		REVISION STATUS CHG PER TDRR 23000	17 JUN 65	GM
E		REVISION STATUS CHANGE	17 JUN 65	GM
F		REVISED PER TDRR 22949	17 JUN 65	GM
G		REVISED PER TDRR 23888	17 JUN 65	GM
H		REVISION STATUS CHANGED	23 FEB 66	GM
J		REVISION STATUS CHANGED	17 FEB 66	GM



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON	INSTRUMENTATION LAB DATE DRAWN CHECKED APPROVAL	MANNED SPACECRAFT CENTER HOUSTON TEXAS <b>GIMBAL COARSE ALIGN AMPLIFIER MODULE ASSY</b>
DO NOT SCALE THIS DRAWING	NASA APPROVAL MIT APPROVAL	CODE IDENT NO. 80230 SCALE 5:1
CONTRACT NAS 9-497		SIZE E 1007541 SHEET 2 OF 2