

ZONE		BYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPR
A			SEE SHEET 2 OF 2 REVISION "A"	7-21-63	8327			
B			(1) "F" & (5) "J" HOLES ADDED, (1) "C" HOLE DELETED	2-27-63	8403			
C			SEE SHEET 2 OF 2 REVISION "B"	4-23-64	11200			
D			REVISED AND CLARIFIED DRG	12-17-63	10507			
D-II			UPDATED & CLARIFIED DRG					
D-SES			ON HOLE SCHED. ADDED (1) "L" HOLES 3/16 DIA. "C" GAUGE. WAS 3 CHNG. (2) "C" HOLES TO "L", RELOC. (1) UNMARKED HOLE	3-18-64	11054			
E-II			ON HOLE SCHED. "B" HOLES WAS 51, "F" HOLES WAS B	4-23-64	11277			
F-B, D, P			4 "B" HOLE CALLOUTS ADDED	6-16-64	11588			
G			SEE SHEET 3 OF 3 FOR REVISION "G"					
H			4 "C" HOLES CHNG. TO "D" HOLES, 1 "B" HOLE ADDED	7-24-64	11738			

HOLE SCHEDULE		
LETTER	SIZE	NO. REQD
UNMARKED	DR #53 (059)	AR *
B	DR #42 (.093)	54
C	1/8 DIA	3
D	5/32 "	15
E	1/4 "	17
F	DR #27 (144)	7 *
G	DR #38 (101)	53 *
H	19/64 "	2
J	DR #51 (.067)	5
L	5/16 DIA.	2

* SEE NOTE 3



PRINTED CIRCUITRY
CAUTION: THIS SIDE UP WHEN PRINTED

SCALE: APPROX.
 REDUCE TO FINAL DIMENSIONS AS SHOWN BOTH FRONT & REAR VIEWS. (FRONT VIEW ON SHEET #2)

NOTES:
 1. MAT'L: SYNTHANE G-II EPOXY GLASS LAMINATE 3/32 THK. .002 COPPER CLAD (2) SIDES.
 2. DO NOT PRINT LETTER DESIGNATIONS AS SHOWN ON BOARD.
 3. HOLES ARE TO BE "PLATED-THRU" WITH MINIMUM COPPER PLATING THICKNESS OF .0015 & MIN. SOLDER-PLATE (TIN) THICKNESS OF .0005. MIN. FINISHED DIA OF "PLATED-THRU HOLES":
 UNMARKED ~ .050
 F ~ .136
 G ~ .093
 4. ETCHED CIRCUIT TO BE TINNED .0005 THK.
 5. SEE PURCHASING NOTE.

PURCHASING NOTE:
 ORIGINAL ARTWORK TO BE SUPPLIED TO VENDOR FOR MANUFACTURING. ARTWORK MUST BE RETURNED TO TMC IN GOOD CONDITION AS SOON AS POSSIBLE

DO NOT FOLD ORIGINAL

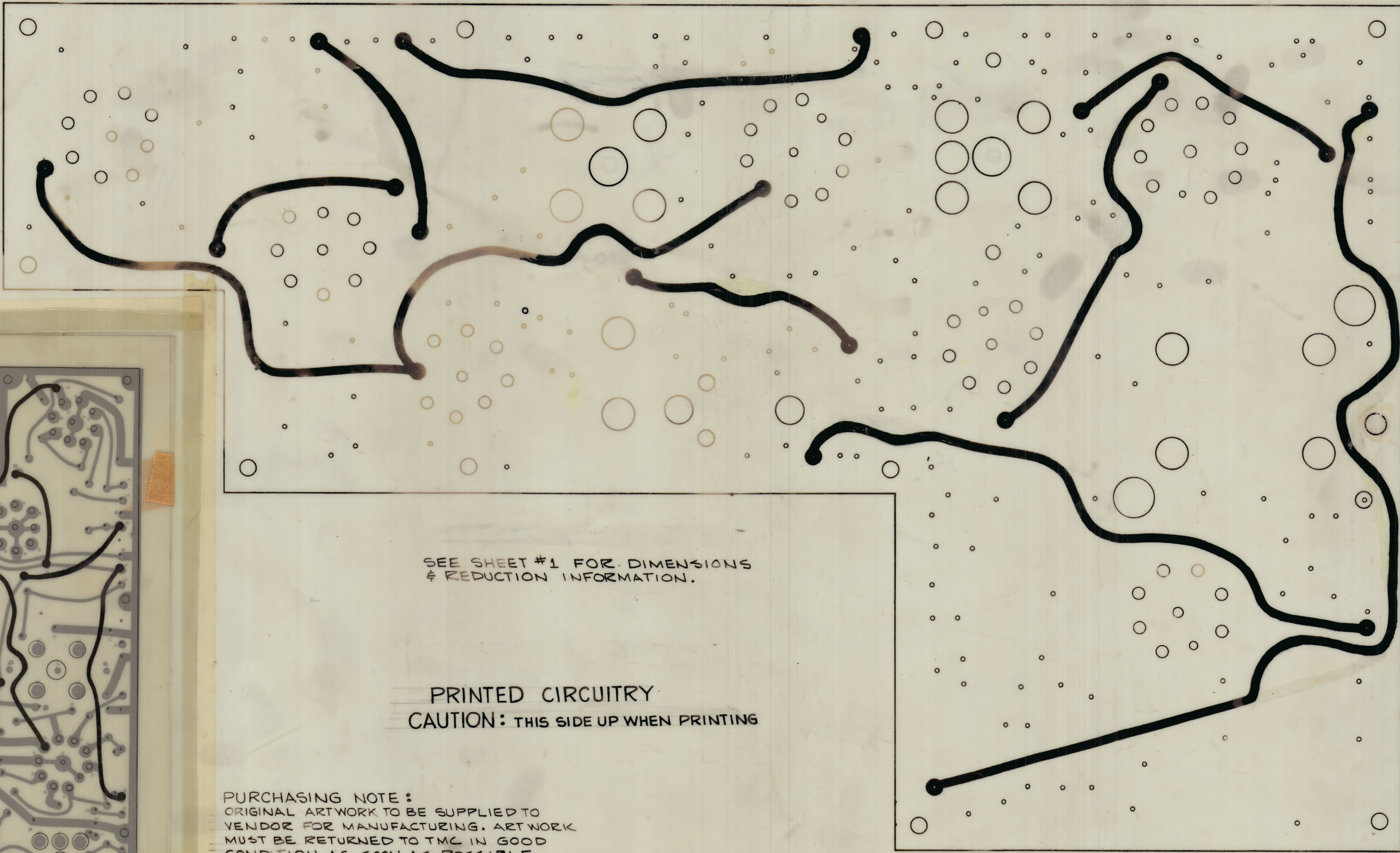
REQ'D	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
STRUMER LIST OF MATERIAL				
MATERIAL		SEE NOTE 1		
FINISH		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
TITLE		PRINTED CIRCUIT BD. ASSY (BOTTOM VIEW SHOWN)		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES	DRAWN	DATE	FINAL APPROVAL	
	W.S.	7-24-64	K.P.	
	CHECKED	DATE	DATE	
		1-14-63	10-25-63	
DECIMALS ± .005	TOLERANCES	FRACTIONS ± 1/64	MECH. DATE	DATE
XX ± .01	ANGLES	± 0° 30'	1-11-63	1-11-63
XXX ± .008			SHEET 1 OF 3	H

NOTES

A-2509



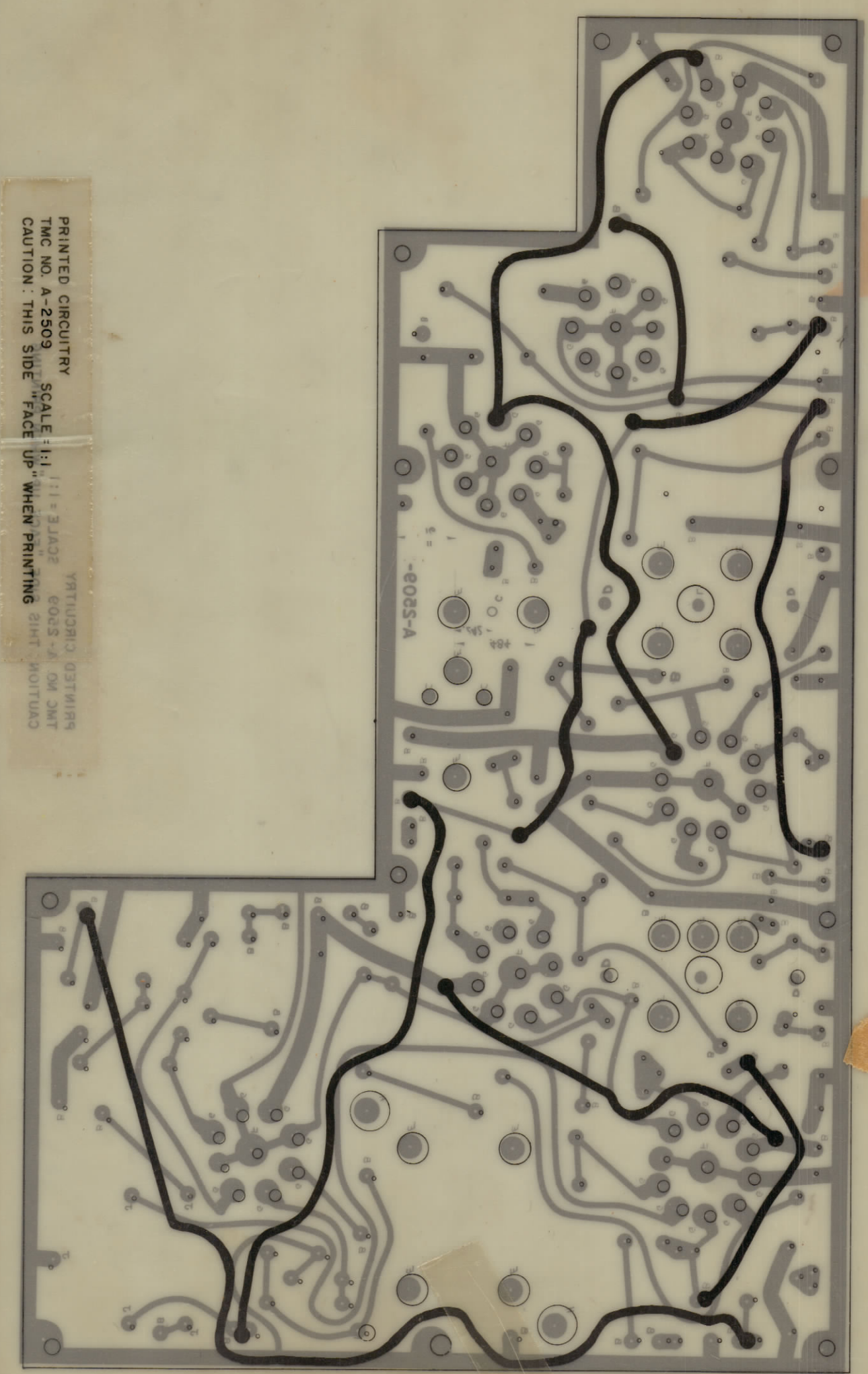
REVISIONS							
ZONE	SYN	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
-	A	SEE SHEET 1 OF 3, REVISION "A"	2-21-63	8237	G.S.		
-	B	SEE SHEET 1 OF 3, REVISION "B"	2-27-63	8403	G.S.		
-	C	REDRAWN & REVISED	4-15-63	10200	G.D.		
-	D	SEE SHEET 1 OF 3 REVISION "D"	12-11-63	10567	HPB		
-	E	SEE SHEET 3 OF 3 REVISION "E"	3-9-64	11054	HPB		
-	F	SEE SHEETS 1 & 3 REVISION "F"	4-23-64	11277	AM		
-	G	SEE SHEET 3 OF 3 FOR REVISION "G"	6-16-64	11588	LJS		
-	H	SEE SHEET 1 OF 3 REV "H"	7-24-64	11738	LJS		



SEE SHEET #1 FOR DIMENSIONS & REDUCTION INFORMATION.

PRINTED CIRCUITRY
CAUTION: THIS SIDE UP WHEN PRINTING

PURCHASING NOTE:
ORIGINAL ARTWORK TO BE SUPPLIED TO VENDOR FOR MANUFACTURING. ARTWORK MUST BE RETURNED TO TMC IN GOOD CONDITION AS SOON AS POSSIBLE.

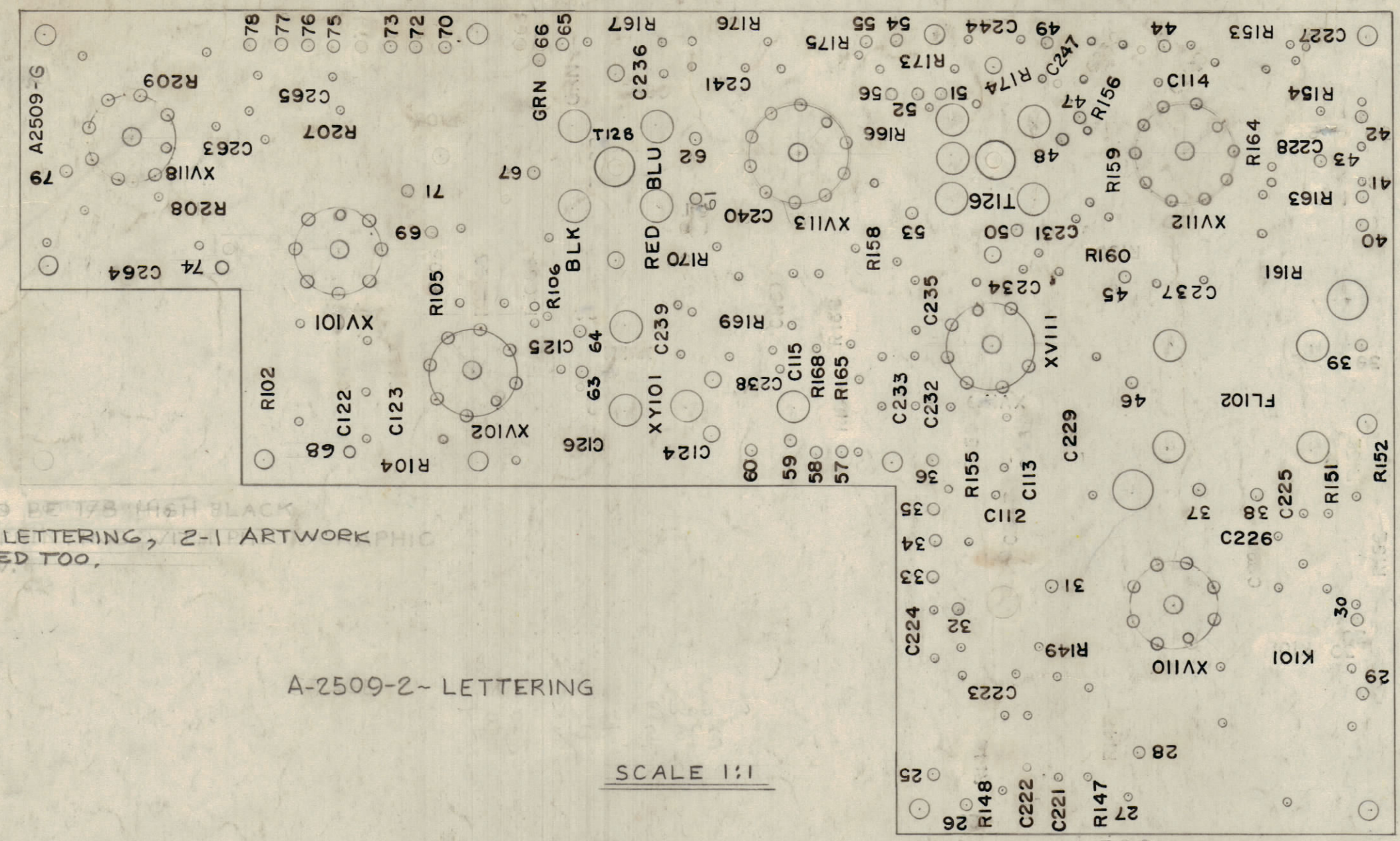


PRINTED CIRCUITRY SCALE 1:1
CAUTION: THIS SIDE UP WHEN PRINTING

DO NOT FOLD ORIGINAL

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
STRUMER LIST OF MATERIAL				
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
SEE NOTE 1 SHEET 2		TITLE PRINTED CIRCUIT BD. ASSY (TOP VIEW SHOWN)		
FINISH		DRAWN: <i>HPB</i> DATE: 10-11-63		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		CHECKED: <i>HPB</i> DATE: 11-17-63		
DECIMALS: XX ± .08		FRACTIONS: ± 1/64		
ANGLES: XXX ± .008		MECH DES: <i>HPB</i> DATE: 11-22-63		
SCALE: 2:1 APPROX.		REV. LTR: A-2509 H		
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.		SHEET 2 OF 3		

A-2509 H



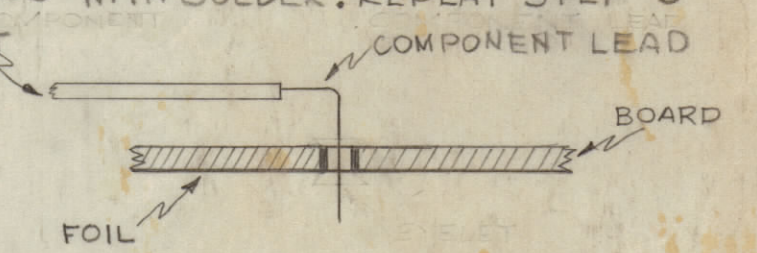
NOTE: ALL LETTERING TO BE 3/32 HIGH BLACK, GOTHIC LOCATED AS SHOWN.
 LETTERING: 3/32 HIGH BLACK, GOTHIC LOCATED AS SHOWN.
 MARKING METHOD: TMC SPEC. 6727

A-2509-3 - SUB - ASS'Y

SCALE 1:1

REVISIONS							
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
AZ	A	ITEM (2) WAS 1-REQ. (CLARIFIED)	2-14-53	8327			
EB, E9	B	ON A-2509-2, R149 WAS C149; ON A-2509-3, STUD W6 ADDED	2-21-53	8403			
	C	SEE SHEET (D) OF (2) REVISION "B"					
	D	DWG UPDATED & CLARIFIED PER EMN NO. 10200	11/1/54	10200			
	E	DWG UPDATED & CLARIFIED	12/16/54	10167			
	F	REVISED & UPDATED PER EMN 11054	3-15-54	11054			
B3, D3	G	ITEMS: 4, 6, 42, 44 QTX CHG; ITEM 17 WAS 124K ITEM: 49 ADDED; C125, V101, V118 RELOCATED	4-23-54	11277	A.M.		
	H	IT. 5 WAS 7REQ, IT 2B. WAS RC20GF680K	6-16-54	11588	JTB		
		SEE SHEET 1 OF 3	7-23-54	11736	AWB		

ASSEMBLY NOTICE
 1- TO MOUNT COMPONENTS - INSERT LEAD THROUGH PLATED-THRU HOLES & BEND ABOUT 1/16" OF LEAD, OVER COPPER FOIL AS SHOWN.
 2- APPLY HEAT & SOLDER TO LEAD AND FOIL - CAUTION - TOO MUCH HEAT WILL CAUSE THE FOIL TO SEPARATE FROM THE BOARD.
 3- CLEAN & INSPECT AS PER S-676
 4- MOUNT TUBE SOCKETS ON FOIL SIDE OF BOARD. FILL-IN PLATED-THRU MOUNTING HOLES WITH SOLDER. REPEAT STEP 3



A-2509-4 ELECTRICAL ASSY
 A-2509-4 ELECTRICAL ASSY
 (TOP VIEW SHOWN)
 REF: SHT 2 OF 3

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 MAMARONECK, NEW YORK

QTY	UNIT	DESCRIPTION	SYMBOL
2	49	TS160-2	SOCKET, ELEC. TUBE, 7PIN
1	48	UTH0440ENG	NUT, HEX
1	47	LWS04MRJ	LOCKWASHER, SPRING TYPE
1	46	SCBPO440BNB	SCREW MACHINE
1	45	CU-149-1	HOLDER, XTAL
1	44	TS-104-2	SOCKET, XTAL
X	43	BS-100	SOLDER, SOFT
3	42	TS-160-1	SOCKET, ELECTRON TUBE, 7-PIN P/C
2	41	TS-161-1	SOCKET, ELECTRON TUBE, 9PIN P/C
54	40	TE-127-5	TERMINAL, TURRET
1	37	RL142	RELAY, MINIATURE
1	36	RC42GF 271K	RESISTOR, FIXED, COMPOSITION
1	35	RC42GF 220K	
1	34	RC32GF 823K	
1	33	272K	
1	32	472K	
1	31	RC32GF 222K	
1	30	RC20GF 824K	
1	29	RC20GF 823K	
1	28	RC32GF 562K	
1	27	RC20GF 563K	
2	26	473K	
1	25	472K	
1	24	470K	
1	23	273K	
1	22	RC20GF 224K	
1	21	RC42GF 222K	
2	20	RC20GF 184K	
1	19	181K	
2	18	154K	
1	17	473K	
1	16	123K	
2	15	121K	
2	14	105K	
3	13	104K	
1	12	RC20GF 100K	RESISTOR, FIXED, COMPOSITION
1	11	CM-15D221J	CAPACITOR, FIXED, MICA
1	10	CM-15C151J	CAPACITOR, FIXED, MICA
1	9	CE-105-25-50	CAPACITOR, ELECTROLYTIC
8	8	CC-100-32	CAPACITOR, FIXED, CERAMIC
1	7	-10	
4	6	-29	
6	5	-24	
3	4	-16	
3	3	CC-100-15	
3	2	CC-26SL01K	
1	1	CC-215L050C	CAPACITOR, FIXED, CERAMIC

QTY	UNIT	DESCRIPTION
1		GPR-92
2	1	& NOTED

STRUMER LIST OF MATERIAL			
MATERIAL	FINISH	TITLE	DATE
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		PRINTED CIRCUIT ED. ASSY (TOP VIEW SHOWN)	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		DRAWN VFR	DATE 6-20-54
DECIMALS X ± .05 XX ± .01 XXX ± .005		CHECKED JTB	DATE 11-1-53
FRACTIONS X ± 1/64 XX ± 1/32 XXX ± .005		ELECT. DES. JTB	DATE 1-11-53
TOLERANCES ANGLES ± 0° 30'		MECH. DES. JTB	DATE 1-11-53
		APPROVAL A-2509	DATE 1-11-53
		REV. LTR. H	SHEET 3 OF 3

NOTES