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TITLE:			
Typed by mtp 11/29/65			

KIT-180

Modification of the GPT-40K to provide Vapor Cooling.

I. EQUIPMENT AFFECTED:

A. TMC Model GPT-40K general purpose transmitter.

II. PURPOSE:

To provide Vapor Cooling for the 10KW Driver Tube and the 40KW PA Tube for more efficient cooling and quieter operation.

III. LIST OF MATERIAL REQUIRED:

TABLE 1 lists material supplied with the field change kit.
TABLE 2 lists tools and test equipment furnished by the installing activity.

TABLE 1 Material supplied with the field change kit.

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	A5426	Pump Contactor Box Ass'y.
2	1	AD103-9	Fil, Air Cond.
3	1	BI100-51	Lamp, Glow (I706)
4	2	BL103	Fan, Cent. (B7103, 801)
5	1	BL123	Fan, Axial (B7104)
6	1 LB.	BS100	Solder, Tin Aly.
7	1	CA1206	Cable, Special Purpose
8	1	CA1207	Cable, Special Purpose
9	1	CA1208	Cable, Special Purpose
10	1	CA1209	Cable, Special Purpose
11	1	CA1210	Cable, Special Purpose
12	1	CA1211	Cable, Special Purpose
13	1	CA1212	Cable, Special Purpose
14	1	CA1213	Cable, Special Purpose
15	1	CA1214	Cable, Special Purpose
16	1	CA1215	Wiring Harness, Branched
17	1	CA1217	Wiring Harness, Branched
18	1	CA1218	Wiring Harness, Branched

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ITEM	QUANTITY	PART NUMBER	DESCRIPTION
19	1	CA409-161-3.00	Lead, Elect.
20	1	CA409-168-3.00	Lead, Elect.
21	1	CA409-175-3.00	Lead, Elect.
22	1 Roll	CD101-1MW	Cord, Nylon Lacing
23	7	CM35F1Ø3FØ3	Cap., Fxd., Mica(C7336 thru C7342)
24	3	CP41B1FF4Ø5K	Cap., Fxd., Paper(C7335, C7127 C816)
25	2	CU102-1	Clamp, Loop
26	5	CU102-2	Clamp, Loop
27	5	CU102-4	Clamp, Loop
28	2	CU129-10	Clamp, Hose
29	1	D512529	Ass'y, Vapor Down Cooling Sys.
30	1	EY102-21	Grom, Rub
31	2	FU1Ø2-2	Fuse, Ctg. 2A (F700,701)
32	1 3/4 OZ.	GL1Ø1-2	Adhesive
33	1	HVRB-1	Solid State Power Supply
34	1	HVRC-1	Solid State Power Supply
35	1	LD2039/PX968	Insulator, Term. Strip
36	1	LD2040/MS1499	10K Relay Panel
37	1	LD2041/MS3678	10K Main Control Panel
38	1	LD2042/MS1947	40K Main Control Panel
39	1	LD2043/MS1948	40K PS Main Control Panel
40	1	LD2044/MS1979	40K Relay Panel
41	1	LD2045/MS4852	Brkt., PA Filter Conn.
42	1	LS2047/MS4864	Brkt., Main Blower
43	1	LD2048/MS1611	Brkt., Fap Cap.

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ITEM	QUANTITY	PART NUMBER	DESCRIPTION
44	1	ML-LPT11	Tube, PA(V900)
45	1	ML7480	Tube, PA(V7301)
46	10	MS154-1	Plate, Straddle, Term. Bd.
47	2	MS202-4-5.00	Lead, Elect., Strap
48	2	MS3057-6	Clamp, Cable
49	2	MS3102A14S-2S	Conn., Recp, Fml 4/C(J7305, 801)
50	1	MS3102A14S-2P	Conn., Recp. ML 4/C(J7106)
51	2	MS3106A14S-2P	Conn, PL, ML 4/C(P801, 7305)
52	2	MS3420-6A	Bush, Rub.
53	1	MS1632	Flange, Blower
54	4	MS1638	Flange Plate, Blower
55	1	MS2518	Chassis, Blower
56	1	MS4853	Plate, Fan Mtg.
57	1	MS4854	Brkt., Hose Mtg.
58	1	MS4855	Plate, Cover, Main Blower
59	1	MS4856	Brkt., Main Blower
60	1	MS4857	Brkt., Term Bd. Mtg.
61	1	MS4858	Brkt, Air Duct
62	1	MS4859	Brkt, PS Fil FanInterlock Sw.
63	1	MS4860	Brkt. Hose Mtg.
64	1	MS4861	Strap, Conn.
65	2	MS4862	Plate Side
66	1	MS4863	Strap, Tube
67	20"	MWC22(7)UO	Wire, Elec., Ins. Black
68	1	PM1297	Brkt, Mtg.

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
69	1	PM1298	Brkt, Mtg.
70	1	P0168-3	Adapt., Sw Actuator
71	20"	PX100-1-106	Ins, Slvg, Sz 10
72	3"	PX100-1-148	Ins, Slvg, Sz 7
73	40"	PX100-1-234	Ins, Slvg, Sz 3
74	2	PX336-3	Ins, Term Bd.
75	1	PX336-5	Ins, Term Bd.
76	1	PX336-8	Ins, Term Bd.
77	1	PX336-14	Ins, Term Bd.
78	2	PX544-3	Ins, Term Bd.
79	1	PX544-5	Ins, Term Bd.
80	6"	PX830-16-1	Ins, Slvg. Shrink
81	7"	PX830-12-1	Ins, Slvg. Shrink
82	1	PX969	Air Duct, Cone
83	1	PX970	Duct, PA
84	1	PX974	Cover, Term. Bd.
85	1	RC32GF224J	Res, Fxd, Comp. (R7*13*)
86	2	RY127	Gasket, Fan
87	1	RY140-1-48	Rub Chan.
88	1	RY160	Hose, Flex. 16"
89	12	SH105-1	Mount, Resilient
90	1	SW252	Sw., Air Flow (S7107)
91	1	TA111-2-8-72.00G	Tape, Urethane
92	2	TE149-120	Term. Lug--No. 4

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ITEM	QUANTITY	PART NUMBER	DESCRIPTION
93	7	TE149-144	Term Lug - No. 6
94	4	TE2520BN4.500R16	Post, Elec-Mech.
95	2	TM102-3	Term Bd, Barr.(E1011, 921)
96	1	TM102-5	Term Bd, Barr.(E7103)
97	1	TM102-8	Term Bd, Barr.(E7336)
98	1	TM102-14	Term Bd, Barr.(E7104)
99	1	TP131-2-1/2	Stamp
100	1	TP131-2-3/4	Stamp
101	1	TP131-2-5/6	Stamp
102	1	TP131-2-7/8	Stamp
103	1	TP131-2-B801	Stamp
104	1	TP131-1-B7104	Stamp
105	1	TP131-1C7335	Stamp
106	1	TP131-1-C7336	Stamp
107	1	TP131-1-C7337	Stamp
108	1	TP131-1-C7338	Stamp
109	1	TP131-1-C7339	Stamp
110	1	TP131-1-C7340	Stamp
111	1	TP131-1-C7341	Stamp
112	1	TP131-1-C7342	Stamp
113	1	TP131-2-E921	Stamp
114	1	TP131-1-E1011	Stamp
115	1	TP131-1-E7104	Stamp
116	1	TP131-1-E7336	Stamp
117	1	TP131-2-R713	Stamp

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ITEM	QUANTITY	PART NUMBER	DESCRIPTION
118	1	TP131-2-S919	Stamp
119	1	TP131-1-S7105	Stamp
120	1	TP131-1-S7107	Stamp
121	1	TP131-1-S7108	Stamp
122	1	TS106-2	Light, Ind, Clear (XI706)
123	8"	WL100-4	Wire, Elec, Buss.
124	8	SCBP0440BN5	Screw, Mach.
125	4	SCBP0440BN6	Screw, Mach.
126	4	SCBP0440BN10	Screw, Mach.
127	6	SCBP0440BN12	Screw, Mach.
128	4	SCBP0440BN14	Screw, Mach.
129	4	SCBP0440BN16	Screw, Mach.
130	10	SCBP0632BN4	Screw, Mach.
131	4	SCBP0632BN5	Screw, Mach.
132	62	SCBP0632BN6	Screw, Mach.
133	4	SCBP0632BN20	Screw, Mach.
134	4	SCBP0832BN6	Screw, Mach.
135	4	SCBP0832BN10	Screw, Mach.
136	10	SCBP0832BN12	Screw, Mach.
137	12	SCBP0832BN14	Screw, Mach.
138	8	SCBP2520BN8	Screw, Mach.
139	2	SCFP0440BN7	Screw, Mach., Flathead
140	4	SCFP0440BN16	Screw, Mach., Flathead
141	12	SCFP0832BN12	Screw, Mach., Flathead

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
142	1	SFB0832SN6	Screw, Tap., Thd. Cut
143	3	SCHH2520BN8	Screw, Mach.Hex Head
144	12	SCHH2520BN10	Screw, Mach.Hex Head
145	2	SCHH2520BN12	Screw, Mach.Hex Head
146	16	FW04HBN	Wash., Flat
147	3	FW06HBN	Wash., Flat
148	35	FW08HBN	Wash., Flat
149	4	FW100-19	Wash., Flat
150	46	LWE04MRN	Wash., Lock, Ext.
151	76	LWE06MRN	Wash., Lock, Ext.
152	42	LWE08MRN	Wash., Lock, Ext.
153	4	LWE10MRN	Wash., Lock, Ext.
154	25	LWS25MRN	Wash., Lock, Split
155	46	NTH0440BN6	Nut, Pln, Hex
156	11	NTH0632BN8	Nut, Plain, Hex
157	25	NTH0832BN10	Nut, Pln, Hex
158	4	NTH1032BN12	Nut, Pln, Hex
159	17	NTH2520BN14	Nut, Pln, Hex
160	1	NT108-6	Nut, Sh., Spring
161	1	DRILL-#20	Drill, Twist, #20
162	1	DRILL-#29	Drill, Twist, #29
163	1	DRILL-#36	Drill, Twist, #36
164	1	DRILL-1/8	Drill, Twist, 1/8
165	1	DRILL-9/64	Drill, Twist, 9/64

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ITEM	QUANTITY	PART NUMBER	DESCRIPTION
166	1	DRILL-11/64	Drill, Twist, 11/64
167	1	DRILL-13/64	Drill, Twist, 13/64
168	1	DRILL-15/64	Drill, Twist, 15/64
169	1	DRILL-1/4	Drill, Twist, 1/4
170	1	DRILL-5/16	Drill, Twist, 5/16
171	1	DRILL-3/8	Drill, Twist, 3/8
172	1	TP113RO-1/2	Punch, Cahssis, 1/2
173	1	TP113RO-5/8	Punch, Chassis, 5/8
174	1	TP113RO-3/4	Punch, Chassis, 3/4
175	1	TP113R1-1/8	Punch, Chassis, 1-1/8
176	1	TP113R2-1/4	Punch, Chassis, 2-1/4
177	1	TAP-0632	Tap, 0632, UNC
178	1	TAP-1032	Tap, 1032, UNC
179	1	COUNTERSINK-82°	C'nts'k, 82°, 1/4" Shank
180	1	LD713/PX535	Insulator, Term.Bd.

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NOTE: D512529 Ass'y, Vapor Down Cooling System consists of the following:

QUANTITY	PART NUMBER	DESCRIPTION
1	F28901	Jacket, 50KW
2	F512512	Hose Adapter
1	F512513	Tubing, Sil. Rub, 2-1/4" X 16"
1	F512514	Tubing, Sil. Rub, 1" X 36"
1	F512515	Tubing, Sil. Rub, 2-1/4" X 24"
1	F512516	Tubing, Sil. Rub, 7/8" X 37"
1	F512518	Tubing, Sil. Rub, 3" X 20"
1	F512521	Fitting, Pressure Equalizing
1	F512522	Tubing, Sil. Rub, 1" X 18"
1	F512524	Tubing, Sil. Rub, 1-1/2" X 11"
1	F512525	Tubing, Sil. Rub, 5/8" X 13"
1	F512526	Tubing, Sil. Rub, 1" X 18"
1	F512527	Tubing, Sil. Rub, 3/4" X 17"
1	F512528	Tubing, Sil. Rub, 1/2" X 41"
1	F512544	Water Overflow Trap
1	P27882	Anti-Electrolytic Target
1	P512517	Reservoir and Circulating Unit
6	P512519	Hose Clamp, 2-5/16" - 3-1/2"
1	P512523	Water Level Control
14	P512530	Hose Clamp, 9/10" - 1-1/2"
2	P512533	Hose Clamp, 1-5/16" - 2-1/4"
1	P512552	Anti-Electrolytic Target
1	P512556	Motor and Pump
X	--	Tape, Teflon, .015 X 7/8"
X	--	Dope, Tape

TABLE 2 Tools and Test Equipment required by the installing activity to perform this modification. Since these are not specialized, they are not provided.

1. Multimeter, Simpson 260 or equivalent.
2. Screwdrivers, Flat Blade, assorted sizes.
3. Screwdrivers, Phillips Blade, assorted sizes.
4. Soldering iron.
5. Drill, Electric, 3/8" chuck.
6. Pliers, Diagonal
7. Pliers, Longnose.

IV. PROCEDURE FOR REMOVAL OF COMPONENTS

A. PRELIMINARY

1. Turn all power switches to OFF or STANDBY.

2. Turn off the MAIN BREAKER feeding the transmitter. Hazardous voltage will be present in the transmitter if the MAIN BREAKER is not turned off.

3. In the 40K PA frame, remove the rear shields from the PA and blower compartments.

4. Use the grounding rod to short all high voltage points.

5. In the 10K main frame, remove the rear shield from the PA compartment.

6. Use the grounding rod to short all high voltage points.

7. At the front of the transmitter, remove enough of the units from th top of the auxiliary frame to allow access to the high voltage light mounting screws.

8. In the 10K main frame, remove the high voltage rectifier drawer, the relay panel, and the IPA drawer.

9. In the 40KPA frame, remove the bias supply drawer, relay panel, window panel, and control panel shield.

10. In the following procedures do not discard any hardware. Parts to be replaced will use the original hardware.

B. AUXILIARY FRAME

1. Remove the light leads from E3003

2. Remove the nuts from the mounting screws.

3. Remove the high voltage light from the top cover.

4. Remove the top covers from the 10K and 40K frames.

C. 40 K PA FRAME - PA COMPARTMENT

1. R move the m tal and fiberglass shields from the PA tube compartment.

2. Remov th fib rglass air duct attached to th fiberglass tube compartment.

3. Disconn ct the strap from C 7326 to the air duct tub base.

C. 40 K PA FRAME - PA COMPARTMENT - Cont'd

4. Remove C 7326.

5. Remove the filament and grid straps from the tube.

6. Remove both halves of the grid screen.

7. Disconnect the C 7330, tune capacitor strap by removing the two 2520 screws in the PA tube compartment.

8. Remove the PA tube and the air duct tube base.

9. Remove the fiberglass tube compartment box. It may be necessary to r - move the strap to the bandswitch. Discard all the fiberglass parts rem ved.

D. 40 K PA FRAME - BLOWER COMPARTMENT

1. Disconnect the wires from the blower air switch and remove th cabl from the clamp.

2. Remove the terminal cover plate on the motor and disconnect the wires.

3. Remove the clamp and rubber hose from the air duct flange.

4. Remove the clamp and the rubber boot from the tube base duct.

5. Remove the four 2520 bolts securing the blower to the shock mounts and remove the blower.

6. Remove the two shock mounts that hold the right side of the blow r, th side away from the contactor box. Save the shock mounts and the grounding strap.

7. On the contactor box, disconnect P 7103 from J 7101 and remove the four screws securing the box. Remove the box.

E. 10 K MAIN FRAME - PA COMPARTMENT

1. Remove the cover plate of the tube base.

2. Remove the 4CX5000 tube.

3. R move th 4CX5000 plat strap by removing the 2520 bolts on the standoff.

4. R move the four ceramic standoffs that mount C 909 and C 929 to the tube bas duct. Do not discard the standoffs or the capacitors.

E. 10 K MAIN FRAME - PA COMPARTMENT - Cont'd

5. Remove the base duct from the baseplate by removing the 6-32 screws.

6. Remove the fiberglass air duct attached to the top shield above the tube.

7. In the tube base compartment, remove the twelve 6-32 screws securing the blower boot plate.

F. 10 K MAIN FRAME - BLOWER COMPARTMENT

1. Disconnect the wires from the air switch and mark.

2. Remove the terminal cover !late on the motor and disconnect the leads.

3. Remove the four 2520 screws securing the blower and remove the blower.

4. Remove the blower mount standoffs.

5. Remove L800. Care should be taken not to break the ceramic insulation around the terminals.

V. PROCEDURE FOR MODIFICATION OF METAL WORK

A. 40 K PA FRAME - PA COMPARTMENT (Compartment A, Figure 1)

1. MS2004 Shield, Top, PA Section.
   a. Modify by removing mesh, either by removing the rivets or cutting around the edge of the shield.

2. MS2005 Shield, Deck, PA Section.
   a. Modify as per Figure 2.

3. MS2038 Wraparound, PA Tube.
   a. Modify as per Figure 3.

4. MS2480 Plate, PA Bandswitch.
   a. Modify as per Figure 14.

B. 40 K PA FRAME, BLOWER COMPARTMENT (Compartment B, Figure 1)

1. MS1994 PA Frame, Blower Manufacturing Plate.
   a. Modify the Blower Mounting Plate as per Figure 4.

C. 10 K MAIN FRAME PA COMPARTMENT (Compartment C, Figure 1)

1. MS1548 Shield, Top.
   a. Modify as per Figure 5.

2. MS1547 Chassis, PA Deck
   a. Modify as per Figure 6.

3. MS1592 Shield, Right Side, Top, Inside.
   a. Modify as per Figure 7.

D. 10 K MAIN FRAME, BLOWER COMPARTMENT (Compartment D, Figure 1)

1. MS1500 Deck, Blower Mounting.
   a. Modify as per Figure 8.

2. MS1830 Shield, Right Side.
   a. Modify as per Figure 9.

E. 10 K MAIN FRAME P.S. COMPARTMENT (Compartment E, Figure 1)

1. MS3679 Plate, Sheild.
   a. Modify as per Figure 10.

F. LOOSE METALWORK

1. MS1997 Cover, Top, 40K Section.
   a. Modify as per Figure 11.

2. MS1699 Cover, Top, 10 K Section.
   a. Modify as per Figure 12.

3. MS2045 Plate, PA Tube.
   a. Modify as per Figure 13.

4. MS1518 Relay Panel, Sub-Mounting Chassis.
   A. Modify by enlarging the F702 mounting hole to 1-1/8 inch diameter.

5. BL103, Blower
   a. Modify the two BL103 as per Figure 15.

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A. TERMINAL STRIPS

1. E1011

Using four each SCBPØ44ØBN14 7/8" screws, LWEØ4MRN lockwashers, NTHØ44ØBN6 nuts, one each TM102-3, 3 terminal barrier strip, PX336-3 insulation paper, and two each MS154-1 straddle plates, mount the strip to the side plate between the 10 K PA Frame and the auxiliary frame, with the threaded portion of the screw extending over the strip to allow a cover plate to be secured.

2. E921

Using four each SCFPØ44ØBN16 1" flat head screws, LWEØ4MRN lockwashers, NTHØ44ØBN6 nuts, one each TM102-3,3 terminal barrier strip, PX336-3 insulation paper and two each MS154-1 straddle plates, mount the strip to the inside of the lip of the PA Deck.

3. E7336

Using four each SCBPØ44ØBN1Ø 5/8" screws, NTHØ44ØBN6 nuts, LWEØ4MRN lockwashers, two each TE149-120 solder lugs, MS154-1 straddle plates and one each TM102-8,8 terminal barrier, PX336-8 insulation paper, mount the strip on the inside of the 40K PA Tube wraparound in the same manner as E7306.

4. E7104

Using four each SCBPØ44ØBN12 3/4" screws, NTHØ44ØBN6 nuts, LWEØ4MRN lockwashers, two each MS154-1 straddle plates, and one each TM102-14,14 terminal barrier strip, PX336-14 insulation paper, LD713/PX535 insulating board, mount the strip to the underside of the 40 K PA Deck, with LD713 in a position so that terminal 1 is toward the center of the frame.

B. CA1209

Insert the EY102-21, 3/8" I.D. grommet into the 1/2" hole to the right of E921. Feed one end of CA1209 from the bottom of the grommet and connect to E921 terminals 1 and 3 as marked on the cable. Lace CA1209 along the existing cable toward the right rear corner. Continue along the cable down to the interlock switch. Lace toward the front of the transmitter to the second grommet hole in the blower deck. This is the same hole that the cable to J1000 occupies. Connect the end of CA1209 to E1011 as marked.

C. MODIFICATION OF J1000

To allow for easier modification, remove J1000 from the shield and cut back some of the sleeving on the cable. Remove the two yellow wires from Pin K. Take a 1-1/2" piece of shrink tubing, PX830-16-1, and place it over the end of the two yellow wires. Splice these two yellows wires to the stripped end of the CA409-175-3.00, 3" WHITE/GRAY jumper. Move the tubing over the splice and shrink. Solder the end of the CA409-168-3.00, 3" WHITE/BLACK jumper to Pin K. Replace the sleeving on the cable and reconnect J1000 to the shield. Connect the WHITE/GRAY lead to Terminal 1 and the WHITE/BLACK lead to Terminal 3 of E1011. Place a PX544-3, insulation 1/8", over the strip. Use two each FWØ4HBN flat washers, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts.

D. CA1208

Remove P900 from its connection to the Interconnect Filter Box betwe n the 10 K and 40 K portions of the transmitter, Open the plug and push back the bushing and cable sleeving. Cut three 1/2" pieces of PX100-1-106, insulating tubing and slip them over the three gray wires marked B, L, N on CA1208. Sold r these to pins B, L, N of P900. Slip the tubing over the pins and close th plug. Lace CA1208 along the main harness to the control panel.

Lace along the control panel up to the breakout for CB1000, MAIN BREAKER. On the main breaker, disconnect the three #16 GRAY wires on the LOAD side. Cut the lugs off and trim the leads. Cut three 1-1/2" pieces of PX830-12-1, shrink tubing and slug over these leads, splice and solder these three GRAY wires to the three wires of CA1208. Cover the splices with the tubing and shrink. Finish lacing this portion to keep the wires from being loose.

E. CA1206

Remove the Interconnect Filter Box from the 40 K frame. Remove the cover from the box. Cut six 1/2" pieces of PX100-1-106, insulating sleeving and slip over the ends of CA1206. Solder the leads to Pins B, L, N of J7102 and J7103 as marked. Slip the tubing over the pins and replace the cover and the box into the transmitter.

F, CA1217

Using eight inches of WL100-4, #16 Buss Wire, solder it to the lugs mounting E7336 in the 40 K Tube Compartment the same way E7306 is mounted. Mount seven CM35F103F03, 10000 mmf Mica capacitors to terminals 1 thru 7 using TE149-144 solder lugs. Bend the buss wire up to prevent shorting J7302. At the front of the control panel of the 40 K PA Frame, locate the breakout from the main harness going up in the left side channel. On CA1217, locate the junction of the main portion and the breakout to E7336. This is a lead 84" long consisting of seven wires labeled 1 thru 7. Place the junctio on CA1217 on the breakout of the main cable. Lace the E7336 lead along the main cable up the left side channel and then back to the PA Tube wraparound. Where the main harness go s into the wraparound, CA1217 goes on the outside of the added 1/2" hole. Feed the seven wires through the hole and secure the grommet in the hole. Connect the leads as marked to E7336. At the control

panel, lace the 3 wire lead, marked 1, 2 and 3 toward the rear of the transmitter along the main cable to a point opposite E7104. Connect these wires to the terminals as marked. Mount a CP41B1FF405K, 4 mfd capacitor in the hole added in the RF deck next to C7327 and marked C7335. Lace the remaining breakout of CA1217 along the main harness behind the control panel. Solder the RED and WHITE/RED leads to the capacitor. Continue lacing CA1217 along the main harness to the extreme right of the control panel. Then lace to the rear as far as the breakout to P7103. Open P7103 and solder the leads to pin X and Y as marked using PX100-1-106, insulating sleeving.

G. CA1218

Locate the P7103 breakout on the main harness in the 40 K PA Frame. On CA1218, locate the P7103 breakout. This is a 9 wire lead 39 inches long. Lace these two breakouts together. Lace CA1218 to the P7103 breakout and solder the leads into P7103 as marked. Use 1/2" lengths of PX100-1-106 for the small pins and PX100-1-148 for the large pins. Close P7103. Lace the P7111 breakout toward the rear of the transmitter and along the cable to a point opposite the breakout for E7302. Lace CA1218along the main harness toward the front of the transmitter to the breakout for P7107. Lace the P7107 breakout of CA1218, two wires marked H and J, and lace along the cable to P7107. Open P7107 and connect the leads to P7107, Pins h and j. Use 1/2" lengths of PX100-1-106 to cover the pins. Do not close P7107. Continue lacing CA1218 along themain harness toward the front of the transmitter, along the rear of the control panel to the left and then back toward the rear. At a point opposite E7104 connect the two leads to Terminals 10 and 11 of E7104. Continue lacing to P7104. Open P7104 and connect the l ads to Pins B, L, N as mark d using PX100-1-106 to cover the pins. Close P7104.

H. CA1207

Locate MS4859, Bracket, Switch Mounting. Position the piece so that the 1/8" switch mounting holes are on the left and the bend faces you. Mount the SW252, Micro-switch, with the terminals up with two each SCBPØ44ØBN12, 3/4" screws, FWØ4HBN flat washers, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Mount the PO168-3 Air Vane to the switch so the blade will be blown down. Solder the end of CA1207 to the switch contacts as marked. Use a CU102-2, 3/16" clamp, and secure the cable to the 11/64" hole in MS4859 with a SCBPØ632BN6 3/8" screw, FWØ6HBN flat washer, LWEØ6 MRN lockwasher and NTHØ632BN8 nut. Mount the bracket and switch assembly to the 40 K PA Tube wraparound with a SCBPØ632BN6 3/8" screw and LWEØ6MRN lockwasher to the hole added to the upper right side of the wraparound viewed from the rear. Lace CA1207 along the cable in the wraparound and connect to terminals 3, 4, 5 of E7336.

I. CA1214

Solder CA1214 to the MS3102A14S-2S, connector, receptacle, female as mark d using PX100-1-106 to cover the pins. Feed the loose end of the cable through the hole for J7305 on LD2045/MS4852, Bracket, PA Filter Connector. Secure the MS3102A14S-2S to LD2045 with four each SCBPØ44ØBN5 5/16" screws, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Secure the bracket to the inside of the 40 K PA Tube compartment next to E7336 with two each SCBPØ632BN5 5/16" screws and LWEØ6MRN lockwashers. Connect the other end of CA1214 to terminals 1, 2, 6, 7 of E7336 as marked.

J. CA1211

On P7107, remove the ORANGE wire in Pin f. Solder the lead of CA1211 marked f to P7107. Use 1/2" length of PX100-1-106 Insulation Sleeving to cover the pin. Cut a 1-1/2" length of PX830-16-1 shrink tubing and slip over the

lead removed from P7107. Splice and solder this lead to the lead marked F of CA1211. Cover the splice with the shrink tubing and heat. Close P7107. Lace the cable along the main cable behind the control panel to a point opposite E7104. Connect the end of CA1211 to terminals 4 and 6 of E7104 as marked.

K. CA1212

On the 40 K PA Frame Interlock Switch remove the two WHITE/GREEN wires from position 1. With a meter, check which one goes to the OPERATE light. Slip a piece of PX830-16-1 shrink tubing over this lead. Splice and solder the lead marked L of CA1212. Cover the splice with shrink tubing and heat. On CA1212, connect the other lead marked 1 and the original WHITE/GREEN lead and solder them to Position of the switch. Lace CA1212 along the main harness behind the control panel to a point opposite E7104. Connect the cable to terminals 10 and 11 of E7104.

L. CA1213

In the 40 K PA Frame disconnect the WHITE/RED, YELLOW and WHITE/BROWN wires from the Relay Panel Interlock Switch, S7103. Connect the leads of CA1213 marked C, NC, NO to the switch. Disconnect the original relay panel interlock wiring as far as the main harness and run CA1213 in its place. Lace the two cables to the main harness behind the control panel to a point opposite E7104 and connect CA1213 to terminals 4, 5, 6 of E7104 as marked. Connect the original cable as follows: WHITE/RED to terminal 7, YELLOW to terminal 8, WHITE/BROWN to terminal 9.

M. CA1210

Mount the BL103, B7103 to LD2047/MS4864, Bracket Blower, using 6 each SH105-1 Shock Mounts, SCBPØ832BN14 7/8" screws, FW08HBN flatwashers, LWEØ8MRN lockwash rs. Mount the fan on the inside of the bend in the bracket with the air duct in the notch. Mount a CP41B1FF405K 4 mfd. capacitor

in the 3/4" hole marked C7127. Mount the MS3102A14S-2P, J7106 with four each SCBPØ44ØBN6 3/8" screws, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Mount the capacitor and jack on the outside of the bend. Solder two 8" pieces of MWC22(7)UO, BLACK #22 wire to the capacitor, C7127. Slip a 6" piece of PX100-1-234 Insulating Sleeving Size 1 over the blower leads. Solder the blower and capacitor leads to J7106 as follows using 1/2" pieces of PX100-1-148 to cover the pins.

PIN A - GREEN, YELLOW

PIN B - RED

PIN C - BLUE, Capacitor Lead

PIN D - BROWN, VIOLET, Capacitor

Mount the blower and bracket assembly on the 40 K PA Frame Blower Compartment to the underside of MS2005, Shield, PA Deck, with the two 5/16" holes added to the deck and the bandswitch plate. Mount with two each SCHH2520BN12 3/4" hex head 1/4 20 bolts, LWS25MRN lockwashers, NTH2520BN14 nuts. Mount so that the air duct faces the rear of the transmitter.

Remove the air switch from the 40K main blower that was removed. Solder the leads of CA1210 to the air switch as marked on the cable. Mount the switch to B7103 using the same hardware.

Viewed from the rear of the transmitter, route the cable up and to the left to the main harness. Lace to the main harness and route the cable to the front, around the rear of the control panel to a point oppostie E7104. Connect the cable to terminals 7, 8, 9 of E7104 as marked. Connect the CA409-161-3.00, WHITE/BROWN jumper between terminals 5 and 2 of E7104. Mount PX974, Cover, Terminal Board with two each SCBPØ632BN5, 5/16" screw, FWØ6HBN flat washers and LWEØ6MRN lockwashers to cover E7104.

N. B801

Cut a 17" piece of PX100-1-234 insulation sleeving and slip it over the leads of a BL103, B801. Slip the MS3420-6A Cable Bushing and the MS3057-6 Cable Clamp over the sleeving. Using 1/2" lengths of PX100-1-106 to cover the pins solder the leads to the MS3106A14S-2P as follows:

PIN A - GREEN, BLUE

PIN B - RED

PIN C - YELLOW

PIN D - BROWN, VIOLET

Close the plug. Mount four TE2520BN4.500R16, 4-1/2" standoffs with SCHH2520BN10 5/8" bolts and LWS25MRN lockwashers outside of the bend on MS4856, Bracket Blower. Mount the blower BL103 inside of the bend of MS4856 with six each SH105-1 Shock mounts, SCBPØ832BN14 7/8" screws, FWØ8HBN flatwashers and LWEØ8MRN lockwashers. Remove the air switch from B800 which was removed and mount to B801 with the same hardware.

Using twelve each SCBPØ632BN6 3/8" screws and LWEØ6MRN lockwashers, mount MS1632 Mounting Flange, Blower to MS4855 Plate, Cover. With the flange facing up, mount the Cover Plate to the blower using RY127 Gasket between with four SCBP2520BN8, 1/2" screws, LWS25MRN lockwashers and NTH2520BN14 nuts. From B800, remove the rubber air flue and the MS1632 that was left on by removing the 12 screws securing the rubber to the blower. Mount this flue to the B801 assembly by using four MS1638 Flange Plates and twelve SCBPØ632BN6, 3/8" screws and LWEØ6MRN lockwashers. Put the blower assembly in the blower compartment and mount to the blower deck with four SCHH2520BN10, 5/8" bolts and LWS25MRN lockwash rs. Secure the upper Blower Mounting Flange to the PA Tube Compartment using twelve SCBPØ632BN6, 3/8" screws and LWEØ6MRN lockwashers.

Reconnect the air switch cable that was removed.

O. C816 - J801

Mount a CP41B1FF405K, 4 mfd. capacitor on the outside of LD2048/MS1611 Blower Capacitor Bracket. Mount a MS3102A14S-2P using four each SCBPØ44BN5 5/16" screw, LWEØ4MRN lockwasher and NTHØ44ØBN6 nuts. Strip the ends of the leads of the cable that were disconnected from the blower motor. Solder the two WHITE/BLACK leads together and place a piece of PX830-12-1 shrink tubing over the splice and heat. Tie this lead back. Using 1/2" pieces of PX-100-1-106 insulation sleeving, solder the leads as follows:

PIN A - TWO YELLOW

PIN B - GRAY

PIN C - 2" piece MWC22(7)UO BLACK #22 WIRE

PIN D - 2" piece MWC22(7)UO BLACK #22 WIRE

Solder the other end of the two BLACK leads to the capacitor. Mount the bracket to the underside of the RF Deck in the four holes added with the capacitor facing away from B801. Use four each SCBPØ832BN6, 3/8" screws, LWEØ8MRN lockwashers and NTHØ832BN10 nuts. Remount L800.

P. 10 K PA TUBE BASE PX969

Mount the C909 and C929 mounting standoffs to PX969 Tube Base Air Duct with the same hardware. Mount the air duct to the base plate with the same hardware. Remount C909 and C929 with the same straps and hardware except replace the straps going to the tube straps with two MS202-4-5.00 straps. Mount the MS4863 Tube Strap to the standoff with the original hardware. Use the original hardware for the clamp of the strap.

Q. A5426 Pump Contactor Assembly

Remove the cover plate on the Blower Contactor Assembly. Disconnect

the wires going to the relay, capacitors and terminal strip. Remove the back cover. On the back cover, remove the terminal strip and capacitors. Mount the cover and relay to the new A5426 Assembly with seven each SCBPØ632BN6, 3/8" screws and LWEØ6MRN lockwashers. Connect the cable to the relay as marked. Replace the front cover plate with seven each SCBPØ632BN6, 3/8" screws and LWEØ6MRN lockwashers. Mount the pump contactor box in the transmitter with the original hardware.

R. 40 K COIL AIR DUCT

Mount the PX970 PA Air Duct to the RF Deck with the original hardware with the air hose flange under the deck. Mount the MS4858, Air Duct bracket, to the PA Tube wraparound, to secure the air duct, with two each SCBPØ632BN6, 3/8" screws, LWEØ6MRN lockwashers and NTHØ632BN8 nuts. On the PA Coil Fan, B7103, mount MS4860, Bracket, Hose Mounting and RY127 Gasket with four SCBP2520BN8, 1/2" screws, LWS25MRN lockwashers and NTH2520BN14 nuts.

S. 40 K TOP COVER

Cut a 17" piece of PS100-1-234, insulation sleeving and slip it over the leads at the BL123, B7104. Slip the MS3420-6A Cable Bushing and the MS3057-6 Cable Clamp over the sleeving. Using 1/2" lengths of PX100-1-106 insulation sleeving to cover the pins, solder the leads to the MS3106A14S-2P as follows:

PIN A - GREEN, BLUE

PIN B - YELLOW

PIN C - RED

PIN D - VIOLET, BROWN

Close the plug. On MS2518 Blower Chassis, knock out the twelve captive nuts. Mount the BL123, B7104 to MS2518 with eight each SCBPØ632BN6, 3/8" screws, LWEØ6MRN lockwashers and NTHØ632BN8 nuts. Mount the fan chassis to MS4853

Fan Mounting Plate using twelve SCFPO832BN12, 3/4" flathead screws, FWØ8HBN flatwashers, LWEØ8MRN lockwashers and NTHØ832BN10 nuts. When mounting the chassis, locate the filter opening away from the 2-1/4" hole. Mount the F512512 Hose Adapter to the plate using two SCHH2520BN10, 5/8" bolts, LWS25MRN lockwashers and NTH2520BN14 nuts. Secure the TA111, Adhesive Tape, along the bottom edges of MS4853. Mount the Fan Mounting Plate Assembly to the top cover using the PM1297, Mounting Bracket and ten each SCBPO832BN12, 3/4" screws, LWEØ8MRN lockwashers and seven NTHØ832BN10 nuts. Remount the 40 K Top Cover using the original hardware. Mount the AD103-9 Air Filter in the bracket.

T. 10 K TOP COVER

Mount F512521 Pressure Equalizing fitting to MS4854 Hose Mounting Bracket, with three each SCHH2520BN8, 1/2" bolts, LWS25MRN lockwashers and NTH2520BN14 nuts. Mount the two MS4862 Side Plates with ten each SCBPØ632BN4, 1/4" screws and LWEØ6MRN lockwashers. This is temporary to allow for mounting alignment. Remove the side plates after the bracket is mounted to the top to allow access for clamping the hose. Using the PM1298 Mounting Bracket and four SCBPØ832BN10 5/8" screws, LWEØ8MRN lockwashers and two NTHØ832BN10 nuts. Remount the 10 K Top Cover and the H.V. warning light with the original hardware.

U. F512512 HOSE ADAPTER

In the 40 K PA Compartment, mount a F512512 Hose Adapter in the hole provided near the base of the tube using two each SCHH2520BN10, 5/8" bolts, LWS25MRN lockwash rs and NTH2520BN14 nuts.

V. WATER RESERVOIR AND CIRCULATING UNIT

Remount the two shock mounts and the ground strap that were removed

during the removal of B7102 40 K Main Blower, in the new holes provided. Mount LD2039/PX968 Terminal Strip Insulator to MS4857 Terminal Board Bracket using two each SCFPØ44ØBN7, 7/16" flathead screws, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Mount TM105-5, E7103, Terminal Strip, and a PX336-5, Insulator, to the LD2039 using two MS154-1, Straddle plates, and four each SCBPØ44ØBN16, 1" screws, FWØ4HBN flatwashers, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Mount the flatwashers and the screw through LD2039 into the strip so th threaded portion extends over the terminal strip. Using the side with the sight glass as the front, the sheet metal screws referred to will be those on the rear face. Remove the center screw of the top row. On the same center line of this hole, mark a spot 1" away in the direction away from the pump motor. Drill this spot with a #29 drill bit. Mount the terminal block assembly in these holes with the terminal board over the unit, with the originalscrew and a SFBØ832SN6, 3/8" self tapping screw. On CA1215, locate the junction of the pressure switch, S7108, breakout, WHITE/BLACK and WHITE/GREEN and the pump motor, B7105 breakout, WHITE and GRAY. Remove the top corner screw, the same side as the pump motor, and using a FWØ8HBN flatwasher and a CU102-2, 3/16" clamp, mount the cable to the unit at the junction previously mentioned. Usingtwo CU102-1, 1/8" clamps, FWØ8HBN flatwashers, clamp theswitch breakout ,along the top of the reservoir to the switch. Using three CU102-2, 3/16" clamps, FWØ8HBN flatwashers, clamp the pump motor breakout down the side of the reservoir to the motor. Connect the switch and motor. Using five CU102-4, 5/16" clamps, FWØ8HBN flatwashers, clamp the cable along the top rear past E7103 to the other corner and then down. Leave enough slack at the plug to allow free connecti n to the pump contactor box. Connect the cable to E7103 as marked. Conn ct the leads from the water level switch to t rminals 4 and 5 of E7103. Mount the PX544-5 Insulator over E7103 and secure

using four each FWØ4HBN flatwashers, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts. Mount the reservoir, with the sight glass facing the rear of the transmitter, to the shock mounts in the 40 K blower compartment using the original hardware. Do not forget to secure the ground strap.

W. HOSES-40 K

The following procedure is to be used on all clamping operations. Wrap the hose with one turn of teflon tape and clamp over the tape.

Clamp F512518, 3" x 1/16" x 20" hose to the vapor exhaust opening of F28901, 40 K PA Tube Jacket, with a P512519, 2-5/16" to 3-1/2" clamp. Mount P27882, Anti-Electrolytic target to the intake hole of the jacket. Clamp F512527, 3/4" x 1/16" x 17" hose to the target in the F28901 Jacket using a P512530. 9/16" to 1-1/2" clamp. Mount the Jacket in the transmitter by slipping the loose ends of the hose through the glass support and lining up the jacket so that the intake hose is above the flow adjusting valve. Clamp the 3-1/2" hose to the opening in the reservoir using a P512519 clamp. Mount the 3/4" hose to the flow regulating value with a F512530 clamp. Clamp the F512526, 1"1 x 1/16" x 18" flexible hose, with a P512530 clamp, to the top of the reservoir. Clamp the other end to the P512512 Hose Adapter mounted near the base of the 40 K PA Tube with a F512530 clamp. Clamp the F512515, 2-1/4" x 1/16" x 24" flexible hose to the top of the reservoir with a, P512519 clamp. Clamp the other end to the hose adapter with another P512519 clamp. Replace MS2045-2 Tube Plate, Front. This is the section of the grid screen which is toward the front of the transmitter. This is the unmodified half. B tween the two hose adapters in the 40 K PA Deck and Top, connect F512514, 1" x 1/16" x 36" hose and F512513, 2-1/4" x 1/16" x 36" hose with two each P512530 and P512519 clamps resp ctively. Remove the tube strap from the

ML-6697 tube and place it around the water jacket and secure it to the capacitor, C7330 as it was originally. Replace C7326 into its clamp at the base of the tube. Secure MS4861, strap to C7326 and connect it to the tube strap and secure the tube strap. Place the new ML-7480 into the water jacket. Check to see that it is seated properly to avoid leaks around the "O" ring. Replace the MS2045-1 Tube Plate, Rear, with the cut-out section around the hoses. Secure the filament and grid rings around the tube. Check to see that the fan, B7104 is connected. Replace the cover on the tube wraparound. Replace the shield on the PA Compartment.

X. HOSES-10 K

Layout and measure the RY140-1 Rubber U Channel around the 2-1/4" holes in the right side shield of the PA Deck and the 5" cutout in the top shield of the 10 K frame. Cut the flat edges of the channel so that it will fit into the corners of the cutout and fill the circumferance of the holes. Spread a layer of GL101-2 Adhesive around the edges of the cutouts and in the channel of the rubber. When the adhesive becomes tacky, secure for rubber channel to the cutouts. Mount the P512523 Water Level Control through the right side shield in the PA Compartment into the the 40 K Compartment with four each SCBP1032BN20, 1-1/4" screws, FW100-19 flatwashers, LWE10MRN lockwashers and NTH1032BN12 nuts. Mount the ML-LPT11 Tube into the socket with the water intake facing the water level tank. Secure the tube strap. Check the water level line on the water level tank to see that it lines up with the water level line on the ML-LPT11. Adjust the tank height if necessary. Mount the F512524, 1-5/8" x 1/16" x 11" hose between the tube and the pressure equalizing fitting with two P512533, 1-5/16" to 2-1/4" clamps. Remount the side plates of the brack t. Connect th F512522, 1" x 1/16" x 18" hose from the pressure

equalizing fitting to the top of the water level tank with two P512530, 9/16" x 1-1/2" clamps. Attach the union onto the ML-LPT11 tube with "O" ring and tighten. Connect the F512525, 5/8" x 1/16" x 13" hose between the ML-LPT11 and the water level tank with two P512530, 9/16" to 1-1/2" clamps. Connect the F512516, 7/8" x 1/16" x 37" hose to the bottom of the water level tank. Extend it through the 2-1/4" hole in the side shield and connect it to the water overflow trap on the reservoir. This is a connection on the front of the reservoir with the pipe at the top at a 45° angle. Secure with two P512530 clamps. Connect F512528, 1/2" x 1/16" x 41" hose to the bottom of the water level tank. Route the same way as the 7/8" hose and connect it to the water flow adjusting valve on the reservoir with two P512530 clamps. Recheck all hose connections. Connect the water level switch wires to E921, Terminals 1 and 3. Mount a PX544-3 with four each FWØ4HBN flatwashers, LWEØ4MRN lockwashers and NTHØ44ØBN6 nuts.

Y. Using two CU129-10, 2" clamps, secure the RY160, 16" Flexible Hose, to B7103, 40K Main Blower and the air hose flange feeding the air duct for the 40K coil.

Z. 40 K RELAY PANEL

Disconnect the relay wiring from E7601 through E7606 and feed thru's, mark the leads if necessary. Remove the relay mounting plate by removing the four screws mounting the plate to the shock mounts. Disconnect all lights and timers. Mark the leads. Remove the lights and timers from the panel. Remove the potentiometers, switches and the fuseholder mounting bracket from the panel without removing the wiring. Remove the screws holding the wire wound resistors to the pan 1. Remove the brack t holding J7601 and J7602 from the pan 1. Unsolder the leads from the t rminal strips. Mark the leads. Remove all items left on the panel. Reconnect all the above item to LD2044/MS1979, Front Panel, 40K Relay Pan 1,

identically as the old panel. Replace the relay panel in the transmitter.

AA. 10 K RELAY PANEL

Follow the same procedure for the 10 K Relay Panel as the 40 K Relay Panel except as noted. Remove all components and cables from the panel. On the fuseholder bracket, remove XF702 and enlarge the hole to 1-1/8". On LD2040/MS1499, Front Panel, 10 K Relay Panel, mount a TS106-2, Socket, in the WATER ON hole. Remount all components and rewire as original. Wire TS106-2 in the following manner. Connect the two GRAY wires and one WHITE/GRAY wire that went to XF702 to one side of the light socket. Connect the RC32GF224J 200K Resistor, between the other terminal of the light and the YELLOW wire on XF701.

AB. 10 K CONTROL PANEL

Remove the 10 K Control Panel from the transmitter. Remove the knobs from the switches. Disconnect the controls from the panel. On any controls that have to be unsoldered, mark the leads. Remount the controls on the LD2041/MS3678, Front Panel, 10 K Main Control. Remount the control panel to the transmitter.

AC. 40 K MAIN CONTROL PANEL

Follow the same procedure as paragraph AB using LD2042/MS1947, Front Panel, 40 K Main Control.

AD. 40 K P.S. CONTROL PANEL

Follow the same procedure as paragraph AB using LD2043/MS1948, Front Panel, 40 K P.S. Control Panel.

AE. Reinsert all units into the transmitter replacing the high voltage drawers with the HVRB-1 in the 40 K and the HVRC-1 in the 10 K. Check to see that all plugs are connected correctly in the transmitter that were disconnected or added. Replace all shields and covers.

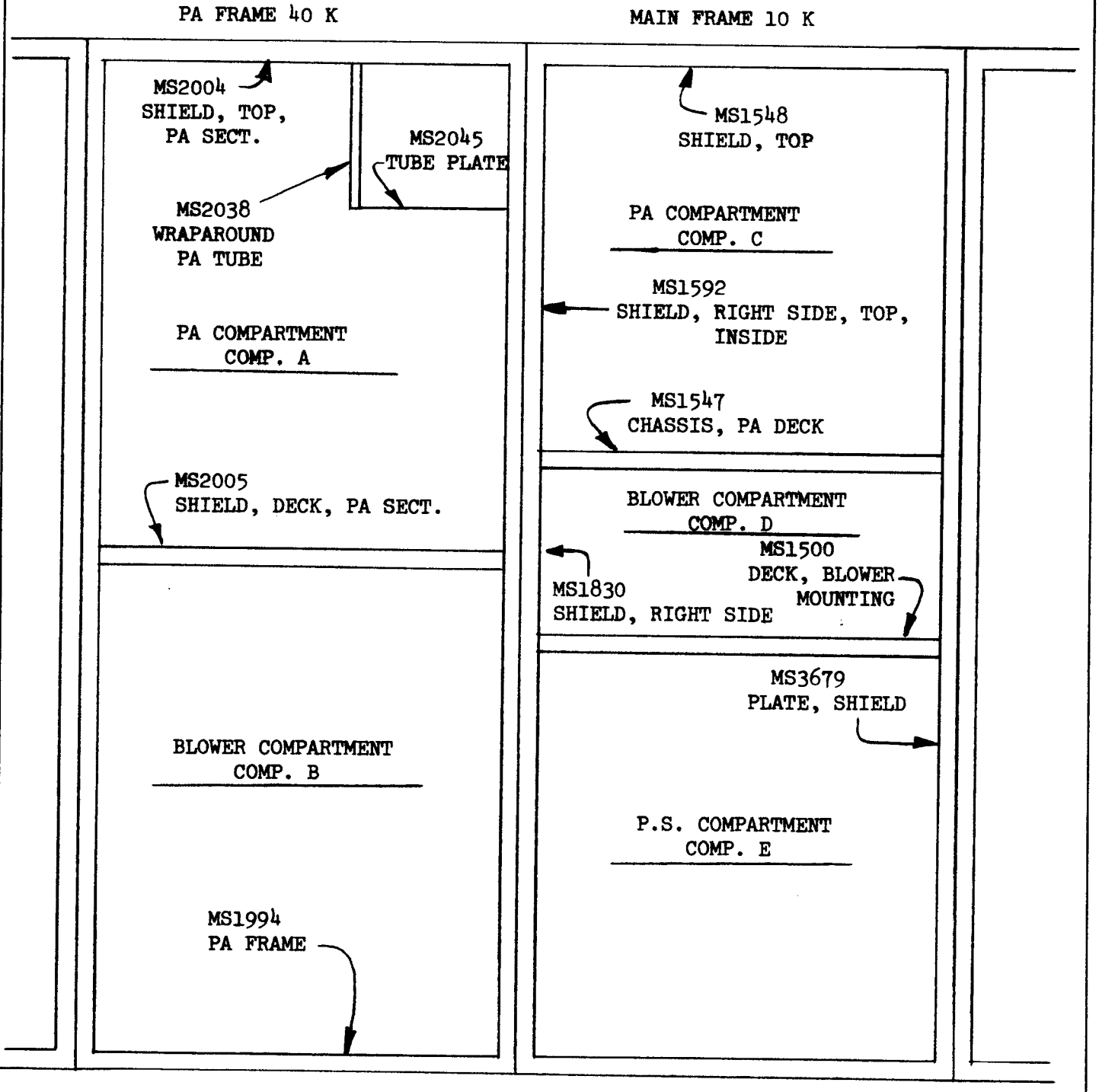
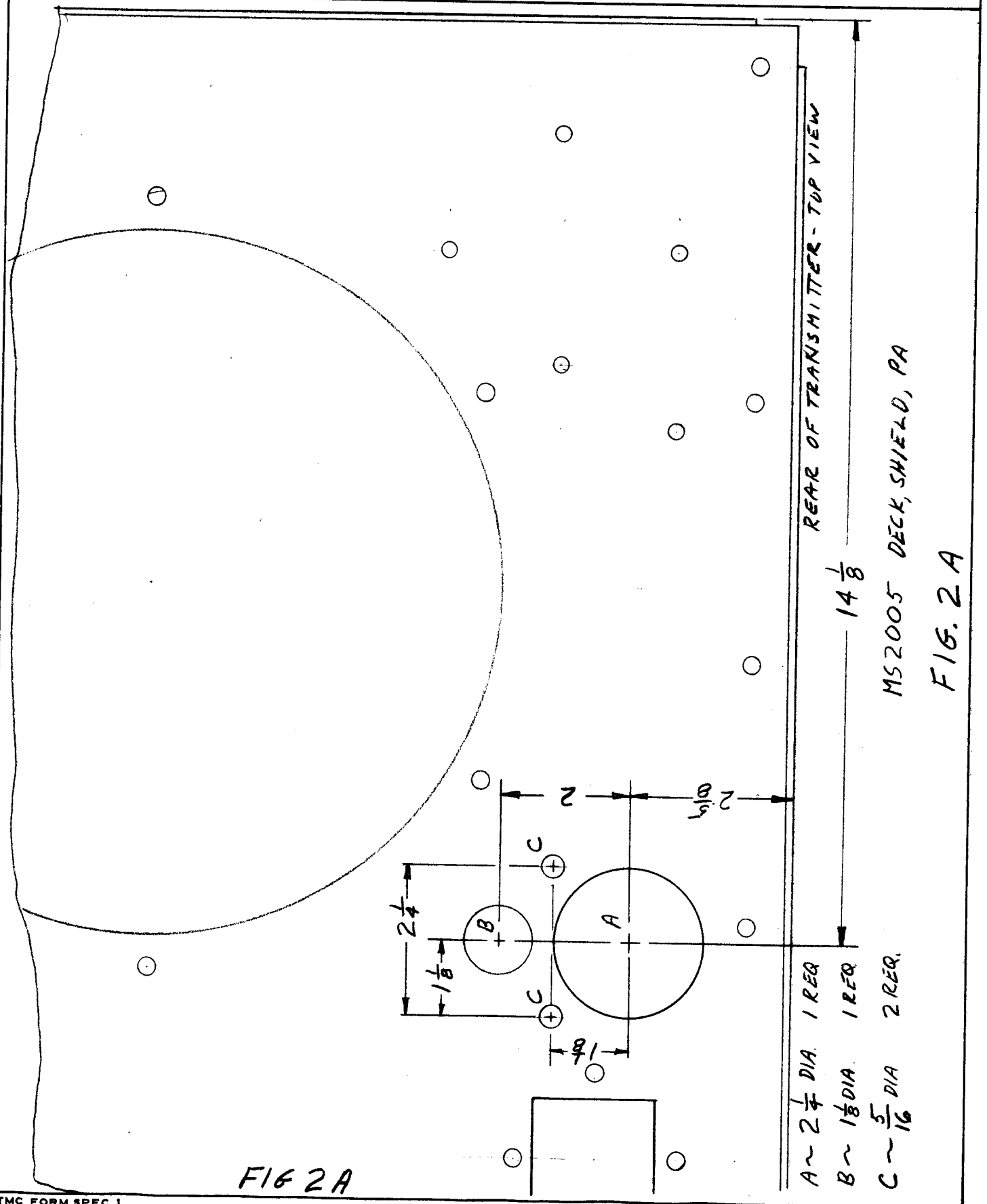


FIG 1

AN/FRT-40 REAR ELEVATION

TMC SPECIFICATION

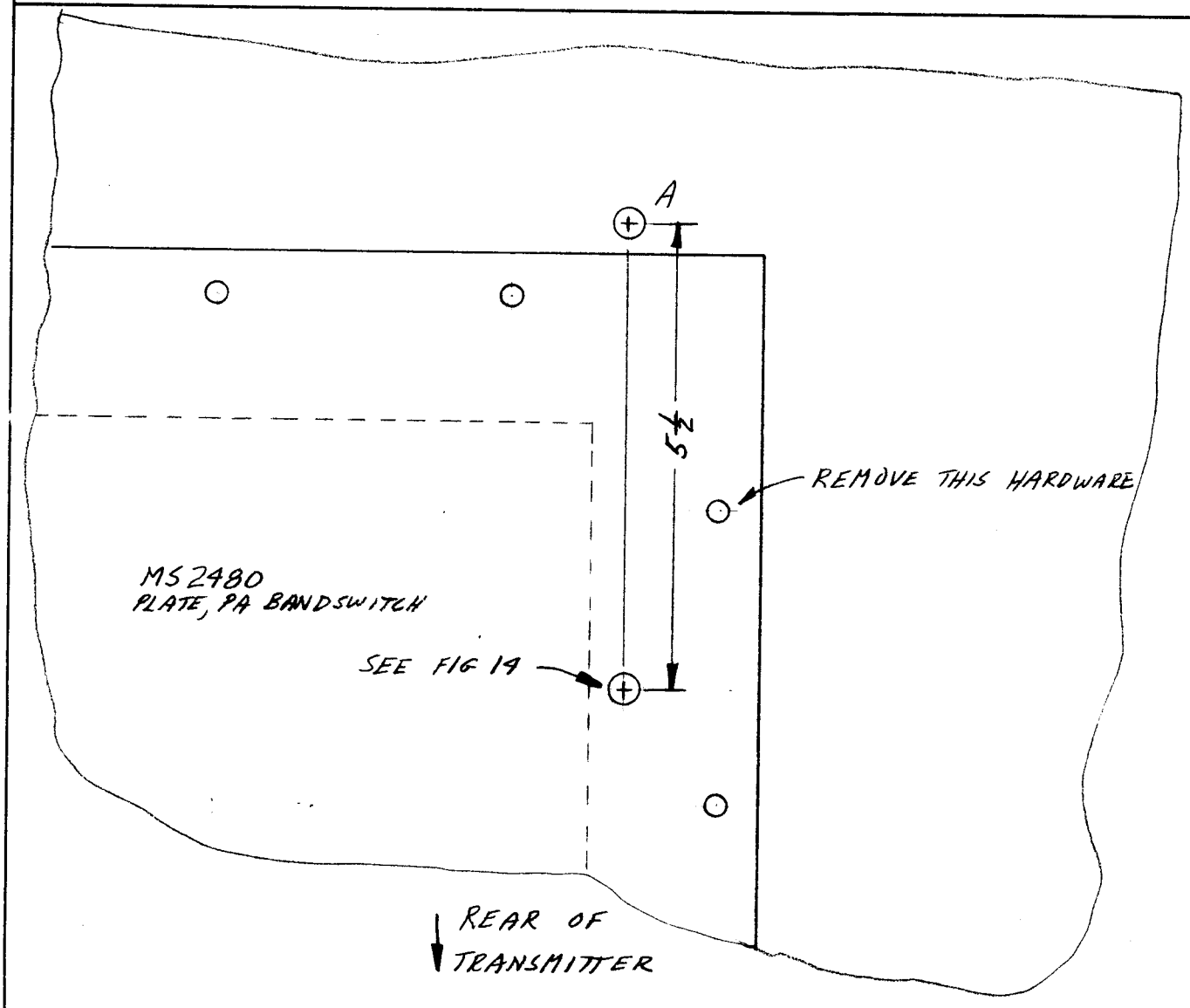
REV: A			NO. S 1077
COMPILED:	CHECKED:	APPD:	SHEET 36 OF 53
TITLE:			



MS2005 DECK, SHIELD, PA

FIG. 2A

FIG 2A



MS2005 DECK, SHIELD, PA.
TOP VIEW SHOWN

A ~ $\frac{5}{16}$ DIA 1 REQ.

FIG. 2B

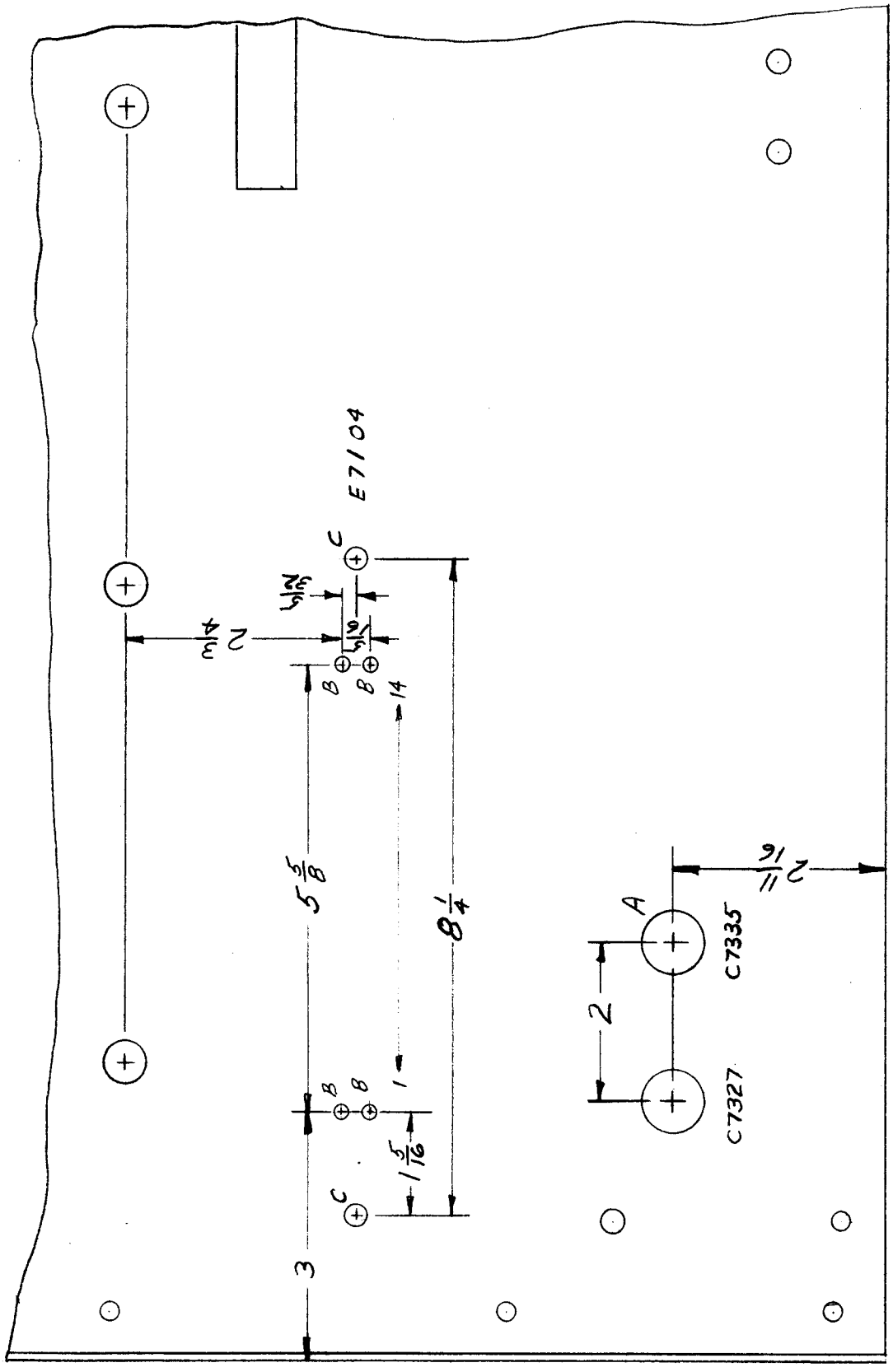

E7104
C
2 3/4
9/16
9/16
B
B
14
5 5/8
8 1/4
1
1 5/16
C
3
A
C7335
2 11/16
2
C7327
FRONT OF TRANSMITTER
MS2005 DECK, SHIELD, PA
TOP VIEW
A ~ 3/4 DIA 1 REQ.
B ~ 9/64 DIA 4 REQ.
C ~ #36 DRILL & TAP FOR 0632 2 REQ.

FIG. 2C

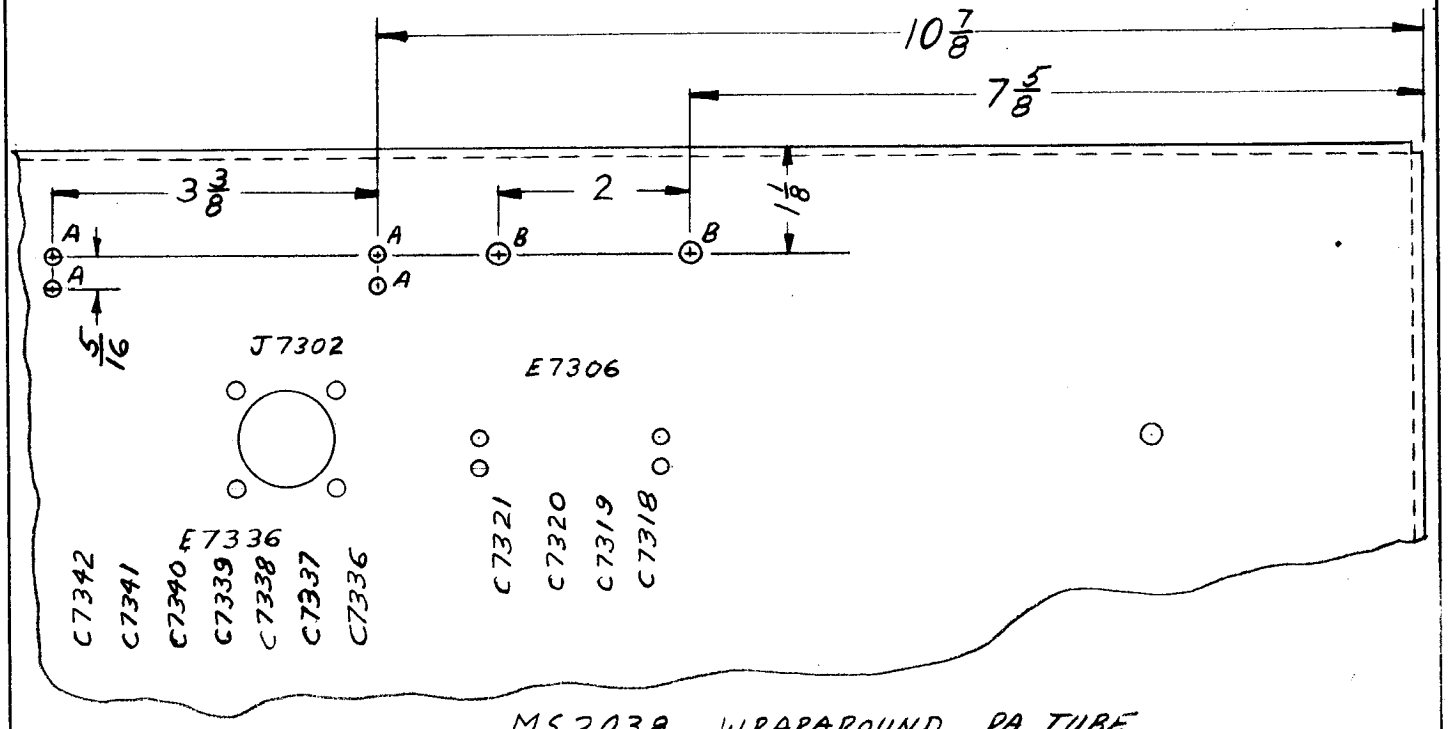
TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 39 OF 53

TITLE:

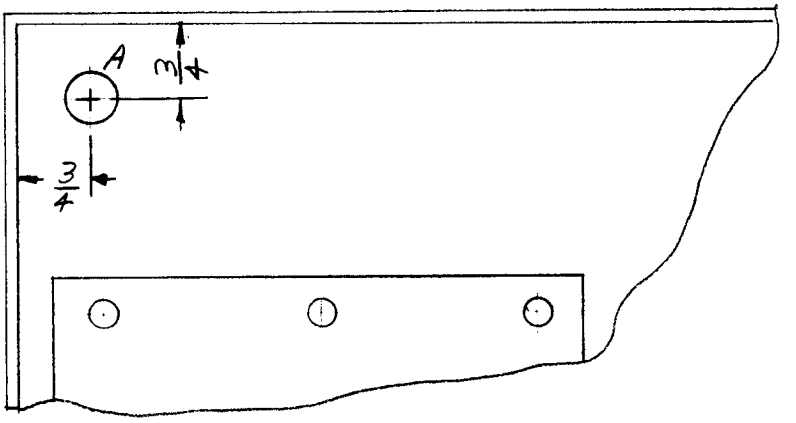


MS2038 WRAPAROUND, PA TUBE
OUTSIDE VIEW SHOWN (LETTERING INSIDE)

ADD E7336 LETTERING INSIDE

HOLE	DIA.	REQ.
A ~	9/64	4
B ~	11/64	2

FIG. 3A

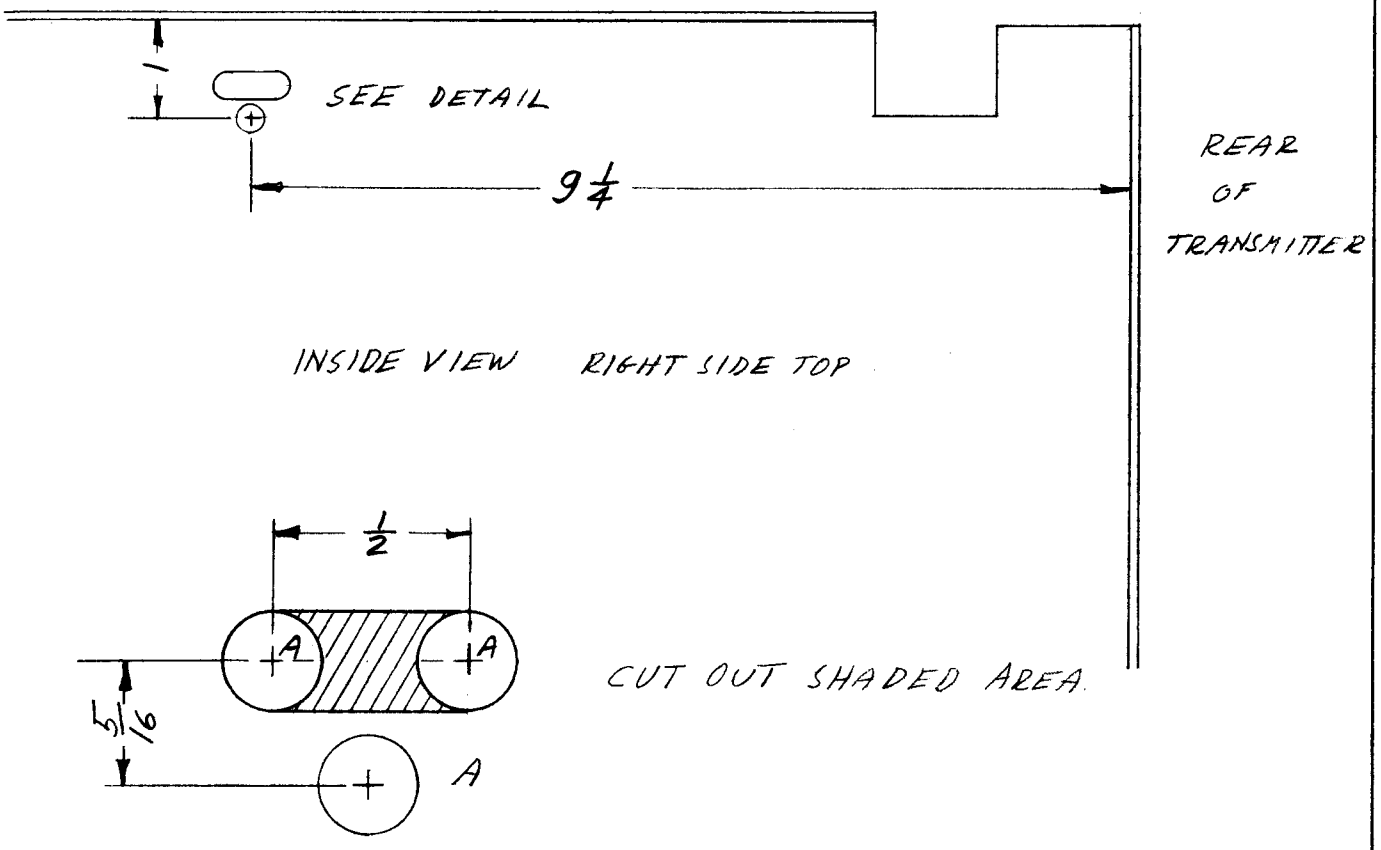


A ~ 1/2 DIA. 1 REQ.

MS2038 WRAPAROUND, PA TUBE
INSIDE VIEW SHOWN FROM REAR.

FIG. 3B

TMC SPECIFICATION			NO. S 1077
REV: A			
COMPILED:	CHECKED:	APPD:	SHEET 40 OF 53
TITLE:			



INSIDE VIEW RIGHT SIDE TOP

CUT OUT SHADED AREA.

A ~ 1/4" DIA

MS 2038, SHIELD, TUBE

NOTE: 1. LOCATING DIMENSIONS ARE INSIDE DIMENSIONS.
2. MOUNT ONE NT 108-6, SPRING NUT IN CUTOUT.

FIG. 3C

MS1994 FIG 4

TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 41 OF 53

TITLE:

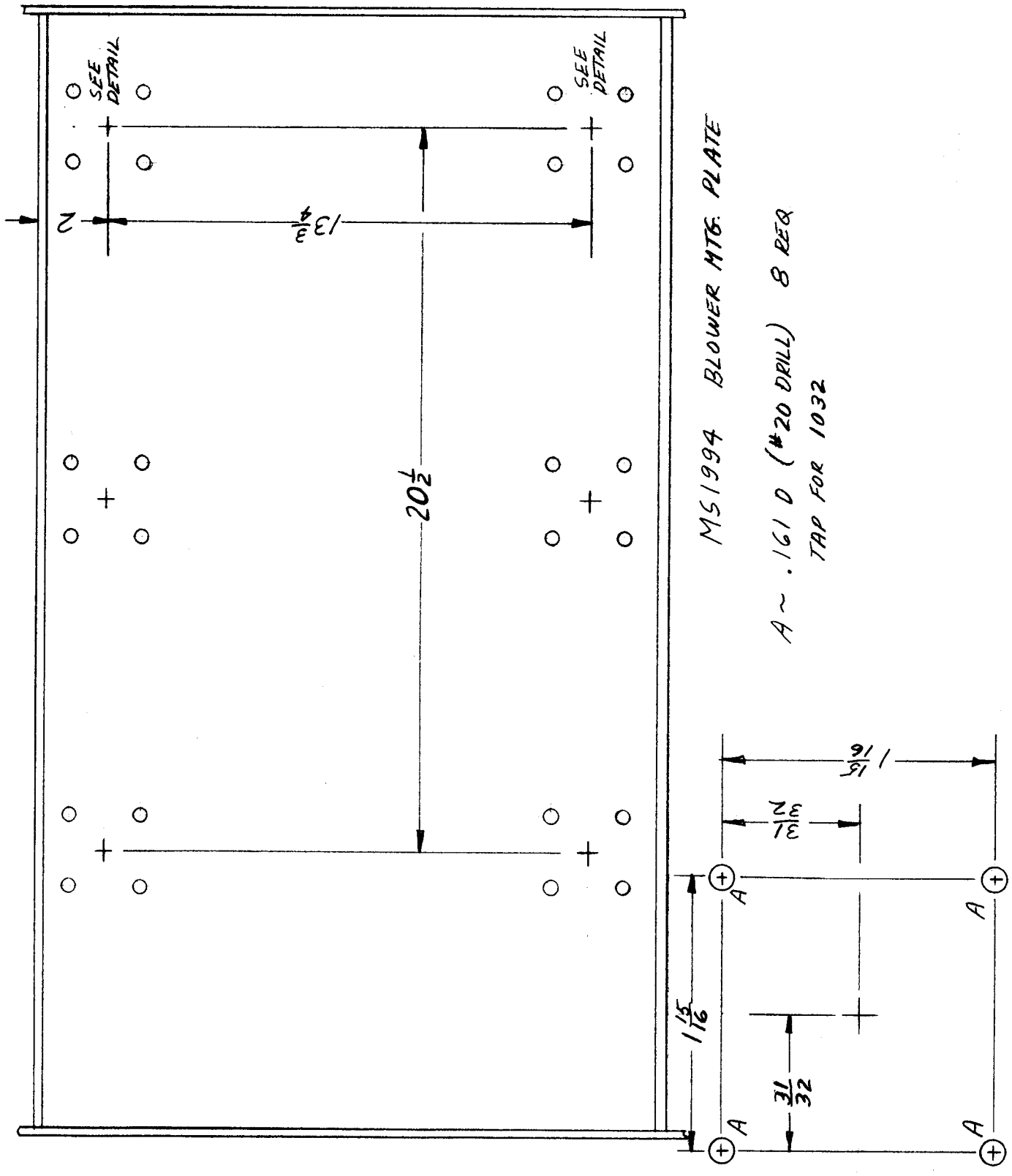


FIG. 4

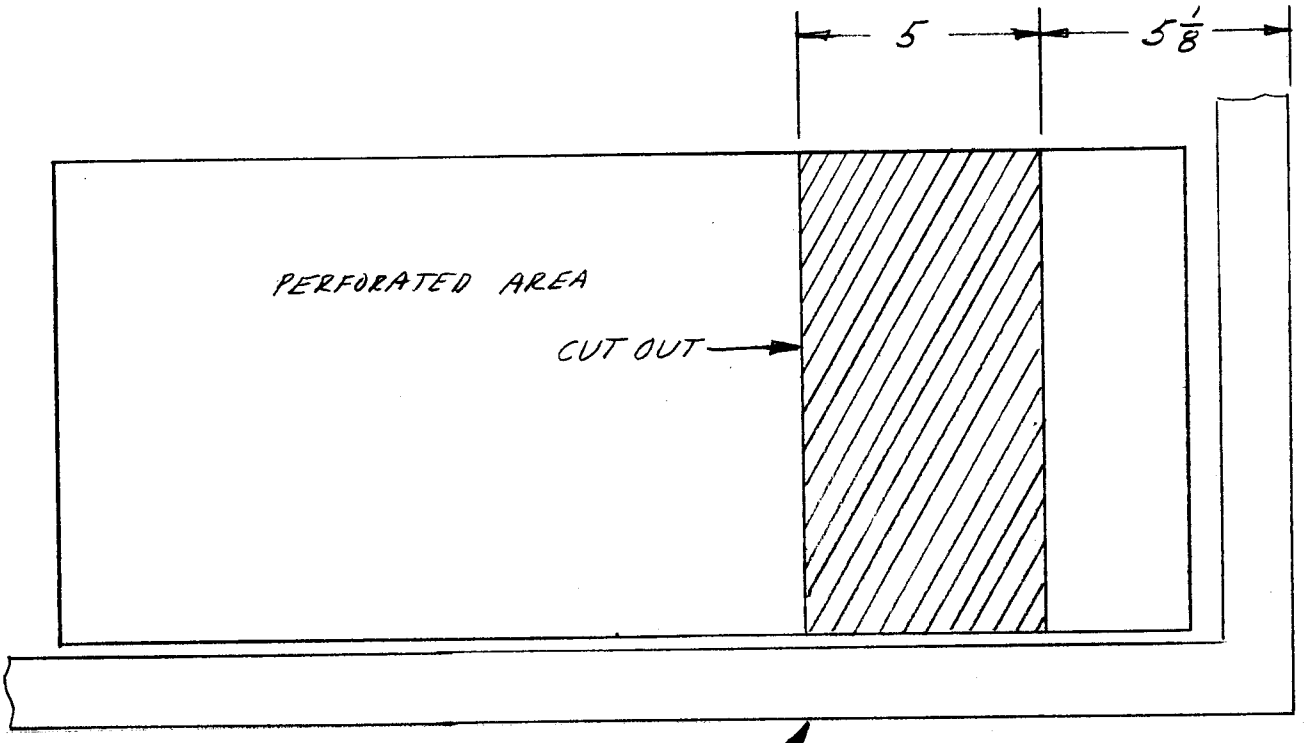
TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 42 OF 53

TITLE:



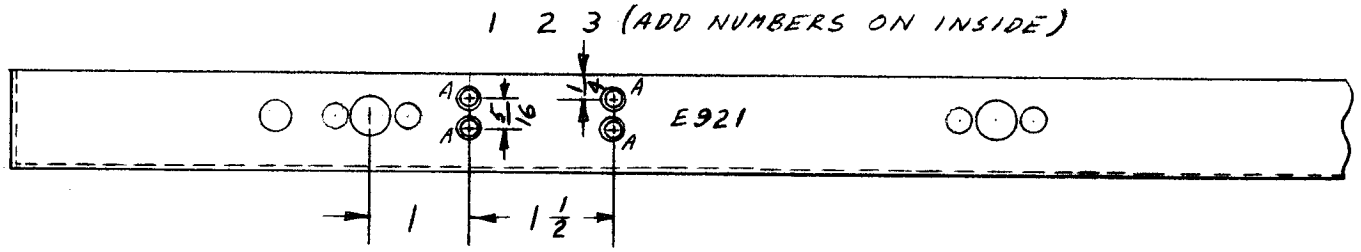
REAR OF TRANSMITTER
TOP VIEW

MS1548 SHIELD, TOP MAIN FRAME

FIG. 5

TMC SPECIFICATION

REV: A			NO. S 1077
COMPILED:	CHECKED:	APPD:	SHEET 43 OF 53
TITLE:			

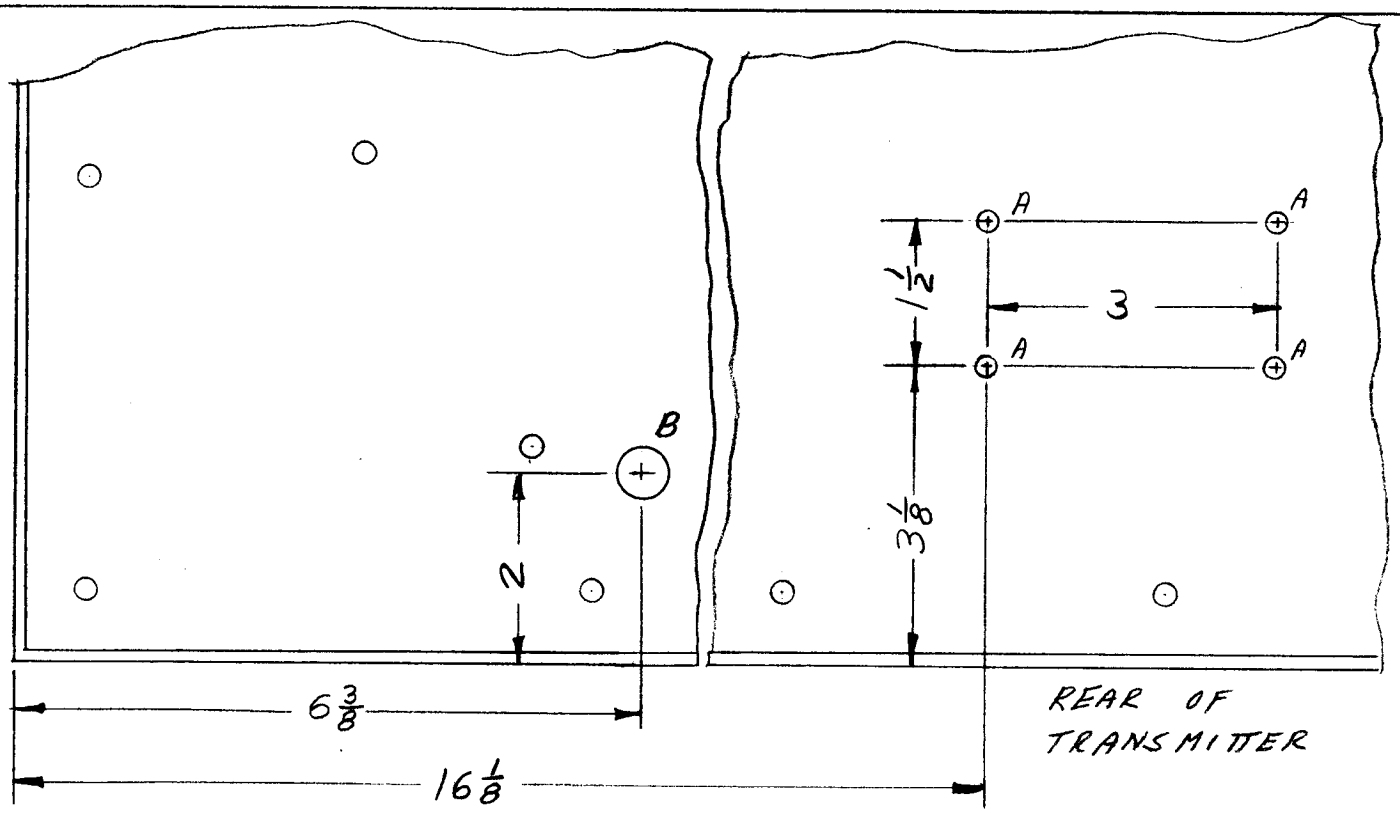


A ~ .1/8 DIA C'SK 82° TO .230 D. 4 REQ.

ADD LETTERING

MS1547 CHASSIS, PA DECK
REAR VIEW OF TRANSMITTER. LEFT EDGE OF LIP

FIG. 6A.



MS1547 CHASSIS, PA DECK
TOP VIEW SHOWN.

A ~ 13/64 DIA. 4 REQ.

B ~ 1/2 DIA 1 REQ.

FIG. 6B

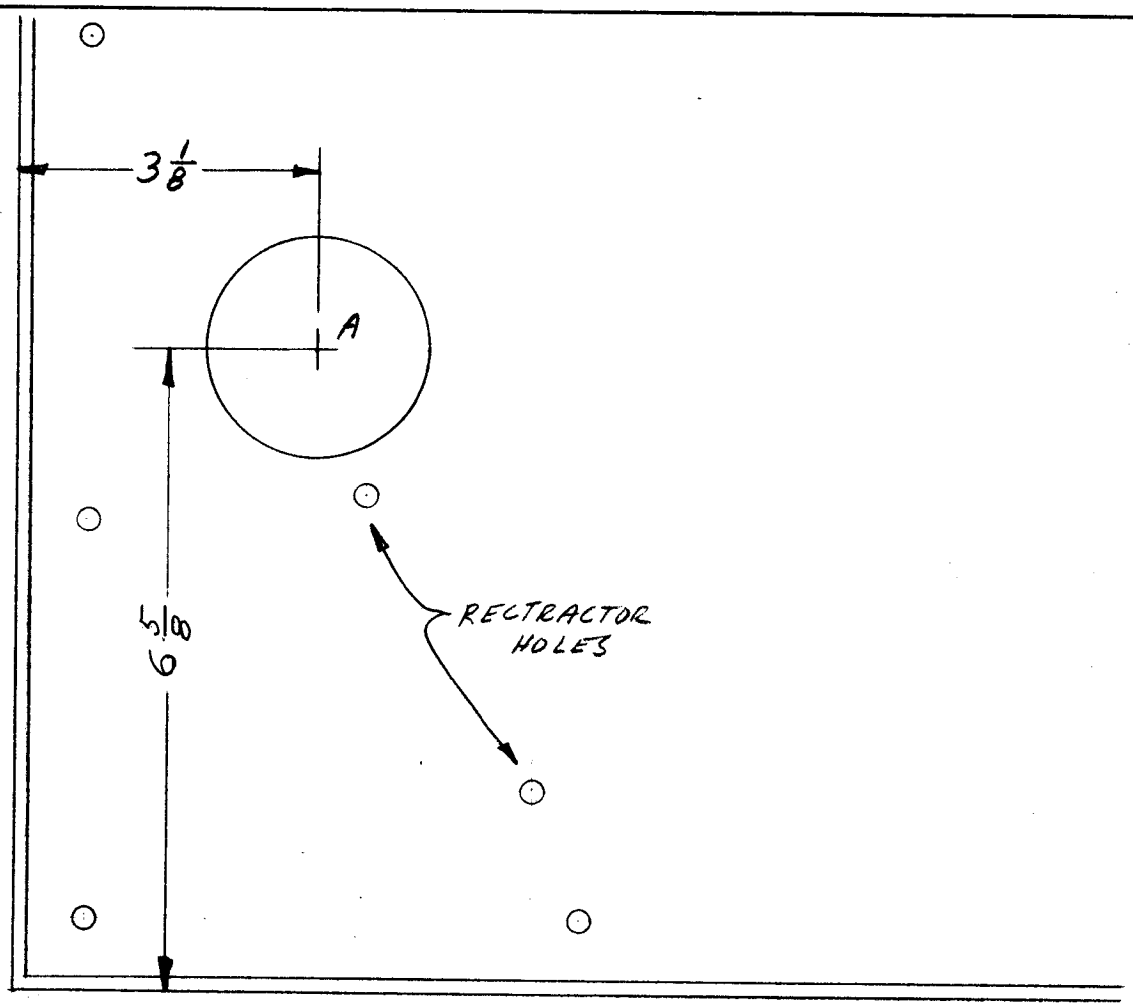
TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 44 OF 53

TITLE:



A ~ 2 1/4 DIA. 1 REQ.

MS1547 CHASSIS, PA DECK
TOP VIEW LEFT REAR CORNER
(SAME VIEW AS FIG. 6B)

FIG. 6C

MS1592 FIG 7

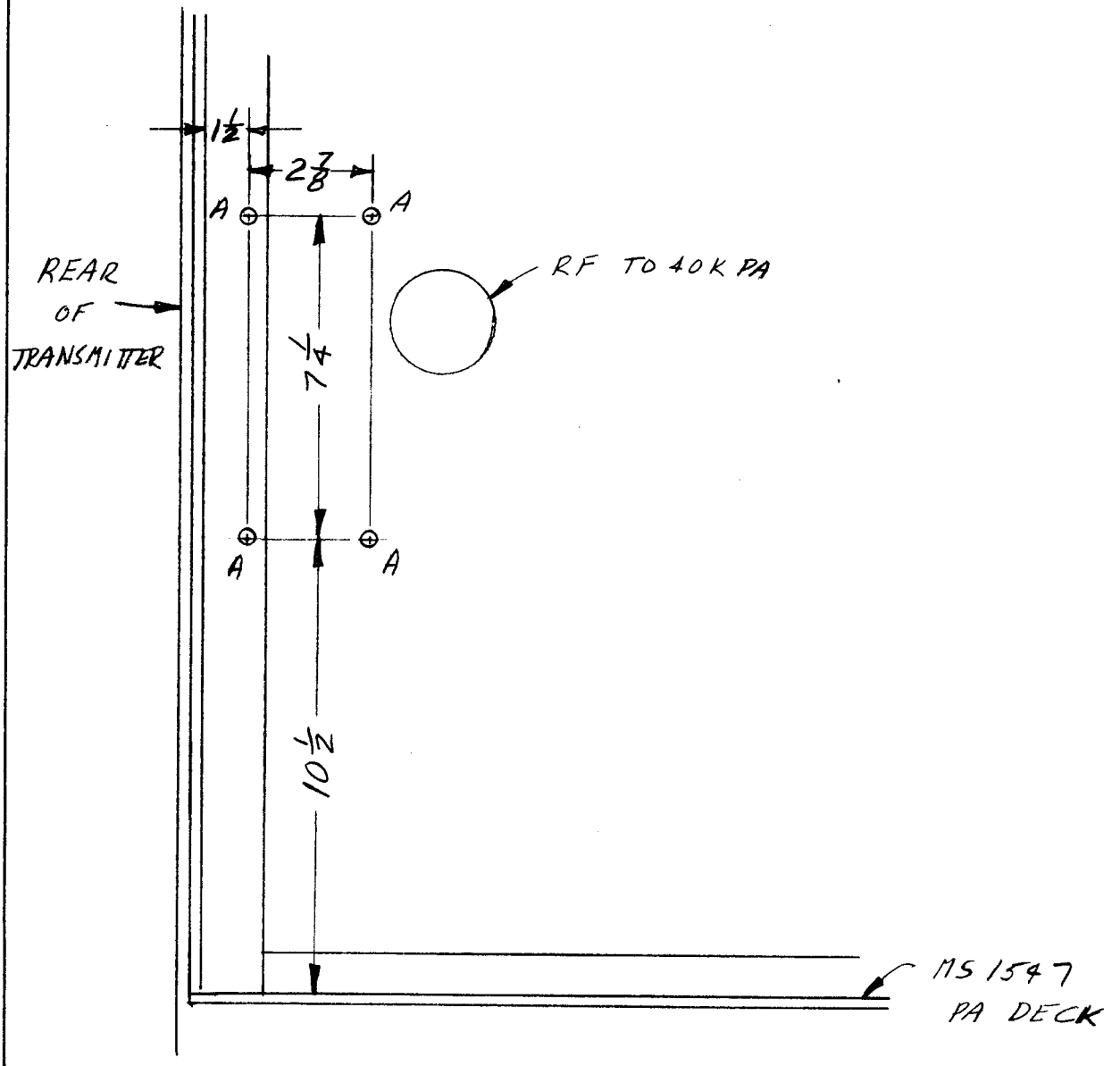
TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 45 OF 53

TITLE:



A ~ 15/64 DIA 4 REQ.

NOTE: DIMENSIONS ARE GIVEN AS INSIDE DIMENSIONS. DRILL THROUGH INTO 40 K PA FRAME.

MS 1592 SHIELD, RIGHT SIDE

FIG. 7

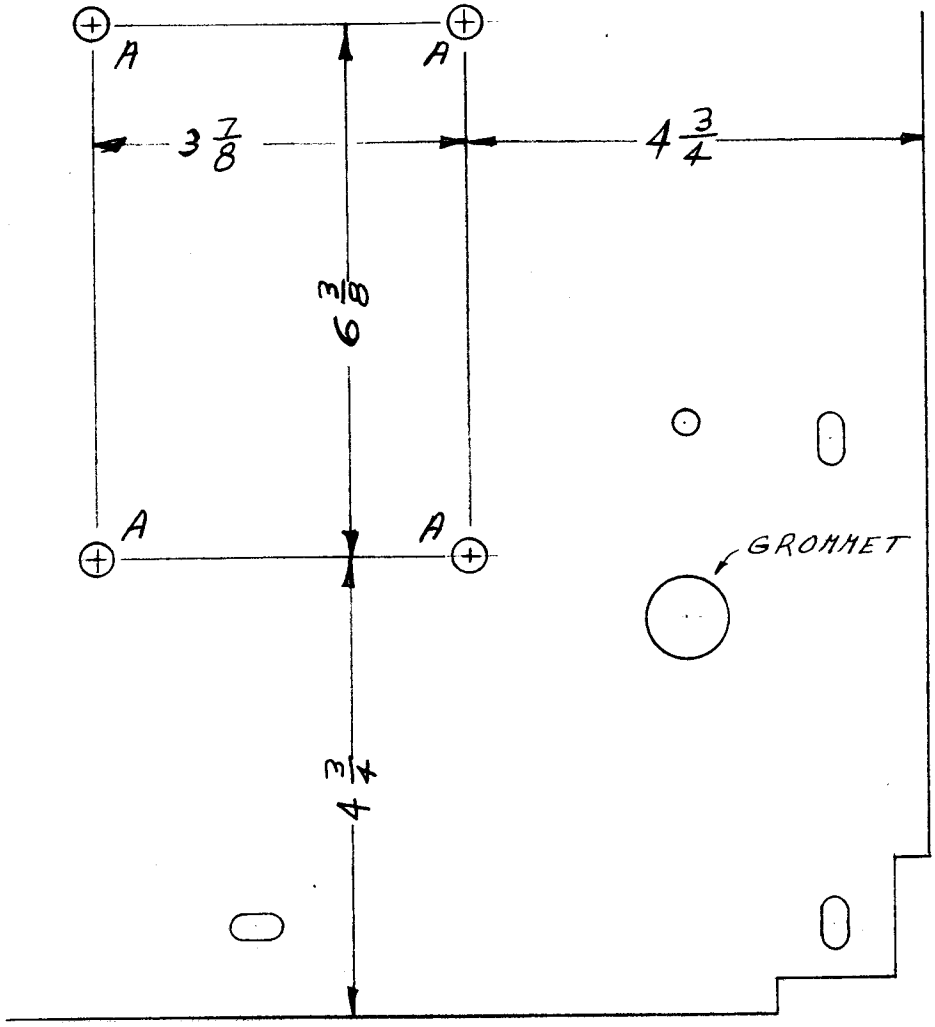
TMC SPECIFICATION

NO. S 1077

REV: A

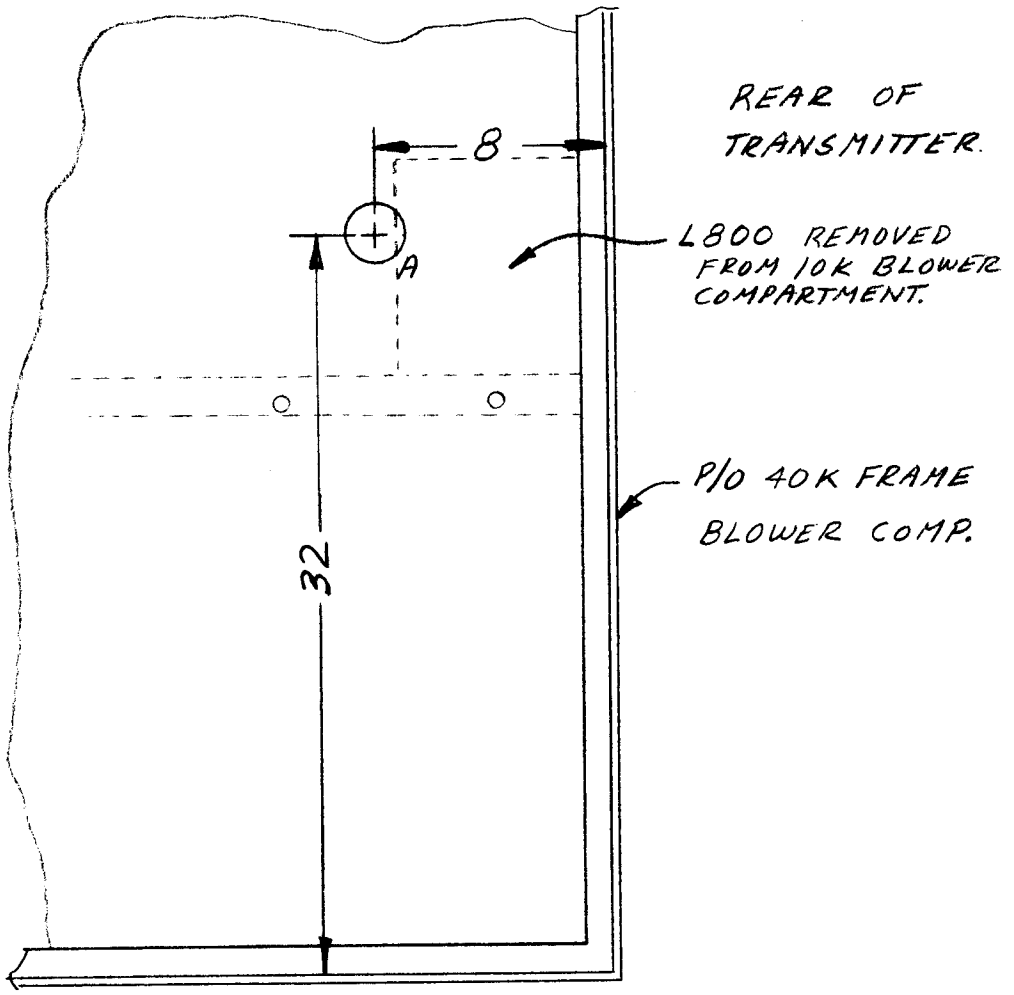
COMPILED: | CHECKED: | APPD: | SHEET 46 OF 53

TITLE:



A ~ 5/16 DIA 4 REQ MS1500 DECK, BLOWER MOUNTING.

FIG. 8



MS1830 SHIELD, RIGHT SIDE 10K
VIEWED FROM 40K BLOWER COMPARTMENT.

A ~ 2 1/4 DIA. 1 REQ.

FIG. 9

MS 3679 FIG 10

TMC SPECIFICATION

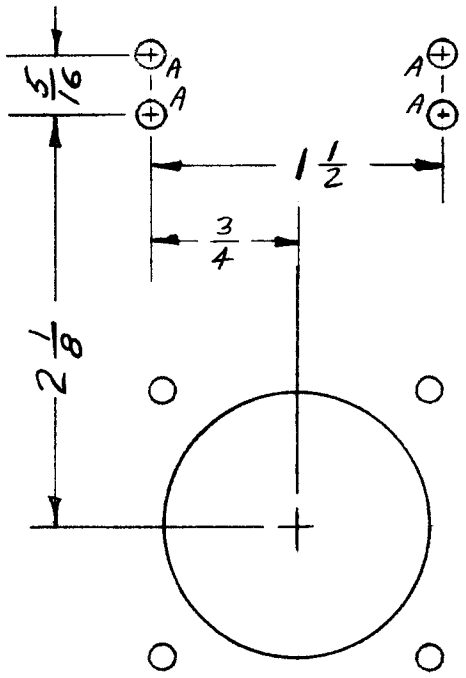
NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 48 OF 53

TITLE:

1 2 3



E 1011

J1000

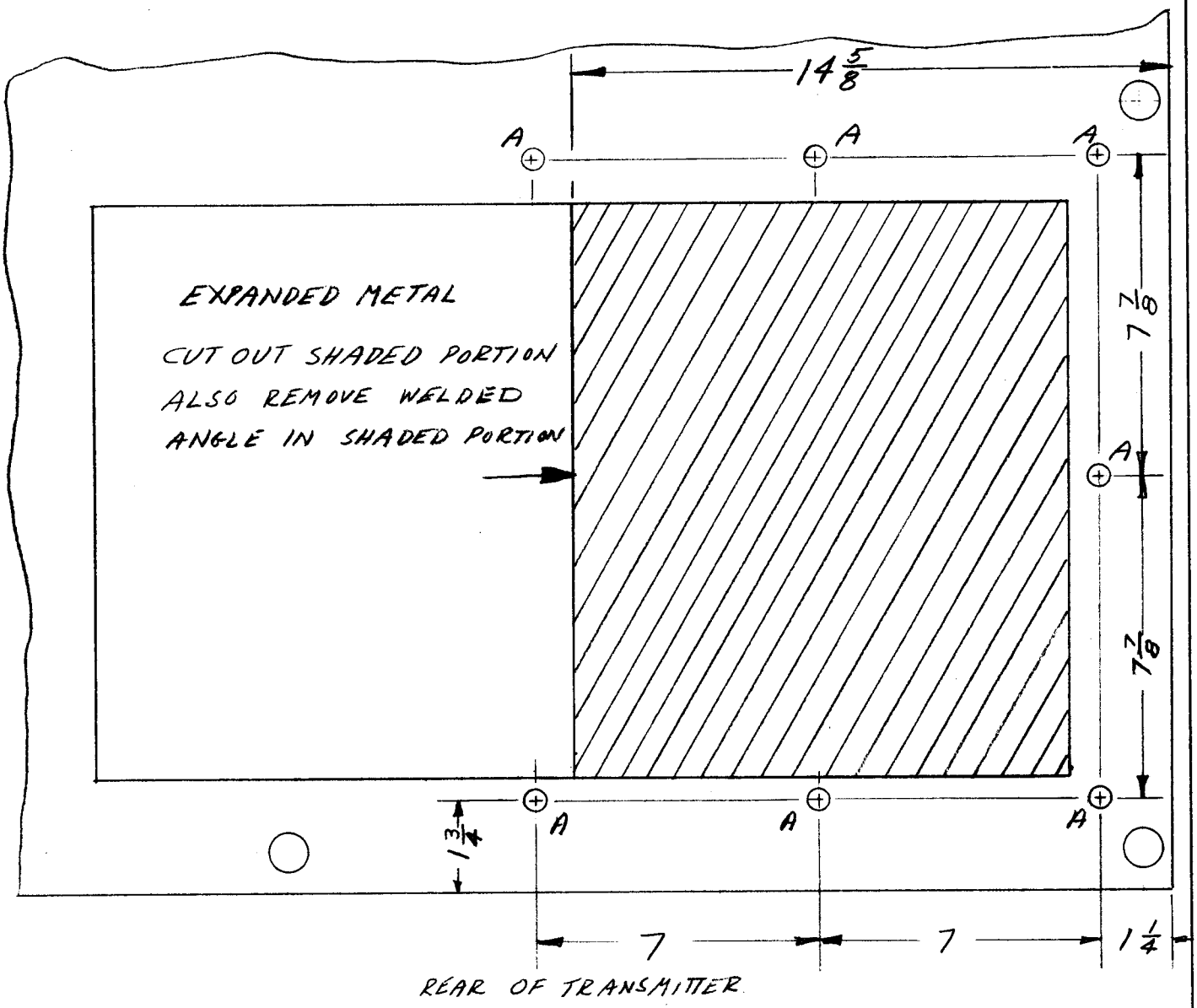
A ~ 9/64 DIA. 4 REQ.

ADD LETTERING

MS3679 PLATE, SHIELD

FIG. 10

TMC SPECIFICATION			NO. S 1077
REV: A			
COMPILED:	CHECKED:	APPD:	SHEET 49 OF 53
TITLE:			



A ~ 13/64 DIA. 7 REQ. MS 1997 COVER, TOP, 40K

FIG. 11

MS1699 FIG 12

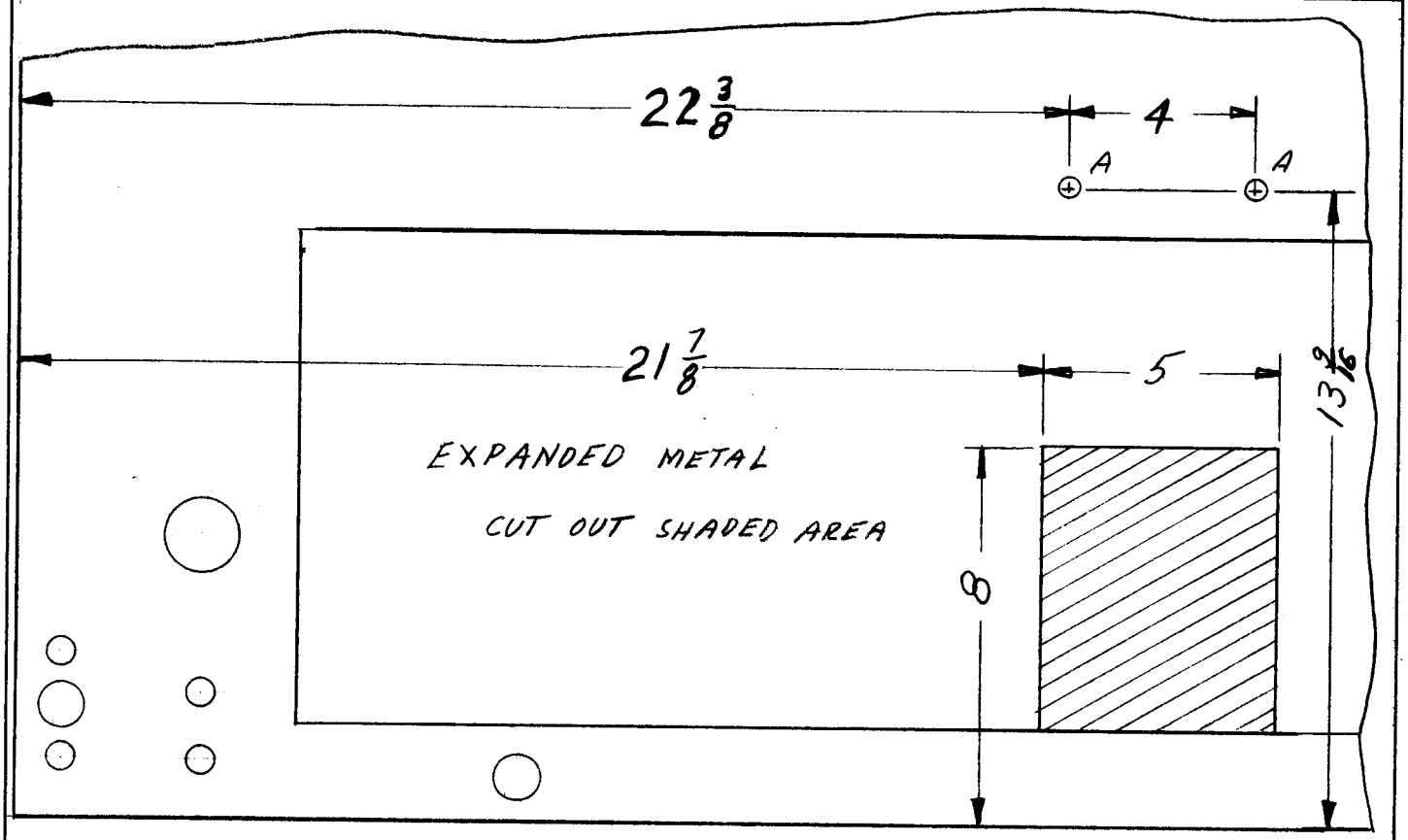
TMC SPECIFICATION

NO. S 1077

REV: A

COMPILED: | CHECKED: | APPD: | SHEET 50 OF 53

TITLE:



REAR OF TRANSMITTER.

A ~ 13/64 DIA. 2 REQ.

MS1699 COVER, TOP, 10K

FIG. 12

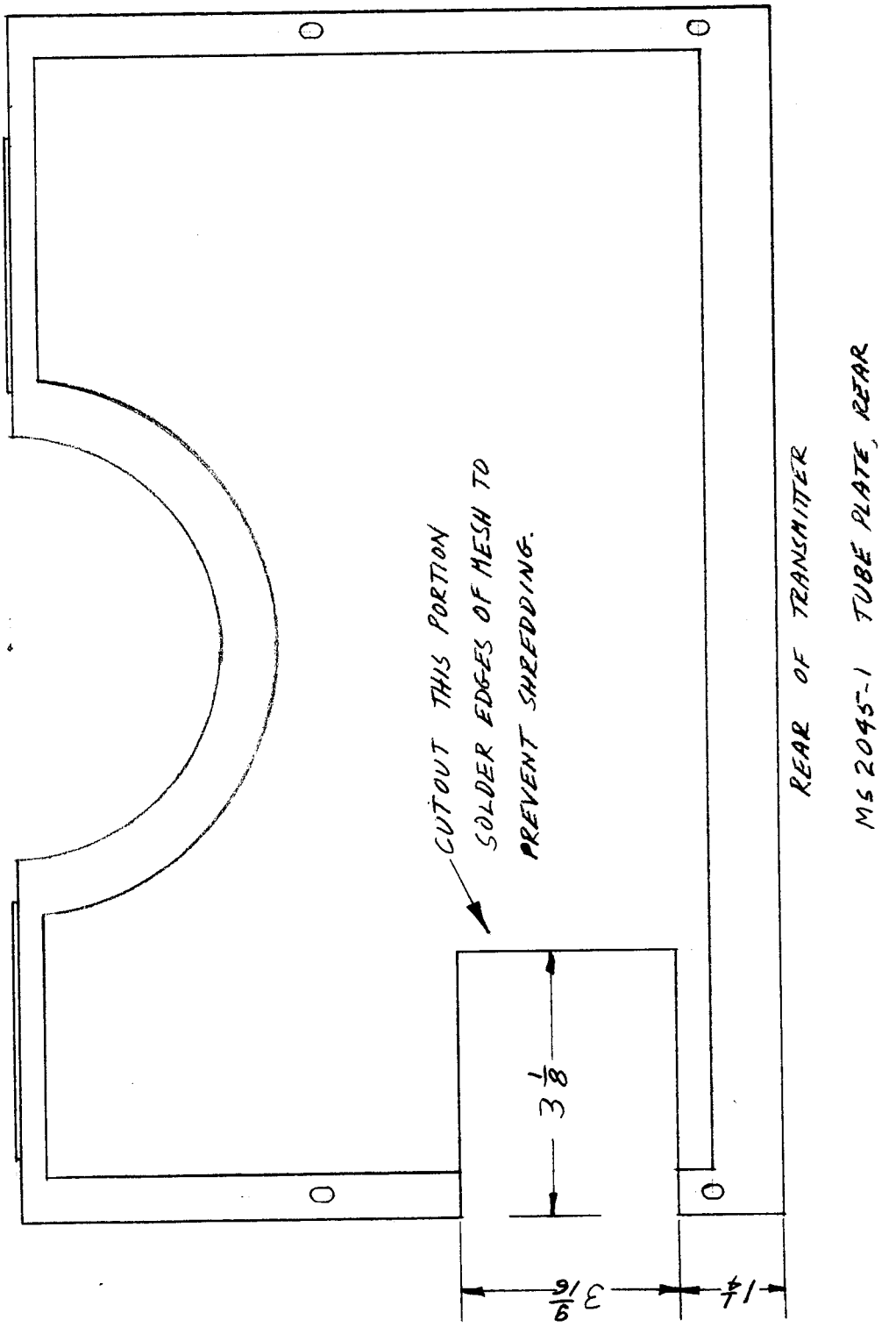
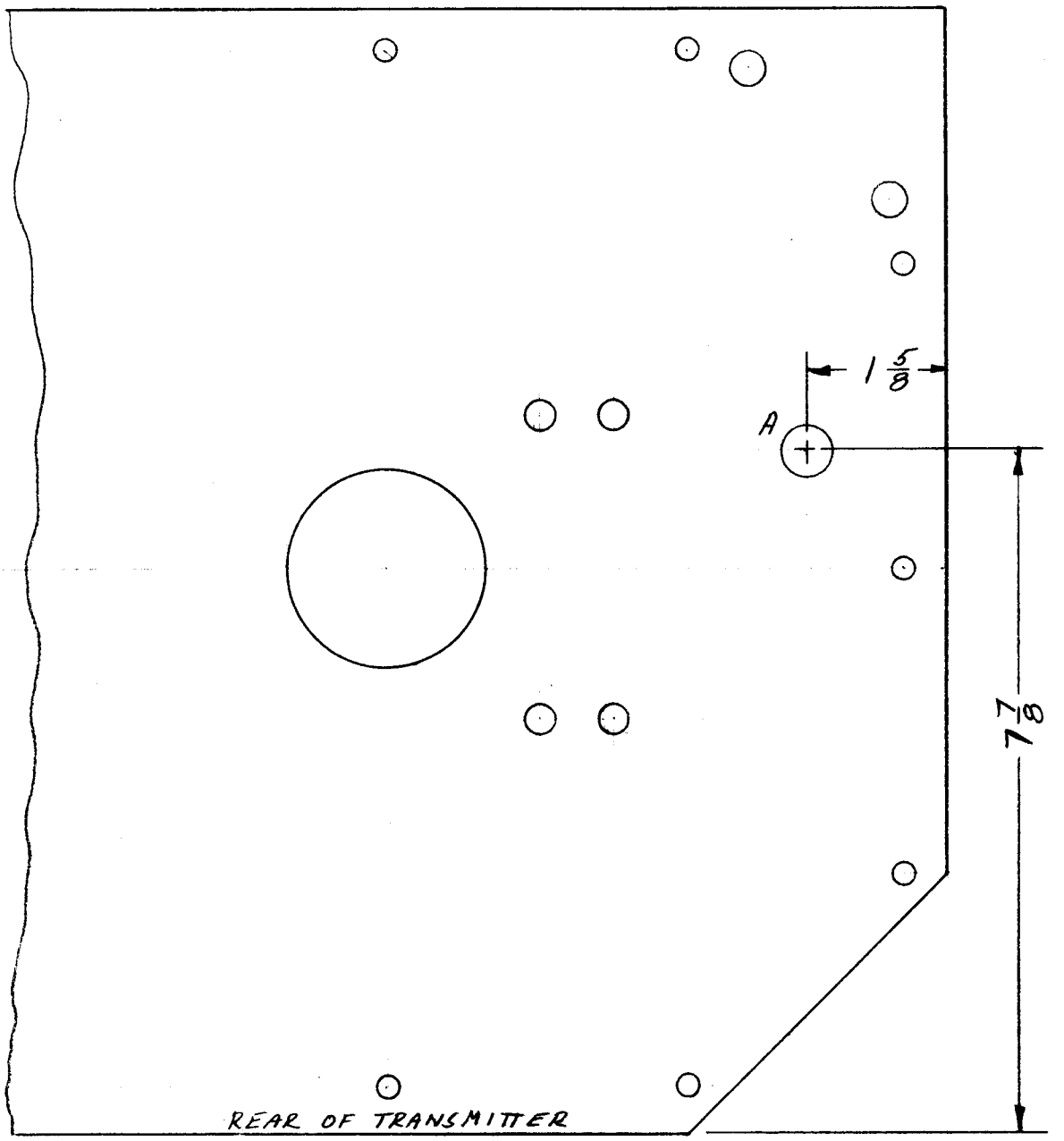

CUTOUT THIS PORTION
SOLDER EDGES OF MESH TO
PREVENT SHREDDING.
REAR OF TRANSMITTER
MS 2045-1 TUBE PLATE, REAR
3 1/8
3 9/16
1/4

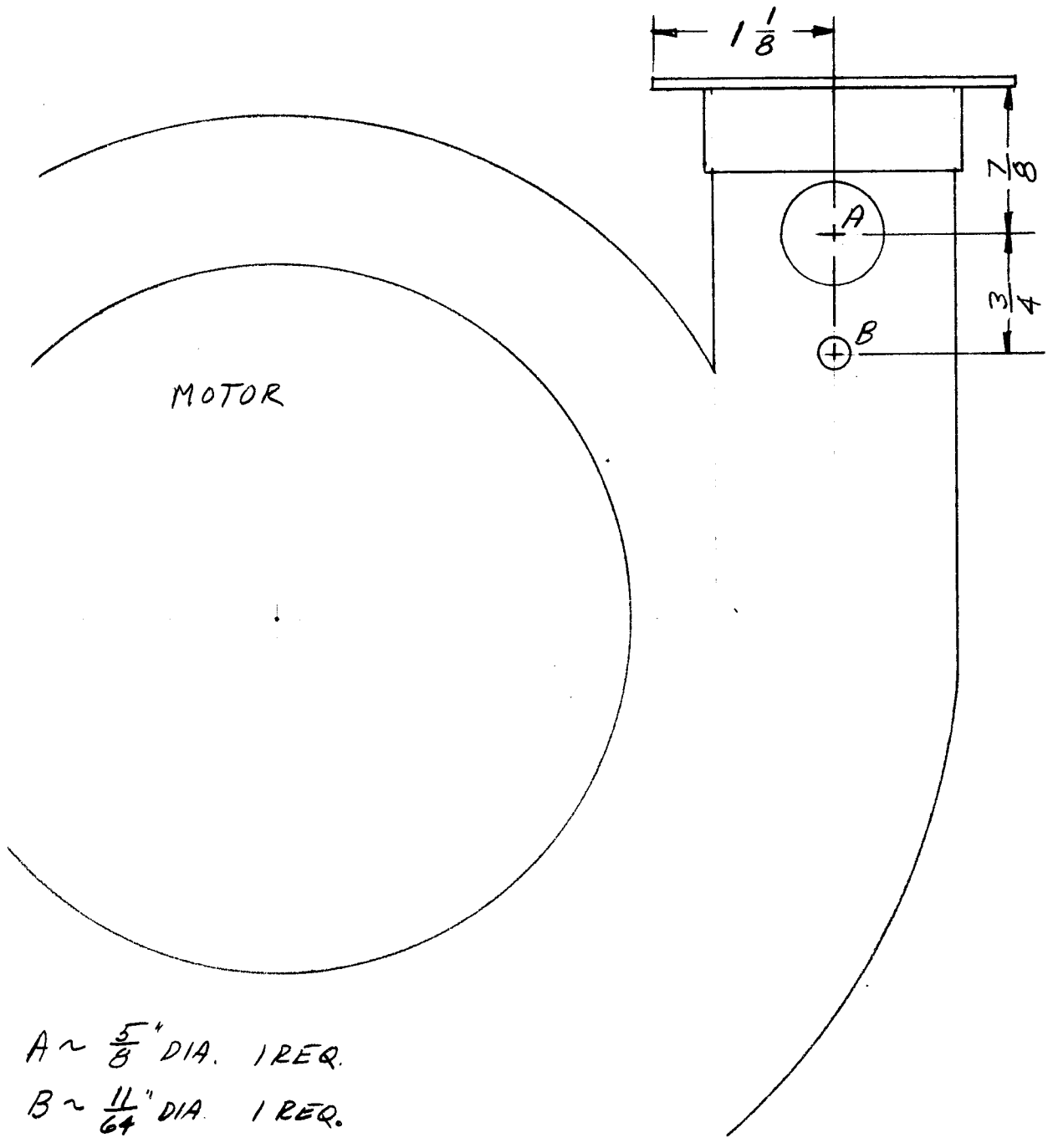
FIG. 13

TMC SPECIFICATION			NO. S 1077
REV: A			
COMPILED:	CHECKED:	APPD:	SHEET 52 OF 53
TITLE:			



A ~ 5/16 DIA 1 REQ. MS 2480 PLATE, PA BANDSWITCH

FIG. 14



A ~ $\frac{5}{8}$" DIA. 1 REQ.

B ~ $\frac{11}{64}$" DIA. 1 REQ.

BL103 MODIFICATION

FIG. 15

REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK NEW YORK

S 1077
LIST NO.

DATE	REV.	SHEET	EMN #	DESCRIPTION	APP.
3/10/66	Ø			ORIGINAL RELEASE FOR PRODUCTION	
7/7/66	A	10	16474	Revised per EMN	WSE

TMC FORM MLR-1 2-65—AINS.