

DATE 12/8/51

SHEET \_\_\_\_\_

OF \_\_\_\_\_

TMC SPECIFICATION NO. S-613

A

*LB*  
COMPILED

CHECKED

TITLE: GPT-10K & 40K SHORTING RELAY CAPACITOR & HV CIRCUIT

*OB*  
APPROVED

BREAKER MODIFICATION KIT (KIT-127)

GPT-10K & 40K SHORTING RELAY CAPACITOR

AND

HV CIRCUIT BREAKER MODIFICATION KIT (KIT-127).

DATE 12/10/51		<b>TMC SPECIFICATION NO. S-613</b>	A
SHEET 1 OF 5			
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APPROVED		BREAKER MODIFICATION KIT (KIT-127)	

**I. EQUIPMENT AFFECTED**

- A. TMC Model GPT-10K
1. AN/FRT-39 all
  2. AN/FRT-39A all
  3. AN/FRT-39B Serial No's. \_\_\_\_\_ Thru \_\_\_\_\_
- B. TMC Model GPT-40K
1. AN/FRT-40 all
  2. AN/FRT-40A Serial No's. \_\_\_\_\_ Thru \_\_\_\_\_

**II. PURPOSE**

- A. To reduce the voltage transient in the GPT-10K & 40K interlock circuits, thus reducing the failure rate of several capacitors.

**III. MATERIALS SUPPLIED IN KIT**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>
1	One each, TMC No. CP70E1FL254K (symbol No. C815) capacitor, fixed, paper, .25 uf.
2	Two each, TMC No. CP07SB2, bracket, capacitor mounting.
3	One each, TMC No. CA-409-35-6.00, lead, electrical, white/brown.
4	One each, TMC No. CA-409-36-6.00, lead, electrical, brown.
5	Two each, TMC No. LWL10MRN, washer, lock, external teeth.
6	Two each, TMC No. NTH1032BN12, Nut, plain, hexagon.
7	One each, TMC No. A-2226, circuit breaker micr - switch board assembly (consisting of one insulator board, two switches symbol No's. S1015, S1016, one resistor, symbol No. R1002, associated wiring and hardware.

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ITEM NO.DESCRIPTION

8

Three each, TMC No. NT-121-71B, nut, wire.

9

One each; 2 feet TMC No. CD100, cord, lacing

10

Six each; TMC No. NT-121-6204B

IV. TOOLS REQUIRED (To be Provided by Installing Activity)

1. Pliers, 6 inch longnose
2. Solder
3. Solder iron, 35 watts or equivalent
4. Wrench, open end, for #10 hexagon nut
5. Electric hand drill, 1/4 inch chuck capacity
6. Drill bit, size .203 (13/64) inch diameter.
7. Cutters, diagonal

V. PROCEDURE

## A. Shorting Relay Capacitor

1. Referring to figure one, drill ~~two~~ holes as dimensioned on blower mounting chassis. The four holes marked with asterisks are the ones in which the main blower standoffs are mounted.
2. Mount the capacitor (item 1) on the underside of the chassis using brackets (item 2) and mounting hardware (items 5 & 6).
3. Solder the two leads (items 3 & 4) to the lugs on the capacitor. Connect other end of leads to terminal strip E805, terminals 1 & 2 (terminals located on shorting relay assembly). Secure the leads to the existing cable harness using (item 9), lacing cord.

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## B. Circuit Breaker

1. Disconnect all external wiring from AX-104 (driver drawer). Remove AX-104 from transmitter.
2. Referring to figure 2, step 1, remove nut holding the three purple/white wires, retain nut, washer and lock washer.
3. Referring to figure 2, step 2, cut the two red and white wires, strip 1/2 inch, tie together and mark.
4. Referring to figure 2, step 3, cut the red/white lead at the bottom R1002, strip 1/2 inch and mark.
5. Referring to figure 2, step 4, remove screw washer, lock washer and retain. Remove the red wire with the lug and leave intact. Remove the phenolic board from CB1001 and discard.
6. Referring to figure 2, step 5, cut the red and red/white wire, strip 1/2 inch and twist together. Clear the resistor lug by using a soldering iron.
7. Referring to figure 2, step 6, place A-2226 on CB1001, place the three purple/white wires and secure with nut, washer and lock washer taken off in step 1.
8. Referring to figure 2, step 7, take the two red/white wires of step 2 and the red/white wire on the top of S1015, twist the three wires together. Insert on the end of three wires, one of item No. 8, NT-121-71B, wire nut.
9. Referring to figure 2, step 8, take the red/white wire of step 3 and the red/white wire terminated in the middle of S1015, twist the pair together. Insert on the end of the two wires, one of item No. 8, NT-121-71B, wire nut.
10. Referring to figure 2, step 9, place the red wire taken off in step 4 and the red wire terminated in the middle of S1016, place the two wires on the bottom studs and secure with hardware removed in step 4.
11. Referring to figure 2, step 10, solder the red wire terminated on the top of S1016 to R1001.

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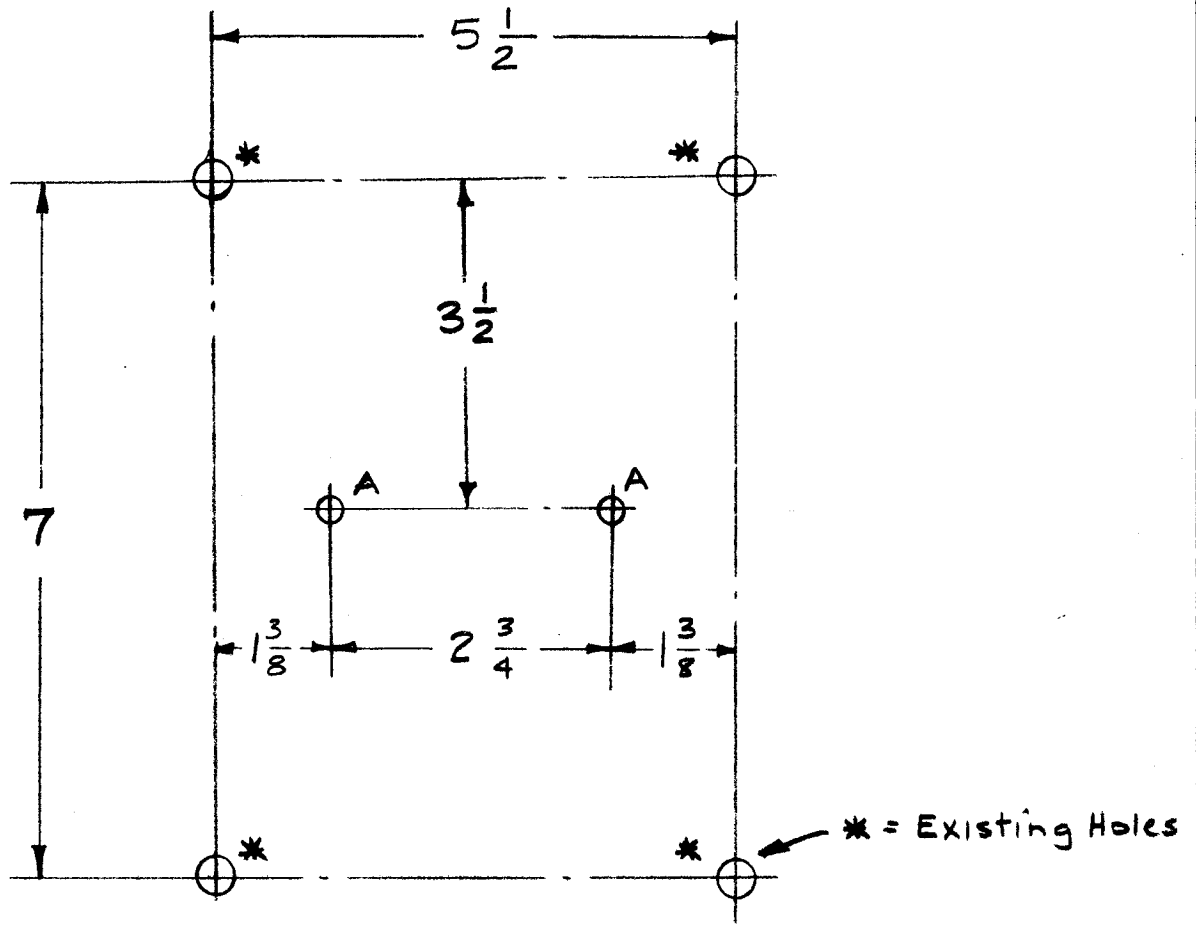
COMPILED

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(KIT-127)



TOP VIEW OF CHASSIS

Drill Two "A" Holes (.203" Dia.) To Accommodate Capacitor Support Brackets.

Fig. 1. Detail of modification to blower mounting chassis.

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TITLE:

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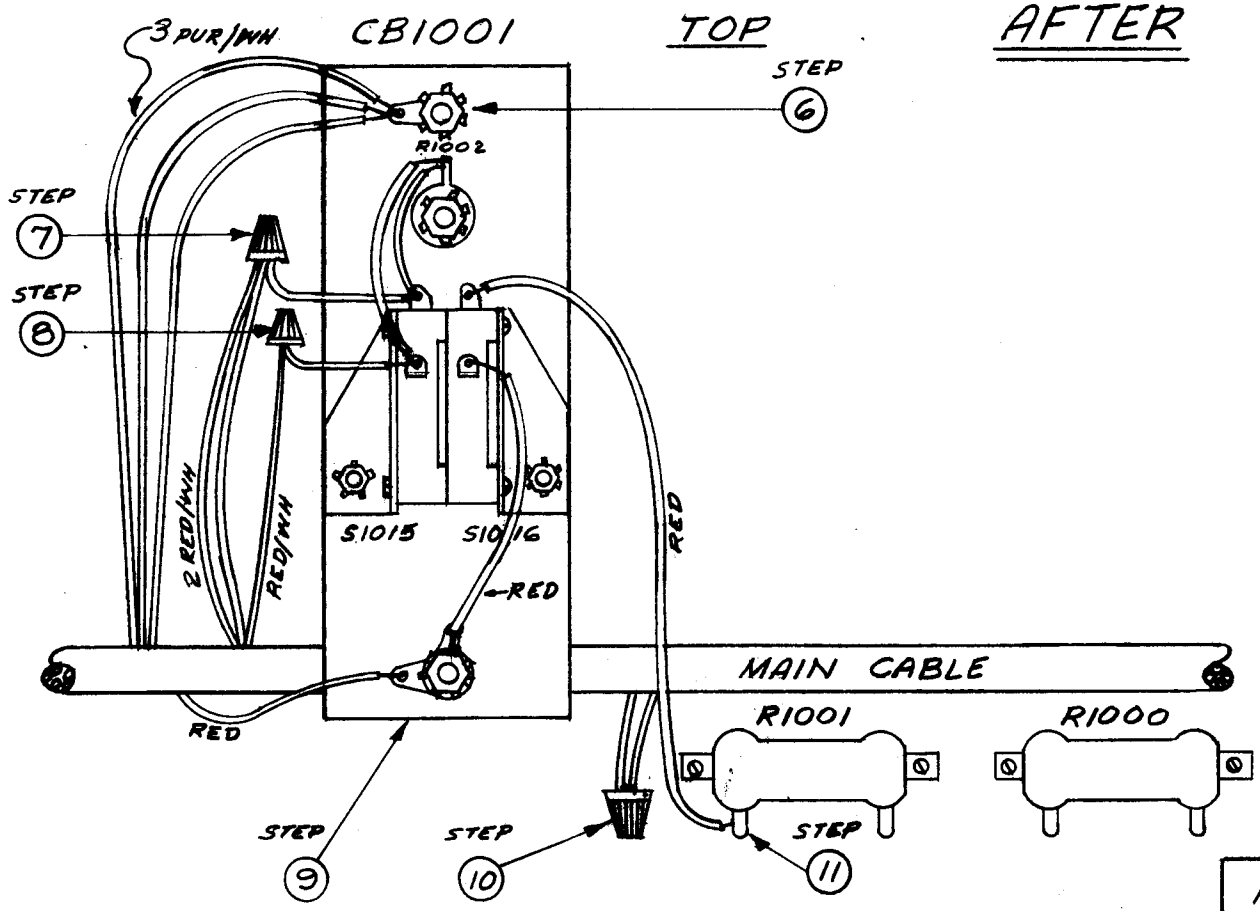
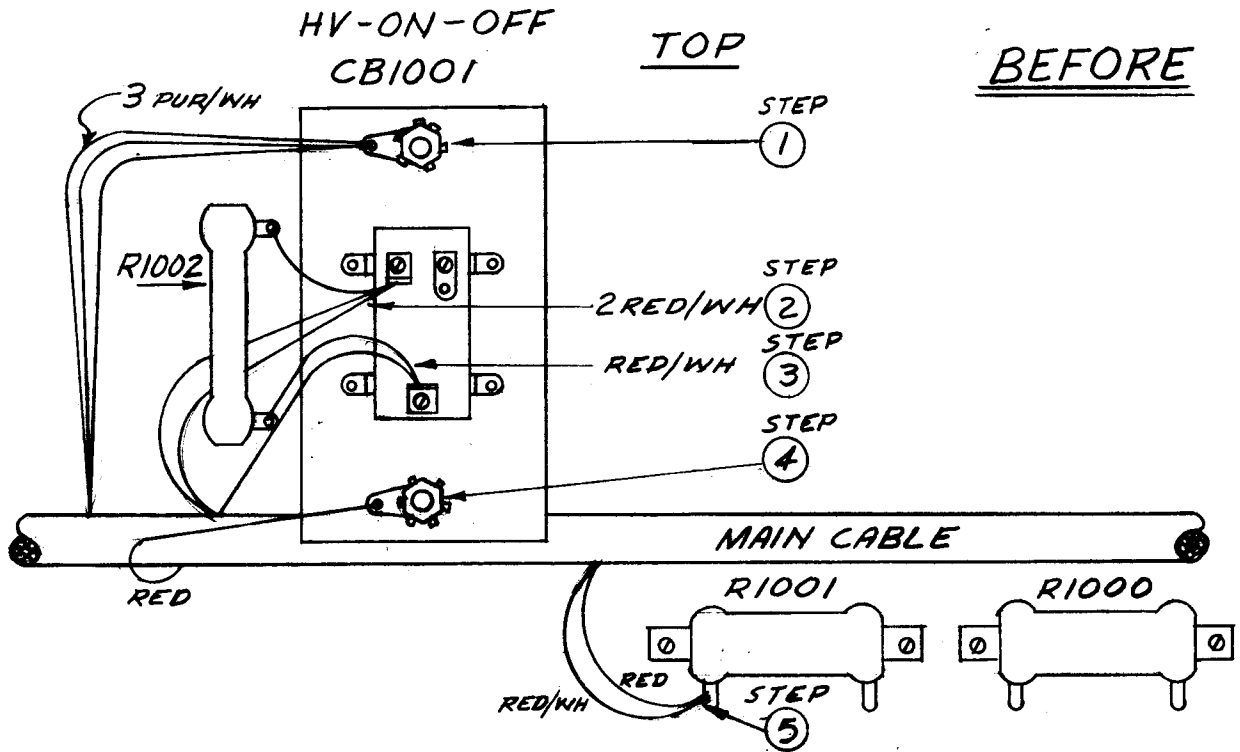


FIG: 2

REVISION SHEET

THE TECHNICAL MATERIEL CORP.  
MAMARONECK  
NEW YORK

S-613

MODEL KIT-127

PROJECT NO. \_\_\_\_\_

DATE	REV.	PAGE	EMN#	DESCRIPTION	CHK.	APP.
8/2/62	A	2	7043	On Sect. V, Part A, <del>Step</del> 3, Line 3, Chg. 3 & 4 to		
				1 & 2		
8/11/62	B	2	7149	On Sect. V, Part A, Step 3, Line 3, Chg. 3 & 4 to		
				1 & 2		