

# ***instructions***

FOR THE



## **HEATHKIT MICROPHONE**

**Model HDP-21A**

### **INTRODUCTION**

The HEATHKIT Model HDP-21A Microphone is attractively styled and well constructed.

Its frequency response is especially recommended for voice communications with Heathkit SSB Amateur Radio equipment.

### **FEATURES**

Optimum Frequency Response..... Choice Of  
Switching Configurations..... Locking Button On  
Press-To-Talk Lever..... Strong Chrome Plated  
Die-Cast Zinc.

### **SPECIFICATIONS**

Type. . . . .	Dynamic, high impedance.
Frequency Response. . . . .	70 Hz to 10 kHz.
Output. . . . .	57 db below 1 volt per microbar.
Load Impedance. . . . .	100 K $\Omega$ , minimum.
Maximum Switch Current. . . . .	1 ampere.
Maximum Switch Voltage. . . . .	125 volts AC or DC.
Material. . . . .	Die-cast zinc and plastic.
Finish. . . . .	Satin chrome and gray.
Dimensions. . . . .	10" high x 5-1/8" base diameter.
Net Weight. . . . .	1-3/4 lbs.

# STEP-BY-STEP INSTRUCTIONS

NOTE: The following wiring instructions are for standard VOX and push-to-talk operation, as would be used in all HEATHKIT HW Series Transceivers and SB Series Transceivers and Transmitters. If another type of wiring is required, refer to the Switch Explanation section and Figure 6.

Refer to Figure 1 for the following steps.

- ( ) Screw the BASE onto the end of the SWITCH RISER opposite the ADJUSTABLE COLLET.
- ( ) Screw the MICROPHONE onto the top of the SWITCH RISER. Be careful not to strip the threads.
- ( ) Remove the SWITCH COVER by removing the two Phillips head screws from the back of the SWITCH RISER.
- ( ) Remove the CABLE CLAMPS from the SWITCH RISER.
- ( ) Locate the short length of shielded cable. Then prepare both ends and install the microphone connector. Refer to Figure 2.

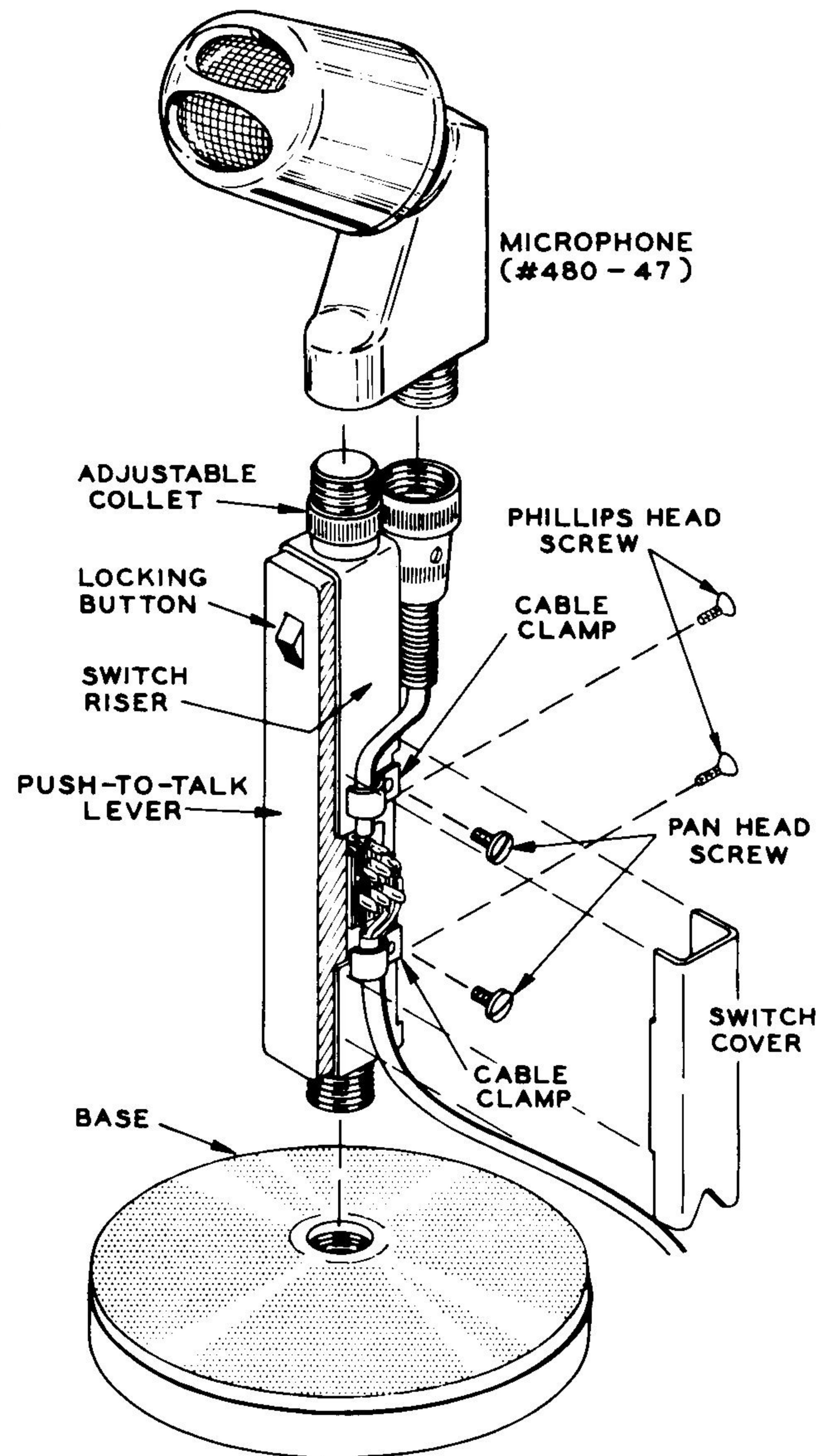


Figure 1

- ( ) Screw the microphone connector onto the Microphone.
- ( ) Locate the length of 3-wire cable and prepare one end as shown in Figure 3.

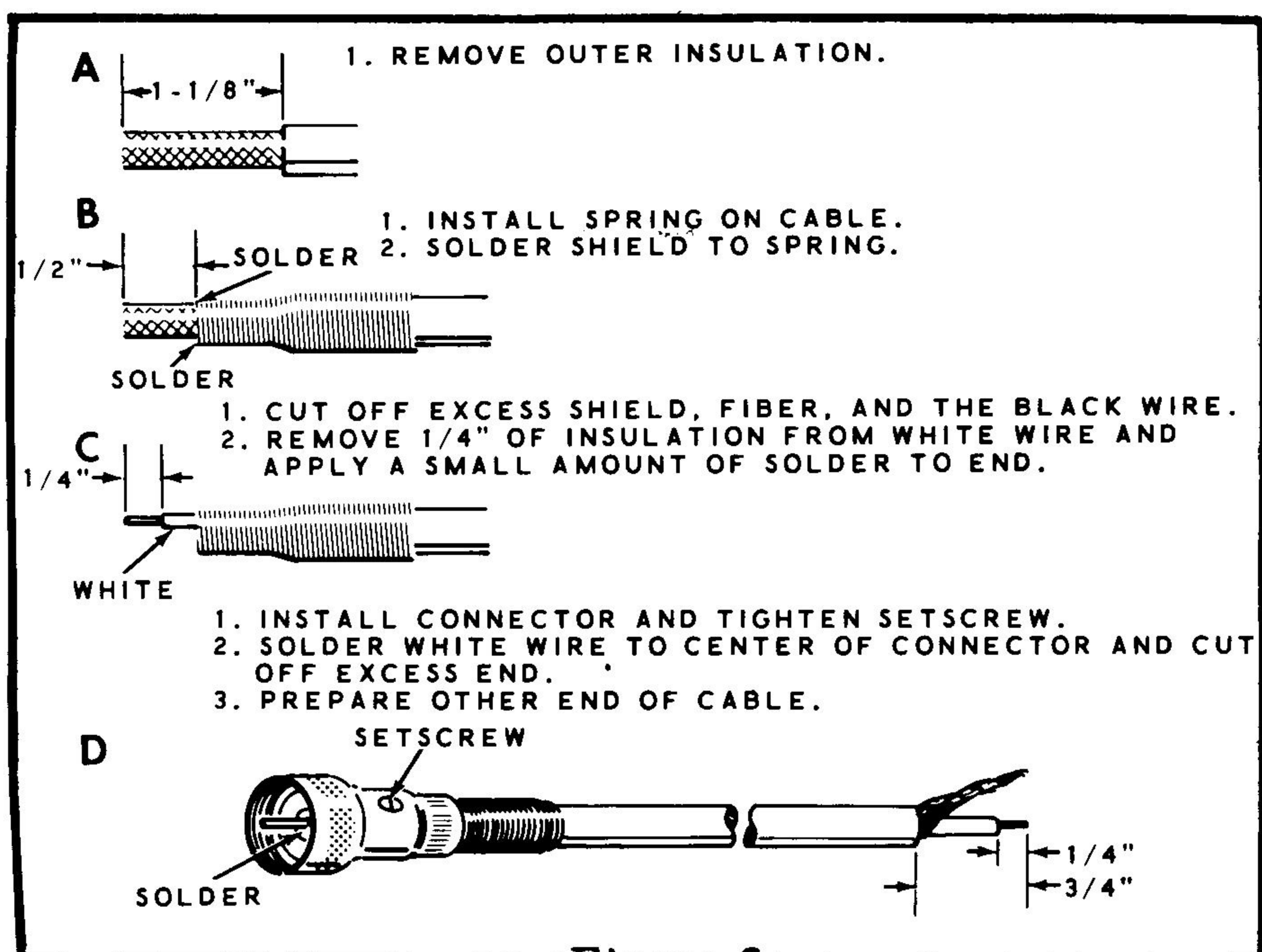


Figure 2

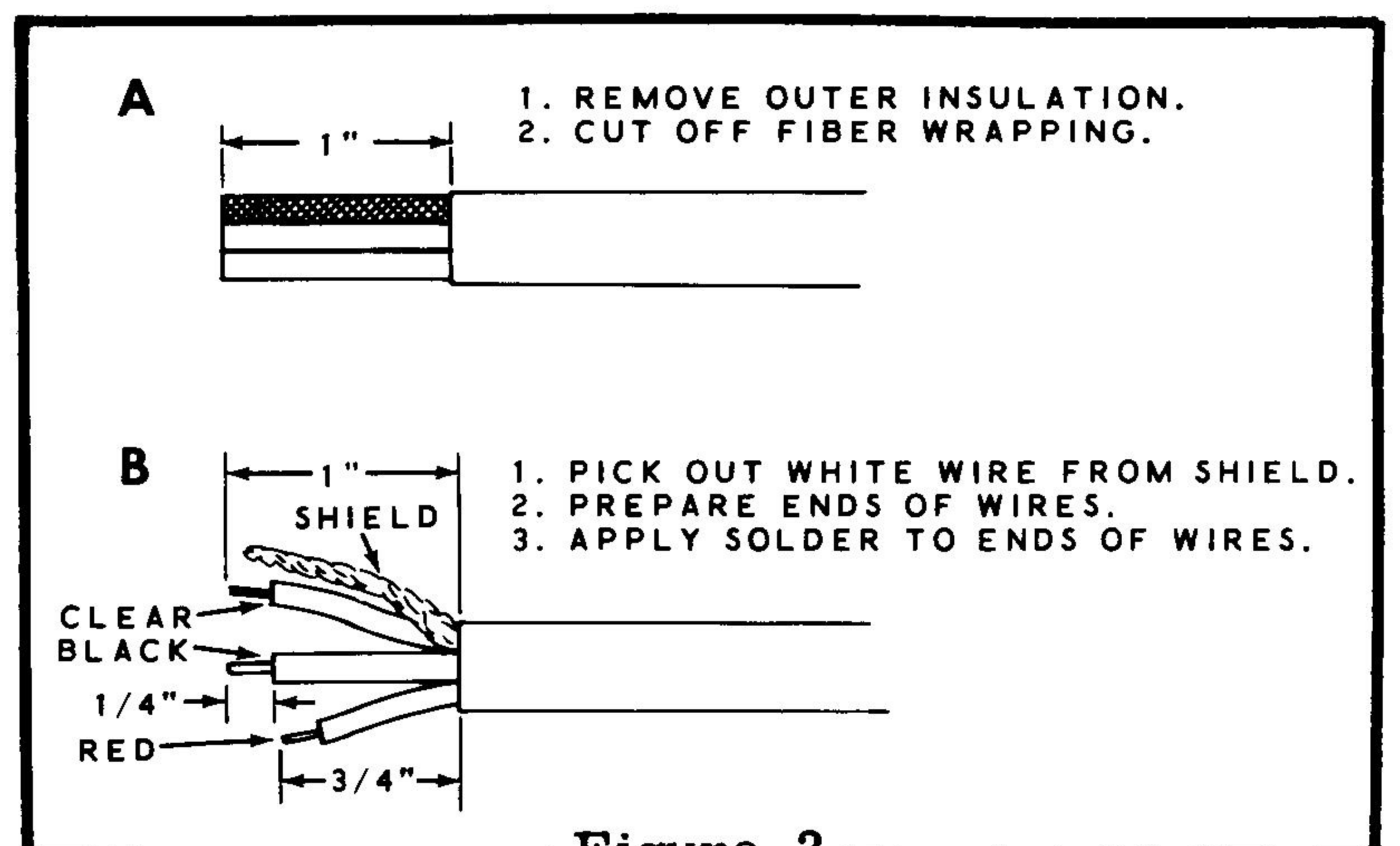


Figure 3

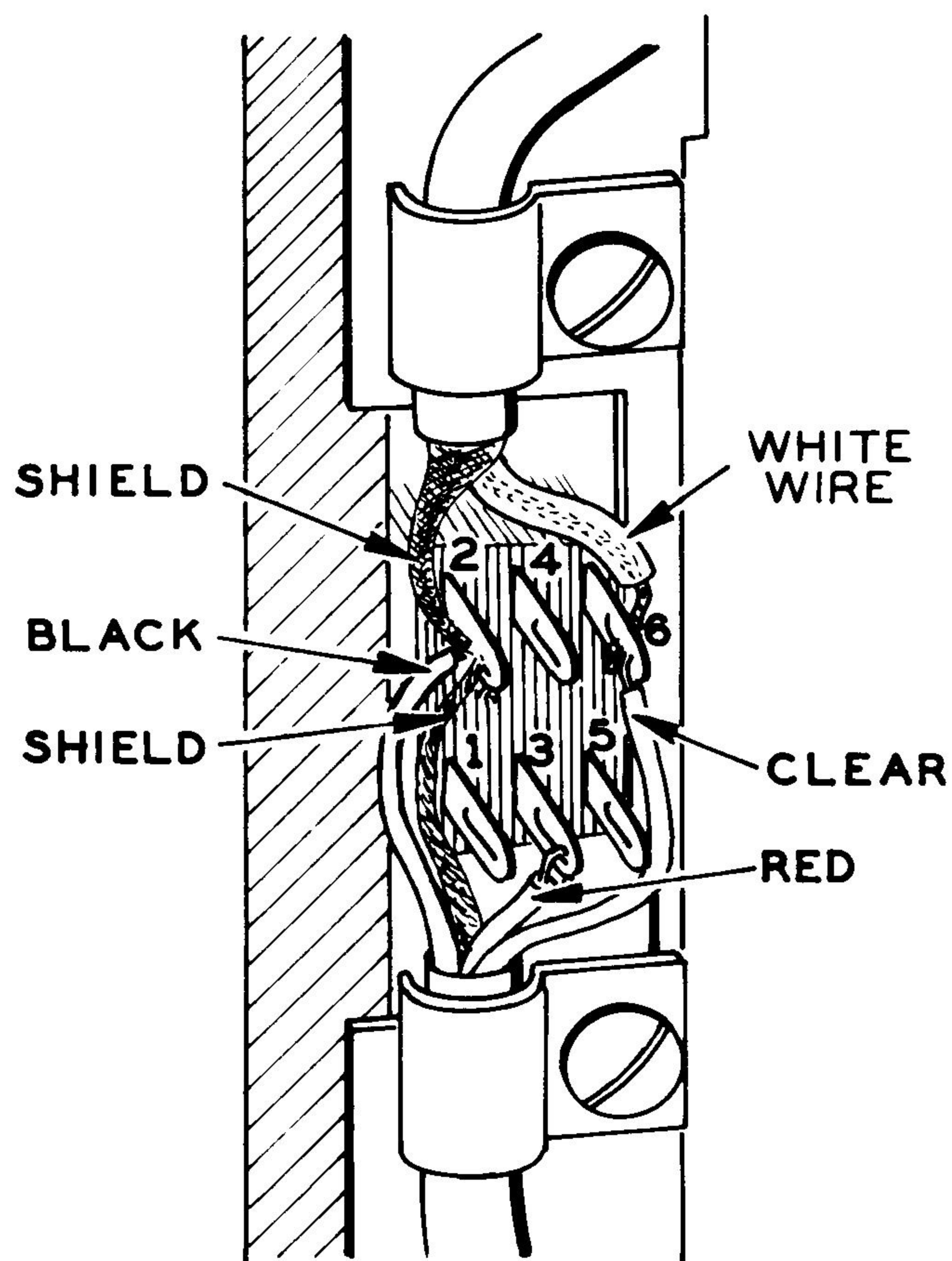


Figure 4

Refer to Figure 4 for the following steps.

Connect the cable coming from the microphone connector to the switch as follows:

- ( ) Connect the shield to lug 2. Do not solder.
- ( ) Connect the white wire to lug 6. Do not solder.

Connect the 3-wire cable to the switch as follows:

- ( ) Connect the shield to lug 2. Do not solder.
- ( ) Connect the black wire to lug 2. Solder all three connections.
- ( ) Connect the red wire to lug 3. Solder.
- ( ) Connect the clear wire to lug 6. Solder both connections.
- ( ) Position the cables as shown and mount the two CABLE CLAMPS.
- ( ) Mount the SWITCH COVER with the Phillips head screws.
- ( ) Cut the 3-wire cable to the correct length for your installation.
- ( ) Prepare the free end of the 3-wire cable to fit the connector to be used with your equipment. A two or more pin connector is required. Refer to the wiring diagram of your equipment for proper terminations at the connector.

- ( ) Connect the red wire to the control circuit pin of the cable connector as shown in Figure 5. Solder.
- ( ) Connect the clear wire to the audio pin of the cable connector as shown in Figure 5. Solder.
- ( ) Connect the black wire and the shield together, and fold them back along the outside (spring) of the connector.

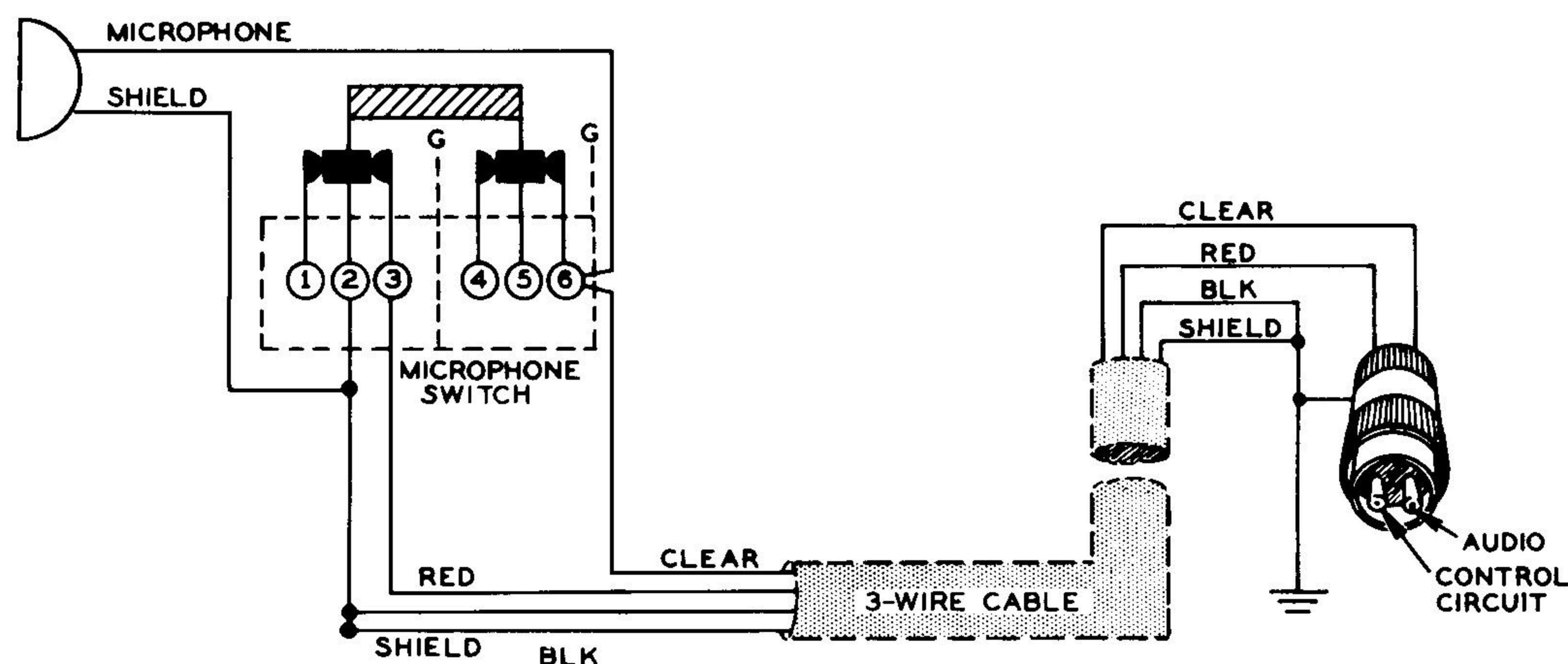


Figure 5

## SWITCH EXPLANATION

Figure 6 shows the contact arrangement of the switch used in the Microphone. For switching requirements other than previously given, the following explanation should be helpful.

Contacts 1 and 2 break before 4 and 5 break.  
Contacts 4 and 5 break before 2 and 3 make.  
Contacts 2 and 3 make before 5 and 6 make.  
At G are the contact insulators, and at H is the push-to-talk lever return spring.

If the switch is to be used to operate a relay, be sure to check the Specifications for the maximum current rating of the contacts. It is recommended that wires used to carry high voltage or high current be run separate from the microphone cable.

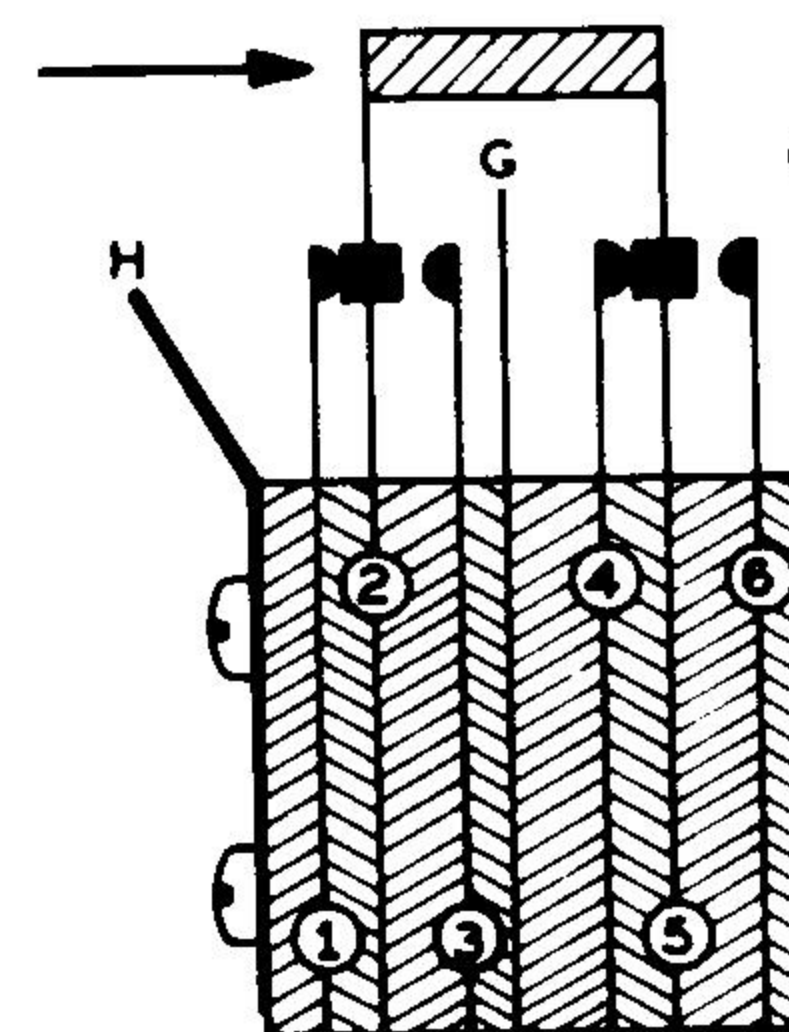


Figure 6

### WARRANTY

The Heath Company warrants parts in its kits for 90 days after shipment. Under this warranty, we will exchange any defective part returned prepaid within the 90 days. If a part is defective, its replacement is shipped prepaid by us anywhere in the continental United States or to APO and FPO addresses. Shipments to all other areas are FOB factory. Heath's obligation is limited to such replacement or repair by Heath, and Heath is not responsible under this warranty or otherwise for any consequential damage or other loss in connection with the purchase, assembly, or use of the kit or parts. Use the Parts Order Form in the kit to notify us of the defective part and return instructions will be sent to you, or contact any Heathkit Electronic Center.

Questions relating to repairs or warranty replacement in the continental United States (APO and FPO included) should be addressed to Heath Company, attention: Customer Relations, or the nearest Heathkit Electronic Center. In all other areas please contact the authorized Heathkit representative in your country, or Heath Company, attention: International Division.

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