INSTALLATION INSTRUCTIONS for MOTORCYCLE TWO-WAY FM RADIOS

The General Electric 2-Way FM Radio is designed for installation on 2 or 3-wheel Harley-Davidson motorcycles. The radio is completely transistorized and resistant to shock, vibration, moisture and temperature extremes to insure reliable radio service.

LBI-3685A DF-9018

A typical motorcycle two-way FM radio (figure 1) includes installation of the transmitter-receiver, control unit and connecting cable. Follow Installation Steps 1-5 for two-wheel motorcycles and Installation Steps 2, 4, 1, 3 and 5 in succession for three-wheel motorcycles.

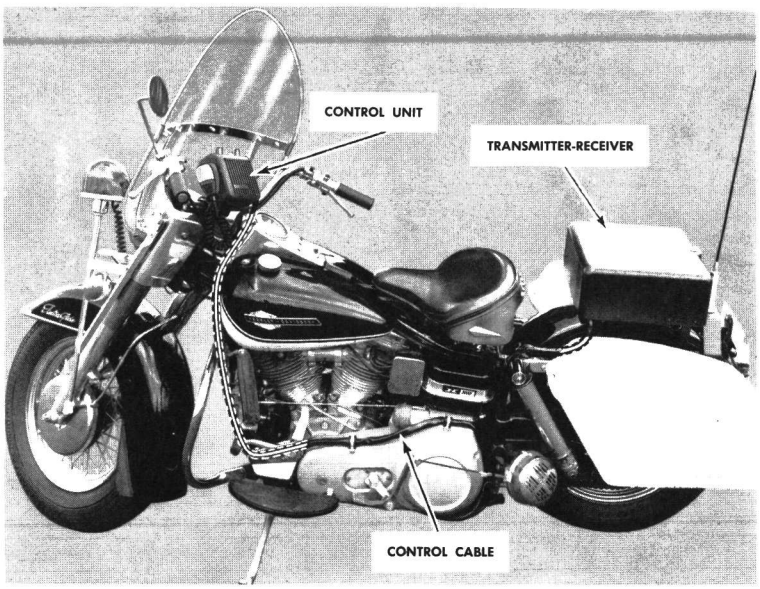


Figure 1 - Typical Installation

1 MICROPHONE AND CONTROL CABLE INSTALLATION

Connect microphone and control cables to speaker/control unit as shown in Figure 2.

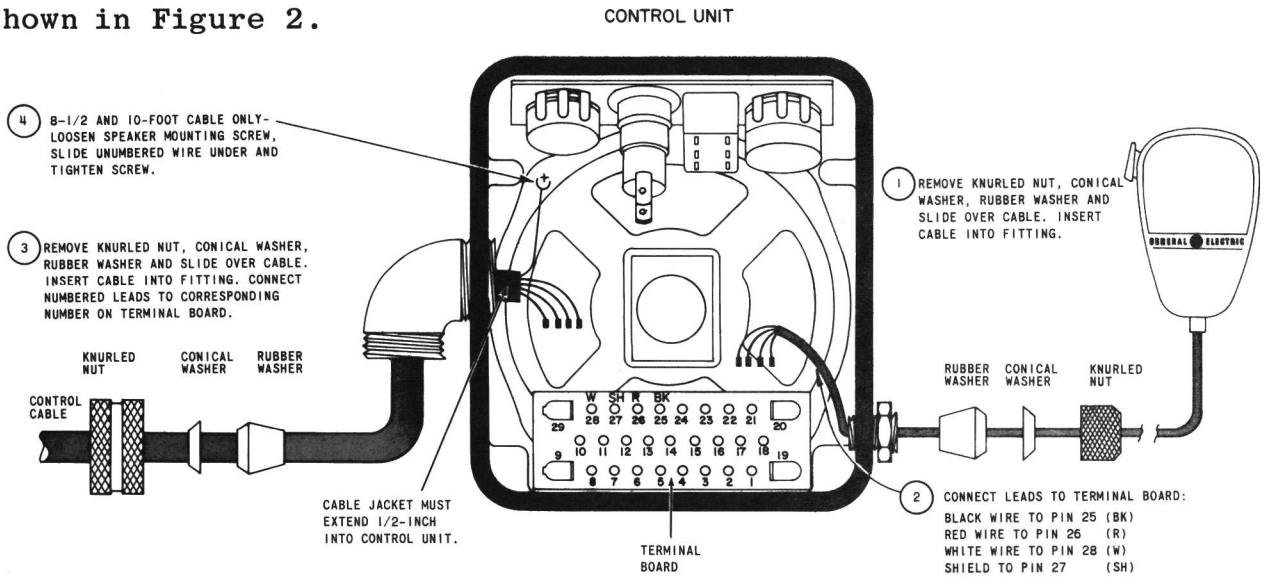


Figure 2 - Cable Connections RC-1276A

After completing STEP 1, the entire system can be hooked up and tested on the bench by a 1st or 2nd Class FCC Radiotelephone licensed electronic technician following the instructions described in the MAINTENANCE MANUAL.

2 TRANSMITTER-RECEIVER INSTALLATION

2-Wheel Cycles - Mount as shown in Figure 3.

3-Wheel Cycles - Install transmitter-receiver mounting frame in cycle body compartment using the self-tapping screws supplied. Slide and secure transmitter-receiver into frame. Attach control cable plug into matching socket on the transmitter-receiver. Make cable exit hole (1-1/4" dia.) through body compartment, install rubber grommet, and route cable through the hole.

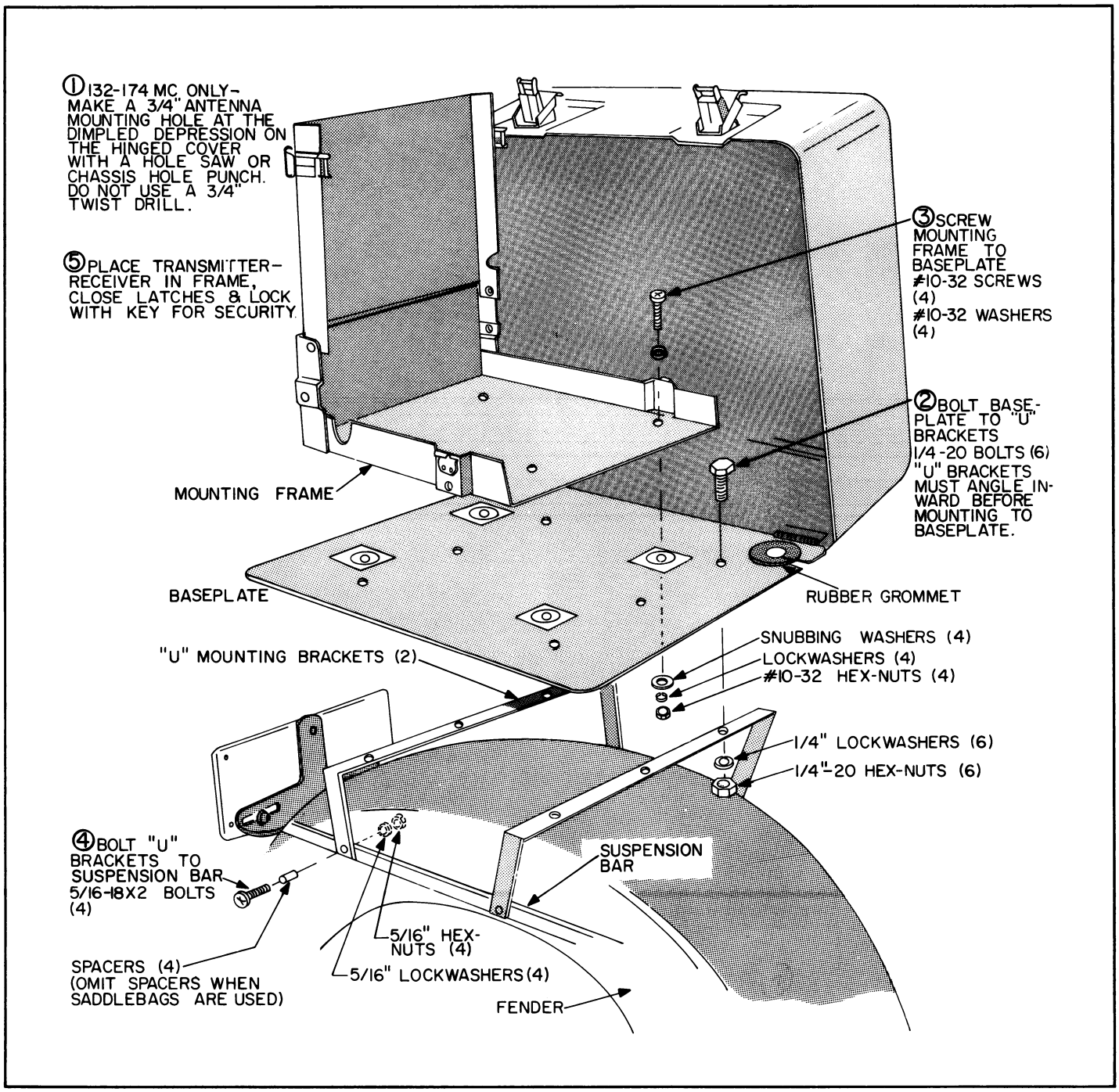
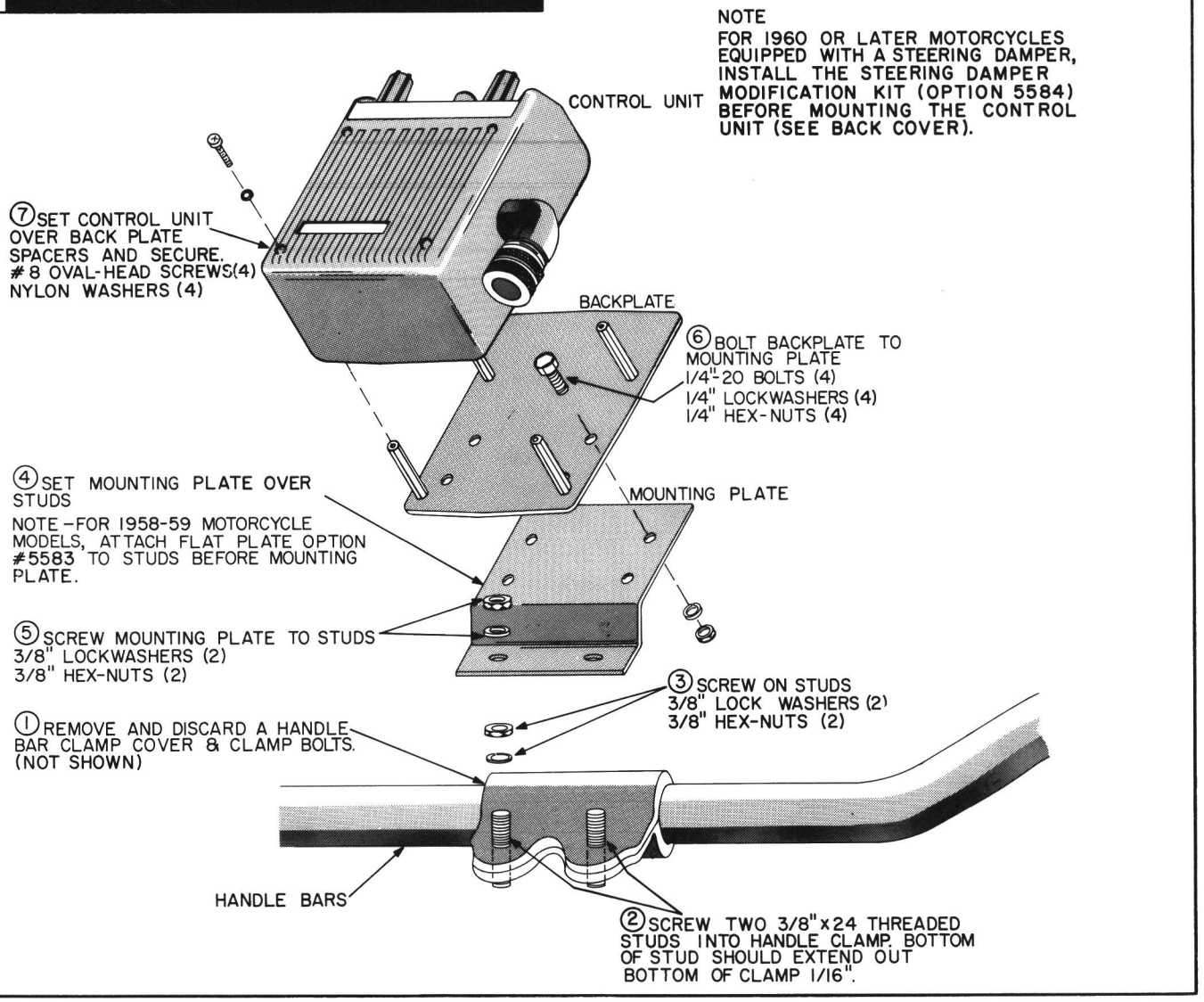


Figure 3 - Transmitter-Receiver Installation

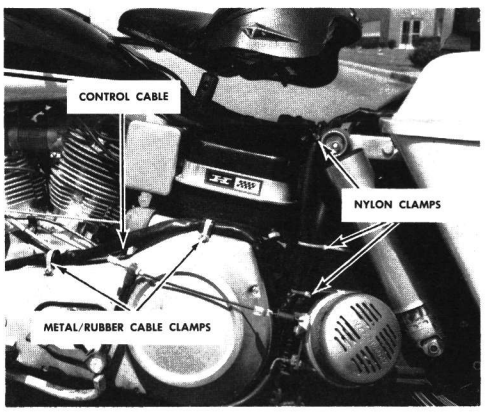
3 CONTROL UNIT INSTALLATION



NOTE - On 1958-59 Harley-Davidson motorcycles, a four-hole mounting plate (option 5583) must be installed first, before mounting the mounting plate shown in Figure 4.

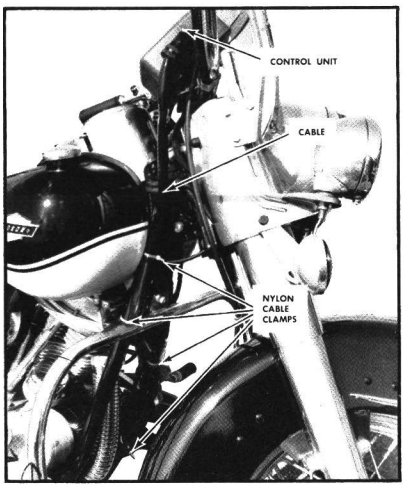
Figure 4 - Control Unit Installation

4 CABLE ROUTING



A

Route and dress the cable close to the cycle. Use 7 nylon straps and 2 cable clamps (supplied) to secure cable to motorcycle as shown in Figures 5a and b.



B

Figure 5 - Cable Routing Installation

Power Connections

Before connecting transmitter-receiver to the motorcycle battery, be sure the transmitter-receiver input voltage and polarity (as shown on the transmitter-receiver nameplate) agrees with the motorcycle battery voltage and polarity.

To make connections to the motorcycle battery, cut the brown and red wires (extending from the cable near the transmitter-receiver) to the proper length to reach the battery terminals. Attach terminal lugs to each wire. Connect the red lead to the hot battery terminal and the brown to the ground battery terminal.

5 ANTENNA INSTALLATION

Assemble antenna following instructions packaged with antenna. Mount and connect antennas as shown in Figures 6 or 7.

132 - 174 MC Standard Antenna

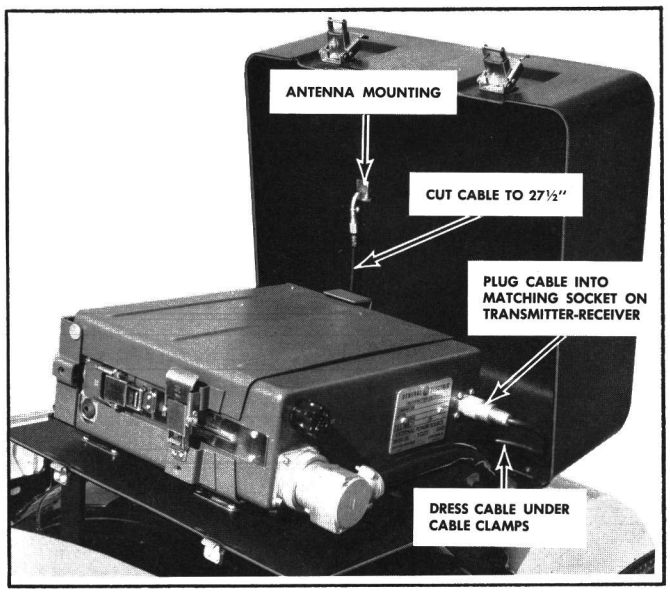


Figure 6 - Transmitter-Receiver Cover Mounting Antenna

25-50 MC Standard & 150-174 MC High Gain Antenna

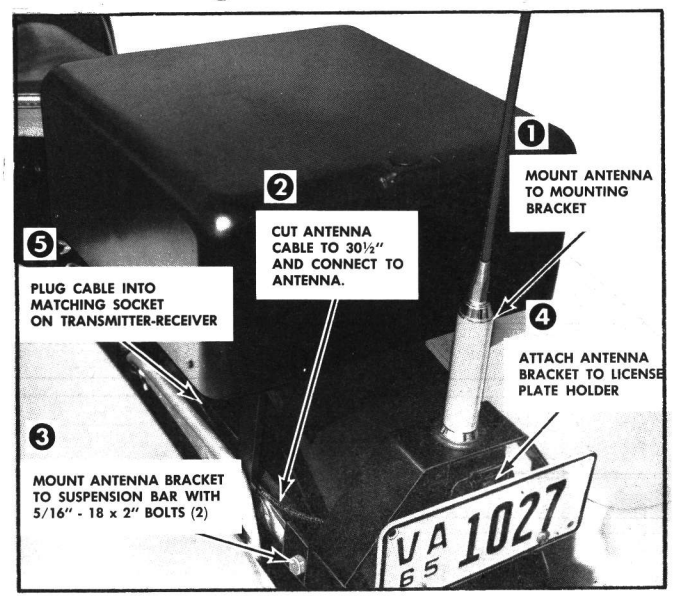


Figure 7 - Fender Mounting Antenna

The antenna must be installed in accordance with good engineering practice for optimum results.

FINAL INSPECTION CHECK

Be sure all components are firmly mounted, control cable dressed away from all cycle moving parts and exhaust pipe.

PLACING THE TWO-WAY RADIO INTO OPERATION

After the installation is completed, a 1st or 2nd Class FCC Radiotelephone licensed electronic technician must make the final transmitter and receiver adjustments as described in the MAINTENANCE MANUAL.

Be sure a RADIO TRANSMITTER IDENTIFICATION form (FCC Form 452-C or General Electric Form ECP-82) is filled out and attached to the transmitter.

NOISE SUPPRESSION KIT

To reduce the motorcycle generator and ignition noise, disconnect one side of the battery and install the generator and ignition coil noise suppression capacitors as follows:

Generator

1. Mount 0.5 uf feed-thru capacitor to generator as close as possible to armature terminal (Figure 8). Scrape paint off generator near mounting hole to provide a good ground.

2. Remove leads from the armature terminal and connect leads to one end of the capacitor.

3. Connect other end of capacitor to the armature terminal, using #14 wire and ring terminals. Keep wire as short as possible.

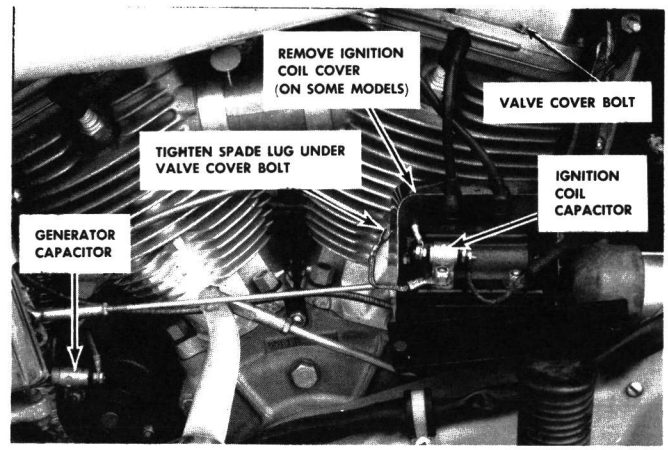


Figure 8 - Noise Suppression Kit Installation

Ignition Coil

1. Connect a ring terminal to one of the metal braid (supplied) and mount with 0.1 uf feed-thru capacitor to an ignition coil mounting bolt or ground terminal on coil (Figure 8).

2. Connect spade lug to other end of metal braid and mount to nearest valve cover bolt on engine. Braid must be as short as possible.

3. Remove ignition switch input wire from coil and attach to one end of capacitor.

4. Connect terminals to the #16 wire (supplied) and connect one end of the wire to the input terminal of the coil and the other to other end of the capacitor.

NOTE

Recheck generator and ignition coil connections to be sure shorts do not occur.

5. Re-connect battery lead.

STEERING DAMPER MODIFICATION KIT (Option 5584)

1. Remove the steering damper adjustment screw and handlebar clamp cover supplied with the motorcycle.

2. Place the new cover over the large nut and leaf spring.

3. Slide the coil spring over the new short damper screw, insert the screw through the hole in the cover and tighten as desired.

4. Mount the Control Unit according to Steps 2 through 7 as shown on Page 3, using the long threaded studs, 3/4-inch hexnuts and lockwashers for Steps 2 and 3.

Progress Is Our Most Important Product

GENERAL ELECTRIC

COMMUNICATION PRODUCTS DEPARTMENT, LYNCHBURG, VIRGINIA

(In Canada, Canadian General Electric Company, Ltd., 830 Lansdowne Rd., Toronto, Ontario)

PRINTED IN U.S.A.