

for Two-Way FM Radios

The General Electric 2-way FM Radio is designed for saddlebag mounting on 2-wheel Harley-Davidson motorcycles. It mounts in the left saddlebag and can be used on motorcycles with or without a side car. The radio is completely transistorized and resistant to shock, vibration, moisture and temperature extremes to insure reliable radio service.

LB1-38/7 DF-9018

> A typical motorcycle saddlebag mount for two-way FM radio includes the installation of saddlebag, transmitter-receiver, control unit and associated cables (see Figure 1). Read the following instructions carefully before starting the installation.

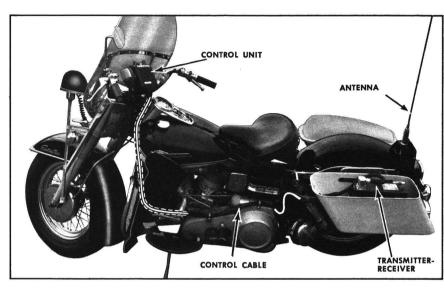


FIGURE 1 — TYPICAL INSTALLATION

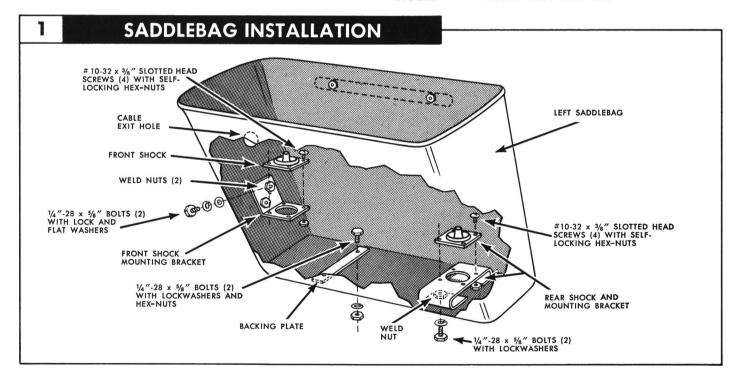


FIGURE 2 — FRONT AND REAR SHOCK INSTALLATION

a. Install the saddlebag carrier and saddlebag on the motorcycle according to the instructions furnished by Harley-Davidson.

b. Install the front and rear shocks and associated mounting brackets as shown in Figure 2. (Offset mounting holes for the rear shock mounting bracket should be toward the front of the saddlebag.)

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a. Assemble the Radio Mounting Frame as shown in Figure 3.

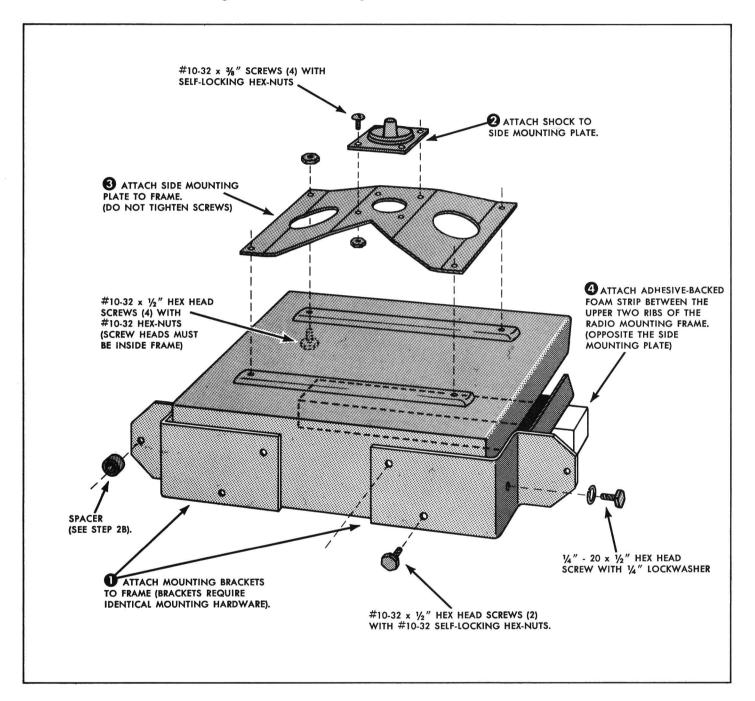


FIGURE 3 — RADIO MOUNTING FRAME ASSEMBLY

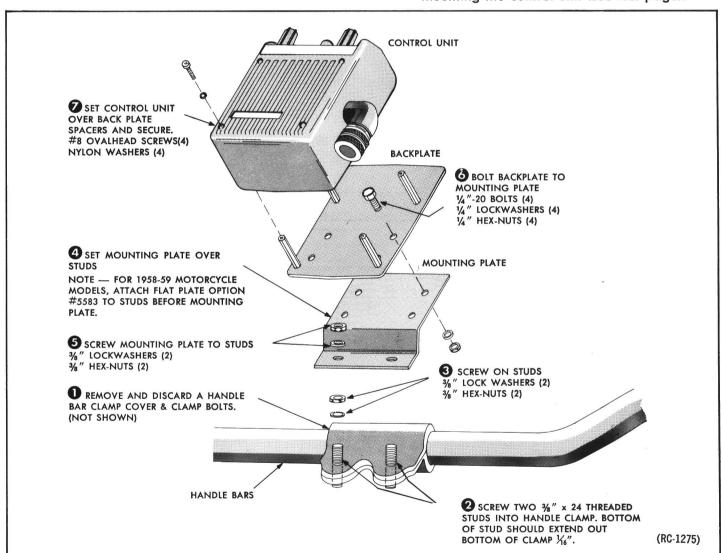
- **b.** Place the Radio Mounting Frame Assembly into the saddlebag with side mounting plate toward the motorcycle fender. (Be sure spacer shown in Figure 3 is between the rear shock and mounting bracket).
- c. Secure assembly to rear shock with $\frac{1}{4}$ " 28 x $\frac{1}{18}$ " screw (replaces screw supplied by Harley-Davidson) and lockwasher. Secure assembly to front shock with $\frac{1}{4}$ " 28 x $\frac{9}{16}$ " screw and lockwasher. Do not tighten screws completely for this is a temporary installation.

- **d.** Adjust the side mounting plate to align side shock with hole in the saddlebag. Then remove the Radio Mounting Frame Assembly from the saddlebag and tighten screws on the side mounting plate.
- e. Return the Radio Mounting Frame Assembly to the saddlebag and secure to front and rear shocks as described in preceding steps b & c. Tighten mounting screws.
- **f.** Secure the side shock to the saddlebag with $\frac{1}{4}$ " 28 x $\frac{9}{16}$ " screw and 2" steel washers (2). Place one washer on each side of the saddlebag.
- g. Slide the transmitter-receiver into frame (make sure that the control cable connector is toward the front). Close latches and lock with key for security.

CONTROL UNIT AND CABLE INSTALLATION

a. Perform steps 1-6 of Control Unit Installation (Figure 4).

NOTE - For 1960 or later motorcycles equipped with a steering damper, install the steering damper modification kit (option 5584) before mounting the control unit (see last page).



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

FIGURE 4 — CONTROL UNIT INSTALLATION

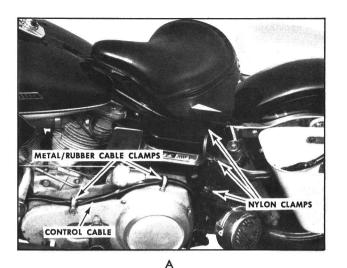


FIGURE 5 — CABLE ROUTING



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- **b.** Install rubber grommet in the cable exit hole on saddlebag.
- c. Attach control cable connector to jack on the transmitter-receiver.
- d. Route control cable through hole in the saddle-

bag to control unit mounting location. Use 7 nylon straps and 2 cable clamps (supplied) to secure cable to motorcycle as shown in Figure 5A and 5B.

e. Connect microphone and control cables to speaker/control unit as shown in Figure 6.

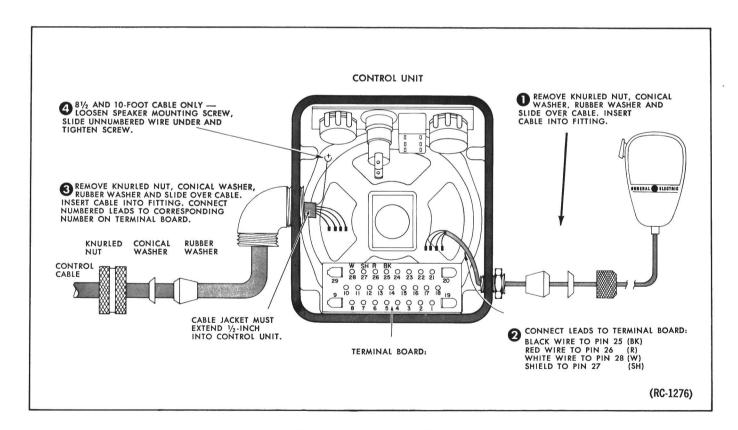


FIGURE 6 — CABLE CONNECTIONS

f. Perform step 7 of Control Unit Installation (Figure 4).

4

POWER CONNECTIONS

Before connecting the transmitter-receiver to the motorcycle battery, be sure the transmitterreceiver 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 antenna as shown in Figure 7.

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

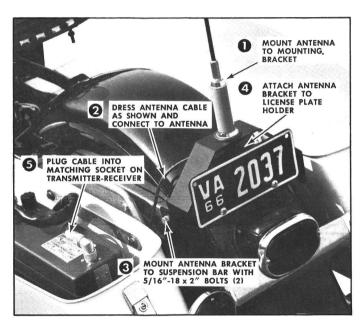


FIGURE 7 — ANTENNA MOUNTING

6

FINAL CHECKS

FINAL INSPECTION

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 elec-

tronic technician must make the final transmitter and receiver adjustments as described in the MAINTENANCE MANUAL.

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

7

NOISE SUPPRESSION KIT INSTALLATION

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.

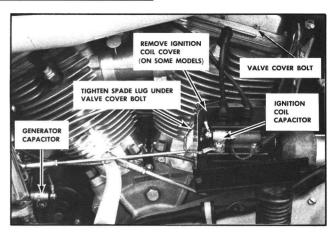


FIGURE 8 — NOISE SUPPRESSION KIT INSTALLATION

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

Ignition Coil

- 1. Connect a ring terminal to one end 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 feed-thru capacitor.
- **4.** Connect ring terminals to the #16 wire (supplied). Connect one end of the wire to the input terminal of the coil and the other end to the remaining unused terminal on the feed-thru capacitor.
- 5. Re-connect battery lead.

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

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 Figure 4, using the long threaded studs, ³/₄-inch hexnuts and lockwashers for Steps 2 and 3.

