

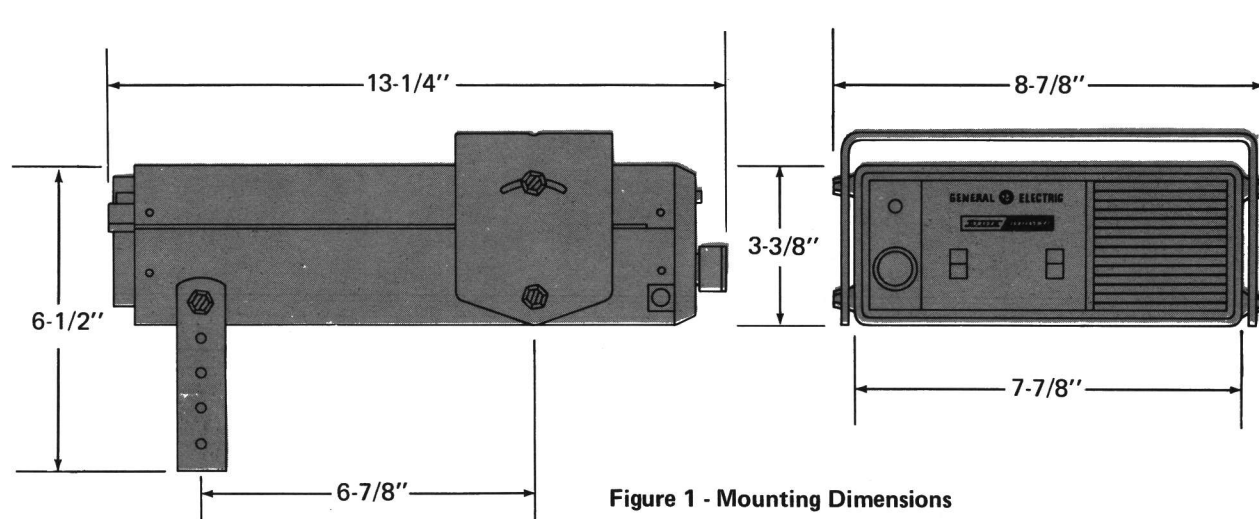
INSTALLATION OF

—  **MOBILE RADIO**

MASTR
PROGRESS LINE

CUSTOM EXECUTIVE

MOBILE COMBINATIONS



INSTALLATION EQUIPMENT

The equipment required for installing the radio includes:

- A No. 24 (9/64-inch) drill for No. 10 Self-Tapping Screws
- A 3/8-inch drill for the antenna
- A soldering iron for the antenna
- Phillips and flat-blade screwdrivers for mounting screws

GENERAL  ELECTRIC

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the Two-Way Radio. It is recommended that you identify the items in the packing case and check them off in the appropriate column below before discarding the packing material. If any damage has occurred to the equipment during shipment, file a claim with the carrier immediately.

EQUIPMENT

Two-Way Radio ☐
Microphone (4EM25L10) and
 bracket (7141414G2) ☐
Mounting Brackets
 Front ☐
 Rear ☐
Mounting Hardware (19A129302G1) ☐
Power Cable with Systems Plug
 (19A129305G1) ☐
Alignment Tools (2) ☐

Antenna 4EY12A13 ☐

OPTIONAL EQUIPMENT

Channel Guard Hookswitch (19C303571G1) ☐
10-Watt Speaker (Model 4EZ18A14) ☐

PLANNING THE INSTALLATION

The accompanying photograph of a typical Custom Executive installation should help you in planning your installation. Suggestions for locating and installing the units are given with the following installation instructions:

Before starting, plan your installation carefully—so that it will be:

- Convenient for the operator to use
- Neat
- Protected from damage from water
- Easy for the serviceman to service
- Out of the way of auto mechanics
- Out of the way of passengers



Figure 1 — Typical Installation

It is suggested that you take advantage of the experience of one of the many authorized General Electric Service Stations located throughout the United States by having them install your Two-Way Radio and make the final adjustments.

NOTE

The Custom Executive mobile combination operates in 12-volt negative ground systems *only*! Always check the battery polarity and voltage of the vehicle before installing the radio.

POWER CABLES

The Power Cable consists of a fused red lead, a black lead, and a 13-pin vehicle systems plug (see Figure 2).

To install the Power Cable, start with the plug end of the Cable at the location of the radio and run the two leads to the vehicle battery. Connect the red fused lead to the positive (+) battery terminal, and the black lead to the negative (–) battery terminal. Always locate the fuse as closely to the power source as possible. Coil up the surplus cable and secure it out of the way.

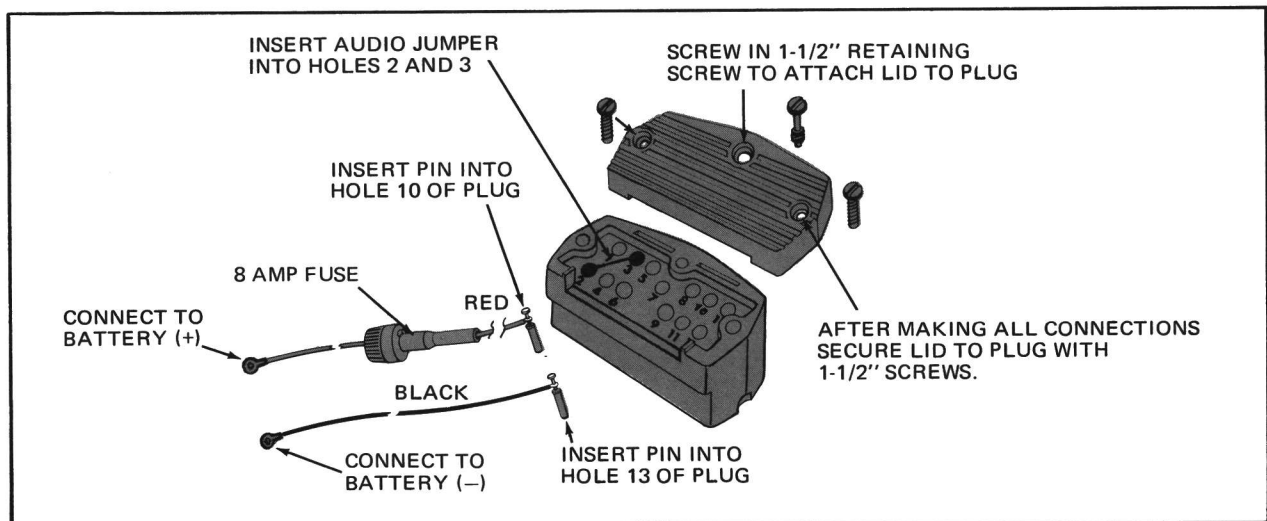


Figure 2 - Power Cable and Vehicle Systems Plug

NOTE

The optional Channel Guard Hookswitch and 10-Watt speaker require connections to the 13-pin vehicle systems plug. If either of the options is used, do not connect the plug to the radio until these connections have been made.

INSTALLING THE RADIO

In Front-Mount installations, mount the Two-Way Radio so that the controls are within reach of the operator. Use the mounting brackets as a template to locate the holes, and mount the radio as shown in Figures 3 or 4.

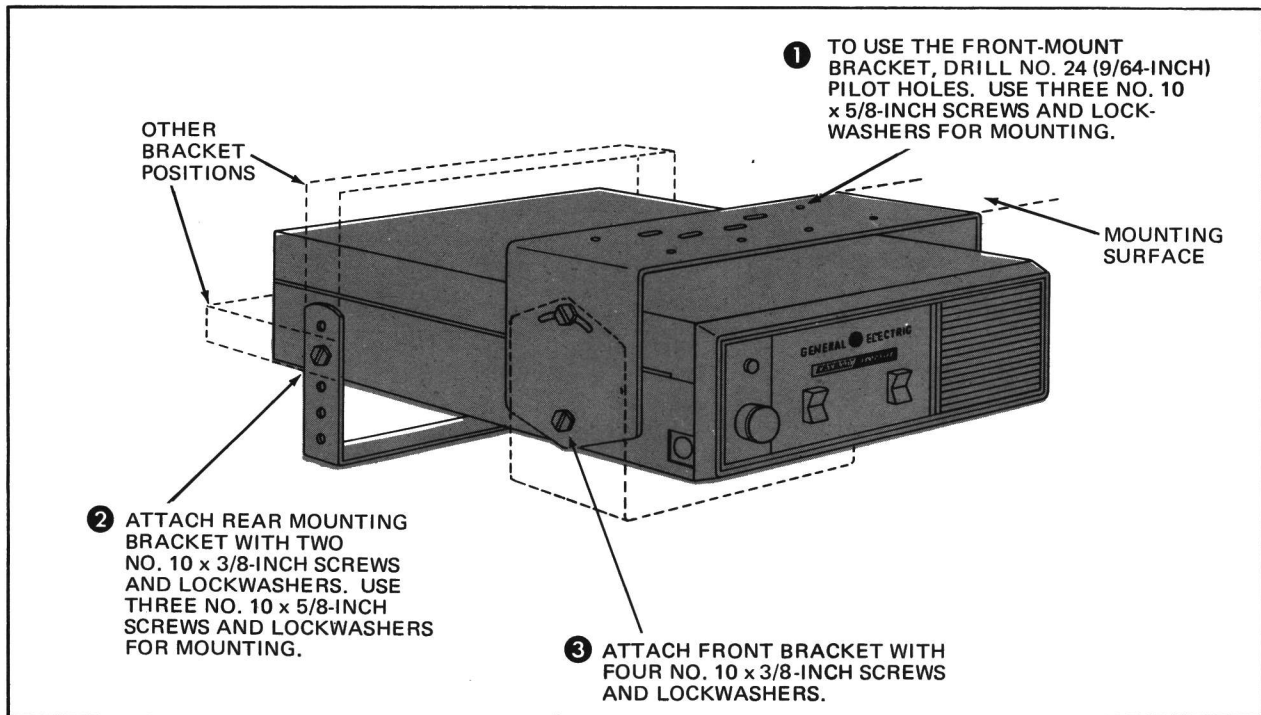


Figure 3 - Using Front-Mount Bracket

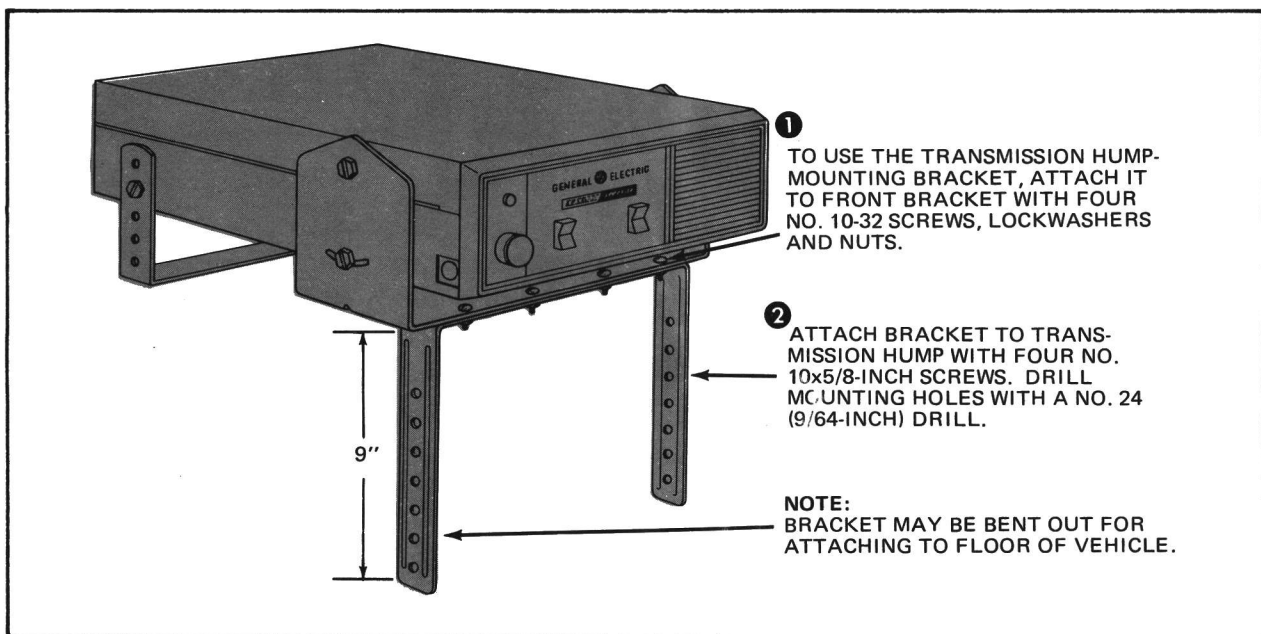


Figure 4 - Using Transmission Mounting Bracket

CAUTION

BE CAREFUL TO AVOID DAMAGING SOME VITAL PART OF THE VEHICLE WHEN DRILLING MOUNTING HOLES.

Before attaching the radio in the mounting brackets, connect the antenna plug and vehicle systems plug as shown in Figure 5.

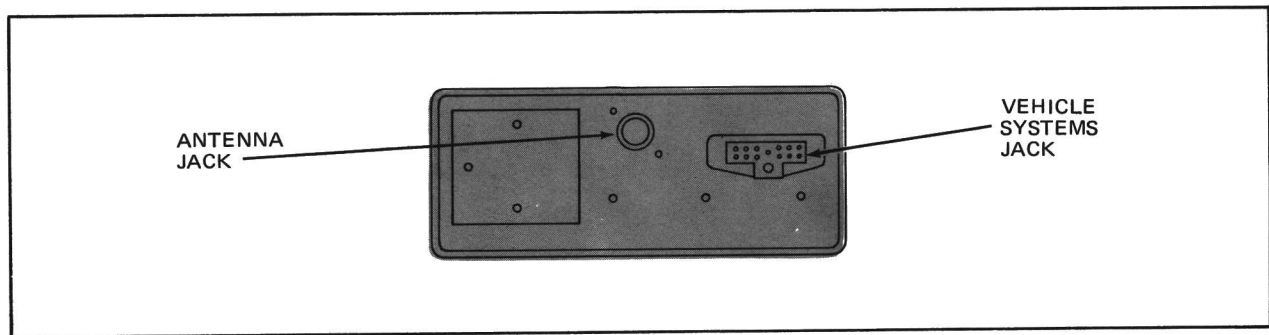


Figure 5 - Rear View of Radio

ACCESSORIES AND OPTIONS

MICROPHONE BRACKET

Mount the microphone bracket where the microphone will be within easy reach of the operator but will not interfere with safe operation of the vehicle (see Figure 6).

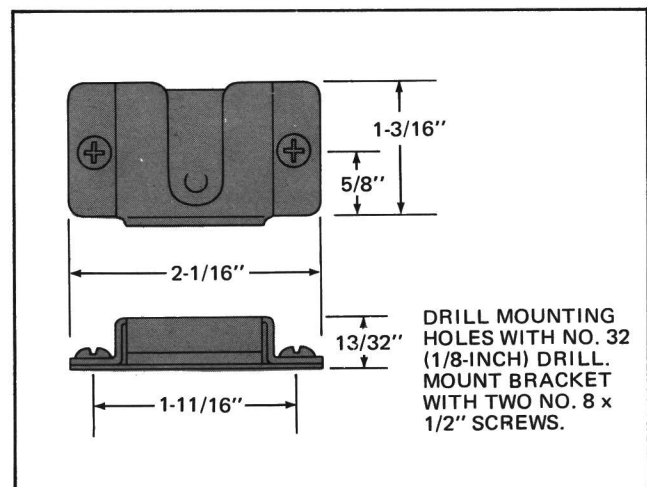


Figure 6 - Microphone Bracket

CHANNEL GUARD AUTOMATIC MONITORING HOOKSWITCH (OPTIONAL)

For Channel Guard with Automatic Monitoring applications, a hookswitch is used in place of the microphone bracket. Mount the hookswitch as shown in Figure 7. After mounting the hookswitch, insert the two pins in holes 1 and 6 on the Vehicle Systems Plug.

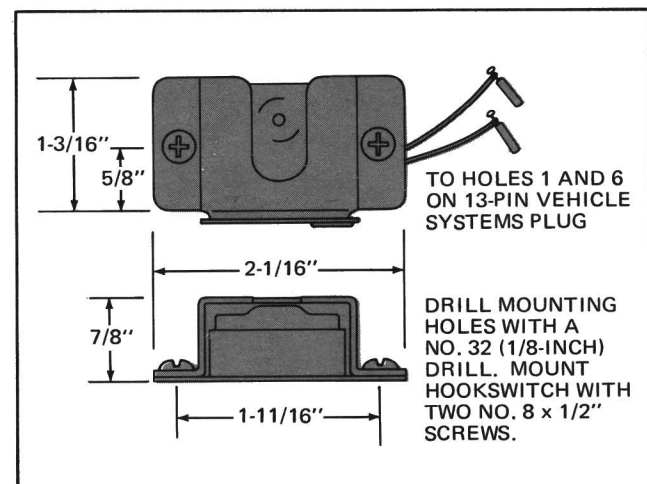


Figure 7 - Hookswitch Mounting

10-WATT SPEAKER (OPTIONAL)

The speaker should be mounted where it will direct sound to the operator, but not interfere with his vision. The speaker may be mounted on the lower edge of the instrument panel, on the firewall, above the windshield in trucks, or behind the built-in speaker grille of some vehicles. Use the swivel bracket from the speaker as a template for locating three mounting holes, and mount the speaker as shown in Figure 8.

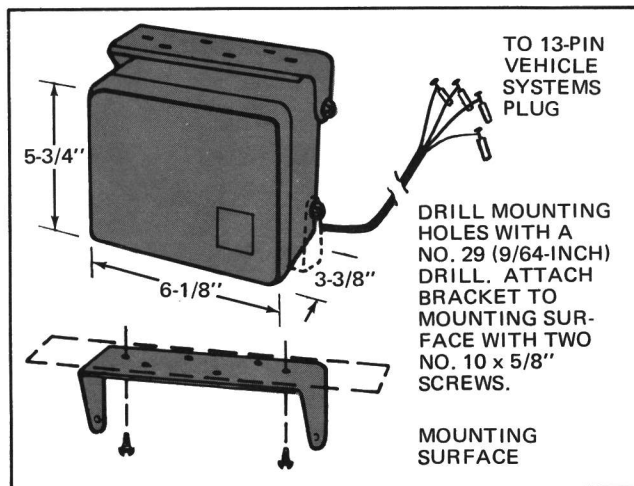


Figure 8 - Mounting the Speaker

After the speaker is mounted, make jumper connections and insert the four pins in the 13-Pin Vehicle Systems Plug as shown in the following chart:

WIRE COLOR	SYSTEMS PLUG CONNECTIONS
Remove jumper between Hole 2 and Hole 3 Add jumper between Hole 2 and Hole 5	
Red (+12V)	Hole 7
Brown (Audio Hi)	Hole 9
White (Audio Lo)	Hole 8
Black (Gnd)	Hole 12

ANTENNA

Installation instructions are packaged with the antenna. The antenna must be installed in accordance with good engineering practice for optimum results.

For the 150.8-174 MHz antenna, the most effective mounting position is usually in the center of the roof of the vehicle. The antenna cable will normally run from the rear of the Two-Way Radio, behind sections of the interior trim to a door or window post, and then up between the roof and header in the passenger compartment to the antenna base.

PLACING THE TWO-WAY RADIO IN OPERATION

After completing the installation of the Two-Way Radio, the following final operations should be performed:

- Have an electronics technician who holds a 1st or 2nd Class FCC Radiotelephone license make the final adjustments. These include:
 - Transmitter: Tuning the output circuits to match the antenna. Measure the transmitter frequency and modulation and enter these measurements on the FCC - required Station Records.
 - Receiver: Tuning the input circuit to match the antenna.
 - Vehicle: Checking to see if any electrical noise suppression is needed.
- Instructions for making these adjustments are included in the Maintenance Manual for the Two-Way Radio. Give the alignment tools (packed with the unit) to the technician.
- Be sure that a RADIO TRANSMITTER IDENTIFICATION form (FCC Form 452-C or General Electric Form NP270303 is filled out and attached to the transmitter.
- Fill out and mail the "ON ARRIVAL" Information Card
- Give the Operator's Manual for the Two-Way Radio to the person who is going to operate it or place the Manual in the vehicle where he will find it.

MOBILE RADIO DEPARTMENT
GENERAL ELECTRIC COMPANY • LYNCHBURG, VIRGINIA 24502

