



INSTALLATION INSTRUCTIONS

Porta-Mobil II

MOBILE/INDUSTRIAL

Two-Way FM Radios

LBI-30448

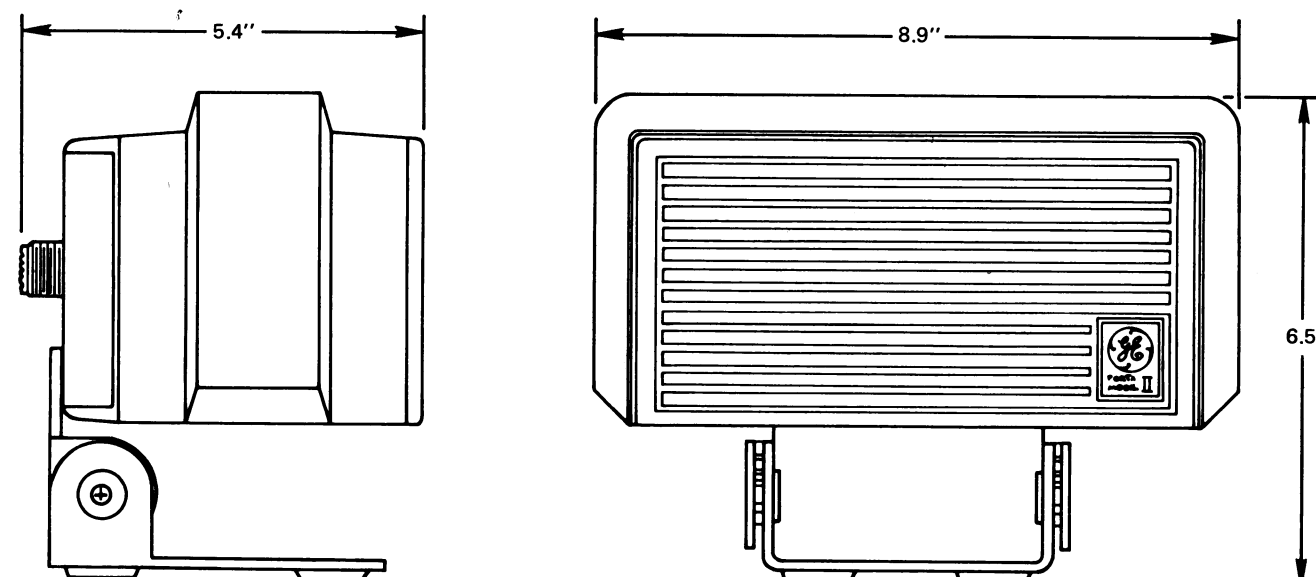


Figure 1 — Mounting Dimensions

INSTALLATION EQUIPMENT

The equipment required for installing the Two-Way Radio includes:

- An electric drill for drilling mounting holes
- Drills and circle cutters (see sizes in box below)
- A soldering iron for the antenna cable
- Phillips and flat-blade screwdrivers and a 5/16-inch hex head driver for mounting screws

DRILL SIZES

7/32-inch Drill for 1/4 Self-Tapping Screws
9/32-inch Drill for Lo-Band Antenna and 1/4-inch Bolt
3/4-inch Punch or Holesaw for 132-512 MHz Antenna
1 3/8-inch Circle Cutter, Holesaw and Socket Punch for 25-50 MHz Antenna

MOBILE RADIO DEPARTMENT
GENERAL ELECTRIC COMPANY • LYNCHBURG, VIRGINIA 24502

GENERAL  ELECTRIC

GENERAL  ELECTRIC

APPLICATION FOR PORTA-MOBIL II MOBILE/INDUSTRIAL
HARDWARE KIT 19A136677G1

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

Porta-Mobil II two-way radio	<input type="checkbox"/>
Mounting Hardware Kit 19A136677G1	<input type="checkbox"/>
Ignition Noise Filter Assembly 19C321889	<input type="checkbox"/>
Cable Assembly 19C321929G3	<input type="checkbox"/>
Cable Assembly 19A136593G1	<input type="checkbox"/>
Cable Assembly 19A136593G2	<input type="checkbox"/>
Antenna and RF Connector	<input type="checkbox"/>

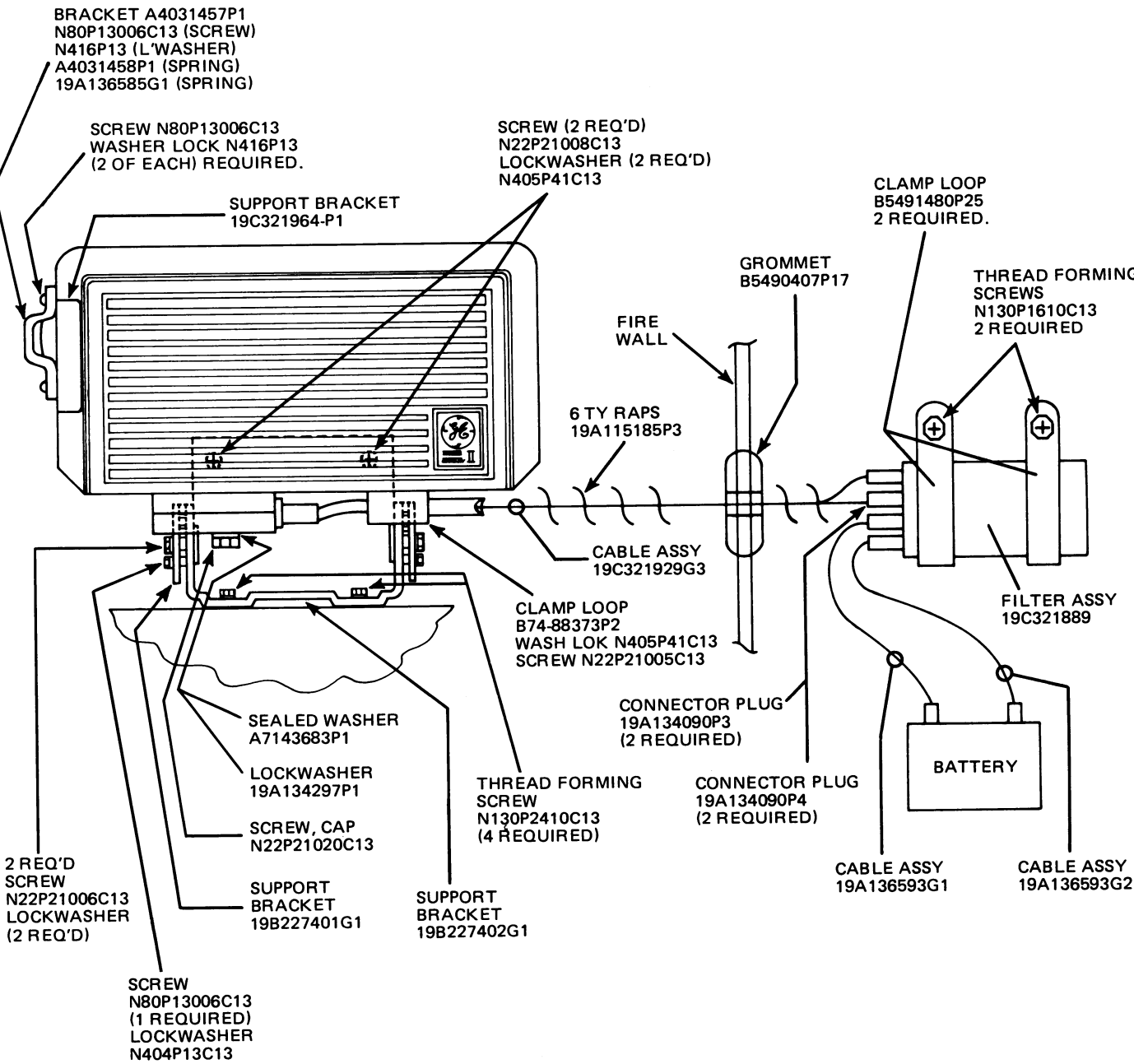


Figure 4 — Mobile/Industrial Application

ANTENNA

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

For the 138–512 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 front of the Two-Way Radio, behind sections of the interior trim to a door or window post, and then up between the roof and headliner in the passenger compartment to the antenna base.

For the 30–50 MHz and 66–88 MHz antenna, the most effective mounting position is usually on the driver's side of the vehicle near the top of the left rear fender or body of the vehicle.

Try to route the cable away from locations where it will be exposed to heat, sharp edges or mechanical damage, and where it will be out of the way of the driver, passengers or vehicle mechanics. Wherever possible, existing holes in the trunk wall, and the channels above or beneath doors and window columns should be utilized.

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: Measure Forward and Reflected Power and adjust antenna length for optimum ratio. Set transmitter to rated power output (or to the specific output or input that may be required by the FCC station authorization). Measure the frequency and modulation and enter these measurements on the FCC-required Station Records.

Receiver: Tune the input circuit to match the antenna.

Vehicle: Check 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.

PLANNING THE INSTALLATION

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

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.

WARNING

Interference with Vehicular Electronics — *Electronic fuel injection systems, electronic anti-skid braking systems, electronic cruise control systems, etc., are typical of the types of electronic devices which may be prone to malfunction due to the lack of protection from radio frequency energy present when transmitting. If the vehicle contains such equipment, consult the dealer for the make of vehicle and enlist his aid in determining if such electronic circuits will perform normally when the radio is transmitting.*

RUNNING CABLES

To assure the feasibility of the cable routings you plan to use, the cables should be run prior to installing the unit. Try to route the cables away from locations where they may be damaged or where they may be in the way of automobile mechanics, the driver or passengers. Whenever possible, utilize existing holes in the firewall and trunk and the channels above or beneath the doors. Be sure to leave enough slack in the cables to allow the radio to be pulled out, with power applied, for servicing.

Starting with the plug end of the Power Cable at the location of the Porta-Mobil II, run the cable to the vicinity of the battery (see Figure 3). Mount the ignition noise filter near the battery and connect the red lead of the Power Cable to the + OUT terminal and the black lead to GRD. Connect the short red power cable between the + BATT of the noise filter and the positive terminal of the battery. Connect the short black power cable between the GND of the noise filter and the negative terminal of the battery.

INSTALLING THE TWO-WAY RADIO

The Two-Way Radio may be mounted on the hump of an automobile or on any flat surface for industrial applications. Select a mounting location with sufficient room for the radio to be removed from the mounting bracket for servicing. Mount the radio as shown steps 1 through 5 in Figure 2.

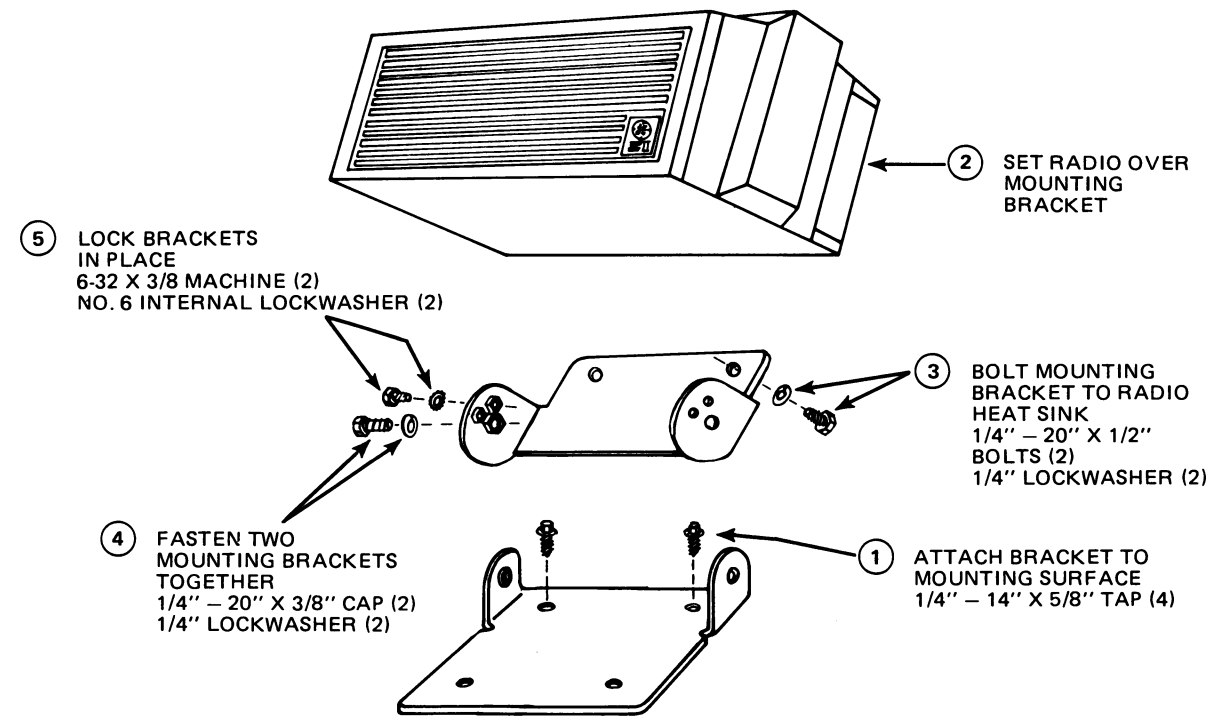


Figure 2 — Installing the Two-Way Radio

CAUTION

Be careful to avoid damaging some vital part of the vehicle when drilling mounting holes. Always check to see how far the mounting screws will extend below the mounting surface before installing.

WARNING

For passenger safety, mount the radio securely so that the unit will not break loose in the event of a collision. This is especially important in station wagons, vans and similar type installations where a loose radio could be extremely dangerous to the vehicle occupants.

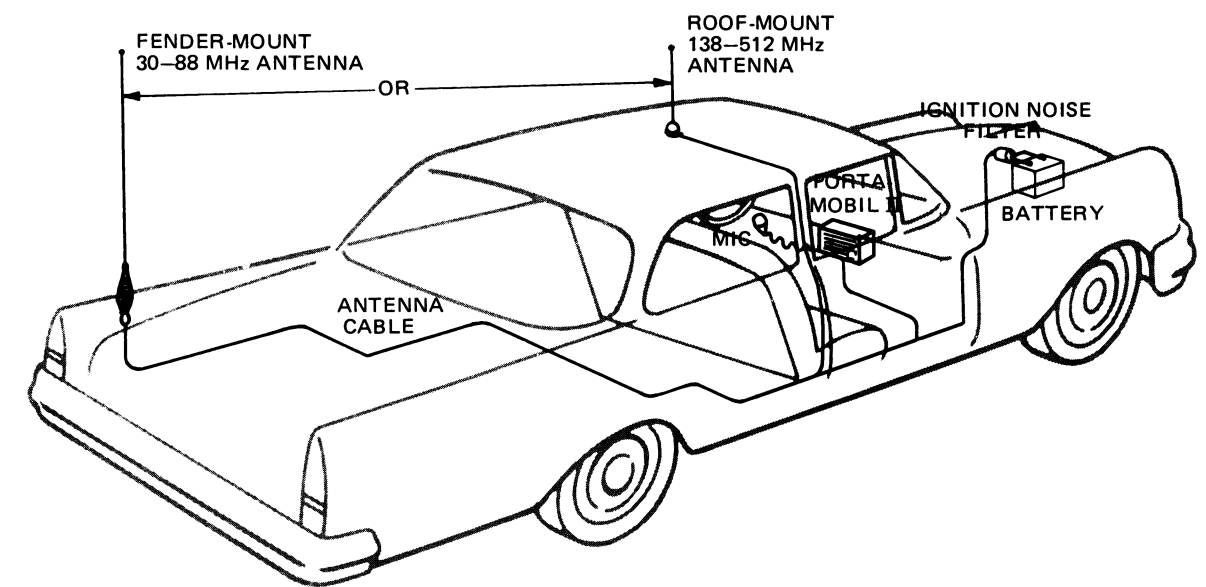


Figure 3 — Vehicle Cabling Diagram