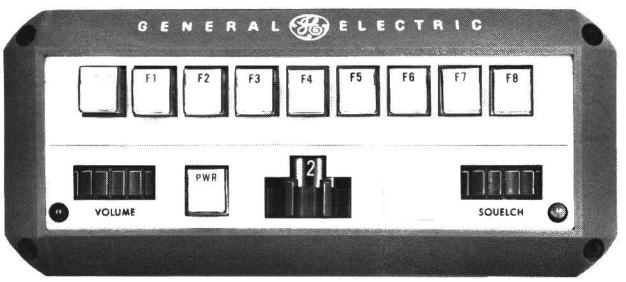
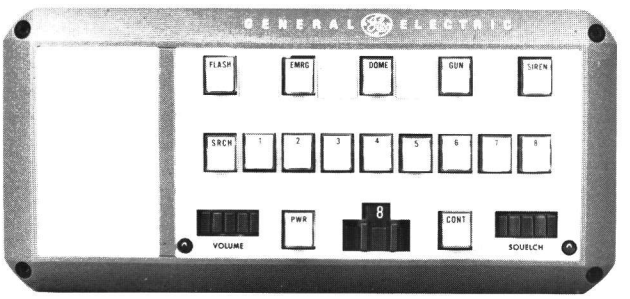
INSTALLATION MANUAL FOR
C-800 & C-900 SERIES CONTROL UNIT

LBI30369B
(DF4104)



C-800 SERIES



C-900 SERIES

INSTALLATION EQUIPMENT

The equipment required for installing the Control Unit includes:

- An electric drill for drilling mounting holes
- Drills
- No. 31 (1/8-inch) Drill for No. 8 Self-Tapping Screws
- No. 27 (9/64-inch) Drill for No. 10 Self-Tapping Screws
- Phillips and flat-blade screwdrivers and a 5/16-inch hex head driver for mounting screws

GENERAL ELECTRIC

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the Control Unit. 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.

Control Unit ..... ☐

Control Unit Mounting Kit
Hump Mount (3 pcs) ..... ☐
Dash Mount (2 pcs) ..... ☐

Speaker & Mounting Bracket ... ☐

Microphone & Bracket ..... ☐
or
Handset w/Hookswitch ..... ☐

Power/Control Cable ..... ☐

Power/Ignition Cable ..... ☐

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 equipment and make the final adjustments.

RUNNING CABLES

To assure the feasibility of the cable routings you plan to use, it is suggested that you run the cables before mounting the equipment. Be sure to leave some slack in each cable going to the Control Unit (and Two-Way Radio) so that they may be pulled out for servicing with the power applied.

Refer to the Installation Instructions provided with your Two-Way Radio equipment for details of suggested cable installation.

IGNITION SWITCH CABLE ASSEMBLY

In 12-volt vehicle systems, the Ignition Switch Assembly consists of a Yellow "Y" fused lead, a black "Y" lead, and a 19-pin Vehicle Systems Plug. For 12-volt ignition switch connections, refer to Figure 4.

For radios using the DC Converter, the Ignition Switch Assembly consists of a Red fused lead, a jumper and a 19-pin Vehicle Systems Plug. The Red fused lead always connects to battery positive in either positive or negative ground systems.

In-line connectors are provided for shortening the fused leads, if desired. If the in-line connectors are used, install the connectors between the fuse and the Vehicle Systems Plug.

NOTE

The speaker connections and other option connections (hookswitches, etc.) are also made to the Systems Plug. Do not connect the Systems Plug to the Control Unit until all connections have been made.

12-VOLT NEGATIVE GROUND SYSTEMS

The Ignition Switch Assembly is shipped from the factory connected for negative ground systems as shown in Figure 1.

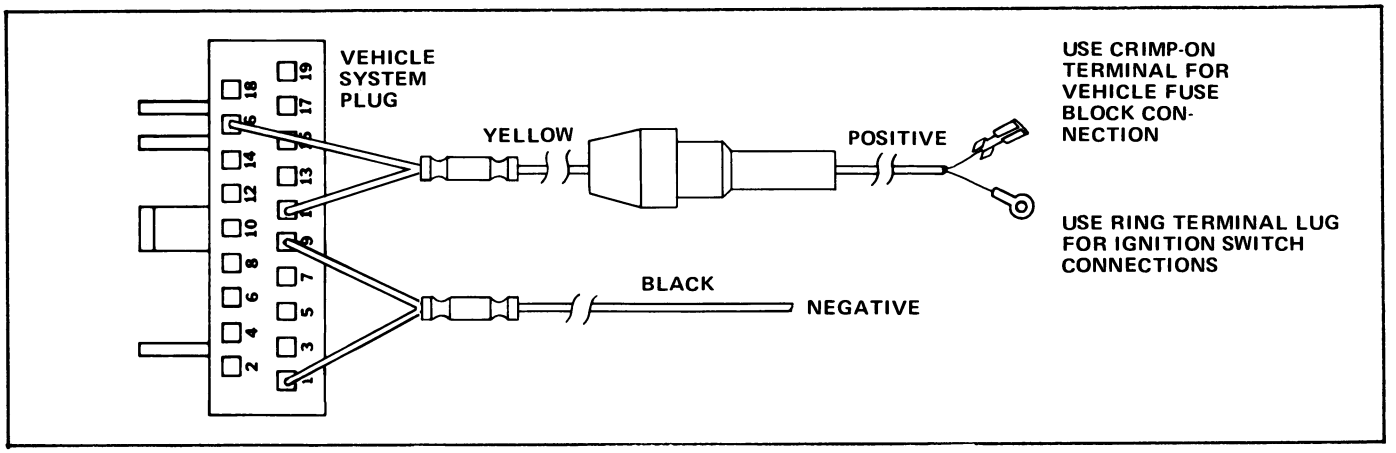


Figure 1. 12-Volt, Negative Ground Connections

12-VOLT POSITIVE GROUND SYSTEMS (MASTR II ONLY)

For 12-volt, positive ground systems, the connections to the Vehicle Systems Plug must be changed as shown in Figure 2. Use the extractor tool for changing the connections.

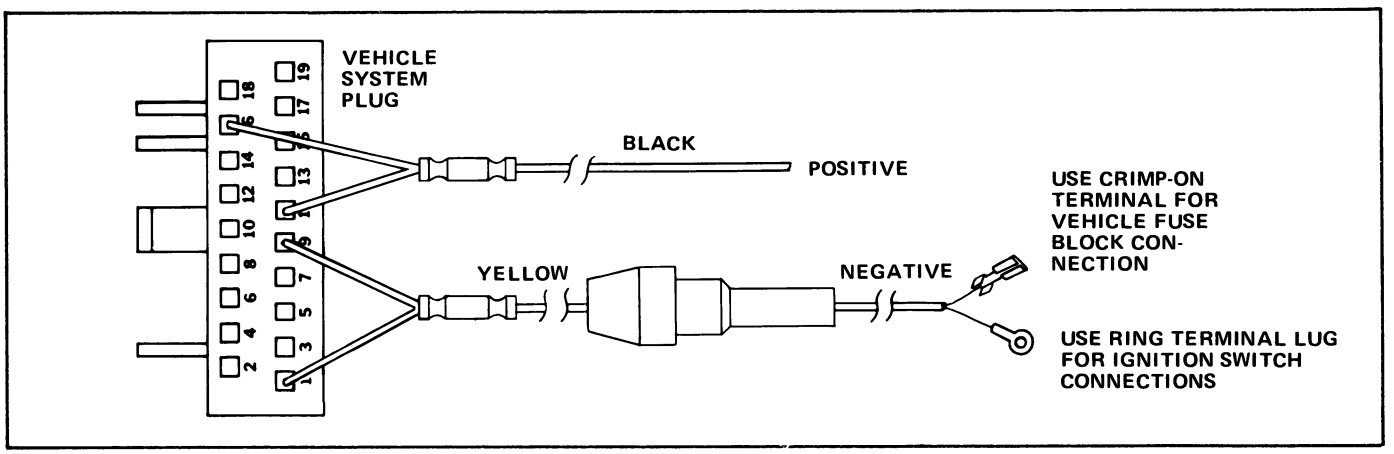


Figure 2. 12-Volt, Positive Ground Connections

DC CONVERTER SYSTEMS (+ OR − GROUND) (MASTR II ONLY)

For radios equipped with the DC converter, connections to the Vehicle Systems Plug are shown in Figure 3.

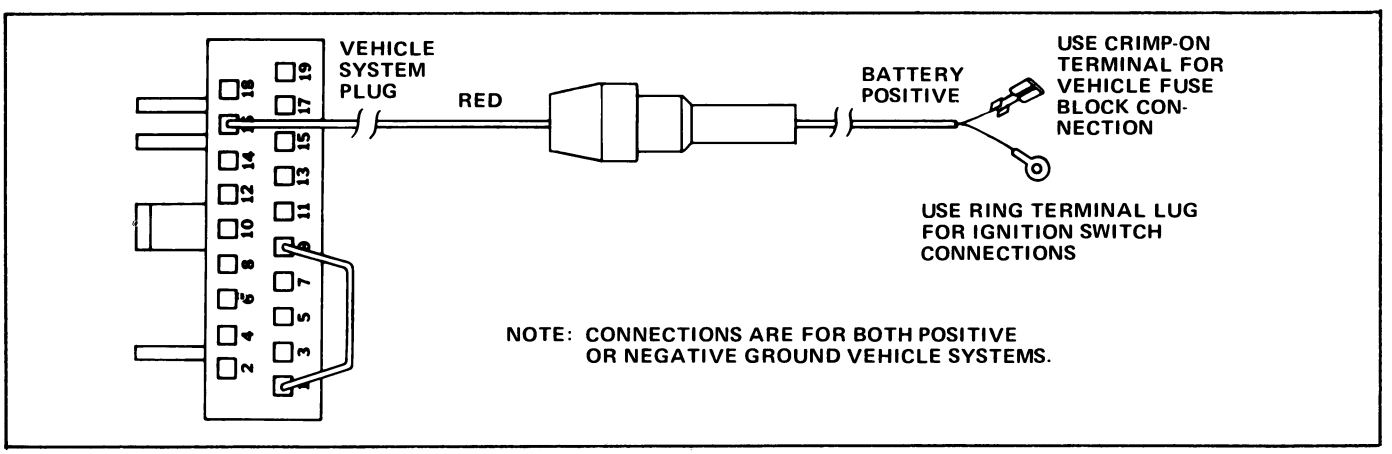


Figure 3. ±Ground DC Converter Connections

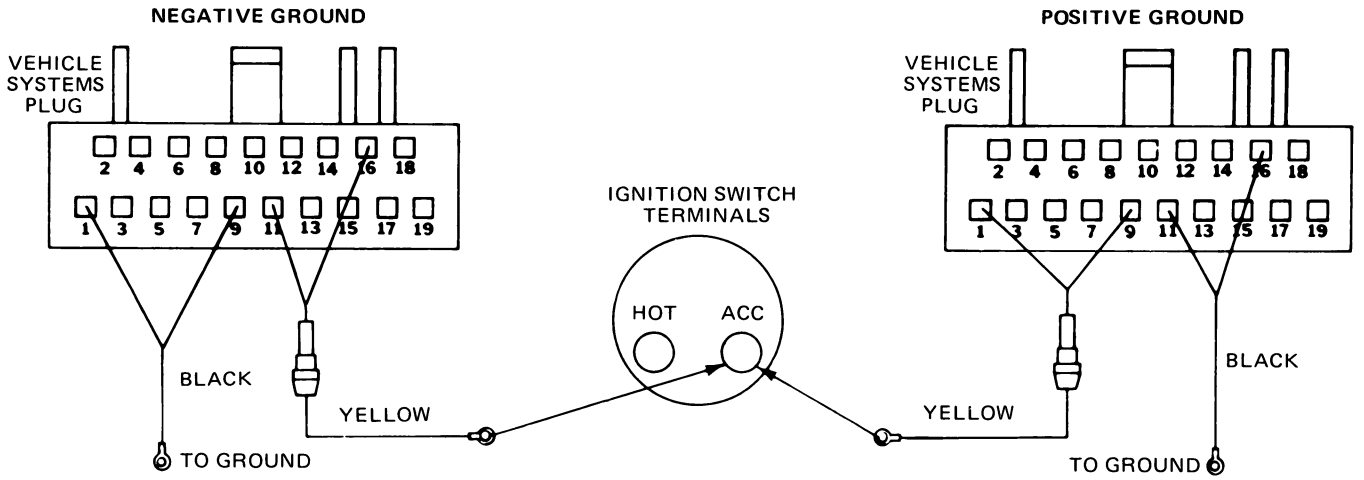
Power to the radio can be controlled by one of two methods shown here. Select the type of control desired, and connect the Ignition Switch cables as directed.

NOTE

POSITIVE GROUND operation for MASTR II only.

1 **IGNITION SWITCH CONTROL**

Transmitter and receiver will operate only with ignition switch in ACCESSORY or ON position. Turning ignition switch OFF removes all power to the radio.



2 **IGNITION SWITCH BYPASS**

Transmitter and receiver operate independently of ignition switch. Unit can be turned ON and OFF only by Control Unit switch.

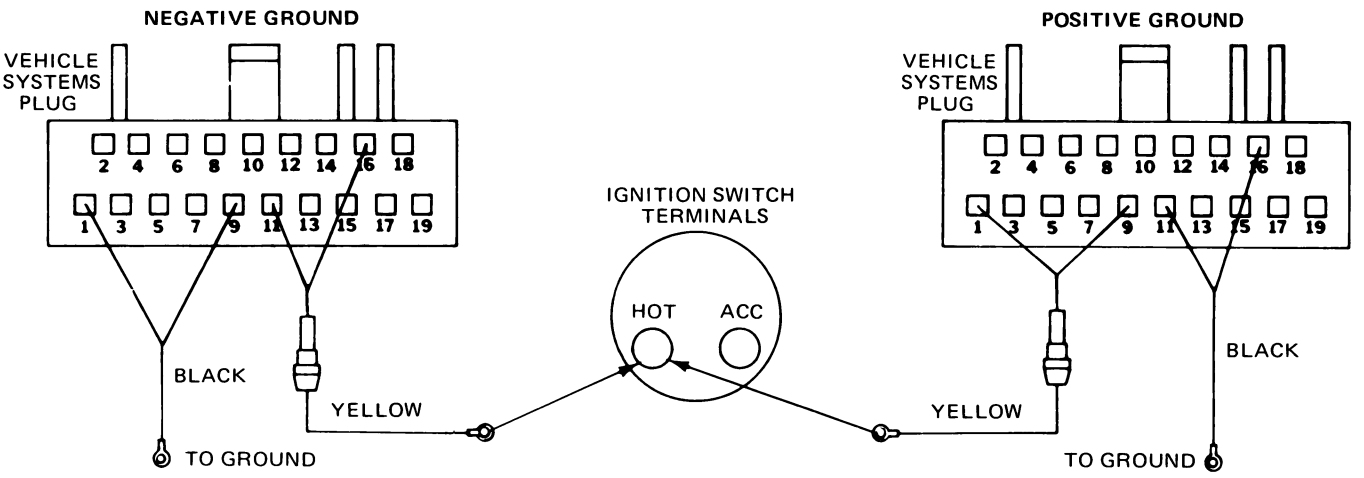


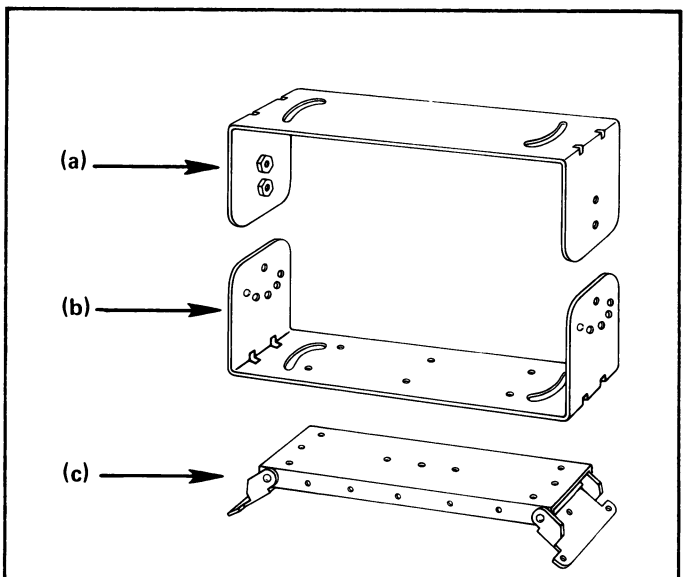
Figure 4. Connections for 12-Volt Ignition Switch Cables

CONTROL UNIT

The Control Unit should be mounted within convenient reach of the operator, and where it will not interfere with the safe operation of the vehicle or provide a hazard to the vehicle passengers in case of an accident.

Use the mounting bracket as a template for locating the mounting holes. Drill pilot holes for No. 10 self-tapping screws with a No. 27 (9/64-inch) drill. Mount the Control Unit as shown in Figure 6 or Figure 7. After mounting the unit, connect the control cable plug(s). Do not attach the Vehicle Systems Plug until the speaker connections and other optional connections (hookswitches, etc.) have been made.

After making all connections to the Vehicle Systems Plug, connect it to the Control Unit. Attach the retaining strap to provide strain relief for connections to the Vehicle Systems Plug.



(a) Mounting Bracket 19C321089G2
(b) Mounting Bracket 19C321086P2
(c) Mounting Bracket 19B227124G1

Figure 5. Mounting Components

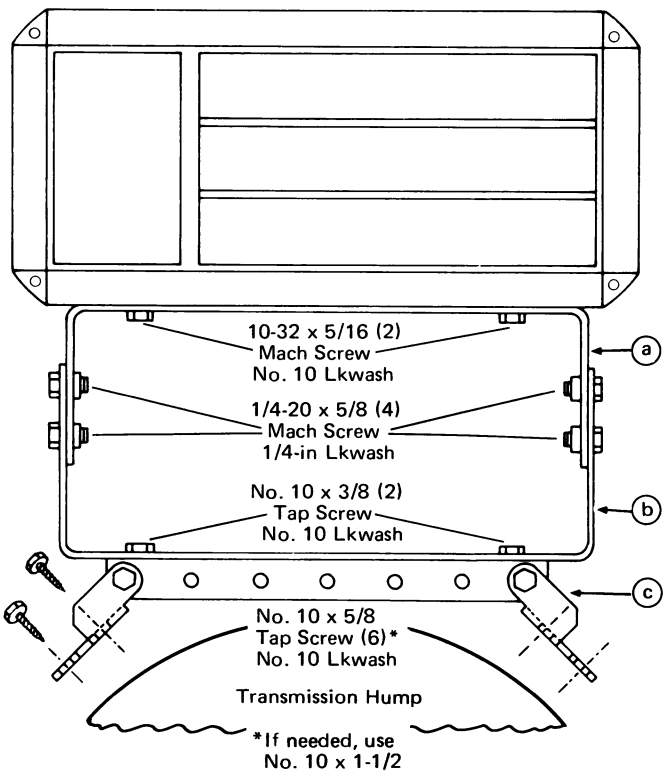


Figure 6. Typical Hump Mount

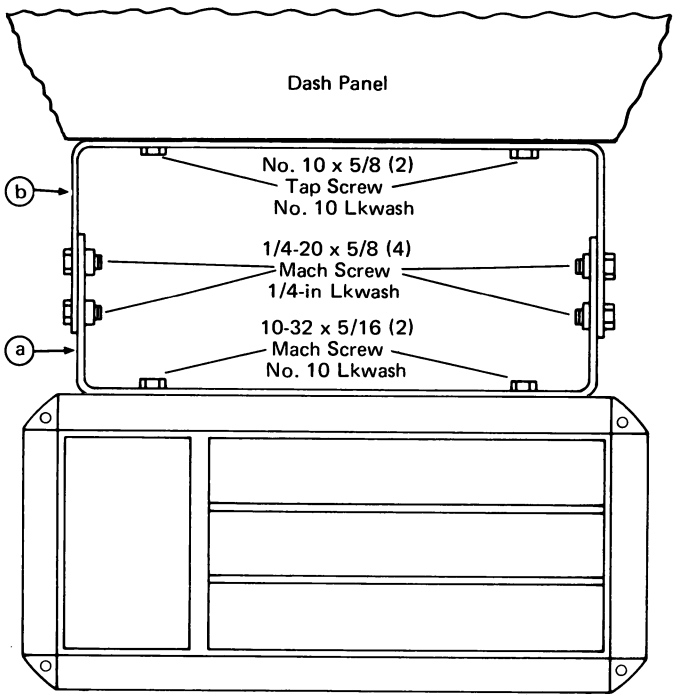


Figure 7. Typical Dash Mount

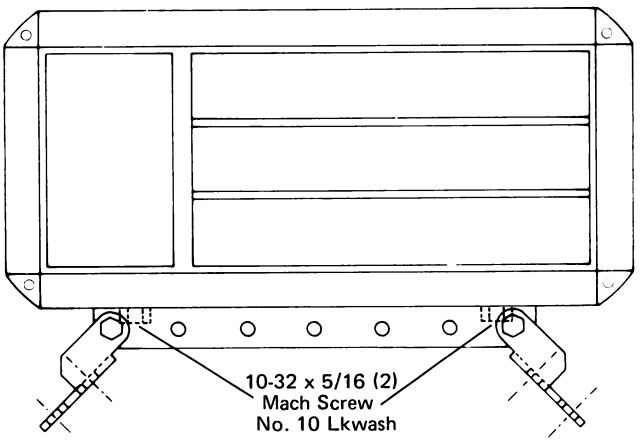


Figure 8. Customer Option - Mounting Control on Hump Mount Bracket

MICROPHONE

Mount the microphone where it will be within easy reach of the operator, but will not interfere with safe operation of the vehicle. Refer to Figure 9 for mounting instructions. After the microphone bracket is mounted, connect the microphone plug into the microphone jack on the back of the Control Unit, and tighten the retaining screws in the plug.

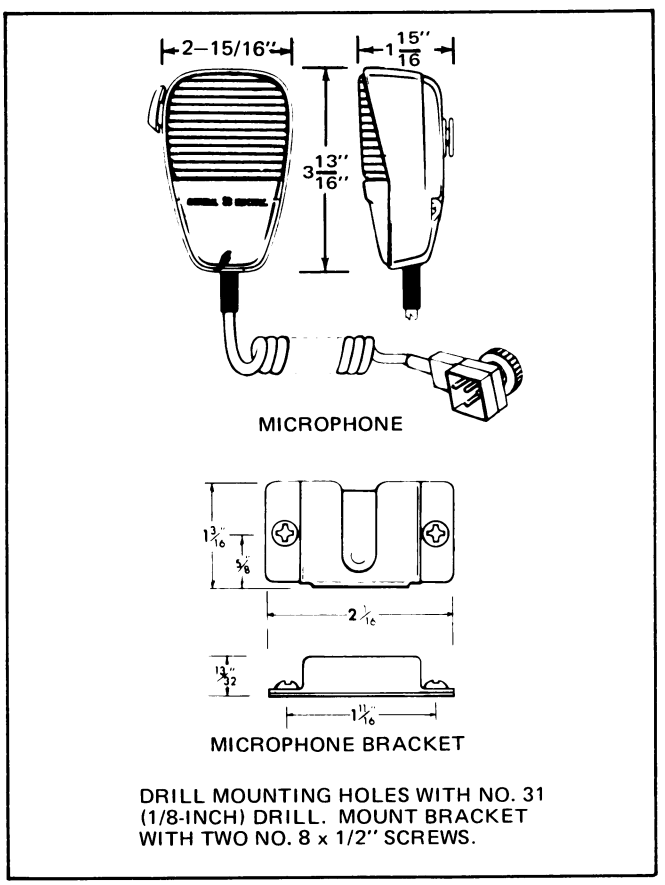


Figure 9. Microphone Bracket Mounting

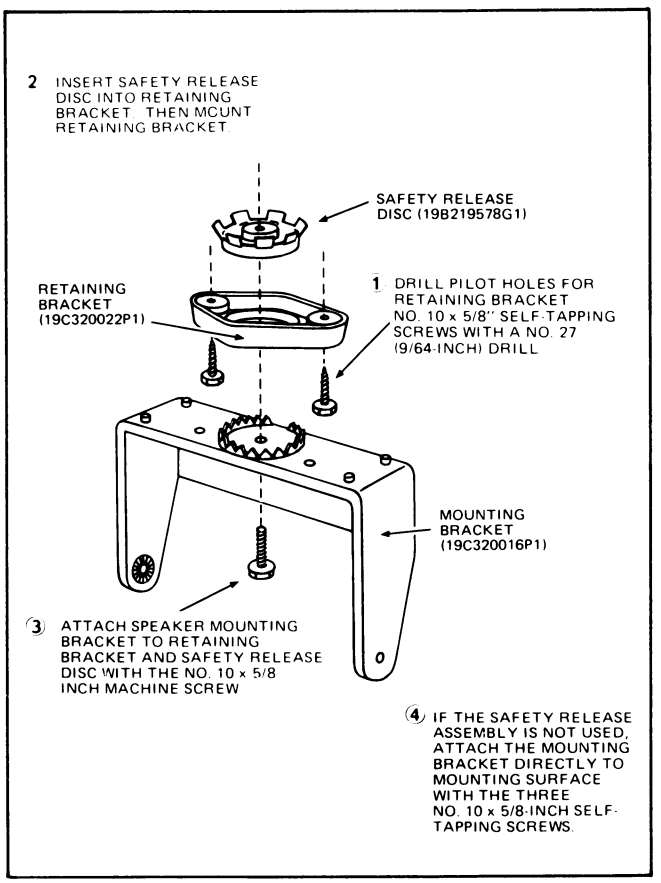


Figure 10. Mounting the Speaker

SPEAKER

The speaker should be mounted where it will direct sound to the operator, but not interfere with his vision or provide a hazard to passengers in case of an accident. Use the Safety Release mounting brackets for passenger safety whenever the mounting location requires, or where the swivel action is desired.

The speaker may be mounted on the lower edge of the instrument panel, on the firewall, above the windshield in some trucks, or behind the built-in speaker grille in some vehicles. Use the mounting bracket as a template for locating the mounting holes, and mount the speaker as shown in Figure 10. If the speaker has been disconnected, connect the two pins to holes 4 and 17 on the Vehicle Systems Plug.

CHANNEL GUARD HOOKSWITCH

For Channel Guard with Automatic Monitoring applications, a hookswitch is used in place of the microphone bracket. Mount the hookswitch as shown in Figure 11. After mounting the hookswitch, connect the two pins to holes 10 and 14 on the Vheicle Systems Plug if the hookswitch has been disconnected.

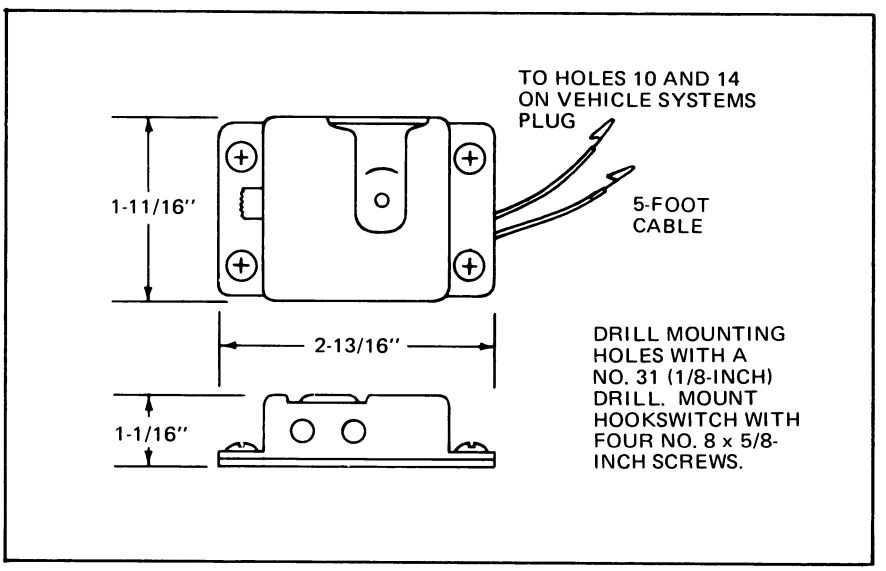


Figure 11. Hookswitch Mounting

HANDSET AND HANDSET HOOKSWITCH (OPTIONAL)

Mount the handset hookswitch as shown in Figure 12. After mounting the handset mookswitch, connect the handset plug to the microphone jack on the back of the Control Unit. If the hookswitch has been disconnected, connect the hookswitch cable to the Vehicle Systems Plug as shown in Figure 13.

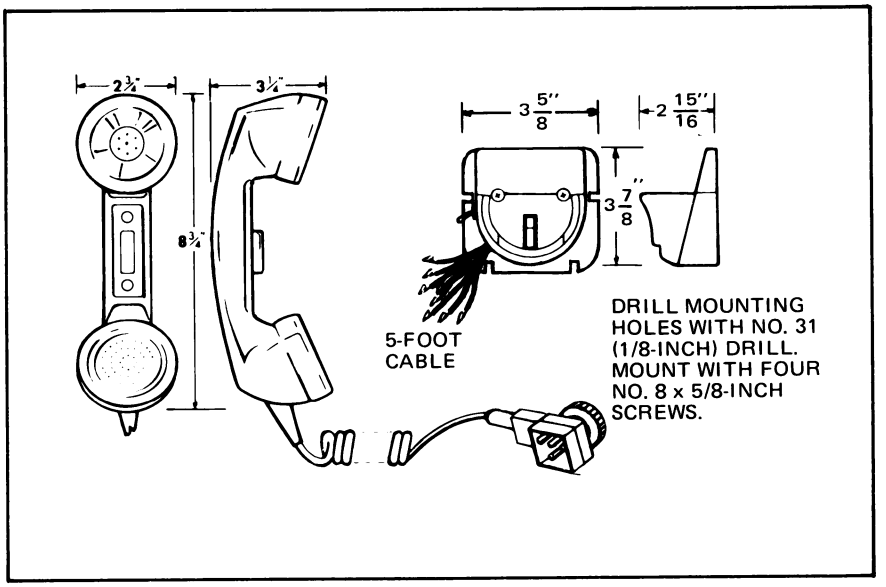


Figure 12. Handset Hookswitch Mounting

WIRE COLOR	CONNECT TO SYSTEMS PLUG
Blue	J701 - 13
Green	J701 - 2
Orange	J701 - 15
Black	J701 - 14
Brown	J701 - 18
Red	J701 - 10

Figure 13. Connections for Handset Hookswitch

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