

Mobile Communications

**RELAY KIT
OPTION SU1C
(19A705499P1)**

UNPACKING AND CHECKING EQUIPMENT

When ready for installation, carefully unpack the equipment. It is recommended that you identify each item in the packing carton and check them off in the following list. If any damage has occurred during shipment, file a claim with the carrier immediately.

PARTS LIST

QUANTITY	GE PART #	DESCRIPTION
1	19A149299P1	Relay 12 VDC, 20A contacts
1	19A149451P2	Fuseholder Kit
1	19A701881P22	Fuse, 1A
5	402484P10	Insul. Tab Receptacle, .032 x .250 in.
6 ft		AWG #18 Black wire with Molex terminal #39-00-0060 crimped to one end
4 ft		AWG #18 Red wire with 3/8 in. Ring term. Crimped to one end (AMP #34115)
1	N193P1412J	#8 x 3/4 sheet metal screw
1	4029387P6	Nut plate for #8 screw

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PLANNING THE INSTALLATION

Before starting, plan your installation carefully. The equipment should be installed neatly, protected from water or moisture damage, easy to service and out of the way of auto mechanics. The installation should not interfere with the safe operation of the vehicle.

CAUTION

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

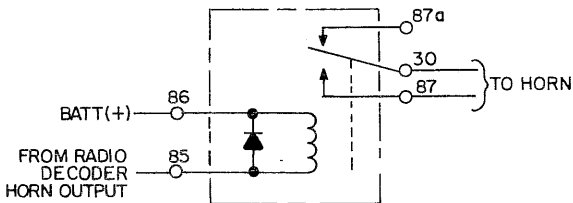
INSTALLATION TOOLS REQUIRED

The tools required for installing the relay kit option are:

*Phillips Screwdriver
Electric drill with #7 bit
Wire cutters
Wire crimpers*

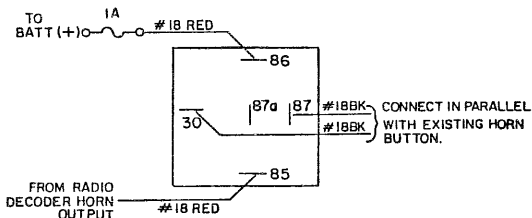
I. INSTALLATION FOR EXTERNAL ALARM (HORN RELAY)

The following procedure is used to apply the relay kit as a horn alert circuit. When controlled by a radio decoder such as a Type 99 decoder or Trunked radio horn control; a contact closure to ground, provided by the decoder, will activate the vehicle horn when a call is received. Refer to the radio LBI for interconnection of the decoder horn output lead.



HORN RELAY SCHEMATIC

1. *Select a location under the dash or in the engine compartment convenient to radio, continuous 12Vdc power source, and horn wiring. Mount the Relay using #8 x 3/4 inch sheet metal screw and nut plate.*



HORN RELAY WIRING DIAGRAM, CONNECTOR END

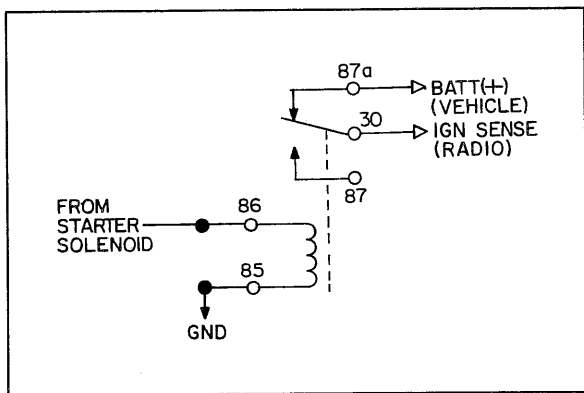
2. *Connect the #18 AWG black wire to the radio decoder horn control lead. (For MVS radios the appropriate connector is precrimped to the wire for insertion into the radio option cable.)*
3. *Route the black wire to the mounted relay, cut to the appropriate length, and crimp one of the 1/4 inch tab receptacles to the wire. Slide the receptacle on relay terminal #85.*
4. *Connect the #18 AWG red wire to a continuous, positive battery source using the precrimped 3/8 inch ring terminal. Route the wire to the relay, cut to length, and crimp a 1/4 inch tab receptacle to the wire end. Slide the receptacle on relay terminal #86.*
5. *Locate an appropriate place to install a fuse assembly on the red wire just installed near the power source. Cut the wire and install the fuse assembly and fuse provided.*
6. *Use two pieces of #18 black wire to connect relay contacts #30 and #87 for horn control. Crimp 1/4 inch tab receptacles on the wire for connection to the relay. Connect the other end in parallel with the vehicle horn button.*
7. *Secure all wires and cables installed to prevent any damage from moving parts of the vehicle.*

II. IGNITION SENSE CONTROL INSTALLATION

In some EGE mobile radios, and IGNITION SENSE lead is supplied along with POWER and GROUND leads on the Power Supply cable. This IGN SENSE lead is normally connected to the vehicle's ignition switch so that the radio is off while the vehicle is starting and when the vehicle is off.

There are times, however, when it is desirable to have the radio on when the vehicle is off. This is done by connecting the IGN SENSE lead directly to the battery.

This configuration can lead to occasional corruption of the non-volatile memory during starting transients. There we recommend connecting the IGN SENSE through a relay to the battery using the installation instructions that follow.



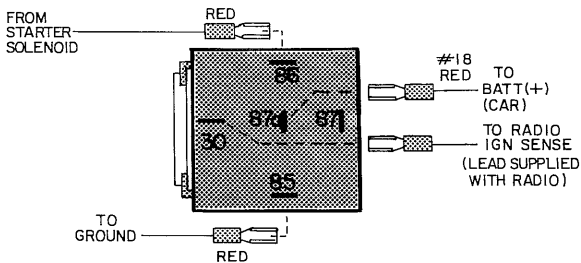
IGNITION SENSE CONTROL SCHEMATIC

NOTE

Connect Pin 86 of the relay to the contact on the starter solenoid that is at battery (+) voltage during starting and low otherwise.

INSTALLATION

- 1. Install the POWER and GROUND leads of the radio as detailed in the instruction manual and cut the jumper between IGN SENSE and POWER leads (if existing).**
- 2. Select a flat surface in the engine compartment near the starter solenoid and a continuous 123 volt power source. Mount the Ignition Sense Relay using the #8 x 3/4 sheet metal screw and nut plate.**
- 3. Install an 18 AWG black wire from any convenient ground point to the relay. At the relay end of this wire, crimp the wire to one of the 1/4 inch tab receptacles. Slide this receptacle on terminal 85 of the relay.**
- 4. Using a DC voltmeter, find a point on the starter solenoid that has 0 volts under all conditions EXCEPT when the ignition switch is in the START position. Install an 18 AWG red wire from this point to the relay. At the relay end of this wire, crimp the wire to one of the 1/4 inch tab receptacles. Slide this receptacle on terminal 86 of the relay.**
- 5. Cut a length of wire from the IGN SENSE lead of the radio power cable and install this from any convenient source of positive battery voltage to the relay. At the relay end, crimp a receptacle on the wire. Slide this receptacle on terminal 87A of the relay.**
- 6. Crimp a receptacle on the IGN SENSE lead from the radio. Slide this receptacle on terminal 30 of the relay.**
- 7. Secure all wires and cables installed to prevent any damage from moving parts of the vehicle.**



IGNITION SENSE CONTROL WIRING DIAGRAM



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