

SFGH-100 SIREN & FLASHING LIGHT SYSTEM

Installation & Operation

The SFGH-100 is a precision built, full function 100 watt siren system that incorporates both an alternating headlight and grille light flasher in the same unit. The SFGH-100 draws no current unless a function is selected, so there is no battery drain. The Amplifier/Flasher unit mounts in the trunk. Quick connection allows the remotely controlled siren, public address system, air horn, and flashers to be installed easily and quickly.

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING THE INSTALLATION

INSTALLATION

Proceed as follows referring to figure (1) on back page.

1. UNPACKING

- A. Carefully remove the control head box, power cable, accessory harnesses, and Amplifier/Flasher unit from the shipping carton. Remove the speaker from its shipping carton.

2. MOUNTING

- A. The Amplifier/Flasher unit should be located in the trunk on the same side of the vehicle as the battery. Preferred locations are under the rear deck or on the rear seat supports. Mount the unit using 4 sheet metal screws. Be careful that the screws don't intrude into the passenger compartment. Keep in mind the location of connectors P1, P2, and P3 and where their cables will run. **CAUTION: The transistor heatsinks must NOT touch ground. If possible, the unit should be mounted to a metal surface for adequate ventilation and heat dissipation.**
- B. Find a suitable location for speaker mounting, away from heat, moving parts, and as protected as possible. On some vehicles this can be in front of the radiator, on others behind the bumper, or between the tire and bumper. Mount the speaker securely, IT IS HEAVY. Use at least 1/4 x 20 bolts & nuts. Route the plug-in connector into the engine compartment.

3. POWER CABLE INSTALLATION

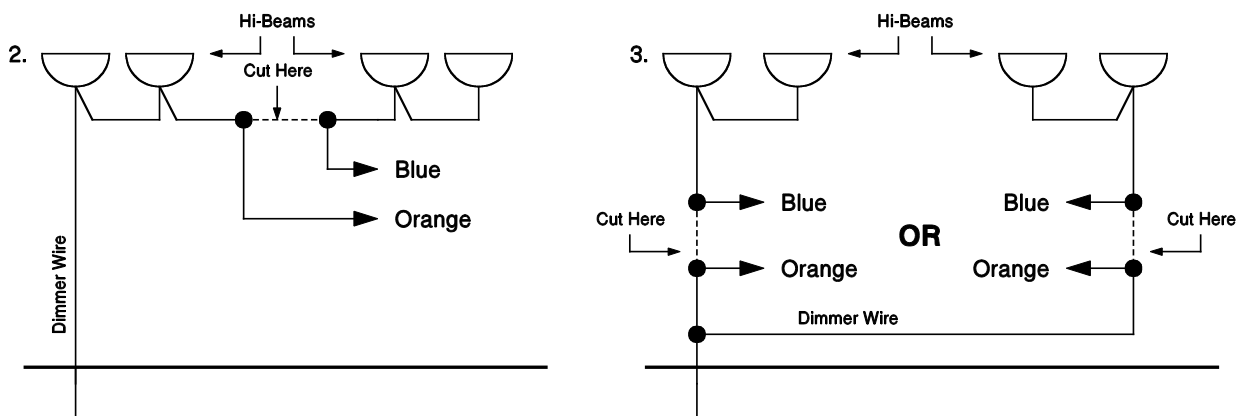
- A. The power cable included in the SFGH-100 system is equipped with a 12 pin socket on one end (P2) and butt connectors for the engine compartment, on the other.
- B. Find a large grommet, or drill a 1 1/4" hole in the vehicle's firewall on the same side as the battery. If a hole was drilled use a grommet or snap bushing to protect the cable. Route the cable to the trunk, leaving the WHITE sense wire in the front seat area for later connection. Plug the power cable into its' mating connector (P2) on the Amplifier/Flasher unit. Be sure to leave enough slack in the cable at the connector so the plug can't pull out.
- C. The black ground wire should be connected to the vehicles chassis with a sheet metal screw and star type lock washer under the terminal. Make sure it is a good clean connection.
- D. Route the speaker wire to the brown and blue/black wires in the power cable and butt connect them together.

- E. Butt connect the battery cable wires to the red and red/black wires on the power cable. Route cable to the battery and connect to the positive (+) terminal, or an auxiliary terminal block as provided some vehicles.
- F. WHITE WIRE (Ignition Sense) is routed to the fuse block or other ignition source. This wire must see +12 volts when the key is turned on or the SFGH-100 will not operate.

CAUTION: The battery cable connector and ignition sense lead are both fused for the SFGH-100's protection. The battery cable fuses are 20 amp. and the ignition sense uses a 3 amp. fuse. Both are standard ATO type. **NEVER REPLACE A FUSE WITH ANYTHING BUT THE PROPER SIZE. SERIOUS DAMAGE COULD RESULT.**

- G. Refer to figures 2 & 3 below. The SFGH-100 flasher splices into the headlight circuit at a single point, and this point is after the headlight wire harness split between the Headlights. The **BLUE & ORANGE** wires in the flasher harness may be installed in either leg of the headlight wiring as shown.

Figures 2 & 3 Location of Slice into Hi-Beam Headlight Wiring:



- H. Alternating lights such as grille lights or deck lights (Caution: 8 amps. maximum) may be connected to the **BLACK** and **YELLOW** wires from the flasher harness.. Use silicone filled butt connectors and be sure to make solid connections. If Not Used the Yellow and Black wire MUST NOT touch ground.

4. CONTROL HEAD & CABLE INSTALLATION

- A. Find a location from which the SFGH-100 Control Head can easily be operated, and concealed if necessary. If the Control Head mounting bracket is used, mount it to the Control Head using the 6-32 x 3/8" thread cutting screws provided. Carefully mount the bracket.
- B. Route the 12-pin plug (P1) under the carpet to the trunk, and plug it into the Amplifier/ Flasher unit P1 connector. Be sure to strain relieve the cable.
- C. If radio rebroadcast is desired, connect the 22ga. zip cord provided across the speaker terminals of the radio to be monitored. The rebroadcast feature can be disabled by unplugging the in-line 2-pin connector.

OPERATION

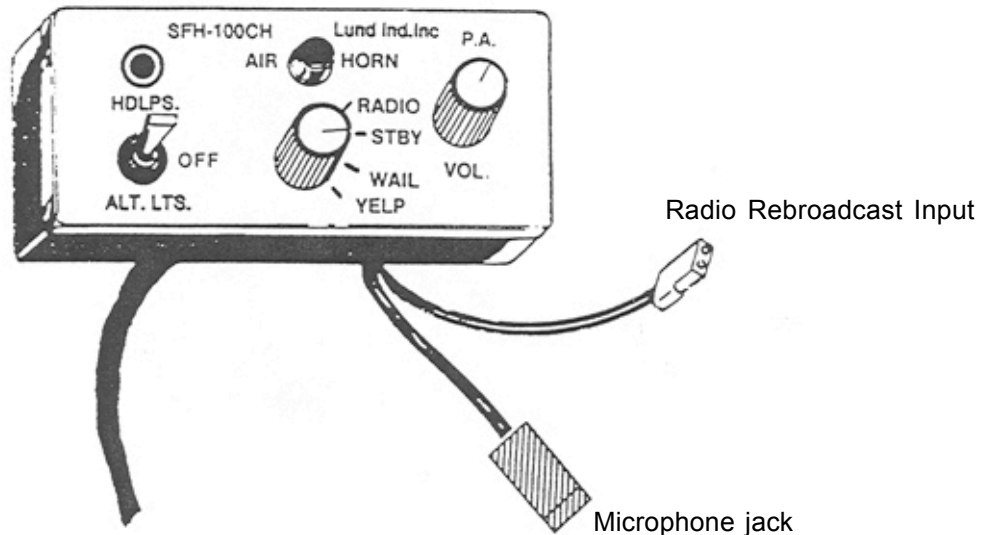
Refer to figure 4 below.

All functions of the SFGH-100, except on & off, are controlled from a small Control Head. The vehicles key will turn the unit on & off. The SFGH-100 draws no current unless a function is activated. Control Head functions are as follows:

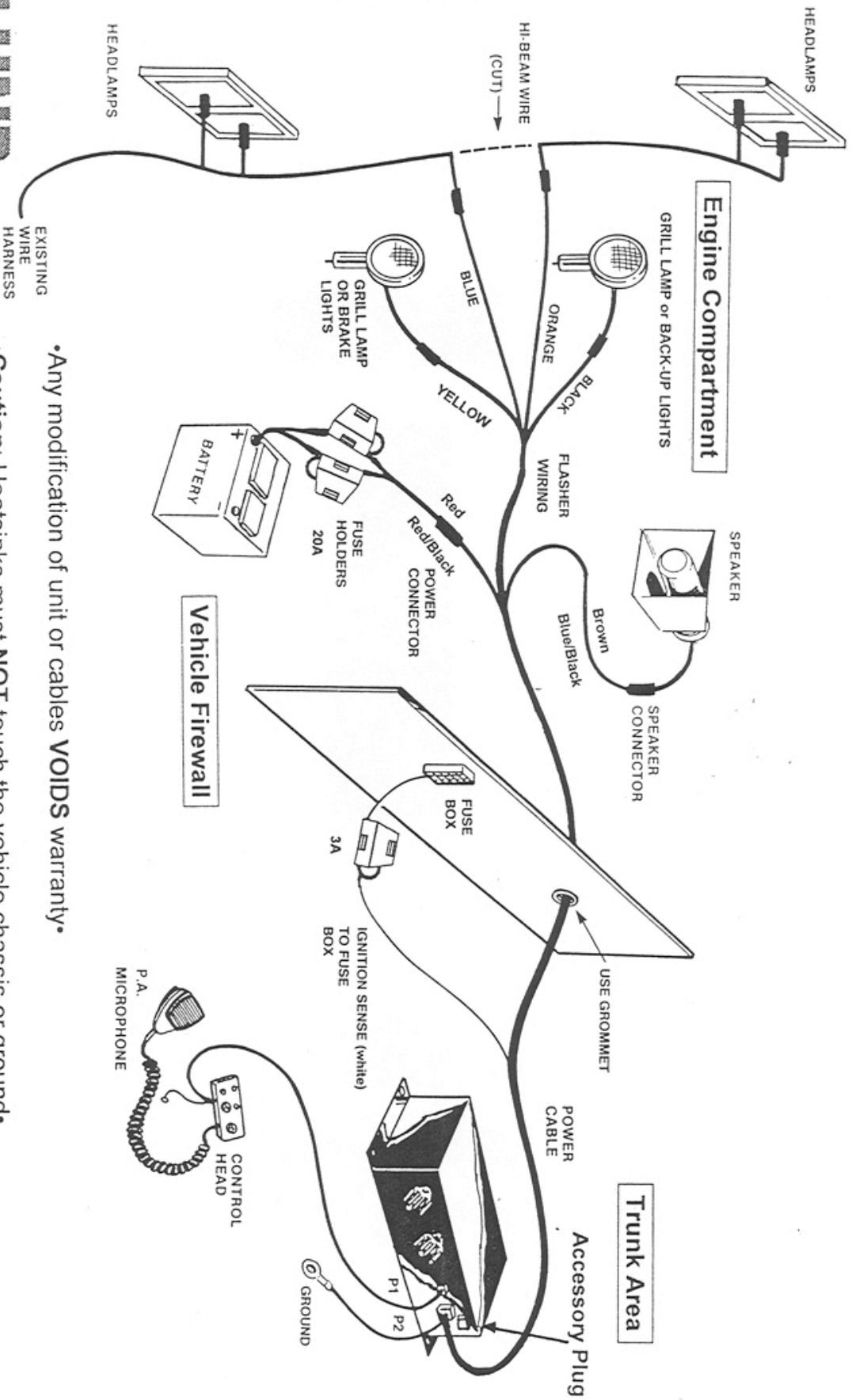
- HDLPS & ALT LTS** In the **ALT LTS**. (Down) position the grille or other lights are flashing. In the **HDLPS & ALT LTS** (Up) position the headlights are also flashing. When the flasher is in the **ALT. LTS.** or OFF position the Headlights will function normally. When the Headlights are flashing, using the bright lights will override the flashers operation. An indicator above the switch shows when either flasher is on.
- RADIO** Provides radio rebroadcast through the SFGH-100 siren speaker. Rebroadcast volume is controlled by the P.A. Volume Control, and should always be set to its' lowest position then advanced to a comfortable level. 2-way radio volume should be set at approximately 1/3 to avoid overdriving the amplifier and causing distortion.
NOTE: The amplifier is ON in this position and drawing current.
- STBY** Standby position of the siren system. All functions are ready. **Switch should normally be in this position.**
- WAIL** Provides a slow, continuous rising & falling sound.
- YELP** Provides a fast, continuous rising & falling sound.
- P.A. VOLUME** Provides volume control of the Public Address system and radio rebroadcast. Keying the P.A. microphone overrides all siren functions, allowing its' operation while the siren is in the **WAIL** or **YELP** modes.
- AIR HORN** Pressing this button provides a simulated air horn sound. AIR HORN overrides all siren functions and the P.A. system.

If there are any questions concerning the installation or operation of the **SFGH-100** system, please call the factory and service center at (847) 459-1460 or Outside Illinois (800) 504-1460 and we will be happy to assist you.

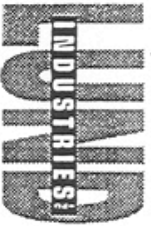
CONTROL HEAD (FIG. 4)



SFGH-100 WIRING DIAGRAM
(fig. 1)

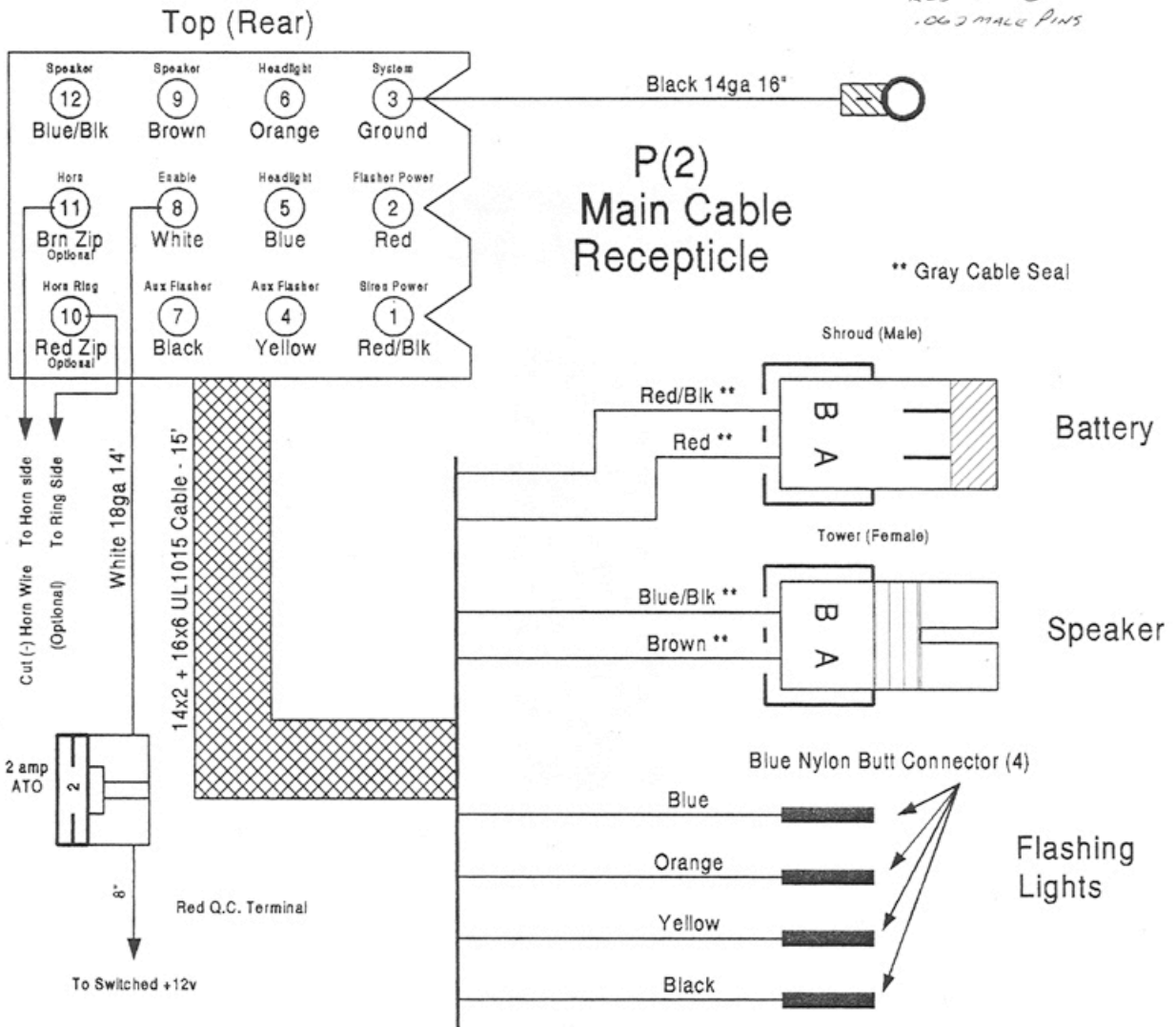


- Any modification of unit or cables **VOIDS** warranty.
- **Caution:** Heatsinks must **NOT** touch the vehicle chassis or ground.



303 MESSNER DRIVE • WHEELING, ILLINOIS 60090 847-459-1460 • FAX 847-459-1569

6 PIN AUX CONTROL CABLE
 BRN/RED ZIP CORD
 BRN PIN 6
 RED PIN 3
 .062 MALE PINS



K2 Color Code

Lund Industries, Inc. 7/2/90
 Rev.3/27/97

SFGH-100 Main Cable Construction