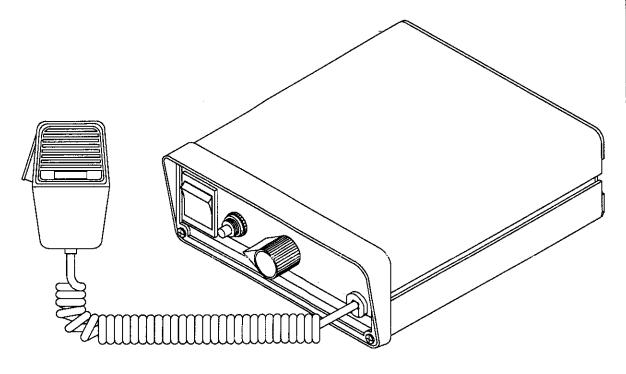
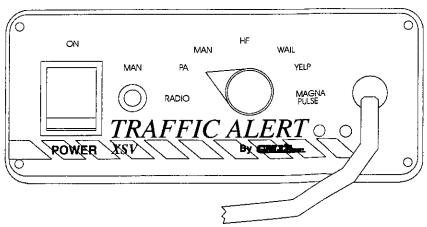
Installation And Operating Manual For The Galls 295HFG Siren





GALL'S TNC

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Installation...

The 295HFG, although technologically advanced, is simple to install. An aftermarket center console is recommended for the mounting location of the 295HFG. This not only allows the driver to reach the controls easily, but also keeps the unit safely out of the path of the vehicle's SRS air-bag. Follow the console manufacturer's instructions for mounting information.

If a console-type mount is not possible, the 295HFG includes a bail strap mounting kit for over- or under-dash mounting. *Important Note!* If dash mounting is chosen, the installer *must* confirm that the unit is not being installed in an air-bag deployment zone. Failure to do so could result in the interference of the air-bag's ability to function properly. The air-bag deployment zones can be found in the vehicle's owner manual.

The following steps will guide you through the installation process:

Connecting The 295HFG Power & Ground wires (Red and Black)...

RED (Power) and BLACK (Ground)

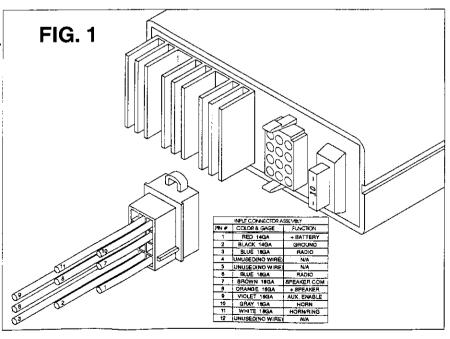
- Remove the driver's side front seat.
- 2. Remove the front, driver's side rocker sill plate and kick panel.
- 3. Fold back the floor covering so that access is gained to the factory wire harness routed under the driver's seat area.
- 4. Insert the wiring harness into it's port as shown in Fig. 1.
- 5. Extend the two RED and two BLACK wires toward the sill plate location. Follow the same path as the factory wire harness.

WARNING: All customer supplied wires that connect to the POSITIVE (+) terminal of the battery must be sized to supply at least 125% of the maximum operating current and be fused "at the battery" to carry that load!

- 6. Continue to follow the factory harness through the firewall. To pass the RED and BLACK wires through, it may be necessary to drill a hole in the firewall. If so, be absolutely sure that there are no components that could be damaged by drilling. After the hole is drilled, insert a grommet to protect the wires.
- 7. Route the RED and BLACK wires along the factory harness towards the battery.
- Install a 15 amp fuse block (user supplied) on the end of the RED wire.

Note: Remove the fuse from the fuse block before connecting any wires to the battery!

9. Connect the fuse block wire to the POSITIVE (+) terminal on the battery. There must not be more than two (2) feet of wire between the fuse block and the battery. As the wire between the fuse and the battery is "unprotected", do not allow this wire to come in contact with any other wires!



10. Connect the BLACK wire to the factory chassis ground, adjacent to the battery.

Connecting The 295HFG Speaker Wires (Orange & Brown)...

- Route the ORANGE and BROWN wires toward the vehicle's siren speakers.
- Connect the ORANGE wire to the POSITIVE speaker connection on speaker #1.
- Connect the BROWN wire to the NEGATIVE speaker connection on speaker #1.

Connecting The 295HFG Horn Relay Wires (White & Grey)...

- 1. Route the WHITE and GREY wires along the factory wire harness and through the firewall at the same point as the RED and BLACK wires.
- Locate your vehicle's horn relay and route the WHITE and GREY wires to this. If possible, follow the factory wire harness to this relay.
- Locate the wire that connects the vehicle horn to the horn relay.
- Cut this wire.
- Connect the WHITE wire to the wire coming from the horn relay.
- 6. Connect the GREY wire to the wire coming from the horn.

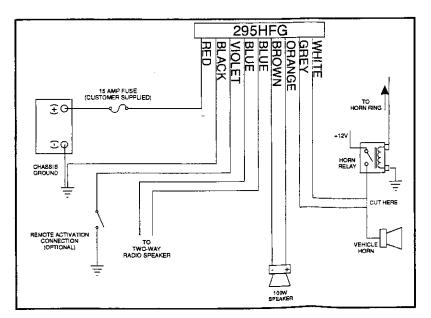
Note: The two (2) remaining BLUE wires are used to connect your two-way radio's external speaker to the 295HFG for radio re-broadcast. This is an optional connection and does not effect the other operations of the 295HFG.

Note: Radio re-broadcast will <u>NOT</u> work with amplified remote speakers! If your remote speaker is amplified (I.E.: contains a power amp circuit in the speaker assembly), do not enable the radio re-broadcast feature.

- Locate the two wires that connect the external speaker to the two-way radio.
- 2. Cut one of these wires and splice one of the BLUE wires into this circuit.
- Cut the remaining speaker wire and splice the remaining BLUE wire into this circuit.

Connecting The 295HFG To A Remote Control-head (optional)...

The 295HFG may be connected to an existing control-head, such as the Whelen PCC-S9N or equivalent. This is an optional connection that enables the WAIL tone to be activated through the use of a PCC-S9N button or switch. If this connection is not chosen, cut the VIOLET wire and cap the remaining stub to prevent accidental grounding of the wire.



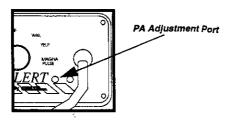
295HFG WIRNG DIAGRAM

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To Adjust The PA and Radio Repeat Levels

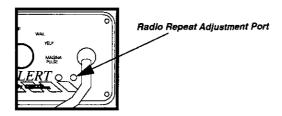
Before using the 295HFG, the PA and Radio Repeat output volume must be adjusted to satisfactory operating levels. To adjust these levels, a small flat blade screwdriver is needed.

PA Volume



Locate the PA adjustment port (potentiometer) as shown. With the vehicle in an enclosed area, turn the Rotory Knob to PA and speak into the microphone. While speaking, insert the screwdriver and turn in a clockwise direction to increase the volume. Continue to increase the PA volume until audio feedback occurs. Turn the screwdriver in a counter-clockwise direction to eliminate feedback and set the PA level to maximum volume.

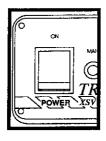
Radio Repeat Volume



Locate the Radio Repeat adjustment port (potentiometer) as shown. Set the volume level of the vehicle's twoway radio to it's normal operating volume. Turn the Rotory Knob to RAD to activate Radio Repeat. Insert the screwdriver in the Radio Repeat adjustment port and turn in a clockwise direction to increase the volume to it's maximum desired volume.

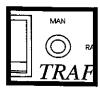
Operating the 295HFG controls...

Power Switch



This switch has two positions: Down (295HFG - Off) and Up (295HFG - On). When this switch is in the Off position, the WS295HFG will not function. When the switch is in the On position the siren is functional and may be activated at the operator's discretion. **NOTE:** If the 295HFG is connected to the vehicle's horn ring circuit, the vehicle horn is disabled when the 295HFG power switch is in the ON position.

MAN Button



The Manual button generates a variety of tones, depending on what position the Rotary knob is in. For further explanation of this button's function, refer to the Rotary knob section of this manual.

Rotary Switch



The Rotary Knob controls the siren and PA (Public Address) functions of the 295HFG. There are 7 positions that may be selected. Each position and it's function is outlined below:

RAD (Radio Repeat) - When the rotary knob is in the RAD position, any signal that is received by the vehicle's two-way radio will be simultaneously broadcast over the vehicle's loudspeaker (the 295HFG must be connected to the two-way radio as outlined in this manual). This function overrides any other siren function.

PA (Public Address) - When the rotary knob is in the PA position, public address functions are operational. Messages may be broadcast over the vehicle's loudspeaker when the 295HFG microphone is in use. If the Manual button is pressed while the rotary knob is in this position, an "air horn" siren tone will be generated by your vehicle's loudspeaker. This tone is generated until the Manual button is released. The "air horn" may also be generated by pressing the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG).

MAN (Manual Siren) - When the rotary knob is in the MAN position, pressing the Manual button generates a tone that rises in pitch to a pre-set level. This tone is generated for as long as the Manual button is pressed. The same tone may be generated by pressing the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG). Please note that the 295HFG microphone will override the siren function.

HF (Hands Free Operation) - When the rotary knob is in the HF position, the siren functions of the 295HFG are placed in a stand-by mode. Siren tones are activated by a single "tap" on the MAN button or a single "tap" on the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG). The first "tap" produces a "Wail" tone (a steady, rise and fall tone). A second "tap" produces a "Yelp" tone (a fast, rise and fall tone). A third "tap" produces a "MAGNA PULSETM" tone (an extremely fast, rise and fall tone). The next "tap" returns the siren to a "Wail" tone and the cycle repeats itself. Two quick, successive "taps" will stop the siren.

WAIL (Wail Tone) - When the rotary knob is in the WAIL position, a steady, rise and fall tone is produced. A single "tap" on the MAN button or a single "tap" on the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG), changes the siren tone to a "Yelp" pattern (a fast, rise and fall tone). A second "tap", and the siren returns to a "Wail" tone. Please note that the 295HFG microphone will override the siren function.

YELP (Yelp Tone) - When the rotary knob is in the YELP position, a fast, rise and fall tone is produced. Pressing the MAN button or the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG), changes the siren tone to a simulated air horn tone for as long as the button is pressed. Releasing the button causes the siren to return to the Yelp tone. Please note that the 295HFG microphone will override the siren function.

MAGNA PULSE (MAGNA PULSE™ Tone) - When the rotary knob is in the MAGNA PULSE position, an extremely fast, rise and fall tone is produced. A pressing the MAN button or a single "tap" on the vehicle's steering wheel horn button (if the vehicle's horn has been wired to the 295HFG), changes the siren tone to a simulated air horn tone for as long as the button is pressed. Releasing the button causes the siren to return to the "MAGNA PULSE™" tone. Please note that the 295HFG microphone will override the siren function.