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OG-6H90 System with Hi/Lo option Installation Guide

Safety First

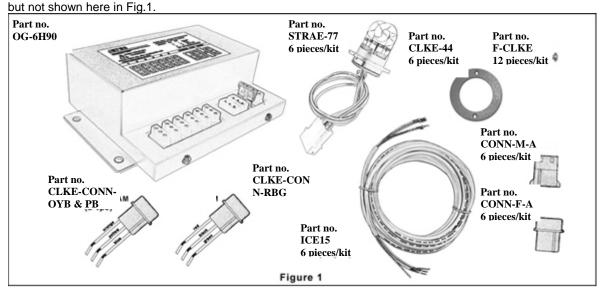
This installation guide is intended to provide all the necessary information for installing OG-6H90 system properly and safely. Before beginning the installation and/or operation of OG-6H90, the installer must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital
 parts could be damaged. Check both sides of the mounting surface before drilling. Also de-burr any holes and remove
 any metal shards or remnants. Install grommets into all wire passage holes.
- Do not install this product or route any wires in the deployment area of your air bag; as it will damage or reduce the
 effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your
 vehicle owner's manual for the air bag deployment area. The User/Installer assumes full responsibility to determine
 proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.
- For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The
 recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post.
- If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.
- Do not attempt to activate or control this device in a hazardous driving situation.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.

FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!

The OG-6H90 Strobe Power Supply, like other strobe units can be installed in many different types of vehicles. The guidelines for the installation of this product are written so that no matter what vehicle is being used, the installation and operation will be simple.

I. Ensure that all the necessary parts are enclosed; refer to Fig.1. Other optional accessories may be enclosed in the package,



II. Mount the OG-6H90 Power Supply.

The most common choice for a mounting area would be a trunk or similar compartment. However, due to the wide variety of vehicles a OG-6H60 can be installed, this is not always possible. The following guidelines will help the installer select an acceptable alternative:

- A) This unit should be mounted on a metal surface to aid heat dissipation. Be sure that this surface is not one that either generates or is exposed to excessive heat during normal operation of the vehicle.
- B) Do not select a location where the power supply will be exposed to potential damage from any unsecured or loose equipment in the vehicle.
- C) Be sure the area selected will not allow the unit to be exposed to water.
- D) When routing the power supply's wires, it is important to choose a path that will keep these wires away from excessive heat and from any vehicle equipment that could compromise the integrity of the wires (ex. Trunk lids, door jams, etc).
- E) When the best mounting location has been determined, securely fasten the OG-6H90 Power Supply to its mounting surface.

WARNING! The Strobe Light Power Supply is a high voltage device. Do not touch or remove strobe light head while in operation. Wait 10 minutes after disconnecting the unit from its power source before starting work or troubleshooting on power supply or system.

Caution: As it will be necessary to drill holes into the mounting surface, the installer MUST be sure that no vehicle components or other vital parts could be damaged from drilling. Check both sides of the mounting surface before drilling.

- 1. Position the Power Supply (part no. OG-6H90) in its proposed mounting location to ensure that it fits properly. Use the power supply as a template to mark the hole locations to be drilled.
- 2. Remove the OG6H90 from its mounting area and drill holes suitable to use with 1/4" bolts.
- 3. Return the unit to its mounting location and secure the bolts accordingly.

III. Install the Strobe Bulbs.

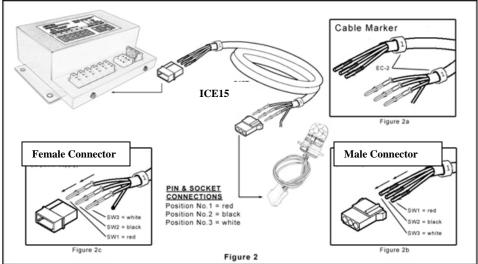
The most common choice for installing the Strobe Bulbs (part no. STRAE-77) is in the Turn Signal, Tail Lights, or Head Lights. However, due to different user preferences, installation in other areas is possible with the use of optional accessories (sold separately).

- 1. Select the areas to install the Strobe Bulbs.
- 2. Drill a 1" hole to the housing and fit the Strobe Bulb in this hole with the Washer (part no. CLKE-44) in place. Secure the Strobe Head to the housing by using the screws (part no. F-CLKE).

Note: The Washers (part no.CLKE-44) must be used when securing the Strobe Bulbs to the housings to ensure a tighter fit to keep the Strobe Bulb from coming loose and to keep out moisture.

IV. Connect the Strobe Bulbs to the Power Supply.

- 1. Use Cable Markers (user-supplied) to label both ends of the Cable (part no. ICE15); refer to Fig.2a. This is for easier cable identification when making alterations after installation.
- 2. Connect the Cable (part no. ICE15) to the Male Connector (part no. CONN-M-A) by inserting SW1, SW2, and SW3 individually into each hole in the connector all the way until they lock in place; refer to Fig.2b.



Note: The ends of the Cable (part no. ICE15) are different on both sides; follow closely to Fig.2 to make sure the correct side is used with the Connectors. Improper insertion may be difficult to undo and may cause damage.

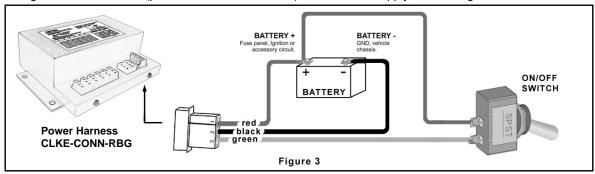
- 3. Plug the Strobe Bulb (part no. STRAE-77) to the Male Connector (part no. CONN-M-A) of the Cable.
- 4. Select the path for the Cables (part no. ICE15) to route from the Strobe Bulbs to the Power Supply.
- 5. Once the cable routing is secured in place, connect the Cable to the Male Connector (part no. CONN-F-A) by inserting SW1, SW2, and SW3 individually into each hole in the connector all the way until they lock in place; refer to Fig.2c.
- 6. Plug the Female Connector (part no. CONN-F-A) to the Power Supply according to flashing patterns that is required.

Note: Keep the following in mind.

- ♦ Heads connected to outlets 1, 3 flash at the same time.
- ♦ Heads connected to outlets 2, 4 flash at the same time.
- ♦ Heads connected to 1, 3 alternate with heads 2, 4.

V. Wiring the OG-6H90 Power Harness.

Plug the Power Harness (part no. CLKE-CONN-RBG) to the Power Supply; refer to Fig.3.



2. Extend the BLACK and RED wires of the Power Harness (part no. CLKE-CONN-RBG) towards the battery; and extend the GREEN wire towards the area where the user-supplied ON/OFF switch will be installed.

WARNING! All user-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 fused "at the battery" to carry the load!

3. Connect RED wire to the POSITIVE (+) terminal on the battery or to a fuse panel circuit rated at least 20 AMPS.

Note: If connecting to a fuse panel, do not install the fuse until all of the wire connections are completed.

4. Connect the BLACK wire to the NEGATIVE (-) terminal on the battery or directly to the factory chassis ground adjacent to the battery.

Note: Use the correct size wire for power connections. The length of the wires determines the size needed.

- ♦ 1 to 7 ft. use 18AWG wire.
- ♦ 7 to 14 ft. use 16AWG wire.
- ♦ 14 to 25 ft. use 14AWG wire.
- \$\delta\$ 25 to 35 ft. use 12AWG wire.
- 5. Connect the GREEN wire to a user-supplied ON/OFF switch or to SSWE-6 switch for the Hi/Lo option (refer to Section VII).

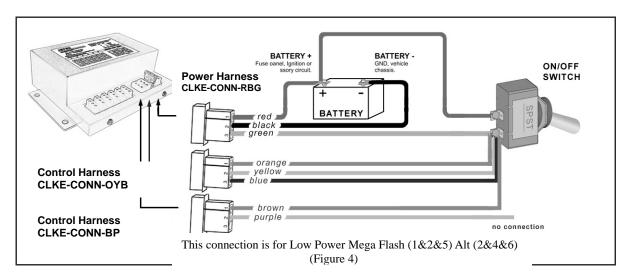
VI. Wiring the OG-6H90 Control Harness.

The Control Harness (part no. CLKE-CONN-OYB & CLKE-CONN-PB) are required to activate many different flash patterns. For other FP (Flashing Patterns):

- 1. Plug the Control Harnesses (part no. CLKE-CONN-OYB & CLKE-CONN-PB) to the Power Supply; refer to Fig.4.
- 2. Combination of Orange, Yellow, Bleu, Purple wires allow for different flash patterns, see the table below. The Green wire of

the CLKE-CONN-RBG enables the Hi/Lo power function. When it is off, the unit is in the High power mode; otherwise, it is in the Low power mode.

Warning: Do not activate any flash patterns using more strobe bulbs than are installed, i.e. do not activate a 6 bulb flash pattern with only 4 bulbs connected; and do not activate a 4 bulb flash pattern with only 2 connected. This power supply is equipped with an active current sensor, which will reduce the output power when only 2 outlets are active to preserve the power dissipating property of the bulbs.



3. Select the desired flash pattern in the Flash Pattern Table below.

Flash Pattern						
FP#	Purple	Brown	Blue	Yellow	Orange	Function
1	i di pic	Brown		TCHOW	Orange	SHUTDOWN
2					POWER	Quad Flash, 1 Alt 2
3				POWER		Quad Flash, 3 Alt 4
4				POWER	POWER	Quad Flash, (1&3) Alt (2&4)
5			POWER			Quad Flash, 5 Alt 6
6			POWER		POWER	Quad Flash, (1&5) Alt (2&6)
7			POWER	POWER		Quad Flash, (3&5) Alt (4&6)
8			POWER	POWER	POWER	Quad Flash, (1&3&5) Alt(2&4&6)
9		POWER				SHUTDOWN
10		POWER			POWER	Quintuple Flash, 1 Alt 2
11		POWER		POWER		Quintuple Flash, 3 Alt 4
12		POWER		POWER	POWER	Quintuple Flash, (1&3) Alt (2&4)
13		POWER	POWER			Quintuple Flash, 5 Alt 6
14		POWER	POWER		POWER	Quintuple Flash, (1&5) Alt (2&6)
15		POWER	POWER	POWER		Quintuple Flash, (3&5) Alt (4&6)
16		POWER	POWER	POWER	POWER	Quintuple Flash, (1&3&5) Alt (2&4&6)
17	POWER					SHUTDOWN
18	POWER				POWER	Mega Flash, 1 Alt 2
19	POWER			POWER		Mega Flash, 3 Alt 4
20	POWER			POWER	POWER	Mega Flash, (1&3) Alt (2&4)
21	POWER		POWER			Mega Flash, 5 Alt 6
22	POWER		POWER		POWER	Mega Flash, (1&5) Alt (2&6)
23	POWER		POWER	POWER		Mega Flash, (3&5) Alt (4&6)
24	POWER		POWER	POWER	POWER	Mega Flash, (1&3&5) Alt (2&4&6)
25	POWER	POWER				SHUTDOWN
26	POWER	POWER			POWER	Double Flash, 1 Alt 2
27	POWER	POWER		POWER		Double Flash, 3 Alt 4
28	POWER	POWER		POWER	POWER	Double Flash, (1&3) Alt (2&4)
29	POWER	POWER	POWER			Double Flash, 5 Alt 6
30	POWER	POWER	POWER		POWER	Double Flash, (1&5) Alt (2&6)
31	POWER	POWER	POWER	POWER		Double Flash, (3&5) Alt (4&6)
32	POWER	POWER	POWER	POWER	POWER	Double Flash, (1&3&5) Alt (2&4&6)

ALT: Alternates

- 4. Connect the wires marked POWER to the "load" side of the ON/OFF switch.
- 5. The remaining unused wires may be removed or left in place for future alterations.

VII. SSWE-6 Switch Connection Diagram.

SSWE-6 Switch with 4 buttons; refer to Fig.5. With this switch, the user can switch between all the different flash patterns.

