

WHELEN[®]

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Installation Guide SSNF800 Series Sun / Snow / Fog Strobe / Halogen Beacon

Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator 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 by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr the holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**
- **If this product is mounted with tape or Velcro™, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.**
- **Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area 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 owners 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 (this does not include products that use cigar power cords).**
- **If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device to be operated safely in any driving condition.**
- **Do not attempt to activate or control this device in a hazardous driving situation.**
- **This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.**
- **Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.**
- **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 SSNF800 features a base which may be used for either Flange Mount, 1" (NPT) Pipe Mount, or Permanent Mount. The threading for a 1 inch (NPT) pipe mounting is precast into the base. Magnetic and Telescoping Pole Mount models are also available. The Telescoping Pole Mount is designed for custom installation.

WARNING: The use of any magnetically mounted warning beacon on the outside of a vehicle while in motion is not recommended and is at the sole discretion and risk of the user.

WARNING: The strobe light power supply is a high voltage device. Do not touch or remove strobe tube assembly while unit is in operation. Wait at least 10 minutes after turning off power before starting work or any trouble shooting on the unit.

Installation: FLANGE MOUNT

1. Using the base seal as a template, mark the 3 mounting holes and wire access hole onto the mounting surface.
2. Drill holes for the 10 X 5/8" mounting screws (Qty. 3).
3. Drill the wire access hole using a 1/2" drill. Install a rubber grommet (customer supplied) in the wire access hole to protect the wires.
4. Place the base seal onto the mounting surface aligned with the mounting holes. After connecting the wires (*do not turn power on*), feed them through the wire access hole. Place the beacon onto the mounting position and slip the mounting collar over to fit around the base of the unit. **NOTE:** If you dont have the DMS dome you will have to remove the dome to get the collar on. Align the 3 holes in the mounting collar with the 3 holes in the mounting surface. Using the 3 enclosed mounting screws, secure the beacon to the mounting surface and replace dome.

Installation: PIPE MOUNT

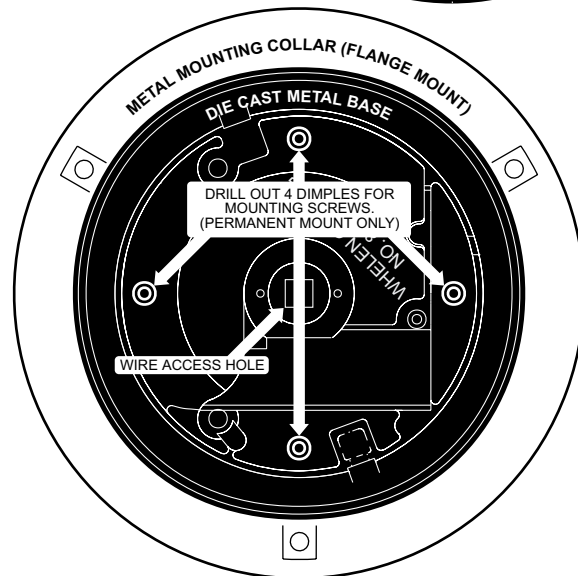
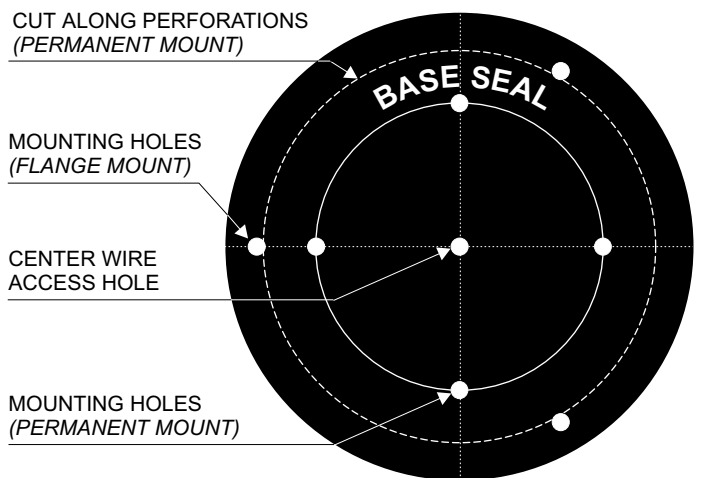
1. Feed power cable through the 1 inch pipe and connect the cable to the wires of the strobe beacon.
2. Screw the beacon to the threads on the 1 inch pipe, taking precaution not to damage the connected power wires.

Installation: PERMANENT MOUNT

This is a tamper proof way to mount the beacon. The mounting screws are hidden inside the base, and are not accessible from the outside.

1. Remove the optic dome and separate the PCB assembly from the base.
2. Locate the 4 dimples within the perimeter of the die-cast base and drill them out for the mounting screws.

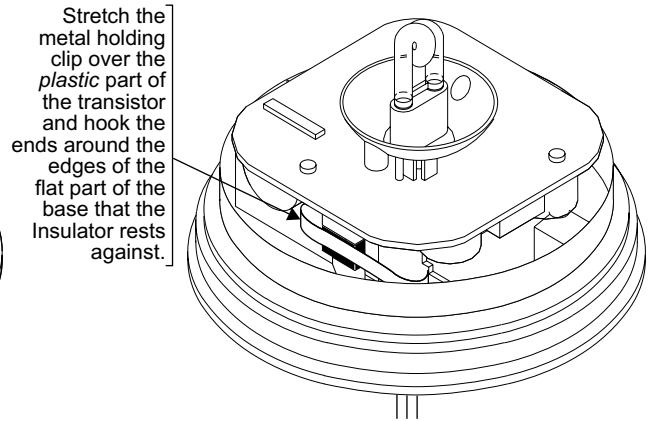
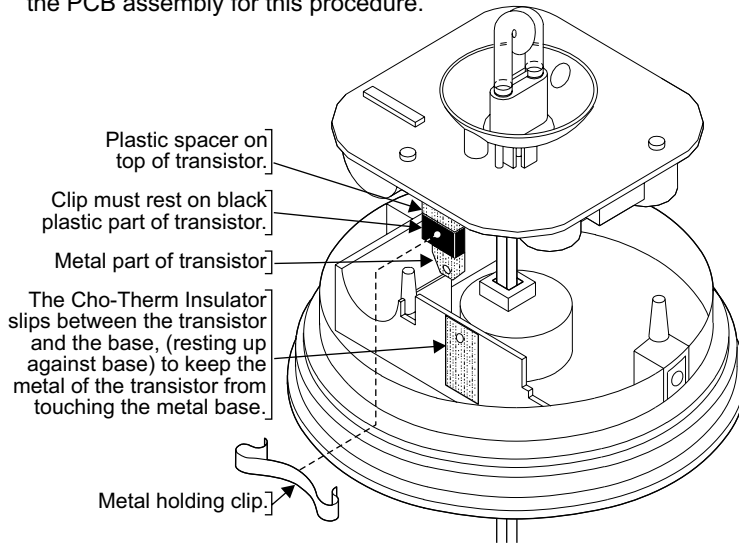
3. Using the base as a template mark the four mounting holes and the wire access hole onto the mounting surface.
4. Drill the mounting holes into the mounting surface to fit the (customer supplied) mounting screws. Drill the wire access hole using a 1/2 inch drill. Install a rubber grommet (customer supplied) in the wire access hole to protect the wires.
5. The base seal will be used between the beacon base and the mounting surface. Cut the gasket along the perforation to fit the diameter of the base.
6. After connecting the beacon power cable, feed the wires through the cable access hole and place the base and gasket on the mounting surface, lined up with the mounting holes. Secure beacon to mounting surface and reassemble.



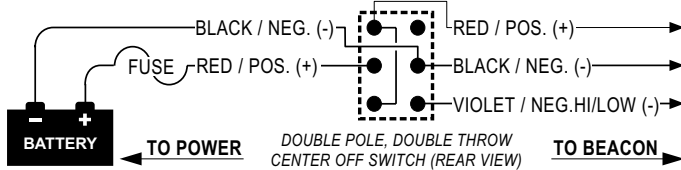
ASSEMBLY INSTRUCTIONS OF THE PCB ASSEMBLY TO THE DIE CAST BAST, TO ENSURE PREVENTION OF AN ELECTRICAL SHORT CIRCUIT BETWEEN THESE TWO PARTS.

NOTE: The PCB assembly is shown here detached from the base for illustration purposes only. It is not necessary to remove the PCB assembly for this procedure.

IMPORTANT: Do not substitute *any other material* for the Cho-Therm Insulator. The insulator has other properties besides electrical insulation that are necessary for the proper operation of the beacon.



WIRING OF SWITCH FOR HI-LOW OPTION



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 fused at the battery to carry the load.

FUSING: A 2.5 Amp fuse should be used.

Removing Dome & PCB Assembly:

If your beacon has a mounting collar, remove the 3 screws holding it down and remove it. Next remove the two dome screws and remove the dome. Now remove the 3 screws that hold down the PCB assembly and separate it from the base. Remove spring clip and insulator. (See above)

IMPORTANT: Always tape any unused wires.

Choosing a Flash Pattern:

Your beacon comes set for CometFlash. You may permanently change to any of the 3 optional flash patterns by cutting one, or both of the two resistors (R12 and R13) located inside the unit. Use the chart (Fig. 6) that shows which resistors to cut or leave for each flash pattern. You must disassemble the beacon for this operation.

Hi/Lo Intensity Option:

1. Take the dome and strobe power supply assembly apart.
2. Locate the VIOLET (looped) wire, cut it at pin 2, and run it out of the bottom of the unit with the black and red wires.
3. Reassemble the unit. Now, if you ground the VIOLET wire, your light runs at high intensity, and if you tape off the violet wire, your light runs at low intensity. See wiring on page one if you want to install a two position switch to alternate between the two functions.

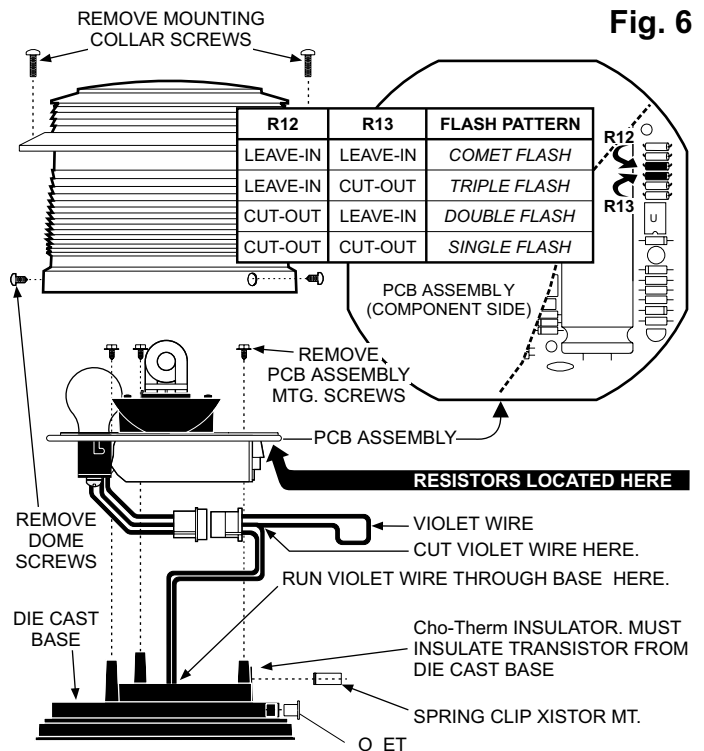
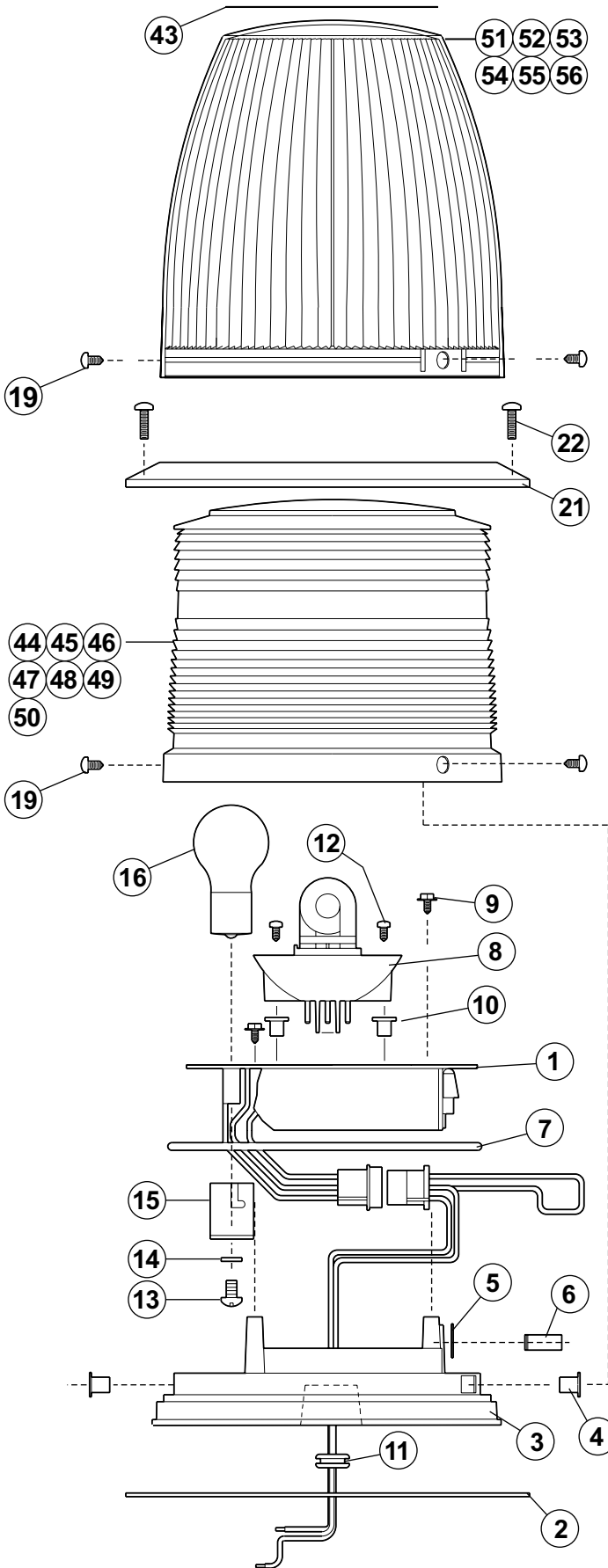


Fig. 6



SSNF800 REPLACEMENT PARTS LISTING

QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
					01-0683384(-)JP	MODEL SSNF800 / PERMANENT MOUNT
					01-0683384(-)JD	MODEL SSNF800 / DASH MOUNT STROBE (DMS)
					01-0683384(-)JM	MODEL SSNF800 / MAGNETIC MOUNT
					01-0683384(-)JX	MODEL SSNF800 / POLE MOUNT
1	1	1	1	1	02-0168709-00	PCB ASSY / MODEL SSNF800 / SUN-SNOW-FOG
—	—	—	1	2	38-0240821-00	BASE SEAL
—	1	1	1	3	06-180842-072	STROBE / MODEL 800 W/1" NPT SILVER BASE
2	2	2	2	4	13-062C40-16J	NUT - NO.6 FASTEX SCREW GROMMET
1	1	1	1	5	56-000000-100	TO-3P INSULATOR
1	1	1	1	6	23-0320760-00	TRANSISTOR MOUNT SPRING CLIP
1	1	1	1	7	38-0441331-00	"O" RING
1	1	1	1	8	36-0342400-00	FLASH TUBE ASSEMBLY / 80DTUBE
3	3	3	3	9	—	6-32 X 5/16 HEX WASHER HD THD FORM
2	2	2	2	10	21-17020602-3	NO.4 FASTEX GROMMET
—	1	1	1	11	21-11091202-0	3/8" GROMMET P/N901132093
2	2	2	2	12	—	NO.4 X 1/2" PPHDSMS
2	2	2	2	13	—	6-32 X 1/4" PHMS SS
2	2	2	2	14	—	NO.6 INT'L TOOTH LOCK WASHER
1	1	1	1	15	33-05642690-0	LAMP SOCKET
1	1	1	1	16	34-0412020-00	LIGHT BULB / GE #1156
2	2	2	2	19	—	PAN HD THD FORMING 6-32 X 1/2"
—	—	—	1	21	11-760897-001	METALLIZED MOUNTING COLLAR
—	—	—	3	22	—	10 X 5/8 PHMS SS
1	—	—	—	24	06-180842-073	SILVER BASE W/7/8-27 THREAD
1	—	—	—	25	02-0262362-03	MAST & CABLE ASSY W/3 CONNECTORS
1	1	1	—	26	39-0403023-04	3 POS F/H SOCKET HOUSING
—	1	1	—	27	—	1/4" SCREW GROMMET
—	1	1	—	28	65-0010192-00	X-80 MAGNET / RB-80 NICKEL PLATED
—	1	1	—	29	—	1/4" SPLIT LOCK WASHER
—	1	1	—	30	—	1/4 X 1 1/4 PHMS
—	1	1	—	31	38-0141595-00	GASKET / FOAM
—	1	1	—	33	04-0110111-00	PORTABLE CORD POLARITY TAG / WHITE
—	1	1	—	34	26-0215001-03	3" TY-WRAP
—	1	1	—	35	69-1340052-00	PORTABLE CIGAR CORD / B-40052
—	OPT	OPT	—	36	69-2310486-00	PORTABLE CIGAR COIL CORD
—	OPT	OPT	—	37	02-0340345-00	PORTABLE CIGAR CORN W/ON/OFF SWITCH
—	—	OPT	—	38	70-0160068-00	DMS HOOD / LOW DOME ONLY
—	—	OPT	—	39	02-0310612-00	BONGEE CORD KIT ASSY
OPT	—	—	OPT	40	07-260948-016	BRANCH GUARD / LOW DOME
OPT	—	—	OPT	41	07-280929-016	BRANCH GUARD / HIGH DOME
OPT	—	—	OPT	42	—	6-32 X 5/8 PAN HD THD FORMING SCREW
OPT	OPT	—	—	43	38-0122559-00	SUN SHADE / HIGH
OPT	OPT	OPT	OPT	44	68-2180452-10	DMS DOME / ROUND BASE / AMBER
OPT	OPT	OPT	OPT	45	68-2180452-20	DMS DOME / ROUND BASE / BLUE
OPT	OPT	OPT	OPT	46	68-2180452-30	DMS DOME / ROUND BASE / CLEAR
OPT	OPT	OPT	OPT	47	68-2180452-40	DMS DOME / ROUND BASE / GREEN
OPT	OPT	OPT	OPT	48	68-2180452-50	DMS DOME / ROUND BASE / RED
OPT	OPT	OPT	OPT	49	68-2180452-06	DMS DOME / ROUND BASE / SPLIT
OPT	OPT	OPT	OPT	50	68-2180452-V0	DMS DOME / ROUND BASE / VIOLET
OPT	OPT	—	OPT	51	68-2161803-A0	LENS ASSEMBLY / AMBER
OPT	OPT	—	OPT	52	68-2161803-B0	LENS ASSEMBLY / BLUE
OPT	OPT	—	OPT	53	68-2161803-C0	LENS ASSEMBLY / CLEAR
OPT	OPT	—	OPT	54	68-2161803-G0	LENS ASSEMBLY / GREEN
OPT	OPT	—	OPT	55	68-2161803-R0	LENS ASSEMBLY / RED
OPT	OPT	—	OPT	56	68-2161803-V0	LENS ASSEMBLY / VIOLET

SPECIFICATIONS

Input Voltage	12.8VDC, +/-20%
Input Current (HI)	2.5 AMPS
Input Current (LO)	1.5 AMPS
Input Power	32 WATTS
Flash Rate	80CFPM +/-5%
Energy	8/3.7/3.7/3.7 Joules
Output Power	25 WATTS