

INSTRUCTIONS
SBW® LUMINAIRE

35, 50, 70 WATT, 120 VOLT

High Pressure Sodium Luminaire
Installation and Maintenance Instructions



GE Lighting Systems, Inc.

Hendersonville, NC 28793-4506

READ THOROUGHLY BEFORE INSTALLING

GENERAL INSTRUCTIONS

The SBW Luminaire with diffuser is designed for both horizontal and vertical wall mounting as well as ceiling mounting. The 70 watt version is designed for horizontal wall mounting only. All units are provided for means to mount to standard electrical boxes.

WARNING

Risk of electric shock
• Turn power off before servicing
– see instructions

WARNING

Risk of fire
• Use supply wire specified on nameplate

MOST DWELLINGS BUILT BEFORE 1985 HAVE SUPPLY WIRE RATED 60C. CONSULT A QUALIFIED ELECTRICIAN BEFORE INSTALLING.

UNPACKING

This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm.

The lamp, back gasket, four diffuser mounting screws (No. 8 captive phillips head) and two housing mounting screws (No. 8 slotted pan head) will be found inside the optical assembly.

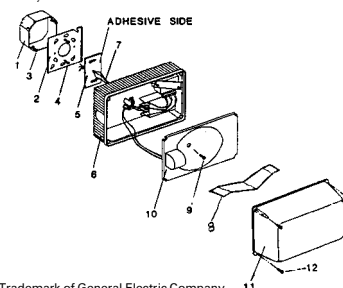


FIGURE 1

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These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to General Electric Company.

- 8) Mount refractor (11) with four refractor mounting screws (12). For wall mount, orient the refractor (11) according to the portion marked top. The housing can be mounted in either horizontal position.
- 9) Fixture power may now be turned ON.
- 10) To provide a rain tight seal between the back of the fixture and the mounting surface of outdoor wall mounted units, caulk the back of the luminaire with generic non-hardening sealer across the top and down both sides.

INSTALLATION OF FIELD INSTALLED P.E. CONTROL KIT

Do not remove knockout unless a photoelectric control is to be installed.

- 1) Turn power OFF, disconnect wiring, and dismount fixture. Remove the knockout (14) on the side of the aluminum housing (Fig. 2) by placing the blade of a screw driver in the groove and tapping with a hammer. Remove flashing if present. The housing can be oriented so that the side with the knockout is away from adjacent walls or other shading obstacles. Shadowing the photocell causes the light to turn on earlier and turn off later.
- 2) Remove nut from P.E. control and push P.E. control (13) through hole, if necessary use washer (16). Attach nut (15) and tighten to secure.
- 3) Make wiring connections (Fig. 3):
 - a. Cut black and white incoming power leads and strip all ends for use with customer furnished insulated connectors.
 - b. Connect the black P.E. lead to the cut and stripped black incoming power lead.
 - c. Connect the red P.E. lead to the black lead from the ballast.
 - d. Reconnect the white incoming power lead adding the white P.E. lead. (Tie 3 white leads together.)
- 4) Remount the fixture according to normal installation instructions.
- 5) When a lightshield is required, push the piece of tubing (17) onto the threaded part of P.E. control.

- 2) Is the lamp damaged? Replace with new lamp. Is lamp seated in socket properly?
- 3) To check photoelectric control:
 - a. During daylight operation, does the lamp come on when the photoelectric control window is covered? If not, retest with a known, good lamp. If it still does not light, replace the control device.
 - b. After having operated correctly in service, does the lamp burn continually all day? If so, replace the control device.
 - c. For newly installed fixtures during daylight operation, does the lamp go out within two minutes after the control window is uncovered? If not, remove the lightshield tube (17) and retest. Replace the control if the problem continues.
 - d. If the lightshield is not over the control, does the unit cycle on and off during normal operation times? If so, it is possible the control is reacting to other light sources, possibly reflected light. Solve this by placing the shield (piece of tubing) over the P.E. control.
- 4) With high pressure sodium (HPS) lamps, the end of life failure mode is one of cycling. The lamp will come on for a short time and then shut off. The initial on/off period may be as long as an hour or more, but will shorten over time to as little as one minute. Replacement of the lamp will correct the cycling condition.
- 5) For replacement parts, contact a local authorized General Electric Company lighting systems distributor.

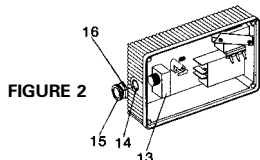


FIGURE 2

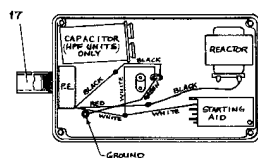


FIGURE 3

MAINTENANCE

For cleaning the diffuser (11) use a solution which is essentially neutral (pH approximately 6-8), nonabrasive, and which contains no chlorinated or aromatic hydrocarbons. Wash thoroughly in this solution using a soft cloth, or brush if necessary. Rinse in clean cold water, drain and wipe dry. Should it be necessary to clean the reflector (10), any dirt which cannot be wiped off with a clean soft cloth may be removed by wetting a clean in a solution of water and nonabrasive household detergent. A clean cloth or chamois moistened in clear water should be used to remove any residual cleaner.

GE Lighting Systems, Inc.
3010 Spartanburg Highway
Hendersonville, NC 28793
(828) 693-2000

35-201578-A1 (11/99) LSD

HOW TO INSTALL (Fig. 1)

CAUTION
Unit will fall if not installed properly
• Follow installation instructions

Make all electrical connections in accordance with the National Electrical Code and any applicable local code requirements.

Verify that supply voltage is correct by comparing it to nameplate.

- 1) Attach mounting plate (2) to electrical box (1) with two No. 8 round head screws (3) provided with electrical box. Flanges of mounting plate should face back of luminaire housing. Thread two No. 8 slotted pan head mounting screws (4) (provided) into mounting holes of plate which correspond to mounting holes in back of housing. Thread mounting screws until several threads are engaged.
- 2) Apply adhesive backed gasket (5) to back of housing (6). Align holes in gasket with mounting holes and wiring exit holes in back of unit. Peel backing and apply adhesive side to housing surface.
- 3) Make wiring connections with customer furnished insulated connectors and push splices into electrical box.
- 4) Unfasten reflector/socket plate (10) by backing out captive screw (9). Lift reflector plate, align housing mounting holes with mounting screws and push unit up to mounting plate. After leveling fixture, secure by tightening mounting screws.
- 5) Replace the reflector plate and retighten captive screw.
- 6) Install lamp.

Use only lamps specified on nameplate. Observe lamp manufacturer's recommendations and restrictions on lamp operation, particularly ballast type, burning position, etc.
Lamp Tightness – Medium Base Lamp: The lamp should be tightened to a light firmness sufficient to depress the center contact.
- 7) On wall mounting units, heat shield (8) seats in grooves on sides of diffuser near top and pointed downward (shown in Figure 1). For ceiling mounting, heat shield is not used.