ITEM # 0090952

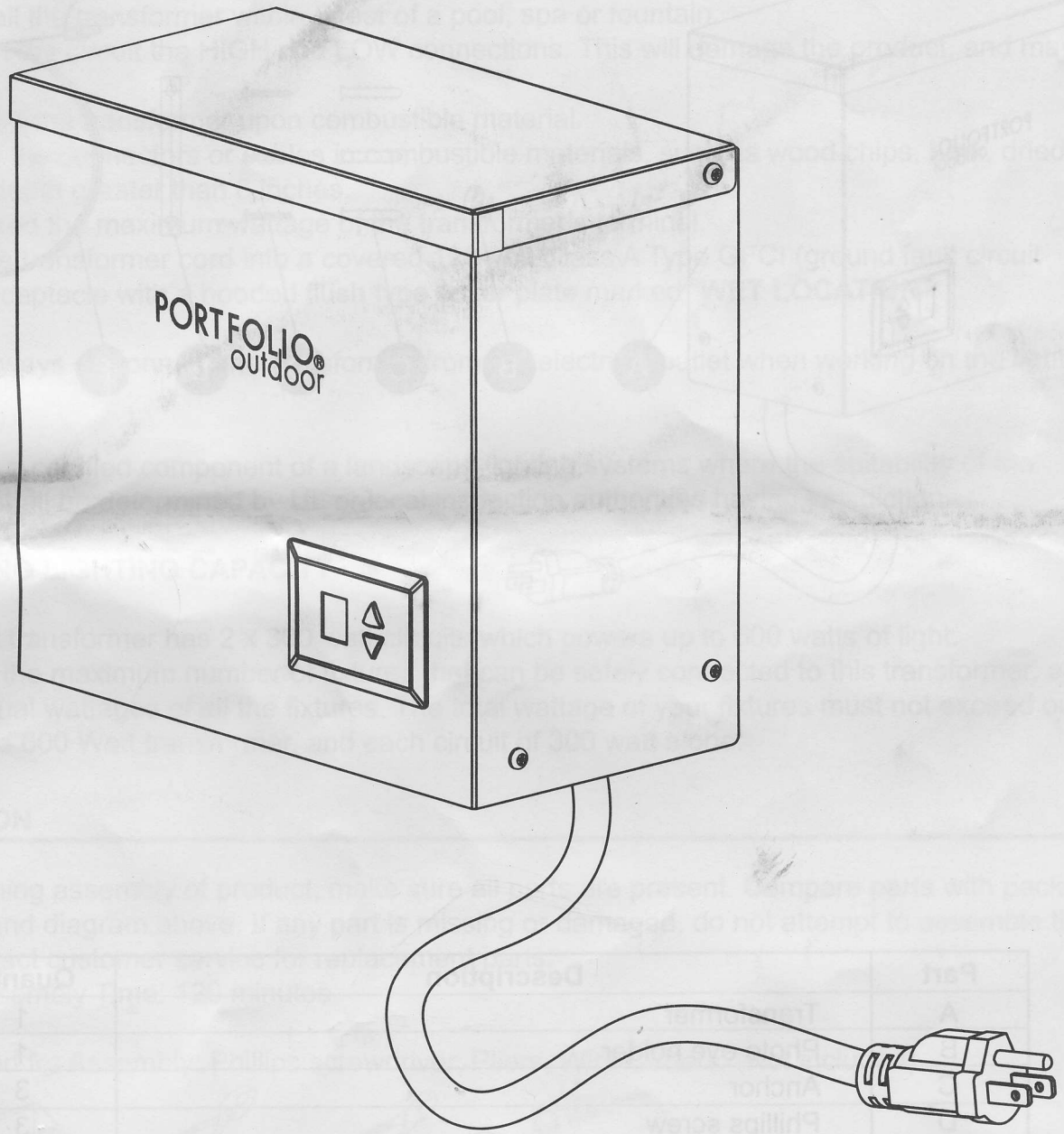
PORTFOLIO outdoor

600W Transformer

Model # EE0002BK

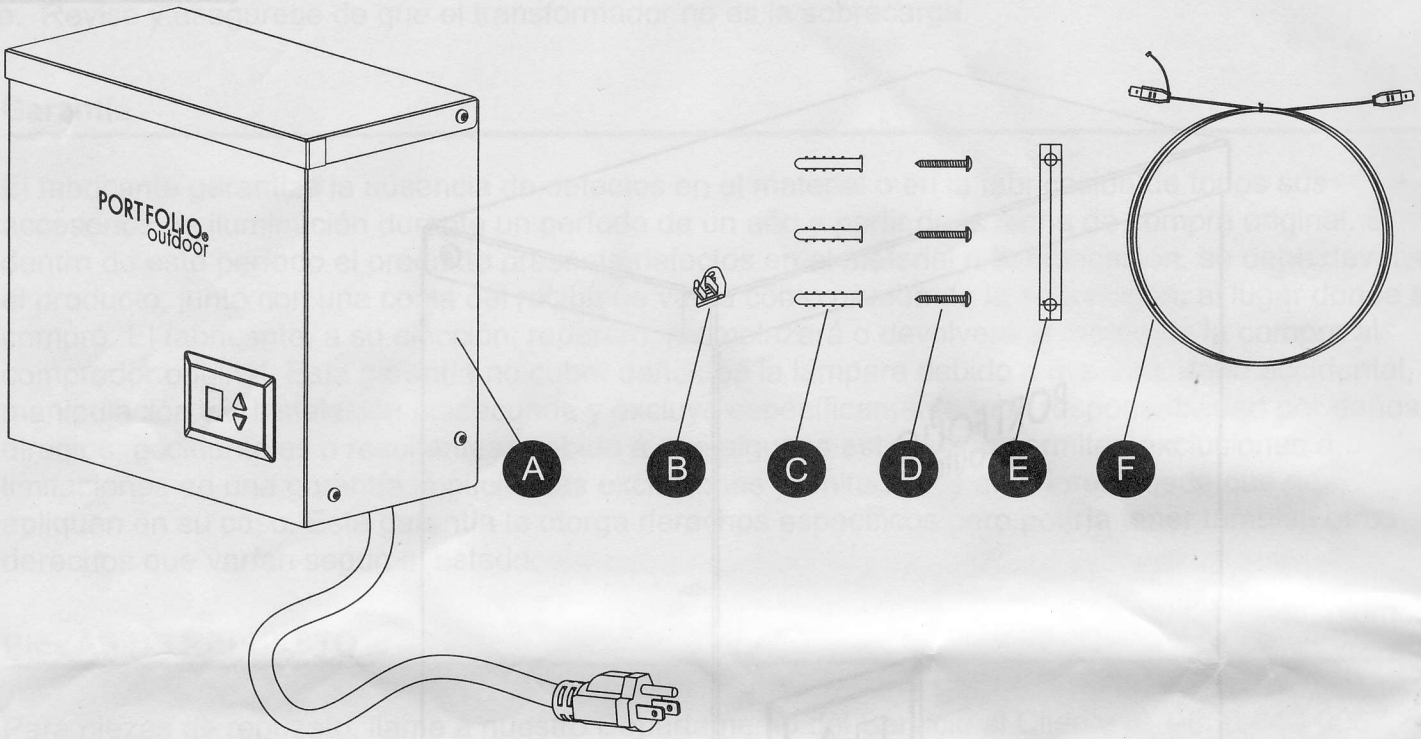
Français p. 9-16

Español p. 17-24



Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 1-800-643-0067, Monday-Thursday 8a.m-6p.m,Friday 8a.m-5p.m, EST.

PACKAGE CONTENTS



Part	Description	Quantity
A	Transformer	1
B	Photo eye holder	1
C	Anchor	3
D	Phillips screw	3
E	Template	1
F	Photo eye	1

SAFETY INSTRUCTIONS

WARNING-RISK OF FIRE OR ELECTRICAL SHOCK

This transformer is for use with low voltage landscape lighting systems only.
This transformer is suitable for outdoor use.
DO NOT use this transformer with submersible fixtures.
DO NOT repair or tamper with cord or plug.
DO NOT use extension cords.
DO NOT submerge the transformer in water.
DO NOT connect two or more transformers in parallel.
DO NOT use the transformer with a dimmer switch.
DO NOT install the transformer within 5 feet of a pool, spa or fountain.
DO NOT short the circuit the HIGH and LOW connections. This will damage the product, and may cause a fire.
DO NOT mount the transformer upon combustible material.
DO NOT bury the connectors or cables in combustible materials, such as wood chips, bark, dried leaves, or at depth greater than 6 inches.
DO NOT exceed the maximum wattage of the transformer's terminal.
ONLY plug the transformer cord into a covered 120-volt Class A Type GFCI (ground fault circuit interrupter) receptacle with a hooded flush type cover plate marked "**WET LOCATION**".

CAUTION: Always disconnect the transformer from the electrical outlet when working on the lighting system.

The device is a certified component of a landscape lighting systems where the suitability of the combination shall be determined by UL or local inspection authorities having jurisdiction.

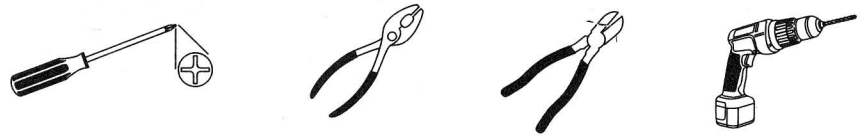
CALCULATING LIGHTING CAPACITY

The 600 Watt transformer has 2 x 300 watt circuits which powers up to 600 watts of light.
To determine the maximum number of fixtures that can be safely connected to this transformer, add up the individual wattages of all the fixtures. The total wattage of your fixtures must not exceed output capacity of the 600 Watt transformer, and each circuit of 300 watt alone.

PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and diagram above. If any part is missing or damaged, do not attempt to assemble the product. Contact customer service for replacement parts.
Estimated Assembly Time: 120 minutes

Tools Required for Assembly: Phillips screwdriver, Pliers, Wire Cutters. (Not included)

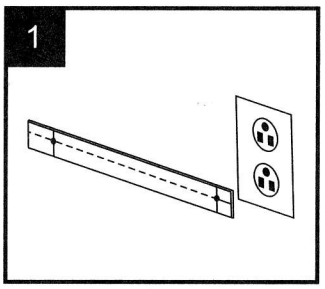


Helpful Tools: Electrical Tape, Safety Glasses. (Not included)

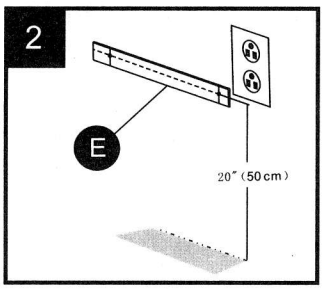
ASSEMBLY INSTRUCTIONS

INSTALL TRANSFORMER MOUNTING SCREWS

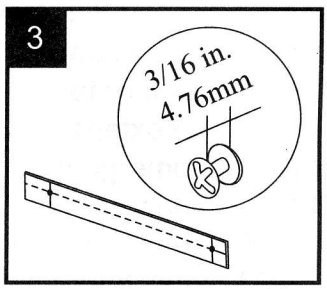
1. Select location near the 12 volt covered GFCI outlet with cover plate marked for WET LOCATION.



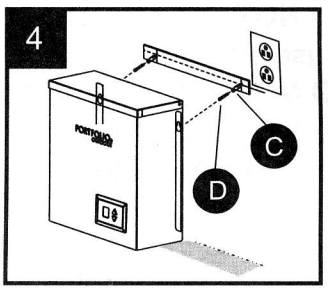
2. Use template (E) and mark holes. (Minimum 20 in. off the ground)



3. Drill holes 3/16 in. (4.76mm)



4. Install anchors (C) and screws (D), leaving enough space for the transformer to hang on the screws by means of the keyhole slots located on the back of the Transformer.



****NOTE:** Do Not attach the transformer to the wall at this time. First, connect the low voltage cable to the transformer terminals.

CONNECT LOW VOLTAGE CABLE TO TRANSFORMER

1. For 12 gauge through 16 gauge cable connections, split one end of cable approximately 2 in., and strip about 3/4 in. (17~19mm) of insulation off each wire and twist strands together tightly. (See Diagram 2)

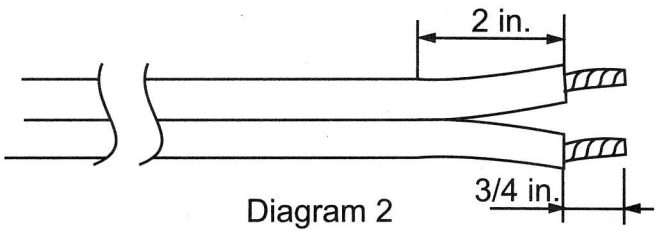


Diagram 2

NOTE: It is essential to use the correct gauge cable for obtaining proper lighting performance. For use with SPT-3, SPT-2W, underground, outdoor, low voltage, cable (minimum 25' length). See Chart.

IMPORTANT NOTE:

- Cable distance, total wattage and spacing of fixtures affect the light output of each fixture along the run.
- Higher gauge cable such as 12 gauge (recommended for all runs), allows for the highest wattage fixture at the beginning of the run.
- Always make sure to use the cable required for the wattage load even on short runs. Please refer to the recommended installation configurations on below table.
- Never exceed 300W for any run.
- Please make sure to tighten the screw of the output connection with wire to prevent short circuit and overheat. ***Caution: Fire is possible by a loose wire, tighten connection screw firmly.***.

Recommended installation configurations for each output terminal

Combined Wattage of all fixtures	Recommended Cable Gauge	Using LOW Recommended Cable Length	Using HIGH Recommended Cable Length
Less than 150W	16	Less than 300'	Less than 400'
	14	Less than 400'	Less than 500'
	12	Less than 500'	Less than 600'
Above 150W	16	Less than 150'	Less than 200'
	14	Less than 250'	Less than 300'
	12	Less than 350'	Less than 400'

Additional Tips:

1. Distribute the light fixtures as evenly as possible along the cable.
2. Position the higher wattage fixtures closer to the transformer and lower wattage fixtures away from it.
3. Place the first fixture a minimum of 10ft away the transformer.
4. If the run is long and there is an obvious drop in light level along the cable, use 2 output cables and connect one wire to the HI terminal block for longer distance fixtures and connect the other to the LOW terminal block for shorter distance fixtures. This will help increase the light level for fixtures at the further distance. (See Diagram 3a).
5. Another cable connection method, called "Looping", should be used to maintain even light output.

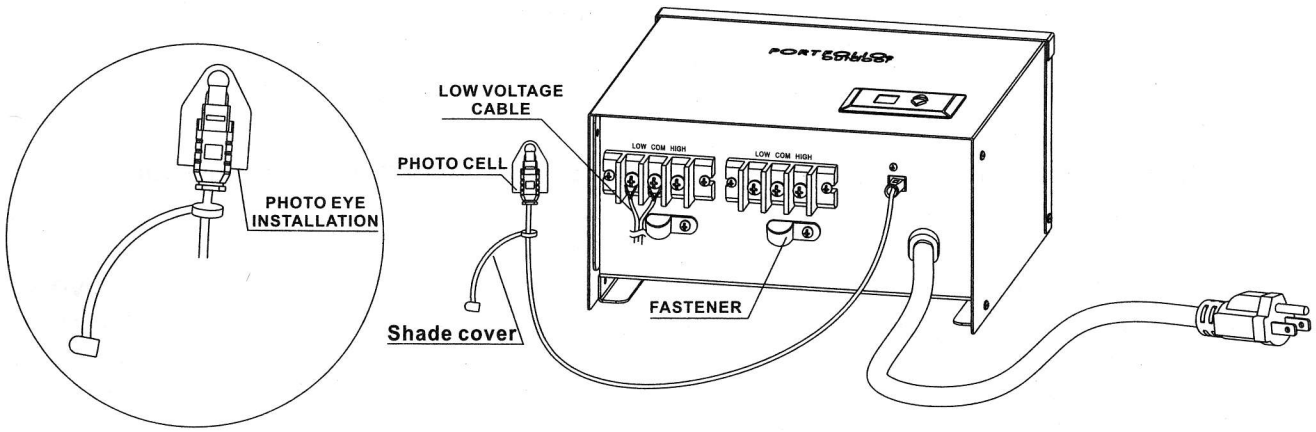


Diagram 3C

Diagram 3

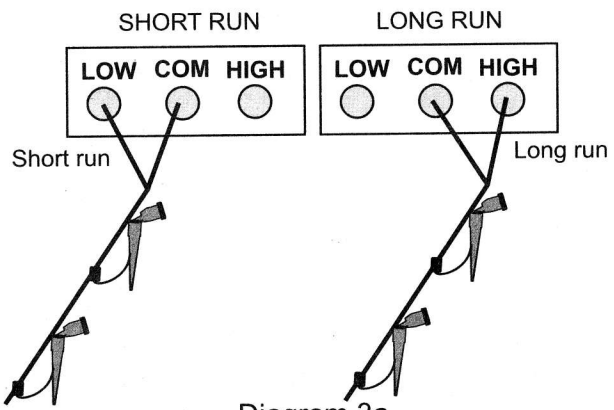


Diagram 3a

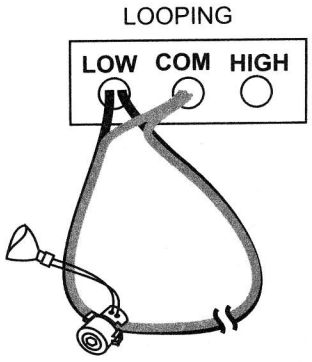


Diagram 3b

CABLE INSTALLATION (Diagram 3)

1. Loosen the cable port screws at the bottom of the transformer.
2. Thread the pre-stripped cables into the cable ports in the bottom of transformer and push in firmly. Tighten the screws securely.
3. Complete layout and test the system before burying cable.
4. Mount the transformer to the wall using screws and template shown in the assembly instructions on page 4 of this manual.

LOOPING WIRE INSTALLATION (See Diagram 3b)

This method is especially good for distribution of lights on the perimeter of a garden in a closed loop.

- Decide the distribution of lights and calculate the total length of cable that is needed to go around and return to the transformer's terminal blocks.
- Make sure to not cross the wires when routing the wires back to the terminal blocks. The wire coming out from a particular terminal block must go back in the same terminal block. Note the wire has a smooth side and a ridged side for easy identification.
- Wrong wire connection will lead to protection mode. The fixtures will not light on the short run and the fixtures will be abnormally dim on the long run. Please check the circuit and re-connect.
- Please make sure the cable joint securely connected with the output connection, otherwise, the cable wire and the transformer will be destroyed and then catch fire.

SELECTING LOCATION OF PHOTOCELL (See Diagram 3c)

- Select location that will receive light during the day. IMPORTANT: Do not mount the photocell where it could sense artificial light, such as streetlight, porch lights or headlights. These artificial lights may cause the lighting system to shut off unexpectedly. The photocell must be installed outdoors!
- Drill hole minimum 36" off the ground.
- Install anchor and screw.
- Take the photocell wire, choose the end without black plastic cover, insert the wire into the photocell hole, push in firmly until you hear a "click".

NOTE: If you want to test the photocell during the day, plug the transformer into 120 volt covered GFCI outlet and use the black plastic cover provided to cover the photocell (make sure the photo-cell does not receive any light). Press the setting button to "A", make sure the photocell is completely covered and your light fixtures will turn on. Remove the black plastic cover, and your lighting fixtures will shut off automatically (There will be 30~60 seconds time defer of photocell).

In the event that your photocell needs replacing, follow these Steps.

PHOTOCELL REPLACEMENT

Remove the old photocell from the transformer and place the new. Please notice the direction of plug, opposite and force plugging will damage the plug

OPERATING THE LIGHTING SYSTEM

After installing the transformer, check carefully and turn on the electrical source. Select the working mode you like: ON (Light stay on); AUTO(Photocell). There are double key-press for your operation, every time you press the key, it will turn to another working mode, the transformer will also keep your setting automatically, even though the system power off and turn back to work, it still operate according to your prior setting (See Diagram 4).

Select setting by pressing "SETTING" Button. There are 11 working modes for your option, difference working way have difference code. Push repeatedly to move to the different selections:

"O"— **ON**, Lights stay on continuously.

"A"— **AUTO**, Lights on at dusk, off at dawn.

"Timing"--1~9Hours—Lights on at dusk, off at dawn with photocell, and then they will go off after hours selected (1;2;3;4;5;6;7;8;9 hours).

IMPORTANT:

If the indicator displays "E" there may be potential problem for a fire. Immediately unplug the transformer from the electrical outlet and check the following:

- Cable is correctly inserted in the cable ports at the bottom of the transformer.
- Check for overload or short circuits (wires touching) along the cable.
- Check that fixtures are correctly installed on the cable and that there are no short circuits. Make all repairs before operating the lighting system.

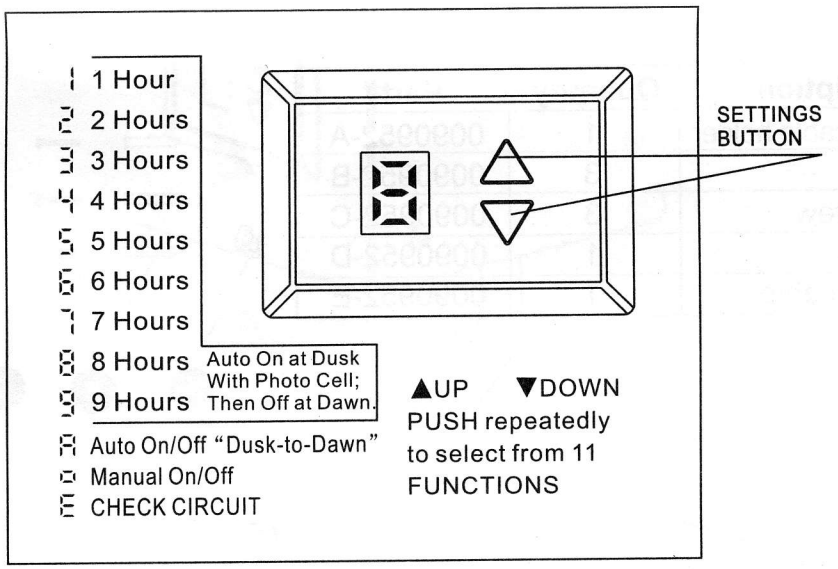


Diagram 4

USING A MECHANICAL TIMER

If using a mechanical timer (sold separately), make sure that the mechanical timer is plugged into the electrical outlet and the transformer is plugged into the mechanical timer. Cover the photocell with the black plastic cover provided.

Set the transformer to the "O" position and follow the instructions included with the mechanical timer for settings.

TROUBLE SHOOTING

If the transformer does not work at night, it may be caused by one of the following conditions:

a. Make sure the transformer is connected into power receptacle.
b. Check the low voltage cable connection; make sure it is well connected with the transformer.
c. Check the wiring of the fixture connector. Make sure the contact pins pierced the wire plastic insulation and touch the electric wire inside.
d. Check the bulb. If the bulb is broken, replace with new bulb.
e. Check and make sure the transformer is not overload.

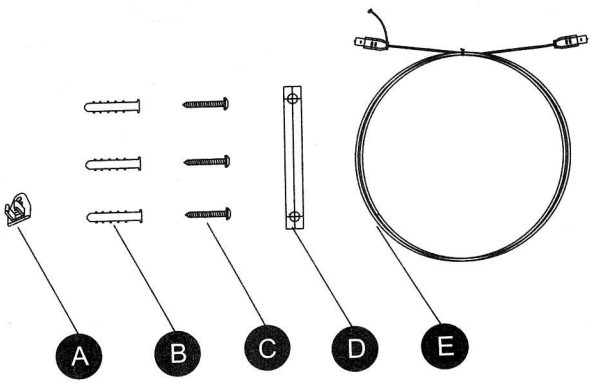
Warranty

The Manufacturer warrants all of its lighting fixtures against defects in materials and workmanship for a period of one year from the date of purchase. If within this period the product is found to be defective in material or workmanship, the product must be returned, with a copy of the bill of sales as proof of purchase, to the original place of purchase. The manufacturer will, at its option, repair, replace or refund the purchase price to the original purchaser consumer. This warranty does not cover the fixture becoming damaged due to misuse, accidental damage, improper handling and/or installation and specifically excludes liability for direct, incidental or consequential damages. As some states do not allow exclusions or limitations on an implied warranty, the above exclusions and limitations may not apply. This warranty gives you specific rights and you may also have other rights that vary from state to state.

REPLACEMENT PARTS

For replacement parts, call our customer service department at 1-800-643-0067, Monday-Thursday 8a.m-6p.m,Friday 8a.m-5p.m, EST.

Part	Description	Quantity	Part#
A	Photo eye cable holder	1	0090952-A
B	Anchor	3	0090952-B
C	Phillips screw	3	0090952-C
D	Template	1	0090952-D
E	Photo eye cable	1	0090952-E



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