



# SLIMLITE WHITE LED LIGHT FOR SWIMMING POOLS



## INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS  
READ AND FOLLOW ALL INSTRUCTIONS  
SAVE THESE INSTRUCTIONS

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Contents	
<b>IMPORTANT WARNING AND SAFETY INSTRUCTIONS.....</b>	<b>3-4</b>
SlimLite White Pool Light Pool Overview .....	5
SlimLite Light Assembly - Removal / Installation (in an existing pool).....	2
Circuit Board - Removal / Installation.....	7-8
Wide and Narrow Angle Lens Adjustment .....	10
Light Assembly - Removal / Installation.....	11-13
Replacement Part Numbers .....	14

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READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.

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 CAUTION

THE SlimLite 5G LED POOL LIGHT **CANNOT BE USED** ON A DIMMER CIRCUIT. USING A DIMMER SWITCH WILL RESULT IN PERMANENT DAMAGE TO THE LIGHT.

## IMPORTANT WARNING AND SAFETY INSTRUCTIONS

### **⚠ DANGER**

**SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT IS NOT INSTALLED AND USED CORRECTLY.**

### **⚠ DANGER**

**INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL LIGHT.**

### **⚠ WARNING**

Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.



**IMPORTANT NOTICE - Attention Installer:** This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this underwater pool light. This Guide should be given to the owner and/or operator of this equipment.

### **⚠ WARNING**

Before installing this product, read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage.

Call (800) 831-7133 for additional free copies of these instructions. Please refer to [www.pentair.com](http://www.pentair.com) for more information related to this products.

### **⚠ DANGER**



**RISK OF ELECTRICAL SHOCK OR ELECTROCUTION: THE SLIMLITE POOL LIGHT REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH. BEFORE WORKING ON POOL LIGHTS always disconnect power to the pool lights at the circuit breaker from the light before servicing the light. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock.**

This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock.

### **⚠ WARNING**

**Important Safety Information for Pentair Niche and Light Installation**

- All Niche and Light installations must conform with all codes. The SlimLite light can only be used with Pentair niches P/N 56503 (3/4" bushing) or P/N 59504 (1" bushing). If local codes mandate a cord seal, use Cord Seal Kit (P/N 670044).

## IMPORTANT WARNING AND SAFETY INSTRUCTIONS

**⚠ WARNING RISK OF ELECTRIC SHOCK AND INJURY. USE ONLY THE INSTALLATION METHOD SPECIFIED BELOW.**

Location of Luminaire Use	Pentair Water Pool and Spa Fountain Fixture* (P/N 560001 and P/N 560000)	Required Installation Method
Swimming Pool and Spa	Wet-Niche Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) ONLY. DO NOT USE Fountain Fixture Stand.
Fountain	Wet-Niche Submersible Luminaire (Light) swimming Pool (or Spa) Luminair (Light)	Fixture Housing (Forming Shell) or Fountain Fixture Stand

**(\*) Note:** Wet-niche luminaires complying with requirements for both uses may bare both the Listed Wet-Niche Submersible Luminaires UL Mark. A luminaire not bearing the corresponding UL Listing Mark is not considered by UL to have been produced under UL's Listing and Follow-Up Service for the associated usage location.

**CAUTION** - The SlimLite Light fixture must only be used with Pentair fixture housings (niches) as noted above.. If the SlimLite light fixture is installed into other niches, the installation will not carry U L approval and will void all warranties.

**NOTICE:** The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

**⚠ WARNING** For countries in compliance with International Electromechanical Commission (IEC) regulatory standards: The light fixture must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with IEC 364-7-702 and all applicable local codes and ordinance. Improper installation will create an electrical hazard, which could result in death or serious injury to pool user, installer or other due to electrical shock and may also cause damage to the property.

**⚠ WARNING** Salt is an inherently corrosive material. While the levels of salt required for proper operation of an electronic chlorine generator are relatively low when compared to sea water and other salt solutions, placing any amount of salt in your pool increases the likelihood of corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Metal parts and certain natural and man-made surfaces are particularly susceptible to corrosion and deterioration when used in and around salt water pools. Pentair does not represent or otherwise guarantee that the proper use of an electronic chlorine generator will prevent corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Consult your experienced pool professional, who should be able to advise you on the proper material selection, installation techniques for those materials, and the proper use, care and maintenance of those materials for your specific pool type and location in order to minimize the corrosion and deterioration that is inherent in and around salt water pools.


**POOL LIGHT FIXED LUMINARIES:** Follow these guidelines when installing, replacing or repairing Pentair fixed luminaries:

**REPLACE ANY CRACKED PROTECTIVE SHIELD (CRACKED LENS) WITH NEW LENS AND GASKET. FOR MORE INFORMATION SEE PAGE 11.**

**FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.**

**CAUTION! Luminaires not suitable for direct mounting on normally flammable surfaces (suitable ONLY for mounting on non-combustible surfaces).**

**Fixed pool and spa luminaries specification:**

12 VAC 50/60 Hz - 120 VAC  ,50/60 Hz.



**Surface Mount**

## SlimLite White Pool Light Overview

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This manual describes how to install the SlimLite white pool light.

**The SlimLite white pool light** provides a brilliant white light for a spectacular effect in your pool. The SlimLite white light lens geometry (pool light only) provides a choice between two light beam shapes; wider coverage with less intensity, or narrower coverage with more intensity.

### THIS MANUAL INCLUDES INSTRUCTIONS TO:

- **Replace the SlimLite Pool Light assembly (in an existing pool). See page 6-13.**

**For SlimLite Pool Light installation instructions  
(for a new pool, please refer to the Pentair IntelliBrite 5G  
manual (P/N 620278))**

- **Replacing the SlimLite Pool Light circuit board (See page 7-8)**



**WARNING** Replace the light circuit board assembly with the same type and wattage. Failure to replace the light circuit board assembly with the same type will damage the light assembly and may cause an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

## SLIMLITE POOL LIGHT DISASSEMBLY INSTRUCTIONS (IN AN EXISTING POOL)

### Removal and Installation of the SlimLite Light assembly

**When replacing the SlimLite Light assembly, the LENS GASKET (P/N 620400Z) MUST ALSO BE REPLACED - SEE PAGE 14 FOR PART NUMBERS.**

#### **⚠ DANGER**



#### **D A N G E R !**

#### **RISK OF ELECTRICAL SHOCK OR ELECTROCUTION**

Always disconnect power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to installer, service person, pool users, or others due to electrical shock.

1. Turn off main electrical switch or circuit breaker, as well as the switch which operates the SlimLite light itself. **Note: DO NOT service the light while in the pool water. Service the light on the deck.**
2. Before starting be sure that you have a new Lens Gasket (P/N 620400Z) ready to install.

#### **⚠ WARNING**

Always install a new lens gasket (P/N 620400Z) whenever disassembling the SlimLite light assembly. Failure to do so may permit water to leak into the assembly which could cause:

- (a) an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, or
- (b) breakage of the lens, which likewise could result in serious injury to pool users, installers, or bystanders, or in damage to property.

3. Place a cloth on the ground to protect to protect the light housing grille.
4. Using a 1/4" Hex head driver, remove all of the eight (8) hex head screws. Remove the Clamp ring and from the light housing. See Figure 7.
5. With the light resting on its base, carefully pry off the gasket to remove the lens. Set the lens aside for installation later. **Discard the gasket.**

**Note: A NEW LENS GASKET (P/N 620400Z) MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED.**

**See page 14 for Replacement Kit part numbers.**

## CIRCUIT BOARD - REMOVAL / INSTALLATION

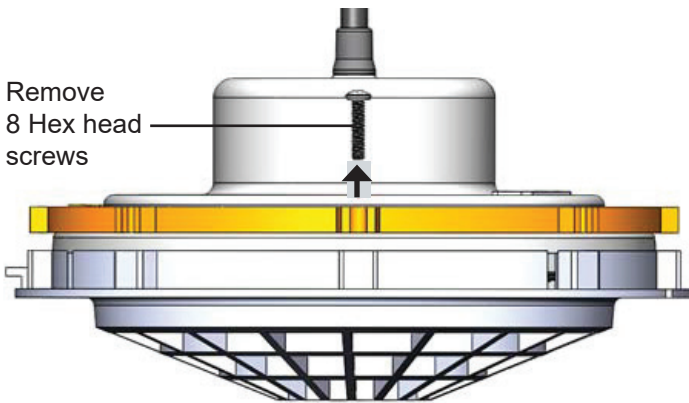


Figure 7.

### Removing the SlimLite Light Circuit Board

6. Using a  $\frac{1}{4}$ " nut driver, carefully remove the four retainer nuts from the light assembly. See Figure 8. Place the nuts aside for reinstallation. See Figure 8.
7. Unplug the two connector plugs from the circuit board. Lift up the circuit board and remove it from the light housing base.
8. Carefully lift off the old thermal strips from the base of the light housing base and discard.

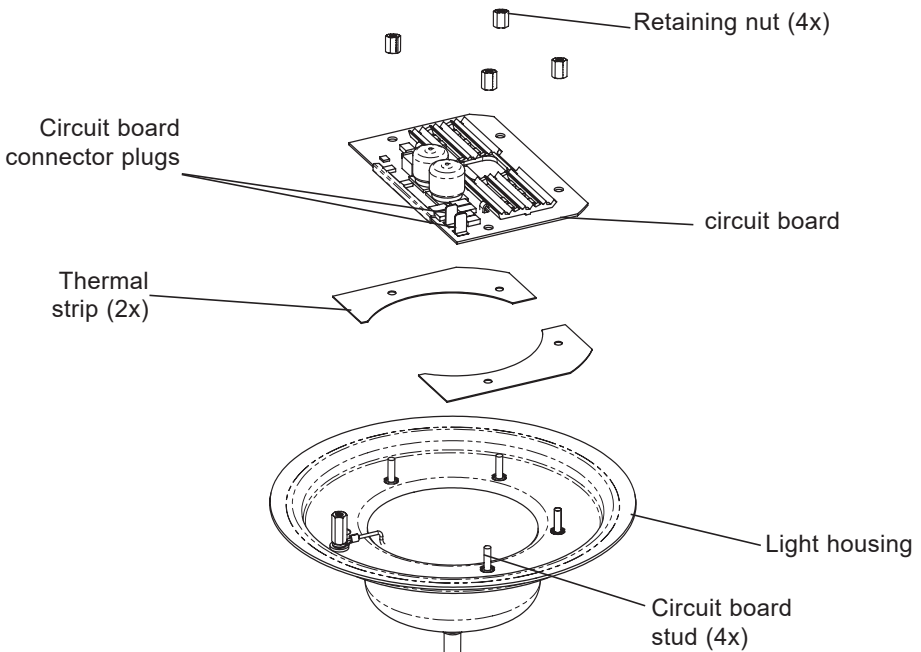


Figure 8.

## CIRCUIT BOARD - REMOVAL / INSTALLATION

### Installing the SlimLite Light Circuit Board (See Figure 8)

9. Place the two new thermal strips (provided) over the circuit board studs in the base of the light housing.
10. Place the light circuit board over the base studs and seat the circuit board on top of the thermal strips. Be sure the two connecting wires are not caught between the housing and the edge of the circuit board.
11. Using a  $\frac{1}{4}$ " nut driver, tighten each of the four (4) retaining nuts to a torque value of 6.0 (minimum) to 8.0 (maximum) in-lbs to secure the circuit board. **DO NOT OVERTIGHTEN THE CIRCUIT BOARD NUTS.**
12. Connect the two connector plugs to the circuit board terminals.
13. **Install the SlimLite Light Assembly with new Lens and Gasket: See page 9-13. A NEW LENS GASKET (P/N 620400Z) MUST BE USED EACH TIME THE SLIMLITE LIGHT IS REASSEMBLED.**

Note: Note the current position of the lens at the pilot screw (12 o'clock) position, before removing it from the fixture. "W" on the lens indicates wide angle, "N" indicates narrow angle. For more information, see page 8 and 9.



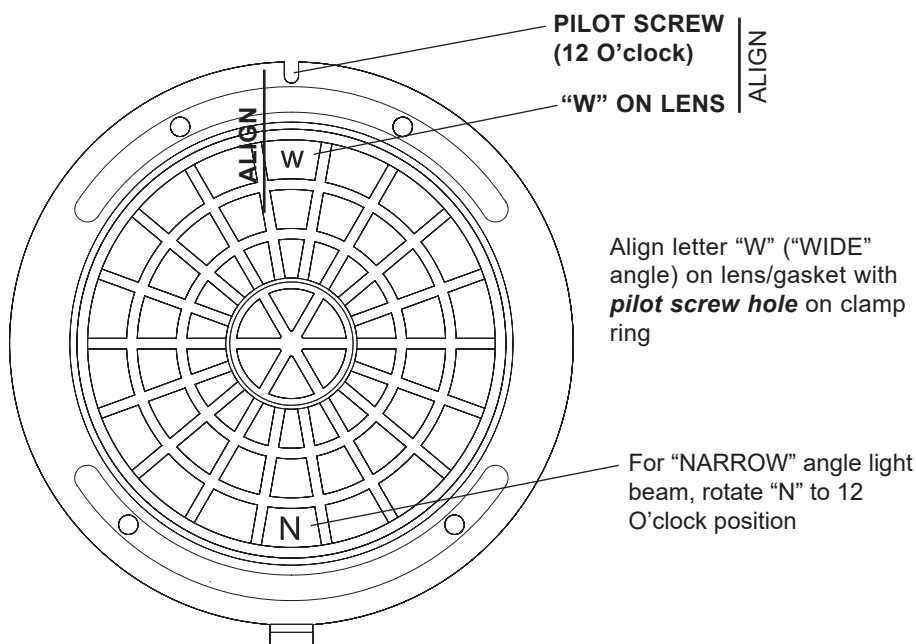
## LIGHT REASSEMBLY - INSTRUCTIONS

1. **Narrow Beam Lens Position:** With the 'N' & arrow on the lens pointed to the notch insert the light assembly into the slot of the grille. Be sure the lettering "SUBMERGE BEFORE LIGHTING" appears as shown in Figure 1. See page 10 for more information.
2. **Wide Beam Lens Position:** Rotate the lens 180 degrees to the "W" arrow is facing the notch.

**Note:** It may be easier to rotate and position the lens/gasket outside the light housing before installing it in the light housing.

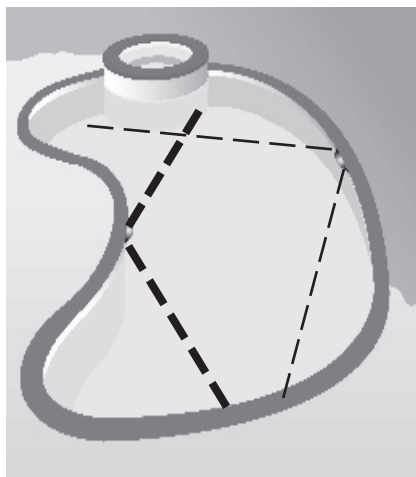


Figure 1.

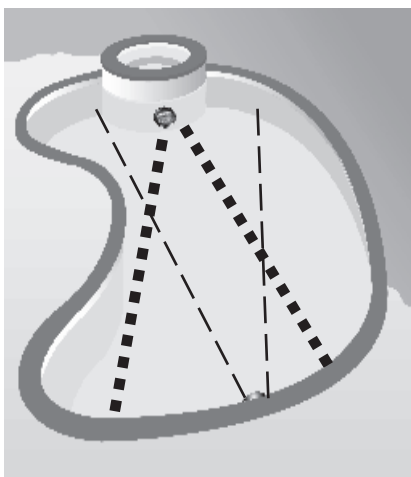


**LIGHT REASSEMBLY - INSTRUCTIONS****Wide and Narrow Angle Lens Adjustment**

The SlimLite Light lens geometry provides a choice of “wide” or “narrow” angle light beam to suit various size pools (see page 4). For lights located on either side of the pool, rotate the lens to the ‘wide’ (W) angle position, which will provide a wider angle light beam for greater underwater coverage and light reflection the width of the pool. For lights located either end of the pool, rotate the lens to the ‘narrow’ (N) angle light beam position for increased underwater light intensity and distance. Note: The SlimLite light lens ships from the factory in the ‘WIDE’ (W) angle position.



**WIDE ANGLE LIGHT BEAM  
(FOR SIDES OF POOL)**



**NARROW ANGLE LIGHT BEAM  
(FOR ENDS OF POOL)**

**TIP:** It's easier to remove the lens/gasket from the light housing before rotating the lens. However, using this method, the gasket must be replaced.

## LIGHT REASSEMBLY - INSTRUCTIONS

3. With the back of the light still facing up, install the existing (previously removed) Clamp Ring. See Figure 2.



Figure 2.

4. Rotate the clamp ring so that the slots on the outer edge line up with the threaded holes of the grille as shown in Figure 3. Lastly, ensure clamp ring is flush with the grille.

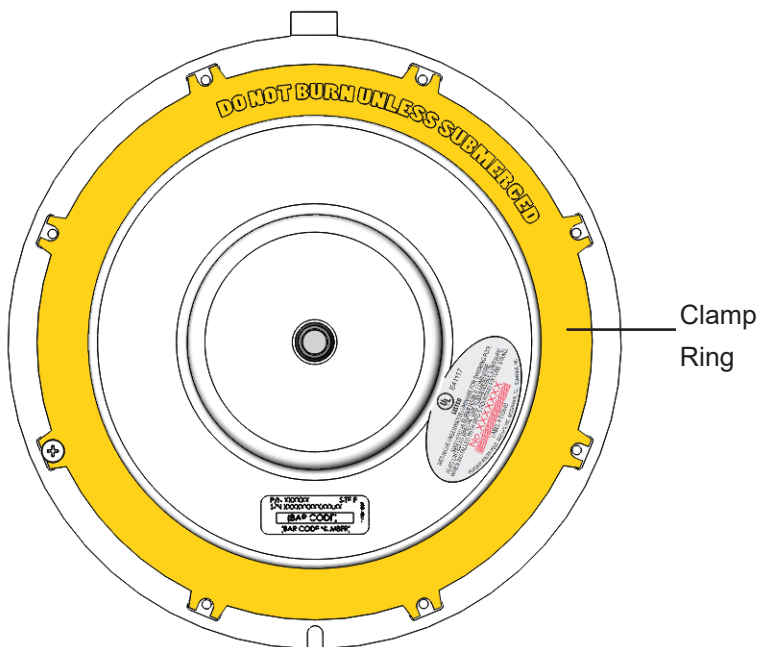


Figure 3.

## LIGHT REASSEMBLY - INSTRUCTIONS

Note: The red silicon gasket should not be visible between the grille and the light housing once the clamp is on. See detail B.

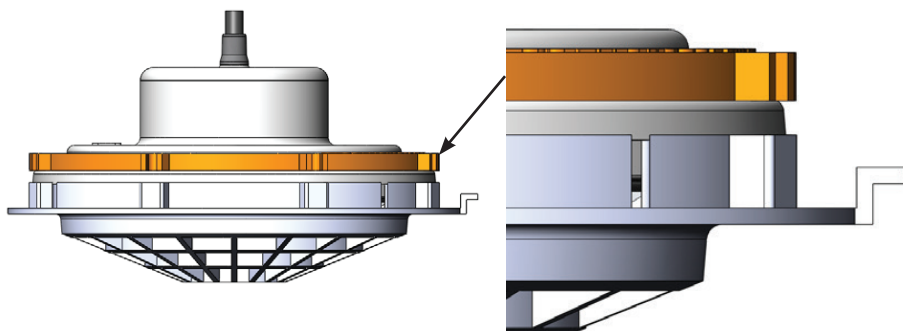


Figure 4.

Detail B.

5. Insert one Truss head screw (11) into each of the 'U' shaped grooves on the clamp ring as shown in Figure 5.

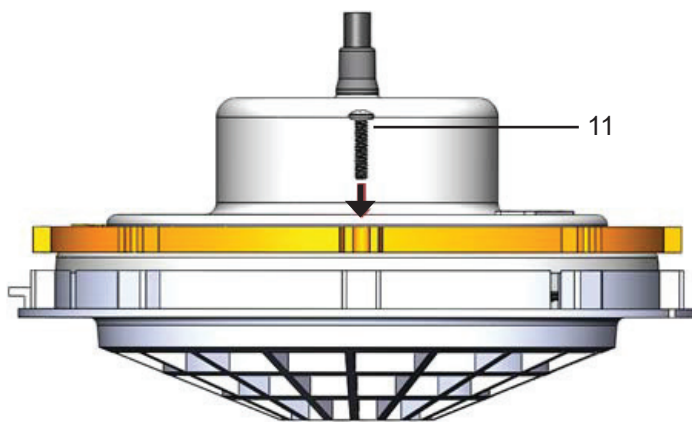


Figure 5.

## LIGHT REASSEMBLY - INSTRUCTIONS

6. Hand tighten all eight screws ensuring all screw heads are flush with the top of the clamp ring. Follow the pattern in consecutive order starting from #1 and ending on #8 shown below in Figure 6. BE CAREFUL NOT TO CROSS THREAD THE SCREWS.

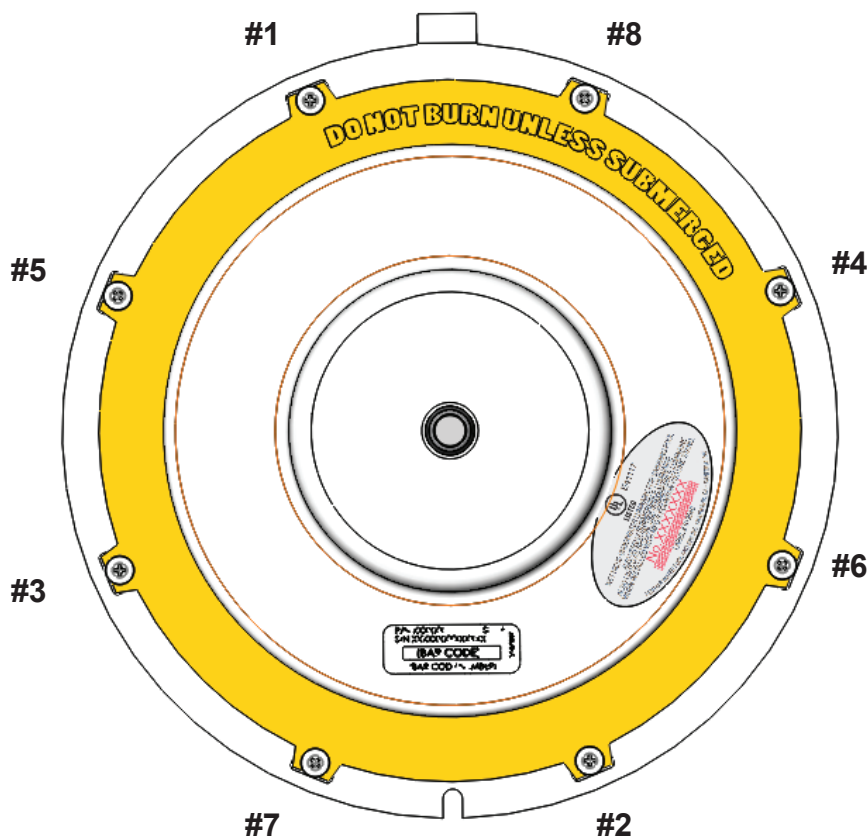


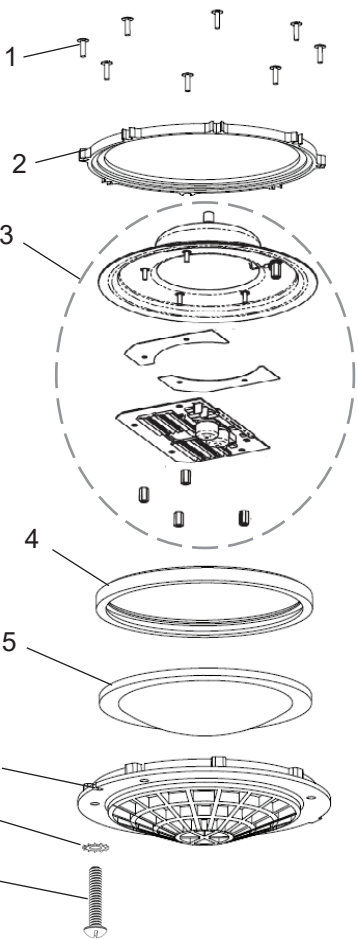
Figure 6.

7. Following the same pattern described in Step 6: **Tightening pattern: 1-2, 5-6, 3-4, 7-8**) and using a 1/4" Hex head driver, fully tighten the screws, but do not overtighten. Overtightening may lead to stripping the holes in the holes in the grille.
8. Assembly of the Slimlite Light is complete.

SlimLite Light Illustrated Parts List

Item #	Part #	Description
1	618037	10-24 hex head Mach screw
2	56925	Locking Ring
4	620400Z	Lens Gasket
5	56804	Lens
6	56924	Protective Grille
7	618052	Star Washer
*8	94215	Pilot Screw (Stainless Steel)

(\*) The Star Washer (#7) MUST always be used with the Pilot Screw (#8) to ensure proper electrical grounding.



SlimLite White Light Assembly (UL listing)

Product Model	Voltage	Cord Length (feet)
56400	120V	30'
56401	120V	50'
56402	120V	100'
56403	120V	150'
56404	120V	200'

Item No.	Kit Part No.	Description
4, 3	619864Z	Replacement Lens Kit. - Gasket, 8-3/8 in (20.9 cm) diameter, off white, - Clamp Assembly. - Lens, Pool, 8-3/8 in (20.9 cm) diameter, tempered. - Gasket, 8-3/8 in (20.9 cm) silicon diameter, off white.
1	94215Z	Pilot screw (Stainless Steel), Star Washer
5	620400Z	Gasket, 8-3/8 in (20.9 cm) diameter, silicone.

**Note:** The 120 VAC SlimLite light has an integrated 12 VAC transformer.





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