

Jandy® Pool/Spa Light Parts Replacement Kit

⚠ WARNING

FOR YOUR SAFETY: This product must be installed and serviced by a professional service technician, qualified in pool/spa electrical component installation and maintenance. Improper installation and/or operation could create an electrical shock hazard causing serious injury, property damage, or death. Improper installation and/or operation will void the warranty.

These instructions are to be used with the following Jandy Replacement Kits:

- R0400501 -- Gasket, Spa Light, Replacement Kit
- R0400601 -- Glass Lens, Spa Light, Replacement Kit
- R0450501 -- Lamp Replacement Kit, Pool and Spa White Light (100W, 12V)
- R0450502 -- Lamp Replacement Kit, Pool White Light (300W, 120V)
- R0450503 -- Lamp Replacement Kit, Pool White Light (300W, 12V)
- R0450504 -- Lamp Replacement Kit, Pool White Light (500W, 120V)
- R0450505 -- Lamp Replacement Kit, Spa White Light (100W, 120V)
- R0450601 -- Glass Lens, Pool Light, Replacement Kit
- R0450701 -- Clamp Assembly, Pool Light, Replacement Kit
- R0450901 -- Pilot Screw, Pool and Spa Light, Replacement Kit
- R0451001 -- Hardware Kit, Pool Light, Replacement Kit
- R0451101 -- Gasket, Pool Light, Replacement Kit
- R0451201 -- Clamp Assembly, Spa Light, Replacement Kit
- R0451401 -- Hardware Kit, Spa Light, Replacement Kit
- R0451600 -- Bulb, Large Light, 75W Halogen, MR-16, EYC/60, Replacement Kit
(2 Bulbs in Kit, 8 Bulbs Required Per Light)
- R0451700 -- Dichroic Holder, Large Light, Replacement Kit
- R0473900 -- Light Engine PCB, 12V/120V Small LED Light
- R0474000 -- Light Engine PCB, 12V Large LED Light w/ Light Shaping Diverger
- R0474100 -- Light Engine PCB, 120V Large LED Light w/ Light Shaping Diverger
- R0474200 -- Diverger, Light Shaping, Small LED Light

⚠ WARNING

If the information in these instructions is not followed exactly, an electrical fire or shock hazard may result causing property damage, personal injury or death.

This document gives instructions for replacement of various components of the Jandy Large and Small Lights. These instructions are written for replacing the bulbs in the fixture. All other components can be replaced by following the instructions to the point of removing the damaged or defective part then following the instructions for reassembly as needed. The instructions must be followed exactly. Read through the instructions completely before replacing parts.

Before starting the procedure, use Figure 2 for the white light, color light, and color LED light, and the part lists at the back of these instructions to identify the parts that are in your kit. If any parts are missing from the kit, please call your local Jandy distributor for assistance. For technical assistance, please contact our Technical Service Department at (707) 776-8200, extension 260.

A. Remove Light from Pool/Spa

Use the following procedure to remove the Jandy Light from the wall of the pool/spa. This procedure can be done under water. It is not necessary to remove any water from the pool/spa.

⚠ WARNING

SHOCK HAZARD!

Turn off all switches and the main breaker in the pool/spa light electrical circuit before starting the replacement procedure. Failure to comply may cause a shock hazard resulting in severe personal injury or death.

1. Turn off all power switches and the main breaker in the pool/spa light electrical circuit.

2. Unscrew the pilot screw at the top of the light face ring. Do not remove the pilot screw completely. The pilot screw has a retainer on the threads to prevent it from falling free of the face ring.
3. Use a screwdriver to pry the top of the light fixture approximately 1/2" away from the wall of the

pool/spa. There is a positioning tab at the bottom of the face ring that holds the fixture in place in the niche. As shown in Figure 1, push up on the bottom of the face ring until the fixture comes away from the niche and the wall. You may need to tap the bottom of the face ring lightly to free the clip from its seat.

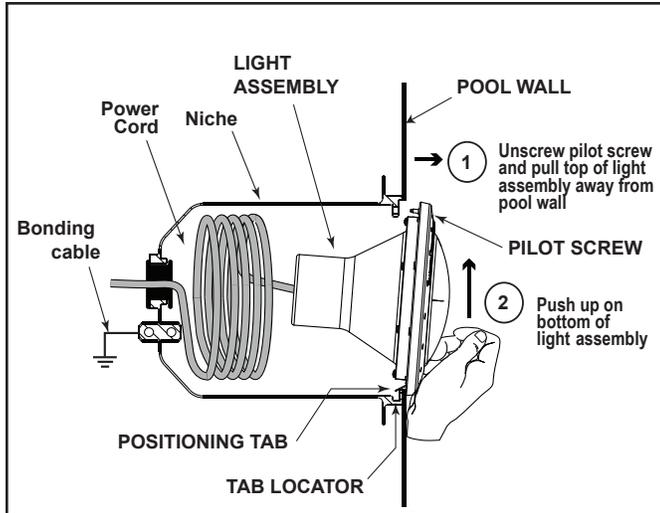


Figure 1. Remove Light Assembly from Pool Wall

4. Carefully pull the fixture away from the wall and place it on the pool/spa deck to be disassembled. The power cord is coiled behind the fixture in the niche and should come out easily as you place the light on the deck.

B. Disassemble Pool and Spa Light

Depending upon which part you are replacing, you may not need to follow all of the steps to the end of the procedure. For example, if you are replacing the lens, you need only proceed as far as the step to remove the lens. See Figure 2 for parts identification.

1. Remove the face ring from top clamp.

NOTE Only remove the face ring if you are replacing the clamp assembly.

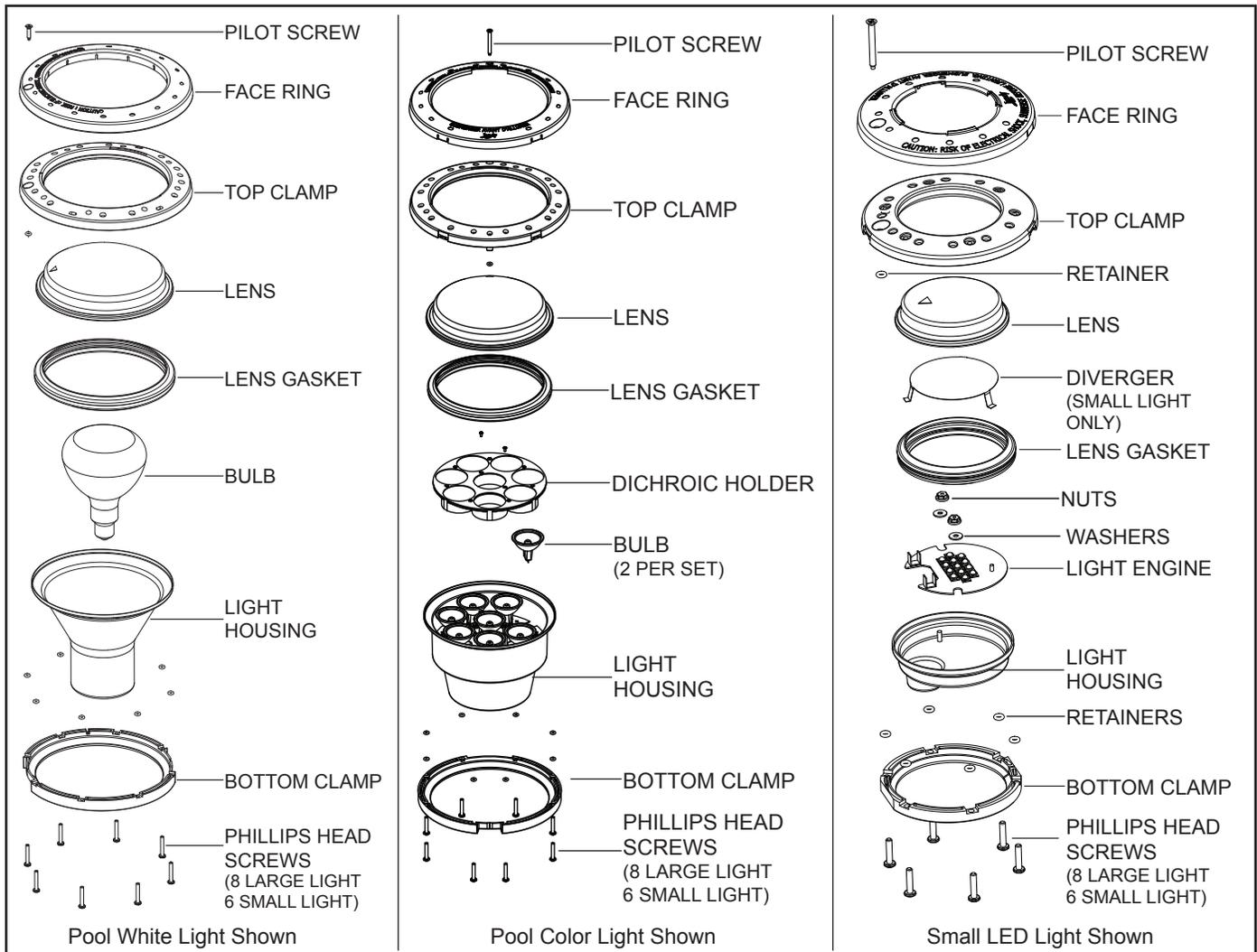


Figure 2. Light Assemblies Exploded Views

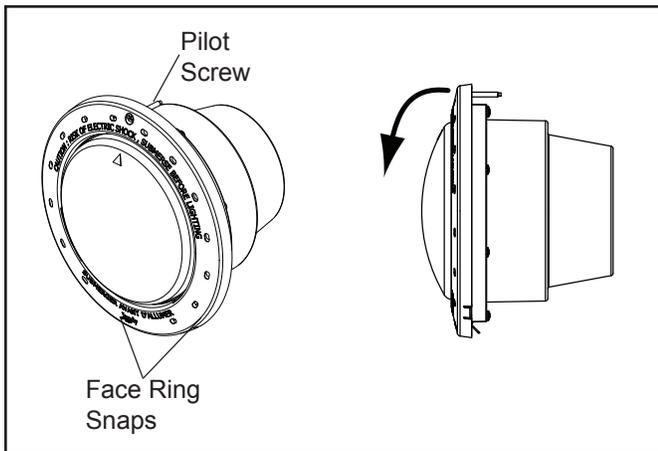


Figure 3. Stainless Steel Face Ring Removal

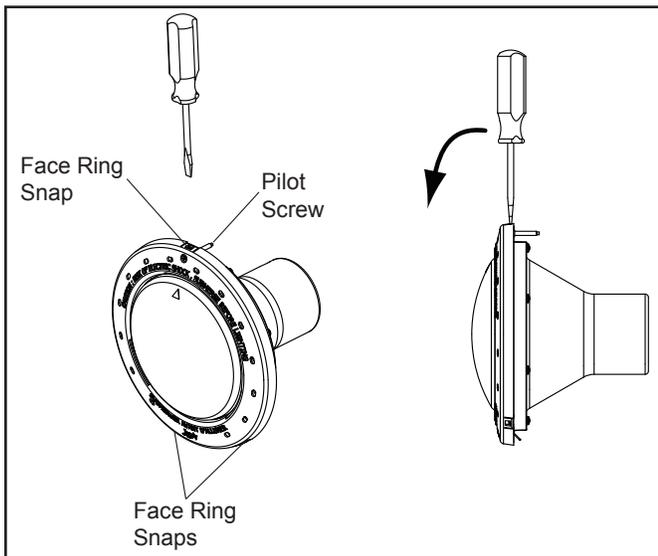


Figure 4. Plastic Face Ring Removal

- a. To remove a stainless steel face ring, first remove the pilot screw and o-ring from the face ring and top clamp. Pull the top edge of face ring until face ring separates from top clamp. See Figure 3.
 - b. To remove a plastic face ring, insert a slotted screwdriver into the opening in the face ring. Once engaged, pry the screwdriver towards the light lens. Once snap is disengaged, remove screwdriver from cutout and pull the top edge of face ring until face ring separates from top clamp. See Figure 4.
2. Loosen the screws (eight (8) for pool or six (6) for spa) on the bottom clamp that holds the face ring, top clamp and lens to fixture body. Do not remove the screws or retaining rings completely from the bottom clamp. Remove the bottom clamp and pull the face ring and the top clamp assembly from the fixture body. Do not remove the top clamp from the face ring.
 3. Place the tip of a flat head screwdriver between the lens gasket and the body of the fixture. **Gently** pry the lens and lens gasket from the fixture body,

moving the screwdriver along the circular edge of the fixture body as you work the lens gasket loose.

4. Remove the gasket from the glass lens and install a new gasket, P/N R0451101 for the large light and R0400501 for the small light, on the lens. On the small LED light, remove the diverger from the lens and replace with a new one if it is damaged.
5. For White Light Bulb Replacement, go to Section C. For Color Light Bulbs Replacement, go to Section D. For Color LED Light Engine (PCB) Replacement, go to Section E.

C. Replace White Light Bulb

NOTE Always install a new lens gasket whenever disassembling the light per Jandy White Pool and Spa Lights Installation and Owner Manual.

1. Remove the damaged or faulty bulb by carefully unscrewing it from the socket.
2. Install the new bulb into the socket.

NOTE Be sure to use the correct bulb with the corresponding light fixture (12 volt bulb with a 12 volt light fixture and 120 volt bulb with a 120 volt light fixture). Using a 12 volt bulb with a 120 volt light fixture will damage the bulb.

3. To reassemble the light assembly go to Section F.

D. Replace Color Light Bulbs

NOTE Always install a new lens gasket whenever disassembling the light per Jandy Color Pool and Spa Lights Installation and Owner Manual.

1. Remove the two (2) Phillips head screws on the face of the dichroic assembly and remove the assembly to expose the bulbs.
2. Remove the damaged or faulty bulb by carefully pulling the bulb straight up and out of the socket. Use care when removing, old bulbs may break. It is recommended that all eight (8) bulbs be replaced at the same time (four sets of p/n R0451600).
3. Install the new bulbs into the sockets. **Hold bulbs on the outer casing only. Do not touch the bulb surface; doing so may reduce the bulb life.** You may need to wiggle the bulbs slightly as you insert the pins of the bulb into the receptacle. Once the pins have entered the receptacle of the socket be sure to push the bulb all the way down to seat it correctly.
4. To reassemble the light assembly go to Section F.

E. Replace LED Color Light Engine (PCB)

NOTE Always install a new lens gasket whenever disassembling the light per Jandy Color Pool and Spa Lights Installation and Owner Manual.

1. 12V Small Light Engine (PCB) Replacement

- a. Remove two (2) nuts and two (2) washers. Refer to Figure 5.
- b. Unplug the quick disconnect terminals from the light engine.
- c. Remove the light engine from the light fixture.
- d. Place new light engine into the fixture with the orientation shown in Figure 5.
- e. Secure the light engine with one (1) nylon washer and one (1) nut. Torque to 9 in-lbs.
- f. Place a nylon washer on the other stud and place the green ground wire terminal on the nylon washer and secure both with the nut. Torque to 9 in-lbs.
- g. Plug in the quick disconnect wire (white for the 12V and red for the 120V) onto the terminal (AC1) of the light engine.
- h. Plug in the quick disconnect wire (black for the 12V and blue for the 120V) onto terminal (AC2) of the light engine.

2. Large Light Engine (PCB) Replacement (120V and 12V)
 - a. Remove three (3) nuts and washers. Refer to Figure 6.
 - b. Unplug the quick disconnect terminals from the PCB.
 - c. Remove the light engine from the light fixture.
 - d. Place new light engine into the fixture with the orientation shown in Figure 6.
 - e. Secure the new light engine (PCB) with two (2) nylon washers and two (2) nuts. Torque to 9 in-lbs.
 - f. Plug in the white quick disconnect wire onto the terminal (J2) of the light engine.
 - g. Plug in the black quick disconnect wire onto terminal (J6) of the light engine for the 12V models; or terminal (J3) of the light engine for 120V models.
 - h. For 12V models, place a nylon washer on the stud and place the green ground wire terminal on the nylon washer and secure both with the nut. Torque to 12 in-lbs.
 - i. For 120V models, place the green ground wire on the stud and secure with the nut. Torque to 9 in-lbs.
3. To reassemble the light assembly, go to Section F.

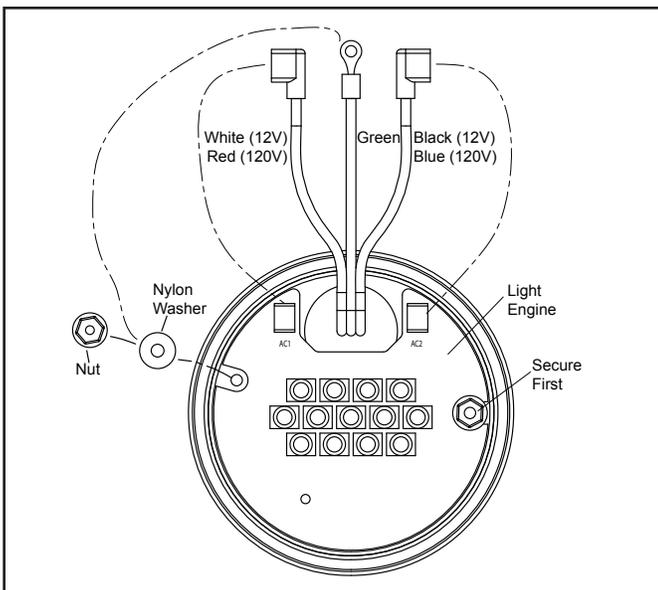


Figure 5. Small Light Engine (PCB) Replacement and Wiring

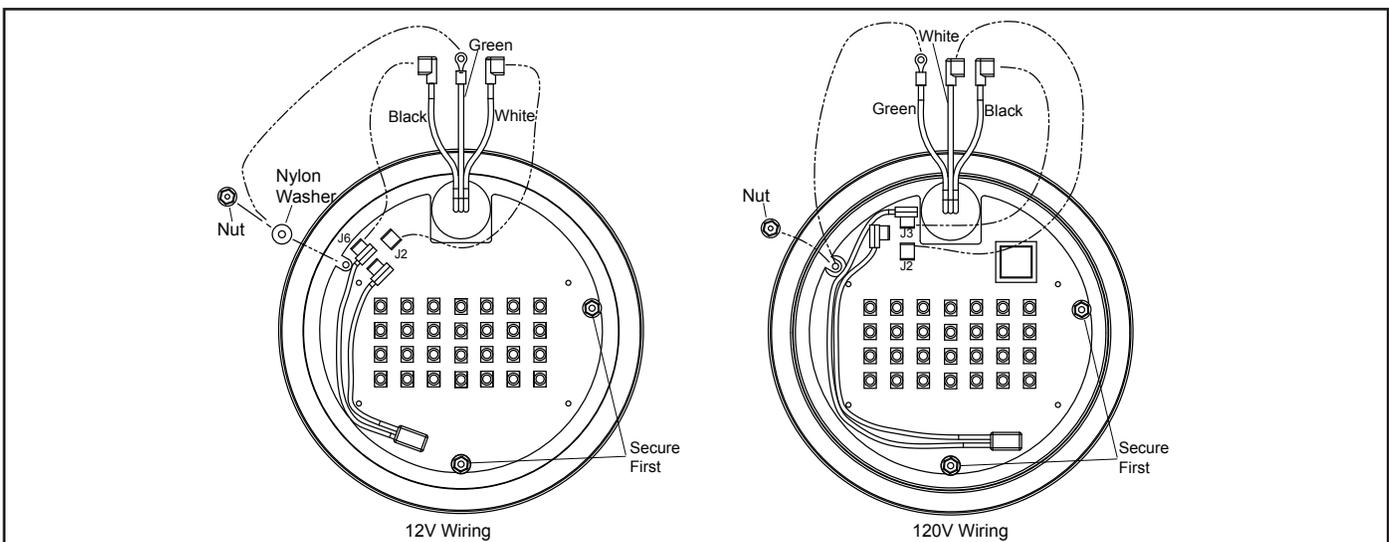


Figure 6. Large Light Engine (PCB) Replacement and Wiring

F. Reassemble Pool and Spa Light

Use the following procedure to reassemble the light assembly and test it for watertightness.

1. After replacing the bulb, check to see if the light is functioning correctly.
 - a. Be sure that there is no water in or near the light fixture.
 - b. Turn on the breaker to the pool/spa light electrical circuit.

**⚠ WARNING
BURN HAZARD!**

The light bulb becomes very hot when turned on and remains hot for several minutes after being turned off. Allow bulb to cool before handling. Touching the bulb when hot may cause severe burns.

⚠ WARNING

Never operate this underwater light for more than 10 seconds unless it is totally submerged in water. Without total submersion, the light assembly will get extremely hot, which may result in serious burns or in breakage of the bulb or lens. This may result in serious injury to pool or spa users, installers, or bystanders or damage to property.

- c. Turn on any other switches in the circuit to see if the bulbs light. Test the lights for ***no more than a few seconds***. If the switch is not in a location where you can see the lights, it is a good idea to have a helper stand near, ***but do not touch or handle the light*** so that it can be checked while the switch is turned on.
 - d. After checking the bulb, ***be sure to turn off all switches and the breaker*** on the light circuit before handling the light fixture.
2. If not already done, install the new lens gasket on the lens. Please note that the lens gasket is not symmetrical. Therefore, it must be installed correctly so that the lens can seal to the fixture body. Place the lens gasket on the lens so that the thick molded side of the gasket will mate with the body of the fixture when the lens is installed. See Figure 7.
3. Position the lens and gasket on the fixture body, by aligning the arrow on lens with the "TOP" marking on light fixture. See Figure 8.
4. Replace the face ring onto the top clamp.
 - a. To replace a stainless steel face ring, align the top hole in the face ring and the pilot top hole in the top clamp. Press the face ring straight onto the top clamp. Both of the bottom two (2)

snaps in the face ring should engage. Insert the pilot screw into the hole in the face ring and hold in place using the retaining ring.

- b. To replace a plastic face ring, align the top hole in face ring with the pilot screw hole in top clamp. Press face ring straight onto the top clamp. All three (3) snaps in the face ring should engage. Insert the pilot screw into the hole in the face ring and hold in place using retaining ring.
5. Place the face ring clamp assembly over the lens so that the pilot screw is aligned with the small arrow mark on the face of the lens. See Figure 8.
6. Spread the bottom clamp over the electrical cord and slide it onto the back of fixture to the face ring and top clamp.
7. Tighten the Phillips head screws (eight (8) for pool or six (6) for spa) in an alternating cross-pattern. Torque screws to approximately 20 in-lbs. Do not over-tighten.
8. Test the light assembly for watertightness before installing it in the wall of the pool/spa. Place the entire assembly in a bucket of water. If the assembly is not watertight, a stream of bubbles will emerge from the point of the leak.

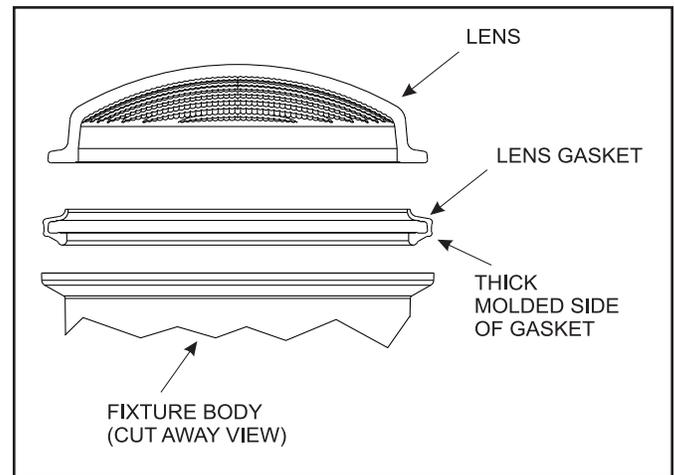


Figure 7. Install Thick Molded Side of Lens Gasket Towards Fixture Body

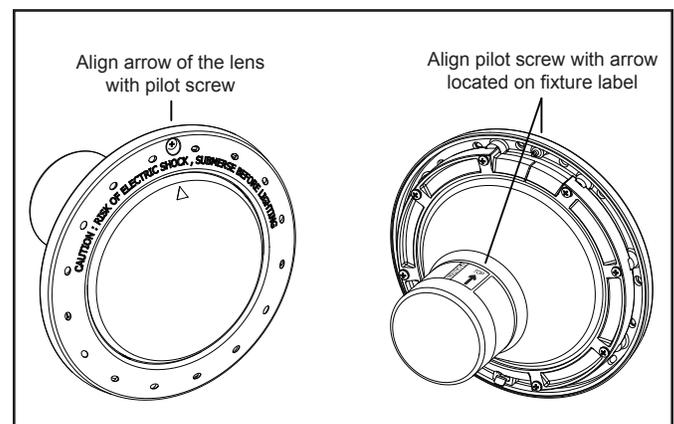


Figure 8. Lens, Pilot Screw and Label Alignment

If any leaks are noted, remove the assembly from the bucket and remove the clamp, lens and gasket. Check for debris or a reason for the leak around the gasket. Reassemble the gasket, lens, face ring and clamp and test the assembly again. Once a water tight seal has been achieved, proceed with the instructions to install the assembly into the niche in the pool/spa wall.

G. Reinstall Pool/Spa Light

Only after testing the light assembly for water-tightness as described in the previous step should you proceed with the reinstallation of the light into the pool/spa wall.

1. Coil the power cord in the back of the niche as you place the assembly into the pool/spa wall.
2. Insert the positioning tab on the face ring of the light into the tab locator on the bottom of the niche as you push the face ring against the pool/spa wall.

WARNING

Use only the special pilot screw provided with this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard, which could result in death or serious injury to pool or spa users, installers or others due to electrical shock.

3. Seat the light assembly in the niche by pushing the face ring down until the pilot screw aligns with the threaded boss on the top of the niche.
4. Secure the light to the pool/spa wall by tightening the pilot screw.

H. Parts List

The Parts List is on the following page.

