

# AquaLuminator™ Light and Return Water Flow for Above Ground Pools Owner's Manual

**IMPORTANT SAFETY INSTRUCTIONS**  
*READ AND FOLLOW ALL INSTRUCTIONS*  
**SAVE THESE INSTRUCTIONS**

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### **WARNING**

Before installing this product, read and follow all warning notices and instructions accompanying this light. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.

### **Important Notice**



Attention Installer.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

**Pentair Pool Products**

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## SECTION I. IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following.

1. This light can be installed on storable above ground or permanent above ground pools.
2. To reduce the risk of electric shock, if any cord becomes damaged, return the entire transformer assembly for repair or replacement.
3. Risk of entrapment, injury or death. Use plumbing passageways only to return water to pool. Do not use as a suction device.
4. Risk of electrical shock. Connect only to a grounding type circuit protected by a ground fault circuit interrupter. Contact a licensed electrician if you cannot verify that the receptacle or circuit is protected by a ground fault circuit interrupter. Do not use an extension cord.
5. Locate your pool so that the wall is at least 3.0 meters from all electrical receptacles and at least 6.1 meters from all receptacles not protected by a ground fault circuit interrupter. It is also very important to locate the pool so that it is not under any electrical wiring, that is less than 5.5 meters vertically above the pool wall and within an area located 3.0 meters outside the pool walls. The pool must also never be located under any lighting fixture or within 1.7 meters measured horizontally from any fixture mounted less than 1.7 meters vertically above the pool water level.
6. Risk of injury. Install the top of the lens with a minimum of 20.3 centimeters and a maximum of 25.4 centimeters below top of pool wall or in manufacturers pre-punched return fitting hole.
7. Do not use electrical equipment within 3.0 meters of pool wall unless specifically C.E. listed for that use.

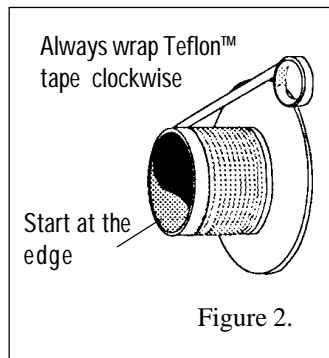
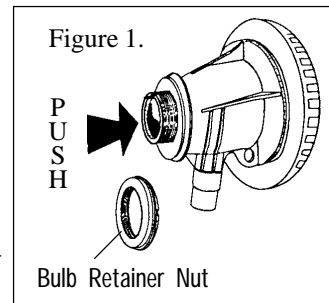
## SECTION II. LAMP HOUSING INSTALLATION

1. Remove the bulb retainer nut and push the bulb assembly out from the rear of the fitting body so that it will come out of the front of the fitting. The flow director will come off along with the bulb assembly; see Figure 1. Push the red cap/plug in the end of the bulb assembly. It will be removed later.
2. Unscrew the threaded wall flange from the fitting body by rotating it counter-clockwise.

### NOTE

Retain the gaskets supplied and keep them accessible.

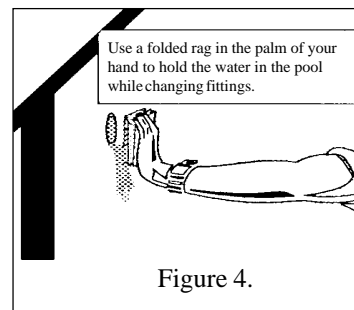
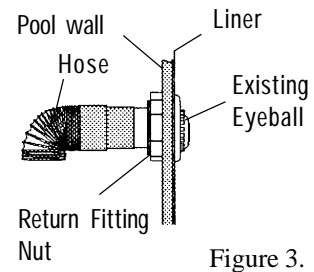
3. Use the Teflon™ tape provided. Snugly wrap the threaded wall flange in a clockwise direction (as viewed from the back) starting at the edge of the threads; see Figure 2. Work towards the flange lip (overlapping 1/2 of the tape width with each wrap) then back towards the starting point.
  - If you have a new pool, move on to step 10.
  - If the water level is below the return fitting on an existing pool, remove the old fitting and move on to step 10.
  - If the pool is full of water, follow steps 5 through 9.



### NOTE

Steps 4 through 8 require two (2) No. 9 winterizing plugs (not supplied).

4. Remove the existing eyeball fitting from the return fitting on your pool wall, see Figure 3.
5. Place a winterizing plug in the front side of the existing return fitting and disconnect the return hose and clamp from the existing fitting.
6. Place a winterizing plug in the front side of the AquaLuminator threaded wall flange.
7. While holding the existing return fitting from the inside of the pool, remove the large nut or the existing fitting body on the outside of the pool wall.
8. Using a folded rag in the palm of your hand, push the old return fitting out of the wall from the outside of the pool; see Figure 4. Hold the rag firmly against the wall to prevent water spillage.
9. Insert the flange and gasket from the inside of the pool through the hole cut out for the inlet fitting. Ensure that the threaded wall flange is centered on the hole.
10. Take the remaining gasket and put it on the threaded wall flange from the outside of the pool; see Figure 5. Standard sheet metal walls will have one gasket and one spacer left over. Do not use these two items, as they are for use on narrow interlocking wall panels only.

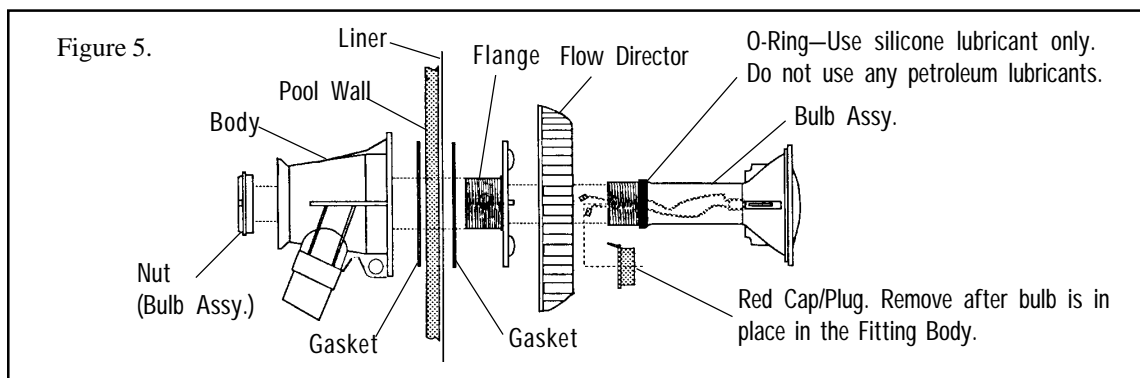


### NOTE

For narrow, interlocking, extruded aluminum wall panels, center flange between the ridges while viewed from the inside of the pool. Add the spacer and additional gasket to the flange before inserting the flange through the wall panel. This is necessary to accommodate a fountain attachment.

## ⚠ WARNING

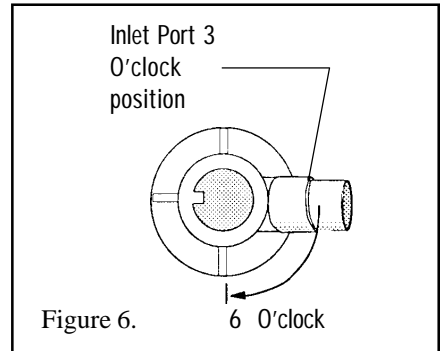
The light fixture must be mounted so that the word "top" is at the top of the fixture when installed. Incorrect orientation and a low water condition can damage the light fixture.




- With the inlet port of the fitting body in the 3 O'clock position, place the fitting body against the threads of the flange and keeping the inlet port in the 3 O'clock position; see Figure 6. Hand tighten the flange as tight as possible. Rotate the flange, not the body.

	<b>CAUTION</b>
	Do not over tighten the flange.

- To complete the tightening process, hold the flange in place and rotate the fitting body until the inlet port is in the 6 o'clock position; see Figure 6.
- Take a hose clamp and place it over the return hose cuff.
- Slip the return hose from the equipment, over the inlet port, and tighten the hose clamp securely; see Figure 7.
- Take the bulb assembly and insert it through the flow director. Note the aligning keyway on the bulb assembly as shown in Figure 8. The keyway must point in the same direction as the top key on the fitting body.

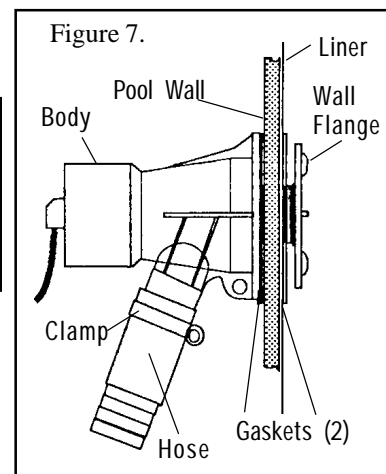


- Now, from inside the pool, push the bulb assembly and flow director with the red cap/plug in place into the fitting body until the bulb assembly/flow director are nearly flush against the inside pool wall.
- Thread the bulb assembly nut until it just touches the fitting body, then finger tighten.

	<b>CAUTION</b>
	Do not over tighten as adjustability of the flow director may be impaired and/or damage to parts causing leakage may occur. If the flow director does not rotate by hand, the nut is too tight.

- Take the red cap/plug off and gently bring the wire connectors through the back side of the bulb assembly. Save the red cap/plug for storage and winterizing.

	<b>CAUTION</b>
	This lighting fixture may be damaged if subjected to freezing weather. See winterizing instructions for details on how to store the bulb assembly.



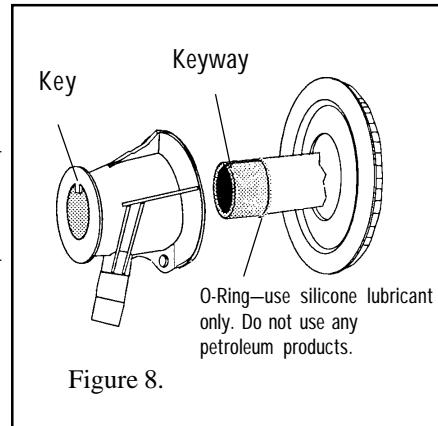
### SECTION III. ELECTRICAL CONNECTIONS FOR STORABLE POOLS

1. Connect the wire connectors from the bulb assembly to the wire connectors attached to the snap-on cord cap.

**NOTE**

There is no polarity (no positive or negative) to the wires, either connection will work.

2. Snap the cap onto the end of the body and turn so that the electrical cord is pointing down.
3. Mount the transformer on the vertical wall using the single screw provided.
4. Plug the power cord's 2-prong plug into an appropriate 220V ground fault circuit interrupter protected receptacle at least 3.0 meters from the pool.
5. If the light is not on, press the switch on the transformer case *once*.



**⚠ WARNING**



Risk of electric shock. Connect only to a grounding-type receptacle protected by a ground fault circuit interrupter. Do not use extension cords for connection. Failure to do so can result in death or severe personal injury.

???WHAT IS A ground fault circuit interrupter???

A 'Ground Fault Circuit Interrupter' is an electrical safety device designed to measure electrical leakage in a circuit. It is far more sensitive than a standard circuit breaker. Ground fault circuit interrupter equipped breakers and outlet combinations react to unsafe leakage and shut the power off before electrical shock injury can occur. Any electrical device used within 3.0 meters of a pool must be protected by a ground fault circuit interrupter equipped outlet or a ground fault circuit interrupter equipped circuit breaker and be intended for such use.

### SECTION IV. RELAMPING INSTRUCTIONS

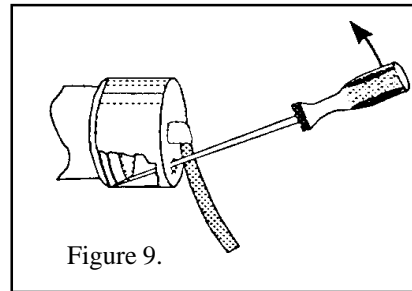
**⚠ WARNING**



Risk of electric shock. Disconnect power before servicing this unit. Failure to disconnect power can result in death or severe personal injury.

1. It is desirable to reduce the water level to the lower edge of the flow director. This makes bulb assembly replacement easier, but it is not mandatory.
2. Remove power from the unit by taking the power cord's 2-prong plug and disconnecting it from its electrical outlet, or in the case of a hard-wired application, by turning the respective circuit breaker to the OFF position.

3. Remove the snap-on cord cap by inserting a slotted screw driver into the access hole as illustrated in Figure 9 and prying upwards.
4. Disconnect both wire connectors and put the snap-on cord cap aside in a dry location and remove the bulb assembly nut.
5. At this point you should have the new replacement bulb assembly accessible and confirm that the red cap/plug is pressed firmly into the bulb assembly to prevent water from entering the bulb assembly.



6. If you were able to lower the water level as suggested in step 1, then simply remove the old bulb assembly by pulling on the flow director while pushing the bulb assembly from the outside of the pool. If you were unable to lower the water level, follow these instructions: push the bulb assembly out from the outside of the pool, keeping the back of the fitting covered with a folded rag in the palm of your hand to prevent water loss from the rear of the fitting body. Pull the flow director and bulb.
7. Take the new replacement bulb assembly with the red cap/plug in place and insert the bulb assembly through the flow director. Note the aligning keyway on the bulb assembly as shown in Figure 8. The keyway must point in the same direction as the top key on the fitting body.  
Now, from inside the pool, push the bulb assembly with the flow director into the fitting body until both are nearly flush against the inside pool wall. You can now remove your hand and the fitting should again be sealed.
8. Thread the bulb assembly nut until it just touches the fitting body, then finger tighten.

	<b>⚠ CAUTION</b>
	Do not over tighten as adjustability of flow director may be impaired and/or damage to parts causing leakage may occur. If flow director does not rotate by hand, nut is too tight.

9. Take the red cap/plug off and gently bring the wire connectors through the back side of the bulb assembly. Save red cap/plug for storage and winterizing.
10. Connect the wire connectors from the bulb assembly to the wire connectors attached to the snap-on cord cap.

#### NOTE

There is no polarity (no positive or negative) to the wires, either connection will work.

11. Snap cap onto end of body and turn so that the electrical cord is pointing down.

	<b>⚠ WARNING</b>
	Risk of electric shock. Connect only to a circuit protected by a ground fault circuit interrupter. Failure to do so can result in death and/or serious injury.

12. Reconnect the power to a circuit in accordance with the appropriate electrical connections. See Section III, Electrical Connections. If the light is not on, press the switch on the transformer case *once*.

## ⚠ WARNING



This is an electrical appliance. Unsupervised use of this product by children can result in injury and/or death.

### SECTION V. STORAGE AND WINTERIZING INSTRUCTIONS

1. It is common practice to drain the water level to a point below the skimmer and the light, for winterizing.
2. **For storable pools:** remove power from the unit by taking the power cords' three-prong plug and disconnecting it from its electrical outlet.
3. Remove the snap-on cord cap by inserting a slotted screwdriver into the access hole and prying upwards, as illustrated in Figure 9, Section IV Relamping Instructions.
4. The wire connectors should be gently disconnected and pushed into the rear of the bulb assembly.
5. Push red cap/plug into rear of bulb assembly to seal it.
6. Remove the bulb assembly nut.
7. Remove the bulb assembly by pulling on the flow director while pushing the bulb assembly from the outside of the pool.

#### NOTE

The fitting body, threaded wall flange and gaskets may remain attached to the pool wall when winterizing, but should be removed if pool is to be stored.

8. **For storable pools:** remove the transformer from its mounting by lifting up and out.
9. Place all the parts together in a box and store indoors.

**When reinstalling bulb assembly next season do not use petroleum base product.**

## ⚠ CAUTION

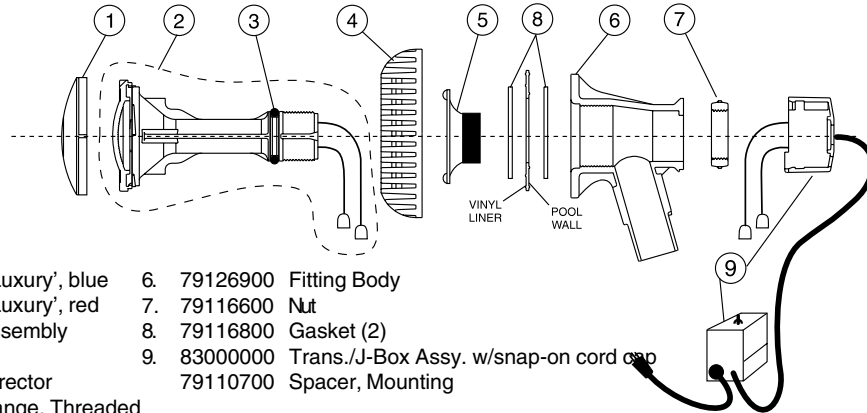


Do not use any petroleum base lubricant. Petroleum base products will destroy plastic parts. Lubricate o-ring with a silicone lubricant only. A new o-ring should be used each time the bulb assembly is removed.

**SAVE THESE INSTRUCTIONS.**

## SECTION VI. TECHNICAL DATA.

### A. REPLACEMENT PARTS.



- |                                   |   |
|-----------------------------------|---|
| 1. 79123401 Lens, 'Luxury', blue  | 6. 79126900 Fitting Body                          |
| 1. 49300000 Lens, 'Luxury', red   | 7. 79116600 Nut                                   |
| 2. 69100000 Bulb Assembly         | 8. 79116800 Gasket (2)                            |
| 3. 79116900 O-ring                | 9. 83000000 Trans./J-Box Assy. w/snap-on cord cap |
| 4. 79102800 Flow Director         | 79110700 Spacer, Mounting                         |
| 5. 79118300 Wall Flange, Threaded |   |

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