# AquaLuminator™ Light and Return Water Flow for Aboveground Pools Owners Manual

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

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## **AWARNING**

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**

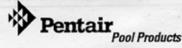


Attention Installer.

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.

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Because reliability matters most

#### SECTIONI. 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.
- A storable pool has a maximum water depth of 42 inches and is so constructed that it may be readily disassembled for storage and re-assembled to its original integrity.
- A permanent pool has a maximum water depth of over 42 inches. Do not install on therapeutic pools, hydro-massage bathtubs, spas or hot tubs.
- To reduce the risk of electric shock, if any cord becomes damaged, return the entire transformer assembly for repair or replacement.
- Risk of entrapment, injury or death. Use plumbing passageways only to return water to pool. Do not use as a suction device.
- Risk of electrical shock. Connect only to a grounding type circuit protected by a ground fault
  circuit interrupter (GFCI). Contact a licensed electrician if you cannot verify that the receptacle or
  circuit is protected by a GFCI. Do not use an extension cord.
- 7. Locate your pool so that the wall is at least 10 feet from all electrical receptacles and at least 20 feet from all receptacles not protected by a GFCI. It is also very important to locate the pool so that it is not under any electrical wiring, that is less than 18 feet vertically above the pool wall and within an area located 10 feet outside the pool walls. The pool must also never be located under any lighting fixture or within five (5) feet measured horizontally from any fixture mounted less than five (5) feet vertically above the pool water level.
- Risk of injury. Install the top of the lens with a minimum of 8 inches and a maximum of 10 inches below top of pool wall or in manufacturers pre-punched return fitting hole.
- Do not use electrical equipment within 10 feet of pool wall unless specifically U.L. listed for that
  use.

### SECTION II. LAMP HOUSING INSTALLATION

#### NOTE

Installation of the lamp housing into the pool wall is the same for both the storable and the permanent above ground pools.

- 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.
- 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.

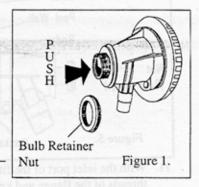
#### NOTE

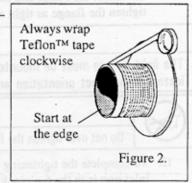
Steps 4 through 8 require two (2) No. 9 winterizing plugs (not supplied).

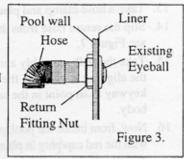
- Remove the existing eyeball fitting from the return fitting on your pool wall, see Figure 3.
- Place a winterizing plug in the front side of the existing return fitting and disconnect the return hose and clamp from the existing fitting.
- Place a winterizing plug in the front side of the AquaLuminator threaded wall flange
- 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.
- 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.
- 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.

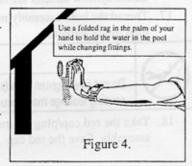
### NOTE

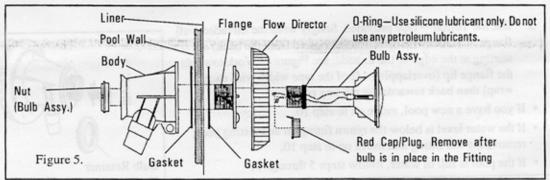
For narrow, interlocking, extruded aluminum wall panels, center flange between the ridges while viewed from the inside of the pool. Add the spacer and aditional gasket to the flange before inserting the flange through the wall panel. This is necessary to accommodate a fountain attachment.











11. 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.

## **AWARNING**

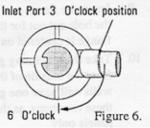
The light fixture must be mounted so that the word "top" is at the top of the fixture when installed. Incorrect orientation and a low water condition can damage the light fixture.



## **ACAUTION**

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.
- 13. Take a hose clamp and place it over the return hose cuff.
- 14. Slip the return hose from the equipment, over the inlet port, and tighten the hose clamp securely; see Figure 7.
- 15. 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.
- 16. 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.





# **ACAUTION**

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.

18. 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.



## ACAUTION

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

 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.
- Mount the transformer on the vertical wall using the single screw provided.
- Plug the power cord's 3-prong plug into an appropriate 110V GFCI protected receptacle at least 10 feet from the pool.
- 5. If the light is not on, press the switch on the transformer case once.

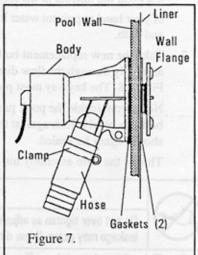
## **AWARNING**

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

#### **EXAMPLE 15 A GFCI???**

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. GFCI 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 10 feet of a pool must be protected by a GFCI equipped outlet or a GFCI equipped circuit breaker and be intended for such use.



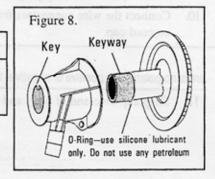
## SECTION IV. RELAMPING INSTRUCTIONS

## **AWARNING**



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

 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.



- Remove power from the unit by taking the power cord's 3-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.
- Remove the snap-on cord cap by inserting a slotted screw driver into the access hole as illustrated in Figure 9 and prying upwards.
- Disconnect both wire connectors and put the snap-on cord cap aside in a dry location and remove the bulb assembly nut.
- 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.

Figure 9.

- 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; see Figure 4. 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.
- Thread the bulb assembly nut until it just touches the fitting body, then finger tighten.



## ACAUTION

Do not over tighten as adjustability of flow director may be impaired and/or damage to parts causing leakage may occur. If low director does not rotate by hand, 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 red cap/plug for storage and winterizing.
- Connect the wire connectors from the bulb assembly to the wire connectors attached to the snapon 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; see Figure 10.

## AWARNING



Risk of electric shock. Connect only to a circuit protected by a GFCI. Failure to do so can result in death and/or serious injury.

 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.

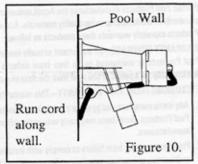
## AWARNING



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

- It is common practice to drain the water level to a point below the skimmer and the light, for winterizing.
- For storable pools: remove power from the unit by taking the power cords' three-prong plug and disconnecting it from its electrical outlet.
- Remove the snap-on cord cap by inserting a slotted screwdriver into the access hole and prying upwards; see Figure 9, Section IV, Relamping Instructions.
- 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.
- 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.

## **ACAUTION**

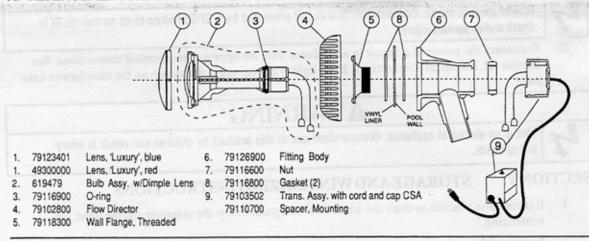


Do not use any petroleum base lubricant. Petroleum base products will destroy plastic parts. Lubricate o-ring with a silicone lubricant only. A new o-ring should be used each time the bulb assembly is removed.

## SAVE THESE INSTRUCTIONS.

#### TECHNICAL DATA. SECTION VI.

#### A. REPLACEMENT PARTS.



## Pentair Pool Products AguaLuminator™ Limited Warranty

standards of workmanship using quality materials. Accordingly, Pentair Pool Products expressly warrants these products as follows:

WARRANTY COVERAGE-All equipment actually manufactured by Pentair Pool Products is warranted to be free from defects in material and/or workmanship for a period of one year from the date of purchase.

EXCLUSIONS FROM THIS WARRANTY—This warranty does not cover:

- 1. Any items manufactured by other companies and installed by Pentair Pool Products. Such items may carry warranties offered by the original manufacturers.
- 2. Problems resulting from failure to comply with installation instructions or drawings, or improper installation. Damage caused by installer.
- 3. Problems resulting from abuse, misuse, negligence or accident by any party other than Pentair Pool Products.
- 4. Problems resulting in whole or in part from alteration or modification of these products by any party.
- Metal failures due to chemical corrosion.

WARRANTY OBLIGATIONS OF PENTAIR POOL PRODUCTS-Should a defect in workmanship and/or material in any item covered by this warranty become evident during the term of the warranty, then upon the consumer following the procedures set forth below, Pentair Pool Products will, at its option, repair or replace such item at its own cost and expense. Pentair Pool Products is not, however, responsible under this warranty for any cost of shipping or transportation of the equipment or parts thereof to or from the Service Department, Also, Pentair Pool Products is not liable for any loss of time, inconvenience, incidental expenses such as telephone calls, labor or

Pentair Pool Products manufactures the AquaLuminator ™under the highest material charges incurred in connection with the removal or replacement of the equipment. or any other incidental or consequential damages.

> PLEASE NOTE: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

> PROCEDURE FOR OBTAINING WARRANTY PERFORMANCE-In order to obtain the benefits of this warranty, the consumer who made the original retail purchase shall contact Pentair Pool Products, Consumer Relations Department, 10951 West Los Angeles Ave., Moorpark, CA 93021, as soon as possible after discovery of the defect, but in no event later than the expiration date of the warranty period provided in this warranty. Upon receipt of this communication, Pentair Pool Products will promptly notify the consumer of the address to which the defective item may be shipped. The consumer shall then ship the item. freight prepaid, to the address indicated together with a letter stating the model number, serial number, if any, and date of purchase of the item which is claimed to be defective, the name and address of the consumer, and a brief description of the problems encountered. WARRANTY PROTECTS ORIGINAL RETAIL PURCHASER - This warranty extends to the consumer who made the original retail purchase only and is not enforceable by any other party.

> WARRANTIES OR REPRESENTATIONS BY OTHER - No dealer or other person has any authority to make any warranties or representations concerning Pentair Pool Products or its products. Accordingly, Pentair Pool Products is not responsible for any such warranties or representations.

> OTHER RIGHTS - This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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