

# **IntelliBrite**®

# Underwater Pool and Spa White LED Light





# Installation and User's Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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P/N 619838 Rev B - 10/07/09

### **WARNINGS AND IMPORTANT SAFETY PRECAUTIONS**



SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS PUMP AND SAND FILTER IS NOT INSTALLED AND USED CORRECTLY.



INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL AND/OR SPA LED 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 and spa light. This Guide should be given to the owner and/or operator of this equipment.

**A**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.pentairpool.com for more information related to this products.



### RISK OF ELECTRICAL SHOCK OR ELECTROCUTION:

INTELLIBRITE® POOL AND SPA WHITE LED LIGHTS REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.

BEFORE WORKING ON INTELLIBRITE POOL AND SPA WHITE LED LIGHTS! Always disconnect power to the pool and/or spa 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 National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. 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.

READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.

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

- All Niche and Light installations must conform with all codes. If local codes mandate a cord seal, use Pentair Water Pool and Spa plastic niches (P/N 79206600 and P/N 79206700).
- Under no circumstances replace lights by splicing wire under water or behind niche.

### **WARNINGS AND IMPORTANT SAFETY PRECAUTIONS**

AWARNING 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		Fixture Housing (Forming Shell) ONLY. <b>DO NOT USE</b> 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 produces under UL's Listing and Follow-Up Service for the associated usage location.

CAUTION - The Pentair Water Pool and Spa® IntelliBrite LED light fixture must only be used with Pentair Water Pool and Spa fixture housings (niches). If the IntelliBrite LED light fixture is installed into other niches, the installation will not carry U.L. approval and will void all warranties.

Salt is an inherently corrosive material. While the levels of salt required Salt is an innerently corrosive material.

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 Water Pool and Spa 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.

### IntelliBrite® Pool White LED Light models

There are two IntelliBrite Pool LED light models:

- IntelliBrite Pool White LED Light, 120 VAC, with integrated 12 VAC transformer, 50 ft. cord length\* (P/N 600101).
- IntelliBrite Pool White LED Light, 12 VAC, (requires 120 VAC to 12 VAC transformer), 50 ft. cord length\* (P/N 600104)
- (\*) cord length vary from 30 ft. to 100 ft.

#### IntelliBrite® Spa LED Light models

There are two IntelliBrite Spa LED light models:

- IntelliBrite Spa White LED Light, 120 VAC, with integrated 12 VAC transformer, 50 ft. cord length\* (P/N 640051)
- IntelliBrite Spa White LED Light, 12 VAC, (requires 120 VAC to 12 VAC transformer), 50 ft. cord length\* (P/N 640054)
- (\*) cord length vary from 30 ft. to 100 ft.

### IntelliBrite® Underwater Pool and Spa White LED Light Overview

This manual describes how to installation and setup the IntelliBrite underwater pool and spa white LED (light-emitting diode) light. The IntelliBrite pool and spa light provides brilliant white light for spectacular effects for your pool and spa. The unique IntelliBrite lens geometry provides a wider beam for greater underwater light reflection providing increased light intensity.

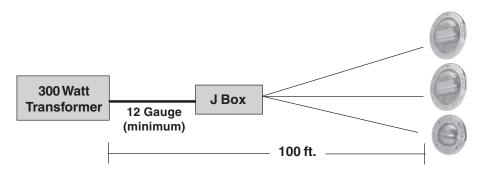
IntelliBrite LED lights are fully compatible with Pentair Water Pool and Spa® IntelliTouch®, EasyTouch® and SunTouch® automation system. For more information refer to the IntelliTouch User's Guide (P/N 520102), EasyTouch User's Guide (P/N 520584), and SunTouch User's Guide (P/N 520785).

### Operating IntelliBrite White Pool or Spa LED lights

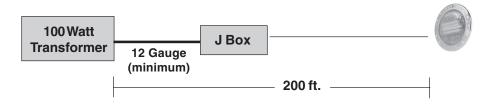
The IntelliBrite pool and spa white LED lights can be manually controlled using a standard wall-mount light switch. Multiple IntelliBrite lights can be connected via a junction box to a single switch so that all lights can be switched on and off together.

# Using an External Transformer for Multiple IntelliBrite 12 VAC Lights

When using multiple IntelliBrite 12 VAC LED lights on a **300 Watt** transformer, it is recommended that no more than two (2) IntelliBrite pool lights and one (1) IntelliBrite Spa light be used. It is also recommended not to exceed 100 feet of total cable run between the transformer and light (see diagram below).



If a longer cable run is necessary, it is recommended that separate **100 Watt** transformers be used for each light with no more than 200 feet of total cable run between the transformer and light (see diagram below).



### **Troubleshooting**

Use the following tips to help to resolve problems that might occur while operating the LED light.

Problem	Cause/Action
The light will not illuminate.	Check the ground fault wiring and reset if necessary.
Light does not function properly.	Check the light wiring connection to the junction box at the pool side and to the AC power switch.
	Be sure that there is proper AC power applied to the light.

### IntelliBrite Pool and Spa White LED Light Installation

The following describes how to install the IntelliBrite pool and spa white LED light fixture. Read through pages 2 through 7 before starting the installation procedure.

BEFORE STARTING: The following steps 1-6 (page 3-4) describe the tasks that must be completed by the electrician before the IntelliBrite light fixture is installed. See Figure 1 diagram.

# **A**WARNING

Be sure that the pool or spa meets the requirements of the current National Electrical Code (N.E.C.) Article 680-22 and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

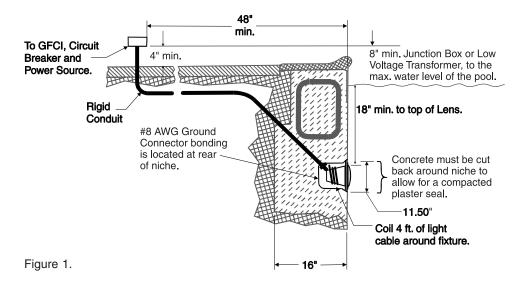
- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for 12 volt models, the low voltage transformer) is located at least 8 inches above the maximum water level of the pool and at least 48 inches from the edge of the pool;
- The light fixture and all metal items within 5 feet of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1. (Not more than 20" depth in Canada.)
- The wet niche is properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche; see Figure 1.

**Note:** The pool or spa electrical system can be verified with a Pool and Spa Electrical Qualification Test Kit. The test kit is available from Pentair Water Pool and Spa®. The electrical system inspection using this kit must be performed by trained and certified personnel.

- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.
- Use only Pentair Water Pool and Spa wet niches to insure proper bonding and grounding connections.

# Installing the IntelliBrite White LED light (after electrical requirements are met)

 Feed cord through conduit to Junction Box, leaving at least four (4) feet of cord at the light fixture to coil around the light; see Figure 1. The four (4) feet of cord around the light allows the light to be serviced after the pool is filled with water.



- Cut the cord at the Junction Box, leaving at least six (6) inches of cord to make connections.
- Strip back six (6) inches of the outer cord jacket to expose the three insulated wires (be careful not to damage the insulation on the three (3) inner wires).
- 4. Connect all three (3) wires to the corresponding circuit wires in the Junction Box and secure the Junction Box cover in place.

**AWARNING**Never operate this underwater light for more than ten (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 lens. This may result in serious injury to pool users, installers, or bystanders, or in damage to property.

5. Install the IntelliBrite light assembly into the niche and tighten the special bronze pilot screw.

**AWARNING** 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 users, installers or others due to electrical shock.



IntelliBrite Pool White LED Light



IntelliBrite Spa White LED Light

- 6. Fill the pool until the underwater light is completely submerged in water before operating the light for more than ten (10) seconds.
- 7. **Final check for proper light operation:** To check for proper operation, switch on the main switch or circuit breaker, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 3)

# FOR INTELLIBRITE POOL AND SPA WHITE LED LIGHT REMOVAL AND INSTALLATION INSTRUCTIONS SEE:

- IntelliBrite Pool White LED Light Removal and Installation instructions, on page 5.
- IntelliBrite Spa White LED Light Removal and Installation instructions, on page 11.

## Replacing the IntelliBrite Pool White LED Light Assembly



# D A N G E R! RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

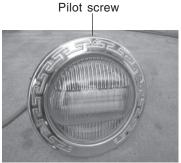
Always disconnect power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to installer, serviceman, pool users, or others due to electrical shock.

- Turn off main electrical switch or circuit breaker, as well as the switch which operates the IntelliBrite LED underwater light itself.
- 2. Before starting make sure that you have a new lens gasket (P/N 79101600) and a IntelliBrite LED pool light assembly (P/N 619834Z) ready to install.

Replace the LED light assembly with the same type and wattage. Failure to replace the LED light assembly with the same type will damage the LED 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.

Always install a new lens gasket (P/N 79101600) whenever disassembling the IntelliBrite LED 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. **REMOVING THE INTELLIBRITE LED LIGHT:** Remove the pilot screw at top of face ring, remove the light assembly from the niche. Place the assembly on the deck. **Note:** It is not necessary to drain down the pool.

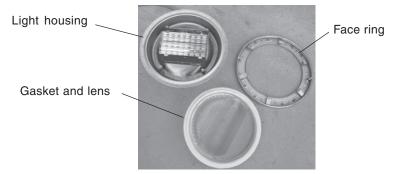
Be sure to keep the pilot screw from the IntelliBrite LED underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

- 4. Using a ¼" nut driver and a #3 Phillips screwdriver, remove the nut unitension wire clamp. Place the nut aside for reinstallation.
- 5. Remove the face ring and wire clamp from the light housing.

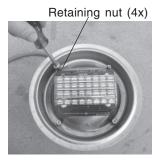


Spring clamp: Remove nut and screw

 With the light resting on its base, carefully pry off the gasket to remove the lens. Discard the gasket. A NEW LENS GASKET (P/N 79101600) MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED. See page 10 for replacement kit part numbers.



- 7. Using a ¼" nut driver, carefully remove the four retainer nuts from the LED light assembly. Place the nuts aside for reinstallation.
- Unplug the LED light assembly connector and remove the assembly from the housing.







Unplug the LED light assembly connector to remove the light assembly from its housing

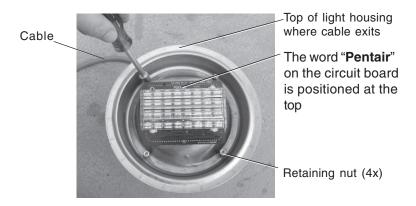
IntelliBrite® Pool and Spa White LED Light Installation and User's Guide

- INSTALLING THE INTELLIBRITE LED LIGHT WITH NEW GASKET: Install
  a new gasket (P/N 79101600, see page 10) during reassembly of the
  IntelliBrite LED light. A NEW LENS GASKET MUST BE USED EACH TIME
  THE LIGHT IS REASSEMBLED.
- Clean the inside surface containing the four mounting studs with isopropyl alcohol. Be sure to keep the underside of the new IntelliBrite LED assembly clean.



Clean this surface before installing the light assembly

- 11. Connect the IntelliBrite LED light plug to the connector in the light housing. Lower the LED light assembly into the light housing. Be sure that there are no wires caught between the housing and the back of the light assembly.
- 12. Orientate the light assembly so that the word "Pentair" on the circuit board is positioned at the top (where cable exits) as shown below.



13. With the housing resting on its base, carefully align the four screws holes of the light assembly and the housing base. Using a ¼" nut driver, secure the light assembly in place with the four (4) retaining nuts.

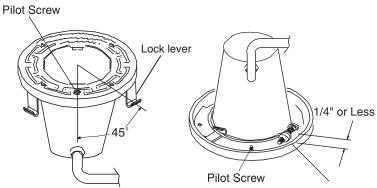
#### 14. Install the new gasket onto the lens:

- a) With the light housing resting on its base, place the lens then the gasket on top of the light housing.
- **b**) Place the face ring on top of the gasket. Make sure that the lens and gasket are centered correctly on the light housing.
- c) Aligning the face ring and lens: Align the face ring and lens so that the letter "O" in the word "TOP" (and the small arrow above it) on the surface of the lens points to the pilot screw hole on the face ring.
- d) Aligning the lens position with the LEDs: While looking through the front of the lens, slightly rotate the lens until the vertical lines on the lens are in focus with the four (4) rows of LEDs below.

Align letter "O" in the word "TOP" on lens with pilot screw hole on face ring

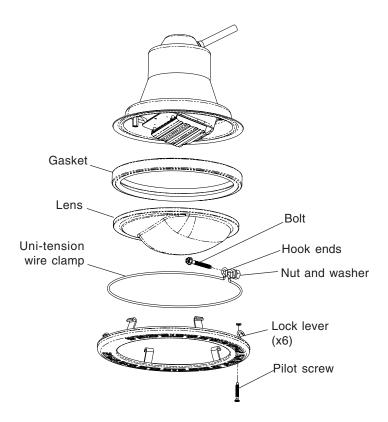
Align vertical line on lens with rows of LEDs under lens

- 15. With the hook ends of the circular uni-tension clamp pointing down, spread the clamp and place it in the "U" recesses of the locking levers. Be sure the hook ends of the clamp are located between the pair of locking levers as shown below and that the wire clamp is properly engaged with all of the lock levers.
- 16. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Be sure the orientation of the wire clamp and the bolt connection is positioned at 45°.
- 17. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-inch or less.



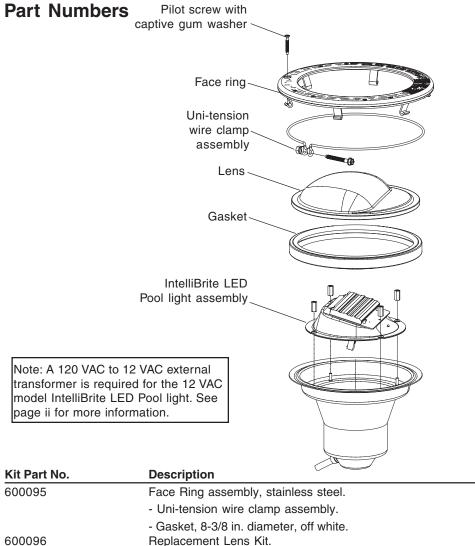
Position wire clamp nut and bolt about 45° between Pilot screw and lock levers.

Tighten nut and bolt so that distance between ends of clamp equals ¼-inch or less..



18. PROCEED TO "Replacing the IntelliBrite White LED Light Assembly (in an existing pool or spa)" on page 16 for pool light assembly installation instructions.

# IntelliBrite Pool White LED Light Replacement Kit



Kit Part No.	Description
600095	Face Ring assembly, stainless steel.
	- Uni-tension wire clamp assembly.
	- Gasket, 8-3/8 in. diameter, off white.
600096	Replacement Lens Kit.
	- Gasket, 8-3/8 in. diameter, off white.
	- Lens, IntelliBrite, Pool, 8-3/8 in. diameter, tempered.
619834Z	Replacement Kit (light assembly, white LED).
	- Uni-tension wire clamp assembly.
	- Gasket, 8-3/8 in. diameter, off white.
79104800	Pilot screw, with captive gum washer.
79101600	Gasket, 8-3/8 in. diameter, off white.

Note: The 120 Volt IntelliBrite White light has an integrated 12 Volt transformer.

# Replacing the IntelliBrite Spa White LED Light Face ring and Gasket (P/N 640045) or Gasket and Lens (640046) see page 15

Note: When replacing an IntelliBrite Spa White LED light assembly, a new spa light assembly includes a light engine, lens, gasket and face ring (for part light assembly part numbers, see page ii).



#### DANGER!

#### 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, pool professional, pool users, or others due to electrical shock.

 Turn off main electrical switch or circuit breaker, as well as the switch which operates the IntelliBrite LED underwater light itself.

Replace the LED light assembly with the same type and wattage. Failure to replace the LED light assembly with the same type will damage the LED 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.

Always install a new lens gasket (see page 15 for kit part numbers) whenever disassembling the IntelliBrite LED 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.



IntelliBrite Spa White LED Light

REMOVING THE INTELLIBRITE LED LIGHT: Remove the pilot screw at top
of face ring, remove the light assembly from the niche. Place the assembly
on the deck. Note: It is not necessary to drain down the pool.

Be sure to keep the pilot screw from the IntelliBrite LED 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 users, installers or others due to electrical shock.

- 4. Using a number three (3) Phillips head screwdriver loosen the screw and remove uni-tension wire clamp from the face ring.
- 5. Remove the face ring and wire clamp from the light housing and set aside for installation later.

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite LED Spa light. See page 9 for more information.

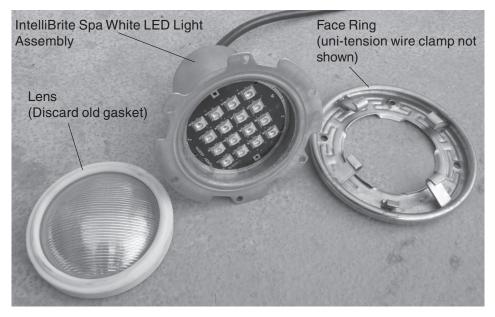
Loosen the Phillips screw to remove wire clamp

Note: The IntelliBrite Spa Light fixture is a sealed light assembly which is replaceable. The lens, gasket and face ring can be removed from the sealed light assembly for replacement. See page 15 for replacement kit part numbers.



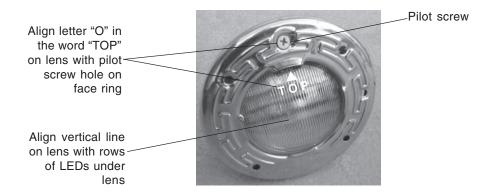
IntelliBrite spa light fixture with lens, gasket and face ring attached

- With the light assembly resting on its base, carefully pry off the gasket to release the lens. Discard the gasket. A NEW LENS GASKET MUST BE USED EACH TIME THE SPA LED LIGHT IS REASSEMBLED
- 7. Disconnect the IntelliBrite Spa LED light assembly cable from the junction box and discard the light assembly.



IntelliBrite® Pool and Spa White LED Light Installation and User's Guide

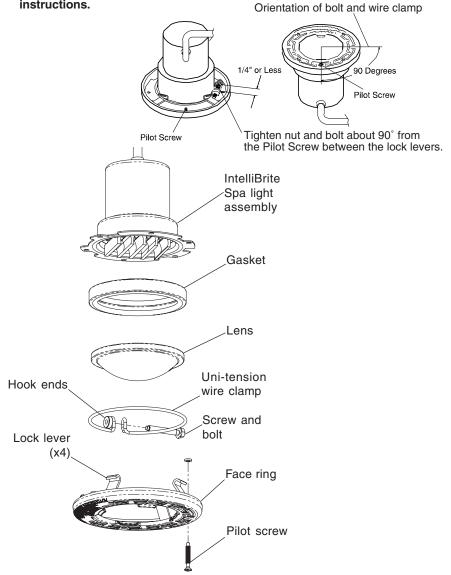
- 8. **INSTALLING THE INTELLIBRITE SPA LED WHITE WITH NEW GASKET:** Install a new gasket during reassembly of the IntelliBrite spa LED white light. A NEW LENS GASKET MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED.
- 9. Install the new gasket onto the lens:
  - a) With the light housing resting on its base, place the lens then the gasket on top of the light housing.
  - **b**) Place the face ring on top of the gasket. Make sure that the lens and gasket are centered correctly on the light housing.
  - c) Aligning the face ring and lens: Align the face ring and lens so that the letter "O" in the word "TOP" and the small arrow above it) on the surface of the lens points to the pilot screw hole on the face ring.
  - d) Aligning the lens position with the LEDs: While looking through the front of the lens, slightly rotate the lens until the vertical lines on the lens are in focus with the four (5) rows of LEDs below.



- 10. With the hook ends of the circular uni-tension wire clamp pointing down, spread the clamp and place it in the "U" recesses of the locking levers. Be sure the hook ends of the wire clamp are located between the pair of locking levers as shown below and that the clamp is properly engaged with all of the lock levers.
- 11. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-in or less.

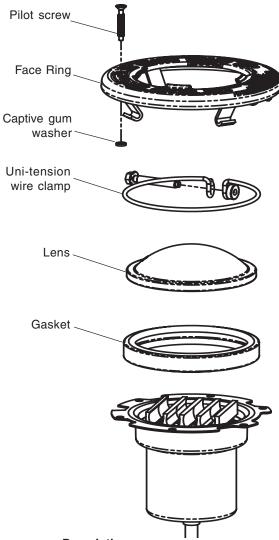
12. PROCEED TO "Replacing the IntelliBrite White LED Light Assembly (in an existing pool or spa)" on page 16 for spa light assembly installation instructions.

Orientation of holt and wire claims



IntelliBrite® Pool and Spa White LED Light Installation and User's Guide

# IntelliBrite Spa Light Replacement Kit Numbers



Kit Part No.	Description
640045	Face ring assembly, stainless steel
	- Uni-tension wire clamp assembly
	- Gasket, 4 in diameter, off white
640046	Gasket, 4 in diameter, off white
	- Lens, IntelliBrite, Spa, 4 in diameter, tempered
79104800	Pilot screw, with captive gum washer
79108500	- Gasket, 4 in diameter, off white

**Note:** A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite LED Spa light. See page ii for more information.

# Replacing the IntelliBrite Pool or Spa White LED Light Assembly (in an existing pool or spa)

### **Risk of Electrical Shock or Electrocution!**



This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the National Electrical Code and all applicable local codes and ordinances. 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.

Verify that the pool and spa meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for 12 volt models, the low voltage transformer) is located at least eight (8) inches above ground level and at least 48 inches from the edge of the pool; see Figure 1 on page 3.
- The light fixture and all metal items within five (5) feet of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1 on page 3.
- The wet niche is properly electrically bonded and grounded via the No.
   8 AWG ground connector located at the rear of the niche; see Figure 1.

**Note:** The pool and spa electrical system can be verified with a Pool and Spa Electrical Qualification Test Kit. The test kit is available from Pentair Water Pool and Spa. The electrical system inspection using this kit must be performed by trained and certified personnel.

- To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department.
- Use only Pentair Pool Products<sup>®</sup> wet niches to insure proper bonding and grounding connections.

# Replacing the IntelliBrite Pool or Spa White LED light (after electrical requirements are met)

The following installation instructions describe how to install the IntelliBrite white pool and spa LED light assembly after completing the LED light engine removal and replacement procedures. Refer to:

- IntelliBrite Pool White LED Light Removal and Installation instructions, on page 5.
- IntelliBrite Spa White LED Light Gasket, Face Ring and Lens Removal and Installation instructions, on page 11.

# **AWARNING**

Failure to bring the pool or spa's electrical system up to code requirements before installing the underwater light 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.

- WARNING! Switch off main electrical switch or circuit breaker, and the switch which operates the IntelliBrite underwater light.
- 2. **To remove light fixture assembly from the pool.** Remove the special bronze pilot screw at top of face ring. Remove the IntelliBrite light assembly from the niche and place it on the deck.
- 3. Remove Junction Box cover, disconnect the light fixture wires, and pull the cord through the conduit.
- 4. Feed the new light fixture cord through the conduit from the niche to the Junction Box. **Note:** Depending on the length of the conduit, special tools may be required to pull the cord through the conduit.
- 5. Leave at least four (4) feet of cord to coil around the light fixture; see Figure 1 on page 3. This four (4) feet of cord coiled around the light allows the light to be serviced after the pool is filled with water.
- 6. Cut the cord at the Junction Box, leaving at least size (6) inches of cord to make connections.
- 7. Strip six (6) inches of the outer cord jacket from the cord to expose the three insulated wires Be careful not to damage the insulation on the three inner wires.
- 8. Connect all three wires to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common, and green wire to ground) and secure the Junction Box cover in place.

**AWARNING** Never operate this underwater light for more than ten (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 lens. This may result in serious injury to pool users, installers, or bystanders, or in damage to property.

9. Install the IntelliBrite light assembly into the niche and tighten the special bronze pilot screw.

▲ 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 users, installers or others due to electrical shock.



IntelliBrite Pool White LED Light



IntelliBrite Spa White LED Light

10. Fill the pool/spa until the IntelliBrite underwater LED light is completely submerged in water before operating the light for more than ten (10) seconds. Note: The light should never be powered on out of the water for more than 10 seconds. Switch on main switch or circuit breaker, as well as the switch which operates the underwater light itself to verify that the light is operating correctly.



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