

Clean & Clear® Cartridge Filter Owners Manual

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

Table of Contents

SECTION I.	FILTER INSTALLATION	1
SECTION II.	FILTER OPERATION	2
SECTION III.	TROUBLESHOOTING	6
SECTION IV.	TECHNICAL DATA	7
	A. Filter Pressure Loss Chart	7
	C. Replacement Parts	7
	B. Flow Rate Table	7

⚠ WARNING

Before installing this product, read and follow all warning notices and instructions accompanying this filter. 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.

SECTION I. FILTER INSTALLATION

A. GENERAL INFORMATION

1. The filter should be mounted on a level concrete slab. Position the filter so that the instructions, warnings and pressure gauge are visible to the operator. Also, position the filter so that the piping connections, control valve and drain port are convenient and accessible for servicing and winterizing.
2. Install electrical controls (e.g., on/off switches, timers control systems, etc.) at least five (5) feet from the filter. This will allow you enough room to stand clear of the filter during system start up.
3. Provide sufficient clearance around the filter to permit visual verification that the clamp is properly installed, see Figure 1.
4. Provide sufficient space above the filter to remove the filter lid for cleaning and servicing. This distance will vary with the model of filter you are using. See Table 1, for the required vertical clearance.

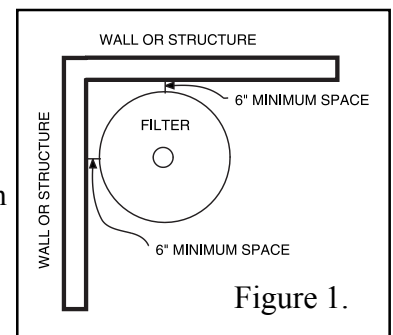


Figure 1.

Pentair Water Pool and Spa, Inc.

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 **Pentair** *Pool Products®*
Because *reliability* matters most®

⚠ WARNING



Risk of electrical shock or electrocution. Position the filter and High Flow™ manual air relief valve to safely direct water drainage and purged air or water. Water discharged from an improperly positioned filter or valve can create an electrical hazard that can cause severe personal injury as well as damage property.

5. When installing the High Flow™ manual air relief valve use the O-ring only, there is no need for thread sealing compounds. Position the filter to safely direct water drainage. Rotate the valve to safely direct purged air or water. Water discharged from an improperly positioned filter or valve can create an electrical hazard as well as damage property.
6. Make all plumbing connections in accordance with local plumbing and building codes. Filter plumbing connections are provided with an O-ring seal. Use only a silicone base lubricant on the O-rings. Do not use pipe joint compound, glue or solvent on the bulkhead connections.
7. The base of this filter is provided with two (2) mounting bosses for the purpose of anchoring the filter to the concrete.
8. The maximum working pressure of this filter is 50 psi. Never subject this filter to pressure in excess of this amount, even when conducting hydrostatic pressure tests. Pressures above 50 psi can cause the lid to be blown off, which can result in severe injury, death or property damage.

TABLE 1.

Model	P/N	Size	Vertical Clearance Req.
CC50	160314	50 sq. ft.	30 in.
CC75	160315	75 sq. ft.	39 in.
CC100	160316	100 sq. ft.	61 in.
CC150	160317	150 sq. ft.	76 in.
CC200	160318	200 sq. ft.	76 in.

When performing hydrostatic pressure tests or when testing for external leaks of the completed filtration and plumbing system, ensure that the Maximum Pressure that the filtration system will be subjected to DOES NOT EXCEED THE MAXIMUM WORKING PRESSURE OF ANY OF THE COMPONENTS CONTAINED WITHIN THE SYSTEM. In most cases, the maximum pressure will be stated on each component of the system.

If doubt exists as to the pressure to which the system will be subjected, install an ASME approved automatic Pressure Relief or Pressure Regulator in the circulation system for the lowest working pressure of any of the components in the system.

SECTION II. FILTER OPERATION

⚠ WARNING



THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., LOCK RING, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID TO BLOW OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE. TO AVOID THIS POTENTIAL HAZARD, FOLLOW THESE INSTRUCTIONS.

1. BEFORE REPOSITIONING VALVES AND BEFORE BEGINNING THE ASSEMBLY, DISASSEMBLY, OR ADJUSTMENT OF THE LOCK RING OR ANY OTHER SERVICE OF THE CIRCULATING SYSTEM: (A) TURN THE PUMP OFF AND SHUT OFF ANY AUTOMATIC CONTROLS TO ASSURE THE SYSTEM IS NOT INADVERTENTLY STARTED DURING THE SERVICING; (B) OPEN AIR RELIEF VALVE; AND (C) WAIT UNTIL ALL PRESSURE IS RELIEVED -PRESSURE GAUGE MUST READ ZERO (0).
2. WHENEVER INSTALLING THE FILTER LOCK RING, FOLLOW THE **FILTER LOCK RING INSTALLATION INSTRUCTIONS EXACTLY.**
3. ONCE SERVICE ON THE CIRCULATING SYSTEM IS COMPLETE, FOLLOW **SYSTEM RESTART INSTRUCTIONS EXACTLY.**
4. MAINTAIN CIRCULATION SYSTEM PROPERLY. REPLACE WORN OR DAMAGED PARTS IMMEDIATELY (e.g., lock ring, pressure gauge, relief valve, O-rings, etc.)
5. BE SURE THAT THE FILTER IS PROPERLY MOUNTED AND POSITIONED ACCORDING TO THE INSTRUCTIONS PROVIDED.

A. GENERAL INFORMATION

1. This filter operates under pressure. When the lock ring is installed properly and operated without air in the water system, this filter will operate in a safe manner.
2. The maximum working pressure of this filter is 50 psi. Never subject this filter to pressure in excess of this amount - even when conducting hydrostatic pressure tests. Pressures above 50 psi can cause the lid to be blown off, which can result in severe injury, death or property damage.

When performing hydrostatic pressure tests or when testing for external leaks of the completed filtration and plumbing system, ensure that the Maximum Pressure that the filtration system will be subjected to DOES NOT EXCEED THE MAXIMUM WORKING PRESSURE OF ANY OF THE COMPONENTS CONTAINED WITHIN THE SYSTEM. In most cases, the maximum pressure will be stated on each component of the system.

If doubt exists as to the pressure to which the system will be subjected, install an ASME approved automatic Pressure Relief or Pressure Regulator in the circulation system for the lowest working pressure of any of the components in the system.

3. The pressure gauge is the primary indicator of how the filter is operating. Maintain your pressure gauge in good working order.

WARNING



Your filter is a piece of machinery, do not tamper with it, attempt to disassemble it or otherwise adjust it unless you fully understand it's operation. Serious injury or death can occur if the equipment is improperly handled. Consult a pool service professional for maintenance and service assistance.

4. Clean your filter when pressure reads between 8-10 psi higher than the original starting pressure. Your filter pressure reading will increase as it removes dirt from your pool. However, this buildup of pressure will vary due to different bathing loads, temperature, weather conditions, etc.
 - a. MY ORIGINAL STARTING PRESSURE IS _____ psi (pounds per square inch).
I SHOULD CLEAN THE FILTER CARTRIDGES AT _____ psi.

NOTE

When the cartridge element filter is used on new pools and after cleaning the elements, introduce into the system .5 pounds of diatomaceous earth per every 100 square feet of filter area, (a one-pound coffee can equals .5 pounds of diatomaceous earth). Mix the diatomite with water and pour it into the skimmer after the pump is primed and the system is operating. This will enhance the filtration of your water.

B. LOCK RING INSTALLATION INSTRUCTIONS

These instructions **MUST BE FOLLOWED EXACTLY** to prevent the lid from blowing off during system restart or later operation.

1. Perform the following steps before working on any part of the circulating system (e.g., lock ring, pump, filter, valves, etc.).
 - a. Turn the pump off and shut off any automatic controls to ensure that the system is not inadvertently started during servicing.
 - b. Open the High Flow™ manual air relief valve.
 - c. Wait until all pressure is relieved. **Never attempt to assemble, disassemble or adjust the filter lock ring while there is any pressure in the filter.**

⚠ WARNING



THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., LOCK RING, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE. TO AVOID THIS POTENTIAL HAZARD, FOLLOW THESE INSTRUCTIONS.

2. Be certain the O-ring is in position in the lower tank half. Place the filter lid over the lower tank half, making sure it is fully and firmly seated on the tank half, see Figure 2.
3. Place lock ring over the tank lid, and centering the lock ring on the threads of the tank body. Turn the lock ring clockwise until the safety latches click and the lock ring hits the stops on the body. **DO NOT ATTEMPT TO OVER-TIGHTEN THE LOCK RING AFTER LOCK RING HAS HIT THE STOPS ON THE BODY.**
4. Follow the System Restart Instructions in Section C.

C. SYSTEM RESTART INSTRUCTIONS

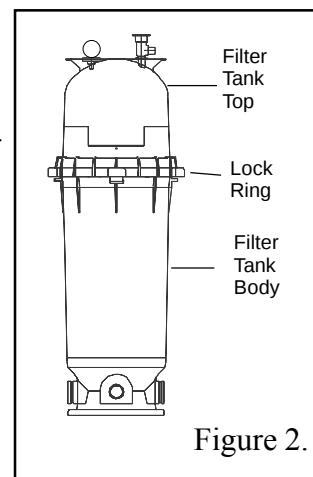
⚠ WARNING



THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., LOCK RING, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE. TO AVOID THIS POTENTIAL HAZARD, FOLLOW THESE INSTRUCTIONS.

1. **Open the High Flow™ manual air relief valve until it snaps into the full open position (this only requires a quarter turn counterclockwise).** Opening this valve rapidly releases air trapped in the filter.
2. Stand clear of the filter tank, then start the pump.
3. Close the High Flow™ manual air relief valve after a steady stream of water appears.
4. The system is not working properly if either of the following conditions occur.
 - a. A solid stream of water does not appear within 30 seconds, after the pump's inlet basket fills with water.
 - b. The pressure gauge indicates pressure before water outflow appears.

If either condition exists, **shut off the pump immediately**, open valves in the water return line to relieve pressure, and clean the air relief valve, see Section F. Cleaning the High Flow™ manual air relief valve. If the problem persists, call (800) 831-7133 for assistance.



D. CLEANING THE FILTER

⚠ WARNING

The following information should be read carefully since it outlines the proper manner of care and operation for your filter system. As a result of following these instructions and taking the necessary preventative care, you can expect maximum efficiency and life from your filter system.

⚠ CAUTION



Please heed all manufacturers' posted instructions, warnings and cautions when using Baquacil® or Baqua® Clean.

1. Turn the pump off, shut off any automatic controls to ensure that the system is not inadvertently started during servicing.

2. Open the filter High Flow™ manual air relief valve, (and the waste drain valve, or cap, if your system has one).

NOTE

Special care must be taken when cleaning cartridge element used in a swimming pool or spa using Baquacil® as a sanitizer. Because of the way Baquacil® works, the cartridge element must be cleaned more thoroughly and more frequently than in a chlorine system. If extreme care is not taken to completely remove all residue from the cartridge element, a buildup will occur. This buildup will significantly shorten the life of the cartridge element.

Baquacil® is a mild coagulant which combines bacterial cells as well as other small particles contributed by the environment, bathers, etc. into particles large enough to be trapped by the filter. In comparison with all other trapped contaminants in a typical pool or spa the amount of bacterial cells that are deposited on the filter is minimal. The resulting deposit is a gray sticky film which can only be removed with Baqua® Clean. If TSP or any TSP type cleaner is used prior to stripping the film, the cleaner and the gray film will combine to form a gum-like substance. Once this occurs, the substance cannot be removed from the media and the cartridge element must be replaced.

3. Remove hair and lint strainer pot lid and clean basket. Replace basket and secure lid.
4. Disconnect air relief drain hose if installed.
5. Remove locking ring by depressing safety latches on both sides of ring and rotate counterclockwise, then remove tank lid.
6. Remove the element assembly by placing hands in lifting handles and pulling straight up on the element assembly.
7. Remove the cartridge element from the center support tube.
8. Using a garden hose with a nozzle, direct water spray at the cartridge element to dislodge and wash away accumulated foreign matter. Water may be sprayed at the outside as well as the inside of the cartridge element for thorough cleaning.
9. Turn the cartridge element over several times during the washing operation to clean the media thoroughly.
10. Clean and remove debris from inside the filter tank and from the O-ring and O-ring groove on the tank body.
11. Replace clean cartridge element on support tube and install assembly into the filter tank body, aligning the arrow on the support tube with the inlet port of the filter, making sure it is fully seated. Make sure the internal air relief screen is attached to the top of the element support tube.
12. Replace the tank lid onto the tank body making sure it is fully and firmly seated on the tank body.
13. Place lock ring over tank lid, and centering the lock ring on the threads of the tank body, turn the lock ring clockwise until the safety latches click and the lock ring hits the stops on the body. **DO NOT ATTEMPT TO OVER-TIGHTEN THE LOCK RING AFTER LOCK RING HAS HIT THE STOPS ON THE BODY.**

NOTE

Any time the filter tank is opened, and/or element assembly is removed, be sure to generously coat the O-ring with silicone lubricant before reassembling the unit. **DO NOT USE PETROLEUM BASED LUBRICANTS BECAUSE THEY HAVE A DETERIORATING EFFECT ON RUBBER.**

14. Replace drain cap and reinstall High Flow™ manual air relief valve drain hose if used.

E. REPLACING CARTRIDGE ELEMENT

Cartridge element life will vary with pool conditions such as bather load, wind, dust, etc. You can expect an average media life of three (3) years under normal conditions.

1. To replace cartridge element follow steps in section D, Cleaning the Filter.

F. CLEANING THE HIGH FLOW™ MANUAL AIR RELIEF VALVE

1. Turn the pump off and shut off any automatic controls to ensure that the system is not inadvertently started during servicing.
2. **OPEN THE HIGH FLOW™ MANUAL AIR RELIEF VALVE UNTIL IT SNAPS INTO THE FULL OPEN POSITION, THEN WAIT UNTIL ALL PRESSURE IS RELIEVED.**
3. With the relief valve attached to the filter tank, pull out the locking tabs and remove the valve stem and cover assembly with a counterclockwise and lifting motion, see Figure 3.
4. Clean debris from the valve stem and body. Verify that the filter tank's air passage is open by inserting a 5/16 in. drill bit through the valve body. Verify that the O-ring are in good condition, properly positioned, and lubricated with a silicone base lubricant.
5. Reinstall the valve stem and cover assembly with a downward and clockwise motion until it snaps into position.

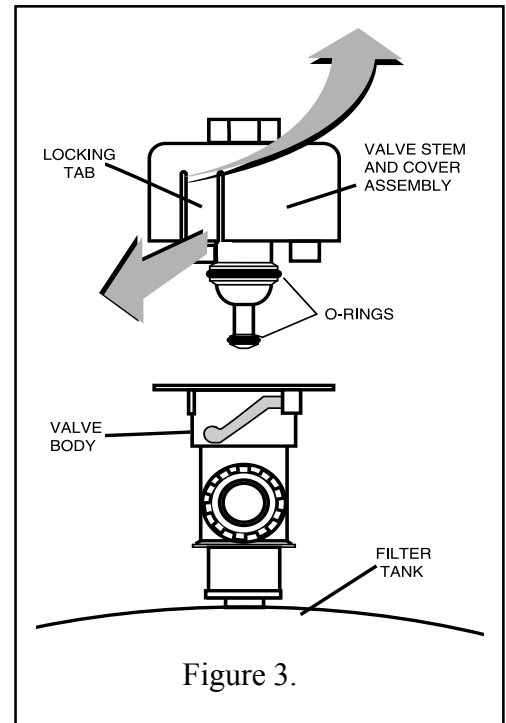


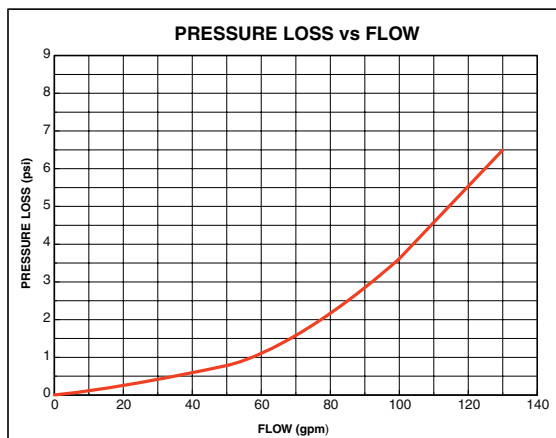
Figure 3.

SECTION III. TROUBLESHOOTING

- A. Air entering your filter is dangerous and can cause the lid to blow off. Correct any conditions in your filtration system that allow air to enter the system.
 1. Some common ways to identify air entering the system:
 - a. Low water level in pool or spa - skimmer is starving for water with pump running. Add water to pool or spa.
 - b. Air bubbles or low water level in pump hair and lint pot are caused by; low water level, clogged skimmer basket, split suction cleaner hose, leak in pump hair and lint pot lid, or leak in pump suction line.
 - c. Air bubbles coming out of water return lines into pool or spa with pump running, see items 1.a and 1.b of this section.
 - d. Air is discharged from the air relief valve on top of the filter when the valve is opened with the pump running, see items 1.a and 1.b of this section, above.
- B. Until the water initially put into the pool has been completely filtered, short filter cycles in between cleanings are normal. In most cases pool owners are dismayed by the undesirable color and appearance of water in a newly filled pool. Plaster dust can be responsible for short filter cycles, requiring frequent cleaning.
- C. If pressure drops on gauge, check skimmer basket and pump basket first for debris. If the baskets are clean, shut off power to pump and turn off any automatic controls. Then turn motor shaft with your fingers. If it turns freely then the pump must be disassembled and the impeller checked to see if it is clogged. If it is not frozen or clogged then there is an obstruction in the line between the pool and the pump.
- D. The pressure gauge is an important part of the filter system. It is your primary indicator of how the system is operating. Maintain your pressure gauge in good working order. Check the operation of your pressure gauge in the following manner:
 1. The pressure gauge should go to zero (0) when the system is turned off and pressure is relieved.
 2. The pressure gauge should indicate pressure when the system is operating.
 3. The pressure gauge should be readable and not damaged in any way.
 4. Replace the pressure gauge if it is not meeting the requirements of items D.1 through D.2 of this section, above.

SECTION IV. TECHNICAL DATA

A. Filter Pressure Loss Chart



B. Flow Rate Table

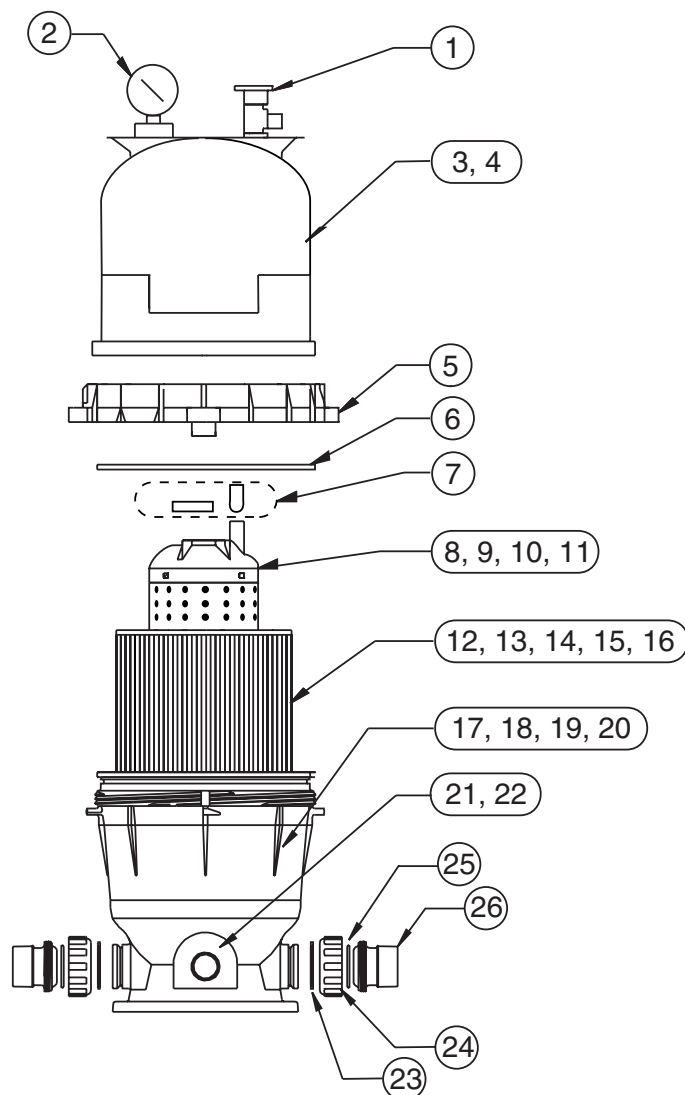
Product #	sq. ft.	Residential Maximum Cartridge Flow Rates				Commercial Maximum Cartridge Flow Rates			
		GPM	GPH	6 hour	8 hour	GPM	GPH	6 hour	8 hour
160314	50	50	3,000	18,000	24,000	19	1,140	6,840	9,120
160315	75	75	4,500	27,000	36,000	28	1,680	10,080	13,440
160316	100	100	6,000	36,000	48,000	38	2,280	13,680	18,240
160317	150	150	9,000	54,000	72,000	56	3,360	20,160	26,880
160318	200	150	9,000	54,000	72,000	75	4,500	27,000	36,000

- (1) One GPM per sq. ft. shown, recommended flow rate for residential is .5 GPM per sq. ft.
 (2) Commercial flow rate is a maximum of .375 GPM per sq. ft. of filter area.

NOTE: Actual system flow will depend on plumbing size and other system components.

C. Replacement Parts

Item	Part Number	Description
1	98209800	High Flow™ manual air relief valve
2	190058	Pressure Gauge
3	178553	Lid, 50, 100 sq. ft. filter
4	178561	Lid, 75, 150, 200 sq. ft. filter
5	59052900	Locking Ring assy.
6	87300400	Body O-ring
7	59016200	Air Bleed Sock Kit
8	59053500	Center Core, 50 sq. ft. filter
9	59053600	Center Core, 75 sq. ft. filter
10	59053700	Center Core, 100 sq. ft. filter
11	59053800	Center Core, 150, 200 sq. ft. filter
12	R173213	Cartridge Element, 50 sq. ft. filter
13	R173214	Cartridge Element, 75 sq. ft. filter
14	R173215	Cartridge Element, 100 sq. ft. filter
15	R173216	Cartridge Element, 150 sq. ft. filter
16	R173217	Cartridge Element, 200 sq. ft. filter
17	178562	Bottom, 50 sq. ft. filter
18	178554	Bottom, 75 sq. ft. filter
19	178563	Bottom, 100 sq. ft. filter
20	178560	Bottom, 150, 200 sq. ft. filter
21	86202000	Drain Cap Assy.
22	51005000	Drain Cap Gasket
23	39104500	Union Nut "C" Clip
24	98212200	Union Nut
25	071426	Union O-ring
26	79304600	Body, Swivel



SAVE THESE INSTRUCTIONS

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SERIES CL100/110 SERIES CL200/220 by **HAYWARD®** AUTOMATIC CHLORINE FEEDERS



Owner's Manual

IMPORTANT SAFETY INSTRUCTIONS

Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

⚠ This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

⚠ WARNING warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

⚠ CAUTION warns about hazards that **will** or **can** cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

⚠ DANGER indicates an imminently hazardous situation which, if not avoided, **will** result in death, serious injury, or major property damage.

The **NOTICE** label indicates special instructions that are important but not related to hazards.

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⚠ WARNING - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

⚠ WARNING – Suction Entrapment Hazard.



Suction in suction outlets and/or suction outlet covers which are, damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:



Hair Entrapment- Hair can become entangled in suction outlet cover.



Limb Entrapment- A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.

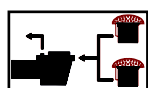


Body Suction Entrapment- A negative pressure applied to a large portion of the body or limbs can result in an entrapment.

Evisceration/ Disembowelment - A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover which is, damaged, broken, cracked, missing, or unsecured can result in evisceration/ disembowelment.

Mechanical Entrapment- There is potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

⚠ WARNING - To Reduce the risk of Entrapment Hazards:



- o When outlets are small enough to be blocked by a person, a minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plane (i.e. floor or wall), must be installed a minimum of three feet (3') [1 meter] apart, as measured from near point to near point.
- o Dual suction fittings shall be placed in such locations and distances to avoid “dual blockage” by a user.
- o Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- o The maximum system flow rate shall not exceed the flow rating of as listed on Table 1.
- o Never use Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- o Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- o In addition two or more suction outlets per pump installed in accordance with latest ASME, APSP Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- o Installation of a vacuum release or vent system, which relieves entrapping suction, is recommended.

⚠ WARNING – Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every ten years or if found to be damaged, broken, cracked, missing, or not securely attached.

⚠ CAUTION – Components such as the filtration system, pumps and heater must be positioned so as to prevent their being used as means of access to the pool by young children.

⚠ WARNING – Never operate or test the circulation system at more than 50 PSI.

⚠ WARNING – Never change the filter control valve position while the pump is running.

⚠ WARNING – To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times. Components such as the filtration system, pumps, and heaters must be positioned to prevent children from using them as a means of access to the pool.



⚠ WARNING – Hazardous Pressure. Pool and spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation system, all system and pump controls must be in off position and filter manual air relief valve must be in open position. Before starting system pump, all system valves must be set in a position to allow system water to return back to the pool. Do not change filter control valve position while system pump is running. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air or air and water) is discharged.



⚠ WARNING – Separation Hazard. Failure to follow safety and operation instructions could result in violent separation of pump and/or filter components. Strainer cover must be properly secured to pump housing with strainer cover lock ring. Before servicing pool and spa circulation system, filters manual air relief valve must be in open position. Do not operate pool and spa circulation system if a system component is not assembled properly, damaged, or missing. Do not operate pool and spa circulation system unless filter manual air relief valve body is in locked position in filter upper body.



⚠ WARNING – Risk of Electric Shock. All electrical wiring **MUST** be in conformance with applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do **NOT** use an extension cord to connect unit to electric supply. Provide a properly located electrical receptacle. Before working on any electrical equipment, turn off power supply to the equipment.

⚠ WARNING – To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment.

⚠ WARNING – Electrical ground all electrical equipment before connecting to electrical power supply. Failure to ground all electrical equipment can cause serious or fatal electrical shock hazard.

⚠ WARNING – Do **NOT** ground to a gas supply line.

⚠ WARNING – To avoid dangerous or fatal electrical shock, turn **OFF** power to all electrical equipment before working on electrical connections.

⚠ WARNING – Failure to bond all electrical equipment to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation instructions and consult a professional electrician on how to bond all electrical equipment. Also, contact a licensed electrician for information on local electrical codes for bonding requirements.

Notes to electrician: Use a solid copper conductor, size 8 or larger. Run a continuous wire from external bonding lug to reinforcing rod or mesh. Connect a No. 8 AWG (8.4 mm²) [No. 6 AWG (13.3 mm²) for Canada] solid copper bonding wire to the pressure wire connector provided on the electrical equipment and to all metal parts of swimming pool, spa, or hot tub, and metal piping (except gas piping), and conduit within 5 ft. (1.5 m) of inside walls of swimming pool, spa, or hot tub.

IMPORTANT - Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

⚠ WARNING – Risk of Electric Shock. Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

⚠ WARNING – Risk of Electric Shock. The electrical equipment must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the electrical equipment without the test button being pushed, a ground current is flowing, indicating the possibility of an electrical shock. Do not use this electrical equipment. Disconnect the electrical equipment and have the problem corrected by a qualified service representative before using.

⚠ CAUTION – The pump is intended for use with permanently-installed pools and may be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

SAVE THESE INSTRUCTIONS

HAYWARD® Pool Products Limited Warranty

To original purchasers of this equipment, Hayward Pool Products, Inc. warrants its chemical feeders to be free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase, when used in single family residential applications.

The limited warranty excludes damage from freezing, negligence, improper installation, improper use or care or any Acts of God. Parts that fail or become defective during the warranty period shall be repaired or replaced, at our option, within 90 days of the receipt of defective product, barring unforeseen delays, without charge.

Proof of purchase is required for warranty service. In the event proof of purchase is not available, the manufacturing date of the product will be the sole determination of the purchase date.

To obtain warranty service, please contact the place of purchase or the nearest Hayward Authorized Service Center. For assistance on your nearest Hayward Authorized Service Center please visit us at www.haywardpool.com.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

The Hayward Pool products warranty does not apply to components manufactured by others. For such products, the warranty established by the respective manufacturer will apply.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its' pool products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

***Supersedes all previous publications.**

Hayward Pool Products
620 Division Street
Elizabeth, NJ 07207

 **⚠ DANGER** Mixing Chemicals or using fast dissolving chemicals may result in explosion and/or fire. To avoid death, serious injury or major property damage:

- ▲ Use only slow dissolving Trichlor Chlorine tablets.
- ▲ Never use fast dissolving Trichlor Chlorine tablets.
- ▲ Never mix chemicals.
- ▲ Never mix Trichlor Chlorine tablets with Calcium Hypochlorite, or with any other form of concentrated chlorine or other chemicals. Fire and/or explosion may result.
- ▲ Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. If these products must be used, they should be added directly into the pool water.
- ▲ Never isolate chlorine feeder with valves or other devices.

 **⚠ WARNING** Wear eye and skin protection while maintaining or servicing this unit.

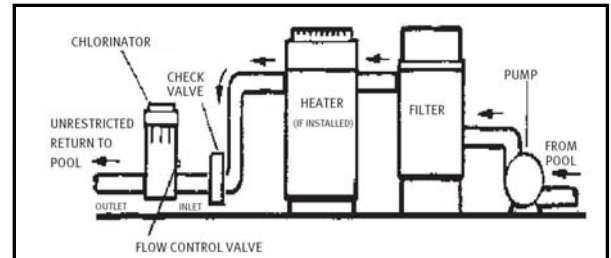
 **⚠ WARNING** Do not inhale fumes from the chlorinator or chemical container.

 **⚠ WARNING** Chlorine feeder may be under pressure. Use caution removing cover.

INSTALLATION:

CL-100/200

1. Your CL-100/200 automatic chlorine feeder is designed for permanent installation in the pool water return line.
2. Always install the chlorine feeder **after** the heater. If there is no heater, install **after** the filter.



 **⚠ CAUTION** Damage to the heater or filter may result if concentrated chlorine is allowed to flow through them.

An in-line positive seal corrosion resistant check valve should be installed to reduce backflow of chlorine gas when the system is shut off. If the chlorine feeder is located below water level, you may want to install a check valve to prevent water backflow when operating/servicing the unit. The CL100 has this feature built in.

3. Both the CL-100/200 are furnished with 1 1/2" female threads. If PVC socket (solvent weld) connections are desired, order SP1500UNPAK2, socket flush union end connectors package. For threaded male and union connectors, order SP1500UNMPAK1 male union connector package (two required). Thread or socket adapters may also be used. Only use pipe sealants formulated and approved for use with ABS plastic connections (e.g. Teflon Tape, Permatex Form-A-Gasket No. 2, Laco Plasto-Joint stick). Do not over tighten pipe fitting. Proper fitting makeup is hand tight plus 1 to 1 1/2 turns maximum.

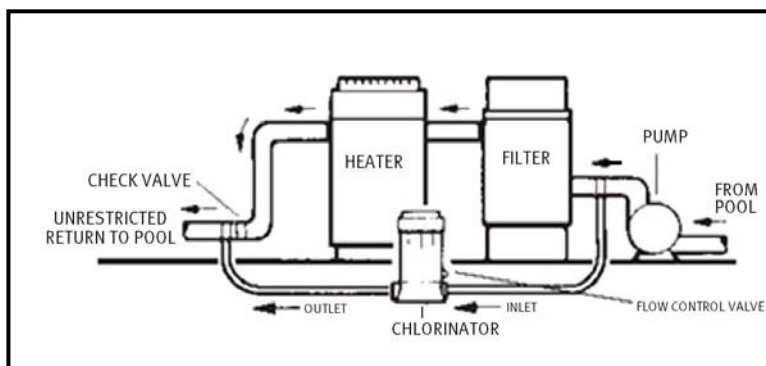
NOTICE: After starting up system, re-check all connections for leaks. Re-tighten as required.

 **⚠ CAUTION** Never install chlorine feeder directly into copper plumbing as pipe damage may occur. If you have brass or bronze backwash valves, or other sensitive metallic components, consult your dealer for precautions or recommendations for your particular system.

CL-110/220

1. The inlet connection should be made in the piping after the pump and before the filter. Mark location on pipe.
2. The outlet connection should be made in the piping after the heater. If no heater is being used, connection should be made after the filter. Mark location on pipe.
3. Based on the locations from steps. No. 1 and No. 2, cut tubing to required lengths. Be sure ends are cut evenly and cleanly.
4. Wrap Teflon tape on larger male thread of Check Valve and thread it hand tight plus 1/2 turn into outlet port of chlorinator. DO NOT OVER TIGHTEN.

NOTICE: The Check Valve is marked with a "dot". It also has a ball that "clicks" when you shake it.



5. Wrap Teflon tape on larger male thread of the Inlet Fitting Adapter and thread it hand tight plus ½ turn into the inlet port of chlorinator. **DO NOT OVER TIGHTEN.**
6. To connect inlet tubing to chlorinator, place Compression Nut over inlet tubing and slide nut up about 2". Insert the tubing all the way into the Inlet Fitting Adapter socket and, holding tubing in place, tighten nut firmly by hand. Do not over tighten.
7. Connect outlet tubing to the Check Valve in the same manner as in step 6 above.

NOTICE: The saddle fittings and clamps are designed to fit the O.D. of 1 1/2" or 2" pipe.

8. Drill a 3/8" hole at location identified in Step 1 of Planning Installation section. Clean all burrs, shavings etc. Fit Saddle Fitting, with gasket, into oval shaped hole in clamp and insert fitting into the 3/8" hole. Secure clamp around Saddle Fitting, gasket and pipe and tighten securely to achieve a good seal. Do not over tighten clamp.
9. Drill a 3/8" hole at location identified in Step 2 of Installation section for CL-110/220. Install Saddle Fitting as in Step 8 above.
10. Connect inlet and outlet tubing to the Saddle Fittings with Compression Nuts as in Step 6 above. Do not over tighten.

▲ CAUTION Never install chlorine feeder directly into copper plumbing as pipe damage may occur. If you have brass or bronze backwash valves, or other sensitive metallic components, consult your dealer for precautions or recommendations for your particular system.

NOTICE: After starting up system, re-check all connections for leaks. Re-tighten as required.

DIRECTIONS FOR USE:

GENERAL

Before using your chlorinator, your pool/spa water should be properly balanced and conditioned and should have a chlorine residual of approximately 1.0 to 1.5 ppm. Follow dealer and chemical manufacturer's directions and instructions.

Check chlorine residual daily and adjust the dial valve for more or less chlorine. The chlorine demand for pools and spas varies based on usage, temperature, sunlight, etc. Initially, you'll have to experiment to determine the proper amount of chlorine and the correct valve setting required for your pool and filter time cycle. Follow chemical manufacturer's instructions for proper chlorine level.

▲ DANGER Mixing Chemicals or using fast dissolving chemicals may result in explosion and/or fire.

To avoid death, serious injury or major property damage:

- ▲ Use only slow dissolving Trichlor Chlorine tablets.
- ▲ Never use fast dissolving Trichlor Chlorine tablets.
- ▲ Never mix chemicals.
- ▲ Never mix Trichlor Chlorine tablets with Calcium Hypochlorite, or with any other form of concentrated chlorine or other chemicals. Fire and/or explosion may result.
- ▲ Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. If these products must be used, they should be added directly into the pool water.
- ▲ Never isolate chlorine feeder with valves or other devices.

▲ WARNING Wear eye and skin protection while maintaining or servicing this unit.

USE ONLY GENUINE HAYWARD PARTS





- ⚠ WARNING** Do not inhale fumes from the chlorinator or chemical container.
- ⚠ WARNING** Chlorine feeder may be under pressure. Use caution removing cover.

REFILLING CHORINATOR

1. Shut off all pumps and pump timers.
2. Turn chlorine feeder flow control valve to "OFF".
3. Verify chlorine feeder return line to pool is unrestricted.
4. Wait one minute to relieve system pressure before attempting to remove cover.
5. If installed in a flooded system, shut off valves to isolate chlorinator.
6. Remove cover.
7. Refill chlorine feeder with slow dissolving Trichlor-Chlorine Tablets.
8. Secure cover to chlorine feeder.
9. If installed in a flooded system, open valves to assure flow from pump to pool.
10. Turn flow control valve on chlorinator to desired setting and restart pump.

MAINTENANCE:

TO CHANGE O-RING CL100/110

1. Read and follow instructions in Steps 1 to 5 in Refilling Chlorinator section.
2. Remove the O-Ring and replace with a Genuine Hayward Part O-Ring (part no. CLX110K).
3. Replace cover. If chlorinator needs to be refilled, read and follow instructions in Steps 6 to 8 in Refilling chlorinator section.

TO CHANGE O-RING CL200/220

1. Read and follow instructions in Steps 1 to 5 in Refilling Chlorinator section.
2. Pry off Logo Cap, located on the cover of the chlorinator. Unscrew and remove retainer screw. Cover may now be slipped free of the Cover Cap.
3. Replace O-ring with a Genuine Hayward Part O-ring (part no. CLX200K). Reassemble being sure Slip Washers are in place on stem of Cover (inside), and under head of Retaining Screw.
4. Replace cover. If chlorinator needs to be refilled, read and follow instructions in Steps 6 to 8 in Refilling Chlorinator section.

TO REMOVE FLOW CONTROL VALVE HANDLE

Set pointer to FULL. Insert screwdriver in slot opposite pointer, lift up and rotate handle counterclockwise. This allows the handle index lock tab to clear the body ridge.

TO INSTALL FLOW CONTROL VALVE HANDLE

1. The flow control valve handle Genuine Hayward Part (CLX200PA) is furnished in two pieces.
2. To install push the handle into the stem and fully install stem into body. You may have to remove handle and reposition to assure the stem is fully seated.
3. Remove handle by pulling straight out.
4. Apply a single drop of Super Glue to the end of the stem, push on handle, positioned in the OFF position. Apply pressure for 30 seconds.

WINTERIZING

Where freezing temperatures can be expected, drain all water and remove all chlorine from chlorinator. (For in-line permanently installed unit remove drain plug). Carefully remove all tablets and pieces of tablets. Rinse out chlorinator thoroughly with water. Replace cover and drain plug.

VACUUMING

When vacuuming, close flow control valve to prevent bypass of sediment and possible clogging of control valve.

LUBRICATION

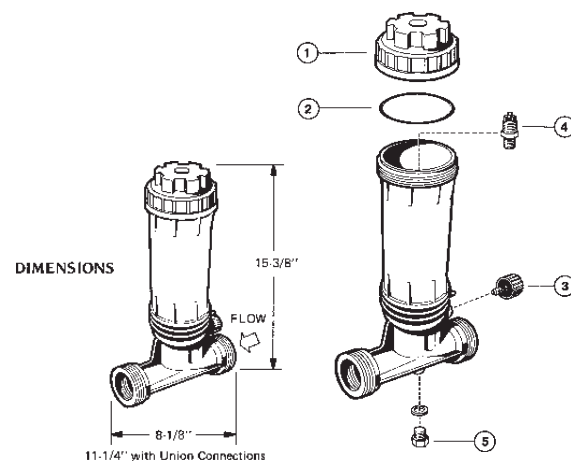
Never use petroleum type lubricants on Cover O-Ring. To lubricate use Genuine Hayward Part Jack's Lube No. 327 (Part No. SP032712).

USE ONLY GENUINE HAYWARD PARTS

SPARE PARTS

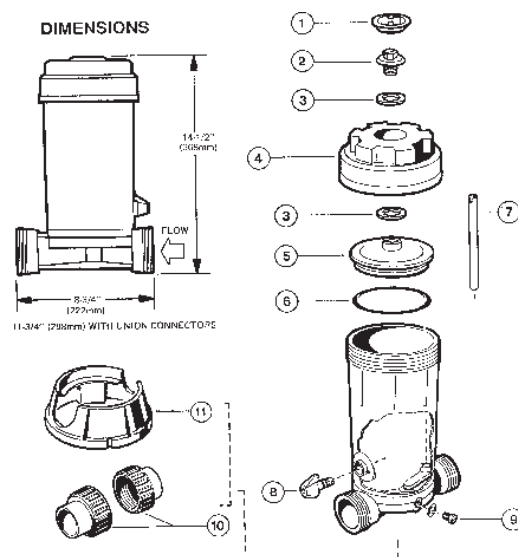
CL100

Ref No.	Part Number	Description	No. Req'd
1	CLX110C	Cover	1
2	CLX110K	O-Ring	1
3	CLX110FA	Control Knob Assembly	1
4	CLX220CV	Check Valve Assembly	1
5	SPX1700FGV	Drain Plug w/Gasket	1
	SP032712	Hayward Jack's Lub #327	1



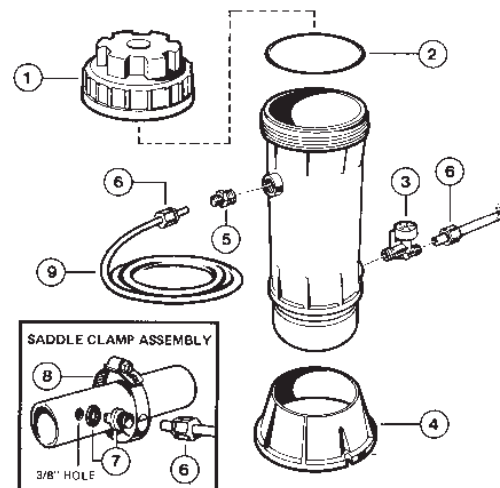
CL200

Ref No.	Part Number	Description	No. Req'd
1	CLX200E	Logo Cap	1
2	CLX200G	Cover Retaining Screw	1
3	CLX200W	Slip Washer	2
4	CLX200C	Cover Cap	1
5	CLX200B	Cover	1
6	CLX200K	O-Ring	1
7	CLX200H	Feeder Tube (some models)	1
8	CLX200PA	Control Valve Assembly	1
9	SPX1700FA	Drain Plug w/Gasket	1
10	SPX1500UNPAK	Union Connectors--Socket (2)	-
11	CLX200BS	Base	1
	SP032712	Hayward Jack's Lub #327	1



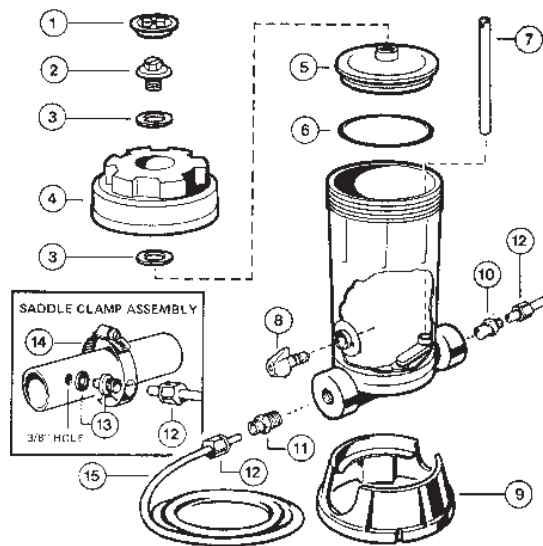
CL110

Ref No.	Part Number	Description	No. Req'd
1	CLX100C	Cover	1
2	CLX110K	O--Ring	1
3	CLX110DA	Dial Flow Valve	2
4	CLX110B	Base	1
5	CLX220CV	Check Valve Assembly	1
6	CLX220H	Compression Nuts	4
7	CLX220G	Saddle Fitting	2
8	CLX220K	Saddle Clamp	2
9	CLX220J	Plastic Tubing--8 Ft.	1
	SP032712	Hayward Jack's Lub #327	1



USE ONLY GENUINE HAYWARD PARTS

Ref No.	Part Number	Description	No. Req'd
1	CLX200E	Logo Cap	1
2	CLX200G	Cover Retaining Screw	1
3	CLX200W	Slip Washer	2
4	CLX200C2	Cover Cap	1
5	CLX200B	Cover	1
6	CLX200K	O-Ring	1
7	CLX200H	Feeder Tube (some models)	1
8	CLX200PA	Control Valve Assembly	1
9	CLX220B	Base	1
10	CLX220CV	Check Valve Assembly	1
11	CLX220D	Inlet Fitting Adapter	1
12	CLX220H	Compression Nuts	4
13	CLX220G	Saddle Fitting	2
14	CLX220K	Saddle Clamp	2
15	CLX220J	Plastic Tubing—8 ft.	1
	SP032712	Hayward Jack's Lub #327	1



(Retain For Your Records)

DATE OF INSTALLATION _____

▲ Retain this Warranty Certificate (upper portion) in a safe and convenient location for your records.



DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation or register online.

Warranty Card Registration

Register online at www.haywardpool.com

Or REGISTER YOUR WARRANTY ON-LINE AT WWW.HAYWARDPOOL.COM

☐ In Ground ☐ Above Ground ☐ Spa

HAYWARD®

Hayward is a registered trademark of Hayward Industries, Inc.



INTELLIBRITE® 5G

WHITE AND COLOR POOL AND SPA LIGHTS



INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support: Phone: (800) 831-7133 - Fax: (800) 284-4151

Web sites: www.pentairpool.com and www.staritepool.com:

Contents

IMPORTANT WARNING AND SAFETY INSTRUCTIONS.....	ii
IntelliBrite 5G Pool and Spa Lights Overview	1
Operating IntelliBrite Pool and Spa lights using a wall switch (12 VAC)	1
Using an External Transformer for Multiple IntelliBrite 12 VAC Light	1
Powering on IntelliBrite 5G Lights	2
Selecting a light show mode or fixed color	2
Replacing the IntelliBrite 5G Pool and Spa Light Assembly (in an existing pool/after Electrical Requirements are met)	3/4
Installing the IntelliBrite 5G Pool and Spa Light Fixture (new pool construction/ /after Electrical Requirements are met))	6/7
IntelliBrite 5G Pool Light (12 V) Fuse Harness Replacement	9
Replacing the IntelliBrite 5G Pool Light Circuit Board Assembly (in an existing pool)	9
Wide and Narrow Angle Lens Adjustment.....	17
IntelliBrite 5G Pool Light Replacement Kit Part Numbers	18
Replacing the IntelliBrite Spa Light Face ring and Gasket (P/N 640045) or Gasket and Lens (640046)	19
IntelliBrite 5G Spa Light Replacement Kit Part Numbers	23
IntelliBrite Color Light Controller	24

Before Installing luminaries read the following:



WARNING Always install a new lens gasket (see part number in this User's Guide on page 9 and 19), when ever reassembling the light. 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, installer, or others due to electrical shock, or (b) breakage of the lamp or lens, which likewise could result in serious injury to pool user, installers, or bystanders, or in damage to property.

FOR 12 VAC LUMINARIES: ALWAYS USE A SEPARATE STEP DOWN TRANSFORMER TO POWER LUMINARIES. SEE DIAGRAM ON PAGE 7.

Note: 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).

12 VAC LUMINARIES SPECIFICATION: 12 VAC, 50/60 Hz REPLACE ANY CRACKED PROTECTIVE SHIELD (CRACKED LENS) WITH NEW LENS AND GASKET.



THE INTELLIBRITE 5G LED POOL LIGHT AND SPA 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



SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT 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 LIGHT.



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.



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:

THE INTELLIBRITE® POOL AND SPA LIGHT REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.

BEFORE WORKING ON POOL AND SPA 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 current 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.



Important Safety Information for Pentair Water Pool and Spa 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) and Cord Seal Kit (P/N 670044).
- Under **no circumstances** replace lights by splicing wire under water or behind niche.



READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.

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 IntelliBrite® 5G Light fixture must only be used with Pentair Water Pool and Spa fixture housings (niches). If the IntelliBrite light fixture is installed into other niches, the installation will not carry U.L. approval and will void all warranties.

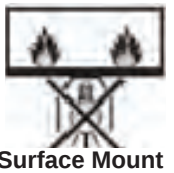
NOTICE: The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

⚠ 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 AND SPA FIXED LUMINARIES: Follow these guidelines when installing, replacing or repairing Pentair Aquatic Systems Pool and Spa 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 - 120VAC ~ ,50/60 Hz.



IntelliBrite® 5G Pool and Spa Lights Overview

This manual describes how to install the IntelliBrite 5G white and color pool light and the IntelliBrite 5G white and color spa light.

The IntelliBrite 5G white light provides a brilliant white light for a spectacular effect in your pool and spa. The IntelliBrite 5G 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.

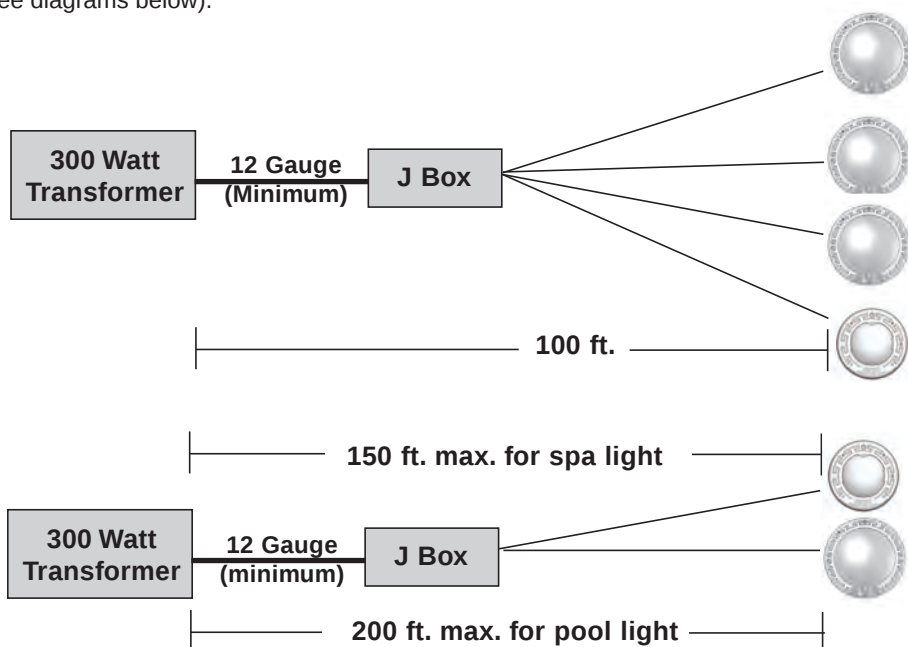
The IntelliBrite 5G color light provides brilliant vivid multi-colors with spectacular effects for your pool and spa. Choose one of the seven pre-programmed color light shows or select one of the five fixed colors to create virtually endless range of dramatic underwater lighting effects for a spectacular effect in your pool and spa.

Operating Pool and Spa Lights Using a Wall Switch (12 VAC)

IntelliBrite 5G pool and spa 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. IntelliBrite lights can also be automatically controlled via Pentair IntelliTouch®, EasyTouch® and SunTouch® Control Systems. **Note: Multiple IntelliBrite 5G pool/spa lights can also be controlled using the IntelliBrite Controller, for more information see page 2.**

Using an External Transformer for Multiple IntelliBrite 12 VAC Lights

When using multiple IntelliBrite 12 VAC lights on a **300 Watt** transformer, it is recommended that no more than three 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. Note: For long cable lengths, set transformer to 14 VAC (see diagrams below).



Powering on IntelliBrite® 5G Color Lights

When the IntelliBrite light is powered on, a momentarily white light will illuminate, followed by the previously selected color. Note: If power to the light is off for more than five (5) seconds, the last color show mode or fixed color that was saved will be displayed.

Selecting a light show mode or fixed color

Switch power on to the light. A white light will momentarily illuminate, followed by the previously selected color. To select a color show mode (1-7) or fixed color (8-12), turn the wall switch off/on a specific number of times. Each number (1-12) shown below corresponds to the number of times to power-cycle the switch to activate a color light show or fixed color. For details about saving color effects while in “show” modes, see “Hold” and “Recall” feature on page 4. Example: To select California Sunset Mode; turn the light on, then turn off and on six times. During the off/on switching process, no illumination will occur,

Number of times to cycle power (1-5)	1	SAm Mode: Cycles through white, magenta, blue and green colors (emulates the Pentair SAm® color changing light).	Number of times to cycle power (6-14)	6	California Sunset Mode: Dramatic transitions of orange, red and magenta tones.
	2	Party Mode: Rapid color changing building energy and excitement.		7	Royal Mode: Richer, deeper color tones.
	3	Romance Mode: Slow color transitions creating a mesmerizing and calming effect.		8	Blue: Fixed color.
	4	Caribbean Mode: Transitions between a variety of blues and greens.		9	Green: Fixed color.
	5	American Mode: Patriotic red, white and blue transition.		10	Red: Fixed color.
				11	White: Fixed color.
				12	Magenta: Fixed color.
				13	Hold: Save the current color effect during a color light show.
				14	Recall: Activate the last saved color effect.

Saving a Color Mode or Fixed Color: When power is switched off to the IntelliBrite color lights, the last color show mode or fixed color will be saved. The next time the light is powered on, the previously saved color show mode or fixed color will be displayed. For example, while in “Party Mode” switch the light off. Wait more than 10 seconds, switch the light back on to resume “Party Mode.”

**WARNING**

During the off/on switching process, before the selected color is displayed, no illumination will occur for a brief second. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa users.

Using an IntelliBrite Color Light Controller

Using the IntelliBrite Controller (sold separately, P/N 600054), IntelliBrite 5G color pool/spa lights can all be synchronized so that individual or multiple IntelliBrite lights all lights can be switched on and off together.

To select a color light show mode or fixed color mode, rotate the dial so that it points to the desired selection.

Hold and Recall Feature: When IntelliBrite color lights are powered on, the previously selected color will be displayed, unless the HOLD or RECALL feature was previously enabled.

Hold button/LED: Press this button (LED on) to capture and save a color effect while displaying one of the light show modes. When the button is pressed, the LED will be on, indicating that the color effect is captured.

Recall Button/LED: Use this button (LED on) to activate the last saved color effect. When the button is pressed, the LED will be on, indicating that the color effect is being displayed.

Replacing the IntelliBrite® 5G Pool and Spa Light Assembly (in an existing pool or spa)



Risk of Electrical Shock or Electrocutation!

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 (20.3 cm) above ground level and at least 48 inches (1.219 m) from the edge of the pool; see Figure 1 on page 7.
- The light fixture and all metal items within five (5) feet (1.524 m) 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 7.
- 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 on page 7.
- To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department. Note: Use only Pentair wet niches to insure proper bonding and grounding connections.

Replacing the IntelliBrite® 5G Pool and Spa Light Assembly (After Electrical Requirements Are Met)

The following removal and installation instructions describe how to remove and install the IntelliBrite pool and spa light assembly. Also use these instructions after completing the following light replacement procedure:

- **IntelliBrite Spa Light and Face Ring Gasket and Lens Removal and Installation instructions, on page 19.**

WARNING

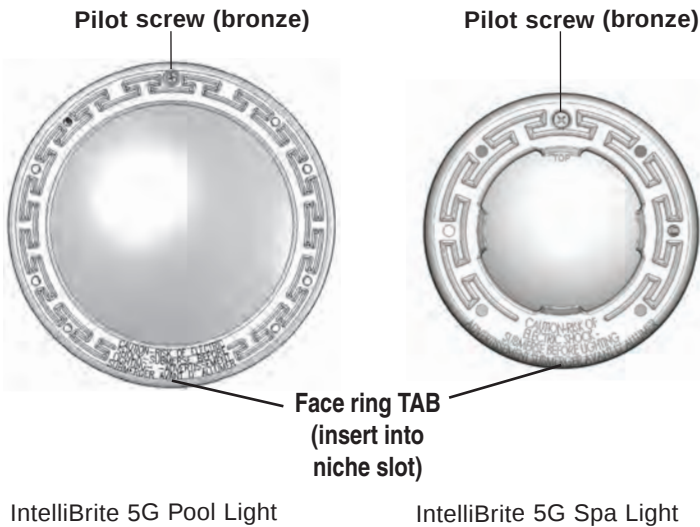
Failure to bring the pool or spa's electrical system up to code requirements before installing the underwater light will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

1. **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. Cut the cord about 12 inches (30.5 cm) from the back of the light assembly.
4. Remove Junction Box cover, disconnect the light fixture wires, and pull the cord through the conduit. ***Tip: Before pulling the cord, tape the new cord to the existing cord, This might make it easier to feed the new cord through the conduit (see following step).***
5. 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.
6. Leave at least four (4) feet of cord to coil around the light fixture; see Figure 1 on page 6. This four (4) feet (1.2192 m) of cord coiled around the light allows the light to be serviced after the pool is filled with water.
7. Cut the cord at the Junction Box, leaving at least size (6) inches of cord to make connections.
8. Strip six (6) inches (15.2 cm) of the outer cord jacket from the cord to expose the three insulated conductors. Be careful not to damage the insulation on the three (3) inner conductors). Strip a 1/2" of insulation

9. Connect the three light wires (or two wires) to the corresponding light circuit wires in the Junction Box. For three wires; connect the black wire to power, white wire to common, and the green wire to ground.
10. For two wires connect the corresponding circuit wires (match the wire colors) in the Junction Box. Secure the Junction Box cover.
11. Install the IntelliBrite® light assembly into the pool niche. Be sure to insert the TAB on the lower part of the face ring into the niche SLOT (located on the lower part of the niche). This is important to secure the lower part of the light assembly onto the niche before tightening the pilot screw.
12. Carefully tighten the special bronze pilot screw to secure the upper part of the light assembly onto the niche.

⚠ 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.



13. **Final check for proper IntelliBrite light operation:** Switch on the main switch or circuit breaker to the system, 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 4).

INTELLIBRITE® 5G POOL AND SPA LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION)

The following describes how to install the IntelliBrite® Pool Light fixture and the IntelliBrite Spa Light fixture. Read page 4 before starting the installation procedure.

BEFORE STARTING: The following steps 1-7 (page 7-8) describe the tasks that must be completed by the electrician before the IntelliBrite light fixture is installed. See Figure 1 diagram on page 7.

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 eight (8) inches (20.3 cm) above ground level and at least 48 inches (1.219 m) from the edge of the pool; see Figure 1 on page 7.
- The light fixture and all metal items within five (5) feet (1.524 m) 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 7.
- 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 on page 7.

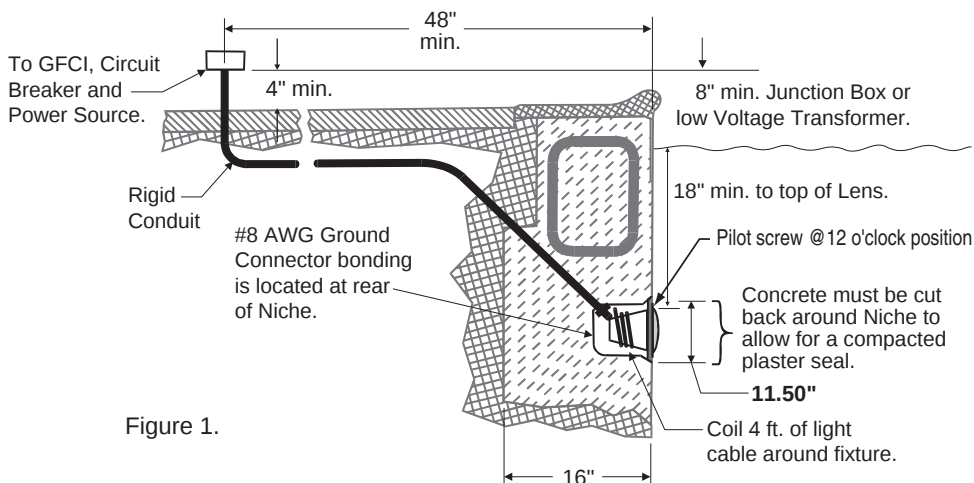
Note: *To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.*

Note: *Use only Pentair wet niches to insure proper bonding and grounding connections.*

INSTALLING THE INTELLIBRITE® 5G POOL AND SPA LIGHT FIXTURE (AFTER ELECTRICAL REQUIREMENTS ARE MET)

To install the IntelliBrite® Pool Light and Spa Light fixture:

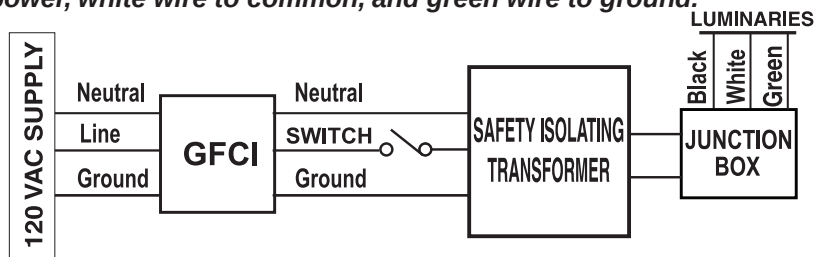
1. Route light cable through conduit to Junction Box, leaving at least four (4) feet of cable at the light fixture to coil around the light (this allows the light to be serviced after the pool is filled with water). See Figure 1 below.



2. Cut the cable at the Junction Box, leaving at least six (6) inches (2.4 cm) of cord to make connections.
3. Strip back six (6) inches (2.4 cm) of the outer cord jacket to expose the three insulated conductors (be careful not to damage the insulation on the three (3) inner conductors). Strip a 1/2" of insulation off the three conductors. Be careful not to damage the copper conductor.
4. Connect all three (3) conductors to the corresponding circuit wires in the Junction Box and secure the Junction Box cover in place.

FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.

Note: Connect three wires (or two wires) to the corresponding circuit wires in the Junction Box. For three wires connect: Black wire to power, white wire to common, and green wire to ground.



NOTE: FOR 120 VAC ILLUMINARIES, ISOLATION TRANSFORMER IS INCLUDED IN LIGHT FIXTURE.

5. 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.

Pilot screw (bronze)



IntelliBrite 5G Pool Light

Pilot screw (bronze)



IntelliBrite 5G Spa Light

6. Fill the pool until the underwater light is completely submerged in water before operating the light.
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 7)

FOR INTELLIBRITE POOL AND SPA LIGHT REMOVAL AND INSTALLATION INSTRUCTIONS SEE:

- **Replacing the IntelliBrite® 5G Pool and Spa Light Assembly instructions, on page 3.**
- **Replacing the IntelliBrite Spa Light Face Ring and Gasket or Gasket and Lens instructions, on page 19.**

IntelliBrite® 5G Pool Light (12V) Fuse Harness Replacement

The following describes how to replace the IntelliBrite 5G Pool Light fuse assembly (if applicable) and the light main circuit board for the IntelliBrite 5G pool light.

IMPORTANT! Before replacing the fuse assembly note the following:

Troubleshooting

Problem	Cause/Action
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.
The light will not illuminate.	Check the GFCI ground fault wiring and reset if necessary.
IntelliBrite 5G 12 V Light with Light Fuse Assembly Replace FUSE assembly (see page 12): Note: Replacing the fuse assembly may or may not resolve this problem. In some instances the fuse assembly will blow, and after replacing the fuse the light's circuit board is still not functional.	

REPLACING THE INTELLIBRITE POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL)

When replacing or reassembling the IntelliBrite Pool Circuit Board, the Gasket (P/N 79101601) or Gasket and Lens (619864Z) MUST ALSO BE REPLACED - SEE PAGE 18 FOR PART NUMBERS

Removal and Installation of IntelliBrite 5G Light Circuit Board

⚠ 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 IntelliBrite light itself.
2. Before starting make sure that you have a new lens gasket (P/N 79101601) and a IntelliBrite 5G pool light circuit board assembly (P/N 619875Z - 300w, P/N 619916Z-400W, P/N 619917Z- 500w) ready to install (see page 11).

REPLACING THE INTELLIBRITE® 5G POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL) (Continued)

⚠ 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.

⚠ WARNING

Always install a new lens gasket (P/N 79101601) whenever disassembling the IntelliBrite 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 5G POOL LIGHT ASSEMBLY:** 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.
4. Unwind the cord from the base of the light housing.

Pilot screw (bronze)



IntelliBrite 5G Pool Light

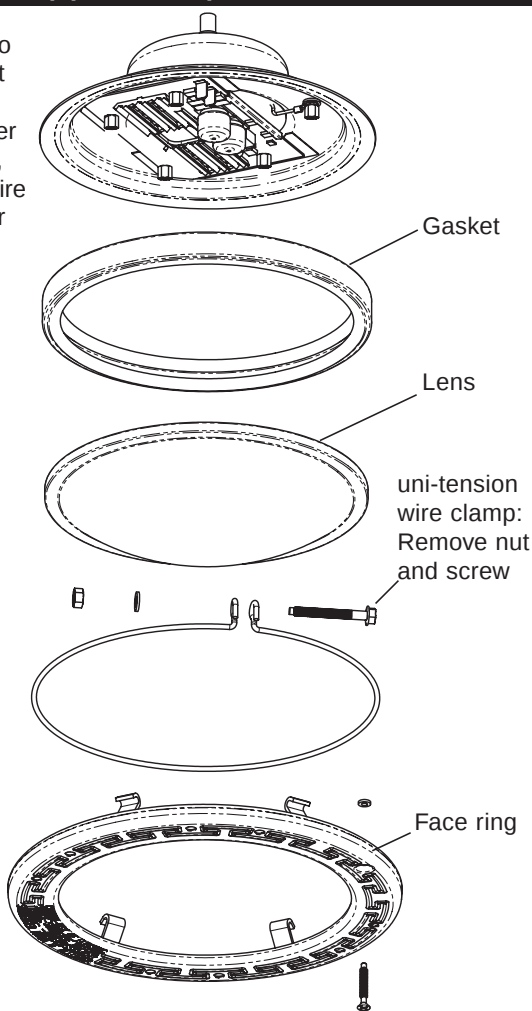
⚠ WARNING

Be sure to keep the pilot screw from the IntelliBrite 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.

REPLACING THE INTELLIBRITE® POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL) (Continued)

5. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Using a $\frac{1}{4}$ " nut driver and a #3 Phillips screwdriver, remove the nut uni-tension wire clamp. Place the nut aside for reinstallation.
6. Remove the face ring and wire clamp from the light housing.
7. 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.

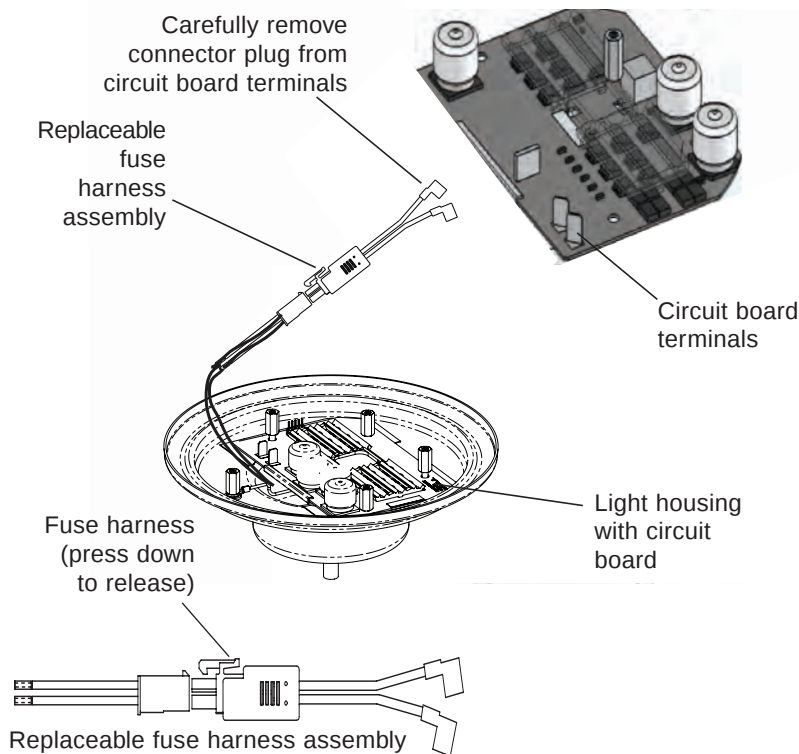
Note: A NEW LENS GASKET (P/N 79101601) MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED. See page 18 for Replacement Kit part numbers.



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 17.

NOTE: For a pool light (12 V only. No internal step-down transformer) that has a replacement FUSE ASSEMBLY, continue the procedure on the next page. If the light does NOT have a replaceable fuse assembly, proceed to page 13.

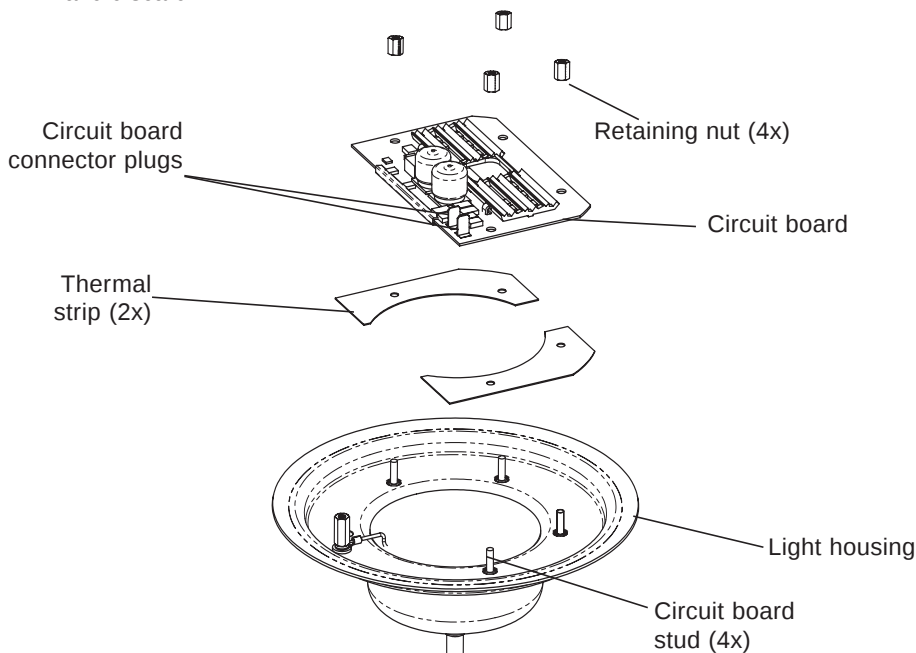
REPLACING THE FUSE HARNESS ASSEMBLY (FOR 12 V LIGHTS ONLY)



1. Using your fingers, carefully disconnect each fuse connector plug from the circuit board terminals. Carefully lift each connector plug upward, with small side-to-side movements while holding the circuit board terminals with a flat screw driver. Then gradually disconnect the connector plug from the terminal. *Note: To avoid permanent damage to the circuit board, be sure not to pull the terminals off the surface of the circuit board.*
2. Once the fuse connector plugs are removed from the circuit board terminals, separate the fuse assembly from the light wire harness by pressing down on the fuse release lever, then gently pull apart.
3. Insert the new fuse harness connector into the light cable harness plug and snap together.
4. Using your fingers to carefully connect each fuse connector plug onto the circuit board terminals. *Be sure not to press down too hard on the connector, this can damage the terminal connections on the circuit board.*
5. **Continue with “INSTALLING THE INTELLIBRITE® 5G POOL LIGHT ASSEMBLY WITH NEW GASKET” on page 13.**

REMOVING THE LIGHT CIRCUIT BOARD ASSEMBLY

1. Using a ¼" nut driver, carefully remove the four retainer nuts from the light assembly (see illustration on next page). Place the nuts aside for reinstallation.
2. Unplug the two connector plugs from the circuit board. Lift up the circuit board and remove it from the light housing base.
3. Carefully lift off the old thermal strips from the base of the light housing base and discard.



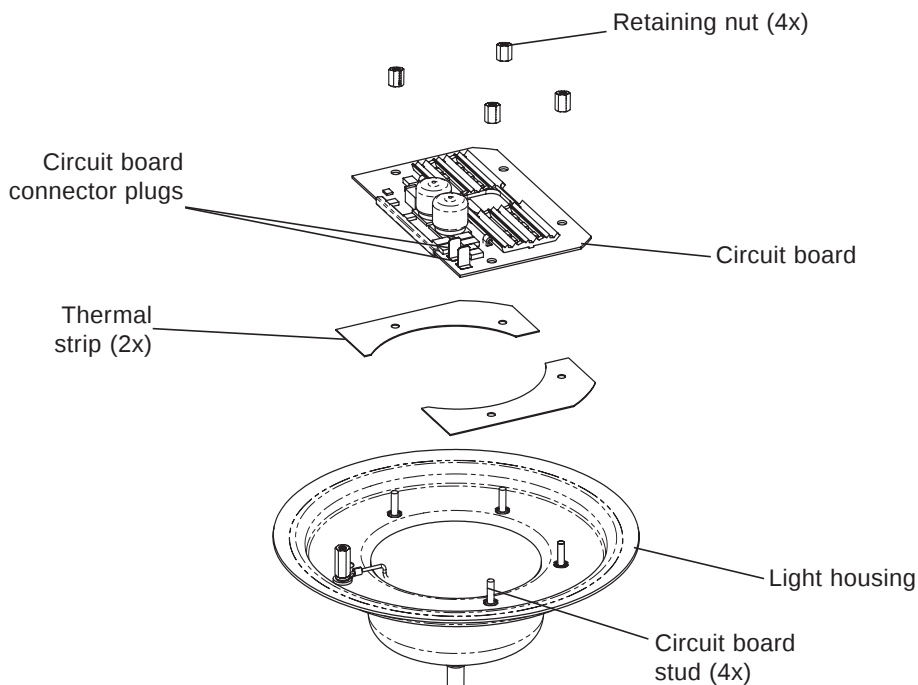
4. Place the two new thermal strips (provided) over the circuit board studs in the base of the light housing.
5. Place the light circuit board over the base studs and seat the circuit board on top of the thermal strips. Be sure the two connecting wires are not caught between the housing and the edge of the circuit board.
6. Using a ¼" 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.**

INSTALLING THE INTELLIBRITE® POOL LIGHT ASSEMBLY WITH NEW GASKET (see illustration on next page)

⚠ WARNING

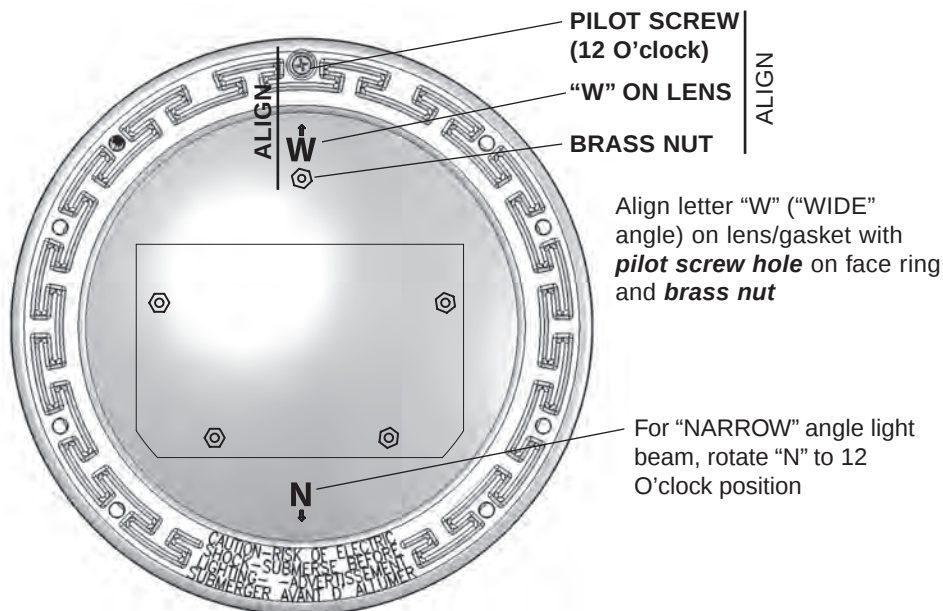
Be sure to install ALL of the four (4) retaining nuts. These nuts ensure proper electrical ground. Failure to install all of the retaining nuts could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

Continue on next page.

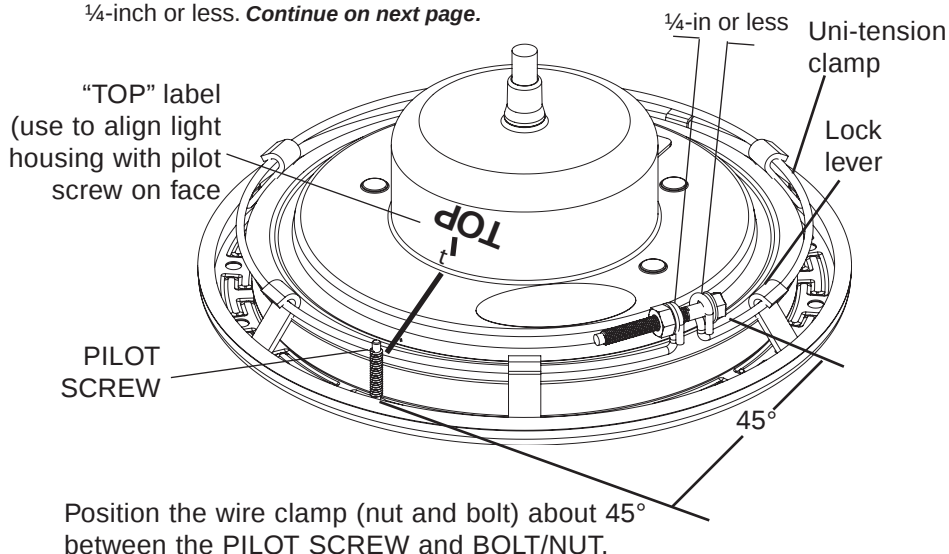


1. **Install NEW GASKET ONTO LENS:** Stretch the gasket around the circumference of the lens. Be sure the gasket is installed evenly around the lens.
2. **ALIGN LENS/GASKET ONTO LIGHT HOUSING:**
 - a) With the light housing resting on its base, place the lens/gasket on top of the light housing.
 - b) Rotate the lens/gasket to align the letter "W" ("WIDE" angle) on the lens with the brass nut in the housing (see diagram on page 14 for brass nut location).

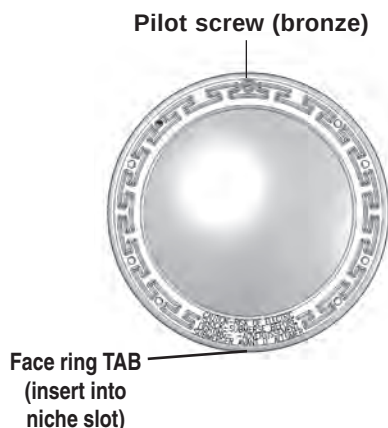
Note: The IntelliBrite light lens ships from the factory in the 'WIDE' (W) angle position. The "wide" position of the lens is typically used for lights located either side of the pool. The "narrow" position of the lens is typically used for lights located either end of the pool. To use the "NARROW" angle light beam, rotate the lens/gasket to align the letter "N" on lens. Note: For more information about using the "WIDE" and NARROW angle lens, see page 17.



4. **INSTALL UNI-TENSION CLAMP:** 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.
5. 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°.
6. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-inch or less. **Continue on next page.**



7. Coil at least four (4) feet of cord around the light fixture (see Figure 1 on page 6). This allows the light to be serviced after the pool is filled with water.
8. Connect the three light wires (or two wires) to the corresponding light circuit wires in the Junction Box. For three wire connection: Connect the black wire to power, white wire to common, and the green wire to ground. Secure the Junction Box cover.
9. Install the light assembly into the pool niche. **IMPORTANT: Be sure to insert the TAB on the lower part of the face ring into the niche SLOT (located on the lower part of the niche). This is important to secure the lower part of the light assembly onto the niche before tightening the pilot screw.**
10. Carefully tighten the special bronze pilot screw to secure the upper part of the light assembly onto the niche.



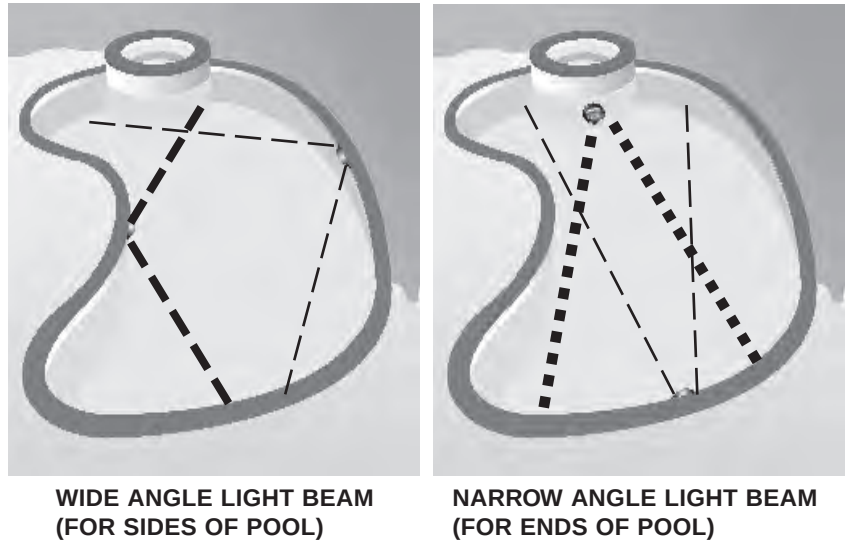
IntelliBrite Pool Light

11. **Final check for proper IntelliBrite® Light operation:** Switch on the main switch or circuit breaker to the system and the switch that operates the IntelliBrite light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 4).

Wide and Narrow Angle Lens Adjustment

Wide and Narrow Angle Lens Feature

The IntelliBrite light lens geometry provides a choice of “wide” or “narrow” angle light beam to suit various size pools. 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 IntelliBrite light lens ships from the factory in the ‘WIDE’ (W) angle position.



IntelliBrite® 5G Pool Light Assembly Replacement Kit Part Numbers

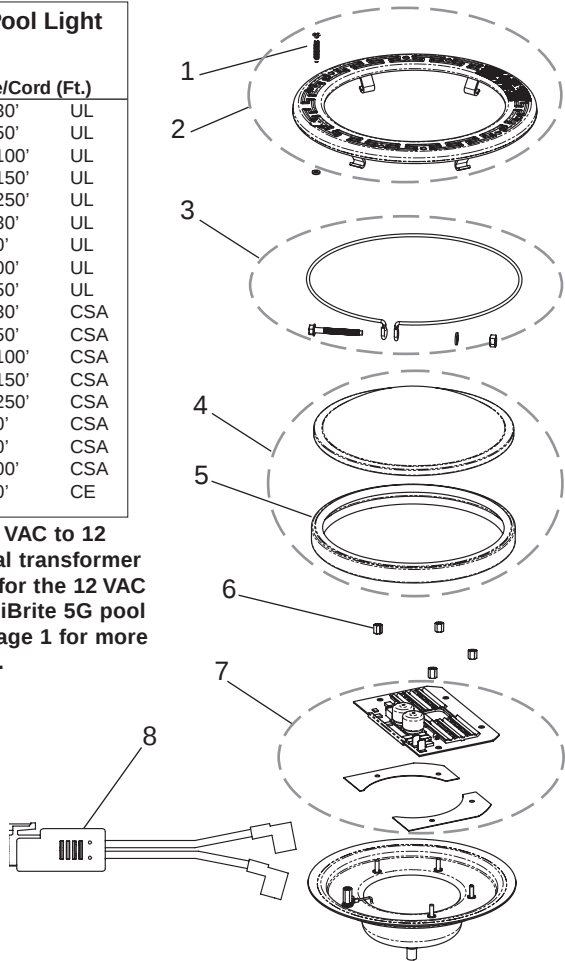
Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite pool white light. See page 1 for more information.

IntelliBrite 5G Pool Light Assembly (UL/CAS listing)		
Product Model	Voltage	Cord Length (feet)
601105	12V	30'
601106	12V	50'
601107	12V	100'
601108	12V	150'
601205	12V	30'
601206	12V	50'
601207	12V	100'
601208	12V	150'
601300	120V	30'
601305	12V	30'
601306	12V	50'
601307	12V	100'
601308	12V	150'

IntelliBrite® Pool Light Assembly Replacement Kit Part Numbers

5G White Pool Light (UL/CSA)	5G Color Pool Light (UL/CSA)
Model/Voltage/Cord (Ft.)	Model/Voltage/Cord (Ft.)
601100/120V/30'	601000/120V/30' UL
601101/120V/50'	601001/120V/50' UL
601102/120V/100'	601002/120V/100' UL
601103/120V/150'	601003/120V/150' UL
601104/120V/250'	601004/120V/250' UL
601105/12V/30'	601010/120V/30' UL
601106/12V/50'	601011/12V/50' UL
601107/12V/100'	601012/12V/100' UL
601108/12V/150'	601013/12V/150' UL
601200/120V/30'	602000/120V/30' CSA
601201/120V/50'	602001/120V/50' CSA
601202/120V/100'	602002/120V/100' CSA
601203/120V/150'	602003/120V/150' CSA
601204/120V/250'	602004/120V/250' CSA
601205/12V/30'	602010/12V/30' CSA
601206/12V/50'	602011/12V/50' CSA
601207/12V/100'	602012/12V/100' CSA
601208/12V/150'	602020/12V/10' CE
601300/120V/30'	
601301/120V/50'	
601302/120V/100'	
601303/120V/150'	
601304/120V/250'	
601305/12V/30'	
601306/12V/50'	
601307/12V/100'	
601308/12V/150'	

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite 5G pool light. See page 1 for more information.



Item No.	Kit Part No.	Description
2, 3, 5	600095	Face Ring assembly, stainless steel. - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. diameter, silicon.
4, 5	619864Z	Replacement Lens Kit. - Gasket, 8-3/8 in. diameter, off white. - Lens, IntelliBrite, Pool, 8-3/8 in. diameter, tempered.
3, 5, 7	619875Z (UL) (300W), 619916 Z (400W), 619917Z (500W) - 619818Z (color)	Replacement kit includes: Circuit Board, Thermal Strips (2x). - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. silicon diameter, off white.
1	79104800	Pilot screw, with captive gum washer.
5	79101601	Gasket, 8-3/8 in. diameter, silicone.
8	620276	Fuse Harness Kit (For 12 V lights only)

Note: The 120 VAC IntelliBrite pool light has an integrated 12 VAC transformer.

Replacing the IntelliBrite® 5G Spa Light Face ring and Gasket (P/N 640045) or Gasket and Lens (640046) see page 21

Note: When replacing an IntelliBrite 5G Spa light assembly, a new spa light assembly includes a light engine, lens, gasket and face ring (for part light assembly part numbers, see page 23).

DANGER



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.

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

WARNING

Always install a new lens gasket (P/N 79108600). Whenever disassembling the IntelliBrite 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.

Pilot screw (bronze)



IntelliBrite 5G Spa Light

2. **REMOVING THE INTELLIBRITE SPA 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.

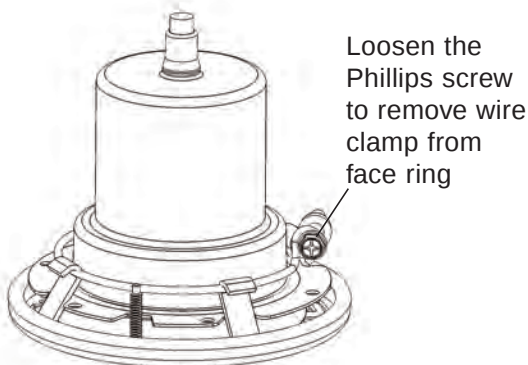
WARNING

Be sure to keep the pilot screw from the IntelliBrite 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.

3. Using a #3 Phillips head screwdriver, loosen the CLAMP SCREW and remove uni-tension wire clamp from the face ring.
4. Remove the face ring and wire clamp from the light housing and **set aside for installation later.**

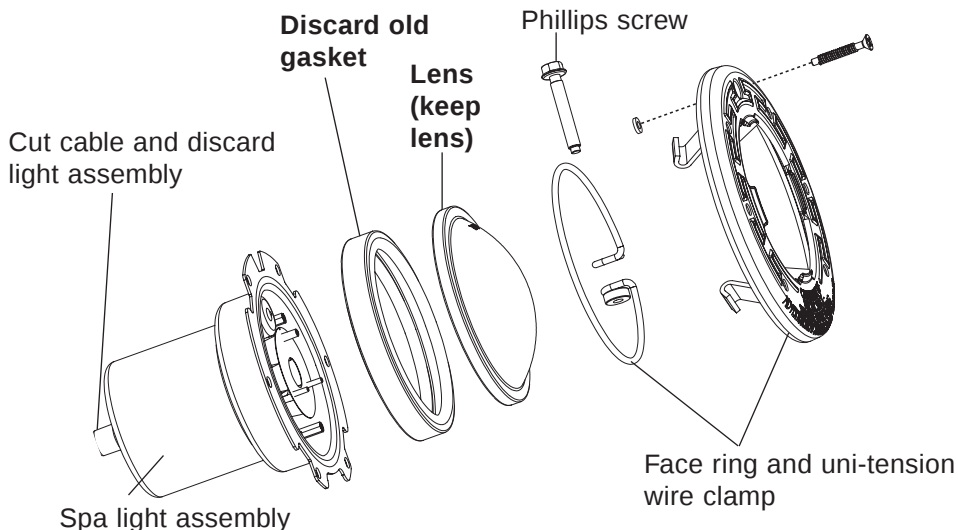
Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite® Spa Light. See page 1 for more information.

Note: The IntelliBrite Spa Light fixture is a sealed light assembly with no replaceable circuit board assembly. Only the lens, gasket and face ring can be removed from the sealed light assembly for replacement. See page 23 for replacement kit part numbers.

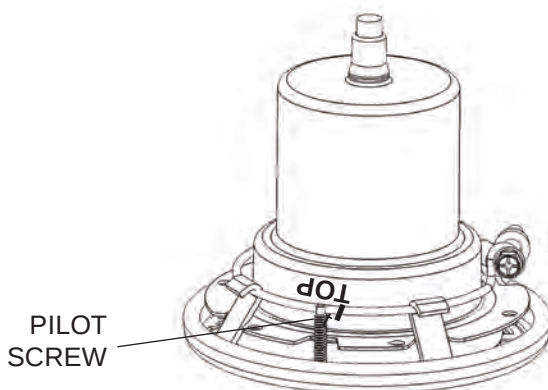


Spa light fixture with lens, gasket and face ring attached

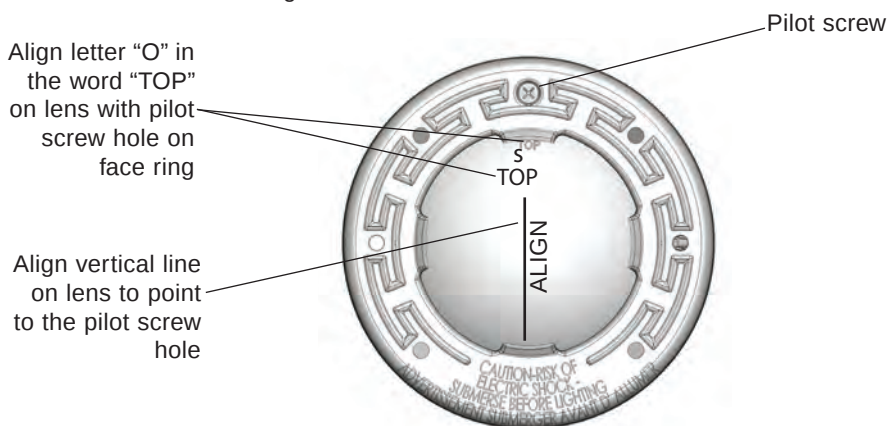
5. With the light assembly resting on its base, carefully pry off the gasket to release the lens. Discard the gasket. A NEW LENS GASKET MUST BE USED EACH TIME THE SPA LIGHT IS REASSEMBLED
6. Disconnect the IntelliBrite spa light assembly cord from the junction box. **Cut the cord near the back of the light assembly and discard the light. See page 4 for replacement instructions for the new spa light.**



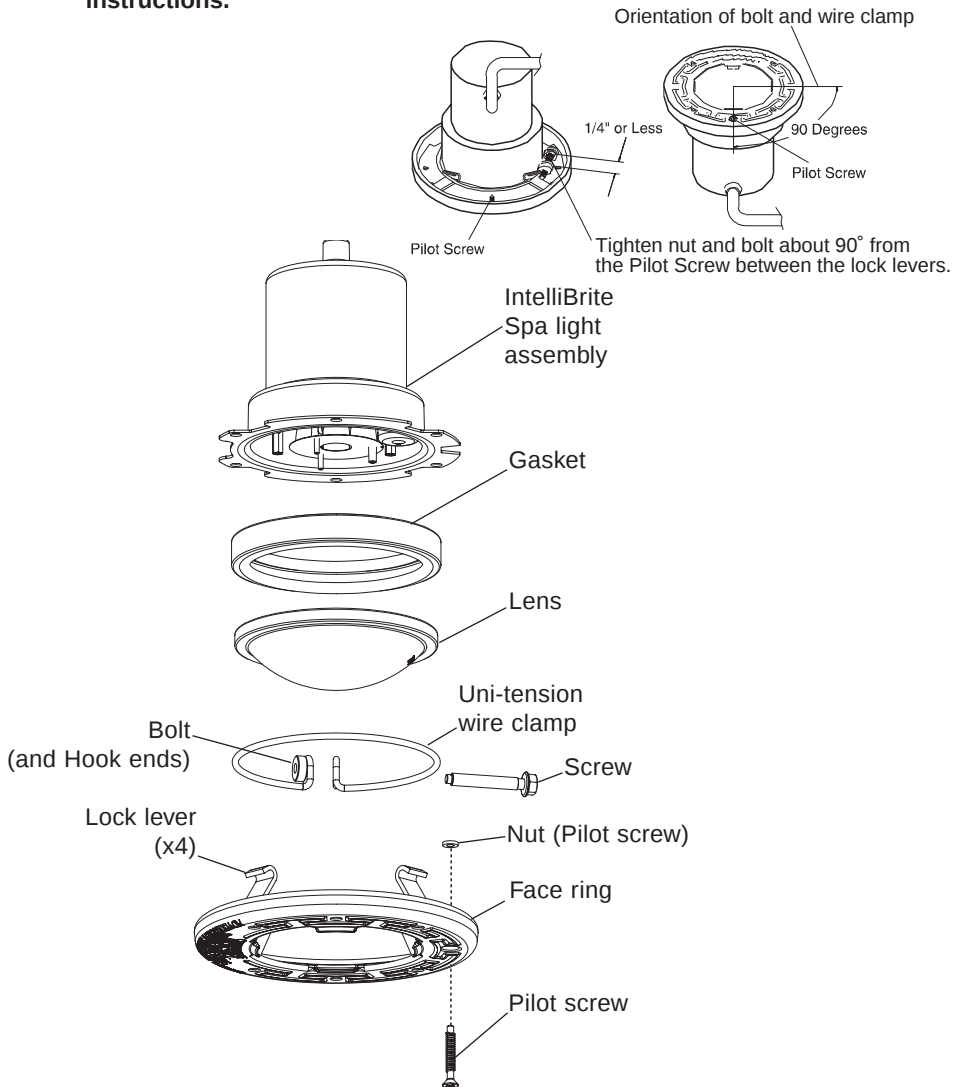
7. **INSTALLING THE INTELLIBRITE® SPA LIGHT WITH NEW GASKET:** Install a new gasket during reassembly of the IntelliBrite spa light. A NEW LENS GASKET MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED.
8. **Install the new gasket onto the lens:** With the light housing resting on its base, place the lens then the gasket on top of the light housing.
9. **INSTALL FACE RING:** Place the face ring on top of the lens/gasket/housing. Rotate the light housing to align the "TOP" position arrow indicator label on the rear of the housing is aligned with the pilot screw on the face ring. Place the face ring on top of the gasket. Make sure that the lens and gasket are centered correctly on the light housing.



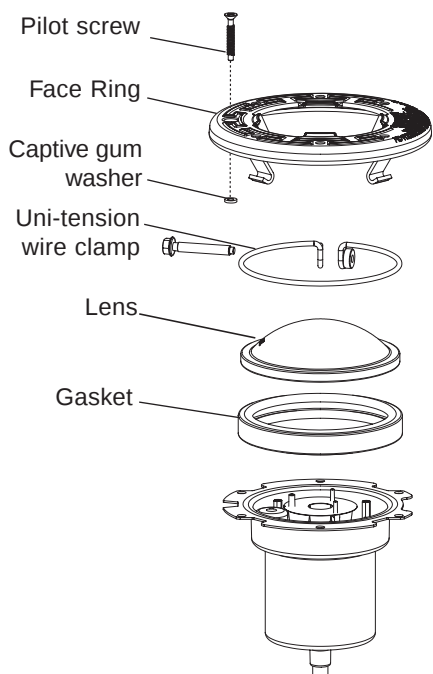
10. **Aligning the face ring and lens:** Align the face ring and vertical line on the lens so that the letter "O" in the word "TOP" and the small arrow above it) on the surface of the lens points to the 12 O'clock position and with pilot screw hole on the face ring.



11. **INSTALL UNI-TENSION CLAMP:** 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.
12. 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°. Tighten the bolt and nut until the distance between the ends of the clamp equals 1/4-in or less.
13. **PROCEED TO “Replacing the IntelliBrite® Spa Light Assembly (in an existing pool or spa)” on page 4 for spa light assembly installation instructions.**



IntelliBrite® 5G Spa Light Replacement Kit Numbers



IntelliBrite® 5G Color Spa Light Assembly (Listing UL/CSA)

Product Model	Voltage	Cord Length (feet)
640120	120V	30'
640121	120V	50'
640122	120V	100'
640123	120V	150'
640124	120V	250'
640130	12V	30'
640131	12V	50'
640132	12V	100'
640133	12V	150'

IntelliBrite® 5G White Spa Light Assembly (Listing UL/CSA)

Product Model	Voltage	Cord Length (feet)
640140	120V	30'
640141	120V	50'
640142	120V	100'
640143	120V	150'
640144	120V	250'
640150	12V	30'
640151	12V	50'
640152	12V	100'
640153	12V	150'

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
791108600	- Gasket, 4 in diameter, silicone

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite spa light. See page 1 for more information.



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P/N 619921 REV. K 4/2015



INTELLIBRITE® 5G

LAMPE À DEL BLANCHE POUR SPA ET LAMPE À
DEL COULEUR SUBMERSIBLE POUR PISCINE



GUIDE D'UTILISATION ET D'INSTALLATION

INSTRUCTIONS DE SÉCURITÉ IMPORTANTES
LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS
CONSERVEZ CES INSTRUCTIONS

Soutien technique (USA)

Téléphone : (800) 831-7133 - Télécopie : (800) 284-4151

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Contenu

MISES EN GARDE ET CONSIGNES DE SÉCURITÉ IMPORTANTES	ii
Présentation des lampes IntelliBrite 5G pour piscine et spa.....	1
Utilisation des lampes IntelliBrite pour piscine et spa à l'aide d'un interrupteur mural (12 V CA)....	1
Utilisation d'un transformateur externe pour plusieurs lampes IntelliBrite 12 V CA.....	1
Allumage des lampes IntelliBrite 5G.....	2
Sélection du mode spectacle de couleurs ou couleur fixe.....	2
Remplacement de l'ensemble de la lampe IntelliBrite 5G pour piscine et spa (dans une piscine existante/après la satisfaction des exigences en matière d'électricité).....	4/5
Installation de la lampe IntelliBrite 5G pour piscine et spa (dans une nouvelle piscine/après la satisfaction des exigences en matière d'électricité).....	7/8
Remplacement de faisceau de fusible pour lampe IntelliBrite 5G pour piscine (12 V).....	10
Réglage de lentille à angles large et étroit.....	18
Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite 5G pour piscine ...	18/19
Remplacement de l'anneau frontal et du joint de la lampe IntelliBrite pour spa (N/P 640045) ou joint et lentille (640046).....	20
Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite 5G pour spa.....	24

Avant l'installation des lampes, lisez ce qui suit :

⚠ AVERTISSEMENT Toujours installer un nouveau joint de lentille (voir le numéro de pièce dans le Guide de l'utilisateur aux pages 9 et 19) lors de chaque remontage de la lampe. Ne pas le faire peut permettre à l'eau d'entrer dans l'ensemble, ce qui pourrait causer : (a) un danger électrique pouvant entraîner la mort ou des blessures graves pour les utilisateurs de la piscine, l'installateur ou d'autres personnes en raison de décharges électriques; (b) un bris de la lampe ou de la lentille, ce qui pourrait entraîner des blessures graves à l'utilisateur de la piscine, aux installateurs ou à des personnes à proximité, ou encore des dommages à la propriété.

POUR LES LAMPES 12 V CA : TOUJOURS UTILISER UN TRANSFORMATEUR ABAISSEUR POUR ALIMENTER LES LAMPES. VOIR LE SCHÉMA À LA PAGE 7.
Remarque : Brancher les trois fils aux fils correspondants du circuit dans la boîte de jonction (fil noir à l'alimentation, fil blanc au conducteur commun et fil vert à la mise à la terre).

SPÉCIFICATION DES LAMPES 12 V CA : 12 V CA, 50/60 Hz. REMPLACER TOUT COUVERCLE PROTECTIF FISSURÉ (LENTILLE FÊLÉE) AVEC UNE NOUVELLE LENTILLE ET UN NOUVEAU JOINT.

⚠ MISE EN GARDE **LA LAMPE À DEL INTELLIBRITE 5G POUR PISCINE ET SPA NE PEUT PAS ÊTRE UTILISÉE AVEC UN GRADATEUR. L'UTILISATION D'UN GRADATEUR SE TRADUIRA PAR DES DOMMAGES PERMANENTS À LA LAMPE.**

MISES EN GARDE ET CONSIGNES DE SÉCURITÉ IMPORTANTES



DES BLESSURES GRAVES OU LA MORT PEUVENT S'ENSUIVRE SI CETTE LAMPE N'EST PAS INSTALLÉE OU UTILISÉE CORRECTEMENT.



LES INSTALLATEURS, UTILISATEURS OU PROPRIÉTAIRES DE PISCINE DOIVENT LIRE CES AVERTISSEMENTS ET TOUTES LES INSTRUCTIONS AVANT D'UTILISER LA LAMPE À DEL POUR PISCINE ET/OU SPA.



Les codes locaux et ceux de la majorité des provinces/états couvrent la construction, l'installation et l'utilisation des piscines et spas publics et la construction de piscines et spas résidentiels. Il est important de se conformer à ces codes, dont un grand nombre régissent l'installation et l'utilisation de ce produit. Consultez les codes locaux du bâtiment et de la santé pour obtenir plus d'informations.



AVIS IMPORTANT - À l'attention de l'installateur : Ce guide d'utilisation et d'installation (« Guide ») comporte des informations importantes sur l'installation, le fonctionnement et l'utilisation sûre de cette lampe pour piscine et spa. Ce Guide doit être remis au propriétaire et/ou à l'utilisateur de cet équipement.



Avant d'installer ce produit, lisez et respectez tous les avertissements et instructions présentés dans ce Guide. Le non respect de ces avertissements et instructions peut entraîner des blessures graves, voire mortelles ou des dommages matériels. Composez le (800) 831-7133 (USA) pour d'autres copies gratuites de ces instructions. Veuillez vous reporter à www.pentairpool.com pour obtenir plus d'informations sur ce produit.



RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION :

La lampe à DEL pour spa et la lampe à DEL 5G pour piscine IntelliBrite NÉCESSITENT UNE TENSION ÉLEVÉE QUI PEUT PROVOQUER UNE DÉCHARGE ÉLECTRIQUE, DES BRÛLURES OU LA MORT.

AVANT DE TRAVAILLER SUR LES LAMPES INTELLIBRITE ! Débranchez toujours l'alimentation de l'éclairage de la piscine/du spa au niveau du disjoncteur de la lampe avant de faire l'entretien de celle-ci. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, du réparateur, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

Cette lampe submersible doit être installée par un électricien agréé ou certifié ou par un professionnel compétent en piscine conformément au National Electrical Code (NEC), NFPA 70 ou au Code canadien de l'électricité (CCE), CSA C22.1. Tous les codes et règlements locaux applicables doivent être respectés. Une installation inappropriée entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels. Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles des réparateurs, utilisateurs de la piscine et autres personnes suite à une décharge électrique.



Informations de sécurité importantes pour l'installation de niche et de lampe Pentair

- Toutes les installations de niches et de lampes doivent être conformes à tous les codes. Si les codes locaux exigent un joint de cordon, utilisez les niches en plastique de Pentair Water Pool and Spa (pièce n° 79206600 et pièce n° 79206700) et un nécessaire de joint de cordon (pièce n° 670044).
- En aucun cas, les lampes ne peuvent être remplacées en faisant un épissage de fils situés sous l'eau ou derrière une niche.



LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS DE CE MANUEL.

MISES EN GARDE ET CONSIGNES DE SÉCURITÉ IMPORTANTES

⚠ AVERTISSEMENT

RISQUE DE DÉCHARGE ÉLECTRIQUE ET DE BLESSURE. N'UTILISEZ QUE LA MÉTHODE D'INSTALLATION PRÉCISÉE CI-DESSOUS.

Emplacement du luminaire installé	Appareil de fontaine de Pentair Water Pool and Spa* (pièces n°s 560001 et 560000)	Méthode d'installation requise
Piscine et spa	Luminaire (lampe) pour piscine (ou spa) à niche humide	Boîtier d'appareil (coque de formation) SEULEMENT. N'UTILISEZ PAS le support d'appareil à fontaine
Fontaine	Luminaire (lampe) pour piscine (ou spa) submersible à niche humide	Boîtier d'appareil (coque de formation) ou support d'appareil à fontaine

(*) Remarque : Les luminaires à niche humide conformes aux exigences des deux types d'emploi peuvent porter les deux marques UL pour luminaires submersibles à niche humide listés. Un luminaire ne portant pas la marque d'homologation UL correspondante n'est pas considéré par UL comme étant fabriqué selon le service de suivi et la norme UL pour l'emplacement associé à l'installation.

ATTENTION - L'appareil d'éclairage à DEL IntelliBrite de Pentair Water Pool and Spa® ne doit être utilisé que dans des boîtiers (niches) Pentair Water Pool and Spa. Si l'appareil d'éclairage à DEL IntelliBrite est installé dans d'autres niches, l'installation ne portera pas l'homologation UL et les garanties seront nulles et non avenues.

AVIS : Le câble ou le cordon flexible externe de ce luminaire ne se remplace pas; si le cordon est endommagé, le luminaire doit être détruit.

⚠ AVERTISSEMENT

Pour les pays en conformité avec les normes de la Commission électrotechnique internationale : Cet appareil d'éclairage doit être

installé par un électricien agréé ou certifié ou par une personne qualifiée pour l'entretien de piscine, selon la norme IEC 364-7-702 et tous les codes et règlements locaux applicables. Une installation inappropriée créera un risque d'électrocution pouvant entraîner des blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels.

⚠ AVERTISSEMENT

Le sel est un matériau corrosif. Même si les niveaux de sel nécessaires pour un bon fonctionnement d'un générateur de chlore électronique sont relativement faibles comparativement à l'eau de mer et aux autres solutions salines, toute quantité de sel quelle qu'elle soit dans votre piscine augmente la possibilité de corrosion ou d'autres détériorations de l'équipement de la piscine et de toute surface de la piscine ou d'objets avoisinants. Les pièces métalliques et certaines surfaces artificielles sont particulièrement susceptibles à la corrosion et à la détérioration lorsqu'elles sont utilisées dans des piscines d'eau salée ou près de celles-ci. Pentair Water Pool and Spa ne fournit pas de garantie et ne garantit pas que l'utilisation appropriée d'un générateur de chlore électronique empêchera la corrosion ou autre détérioration de l'équipement de piscine et de toute surface de la piscine ou se trouvant proche de celle-ci. Consultez votre professionnel compétent dans le domaine des piscines qui devrait pouvoir vous donner des conseils sur le bon choix des matériaux, les techniques d'installation de ces matériaux, ainsi que sur leur entretien et utilisation appropriés selon le type et l'emplacement particuliers de votre piscine afin de minimiser la corrosion et la détérioration des piscines d'eau salée et de leurs environs.

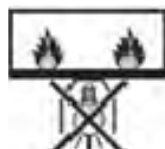
LAMPES FIXES POUR PISCINE ET SPA : Suivez ces lignes directrices lors de l'installation, du remplacement ou de la réparation des lampes fixes pour piscine et spa Pentair :

- **REPLACER TOUT COUVERCLE PROTECTIF FISSURÉ (LENTILLE FÊLÉE) AVEC UNE NOUVELLE LENTILLE ET UN NOUVEAU JOINT. POUR OBTENIR PLUS D'INFORMATION, VOIR LA PAGE 11.**
 - **POUR L'UTILISATION DE LA LUMIÈRE, UTILISER UNIQUEMENT UN TRANSFORMATEUR D'ISOLATION DE SÛRETÉ.**

AVERTISSEMENT! Ces lampes ne conviennent pas pour un montage direct sur des surfaces normalement inflammables (elles conviennent UNIQUEMENT au montage sur des surfaces non inflammables).

Spécifications des lampes fixes pour piscine et spa :

12 V CA 50/60 Hz – 120 V CA  50/60 Hz.



Montage en surface

Présentation des lampes IntelliBrite® 5G pour piscine et spa

Ce manuel explique comment installer les lampes IntelliBrite 5G blanches et colorées pour piscine et les lampes IntelliBrite 5G blanches et colorées pour spa.

La lampe IntelliBrite 5G blanche fournit une lumière blanche brillante pour un effet spectaculaire dans votre piscine et votre spa. La lentille de la lampe IntelliBrite 5G (lumière de piscine seulement) permet de choisir entre deux formes de faisceau lumineux : une couverture plus large avec moins d'intensité ou une couverture plus étroite avec plus d'intensité.

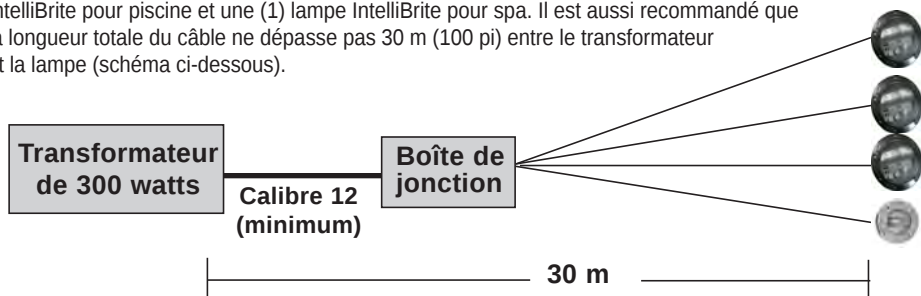
La lampe IntelliBrite 5G colorée fournit plusieurs couleurs vives et intenses avec des effets spectaculaires pour votre piscine et votre spa. Choisissez l'un des sept spectacles de lumières colorées préprogrammés ou l'une des cinq couleurs fixes pour créer une sélection presque infinie d'effets de lumières aquatiques d'ambiance pour un résultat spectaculaire dans votre piscine ou votre spa.

Utilisation des lampes pour piscine et spa avec un interrupteur mural (12 V CA)

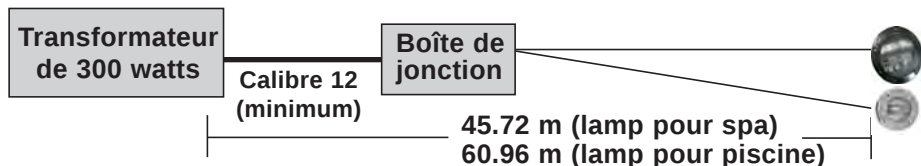
Les lampes 5G IntelliBrite pour piscine et spa peuvent être contrôlées manuellement à l'aide d'un interrupteur mural standard. Grâce à une boîte de jonction, plusieurs lampes IntelliBrite peuvent être raccordées à un seul interrupteur afin que toutes les lampes puissent être allumées et éteintes simultanément. Les lampes IntelliBrite peuvent également être contrôlées automatiquement par les systèmes de contrôle Pentair IntelliTouch®, EasyTouch® et SunTouch®. **Remarque : Plusieurs lampes IntelliBrite 5G pour piscine et spa peuvent également être contrôlées à l'aide du régulateur IntelliBrite. Pour obtenir plus d'information, voir la page 2.**

Utilisation d'un transformateur externe pour multiples lampes IntelliBrite de 12 V CA

Lors de l'utilisation de multiples lampes à DEL IntelliBrite pour piscine de 12 VCA sur un **transformateur de 300 watts**, il est recommandé de ne pas utiliser plus de deux lampes IntelliBrite pour piscine et une (1) lampe IntelliBrite pour spa. Il est aussi recommandé que la longueur totale du câble ne dépasse pas 30 m (100 pi) entre le transformateur et la lampe (schéma ci-dessous).



Si une longueur de câble plus importante est nécessaire, il est recommandé d'utiliser un transformateur de 300 watts séparé pour chaque lampe avec une longueur de câble non supérieure à 61 m au total entre le transformateur et la lampe (schéma ci-dessous).



Allumage des lampes IntelliBrite 5G

Il est possible de commander les lampes à DEL IntelliBrite 5G pour piscine en utilisant un interrupteur mural standard. De multiples lampes à DEL IntelliBrite peuvent être connectées ensemble par l'intermédiaire d'une boîte de jonction à un seul interrupteur pour les allumer ou les éteindre toutes ensemble. Les lampes IntelliBrite 5G se commandent en commutant l'alimentation CA à partir d'un interrupteur mural standard. En mettant l'interrupteur sur marche et sur arrêt un certain nombre de fois, la lampe active l'un des sept modes de jeu de lumière, les couleurs fixes, ainsi que la caractéristique d'« attente » et de « rappel ».

Sélection du mode spectacle de couleurs ou couleur fixe

Alimentation de la lampe. La lumière sera momentanément couleur, puis passera à la couleur préalablement choisie. Pour sélectionner un mode de jeu de couleurs (1-7) ou une couleur fixe (8-12), mettez l'interrupteur mural sur arrêt/sur marche un certain nombre de fois. Chaque chiffre (1-12) illustré ci-dessous correspond au nombre de rallumages au niveau de l'interrupteur pour activer un certain jeu de lumière ou une couleur fixe. Pour obtenir des détails sur la sauvegarde des effets de couleur tout en étant en modes « show » (jeu de lumière), consultez la caractéristique d'« attente » et de « rappel » à la page 4.

1. **Mode SAm** : passe du blanc aux couleurs magenta, bleue et verte (imite la lampe Pentair SAm®).
2. **Mode Partie** : changement rapide des couleurs, accumulant énergie et agitation.
3. **Mode Romantique** : transitions lentes d'une couleur à une autre créant un effet tranquille et envoûtant.
4. **Mode Caraïbes** : transitions entre divers bleus et verts.
5. **Mode Amérique** : transitions entre le rouge, le blanc et le bleu patriotiques.
6. **Mode Coucher de soleil californien** : transitions dramatiques entre les tons orange, rouge et magenta.
7. **Mode Royal** : tons riches et profonds.
8. **Bleu** : couleur fixe.
9. **Vert** : couleur fixe.
10. **Rouge** : couleur fixe.
11. **Blanc** : couleur fixe.
12. **Magenta** : couleur fixe.
13. **Attente** : sauvegarde l'effet de couleur actuel pendant un jeu de lumière.
14. **Rappel** : active le dernier effet de couleur sauvegardé.

Sauvegarde d'un mode couleur ou d'une couleur fixe : Lorsque l'alimentation des lampes IntelliBrite est coupée, le dernier Mode jeu de couleurs ou la couleur fixe est sauvegardé. Lors de prochaine alimentation de la lampe IntelliBrite, le mode jeu de couleurs ou la couleur fixe sauvegardé préalablement s'affiche. Par exemple, en « Mode Partie », l'interrupteur est à l'arrêt. Attendez plus de 10 secondes, rallumez la lampe pour relancer le « Mode Partie ».

⚠ AVERTISSEMENT Lors de la commutation Arrêt/Marche, avant l'apparition de la couleur sélectionnée, il n'y a aucun éclairage. Ce mode de fonctionnement est normal lors de la commutation. Lors de cette période, la piscine et le spa ne sont pas éclairés et il faut alors prendre des précautions pour éviter des accidents inattendus. Le non respect de cet avertissement peut entraîner des blessures graves, voire mortelles des utilisateurs de la piscine et du spa.

Utilisation d'un régulateur de lampe colorée IntelliBrite

Avec le régulateur IntelliBrite (vendu séparément, N/P 600054), les lampes colorées IntelliBrite 5G pour piscine et spa peuvent être synchronisées pour allumer et éteindre simultanément une seule ou plusieurs lampes IntelliBrite.

Allumage des lampes IntelliBrite 5G (suite)

Pour sélectionner un mode Spectacle de lumières colorées ou une couleur fixe, tourner le cadran pour le faire pointer dans la direction voulue.

Fonctions Hold (Mémoriser) et Recall (Rappel) : Lorsque les lampes colorées IntelliBrite sont allumées, la dernière couleur sélectionnée sera utilisée, à moins que les fonctions MÉMORISER ou RAPPEL aient été activées.

Bouton et DEL Hold (Mémoriser) : Appuyer sur ce bouton (lumière DEL allumée) pour mémoriser et enregistrer un effet de couleur durant l'affichage de l'un des modes Spectacle de lumières colorées. Sur une pression du bouton, la lumière DEL s'allumera pour indiquer que l'effet de couleur est mémorisé.

Bouton et DEL Recall (Rappel) : Appuyer sur ce bouton (lumière DEL allumée) pour activer le dernier effet de couleur mémorisé. Sur une pression du bouton, la lumière DEL s'allumera pour indiquer que l'effet de couleur est affiché.

Allumage de la lampe -Lorsque la lampe à DEL IntelliBrite LED est allumée, une lumière couleur paraît d'abord momentanément, elle est ensuite suivie de la couleur préalablement choisie.

Remarque : Si l'alimentation de la lampe est coupée pendant plus de cinq secondes, le dernier mode de jeu de couleurs ou la dernière couleur fixe qui était sauvegardé s'affichera.

Diagnostic - Utilisez les astuces suivantes pour aider à la résolution de problèmes pouvant avoir lieu lors de l'utilisation de la lampe à DEL.

Fonction d'attente et de rappel -Attente : Utilisez la fonction **Attente** (13 commutations) pour capter et sauvegarder un effet de couleurs tout en affichant l'un des modes jeu de lumière. Il est plus facile de capter des effets de lumière personnalisés à partir de l'un des modes de jeu de lumière lent comme le « Mode Romantique » (n° 3).

Rappel : Utilisez la caractéristique **Rappel** pour activer le dernier effet de couleurs sauvegardé (en utilisant la caractéristique **Attente**) tout en étant en mode jeu de couleurs ou couleur fixe. Pour rappeler un effet de couleur, commutez 14 fois, et après cinq secondes, le dernier effet de couleur sauvegardé sera affiché.

Problème	Cause/Action
La lampe ne s'allume pas.	Vérifiez le câblage du disjoncteur différentiel et réenclenchez-le au besoin.
La lampe ne fonctionne pas correctement.	Vérifiez la connexion du câblage de la lampe au niveau de la boîte de jonction près de la piscine et au niveau de l'interrupteur CA. Assurez-vous qu'une alimentation CA appropriée arrive à la lampe.

Remplacement de l'ensemble de la lampe IntelliBrite 5G pour piscine et spa (dans une piscine existante)



Risque de décharge électrique ou d'électrocution!

La lampe submersible doit être installée par un électricien agréé ou certifié ou par une personne qualifiée et spécialisée en piscine, selon le National Electrical Code et tous les codes et règlements locaux applicables. Une installation inappropriée entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels.

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles des réparateurs, utilisateurs de la piscine et autres personnes suite à une décharge électrique.

Vérifiez que la piscine et le spa sont conformes aux exigences du National Electrical Code et à tous les codes et règlements locaux applicables. Un électricien agréé ou certifié doit installer le circuit électrique afin qu'il réponde à ces exigences et même les dépasse avant même que la lampe submersible ne soit installée. Certaines exigences du National Electrical Code que doit respecter le circuit électrique de la piscine sont les suivantes :

- Le circuit de l'éclairage doit être équipé d'un disjoncteur différentiel (GFCI) pour les modèles prévus pour une alimentation sur le secteur, et d'un disjoncteur de calibre approprié.
- La boîte de jonction (ou, pour **les modèles de 12 volts**, le transformateur de basse tension) est située à au moins vingt (20) centimètres (8 pouces) au-dessus du niveau du sol et à au moins 122 cm (48 po) du bord de la piscine, Figure 1 à la page 3.
- L'appareil d'éclairage et tous les articles métalliques se trouvant à moins de 1,5 mètre (5 pieds) de la piscine doivent être correctement électriquement raccordés.
- La niche humide doit être correctement installée de manière que le bord supérieur de la lentille de la lampe se trouve à au moins 46 cm (18 po) en dessous de la surface de l'eau de la piscine, Figure 1 à la page 3.
- La niche humide doit être correctement électriquement raccordée et mise à la terre via le connecteur de terre de 8 AWG situé à l'arrière de la niche, Figure 1.

Remarque : Le circuit électrique de la piscine et du spa peut être vérifié en utilisant un nécessaire d'essai d'homologation électrique pour piscine et spa. Ce nécessaire d'essai est disponible auprès de Pentair Water Pool and Spa. L'inspection du circuit électrique à réaliser avec ce nécessaire doit être exécutée par du personnel certifié et compétent.

Remplacement de l'ensemble de la lampe IntelliBrite 5G pour piscine et spa (après la satisfaction des exigences en matière d'électricité)

Les instructions de dépose et d'installation décrivent comment enlever et installer l'ensemble de lampe à DEL IntelliBrite pour piscine et spa. Utilisez aussi ces instructions après avoir terminé le remplacement suivant de la lampe :

- **Instructions d'installation et de dépose de la lentille, du joint de l'anneau frontal et de la lampe à DEL IntelliBrite couleur pour spa, page 17.**

AVERTISSEMENT

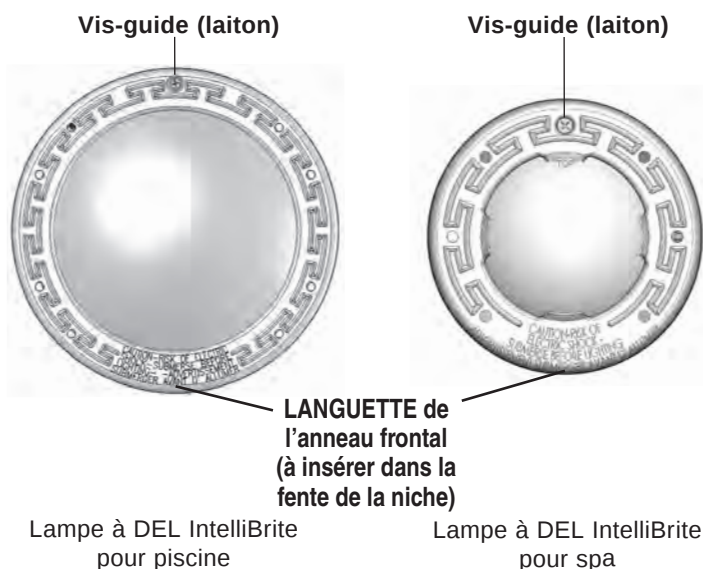
Une installation inappropriée d'un circuit électrique pour la piscine ou le spa, avant la pose de la lampe submersible, non conforme aux exigences des codes, entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, et pouvant aussi entraîner des dommages matériels.

1. **AVERTISSEMENT ! Coupez l'alimentation au disjoncteur ou à l'interrupteur principal, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite.**
2. **Dépose de la piscine de l'ensemble de lampe.** Retirez la vis-guide spéciale en laiton à la partie supérieure de l'anneau frontal. Retirez l'ensemble de la lampe IntelliBrite de la niche et placez-le sur le pourtour de la piscine.
3. Coupez le cordon à environ 30 cm (12 po) de l'arrière de l'ensemble de lampe.
4. Retirez le couvercle de la boîte de jonction, débranchez les fils de l'appareil d'éclairage et tirez le cordon par le conduit. **Conseil : Avant de tirer le cordon, rubanez le cordon neuf au cordon existant, pour faciliter l'insertion du cordon neuf dans le conduit (voyez l'étape suivante).**
5. Passez le cordon neuf de la lampe dans le conduit de la boîte de jonction jusqu'à la niche. **Remarque :** Selon la longueur du conduit, des outils spéciaux peuvent être nécessaires pour tirer le cordon d'un bout à l'autre du conduit.
6. Laissez au moins 1,2 m (4 pi) de cordon enroulé(s) autour de la lampe, Figure 1 à la page 3. Ce 1,2 m de cordon enroulé autour de la lampe permettra de connecter la lampe une fois que la piscine sera remplie d'eau.
7. Coupez le cordon au niveau de la boîte de jonction en laissant une longueur de cordon d'au moins 15 cm (6 po) pour réaliser les raccordements.
8. Enlevez 15 cm de la gaine extérieure du cordon pour exposer les trois fils isolés – Faites attention de ne pas endommager l'isolant de ces trois fils.

9. Branchez les trois fils aux fils du circuit correspondant dans la boîte de jonction (le noir à la phase, le blanc au neutre et le vert à la terre) et remontez le couvercle de la boîte de jonction.
10. Installez l'ensemble de lampe IntelliBrite dans la niche et serrez la vis-guide spéciale en laiton.

⚠ AVERTISSEMENT

N'utilisez que **la vis-guide spéciale fournie** avec cette lampe submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.



11. Vérification finale du bon fonctionnement de la lampe IntelliBrite :

Établissez l'alimentation à l'interrupteur principal ou au disjoncteur du circuit, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 4).

INSTALLATION DE LA LAMPE INTELLIBRITE 5G POUR PISCINE ET SPA (DANS UNE NOUVELLE PISCINE)

Ce qui suit décrit comment installer un appareil d'éclairage à DEL IntelliBrite blanc pour piscine et spa. Lisez la page 3 avant de commencer l'installation.

AVANT DE COMMENCER : Les étapes suivantes 1-7 (pages 7-8) décrivent les tâches que l'électricien doit accomplir avant d'installer l'appareil d'éclairage IntelliBrite. Consultez le schéma de la Figure 1 à la page 7.

AVERTISSEMENT

Assurez-vous que la piscine ou le spa est conforme aux exigences du National Electrical Code (N.E.C.) actuel, Article 680-22, et à tous les codes et règlements locaux applicables. Un électricien agréé ou certifié doit installer le circuit électrique afin qu'il réponde à ces exigences et même les dépasse avant même que la lampe submersible ne soit installée. Certaines exigences du National Electrical Code que doit respecter le circuit électrique de la piscine sont les suivantes :

Le circuit de l'éclairage doit être équipé d'un disjoncteur différentiel (GFCI) pour les modèles prévus pour une alimentation sur le secteur, et d'un disjoncteur de calibre approprié.

- La boîte de jonction (ou, pour les modèles de 12 volts, le transformateur de basse tension) est située à au moins 20 cm au-dessus du niveau maximal de l'eau et à au moins 1,2 m du bord de la piscine, Figure 1.
- L'appareil d'éclairage et tous les articles métalliques se trouvant à moins de 1,5 m de la piscine doivent être correctement électriquement raccordés.
- La niche humide doit être correctement installée de manière que le bord supérieur de la lentille de la lampe submersible se trouve à au moins 46 cm en dessous de la surface de l'eau de la piscine, Figure 1. (Au Canada, pas à une profondeur de plus de 51 cm.)
- La niche humide doit être correctement électriquement raccordée et mise à la terre via le connecteur de terre de 8 AWG situé à l'arrière de la niche, Figure 1.

Remarque : Le circuit électrique de la piscine ou du spa peut être vérifié en utilisant un nécessaire d'essai d'homologation électrique pour piscine et spa. Ce nécessaire d'essai est disponible auprès de Pentair Water Pool and Spa®. L'inspection du circuit électrique à réaliser avec ce nécessaire doit être exécutée par du personnel certifié et compétent.

Remarque : *Pour vous assurer que le circuit électrique de la piscine ou du spa répond à toutes les exigences applicables, l'électricien doit aussi consulter le Service de la construction local. N'utilisez que des niches humides de Pentair Water Pool and Spa pour assurer une liaison électrique et une mise à la terre appropriées.*

INSTALLATION DE LA LAMPE INTELLIBRITE 5G POUR PISCINE ET SPA (APRÈS LA SATISFACTION DES EXIGENCES EN MATIÈRE D'ÉLECTRICITÉ)

Installation de l'appareil d'éclairage IntelliBrite :

1. Introduisez le cordon dans le conduit jusqu'à la boîte de jonction, en laissant au moins 1,2 m de cordon enroulé autour de l'appareil d'éclairage (ceci permet de connecter la lampe une fois la piscine remplie d'eau). Consultez la Figure 1 ci-dessous.

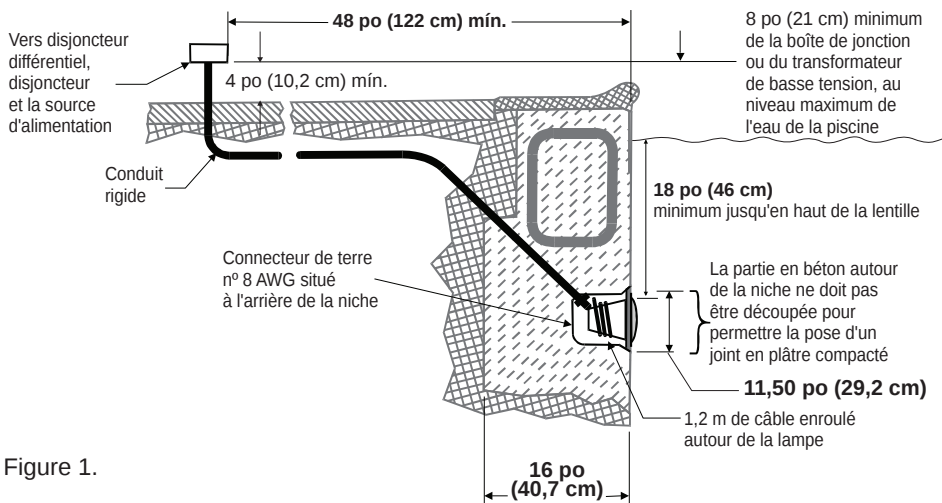
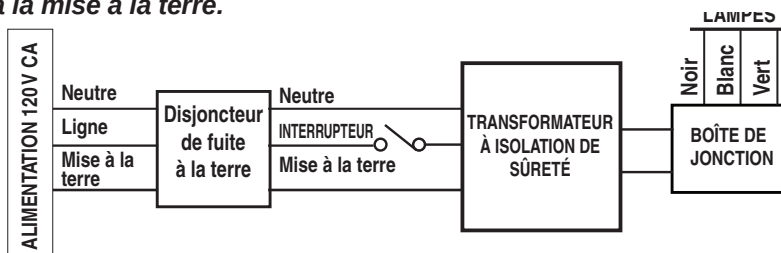


Figure 1.

2. Coupez le cordon au niveau de la boîte de jonction en laissant une longueur de cordon d'au moins 15 cm pour réaliser les raccordements.
3. Enlevez 15 cm de la gaine extérieure du cordon pour exposer les trois fils isolés (faites attention de ne pas endommager l'isolant de ces trois [3] fils).
4. Branchez les trois (3) fils aux fils du circuit correspondant dans la boîte de jonction et remontez bien le couvercle de la boîte de jonction.

POUR L'UTILISATION DE LA LUMIÈRE, UTILISER UNIQUEMENT UN TRANSFORMATEUR D'ISOLATION DE SÛRETÉ.

Remarque : Raccorder les trois (ou deux) fils aux fils correspondants du circuit dans la boîte de jonction. Pour les raccords à trois fils : Brancher le fil noir à l'alimentation, le fil blanc au conducteur commun et le fil vert à la mise à la terre.



REMARQUE : POUR LES LAMPES 120 V CA, LE TRANSFORMATEUR À ISOLATION EST INCLUS DANS LE DISPOSITIF DE RACCORDEMENT.

⚠ AVERTISSEMENT

N'utilisez jamais cette lampe submersible pendant plus de dix (10) secondes sauf si elle est complètement submergée dans l'eau. S'il n'est pas entièrement sous l'eau, l'ensemble de lampe devient extrêmement chaud, et peut entraîner des brûlures graves ou une rupture de la lentille. Ceci pourrait provoquer des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

5. Installez l'ensemble de lampe IntelliBrite dans la niche et serrez la vis-guide spéciale en laiton.

⚠ AVERTISSEMENT

N'utilisez que **la vis-guide spéciale fournie** avec cette lampe submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

Vis-guide (laiton)



Lampe à DEL IntelliBrite pour piscine

Vis-guide



Lampe à DEL IntelliBrite pour spa

6. Remplissez la piscine jusqu'à ce que la lampe soit complètement submergée par l'eau avant d'allumer la lampe pendant plus de dix (10) secondes.
7. **Vérification finale du bon fonctionnement de la lampe :** Pour vérifier le bon fonctionnement, établissez le courant à l'interrupteur principal ou au disjoncteur, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite elle-même. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 7).

POUR LES INSTRUCTIONS D'INSTALLATION ET DE DÉPOSE DE LA LAMPE À DEL INTELLIBRITE 5G POUR PISCINE ET SPA, CONSULTEZ :

- Instructions d'installation et de dépose de la lampe IntelliBrite pour piscine, page 4.
- Instructions d'installation et de dépose de la lampe à DEL IntelliBrite pour spa, page 19.

Remplacement de faisceau de fusible pour lampe IntelliBrite® 5G pour piscine (12 V)

Ce qui suit explique comment remplacer l'ensemble de fusible de la lampe IntelliBrite 5G pour piscine (le cas échéant) et le circuit imprimé principal intégré de la lampe IntelliBrite 5G pour piscine.

IMPORTANT! Avant de remplacer l'ensemble de fusible, notez les points suivants :

Dépannage

Problème	Cause/Action
La lampe ne fonctionne pas correctement	Vérifier le raccordement électrique de la lumière à la l'interrupteur CA. S'assurer qu'une alimentation CA adéquate est acheminée à la lumière.
La lumière ne s'allume pas	Vérifier le câblage du disjoncteur de fuite à la terre et réinitialiser au besoin. Lampe IntelliBrite 5G 12 V avec ensemble de fusible de lampe Remplacer l'ensemble de fusible (voir page 12) : Remarque : Le remplacement de l'ensemble de fusible peut ne pas résoudre ce problème. Dans certains cas, l'ensemble de fusible grillera, et après avoir remplacé le fusible, le circuit imprimé de la lampe ne fonctionne toujours pas.

REEMPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE)

Lors du remplacement ou du remontage de la lampe IntelliBrite 5G pour piscine, le joint (pièce n° 79101600) ou le joint et la lentille (619864) **DOIVENT ÉGALEMENT ÊTRE REMPLACÉS - VOYEZ LA PAGE 17 POUR LE NUMÉRO DES PIÈCES**

Dépose et installation de la carte de circuit imprimé de la lampe IntelliBrite 5G

⚠ DANGER



DANGER !

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, du réparateur, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

1. **Coupez l'alimentation à l'interrupteur principal ou au disjoncteur**, et à l'interrupteur de l'alimentation de la lampe IntelliBrite elle-même.
2. Avant de commencer, assurez-vous d'avoir un joint de lentille neuf (pièce n° 79101600) et un ensemble de lampe à DEL IntelliBrite 5G pour piscine (pièce n° 619818Z) prêt à être installé.

REPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE) (suite)

⚠ AVERTISSEMENT

Remplacez l'ensemble de lampe par un ensemble du même type et de la même puissance en watts. Un non remplacement de l'ensemble par un ensemble du même type endommagera l'ensemble de lampe à DEL et pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, et pouvant aussi entraîner des dommages matériels.

⚠ AVERTISSEMENT

Installez toujours un joint de lentille neuf (pièce n° 79101600) chaque fois que l'ensemble de lampe IntelliBrite est démonté. Sinon, de l'eau pourrait pénétrer dans l'ensemble et entraîner :

- (a) un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, ou
- (b) une rupture de la lentille, qui pourrait aussi entraîner des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

3. **DÉPOSE DE L'ENSEMBLE DE LAMPE À DEL INTELLIBRITE 5G POUR PISCINE** : Retirez la vis-guide à la partie supérieure de l'anneau frontal, retirez l'ensemble de lampe de la niche. Placez l'ensemble sur le pourtour de la piscine. **Remarque** : Il n'est pas nécessaire de vider partiellement la piscine.
4. Déroulez le cordon de la base du boîtier de la lampe.

Vis-guide (laiton)



Lampe à DEL IntelliBrite
pour piscine

⚠ AVERTISSEMENT

Assurez-vous de conserver la vis-guide de la lampe à DEL IntelliBrite submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

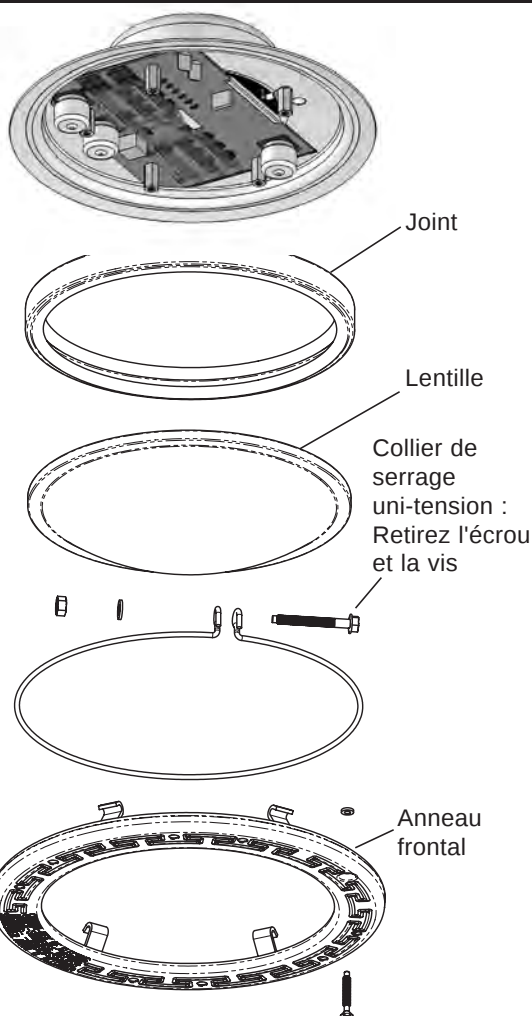
REPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE) (suite)

5. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. À l'aide d'un tourne-écrou de ¼ po et d'un tournevis Phillips n° 3, retirez le collier de serrage uni-tension. Mettez l'écrou de côté pour le remontage.

6. Retirez l'anneau frontal et le collier de serrage du boîtier de la lampe.

7. La lampe reposant sur sa base, enlevez soigneusement le joint pour extraire la lentille. Mettez la lentille de côté pour le remontage. Jetez le joint.

Remarque : UN JOINT NEUF (PIÈCE N° 79101600) DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE. Consultez la page 15, pour le numéro de pièce des nécessaires de rechange.

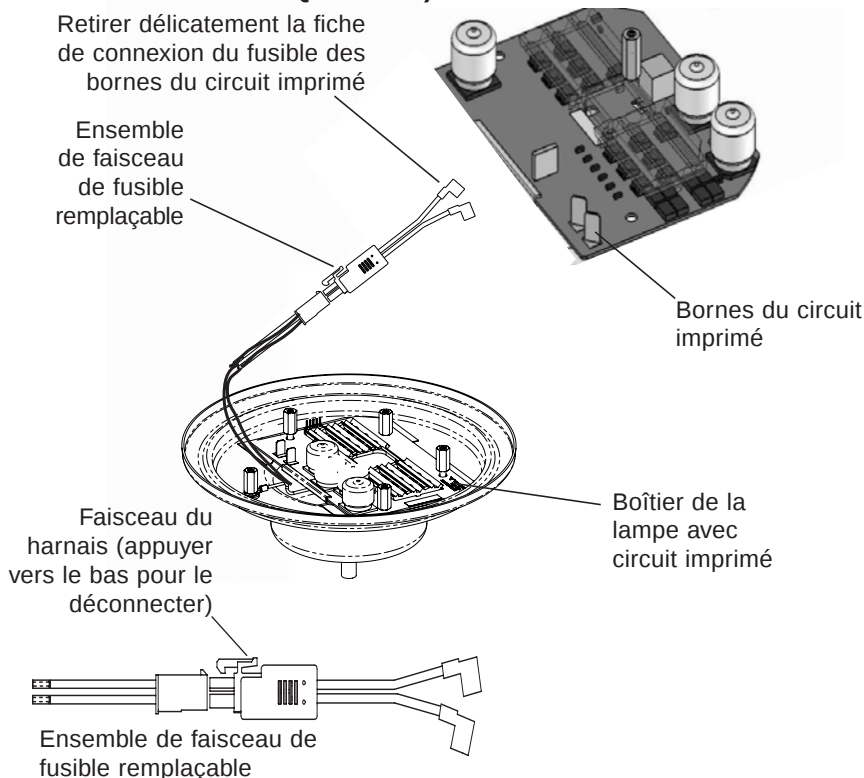


Remarque : Prenez note de la position actuelle de la lentille au niveau de la vis-guide (12 h), avant de la retirer de l'appareil d'éclairage. Un « W » sur la lentille indique un grand angle, un « N » un angle faible. Pour de plus amples renseignements, consultez la page 15.

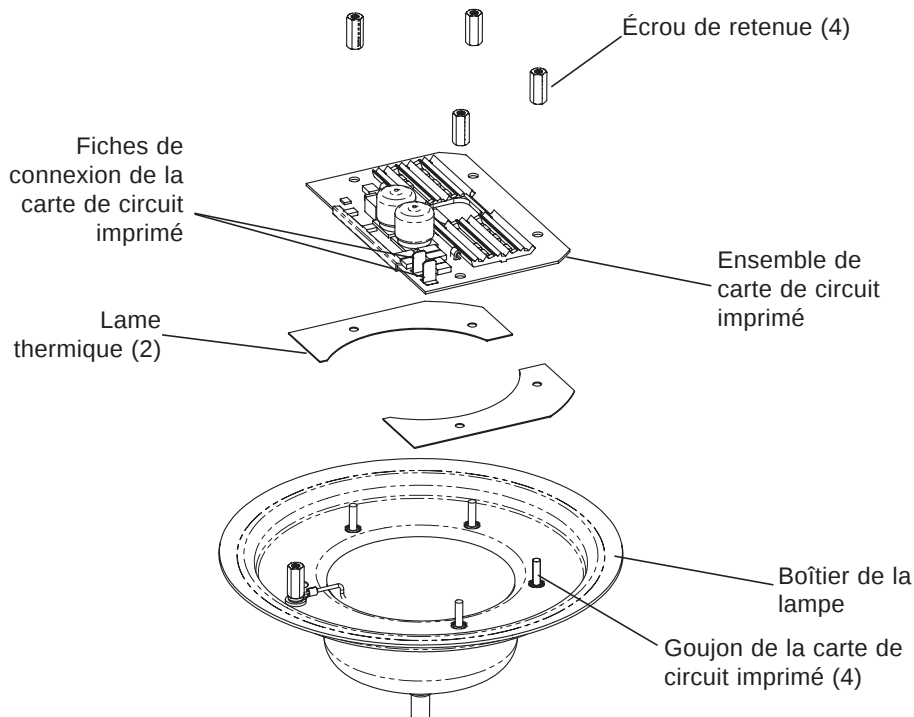
8. À l'aide d'un tourne-écrou de ¼ po, enlevez soigneusement les quatre écrous de retenue de l'ensemble de lampe à DEL (illustration à la page suivante). Mettez les écrous de côté pour le remontage.
9. Débranchez les deux fiches de la carte de circuit imprimé. Soulevez la carte de circuit imprimé et retirez-la de la base du boîtier de la lampe.
10. Soulevez soigneusement les lames thermiques du fond de la base du boîtier de la lampe.

Suite à la page suivante.

REPLACEMENT DE L'ENSEMBLE DE FAISCEAU DE FUSIBLE (POUR LAMPES 12 V UNIQUEMENT)



1. Avec vos doigts, débranchez soigneusement chaque fiche de connexion du fusible des bornes du circuit imprimé. Soulevez délicatement chaque fiche avec de petits mouvements latéraux, tout en maintenant en place les bornes du circuit imprimé avec un tournevis plat. Par la suite, débranchez progressivement la fiche de connexion de la borne. *Remarque : Pour éviter des dommages permanents au circuit imprimé, veillez à ne pas arracher les bornes de la surface du circuit imprimé.*
2. Une fois les fiches de connexion du fusible retirées des bornes du circuit imprimé, séparez l'ensemble de fusible du faisceau de fils de la lampe en appuyant sur le levier de dégagement du fusible, puis en tirant doucement.
3. Insérez le connecteur du nouveau faisceau de fusible dans la fiche du faisceau de fils de lampes et les emboîter.
4. Avec vos doigts, raccordez soigneusement chaque fiche de connexion du fusible aux bornes du circuit imprimé. *N'appuyez pas trop fort sur le connecteur, car cela risquerait d'endommager les bornes du circuit imprimé.*
5. **Suite de l'« INSTALLATION DE L'ENSEMBLE DE LAMPE INTELLIBRITE® 5G POUR PISCINE AVEC NOUVEAU JOINT » à la page 14.**



1. Placez les deux lames thermiques (fournies) sur les goujons de la carte de circuit imprimé dans la base du boîtier de la lampe (consultez l'illustration à la page suivante).
2. Placez la carte de circuit imprimé de la lampe sur les goujons de la base et logez la carte de circuit imprimé sur les lames thermiques. Assurez-vous que les deux fils de connexion ne se trouvent pas pris entre le boîtier et le bord de la carte de circuit imprimé.
3. En utilisant une clé à douille $\frac{1}{4}$ ", serrez chacun des quatre (4) en conservant les noix à une valeur de couple de 6,0 (minimum) à 8,0 (maximum) en lbs pour sécuriser le circuit. Ne serrez pas les NUTS circuit..

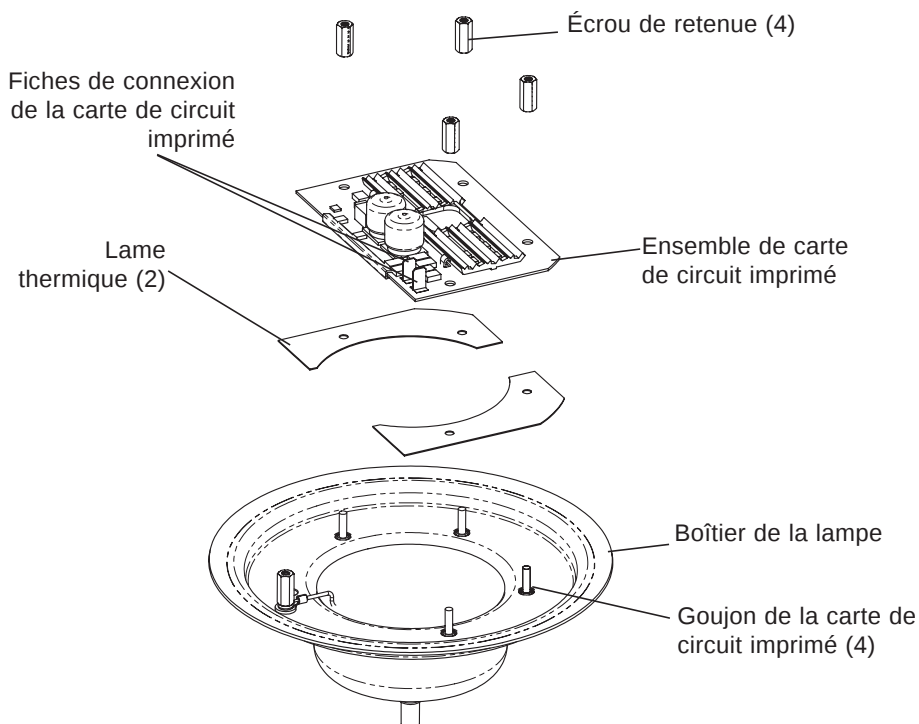
INSTALLATION DE L'ENSEMBLE DE LAMPE À DEL INTELLIBRITE 5G POUR PISCINE AVEC UN JOINT NEUF (consultez l'illustration à la page suivante)

⚠ AVERTISSEMENT

Assurez-vous d'installer TOUS les quatre (4) écrous de retenue. Ces écrous permettent d'assurer une liaison à la terre appropriée. Une non utilisation de tous les écrous de retenue pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

4. Branchez les deux fiches de connexion aux bornes de la carte de circuit imprimé.

Suite à la page suivante.



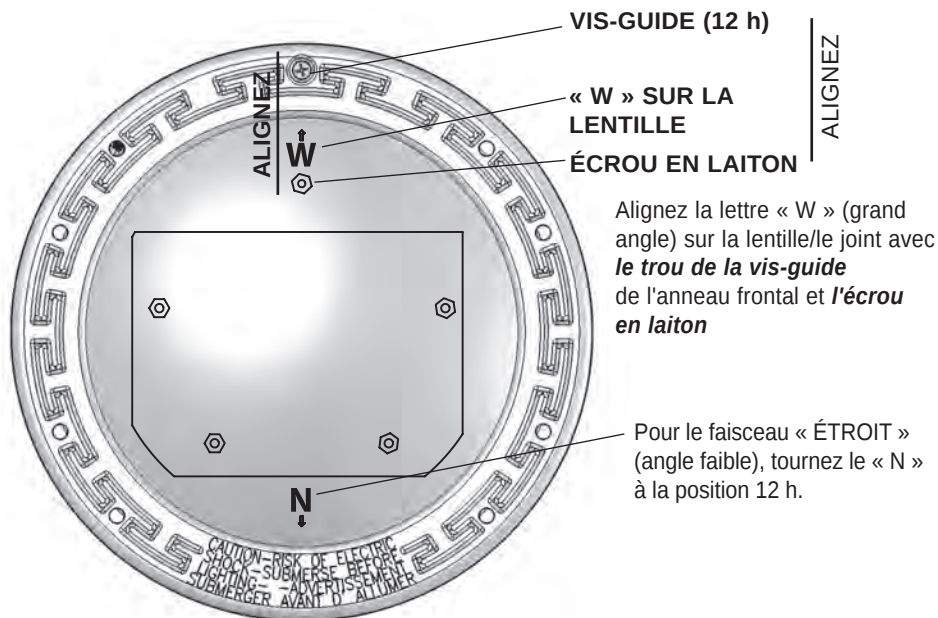
1. **Installez UN JOINT NEUF SUR LA LENTILLE (consultez l'illustration à la page suivante) :** Étirez le joint en le plaçant sur le pourtour de la lentille. Assurez-vous que le joint est installé uniformément autour de la lentille.
2. **ALIGNEZ LA LENTILLE/LE JOINT SUR LE BOÎTIER DE LA LAMPE :**

a) Le boîtier de la lampe reposant sur sa base, placez la lentille/le joint sur le boîtier de la lampe.

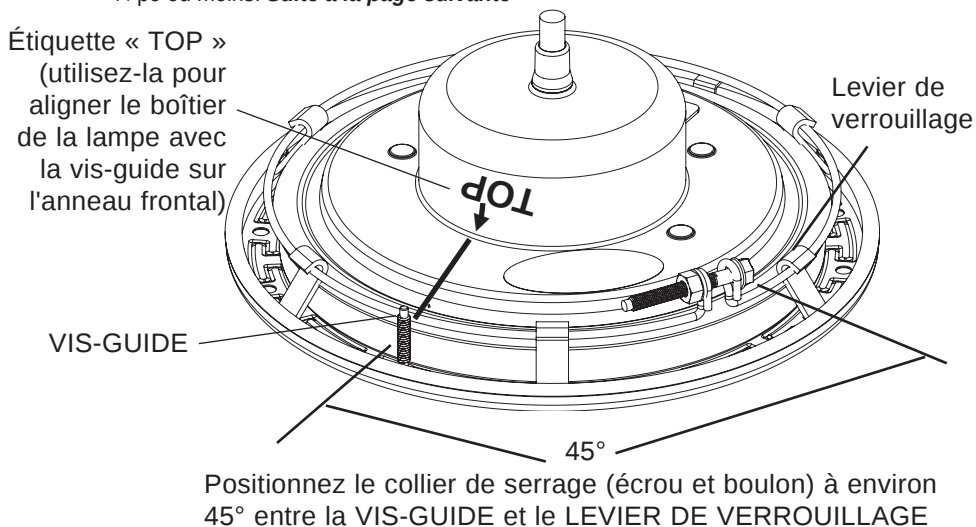
b) Tournez la lentille/le joint pour aligner la lettre « W » (« WIDE », grand angle) sur la lentille avec l'écrou en laiton dans le boîtier (consultez le schéma à la page 13 pour l'emplacement de l'écrou en laiton).

Remarque : La lentille de la lampe IntelliBrite est expédiée de l'usine en position « WIDE » (grand angle). Pour obtenir un faisceau « NARROW/ÉTROIT » (angle faible), tournez la lentille/le joint pour l'aligner avec la lettre « N » de la lentille. Remarque : Pour de plus amples renseignements sur les angles « GRAND » et « ÉTROIT », du faisceau de la lentille, consultez la page 16.

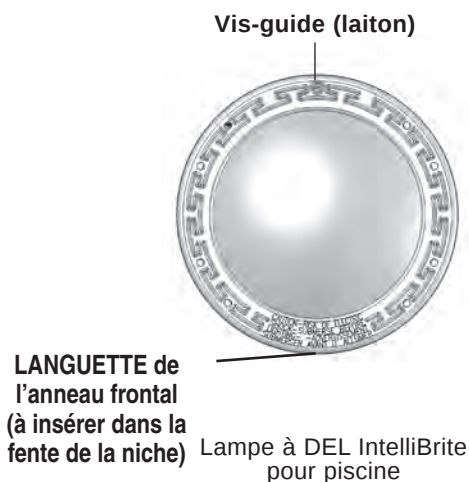
3. **INSTALLEZ L'ANNEAU FRONTAL :** Placez l'anneau frontal sur la lentille/le joint/le boîtier. Tournez l'anneau frontal afin que **le trou de la vis-guide** s'aligne à la position 12 h, la lettre « W » (ou « N ») de la lentille et l'écrou en laiton dans le boîtier. Vérifiez aussi que l'étiquette avec flèche d'indication du haut « TOP » (page 16) à l'arrière du boîtier s'aligne avec la vis-guide de l'anneau frontal.



4. **INSTALLEZ LE COLLIER DE SERRAGE UNI-TENSION** : Les extrémités en crochet du collier de serrage filaire uni-tension se dirigeant vers le bas, écartez ce collier de serrage et placez-le dans les évidements en « U » des leviers de verrouillage. Assurez-vous que les extrémités en crochet sont situées entre la paire de leviers de verrouillage comme il est illustré ci-dessous et que le collier de serrage est correctement engagé avec tous les leviers de verrouillage.
5. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. Assurez-vous que le collier de serrage est orienté de manière que la connexion à boulon se trouve positionnée à 45°.
6. Serrez le boulon et l'écrou jusqu'à ce que la distance entre les extrémités du collier soit de ¼ po ou moins. **Suite à la page suivante**



7. Enroulez au moins 1,2 m de cordon autour de la lampe (Figure 1 à la page 9). Ceci permet de faire l'entretien de la lampe une fois la piscine remplie d'eau.
8. Raccordez les trois (ou deux fils) fils de lampe aux fils de circuit de la lampe correspondante dans la boîte de jonction. Pour les raccordements à trois fils : Brancher le fil noir à l'alimentation, le conducteur blanc au fil commun et le fil vert à la mise à la terre. Mettre en place le couvercle de la boîte de jonction.
9. Installez l'ensemble de lampe dans la niche de la piscine. **IMPORTANT : Veillez à insérer la LANGUETTE sur la partie inférieure de l'anneau frontal dans la fente de la NICHE (située sur la partie inférieure de la niche). Cela est important afin de sécuriser la partie inférieure de l'ensemble de lampe dans la niche avant de serrer la vis-guide.**
10. Installez la vis-guide spéciale en laiton à la partie supérieure de l'anneau frontal pour fixer la lampe à la niche.

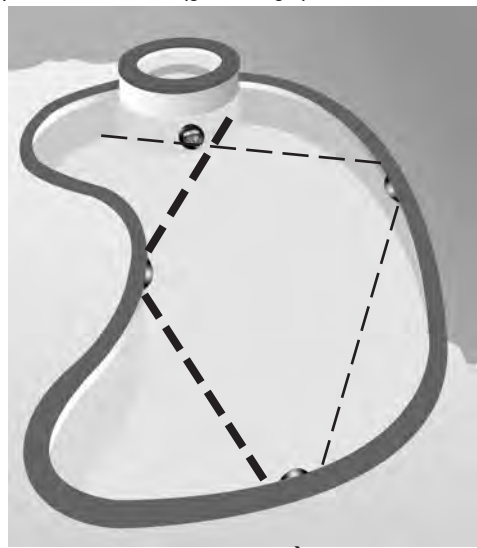


11. **Vérification finale du bon fonctionnement de la lampe IntelliBrite :** Établissez l'alimentation à l'interrupteur principal ou au disjoncteur, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 9).

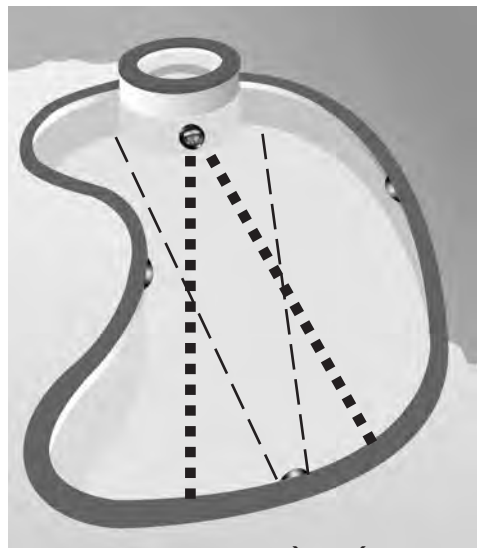
Réglage de lentille à angles large et étroit

Caractéristique unique de la lentille - à grand angle et à angle faible

La géométrie sans pareille de la lentille IntelliBrite donne un choix entre deux formes de faisceau lumineux; un à grand angle « large », ou un à angle faible « étroit » qui conviennent à des piscines de diverses dimensions. Dans le cas de lampes situées des deux côtés de la piscine, tournez la lentille à la position « WIDE » (grand angle), qui donne un faisceau de lumière plus large et une réflexion sur la largeur de la piscine. Dans le cas de lampes situées à une extrémité de la piscine, tournez la lentille à la position « N » (faisceau étroit) pour une intensité de lumière et une distance plus importantes sous l'eau. Remarque : La lentille de la lampe IntelliBrite est expédiée de l'usine en position « WIDE » (grand angle).



**FAISCEAU DE LUMIÈRE LARGE
(POUR CÔTÉS DE PISCINE)**



**FAISCEAU DE LUMIÈRE ÉTROIT
(POUR EXTRÉMITÉS DE PISCINE)**

Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite® 5G pour piscine

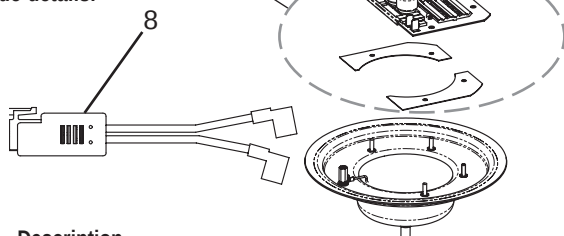
Remarque : Un transformateur externe 120 V CA à 12 V CA est nécessaire pour la lampe blanche IntelliBrite 5G pour piscine de 12 V CA. Consultez la page 1 pour obtenir plus de détails.

Ensemble de lampe IntelliBrite 5G pour piscine (homologation UL/CAS)		
Modèle du produit	Tension	Longueur du câble (pieds)
601105	12 V	30 pi
601106	12 V	50 pi
601107	12 V	100 pi
601108	12 V	150 pi
601205	12 V	30 pi
601206	12 V	50 pi
601207	12 V	100 pi
601208	12 V	150 pi
601300	120 V	30 pi
601305	12 V	30 pi
601306	12 V	50 pi
601307	12 V	100 pi
601308	12 V	150 pi

Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite® 5G pour piscine

Lampe 5G blanche pour piscine	Lampe 5G colorée pour piscine
Modèle/tension/câble (pi)	Modèle/tension/câble (pi)
601100/120 V/30 pi	01000/120 V/30 pi UL
601101/120 V/50 pi	601001/120 V/50 pi UL
601102/120 V/100 pi	601002/120 V/100 pi UL
601103/120 V/150 pi	601003/120 V/150 pi UL
601104/120 V/250 pi	601004/120 V/250 pi UL
601105/12 V/30 pi	601010/120 V/30 pi UL
601106/12 V/50 pi	601011/12 V/50 pi UL
601107/12 V/100 pi	601012/12 V/100 pi UL
601108/12 V/150 pi	601013/12 V/150 pi UL
601200/120 V/30 pi	602000/120 V/30 pi CSA
601201/120 V/50 pi	602001/120 V/50 pi CSA
601202/120 V/100 pi	602002/120 V/100 pi CSA
601203/120 V/150 pi	602003/120 V/150 pi CSA
601204/120 V/250 pi	602004/120 V/250 pi CSA
601205/12 V/30 pi	602010/12 V/30 pi CSA
601206/12 V/50 pi	602011/12 V/50 pi CSA
601207/12 V/100 pi	602012/12 V/100 pi CSA
601208/12 V/150 pi	602020/12 V/10 pi CE
601300/120 V/30 pi	
601301/120 V/50 pi	
601302/120 V/100 pi	
601303/120 V/150 pi	
601304/120 V/250 pi	
601305/12 V/30 pi	
601306/12 V/50 pi	
601307/12 V/100 pi	
601308/12 V/150 pi	

Remarque : Un transformateur externe de 120 V CA à 12 V CA est nécessaire pour le modèle de lampe IntelliBrite 5G pour piscine de 12 V CA. Consultez la page 1 pour obtenir plus de détails.



Numéro d'article	Numéro de pièce de l'ensemble	Description
2, 3, 5	600095	Ensemble d'anneau frontal en acier inoxydable. - Ensemble de collier de serrage à tension uniforme. - Joint, 8 ⅜ po de diamètre, silicone.
4, 5	619864Z	Ensemble de remplacement de lentille. - Joint, 8 ⅜ po de diamètre, blanc cassé. - Lentille, IntelliBrite, piscine, 8 ⅜ po de diamètre, trempé.
3, 5, 7	619875Z (UL) (300 W), 619916 Z (400 W), 619917Z (500 W) – 619818Z (couleur)	L'ensemble de remplacement inclut : Carte de circuit imprimé, bandes thermiques (2 x). - Ensemble de collier de serrage à tension uniforme. - Joint, 8 ⅜ po de diamètre, silicone, blanc cassé.
1	79104800	Vis-guide, avec rondelle de gomme captive.
5	79101601	Joint, 8 ⅜ po de diamètre, silicone.
8	620276	Ensemble de faisceau de fusible (pour lampes 12 V seulement)

Remarque : La lampe pour piscine IntelliBrite 120 V CA dispose d'un transformateur 12 V CA intégré.

Remplacement de l'anneau frontal et du joint de la lampe IntelliBrite pour spa (N/P 640045) ou joint et lentille (640046)

Remarque : Lors du remplacement d'un ensemble de lampe à DEL IntelliBrite pour spa, un nouvel ensemble de lampe pour spa comprenant un moteur lumière, une lentille, un joint et un anneau frontal (consultez la page ii pour le numéro de pièce des ensembles de pièces de lampe).

DANGER



DANGER !

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, de l'installateur, du spécialiste en piscine, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

1. **Coupez l'alimentation à l'interrupteur principal ou au disjoncteur**, et aussi à l'interrupteur de l'alimentation de la lampe à DEL IntelliBrite submersible.

AVERTISSEMENT

Installez toujours un joint de lentille neuf (voir la page 15 pour les numéros de pièces des nécessaires) chaque fois que l'ensemble de lampe à DEL IntelliBrite est démonté. Sinon, de l'eau pourrait pénétrer dans l'ensemble et entraîner : **(a)** un risque d'électrocution pouvant entraîner des blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, ou **(b)** une rupture de la lentille, pouvant aussi entraîner des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

Vis-guide —————



Lampe à DEL IntelliBrite 5G pour spa

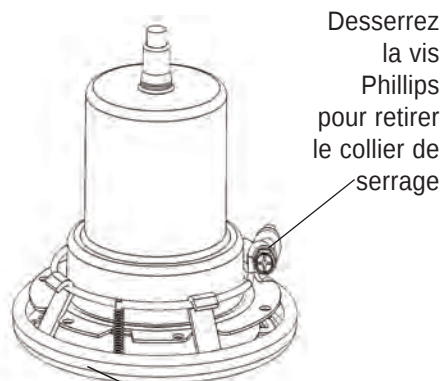
2. **DÉPOSE DE LA LAMPE À DEL INTELLIBRITE 5G POUR SPA :** Retirez la vis-guide à la partie supérieure de l'anneau frontal, retirez l'ensemble de lampe de la niche. Placez l'ensemble sur le pourtour de la piscine. **Remarque :** Il n'est pas nécessaire de vider partiellement la piscine.

AVERTISSEMENT

Assurez-vous de conserver la vis-guide de la lampe à DEL IntelliBrite submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

3. À l'aide d'un tournevis Phillips n° 3, desserrez la vis et retirez le collier de serrage filaire uni-tension de l'anneau frontal.
4. Retirez l'anneau frontal et le collier de serrage du boîtier de la lampe et conservez-le pour le montage ultérieur.

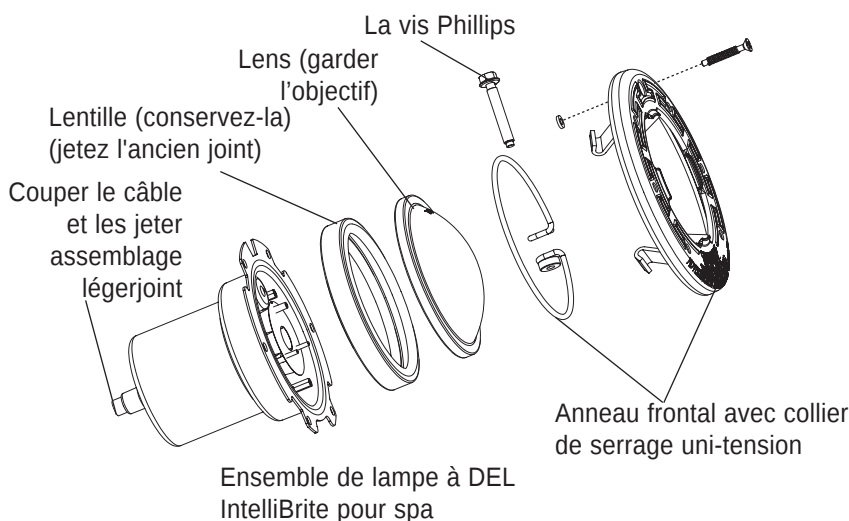
Remarque : Un transformateur externe de 120 VCA à 12 VCA est nécessaire pour le modèle de lampe à DEL IntelliBrite pour spa de 12 VCA. Consultez la page 2 pour obtenir plus de détails.



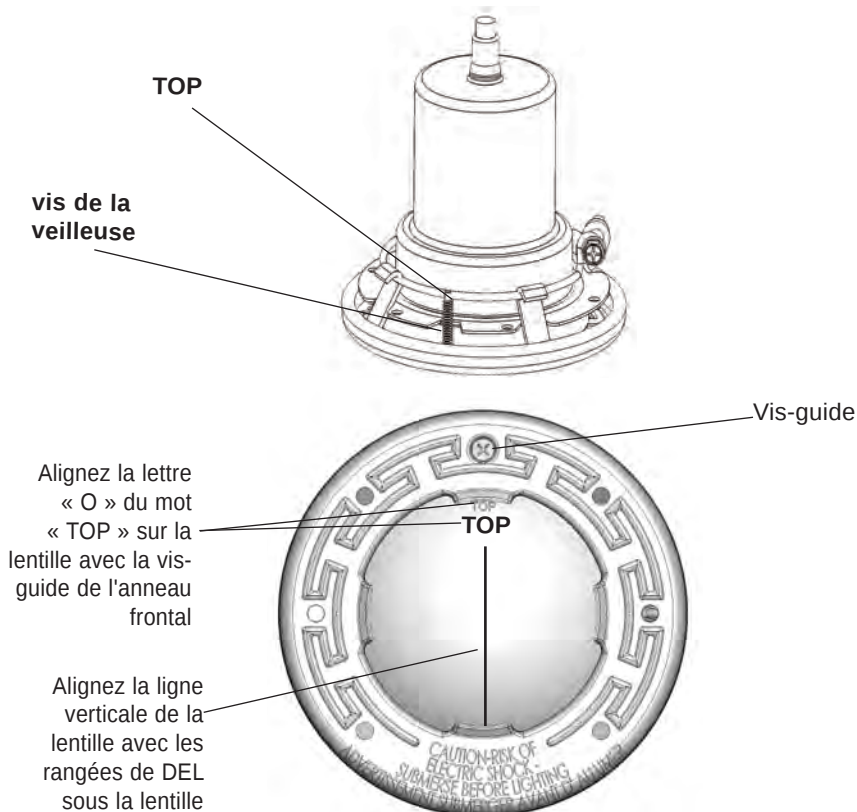
Appareil d'éclairage IntelliBrite blanc pour spa avec lentille, joint et anneau frontal fixés

Remarque : L'appareil d'éclairage IntelliBrite pour spa est un ensemble de lampe étanche, remplaçable. La lentille, le joint et l'anneau frontal peuvent être enlevés de l'ensemble de lampe étanche pour être remplacés. Consultez la page 23, pour le numéro de pièce des nécessaires de rechange.

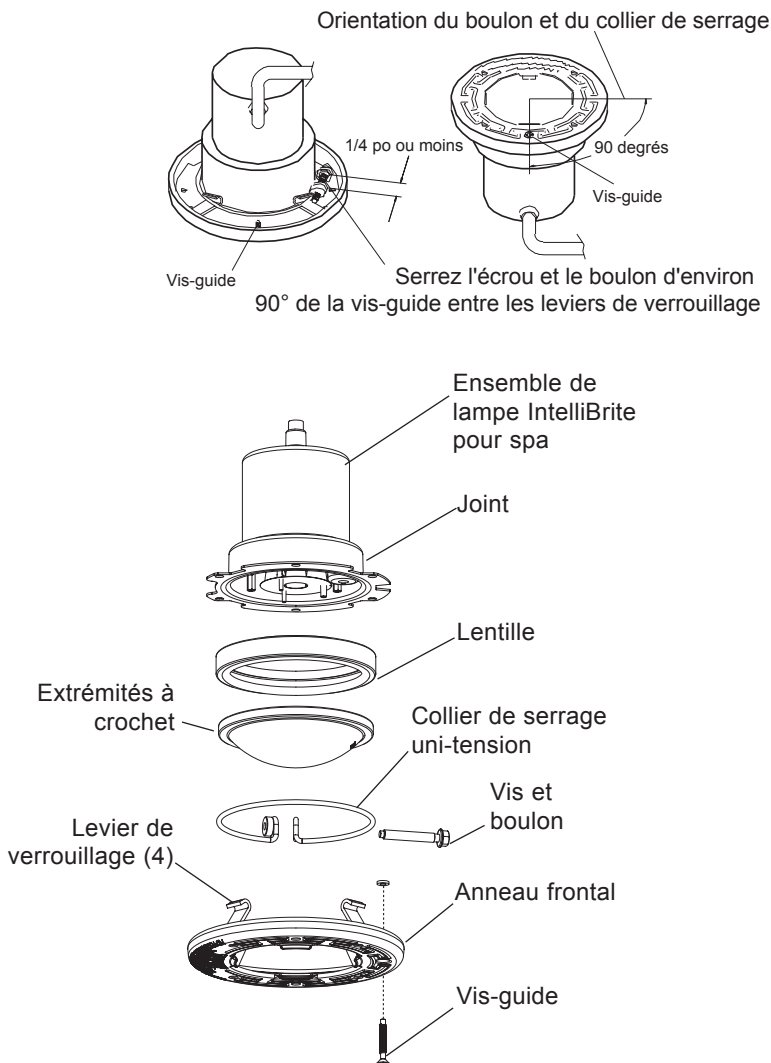
5. L'ensemble de lampe reposant sur sa base, enlevez soigneusement le joint pour extraire la lentille. Jetez le joint. UN JOINT NEUF POUR LENTILLE DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE À DEL POUR SPA.
6. Débranchez de la boîte de jonction le cordon de l'ensemble de lampe à DEL IntelliBrite pour spa. **Coupez le cordon près de l'arrière de l'ensemble de lampe et jetez la lampe. Consultez la page 6 pour les instructions de remplacement de la lampe neuve pour spa.**



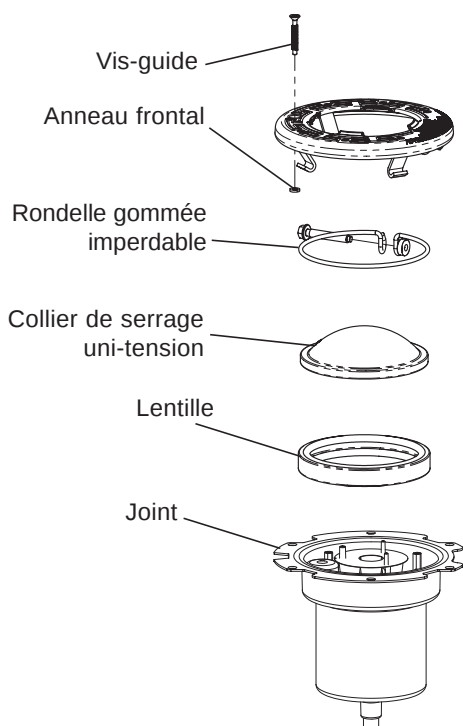
7. **INSTALLATION DE LA LAMPE À DEL INTELLIBRITE 5G POUR SPA AVEC UN JOINT NEUF :** Installez un joint neuf lors du remontage de la lampe à DEL IntelliBrite 5G pour spa. UN JOINT NEUF POUR LENTILLE DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE.
8. **Installez un joint neuf sur la lentille :**
- a) Le boîtier de la lampe reposant sur sa base, placez la lentille, puis le joint sur le dessus du boîtier de la lampe.
 - b) Placez l'anneau frontal sur le joint. Assurez-vous que la lentille et le joint sont centrés correctement sur le boîtier de la lampe.
 - c) **Alignement de l'anneau frontal et de la lentille :** Alignez l'anneau frontal et la lentille afin que la lettre « O » du mot « TOP » et la petite flèche au-dessus de celui-ci sur la surface de la lentille se dirigent vers le trou de la vis-guide de l'anneau frontal.
 - d) **Alignement de la lentille avec les DEL :** Tout en regardant au travers du devant de la lentille, tournez légèrement la lentille jusqu'à ce que les lignes verticales de la lentille se focalisent sur les quatre rangées de DEL ci-dessous.



9. Les extrémités en crochet du collier de serrage filaire uni-tension se dirigeant vers le bas, écartez ce collier de serrage et placez-le dans les évidements en « U » des leviers de verrouillage. Assurez-vous que les extrémités à crochet du collier de serrage sont situées entre la paire de leviers de verrouillage comme il est illustré ci-dessous et que le collier est correctement engagé avec tous les leviers de verrouillage.
10. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. Serrez le boulon et l'écrou jusqu'à ce que la distance entre les extrémités du collier soit de $\frac{1}{4}$ po ou moins.
11. **PASSEZ À « Remplacement de l'ensemble de lampe à DEL IntelliBrite pour spa (piscine ou spa existant) » à la page 4 pour les instructions d'installation de l'ensemble de lampe pour spa.**



Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite 5G pour spa



Ensemble de lampe colorée IntelliBrite® 5G pour spa (homologation UL/CSA)

Modèle du produit	Tension	Longueur du câble (pieds)
640120	120 V	30 pi
640121	120 V	50 pi
640122	120 V	100 pi
640123	120 V	150 pi
640124	120 V	250 pi
640130	12 V	30 pi
640131	12 V	50 pi
640132	12 V	100 pi
640133	12 V	150 pi

Ensemble de lampe blanche IntelliBrite® 5G pour spa (homologation UL/CSA)

Modèle du produit	Tension	Longueur du câble (pieds)
640140	120 V	30 pi
640141	120 V	50 pi
640142	120 V	100 pi
640143	120 V	150 pi
640144	120 V	250 pi
640150	12 V	30 pi
640151	12 V	50 pi
640152	12 V	100 pi
640153	12 V	150 pi

Pièce n° (néc.)	Description
640045	Ensemble d'anneau frontal, acier inoxydable - Ensemble de collier de serrage uni-tension - Joint, 4 de diamètre, blanc cassé
640046	Joint, 4 de diamètre, blanc cassé - Lentille, IntelliBrite, spa, 4 de diamètre, trempée
79104800	Vis-guide avec rondelle gommée imperdable
79108600	- Joint, 4 de diamètre, silicone

Remarque : Un transformateur externe de 120 VCA à 12 VCA est nécessaire pour le modèle de lampe à DEL IntelliBrite pour spa de 12 VCA. Consultez la page ii pour obtenir plus de détails.

REMARQUES

REMARQUES

REMARQUES



PENTAIR WATER POOL AND SPA

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PIÈCE N° 619921 RÉVISION K 4/2015



INTELLICHLOR[®] POWER CENTER
FOR USE WITH INTELLILCHLOR CHLORINE GENERATOR
MODEL IC20, IC40 & IC60



INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

Sanford, North Carolina (8 A.M. to 4:30 P.M. ET)
Moorpark, California (8 A.M. to 4:30 P.M. PT)
Phone: (800) 831-7133
Fax (800) 284-4151
Web sites: visit www.pentairpool.com and staritepool.com

Contents

IMPORTANT SAFETY PRECAUTIONS i

IntelliChlor Power Center Overview 1

IntelliChlor System Components 2

Operating Instructions 2

 Installation 2

 Kit Contents 2

 Required Tools 2

Installing the Power Center 3

SAFETY PRECAUTIONS 3

Troubleshooting 6

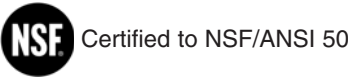
Electrical Specifications 6

230 VAC Basic System Wiring 6

110 VAC Basic System Wiring 6

IntelliChlor Power Center with ORP Controller 9

Connecting AP Power Wires to ORP Controller 9



IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

DANGER

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

DANGER

INSTALLERS AND POOL OPERATORS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THIS PUMP AND SAND FILTER. To reduce the risk of injury, service should only be done by a qualified pool service professional.

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. **Before attempting installation of service, ensure that all power to the circuit supplying power to the IntelliChlor Salt Chlorine Power Center(s) is disconnected/switched off at the circuit breaker.**

WARNING

IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS. READ AND FOLLOW ALL INSTRUCTIONS.



IMPORTANT NOTICE - Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this product. 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.pentaircommercial.com for more information related to these products.

WARNING

CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER WIRING:

To reduce the risk of personal injury the IntelliChlor® Salt Chlorinator Power Center must be installed on and wired to the load side of the time clock, electronically controlled switch, or relay load side, so that it will receive power only when the pool pump is on. Otherwise, dangerous chlorine gas buildup can occur. **The IntelliChlor Salt Chlorinator should never be energized when the pool pump is OFF and water is not flowing through the unit.**

WARNING

To reduce the risk of injury, do not permit children to use or operate this pump and sand filter.

WARNING

When setting up pool water turnovers or flow rates the operator must consider local codes governing turnover as well as disinfectant feed ratios.

WARNING

DO NOT increase pump size; this may increase the flow rate through the system and exceed the maximum flow rate stated on the drain cover.

Never operate the IntelliChlor Salt Chlorinator without proper flow or water circulation. A build-up of flammable gases will result in hazardous conditions.

Operate unit with minimum flow of 25 gpm. For high flow applications, use a bypass loop.

IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

⚠ WARNING Never operate the IntelliChlor® Salt Chlorinator without proper flow or water circulation. A build-up of flammable gases will result in hazardous conditions. Operate unit with minimum flow of 25 gpm. For high flow applications, use a bypass loop.

Only use pipe couplings that meet Schedule 80, maximum pressure 150 psi at 70° F.

⚠ WARNING

⚠ DANGER RISK OF ELECTRICAL SHOCK OR ELECTROCUTION:



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

⚠ WARNING

IntelliChlor Salt Chlorinator is for use with permanently-installed pools and may also be used with hot tubs and spas if so marked.

Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

⚠ WARNING

The IntelliChlor Salt Chlorinator Power Centers must be interconnected with the pool pump motor power source. This ensures the IntelliChlor Salt Chlorinator and pool pump will **switch on and off together**.

⚠ WARNING

When mixing acid with water, ALWAYS ADD ACID TO WATER. NEVER ADD WATER TO ACID.

⚠ WARNING

Use of chemicals other than those recommended may be hazardous. Follow the Chemical Manufacturer's Instructions.

⚠ WARNING

To reduce the risk of electric shock, install IntelliChlor Salt Chlorinator a minimum of five (5) feet away from the inside wall of the pool.

⚠ WARNING

Install the IntelliChlor Salt Chlorinator a minimum of three (3) feet away from the heater outlet. Allow ample access to the IntelliChlor control panel buttons and the IntelliChlor Power Center.

⚠ WARNING

A solid copper, bonding conductor not smaller than No. 8 AWG (8.4 mm) should be connected to all metal parts of the swimming pool, spa, or hot tub structure and to all electrical equipment, metal conduit, and metal piping.

IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

For information about the Virginia Graeme Baker Pool and Spa Safety Act, contact the Consumer Product Safety Commission at (301) 504-7908 or visit www.cpsc.gov.

NOTE: Always turn off all power to the pool pump before installing the cover or working on any suction outlet.

WARNING

When mixing acid with water, **ALWAYS ADD ACID TO WATER. NEVER ADD WATER TO ACID.**

Do not operate electrolytic cell without proper flow or water circulation. A build-up of flammable gases will result in hazardous conditions.

WARNING

When using IntelliChlor® Salt Chlorinator with an IntelliTouch control system, it is recommended to wire the IntelliChlor Power Center to the pump side of the relay located in the IntelliTouch Load Center. This wiring method does not require a ground fault circuit-interrupter (GFCI) to protect the circuit. A green colored terminal (or a wire connector marked “G”, “GR”, “Ground” or “Grounding”) is provided within the terminal compartment in the Power Center transformer enclosure. To reduce risk of electric shock, connect this terminal or connector to the grounding terminal of your electric service or supply panel with a conductor equivalent in size to the circuit conductors supplying this equipment. The power supply must be interconnected with pool pump motor power source. This insures the IntelliChlor chlorinator and pool pump will switch on and off together.

CAUTION

Use of chemicals other than those recommended may be hazardous. Follow the Chemical Manufacturer's Instructions.

CAUTION

Install the IntelliChlor unit a minimum of two (2) feet from the heater outlet.

DANGER

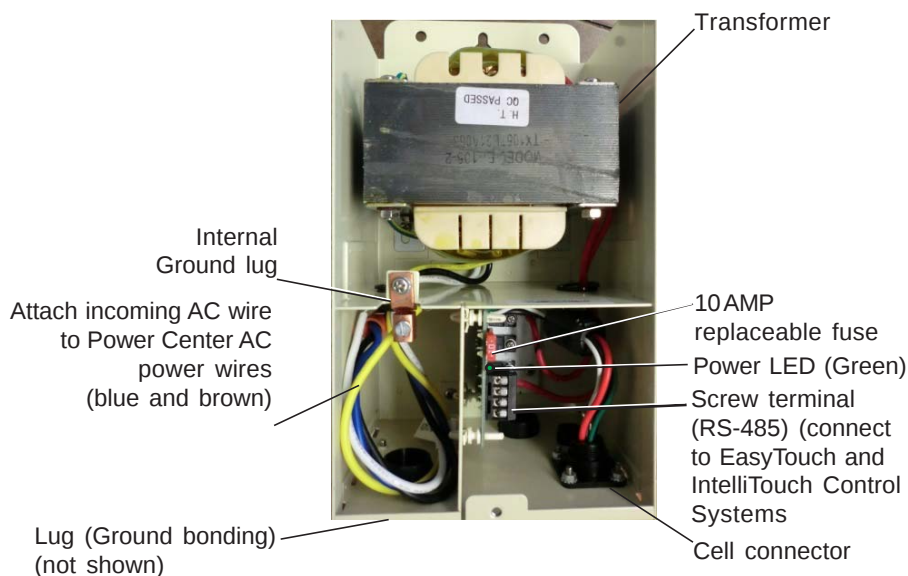


Water temperature in excess of 100° F (37.7° C) may be hazardous to your health. Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6° F (37° C.). Effects of hyperthermia include: (1) Unawareness of impending danger. (2) Failure to perceive heat. (3) Failure to recognize the need to leave the spa. (4) Physical inability to exit the spa. (5) Fetal damage in pregnant women. (6) Unconsciousness resulting in danger of drowning. The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.

IntelliChlor® Salt Chlorinator Power Center Overview

The IntelliChlor Salt Chlorinator system comprises of a Power Center and electrolytic Cell. The Power Center converts AC electrical current to a low voltage DC current required by the IntelliChlor Salt Chlorinator electrolytic cell to operate and create chlorine for the swimming pool and spa. The Power Center is connected with the pool circulation pump electrical source so that the electrolytic cell only operates when the pool pump is on. It is recommended that a pool pump timer be used to save on energy and prolong the service life of your pool pump and IntelliChlor Salt Chlorinator. A timer is not included as part of the IntelliChlor Salt Chlorinator Power Center kit. The IntelliChlor Salt Chlorinator Power Center can be connected to an IntelliTouch®, EasyTouch® or SunTouch® Control System for automation control.

The Power Center enclosure can be mounted vertically on a flat surface such as a wall or post no more than 15 feet away from the cell controller. The Power Center contains the transformer, fuse, and connector plug to the IntelliChlor Salt Chlorine cell. 110 VAC and 220 VAC wiring is connected at this box, with 35 VDC output to the cell controller. A 10 AMP replaceable fuse is mounted on the electronic circuit board for additional protection. There are no other controls or lights on the outside of the Power Center. A green power LED indicator is mounted on the inside main board. When the Power Center is switched on, the green power LED is lit.



IntelliChlor Salt Chlorinator Power Center
(Model PC 100) (Cover removed)

IntelliChlor® Salt Chlorinator System Components

An IntelliChlor Salt Chlorinator system consists of one or more of the following:

- **PC100 (P/N 520556):** Power Center Kit. Provides power and control communication to and from the IntelliChlor cell.
- **IC20 Cell (P/N 520554):** Designed for pools up to 20,000 U.S. gallons (75,000 liters). The cell will produce the equivalent of 0.70 lbs. of pure chlorine per 24 hours of continuous pool pump run time.
- **IC40 Cell (P/N 520555):** Designed for pools up to 40,000 U.S. gallons (150,000 liters). The cell will produce the equivalent of 1.40 lbs. of pure chlorine per 24 hours of continuous pool pump run time.
- **IC60 Cell (P/N 521105):** Designed for pools up to 60,000 U.S. gallons (227,124 liters). The cell will produce the equivalent of 2 lbs. of pure chlorine per 24 hours of continuous pool pump run time.
- **IntelliChlor “dummy” bypass cell (P/N 520588):** For new pool start-up.

Operating Instructions

When using a pool pump timer: The Association of Pool and Spa Professionals (APSP) recommends that all water in a residential pool pass through the filtration system at least once every 12 hours (referred to as pool water turnover). However, many factors have an effect on actual pump and filter system run times. Pool size, source of water, direct sun light, indoor/outdoor, screened and unscreened, filtration system, cold or hot weather, swimmer load, rain, organic debris, algae, etc., are all factors which contribute to either more or less pool pump and filter system run times. Because of these differences, it is extremely difficult to set an initial run time (starting point) for the pool pump and chlorinating system.

Try initially setting the pool pump timer to 12 hours. It will take a few days to get just the right amount pool pump operating time. When the IntelliChlor Salt Chlorator is wired with a pool pump timer (see page 6) results will vary greatly from one pool installation to the next, so this should be discussed with either the pool builder or your pool professional.

Installation

The following information describes how to install the IntelliChlor Salt Chlorinator Power Center. Before installing, review the IntelliChlor Salt Chlorinator kit contents and required tools. For cell installation instructions, see the “IntelliChlor User’s Guide” (P/N 520584).

Kit Contents

- One Power Center enclosure
- Installation Guide (this manual)

Required Tools

- Phillips & Flathead screwdrivers
- Voltmeter. (To determine AC line voltage to Power Center)
- Electric drill and 1/4" masonry drill bit. (To mount Power Center)

Installing the IntelliChlor® Salt Chlorinator Power Center

⚠ WARNING

IMPORTANT SAFETY PRECAUTIONS. PLEASE READ THE FOLLOWING: Read all the safety precautions in this manual before attempting any electrical wiring. Be sure to read and follow all safety Instructions on page ii. Wiring should only be performed by a qualified professional. When using electrical products, basic precautions should always be followed, including the following:

⚠ DANGER



RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Before attempting installation of service, ensure that all power to the circuit supplying power to the system is disconnected/switched off at the circuit breaker. When using IntelliChlor Salt Chlorinator with an IntelliTouch® Control System, it is recommended to wire the IntelliChlor Salt Chlorinator Power Center to the pump side of the relay located in the IntelliTouch Control System Load Center. This wiring method does not require a ground fault circuit-interrupter (GFCI) to protect the circuit. A green colored terminal (or a wire connector marked “G”, “GR”, “Ground” or “Grounding”) is provided within the terminal compartment in the Power Center transformer enclosure. To reduce risk of electric shock, connect this terminal or connector to the grounding terminal of your electric service or supply panel with a conductor equivalent in size to the circuit conductors supplying this equipment. The power supply must be interconnected with pool pump motor power source. This insures the IntelliChlor Salt Chlorinator and pool pump will switch on and off together.

- Grounding (earth bonding) is required. The unit should be installed by a qualified service person and grounded.

⚠ CAUTION

- Install the IntelliChlor Salt Chlorinator enclosure a minimum of two (2) feet from the heater outlet.
- Allow ample access to the IntelliChlor Salt Chlorinator control panel buttons and the IntelliChlor Salt Chlorinator Power Center.
- Pipe couplings: Schedule 80, maximum pressure 150 psi at 70° F.
- Operate unit with minimum flow of 20 gpm. For high flow applications, use a bypass loop.

⚠ CAUTION

Install the Power Center at eye level as close to the IntelliChlor Salt Chlorinator pump and filtration as possible.

The IntelliChlor Salt Chlorinator power center must be installed more than 8 ft. (2.44 m) from the pool edges. Leave sufficient clearance on all sides of the Power Center. Ensure that the 15 ft. (4.61 m) DC power cord from the Cell assembly pipe location can reach the Power Center location. The Power Center enclosure can be mounted on the wall up to 15 feet away from the cell controller.

Note: For installation instructions about connecting the cell to Power Center, see the “IntelliChlor User’s Guide” (P/N 520589).

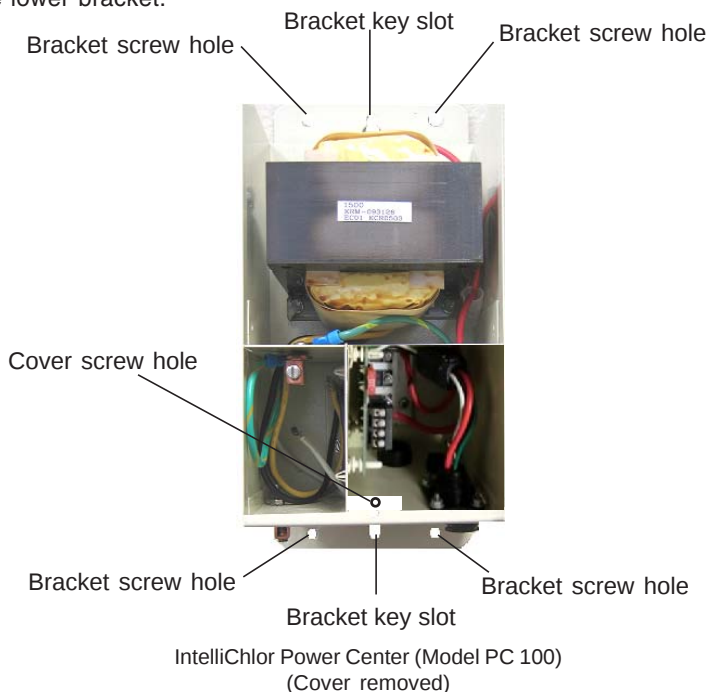
Installing the Power Center

Install the Power Center at eye level as close to the IntelliChlor pump and filtration as possible. **CAUTION: The Power Center must be installed more than 8 ft (2.44 m) from the pool edges.**

Leave sufficient clearance on all sides of the Power Center. Ensure that the 15 ft (4.57 m) "Type Z" DC power cord from the Cell assembly pipe location can reach the Power Center location. The Power Center enclosure can be mounted on the wall up to 15 ft (4.57 m) away from the cell controller. **Note:** For installation instructions about connecting the cell to Power Center, see the IntelliChlor User's Guide (P/N 520848).

Mount the Power Center enclosure:

1. Remove the screw securing the Power Center cover and remove the cover.
2. Mount the Power Center on a flat surface such as a wall or post and mark each mounting bracket screw hole location. There are two (2) screw holes and a keyslot for the top and lower bracket.
3. Drill six ¼ in (6.35 mm) holes. Install anchors if necessary and one screw for each bracket keyslot location.
4. Position each Power Center keyslot (top and lower) slot over the two mounting screws just installed. Tighten the two (2) screws to secure the enclosure.
5. Install and tighten four (4) mounting screws two (2) in the top and two in the lower bracket.



Connect AC Power to the IntelliChlor® Power Center

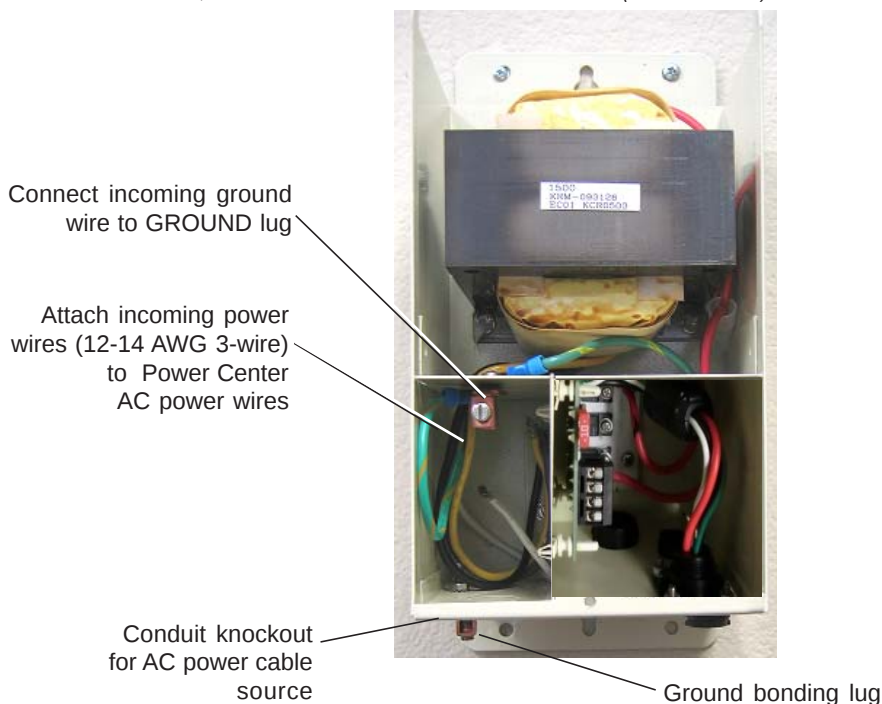
Note: This Power Center is wired as an “All Pole Disconnect” System. Therefore a 3 mm spacing is required for all AC wiring entering the unit.

6. Use 12-14 AWG three conductor insulated wire for the main AC power connection. Connect the Power Center to pool pump AC power source. The Power Center should be connected to the pump motor switch or automatic timer. For system wiring information, see page 6.
7. Attach incoming GROUND wire to the ground lug inside the Power Center.

8. **Earth Bonding (Grounding):** Connect the earth wire to the **GROUND BONDING LUG** located on the bottom of the Power Center enclosure. Earth bonding is necessary to ensure personal safety and safety of equipment.

IMPORTANT: A number 8- guage (8.4 mm) wire is recommended when connecting the power supply to a Permanent Earth Ground connection that is acceptable to the local inspection authority. Attach the bonding point located on bottom of the Power Center to a Common Earth Bonding Point. Do not use the IntelliChlor as the Common Bonding Point. Each piece of non-chlorinator pool equipment requiring a ground should be bonded to the Common Approved Earth Bonding Point. **Never ground pool pump to Power Center.**

9. Reinstall the Power Center cover and secure with the cover screw.
10. The Power Center installation is complete. For IntelliChlor operating information, refer to the *IntelliChlor User's Guide (P/N 520848)*.



Troubleshooting

***Note:** Turn off power to unit before attempting to service or repair.*

Problem	Possible Cause	Corrective Action
The IntelliChlor green power light on the control panel is not on.	Fuse in Power Center is open.	Replace 10 AMP fuse, located on the main circuit board.
	No AC power to Power Center.	Verify time clock is providing 110 VAC or 220 VAC to Power Center when active.
	Transformer leads not wired correctly in Power Center.	Verify transformer leads wired to AC source by referring to wiring diagram decal on inside of Power Center cover.

Electrical Specifications

Circuit Protection: Two-pole 20 AMP device at the electrical panel.

IntelliChlor Salt Chlorinator Model IC20

Input: 90-130 VAC, 50/60 Hz, 220 Watts (2 AMP) or 220-240 VAC, 50/60 Hz, 220 Watts (1 AMP).

Output: 22-39 VDC @ 7.3 AMPS maximum from the Power Center.

IntelliChlor Salt Chlorinator Model IC40

Input: 90-130 VAC, 50/60 Hz, 220 Watts (2 AMP) or 220-240 VAC, 50/60 Hz, 220 Watts (1 AMP).

Output: 22-39 VDC @ 7.3 AMPS maximum from the Power Center.

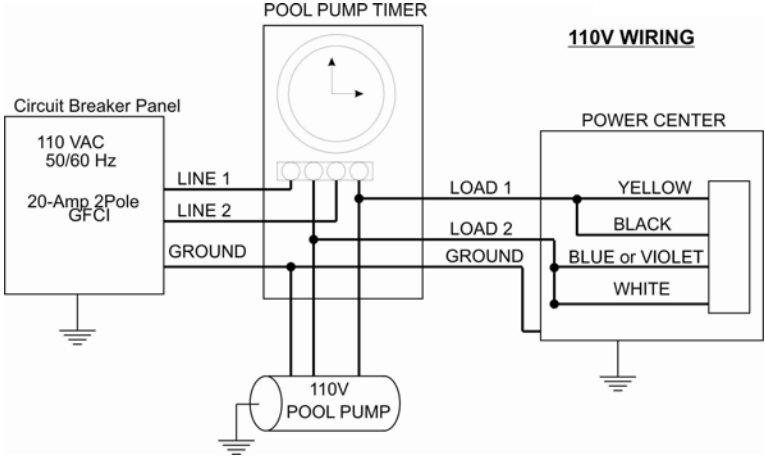
IntelliChlor Salt Chlorinator Model IC40

Input: 90-130 VAC, 50/60 Hz, 220 Watts (2 AMP) or 220-240 VAC, 50/60 Hz, 220 Watts (1 AMP).

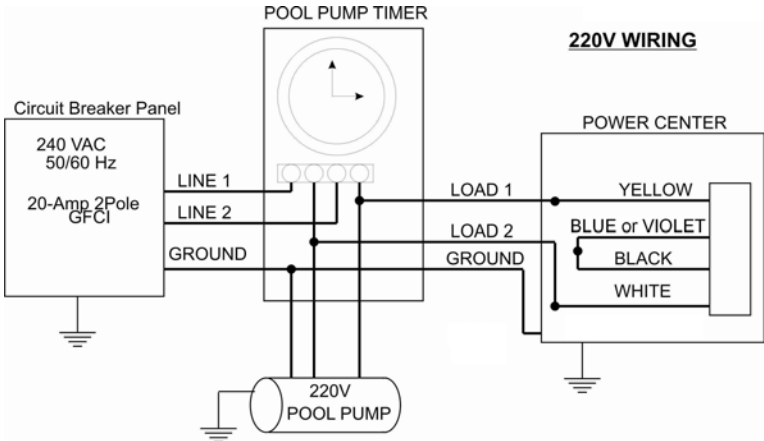
Output: 22-39 VDC @ 7.3 AMPS maximum from the Power Center.

IMPORTANT: When using IntelliChlor® Salt Chlorinator with an IntelliTouch® Control System, EasyTouch® Control System or SunTouch® Control System, it is recommended to wire the Power Center to the PUMP SIDE OF THE RELAY located in the automation control system load center. This method does not require a ground fault circuit-interrupter (GFCI) to protect the circuit.

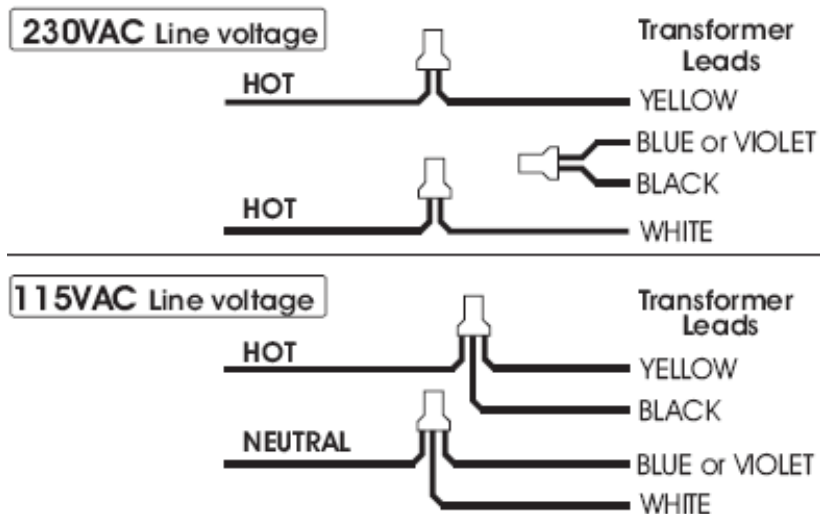
110 VAC and 220 VAC Transformer Wiring



115 VAC Basic System Wiring



230 VAC Basic System Wiring



IntelliChlor Salt Chlorinator SPower Center 230 VAC and 115 VAC Transformer Wiring

IntelliChlor Power Center with ORP Controller

Connect AC Power Wires and ORP Controller Wires

1. Provide 208-260VAC power to the POWER CENTER. This power should be on its own breaker for future servicing. A knock-out opening is provided on the bottom of the power center for a conduit.

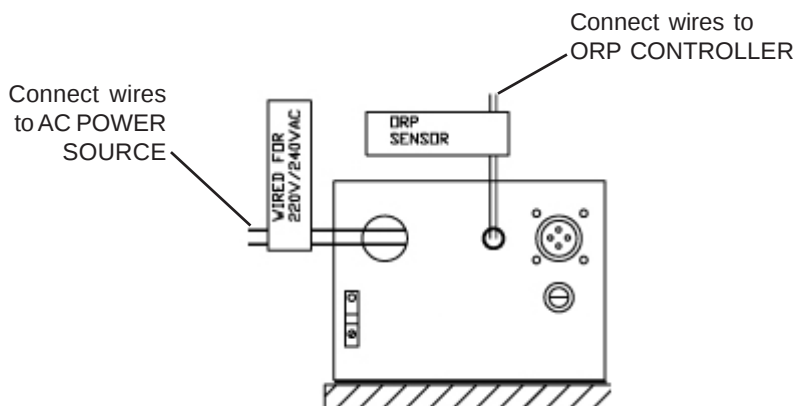
Note: For 110VAC operations, each power center will need to be re-configured. A 110VAC wiring diagram is provided on the inside of the power center cover.

2. Splice the incoming AC power wires onto the two wires labeled **WIRED FOR 220V**. Do not apply AC power yet.

3. Connect the two (2) twisted wires labeled **ORP CONTROLLER** to the ORP chlorine controller (AcuTrol). Carefully place the connection inside of power center.

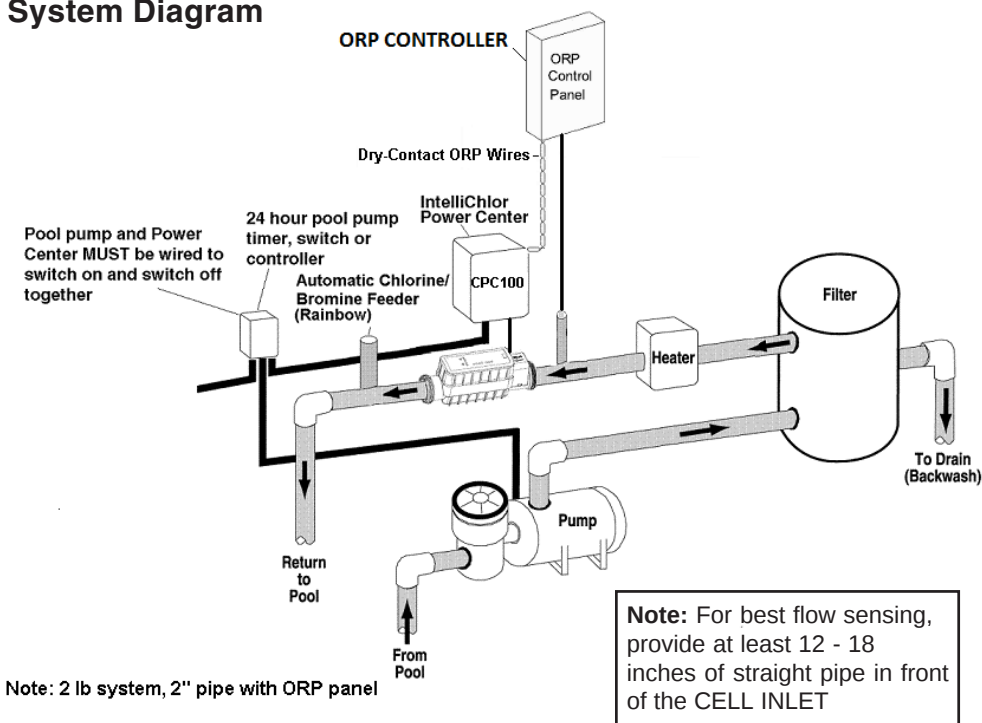
Note: The **Acu-Trol Controller** (sold separately), contains an oxidation reduction potential (ORP) sensor that is placed in the water stream to detect the sanitizing ability of the water and according to a user-preset set point, calls for chlorine when low, and cancels chlorine when satisfied. This Controller provides a dry-contact output that connects to the Power center with ORP input. When the dry-contact terminals are closed, chlorine is required. When the dry contact terminals are open, no chlorine is required. The **Acu-Trol** Controller is not used for a stand-alone-No ORP system.

4. Replace the cover. Secure it using the retaining screw.



Power Center (Bottom View)

System Diagram



Troubleshooting

Problem:

The IntelliChlor 100% light does NOT come on when the ORP controller calls for chlorine

Actions:

1. Verify the ORP controller is opening and closing the dry-contact output.
2. Remove the ORP CONTROLLER wires connection from the power center and the ORP controller. Manually tie the ORP CONTROLLER wires together. This will turn on the cells at 100%. If the 100% lights do not come on, verify the communication wires are connected.

Problem:

The IntelliChlor 100% light stays on after the chlorine controller says to stop

Actions:

1. Verify the ORP SENSOR wires are not shorted together in the power center.
2. Verify the ORP controller dry contact output is opening and closing by using an ohmmeter. Manually set this output open and closed using the controller menu system.

More and Less Output Buttons on Intellichlor cell.

These buttons control the output setting and only operate in a single-cell system where the cell is connected to the standard 520556 power center, no ORP. **When an ORP system is used, these buttons are disabled.** Chlorine demand is controlled by the ORP controller.



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P/N 520590 REV. F 1/2015

Models: PJB2175 & PJB4175

ELECTRICAL JUNCTION BOX FOR POOL/SPA LUMINAIRES

CAPACITY: - PJB2175: UP TO 2 UNDERWATER LIGHTS
- PJB4175: UP TO 4 UNDERWATER LIGHTS

DANGER! To Reduce the Risk of Injury:

...do not permit small children to operate Pool/Spa equipment or use the Pool/Spa unless they are closely supervised at all times.
...always disconnect electricity before servicing the Pool/Spa equipment.

IMPORTANT SAFETY INSTRUCTIONS

When installing and servicing this Product and other associated equipment, basic safety precautions should always be followed,

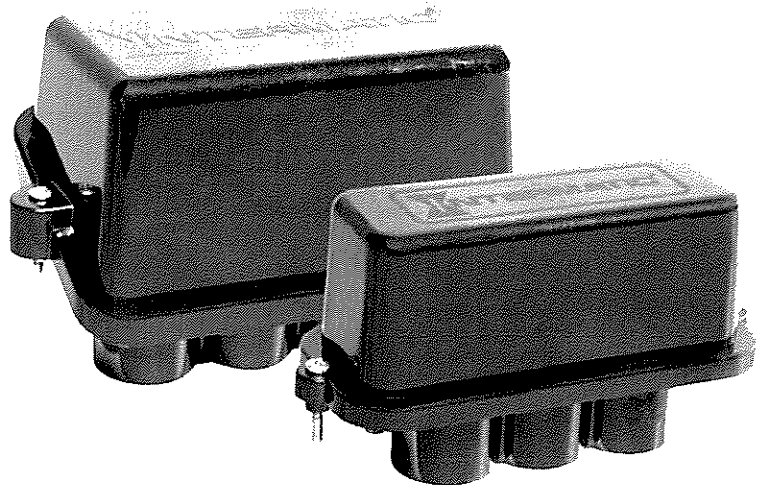
1. Read and follow all instructions.
2. This Junction Box must be installed by a qualified person, according to National and Local Electrical Codes.
3. Install this Junction Box not less than 48 inches from inside edge of pool. USE COPPER CONDUCTORS ONLY.
4. Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
5. For grounding, bonding, installing and the wiring of underwater luminaires, refer to Article 680 of the National Electrical Code.

READ, FOLLOW AND SAVE THIS INSTRUCTION MANUAL

GENERAL INFORMATION

This polymeric, watertight, multi-fixture Junction Box is especially designed for pools, pool-spa combinations and landscape applications. It is very versatile, rugged and simple to install. The Junction Box provides safe and reliable connections for up to four high or low voltage luminaires. It will accommodate flexible cords from #16-3 up to #12-3 and #10-2 in any combination and conduits from 1/2 to 1 inch, including the one for supply conductor feed.

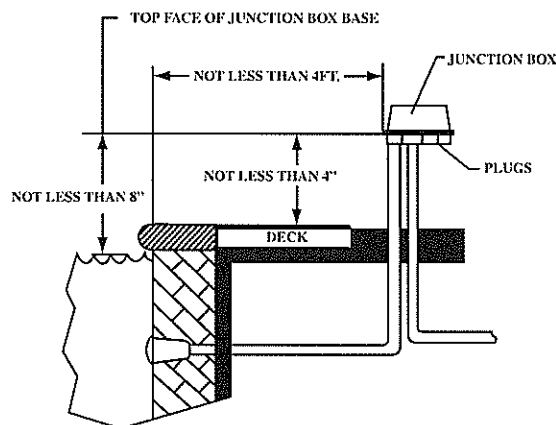
A grounding bar accepts solid or stranded conductors from #16 to #8 gauge. An external bonding lug is also provided in case your installation requires it. An optional wall/post mounting bracket (Model PA114) is available. The Junction Box complies with all the requirements of UL1241 and the National Electric Code.



INSTALLATION PJB2175 & PJB4175

A wiring layout should be prepared ahead of the installation of this Junction Box with considerations given to the following details.

1. Installation shall be according to Article 680 of the National Electric Code and all applicable local Codes. This Junction Box is suitable for either line or low voltage luminaires.
2. Use copper conductors only.
3. This Junction Box will accommodate water resistant flexible cord, #16/3 or #14/3 Extra-hard usage (Type SOW, STW or STOW) or, #12/3 or #10/2 Hard usage (Type SJW, SJTW or SJTWO).
4. The Junction box must be rigidly supported and unused conduit openings permanently plugged with the plugs provided.



Installation

1. Determine best location for the Junction Box and run properly sized conduits as per the wiring layout. **The Junction Box shall be located not less than 4 feet from the inside wall of the pool. It must also be at least 8 inches above the maximum water level and not less than 4 inches above deck or grade.** (See Illustration) Make sure the Junction Box can be rigidly supported. The optional mounting bracket (Model PA114) is designed to accommodate either wall or stake mounting.
2. Cut off all conduits at the same level. Use reducer bushings furnished as needed for installation. For 1/2 inch conduit, apply PVC Solvent Cement 1 inch down conduit and to small inside diameter of reducer bushing. Slide small end of reducer bushing over conduit to the stop tab. For 3/4 inch conduit, break the stop tab off of reducer bushing and PVC Solvent Cement large inside diameter of reducer bushing to conduit. PVC Solvent Cement large outside diameter of reducer bushings or 1 inch conduit to Junction Box base. **Permanently close all unused conduit openings with the plugs provided.**
3. An optional external bonding lug is provided. Connect to Equipotential Bonding Grid, if your installation requires it.
4. Pull supply conductors from source and flexible cord from luminaires into Junction Box. Use twist on wire connectors or other approved termination method for power connections. Connect ground conductors and bonding conductors, if required, to ground bar. Tighten terminal screws 35 in-lbs minimum.
5. Install strain reliefs. The direction that the clamps go on depends on the diameter of cable. For cables smaller than 1/2 inch (#16/3 or #12/3), install clamps with the arrow pointing down. For cables larger than 1/2 inch (#14/3 or #10/2) install clamps with the arrow pointing up. Tighten screws evenly until clamp bottoms out. If required, make bonding connections to the grounding bar and to external bonding lug.
6. Check tightness of connections, make sure gasket is properly seated and close the Junction Box with the screws provided.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
1. On light is OFF	a. Burned - out bulb b. Bad connection	a. Replace bulb b. Correct defect
2. All lights are OFF	a. Tripped breaker b. Open GFCI	a. Reset breaker b. Call Electrician

ONE YEAR LIMITED WARRANTY

If within one (1) year from the date of purchase, this product fails due to a defect in material or workmanship, except diverter seal, which is warranted for the life of the product Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (f) transit damage, initial installation costs, removal costs, or reinstallation costs.

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This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 <http://www.intermatic.com> Please be sure to wrap the product securely to avoid shipping damage.

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