



Installation Manual



Jandy® WaterColors LED, Underwater Large and Small Light

WARNING

FOR YOUR SAFETY - This product must be installed and serviced by a professional pool/spa builder or service technician. The procedures in this manual must be followed exactly. Failure to follow warning notices and instructions may result in property damage, serious injury, or death. Improper installation and/or operation will void the warranty. Before installing this product, read and follow all warning notices and instructions that accompany this light.

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Section 1. Safety Information

IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

READ AND FOLLOW ALL INSTRUCTIONS

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

WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION. This underwater light must be installed by a licensed or certified electrician in accordance with the National Electrical Code and applicable local codes and ordinances. Improper installation will create an electrical hazard, which could result in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.

WARNING

Before installing this underwater light, read and follow all warning notices and instructions accompanying this light. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (707) 776-8200 for additional free copies of these instructions.

CAUTION

Except when the Jandy WaterColors LED Lights are installed in an area of the swimming pool that is not used for swimming and the lens is adequately guarded to keep any person from contacting it, the light shall be installed in or on a wall of the pool, with the top of the lens opening not less than 18 inches (457 mm) below the normal water level of the pool



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.

NOTICE

The Jandy WaterColors LED Lights are intended for installation in fresh water and salt water swimming pools. It is important to ensure that the wet niches in which the lights are installed are intended for their appropriate application, either fresh water or salt water pools.

SAVE THESE INSTRUCTIONS

Section 2. Product Description and Model Numbers

| <u>Jandy® Model #</u> | <u>Jandy® WaterColors Light Size</u> | <u>Voltage</u> | <u>Amps</u> | <u>Cord Length</u> | <u>Face Ring Material</u> |
|-----------------------|--|----------------|-------------|------------------------|-------------------------------|
| CPLVLEDS30 | Large | 12 Volt AC | 4.0 | 30 feet | Stainless Steel |
| CPLVLEDS50 | Large | 12 Volt AC | 4.0 | 50 feet | Stainless Steel |
| CPLVLEDS100 | Large | 12 Volt AC | 4.0 | 100 feet | Stainless Steel |
| CPLVLEDP100 | Large | 12 Volt AC | 4.0 | 100 feet | Plastic |
| CPLVLEDS50C | Large | 12 Volt AC | 4.0 | 50 feet | Stainless Steel |
| CPLVLEDS100C | Large | 12 Volt AC | 4.0 | 100 feet | Stainless Steel |
| CPLVLEDP100C | Large | 12 Volt AC | 4.0 | 100 feet | Plastic |
| CPHVLEDS30 | Large | 120 Volt AC | 0.4 | 30 feet | Stainless Steel |
| CPHVLEDS50 | Large | 120 Volt AC | 0.4 | 50 feet | Stainless Steel |
| CPHVLEDS100 | Large | 120 Volt AC | 0.4 | 100 feet | Stainless Steel |
| CPHVLEDP100 | Large | 120 Volt AC | 0.4 | 100 feet | Plastic |
| CPHVLEDS150 | Large | 120 Volt AC | 0.4 | 150 feet | Stainless Steel |
| CPHVLEDS250 | Large | 120 Volt AC | 0.4 | 250 feet | Stainless Steel |
| CPHVLEDS50C | Large | 120 Volt AC | 0.4 | 50 feet | Stainless Steel |
| CPHVLEDS100C | Large | 120 Volt AC | 0.4 | 100 feet | Stainless Steel |
| CPHVLEDP100C | Large | 120 Volt AC | 0.4 | 100 feet | Plastic |
| | | | | | |
| CSLVLEDS30 | Small | 12 Volt AC | 2.0 | 30 feet | Stainless Steel |
| CSLVLEDS50 | Small | 12 Volt AC | 2.0 | 50 feet | Stainless Steel |
| CSLVLEDS100 | Small | 12 Volt AC | 2.0 | 100 feet | Stainless Steel |
| CSLVLEDP100 | Small | 12 Volt AC | 2.0 | 100 feet | Plastic |
| CSLVLEDS50C | Small | 12 Volt AC | 2.0 | 50 feet | Stainless Steel |
| CSLVLEDS100C | Small | 12 Volt AC | 2.0 | 100 feet | Stainless Steel |
| CSLVLEDP100C | Small | 12 Volt AC | 2.0 | 100 feet | Plastic |
| CSHVLEDS30 | Small | 120 Volt AC | 0.2 | 30 feet | Stainless Steel |
| CSHVLEDS50 | Small | 120 Volt AC | 0.2 | 50 feet | Stainless Steel |
| CSHVLEDS100 | Small | 120 Volt AC | 0.2 | 100 feet | Stainless Steel |
| CSHVLEDP100 | Small | 120 Volt AC | 0.2 | 100 feet | Plastic |
| CSHVLEDS150 | Small | 120 Volt AC | 0.2 | 150 feet | Stainless Steel |
| CSHVLEDS250 | Small | 120 Volt AC | 0.2 | 250 feet | Stainless Steel |
| CSHVLEDS50C | Small | 120 Volt AC | 0.2 | 50 feet | Stainless Steel |
| CSHVLEDS100C | Small | 120 Volt AC | 0.2 | 100 feet | Stainless Steel |
| CSHVLEDP100C | Small | 120 Volt AC | 0.2 | 100 feet | Plastic |

Section 3. Installing Jandy Light Fixture during New Construction

WARNING

Risk of Electrical Shock or Electrocution.

This underwater light must be installed by a licensed or certified electrician or a qualified pool serviceman 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 or spa users, installers or others due to electrical shock, and may also cause damage to property.

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

3.1 Preparing the Light Fixture for Installation

NOTE The electrician must complete preparatory steps before light fixture is installed. See Figure 1.

Ensure that the pool 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 electrical systems must meet, are as follows:

1. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI) for 120 volt models, and must have an appropriately rated circuit breaker.
2. The junction box (or, for 12 volt models, the low voltage transformer) must be located at least eight (8) inches above water level, at least four (4) inches above ground level, and at least four (4) feet from the edge of the pool; see Figure 1.
3. The light fixture and all metal items within five (5) feet of the pool must be properly electrically bonded to a reliable point of grounding.
4. The wet niche must be 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.

5. The wet niche must be properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche; see Figure 1.

NOTE To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department.

Use only approved wet niches (see following note) to ensure a safe and proper installation.

NOTE Jandy lights are ETL listed (ETL report/file 3141154CHI) for installation with *only* the following manufacturer's wet niche fixtures:

Large Niche Model Numbers:

Jandy: PLNICLRG, PLNICVFLRG,
SSNICLRG1R, SSNICLRG1S

Pentair: 620004, 78210200 thru 700,
78210401, 79206700

Hayward DuraNiche: SP0600U

Sta-Rite: 05161-2352 thru 2369, 05163-2395
thru 2396

Small Niche Model Numbers:

Jandy: PLNICSM, SSNICSM,
Pentair: 78241100, 78242200, 78242300
78243100 thru 300, 78244100 thru 300,
79206600

Hayward DuraNiche: SP0601U

Sta-Rite: 05166-1017 thru 1034, 05167-1035
thru 1037

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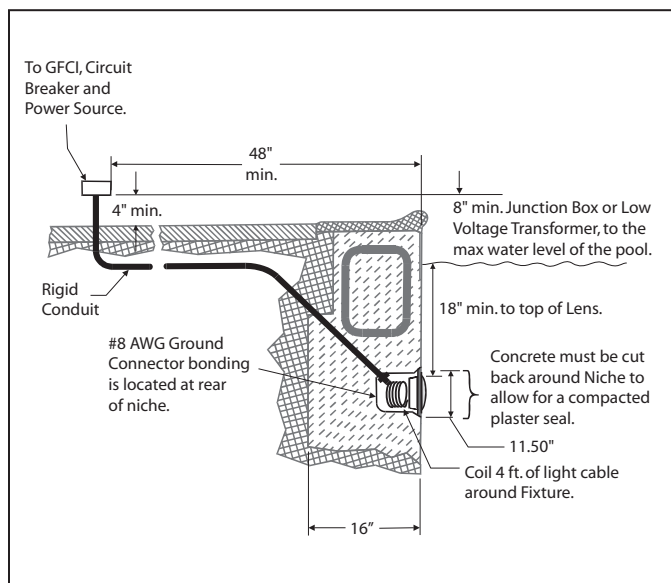


Figure 1. Jandy Digital Color Light Installation

3.2 Installing the Light Fixture

NOTE Perform these steps *only* after the electrical system requirements are met.

1. Feed cord through conduit to junction box, leaving at least four (4) feet of cord at the light fixture to coil into the base of the light niche. See Figure 1. The four (4) feet of cord allows the light to be serviced after the pool is filled with water.
2. Cut the cord at the junction box, leaving at least six (6) inches of cord to make connections.
3. Strip six (6) inches of the outer cord jacket to expose the three insulated wires. *Be careful not to damage the insulation on the three (3) inner wires.*
4. Install strain relief over cord jacket and connect all three (3) wires to the corresponding circuit wires in the junction box. Install the junction box cover.
5. Coil the 4-foot length of cord around the fixture or into the base of the pool niche, and place the light assembly into the niche.
6. Engage the retainer tab on the bottom of the face ring, then pivot the top of the fixture inward and tighten the special 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 or spa users, installers or others due to electrical shock.

7. Fill the pool until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breaker, and the switch, which operates the underwater light, to check for proper operation. Refer to *Section 6, Operating Instructions*.

WARNING

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

Section 4. Replacing Jandy Light Fixture in an *Existing* Pool or Spa

WARNING

Risk of Electrical Shock or Electrocution.

This underwater light must be installed by a licensed or certified electrician or a qualified pool serviceman 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 or spa users, installers or others due to electrical shock, and may also cause damage to property.

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

4.1 Preparing the Light Fixture for Replacement

Verify that the pool 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:

1. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI) for 120 volt models, and must have an appropriately rated circuit breaker.
2. The junction box (or, for 12 volt models, the low voltage transformer) must be located at least eight (8) inches above water level, at least four (4) inches above ground level or pool deck level, and at least 48 inches from the edge of the pool or spa; see Figure 1.
3. The light fixture and all metal items within five (5) feet of the pool must be properly electrically bonded to a reliable point of grounding.
4. The wet niche must be 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.

- The wet niche must be properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche. See Figure 1.

To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department.

4.2 Replacing the Light Fixture

NOTE Perform these steps *only* after the electrical system requirements are met.

WARNING

Failure to bring the pool'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 or spa users, installers, or others due to electrical shock, and may also cause damage to property.

NOTE The light fixture may be replaced without removing water from the pool.

- Turn off the **main** electrical switch or circuit breaker, as well as the switch, which operates the underwater light.
- Unscrew the special pilot screw at top of the face ring and remove the light assembly from the niche, and place the assembly on the deck.

WARNING

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

- Remove Junction Box cover, disconnect the light fixture wires and strain relief, and then pull the cord out of the conduit from the niche.
- 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.

- Leave at least four (4) feet of cord to coil around the light fixture or coiled into the base of the light niche. See Figure 1. This allows the light to be serviced after the pool is filled with water.

- Cut the cord at the Junction Box, leaving at least six (6) inches of cord to make connections.
- Strip six (6) inches of the outer cord jacket from the cord to expose the three insulated wires. *Be careful not to damage the insulation on the three (3) inner wires.*
- Install the strain relief over the cord jacket and connect all three wires to the corresponding circuit wires in the junction box. Install the junction box cover.
- Reinstall the light assembly into the niche and tighten the special 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 or spa users, installers or others due to electrical shock.

- Fill the pool until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breaker, as well as the switch, which operates the underwater light, to check for proper operation. Refer to *Section 6, Operating Instructions*.

WARNING

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

Section 5. Wiring Options for Controlling Jandy WaterColors LED Lights

NOTE The **Jandy WaterColors Lights** will not operate properly with light dimmers. *Do not wire the Jandy Lights to any dimming circuitry.*

To the extent allowed by code and capacity of the electrical equipment, multiple Jandy lights may be controlled with a single switch so their colors will *always* be synchronized.

Separate switches may be used to control the on/off and color functions of each Jandy light. It is recommended that these switches be located next to each other to facilitate simple color synchronization when desired. All switches *must be operated at the same time to assure color synchronization*. Otherwise, the lights will work independently of each other.

5.1 Wiring to an AquaLink® RS Control System

The Jandy WaterColors Lights can be wired into the Jandy AquaLink RS control system to provide simplified operation of the lights, as well as a means to synchronize the color change function. Connect the lights to one of the auxiliary relays in the Power Center.

NOTE It is recommended to connect one light per relay so each light can be controlled separately. However, up to four lights can be connected on a single relay. If there are more than four lights installed on one AquaLink RS system, ensure there is more than one auxiliary relay available in the Power Center.

Refer to Figures 2 and 3 to connect the Jandy Color Lights to the Power Center.

CAUTION

A Ground Fault Circuit Interrupter (GFCI) must be provided for 120 volt models. The conductors on the load side of the GFCI circuit shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a GFCI. Refer to local codes for complete details.

NOTE The Jandy WaterColors Lights are available in 120-volt and 12-volt versions. If installing a 12-volt light, a 120-volt/12-volt step-down (AC) transformer *must* be used. For more information about 12-volt installations, refer to *Section 8* of this manual.

5.2 Wiring to a Time Clock

The Jandy WaterColors Lights can be wired into a basic time clock to automatically turn on the lights at a predesignated time. Refer to Figure 4 to connect the lights into the time clock.

5.3 Wiring to a Switch

The Jandy WaterColors Lights can be wired into a switch to manually turn on/off the lights. Refer to Figure 5 to connect the lights into the switch.

Section 6. Jandy WaterColors LED Light Operating Instructions

6.1 To Operate the Light and Change Colors

Turn the light **ON**. The *first* time the light is turned on, the color sequence begins with the Alpine White. To change the color, turn the light OFF and then ON within three (3) seconds. Continue turning OFF and ON until the desired light color mode is reached. See Table 1 for the color mode sequence.

Table 1. Jandy WaterColors Lights Sequence

| Sequence Order | Color Modes |
|----------------|-----------------------|
| 1 | Alpine White |
| 2 | Sky Blue |
| 3 | Cobalt Blue |
| 4 | Caribbean Blue |
| 5 | Spring Green |
| 6 | Emerald Green |
| 7 | Emerald Rose |
| 8 | Magenta |
| 9 | Violet |
| 10 | Slow Color Splash |
| 11 | Fast Color Splash |
| 12 | America the Beautiful |
| 13 | Fat Tuesday |
| 14 | Disco Tech |

NOTE When the light is turned OFF for more than seven (7) seconds, it will remain in the color set that is currently active. When the light is turned back ON, the light will be on the same color set.

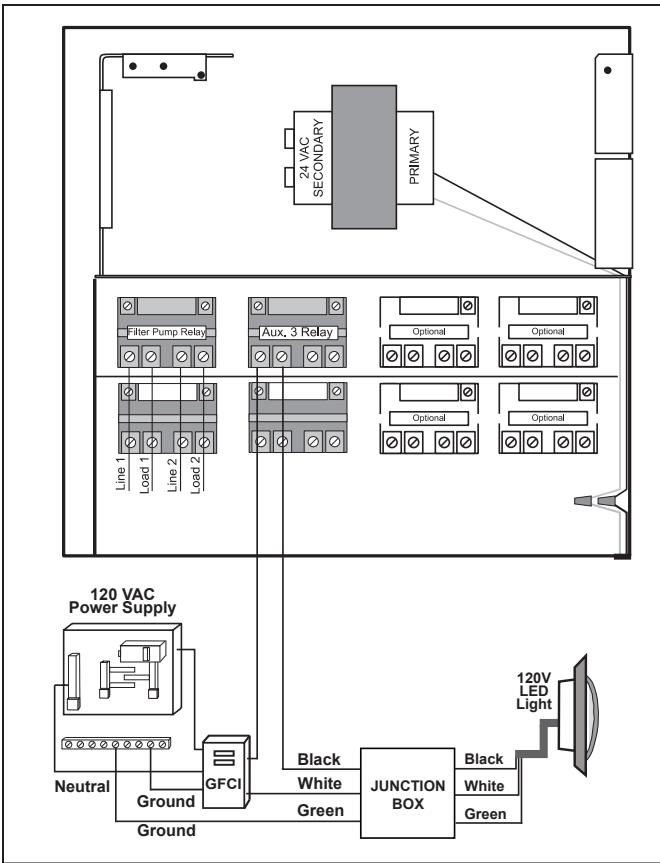


Figure 2. 120-Volt Jandy WaterColors Light Wiring Diagram

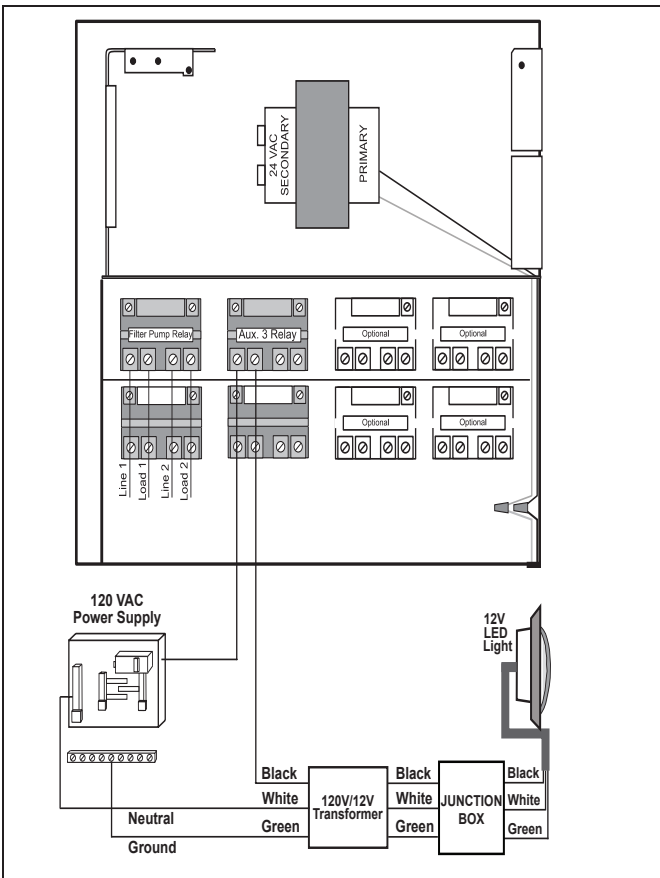


Figure 3. 12-Volt Jandy WaterColors Light Wiring Diagram

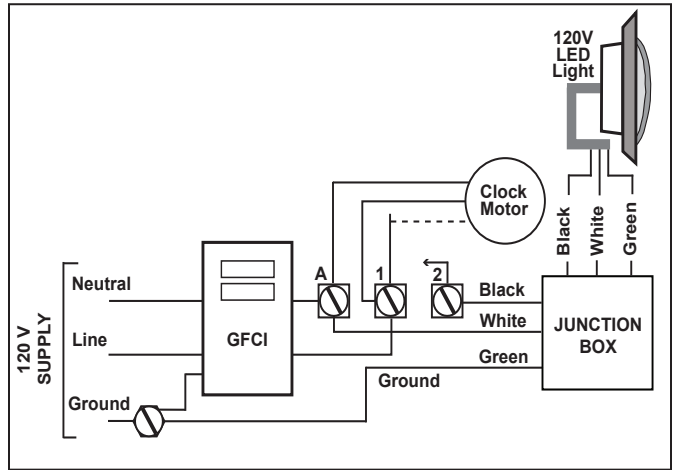


Figure 4. Wiring the Jandy WaterColors Light to a Time Clock

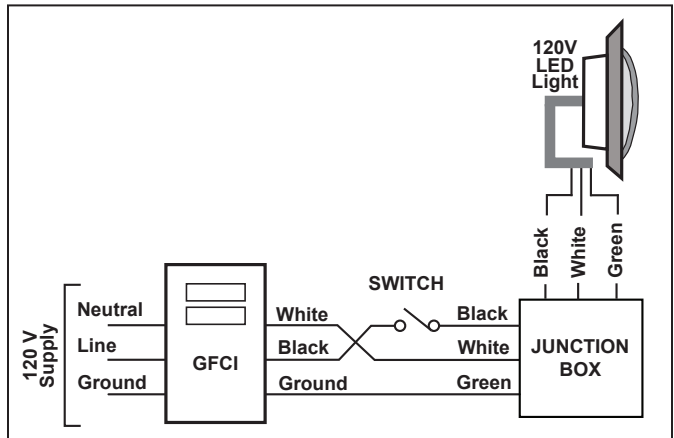


Figure 5. Wiring the Jandy WaterColors Light to a Switch

6.2 To Reset to the Beginning of the Color Sequence

Turn the light OFF, wait four (4) to five (5) seconds, then turn ON, the light will return to the beginning of the color cycle (Alpine White).

NOTE If an AquaLink RS control system is being used the color set can be selected using the indoor controller.

NOTE To synchronize colors on multiple Jandy WaterColors Light systems wired to separate switches, perform the above actions on all of their switches simultaneously. All Jandy WaterColors Lights will synchronize automatically if activated by the same switch. No other accessories are required.

Section 7. Replacing Light Engine (PCB)

WARNING

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

1. Turn off the main electrical switch or circuit breaker, as well as the switch, which operates the underwater light.
2. Be sure to have the following items:
 - A new lens gasket, P/N R0451101 for the large light or P/N R0400501 for the small light.
 - A light engine. See Table 2 for specification.

WARNING

Replace light engine with the same type. Failure to replace the light engine with the same type will damage the light assembly and may cause an electrical hazard resulting in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. Be sure the power is switched OFF before removing or installing PCB. Allow PCB to cool before replacing.

3. To remove the light assembly, unscrew the special pilot screw at the top of the face ring, remove light assembly from niche and gently place assembly on the deck. It is not necessary to drain down the pool. See Figure 6.

Table 2. Light Specifications

| Model | Fixture Voltage | Light Engine (PCB) Part Number |
|-------------------------------|-----------------|--------------------------------|
| Jandy WaterColors Large Light | 12 Volt AC | R0474000 |
| Jandy WaterColors Large Light | 120 Volt AC | R0474100 |
| Jandy WaterColors Small Light | 12 Volt AC | R0473900 |
| Jandy WaterColors Small Light | 120 Volt AC | R0473900 |

WARNING

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

4. Pool Clamp Removal.
 - a. Loosen the Phillips head screws (six (6) for small light, eight (8) for large light) to allow the bottom clamp to be removed from the face ring assembly. Do not remove the screws or the retaining rings. The retaining rings prevent the screws from falling free from the bottom clamp and also aid in ease of assembly.
 - b. Remove the bottom clamp, the face ring assembly, the glass lens, and the gasket from the fixture. Remove the gasket from the lens. Refer to *Section 9, Exploded View and Replacement Parts*.
5. Light Engine Replacement
 - a. 12V Small Light Engine (PCB) Replacement
 1. Remove two (2) nuts and two (2) washers.
 2. Unplug the quick disconnect terminals from the light engine.
 3. Remove the light engine from the light fixture.
 4. Place new light engine into the fixture with the orientation shown in Figure 7.
 5. Secure the light engine with one (1) nylon washer and one (1) nut. Torque to 12 in-lbs.
 6. Place a nylon washer on the other stud and place the green ground wire terminal on the nylon washer and secure both with the nut. Torque to 12 in-lbs.

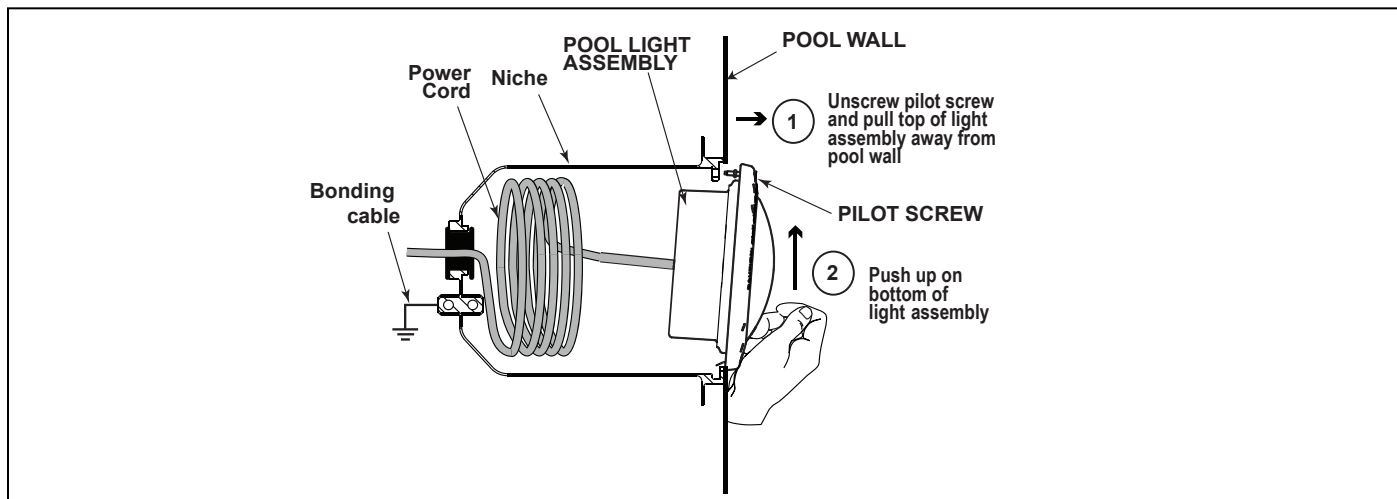


Figure 6. Removing the Jandy WaterColors Light Assembly for Light Engine Replacement

7. Plug in the quick disconnect wire (white for the 12V and red for the 120V) onto the terminal (AC1) of the light engine.
 8. Plug in the quick disconnect wire (black for the 12V and blue for the 120V) onto terminal (AC2) of the light engine.
- b. Large Light Engine (PCB) Replacement (120V and 12V)
1. Remove three (3) nuts and washers.
 2. Unplug the quick disconnect terminals from the PCB.
 3. Remove the light engine from the light fixture.
 4. Place new light engine into the fixture with the orientation shown in Figure 8.
 5. Secure the new light engine (PCB) with two (2) nylon washers and two (2) nuts. Torque to 12 in-lbs.
 6. Plug in the white quick disconnect wire onto the terminal (J2) of the light engine.
 7. Plug in black quick disconnect wire onto terminal (J6) of the light engine for the 12V models; or terminal (J3) of the light engine for 120V models.
 - 8a. For 12V models, place a nylon washer on the stud and place the green ground wire terminal on the nylon washer and secure both with the nut. Torque to 12 in-lbs.
 - 8b. For 120V models, place the green ground wire on the stud and secure with the nut. Torque to 12 in-lbs.
6. Reassemble the fixture.
- a. If not already done, remove the gasket from the glass lens and install a new gasket, P/N R0451101 for the large light and R0400501 for the small light, on the lens. On the small light, remove the diverger from the lens.

NOTE A new lens gasket must be used each time the light is reassembled.

⚠ WARNING

Risk of Electrical Shock or Electrocution. Always install a new lens gasket whenever disassembling the light (Jandy Color Light Gasket P/N R0451101 for large light and P/N R0400501 for small 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 or spa users, installers, or others due to electrical shock, or
- (b) A malfunction of the Jandy WaterColors Light, which likewise could result in serious injury to pool or spa users, installers, or bystanders, or in damage to property.

- b. While holding the fixture upright, place the glass lens with the gasket on top of the fixture. Please note that the lens gasket is not symmetrical. Therefore, it must be installed correctly so that the lens can seal to the fixture housing. Place the gasket on the lens so that the thick molded side of the gasket will mate with the housing when the lens is installed. See Figure 10. On the small light, replace the diverger by tucking the tabs between the lens and gasket.

NOTE Be sure to face the dull side of the diverger down towards the PCB.

- c. Position the lens and gasket on the fixture. Place the face ring assembly over the lens and align the pilot screw with the small arrow mark on the face of the lens. Note that the small arrow mark on the face of the lens and the pilot screw of the face ring must be aligned with the arrow located on fixture label that reads, “Arrow on this label must line up with the pilot screw on the Face Ring”. See Figure 9.
- d. While holding the aligned face ring assembly and fixture together, turn the assembly upside down and set it on the old gasket, using the old gasket as an assembly fixture. This will keep the lens and gasket assembly from being pushed out of the face ring while you secure it to the light fixture.
- e. Spread the bottom clamp over the electrical cord and slide it onto the back of fixture to the top clamp.
- f. Tighten the Phillips head screws (eight (8) for large light and six (6) for small light) on the light in alternating cross-pattern. Torque screws to approximately 20 in-lbs. Do not over-tighten.
- g. Discard the old gasket.

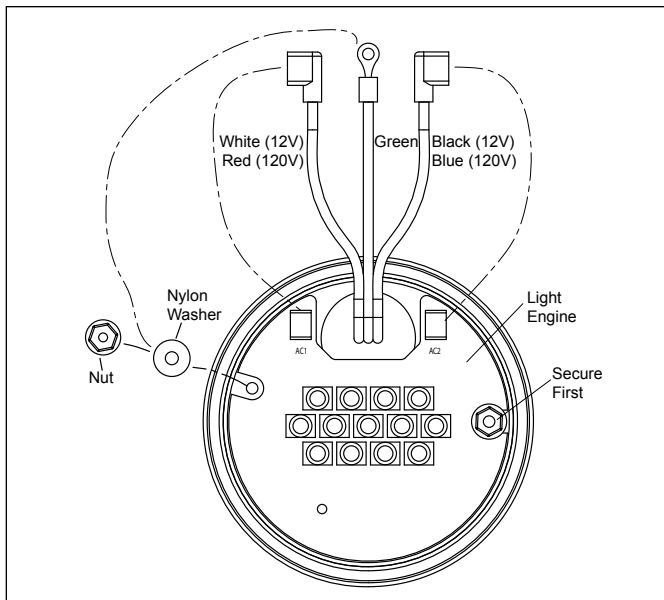


Figure 7. Small Light Engine (PCB) Replacement and Wiring

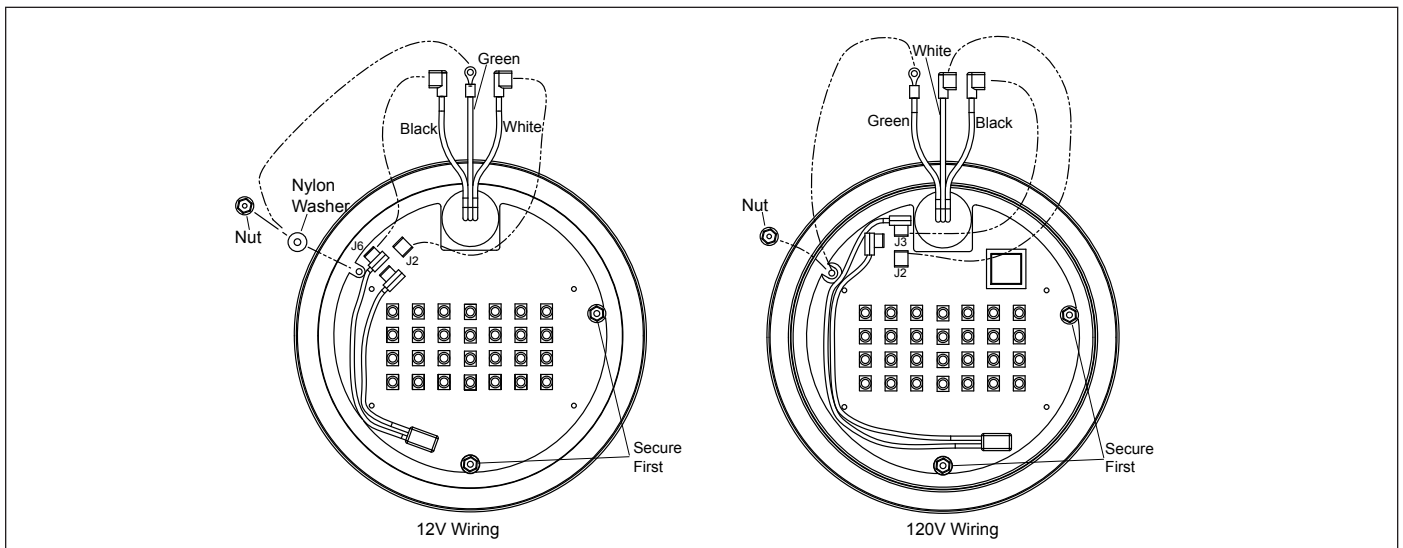


Figure 8. Large Light Engine (PCB) Replacement and Wiring

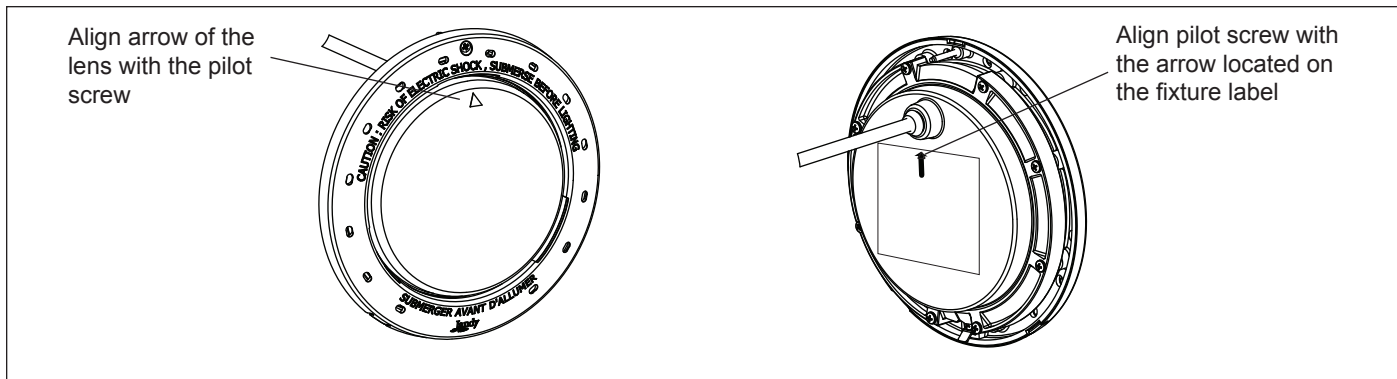


Figure 9. Alignment of the Lens, Face Ring, Housing and Clamps for WaterColors Lights

7. Reinstall the Jandy Light into niche fixture.
 - a. Coil the extra four (4) feet of cord around the fixture or into the base of the niche and place the light assembly into the niche.
 - b. Engage the retainer tab on the bottom of the face ring, then pivot the top of the fixture inward and tighten the special 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 or spa users, installers or others due to electrical shock.

8. If pool is empty, fill the pool until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breaker, as well as the switch, which specifically operates the underwater light, to check for proper operation.

⚠ WARNING

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

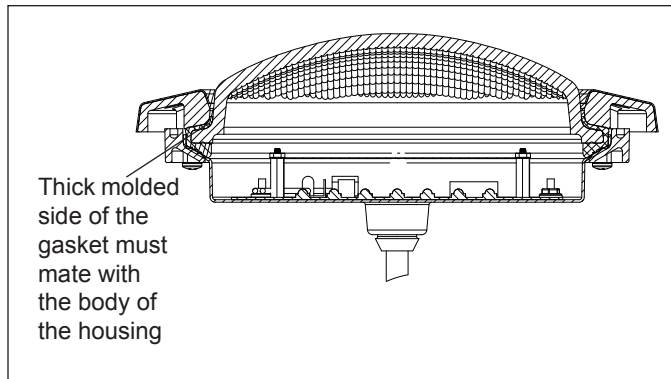


Figure 10. Cross Section of Jandy WaterColors LED Light

Section 8. Twelve (12) Volt Installation

A separate 12-Volt AC Transformer is required on all 12-Volt Models. For Jandy WaterColors Light use a 150-watt multi-tap 12-volt system per light.

NOTE For optimum performance Jandy recommends to use one transformer per 12-volt light.

To ensure maximum safety, it is strongly recommended that a transformer that has been listed or recognized by a Nationally Recognized Testing Laboratory (NRTL) for the application be used.

Section 9. Exploded View and Replacement Parts

9.1 Jandy Large WaterColors LED Light

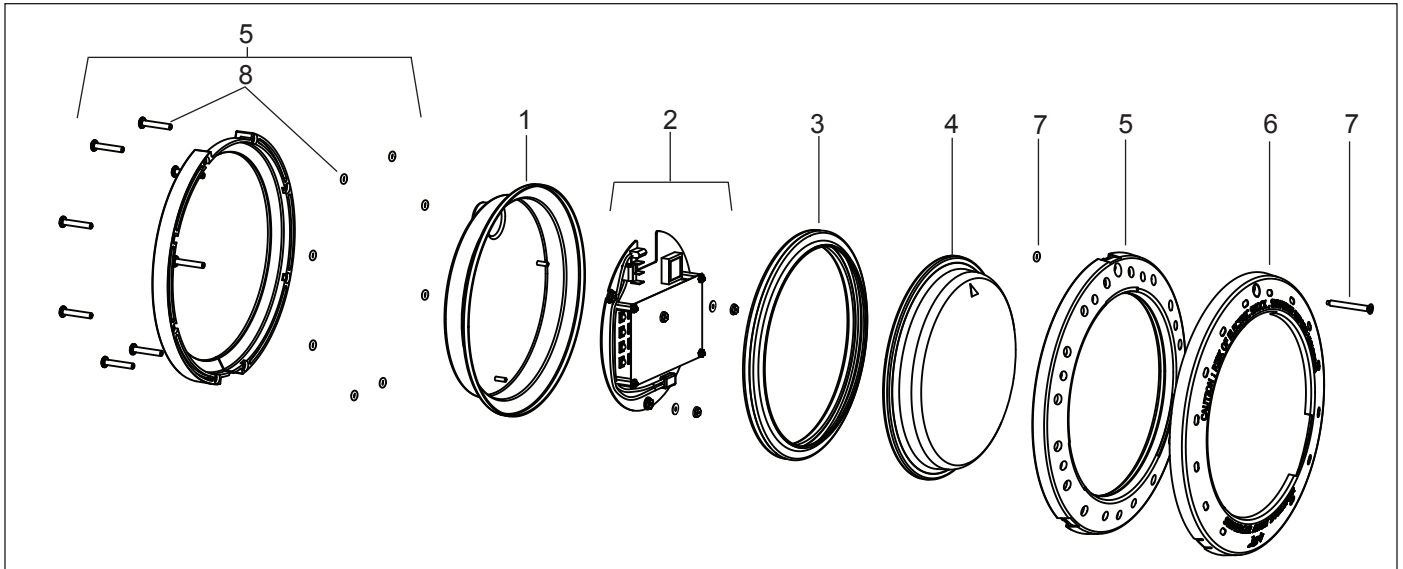


Figure 11. Jandy Large WaterColors LED Light Exploded View

| DWG # | Part # | Description | Field Replaceable |
|-------|----------|--|--------------------------------|
| 1 | N/A | WaterColors Light Housing | <i>NO - Purchase New Light</i> |
| 2 | R0474000 | Light Engine PCB, 12V Large LED Light w/ Light Shaping Diverger | YES |
| 2 | R0474100 | Light Engine PCB, 120V Large LED Light W/ Light Shaping Diverger | YES |
| 3 | R0451101 | Silicone Gasket | YES |
| 4 | R0450601 | Glass Lens | YES |
| 5 | R0450701 | Clamp Assembly | YES |
| 6 | R0450801 | Face Ring, Stainless Steel (SS) | YES |
| 6 | R0450802 | Face Ring, Plastic, Whitet | YES |
| 6 | R0450803 | Face Ring, Plastic, Black | YES |
| 6 | R0450804 | Face Ring, Plastic, Gray | YES |
| 6 | R0450805 | Face Ring, Plastic Set | YES |
| 7 | R0450901 | Pilot Screw, with Retainer | YES |
| 8 | R0451001 | Clamp Screws (8 Screws and 8 Retainers) | YES |

9.2 Jandy Small WaterColors LED Light

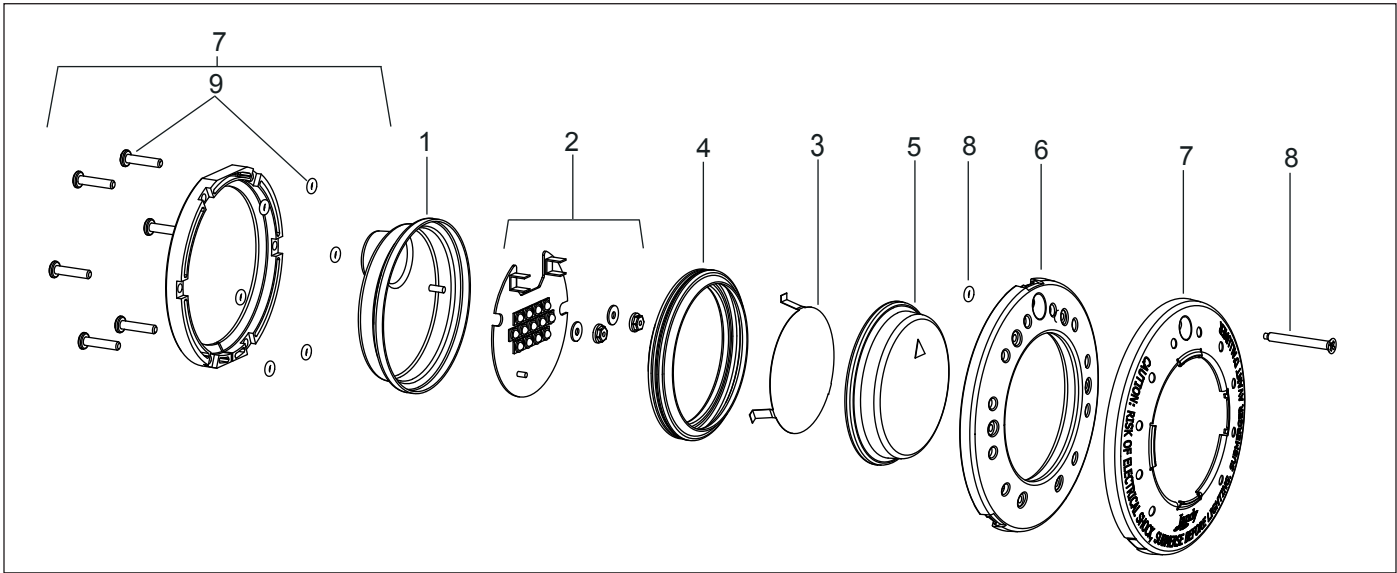


Figure 12. Jandy Small WaterColors LED Light Exploded View

| DWG # | Part # | Description | Field Replaceable |
|-------|----------|--|-------------------------|
| 1 | N/A | WaterColors Light Housing | NO - Purchase New Light |
| 2 | R0473900 | Light Engine, 12V/120V Small LED Light | YES |
| 3 | R0474200 | Diverger, Light Shaping, Small LED Light | YES |
| 4 | R0400501 | Silicone Gasket | YES |
| 5 | R0400601 | Glass Lens | YES |
| 6 | R0451201 | Clamp Assembly | YES |
| 7 | R0451301 | Face Ring, Stainless Steel (SS) | YES |
| 7 | R0451302 | Face Ring, Plastic, White | YES |
| 7 | R0451303 | Face Ring, Plastic, Black | YES |
| 7 | R0451304 | Face Ring, Plastic, Gray | YES |
| 7 | R0451305 | Face Ring, Plastic Set | YES |
| 8 | R0450901 | Pilot Screw, with Retainer | YES |
| 9 | R0451401 | Clamp Screws (6 Screws and 6 Retainers) | YES |

Notes

Notes

Notes

LIMITED WARRANTY

Thank you for purchasing Jandy® pool and spa products. Jandy Pool Products, Inc. warrants all parts to be free from manufacturing defects in materials and workmanship for a period of one (1) year from the date of retail purchase, with the following exceptions:

- AquaLink® RS units installed with Jandy Surge Protection Kits will be covered for two (2) years.
- Never Lube® valves are warranted for the life of pool and/or spa on which they were originally installed.
- AquaPure® Electronic Chlorine Generator Electrolytic Cells carry a five (5) year limited warranty on a prorated basis.

This warranty is limited to the first retail purchaser, is not transferable, and does not apply to products that have been moved from their original installation sites. The liability of Jandy Pool Products, Inc. shall not exceed the repair or replacement of defective parts and does not include any costs for labor to remove and reinstall the defective part, transportation to or from the factory, and any other materials required to make the repair. This warranty does not cover failures or malfunctions resulting from the following:

1. Failure to properly install, operate or maintain the product(s) in accordance with our published Installation, Operation and Maintenance Manuals provided with the product(s).
2. The workmanship of any installer of the product(s).
3. Not maintaining a proper chemical balance in your pool and/or spa [pH level between 7.2 and 7.8, Total Alkalinity (TA) between 80 to 120 ppm, Total Dissolved Solids (TDS) less than 2000 not including salt ppm].
4. Abuse, alteration, accident, fire, flood, lightning, rodents, insects, negligence or acts of God.
5. Scaling, freezing, or other conditions causing inadequate water circulation.
6. Operating the product(s) at water flow rates outside the published minimum and maximum specifications.
7. Use of non-factory authorized parts or accessories in conjunction with the product(s).
8. Chemical contamination of combustion air or improper use of sanitizing chemicals, such as introducing sanitizing chemicals upstream of the heater and cleaner hose or through the skimmer.
9. Overheating; incorrect wire runs; improper electrical supply; collateral damage caused by failure of O-Rings, DE grids, or cartridge elements; or damage caused by running the pump with insufficient quantities of water.

LIMITATION OF LIABILITY:

This is the only warranty given by Jandy Pool Products, Inc. No one is authorized to make any other warranties on behalf of Jandy Pool Products, Inc. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. JANDY POOL PRODUCTS, INC. EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.** This warranty gives you specific legal rights. You may also have other rights that vary by state or province.

WARRANTY CLAIMS:

For prompt warranty consideration, contact your dealer and provide the following information: proof of purchase, model number, serial number and date of installation. The installer will contact the factory for instructions regarding the claim and to determine the location of the nearest designated service center. If the dealer is not available, you can locate a service center in your area by visiting www.jandy.com or by calling our technical support department at (707) 776-8200 extension 260. All returned parts must have a Returned Material Authorization number to be evaluated under the terms of this warranty.