INSTALLATION AND OPERATION MANUAL

ENGLISH | FRANÇAIS | ESPAÑOL

Jandy Pro Series
WaterColor RGBW LED Lights
Underwater Large and Small Light

⚠ WARNING

FOR YOUR SAFETY - This product must be installed and serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed where such state or local requirements exist. The maintainer must be a professional with sufficient experience in pool equipment installation and maintenance so that all of the instructions in this manual can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty.

Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death.

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.

H0596700 Rev B

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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 Pro Series WaterColors RGBW 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 Pro Series WaterColors RGBW 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

Model #	WaterColors Light Size	Voltage	Amps	Cord Length	Face Ring Material
CPLVRGBWS30	Large	12 Volt AC	4.0	30 feet	Stainless Steel
CPLVRGBWS50	Large	12 Volt AC	4.0	50 feet	Stainless Steel
CPLVRGBWS100	Large	12 Volt AC	4.0	100 feet	Stainless Steel
CPLVRGBWP100	Large	12 Volt AC	4.0	100 feet	Plastic
CPLVRGBWS50C	Large	12 Volt AC	4.0	50 feet	Stainless Steel
CPLVRGBWS100C	Large	12 Volt AC	4.0	100 feet	Stainless Steel
CPLVRGBWP100C	Large	12 Volt AC	4.0	100 feet	Plastic
CPHVRGBWS30	Large	120 Volt AC	0.4	30 feet	Stainless Steel
CPHVRGBWS50	Large	120 Volt AC	0.4	50 feet	Stainless Steel
CPHVRGBWS100	Large	120 Volt AC	0.4	100 feet	Stainless Steel
CPHVRGBWP100	Large	120 Volt AC	0.4	100 feet	Plastic
CPHVRGBWS150	Large	120 Volt AC	0.4	150 feet	Stainless Steel
CPHVRGBWS250	Large	120 Volt AC	0.4	250 feet	Stainless Steel
CPHVRGBWS50C	Large	120 Volt AC	0.4	50 feet	Stainless Steel
CPHVRGBWS100C	Large	120 Volt AC	0.4	100 feet	Stainless Steel
CPHVRGBWP100C	Large	120 Volt AC	0.4	100 feet	Plastic
CSLVRGBWS30	Small	12 Volt AC	2.0	30 feet	Stainless Steel
CSLVRGBWS50	Small	12 Volt AC	2.0	50 feet	Stainless Steel
CSLVRGBWS100	Small	12 Volt AC	2.0	100 feet	Stainless Steel
CSLVRGBWP100	Small	12 Volt AC	2.0	100 feet	Plastic
CSLVRGBWS50C	Small	12 Volt AC	2.0	50 feet	Stainless Steel
CSLVRGBWS100C	Small	12 Volt AC	2.0	100 feet	Stainless Steel
CSLVRGBWP100C	Small	12 Volt AC	2.0	100 feet	Plastic
CSHVRGBWS30	Small	120 Volt AC	0.2	30 feet	Stainless Steel
CSHVRGBWS50	Small	120 Volt AC	0.2	50 feet	Stainless Steel
CSHVRGBWS100	Small	120 Volt AC	0.2	100 feet	Stainless Steel
CSHVRGBWP100	Small	120 Volt AC	0.2	100 feet	Plastic
CSHVRGBWS150	Small	120 Volt AC	0.2	150 feet	Stainless Steel
CSHVRGBWS250	Small	120 Volt AC	0.2	250 feet	Stainless Steel
CSHVRGBWS50C	Small	120 Volt AC	0.2	50 feet	Stainless Steel
CSHVRGBWS100C	Small	120 Volt AC	0.2	100 feet	Stainless Steel
CSHVRGBWP100C	Small	120 Volt AC	0.2	100 feet	Plastic

Section 3. Installing Jandy Pro Series 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:

⚠ WARNING

To minimize risk of Electrical shock or electrocution, which could result in injury or death, for supply connection of low-voltage lights use only an isolating low voltage power supply, evaluated and listed by a Nationally Recognized Testing Laboratory (NRTL) for swimming pool use.

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

Large Niche Model Numbers:
Jandy Pro Series: PLNICLRG, PLNICVFLRG, WT000002, 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 Pro Series: 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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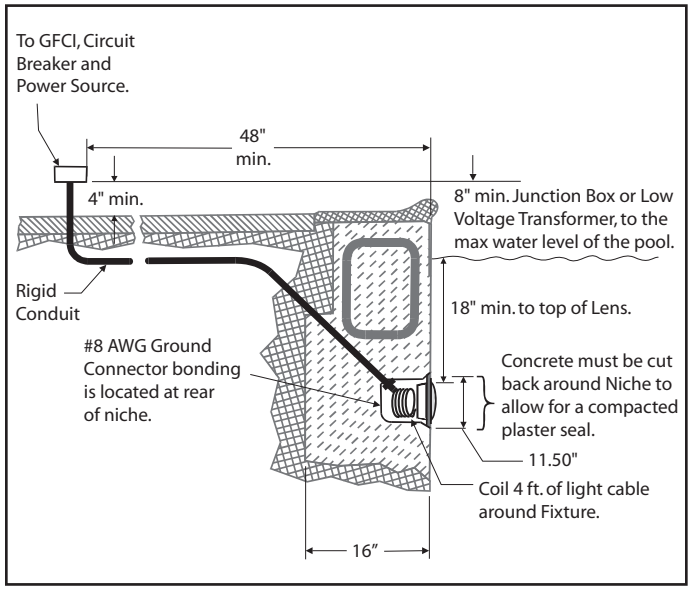

Figure 1. Jandy Pro Series Digital Color Light Installation

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 2 minutes. The light will heat up quickly when operated outside of water. 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 Pro Series 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® (NEC) 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.
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.

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.

1. Turn off the **main** electrical switch or circuit breaker, as well as the switch, which operates the underwater light.
2. 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.

3. Remove Junction Box cover, disconnect the light fixture wires and strain relief, and then pull the cord out of the conduit from the niche.
4. Feed the new light fixture cord through the conduit from the niche to the Junction Box.

NOTE Depending on the length of the conduit, special tools may be required to pull the cord through the conduit.

5. Leave at least four (4) feet of cord to coil around the light fixture 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.
6. Cut the cord at the Junction Box, leaving at least six (6) inches of cord to make connections.
7. Strip six (6) inches of the outer cord jacket from the cord to expose the three insulated wires. *Be careful not to damage the insulation on the three (3) inner wires.*
8. 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.
9. 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.

10. 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 Pro Series WaterColors LED Lights

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

To the extent allowed by code and capacity of the electrical equipment, multiple Jandy Pro Series 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 Pro Series 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 Pro Series WaterColors RGBW LED Lights can be wired into the Jandy Pro Series 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 Pro Series Color Lights to the Power Center.

⚠ WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION, which could result in serious injury or death. A Ground Fault Circuit Interrupter (GFCI) must be provided for 120 volt models. A Ground Fault Circuit Interrupter (GFCI) for 120 Volt transformers should be used if required by the transformer manufacturer or if required by the local applicable code and/or Authority Having Jurisdiction (AHJ). When a GFCI is used, 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 Pro Series WaterColors Lights are available in 120-volt and 12-volt versions. If installing a 12-volt light, a NRTL certified 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 Pro Series WaterColors RGBW LED 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 Pro Series WaterColors RGBW LED 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 Pro Series WaterColors RGBW 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 Pro Series 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.

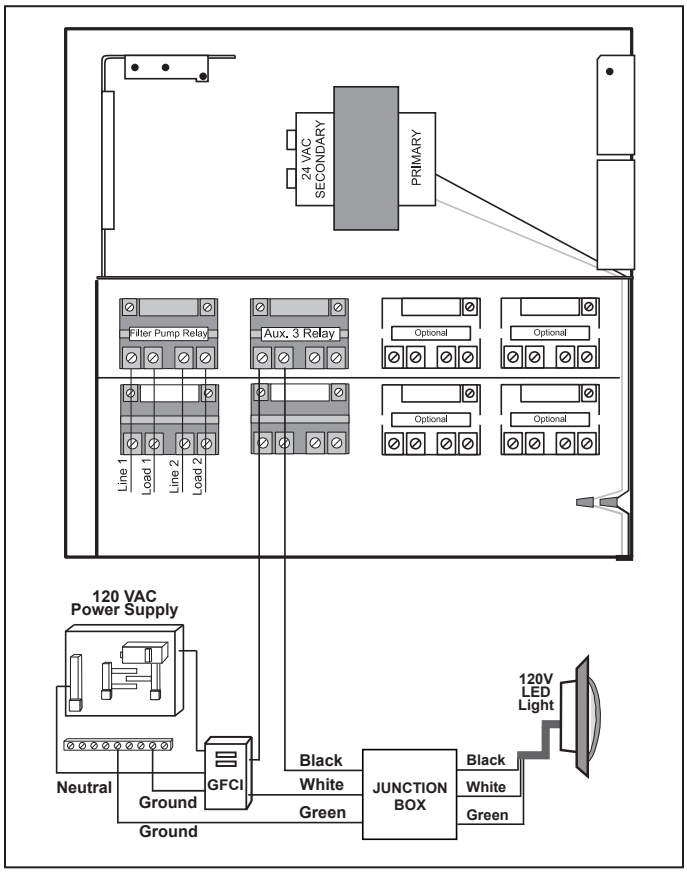

Figure 2. 120-Volt Jandy Pro Series WaterColors RGBW LED Light Wiring Diagram

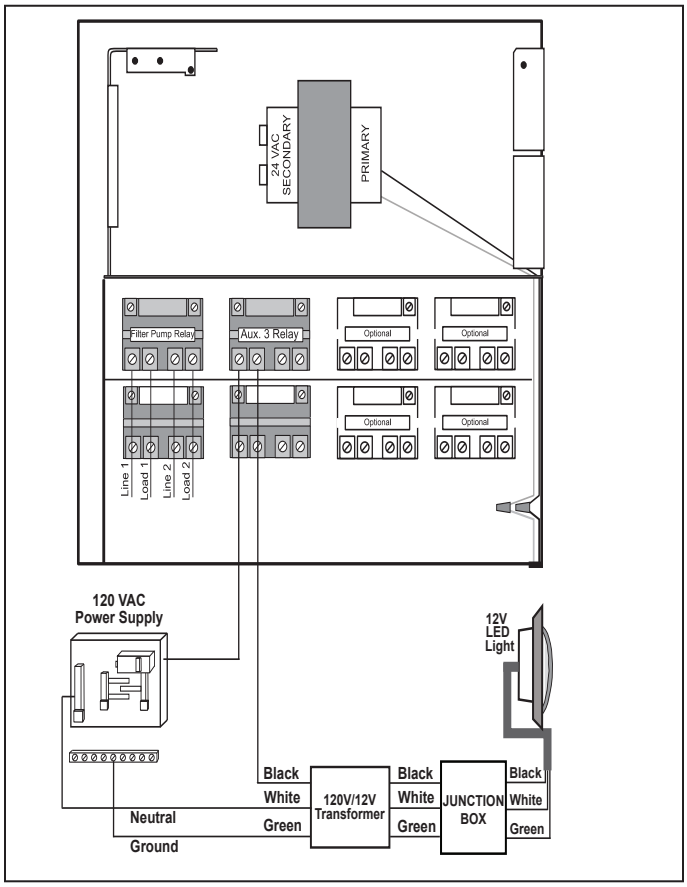

Figure 3. 12-Volt Jandy Pro Series WaterColors RGBW LED Light Wiring Diagram

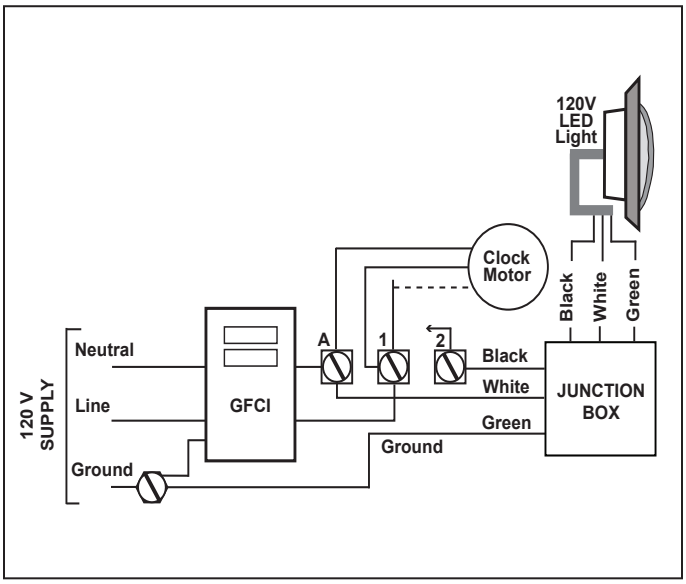

Figure 4. Wiring the Jandy Pro Series WaterColors RGBW LED Light to a Time Clock

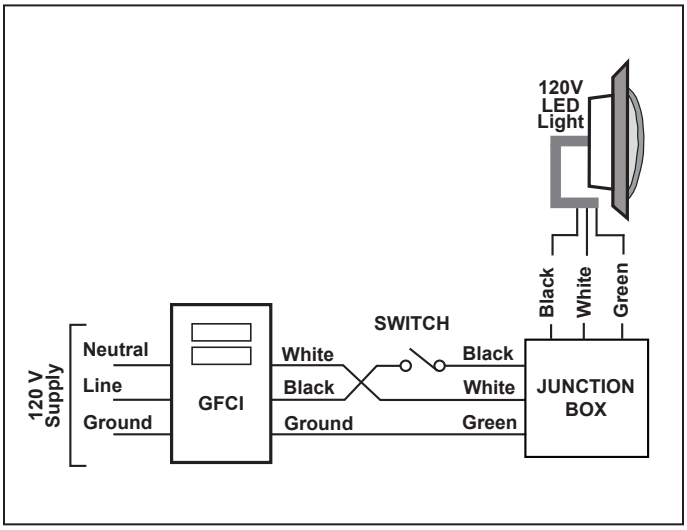

Figure 5. Wiring the Jandy Pro Series WaterColors RGBW LED Light to a Switch

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

Section 7. Replacing LED Board and Driver (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.
   - A light driver board. See Table 2 for specification.

⚠ WARNING

Replace light driver with the same type. Failure to replace the light driver 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

Jandy Pro Series Model	Fixture Voltage	Light Driver (PCB) Part Number
WaterColors RGBW LED Large Light	12 Volt AC	R0739500
WaterColors RGBW LED Large Light	120 Volt AC	R0739400
WaterColors RGBW LED Small Light	12 Volt AC	R0785700
WaterColors RGBW LED Small Light	120 Volt AC	R0739600

⚠ 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.

7.1 Pool Clamp Removal.

1. 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.
2. Remove the bottom clamp, the face ring assembly, the glass lens, and the gasket from the fixture. Remove the silicone gasket from the lens. Refer to *Section 9, Exploded View and Replacement Parts*.

NOTE Always install a new lens silicone gasket whenever disassembling the light.

7.2 12V Small Light Driver (PCB) Replacement

1. Remove both quick disconnect wires from the PCB. Note that the black wire is connected to ACN (TP-2) and the White wire is connected to ACL (TP-1).
2. Remove two (2) nuts and two (2) washers.
3. Remove the light driver from the light fixture.
4. Apply thermal grease to the back of the new light driver board.
5. Place new light driver into the fixture with the orientation shown in Figure 7.
6. Secure the light driver with one (1) washer and one (1) nut on the right side of the light driver. Torque to 12 in-lbs.

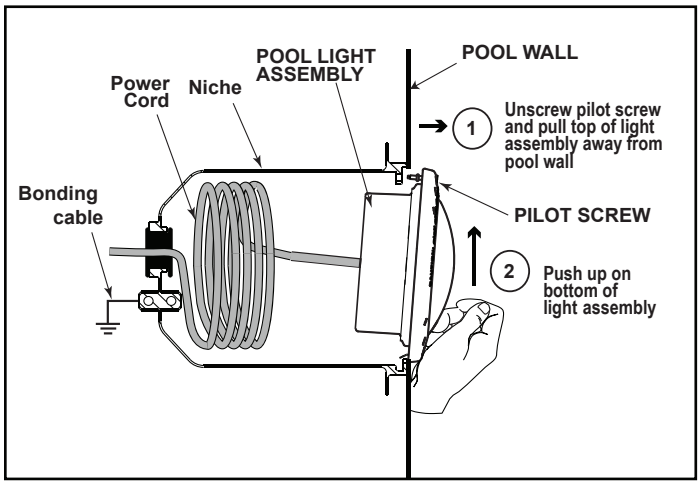

Figure 6. Removing the Jandy Pro Series WaterColors RGBW LED Light Assembly for Light Driver Replacement

7. Place a washer on the other stud and place the green ground wire terminal on the washer and secure both with the nut. Torque to 12 in-lbs.
8. Plug in the quick disconnect wire (white) onto the terminal ACL (TP-1) of the light engine.
9. Plug in the quick disconnect wire (black) onto terminal ACN (TP-2) of the light engine.

7.3 120V Small LED Board Replacement

1. Disconnect power and wait 5 minutes.
2. Remove two (2) screws and six (6) washers.
3. Unplug the board connector from the light engine.
4. Remove the LED board from the heat sink. If you are also replacing the driver board, you can proceed now to step 7.4
5. Apply thermal grease to the back of the new LED board.
6. Place new LED board into the heat sink with the orientation shown in Figure 7.
7. Secure the LED board with two (2) screws and two (2) washers.
8. Plug in the board connector.

7.4 120V Small Light Driver (PCB) Replacement

1. Disconnect power and wait 5 minutes.
2. Remove LED board as instructed in step 7.3
3. Remove 2 screws from the heat sink and remove the heat sink.
4. Remove both quick disconnect wires from the PCB. Note that the black wire is connected to ACN and the White wire is connected to ACL.
5. Remove 2 metal posts from the driver board
6. Remove driver board and place new light driver board into the fixture with the orientation shown in Figure 7.
7. Insert metal posts back on to the screw studs.
8. Plug in both quick disconnect wires, white onto the terminal ACL of the light driver and black onto the ACN.
9. Align heat sink to the metal posts
10. Secure the heat sink with 2 screws
11. Apply thermal grease to the back of the new LED board.
12. Place new LED board into the heat sink with the orientation shown in Figure 7.
13. Secure the LED board with two (2) screws and six (6) washers.
14. Plug in the board connector.

7.5 Large Light Driver (PCB) Replacement (120V and 12V)

1. Disconnect power and wait 5 minutes.
2. Unplug the quick disconnect terminals and the grounding wire (green) from the light driver.
3. Remove three (3) nuts and washers.
4. Remove the LED board, light driver board and board connector from the light fixture.
5. Apply thermal grease to the back of the new LED board.
6. Place new LED board and light driver board into the fixture with the orientation shown in Figure 8.
7. Secure the new boards with 3 washers, spilt washers and nuts. Torque to 12 in-lbs.
8. Plug in the white quick disconnect wire onto the terminal AC1 (TP-L) of the light driver board.
9. Plug in black quick disconnect wire onto terminal AC2 (TP-N) of the light driver. Ensure board connectors are connected to both boards.
10. To secure the ground wire, place the flat washer, followed by the ground wire, followed by the split washer, securing in place with the nut. Torque to 12 in-lbs.

7.6 Reassemble the Fixture.

1. If not already done, remove the gasket from the glass lens and install a new gasket 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. 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 RGBW LED Light, which likewise could result in serious injury to pool or spa users, installers, or bystanders, or in damage to property.

2. 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 with the orientation shown in 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.

3. 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

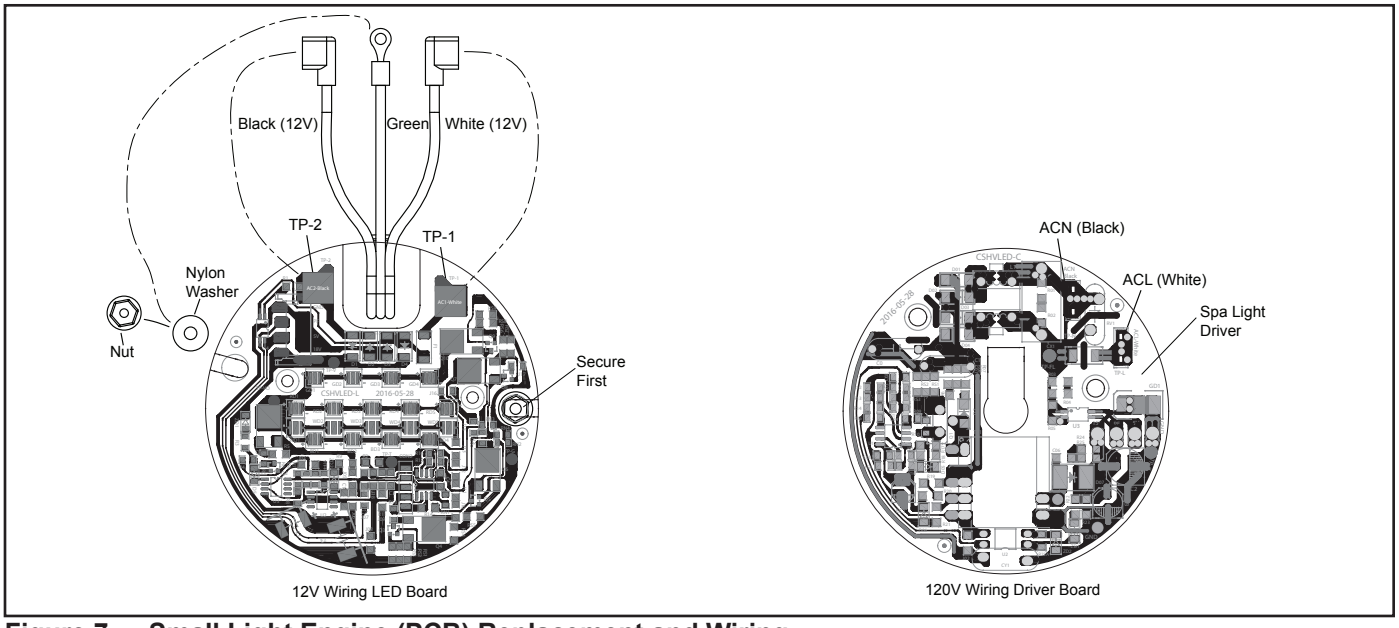

Figure 7. Small Light Engine (PCB) Replacement and Wiring

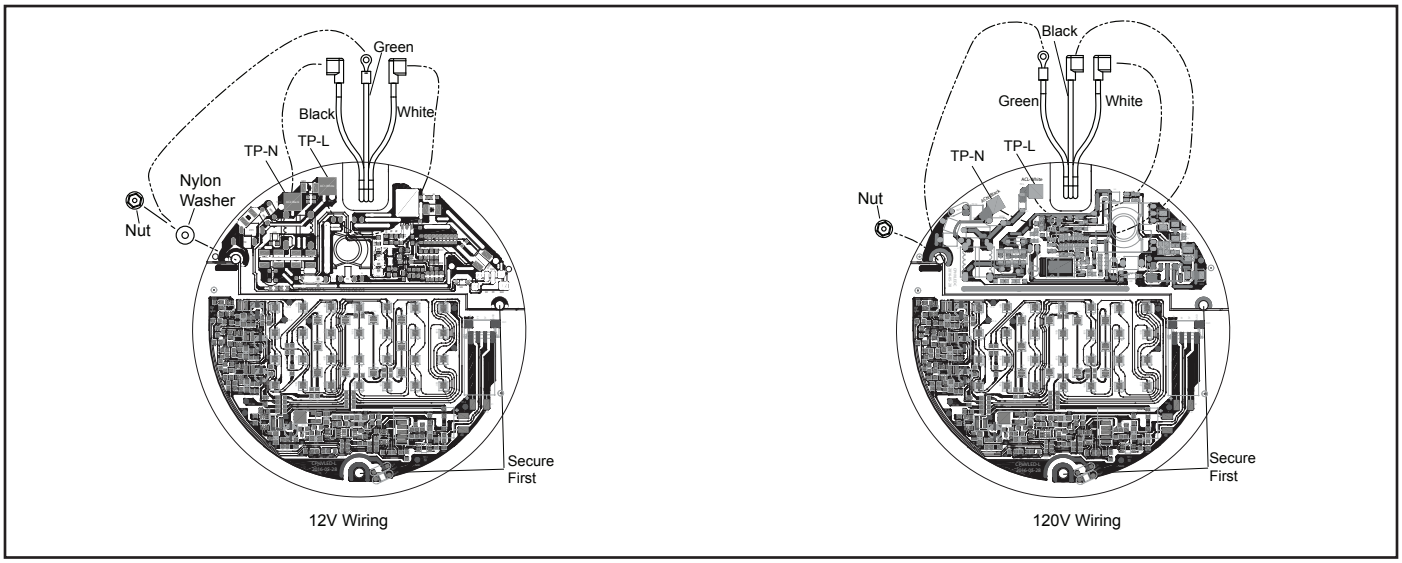

Figure 8. Large Light Engine (PCB) Replacement and Wiring

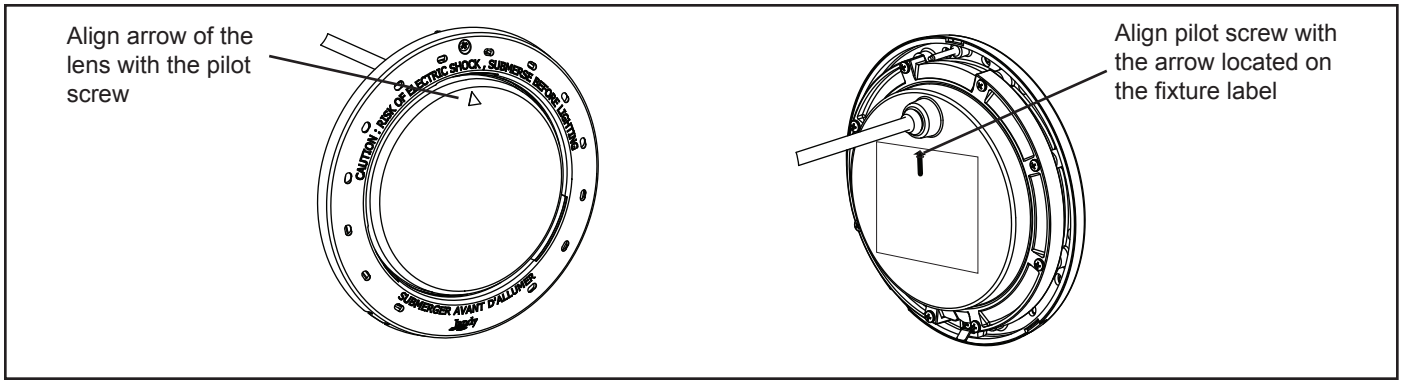

Figure 9. Alignment of the Lens, Face Ring, Housing and Clamps for WaterColors Lights

fixture label that reads, "Arrow on this label must line up with the pilot screw on the Face Ring". See Figure 9.

4. 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.
5. Spread the bottom clamp over the electrical cord and slide it onto the back of fixture to the top clamp.
6. 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 25 in-lbs.
7. Discard the old gasket.

7.7 Reinstall the Jandy Pro Series Light Into Niche Fixture.

1. 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.
2. 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.

3. If pool is empty, Fill the pool until the underwater light is completely submerged in water before operating the light for more than 2 minutes. The light will heat up quickly when operated outside of water. Turn on main switch or circuit breaker, and the switch, which 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.

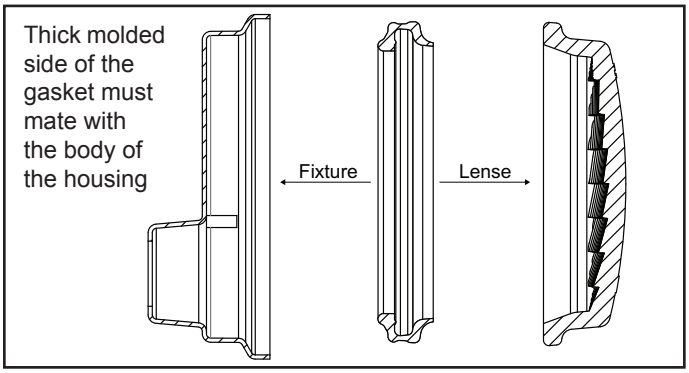

Figure 10. Cross Section of Jandy Pro Series WaterColors LED Light

Section 8. Twelve (12) Volt Installation

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

⚠ WARNING

To minimize risk of Electrical shock or electrocution, which could result in injury or death, for supply connection of low-voltage lights use only an isolating low voltage power supply, evaluated and listed by a Nationally Recognized Testing Laboratory (NRTL) for swimming pool use.

NOTE For optimum performance Jandy Pro Series 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 Pro Series Large WaterColors RGBW LED Light

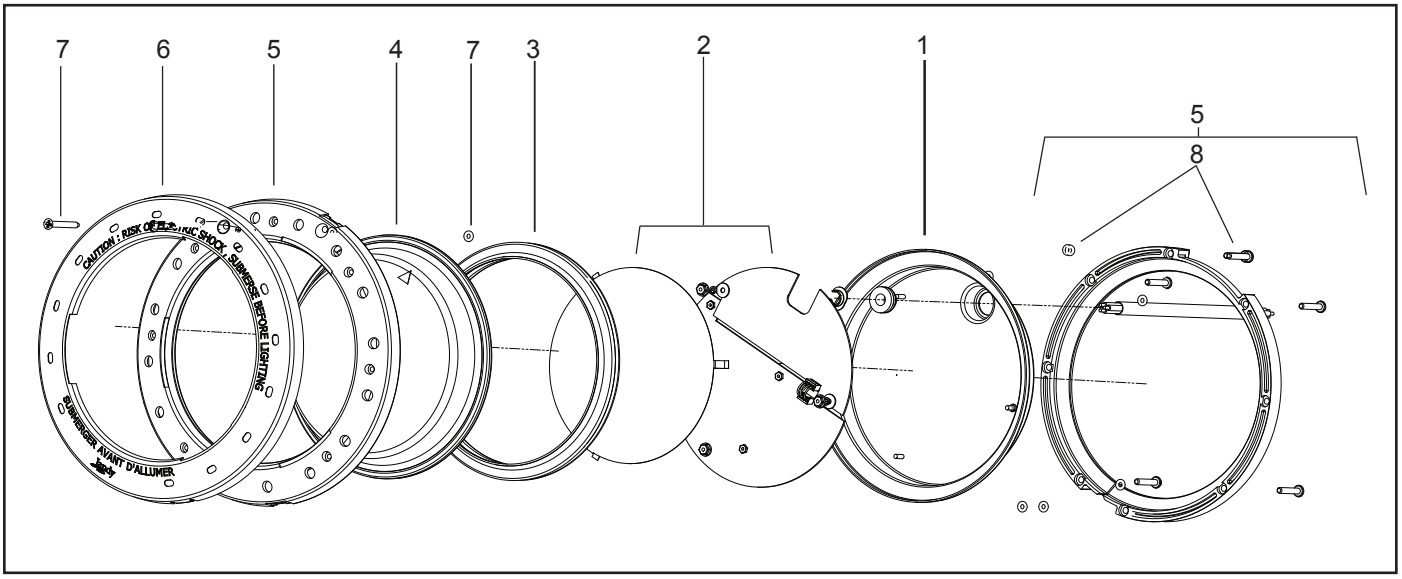

Figure 11. Jandy Pro Series Large WaterColors RGBW LED Light Exploded View

DWG #	Part #	Description	Field Replaceable
1	N/A	WaterColors RGBW LED Light Housing	*NO - Purchase New Light*
2	R0739500	Light Engine PCB, 12V Large LED Light w/ Light Shaping Diverger	**YES**
2	R0739400	Light Engine PCB, 120V Large LED Light W/ Light Shaping Diverger	**YES**
3	R0790500	Silicone Gasket	**YES**
4	R0790600	Glass Lens	**YES**
5	R0790700	Clamp Assembly	**YES**
6	R0790801	Face Ring, Stainless Steel (SS)	**YES**
6	R0790802	Face Ring, Plastic, White	**YES**
6	R0790803	Face Ring, Plastic, Black	**YES**
6	R0790804	Face Ring, Plastic, Gray	**YES**
6	R0790805	Face Ring, Plastic Set	**YES**
7	R0790900	Pilot Screw, with Retainer	**YES**
8	R0791000	Clamp Screws (8 Screws and 8 Retainers)	**YES**

9.2 Jandy Pro Series Small WaterColors RGBW LED Light

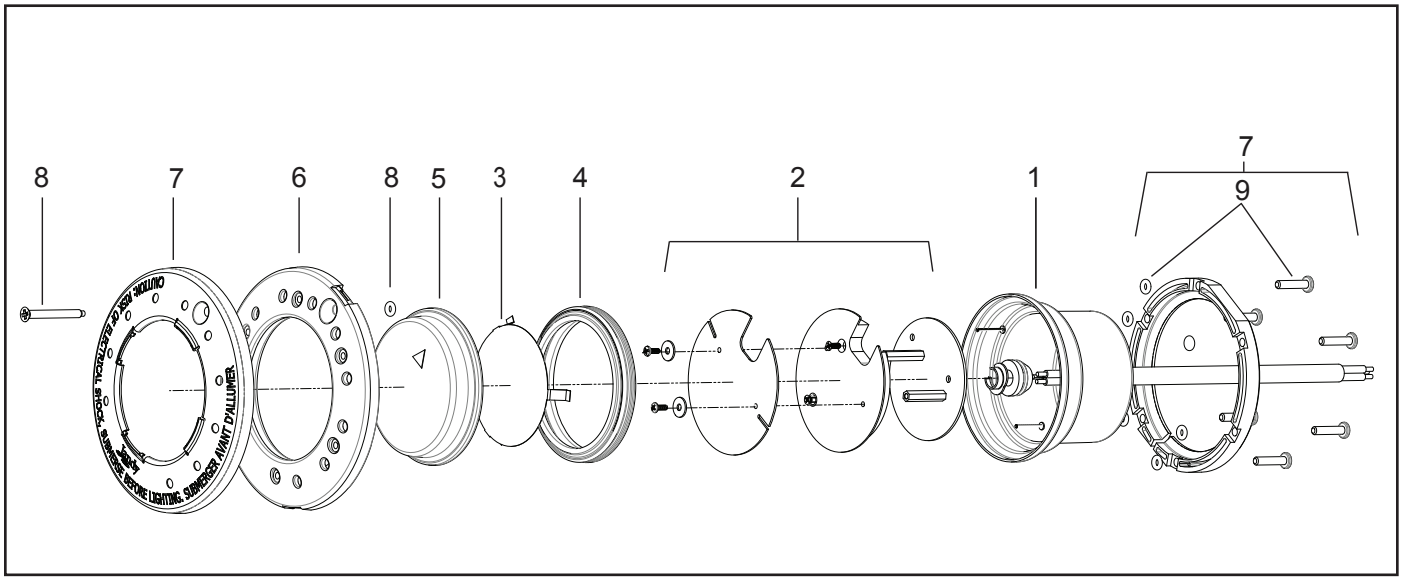

Figure 12. Jandy Pro Series Small WaterColors RGBW LED Light Exploded View

DWG #	Part #	Description	Field Replaceable
1	N/A	WaterColors RGBW LED Light Housing	NO - Purchase New Light
2	R0739600	Light Engine, Small LED Light	**YES**
3	R0739700	Diverger, Light Shaping, Small LED Light	**YES**
4	R0791100	Silicone Gasket	**YES**
5	R0791200	Glass Lens	**YES**
6	R0791300	Clamp Assembly	**YES**
7	R0791401	Face Ring, Stainless Steel (SS)	**YES**
7	R0791402	Face Ring, Plastic, White	**YES**
7	R0791403	Face Ring, Plastic, Black	**YES**
7	R0791404	Face Ring, Plastic, Gray	**YES**
7	R0791405	Face Ring, Plastic Set	**YES**
8	R0790900	Pilot Screw, with Retainer	**YES**
9	R0791600	Clamp Screws (6 Screws and 6 Retainers)	**YES**

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