



INSTALLATION MANUAL

ENGLISH



Jandy Pro Series WaterColors 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.

H0305500 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 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 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
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 Pro Series Light Fixture during New Construction

⚠ WARNING

Risk of Electrical Shock or Electrocutation.

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 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, 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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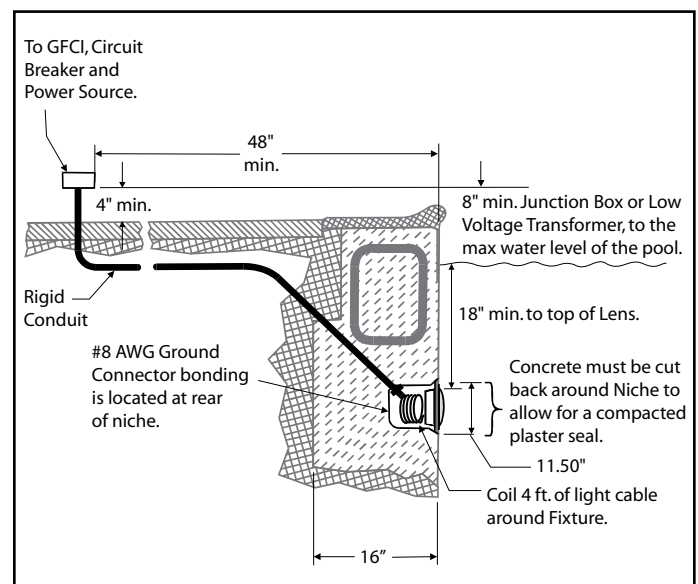


Figure 1. Jandy Pro Series Digital Color Light Installation

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 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 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.

- 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 Pro Series WaterColors LED Lights

NOTE The Jandy Pro Series WaterColors 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 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.

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 Pro Series 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 Pro Series 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 Pro Series 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 Pro Series 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 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.

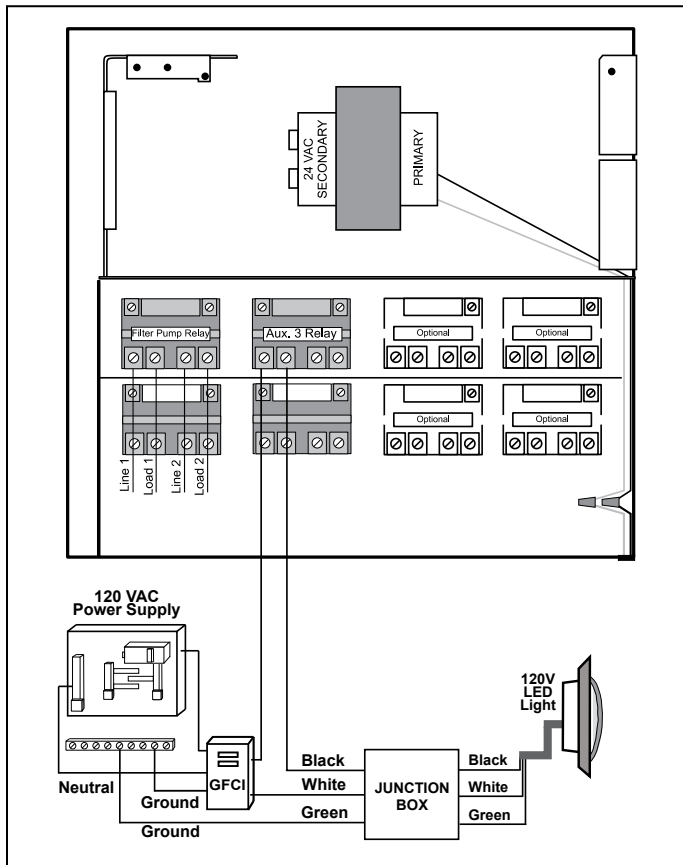


Figure 2. 120-Volt Jandy Pro Series WaterColors Light Wiring Diagram

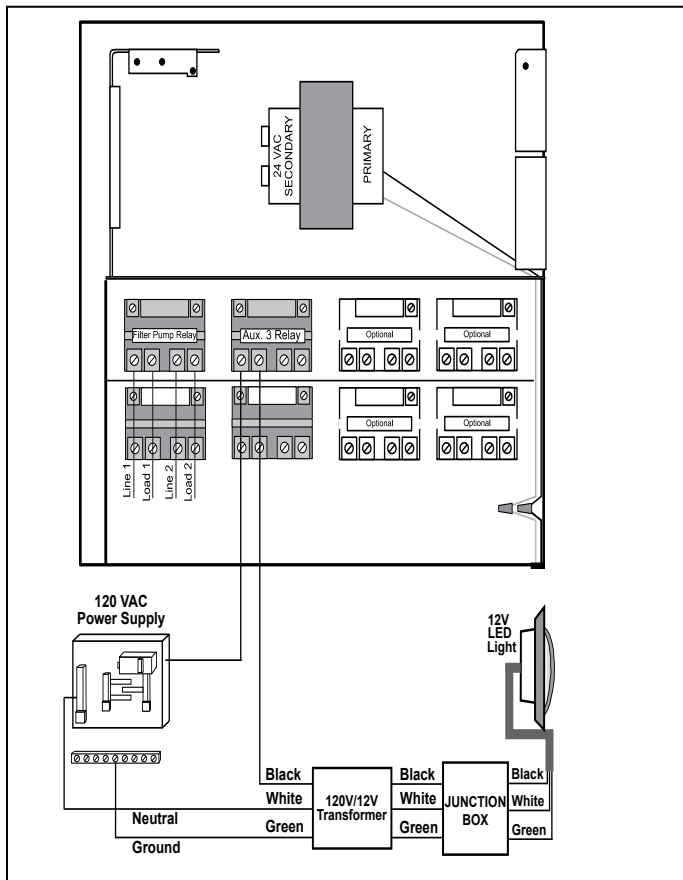


Figure 3. 12-Volt Jandy Pro Series WaterColors Light Wiring Diagram

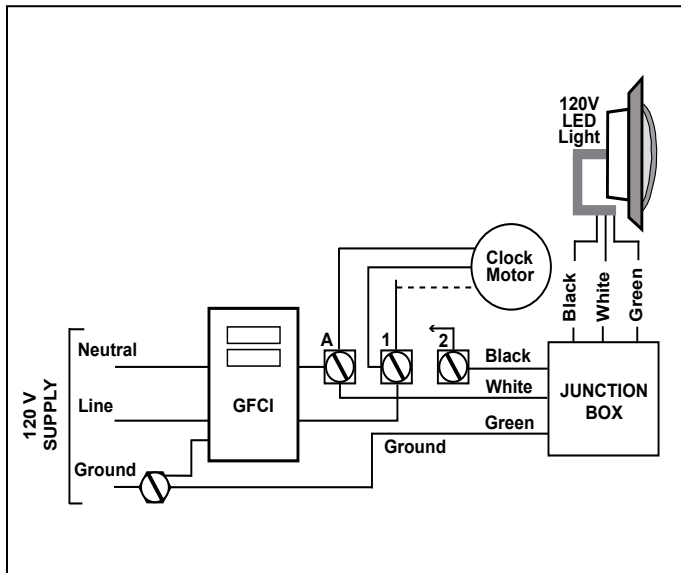


Figure 4. Wiring the Jandy Pro Series WaterColors Light to a Time Clock

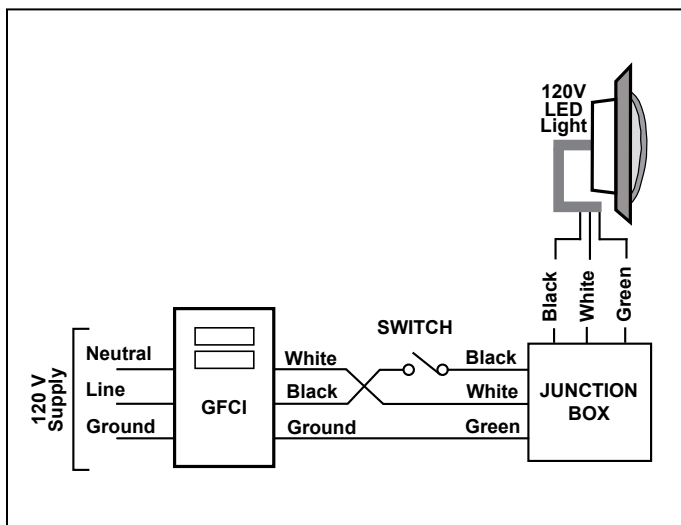


Figure 5. Wiring the Jandy Pro Series WaterColors Light to a Switch

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

Table 2. Light Specifications

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

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.

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.

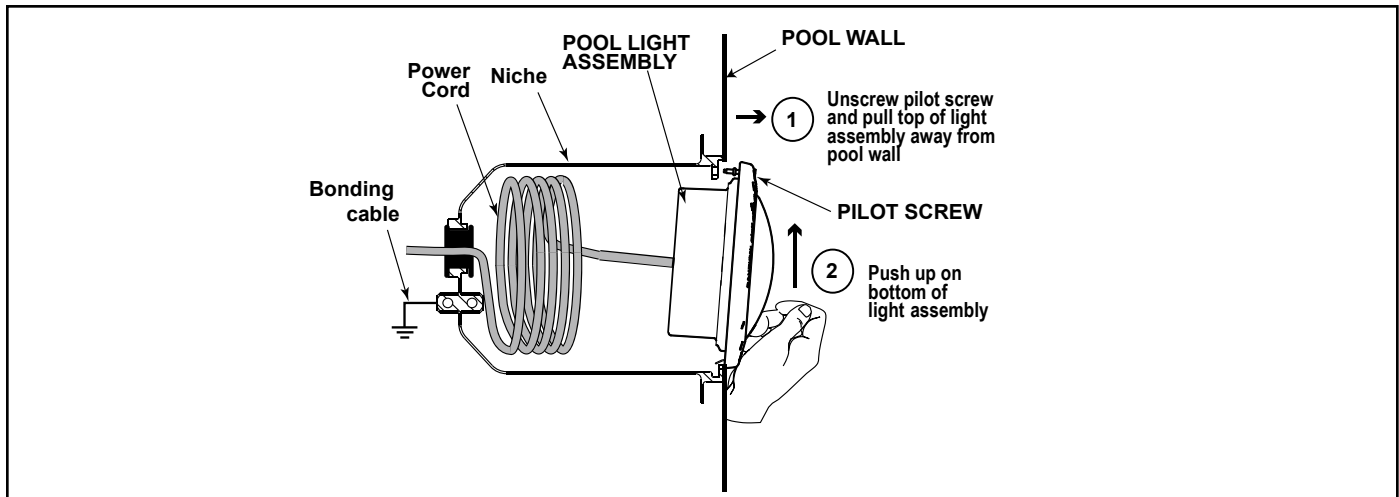


Figure 6. Removing the Jandy Pro Series WaterColors Light Assembly for Light Engine Replacement

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.

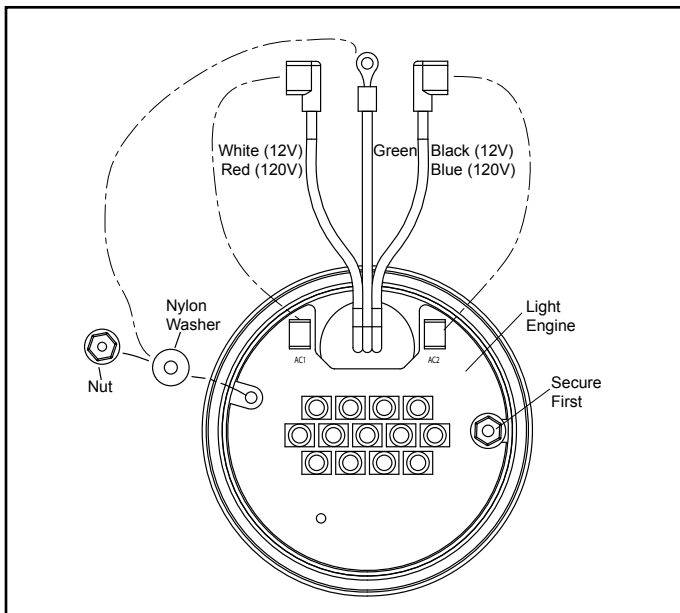


Figure 7. Small Light Engine (PCB) Replacement and Wiring

- 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.

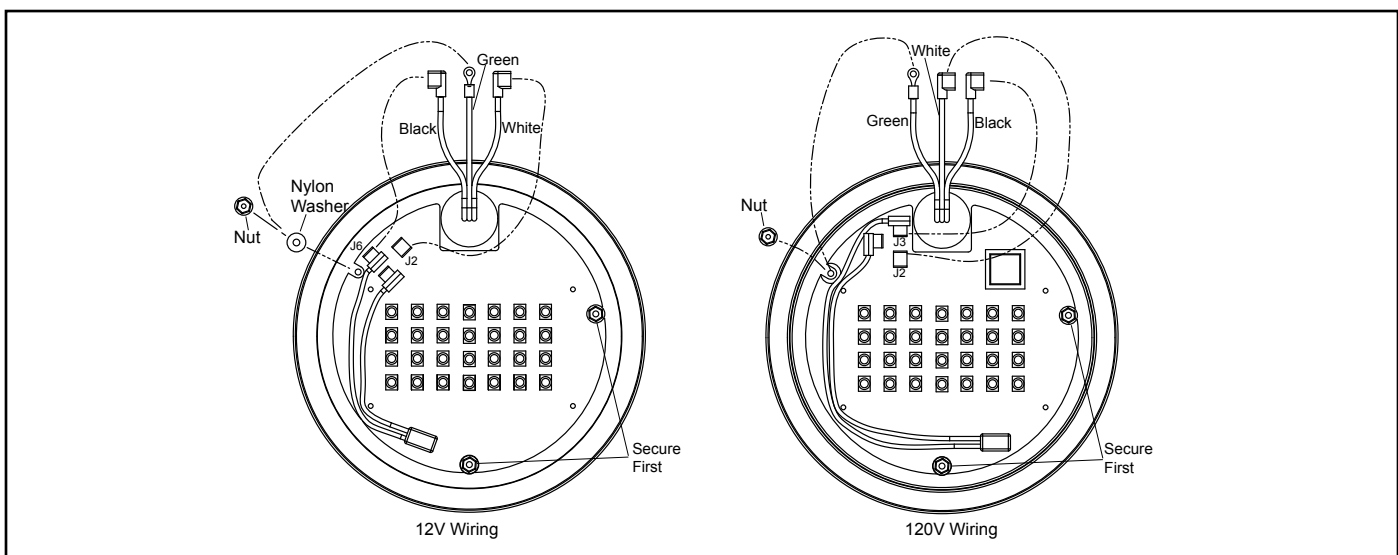


Figure 8. Large Light Engine (PCB) Replacement and Wiring

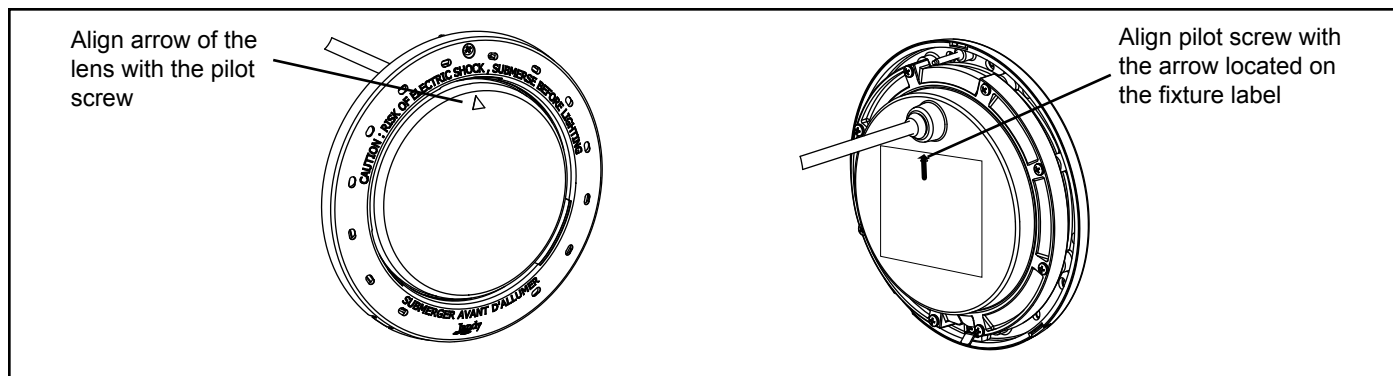


Figure 9. Alignment of the Lens, Face Ring, Housing and Clamps for WaterColors Lights

7. Reinstall the Jandy Pro Series 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.

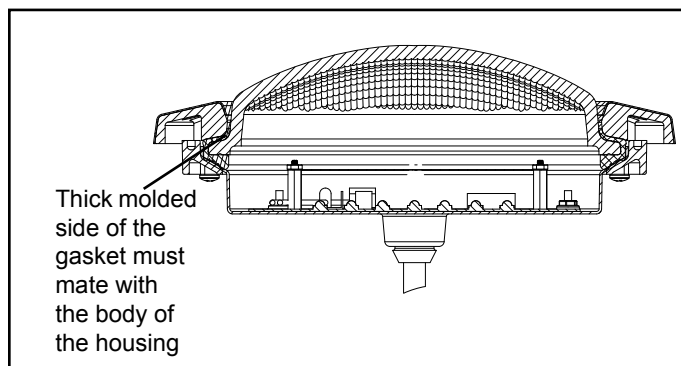


Figure 10. Cross Section of Jandy Pro Series WaterColors LED Light

Section 8. Twelve (12) Volt Installation

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

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 LED Light

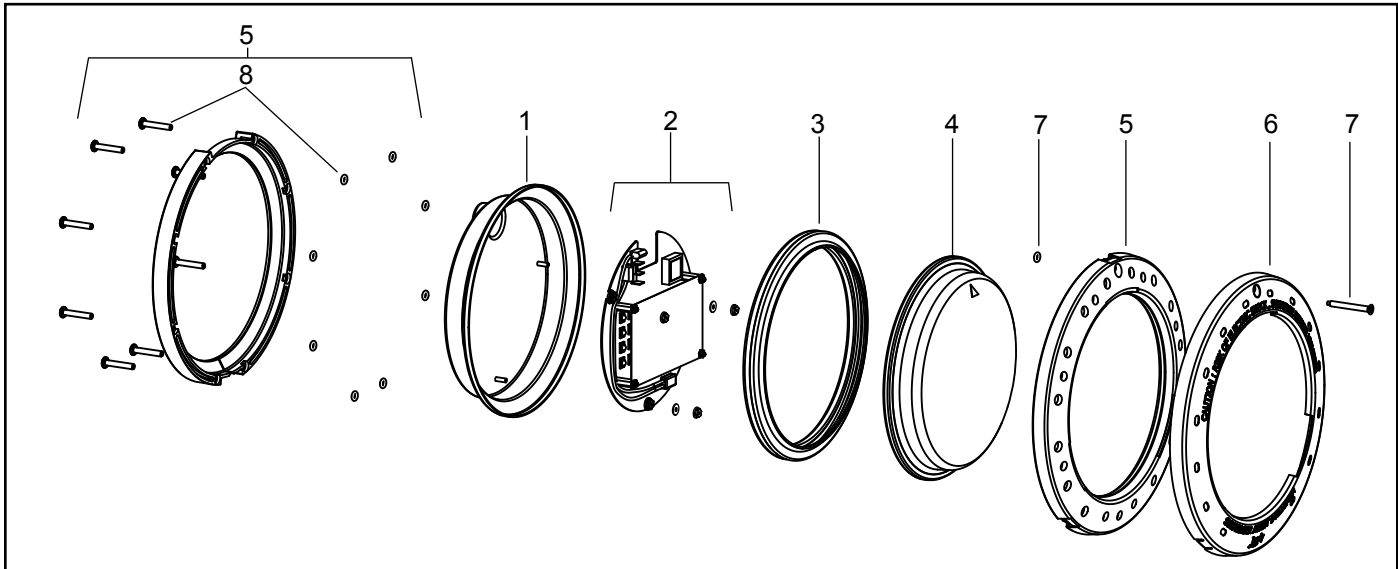


Figure 11. Jandy Pro Series Large WaterColors LED Light Exploded View

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 Pro Series Small WaterColors LED Light

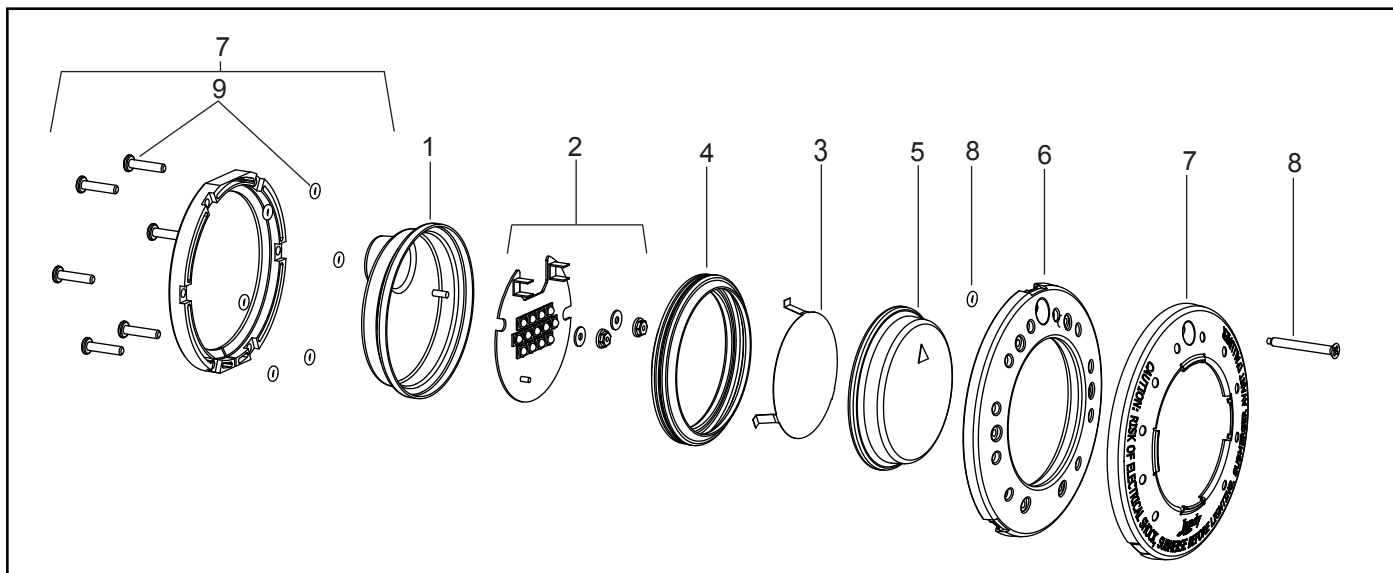


Figure 12. Jandy Pro Series Small WaterColors LED Light Exploded View

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

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