

## INSTALLATION INSTRUCTIONS & OWNERS MANUAL

**INSTALLER - READ ENTIRE INSTRUCTION SHEET BEFORE PROCEEDING TO INSTALL.**

**POOL OWNER - PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

The Aqua-Star Evo2 LED Replacement Light Kit was designed as an upgrade from existing Aqua-Star Halogen recessed pool lights.

Upgrades from other brands of recessed pool lights are available, contact Aqua-Quip for more details.

### INCLUDED IN THIS KIT

#### Included in this kit:

- 1 x Pre-Assembled Quick-Connect Plug Assembly
- 1 x Female Screw Plug Terminal, with screws
- 1 x Evo2 LED Pool Light
- 1 x Screw Kit (to mount Evo2 Light onto Dress Ring)
- 1 x Spare Seal (RED)



#### The tools you will need:

- Phillips Head Screwdriver (small #1)
- Pliers or Sidecutters
- Wire-Stripping tool
- Multi-Grips or Shifting Spanner

Read the entire Instruction Sheet before starting the installation process.

#### Before Starting:

The Quick-Connect Plug Kit is supplied pre-assembled with a WHITE Seal. The WHITE seal is used only when connecting to original Aqua-Star Grey Coloured Cable (1.5mm<sup>2</sup>). This cable has an outside diameter of approx 7.5mm.

If you are attaching the Quick-Connect Plug Kit to Evo2 Black Coloured Cable (1mm<sup>2</sup>), then a RED seal is required instead of the WHITE seal. This RED seal is supplied loose in the kit. Loosen the #128 Cable Nut, remove the WHITE Seal and fit the RED Seal.

**Step 1.** Strip the end of the existing Grey Cable or Black Cable as follows –

#### FOR GREY CABLE ONLY:

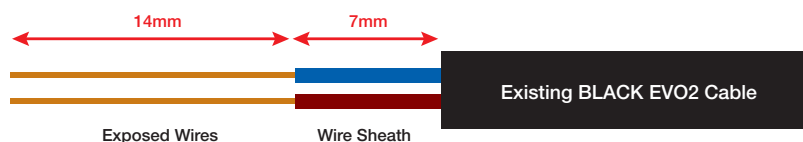
Expose 7mm of Copper Wire.



#### FOR BLACK CABLE ONLY:

##### Step A:

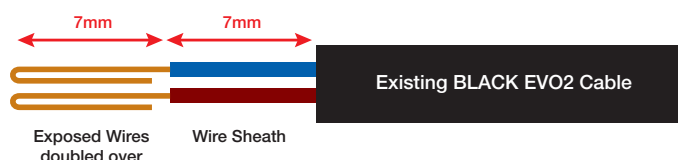
Expose 14mm of Copper Wire.



#### FOR BLACK CABLE ONLY:

##### Step B:

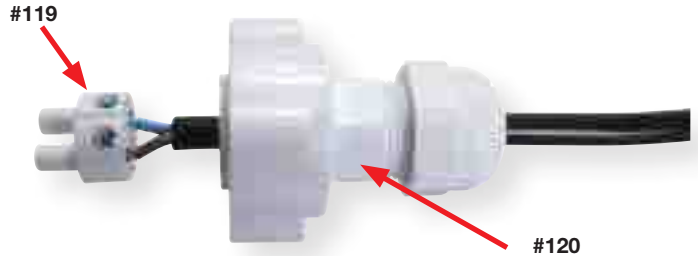
Bend copper wire back on itself, doubling it up so it is 7mm long.



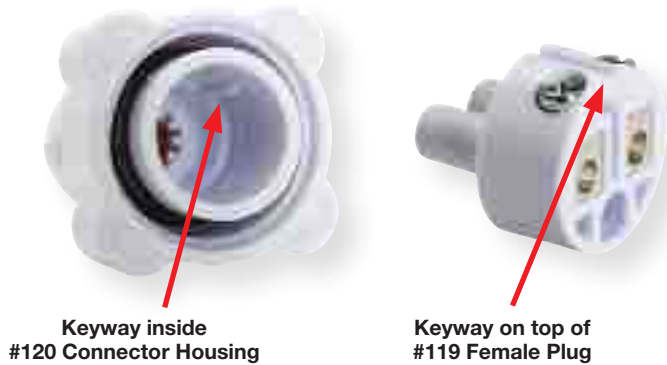
**Step 2.** Slide cable into rear of preassembled Quick-Connect Plug Assembly so that the cable end sits approx 100mm from end of plug. You may have to loosen #128 Nut to enable cable to slide through.



**Step 3.** Insert cable into terminals on #119 Female Plug and tighten screws all the way down (If not tightened correctly the plug will be difficult to fit into the #120 Connector Housing)



**Step 4.** Slide #119 Female Plug into #120 Connector Housing, be sure to align the keyway on #119 Female Plug with keyway on the inside of the #120 Connector Housing.

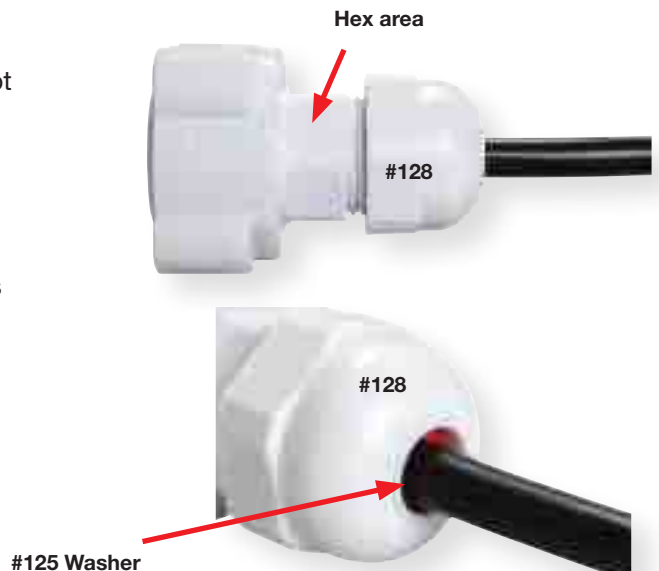


**Step 5.** Push #119 Female Plug all the way into #120 Connector Housing. Please ensure it pushes all the way into the “tongue and groove” keyway, so that the end of #119 Female Plug finishes flush with end of #120 Connector Housing.



**Step 6.** Tighten #128 Cable Nut on the cable. This must be done tight enough to ensure the Quick-Connect Plug will not leak. You will need to hold the hexagonal area on the #120 Connector Housing with multi-grips or shifting spanner in order to tighten the 128 Cable Nut tightly.

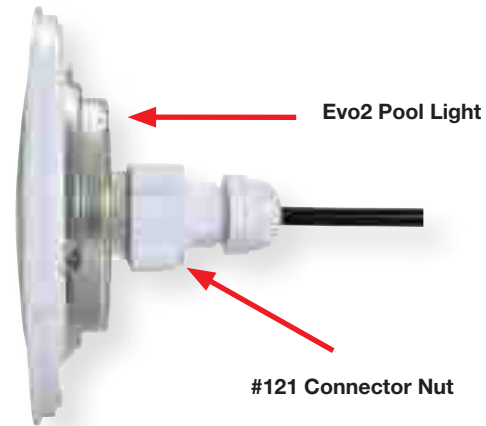
Ensure that the #125 Washer remains “clipped in” the #128 Cable Nut when tightening. This will ensure the #126 Seal is compressed effectively.



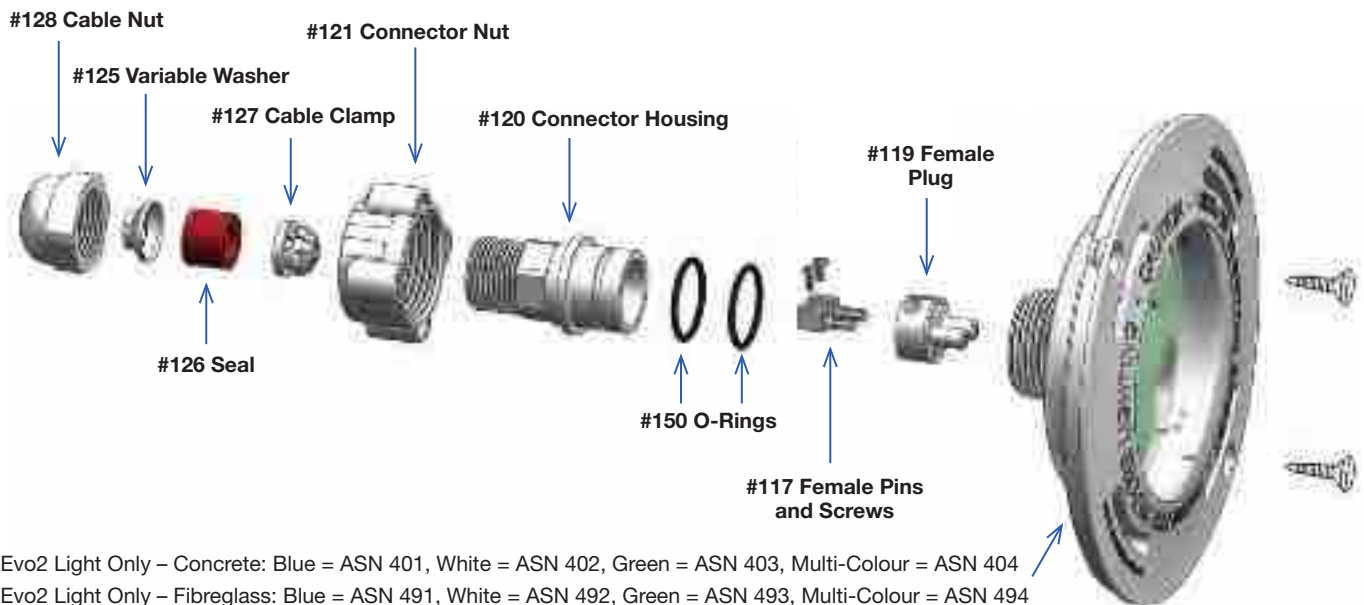
**Step 7.** Put a small amount of silicone-based lubricant onto the 2 x #150 O-rings and insert the Quick-Connect Plug into rear of light. When inserting Quick-Connect Plug be sure to align the #119 Female Plug with the two male pins on back of light. Hand tighten the #121 Connector Nut.

Mount Evo2 Pool Light onto original Aqua-Star or Evo2 Dress Ring, using the new screws provided.

If fitting optional Stainless Steel Trim Ring, then use the longer 7/8" screws provided with that kit. Do not fit coloured lenses over the Evo2 light. The installation is now complete.



## Evo2 LED Pool Light - Parts Diagram



Evo2 Light Only – Concrete: Blue = ASN 401, White = ASN 402, Green = ASN 403, Multi-Colour = ASN 404  
 Evo2 Light Only – Fibreglass: Blue = ASN 491, White = ASN 492, Green = ASN 493, Multi-Colour = ASN 494

## TECHNICAL SPECIFICATIONS EVO2 LED FLUSH MOUNTED POOL LIGHTS

Features:	Operated by extremely safe extra low voltage supply (12V AC), low power consumption, long life span, easy installation and operation
Nominal Supply Voltage:	12V AC 50/60 Hz
Voltage Tolerance:	+20%, -20%
Protection Rating:	IPX8 (to 2.0m depth)
Temperature Range:	-10°C ~ +40°C water temperature
Power Consumption:	White, blue and green = 8 VA
Power Consumption:	Spectrum III Multi Colour = 16 VA maximum
Lamp Life:	>50,000 hours
Light Output (typical):	White-550 lumens, blue-180 lumens, green-500 Lumens
Fault Protection:	Power-cycle "run dry" thermal cut-out. Voltage transient clamping.



**Aqua-Star Evo2 LED Underwater Pool Lights are proudly made in Australia.**

*Evo2 LED's are available in fixed colour White, Blue or Green, or the new and unique Multi-Colour Spectrum III. Programming instructions for Multi-Colour Spectrum III appear on the next page.*

*Evo2 lights must be connected to a 12v AC supply.*

## PROGRAMMING COLOUR-CHANGING LED POOL LIGHTS

These instructions are applicable to Aqua-Quip Evo2 LED Multi-Colour Lights and Aqua-Quip Surface Mounted LED Multi-Colour Lights. The user can save either a Feature Mode or a selected colour.

**Feature Mode:** Select your favourite “scroll” or “flash” mode.

**Selected Colour:** Choose from a wide variety of vibrant colours and subtle hues.

Once a specific mode or colour is saved that selection will be remembered and recalled when the light is switched on (until a new selection is saved).

**Please note:** When switched on for the first time, the lights are factory-saved to start in **Mode 1: Colour Scroll**.

To change from the factory (or default) setting, follow the programming procedures below **STARTING WITH THE DOUBLE SWITCH PROCEDURE:**

**PROCEDURE:**

### PROGRAMMING PROCEDURE

**Note:** The **DOUBLE SWITCH** procedure is a **quick OFF/ON/OFF/ON**. The “dwell time” between switching may be influenced by the use of remote controls and home automation systems.



#### Colour Selection Mode

To save a selected colour as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Lights will scroll through a range of colours starting with RED.

To SAVE, wait until your preferred colour is visible.

#### Feature Mode 1: Colour Scroll

To save Colour Scroll as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Scroll Sequence:

Scrolls through the colour spectrum.

Total 20 second cycle.

#### Feature Mode 2: Slow Colour Scroll

To save Slow Colour Scroll as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Scroll Sequence:

Scrolls through the colour spectrum.

Total 2 minute cycle.

#### Feature Mode 3: Seaside Colour Scroll

To save Seaside Colour Scroll as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Scroll Sequence:

Scrolls through the ocean water colours.

Total 20 second cycle.

#### Feature Mode 4: Fast Flash

To save Fast Flash as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Flash Sequence:

Blue, green, cerise, aqua, hot pink and orange.

2.5 seconds per colour.

#### Feature Mode 5: Slow Flash

To save Slow Flash as default, follow **SAVE** above.

**OR**

To progress to the next Mode, follow **NEXT** above.

Flash Sequence:

Blue, green, hot pink, aqua, orange and cerise.

15 seconds per colour.

In the unlikely event that the lights become un-synchronised repeat the initial DOUBLE SWITCH procedure as described above.