AQUA-STAR EVO2 REPLACEMENT LIGHT KIT INSTRUCTION MANUAL

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 (1.5mm²). This cable has an outside diameter of approx 7.5mm.

If you are attaching the Quick-Connect Plug Kit to Evo2 Black Coloured Cable (1mm²), 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 –
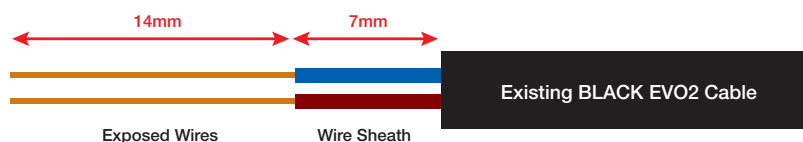
FOR GREY CABLE ONLY:
Expose 7mm of Copper Wire.

7mm	7mm

Exposed Wires   Wire Sheath   Existing GREY AQUA-STAR Cable

FOR BLACK CABLE ONLY:
Step A:
Expose 14mm of Copper Wire.

14mm	7mm

Exposed Wires   Wire Sheath   Existing BLACK EVO2 Cable

FOR BLACK CABLE ONLY:
Step B:
Bend copper wire back on itself, doubling it up so it is 7mm long.

7mm	7mm

Exposed Wires doubled over   Wire Sheath   Existing BLACK EVO2 Cable
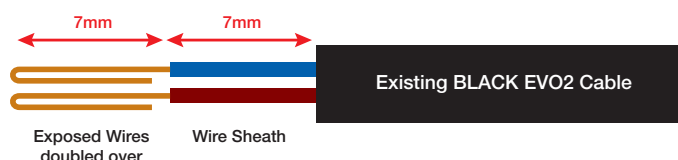
Step 2. Slide cable into rear of preassembled Quick-Connect Plug Assembly so that the cable end sits approx 100mm from end of plug. You may have to loosen #128 Nut to enable cable to slide through.

#128

100mm

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)

#119

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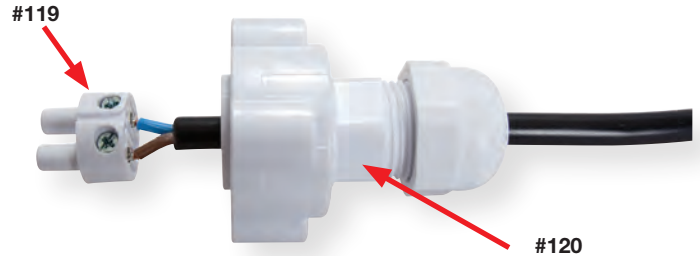
Step 4. Slide #119 Female Plug into #120 Connector Housing, be sure to align the keyway on #119 Female Plug with keyway on the inside of the #120 Connector Housing.

**Keyway inside
#120 Connector Housing**

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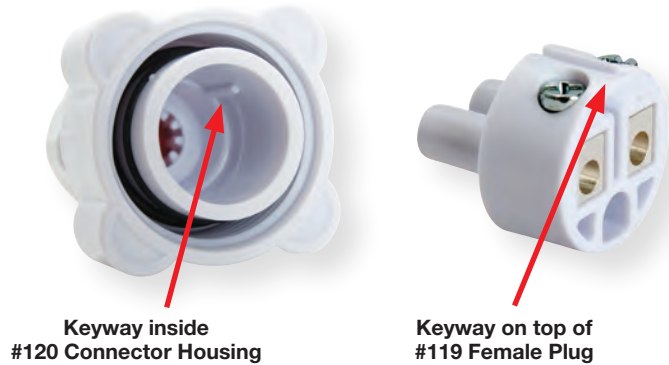
Step 5. Push #119 Female Plug all the way into #120 Connector Housing. Please ensure it pushes all the way into the "tongue and groove" keyway, so that the end of #119 Female Plug finishes flush with end of #120 Connector Housing.

**Keyway aligned, then push
#119 all the way in**

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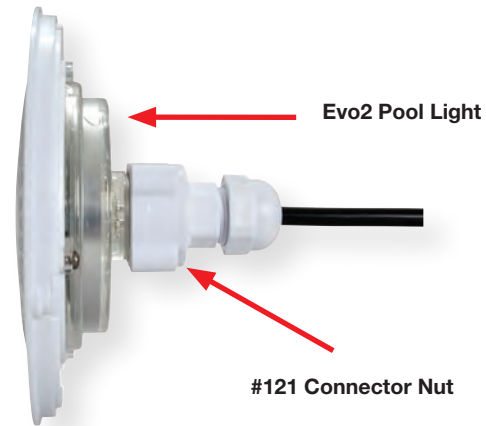
Ensure that the #125 Washer remains "clipped in" the #128 Cable Nut when tightening. This will ensure the #126 Seal is compressed effectively.

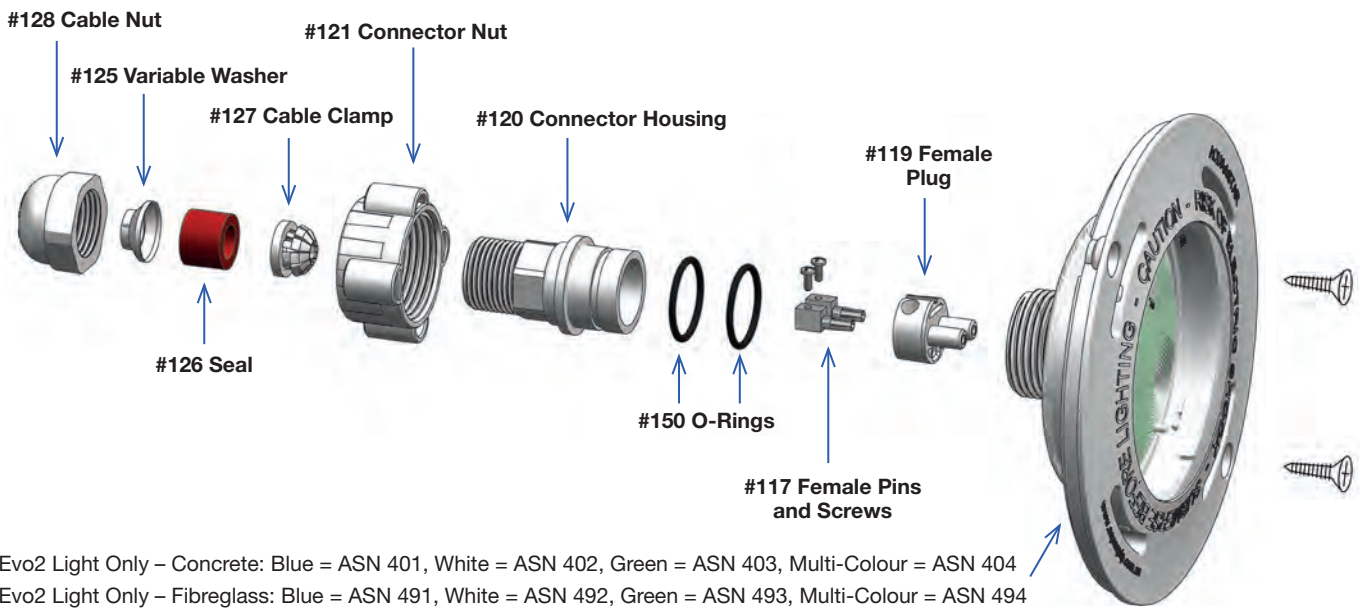**Hex area**

#128

#128

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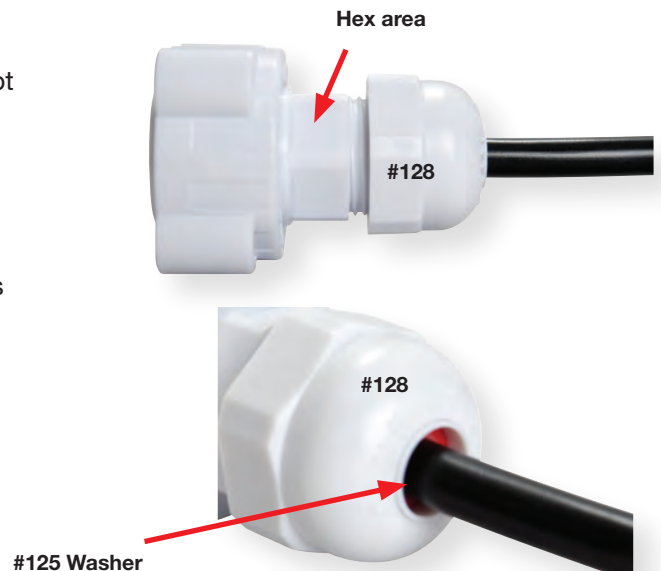
Step 7. Put a small amount of silicone-based lubricant onto the 2 x #150 O-rings and insert the Quick-Connect Plug into rear of light. When inserting Quick-Connect Plug be sure to align the #119 Female Plug with the two male pins on back of light. Hand tighten the #121 Connector Nut.

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 Pool Light

#121 Connector Nut

Evo2 LED Pool Light - Parts Diagram

#128 Cable Nut

#125 Variable Washer

#127 Cable Clamp

#121 Connector Nut

#120 Connector Housing

#119 Female Plug

#126 Seal

#150 O-Rings

#117 Female Pins and Screws

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 <u>DOUBLE SWITCH</u> 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.

DOUBLE SWITCH

SWITCH **OFF** ▶ THEN WITHIN ONE SECOND SWITCH **ON** ▶

THEN WITHIN ONE SECOND ▶

SWITCH **OFF** ▶ THEN WITHIN ONE SECOND SWITCH **ON**

ENTERS COLOUR SELECTION MODE

SAVE

SWITCH **OFF** ▶

WAIT **TEN** SECONDS

▶ SWITCH **ON**

SAVES SELECTION

NEXT

SWITCH **OFF** ▶

THEN WITHIN ONE SECOND

OR ▶ SWITCH **ON**

PROGRESS TO NEXT MODE

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.

AQUAQUIP

Automatic Pool Cleaners (Australia) Pty Ltd
40 Percy Street, Auburn NSW 2144
Ph: 02 9643 8338 Fax: 02 9643 8448
www.aquaquip.com.au

SPASA
SWIMMING POOL & SPA
ASSOCIATION OF NSW LIMITED