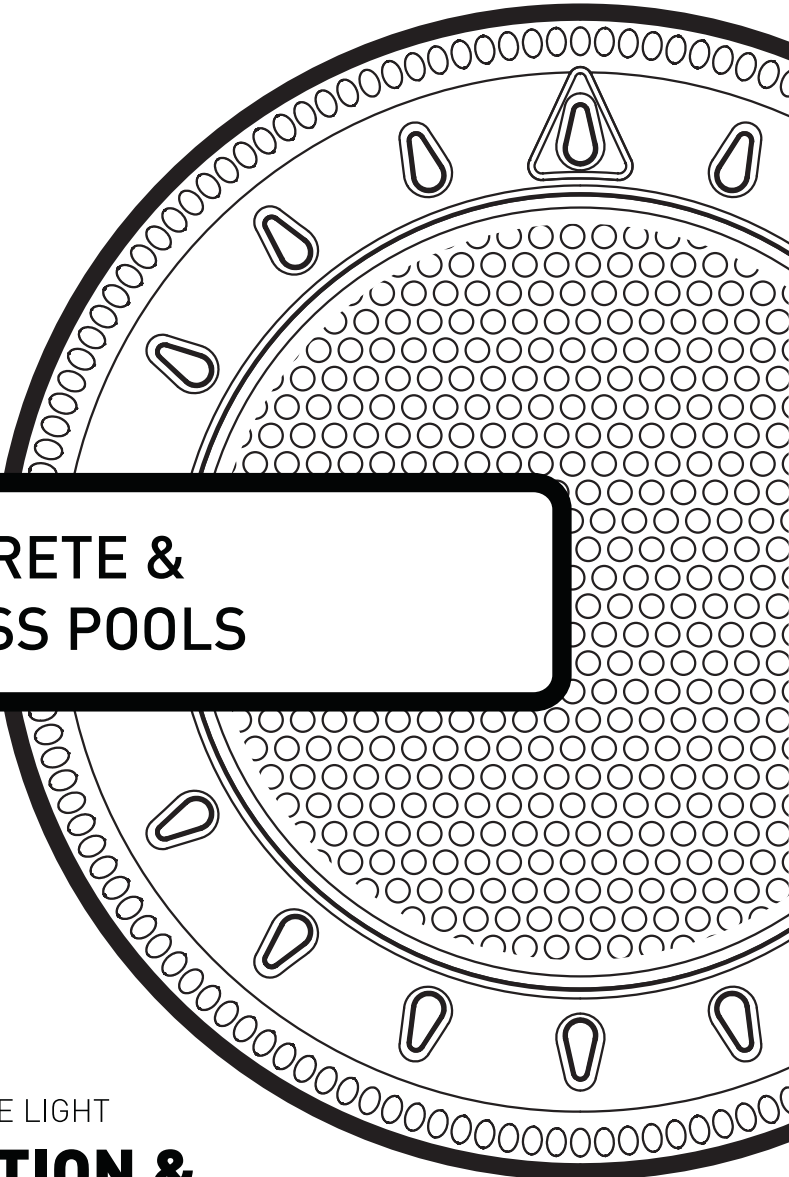




# QUANTUM

WN SERIES



FOR CONCRETE &  
FIBREGLASS POOLS

HIGH-OUTPUT NICHE LIGHT

**INSTALLATION &  
OWNER'S MANUAL**

# CONTENTS

PRODUCT SUPPORT & INFORMATION	1
INTRODUCTION	2
INSTALLATION (CONCRETE POOLS)	3
INSTALLATION (FIBREGLASS POOLS)	9



## WARNING

The **WN** series light must only be powered by the supplied 12V AC SPA ELECTRICS transformer.

- DO NOT use electronic or switch-mode transformers with **WN**-series lights. These transformers will damage the light and void your product warranty.
- Pool chemicals & PH levels: Due to the corrosive nature of unbalanced pool chemicals, Spa Electrics strongly recommend that your pool water is balanced prior to installing your pool lights or any plastic or stainless steel components, and tested weekly to maintain these levels. pH levels should be maintained between 7.2 – 7.6 at all times to ensure the longevity of these components.
  - Failure to do so can result in chemical damage to the light housing and pool fittings, including stainless steel components.
  - Please note: Lights or components found to have excessive chemical damage will not be covered under our manufacturer's warranty policy
- This light contains no user-serviceable parts; opening the light will void the product warranty.

## PRODUCT SUPPORT & INFORMATION

Phone: +61 3 9793 2299 (business hours)

Email: [sales@spaelectrics.com.au](mailto:sales@spaelectrics.com.au) (SALES enquiries)

Email: [tech@spaelectrics.com.au](mailto:tech@spaelectrics.com.au) (TECHNICAL support enquiries)

Web: [www.spaelectrics.com.au](http://www.spaelectrics.com.au)

# INTRODUCTION



Congratulations on your purchase of a Spa Electric underwater lighting system. Spa Electric, specialists in underwater lighting have been designing and manufacturing underwater lighting systems since 1976, with a focus on quality and reliability. All Spa Electric lights are manufactured in Australia from only the highest quality materials.

In order to maintain a long product life and hassle free operation, please take the time to become familiar with the following information.

## **Installation:**

- Ensure that the lighting system is installed by a suitably qualified persons only (eg. registered pool builder and/or qualified electrician), in accordance with AS/NZ 3000:2007 standards.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Lights should only be installed to a maximum depth of 400mm.
- The use of power tools such as cordless / 240v drills during installation is NOT recommended as these devices can damage the light fitting.

## **Cleaning:**

- Should you underwater light require cleaning at any stage, be sure to only use a mild detergent. Products such as methyated spirits can weaken certain parts of the fitting.

## **Use:**

- Your underwater light must be water cooled at all times. Do not switch the light on until installation is complete and the light is fully submerged in water.
- To ensure maximum life, your light should be used regularly throughout the year, ie. once per week.
- The WN-Series has been designed for commercial use and can be operated for continuous periods of time.

# INSTALLATION (CONCRETE POOLS)

## 1 ATTACH NICHE TO REINFORCEMENT BARS

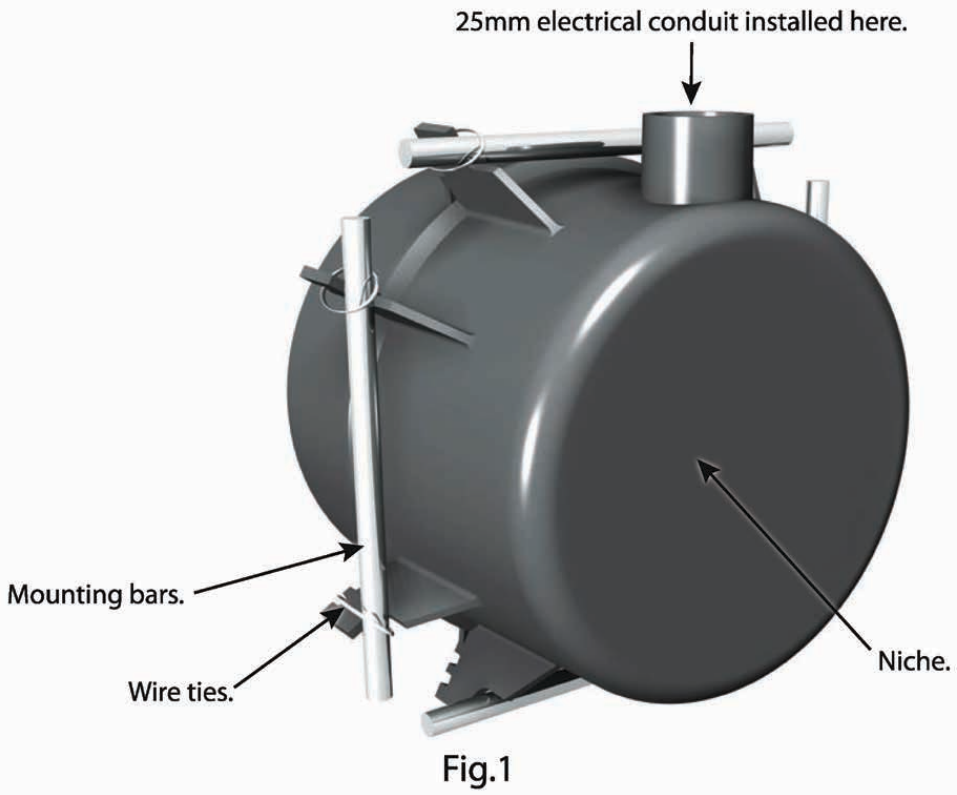
### (Before spraying concrete)

Attach the niche to either horizontal or vertical steel mounting bars using wire ties or similar. Ensure conduit entry is at the top of the niche. [Fig. 1]

### CAUTION:

Lights should only be submerged to a maximum depth of 400mm to the top of the light, any deeper and the warranty will be void.

These lights are not designed for horizontal mounting.



## 2 INSERT AND GLUE 25mm CONDUIT INTO NICHE

Glue length of 25mm electrical conduit into top of niche using PVC solvent cement. Conduit should extend above the water level of the pool.

**CAUTION:** Ensure that sufficient area behind the niche is dug out to allow for 50mm of concrete coverage around the entire niche.

### 3

## INSTALL SECONDARY CONDUIT

Attach a second conduit to return below ground level and away to the location of the transformer. Conduit should contain a draw wire and be covered with a draw box (part No. SE5) or similar to allow for later access. (Fig 2)

**CAUTION:** If a junction box is not used, ensure that conduits are 'broken' before returning below water level, to stop siphoning of water from pool or spa.

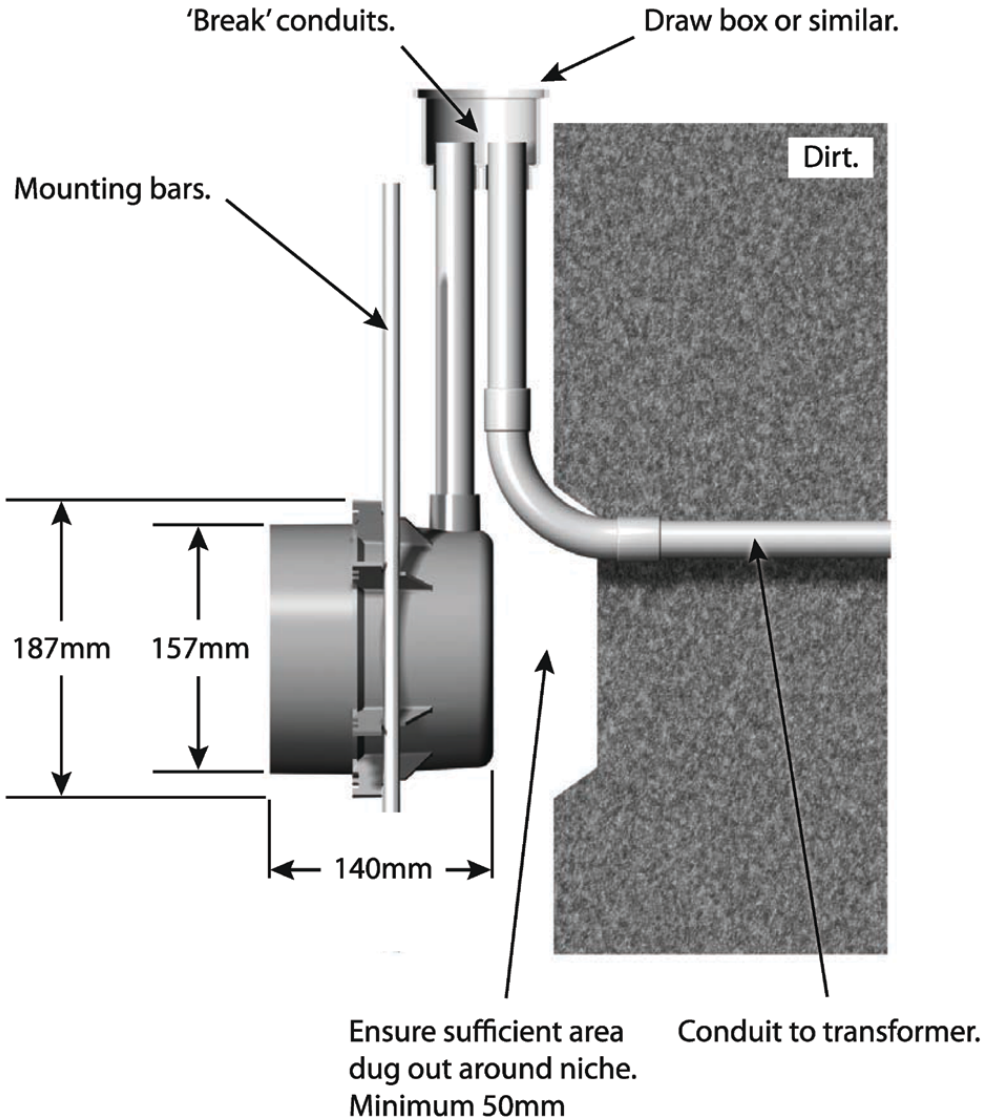


Fig.2

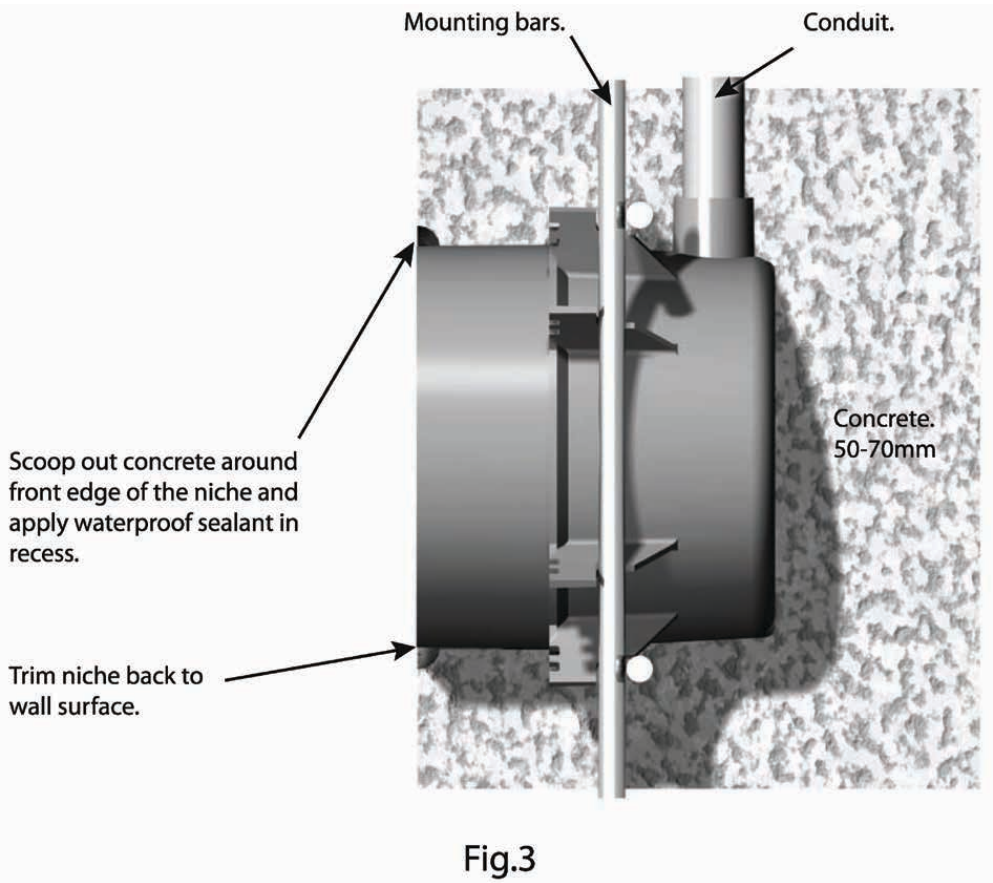
# 4

## CONCRETE SPRAYING

Spray concrete, paying particular attention to covering the entire niche, using fingers, scoop out the concrete around the front edge of the niche. [Fig 3]

**WARNING:** Ensure that the concrete is well compacted around the rear and base of the niche, otherwise the pool may leak.

**CAUTION:** The front of the niche should not be recessed into the concrete.



# 5

## FOAM REMOVAL

**(After concrete is sprayed and dry)**

Remove foam from niche and if necessary, trim niche back to wall surface. Apply a waterproof sealant in the recess between the niche and the concrete wall. (Fig 3)

**CAUTION:** Do not trim more than 20mm from the front of the niche or there may not be sufficient depth remaining for inserting the light.

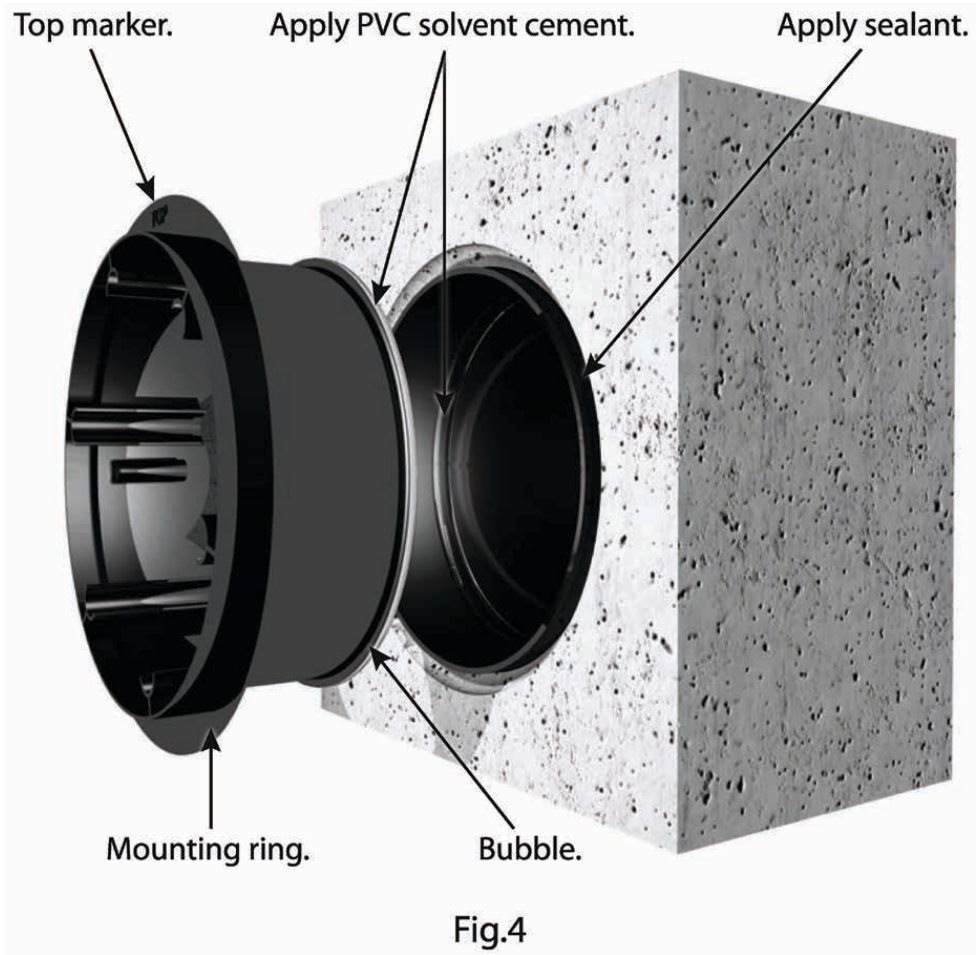


# 6

## MOUNTING RING PREPARATION

Apply PVC solvent cement to bubble at rear of the mounting ring, and also to the inside of the niche where the mounting ring is likely to finish. (approximately 40mm inside niche) (Fig. 4)

**WARNING:** Ensure solvent cement is suitable for ABS plastics.



# 7

## ASSEMBLE MOUNTING RING INTO NICHE

Slide mounting ring into niche, with 'TOP' arrow up; insert until flush against pool wall.

**CAUTION:** Ensure that the mounting ring is parallel with pool wall as the interior pool surface must be level with this ring.

# 8

## APPLY POOL FINISH

Pebble or tile interior pool surface, level with raised edge of mounting ring.

**CAUTION:** Interior surface must not finish higher than raised edge of mounting ring, or the light will not be able to be mounted.

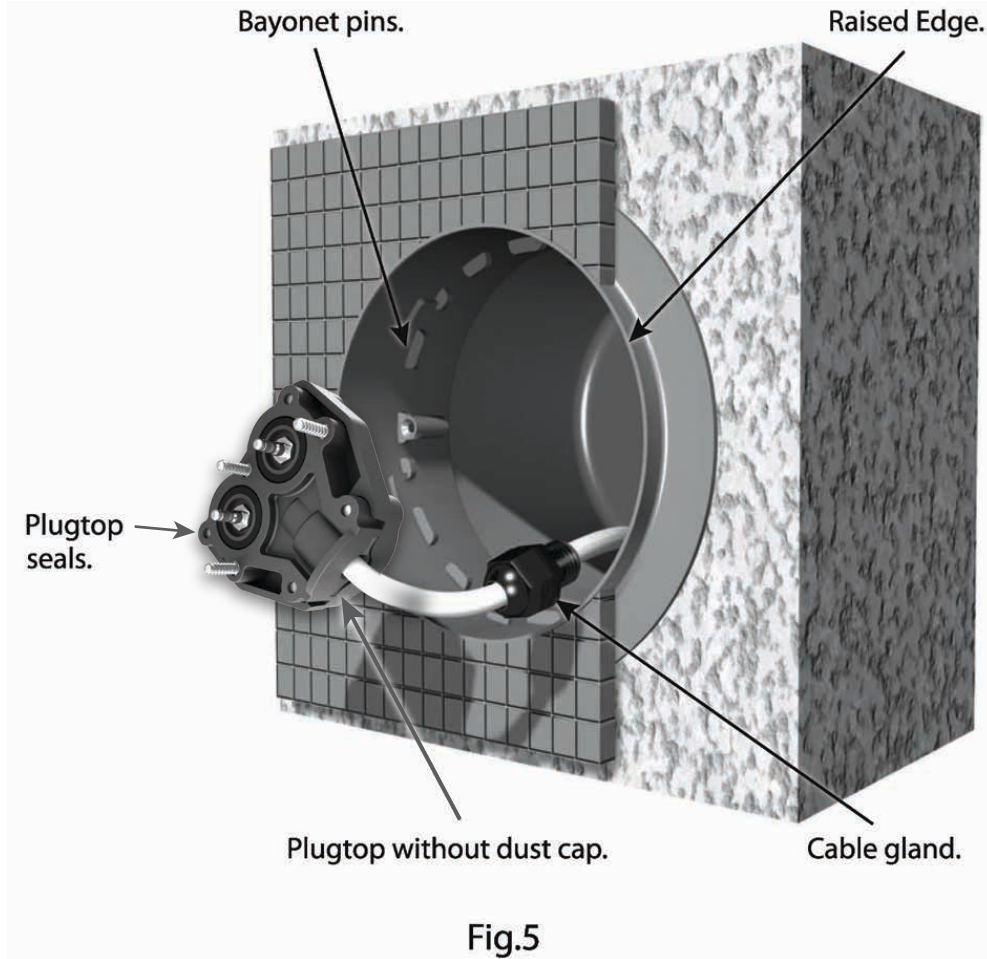


Fig.5

# 9

## INSERT CABLING

Using the draw wire, feed the cable from the pool interior, through the niche and conduit to transformer. Ensure that approximately 800mm of cable extends from the niche to the light, in order to allow the light to be lifted from the water to the pool surround for servicing. Insert and tighten the cable gland.

**CAUTION:** Do not install the light until after the pool has been acid washed. (Fig. 5)



# 10

## ASSEMBLE PLUG TO LIGHT HOUSING

Remove the dust cover from both the light housing and the plugtop. Ensure both plug top seals are present and located within their grooves. Attach plug top to light housing using the three fixing screws provided and tighten firmly by hand. (Fig. 6)



Fig.6

# 11

## ASSEMBLE LIGHT INTO NICHE

Coil the remaining cable into the niche (not around the light body) in a clockwise rotation. Continue turning in a clockwise direction until all cable is inside the niche and the plug top on the light is at the 12 o'clock position. Gently push the light back into the niche.

Insert the two fixing screws provided and lightly tighten.

**WARNING:** Ensure that the light cannot be turned on until it is fully submerged in water.

# INSTALLATION (FIBREGLASS POOLS)

## 1 CUT HOLE IN POOL WALL

Cut a circular hole of 151mm diameter in a flat surface approximately 300mm below the water line. Check that the niche will fit through the previously cut hole without any interference. (Fig. 1)

Remove niche from the hole before continuing to step 2.

**CAUTION:** Niche should be installed no deeper than 400mm below the finished pool surround, to allow for servicing.

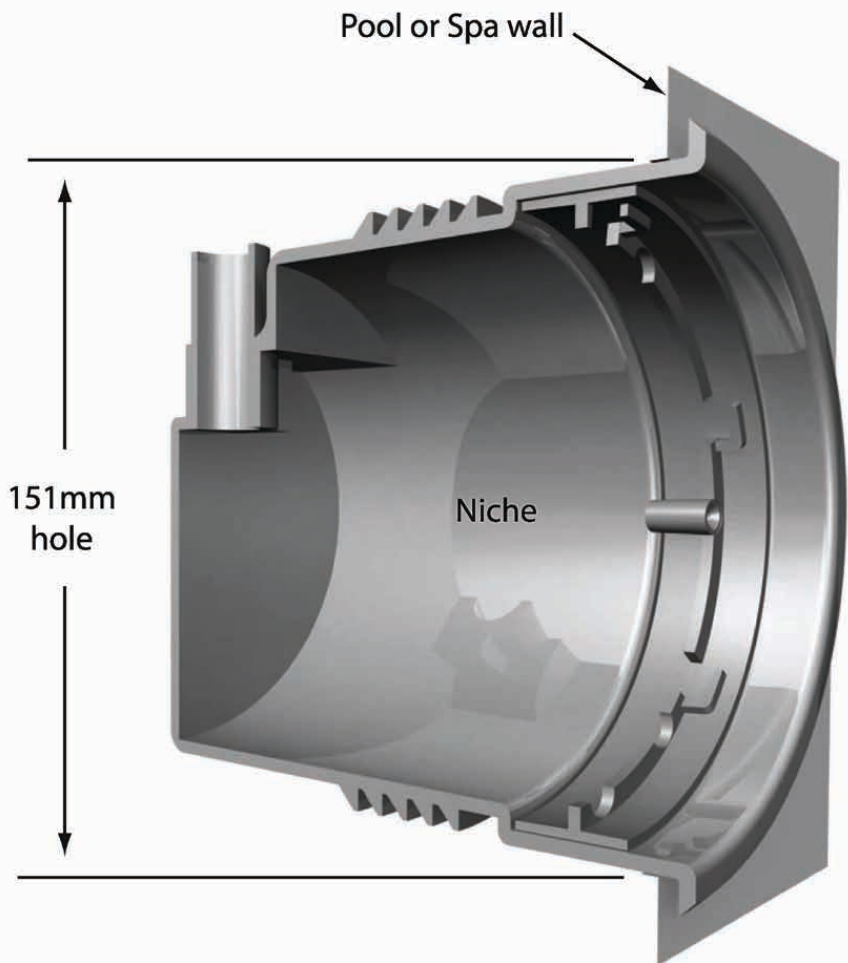


Fig.1

## 2

### ASSEMBLE NICHE TO POOL WALL

Run a small bead of silicone around the inner edge of the niche front lip before fitting the niche through the hole, ensuring that the conduit entry is at the top position of the niche. Apply a second heavy full circle bead of silicone around the niche on the outside of the pool or spa wall. (Fig. 2)

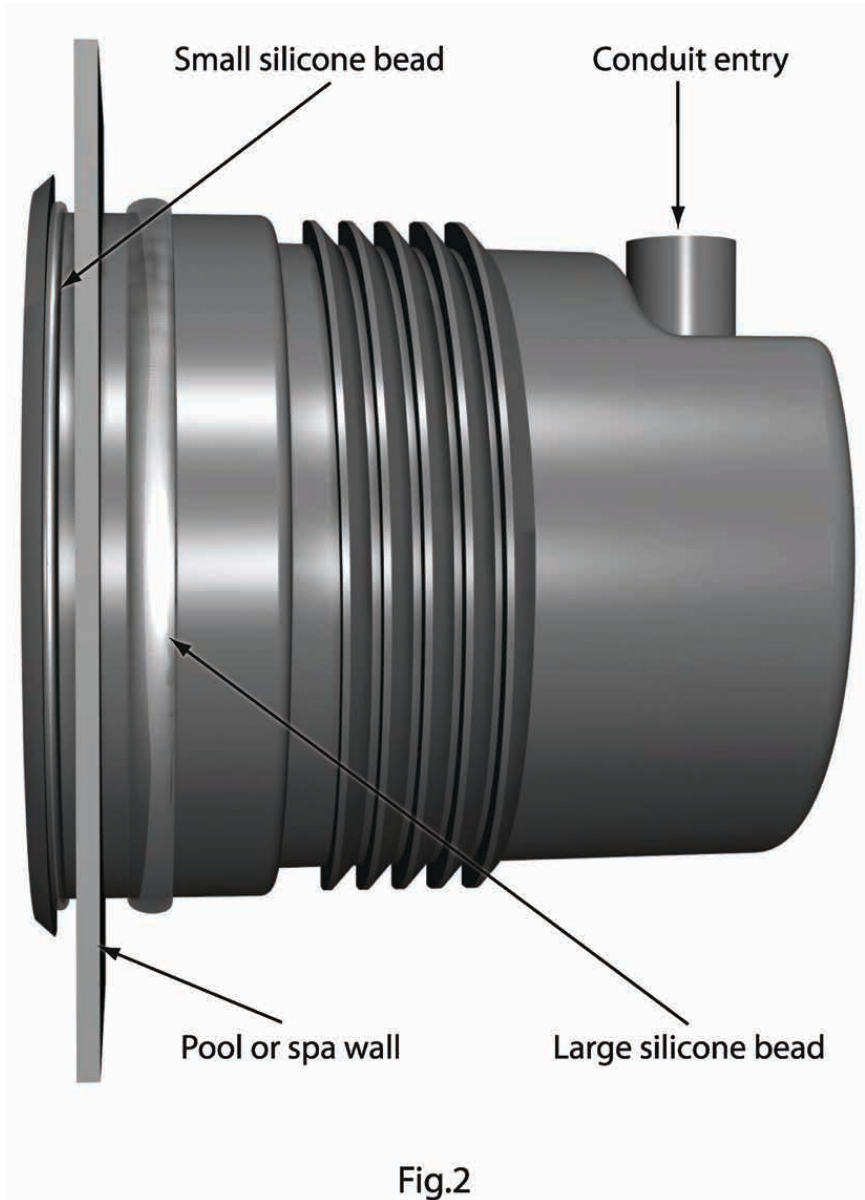
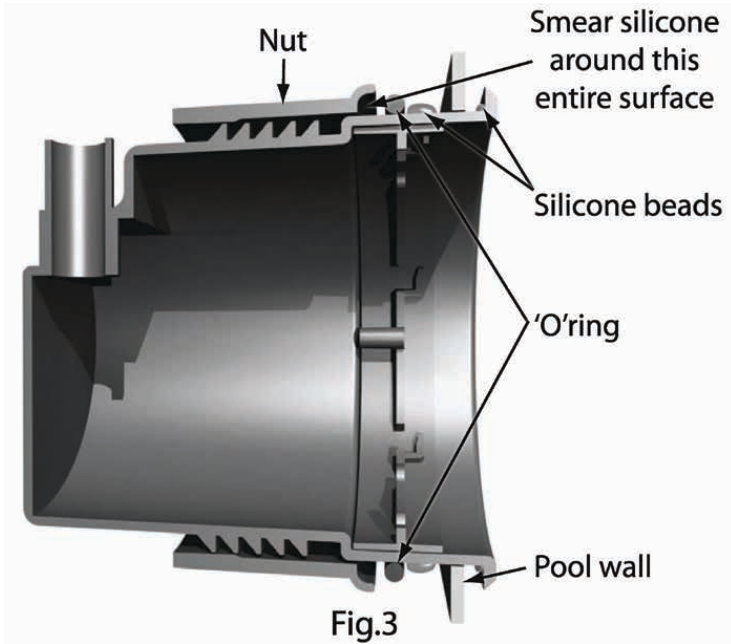


Fig.2

### 3

## FIT COMPRESSION RING

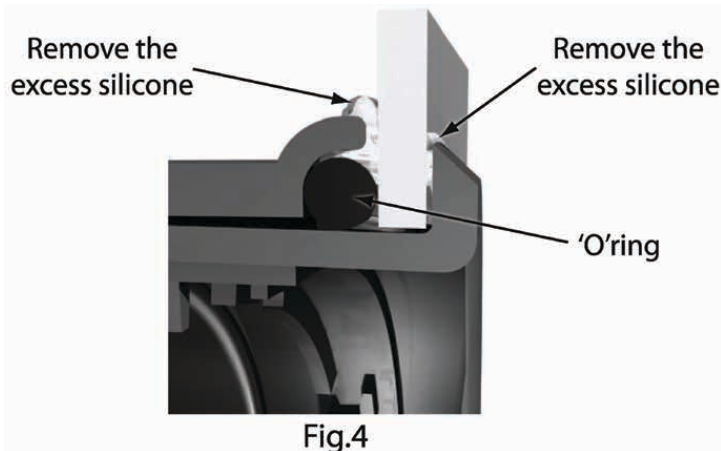
Lightly smear silicone in 'o' ring recess in the nut. Fit 'o' ring then the nut over the niche, allowing 'o' ring to push the silicone bead against the pool or spa wall. Tighten the nut firmly by hand only. (Fig. 3 & Fig. 4)



### 4

## CLEAN-UP SILICONE AND ALLOW TO CURE

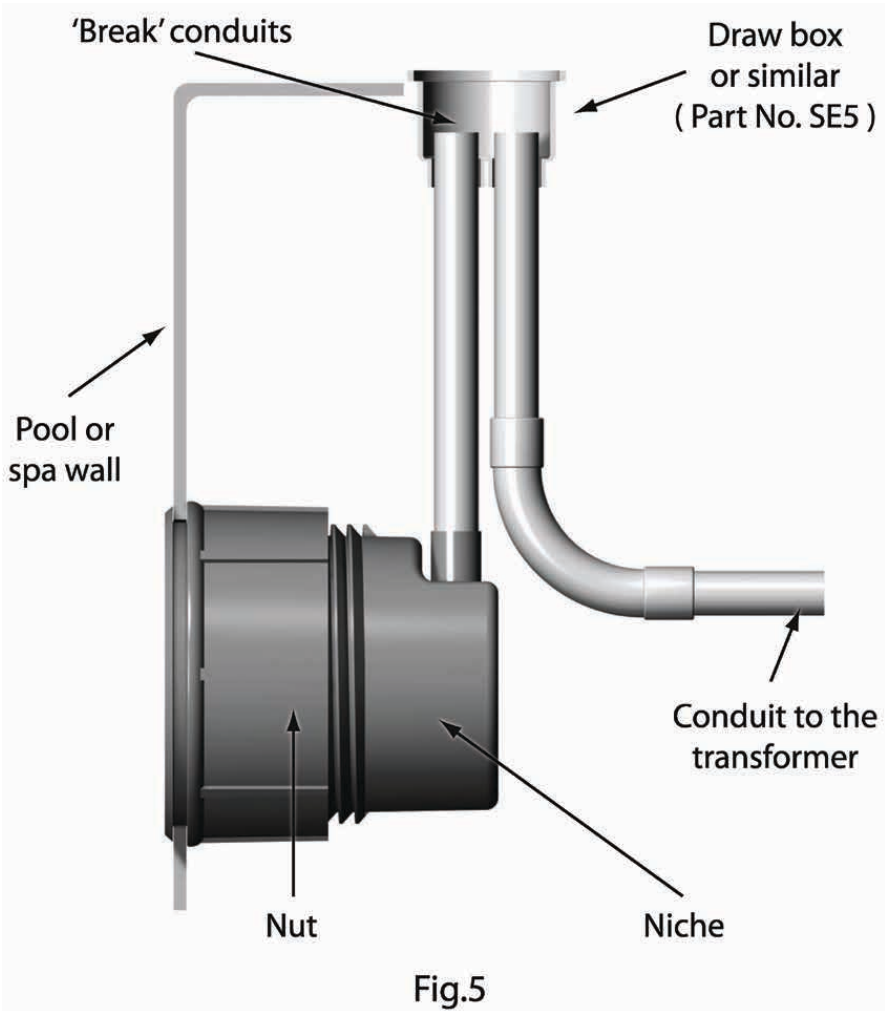
Clean excess silicone from front and rear of outer niche and allow it to cure (approx. 12 hours) before fitting the electrical conduit. (Fig. 4)



# 5

## INSERT AND GLUE 25mm CONDUIT INTO NICHE

Glue a length of 25mm electrical conduit into the top of the niche using PVC solvent cement. The conduit should extend to above the water level of the pool.



# 6

## INSTALL SECONDARY CONDUIT

Attach a second conduit to return below ground level and to the location of the transformer. Conduit should contain a draw wire and be covered with a draw box. (Part no. SE5) or similar, to allow access. (Fig. 5)

Ensure that conduits are 'broken' before returning below water level, to stop siphoning of water from the pool or spa.



**NOTE:** If your light is pre-assembled, please skip Steps 7, 8 & 9

## 7

### INSERT CABLING

Using draw wire, feed electrical cable from the pool interior, through the niche and conduit, to the transformer. Ensure that approximately 800mm cable extends from the niche to the light before tightening the gland, in order to allow the light to be lifted to the pool surround for servicing.

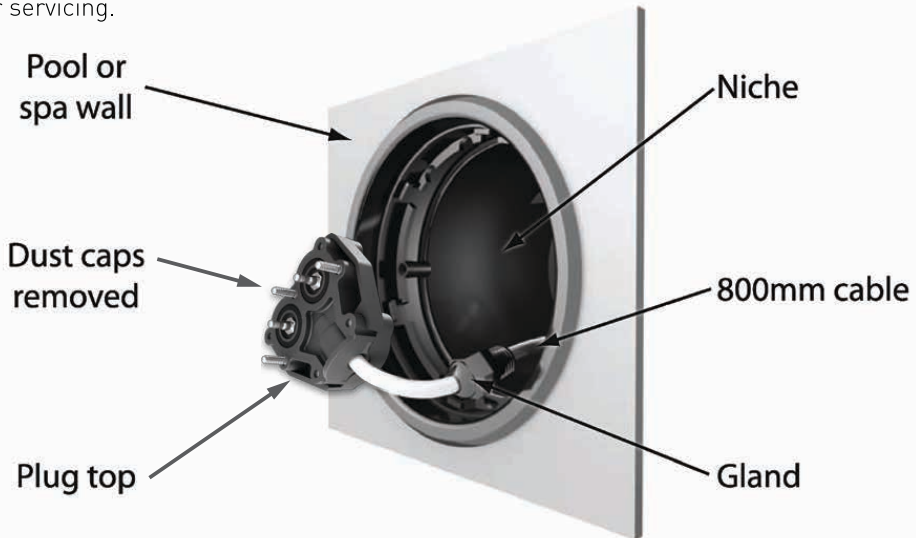


Fig.6

## 8

### ASSEMBLE PLUG TO LIGHT HOUSING

Remove the dust covers from the plug top and the light housing. Attach the plug top to the light using the three fixing screws provided. Tighten firmly. (Fig. 7)

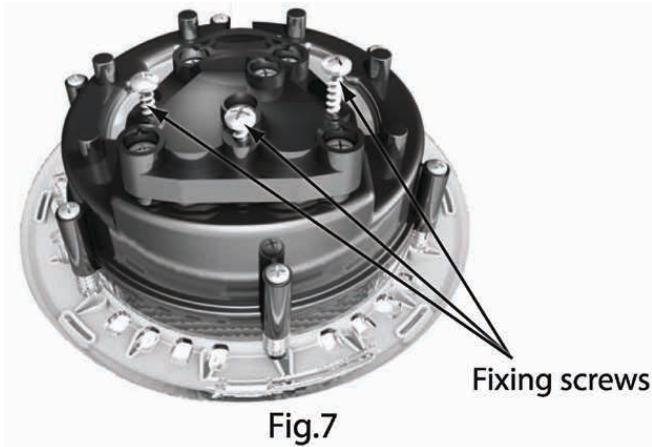


Fig.7

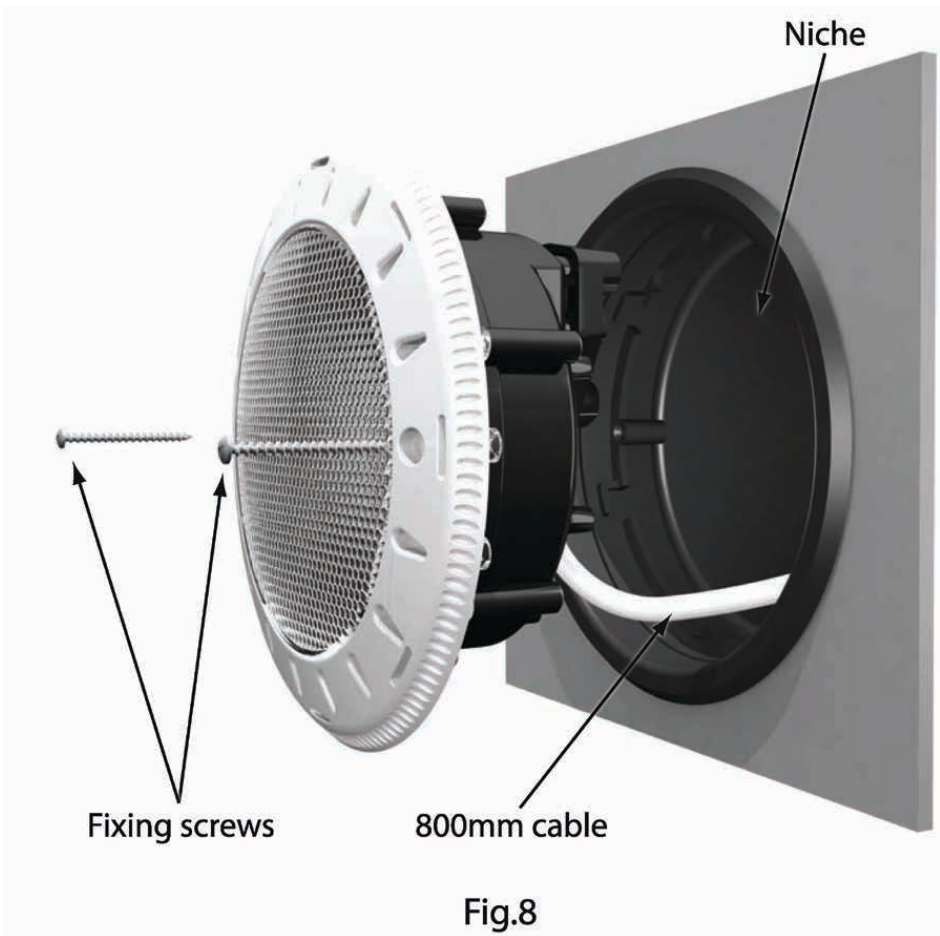


## 9

## ASSEMBLE LIGHT INTO NICHE

Coil the remaining cable into the niche (not around the light body) in a clockwise rotation. Continue turning in a clockwise direction until all cable is inside the niche and the plug top on the light is at the 12 o'clock position. Gently push the light back into the niche. Insert the two fixing screws provided and lightly tighten.

**WARNING:** Ensure that the light cannot be turned on until it is fully submerged in water.





**NOTE**

PLEASE STORE THIS  
MANUAL IN A SAFE PLACE  
FOR FUTURE REFERENCE



© COPYRIGHT 2018 SPA ELECTRICS PTY. LTD.  
ALL RIGHTS RESERVED