

SY 310 Series Underwater lights

INSTALLATION OF A LIGHT MODULE
TO THE WELD-IN FLANGE
(SUPRA AND EOS MODELS)

Please read ALL the following pages before attempting
installation to ensure complete understanding of what is required

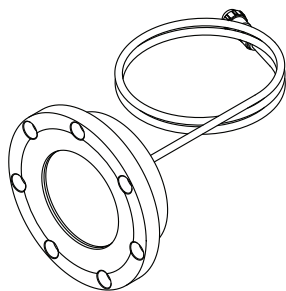
BEFORE YOU START

This document describes the recommended method for installing the light module of Lumishore SY 310 series lights in order to provide a water tight seal between the flange (previously welded in) and the light.

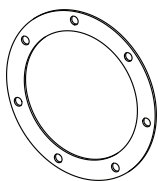
CAUTION

- DO NOT use any adhesives, sealants, gaskets, cleaning agents or chemicals other than those specified in this manual. Using any materials in the installation that are not specified in this manual will invalidate the warranty
- The light module is a factory sealed unit. DO NOT attempt to take the light apart or remove any bolts from the light
- The flange and the light must be electrically isolated - ensure the check described in the manual is carried out
- Cable end of pipe needs to be sealed according to class society rules

Parts Supplied



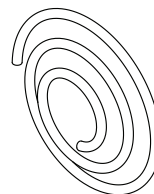
SY 310 Light
and Cable



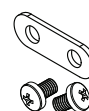
Light Sealing
Gasket



Light Securing
Bolt with
Insulating
Washer (x7)



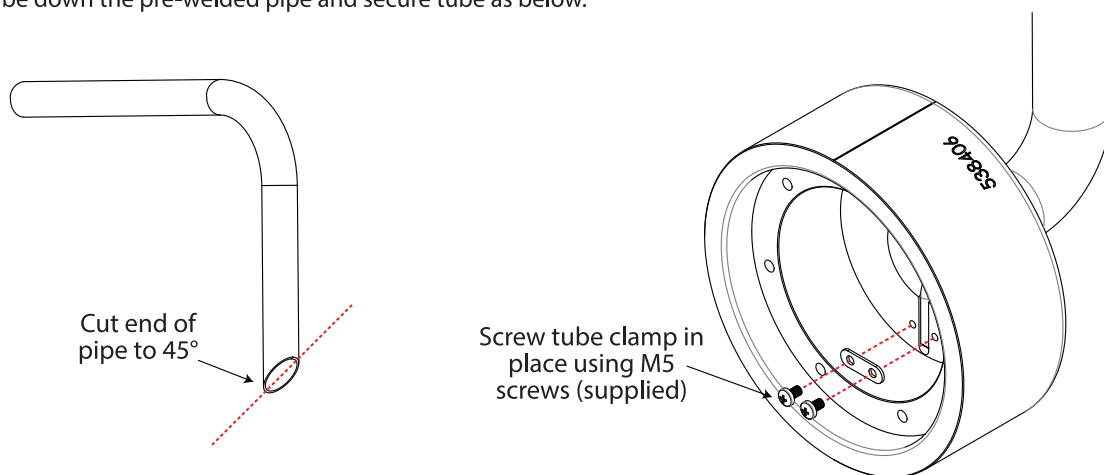
6mm Drain
Tube (5m)



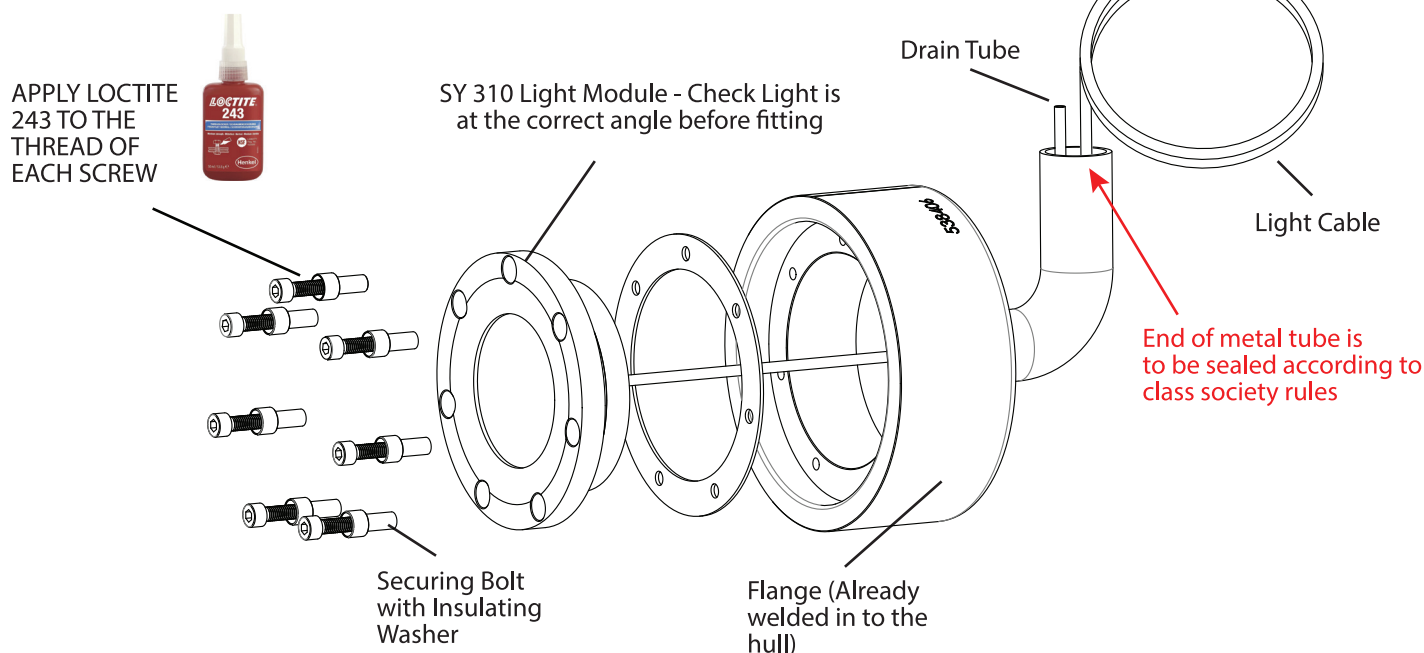
Tube Clamp
& Screws

LIGHT MODULE INSTALLATION

- 1) Clean the weld-in flange thoroughly with IPA, and a clean rag. Check the flange for any damage, debris or weld splatter. The gasket mating surfaces must be clean and flat before the light can be fitted.
- 2) The light **MUST** be fitted in the correct orientation - **ALIGN THE TOP DEAD CENTRE OF THE LIGHT TO THE LINE ON THE FLANGE** - check this before proceeding.
- 3) There are several different light modules, depending on the hull angle they are to be fitted to. **CHECK THE LIGHT MODULE IS THE CORRECT ANGLE FOR THE HULL POSITION** before fitting. The angle of the light will be clearly marked on the label on the back of the light.
- 4) Feed drain tube down the pre-welded pipe and secure tube as below.

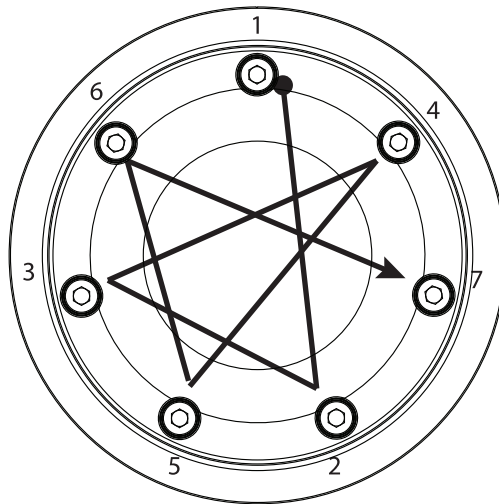


- 5) Place the light module gasket over the light and align the holes.
- 6) Feed light module cable through pre-welded cable tube by using a pull cord from the other side



- 7) Apply a small amount of Loctite 243 (supplied) to the thread of each bolt before fitting. Fit the light module to the flange, and secure in place using the bolts - **MAKE SURE** that the bolts have the insulating washers fitted.

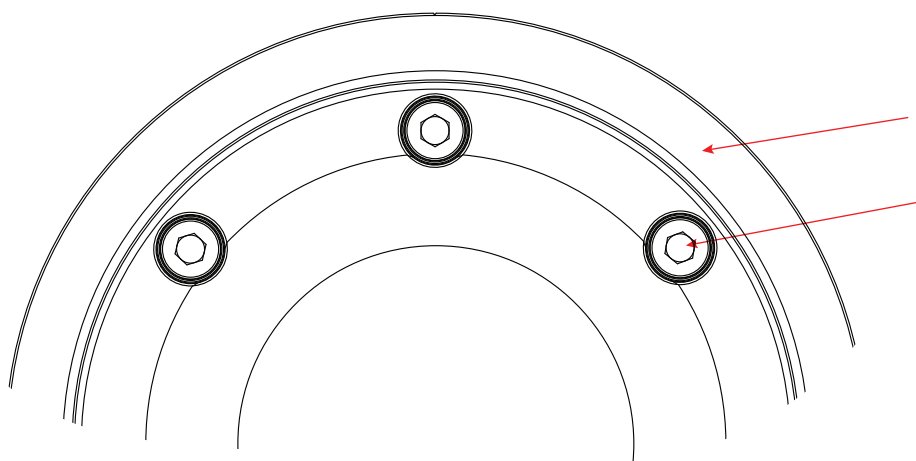
6) Tighten the bolts in a circular pattern (as shown in the diagram). Tighten the bolts half a turn at a time, then move on to the next bolt. USING A TORQUE WRENCH tighten the bolts to a torque of 15 Nm.



Tighten each bolt half a turn at a time until ALL bolts are fully torqued

7) The water tightness of the light fitting should be tested from outside the vessel. The test should be carried out using the yards normal method for testing water-tightness of seals - e.g. Ultrasonic testing.

8) Using a Voltmeter, set to check continuity, check there is NO continuity between the securing bolts and the flange. This means the light is electrically isolated. CHECK THE CONTINUITY FROM THE FLANGE TO EVERY BOLT.



Check for continuity between the head of **EVERY** light securing bolt and the flange

11) End of tube should be sealed according to class society rules.

