

## **Marine Exhausts 2016 Limited**

Marine Exhausts 2016 Limited recommends all exhaust work is carried out by a professional installer who has experience in exhaust installation.

For any further information or installation enquiries please feel free to contact us.

### **Water Separators**

Every engine supplier has different specifications for installation heights for separators. Ensure that the inlet and outlet pipes are of a diameter that back pressure isn't increased and that there is sufficient height for the separator to drain the water easily.

Note: Sail boats should allow for the boats/vessels heeling when installing.

### **Types of Mufflers and where to install**

**Inline Muffler** – is suitable when there is an exiting system that has no surge back issues and limited height for a new muffler install

**Standard Lift Type Muffler** – is suitable for most applications as long as heights are not an issue

**Dual Chamber Muffler** – is suitable when over all space is limited but not height this means the 'riser' is built into the muffler shape

### **Muffler Mounting**

Mufflers should be mounted on a flat level surface preferably with some rubber matting placed under the base to help reduce vibrations

### **Riser Loop – height**

A minimum of 350mm from load water line to the bottom of the riser loop is recommended

### **Under Water Exhaust Installation**

An 'idle by pass' is necessary for all underwater exhausts. This prevents hydraulicing of sea water into the exhaust system thereby flooding the engine.

Underwater exhaust parts 'foils and tubes' are designed to be weaker prior to installation. This is so the parts of the foil or pipe that will be protruding from the lower hull will shatter if impacted by debris while the boat/vessel is moving.

Once glued/glassed into place these parts should on the inside of the vessel be reinforced on all joints and surfaces (at least 4 x DB cloth covers or similar). We recommend installation by professionals only.

### **Joining Pipes to Pipes**

Cut ends of pipes should be clean and grease free. Apply car bog or similar product to one of the pipe ends and press and hold firmly against the other pipe end. Use a heat gun to warm the bog for a fast set up time, once the bog has set using a grinder sand up the join area 100mm either side of the join ready for fibreglassing. We recommend using DB fibreglassing tapes (x4) per join wrapped tightly around the join area. Then rolled out using a compression roller, once dry scuff up the join and apply flowcote – or another layer of resin.

### **Hump Hose Joins**

Ensure that there is enough pipe for the hose to sit on (80 mm min) using detergent or similar (no grease or sealants) apply some to the inside of the hose and slide the hose onto the pipe. If it is still tight soaking the hose end in hot water may help.

Once the hose is in place 2 x hose clamps or bolt clamps per join is recommended. Once tightened – check the clamps once the system is 'run up' to ensure the clamps are tight enough.