

## Trogear Bowsprit Side Mount Installation Manual

*Install with through hull procedure see pages 3&4*

**Congratulations on your purchase of the Trogear Bowsprit** which can be installed on most sailboats. The installation of side mounts is similar to any other boat hardware, but ***please read the instructions thoroughly first, and if in doubt contact us or your boat rigger with any questions. (Install is best accomplished with two people.)***

The side mounts have spherical bearings which allow the alignment of the stub shaft with the bowsprit attachment holes.

**NOTE:** The bowsprit can be removed from the sidemounts at anytime by unbolting the two attachment bolts

### Materials and Tools Required (not supplied)

- Six 5/16" (8MM) SS Bolts, 6 nuts & 12 washers, Backing plates (if needed) (*Bolt length depends on the thickness of the hull*)
- Marker or pencil
- Tape measure
- Masking tape
- Allen wrench
- Drill Bit (5/16" or 8mm)
- Drill Motor
- Structural Epoxy –West System Six10 or similar (if needed)
- Marine grade sealant such as 3M Marine 5200 Sealant.



Spherical Bearing

Stub shaft assembly - washer and 5/16" -18 bolt.  
***\*Secure with medium strength Loctite®***

## **Procedure**

*(Two people recommended for the install)*

### **Determine location of the Attachment Holes:**

Attach the mounts to the bowsprit using the stub shafts and bolts provided.

Apply masking tape on the hull to protect it against damage.

Position the assembled sidemounts and bowsprit on the hull. ***Make sure that the mounting locations are symmetrical from side to side and the sidemounts are flat against the hull surface.*** (FIG: 1)

Mark the location of the holes on the hull.



Fig. 1: Place bowsprit with mounts attached on the hull to determine location

### **Drill the Holes**

Drill the 6 holes using a 5/16" or 8mm drill bit.

**Note for cored hulls:** The mounting holes should be reinforced with structural Epoxy surrounding the hole periphery area. Use large size washers and/or backing plates inside the hull (if needed).

### **Attach sidemount/bowsprit assembly:**

Position the sidemount/bowsprit assembly on the bow. Insert the 6 bolts with washers under the bolt head. Be sure to seal the 6 bolts with the marine grade sealant or your preferred sealing method.

From inside, slide the large sized washers over the bolts and tighten the nuts.

***Remember that the bowsprit can be removed from the sidemounts at any time.***



## **Installing Trogear side mounts together with a through hull tube for AS-40 or AS-50 bowsprits**

When installing the side mounts together with a through hull installation, some additional steps are required in addition to our standard side mount install process. **Please read the following instructions – do not hesitate to contact us with any questions.**

**You will need assistance and good access to the bow from outside. Also, the following:**

- Six 5/16"(8MM) SS Bolts, 6 nuts & 12 washers,
- Backing plates (if needed) (Bolt length depends on the thickness of the hull)
- Marker or pencil
- Tape measure
- Masking tape
- Allen wrench
- Drill Bit (5/16" or 8mm)
- Drill Motor
- Structural Epoxy –West System Six10 or similar (if needed)
- Marine grade sealant such as 3M Marine
- 5200 Sealant.
- \*short shaft provided in shipment – to be used for the install only
- straight edge or straight piece of wood or metal at least 500mm long

### **Determining the mounting location for side mounts:**

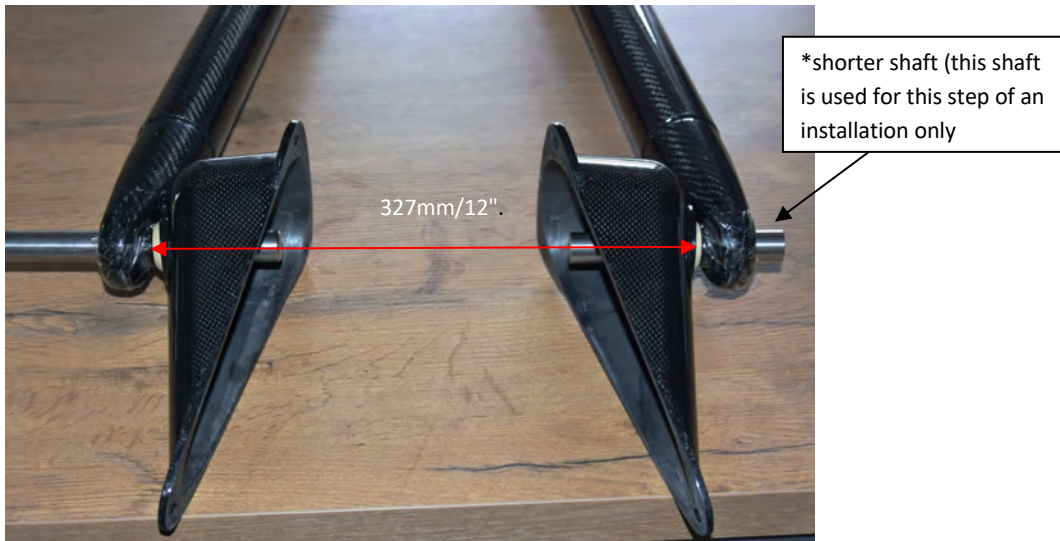
(note - the inside width of the sprit is fixed 327mm/12.9" - therefore the side mounts need to be positioned so that the spherical bearing outer contact surfaces will have the same width-see *picture below*)

- Insert the full length shaft into one bowsprit end and into a side mount spherical bearing. Using the \*shorter shaft provided, do the same on the other side (this \*shorter shaft is only used for this step of the installation)
- To prevent dropping the shafts or side mounts overboard during the dry fitting, use the blue masking tape to tape the shafts together with the side mounts.
- Dry fit the sprit and the mounts on the bow, making sure that the sprit is aligned with the boat axis, and parallel with the boat deck. Be sure to position the side mount mounting surface to fully contact the hull.
- On both sides, mark the location of the 3 side mount attachment holes with a pencil. The mounting locations on both sides should be symmetrical - if not, repeat previous step as necessary.

### **Find the center for the through hull tube:**

- Remove the sprit and position the side mount to the marked location on the bow (Your assistant should hold it in place, or tape it securely to the boat with masking tape to make sure that the mount will stay in place). Insert the long shaft into the spherical bearing and align it parallel to the deck and perpendicular to the boat longitudinal axis; use a straight edge (or similar) placed on the deck to help with the alignment.
- Remove the shaft and keep the side mount taped to the hull. Through the center of the bearing, mark the location of the through hull tube on the hull. Do the same on the opposite side. (TIP: to make sure that the centers for the through holes are placed correctly, use a straight edge (straight wood plank) placed perpendicular across the deck and align the centers of the through holes on each side. It is important that the centers are in alignment.)
- **Now follow standard install instruction for the through hull tube.**

**NOTE: The ends of the installed G10 Tube will protrude out from the hull. Trim the tube so it is flush with the sides of the hull.**



### **Side mount installation Procedure**

#### **Drill the Holes**

Drill the 6 holes using a 5/16" or 8mm drill bit.

**Note for cored hulls:** The mounting holes should be reinforced with structural Epoxy surrounding the hole periphery area. Use large size washers and/or backing plates inside the hull (if needed).

#### **Attach side mount/bowsprit assembly:**

Position the side mount/bowsprit assembly on the bow. Insert the 6 bolts with washers under the bolt head. Be sure to seal the 6 bolts with the marine grade sealant or your preferred sealing method.

From inside, slide the large sized washers over the bolts and tighten the nuts.

Remember that the bowsprit can be removed from the side mounts at any time.