

A Chicagoland / Lake Michigan AS-40 Tale – 2016

Submitted by Jay Grizzell, *Shoe String*, a 1989 Olson 34



Port Side View

Mid-December of 2015 is when the initial discovery of Trogear Marine Products occurred. Unfortunately, the mists of time obscure how this fine company was stumbled upon. It is remembered as a ‘Eureka!’ moment, because the pivoting carbon bowsprit (AS-40, in this case) appeared to meet large percentages of an array of criteria that a sprit for a 1989 Olson 34 (*Shoe String*) must meet:

- Functional
- Affordable
- Aesthetically pleasing
- Easily installed
- Durable
- Uncomplicated

Many conversations ensued, both verbal and via email, with many questions answered and some leading to additional questions. Eventually a new AS-40 was in hand, prompting an unsettling question “uh oh, now what?”.



The moment of truth! Drilling!

The installation guidelines within the Trogear Marine Products site were reviewed and adapted to the particular demands of an Olson 34.

With assistance from the 'sweat equity crewmembers', we measured, dry fit, measured again, taped and prepped for the most important (and nerve-wracking) procedure: drilling (2) 1" diameter holes into the hull. The dry fit procedure verified where the AS-40 would mount relative to the toe rail. Crawling, inverted, inside and past the forward bulkhead to confirm there were no obstructions to the intended location was an important fail-safe.

We 'measured thrice and drilled twice', using a brand new 1" diameter drill bit that included a small pilot auger. We used a straightedge to align the drill, which also had a level. The hull on an Olson in this area of the bow is only @ 5/16" thick and offered little resistance to the drill bit.

much sanding was needed.

A Dremel with a sanding drum was used to clean and expand the 1" diameter holes. Not

Index marks on the exposed 1" D fiberglass tube were drawn, assuring that the exposed port & starboard dimensions were equal.



Prepped and ready to epoxy

Prior to installation of the tube, the inside cavity of the bow was illuminated so the fiberglass area around the 2 holes could be wire brushed and wiped with acetone, so the 1" fiberglass tube could be secured to the hull by additional "peace of mind" strips of epoxy impregnated fiberglass tabbing.

Epoxy was mixed, the 1" D fiberglass tube inserted and epoxied into position and finished with a 'finger fillet' both inside and out. Crawling into the bow to fillet the interior took more time than the entire exterior procedure.

Once cured, the interior tabbing was completed. The exterior union received a treatment of structural fairing



Tabbing of tube within the bow cavity

material, sanded to a 220 grit and the area sprayed with a matching gelcoat. Perhaps overkill, but the intent was to make the entire finished product appear to be OEM.

The U-bolt location for the bobstay was verified, 2 holes drilled and the Wichard Watertight U-bolt installed.



U-bolt location prepped and installed

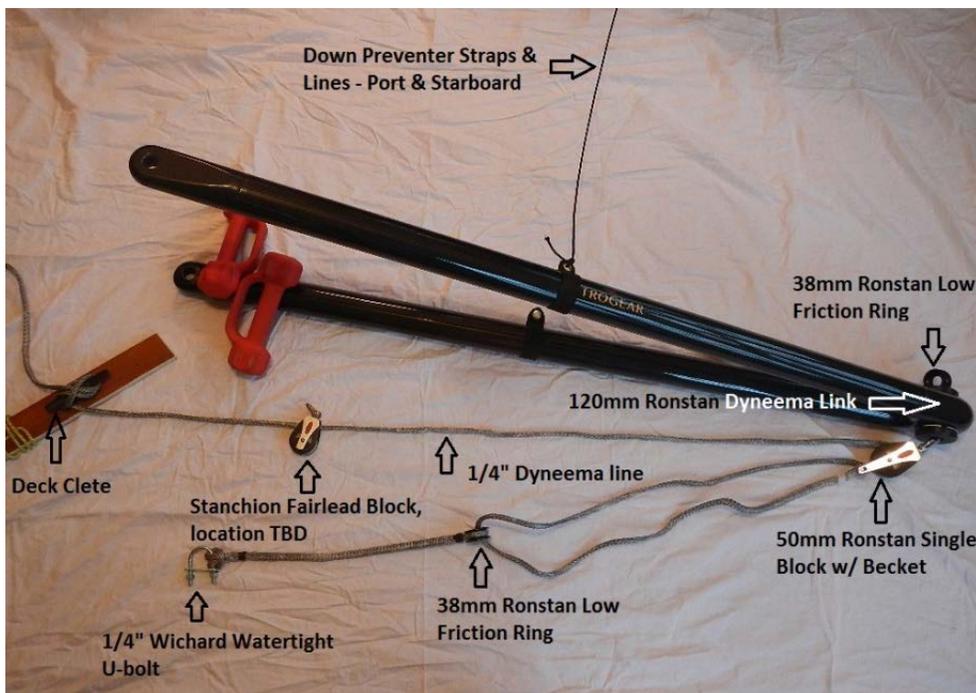
Countless hours were spent to design, verify and procure the components necessary for the bobstay, as each boat has different needs and bow designs. It's believed the design arrived at in this case combines simplicity, ease, function and economics.



Top and bottom black marine board donuts to buffer the friction ring (top) and shackle (bottom)

Black donuts of marine board were fabricated to prevent damage to the sprit from contact by the Ronstan Low Friction rings. These were installed, this season, with butyl tape. Next season they may be secured via some form of adhesive caulk, in an effort to hold them in a fixed position.

The initial reaction? 'Dock walkers' are asking questions. We've seen and felt an improvement, especially ease of inside gybes, on the water and haven't had an opportunity, yet, to see how this AS-40 impacts the staysail. We'll know soon, as the Chicago to Mackinac begins in 8 days.



AS-40 and bobstay components as built 2016



Bow view