



A Guide To Rigging The Classic Lido 14
by
John Papadopoulos

The following guide describes the basics of rigging a Lido 14 sailboat. If you need more detail, please don't hesitate to contact the author via E-mail at jakp@mindspring.com

Plugs:

Though not rigging related, there are 4 plugs on most Classic Lido 14s. The primary plug is usually in the transom but can also be found forward of the centerboard trunk in very early models. The purpose of this plug is to drain the cockpit. Please install this from the inside of the cockpit!

Lido 14s built prior to about 1962 only had flotation via the seats, which are air tanks. After 1962, an additional air tank was fitted in the bow of the boat – also called the bow tank. All air tanks have a hole in them to drain water that may collect inside the tank. The holes are plugged with ordinary stopper corks. Check the tanks for water by tipping the bow upward and downward and seeing if any water flows out.

Always remove the air tank corks when going up or down in altitude so that the pressure doesn't build up in the tanks.

Stepping the mast:

First, always inspect the shrouds for damage (see Bits & Pieces reference below)

Pass the lower end of each shroud wires thru the deck fittings located approximately 1' aft of the mast near the gunwales. Place the terminal fitting on the end of the shroud wire inside the channel of the shroud chain plate and fasten with a 3/16" diameter clevis pin. Do not use a threaded screw as anything other than an emergency substitute for the clevis pin. Do not use quick releasing pins either – as they are prone to failure.

Fasten the upper end of the mast, using a #10 stainless steel machine screw (aka shroud bolt) and a locking nut, to the mast. The holes for the shroud screw are located about 52" from the top of the mast tube.

With the mast set so that the leading edge is up and the base of the mast nestled in the mast hinge (that means the head of the mast is sticking out beyond the transom), pass a 5/16" stainless steel bolt through the hinge, through the mast, and into the opposing side of the hinge. Tighten so that the bolt is firm (won't come out on its own) but don't tighten to the point where you start to bend the hinge sides inward. The length of the bolt should be such that there isn't any threads protruding from the far side of the hinge.

I recommend that you secure the boat so that you can safely walk in and round the cockpit. Once inside the cockpit, lift the mast upward. Once vertical, secure the forestay to the bow fitting and (and only then) let go of the mast. This can be done by one person if they are careful with their footing as they step from the cockpit up onto the bow of the boat. This task is most often completed with two people – one to lift and one to attach the forestay.

Advanced sailors of the Classic Lido 14 use another means of stepping that avoids having to get into the cockpit that works when the boat is on a trailer – however it is somewhat dangerous. This technique calls for one person to stand near the transom and to lift the mast upward. Another person checks that the shrouds and other rigging lines are free and clear of snagging, grabs the forestay, pulls on the forestay, and tells the person at the transom to toss the mast up into the air. The person holding the forestay continues to pull so that the mast rotates into its final vertical position. He then attaches the forestay. If either person doesn't to their job well, the mast will crash downwards. So don't do this until you have it all figured out (no tangles, etc.)

It is always best to step the mast before putting the boat in the water!

Use the reverse of the sequences to lower the mast.

Installing The Gooseneck:

There are two versions of gooseneck hardware: the Classic gooseneck slide and the 6000 Series system. The classic gooseneck consists of a very weird looking piece of metal that slides up and down the mast track. It probably has several hooks on it though many have had the hooks removed. The 6000 Series gooseneck is fabricated from stainless steel and forms a universal joint that is permanently affixed to the mast.

Regardless of gooseneck vintage, the proper position of the gooseneck is such that the top edge of the gooseneck is at the height of the top edge of the black band on the mast. If you don't have a black band on the mast, there should be a 3/4" wide one (made from black electrical tape!) positioned so its top edge is precisely 203" from the top of the mast extrusion. This puts the top of the band approximately 15" up from the bottom of the mast.

If you have a classic gooseneck, it is very wise to rig it so that it stays at the desired altitude. There are two methods to achieve this: 1) Insert a 3/8" wide dowel (12" long) into the mast track and tap it down towards the base of the mast. This will serve as a pedestal to keep the slide from dropping down. 2) Insert a screw (or similar) into the mast track to stop the slide from dropping down. The dowel is preferred for the simple reason that you don't have to drill holes in your mast.

Main Halyard:

Halyard is typically part rope, part wire. Attach shackle to headboard of sail and hoist sail up track. Take the loose end and cleat to the starboard cleat built into the side of the mast hinge. Put the excess halyard into the tray.

Jib Halyard:

There are two common configurations: Single and multiple purchase.

The more common of the two is the multiple purchase system. It consists of a halyard which is typically part rope, part wire, and a stainless steel block joining the two. For this configuration, there should be a cleat mounted on the side of the mast somewhere near the bottom of the mast - port side. If there isn't a cleat, you can't rig multiple purchase. If there is no cleat, rig in the same manner as the main halyard. If there IS a cleat and you have the halyard with the block, rig as follows.

Haul the jib up. Pass the loose (tail end) of the halyard through the block, thereby forming a loop. Hook the loop over the port side cleat on the mast hinge. Pass the loose end through the cleat mounted on the port side of the mast. Tighten until the wrinkles in the luff of the jib are gone and then ease just a tiny bit (do this when sailing close hauled).

Advanced sailors use advanced synthetic lines (e.g. Spectra) as a wire replacement in the jib and main halyard.

Cunningham/Downhaul:

There are two basic systems: Ancient and modern. The ancient method simply involves passing a rope (usually attached to the mast near the base of the mast) over the lower "horn" or hook of the gooseneck slide and running the loose end of the downhaul through a cleat (usually mounted on the starboard side of the mast).

This system of rigging presumes you have the classic gooseneck slide WITHOUT the features described above to prevent the slider from falling. If this is what you have, the rigging of the downhaul requires that you hook the tack of the main onto the funny hook at the top of the slide. Thus, the sail will hold the boom and gooseneck up! The downhaul would then pull down on the slide, thereby pulling down the sail! Yuck!

Rig your gooseneck so it doesn't drop down (see above). Don't hook the sail to the gooseneck slide. Instead, pass the downhaul line through the tack grommet and then back through the cleat previously mentioned. Pulling the downhaul had no impact on the gooseneck or boom.

The classic gooseneck is available in two versions: aluminum and chrome plated bronze. Both are subject to breaking and both are subject to being lost (or stolen). The mechanical connection offered by the classic gooseneck is antique at best. Therefore, most advanced Lido 14 sailors have switched to the 6000 series gooseneck.

Jib Sheets:

Use 32' of 1/4" line. Either permanently whip the line to the jib clew grommet or tie the rope to the grommet. Pass the port side of the sheet around (i.e. outside) the port side shroud, through the jib fairlead (probably on a car that travels along a track on the gunwale). Repeat for starboard side. If you have movable jib cars, sail with them in the maximum forward position.

Advanced Classic Lido 14 sailors replace the track and car system with a fixed fairlead and cleat system.

Main Sheet: Single purchase (simplest) rigging consists of tying the sheet to the traveler car, going up and over the aft mainsheet block on the boom, going forward to the forward mainsheet block on the boom (about mid point of the boom), going down to the mainsheet block and cleat. If you desire a 2:1 purchase, install a block on the traveler car and a block with a becket at the aft boom end. Start the sheet at the becket, go down through the traveler block, up and over the block (with the becket) and forward as previously described.

Advanced Classic sailors replace the traveler track and car system found on Classic Lido 14s with a rope bridle system. In addition, you should shop for a mainsheet that is comfortable in you hand and low in water absorption. 5/16" or 1/4" Yale Lite rope is a fine choice for Lido 14 main sheets.

Vang:

Lots of variations exist. The most basic version consists of a line that starts out at a cleat on the port side of the centerboard trunk, goes down toward the floor in front of the trunk, passes through a block, turns up and connects to a bale on the boom. Better systems put multiple purchase into this system. A good system is as follows.

- 1) Install a double block down near the floor.
- 2) Install a double block onto a 3' length of line
- 3) Attach the free end of the 3' line to the vang bale.
- 4) Route a vang sheet from the cleat, down through a lower sheave, up and through an upper sheave, back down through the 2nd lower sheave, back up through the 2nd upper sheave, and terminate at the floor (most Classic Lido 14's have a wood "nose" piece in front of the trunk that has a few holes for doing just this.). If you don't have a place to terminate the line, install a double block with a becket and terminate on the becket.

The same system works with less purchase (ie. change double blocks to single blocks).

Note that the Lido 14 boom is really weak. A strong vang may lead to breaking your boom!

Advanced Lido 14 sailors install (per Class rules) a stiffener in the boom to keep it from breaking. In addition, they rig more complex configurations so that the vang line is more easily reached by the skipper when sailing off the wind (e.g. to a swivel cleat on the top of the centerboard trunk.)

Outhaul:

There are two basic versions: single and double purchase. The single purchase consists of a single line with a snap shackle on the outboard end. Pass the line through the loop of the outboard boom fitting. Go forward along the bottom edge of the boom to a cleat. The 2:1 version has two lines. The line with the shackle terminates with a small block about 4' inboard from the outboard boom end. The control line starts at the vang bale, passes along the boom, around the small block, and then goes back forward along the boom to a cleat.

Advanced sailors are moving to 3:1 purchase internal outhauls.

Centerboard Up haul:

The centerboard is rotated up into the trunk by a single line. It is typically rigged by taking a line from the floor of the boat, up through a block on the end of the centerboard arm (we're assuming a Classic Lido 14!), back down to a single block near the floor (often mounted to that "nose" piece described earlier), then back up to a cleat on the starboard side of the centerboard trunk.

Centerboard Shock Cord:

Tie a 6' shock cord (3/8" or 1/4" diameter) in a loop that passes through the eye strap (or opening) on the tip of the centerboard arm. Pass the loop around the back lip of the centerboard cap (you have to have the mainsheet uninstalled to do this if you tie the loop first). Adjust the length of the loop so that the shock cord can still stretch when the board is rotated up into the trunk yet still provides sufficient tension to keep the centerboard in the down (vertical) position when sailing. The purpose of the cord is act as a shock absorber in the event you run aground. If the cord were replaced with an ordinary line, something would break if you ran aground and the board couldn't rotate out of the way.

Hiking Straps:

Rig them between the transom and braces forward of the seats. Conversely, avoid using hiking straps that connect to the centerboard trunk. Hiking out on those types of straps will weaken the trunk.

The best braces consist of 1"x1" square wood with a turned end to form a peg. The peg end is fitted into a matching hole drilled in the wood siding of the trunk exactly such that the brace will fit in the hole and rest squarely on the forward surface of the seat (near where the shrouds attach to the chain plates).

With braces installed, connect straps from the braces to the transom. If you prefer independent crew & skipper straps, install the skipper straps between the transom and the centerboard trunk knees (those angle brackets on the side of the trunk). Install crew straps from the knees to the braces. When attaching to the transom, install a stainless steel eye strap (if one isn't already present) near the junction of the transom and the hull.

Attaching The Boom

To attach the boom to a classic gooseneck, you twist the boom so that the inboard end fitting (a ring of sorts) passes over the top hook of the gooseneck. Do this after you have stepped the mast. It is often best to delay attaching the boom until you have launched the boat because the boom can flop around while launching (it's too long to rest in the cockpit when attached to the mast so it has tendency to slip over the edge of the boat)

Attaching the Rudder & Tiller:

Presuming you have a gold aluminum rudder casting and the tiller removed from the casting, place the lower rudder pintle into the gudgeon located near the bottom (outside) edge of the transom. Rotate the casting forward so that the two "ears" pass on either side of the rudder pintle (a funny "bow tie" shaped metal fitting that vertically spans the opening of the Classic Lido 14 transom). Hold the casting in place and insert the tiller between the "ears". Install a ¼" stainless steel bolt through the holes in the casting "ears" and the hole in the tiller. Use a wing nut to hold the assembly together.

As the rudder casting is (once again) out of production, we have resorted to a number of alternatives. Most are based on the design of using simple rudder pintles and gudgeons to directly attach the rudder foil to the transom. This requires a new fitting to attach a tiller to the rudder too.

Advanced sailors prefer to eliminate the casting as substitute systems offer reduced weight, lower replacement cost, smoother operation (better mechanical compliance), and use of off the shelf parts.

Summary:

The Lido 14 dinghy is one of the simplest double-handed boats to rig. There are many small variations found in the field, some of which I've addressed here. More importantly, there are many safety and reliability issues that you should become acquainted with. We suggest that you read "Bits & Pieces" found on the Lido 14 website (www.lido14.org).

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About DoubleWave and John Papadopoulos

DoubleWave, the leading independent supplier of parts and service in the Lido 14 community, is owned and operated by John Papadopoulos.

DoubleWave is an authorized dealer for W.D. Schock Corp., the builder of the Lido 14 but extends service and parts well beyond those of a traditional boat dealer. In many cases, DoubleWave innovates solutions to problems in both the classic and 6000 series boats and has, in several cases, become a preferred supplier of parts and technology to W.D. Schock Corporation.

Outside of DoubleWave, John is very active in many dimensions of the sport of sailboat racing – from organizing local racing to serving as an International Measurer at world championships to writing on various topics of one-design sailing.

To learn more about DoubleWave, please visit www.doublewave.com