About the Lido 14 Centerboard

Since its inception in 1958, there have been at least three different models of classic centerboard offered by W.D. Schock Corp. and at least three different production models offered by third party builders. There are countless numbers of custom centerboards too. Virtually all of them comply with the rules of the Lido 14 Class Association which provide for a centerboard that is at most 60" long (tip to top of head) with a metal arm attached and a pivot hole located approximately 50" up from the tip and 1-7/8" in from the leading (forward) edge of the centerboard. In all cases, these centerboards hang inside the centerboard trunk via a metal hanger assembly, which provides a shaft that is passed thru the pivot hole.

Early model centerboards had hangers fabricated from brass straps and brass rod. The metal pieces were assembled onto the centerboard and pressed together. This model of hanger cannot be removed without destroying it. Subsequent hangers are fabricated from stainless steel and can be disassembled repeatedly. The hanger straps are roughly 1 foot in length and have 90-degree bends at their upper to hang on the top edges of the centerboard trunk walls.

When properly installed, the hanger straps will fit snugly into slots located on the inner walls of the trunk. If they fit loosely into the slots, damage might result.

The classic centerboard must have a metal arm to function. The first generation (factory manufactured) centerboards were made of mahogany and had a two-piece bronze arm assembly that was riveted to the sides of the centerboard.

1st generation classic Lido 14 centerboard with riveted on bronze arm and press fit hangers

3rd generation classic Lido 14 centerboard with stainless steel arm and removable stainless steel hangers

The 2nd generation centerboard (mid to late 1960s to about 1974) was made of molded fiberglass filled with a synthetic foam-like material with a cast aluminum arm embedded into the centerboard. The 3rd (and final) generation of classic Lido 14 centerboards were made of molded fiberglass with a synthetic filler material and a an arm made of stainless steel tubing that was embedded into the centerboard. All arms have a flat tab at their tip to connect rope or hardware to. Note that the current model Lido 14 (aka 6000 Series) uses a completely different centerboard rotation mechanism and thus are not usable in the classic Lido 14.

The arm is curved to allow it to "reach" over the curved forward portion of the centerboard trunk.

Note that there are significant variations in the curvature and position of the arm from one centerboard to the next, thus it is best to assume that each centerboard pivot hole or hanger may need to be adjusted to get the centerboard to fit a particular boat really well.

Removing the Centerboard into the trunk

The centerboard is installed from the topside of the boat – approximately 4 feet of clearance below the boat is needed to install/remove the centerboard. This necessitates putting the boat in the water or perhaps turning the boat on its side.

Once you have figured out how to get the clearance you need, remove the forward cap (about 8" long) on the centerboard trunk by removing the 4 screws holding it down.

Disconnect all the lines from the centerboard to the boat.

Remove the screws holding the centerboard hanger assembly to the boat.

Lift the centerboard straight up out of the centerboard trunk.

Installing the Centerboard into the trunk

Essentially the reverse of the centerboard removal procedure except that as the centerboard hanger assembly nears the trunk, aligns the straps with the slots in the walls of the trunk. Carefully push the board the rest of the way in, making sure to not gouge the walls of the trunk with the straps.

Pull the hanger assembly straps as snugly towards the walls of the trunk as possible and fasten with a stainless steel sheet metal screw. Bolting the straps to the boat is discouraged, as the hole required will weaken the wood sidings on the trunk. If the screw hole is worn out, fill the hole and drill a pilot hole for the screw. For details on how best to do this, contact DoubleWave.

Note that the position of the centerboard arm varies widely from one centerboard to the next. As the tip of the centerboard is expected to strike the forward edge of the forward centerboard cap – thus stopping the rotation of the centerboard – each centerboard will stop at a different position. Worse yet, some arms may not strike at all – which will allow the centerboard to over rotate. This will lead to damage to the boat, the centerboard, and possibly the centerboard trunk.

In addition, as the arm rotates, it may come in contact with the curved top surface of the centerboard trunk. Solutions to this include removing material from the trunk, bending the arm, changing the hanger assembly, changing the pivot hole location, or some combination of these.

It should be apparent that that fitting a centerboard into the Lido 14 can be very complex and difficult. For further assistance, contact DoubleWave.

Rigging the centerboard

The conventional rigging for the Lido 14 centerboard consists of a lift (or up haul) line used to raise (lift) the centerboard up into the centerboard trunk and a shock cord used to help pull the centerboard down into the water and to keep it in place while sailing yet allow the centerboard to spring upwards should you run aground (i.e. beach launch) or into an underwater obstruction.

The lift line is typically made of 1/4" line that starts out at a cleat mounted on the starboard side of the trunk, travels to a turning block near the floor in front of the trunk then turns up to the tip of the arm. The line either stops at the tip of the centerboard arm or passes thru a turning block mounted to the tab on the tip of the arm. If there is a block, the line continues back down to a strap or some other mounting point in front of the trunk.

Centerboard uphaul cleat on side of trunk

Centerboard uphaul rigged for 2:1 purchase

Once the line is tied off, pull the line to rotate the board into the trunk, cleat the line, and put the boat back on its trailer.

The shock cord is typically 1/4" in diameter and approximately 7' long. The cord is tied into a big loop with the loop passing thru a hole in the tip of the arm, or underneath an eyestrap mounted to the tip of the arm. The loop should pass on both sides of the mainsheet cleat swivel base and be hooked over the back end of the rear centerboard cap.

Don't forget to tie the loop so that it goes around the mainsheet! Adjust the length of the loop to so that the centerboard stays fully down (vertical) when sailing at full speed yet make sure there is enough stretch in the shock cord to allow the centerboard to be rotated fully up into the trunk without having to unhook the loop from the aft end of the trunk cap.

Racing Optimization

Optimizing the position of the centerboard is of great concern for racers. As centerboards, centerboard hanger assemblies, and centerboard trunks vary (significantly), each combination of requires a unique and careful analysis to determine how the overall position of the centerboard may be optimized. At the core of the issue are the Lido 14 Class Association rules that limit the fore/aft position and maximum depth (in the down position). In addition, there is a measurement called gybe that concerns the port/starboard rotation of the centerboard. There once was a Class rule limiting how far forward the centerboard could rotate. The rule no longer exists but it is still used, as a guide, in setting the maximum rotation of the centerboard.

Moving the centerboard's position is a very complex matter because each change impacts both the "up" and "down" positions of the centerboard. It is entirely possible to make a change in position that "works" the down position yet literally prevents the centerboard from rotating completely into its "up" position. So great care must be taken in making these changes. To learn more about this complex topic, contact DoubleWave.