Rigging Manual

1. Unpacking and preparation

Unpack the major parts listed below and lay them out on a soft piece of ground free of sharp objects. To avoid damaging contents, do not cut into packaging.

a. Hull
b. Mast kit which includes:
   Top section
   Bottom section (larger diameter)
   Boom (with blocks attached)
c. Boat kit which includes:
   Sail in bag
   Tiller
   Tiller extension
   Batten set
   Daggerboard
   Rudder assembly
   Line bag (all lines are labeled)
d. Block package which includes:
   Mainsheet block
   Double traveler block
   Vang block with v-cleat
   Small vang block with becket
   Shackle

Tools: To rig your Zuma the first time, you will need the following:

- White electrical tape
- 2 adjustable wrenches and/or pliers

Note: All lines are as long as necessary for maximum purchase. Vanguard Sailboats encourages you to customize line lengths for your sailing pleasure, but be sure to cut and burn ends to prevent fraying.

Useful knots to know:

- Figure 8 or Stopper Knot
- Square Knot
- Cleat
- Bowline
- Clove Hitch
2. Assembly

**Vang**

The vang system consists of two blocks and a line. The block with a shackle attaches to the eyestrap on the underside of the boom. The block with a v-cleat and shackle attaches to the eyestrap on the mast. Lay out the block with shackle to the right of the block with v-cleat, leaving about two feet between the two. Tie one end of the vang line to the becket on the block with shackle, run it through the nearest sheave of the block with v-cleat, back through the sheave in the block with a shackle, through the second sheave of the block with v-cleat and out through the cleat. Make sure the line runs without crosses between the two blocks.

**Traveler**

Locate the traveler line and double traveler block and tie the traveler line to the padeye on one side of the stern. Thread the other end of the line through the small double block, and tie it off to the padeye on the opposite side of the stern. The traveler should be rigged loosely to avoid damaging the mast.

**Mainsheet**

Attach the mainsheet block to the eyestrap at the forward end of the hiking strap. Lay the boom on the deck so that the block closest to the end of the boom is even with the stern and the other end points toward the bow. Thread the mainsheet through the ratchet block AGAINST the ratchet, through the forward block on the boom, aft along the boom, and through the aft block. Lead it through the top of the double traveler block previously attached to the traveler line from aft to forward, then take it up to the becket on the block on the boom and tie it off with a figure 8 knot.

**Rudder assembly**

Attach the rudder to the tiller using the supplied bolt and washers. The washers should sit between the tiller and the rudder, one on each side. For extra security, tape the cover plate of the tiller extension to the tiller to prevent unexpected extension removal.

**Mast assembly and stepping**

Insert the collared end of the mast top section into the bottom section until the collar is tight against the aluminum. Make sure the mast step hole and mast butt are perfectly clean; any sand, dirt etc. in the mast step will grind into the gelcoat and eventually damage the boat. Locate the halyard and feed one end through one of the holes in the cap on the top of the mast. Bring both ends down the mast and tie them off to the cleat. Place the mast butt against a solid object, lift the top end, and walk toward the butt, raising it hand over hand until the mast stands vertical. Rotate the mast until the goseneck (the metal post about two feet above the butt) points toward the stern. Keep your hands a good distance apart while lifting the mast over the hole. Let the mast slide into the step, but do not drop it as you may damage the step.

**Clew Tiedown**

Wrap the clew tiedown line twice around the boom and the clew grommet (inside the outhaul), and secure it to itself. It should hold the clew tight against the boom but still allow it to slide forward and aft as you adjust the outhaul.

**Cunningham**

Tie a figure 8 knot in one end of the cunningham and thread the other end forward through the clam cleat and fairlead just aft of the mast. Thread the end up through the grommet in the sail and secure it to the goseneck.

**Vang**

Attach the block with the cleat to the metal fitting on the mast just above the deck. Attach the shackle to the metal strap on the underside of the boom, and snug the line.

**Outhaul**

Tie the bitter end of the outhaul to the plastic fairlead on the outboard end of the boom. Thread the outhaul through the clew grommet in the sail, through the fairlead, and lead it forward to the cleat on the boom. Tighten it enough so that it will keep the boom on the goseneck pin.

**Sail assembly**

After checking that there are no sharp objects in the area, lay out the sail near the boat. Insert the battens into the batten pockets; the short one goes in the top pocket, and the other two are the same length. Unzip the sleeve in the forward edge (luff) of the sail and stack the sail into the boat, with the zipper piled at the base of the mast. Untie the halyard ends from the cleat and attach the end that comes off the aft side of the mast to the webbing strap on the head of the sail. Wrap the sail sleeve around the mast (with the free end of the halyard inside) above the goseneck and engage about three inches of zipper to hold it in place. Pull on the halyard with your left hand while zipping the sleeve closed with your right, until the sail is all the way up. Cleat off the halyard securely.

**Boom**

Insert the gooseneck pin into the hole in the forward end of the boom and walk aft, exerting forward pressure to keep it in place until you attach the outhaul.

**Keep the Cunningham Cleated and Tight at All Times, So the Mast Will Stay in the Boat in the Event of a Capsize.**
3. Launching

Before Launching

Lock the rudder up and attach it to the boat by passing the tiller under the traveler and lining up the rudder pin with the pintles. The bottom groove should fit into the bottom pintle, and when you push down on the spring-loaded pin, the top groove will slide into the top pintle. Release the spring and lock the rudder in place, making sure the rudder is securely connected to the boat at both top and bottom.

Once in the water, slide the daggerboard into the daggerboard trunk. (You will have to turn the boat sideways to the wind to keep the boom clear.) Drop it down as much as depth permits, and push the daggerboard retainer against the board.

Unrigging

When approaching shallow water, pull up the daggerboard as much as possible without obstructing the boom. After you hop out of the boat, remove the daggerboard and place it in the boat. To remove the rudder, push down on the pin and lift it off.

Once the boat is on land, remove the vang from the boom, undo the outhaul and clew tie down line, and drop the sail. If the boat is staying put, you can leave the mast and boom on the boat; just tighten up the mainsheet so that the boom won’t separate from the hull. If the boat is traveling somewhere, you must remove the mast and boom.

The following items can remain assembled:

- Rudder/Tiller
- Vang (leave attached to the mast)
- Cunningham (leave attached to boat)
- Outhaul (leave attached to boom)

Sail care tips

All gear should be rinsed, if sailing in salt water, and the sail should be allowed to dry before it is rolled up. Removing the battens from the pockets between uses will increase the life of the elastic that holds them. Make sure the window is not creased when you fold the sail.

NOW YOU ARE READY TO SAIL

FOR YOUR OWN SAFETY, MAKE SURE YOU ARE WEARING APPROPRIATE CLOTHING FOR THE CONDITIONS, AND PLEASE OBTAIN PROPER TRAINING BEFORE SAILING. HAVE FUN AND DON’T FORGET YOUR LIFEJACKET!
Care, Maintenance and Service of your LaserPerformance Product

Before rigging your Zuma, read and familiarize yourself with the rigging manual. Failure to adhere to these guidelines could invalidate your warranty.

Maintenance

- Keep the equipment clean by frequently flushing with fresh water. In corrosive atmospheres, stainless parts may show discoloration/brown staining around screw holes and rivets. This is not serious and can be removed with a fine abrasive.
- Ropes, rigging and fittings should be checked at regular intervals for wear and tear, including winch gear.
- All moving parts should be lightly lubricated to avoid jamming, i.e., McLube, dry Teflon or a dry silicone based spray. Do not use oil.
- Inspect shackles, pins and clevis rings and tape up to stop snagging sails, ropes and clothing and to prevent them from coming undone.
- When refastening screws do not over tighten as this may strip the thread and do not reuse Nyloc nuts more than three times.
- Damaged or worn parts should be replaced.
- Sails should be thoroughly washed down with fresh water, dried and stored in a dry place.

Trailers and Trolleys/Dollies

- It is highly recommended that a trolley/dolly is used to launch and recover your boat. Dragging your hull up onto a beach or slip way will wear away the gel coat or polyethylene and damage the boat. Also, the hull should not be left on a pebble beach as the hull skin could be dented.
- Trailers should be rinsed with fresh water and checked at regular intervals. It is recommended that trailers be serviced annually. The trailer and road base should never be immersed in water.
- Trailers and trolleys supplied by LaserPerformance are designed to transport the hull in the best possible manner to avoid damaging the hull. For instance, LaserPerformance does not recommend support hulls on rollers except on the keel line and only where there is a reinforced keel-box. We also recommend gunwale hung trolleys for our smaller products. Hulls supported by a trolley bunk or wide strap must have the ability to drain water away from the hull. Trolley bunks padded with carpet or foam can cause blistering in the gel coat and changes to the hull color. Please do not transport your LaserPerformance product on a trailer or trolley that has not been specifically designed for the product. Hulls damaged through using an incorrectly designed or wrongly set up trailer or trolley are not covered under warranty.
- When securing your boat to a trailer for transport be very careful that ratchet straps and ropes are not over tightened and that there is sufficient padding under the strap or rope to prevent the hull/deck from being damaged through abrasion or pressure.
- Top covers must not be allowed to “flap” when driving at speed. This can abrade the surface of the hull and damage it. It is recommended if you are towing and plan to use your top cover that an under cover is fitted first to prevent cover flap damage to the top sides of the hull.
- Repairs to the polyethylene or GRP hulls should be undertaken by persons with the relevant equipment and skills. Contact LaserPerformance for advice.
- Rudders and centerboards must never be stored wet in carry/combo bags. This can cause blistering, print through and warpage.
- All our GRP products are designed to be dry sailed. In other words stored on dry land. If you intend to leave your boat on a mooring for any length of time it is essential that you apply an osmosis barrier coat. LaserPerformance can recommend a suitable product.

On Water

- When wearing a trapeze harness, take particular care when climbing on to the centerboard and back into the boat after a capsize. The trapeze harness hook could easily damage the hull or deck.

On Water Towing

- Towing your LaserPerformance product at high speed (10 – 20 knots) behind a rib or power boat can seriously damage the hull. Boats damaged in this manner are not covered by the warranty. LaserPerformance recommends a maximum towing speed of 6 knots.