V15

Rigging Manual

- Unpacking and Preparation
- Assembly
- Sail Control
- Launching

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:

Rigged mast

Rigged boom

c. Boat kit which includes:

Tiller/Hiking Stick

Daggerboard

Rudder

d. Line bag

Jib sheet

Mainsheet

Daggerboard shockcord

Tools: To rig your V15 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. LaserPerformance 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



SQUARE KNOT STOPPER KNOT





CLEAT





BOWLINE

CLOVE HITCH

2. Assembly

Rigging

Locate the daggerboard shockcord (in the line bag) and attach each end to the eyestraps that secure the forward end of the hiking straps. You may have to raise the line bags to locate the eyestraps. Make sure your knot is very tight; shockcord easily unties itself.

Assembling the mast

The mast comes already rigged except for the spreaders, which are taped to the mast. Remove all tape, and untie the halyards; secure them loosely around the mast so they won't be lost when stepping. Before you install the spreaders, make sure the hoist end of the main halyard (which comes off the aft side of the masthead sheave) is aft of the spreader brackets and all other rigging is forward. This will save you a lot of aggravation later on. Locate the spreaders and pull the clevis pins out of the spreader brackets.

Spreader installation

- Slide the end of each spreader with two holes into the brackets on the mast, with the thin edge facing aft on the mast (toward the sail track). Line up the holes, reinstall the two clevis pins, and reattach the cotter rings.
- Remove the clevis pins in the outboard end of each spreader and pull out the small clip. After locating the port upper shroud, slide the clip onto it and back into the port spreader; then reinsert the clevis pin. Repeat for the starboard upper/spreader.
- Double check there is no rigging running between the upper ends of the shrouds and the spreaders. For extra security, tape around the spreaders to keep the cotter rings from working loose.

Step mast

- Check there are no overhead wires in the area and make sure all halyards are secured so they won't be lost. Two people are recommended to step the mast. The taller person should place the mast heel against a solid object, lift the top end, and walk toward the heel, raising it hand over hand until the mast stands vertical.
- Rotate the mast until the track faces toward the stern of the boat. Keep your hands a good distance apart while lifting the mast over the step for added stability.
- Align the mast heel so that the groove fits over the middle pin in the deck fitting. Once the mast heel is in the step, the second person should attach the shroud on the opposite side of the boat by removing the bolt and nut from the bottom of the Staymaster and reassembling it through the chain plate on the rail.
- Attach the second shroud the same way, then lean the mast forward against the shrouds and tie off the headstay. If you will be using a bowline, attach the headstay to the clevis pin just aft of the shackle and tie the bowline into the shackle. Otherwise, tie the headstay directly to the shackle. Tighten it just enough so the mast will not fall over; the jib halyard will tension the rig for sailing.







Recommended shroud position: Set the Staymaster shroud adjuster at the 7 position by turning the adjusting nut as necessary, then snapping the locking clip into place. This is the light air position. Use the 5 position for medium and 3 for heavy setting."

Note: These are general positions and should be adjusted based upon your preferences.

Rig boom

Lay the boom on the deck so that the block closest to the end of the boom is even with the traveler eye straps and the other end points toward the bow. Remove the fast pin from the gooseneck and line up the holes in the forward end of the boom with the gooseneck holes, then reinsert the pin. Untape the outhaul tail from the boom if you haven't already done so.

Mainsheet and vang

- The V15 mainsheet has a bridle spliced into one end that fastens to the stern deck. Locate the thicker end and pass it forward through the block on the end of the boom, through the black strap, through the forward block, then down through the ratchet block in the cockpit in the direction of the ratchet. Tie a stopper knot in the bitter end.
- Separate the thinner ends of the sheet to avoid twists. Attach the ends of the sheet to the two eyestraps on the stern deck to form a bridle, keeping their length even.
- Adjust bridle ends until the mainsheet splice is on centerline; adjusting the length for different wind conditions will help improve performance. Remove twists in the bridle often while sailing.
- Locate the vang (attached to the mast). Shackle the upper block to the bail on the underside of the boom with the provided shackle. Make sure the line is uncleated and has a stopper knot to ensure it can not pull out.

Mainsail

After checking there are no sharp objects in the area, unroll the mainsail near the boat and install the top batten, thin end first. Secure the velcro over the end. Locate the clew slug and slide it into the aft end of the boom track. Fasten the tack to the inboard end of the boom by removing the attached fast pin and reinstalling it through the grommet. Check there are no twists in the foot (lower edge).

Outhaul

- Tie a stopper knot in one end of the outhaul. Pass the other end through the eyestrap on the port outboard end of the boom, through the clew of the sail from port to starboard, back through the block on the end of the boom, and forward to the cleat.
- After passing through the cleat lead the outhaul line through the cheek block from top to bottom. This allows the outhaul to be adjusted from aft in the boat. Tie a stopper knot in the end to keep it from unrigging itself.







3. Sail Control

Tib

- The jib halyard replaces the headstay when the jib is up, allowing for a wide adjustment of mast rake. The headstay will fall slack when the jib halyard is properly tensioned.
- \bullet Remove the clevis pin just aft of the headstay, line up the jib tack between the holes, and reinsert the clevis pin.
- Locate the jib sheets (one line, in the line bag) and find their halfway point; this is where they will attach to the sail. Feed the midpoint through the clew grommet as a loop and pass both tails through this loop, so that when tightened, the sheet is securely attached to the sail. Lead the nearest sheet back to the fairlead on the near side of the boat, and lead the other sheet in front of the mast and back to the opposite fairlead. Tie a stopper knot in the ends to prevent them from pulling out when you raise the sail.
- Locate the jib halyard shackle and attach it to the head of the jib. Make sure the jib sheets will run free and pull up the halyard. When the sail is most of the way up, you will get to a block at the end of the wire. Run the tail through the block near the bottom of the mast, then through this block on the wire, ending at the cleat. This purchase is used to tension the jib halyard and rig. The tail can be coiled and placed in the halyard bag to eliminate clutter.
- To keep the headstay from interfering with the jib, take up the slack in the wire at the bottom with a piece of shockcord (not provided).

Raising the mainsail

- Locate the aft end of the main halyard and attach it to the head of the mainsail. The smaller the knot, the closer to the top of the mast the sail will be.
- Make sure the mainsheet will run free and hoist the sail, taking care to feed it into the sail track. Once the sail is near the masthead, you will find a stainless ring tied into the line. Pass a loop of halyard through the ring and down under the cleat, and use this additional purchase to pull the main up to full hoist.
- Cleat off the halyard, coil the tail and stow in the line bag.
- The cunningham is attached to the port side of the mast. Pass the end up through the grommet in the luff of the mainsail and back down to the clam cleat on the starboard side of the mast. Tie a stopper knot in the bitter end to prevent it from unrigging itself.

Before launching

Attach the rudder to the gudgeons as shown, kicking up the rudder if necessary. Make sure the rudder bolt is tight enough so the blade will remain kicked up. If the rudder stop does not prevent the rudder from lifting off the boat, bend the stop out so that it fits as shown. Pass the tiller between the mainsheet bridles and slide it into the rudder head. Pass the rudder down haul line through the cleat and leave loose; this line will get tightened once the rudder is all the way down. The shockcord reduces damage if the rudder hits something while sailing.





4. Launching

Daggerboard: With the boat in shallow water or secured to a dock, slide the daggerboard into the daggerboard trunk as much as water depth will allow. The thin edge should be aft and the handle up. Stretch the shockcord around the aft edge with the plastic tubing against the edge of the board; this helps keep the board at a desired height.

Rudder: Push the rudder blade down as much as water depth will allow. Once it is all the way down, tighten the downhaul line.

Unrigging

As you approach shallow water when you come in from sailing, pull up the daggerboard halfway. Release the rudder downhaul and pop up the rudder. After you a re secured to the dock or standing in shallow water, pull the daggerboard out of its slot and lay it down in the bottom of the boat. Make sure your mainsheet will run free, and release the vang. To re move the rudder, depress the stop and pull it off. Once the boat is on land, make sure the headstay is still tied off to the bow shackle before dropping the jib. You can leave the boat rigged unless it is traveling, just make sure both halyards are secured. Remove the boom and roll it up with the mainsail. When unstepping the rig, leave the shroud adjusters attached to the shrouds to prevent damaging them while cartopping.

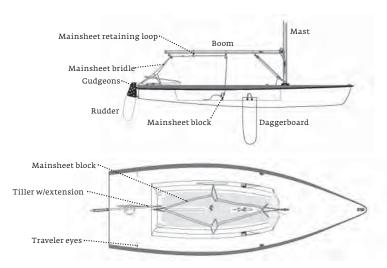
Sail care tips

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 in. Make sure the window is not creased if you fold the sail.



Now you are ready to sail your v15!

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!



LaserPerformance equips our Vanguard 15 with the highest quality parts available. We partner with key suppliers to develop top-of-the-line dinghy equipment so your boat will perform at the highest level possible when sailed with the factory supplied rope, sails and hardware. Shop online at laserperformance.com or at an authorized LaserPerformance dealer to be sure you are getting genuine LaserPerformance parts and accessories. Visit www.laserperformance.com to find your local dealer

Care, Maintenance and Service of your LaserPerformance Product

Before rigging your V15, please 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.
- · Excess water should be removed from the hull.
- 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 keelson. 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.

Storage

- Your boat should always be tied down securely to the ground when not in use.
- UV light will cause fading to some components and fittings. A cover is recommended to reduce the UV degradation.
- Do not leave the rig under tension when not sailing or during storage.
- Care must be taken to support the hull adequately if storing on racking or similar. Any sustained point loading could permanently dent or distort the hull,
- Under covers for LaserPerformance products should be produced from a breathable or semi breathable fabric to
 allow moisture to evaporate away from the hull. This is essential to prevent damage to the hull skin. Also, the hull
 should never be left in the under cover wet or damp. A combination of moisture and heat over an extended period
 can also damage the hull. The under cover is designed to protect the hull when being transported and should be
 removed when the hull is being stored. Typical damage includes small bubbles or blisters, excessive print through
 of glass reinforcement, foam or wood and color change.
- 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.

Owner Information

hull identification number	
purchased from	date of purchase
contact name	phone #
address:	
city / state / county	zip / postal code
hull color: sail #:	
registration information (if applical	
trailer vin #	
license plate number	
registration number	state / county registered in
insurance information	
maintenance	



LaserPerformance NORTH AMERICA

300 Highpoint Avenue Portsmouth, Rhode Island 02871 t +1800 966 SAIL f +1401 683 0990

LaserPerformance EUROPE

Station Works, Long Buckby Northamptonshire NN6 7PF United Kingdom t +44 (0) 1327 841600 f +44 (0) 1327 841601

LaserPerformance ASIA

Room 3415 China Merchants Tower Shun Tak Centre No. 168-200 Connaught Road Central Hong Kong t +852 2902 2818 f +852 2587 7868

LaserPerformance AUSTRALIA

t +61 (o) 3 9016 4151

LaserPerformance MIDDLE EAST

T5 Middle East LLC Dubai Investment Park PO Box 38442 Dubai, UAE t +971 (4) 885 7601

LASERPERFORMANCE.COM

All rights reserved. 02008 LaserPerformance. LaserPerformance and associated logos are trademarks. Laser, SR3, Sunfish, and Dart are trademarks used under license. LaserPerformance reserves the right to make design and/or specification changes to any of their products as part of their continuous development program.