



Challenged Sailors San Diego

Martin 16 Procedures

v2.01	4/2/16	DES	Several edits for new sail procedures and miscellaneous minor corrections.
v2.02	6/28/18	DES	Spelling corrections. Added list of gear in dry bag. Miscellaneous corrections. Added note re. landing on middle finger.

1 Setting up the Martin 16

1.1 Preparation

1.1.1 Boat

- Turn the boat around on the dock if necessary so it is facing as close to the wind as possible.
- Inspect condition of the standing rigging. Check that split rings in the clevis pins holding the shrouds are in place.
- Inspect rudder attachment. Verify pins holding tiller in place and preventing rudder from rotating up are secure.
- Verify rudder is vertical and moves freely from side to side.
- Verify the rudder is centered when the steering joystick is centered and that there is not excess play in the steering lines. Adjust the straps/lashings on the steering lines if necessary.
- Check for any kelp attached to keel or rudder and remove.
- Wipe down the waterline and rudder with a sponge or soft rag.
- Pump, bail or sponge out any excess water in the cockpit or under the rear seat hatch.

1.1.2 Seat

- Verify the horizontal tube at the seat hinge is properly set in the slots on the side of the cockpit. You can move the seat forward or back (into different slots) if needed for different sized sailors. The usual position for most adult sailors is in the 3rd slot from the front.
- Adjust the line under the front edge of the seat so that the front is higher than the back (especially important if the sailor has limited leg or trunk strength).
- Adjust the line behind the seat so that the back is comfortable for the sailor. This can be further adjusted when the sailor is in the seat.

1.1.3 Sails

- Select the sail with the same number as the boat you are rigging.
- Be sure not to leave sails loose on the dock.
- Handle the sails carefully and don't drag them across the concrete dock.

1.1.4 Gear

1 Personal gear (for sailor and companion)

- Sunscreen
- Water
- Hat
- PFD (stored in dock boxes)
- Whistle
- Sweets or quick-dissolving candy to address low-blood sugar

2 Sponge

3 Paddle – don't leave home without one!

4 VHF radio - turn on, unlock if necessary, set to channel 69 or other channel agreed with the dock staff, turn on Dual Watch by pressing and holding DW button until radio beeps, and lock radio by pressing and holding lock button until radio beeps.

5 Dry Bag

- First aid kit
- Distress flag
- Whistle
- Multi-tool
- Spare line (Spectra)
- Duct tape
- Zip-ties
- Sunscreen
- Spray bottle (for cooling)

1.1.5 Weather forecast and tide table

- Know what to expect from the weather before you go out.

- It is typically best to sail into the current so that if the wind should die, the current is bringing you back towards home. Remember, your only auxiliary propulsion is your paddle. You don't want to have to paddle back from Ballast Point against a 2 knot current!
- A good source of both weather and tide information is:

<http://tinyurl.com/6tkyrjs>

1.2 Boarding the Boat

- Most participants can assist in rigging the boat and should board before the sails are attached.
- Each person has different capabilities and needs for assistance. Offer suggestions, but be sure to follow the participant's lead and guidance as to how best to assist them.
- Safety (of the participant and yourself) is the top priority.

1.3 Running Rigging

- It is helpful to uncleat and clear all halyards, sheets and other running rigging in the cockpit (except the jib slot trim line on the port side of boats #3-8) before attaching the sails.

1.4 Jib

Attach and hoist the jib first. The luff wire will be providing important support to the mast.

- Clear the jib halyard (located on the shelf on port side of cockpit) and release from the cam cleat (make sure there is a stop knot in the end of the halyard).
- Detach working end of jib halyard from the aft end of the jib boom (be sure to always hold onto the halyard whenever it is not secured to the boat or the sail).
- Verify the halyard is clear and not twisted or fouled around the mast, spreader or shroud.
- Attach the jib halyard to the thimble on the luff wire at the head of the sail (not the grommet in the sail).
- IMPORTANT: Do NOT attach the hanks on the sail to the forestay.
- Hoist the jib ~90% of the way.
- Attach the tack of the jib (thimble at the lower end of luff wire, not the grommet in the sail) to the shackle on the forward end of the jib boom.
- Attach the clew of the jib to the shackle on the aft end of the jib boom (usually easiest to do this if the jib sheet is eased).

- Hoist the jib all the way (the forestay should be completely slack as the jib luff wire is taking all the tension). Flake the halyard and place the bundle under the tensioned halyard forward of the cam cleat.

1.5 Main

- Clear the main halyard (located on shelf on starboard side of cockpit) and release from the cam cleat (make sure there is a stop knot in the end of the halyard).
- Release the boom vang, Cunningham and outhaul lines from their cam cleats on sides of cockpit.
- Release the main sheet from cam cleat (on top of keel box).
- Detach shackle end of main halyard from the keel lift cleat. Check that the bowline tying the halyard to the shackle is secure. Be sure to keep hold of the halyard whenever it is not secured to the boat or the sail.
- Verify the halyard is clear and not fouled around the mast, spreader or shroud.
- Attach the main halyard to the head of the sail.
- Feed the main luff rope into the slot on the mast and hoist the main ~90% of the way.
- Make sure the mainsheet and outhaul lines running from the forward end of the boom to the deck are not twisted and fouled. Rotate the boom to clear them if necessary.
- Attach the clew of the sail to the outhaul shackle near the aft end of the boom.
- You, the participant or an additional person helping out should hold the boom to make sure it doesn't hit the sailor.
- Insert the boom onto the gooseneck fitting on the mast. Apply slight forward pressure to the boom to hold it in the gooseneck until the boom vang has been attached and tightened.
- Attach the tack of the main to the forward end of the boom. Place the ring on the tack of the sail between the two fingers on the top side of the boom. Insert the fastpin through the holes in the fingers and through the tack ring in between them. This will be held in place when the main is fully hoisted.
- Hoist the main all the way, but not so tight that any vertical wrinkles are formed in the luff of the sail. Flake the halyard and place the bundle under the tensioned halyard forward of the cam cleat.
- Attach the boom vang to the padeye on the underside of the boom. (The boom vang is the line that runs through a block at the base of the mast).
- Attach the Cunningham to the grommet on the luff of the sail about 9" up from the tack.

- Tension the main sheet and pull the boom all the way to the center of the boat. Tension the boom vang firmly, but not overly tight. Note that the forward tension of the boom vang is what holds the boom on the gooseneck. Ease the main sheet so the boat is not powered up at the dock.
- Tension the Cunningham if high winds are expected; otherwise leave it loose – just enough tension to keep the Cunningham from coming free from the grommet.
- Tension the outhaul (there should be ~3-5” between the foot of the sail and the boom).

1.6 Ready for departure

- Doublecheck all safety equipment.
- Doublecheck boat setup.
- Doublecheck that the boom is properly attached to gooseneck.
- Doublecheck that the outhaul leads properly over the sheave at the end of the boom. It will sometimes come off the sheave while loose before tensioning.
- Doublecheck that the joystick and rudder move smoothly.
- Remove any fenders.

2 Returning to the Dock

- With the typical wind direction in San Diego (SW-NW), the final approach to our slips is usually downwind. Even in a light wind, if you return to the slip with both sails up you will be going quite fast. We have found it best in typical wind conditions to drop the main in the boat and sail to the slip under jib alone.

2.1 Preparation

- Pull the main halyard out from where it was stowed forward of the cam cleat and pass it back to the companion.
- Carefully, and without pulling it out of the cam cleat, pull up a loop in the halyard aft of the cam cleat and forward of the turning block.
- Once the companion can reach this loop, he/she can continue pulling the halyard through the turning block until the stop knot at the end of the halyard is reached. **Be very careful to not pull the halyard up out of the cam cleat.**
- Arrange the halyard so that it will run free when released and won't foul on any fittings.

2.2 Drop the Mainsail

- Sail (with both sails still up) to an open area upwind of the fairway leading to the CSSD slips with a good deal of sea room on all sides of you.
- Head up into the wind, or just a few degrees to the left (so the boom is along the port side of the boat), release both sheets, the Cunningham, outhaul and boom vang; then release the main halyard from the cam cleat.
- Holding the boom to prevent it from falling on the sailor, pull it out of the gooseneck, pull it down carefully and lay it along the port side of the boat.
- Pull the sail down while continuing just off head to wind. Be sure the halyard doesn't foul on anything. Flake the sail as best you can to keep it out of the water and out of the way of the sailor. Try not to crumple the sail as this will reduce the life of the sail cloth.

2.3 Sail to the Slip Under Jib Alone

- The precise path you take back to the slip will depend on the wind direction.
- If the wind is from the typical west to northwwest, sail slowly down the fairway perpendicular to the slips, about 1 boat length from the west side of the fairway.
- About 4 slips from our slips, turn left, aiming toward our northernmost slip.
- About 1 boat length away, turn to the right to bring the port side of the boat to the end of our middle finger, where someone on the dock can catch the boat at the shrouds.

- Always land on the middle finger between our slips. Be especially careful not to run into any neighboring boats.

3 Putting the Boat Away

3.1 Remove Sails and Secure Lines

- Disconnect the main halyard (being sure to hold onto it), outhaul, Cunningham and tack pin. You can then move the mainsail over to the dock (be sure to weight it down with something if there isn't someone on the dock to take it).
- Secure the main halyard shackle to the keel lift cam cleat. Pull the bitter end of the halyard taut, flake it and tuck it under the taut halyard forward of the cam cleat.
- Release the jib halyard and pull the jib down. Disconnect the jib tack and clew. Secure the jib halyard to the clew shackle.
- Pull the jib sheet in tight so the jib boom is centered and horizontal. Flake it and place under the sheets on top of the keel box.
- Tension the jib halyard, flake it and tuck it under the taut halyard forward of the cam cleat.
- Clip the working ends of the Cunningham and boom vang to the top of the sheet cam cleats.
- Loosely coil the outhaul and port side end of the jib sheet (if there is one) and place them on the port side shelf next to the seat.
- Place the boom along the side of the boat extending under the deck.
- Tension the main sheet, flake it and place under the sheets on top of the keel box.
- Loosely coil the Cunningham and boom vang lines and place them on the starboard side shelf next to the seat.
- Make sure all lines and sponges are secure and not lying in the bottom of the boat where they will turn green and slimy if it rains.

3.2 Roll Sails

- Treat the sails gently; don't crumple them or drag them across the dock and they will last much longer.
- The mainsail can be rolled on the long black plastic pipe. Keep the battens (except the top one which is at a different angle) parallel to the pipe.
- Roll the jib, keeping the battens parallel to the roll.

- Insert the rolled sails into the sail bag.
- Stow the sail bag.

3.3 *Secure Boat to Dock*

- Turn the boat around if necessary so that it will be pointing into the wind when it next goes out.
- Position the boat and cleat the dock lines such that the boat rests against the rub rails on the dock. Use a spring line if necessary to maintain proper fore/aft position.
- Remove any empty bottles, trash, etc. from the boat. Hose down the boat with fresh water. A bucket, boat soap and deck brush are available to clean dirt or bird droppings. Sponge or pump out any excess water in the bilge.
- Wipe down the boat as needed. Try to leave the boat in better condition than you found it.

3.4 *Report any mechanical problems or maintenance issues to the dock staff.*