



One Design

C Scow Tuning Guide



Photo David Thorenson

For any question you may have on tuning your C Scow for speed, contact our experts:

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Exclusive tuning instructions for the top two sails in C Scow racing.

I-1 GOLD Mainsail: Our light to medium sail is the fastest, most durable sail in C-Scow racing winning the National Championship, Inland Championship, North Americans and many other local events. The sail is FAST.

Harecut: This sail design has won more races than any other sail in history. Most feel it is best in 15mph and up wind condition. However, the sail carries down to 10mph even in the 0-5mph where we feel this sail is ultra-quick. When the breeze is on, look for the Harecut to find that extra gear and get you to the front of the pack.

Thank You for choosing North Sails!

REVIEW YOUR EQUIPMENT

Take the time to check all your pins and stays for wear. Clean your mast and spreaders with soap and water or acetone. Also, please check your wire halyard for any frayed wires and or cracked swages. Clean and lubricate your turnbuckles. Tape your turnbuckles so that they stay in the selected position you choose.

SETTING UP YOUR MAST – MEASURING YOUR MAST RAKE:

Please install your sidestay turnbuckles in the forward hole of your chainplates. Tighten the bolts with 7/16th wrenches. Have the bottom of the spar held down on the mast step ball while you walk the spar up. Hook up your forestay.

Once your mast is up and in place take a 50ft. steel tape measure and attach it to the shackle on the wire main halyard. Pull your rope halyard so that the tape goes all the way to the top of the spar. Be sure you latch the halyard ball into the halyard

latch at the top of the spar just like when you hoist and lock your sail in place. Pull down on the halyard to make sure the ball is locked in place.

MAST RAKE MEASUREMENT

For Melges Boats Up to 2012:

When measuring, measure the tape to the center of the boat where the deck and stern meet. The starting point for your set up should be 31'10.5". After you get to this measurement you are ready to adjust your sidestays.

For Melges Boats 2013 and Newer:

Follow the same mast rake measurement procedure as noted above. On the 2013 and newer Melges Boats the forestay is fixed at the bow. There is not any internal adjustment. This will change the starting point for your mast rake measurement.

Mast Rake 0-10 mph - 31' 9.5" is what we recommend.

Mast Rake 11-25 mph - 31' 9" is what we recommend.

SIDESTAY TENSION

With your mast rake at the forward measurement your sidestays need to be taught. If you tighten the sidestays as tight as you can without a tool, by hand, your tension will be correct. Do not over-tighten.

JACKSTAY SETTINGS

Measure your jackstays either on your trailer or on your boa lift. With tow fingers, lightly move up the stays until the stay touches the mast. Have your mast marked with the below dimensions for reference.

If you need to measure and adjust your jackstays on the water makes sure you put the boat head to wind, release your mainsheet tension and the measure your jackstays with the above method. Ideally

you have reference numbers from your Sta-Master turnbuckle so you can quickly adjust.

We keep the settings for our jackstays very simple. If you set your jackstays to the following you will be fast and you will achieve maximum pointing with your North Sail. Please keep in mind that when you sail with 3 people your desired combined crew weight is below 475lbs. Whether you are using the I-1 Gold or the Harecut – the tension does not vary.

Two People Racing

Jackstays: 36"

Three People Racing

Jackstays: 28"

To measure your Jackstays, take a tape measure from the deck of the boat next to the mast, and measure up the mast. It is best to start at 28" and put a mark on your mast every 2" until you get to 36". This will allow for a quick reference on where your Jackstays are when you are on the water.

Measure your jackstays either on your trailer or lift.





I-1 GOLD Mainsail Set Up

The I-1 Gold Mainsail will excel in all conditions however it is ultra quick in the 0-15 mph. This sail also excels in lumpy, choppy conditions as there is not a more powerful sail in the C boat class. The I-1 Gold Mainsail has won race after race and championship after championship. This sail is fast and easy to tune. Here are some helpful hints.

Please run through the following checklist so that your boat is in tune for your new I-1 Gold Mainsail.

WIND CONDITION: 0-10 KNOTS

MAST RAKE:

31'11". This is your maximum forward mast rake measurement. Used only in the light air. The spar can be pulled this far forward for downwind sailing too.

New boats 2013 or newer you would go to 31'9.5" as your forward mast rake.

BOARD HEIGHT

The head of your board should be just 2" above the board box slot.

CUNNINGHAM

No tension. Leave the horizontal wrinkles in the luff of the mainsail – this gives you maximum fullness.

OUTHHAUL

Be sure to have the foot of the sail tight. Remove all wrinkles and pull hard enough to begin to develop a "shelf" in the foot of the sail.

VANG

No tension upwind or downwind. A small amount of tension may be applied if bouncing through powerboat chop. Be quick to ease though once back in smooth water.

TRAVELER

4" down from the centerline is where you should have your traveler car in this condition. Keep a soft sheet so that you promote twist in the sail.

DOWNWIND SET UP

Tension your leech cord and ease your outhaul 2". Your leeward board should be down ¼ of the way. The helmsman needs to sit on the leeward side as far forward as possible. The crew needs to stand and hold the boom out. Have your crew look back to help with downwind boat position (clear air) and have him watch for wind.

WIND CONDITION: 11-15 KNOTS

MAST RAKE

This needs to go back to 31'10" but no further.

On new boats 2013 or newer your mast rake would move to 31'9".

BOARD HEIGHT

As the breeze builds to 12 mph (nearing White Caps) you need to slide your board up so that the head is 3-4" above deck. This will allow the boat to steer easier as the helm increases in the building breeze.

As the breeze builds you will be looking to de-power your boat. Remember, you never want the boat to heel so much that your leeward rail or gunnel gets wet. If the boat begins to over heel you need to follow this sequence.

OUTHHAUL

Pull your outhaul control hard enough to make a firm shelf in your sail along the foot. This is important in relation to your pointing and upwind performance.

DEPOWERING SEQUENCE

1. Traveler – drop the traveler down as the breeze builds. All the way if necessary.

2. Cunningham – pull this hard so that the horizontal wrinkles are removed from the luff of your sail.

3. Vang – apply this in order to bend the boom and lower portion of the spar. This will flatten the sail and open the leech of your sail. Anytime you are in need of easing your sail in the breeze you need to have a fair amount of tension on your vang. When racing in heavy air, do not be afraid to pull the vang on very tight as it allows the boat to get into an extra gear.

In order to power the boat back up you can follow the sequence in reverse. Be quick to power your boat back up through the lulls. Anticipate the changing wind velocity so that the boat stays on an even heel all the time.

DOWNWIND TECHNIQUE

With the building breeze you and your crew will want to reverse heel the boat – sitting on the high side and leaning out to weather. You have to pull on the straps in order to get the boat to heel. If you want to go fast you have to do this. You and your crew should sit in your normal upwind positions. There is no need to slide your weight back. Your windward board should be down ¼ of the way and your leechcord will be tensioned again. Ease your outhaul 3".



Harecut Mainsail Set Up

This sail is FAST. The Harecut mainsail will perform best in the breeze. The sail is designed for lighter crew weights and for boats that want to go ultra fast upwind and downwind in these conditions. The Harecut is the sail to have as the breeze builds!

WIND CONDITION: 12-25 KNOTS

MAST RAKE

31'10" is your max aft rake unless it gets above 25 then you can drop back to 31'9". With the promotion of mast bend for top speeds you do not want to go back any further than the above number. 2013 or newer boats you would want to put your mast rake at 31'9".

BOARD HEIGHT

The head of your board should move up to 4-6" above the board slot. This is critical to the overall speed of your boat upwind.

OUTHAUL

Pull this control to the maximum out position on your boom which is the inside position of the black band on outboard end of your boom.

DEPOWERING TECHNIQUE

The same process applies to the Harecut Mainsail in these conditions. You must pull much harder however as the breeze builds. The Cunningham must be pulled very hard. The vang needs to be pulled to its max. and the traveler needs to be all the way out.

The most critical control in this condition is your mainsail trim. As the boat overheels you have to throw your sheet out 6-20" so that the boat remains "on its feet" (meaning not overheeled). For maximum speed you cannot cleat your mainsail in these conditions. You must be prepared to trim and ease according to the wind.

DOWNWIND TECHNIQUE

Ease your outhaul 3" and tension your leech cord. If you are sailing with 3 people in the breeze all of you must be leaning out in order to get the boat to heel to weather. This is one way to prevent nose diving in the larger waves. The other way is for your helmsman to steer around the waves.

The board should be down 1/4 of the way still. As the breeze increases have your crew increase vang tension. This will allow the boat to be more stable downwind in the increased velocity.

Contact North

For more information or to have any questions answered please feel free to call any of our C Scow experts today. Also, we would be happy to give you a tour of our Melges / North Sails Zenda facility anytime.

Call or write today for an appointment.

