



M-16 Scow Tuning Guide

INTRODUCTION

KNOWLEDGE IS POWER

Knowledge is power. We see this in every sport throughout the world. Racing sailboats is much different from the other sporting events. Sailing requires tuning for different wind and water conditions. Many of these tuning adjustments are very small, yet critical.

We have outlined for your information tuning information for many different boats that we race on a regular basis. The measurements achieved have been tested through countless hours on the water in a variety of conditions. What is truly unique with this booklet is the fact that we have simplified the tuning process for all of these classes in order to make the process easy for our customers. You will be able to achieve newfound speed in your class. These measurements coupled with the fastest one-design sails in the world will give you the knowledge for speed. In sailboat racing this is a combination for power and speed!

North Sails will continue to bring you the very best in sailing service and technology. Additional knowledge can be learned from the North Smart Book. Our objective is to allow you to set the pace in your racing class.

North Sails

Fast Sails, Friendly Service and Cutting Edge Knowledge for your sailing program!

0 - 5 Knots

Mast Rake: 24' 7"

Sidestays: Just loose enough to let mast rotate.

Cunningham: Leave wrinkles in luff.

Vang: None.

Traveler: Leave on center line.

Boards: Full down.

Blocks: Set for 45 degrees rotation of mast.

Jib Leads: 4" back from front of cockpit.

Jib Luff: Leave wrinkles in jib for fullness.

Trim: Ease main sheet so that upper batten is parallel to the boom. Allow loose trim on jib so that upper batten twists off.

5 - 15 Knots

Mast rake: 24' 6".

Sidestays: Tight.

Cunningham: Remove most wrinkles when becoming overpowered.

Vang: As soon as boat is hard to hold down, tighten vang and work the mainsheet in the puffs to keep the boat relatively flat.

Traveler: Center line.

Boards: Full down.

Blocks: Set for 45 degrees rotation of mast.

Jib Leads: 4 1/2" back from front of cockpit.

Jib Luff: Tighten to remove wrinkles, but not any tighter.

Trim Main: Harder as wind increases to keep the upper batten parallel to boom.

Trim Jib: Generally harder with increased wind, but careful trim is necessary to help the skipper steer properly. Do not allow the top batten of jib to curl inward.

15 Knots and UP

Mast rake: 24' 5"

Stays: Very tight.

Cunningham: Remove all wrinkles.

Vang: Hard. Ease your mainsail in large puffs to keep the boat on its lines.

Traveler: Down to rudder posts (18").

Boards: Up 2".

Blocks: Set for 45 degrees rotation of mast.

Jib leads: 5 1/2" back from edge of the cockpit.

Jib luff: Tighten down hard.

Trim: Very hard trim on the main, but easing with any puffs to keep the boat on its lines. **The jib will have to be eased or trimmed in order to steer the bow around the waves.**

CURRENT M-16 RACING TECHNIQUES

0 - 5 Knots

The first objective here is to get plenty of heel on the boat so the windward rudder is just out of the water. This will account for less surface area in the water and will make the boat go faster. The skipper and crew must sit very still on the boat so there is no disruption of wind in the sails. The skipper must steer smoothly, not pushing the rudders across the boat. Adjustments in steering and trim must be smooth. Downwind the crew weight should be together and slightly forward. If your combined weight is over 290 pounds you should be sitting forward downwind in all conditions. Here the skipper must build up speed and then head the boat down, when the boat starts to slow again, the skipper should head up and gain speed again. This process must be continued the whole downwind leg.

5 - 15 Knots

These are optimum winds for the M-16 scow. The boat performs best with smooth steering and consistent crew work. The angle of heel should be flatter now. The windward rudder should be skimming the water. Once you have two on the high side hiking the rudder should be 3/4 of the way in the water. Crew weight should be together with crew hiking at an angle back towards the skipper. In choppy conditions both should shift back slightly. Downwind the crew weight should be placed together and on the windward side if there is enough wind. This however, will only be effective if you lean out and heel the boat. Weight again should be forward. With the leaning out of the crew the boat will not nose dive. Just lean the boat, steer down and increase your momentum for the next set of waves.

15 Knots and UP

The main thing in this amount of wind is keeping the boat on its lines and not letting it stall out in the waves. If this happens this increases your chance of getting a big puff and having it tip you over. This is because your speed is not up to where it should be for the wind velocity. The crew should have the jib sheet in hand so if this does happen a simple ease of the jib sheet will allow the boat to head up and stay on its lines. The skipper must constantly be working the mainsheet so the boat stays flat. Easing in the puffs and a trim back in with the lulls will give exceptional speed. Your boom vang should be very tight so the mainsail does not get fuller when you ease the sheet. With this process and hiking hard, you can be a very competitive boat regardless of your combined weight.

All these generalizations are norms and averages that have proven fast over many years. Some experimentation by your part may be necessary to fine tune your particular rig and sailing style.

Good luck with your new sails and please feel free to call us with any questions you may have.

APPENDIX A - SAIL CARE

Your North Sails are constructed out of the best materials on the market today. We make sure of this by testing every roll of cloth we use. Through proper care and maintenance your sails will give you the performance you have come to expect from a North Sail.

The most important factor for a long life for your sails is to watch them for signs of wear and tear in high load and chafe areas. Be sure to wash the sails off with fresh water and dry the sails thoroughly before storing. A dry, mild climate is best. Excessive heat can cause problems with the sails due to the possibility of shrinkage. *It is best to roll the mainsail and jib.*

Mainsail

When hoisting and lowering the sail try to minimize the amount of creasing or wrinkling of the sail. Every time the sail gains a crease the cloth breaks down that much faster. Always have someone contain the leech and luff during these procedures.

The battens can be left in the sail without any problems. Be sure to roll the sail down the leech so that the battens will not twist. This could cause damage to the battens.

Jib

When rolling the jib keep the battens perpendicular to the leech. Pay special attention to the battens and batten pockets for wear and tear.

Spinnaker

The spinnaker is fairly straight forward. Be sure to repair all tears and pulled stitches. Folding the sail when storing is best.

APPENDIX B- CLINICS

This tuning guide only begins to cover all there is to know about racing the boat. The Scow team at North One Design has prepared a professional, in depth Scow racing clinic that you and your fleet will be interested in learning more about. In the course of a weekend you will learn more about racing your Scow than you could possibly learn in a season of racing on your own.

Please call you nearest North Sails One Design loft for complete details!

At North Sails we are constantly striving to make our products better. If you have any comments on this tuning guide and how it could be improved for your purposes we'd love to hear from you. Please give us a call or drop us a line.

CONTACT NORTH SAILS

For tuning information and complete details on how to setup your M-16 Scow sails contact the North M-16 Scow experts at:

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Good Sailing!

NORTH SAILS ONE DESIGN QUALITY CONTROL CHECK

M16 Scow

MAINSAIL		JIB	
Corners		Corners	
Cunningham		Battens	
Numbers		Telltails	
Lake Code		Leech telltails	
Battens		Serial Number	
Leech Telltails		North Logo	
Insignia		Bag	
Serial Number			
North Logo			
Bag			

Checked by: _____

Date: ____ / ____ / ____