



GO BEYOND™



TUNE YOUR SAILS FOR OUTRIGHT SPEED

Thank you for choosing North Sails for your Catalina 22. We hope using this tuning guide will help you get the most from your new North Sails. Please feel free to call us if you have any questions.

Our goal is to give you a rig set up that is fast in all conditions and easy to adjust. Some relatively minor modifications are necessary to the standard Catalina 22 deck layout in order to get the most from your boat and sails.

General

Genoa Tracks

We have found it a huge advantage to install inboard genoa lead tracks. These should be 2-3' long centered on the aft edge of the cabin. The track should be 2" out from the intersection of the deck and the side of the cabin. Before drilling make sure you have access underneath the deck for bolting down the track. Be careful of wiring for deck lights

Shroud Rollers

A good idea to improve tacking is to install shroud rollers on the upper and forward lower shrouds. Install 36" rollers on the forward lowers and 12" rollers on the upper shrouds.

Adjustable Backstay

In order to properly control the shape of the genoa and mainsail it is a big help to have a easily adjustable and fairly powerful backstay. Give us a call or refer to back issues of the "Mainsheet" for ideas how to set one up.

Mast Tuning

Before Sailing

First loosen shrouds until they are somewhat loose.

Mast Rake

The mast rake is probably the single most important element of tuning your boat. Note the mast rake should vary from fixed to swing keels with swing keels having slightly less rake.

Start with boat sitting on its lines in the water. Hang a weight from the end of the main halyard and cleat off halyard with weight and shackle 12" below the boom. Measure distance from the aft face of the mast to where the halyard crosses the boom. This measurement should be 8" for fixed keels, 6-7" for swing keels. Adjust the headstay turnbuckle to achieve desired measurement.

Tighten backstay until snug, no slack. Remove weight from halyard, attach a tape measure to halyard and haul to top of mast. Measure from side to side tightening or loosening upper shrouds until mast is centered.

Now start tightening upper shrouds until they have show 28 on the gauge. Tighten forward lowers until they show 24 on the gauge. Tighten aft lowers until they are 24 on the gauge too. To measure shroud tension use a Loos Model A Tension Gauge. The end result here is to have the mast straight fore and aft with a small amount of rake to give the boat some "bite" upwind.

Now you're ready to go sailing!

On the Water

Sailing upwind with moderate backstay on, sight up the backside of the mast checking that it is straight. Tighten or loosen lower shrouds until mast is straight side-to-side. Your mast is now tuned for moderate winds. The reason for checking the mast while sailing is that the shrouds will stretch slightly under load. We want to make sure the mast is straight, especially side-to-side, under sail.

Sail Trim

Light Air (0-8 knots)

Main

Outhaul should be tensioned so clew is 1-2" in from band. Cunningham/halyard should be loose so there are horizontal wrinkles coming off mast.

Traveler should be centered or slightly to windward. Adjust mainsheet tension so top telltale is flying 90% of the time. Note: Top batten will be slightly outboard of parallel to boom, this may be impossible in very light wind.

Genoa

Tension genoa halyard so that there is a hint of wrinkles in the luff. Be careful not to over tension. Adjust genoa lead fore and aft so luff breaks evenly (roughly 30" forward of deck drain). If top telltales luff first, move car forward. If bottom telltales luff first, move car back.

Backstay should be adjusted so you have about 6" of forestay say.

Upwind, trim your sail so it is approximately 4-6" away from the end of the spreader.



Moderate Air

Main

Pull foot out to band-traveler in center. Tension mainsheet so top telltale flies 70% of time; top batten will be parallel or slightly in board of parallel. This helps to generate power. Tension main halyard/cunningham to just remove horizontal wrinkles in luff.

Genoa

Trim sheet so sail is 2-3" from end of spreader. Tension backstay to medium setting. This will straighten headstay and slightly flatten sail (3-4" of sag). If sailing in waves and chop, move genoa lead forward 1-2 holes to generate more power.

Heavy Air

Main

Outhaul out to band - max tight. Tension halyard or cunningham hard to keep draft forward. Tension aft lower shrouds to keep mast from bending too much. Backstay on very tight. Top batten should be outside of parallel. Traveler should be dropped to leeward all the way. Tension the vang tight enough so that the boom does not go up when the mainsheet is eased. This will allow you to "vang sheet" to keep boat on its feet. Remember, flat is fast. Play the mainsheet aggressively in the puffs to keep the boat flat.

Genoa

Tighten halyard quite tight to keep draft forward. Move lead 1-2 holes aft of light air position. Trim sail so it is 3-4" off end of spreader. Tighten backstay very tight to make headstay as straight as possible and flatten sail.

*Please note that the above trim settings should be taken as starting points only. These are meant to show the range of settings from light to heavy air. We have found it useful to keep a logbook every time we go sailing to note fast settings or ideas.

Contact Us

For more information, visit the North Sails One Design website at:

onedesign.com

For any questions you may have on tuning your Catalina 22, contact our class experts:

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Tension Gauge Conversion Chart

Over the past few years Loos Co. has introduced its new style PT-1, 2 and 3 professional tension gauges to the market. Since many of us are replacing our older model A and B gauges with these new models we are posting the following conversion chart for your convenience.

MODEL A	MODEL PT-1		
	3/32	1/8	5/32
5	6		
10	9		
15	12	14	
20	16	16	
25	20	19	
28	23	21	
30		22	
35		27	25
38		30	28
40		33	30
42			33
44			36
45			38
46			39
47			40

Model B	Model PT-2		PT-3	
	3/16	7/32	1/4	9/32
10	11			
15	13			
18	15			
20	16	18		
22	18	20		
24	19	22		
26	21	24		
28	23	25		
30	25	27	25	
32	27	29	27	
34	29	31	29	
		33	31	
		36	33	6
		37	36	7
			37	9
				10
				11
				12
				14
				16
				18
				20
				25

NORTH SAILS ONE DESIGN QUALITY CONTROL CHECK

CATALINA 22

MAINSAIL		GENOA		SPINNAKER	
Corners		Corners		Corners	
Cunningham		Cunningham		Numbers	
Luff Slug(optional)		Leech Cords		North Logo	
Numbers		Luff Hanks		Bag	
Battens		Foot Line			
Leech Telltale		Spreader Patch			
Insignia		Stanction Patch			
North Logo		Telltale			
Bag		North Logo			
		Bag			

Checked by: _____

Date: ____ / ____ / ____