## THE MUMM 36 SET UP, TUNING AND ASSEMBLY GUIDE

December 1993

Congratulations on the purchase of your exciting new Mumm 36! You now have one of the most exciting boats available and you should be looking forward to lots of fun and enjoyable sailing.

As a help to get you quickly up to speed, we offer this simple guide as an easy way to set up your boat, or a good place to start until you learn more about your exciting new boat. You should also read the Class Rules carefully and anything you intend to do to the boat should be done within these rules.

Now that you have taken delivery of your Mumm 36, you should check that you have everything that you ordered. Also before launching check that you have all of your safety equipment onboard.

Upon checking everything, you will probably want to get sailing as soon as you can. In order to help, following is a guide for getting your Mumm 36 ready.

If your boat was trucked or shipped to you, we suggest putting all of the deck gear back on as the pushpit/pulpits and coach roof winches were removed for trucking because of height restrictions. If you are on a normal cradle you will probably be about 4.170M off the ground with a beam of 3.620M.

Starting with the pushpits/pulpit and stanchions followed by the lifelines to make it safe to move around on the deck, put all the blocks and cars on followed by the purchases. After completing this I would assemble the mast. This is quite easy to do. You may need a helper to assist you with various pieces that need to be put together. Also various tools as well as some Neversieze for fittings that will be removed now and then, and some thread lock for screws and fittings that you don't want to vibrate loose while sailing.

After putting your mast together rods/spreaders and pulling your halyards through, and before stepping, please check that all sharp edges/spreader ends, etc., are very well taped up or faired in so they won't cause any damage to your sails. It will also be easier to put your headfoil on when the mast is standing.

Before launching your boat, check the bottom for any possible transportation problems. Also if you are a pure racer you will probably want to give your bottom a wet sand. Once you are satisfied with your bottom, go ahead and launch your boat. Once the boat is in the water, and before the crane/travel lift is removed, you should go aboard and check your keel bolts/through hulls, etc., making sure that they are all water tight. Once satisfied, remove the crane/travel lift and proceed to move your boat to where you will step the mast.

Before starting your engine, please ensure that the water intake is open and oil levels are full. Check that you have diesel in your tank.

Now that you are ready to step your mast, there are a few things that you should check and do before hand. Check your forestay length. We suggest a forestay length of 13.770M from the center of the pin to the center of the pin (Hall Spar). After measuring your forestay check the location of your mast step. Again, we suggest the mast step to be located so that the athwartship centerline of the mast is approximately 4075mm from the forward face of the forestay fitting below decks. This will give you a very small amount of prebend. If you are from Hawaii or a windy location like this, we suggest moving your mast step aft a little more to induce a bit more prebend. This will make your mast a lot safer in a seaway, preventing the mast from inverting. Please rig your runners and back stay purchase so once you have the mast vertical you will only have to put the pins and shackles through them, making it quicker and spending less time with the crane banging around into your spar.

Once you have your spar vertical in the boat go ahead and attach your cap shrouds/forestay, runners and backstay. Once you have secured them, you may want to remove the crane.

Before leaping ahead and just putting the boat together, we suggest after putting the mast in that you set it up properly and tune it a little.

After stepping the mast and removing the crane you should put the mast chocks in making sure the mast is in the center sideways between the two chainplates using the cap shrouds to measure in from and that J is within the rules taken from tohe center of the forestay pin to the front edge of the mast. This should be between 3800mm - 3838mm.

When you are happy and if you have a mast jack, pump the mast up so the mast wedges just slide in and out with the runners and backstay loose to find out how much cap shroud tension you have (Please make sure that your D1's are not attached or are loose). While the mast is up on the mast jack check the mast to be vertical in the boat from side to side. This is done by pulling a steel tape measure up on your center line halyard and measuring down to the shear, at a common fore and aft position from side to side. To double check this it is suggested that you also measure to the cap shroud pins in your chain plates.

Now that you know your rig tension and if your mast is in the center let it back down off the wedges and mast jack. Once down make the necessary adjustments to the cap shrouds to increase or decrease the tension to the recommended load, Also keep in mind you may have to make the adjustment to one side only or both to move the mast over to get it vertical in the boat. You may have to jack the mast up and down a couple of times to get it correct. Our recommended rig tension with the caps is 4100 psi with a mast jack ram size of one square inch X 2.

Now that you are happy with the cap shroud tension and that the mast is vertical in the boat, hand tighten the D1's. Once they are hand tight, let the rig down off the jack and tension the D1's. Be careful not to put too many turns on as the load jumps quickly with the D1's, and keep making the necessary adjustments until you reach the recommended load. You will notice that you are increasing the rig tension up to our recommended load of 5100 psi. Please note that once you have your cap shrouds to tension, do not adjust them while you are tensioning the D1's.

Now that you have your rig to the recommended tensions, you will notice the D2's are slack. Send a person aloft and hand tension the D2's. While doing this ensure the mast is straight by looking up the mast from the gooseneck and adjust the D2's as necessary to make them straight. You will have to make adjustments to these when you first go sailing to get the mast straight under sailing load.

Now that you have the mast set up, you may want to check your mast rake. We suggest a desired rake of about 864mm measured along the boom from the back face of the mast. Simply put a weight on the end of the main halyard to show the rake along the boom, check that the runners are hand tight and make sure no crew or sails except the person taking the measurement are on board. And as mentioned before it is easier to put the headfoil on now as well. Start by putting a small amount of runner on. Then pull a tape measure up and measure the distance to the desired position where you would like the head foil to finish. You will find a position of about 1.100M off the deck for the feeder to be ideal this being the bottom of the foil. Once you have cut it to length we suggest cutting the top off at a 45° angle so it won't catch on halyards or catch on the mast. After cutting it to length and angling the top, go ahead and put it on following the enclosed instructions. Also, don't forget to seal your mast collar. Now that the boat is fully The best way is with silicone and rubber mast boot. rigged, making sure everything is lead properly, and split pins/clevis pins are well taped.

You are almost ready to go sailing. We suggest you check to see if your sails fit in the mast and headfoil before you throw your dock lines off. Once satisfied, off you go. After hoisting the mainsail and under medium runner tension (recommended maximum runner tension is 4700 lbs). Load the rig up gently and check that your mast is straight from tack to tack before fully loading up the rig. When you are happy, go ahead and hoist your genoa and check the rig again from tack to tack, making the necessary adjustments to the D1's and D2's as required to keep your mast straight.

One more thing you should do while sailing is to set your checkstays up so they are even from side to side and no deflection when the main sail is fully bladed. This will maximize your adjustment.

You will need to get familiar with your electronic installation. Please read your manuals and initialize your instruments. The more you calibrate the log/compass and wind instruments the easier it will be to get the most out of your boat using your supplied polars. You have several options as to the location you can read the polars from. Some people like them written on the back of the coach roof, others like them in their instruments or on a computer.

You will find using and referring to the polars will greatly help you get the most out of your Mumm 36. Polars contain all revelant Wind speed / Wind angle and Boatspeed information.

A few other helpful tips. While you are racing positioning of the crew is also very critical. Generally under 10 kts you will all sit forward of the helmsman and as people are getting off of the rail in the lighter conditions instead of going to leeward, they should go below to help lower the center of gravity. This should be done very agressively in any sloppy conditions up or down wind to prevent the boat from rocking and pitching. Down wind in under 10 kts, be careful not to have too many in the cockpit causing the stern to drag, slide a little forward to where you would be sitting upwind.

As the wind starts to increase above 10 kts, it is good to slide one person behind the helmsman, but if the boat starts pitching too much, slide him back forward. Generally between 10 to 12 kts you should be okay sliding one back. Always be careful with your weight movement and concentration.

On the subject of sail trim, we will only touch the surface. In the lighter breezes, be aggressive with the trim upwind making adjustments to the out haul and easing the runner a lot to keep the boat powered up. As the breeze freshens, start de powering normally and applying more runner tension. Downwind in the lighter breezes, sail your polars aggressively, keeping pressure in your sails and the boat moving. A simple line of communication here between your helmsman and the trimmer talking about pressure will greatly help your performance.

These are only a few of the important tips to help you get the most out of your Mumm 36.

Now that you have everything set up, you will now be able to enjoy your Mumm 36.

You have no excuse not to be a world champion after reading this.

GOOD LUCK!!!

## **MUMM 36 FACTS**

RIG TENSION WITH CAPS 4100 PSI
FULL RIG TENSION 5100 PSI
MAXIMUM RUNNER TENSION 4700 LBS
LEADING EDGE OF MAST BEHIND BULKHEAD 2' 1" 635mm
FORESTAY LENGTH PIN TO PIN CENTER 45'2" 13.769M
MAST RAKE AT GOOSENECK 34" 864mm

## PRINCIPAL DIMENSIONS

LOA 35'10" 10.92M DWL 31'9" 9.68M BEAM 11'10" 3.62M DRAFT 7'4" 2.24M

DISPLACEMENT APPROX 8150 LBS APPROX 3700 KG BALLAST APPROX 3500 LBS APPROX 1590 KG