

GENERAL HINTS

For All Farrier Designs

Including

F-24, F-25, F-82, F-27, F-28.
F-9 Series, F-31 F-36 and all variations

Reprinted from Farrier Marine's
Sailing Manual For All Designs

SAFETY IN GENERAL

Capsize matters can be depressing, but to put it in perspective, a capsize is simply very difficult to do. Luffing up slightly, or bearing away (if on a reach) is usually all that is required. The risk of capsize can also be virtually eliminated simply by reducing sail according to the conditions, and being prepared to let the sheets go.

When under spinnaker in winds of over 20 knots it should always be a matter of policy to never leave the spinnaker sheet unattended. It should be hand held, not even cleated.

Avoid continuous spinnaker sheets, and never cleat the spinnaker in self-tailing winches. Cruisers shouldn't even use the spinnaker in over 20 knots. Under main and jib you can still reach 15 knots, with complete comfort and safety.

Fortunately it is very hard to capsize a Farrier trimaran, but this can lead to overconfidence. Don't fall into this trap - always be aware that it is possible to capsize, and reduce speed accordingly to suit the conditions - just like any car.

TECHNICAL NOTES

WINCH LINE

The trailer winch line should be regularly replaced. This can wear and is under a high strain when lifting the mast. A breakage here could be dangerous, and it is always advisable to stand clear of the line while lifting the mast. Also, frequently check the trailer winch line when on a long trip.

SPRING RETAINING CLIPS

CAUTION: The spring retaining clips as can be used on the Turnbuckle clevis pins should be regularly checked to ensure they will still 'clip' fit on the clevis pin. Replace if they have lost their spring and become loose, otherwise you could lose your mast.

These spring clips have been used successfully for over 20 years and are intended as a convenient 'quick rig' feature. They are not as secure as a properly fitted cotter pin, and if doubts exist on their use then a cotter pin or circular ring should be used instead, and some are usually included in the Toolbox. However these rings/pins will increase rigging time, and the final decision in this regard is for the owner.

LAUNCHING

If immersing the trailer to the bend in the frame will still not let you free the boat, be careful; a few inches more can have your boat drifting away, so have a bow line secured.

HOISTING MAINSAIL

If you find this is tight going up or down (a not uncommon problem with full batten boltrope mains), there are now some spray-on silicon compounds that can help. Remember to also check that the mainsail foot outhaul is slackened off.

BEARING AWAY

Don't forget this is a very effective and safe way of

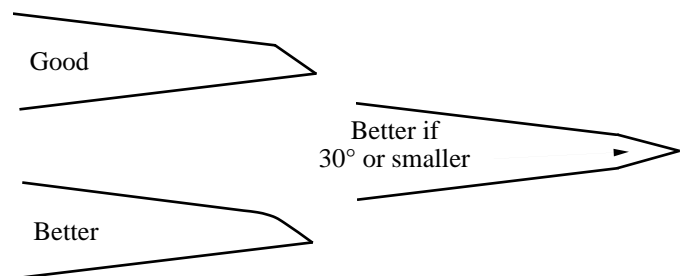
absorbing gusts while reaching in strong wind conditions, particularly under spinnaker. Rounding up tends to throw the mast to leeward (the wrong way), and can increase speed dramatically - all very exciting. However, bearing away throws mast to windward, speed falls off, and the motion feels much safer. This may sound odd, but try it sometime in lighter conditions to get confidence - it really works.

HEAVY HELM

The tiller should always be light and easy to handle, with just one hand. If not, then there is **something wrong**. Usual cause is the rudder blade has kicked back slightly. If this is not the problem then rudder may not be raked far enough forward. This can be changed by filling the pivot hole in the rudder blade and re-drilling slightly further forward (say 1/4").

RUDDER/DAGGERBOARD HUM

This is not an uncommon occurrence due to the difficulty in getting perfectly fair foils in a production environment, and even carefully hand made foils can develop a hum. This can be reduced or eliminated with a little fine tuning by filing or sanding the trailing edge of the foil concerned as follows:



The bottom left shape is probably the easiest to achieve in practice, and the least likely to be damaged.

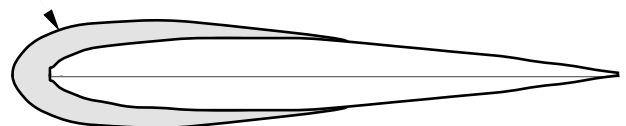
RUDDER VENTILATION

This can be a problem at very high speeds, and symptoms include a 'whoop' sound out the back, a huge rooster tail, and no steering. This normally only happens with speeds over 15 knots and fortunately the boat usually just keeps tracking straight.

The cause is air being sucked down the side of the rudder at high speeds, particularly if oversteering. Immediate cure is to waggle the rudder a little, or bring it back onto the centerline until the water flow reattaches, or slow down.

To avoid, always keep the leading edge of your rudder smooth and fair, and if it becomes a consistent problem then the best cure is to fix a horizontal 'fence' to the leading edge of the rudder about 12 to 15" up from the bottom.

Fence



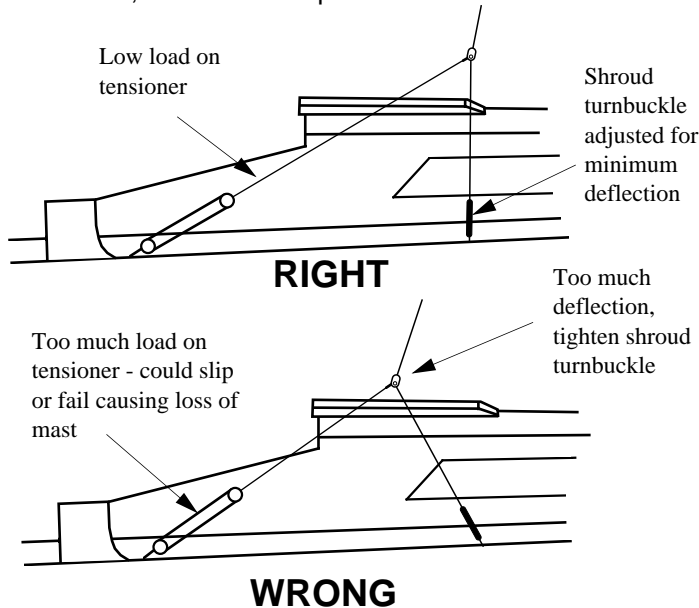
This will prevent the air from travelling down the blade and retains steering control, even if the top part of the rudder

has ventilated. Such fences are fitted as standard on some higher performance Corsair models.

SHROUD TENSIONERS

When leaving the boat for any length of time with floats extended, the shroud tensioners (if used) should be let off. If not, the high tension could slowly bend the boat, due to 'creep' characteristics. This rule applies to all boats with adjustable backstays.

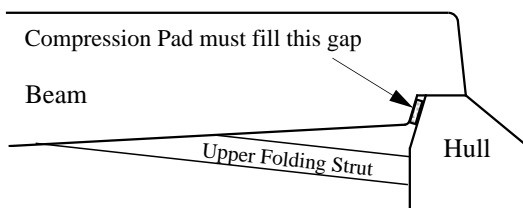
When initially setting up, shrouds with such tensioners must be adjusted to be just long enough to reach chainplate. There will then only be a small deflection when the tensioners are applied. Avoid the shrouds being too long as the resulting large deflection will put too much load on the tensioners, and this could put the mast at risk.



When sailing offshore, or for long periods, it is best and safest to fully tension the cap shrouds with the turnbuckles, so there is no reliance on the tensioners.

COMPRESSION PADS

These are fitted to the ends of the beams, to eliminate any gap or movement between the beam ends and the pads in the hull. **Do not omit or remove**, as this would cause the high compression loads in this area to be directed through the Upper Folding Struts, which are not designed to be strong enough for such loads. They are designed for folding loads only, and the end mounts may fail.



This would not cause a serious beam problem as the beams then simply move inboard to bear against the hull again. The boat is not threatened structurally. However,

repairing an U.F.S. mounting point is difficult and expensive.

The plastic compression pads should be full width of the beam and bear evenly against both beam and hull to avoid any point loading. These pads should be checked periodically and adjusted or replaced if necessary.

BEAM BOLTS

These should always be in place and tightened before going sailing. Otherwise the Upper Folding Struts can again be overloaded as above, due to the beam inner end being forced up slightly by sailing loads.

It is also possible, but unlikely, for a Beam bolt to gall and seize in a bolt pad, which can prevent you from folding up the boat. If this happens, then you can still fold up the boat by simply releasing the bolt pad nuts from inside, or cutting off the Beam bolt head. To avoid this, keep the threads well lubricated with a Teflon grease.

WINGNETS

Take care not to step near the inner ends of the nets on the sides where lashing cannot be used in order to allow easy folding. Your foot may go through this gap. This area can be lashed if you wish, but should you forget to undo when folding, the eyelets in the nets will be pulled out.

BIMINI TOP STORAGE

A bimini top can be very useful, due to its ability to shade the cockpit. For storage, it can be hung over the stern and tied to the pushpit.

FLOAT/BEAM VENTS

The floats should be vented through spring loaded vents just aft of the forward beams, or the latest method is to use micro cowl vents high on the float transoms, and covering a small 1/16" vent hole. These vents are to prevent a build up of air pressure inside the floats on hot days, that could be enough to open up joint seams.

The watertight bulkheads at the forward beam and Shroud chainplate bulkheads should also have very small holes near the top to allow venting throughout the float. Should the float ever be holed then these will be above the flooded waterline, or at worst, only allow a very small amount of water through.

Should the float be inverted as in a capsized, then the airlock formed above these vents would prevent any significant flooding.

Hollow self-built beams also need draining/venting, and this is done through small holes in the very bottom of the beams inside the floats. Should water appear from these then the source of the leak in the beams should be investigated, and repaired.

In the case of capsized, these holes are above the float's flooded waterline, which will prevent any significant water entering, and consequent loss of beam buoyancy.

Current ready made F-82 and F-9A beams are currently still foam filled and do not need drain holes. This may change.

RUST

Many grades of stainless steel will get an occasional brown stain in saltwater, that can look like rust. The grade used on most marine fittings is Type 304 or 303, and both of these will show this. Type 316, a more expensive grade, but actually slightly weaker, does not. All three grades can be used, depending on the application. To avoid this staining, use 316 as much as possible and always wash your boat down with fresh water after every outing. The brown stains will not appear if the salt is washed off.

CLEANING FLOATS

These can be extended for cleaning, if wished, while boat is on the trailer. Float supports must first be dropped down, and the boat then rocked one way. The 'high side' float can then be extended. Let the boat lean the other way and the remaining float can be extended. You will need to support the floats in some way once extended.

CLEAN BOAT HINT

If you are having problems with un-house trained birds on your boat, just leave a dummy, but lifelike, snake in the cockpit floor. Works well.

COLLISION

Any boat that has had a significant fore and aft collision on the float bow, or the folded beams have hit a low bridge, should always be thoroughly checked. No boat can be made collision proof, and hidden damage can result.

The complete float should always be checked after an impact, not just the bow area. A heavy fore and aft collision can actually propagate throughout the float, and has even generated cracks around the aft deck inspection hatch flanges for instance. In one case, a float hull had a vertical fracture in the aft beam area from a severe bow collision.

The beams should also be carefully checked if they have received any significant sharp impact. Being carbon fiber, they can be cracked or damaged from sharp impacts, and areas to check are around the lower folding strut brackets,

and just inboard from the float. Even if no damage is found, continue to monitor for cracks over a period of time.

A particular area to check for delamination on F-9As, after a fore and aft collision, is the forward Beam Bulkhead to hull tapping around the hull brackets and down into the hull.

This is a known collision failure point and is due to the bow diagonal wire brace (F-9A only) directing shock loads into the forward beam structure, and any cracks in the Beam Bulkhead to hull area should be investigated and repaired.

Damage here may not be visible initially, but it may grow to eventually fail later, so continue to monitor. The boat still holds together should this tape delaminate, but obviously sailing should cease until it is repaired.

Such fore and aft collisions on the F-9A also tend to try and lift up the beam bolt pad - so also check this area in the beam recess for cracking.

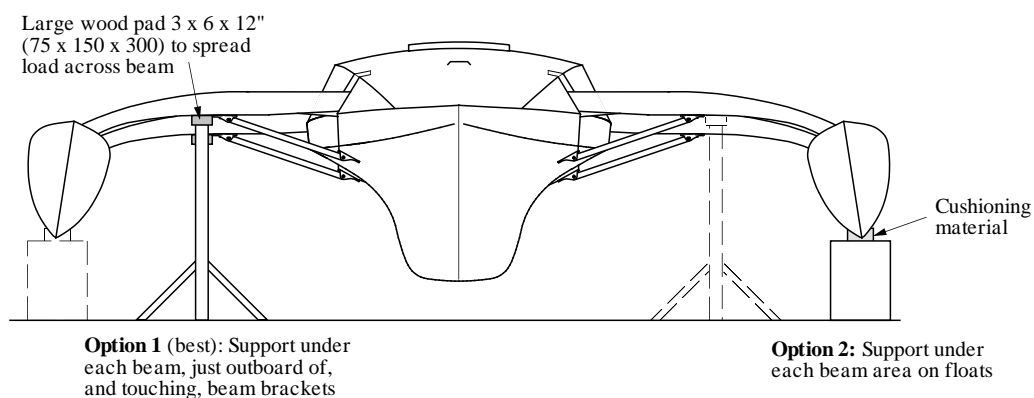
HURRICANE SURVIVAL

Hurricanes frequently cause damage to many boats, and on one occasion capsized a folded F-27. The owner had left it on a mooring, and being worried about possible damage from other boats breaking their moorings nearby felt it best to fold her up to reduce the 'target' profile. However this considerably reduces stability, and as stated earlier, this is limited while folded. As a result, no doubt while swinging sideways, the gale force winds blew the F-27 on its side.

The best procedure in such a situation is to get the boat out of the water, and trailer it inland away from harm - the perfect solution and used by most owners. If there is not time for this, then leave the floats extended, and pump water into each float and the main hull to weigh her down. Also remove the wing and bow nets. These don't have much windage, but it is surprising how much it can be in such winds. Lowering the mast will also reduce windage. Your boat is then as safe as anything can be in a hurricane.

SPECTRA/KEVLAR OPTIONS

Spectra/Kevlar/Technora are all possible experimental alternatives for bow pole bobstay, or side lines, instead of wire. Can also replace the wire diagonal braces on the F-9A.



SUPPORT FOR MAINTENANCE

When necessary, the craft can be supported for short periods as detailed above for anti-fouling or other maintenance work.

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FARRIER MARINE, Inc.

SPECIFICATIONS

The following specifications may vary depending on options, and or design changes

F-25A

L.O.A.....	25' 6"	(7.77m)
L.W.L.....	24' 6"	(7.46m)
Beam.....	19'	(5.8m)
Folded Beam.....	8' 2 1/2"	(2.5m)
Draft Hull only	1'	(0.31m)
Draft C/board down	4' 10"	(1.48m)
Sail Area (Main and Jib)	367sq.ft.	(34sq.m)
Mast length.....	32' 4"	(9.85m)
Mast height above water.....	36' 4"	(11.1m)
Approx. Weight	1900lb	(8600kg)
Load Capacity	1200lb	(546kg)
Height on trailer	9' 8"	(2.95m)
Approx. Towing Weight.....	2800lb	(1270kg)
Auxiliary Power.....	4-8HP Outboard	
Approx. wind capsize force (main & jib):	33 knots	

F-25C (kit boat)

L.O.A.....	26' 6"	(8.1m)
L.W.L.....	24' 6"	(7.46m)
Beam.....	19'	(5.8m)
Folded Beam.....	8' 2 1/2"	(2.5m)
Draft Hull only	1'	(0.3m)
Draft D/board down	4' 7"	(1.4m)
Sail Area (Main and Jib)	440sq.ft.	(40.7sq.m)
Mast length.....	36'	(11m)
Mast height above water.....	40' 4"	(12.32m)
Approx. Weight	1600lb	(730kg)
Load Capacity	1500lb	(818kg)
Height on trailer	9' 8"	(2.95m)
Approx. Towing Weight.....	2200lb	(1000kg)
Auxiliary Power.....	4-8HP Outboard	
Approx. wind capsize force (main & jib):	28 knots	

F-82A

L.O.A.....	26' 11"	(8.2m)
L.W.L.....	24' 6"	(7.46m)
Beam.....	19' 6"	(5.95m)
Folded Beam.....	8' 2 1/2"	(2.5m)
Draft Hull only	1'	(0.3m)
Draft D/board down	4' 7"	(1.4m)
Sail Area (Main and Jib)	408sq.ft.	(37.8sq.m)
Mast length.....	34'	(10.36m)
Mast height above water.....	38' 7"	(11.78m)
Approx. Weight	1700lb	(770kg)
Load Capacity	1400lb	(636kg)
Height on trailer	9' 10"	(3.0m)
Approx. Towing Weight.....	2500lb	(1140kg)
Auxiliary Power.....	4-8HP Outboard	
Approx. wind capsize force (main & jib):	33 knots	

F-82R

L.O.A.....	26' 11"	(8.2m)
L.W.L.....	24' 6"	(7.46m)
Beam.....	19' 6"	(5.95m)
Folded Beam.....	8' 2 1/2"	(2.5m)
Draft Hull only	1'	(0.3m)
Draft D/board down	4' 7"	(1.4m)
Sail Area (Main and Jib)	430sq.ft.	(39.8sq.m)
Mast length.....	36'	(11m)
Mast height above water.....	40' 7"	(12.38m)
Approx. Weight	1500lb	(680kg)
Load Capacity	1600lb	(727kg)
Height on trailer	9' 10"	(3.0m)
Approx. Towing Weight.....	2400lb	(1100kg)
Auxiliary Power.....	4-8HP Outboard	
Approx. wind capsize force (main & jib):	31 knots	

F-9A/F-31

L.O.A.....	30' 10"	(9.4m)
L.W.L.....	30'	(9.15m)
Beam	22' 5"	(6.84m)
Folded beam	8' 2 1/2"	(2.5m)
Draft Hull only	1' 4"	(0.41m)
Draft d/board down.....	5' 6"	(1.67m)
Sail Area (Main and Jib)	599sq. ft.	(55.4sq.m.)
Mast length.....	40'	(12.2m)
Mast height above water.....	44' 10"	(13.65m)
Approx. Weight	3000lb	(1350kg)
Load Capacity	2450lb	(1114kg)
Height on trailer	11' 6"	(3.5m)
Approx. Towing Weight.....	4500lb	(2050kg)
Auxiliary Power.....	8-15HP Outboard	
Approx. wind capsize force (main & jib):	34 knots	

F-9AX

L.O.A.....	30' 10"	(9.4m)
L.W.L.....	30'	(9.15m)
Beam	23' 1"	(7.04m)
Folded beam	9' 6"	(2.89m)
Draft Hull only	1' 4"	(0.41m)
Draft d/board down.....	5' 6"	(1.67m)
Sail Area (Main and Jib)	599sq. ft.	(55.4sq.m.)
Mast length.....	40'	(12.2m)
Mast height above water.....	44' 10"	(13.65m)
Approx. Weight	3100lb	(1410kg)
Load Capacity	2850lb	(1295kg)
Height on trailer	11' 6"	(3.5m)
Approx. Towing Weight.....	4600lb	(2090kg)
Auxiliary Power.....	8-15HP Outboard	
Approx. wind capsize force (main & jib):	35 knots	

F-9R

L.O.A.....	30' 10"	(9.4m)
L.W.L.....	30'	(9.15m)
Beam	22' 5"	(6.84m)
Folded beam	8' 2 1/2"	(2.5m)
Draft Hull only	1' 4"	(0.41m)
Draft d/board down.....	5' 6"	(1.67m)
Sail Area (Main and Jib)	647sq.ft.	(60sq.m.)
Mast length.....	42' 6"	(12.95m)
Mast height above water.....	47' 4"	(13.65m)
Approx. Bare Weight	2750lb	(1250kg)
Load Capacity	2700lb	(1227kg)
Height on trailer	11' 6"	(3.5m)
Approx. Towing Weight.....	4250lb	(1932kg)
Approx. wind capsize force (main & jib)	32 knots	

F-36

L.O.A.....	36' 10"	(11.2m)
L.W.L.....	35' 8"	(10.88m)
Beam	26' 1"	(7.95m)
Draft Hull only	1' 8"	(0.5m)
Draft d/board down.....	6' 9"	(2.07m)
Sail Area (Main and Jib)	838sq. ft.	(77.5sq.m.)
Mast length.....	49'	(14.94m)
Mast height above water.....	54' 8"	(16.65m)
Approx. Weight	6500lb	(2740kg)
Load Capacity	3000lb	(1360kg)
Auxiliary Power.....	20-30 HP	Inboard
Approx. wind capsize force (main & jib):	38 knots	

THE LATEST DESIGNS

F-38, F-38R, and F-38ST

L.O.A.....	38' 6"	(11.74m)
B.O.A.....	27'	(8.23m)
L.W.L.....	36' 11"	(11.25m)
Approx. bare weight	6000lbs	(2730kg)
Full load. displ (at DWL).....	9800lbs	(4455kg)
F-38 rotating mast.....	52'	(15.24m) long
F-38 sail area (main & jib).....	890sq.ft	(82.4sq.m.)
F-38R rotating mast.....	54'	(16.45m) long
F-38R sail area (main & jib).....	939sq.ft	(86.9sq.m.)
F-38ST carbon wing mast.....	56'	(17m) long
F-38ST sail area (main & jib).....	1010sq.ft	(93.5sq.m.)
Draft (board up).....	1' 10"	(0.56m)
Draft (board down).....	6' 11"	(2.11m)

F-41 CATAMARAN

L.O.A.....	41' 8" - 43'	(12.7 - 13.1m)
B.O.A.....	23'	(7m)
Loaded Displ. (at DWL).....	16,900lbs	(7680kg)
Bridgedeck Clearance (at full load).....	2' 9"	(840mm)
Mast Height.....	54' 2"	(16.5m)
Sail Area (main & jib).....	939sq.ft	(87.2sq.m.)
Draft (bd. up).....	1' 10"	(0.56m)
Draft (Bd. down).....	7' 4"	(2.24m)

AND SOME EARLY DESIGNS

TRAMP/EAGLE

L.O.A.....	19' 6"	(5.95m)
L.W.L.....	18' 0"	(5.5m)
Beam	14' 9"	(4.5m)
Folded beam	8' 0"	(2.44m)
Draft Hull only	1' 0"	(0.30m)
Draft d/board down.....	4' 0"	(1.2m)
Sail Area (Main and Jib)	222sq. ft.	(20.7sq.m.)
Mast length.....	28' 10"	(8.78m)
Mast height above water.....	29' 6"	(9.0m)
Approx. Weight	1210lb	(550kg)
Load Capacity	1000lb	(450kg)
Height on trailer	9'	(2.74m)
Approx. Towing Weight.....	2000lb	(910kg)
Auxiliary Power.....	4-6HP	Outboard

TRAILERTRI 680

L.O.A.....	22' 3"	(6.8m)
L.W.L.....	20' 5"	(6.23m)
Beam	16' 4"	(4.98m)
Folded beam	8' 0"	(2.44m)
Draft Hull only	1' 5"	(0.43m)
Draft d/board down.....	4' 3"	(1.3m)
Sail Area (Main and Jib)	239sq. ft.	(22.2sq.m.)
Mast length.....	26' 3"	(8.0m)
Mast height above water.....	30' 7"	(9.3m)
Approx. Weight	1500lb	(700kg)
Load Capacity	1000lb	(450kg)
Height on trailer	10' 6"	(3.2m)
Approx. Towing Weight.....	2400lb	(1100kg)
Auxiliary Power.....	4-6HP	Outboard

TRAILERTRI 720

L.O.A.....	23' 7"	(7.2m)
L.W.L.....	21' 8"	(6.6m)
Beam	16' 4"	(4.98m)
Folded beam	8' 0"	(2.44m)
Draft Hull only	1' 5"	(0.43m)
Draft d/board down.....	4' 3"	(1.3m)
Sail Area (Main and Jib)	277sq. ft.	(25.7sq.m.)
Mast length.....	30' 6"	(9.32m)
Mast height above water.....	34' 10"	(10.62m)
Approx. Weight	1650lb	(750kg)
Load Capacity	1050lb	(480kg)
Height on trailer	10' 6"	(3.2m)
Approx. Towing Weight.....	2550lb	(1160kg)
Auxiliary Power.....	4-6HP	Outboard

For the very latest news on all Farrier designs, be sure to visit:

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