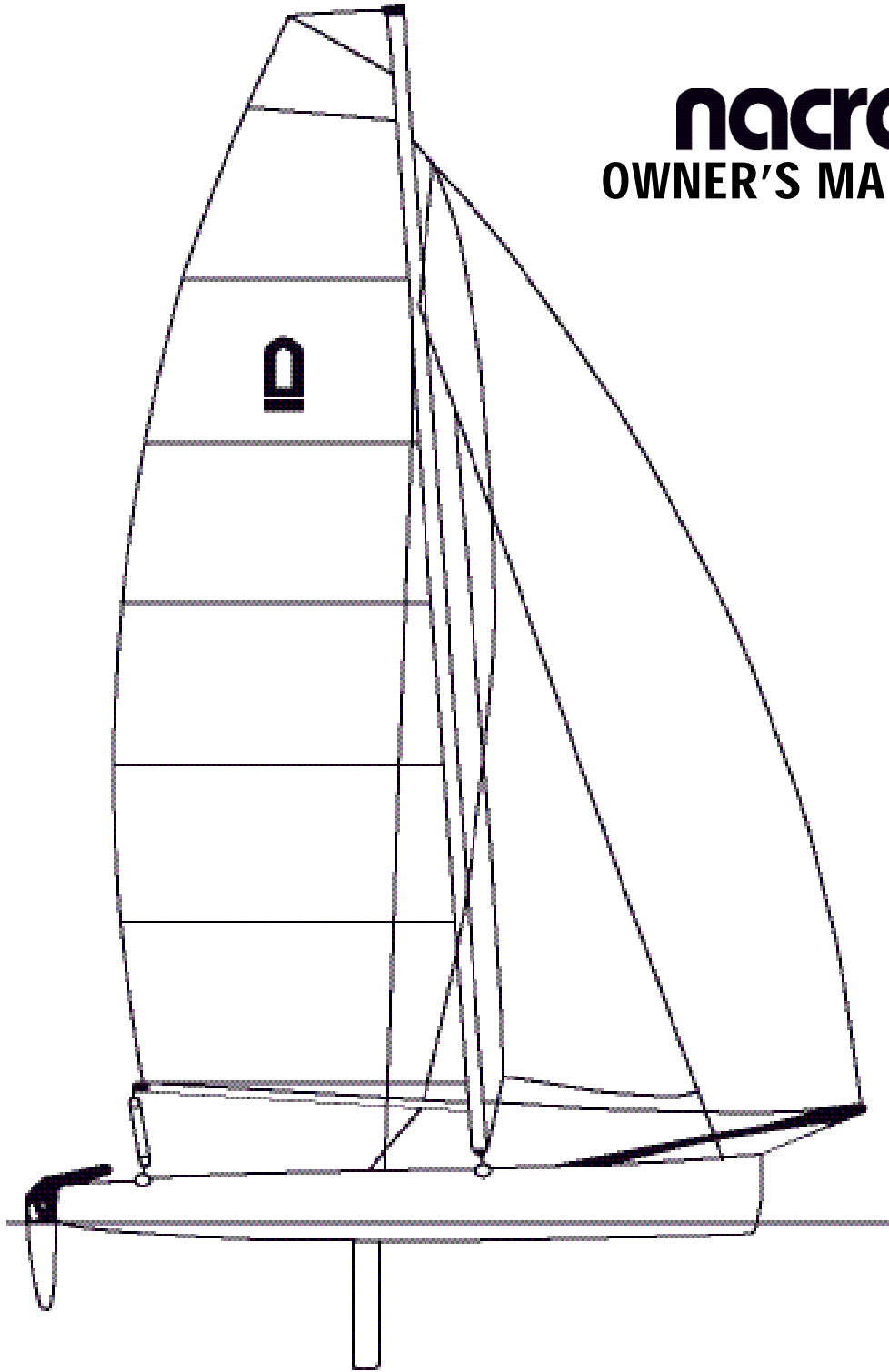


nacra
OWNER'S MANUAL



nacra: 500, 570, BLAST, I-17, I-18, F-18, I-20

www.nacraclass.com

Performance Catamarans, Inc.

1800 East Borchard Avenue
Santa Ana, CA 92705
tel. (714) 835-6416, fax. (714) 541-6643
website: www.performancecat.com

nacra

always one step ahead

Performance Catamarans has been building recreational high performance multihulls since the early 70's. We are the original builders of Nacras, Prindles and Inter Catamarans.

By constantly improving our products each year through trend setting design innovations and the use of the latest construction techniques, we have continued to lead the worldwide multihull market in design, durability and overall performance – producing *regatta winning results*.

By being awarded Sailing World Magazines' top accolade for performance boat of the year, we have proven to be the innovators in the industry.



TABLE OF CONTENTS

Hull Assembly	4-5
Trampoline	5
Spreader Assembly	6
Rotator Arm	7
Downhaul Blocks	7
Halyards	7
Standing Rigging	8
Roller Furler Jib System	8
Downhaul Retractor Kit	8
Rotator Cleats	8
Shroud Adjusters	9
Bridle Wire / Forestay Assembly	9
Trapeze	9
Stepping the Mast	9-10
Steering	11
Jib Sheet System	12
Boom System	12
Rotator System	12
Mainsheet System	13
Traveler System	13
Jibsail	13
Mainsail System	14
Hoisting the Mainsail	14
Lowering the Mainsail	14
Spinnaker Setup	14-15
Standard Spinnaker Pole	15
Snuffer System	16
I-17 Snuffer System Detail	16
Snuffer Halyard Setup	17
Self Tacking Jib	18-19
Sailing and Beaching	20
Righting After a Capsize	20
Trailing and Storage	21
Design Category	21
Maintenance	22
Warranty	23



500, 570, BLAST, 17, I-18, F-18, 20

The basic assembly for these models is covered in this manual. Familiarize yourself with this complete manual to help insure proper assembly and maintenance. There are variations between models, be sure to follow procedures where applicable. Variations may also occur based on model, year built, and options.

PLATFORM ASSEMBLY

TOOLS YOU'LL NEED:

9/16" socket Wrench
Phillips Screwdriver
Allen Wrench (included)

HULL ASSEMBLY

Place hulls boxes approx. 8 feet apart. Make sure both hulls are facing the same direction, and port and starboard hulls are oriented correctly. (Pic. 1) Open the boxes, leaving the hulls in the box cradles. Be cautious of the staples- they are very sharp and may scratch the hulls, or cause cuts.



Open the hardware box or boxes and familiarize yourself with all of the parts of your boat. (2) The hardware boxes may include some or all of the following depending on which model boat you have:

- Main beam
- Rear beam
- Rudder box
- Tiller tie bar
- Tiller extension
- Rigging box
- Boom
- Daggerboards
- Sails w/ battens
- Trampoline w/ rod
- Roller furling gear
- Spinnaker gear



The exact contents for your model will be listed on the sheet enclosed.

If your boat has a jib, but not a self tacking system, open the bag containing the jib cars. With a phillips screw driver , remove the forward beam end caps, and set them aside for re-installation later, and insert the jib traveler cars onto the beam. The pin should be on the inboard side of the beam towards the mast as shown in picture 3.



Place the crossbars in the beam sockets on the hulls. Take time to align them with the pre-drilled bolt holes. (4) From the rig box, open the bag containing the forward and rear beam bolts, washers, and grease. The forward bolts are allen heads (5) . Slide the washers into the track on the front beam. Stack the 2 types of washers on top of each other. The nylon should be on the bottom. Grease the beam bolts, and hand tighten into place. Follow the same steps for the rear beam (6). **BE SURE TO GREASE THE BOLTS.** After hand tightening the bolts, work your way around the boat, tightening all bolts to between 18-20 ft/lbs on a torque wrench.



TRAMPOLINE

Slide the front edge of the trampoline into the slot in the forward beam. The pocket and straps should be facing up (7).



Next, slide each side of the trampoline into the hull tracks (8). Pull slowly and evenly on both sides. **NOTE:** some models have aluminum trampoline tracks on the hulls.



Insert the fiberglass or PVC trampoline tie rod or tube into the slot in the rear of the trampoline.

Attach the lacing line (5/32 X 23'). To do this, tie one end of the line onto the end of the tie bar, and loop the line under the beam, up around the button, to the next button, then back under the beam, and around the tie bar until the trampoline is laced tightly, and tie the end off (9). Locate the hiking strap tie lines, and tie the hiking straps in place.



NOTE: Some models have an additional side lacing system & eyestraps instead of buttons on the rear beam.

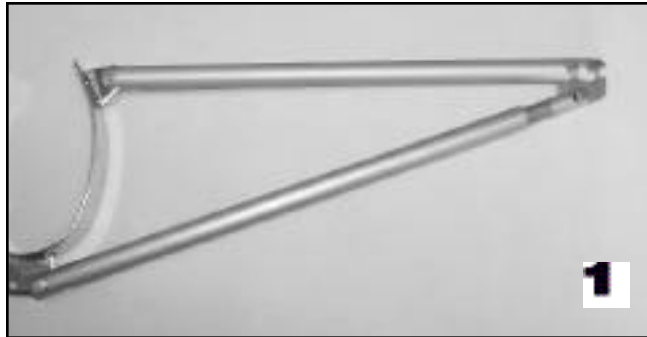
MAS I AND RIGGING

TOOLS YOU'LL NEED:

1/2" socket wrench
Needle nose pliers
Regular pliers
Rigging tape

SPREADER ASSEMBLY

If your boat is equipped with spreaders, start by assembling them. Screw the adjustable spreader end pieces into the long, threaded spreader arms, (use grease) , and attach the non adjustable end onto the forward hole on the spreader base (1). Pin the short spreader arms into the rear holes. The split rings should be towards the bottom of the mast.



Connect the two arms together with the spreader tip plate and 3 clevis pins on each side as shown.

Adjust the spreader rake by removing the pin on the forward arm, and screwing the adjuster in or out. To measure spreader rake, place a yard stick or batten between the spreader tips and measure the distance from the mast to the batten (2). This is your spreader rake. Adjust the arms until this measurement is at least 1 1/2".



Attach the diamond wires to the mast. Locate the large turnbuckle, and attach one end to the fitting near the base of the mast. Remove the clevis pin from the other end of the turnbuckle and pin the thimble end of the diamond wire to it using the special diamond wire plate clevis pin (3) (Single wire only) and a cotter ring. Pin the forked end of the diamond wire to the upper tang as shown (5). Diamond wire tension will vary per model based on crew weight and sailing conditions. Diamond wire tension should be tight initially.



Some models have 2 separate diamond wires- Pin the turnbuckles to the tangs on the lower part of the mast (4) . The upper forked end attaches as above (5).

Tension on the diamond wires must be the same at both sides of the mast.

NOTE: Be sure to tape all split rings and jam nuts to prevent snagging and accidental loosening.

Place the plastic spreader cover over the spreader tip and place the diamond wire in the slot in the spreader tip with the nylon roller above the spreader arms. Feed the monel seizing wire from the back side of the tip with one end on each side of the diamond wire. Lead the wire out of the tip.

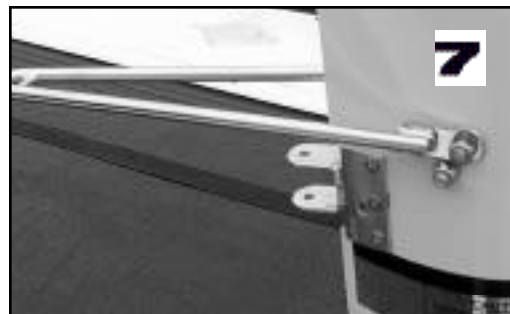
Cross the seizing wire over the diamond wire and feed to the back of the tip. Pull and twist tight with needle-nosed pliers. Check the wire to be sure that it is held tightly in the slot, and cannot come out (6).

NOTE: Be sure to tape all split rings to prevent snagging and accidental loosening.



ROTATOR ARM

Attach the rotator wishbone to the mast (7). Remove the upper nut on the rotator bolts and attach the arm to this bolt. The lower bolt is there only to stop the arm from coming into contact with the boom when sailing. Be sure to tighten both nuts after installing the arm.



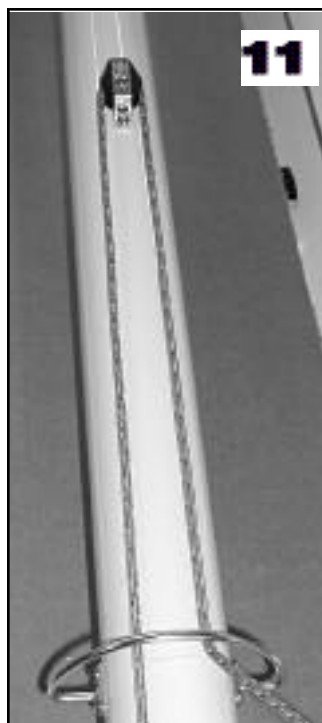
DOWNHAUL BLOCKS



Attach the downhaul swivel blocks to the base of the mast as shown (8).

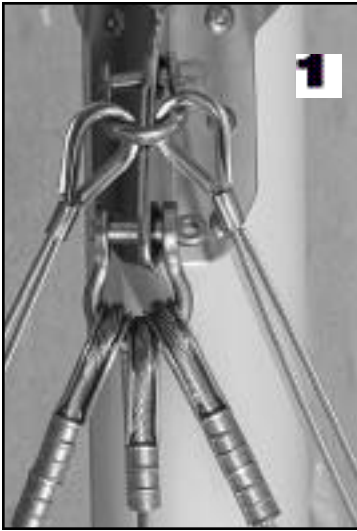
HALYARDS

Run the main halyard line through the masthead sheave and back down through the luff groove in the mast (9). Tie the halyard lock ring onto the end of the halyard that exits the top of the mast using a small bowline. Attach the large twist shackle to the ring (10).



Spinnaker Halyard

Run the spinnaker halyard up the starboard side of the mast, through the spreader arms, through the bale, around the cheek block on the mast, back down through the bale, and down the outside of the mast (11).



STANDING RIGGING

Locate the shrouds and forestay wire or pigtail, and attach them to the large lower hole in the mast hound using the 5/16" bow shackle. Locate the trapeze wires and, using a 1/4" shackle, attach them to the upper hole in the mast hound (1).

Shackle the jib halyard block to the forestay pigtail. Attach the jib halyard pigtail line to the thimble end of the jib halyard (2).

Secure the shackle with seizing wire. Pull and twist tight with needle-nosed pliers. Check the wire to be sure that it is held tightly and tape it to prevent damage.



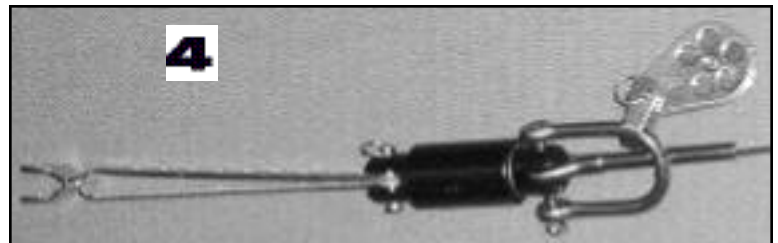
ROLLER FURLING JIB SYSTEM

If your boat has roller furling, the forestay assembly will go together as shown. The tang above the swivel drum attaches to the shackle on the mast hound, and the forestay attaches to the in-line jib halyard block (3).



INTER 18 ONLY:

Assemble the furler/forestay assembly as shown. The shroud adjuster hooks to the shackle on the mast hound, and the forestay attaches to the drum with the D shackle (4).



DOWNHAUL RETRACTOR KIT

Locate the downhaul kit bag, and follow the enclosed directions to install the system. After installing this system, you can re-install the front beam end caps. NOTE: Not all models have this setup.

ROTATOR CLEATS

There are 2 pre drilled and tapped holes just aft of the forward beam for these cleats. Be sure and use the angled shim to attain the proper cleating angle (5). NOTE: not all models utilize this system.



SHROUD ADJUSTERS

Install the shroud adjusters on the hulls using 1/4" clevis pins and split rings as shown (6).

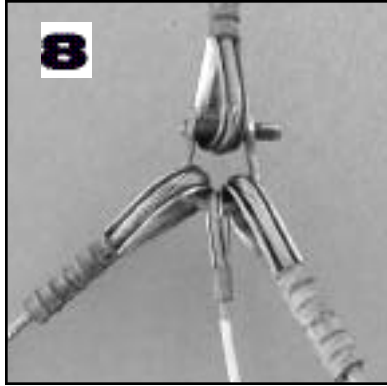


BRIDLE WIRE/FORESTAY ASSEMBLY

Install the bridle wires to the hulls. Attach the spin pole holder and roller furling lower assembly (If necessary). Attach the forestay adjuster. If the forestay adjuster has a tang attached to it, make sure it faces aft (6-10).



Basic Bridle



I-17 Pigtail/Forestays



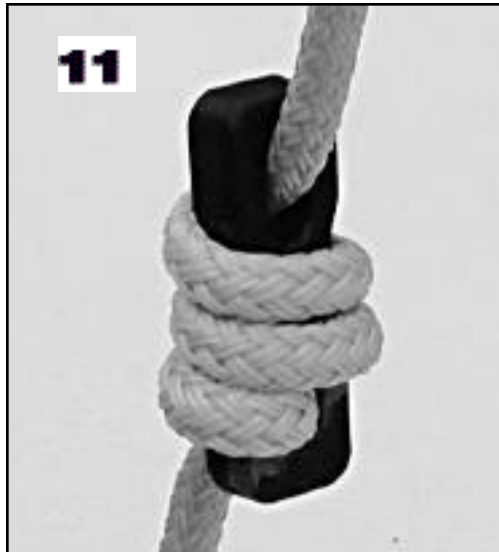
Snuffer/Spin Pole



Snuffer/Spin w/ Furling

TRAPEZE

Run the shock cord through the appropriate spot on the hulls, beams, or trampoline, and tie a bowline in each end. Tie a trapeze ring to each of the 3' lines supplied. Thread the line through the thimble at the end of the trapeze wire (12). Thread one of the plastic adjusters onto the line, wrapping the line around it at least twice (11). The adjuster allows you to adjust the trapeze height. Tie the tail of the line to the trapeze shock cord, being careful to not tangle the trapeze in the shrouds. In general the trapeze ring should barely touch the hull.



STEPPING THE MAST

CAUTION: Check for overhead wires before raising or lowering the mast. A mast which comes in contact with electrical power lines can cause serious injury or death.

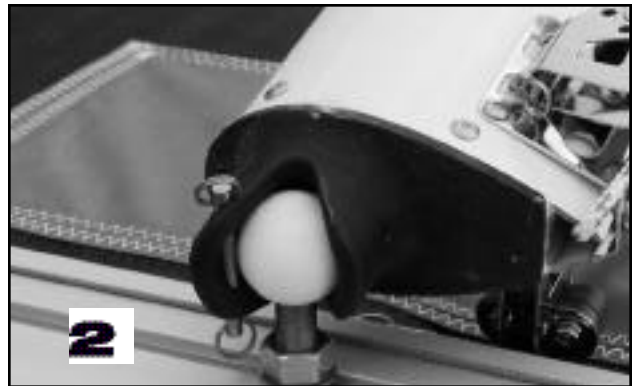
Before raising the mast the boat should be steady on level ground. If the surface is not level, point the bows downhill. If the boat is on a trailer be sure it is tied down and the trailer tongue is secure to the hitch.

CAUTION: Check for overhead wires before raising or lowering the mast. A mast which comes in contact with electrical power lines can cause serious injury or death.

Lay the mast lengthwise on the boat so that the mast rests on the beams with the base forward, and the sail slot pointing down. Slide the shroud covers over the shroud wires, and pin the shrouds in the top hole of the shroud adjusters (1).



Walk the mast backwards until the base is even with the mast ball. Rotate the mast 90 degrees, and pin the mast base onto the mast ball. You must keep the mast turned 90 degrees until it is vertical to avoid damage (2).



Make sure the rigging is clear of the rudders and other obstructions, and the forestay is not tangled in the shrouds before you begin to step the mast.

One person stands on the tramp near the rear beam, while a second person raises the mast up to the person on the tramp (3). Raise the mast to your shoulders and walk forward on the tramp while extending your arms over your head until the mast is upright, being held by the shrouds (4).

CAUTION: Check for overhead wires before raising or lowering the mast. A mast which comes in contact with electrical power lines can cause serious injury or death.



Keep forward pressure on the mast as the second person pins the forestay to the stay adjuster that is attached to the bridle wires (5). Tighten the rig by putting weight on the trapeze wires and adjusting the pins in the appropriate shroud chain plate holes. Adjust so the mast is raked slightly aft, or straight up. Rake adjustment can be set according to boat handling or wind conditions.



Remove the mast step pin to allow the mast to rotate freely while sailing.

S I E E R I N G

TOOLS YOU'LL NEED:

Phillips screwdriver
9/16" wrench

Flat head screwdriver
7/16" wrench



Attach the upper and lower castings to the rudder blades as shown (1). Adjust the rudder rake by turning the eye screw in or out to the desired location, and tightening the nut (2).



Install the hiking stick on the tiller tie bar using the hardware with the hiking stick (3).



Install the completed rudders onto the pintles so that the curved tiller arms face inboard (4).



Remove the philips screws from each of the tiller arms, and insert the tiller tie bar. Do not screw it in place yet (5).

RUDDER ALIGNMENT

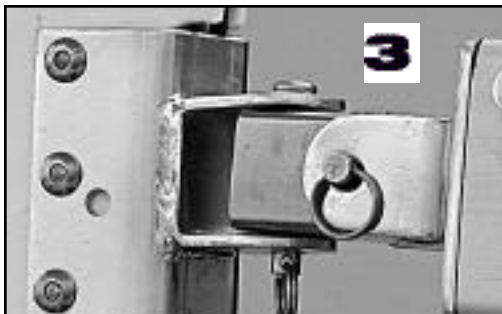
Lock the rudders in the down position and measure the distance between the port and starboard leading and trailing edges of the blades (6). Move the rudders in or out to attain the same measurement on both the leading and trailing edges of the blades. When the position is correct, install the self tapping screws into the urethane rod to lock the position.

(Note: allow 1/2" or more rod showing on each side for proper steering)



JIB SHEET SYSTEM

Install the jib cleat blocks onto the cars located on the front beam (2). Be sure to install the stand up springs. Tie one end of the jib sheet to the becket on one of the jib blocks, and thread one of the 2 bullet blocks onto the line (1). Run the line through the cleat blocks and behind the mast to the other block, and through the cleat first, and out through the block. Thread a bullet block on, and tie the end of the sheet to the becket on that block.



Attach the jib sheet blocks to the clew of the jib using the 3/16" shackle.

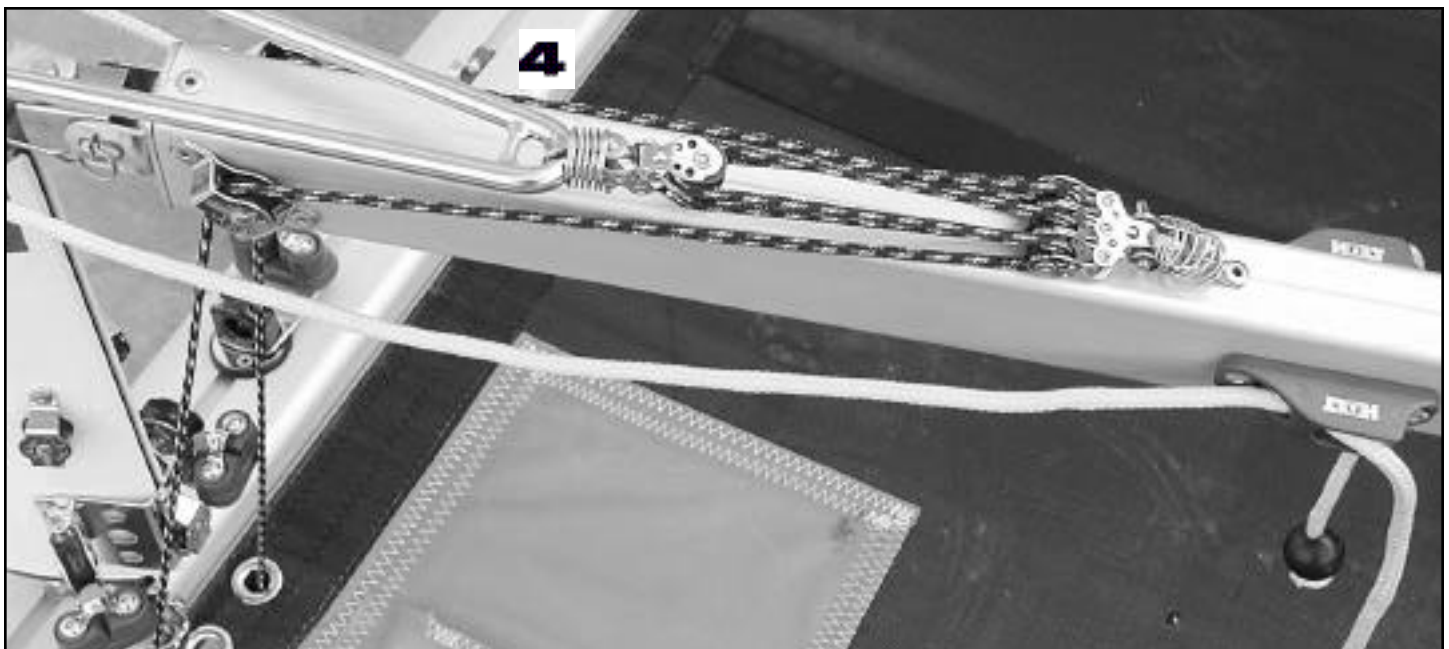
BOOM SYSTEM

Remove the clevis pin from the gooseneck assembly on the boom, and connect the boom to the bracket on the mast, and pin in place on the mast (3).

ROTATOR SYSTEM

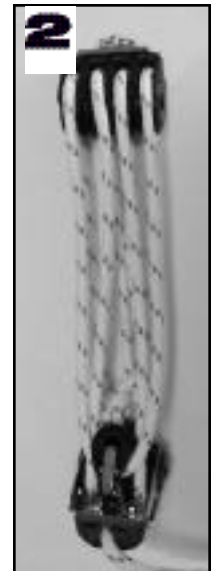
Tie the 5/16" rotator limiter lines to the diamond wire turnbuckles and lead them back to the clamcleats on the boom, and install the stopper balls.

From the rotator kit bag, shackle the double airblock and spring onto the mast wishbone, and the triple onto the eyestraps on the boom (4). Run the line from the cleat on one hull, under the tramp, through the cheek block on the beam, up through the tramp grommet to the check block on the boom and through the rotator purchase, and continue to the respective blocks on the opposite side.



MAINSHEET SYSTEM

To thread the mainsheet line, lay the blocks on their side, or attach them to the boom as if sailing. Start at the lower block cleat and ratchet, and work your way through the blocks until complete. Shackle the lower block to the traveler car with a 1/4" shackle (1, 2).



TRAVELER SYSTEM



Tie the split tailed end of the traveler line to the two eye straps on the rear beam. Make sure to tie them so the line joins in the middle, allowing the traveler car to be centered. Run the line through the traveler car and cleat. You can tie a stopper knot, or tie the tail end to the mainsheet line (3).

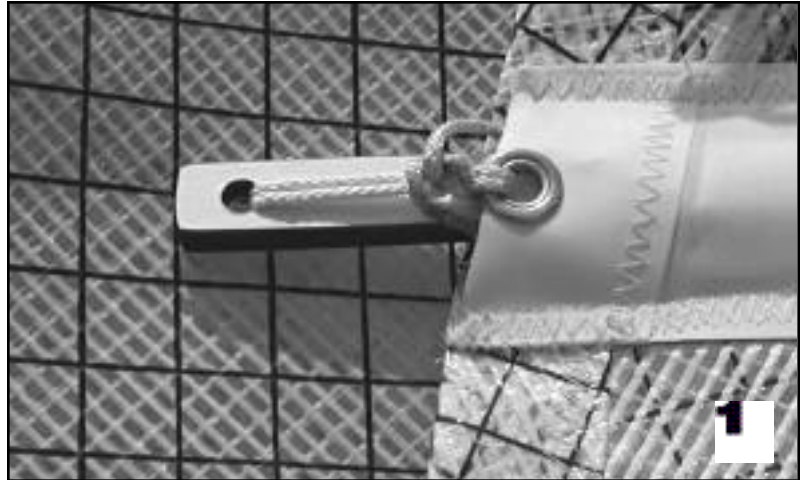
JIBSAIL SYSTEM

Attach the jib halyard shackle wire to the head of the jib, and start the zipper around the forestay. Run the tail end of the jib halyard line in the zipper with the forestay, and pull the jib up, zipping it closed as you pull on the halyard (4). When the jib is all the way up, shackle the tack to the tab on the forestay chainplate. Remove halyard line and attach the short line to the halyard, block or adjuster. Run line through adjuster, block or halyard (purchase not needed on recreational boats) then cleat it off (5). Tension rig before downhauling jib, forestay should never be loose within jib.



MAINSAIL SYSTEM

Unroll the mainsail on a clean, flat surface, and insert the battens into the appropriate batten pockets making sure that the batten tips fit into the batten pockets. Fold the batten tie line in half and loop it through the grommet on one side of the batten pocket. Lead both ends of the tie through the batten and then through the grommet on the opposite side. Tie an overhand knot while pushing the batten into the sail with your thumb (1). Tension the battens enough to eliminate all the wrinkles from the sail. Finish tying with a square knot and tuck the loose ends into the batten pocket.



HOISTING THE MAINSAIL

Always face the boat into the wind when raising or lowering your sails.

Shackle the main halyard twist shackle to the head of the sail and begin to feed the head into the sail slot on the mast and pull on the halyard line (2). Feed the sail into the track as you pull it up. The halyard ring will hook onto the halyard hook when the sail is raised completely (3).



LOWERING THE MAINSAIL

To lower the main, pull on the halyard line to raise the ring above the halyard hook on the mast, and rotate the mast in either direction. While holding the mast rotated, release the halyard line, and pull down gently on the mainsail.

SPINNAKER SET UP

Attach the spinnaker sheet ratchet blocks to the eyestay on the hull inboard of the shroud adjuster (4), or shackle them to the shroud adjuster (5), depending on boat model.



Secure the shackle with seizing wire. Pull and twist tight with needle-nosed pliers. Check the wire to be sure that it is held tightly and tape it to prevent damage.

Mount the spin sheet turning blocks on the front beam. Depending on your model, these eyestraps may not be pre mounted- attach them with the supplied rivets approximately 6" inboard of the hull side as shown (6).



If a spinnaker system is an option on your boat, install the spin pole mounting beam pin in the center of the beam with 4 rivets as shown (7).



Install the spin halyard swivel cleat onto the beam with the rivets provided on the starboard side of the mast as shown if it is not done so already (8).

If you will be using the snuffer system, install the spin halyard turning block below the swivel cleat with the eyestraps and rivets provided.

STANDARD SPINNAKER POLE SYSTEM



Insert the Aluminum spinnaker pole through the bridle fitting and onto the beam pin. Attach the pole bridle wires to the appropriate tangs on the hulls (9).

This spinnaker setup utilizes a 2:1 halyard system.

The Halyard comes down the mast, through the turning block on the spinnaker pole, out to the back to back block, and then back to the halyard swivel cleat.

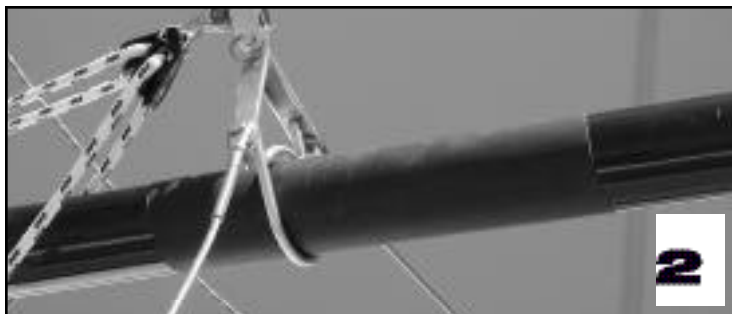
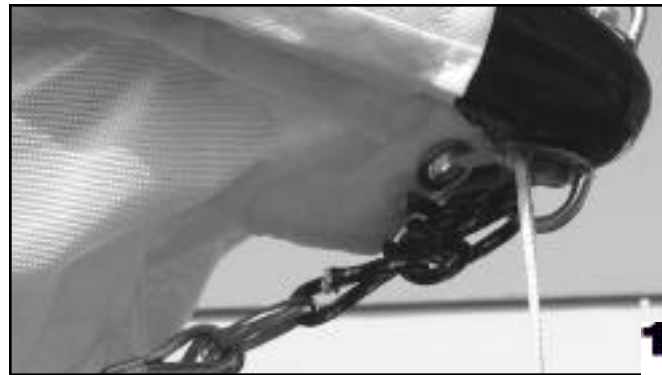
The spinnaker is stored on the spinnaker bag on the trampoline (10). To hoist the spinnaker, you must unzip the bag and pull on the halyard. This will pull both the tack and the head up to their final positions.

When dousing the spinnaker, release the halyard from the cleat and pull the spinnaker onto the boat and pack it back into the bag.



SNUFFER SYSTEM

Insert the small plastic tube into the hole on the front of the snuffer Using the 1/4-20 bolt and the two snuffer eyes, which make up the bridle wire/tack fitting (1).



If you have the carbon snuffer pole, put the extension and the long tube together to make one long pole. Insert the snuffer head onto the long end of the pole.

If you have the aluminum one piece pole, just insert the head onto the pole.

Slide completed snuffer assembly through the pole holder on the bridle/forestay connection, and over the pin on the beam. Be sure that the protective covering on the pole is in the pole holder ring (2).

Attach the snuffer bridle wires to the forward tangs on the hulls, and tie them to the eye fitting on the snuffer head as shown. Above (1).



Velcro the snuffer bag onto the pole, and tie the end of the bag to the pin on the pole with the small line on the end of the snuffer bag (3).

INTER 17 SNUFFER SYSTEM DETAIL

Attach both the snuffer bridle wires to the same tang on the hull as the forestay bridles, using the small bent tang supplied with the snuffer kit. Be sure that the plate is on the outside of the hull tang between the shroud adjuster and the tang (4).



Attach the pole holder to the thin white pole stay wire with the supplied line, and to the pole bridle wires with clevis pins as shown (5).

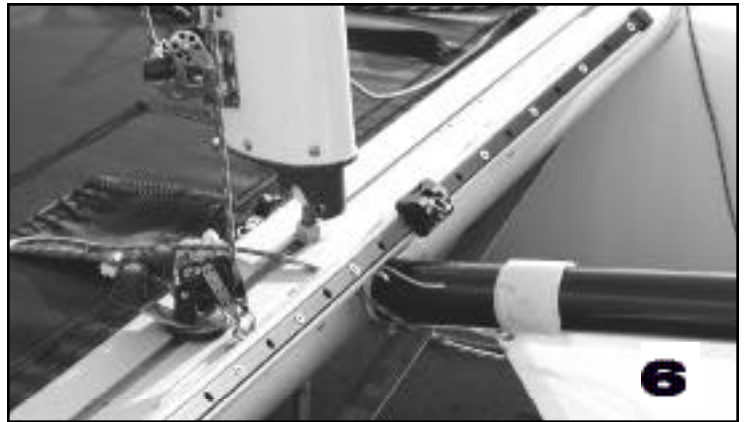


SNUFFER HALYARD SETUP

The spinnaker halyard for the snuffer system is a continuous line – the same line acts as the halyard to raise the spinnaker, and to douse the spinnaker during take downs.

Tie the end of the halyard that comes down the outside of the mast to the head of the spinnaker.

Run the other end of the halyard down the mast, through the turning block on the main beam, and through the swivel cleat. Run the tail of that line (coming from cleat) into the aft end of the snuffer bag, and out through the snuffer head as shown (6, 7).



There is a grommet in the middle of the spinnaker- run the line coming out of the snuffer head through this grommet and tie it to the strap towards the head on the opposite side of the sail. Be sure not to twist the spinnaker when running the halyard (7,8).



Tie the Tack of the sail onto the snuffer eyes on the front of the snuffer head (9).



Run the spinnaker sheet through the ratchet block on the hull, to the turning block on the same side of the beam, to the other turning block, then to the ratchet block on the opposite hull. Tie the ends to the clew of the sail.

Raise the spinnaker by pulling on the halyard line until the sail is all the way up. To “Snuff” the spinnaker, release the halyard from the cleat, and pull on the halyard that comes out of the end of the snuffer bag.

SELF TACKING JIB



If your boat is equipped with the self tacking jib, the track, and jib sheet controls will be pre-mounted on the forward beam as shown (1).

All you will need to do is run the control lines in the correct manner. You will need to install the spinnaker or snuffer pole prior to running the control lines.

There are two lines used with the self tacking jib system.

Run the larger line through the swivel block on the beam, and out to the turning block on the spinnaker pole (3), and through the single airblock, and continue to the respective blocks on the opposite side (2).



Attach the single airblock with becket to the traveler car on the jib track as shown. Using the small twist shackle, attach a single airblock to the clew of the jib (4).



Sample of clew traveler system (5).

Tie the small line to the airblock floating on the on the large line (6), and run it back to the becket block on the jib track traveler car, up to the block on the jib, and tie it off on the becket on the traveler car as shown (4).



GO SAILING! HAVE FUN!

SAILING AND BEACHING

ALWAYS WEAR YOUR LIFEJACKET WHILE SAILING YOUR CATAMARAN

- Never sail above your ability.
- Be sure to carry the proper safety gear when sailing.
- When Launching through the surf, always head directly into the waves.
- Always know the direction that the wind is blowing before launching
- Secure the drain plugs before sailing.
- After sailing, remove the drainplugs to equalize the pressure in the hulls.
- Carry your Nacra or use beach wheels with cradles whenever possible to minimize keel wear.



RIGHTING AFTER A CAPSIZE

Even the best sailors flip occasionally, so prepare yourself and the boat for the inevitable. Install a righting line onto the dolphin striker rod below the mast.

The boat will lose speed as it raises up on one hull and usually flips over slowly. Hang on to the boat, being careful not to separate yourself from the boat if possible.

As the boat flips, sit on the flat surface of the hull that is out of the water. Lower yourself down to the bottom hull using the mast step as a step. It is important to get yourself to the bottom hull as quickly as possible to prevent the boat from turning upside down (turtle). Do not let go of the boat, as the current and the wind may make it hard or impossible to get back onto the boat.

Uncleat the main, jib and spinnaker sheets. Reach around the front crossbar, and throw the righting line over the top hull. Make sure that the bows are facing into the wind. Move your weight towards the transom of the boat to make the boat turn to attain the proper angle. Be careful not to shift your combined weight too far forward or aft as this may cause the boat to roll over and turn turtle. If the mast is pointed directly into the wind, the boat may turn over on the other side when you right it.

Standing even with the front crossbar, the skipper and crew should grab the righting line, and hike out backwards. You can tie knots in the righting line to keep your hands from slipping during this procedure. If you are single handed, you may need to carry a righting bag to attain the necessary weight to right the boat.

Once the tip of the mast starts to come out of the water, the boat will right quickly. Be sure to hold onto the righting line until you can grab the boat and pull yourself up onto it. Be careful to avoid being hit by the dolphin striker rod as the boat comes down on top of you. The boat will now be pointing into the wind, and moving forward slowly if at all. Stow the righting line, organize the sheets, and you are sailing again!

TRAILERING AND STORAGE

- Always use trailers and beach dollies with cradles designed to fit the hulls rather than rollers. Risk of damaging the hulls occurs when using trailers and dollies without the proper support.
- Always remove dagger boards, blocks, and rigging when trailering. Removal of the rudders and steering system is recommended for long distance trailering. For short distances, be sure to secure the tiller tie bar so that the system cannot turn. Be sure to secure the rudders in the up position so that they cannot be lowered accidentally while trailering.
- Tie the boat snugly to the trailer using straps or tie down lines. Be aware that tying the boat too tight can result in hull damage. Do not use the dolphin striker as a tie down point or for pulling the boat. Use the main beam instead.
- Secure both ends of the mast. Be sure to have a red flag flying off the aft end of the mast.
- Boat covers are recommended to protect against rocks, gravel, and road debris while trailering, and to provide good protection from the weather and the elements.
- Mooring of your boat is not recommended. However, if the boat is moored in the water the warranty must be complied with. Barrier and anti-fouling paint must be applied to the bottom.
- Always leave the drain plugs and inspection ports open to avoid possible air pressure damage when not sailing.

CAUTION: Check for overhead wires before raising or lowering the mast. A mast which comes in contact with electrical power lines can cause serious injury or death.

DESIGN CATEGORY

Design category C has been approved for this craft. Designed for voyages in coastal waters, large bays, estuaries, lakes and rivers where conditions up to, and including, wind force 5 and significant wave heights up to, and including, 6 meters may be expected.

SPECIFIC INFORMATION

This catamaran is capable of supporting the crew even when swamped. The catamaran is also intended to be recovered by the crew after a capsized. The minimum crew weight if noted on the table on page 20. The righting technique is on page 18.

GENERAL NOTES

All crew members should receive suitable training before operating the catamaran. The catamaran shall not carry more than the maximum load indicated for the appropriate model and trapezes shall not be used when carrying more than two persons. All inspection ports and drains shall be closed while sailing. Bilge water shall be kept to a minimum. Do not breach watertight compartments. The stability of this craft is reduced by adding any weight up high.



MAINTENANCE

- Rinse ENTIRE boat with fresh water after each use. Be sure to flush all blocks and fittings thoroughly.
- Check the sails and trampoline for rips, tears, or loose stitching. Repair immediately to avoid further damage.
- Always keep trampoline lacing tight.
- Check mast ball for wear- REPLACE IF NECESSARY.
- Tape all split rings and cotter pins to prevent loss or damage.
- Check for broken or delaminated battens. Never sail with damaged battens.
- Rinse sails with fresh water, make sure sails are dry and batten tension is released when storing for more than a day.
- Always check beam bolts to ensure proper torque.
- Check hulls for excessive wear on bottoms from Beaching and dragging the boat. A bottom job should be done to replace any lost fiberglass.
- Check hulls for leaks at all hull fittings by covering suspected areas with soapy water and blowing air (from your lungs) into the drain plug holes. DO NOT USE A VACUUM CLEANER AS THE EXCESSIVE PRESSURE CAN DAMAGE THE HULLS. If the water bubbles, there is a leak. Remove the fitting and/or cover with silicone sealant and replace. If the leak is from a fiberglassed area (no fittings) this should be reglassed to insure proper permanent bonding and sealing.
- Masts should be regularly inspected for water tightness and diamond wire wear. Make sure fittings are sealed with silicone. Replace wires that show any signs of wear. Check diamond wire attachment points, turnbuckles and seizing wire. These areas could cause serious mast failure and sail damage.
- Periodically check for and replace frayed, worn, or kinked wires, shock cord, and lines.
- Avoid storing your Nacra for long periods of time with the rigging tensioned to race settings (very tight.)
- Check all shackles, clevis pins, and fasteners for loosening or wear. Replace as needed.
- Periodically check the bearings in the traveler car and replace them if necessary. Rinse thoroughly with fresh water to free any stuck bearings.
- Periodically check dolphin striker strap tension. It should not move more than 1" Re-tighten if necessary.

RECOMMENDED AND MAXIMUM LOAD TABLE

Model	Light Displacement	Minimum Recommended Capacity	Maximum Recommended Capacity	Maximum Recommended Capacity	Maximum Recommended Capacity	Maximum Loaded Displacement
	<i>Lbs/kgs</i>	<i>In persons</i>	<i>In persons</i>	<i>In persons</i>	<i>Lbs/kgs</i>	<i>Lbs/kgs</i>
Nacra I-17	340/154	1	4	4	661/300	1030/467
Nacra F-18	375/170	2	4	4	749/340	1036/470
Nacra I-20	399/181	2	4	4	749/340	1060/481
Nacra 450	280/127	1	3	3	507/230	787/357
Nacra 500	340/154	1	3	3	749/340	1001/454
Nacra 570	359/163	2	4	4	749/340	1021/463
Blast	340/154	2	4	4	749/340	1089/494

PERFORMANCE CATAMARANS, INC. FIVE YEAR PRORATED LIMITED WARRANTY

Performance Catamarans, Inc. ("Performance") warrants that all catamarans, exclusive of parts and accessories, manufactured by Performance after May 1, 1988 are free from defects in materials and workmanship to retail customers in the United States. Standard equipment manufactured by Performance after May 1, 1988 are warranted free from defects in workmanship and materials to retail customers in the United States for a period of one (1) year. Performance will repair or at its option, replace defective parts under the following terms:

YEAR OF OWNERSHIP	WHAT IS COVERED	AMOUNT OF COVERAGE	
		Original Owner	Subsequent Owner
First Year	Hulls and Standard Equipment	100%	100%*
Second Year	Hulls	80%*	40%*
Third Year	Hulls	60%*	30%*
Fourth Year	Hulls	40%*	20%*
Fifth Year	Hulls	20%*	10%*

** Freight and labor expenses are not included*

Coverage commences from the date of original purchase. All replacement parts or repairs are covered for a period of one year. This warranty is transferable to subsequent owners.

*NOTE: CHARTER AND RENTAL OPERATIONS LIMITS WARRANTY TO 30 DAYS
FROM DATE OF PURCHASE ON ENTIRE BOAT.*

THIS WARRANTY DOES NOT COVER:

- Freight outside contiguous U.S.
- Battens
- Wear from normal sailing and usage
- Damage caused by alterations or modifications
- Discoloration, crazing or blistering of gelcoat caused by mooring or storing the boat in water**
- Transportation of boats or parts to or from Performance Catamarans, Inc. or its dealers
- Any other consequential damages, incidental damages or incidental expenses, including property damage

** Barrier coat and anti-fouling paint must be applied to bottom if boat is stored in water.

Performance Catamarans, Inc. does not recommend storing a catamaran in the water.

To the extent permitted by Federal and State Law, Performance disclaims any and all implied warranties including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose and this limited warranty is given in lieu of all other warranties, expressed or implied. To the extent permitted by Federal and State Law, except for the rights given by this limited warranty, the sailboat to which this limited warranty applies is sold in AS IS WITH ALL FAULTS CONDITION. Should State or Federal Law prohibit Performance from disclaiming implied warranties so implied shall last only as long as the express limited warranties contained in this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

TO OBTAIN WARRANTY SERVICE:

Within 10 days of discovering the defect, take your boat, along with proof of purchase (sales receipt or registration card) to an authorized dealer.

SPECIFICATIONS, HARDWARE AND EQUIPMENT SUBJECT TO CHANGE WITHOUT NOTICE.

WARNING:

The aluminum and carbon masts and other metal parts conduct electricity, coming in contact with or near an electrical power line or lightning can cause severe injury or death.
For your safety, do not sail, motor, launch or beach near power lines.



SUPPORT YOUR LOCAL DEALER

Your local Nacra dealer is there to serve you – the customer. Please take advantage of the many services that authorized Performance Catamarans dealers can provide.

- New Nacra Catamarans fully assembled
- Inter, Nacra and Prindle Catamaran parts and accessories
- Expert advice on boat rigging, repair and maintenance
- A direct source for all catamaran accessories
- Contacts for multihull fleets and events

Performance Catamarans, Inc.

European Distributor

Jan Deboer Catamarans

Floralaan 2 A

Rijnsburg-Holland 2231ZV

The Netherlands

Tel. 011-31-71-408-0080

Email: info@jandeboer.com

Local Dealer:

--