Mirage Tandem Sand Assembly Manual





WELCOME TO THE HOBIE WAY OF LIFE

Congratulations on the purchase of your new Hobie Mirage Tandem Island and welcome to the Hobie family. The Hobie Mirage Tandem Island cannot be outgrown (how do you outgrow fun?) and will provide years of enjoyment for everyone, from children through senior citizens. A fun-seeking pair or a single adult can sail it at top performance or cruise in comfort.

We offer this manual as a guide to increased safety and enjoyment of your new Mirage. The purpose of this publication is to provide easy, simple, accurate instructions on how to get your Hobie Tandem Island ready for the water and use it safely. Please read the instructions carefully and familiarize yourself with your boat and all its parts.

Whether you are a new sailor or a veteran of many years, we recommend that you read this manual thoroughly before your first sail and TRY IT OUR WAY FIRST! If you are new to sailing, this manual alone is not intended to teach you how to sail. There are many excellent books, videos and courses on the safe handling of small sailboats. We suggest you contact your local Hobie sailboat or kayak dealer, college or Coast Guard Auxiliary for recommendations.

Watch for overhead wires whenever you are rigging, launching, sailing or trailering with the mast up. MAST CONTACT WITH POWER LINES COULD BE FATAL! Be certain that the rigging area and the area you will be sailing in are free of overhead power lines. Report any such power lines to your local power authority and sail elsewhere.

We take pride in presenting the Hobie Mirage Tandem Island to you and hope that you'll take as much pride in owning her.

Fair winds and good sailing!

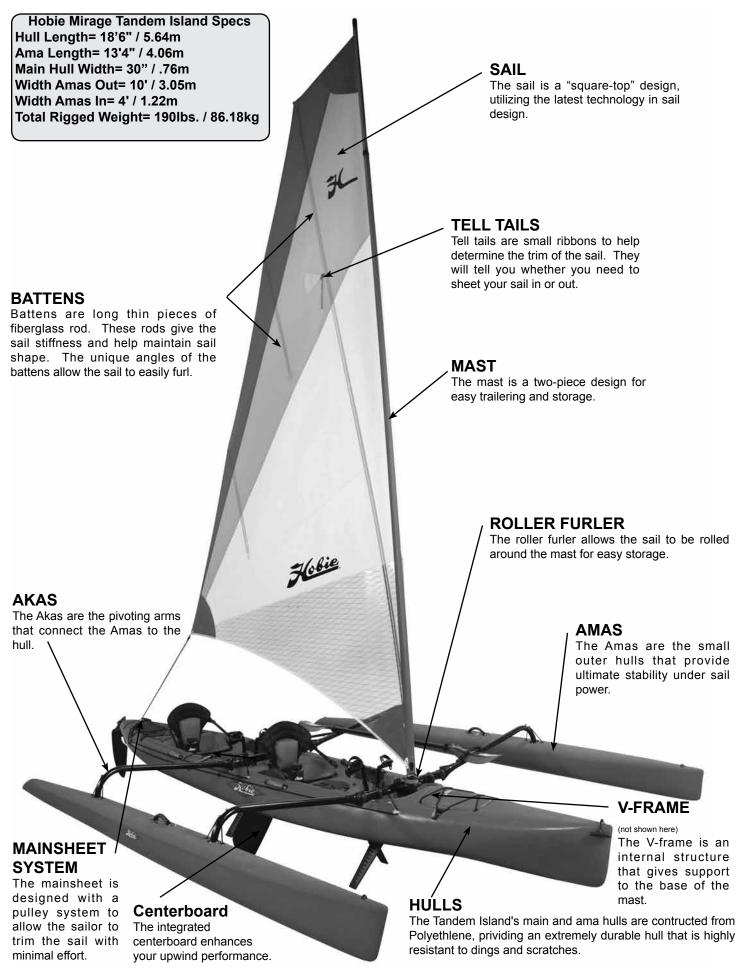


HOBIE MIRAGE TANDEM ISLAND INSTRUCTION MANUAL

This assembly manual takes you stepby-step through the set-up and sailing of your new Hobie MirageTandem Island, and will help you understand each part in detail.

Contents	PAGE
Hobie Mirage Island Terminology	3
List of Parts	4
Sail Assembly	5
Mast Assembly	5-6
Aka and Ama Installation	7
Mast Installation	8
Pivoting Akas	9
Furling the Sail	9
Reefing the Sail	10
Centerboard	10
Aka Storage Bag	10
Transporting the Tandem Island	11
Launching	11
Sail Power	11-12
Righting	13
Breakaway Pins	13
Trailering/Roof Loading	13-14





List of Parts

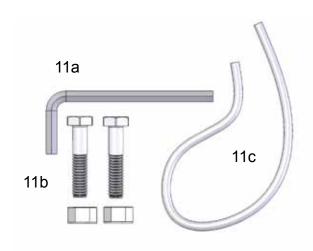
When unwrapping your new Hobie Mirage Tandem Island, be sure to check that all parts are included and that the boat is in good order. Find a clean spot, lay out all of your components and run through the checklist.

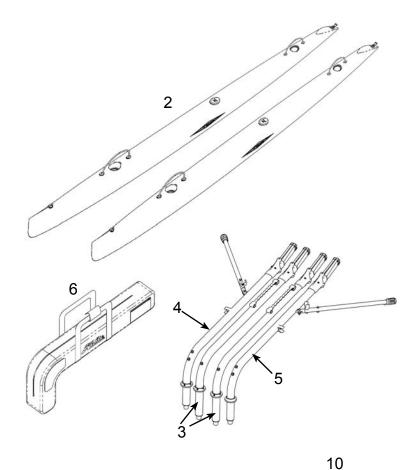
Hull and Crossbars

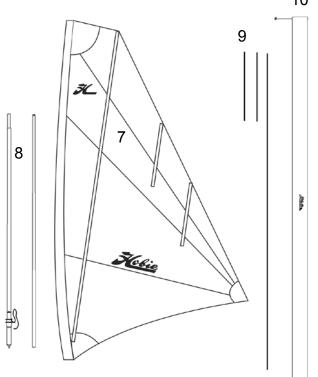
- 1. Hobie Tandem Island Hull with Deck Mounted Crossbars and Mainsheet
- 2. Two Amas
- 3. Two Forward Akas
- 4. Right Rear Aka
- 5. Left Rear Aka
- 6. Aka Carrying Bag

Sail Components and Small Parts

- 7. Tandem Island Sail
- 8. Two-Piece Mast
- 9. Three Battens
- 10. Full Length Mast/Sail Bag
- 11. Bag of Small Parts
 - a. Allen Wrench
 - b. Two Nylon Screws and Nuts
 - c. Small Line for Downhaul







Sail Assembly Instructions

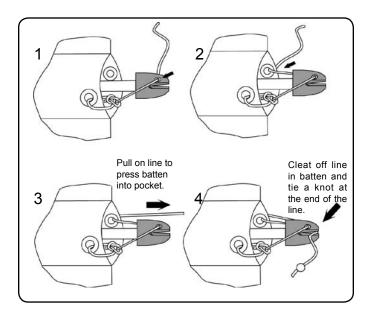
1. Find a large clean area where you can lay the sail flat.



2. The sail battens are the long flexible white rods which are inserted into long pockets on the sails. These pockets run diagonally along the face of the sail. Simply insert the battens into the pockets and run them all the way to the bottom.



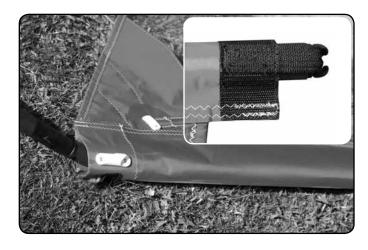
3. Once the battens are fully installed, apply tension to them to keep them in the pocket. Follow the diagram below for the proper lacing procedure. Make sure to tie a knot at the end of the line to prevent it from falling off the batten.



4. The Island's composite mast is two pieces, so simply slide the top of the mast into the lower end.



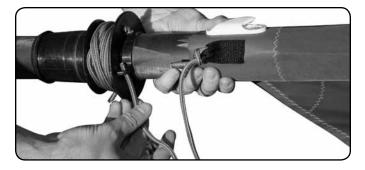
5. Now slide the small end of the mast into the mast sleeve all the way to the top of the sail. Once the mast reaches the top of the sail, make sure the webbing gets pressed into the fitting at the top of the sail, as shown below.



6. In the small parts bag, there is a small length of line that is used to apply a "down" force along the sleeve of the sail (called downhaul). Tie one end of the line to the small webbing loop at the base of the sail sleeve using a bowline knot.



7. Now rotate the base of the mast so that the hole on the mast collar aligns with the line. Feed the line through the hole and pull back up to the sail sleeve. Pull some tension in the line and cleat off the end into the jam cleat on the sail sleeve.





8. Roll the sail onto the mast. If the sail is in the same orientation as shown in the image below, rotate the mast counterclockwise.



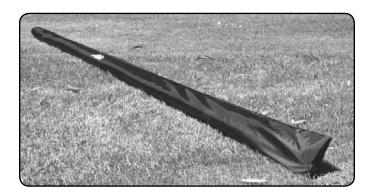


9. Once fully rolled, take the small line with the knot and wrap it around the hook sewn to the sail.



IMPORTANT

To keep your sail in good condition, we highly recommend that you store the sail rolled around the mast and inside the included full length storage bag. It is also important to bag the sail and mast when transporting on a car top or trailer.



<u>!CAUTION!</u>

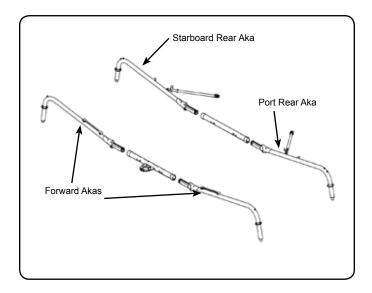
WATCH FOR OVERHEAD POWER LINES
WHEN HANDLING THE SAIL AND MAST.
NEVER RIG, TRAILER, OR SAIL THE BOAT
NEAR OVERHEAD POWER LINES. MAST
CONTACT WITH A POWER LINE COULD
BE FATAL!

Island Assembly

The instructions below will help guide you through the most efficient way to assemble your Tandem Island. Depending on how you transport your kayak (roof racks/trailer), you may be able to eliminate some steps.

Installing the Akas

- 1. Lay the Tandem Island hull on flat dry ground. If you are planning to transport the kayak after it is assembled, now is a good time to plug in your heavy-duty plug-in cart. (Assembling the Island on the cart is much easier.)
- 2. Remove the akas from the carrying bag and install them on the deck-mounted bars. It is important to differentiate the rear bars from the forward bars. The rear bars have an additional smaller tube that can swivel. With the rear akas, it is also important to note that there are port and starboard bars. The diagram below will show you proper orientation.



3. To install the akas, slide the casting on the aka into the deck mounted crossbar until it clicks into place. Please note the layout of the bars in the diagram above.





Removing the Akas

To remove the aka bars from the deck mounted bars, squeeze the two buttons on the deck mounted crossbar and pull out the aka arm.



Installing the Amas

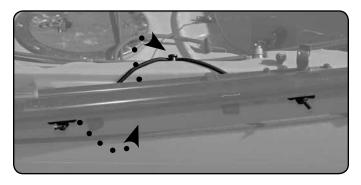
1. Both amas are identical, so they can go on either side. Simply install the end of the aka into the scupper holes on the ama. Keep the Bungee® on the ama on the outside of the scupper.



2. Once completely installed, stretch the Bungee cord over the eyelet posts on the akas. Make sure the aka is fully seated.



3. When transporting the Island, it is easier to keep the amas folded along the side of the hull. Pivot the bars back and stretch the Bungee underneath the forward aka over the eyelet post near the map pocket.



1. **IMPORTANT!** Before raising the mast, look overhead for powerlines.



5. Feed the mainsheet hook through the grommet at the clew of the sail. For the best performance, make sure the line isn't twisted around itself. See page 13 for a 3:1 mainsheet conversion.



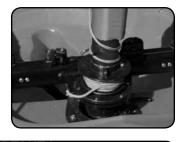
!CAUTION!

WATCH FOR OVERHEAD POWER LINES WHEN HANDLING THE SAIL AND MAST. NEVER RIG, TRAILER, OR SAIL THE BOAT NEAR OVERHEAD POWER LINES. MAST CONTACT WITH A POWER LINE COULD BE FATAL!

2. To install, take the bottom of the mast, and insert it through the bearing on the forward deck-mounted crossbar and into the mast cup. It is important to have good control of the mast as you install it so it goes straight into the hole.



3. As the mast collar goes into the bearing, you should hear the lock snap over the collar. When installed, there should be a 1/8"-1/4" gap between the collar on the mast and the plastic bearing ring.



! IMPORTANT !

The mast cup must be completely clear of sand that can collect at the bottom. Collection of sand will prevent the mast from fully going inside of the cup. To rinse the mast cup out, lay the boat on its side and splash water into the cup to allow it to rinse out.

4. Unwrap the furling line from the mast and feed it through the inboard crossbar cleat as shown in the picture below.



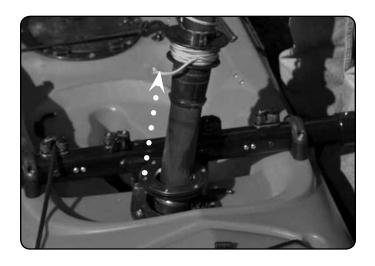
Removing the Mast

When storing or transporting the boat, be sure to take down the mast. Before pulling the mast out, look overhead for powerlines that could make contact with the mast.

1. Pull back on the mast release trigger.



2. Apply a little side pressure on the mast away from the trigger as you lift it out. As soon as the mast is free, grab it with both hands and pull the mast all the way out. Always pull the mast straight out.



Understanding the Working Features of your Tandem Island

Now that your Island is assembled, it is important to familiarize yourself with how some of its features work before taking it on the water. We recommed that you practice the following procedures before launching.

Pivoting Akas and the Locking Crossbrace

The Tandem Island is equipped with pivoting akas to make it easy to get on and off the boat from a dock or beach. As the akas fold in, they also move down to give you plenty of stability even when folded in. Do not sail the boat with the akas folded in.

To keep the akas in the "out" position, you will need to lock them using the pivoting crossbrace and ball locking system. With the akas in the "out" position, press the spring-loaded sleeve on the end of the diagonal locking brace and place it over the small ball that is on the kayak rails in the rear cockpit area.

Position the diagonal crossbrace sleeve over and on top of the ball and release the sleeve. Lift up on the brace a little to make sure it is properly locked on the ball.



To fold in the akas, press in on the sleeve and pull the crossbrace off the ball, then fold the akas in.



Furling and Unfurling the Sail

Furling and unfurling the sail is the process of rolling and unrolling the sail around the mast.

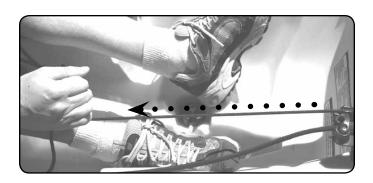
Before attempting to unfurl the sail, make sure the furling line is uncleated.



To unfurl the sail, grab the sail clew and pull it straight back toward you. As the sail unfurls, the furling line will wrap around the mast collar.



To furl the sail, pull on the furling line and the sail will wrap around the mast. Pull the furling line into the cleat to hold it in place. If it is difficult to pull or the sail isn't furling, you probably have the mainsheet cleated. The mainsheet must be uncleated for the sail to furl.



Reefing the Sail

When a sail is reefed, it is in a semi-furled state to reduce the sail area. By doing this you reduce loads on the boat that could be dangerous in squall or high wind conditions. To hold the sail in a partially furled position, adjust the sail to the desired size and cleat the furling line in the jam cleat.





Full Sail

Half Sail

If you are sailing the boat solo in the rear seat, the furling line can be difficult to reach since it is in the front seat. We recommend that you tie the end of the furling line to the end of your mainsheet line. This allows you to always be able to locate the furling line and operate the sail rolling feature from the rear seat.

Positive Rudder Lock Down

In high wind conditions, you will need to make sure that you have a fair amount of hold down force keeping the rudder down. On the right side of the hull near the map pocket, there is a T-handle that you pull to get the rudder down. Make sure to pull plenty of tension in the line and cleat it off to secure the rudder down. Note that both front and rear seats have up/down rudder control. So, for example, if the front seat has the rudder locked. the rear seat will not be able to raise the rudder until the front seat uncleats the rudder.



Centerboard

The daggerboard provides resistance to keep the boat from sliding sideways on the water. A centerboard is different from a daggerboard in that it is built into the boat and isn't removable. This make it much easy to use and operate.

To lower the centerboard, pull up on the centerboard control knob and pull back until the knob locks in the back position. This will hold the board into position unless you run aground, which will automatically raise the board up. To raise the board, pull up on the knob and push it forward until it locks into the forward/ stored position.







Aka Storage Bag

Use the storage bag to keep your akas in good condition. Each bag comes with foam holders to keep the akas in order and to prevent them from scratching one another. The best way to use the bag is to:

1. Insert two akas and press the foam holders over them.



2. Press the other two bars onto the foam holders and zip the bag closed.



Note how the top bars fit in front of the bottom bars.

Sailing Basics

You are now ready to go. Please review the following pages for sailing and maintenance tips. The manual that comes with the kayak package also contains important information about your new boat.

TRANSPORTING YOUR TANDEM ISLAND TO THE WATER

There are many ways to transport your Tandem Island from the car to the water. We recommend that you use the heavy-duty kayak cart or carry it with another person.

To use the cart, simply plug it in prior to attaching the crossbars. Then roll the boat into the water and remove the wheels, or have someone lift the boat to remove them.



To carry the assembled Island requires at least two people. For easy balancing and safety, keep the mast down when carrying it. DO NOT CARRY THE ENTIRE BOAT USING THE AMA HANDLES.

Installing the Mast

Note: The kayak can be slightly "tipsy" when transporting it on the wheels with the mast up in the air. If you are going to wheel your Island a long distance, we recommend that you lay the mast down on the deck until you reach the water and can take the kayak wheels off.

Launching

For safety, and to ensure that you have control of the boat at all times, we recommend the following steps when launching. These instructions start with the assumption that the boat is in the water with the Mirage Drive in, the sail rolled up, and the amas folded to the sides. As you become more familiar with the boat, these steps will become automatic.

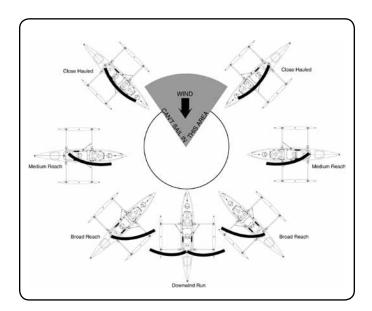
- 1. Lower the rudder.
- 2. Move the amas into the "out" position and lock the crossbrace to the hull.
- 3. Pedal to deeper water, and drop the centerboard.
- 4. Before you unroll the sail, make sure there is enough space around you to maneuver as you start to pick up speed.
- 5. Unroll the sail and trim the mainsheet accordingly.

SAIL POWER

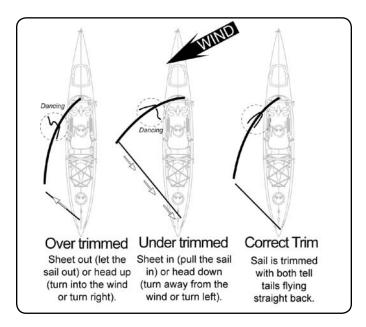
It is important to study the sail and become familiar with its characteristics in order to trim or make adjustments. When the front of the sail just behind the mast luffs, or flutters, in the breeze, you lose power. To start moving, pull the sail in just enough to stop the luffing.

Refer to the sail trim diagram below for approximate sail settings for the different points of sail or directions you will be sailing. Note the "can't sail zone". You cannot sail in this direction as the sail will luff constantly when pointed into the wind. If you get stuck "in irons" (stopped pointed into the wind) you will need to pedal into the zone that you can sail in. Then you can correctly trim the sail and start moving forward.

There are short ribbons (tell tails) hanging on either side



of the sail. Follow the diagram below to get optimum performance out of the sail for all angles of sailing. The tell tails react to air flowing over the sail and will help you determine if the sail is pulled in too tight or not enough. If you pull the sail too tight you will stall the sail power. Ease the sail out until the tell tails on both sides are flying. You will adjust the trim whenever the wind changes direction or when you change course.

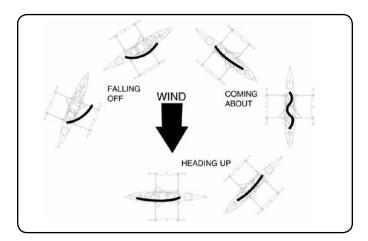


TURNING

To tack or turn the boat into and across the wind to the opposite direction (also known as "coming about"), follow the points of the sail guide illustration and take the boat to the close-hauled point of sail. This is when you are nearly 35 degrees from sailing straight into the wind. With the boat moving forward and not stalling, turn the boat into the wind. When the boat is pointing straight into the wind the boat will become level. Ease the mainsheet trim out just a little. As the boat comes across the wind and falls off onto the opposite, closehauled point of sail, turn the rudder back to the straight position and adjust the mainsail back in for the proper sail trim. If you make the tack and feel that the rudder is fighting the turn, you likely have the sail sheeted in too tight. Let the sail out a bit and turn the rudder to adjust your course.

When sailing downwind, turning the boat from one point of sail across to the other is called a "jibe". The jibe is completed by turning away from the wind (in sailing terms, "falling off") to the opposite point of sail rather than into the wind as when tacking. Care must be taken when attempting a jibe in high winds as the boat will be at full power and you cannot easily de-power it without turning back into the wind.

To start a jibe, turn the boat away from the wind and let the sail out slowly. Keep the turn going at a steady rate and begin pulling the sail back in as the boat nears the straight downwind direction. This will keep the sail from slamming all the way across when the sail fills from the opposite side. Duck below the sail to avoid getting hit as the wind fills the sail from the opposite side and swings across the boat. Attempt to control the speed of the sail while it crosses the deck by maintaining some tension on the mainsheet, then ease the mainsheet out quickly as the boat turns past the downwind direction onto the new point of sail. Trim the sail correctly for the desired point of sail.



REEFING FOR MORE PERFORMANCE

When sailing in high wind conditions, you may find that the bow of the amas start to submerge and pierce the water. To get some of the load off of the amas, reef the sail down as shown on page 10. By eliminating the drag from the submerged amas, you will improve the performance of the Island in high wind conditions.

DOCKING

Properly docking the Tandem Island will prevent damage. Always furl the sail and approach the dock under power of the MirageDrive ®. As you approach the dock, release the diagonal crossbrace on the outrigger closest to the dock and pull it in next to the main hull. Stretch the paddle holder Bungee over the eyelet post on the aka to hold it in against the hull. Be aware of the water depth as you may want to pull up the centerbaord and rudder.

BEACH LANDINGS

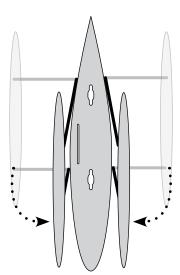
Landing on a beach is simple. As you approach the beach, furl your sail and retract the centerboard. Use the MirageDrive to propel the kayak toward the beach. As you reach the shore, put one pedal forward to raise the fins and move the rudder into the "up" position. Always keep the boat pointed into the wind while beached and keep the sail furled.

RIGHTING THE BOAT

The trimaran setup of the Tandem Island makes it extremely stable and nearly impossible to capsize under most conditions. However, unexpected events do occur, so it is important to know how to "right" the boat if it were to turn upside down.

Step 1. Remain calm and stay with the boat.

Step 2. Because it is so stable with the amas in the "out" position, you will need to unlock both of the aka crossbraces to fold them in. You should also attach the Bungee that holds the amas in to keep them from floating out.



Step 3. Reach underneath the boat and make sure the mainsheet is uncleated. It will make it a lot easier to right the boat if the sail is loose and free from any mainsheet tension.

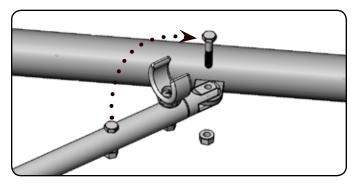
Step 4. Climb up on the hull and reach around to grab the midship carrying handle or one of the aka bars. Holding onto that grip point, lean back to apply your weight to turn it back over. It is important not to pull hard quickly, but to pull with a constant, steady load.

Step 5. As it rolls back up, watch for the boat coming over your head. Once the Island is upright, roll up the sail and fold out both amas so you can climb back into the boat. Hang onto the boat at all times so it doesn't sail or drift away from you.

CROSSBAR BREAK-AWAY PINS

The aka braces are equipped with a break-away pin. This prevents any significant damage that might occur to the bars in the event of a strong collision. If you impact something and break the pin, there are extra pins on the aka braces. Before you do anything else, furl the sail to prevent tipping over.

Now remove one of the extra pins and install it through the hole on the end of the crossbar brace and screw the nut onto the threads. Make sure that you go through the aluminum tube and the plastic part. There are extra pins in the small parts bag to replace your reserve breakaway pins.



3:1 Mainsheet Conversion

The Hobie Mirage Tandem Island is designed to have mainsheet operation from both the front and rear seating positions. To make the mainsheet setup easier on the hands, you can change how much pulley advantage you have from a 2:1 to a 3:1. Follow the directions below to make the purchase change.

- 1. Decide what seat you would like to operate the mainsheet from. By changing how the lines are run, you will only be able to control the sail from one of the seats. Most solo operation of the boat is from the back seat, so these instructions are set up that way. You can easily make the 3:1 mainsheet operation from the front seat using the basic guidelines of these instructions.
- 2. Until the knot that is keeping the mainsheet from pulling through the front crossbar cleat.



3. With the front mainsheet control loose, pull that line completely through the pulley system so that you have the line coming through the rear crossbar clean and around the block with the remaining line in your hand.



4. Take the end of the line and run it to the back of the boat, underneath the akas, and through the forward-most cheek block.



5. Follow the pictures below to see how the line is fed through the blocks.









TRANSPORTING

TOWING

Extra caution is necessary when towing any trailer. Be familiar with traffic and highway laws relating to the towing of trailers. BE SURE TO FOLLOW TRAILER MANUFACTURER'S DIRECTIONS FOR PROPER TRAILER OPERATION AND SAFETY PRECAUTIONS. Tie-down straps or lashings should be of sufficient size and diameter and the boat should be secured to the trailer at all four corners. The carrying handles located at the bow and stern are for carrying only. DO NOT USE THESE HANDLES FOR TOWING OR AS TIE-DOWNS ON A TRAILER.

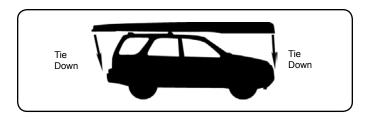
Caution

Boat and mast should be securely attached to the trailer with adequate tie-down straps. Failure to do so could cause serious injury and extensive damage.

Car-Topping Information

Caution is required when car-topping the Tandem Island, or any object, on top of a car. Common sense must be followed to ensure that the roof rack being used will handle the weight of the boat. Roof rack manufacturer's weight limitations and tie-down guidelines must be strictly followed. If in doubt, the best course of action is to trailer the boat. IMPORTANT RULES TO FOLLOW: PLEASE REVIEW THE ISLAND INFORMATION ON PAGE 3 FOR WEIGHT SPECIFICATIONS.

- 1. Roof racks that come as standard equipment on cars are not designed to handle heavy loads. Choose an accessory roof rack with weight ratings that will accommodate the Tandem Island and its parts. If in doubt, consult with the manufacturer. BE SURE TO CHECK THE HEIGHT OF THE RACKS TO PREVENT ROOF SCRATCHING FROM THE DECK-MOUNTED BARS.
- 2. Make sure the roof rack manufacturer's weight limitations are followed.
- 3. Carefully follow the roof rack manufacturer's directions for attaching the rack to your car.
- 4. Always securely tie all parts carried on the rack to the roof rack.
- 5. Always use a good quality 1" webbing strap with a buckle to go over the hull and hold it to your racks.
- 6. In addition to other tie-downs, always tie the bow and stern to the front and back bumper of your car.



- 7. Drivers should use extra caution due to the higher profile of the vehicle and additional windage, especially when related to side winds.
- 8. Always stop and check the tie-downs shortly after beginning any trip and check often on long trips. Check for lines that may become loose or worn.



CAUTION/SAFETY TIPS

- Watch for overhead power lines. Never rig, trailer or sail the boat near overhead power lines. Contact with a power line could be fatal.
- Be aware of your physical and skill limitations. Do not take
 the Hobie Mirage Tandem Island out in the surf or head out in the
 ocean unlesss you are an extremely experienced sailor.
- Always wear a life jacket. Wearing a life vest while sailing is considered mandatory on any small boat. It is also a smart thing to do and could save your life.
- Stay with your boat at all times. A sailboat could sail away by itself if a person were to fall overboard. The best advice to a sailor is to stay with the boat.
- Adhere to car roof rack manufacturer's weight limitations and tie-down suggestions when car topping the Tandem Island.
- When trailering the Tandem Island, be sure to securely tie the boat and loose parts to the trailer. Stop and check tie-downs often.
- Hobie Cat does not recommend leaving the Tandem Island in the water on a mooring, and doing so will invalidate the warranty. Accelerated wear to the boat and rigging will occur, and damage to the hull material is possible. If you choose to moor your boat, take the mast down when not in use and inspect rigging often.
- Learn the right-of-way rules and when in doubt, give way to others
- Your Hobie Tandem Island should not be used between sunset and sunrise as there are no navigation lights on the craft.
- As with any watercraft, there is always a danger of sinking.
 You should not open hatches on the boat while on the water and in rough conditions.

HOBIE CAT COMPANY

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YARD: <u>HOBIE CAT CO.</u>

DESIGN CATEGORY: <u>D</u>

MAX. ↑ + ↑ + 1 = 272 KG

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