

Hobie Twist-N-Stow Rudder Installation Instructions



Twist and Stow Rudder Replacement

Use the following instructions to replace your twist and stow rudder. To remove the rudder that is currently on the boat, bend and pull the cotter pins that are at the bottom of the rudder pin and push the pin out of the top. There are 4 Phillips head screws which are clamping down the steering and up/down lines. Partially unscrew them to release the line. Once the lines are free from the rudder, tie a loose knot at the ends to prevent them from getting pulled into the hull.

Rudder Installation

1. Place the new rudder over the mount at the end of the boat and slide the rudder pin through to hold it in place. Slide the cotter pins through the hole and twist them around the pin with a pair of needle nose pliers.



Up/Down Control Line Installation

1. Now that the rudder is on the boat, you need to disassemble the rudder blade from the rudder housing. Using a socket or wrench, unscrew the bolt that is on the bottom of the rudder. When the bolt is unthreaded, the rudder with come off with the bolt and a small plastic washer.



2. To make sure that you can tell the difference between the up and down line, put the up down control handle in the forward position.

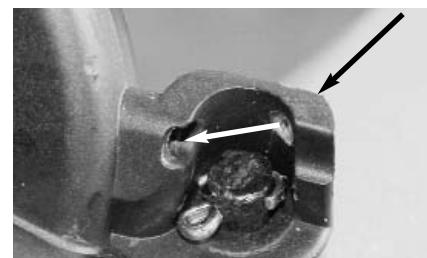


Grab a hold of the two up and down control lines and pull them

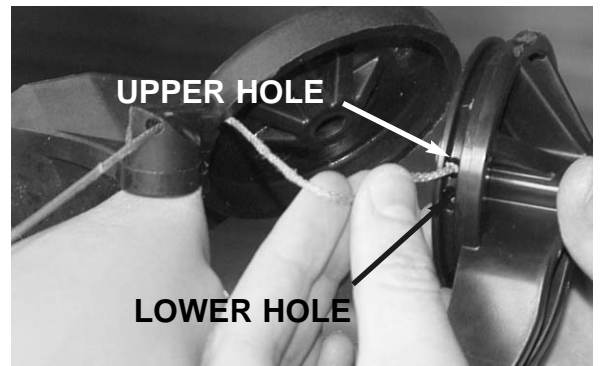
taught. You will notice that one line is longer than the other. Start with the shorter line which is for the down control.



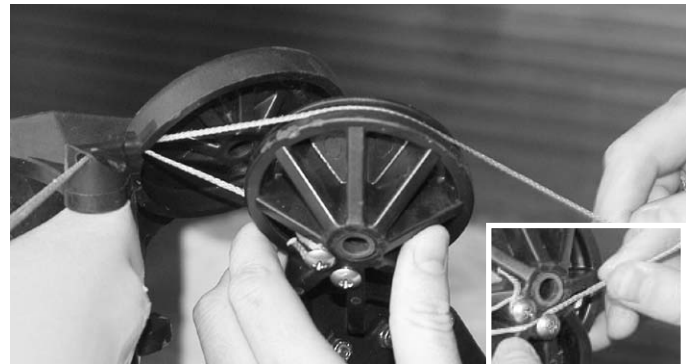
3. Feed the end of the down control line through the two holes at the top of the rudder housing.



4. With the line already passed through the housing, pick up the rudder section and feed the line through the upper most hole located along the circular drum. You will notice two Phillips head screws very close to one another. Loosen the screws a few turns and pull the line up and around the forward most Phillips head screw and tighten it down.



5. Now take the up control line (the longer line of the two that you previously compared) and feed it through the two holes at the top of the rudder housing.



6. To fasten this line to the rudder drum, you will pass the line around the top of the drum and insert the end through the hole just below where you inserted the down control line. Wrap the end of the line around the rear most Phillips head screw and tighten down.

7. The next step is to put the two rudder parts back together. Slide the bolt through the rudder portion of the assembly and place the plastic washer over the threaded end.



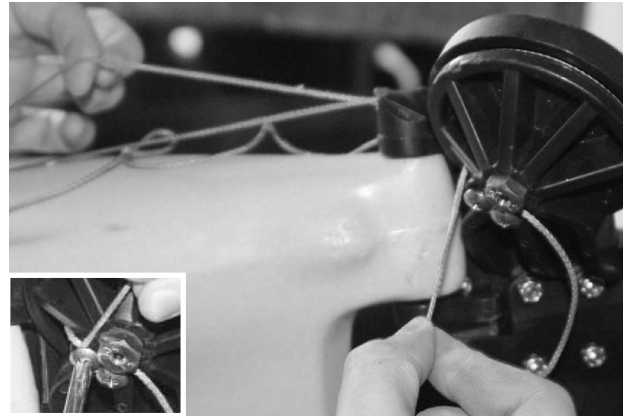
As you insert the rudder half into the housing, you have to be careful to not allow the rudder lines fall off the track around the circular rudder drum. To prevent this, pull up on the up/down control lines that are exposed on the deck to remove the slack and keep the lines tight around the drum.



Thread in the bolt to hold the two halves together. **IMPORTANT NOTE: DO NOT SCREW DOWN THE BOLT SO THAT IT IS TIGHT. YOU ACTUALLY WANT IT TO BE A FAIRLY LOOSE CONNECTION ALLOWING AN 1/8"-1/4" OF MOVEMENT. IF IT IS TOO TIGHT, THE RUDDER WILL NOT GO UP PROPERLY.**



8. Now you are ready to trim the up/down control. With the rudder in the down position, loosed the forward most screw to free up the down control line. By pulling on this line, you will stretch the Bungee cord in the hull (you may need to pull a little on the down control line exposed on the deck to help you stretch the Bungee). What you want to do is pull some more of the line and wrap it around the Phillips head screw and tighten it down. This stretch that you are getting will give you down tension on the rudder.



9. At this point you want to try the up down handle to see how the up down control works. You may need to adjust the lines further to get them adjusted just way you want them. If you need to get more up control, follow the same adjustment procedure with the up control line. If it is difficult for the rudder to disengage and go up, try to loosen up the bolt that connects the two halves of the rudder together.

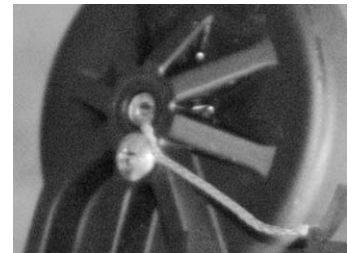
Steering Control Lines

1. The two lines that exit the sides of the boat are for the steering. Before running the lines to the rudder, place the steering handle in the close to center position. On the Mirage Adventure, keep the steering handle turned slightly to the right.

2. Run the right steering line up to the right side of the rudder. Pass the line through the hole and pull the slack out of the (make sure that you don't pull too hard and move the steering handle). Wrap the line around the Phillips head screw and tighten down to hold the line.



3. The left side steering line will be inserted into the hole at the bottom of the bolt that connect the two halves of the rudder. Continue to the pass the line up through the bolt and pull the line taught. Wrap the end around the Phillips head screw and tighten down.



4. Go ahead and try the left and right steering. If you notice that the rudder is turning more or less to one direction, you may need to adjust the steering lines a little bit to get the steering balanced.

