This kit is designed to help improve the performance of your Twist and Stow Rudder if originally supplied with a Bungee on the up control line as described below. Please follow the instructions to complete this modification.

- 1) Place the rudder in the up position with the retaining bungee fastened over the rudder.
- 2) Prop the boat up against a wall so it is resting on its right side and open the round hatch between the seat and mirage drive well.

Reach inside the boat towards the stern, and locate the rudder up/down control arm which is attached to the rudder up-down handle.



3) There are two bungees attached to the up/down control arm, looped around eyelet posts

on either side of the end of the control arm. The up-line bungee is the one attached to a line running from the bungee to the stern of the boat.

Detach the up-line bungee from the eyelet post.

4) Open the round hatch at the rear of the boat.



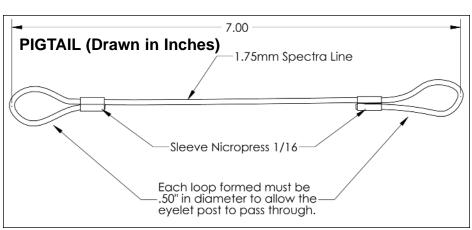
The up/down lines run to the right side of the hatch, tucked under a clip on the underside edge of the hatch.

5) Reach into the hatch and remove the housed lines from the clip.



- **6)** One of the two lines will feel loose, this is the up-line, and the end of it can be pulled out of the boat through the hatch.
- **7)** Cut the up-line right next to the knot around the bungee loop. Discard the Bungee loop.

A length of line "Pigtail" with two loops is provided with this kit. The loop ends are equal 1/2" diameter each. This dimension is critical for hooking onto the eyelet post and must be present on one end of the finished line extension. It may be possible to build this extension using another similar type of line and bowline knots if in-the-field replacement is desired without using the Hobie provided "Pigtail" extension.





## 8) Attaching the cut end of the up-control line to the pigtail...









Make a small knot in the end of the cut line and tie a knot. Pass the end of the line through either of the two loops on the replacement "Pigtail" line (Provided with this kit). Tie into a "figure 8", then pull out the slack to cinch down onto the loop. Pull on both lines to tighten the knot.

- 9) Put the up-line back into the hatch, feeding the end along the right side of the boat towards the control arm.
- **10)** Moving back to the center hatch, locate the end of the up line.

Note: if you cannot reach the up-line, have a friend help you stand the boat on its bow so that the line falls down towards the middle hatch. (Put the boat back down before you continue to work)

11) Re-attach the loop on the end of the new "Pigtail" line to the eyelet post on the control arm.

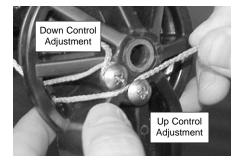


If the up-line will not reach the eyelet post, rotate the rudder up-down handle slightly (the handle on the outside of the boat) with your other hand to bring the control arm closer to the line.

If the up-line still does not reach the control arm, you can let some slack

out on the up-line by loosening the up-line screw on the rudder housing. There are two screws on the rudder housing next to the center axle. The up-line will feel slack, and you can loosen the screw to pull

some slack through the rudder drum. You may also need to adjust this screw if there is too much slack in the line.



**Proper Up-Line Adjustment:** You will want the up-line to have enough slack so that, when the rudder is in the down position, you can rotate the up/down handle 45 degrees before the up-line becomes taught.



If the rudder still sticks after you remove and change the up control bungee, loosen the hex head bolt a little bit. Do not make complete turns with the bolt, the slightest adjustment can make a big difference.

Please refer to your owners manual for further rudder adjustment information.

