

## **Rudder Upgrade Instructions**



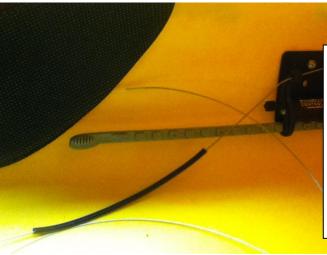


## Parts List

Part#	Description	QTY	UOM
1230	SmartTrack Toe Pilot Control	1	Set
	Foot Brace		
1228	SmartTrack Rudder	1	Set
	Housing and Blade		
1229	Mid Pin Bracket	1	Ea
1044	¼-20 x 5/8" Phillip Pan Head Bolt	2	Ea
1169	¼-20 Locknut	4	Ea
1199	3/16" Bungee	1@20"	Ea
1249	¼" Black Tubing	2@8"	Ea

Begin by removing the Non Rudder Foot Brace from the boat. Detach the black Vertical Adjustment Plate from the Non Rudder Foot Brace and attaching it to the new Toe Pilot Control Foot Brace. Install the Toe Pilot Foot Brace into boat using the included ¼-20 Locknut.





Undo the wire ties holding the rudder cable. Slide one of the ¼" Black Tubing pieces onto one of the cables. Slide the cable into the clear 2mm tubing located behind the thigh pads. CHECK THAT THERE ARE NO FRAIED ENDS THAT COULD IMPEDE THE CABLE FROM SLIDING THROUGH THE TUBING. Once the cable has been pushed through the clear tubing, slide the ¼" Black Tubing over the clear tubing and push back into the opening in the Toe Pilot Control Foot Brace. Repeat the process for the other Foot Brace.

Remove the two Black Nylon Bolts from the rear of the boat. Install the Mid Pin Bracket using the two ¼- 20 Phillips Pan Head Bolts. Place a dap of lock-tite on each bolt before installing.



Place the Mini Clam Cleat found in the Rudder Housing Packet into the slot on the Starboard outside side of the boat in front of where the ¼" Black Tubing comes out of the hull. Mark the holes for the screws and drill out with a 1/16" drill bit. Install the Clam Cleat using the small bolts and nuts supplied in the Rudder Housing Packet.

Take the 3/16" Bungee and run each through an opening in the Half Moon Deck Fitting on the side of the boat. The ends should be facing forward with a loop created towards the stern. Take both ends in hand and together tie a single overhand knot.







Using the 1/8" Rope found in the Rudder Housing Packet, insert one end into the ¼" Black Tubing and out the back of the boat. Insert the Rope into the small opening on the front of the Rudder Housing and tie an overhand knot. Place one of the White Nylon Washers found in to Rudder Housing Packet onto the metal post on the Rudder Housing. Place the Rudder Housing onto the Mid Pin Bracket and install the Large Split Ring in the hole at the bottom of the post of the Rudder Housing. Remove the Cotter Pin from the Rudder Housing and remove Nylon Rudder Blade Support Pin. Slide the Rudder Blade into the Rudder Housing with the straight edge of the Blade facing up. Line up the slot on the Rudder Blade Support Pin with the spring on the Rudder Blade and reinstall the Rudder Blade Support Pin followed by the Cotter Pin. Route the 1/8" Rope into the groove on the base of the Rudder Blade and lock into the slot on the Rudder Blade. Pull on the other end of the 1/8" Rope and check rudder deployment. It should deploy all the way down and be able to retract on its own.

Pull the 1/8" Rope to fully deploy the Rudder and lock it in the Clam Cleat. Slide on the Black Rubber Ball with the big opening facing forward. Route the Rope around the loop in the 3/16" Bungee and back towards the rear. Tie off the rope so that the Bungee has minimal tension. Use a Double Overhand Noose Knot. Pass the Rope through the hole in the Black Rubber Ball and slide the ball over the knot. Tie another Double Overhand Noose Knot behind the Rubber Ball. Release the Rope from the Clam Cleat and check the motion of the Rudder. It should have full range of movement and be able to lay down flat against the boat when not in use. Adjust the length of the rope if you feel there needs more or less tension on the bungee. After you feel confident with the action of the Rudder, cut the excess Rope off and burn the end with a lighter to keep it from unraveling.

## THE FOLLOWING PARTS ARE ALL FOUND INSIDE THE SMALL BAG WITH THE RUDDER HOUSING:

Route the cable into the small opening of the Cable Connector Housing and back out the opening to form a loop. Place a Wedge inside the Cable Connector Housing and pull on the cable to make Toe Pilot Control on the Foot Brace move to 90° or neutral position. (Hint: Place a piece of  $\frac{3}{4}$ " pipe between the Toe Pilot Control and Foot Brace Peg) Once the Toe Pilot Control is set at the correct position, place a Cotter Pin in the small hole of the Cable Connector Housing to keep the Wedge from moving. Line up the large hole of the Cable Connector Housing with hole on the wing of the Rudder Housing. Place a Clevis Pin in the holes and secure with a small Split Ring. Repeat for the other side. Once each side is lock into the desired position, cut the cable just before the clear tubing and crimp on a Cable End. Place the Heat Shrink over the Cable Ends and shrink down with a lighter.









Sit inside your Journey and test motion of all of the rudder components. If the cables feel like they stick, try some spray silicone in the tubes.



Congratulations! You have finished the rudder upgrade. Now get out on the water and have fun!



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