

















**STERN MOTOR FOOT CONTROL KIT**  
 For use with the Torqeedo 403 Ultralight

The Wilderness Systems Foot Control Kit is designed to connect directly to a Torqeedo 403 Ultralight motor mounted on the stern of your kayak. This kit allows you to steer your kayak to the Left or to the Right using a sliding foot brace system, leaving your hands free to cast, operate the throttle or perform a variety of other tasks while out on the water.

**IMPORTANT:** This kit is specifically designed to work with Wilderness Systems “Sit-On-Top” kayak models that are “Rudder-Ready.” This means that the poly guide tubing for the rudder cord has already been installed by the factory. If your kayak is **NOT** rudder-ready or does **NOT** have poly guide tubing already installed, please contact your local Wilderness Systems dealer or our Customer Service Department to determine which additional parts are needed to complete installation.

<b>Parts Included with Kit</b> (images NOT to scale)		
<b>IMAGE</b>	<b>Part Description</b>	<b>QTY</b>
	Aluminum Footbrace Extrusions	2
	Neoprene Washer, ¼ x 5/8"	4
	Lock Nut, 1/4-20	4
	Lock Nut, 10-32 (only on specified models)	4
	Combination Washer, ¼ x 5/8"	2
	Combination Washer Washer, 10 x 5/8" (Thresher models only)	4
	Truss-Head Screw, ¼-20 x 1/2"	2
	Truss Head Screw, ¼-20 x 5/8" (Qty. 4 needed for ATAK models)	2
	Truss Head Screw, ¼-20 x 1" (Thresher model only)	2
	Truss-Head Screw, 10-32 x 3/4" (only on specified models)	2
	Truss-Head Screw, 10-32 x ½" (only on model types specified below)	2
	Flat Head Screw, 10-32 x 7/8" (specified model types only)	2
	Keepers Footbraces (Right & Left)	1 ea.
	Lock Tooth Washer (specified model types only)	2
	SPECTRA CORD, 1.8MM	22 ft.
	Clip	2

**Tools Required for Installation:**












- #2 Philips head screwdriver (for all models)
- Scissors or Knife (for cutting Spectra cord)
- Drill with 5/16" drill bit (for Threshers & ATAK models only)
- 3/8" Box or open-end wrench (for installing backing hardware if needed)

## INSTALLATION INSTRUCTIONS

### STEP 1: INSTALLING ALUMINUM FOOTBRACE EXTRUSIONS

#### Things to Consider before starting this Step:

- The hardware provided in this kit is intended to accommodate a variety of kayak model configurations. Not all hardware will be needed.
- Holes in extrusions are tapped/threaded to accept ¼-20 screws. These holes may need to be drilled out to work on certain models.
- See specific instructions for Threshers and ATAK models below.
- Some SOT models have molded-in threaded inserts for attaching the footbraces while others rely on installing internal washers and nuts (depending on accessibility to the interior hull). Hardware for both scenarios is included.
- Some older models of the Wilderness Systems Ride have 10-32 threaded inserts rather than ¼-20. Both screw sizes are provided but test thread the insert to identify correct screw size.
- Mounting holes on extruded aluminum slide rails should line up with mounting holes on kayak once footbraces have been removed. Be sure to confirm this before drilling any new holes.

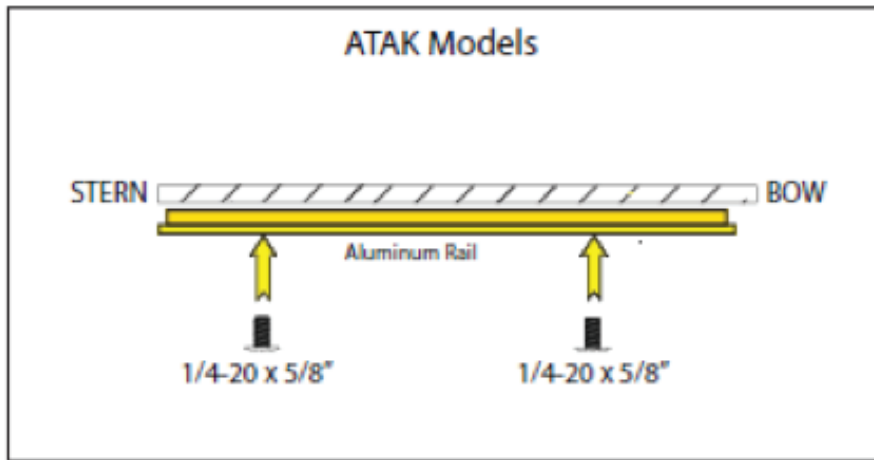
Parts Needed for This Step:				
STEP 1	IMAGE	Part Description	QTY	
		Aluminum Footbrace Extrusions	2	
		Truss-Head Screw, ¼-20 x 1/2"	2	
		Neoprene Washer, ¼ x 5/8"	4	
		Lock Nut, 1/4-20	4	
		Combination Washer, ¼ x 5/8"	2	
		Truss Head Screw, ¼-20 x 5/8" (Qty. 4 needed for ATAK models)	2	
	<i>The hardware listed above should work on most models but some models may have 10-32 threaded inserts rather than 1/4-20. The alternate hardware listed below should cover most other setups and can be substituted as needed. Simply test thread inserts to identify correct screw and hardware sizes.</i>			
		Truss Head Screw, ¼-20 x 1" (Thresher model only)	2	
		Truss-Head Screw, 10-32 x 3/4" (only on specified models)	2	
	Truss-Head Screw, 10-32 x 1/2" (only on model types specified below)	2		
	Combination Washer Washer, 10 x 5/8" (Thresher models only)	4		
	Lock Nut, 10-32 (only on specified models)	4		

#### STEPS:

1. Remove existing footbraces from hull.
2. Confirm the appropriate hardware size or sizes needed for your kayak model and install metal extrusions.
3. If installing on ATAK or Thresher models, please follow model specific instructions directly below.

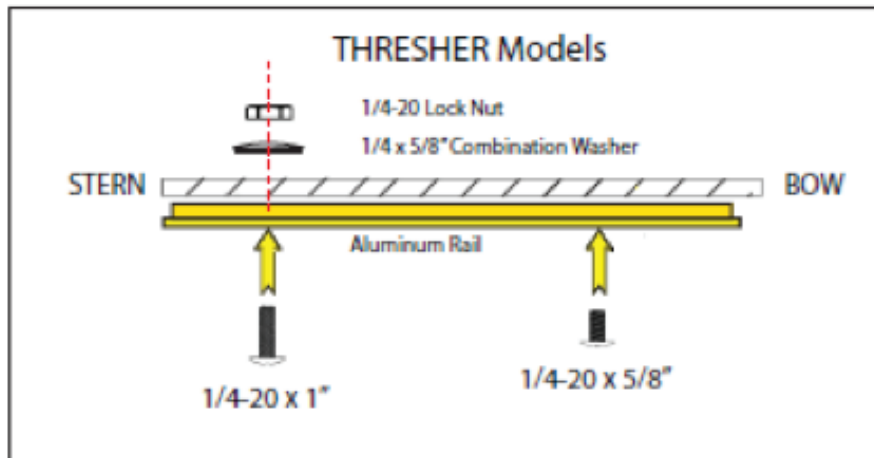
#### Thresher and ATAK:

4. ATAK:
  - Drill out threaded holes in aluminum extrusions with a 5/16" drill bit. Secure foot brace extrusions with a ¼-20 x 5/8" screw in each mounting hole.
  - Tighten hardware securely to secure extrusions to hull.



5. Thresher:


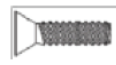

- Drill out threaded holes in aluminum extrusions with a 5/16" drill bit.
- At insert locations closest to bow, secure extrusions with 1/4-20 x 5/8" screws.
- At stern locations without inserts, use 1/4-20 x 1" screws and secure on the interior of hull with 1/4" Combination Washers and 1/4-20" Lock Nuts provided. This can be done by using the center storage hatch as an access point.
- Tighten hardware securely to secure extrusions to hull.



**STEP 2: INSTALLING FOOTBRACES**

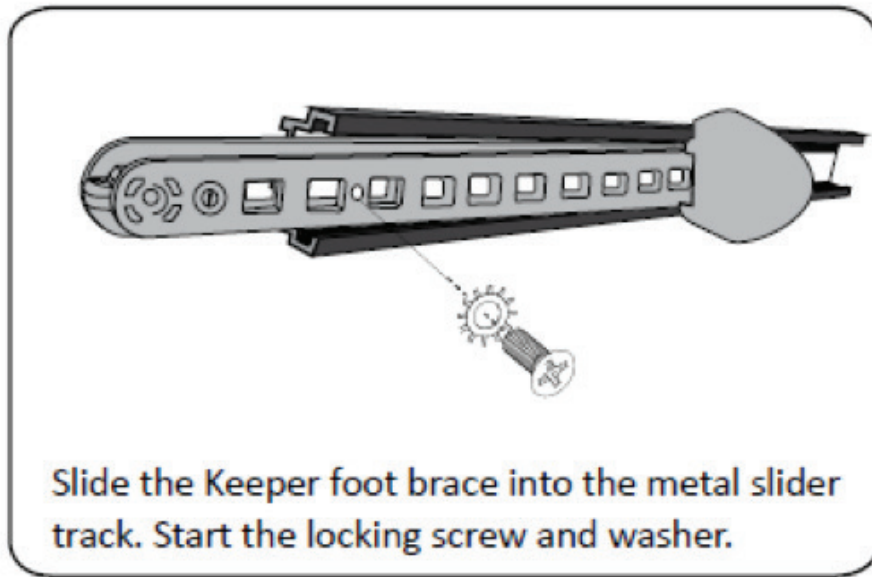
**Things to Consider before starting this Step:**

- Some model designs will allow the foot brace runner to slide out of stern end of the extrusion (example: Ride 135). Test your boat by inserting one of the footbraces and then lifting the bow and to see if it slides out of the extrusion.
- If so, this can be prevented by installing a toothed washer onto a 10-32 x 7/8" Phillips truss head screw (provided).
- Insert screw & washer into recessed hole in center of each footbrace rail and tighten until snug. This will act as a brake to prevent the runner from sliding out of extrusion (see image at the end of Step 1).

<b>Parts Needed for This Step:</b>			
	<i>IMAGE</i>	<i>Part Description</i>	<i>QTY</i>
<b>STEP 2</b>		Keepers Footbraces (Right & Left)	1 ea.
		Flat Head Screw, 10-32 x 7/8" <i>(specified model types only)</i>	2
		Lock Tooth Washer <i>(specified model types only)</i>	2

**STEPS:**



1. Identify the raised stopper molded onto one end of each Keeper footbraces.
2. Slide footbrace rails (with pedals installed) into extrusions so that the stoppers are at front end or bow end of extrusions.



**STEP 3: INSTALLING SPECTRA CORD & CONNECTING STEERING**

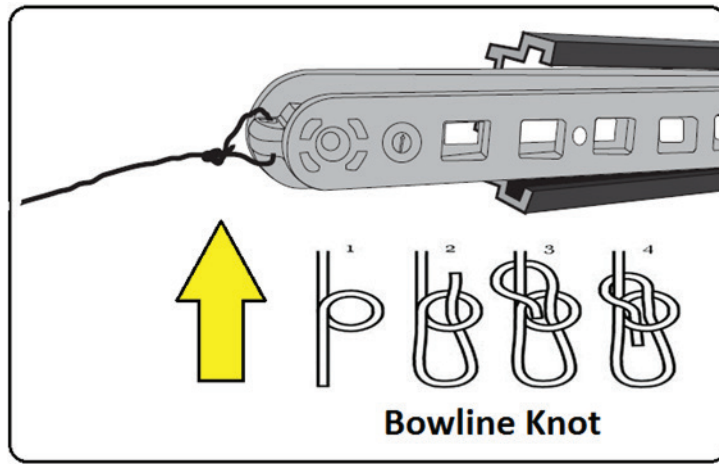
**Things to Consider before starting this Step:**

- Help from a friend may be needed on this step for longer kayaks
- A bowline knot is recommended for attaching the Spectra cord to the footbraces and the motor but there are many other knots that will work.

<b>Parts Needed for This Step:</b>			
	<i>IMAGE</i>	<i>Part Description</i>	<i>QTY</i>
<b>STEP 3</b>		SPECTRA CORD, 1.8MM	22 FT
		Clip	2

**STEPS:**

1. Go ahead and tie Spectra Cord ends to footbraces first using a bowline knot.
2. Insert Spectra cord into the tube opening in cockpit area and feed it through. Continue pushing until end of cord emerges from tubing close to the motor assembly at the kayak rear/stern.



3. Attach the two clips through the circular mounting holes on the triangular steering bracket located on the motor.
4. Keeping motor secured in the “centered” position, tie one of the loose cord ends to its corresponding carabiner using a bowline knot and repeat on opposite side.

**NOTE:** Attaching the carabiners first will allow you to make quick adjustments to ensure proper cord length without having to connect and disconnect the carabiners several times.

5. Once both cord ends are secured to the carabiners on the steering bracket, test the system by sliding one footbrace as far forward as possible. This should pull the steering cord forward as well, turning the motor assembly at the same time (for example: if sliding left footbrace forward, motor should be positioned to the left and vice versa).
6. Extra cord can be trimmed off but it’s not a bad idea to leave a few inches of excess to allow adjustments later if needed.

**SYSTEM INSTALLATION COMPLETE**

