

Upland Enterprises, Inc.

TAVO pedal Boats, TAVO TOON Pontoons, SUP-or-YAK Hybrid Kayaks, Trailers

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TAVO Owners Manual

Thank you for purchasing one of our TAVO products. We know your TAVO product will provide many years of family fun and adventure. Please read and follow the operator, maintenance and adjustment instructions listed on the following pages.

Do not hesitate to call your dealer should you need assistance. Your dealer is there to answer any questions you may have or help with warranty issues. If you can't reach your dealer or the dealer is unable to satisfy your needs, you may contact Upland Enterprises, Inc.

WATERCRAFT OWNER MANUAL

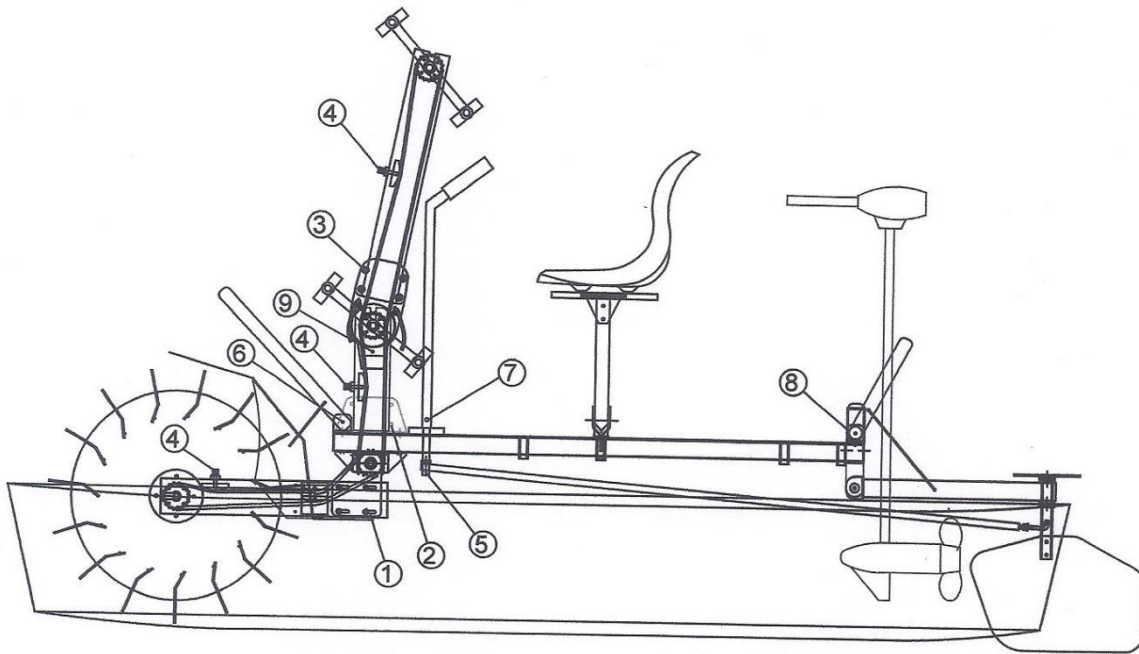


Figure 1: TURBO pedal boats with hand pedal option

Refer to Figure 1 in combination with the adjustment instructions listed on the following pages for the TURBO pedal boat products. Our Mini-Toons and SUP-r-YAK do not require a reference drawing as they require no special maintenance other than general inspection and cleaning.

NUTS & BOLTS – All watercraft

All products should be checked for chain adjustment and loose hardware after the first 5-10 hours of use and at the beginning and end of each season. Hardware may need periodic adjustment. Do not over-tighten!

LUBRICATION – TURBO pedal boats

Bearings - All bearings are self-lubricating and do not require regular lubrication to maintain performance. If, however, a squeak develops, apply a few drops of vegetable oil to the bearing as needed. Do this by applying oil on the shaft where it meets the bearing, rotate the shaft to allow the oil to penetrate into the bearing, and wipe away any remaining oil. It is a good idea to apply a few drops of oil at all bearings at the beginning of the season.

Chains - Use a quality chain lubricant at the beginning of the season, mid-season and end of season, depending on use. Each chain has access points to allow for lubrication and to check the tension.

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CHAIN ADJUSTMENTS – TURBO pedal boats

After the first 5-10 hours of use the chains may require adjustment, as this is a break-in period. After the break-in period check the tension of all chains periodically. For all pedal boat models, follow these simple instructions:

The foot pedals, hand pedals and paddle wheel have chain tensioners that are easily adjusted. First, check the tension on all chains. They should have around $\frac{1}{2}$ " of slack. If too tight, there will be excess bearing and chain wear and extra resistance when pedaling. If too loose, there will be excess chain wear.

If a chain is too tight or too loose, find the lock nut located at Item 4 in Figure 1. Using a $\frac{1}{2}$ " wrench, screw out the lock nut approximately $\frac{1}{4}$ ". To loosen the chain, turn the adjuster bolt counter-clockwise one turn at a time; to tighten, clockwise one turn at a time. With each turn, check the chain tension. Remember to allow $\frac{1}{2}$ " of deflection in the chain. After the desired chain tension has been achieved, re-tighten the lock nut while keeping the adjuster bolt from turning. You will need two $\frac{1}{2}$ " wrenches. Do not over-tighten! Check all chains.

HAND PEDAL INFORMATION AND ADJUSTMENTS – TURBO pedal boats

Our hand pedal upgrade to your TURBO pedal boat allows for more power to the paddle wheel while providing a full-body workout. An approximately 20-30% increase in torque can be achieved by using hand pedals in combination with foot pedals, depending on your arm strength and the force applied. A child or person unable to reach the foot pedals can use the hand pedals from a seated position. This is an option that also may be used by someone with mobility issues.

TAVO hand pedals rotate 170 degrees forward or back, allowing for infinite adjustment to comfortably accommodate most people. With the hand pedals in the vertical position, you can pedal standing up. This is great for fishing or getting a better view. While sitting in a normal pedaling posture, rotate the hand pedals toward you to the point where your extended arm is almost straight at the farthest position of rotation. This is the same as a properly positioned seat in relation to the foot pedals. Your leg should have a slight bend to it at the farthest position of rotation.

The hand pedals are designed to be pushed forward and out of your way when not in use. This allows you to get them out of the way when fishing. They can also be rotated down towards the deck during off-season storage.

Hand Pedal Adjustment - Each hand pedal tube utilizes a rotation friction brake to hold its position. The friction brake requires periodic adjustment due to fluctuations in temperature and use. This brake is designed for easy adjustment. The hand pedal tube rotation resistance should be firm, but not so firm that the tube is difficult to rotate. Use a $\frac{3}{16}$ " Allen wrench to adjust the rotation resistance. The adjusting bolts for the friction brake are located at the junction of the hand pedal tube and vertical foot pedal tube (Figure 1, Item 9). There is one adjuster on each side of the friction plate assembly. Only the outermost adjuster bolt needs to be adjusted: clockwise to tighten, counter-clockwise to loosen. This should only require a half-turn under most conditions.

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PADDLE WHEEL INFORMATION, COMPARISON AND ADJUSTMENTS –TURBO pedal boats

TAVO has created a unique paddle wheel that is adjustable for ride height and capable of taking you places you can't go with any other pedal boat. In stark contrast to traditional paddle wheels, the TURBO turbine paddle wheel is designed so that the tops of the paddle blades are submerged 2-3" under the surface of the water with the bottoms of the blades lower than the bottom of the pontoons. This creates higher vacuum/resistance and greater efficiency and power. It is also possible to adjust the paddle wheel up or down for optimum efficiency. This is very important, as these adjustments compensate for changes in the weight of your payload and affect how low or high your paddle wheel blades sit in the water.

The TURBO paddle wheel can be rotated completely out of the water when using a trolling motor, thus eliminating drag and preventing the pedals from turning. To provide extra boost for the trolling motor, or to lighten the pedaling resistance you can leave the paddle wheel in the water and keep pedaling. No other pedal boat can do that!

The TURBO paddle wheel will "ride up" if you set the pedal boat on the ground, on a flat trailer, or if you run into shallows or run over a shallow or protruding object. This is something a fixed paddle wheel cannot do. A TURBO is even capable of driving off of the bottom if you find yourself stuck in the shallows. The blades will rarely get damaged and are easily replaceable if they do.

Adjustment - The paddle wheel rotation lever is used to lift the paddle wheel up or down; a friction brake holds it at the desired position. To adjust the rotation resistance use two 9/16" wrenches to tighten or loosen the bolt on the friction brake located at the base of the hand lever (Figure 1, Item 6). This should only require a quarter or half-turn under most conditions. Most TURBO models have a hook and cable attached to the paddle wheel lever that prevents the paddle wheel from lowering too far into the water. It has 3 positions to choose from. Chose HIGH for light loads, MED for heavier loads and LOW for heavy loads. This cable may stretch over time and the turn buckle may need adjusting.

STEERING RUDDER INFORMATION AND ADJUSTMENTS – TURBO pedal boats

The TAVO steering rudder is different from all others in three important ways: It is adjustable up or down for maximum steering efficiency; it rotates up and out of the water if you want to steer with your trolling motor (when using a trolling motor it works very well steering with the rudder instead of turning the trolling motor); and it can ride up in shallow water and over immovable objects in the water. Our rudder is large and is set at a level lower than the pedal boat pontoons to maximize your steering. It can be easily adjusted up or down while out on the water for optimum water contact depth depending on the pedal boat payload. The TAVO rudder swing arm allows for a trolling motor to be mounted at the rear-center of the deck. When using a trolling motor, we suggest locking the motor so it won't rotate and steering only with the pedal boat rudder but you can raise it and steer with the trolling motor if you desire.

The rudder swing-arm uses the same type of rotation lever and friction brake as our TURBO paddle wheel to lift the rudder up or down and hold it at the desired position. To adjust the rotation resistance use two 1/2" wrenches to tighten or loosen the bolt on the friction brake located at the base of the hand lever (Figure 1, Item #8). This should only require a quarter to a half-turn under most conditions.

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STEERING LEVER INFORMATION AND ADJUSTMENT – TURBO pedal boats

Steering is accomplished via a tiller that rotates left or right (Figure 1, Item 7). A link rod connects the tiller to the steering rudder. The direction you point the tiller is the same as the direction you turn. If steering resistance needs to be adjusted, tighten or loosen the screw at the base of the plastic bearing holding the tiller rod in place.

SEATING INFORMATION – TURBO pedal boats

We only use seats with the highest quality cushioning and support that will keep you feeling comfortable after many hours on the water. The TURBO pedal boat seats come with quick-detach 9" sliding seat mounts with $\frac{3}{4}$ " adjustments. The slides enable each person to move their seat forward or backward for the best pedaling position to accommodate their height. The driver seats for the TURBO P-2 SUP-r-YAK have pads on the bottom for use with the detachable SUP-r-YAK hybrid kayaks.

Optional extra seats for the TURBO P-4 are matching, but do not include the 9" slides. All seat posts come with $\frac{3}{4}$ " male receivers that mount in $\frac{3}{4}$ " female receivers on the deck. The receivers are located at the main drive stations and around the perimeter of the deck. Move the seats to the perimeter or remove them altogether to create a multi-use raft.

ALUMINUM PONTOON INFORMATION AND MAINTENANCE

TAVO pontoons are built for superb hydrodynamics, producing far less drag than all other aluminum pontoons and creating a better speed-to-work ratio. Do not ram into hard objects or stand on the pontoons. Clean the pontoons with a quality aluminum cleaner. Avoid applying or splashing chemicals where you don't intend, as this may leave spots on the pontoons. Each pontoon can be removed for repair by removing the mounting bolts.

SUP-or-YAK PONTOONS

We designed our hybrid SUP-or-YAK kayaks to be pontoons for the TURBO P-2 SUP-or-YAK pedal boat. They are easily detachable to be used separately. This makes the TURBO P-2 SUP-or-YAK three boats in one: pedal boat and two kayaks/SUPs! TAVO is proud to be the only pedal boat manufacturer to offer this one-of-a-kind product. SUP-or-YAK kayaks can also be purchased individually.

SUP-or-YAKs

The SUP-or-YAK is a truly unique hybrid kayak/stand-up-paddleboard. Racing SUPs were the inspiration for the hull design. This design allows the hull to cut through water and waves rather than ride over them. Your SUP-or-YAK is equipped with a retractable under-hull fin that adjusts, as needed, for great maneuverability or super-straight tracking. The retractable fin also makes it possible for you to launch from 2" of water, something conventional stand-up-paddleboards with fixed fins cannot do. Your SUP-or-YAK will provide you with a dry ride, having high sides and no scuppers under your seat. We use the same premium boat seat that is used with our TURBO pedal boats, a seat made for keeping bottoms comfortable. When you are ready to stand, leave the seat in place or slide it back, and use the personal pull-up strap for assistance. The SUP-or-YAK is great for pleasure or fishing. We are very proud of the SUP-or-YAK and know you will enjoy it!

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Wash your SUP-or-YAK with soap and water. Check the fin bolt for tightness. Do Not over-tighten this bolt, as you may strip the threads in the plastic fin mount! Snug is all that is needed. Fin adjustment is achieved via a rotating lever located on the right side behind the seat. This makes it very easy to make

adjustments on-the-fly. Should a steering line become slack, it can be tightened by untying one of the knots attaching the line to the cable at the stern. Pull it tight and re-tie the knot. Keep your SUP-or-YAK out of direct sunlight if you are storing it for prolonged periods.

SPECIAL CARE FOR USE IN SALTY OR BRACKISH WATER – All watercraft

After each use in salty or brackish water, remove your watercraft from the water and rinse it off with fresh water. Do not leave your watercraft in salty or brackish water for prolonged periods of time.

TRANSPORTING – All watercraft

Make sure your watercraft is securely fastened. Use a minimum of 3 ratchet straps per boat. If your watercraft has a Bimini top and you will be traveling above 30 mph or on bumpy roads, lower the Bimini to its down/travel position to prevent damage to it during transportation and make sure the storage sleeve is secure. To prevent the zipper from opening on the storage sleeve during travel wrap the bimini straps around it and snap them together in the middle. Be sure to secure properly pin the rear tube in its travel position. This position was also designed to lower the bimini out of the way for a clear casting zone while fishing. Fold the seats down if you will be traveling above 30 mph. It is best to remove them so wind and debris doesn't cause damage. You don't want to fray those "do-not-remove tags now do you. Also, remove any tables, as they can catch air and lift out. Secure your boat and accessories well!

When transporting a SUP-r-YAK on top of a vehicle, be sure to use padding to prevent scrapes to the watercraft or vehicle. Tie a line from the bow to the front of the vehicle and one from the stern to the rear. Make sure the anchor points are secure. A ratchet strap should then be used at the middle of the watercraft and anchored to a cargo rack or run through the vehicle while the doors are opened. Be sure to not over-tighten the ratchet strap to avoid damaging the hull.

If you have any questions please feel free to send us an email or give us a call. Thank you for your purchase and enjoy your time on the water and be safe!

Sincerely,

TAVO