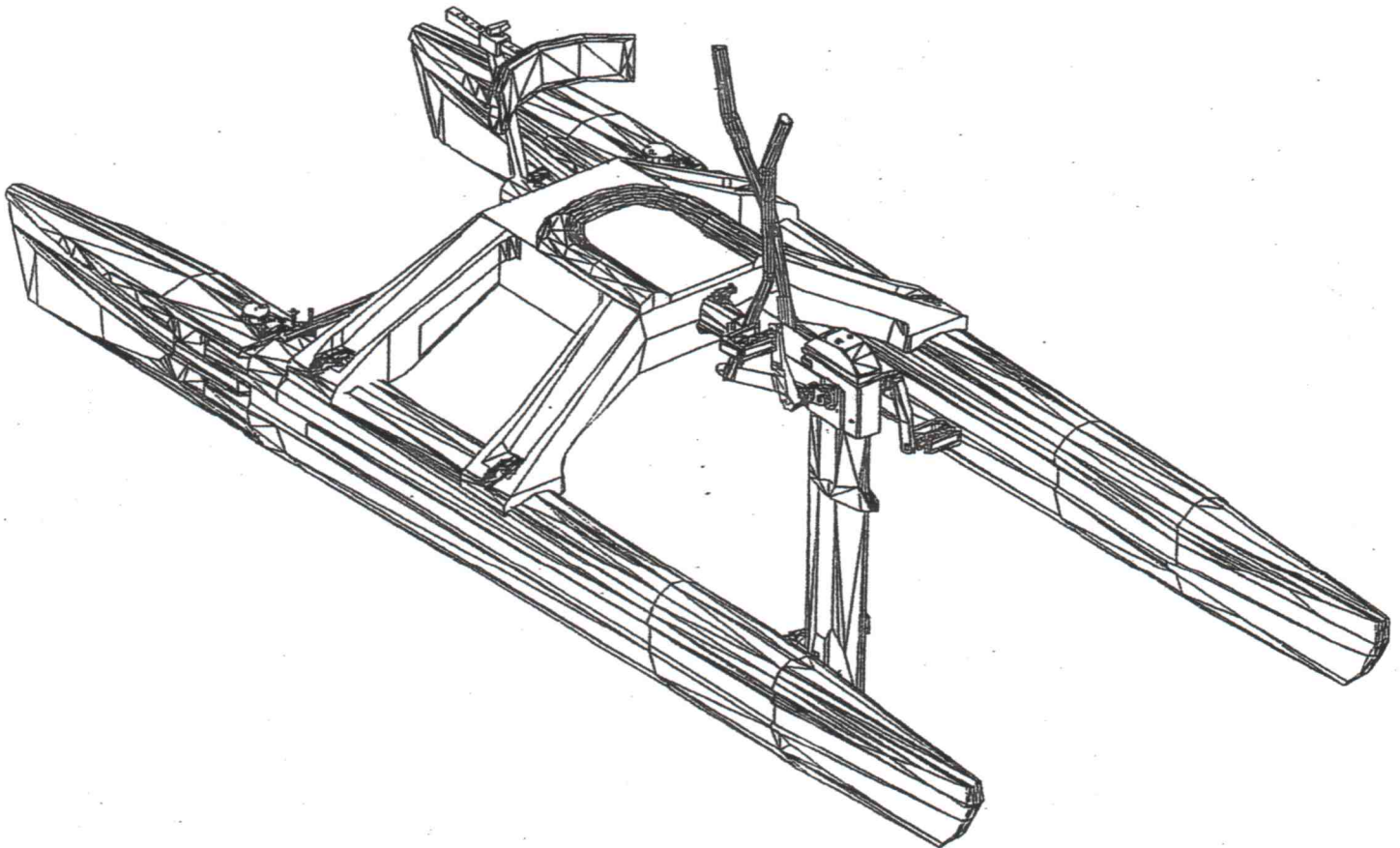


WATER BIKE®

Installation and Users Guide



A Product of Meyers Boat Company
343 Lawrence St.
Adrian MI 49221

CastleCraft

website - www.castlecraft.com
PO # 3, Braidwood, IL 60408
815-458-6216 Telephone
888-274-8490 Toll Free

Voice (517)265-9821
Fax (517)263-2810

INTRODUCTION

Congratulations on your purchase of a waterbike! This human powered watercraft is a high-tech, yet simple design that lets you enjoy being on the water without relying on a motor or the wind. Your Waterbike offers excellent recreational opportunities while also providing you with exercise opportunities.

Please take the time to read this owner's manual carefully before assembly of your Waterbike. It contains important safety, assembly, operation, and maintenance information you will need to get the most from your Waterbike. All in all you will find your Waterbike a fun, safe and environmentally friendly way to enjoy the water. *Enjoy your Waterbike and remember to always think and be safe!*

If you need additional information call 1-800-WATERBIKE.

WATER BIKE® USER'S GUIDE

CONSUMER AND COMMERCIAL MODELS

The WATER BIKE® User's Guide covers the information you'll need to know about transporting, assembling, and using the WATER BIKE, as well as tips on safety and maintenance. Please take time to read the user's guide carefully before you ride your WATER BIKE. Most importantly remember to add the oil to the drive units and **CHECK THE CHAIN TENSION REGULARLY.**

Please be sure to complete and return the enclosed warranty registration card to validate your warranty.

ENJOYING THE WATER BIKE

The WATER BIKE is designed for both fitness and recreation. You can enjoy riding it for an aerobic workout, a leisure day's outing, or an extended overnight tour. To add to the enjoyment plan your outings with other WATER BIKE riders.

The catamaran configuration of the WATER BIKE makes it a very stable craft. It handles well in most rivers, lakes, sounds, bays and can maneuver easily through waves from moderate wind and boat wakes. Always wear your life jacket.

Like all watercraft, however, there are limits to the conditions in which the WATER BIKE can safely operate. The operator should use common sense in the use of the WATER BIKE. The WATER BIKE should not be used in the following conditions.

- The breaking waves, of higher than 3 ft.
- Rivers with strong current or white water.
- Waves from winds, which exceed 20 miles per hour.

All in all you'll find the WATER BIKE a fun, safe way to enjoy the water in the quiet of your own power.

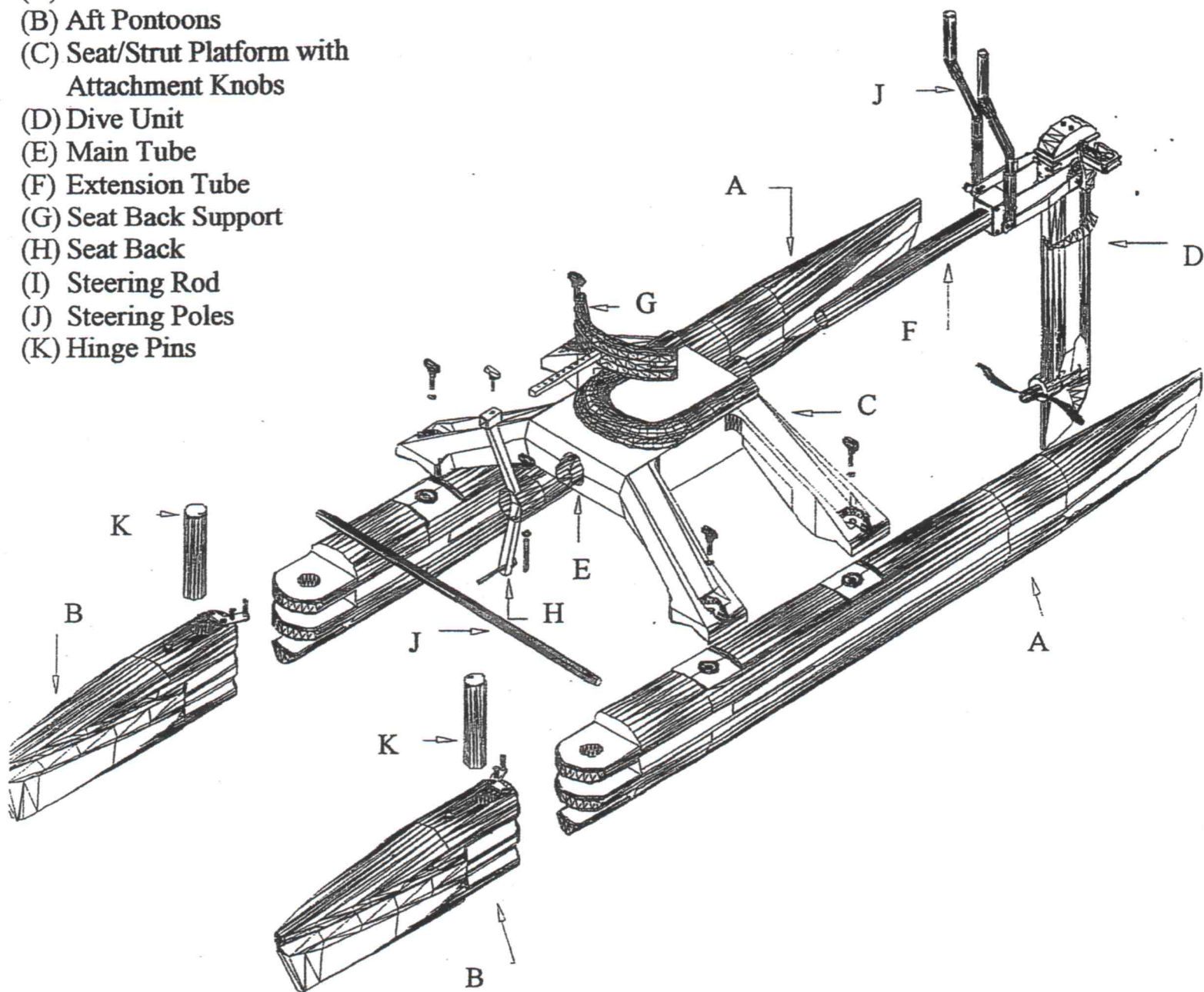
TRANSPORTING THE WATER BIKE

The WATER BIKE can be disassembled in minutes without tools (consumer model only) for easy transport. It is also easy to carry since the heaviest component (hulls and frame assembly) weighs less than 20 lbs.

The hulls can be mounted on top of a car equipped with most standard all-purpose roof racks. Other components can be carried either on a rack or inside your vehicle. If the steering bar is removed the aft pontoons will fold in so it fits nicely without disassembling in the back of a full size pickup or van.

Componets

- (A) Front Pontoons
- (B) Aft Pontoons
- (C) Seat/Strut Platform with Attachment Knobs
- (D) Dive Unit
- (E) Main Tube
- (F) Extension Tube
- (G) Seat Back Support
- (H) Seat Back
- (I) Steering Rod
- (J) Steering Poles
- (K) Hinge Pins



Before assembling your WATER BIKE, take a moment to familiarize yourself with the components on the WATER BIKE.

COMPONENTS

- 2 Front pontoons
- 2 Aft pontoons with Hinge Pins
- 1 Seat/Strut Platform with attachment knobs
- 1 Drive Unit
- 1 Main Tube
- 1 Extension Tube
- 1 Seat Back
- 2 Action Handles
- 1 Steering Rod

Hardware: 1 bolt with knob for attaching seat back support to main tube.
4 T-Handles
Seat platform
2 Pins for Arm Action Handles

All components are "matched" at the factory to ensure proper assembly and performance. All shipping containers are marked, especially on multiple shipments, for example: Boat 1, 2, 3, or A, B, C, etc.

ATTACH AFT PONTOONS:

The Aft pontoons should be attached to the front pontoons with the "L" shaped brackets on the front edge of the Aft pontoons pointing to the center line of the boat.

Slide the cylindrical black hinge pin into the holes in the hinge pin from the topside down. The cap of the hinge pin should be on the top of the pontoons. When turned at 90 degrees to the hull, the aft pontoons will stand on their own. Place them about 3 feet apart.

MOUNTING THE SEAT/STRUTS TO THE HULLS

Place the front pontoons parallel to each other approximately 3' apart with both bows pointing the same direction.

Place the Seat Platform on top of the pontoons. Engage the four T-knob bolts in the four corners of the platform with the holes in the tops of the front pontoons. Tighten the knobs hand tight.

INSTALLING THE MAIN TUBE AND SEAT BACK SUPPORT:

The main tube is shipped with two plastic wear rings slipped over the tube.

The wear ring with the beveled edge should face the collar on the front end of the main tube and goes between the collar and the front edge of the seat platform. The other ring should be removed and reinstalled after the tube has been inserted into the seat platform and then replaced between the seat back support and the back edge of the seat platform.

Insert the Main tube into the large hole in the front of the seat platform. The end of the main tube with the collar attached should be at the front of the seat platform.

Make sure the plastic wear ring with the beveled edge is facing the collar on the front end of the main frame tube and between the collar and the seat platform. The beveled edge should face forward touching the collar. Press the wear ring into the recess hole in the seat platform.

The main tube should now be protruding through the backside of the seat platform. Slide the black plastic wear ring (the one without the beveled edge) over the tube and press it into the recess in the seat platform. Then slide seat back support assembly collar onto the main tube, pin end down. You might need to use a rubber mallet.

The square vertical tubes of the seat back support should engage with the notch in the main tube.

When installed the square tube on top of the seat back support should be at the top of the assembly.

A 4" stainless bolt with knob holds the seat back support to the main tube. Install the bolt from the top down, hand tightening the knob underneath the main tube onto the stainless bolt.

INSTALLING THE SEAT BACK:

The seat back has holes through which the adjustment pin is placed. These holes are beveled on the top side of the seat back bar. **PLACE THIS SIDE UP!**

The hole in the back of seat should face down.

Slide the seat back into the square receptacle at the top of the seat back support and press the pin into the appropriate hole. Light oil on the pin will make this effortless.

INSTALLING THE STEERING ROD:

The steering Rod is the black plastic tube about three feet long. It has a hole in each end, which should be vertical, and one in the middle, which will be horizontal. Place the rod into one aft pontoon vertical steering pins which stick up out of the black "L" shaped brackets on the forward top side of the aft pontoon. Then snap it onto the horizontal pin sticking out of the bottom of the seat back support and then onto the other hull. There is no Hardware necessary to hold the rod into place.

INSTALLING THE STEERING ROD:

The steering Rod is the black plastic tube about three feet long. It has a hole in each end, which should be vertical, and one in the middle, which will be horizontal. Place the rod into one aft pontoon vertical steering pins which stick up out of the black "L" shaped brackets on the forward top side of the aft pontoon. Then snap it onto the horizontal pin sticking out of the bottom of the seat back support and then onto the other hull. There is no Hardware necessary to hold the rod into place. (See figure 1)

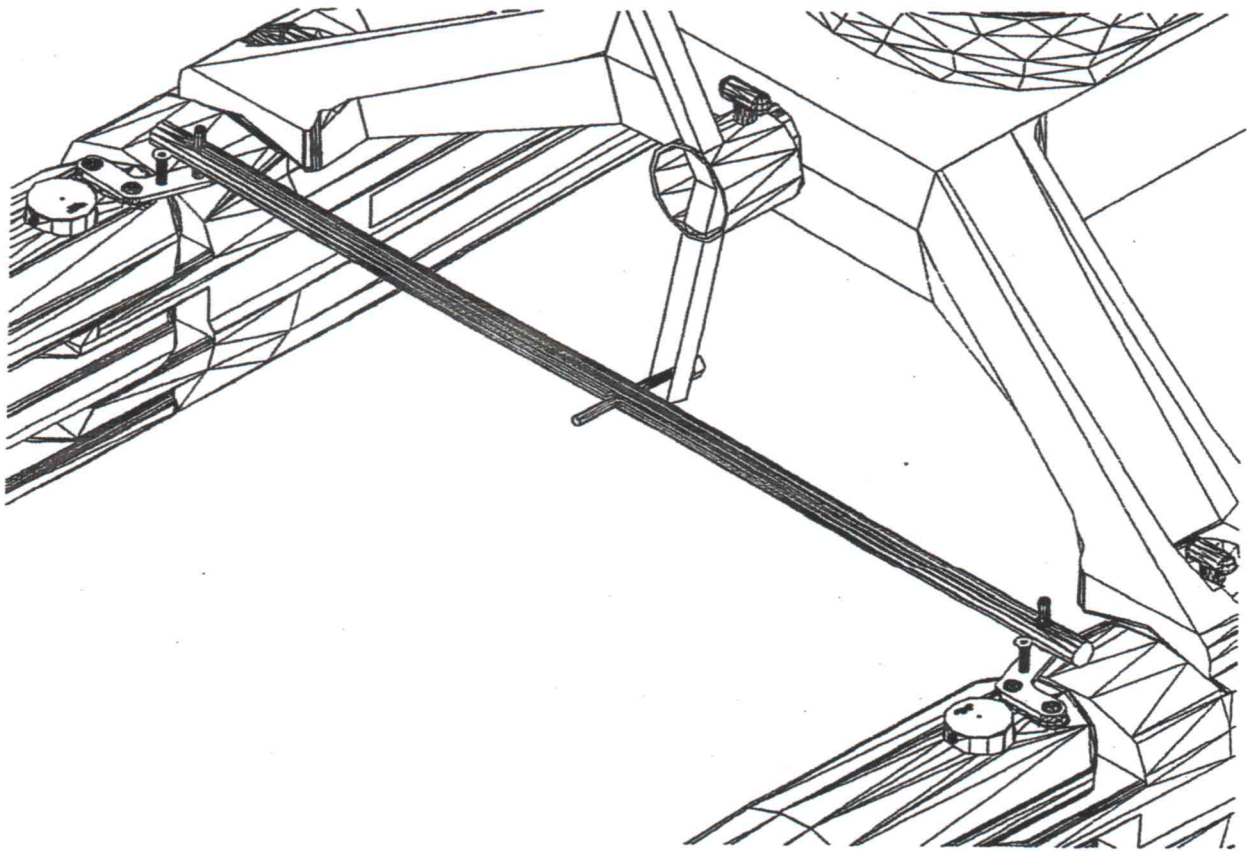


Figure 1

INSTALL THE EXTENSION TUBE:

The Extension Tube slides into the main tube and has the yoke for mounting the drive on the forward end.

There are several pieces of Teflon tape attached to both the end of the extension tube on the outside of the tube and the main tube in the seat platform.

To install the extension tube twist it approximately $\frac{1}{4}$ turn so that the Teflon tape strips slot between each other and slide the extension into the main tube. Once it is in about eight inches rotate the extension tube so that the drive yoke "U" shaped slots are open to the top.

The T-knob pin is placed into the holes in the collar and extension tube. These are used to adjust the leg lengths.

ADDING OIL TO YOUR DRIVES

Your drive has been shipped without oil in the crankcase to prevent spillage during shipment. The oil for the drive unit is included with your order. To install the oil remove the white plastic plug located just below the button receiver in the upper end of the drive unit. This plug is located on the trailing edge of the drive unit. Remove this plug by turning it counter clockwise. Then squirt the oil into the drive from the bottle provided. Each drive should get at least six ounces of oil, which is the amount contained in each bottle. When the oil is installed replace the white plug by turning it clockwise into the hole being careful not to cross thread it. Without water intrusion into the drive unit the oil should last at least 2,000 hours of operation. Although six ounces of oil is the recommended amount for your new drive, there is no danger of over filling the unit. This is a specially formulated non-emulsifying oil available from the factory.

INSTALLING THE DRIVE UNIT(S)

Pull the Extension Tube out of the Seat Platform about 12" (this will keep the Frame Strut from interfering with the installation of the drive unit).

The drive unit mounts into the yoke at the front of the main frame extension tube.

- Place the black drive mount bushings on the side of the drive unit directly over the U-shaped opening on the drive mount yoke.
- Lower the drive unit until the bushings begin to engage the opening of the keyway. Gently push down and rotate the drive slowly, bringing the bottom of the drive up towards the seat.
- Then slide the drive hold down lock up and forward, then tighten the knob firmly to lock in place.

IT IS VERY IMPORTANT NOT TO UNSCREW THE DRIVE MOUNT BUSHINGS TOO FAR. If you do you'll begin disassembling the entire top sprocket mechanism. To tighten the chain, turn the top screws clockwise until they feel snug. If the cap dimples slightly under the screw, go no farther. At that point check to see if the pedals still turn freely. If not, unscrew the top screws each a little at a time until the pedals turn freely, then tighten the drive mount bushings on both sides firmly. At this point the chain is secure and tightened.

NUTS: After the first few hours of running and occasionally thereafter, take a ½" wrench and check the tightness of the 4 nuts on the short crank arms just inside the main cranks, being careful not to over-torque them and strip the threads. **Never run the WATER BIKE with these nuts loose as damage to or loss of the crank can result.**

CHAIN TENSION ADJUSTMENT – STOP BRACKET ADJUSTMENT

It is very important to monitor chain tension. A minute or two of care is all that is necessary to insure hundreds of hours of trouble free WATER BIKING.

When you adjust the chain tension, you may also have to adjust the screws that set the vertical stop bracket to keep the drive vertical. This is the bracket on the back side of the upper end of the drive unit. To adjust this bracket, loosen the four bolts two or three turns and slide the bracket up or down as needed, then retighten the bolts.

BUTTON ADJUSTMENT

Adjusting drive unit flip up feature. The drive unit has two spring loaded composite buttons that control the break away force needed to allow the drive to rotate up out of the water. This prevents the drive from rotate up out of the water when gliding or pedaling backwards. They also hold the drive up when fully rotated up towards the seat.

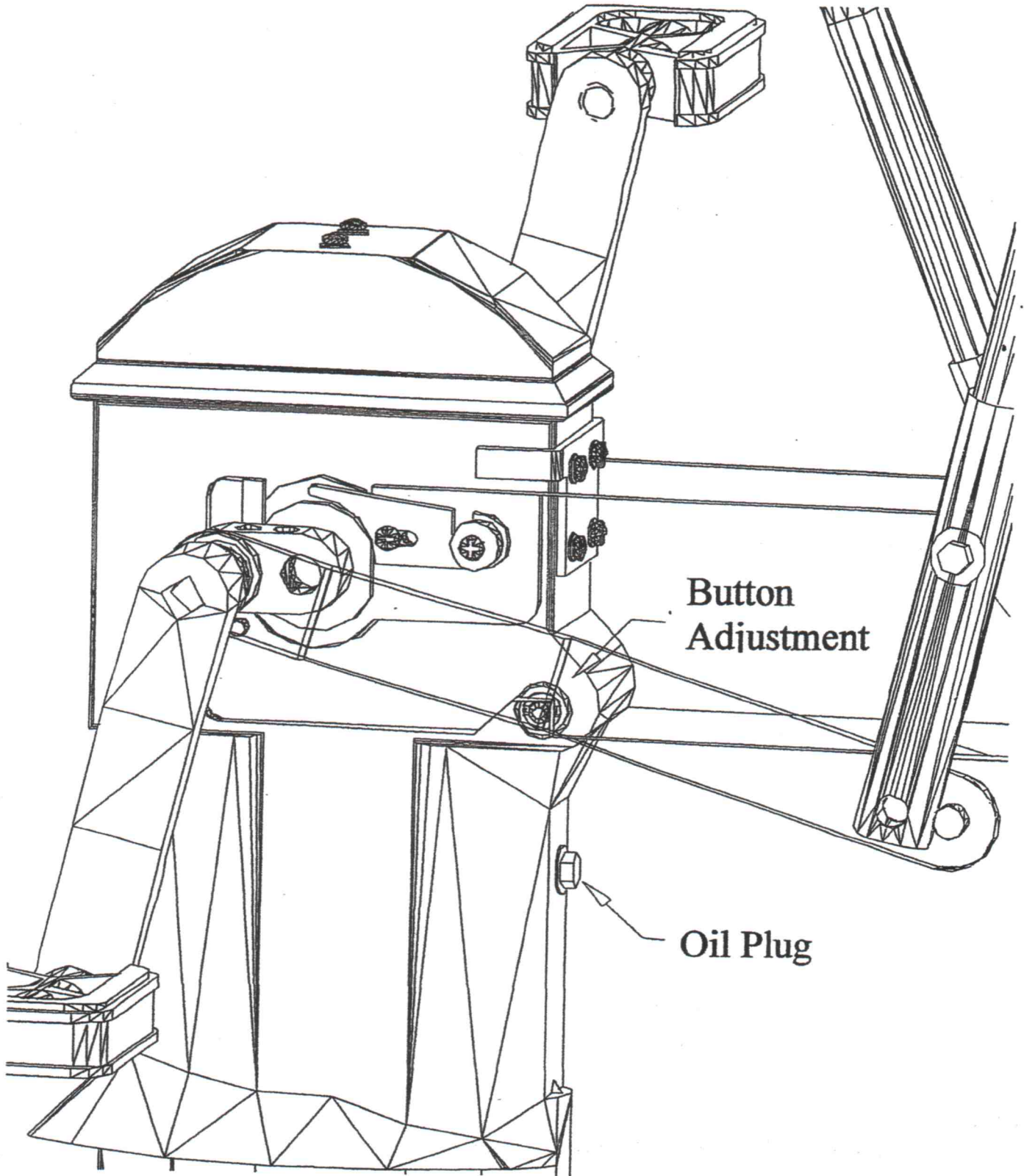
The buttons are mounted in a thread housing that can be turned in or out thereby decreasing or increasing the break away force. The buttons are preset for normal usage.

To adjust the break away force: Take a large screwdriver or the small drive adjustment tool included in the basic tool kit and place it against the tip of the button.

Carefully depress the button until the screwdriver tip of teeth in the tool engages the slot in the button housing.

Maintaining inward pressure, turn the screwdriver counter-clockwise to increase breakaway force. Turning clockwise will reduce the breakaway force. (See Figure 2)

NOTE: Make changes in increments of ½ turns. Moving the buttons outwards in larger increments may cause damage to buttons.



(Figure 2)

NOTE: It may be necessary to rock the drive slightly while continuing gently downward pressure to allow the drive mount brushing to work down into the bottom of the keyway.

ATTACHING THE ARM DRIVE:

Remove the pins from the pump handle base.

Once the drive is seated in the yoke bring the flat arms which are attached to the drives up parallel to the ground.

These arms fit into the slots in the bottom of the pump handle base. Line up the hole in the end of the flat arm with the hole in the pump handle base. Reinstall the pivot pin with the hole in the pin to the outside.

CLEARING THE PROPELLER

If the propeller becomes clogged with weeds, pull the drive unit towards you until it rotates up and out of the water. Then clear way all material from the propeller and shaft and push the drive unit forward until it snaps into position.

SAFETY

Use the same good judgement that you would when in any water craft. Most importantly, of course, always use a personal flotation device (life jacket). Also, learn the generally practiced "rules of the waterway". Although non-powered boats have the right-of-way over power boats, be aware of all other boats that are around you. (Remember, the WATER BIKE makes very little noise).

Wind and weather conditions can change very rapidly. Beware of and prepare for such changes. Avoid getting caught in stormy weather.

To prevent slipping on the hulls, always wear slip-resistant shoes.

Dress properly for the weather. Be sure to use sunscreen on sunny days and always take plenty of liquid to drink.

The WATER BIKE has a safe handling load capacity of approximately 275 pounds. Don't overload it.

Boating accidents in cold water are very dangerous. Hypothermia, the loss of body heat due to immersion in cold water, can be a killer. Survival time can be as short as 15 minutes in 50 degree F. water.

The WATER BIKE handles well in most rivers, lakes, sounds, and bays. White-water rivers, the breaking waves of the surf, and waves from winds which exceed 20 miles per hour are not recommended for Waterbike.

MAINTAINING THE WATER BIKE

The WATER BIKE is easy to maintain. One reason is that it is constructed of quality materials that are strong, durable, and corrosion-resistant. Another is that its modular design allows you to remove only the component that needs repair and not the entire boat.

HULL MAINTENANCE

The hulls utilize rotomolded polyethylene construction that provides a high strength, lightweight structure. Polyethylene hulls can be washed with a mild detergent and protected with products like Armor All®.

DRIVE UNIT MAINTENANCE – KEEP THE CHAIN TIGHT!

The drive chain inside the drive housing requires tensioning when new. After the first four hours of use, the chain should be checked for tightness. You should check the chain a second time after 10 hours of use. A third tensioning may be needed after 40 hours of use. Always check chain tension before using the WATER BIKE. **NOTE: A loose chain can jam and damage itself; routine inspection will prevent this.**

Hold the propeller still with one hand and turn the pedals with the other. If you have more than 2 inches of play you will need to tighten the chain.

ADJUSTING THE CHAIN TENSION (Check tension before use)

CHAIN: EXTREMELY IMPORTANT!!! The chain must be checked for tightness frequently, especially in the first 30 hours of use. During break-in, the chain will stretch in the first few hours of running so it is suggested that the chain be tightened after about 4 hours. After that, it should be checked for tightness about once every 10 hours and eventually about every 40 hours. **The chain is loose if you notice two inches of play in the pedals when going from forward to reverse while holding the propeller still.** Use your best judgment but check for tightness frequently.

Chain tension is adjusted by adjusting the main crank spindle shaft up or down. To loosen the main crank shaft, use the enclosed wrench to loosen the black drive mount bushings only about ½ to ¾ of a turn. (If you loosen more you will begin to disassemble parts). The drive mount bushings are the black round discs about 2 inches in diameter, with a flat side, mounted to each side of the drive housing through which the main shaft protrudes. The pedal crank arms are attached to the main crank shaft by short crank arms. The drive mount bushings slip into the U-shaped cutouts in the main yoke.

The chain has been tightened at the factory and locked tightly in place. To tighten the chain, first remove the drive unit from the yoke then, using the open-end wrench provided, loosen the drive mount bushings on both sides only about ½ to ¾ of a turn.

LUBRICATION

The chain in the drive unit should be inspected for proper lubrication once a month. If usage is heavy, 40+ hours per week, weekly inspections are recommended. Salt water is highly corrosive, proper lubrication is essential to ensure longer chain life.

PROPELLER

The WATER BIKE propeller is made of high strength urethane plastic that provides both exceptional impact resistance and stiffness. A 3/16" stainless pin holds the propeller on its stainless steel shaft.

To remove the propeller, push the pin through the shaft. Pull the propeller off the end of the shaft. To assemble, just reverse the procedure.

GENERAL MAINTENANCE – BEFORE EACH USE

Check chain tension.

Inspect all nuts, bolts and screws for tightness. Inspect crank arms daily, these occasionally need tightening. To inspect crank bolts, remove the plastic dust cap, tighten as needed.

Inspect all T-knobs, mounting parts, seats, extension tube, and rudder shaft for "binding". Lubricate as necessary with chain lube or waterproof oil.

To reduce the corrosive effects of salt water, after use, rinse off the entire boat with fresh water being careful not to run a lot of water over the top of the drive.

Store the WATER BIKE components in a cool dry area. Store the polyethylene hulls with the decks against a flat, smooth surface. Do not put weight on the polyethylene hulls or cover with black tarpon in sun, deformation can result.

IMPORTANT WATER BIKE MAINTENANCE **COMMERCIAL MODELS IN RENTAL OR RESORT USE**

Saltwater, humidity and sunshine combine into one of the most corrosive conditions in the world. Add in the tough rental public and it means your equipment needs definite maintenance program. A little attention each day goes a long way in keeping your WATER BIKE running. It only takes a few minutes. Following are recommended procedures to keep the WATER BIKE in top shape.

DAILY

- Rinse/hose boat off each night to remove salt and sand.
- Lube moving metal joints with A-120 Spray Lube if it is. (3 in 1 light oil can also be used.)

IMPORTANT

• **CHECK CHAIN TENSION**

The chain is factory pre-stretched but will require adjustment for first few days. Stretch will gradually disappear.

NOTE: A loose chain can derail and damage itself. This will shut down your boat. Simple monitoring will prevent this.

Check nuts on the short crank arms, don't over tighten.

Check pedal crank arms on each side of drive for tightness. If loose, tighten with ½" socket drive. On Drive units, the crank bolt has right hand threads; the left side has left hand (reverse) threads.

Check that the drive will stay in the "up" position when rotated to this position. See "Button Adjustment" section if it does not.

WEEKLY

Lube Pedals and Crankshaft bearings.

MONTHLY

Tension chain. Lube Pedals. Lube Hull bolts. Lube Crankshaft Bearings.

SUMMARY

DAILY

- Hose off boat.
- Check chain tension in drive – tighten if necessary.
- Check crank arms on each side of drive for tightness – tighten if necessary.
- Check all T-Knobs, mounting parts and extension tube for sticking and tightness lube if necessary.

WEEKLY

- Lube extension T-knob, main rudder shaft.
- Tension the drive chain once a week for first month,
- Lube pedals and crankshaft bearings.

MONTHLY

- Check drive oil level.
- Remove all T-knobs and lube.
- Exchange hulls – port to starboard/starboard to port.
- Lube bolts.
- Lube drive chain and tension drive chain.
- Lube pedals and crankshaft bearings.

TOOLS REQUIRED:

- Drive adjustment wrench
- 9/64" Allen wrench
- 5/32" Allen wrench
- 1/2" Socket and ratchet drive
- 3/16" Allen wrench
- Large slotted screwdriver

LUBRICANTS:

- Royal Purple non emulsifying drive oil.

CastleCraft

website - www.castlecraft.com
PO # 3 , Braidwood, IL 60408
815-458-6216 Telephone
888-274-8490 Toll Free