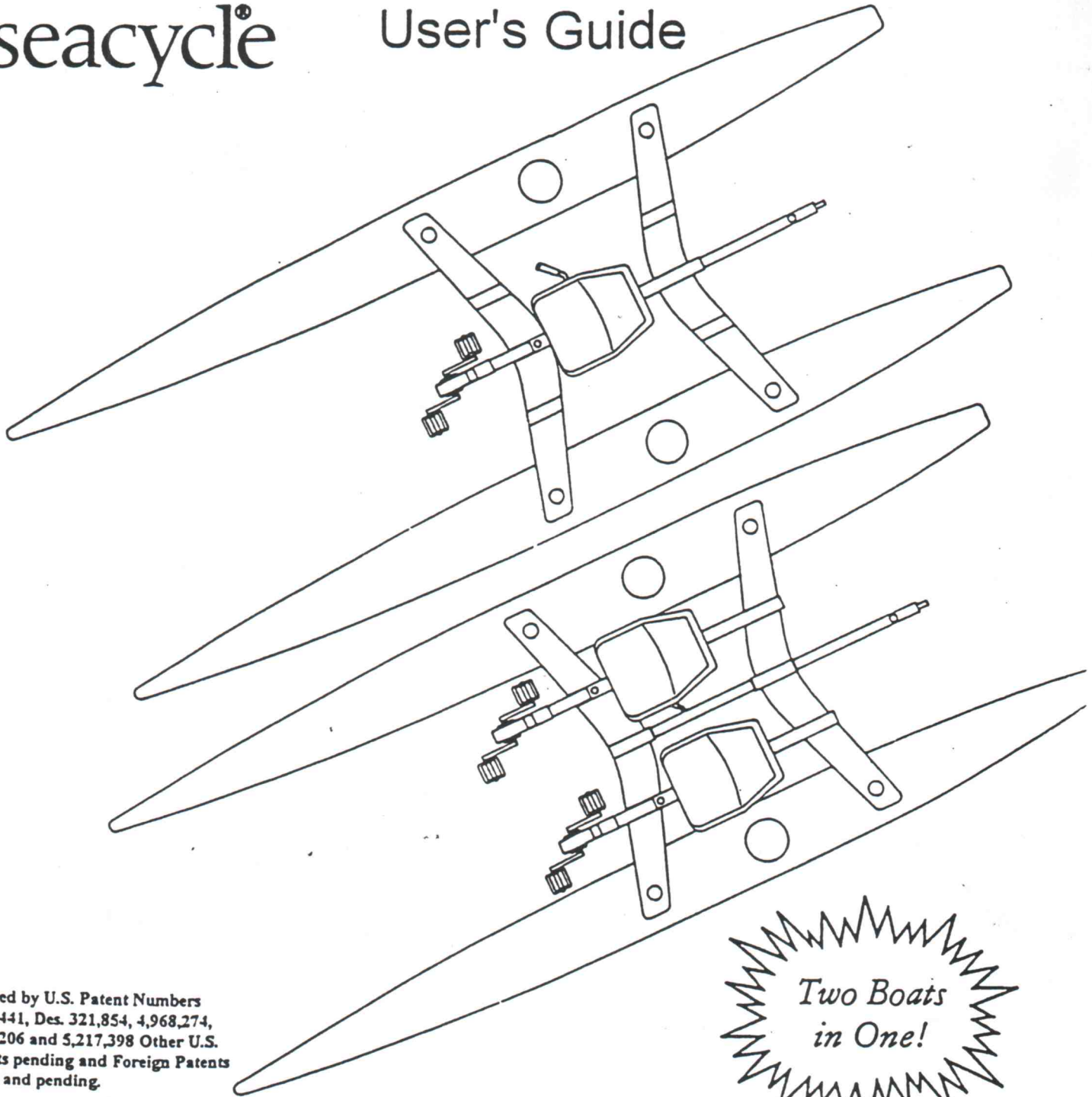




Installation and User's Guide



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5,374,206 and 5,217,398 Other U.S.
Patents pending and Foreign Patents
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*Two Boats
in One!*

343 Lawrence Street

Adrian, Michigan 49221

(517) 265-9821

Division of Meyers Boat Company

CastleCraft

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



SEACYCLE® USER'S GUIDE TWIN AND SOLO MODELS CONSUMER AND COMMERCIAL MODELS

The Seacycle® User's Guide covers the information you'll need to know about transporting, assembling and using the Seacycle, as well as tips on safety and maintenance. Please take time to read the user's guide carefully before you ride your Seacycle. 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 SEACYCLE

The Seacycle 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 Seacycle riders.

The catamaran configuration of the Seacycle 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 Seacycle can safely operate. The operator should use common sense in the use of the Seacycle. The Seacycle should not be used in the following conditions:

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

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

TRANSPORTING THE SEACYCLE

The Seacycle can be disassembled in minutes without tools (consumer model only) for easy transport. It is also easy to carry since each main component (hulls and frame assembly) weigh only 35 to 50 lbs.

The hulls can be mounted on top of a car equipped with most standard all-purpose roof racks using the knobs that hold the struts to the hulls to hold the hulls to your roof rack. All other components can be carried either on a rack or inside your vehicle.

NOTICE

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

COMPONENTS

- 2 Struts
- 2 Main Frame Assemblies (one with Solo)
- 2 Hulls
- 2 Drive Units (one with Solo)
- 1 Main Frame Stabilizer Bar (also child seat foot rest - Twin only)
- 1 Rudder Strut/Steering Assembly
- 2 Seats (one with Solo)
- 10 Star Knobs on Threaded Rods (4 with Solo)
 - 8 for attaching Seats to Main Frames
 - 2 for attaching Stabilizer Bar (not available on Solo)
- 4 T-Knobs (Large) for attaching Struts to Hulls
- 4 T-Knobs (3" Long) for attaching Main Beams to Struts (Twin only)
- 2 T-Knobs (8" Long) for attaching Rudder Assembly to Strut (Twin & Solo)
- 2 Attaching Knobs for above (Twin only)

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.

MOUNTING THE FRAME STRUTS TO THE HULLS

Place hulls parallel to each other approximately 4' apart with both bows pointing the same direction. Note that the Seacycle® graphic on the side of the hull should be on the outside. The Frame Struts have mounting pads that help position them to the hulls.

NOTE: The Frame Struts are identical and differ only in that the rear strut has the serial number tag affixed to it. If you ordered the optional accessory holder, it is factory mounted on the forward Strut. To meet Coast Guard Regulations, make sure the tagged strut goes on the rear of the Seacycle.

Insert the ½" threaded knob assembly into the slot at the end of the frame strut. Engage the threads into the hull receptacles. Tighten the T Knob loosely at this time. Repeat procedure on the 2nd hull. Orient 2nd strut to the hulls as in Fig. 1 and assemble using the method above. Tighten Knobs only enough to prevent the frame struts from "drooping" toward the center of the boat, but still loose enough to allow some fore and aft play at the strut ends.

INSTALL RUDDER/STEERING ASSEMBLY

Align the hulls so that the center "slot" areas in both Frame Struts are parallel. You can use a Main Frame Assembly to test this by placing a Main Frame into the slots to verify that they are parallel.

Place the Rudder/Steering Assembly under the center slot of each strut. Once the tubing is located in the center, align the forward hole in the rudder strut with the hole in the strut. Insert the Long T-Knob with knobs on both ends through the holes in the center of each strut and through the rudder assembly and attach Star Knob with Twin. For the Solo model assembly the long T-Knob that holds up the rudder assembly threads into the Main Frame mounted in the center slot of the Struts. Align rear holes the same way as above. Some adjustment between the Frame Strut/Hull and Rudder/Steering Assembly may be needed to facilitate hole alignment.

RUDDER LOCK-UP LINE

At this time it's important to point out a few features on the Rudder/Steering Assembly. Note the line running from the Rudder Plate to the "Jam-Cleat" attached to the Rudder Strut. When this line is pulled forward, it raises the Rudder Plate so that the Seacycle can be "beached" or launched. The rudder can be placed back down by pulling the line "Outboard" to remove it from the Jam-Cleat. The weight of the Rudder will return it to its normal operating position.

MULTI-POSITION STEERING HANDLE

Please note that the Steering Handle operates the Rudder by pushing or pulling in a fore and aft motion. There are two possible positions for the handlebar, single rider and two rider. To change the handlebar location, remove the quick disconnect pin and pull the handlebar outboard and replace pin.

INSTALL MAIN FRAME(S)

Depending on which Model Seacycle you have the next step is to install the Main Frame(s). NOTE: The twin model comes equipped with a total of 4 T-Knobs that connect the Main Frames to Frame Strut. The four Short T-Knobs are mounted from beneath the Strut into the Threaded Holes in the underside of the Main Beam.

The two longer T-Knobs are used to hold the Rudder Assembly under the Strut with Attaching Knobs on the top of the Wing. These are also used without the Attaching Knobs to mount a Main Beam in the center slot when used as a Solo. (See Above)

Twin Model - Place the Steering Handle in the two rider position (inboard). Place the Main Frames in the "outboard" slots on the Frame Struts. See Fig. 1. Note the "Drive Yoke" is placed "forward", and the threaded holes in the Main Frame are "down" against the Frame Strut. The Main Frames have three possible threaded hole locations to attach to the Frame Struts. In the two rider configuration the "outside" holes are used. Align these holes over the "slots" in the Frame Strut. Using the shorter (3") T-Knobs, insert the threads into the slot under the Frame Struts. This is a "blind" installation, and a certain amount of "feel" is needed to engage the threads into the Main Frame. Be sure not to "cross thread" the T-Knobs. With just a little practice the assembly will take only a few seconds! Once both main frames are securely fastened to the Frame Struts, go back and tighten the T-Knobs fasteners to the hulls snugly.

STABILIZER BAR - As an added feature on all Twin units a new stabilizer bar and rear seat footrest is included with your order. The two U shaped channels mount onto the tops of the Main Frame beams immediately behind the two front seats. Knobs attached to brass slides into the outboard channels in the side of the main beams. Install the brass slides for the stabilizer bar prior to mounting the optional child seats or baskets. Then mount the U shaped channels at each end of the stabilizer bar by pressing them onto the main beams. It should be a snug fit. Slide the brass slides under the U shaped channels, line up the holes and secure with the two knobs that fit through the holes in the outboard sides of the U shaped channels. The location of the stabilizer bar is not important as long as it is behind the front seats and forward of the child seats and baskets.

Solo Model - Place the Steering Handle in the single rider position (outboard). The Main Frame has three possible hole locations to attach the Frame Struts. In the single rider configuration the forward hole and the next hole back are used. Align these holes over the center "slots" in the Frame Struts. Insert the long T-Knob fastener through the Rudder/Steering Strut, through the Frame Strut and engage the threads in the Main Frame. Once again this requires a "feel" to properly engage the thread because you are working "blind". Be sure not to "cross-thread" the T-Knobs. When the T-Knobs first engage the threads in the Main Frame they will turn smooth and easy, continue tightening the knobs until the Main Frame pulls down on the Frame Strut completely. Once the Main Frame is secured go back and tighten the T-Knobs fasteners to secure the Frame Struts to the hulls.

INSTALLING THE SEATS

The bottom "channel" under the seat has 4 Star Knobs threaded into 4 Slide Bars. Loosen each Knob approximately 2-3 turns. The knobs should be in the holes at the front and rear of the seat bases. Working from the back of the Main Frame, engage the Slide Bars into the slots located on either side of the Main Frame. Align the Star Knobs and slide the Seat forward along the top of the Main Frame. Note: A light lubricant or silicone spray will prevent corrosion in the slide channels. On Single rider boats, position the seat a few inches back of the Extension Tube Knob.

On Twin Models, position the loading edge of the seat about 2" behind the Extension T-Knob.

The above seat locations are at the center of gravity on the boat. (This keeps the boat "trim" or level when viewed from the side). Further "fine tuning" of the trim can be accomplished by sliding the seat fore or aft (by small increments) until the proper trim is achieved. Once the seat(s) are in place, securely tighten the Lock Knobs.

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 directly above the propeller 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. 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.

INSTALLING THE DRIVE UNIT(S)

Loosen the Extension Tube Release Knob, 1 or 2 turns. Pull the Extension Tube out of the Main Frame 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 forward tighten the knob firmly to lock in place.

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

ADJUSTING THE LEG LENGTH

The Seacycle adjusts to fit a wide range of riders from children to large adults. To increase the leg length, get on the Seacycle when it is in the water.

- Turn the knob in front of the seat 1-2 turns (do not loosen more as the knob will disengage from the slide and you may lose the slide) to release the extension tube allowing the drive to slide in and out. (See Fig. 1.)
- Place one heel against the back of the pedal. Extend your leg, pushing the drive unit away from you. (Position the drive so that your leg is a few degrees short of full extension when the pedal is furthest from you. If your legs are fully extended while pedaling, you could stress your knees.)
- Tighten the knob in front of the seat to lock the drive in place.

To shorten the leg length, loosen the knob in front of the seat 1-2 turns. With your feet off the pedals pull the extension tube straight back, then tighten the knob to lock in place.

USING THE SEACYCLE

GETTING ON AND OFF THE SEACYCLE

Step onto the deck, then slide onto the seat. The area between the frame struts is reinforced, use only this area for stepping and standing.

STEERING THE SEACYCLE

You can move both forward and backward on the Seacycle by simply pedaling forward or backward respectively.

NOTE: Forceful backwards pedaling may cause the drive to rotate up out of the water. Should this occur, push the drive back down to its vertical position and use less force when pedaling backwards. If the drive rotates up even under light backwards pedaling pressure, the tension governing drive rotation may need to be adjusted. See Button Adjustment.

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 away all material from the propeller and shaft and push the drive unit forward until it snaps into position.

SAFETY

Use the same good judgment 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 Seacycle 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 sun screen on sunny days and always take plenty of liquid to drink.

The Seacycle has a safe handling load capacity of approximately 550 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 Seacycle 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 Seacycling.

It is a good idea to take a paddle with you should you get grounded or encounter other difficulties.

MAINTAINING THE SEACYCLE

The Seacycle 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 hour of use, the chain should be tensioned. You should tension the chain a second time after 2-3 hours of use. A third tensioning may be needed after 6 hours of use. Always check chain tension before using the Seacycle. **NOTE: A loose chain can derail 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 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 bushings one complete turn, only (If you loosen more you will begin to disassemble parts). The drive 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. The drive bushings slip into the U-shaped cutouts in the main yoke.

Once these bushings are loosened the main crank assembly will, with slight pressure, move up and down in slots in the sides of the drive housing.

To pull the assembly up, tighten the two Phillips head screws in the top of the drive housing cap until the screws are tight, but not too tight. Then retighten the drive bushings to the side of the drive housing with the large wrench, firmly.

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 Seacycling.

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 rotating 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 threaded 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 or teeth in the tool engages the slot in the button housing.

Maintaining inward pressure, turn the screwdriver counter-clockwise to increase break away force. Turning clockwise will reduce the break away force.

NOTE: Make changes in increments of ½ turns. Moving the buttons outwards in larger increments may cause damage to buttons. See Fig. 6.

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.

The new drive unit is shipped without oil in the crank case. The oil is packaged separately. Install the oil by removing the white plastic plug in the trailing edge of the drive unit. The drive should have 6 ounces of oil in it at all times. Six ounces will come to a level slightly above the lower sprocket.

To check the oil level remove the drive cap by removing the Phillips head screws holding the drivecap to the top of the drive housing. These screws are finely threaded so be very careful when replacing them. Once the cap is removed use a flashlight to look into the drive housing to view the oil level. When replacing the cap make sure that the gasket is aligned properly.

PROPELLER

The Seacycle 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. Two stainless steel set screws hold the pin in place.

To remove the propeller, remove the set screws and 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.

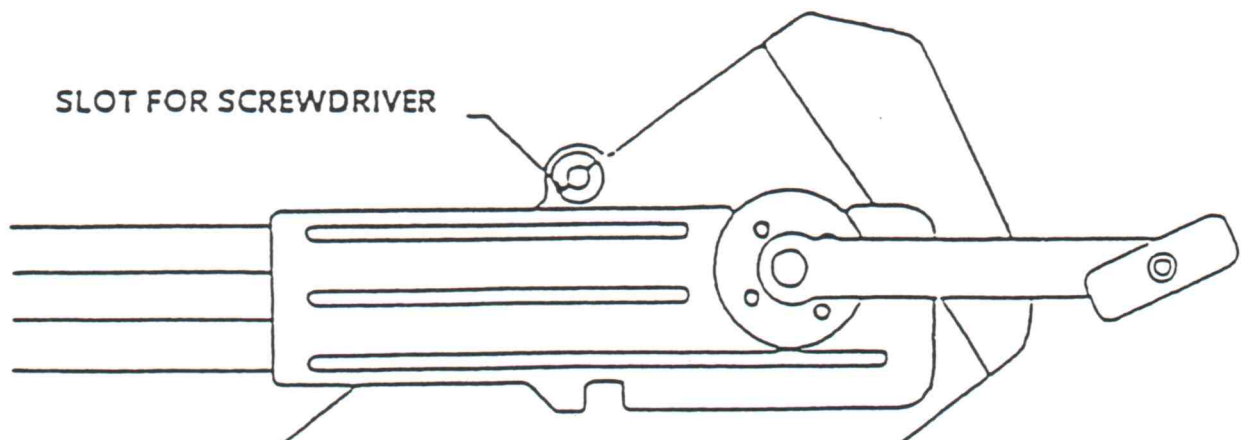
Inspect all nuts, bolts and screws for tightness. Inspect crank arms daily, these occasionally need tightening. To inspect crank bolts, remove the plastic dust cap, tighten as needed. **NOTE: On the drive unit the right hand crank bolt has right-hand threads, the left-hand side has left (or reverse) threads.**

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.

Store the Seacycle 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, deformation can result.

Recreation Industries, Inc. is committed to providing quality service for repair or replacement of parts. If we can be of help please, call Recreation Industries, Inc. at (214) 392-2425 or for warranty replacements send the part to Recreation Industries, Inc. 2151 Hutton Drive, Suite #150, Carrollton, Texas 75006.



SEACYCLE 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 a definite maintenance program. A little attention each day goes a long way in keeping your Seacycle running. It only takes a few minutes. Following are recommended procedures to keep the Seacycle in top shape.

DAILY

- Rinse/hose boat off each night to remove salt and sand.
- Turn drive extension T-Knobs to see it is not sticking and frozen. Lube 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 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 Rudder Shaft where it turns in the square Rudder Strut with A-120 or 3 in 1 Oil.

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:

- 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