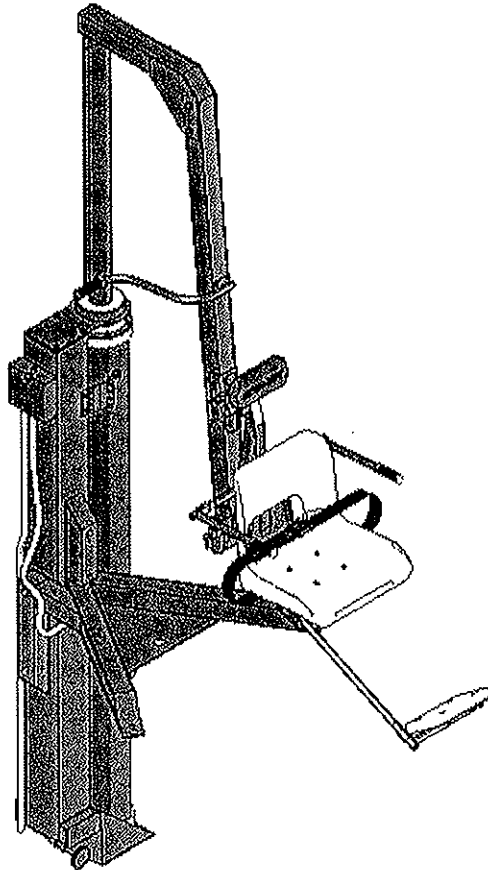


# Swim-Lift® Greycliff WP500



## Owner's Manual Assembly, Installation and Operation

***SPECTRUM***  
*Products*®

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# Swim-Lift® Greycliff

## Installation and Operation Manual

Thank you for purchasing the Swim-Lift®, Model Greycliff from Spectrum Products, we appreciate your business. To assure trouble free installation and operation of your Swim-Lift®, we recommend that you read this entire installation and users guide before attempting to install or operate the lift.

### Step 1: Unpacking and Inspection

Reminder: It is your responsibility to inspect product shipments, checking for the following:

- Check the number of cartons/boxes/crates against the shipping bill of lading.
- Check the cartons/boxes/crates for freight damage.

Please refer to our published freight policy in our General Catalog for further details.

Spectrum employs heavy duty shipping materials i.e., cartons/boxes/crates to protect products from freight and handling damage. Our quality control department guarantees that the proper quantities of items/components are packaged in each individual shipment, having a two-counter sign-off policy, assuring that all shipments are complete.

If freight and/or handling damage, or shortages of cartons/boxes/crates, should occur, it is your responsibility to file a claim with the freight carrier. You must note the damage or shortage on the freight carrier's bill of lading before accepting the shipment.

It is Spectrum's desire to provide you with superior products and services. Unfortunately we cannot control circumstance related to the shipment of products beyond our freight docks. However if you have any questions or problems related to your shipment please feel free to contact us at 800.791.8056, we will make every effort to assist you with freight problems. Ask to speak with our Customer Service Support Department (extension 203). Each Swim-Lift®, will arrive partially assembled as a 1-piece shipment. Before accepting the shipment from the carrier, be sure to inspect for visible damage.

### Greycliff Shipment Contents (see Figure 1):

Cylinder/Support Column Assembly

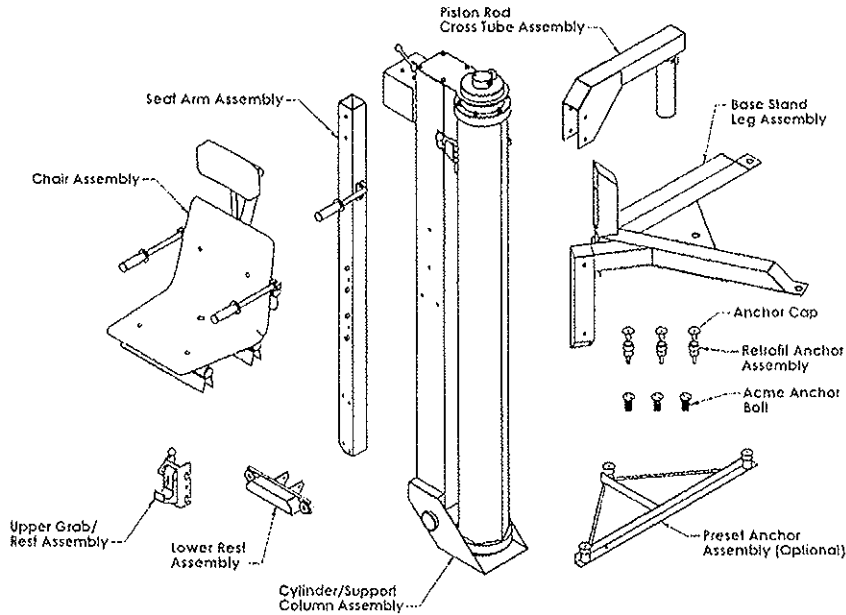
Base Stand Leg Assembly

- (1) Piston Rod Cross Tube Assembly
- (1) Seat Arm Assembly
- (1) Upper Grab/Rest Assembly
- (1) Lower Rest Assembly
- (1) Chair Assembly
- (3) Retro-Fit Anchor Assemblies (if not purchased previously)
- (1) Preset Anchor Assembly (optional)
- (3) Acme Anchor Bolts
- (3) Anchor Caps
- (1) Hardware Package

### Optional Items:

- Stretcher Attachment
- Stretcher Wheeled Carriage
- Wheeled Carriage for Chair

Figure 1



### Tools Required

The following tools will be required to complete assembly and installation:

- Rotary impact drill (retro-fit anchors)
- 1/2-inch diameter concrete drill bit (retro-fit anchors)
- 1 1/2-inch diameter concrete core drill (retro-fit anchors)
- Concrete saw (optional)
- Two-part epoxy (retro-fit anchors)
- Socket wrench
- 9/16-inch deep well socket (retro-fit anchors)
- 9/16-inch wrench
- 3/4-inch wrench
- Carpenters level
- Marking pen or chalk (retro-fit anchors)
- Spanner wrench (provided)
- Hammer (retro-fit anchors)
- Torque wrench

### Step 2: Preset Anchor Installation

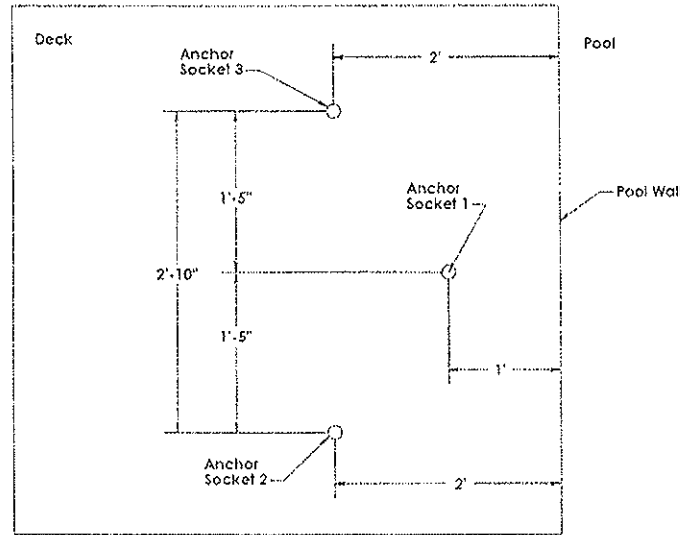
The Swim-Lift® Preset Anchor Assembly can be purchased as an option instead of the standard, retrofit anchors. The Preset Anchor is intended for installation before the pool deck is poured.

Step 1. Check that the location for the lift, as determined by the architectural/pool plan, is appropriate.

Step 2. Bond the anchor by attaching a number 8, solid copper wire between the bonding bolt on the anchor assembly and the pool bonding grid.

- Step 3. Set the anchor so that anchor socket 1 is 12-inch from the pool wall and anchor sockets 2 and 3 are 24-inches from the pool wall. Make sure anchor sockets 2 and 3 are the same distance from the pool wall. See Figure 2.
- Step 4. Set the elevation of the anchor assembly so that the top of the anchor sockets will be 1/8-inch to 1/4-inch below the concrete surface. Make sure the anchor assembly is level.

Figure 2



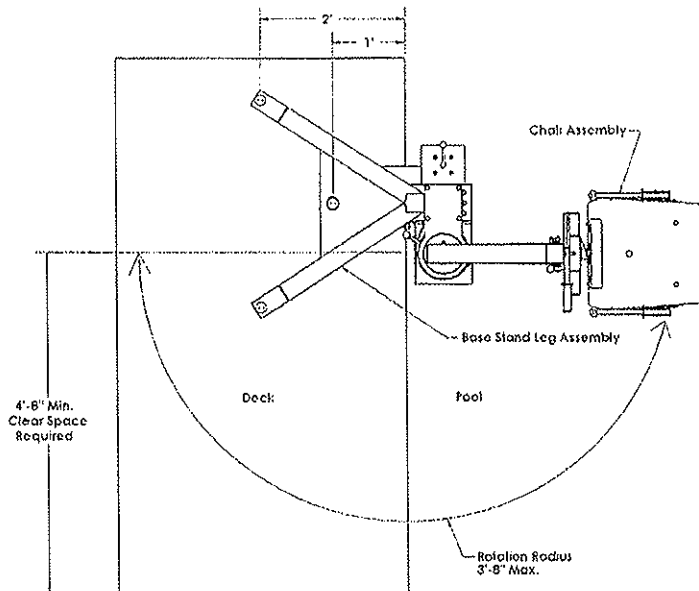
**Step 3: Retrofit Anchor Installation**

If a Swim-Lift® Preset Anchor was previously installed in your pool deck or if your retrofit anchors are already installed, proceed to step 1 of the Lift Assembly section for lift assembly instructions.

- Step 1. Determine a suitable location for the lift. The Swim-Lift® Model Greycliff must be installed with sufficient deck space and operational area as shown in Figure 3.

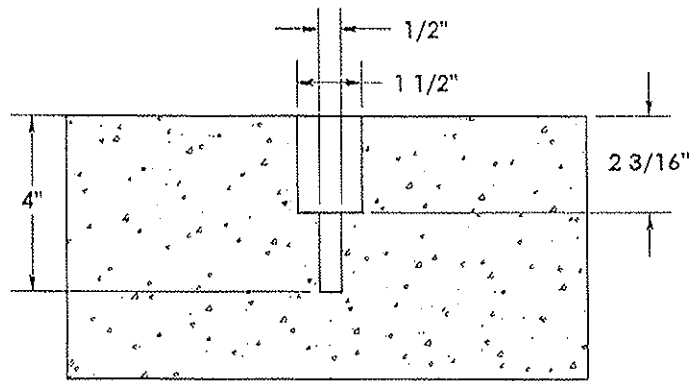
**Note:** The Greycliff can be mounted along a curved wall as long as there is sufficient clear space for the chair to rotate and lower into the water. Do not locate the lift in a corner or directly adjacent to ladders, stair rails, or similar structures. Do not place the lift where it may be cumbersome or hazardous to any pool users.

Figure 3



- Step 2. Mark the anchor locations on the deck as shown in Figure 2. Anchor socket 1 should be 12-inches from the pool wall and anchor sockets 2 and 3 should be 24-inches from the pool wall. You can use the base stand leg assembly as a pattern. Make sure the anchor setback and spacing is correct before proceeding with installation. Double check to make sure anchor sockets 2 and 3 are the same distance from the pool wall.
- Step 3. Use a 1/2-inch diameter concrete drill bit to drill a 4-inch deep hole at each anchor location. Make sure each hole is drilled straight down.
- Step 4. Use a 1 1/2-inch diameter concrete core drill to drill out the anchor holes to a depth of 2 3/16-inch as shown in Figure 4. Clean the debris from the holes and check to see that the bottom of each hole is in solid concrete. The anchors will only hold if the surrounding concrete is solid. The top of each anchor should be 1/8-inch below the deck surface. The anchors can be installed deeper, if necessary, to mount to sufficiently solid concrete.

Figure 4



- Step 5. Use a small amount of two-part epoxy in each anchor hole and place an anchor into each hole. Set the expansion anchors at the bottom of the anchor holes by tapping the anchor pin with the supplied 3/16-inch diameter set tool rod with a hammer. Use a 9/16-inch deep well socket to tighten the internal anchor bolts to approximately 30 ft-lbs. torque. Allow sufficient time for the epoxy to completely harden before installing the lift on the anchors.

**Note:** Many states require that any metal appliance that is within five feet of poolside be bonded (grounded). Retrofit installations are often difficult to bond. It is the responsibility of the installer to determine if bonding is necessary.

The lift can be bonded by attaching a bonding wire to the bonding bolt on the base stand leg assembly. Attach the other end of the wire to part of the pool that is known to be bonded or attach it to a bonded handrail or ladder.

#### Step 4: Lift Assembly

- Step 1. Attach the base stand leg assembly to the support column assembly using four 1/2-inch-13 x 10-inch hex head bolts, two 1/2-inch-13 x 7 1/4-inch hex head bolts, and six 1/2-inch-13 acorn nuts. See Figure 5.
- Step 2. Attach the piston rod cross tube assembly to the piston rod assembly as shown in Figure 6. Align the locate pin with the piston rod guide tube and use a 3/8-inch-16 x 3 1/2-inch hex head bolt, a 3/8-inch flat washer, a 3/8-inch lock washer, and a 3/8-inch-16 acorn nut to secure the piston rod cross tube assembly to the piston rod.

Step 3. Bolt the seat arm to the piston rod cross tube with two 1/2-inch-13 x 4-inch hex head bolts, four 1/2-inch flat washers, and two 1/2-inch-13 acorn nuts as shown in Figure 6.

Figure 5

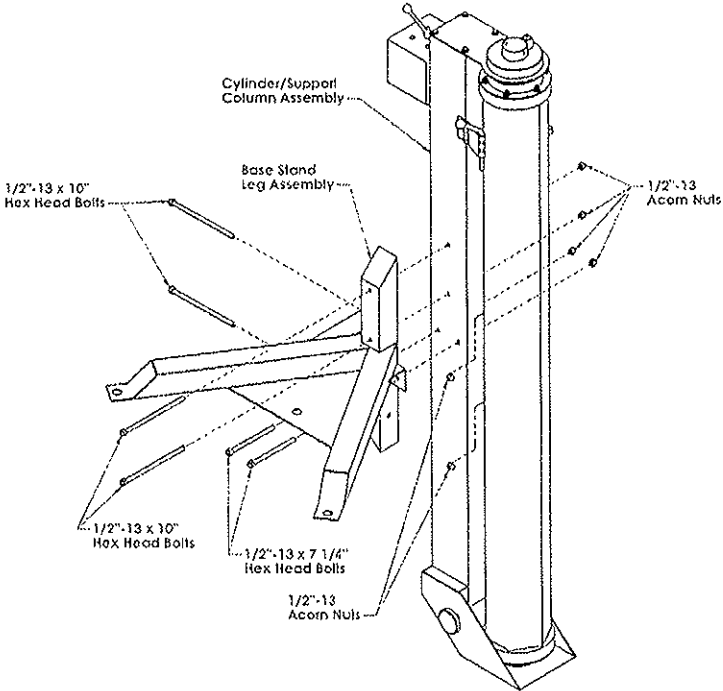
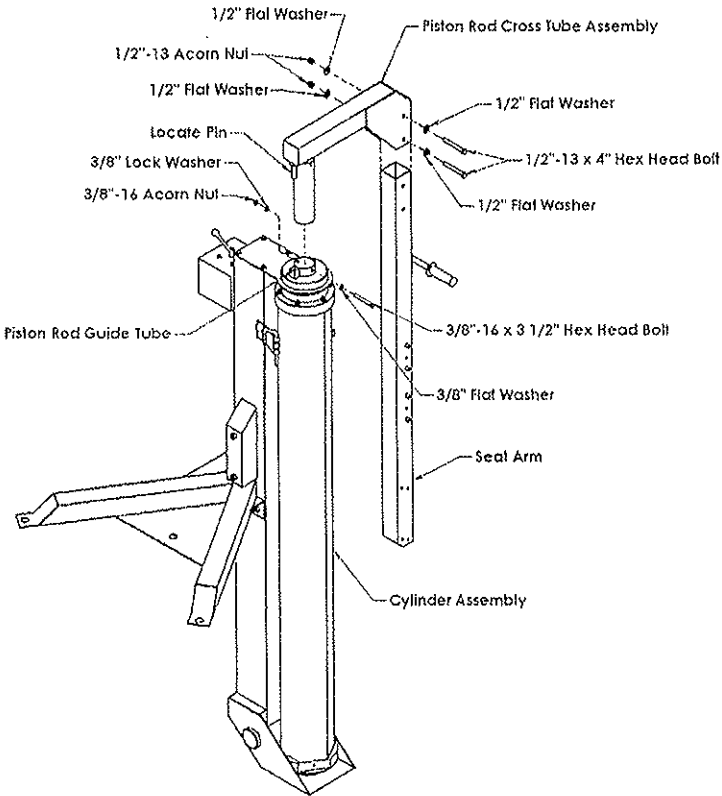
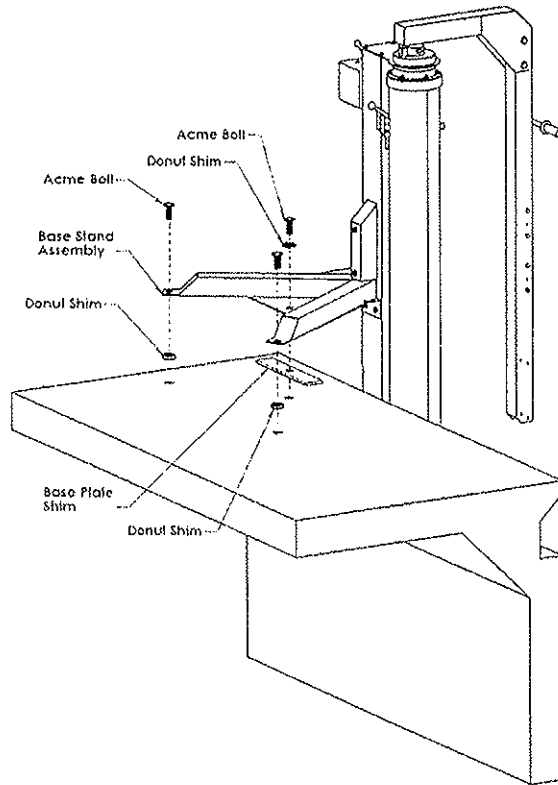


Figure 6



Step 4. Stand the lift with the lift cylinder in the pool and the base stand legs over the deck at the anchors. Use the supplied shims to level the base stand legs. See Figure 7. Make sure the lifting cylinder is vertically straight up and down.

Figure 7



Step 5. Anchor the lift to the deck using three acme thread anchor bolts. Tighten the anchor bolts with the spanner wrench supplied with the lift. If necessary adjust the leveler shoe at the base of the lift support column so that it contacts the pool wall. Check again to make sure the lift is vertically straight up and down. See Figure 8.

Step 6. Attach the upper grab rest assembly to the seat arm in the lower lock location as shown in Figure 9 using one 3/8-inch x 4-inch long lock pin. Attach the lower rest assembly to the seat arm on the lower set of holes using two 3/8-inch x 4-inch long lock pins.

*Note: To operate your lift with the optional stretcher assembly, attach the upper grab rest assembly to the seat arm in the upper lock location and attach the lower rest assembly to the seat arm on the upper set of holes using the 3/8-inch x 4-inch long lock pins.*

**DO NOT OPERATE THE LIFT WITHOUT SECURING THE REST ASSEMBLIES TO THE SEAT ARM WITH THE LOCK PINS.**

Step 7. Hang the chair assembly or the optional stretcher assembly on the upper grab rest assembly by sliding the hanger cross tube past the grab rest lock on the upper grab rest assembly. Make sure the hanger cross tube is resting in the grab rest cradle and is securely locked in place. The lower rest assembly should be just under the lower rest cross tube on either the chair or stretcher frame. See Figure 10.

Step 8. Connect the water supply to the female garden hose coupling on the control valve. Read the Operator's Guide section before using your Swim-Lift®.

Figure 8

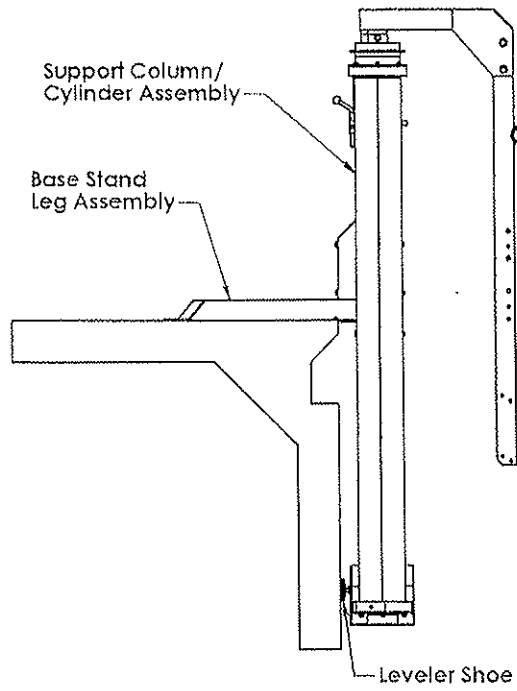
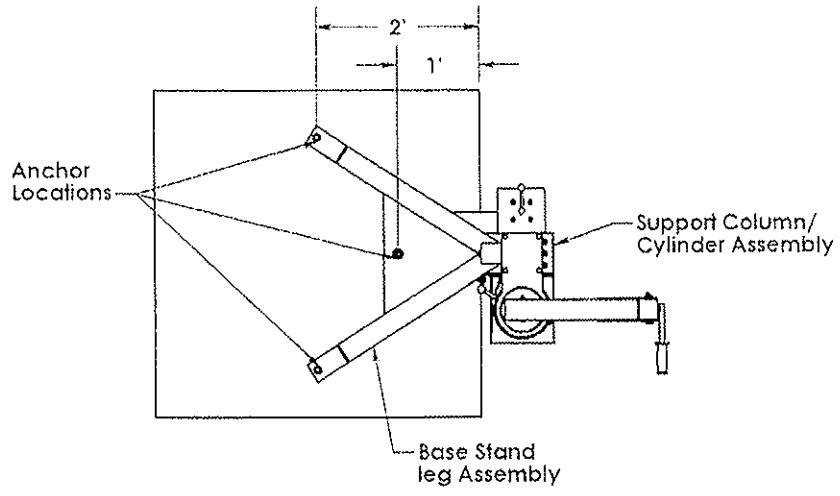




Figure 9

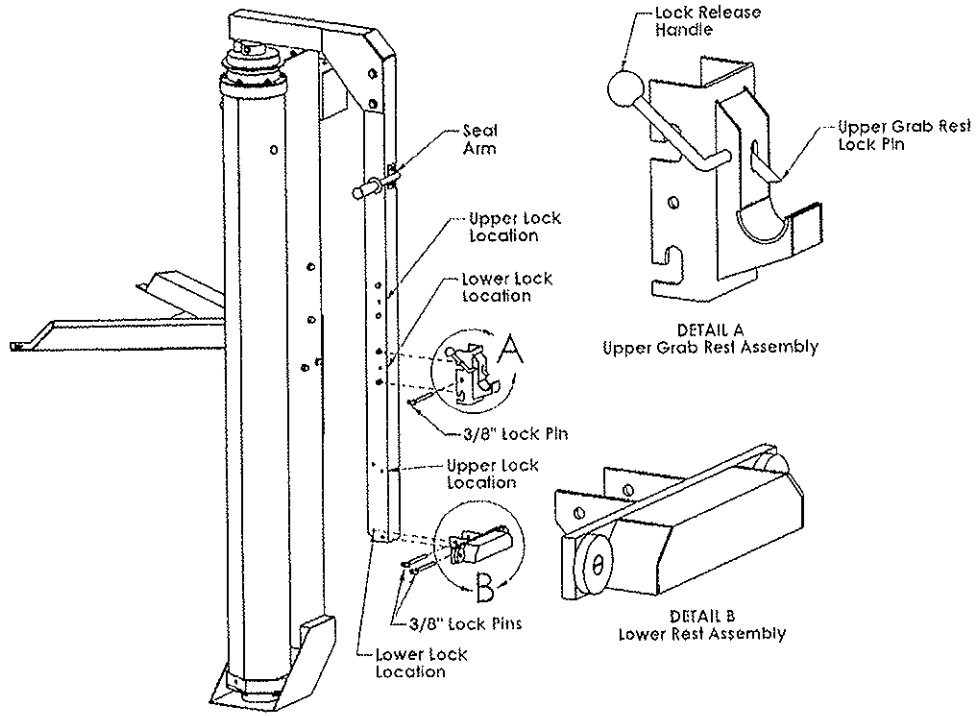
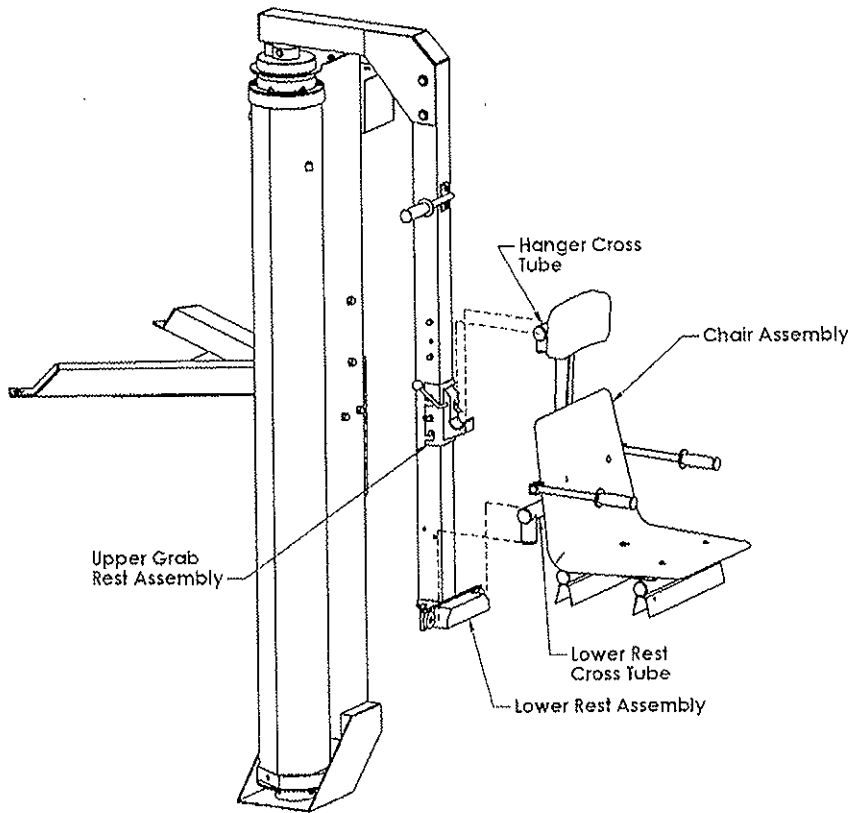


Figure 10



## Operator's Guide

Please read the Operator's Guide completely before using your Swim-Lift® Model Greycliff.

The Swim-Lift® is a water-powered lifting aid designed for use with water systems that have a 55 psi rating. This lift will function with as little as 45 psi water pressure with a reduced lifting capacity. Optional pump kits are available for supplying a constant pressure of 55 psi. Lifting capacities are based on a continual pressure supply without pressure drops incurred during peak demand periods of city water systems.

The maximum lifting capacity and maximum rated load of the Swim-Lift® Model Greycliff is 500 lbs. Never exceed the maximum rated load.

A backflow preventer may be required on this lift to prevent contamination of the municipal water supply. Please check your state and local codes to see if a backflow preventer is required.

### Lift Preparation (cylinder air purge):

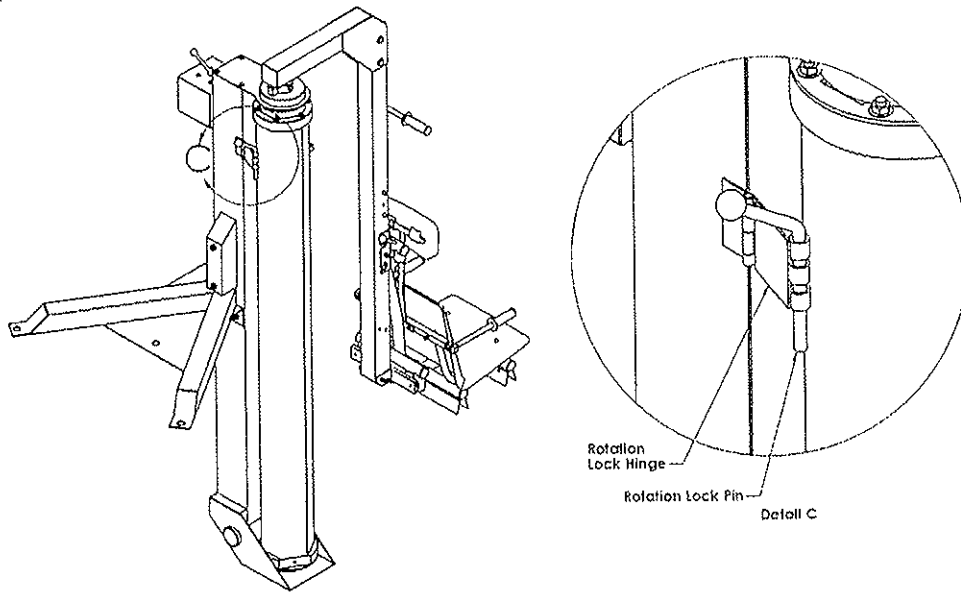
This process must only be completed after the lift cylinder has been drained or the water supply has been disconnected.

1. Make sure the control valve is in the intermediate "stop" position and attach the water supply hose to the female hose fitting on the valve. Turn the water supply on.
2. With no weight on the chair, turn the control valve handle to the up position and allow the chair to rise completely.
3. Turn the control valve to the down position. Allow the chair to lower to the fully down position.
4. Repeat steps 2 and 3 until a smooth operation is obtained. This process should not take more than 2 to 3 cycles to complete.

### Lift Operation:

1. The lift is operated through the use of the control valve. The valve handle turned to the "up" position will raise the chair and turned to the "down" position will lower the chair. The chair will stop at any point along its travel if the valve handle is turned to the intermediate "stop" position. Excessive force is not required to turn the valve handle.
2. Rotation of the lift cylinder is prevented by locking the cylinder at one of two stop locations. The stop locations are located at the load and unload positions over the deck and pool. To lock the rotation, insert the lock pin through the lock ring on the cylinder and hinge rings on the stop hinge. Remove the pin and swing the lock hinge away from the cylinder to unlock rotation. Be sure to always lock the rotation before loading or unloading the user. See Figure 11.
3. The lift is rotated manually by the lift attendant by using the rotation handle on the seat arm.
4. The arms of the chair flip up and back for ease of transfer from a wheelchair to the lift seat. Use of the seatbelt is recommended for all users. Spectrum recommends that all lift attendants be trained on the proper transfer techniques as well as proper operation of the lift before use.
5. Keep other swimmers and children away from the lift at all times.

Figure 11



### Lift Maintenance

The Swim-Lift® is virtually maintenance free because the drive component (water) acts as a lubricant. Providing it is installed correctly, the lift will furnish the user with many years of trouble-free use. The following steps should be performed periodically to ensure safe and dependable use.

1. Disengage the deck anchors one at a time and lubricate the acme thread nut with a small amount of petroleum jelly. Also, for check the expansion anchor bolt inside retrofit anchors to make sure it is tight. If it is loose or severely corroded, replace it immediately. Do not operate the lift until the damaged bolt or anchor is replaced.
2. Lubricate the cylinder piston rod with light amount of petroleum jelly.
3. Check all bolts and hose clamps for tightness.
4. Rinse the stainless steel components with clean, non-chlorinated water (do not use pool water) periodically to prevent buildup of halogen (chlorine or bromine) salt deposits. Auto wax can be applied for a cleaner appearance and to minimize the cleaning required.
5. Remove any discoloration or corrosion with a 3M scratch pad. Rinse with clean, non-chlorinated water. Repeat several times to passivate the stainless steel. Do not use chlorinated cleansers or steel wool to clean stainless steel. Stainless steel cleaning kits are available from Spectrum.
6. To prepare the lift for storage: disconnect the water supply, turn the control valve to down, push the chair down, turn the valve to up, and push the chair back up. Repeat if necessary. This process will force the water from the cylinder, valve, and hoses for storage.

## Troubleshooting

**Problem Cause Solution** The chair will not raise or lower. No or low water pressure. Clogged or kinked hoses. Turn on the water supply. Check hose connections for leaks. Check supply hose for kinks. Check exhaust hose for flow (no flow indicates a possible clog). The lift stops at a certain point during the travel cycle. Piston rod needs lubrication. Low water pressure. Lift is overloaded. Lubricate the piston rod with petroleum jelly. Check that static water pressure is at least 55 psi. Do not attempt to lift more than 500 lbs. The lift travels slower than usual. Leaking hoses. Inconsistent supply water pressure. Valve clogged or corroded. Check hoses for leaks. Check that static water pressure is at least 55 psi consistently. Check for damage or corrosion of the valve.

Traditionally the most common problems that arise are leaks, insufficient water pressure, or exceeding the maximum rated load. Leaks are easy to detect and remedy by tightening hose connections. Lack of supply pressure is generally easy to define by removing the intake connection at the control valve. Water should flow very fast and be nearly impossible to stop with thumb pressure. A water pressure gauge can be fastened to the end of the spigot if in doubt. Optional pump kits are available for water systems with low or unreliable pressure.

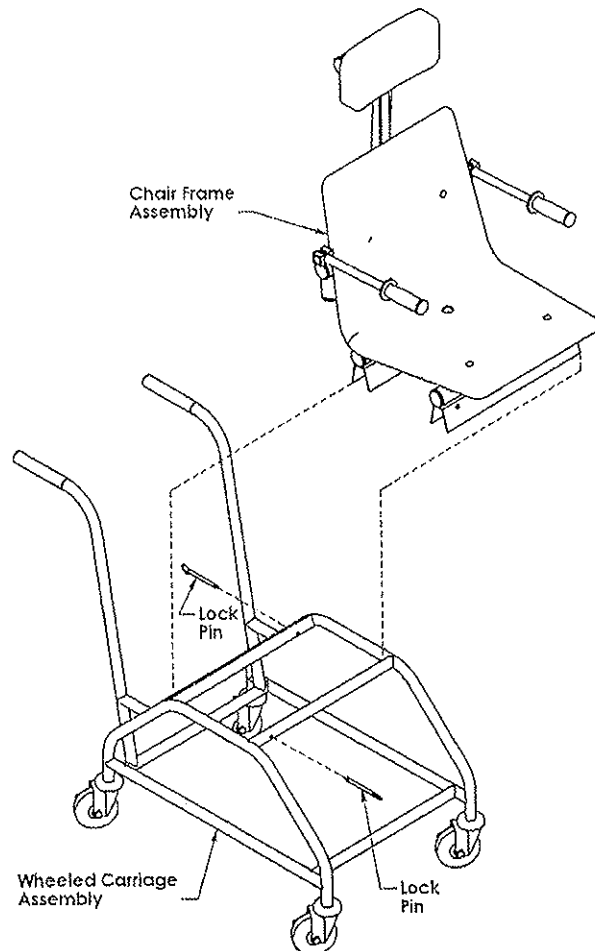
### Optional Wheeled Carriage for Chair

The optional wheeled carriage for the Greycliff chair assembly allows easier transport and transfer to or from the pool.

#### Assembly:

The optional wheeled carriage for the Greycliff chair assembly is shipped fully assembled. It attaches to the chair assembly using two 5/16-inch diameter, 3-inch long lock pins which are attached to the wheeled carriage frame by lanyards. See Figure 12.

Figure 12



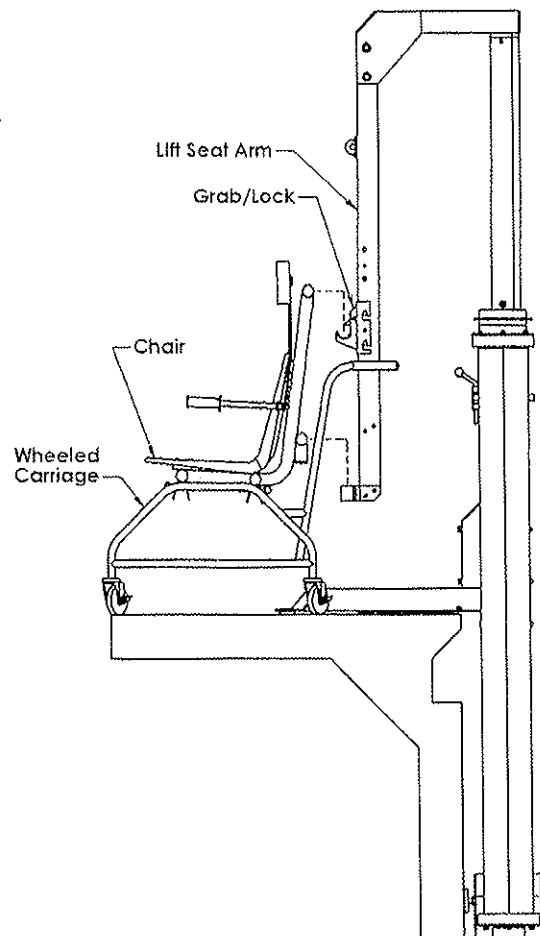
**Operation:**

1. To transfer into the pool, move the chair/carriage assembly next to the lift on the deck.
2. Make sure the grab/lock and lower rest on the seat arm are on the lower pin locations. See step 6 of the Lift Assembly section.
3. Back the chair up to the seat arm on the lift.
4. Lower the seat arm on the lift down so that the grab/lock is below the horizontal grab tube on the chair frame.
5. Push the chair/carriage assembly back to the seat arm and raise the seat arm until it locks into the grab/lock. See Figure 13
6. Remove the two lock pins below the seat to separate the chair frame from the wheeled carriage frame. See Figure 12.
7. To transfer out of the pool, move the wheeled carriage next to the lift on the deck.
8. Rotate the chair over the deck and position the wheeled carriage below the chair as in Figure 13.
9. Lower the chair onto the wheeled carriage making sure to align the two receiver channels on the bottom of the chair support with the two cross bars on the wheeled carriage.
10. Before disengaging the lock on the seat arm grab, insert the two 5/16-inch diameter, 3-inch long lock pins on the wheeled carriage through their respective holes in the chair receiver channels. See Figure 12.

**CAUTION:** FAILURE TO LOCK THE CHAIR FRAME TO THE WHEELED CARRIAGE BEFORE MOVING IT MAY CAUSE THE CHAIR TO SEPARATE FROM THE WHEELED CARRIAGE AND MAY CAUSE INJURY.

11. Release the lock on the seat arm grab and lower the seat arm to free the chair frame from the seat arm of the lift.

**Figure 13**



## Optional Stretcher Attachment

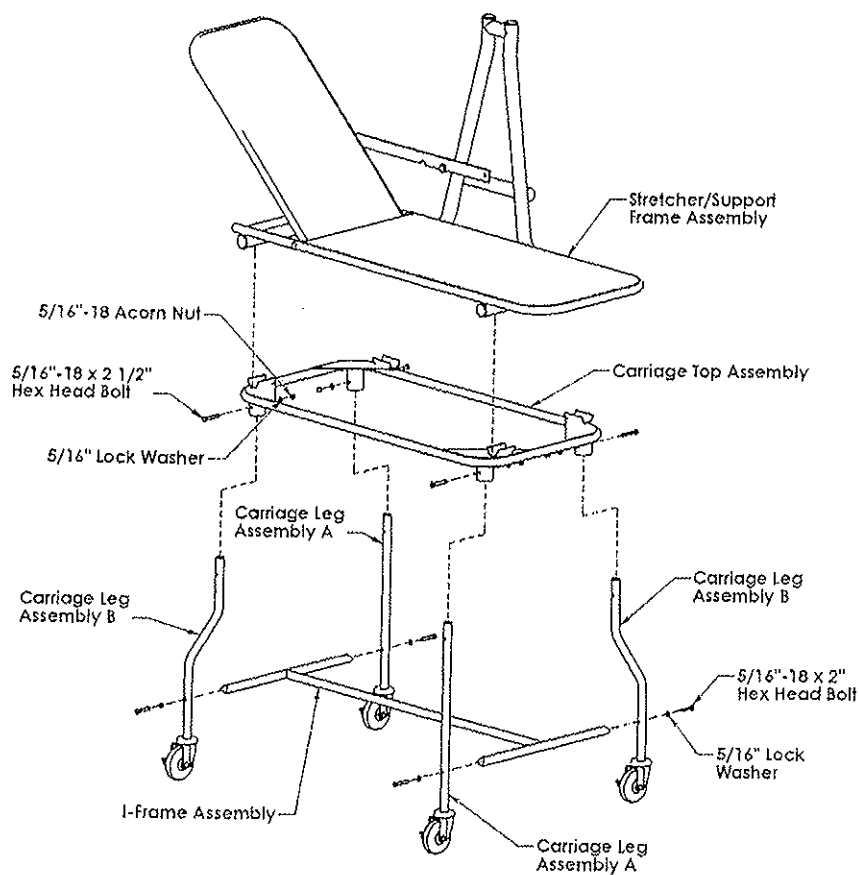
The optional stretcher attachment for the Greycliff allows easier transport and transfer to or from the pool for people who are unable to sit in a chair. The stretcher allows a person to lie nearly flat or sit partially reclined while entering and exiting the pool.

Assembly:

The optional stretcher and support frame are shipped fully assembled. The carriage for the optional stretcher is partially assembled and the following steps describe how to assemble the stretcher carriage.

1. Attach carriage legs A and B to the I-frame assembly as shown in Figure 14 using four 5/16-inch-18 x 2-inch hex head bolts and four 5/16-inch lock washers.
2. Insert the assembled leg frame into the carriage top assembly as shown in Figure 14. Use four 5/16-inch-18 x 2 1/2-inch hex head bolts, four 5/16-inch lock washers, and four 5/16-inch-18 acorn nuts to secure the legs to the carriage top.

Figure 14



## Operation:

1. To transfer into the pool, move the stretcher/carriage assembly next to the lift on the deck.
2. Make sure the grab/lock and lower rest on the seat arm are on the upper pin locations. See step 6 of the Lift Assembly section.
3. Back the stretcher up to the seat arm on the lift.
4. Lower the seat arm on the lift down so that the grab/lock is below the horizontal grab tube on the stretcher frame.
5. Push the stretcher/carriage assembly back to the seat arm and raise the seat arm until the horizontal grab tube locks into the grab/lock. See Figure 15.
6. To transfer out of the pool, move the stretcher carriage next to the lift on the deck.
7. Rotate the stretcher over the deck and position the stretcher carriage below the stretcher as in Figure 15.
8. Disengage the lock on the seat arm, lower the seat arm slightly, and push the stretcher/carriage away from the lift.

Figure 15

