



Aquatic Access[®] Inc.

Pool Lift Model IGAT-180/135



Installation Guide Instruction Manual

AquaticAccess.com

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Aquatic Access Model IGAT-180/135

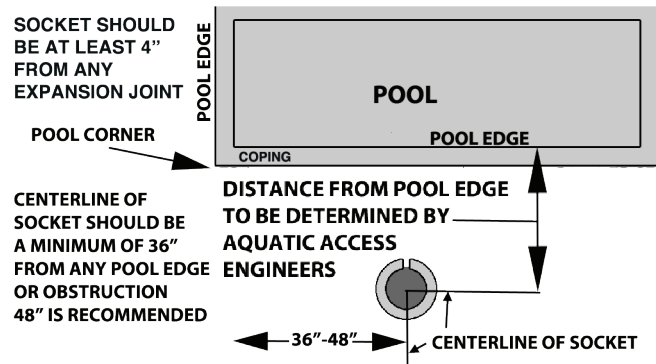
(IN-GROUND AUTOMATIC-TURN OF 135°)

INSTALLATION

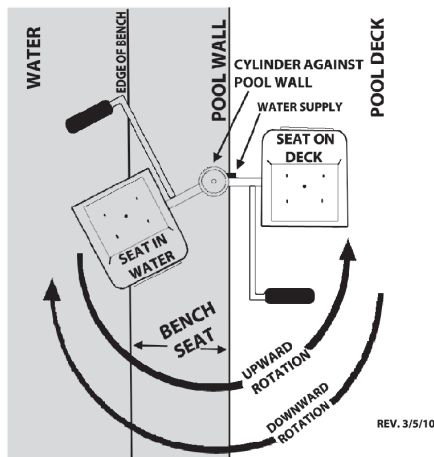
The customer and installer are responsible for assuring the strength of the mounting for the pool lift and for determining if grounding the unit is necessary. These installation instructions must be followed to meet advertised lifting capacities.

SOCKET PLACEMENT

The customer or installer and Aquatic Access mutually agree upon the socket location. Usually, the customer provides Aquatic Access with a drawing showing the measurements and configuration of the deck, coping, gutter, and pool wall. This allows our engineers to determine the best location for the socket. The pool lift should normally be located where there is at least 36" of straight vertical pool wall. The depth would need to be greater if there is a curve instead of a right angle at the pool bottom. The depth range of 42"–48" (deck to pool floor) is ideal.



It is recommended that the lift be installed 48" (minimum 36") from inside pool corners and ladders that could interfere with the turn of the seat. The socket should not be placed directly on an expansion joint, but at least 4" away from it. If unsure about the measurements, configurations or structural integrity, have a local contractor verify them.



IT IS RECOMMENDED THAT 48" (36" MIN.) BE ALLOWED ON ALL SIDES FOR SEAT ROTATION

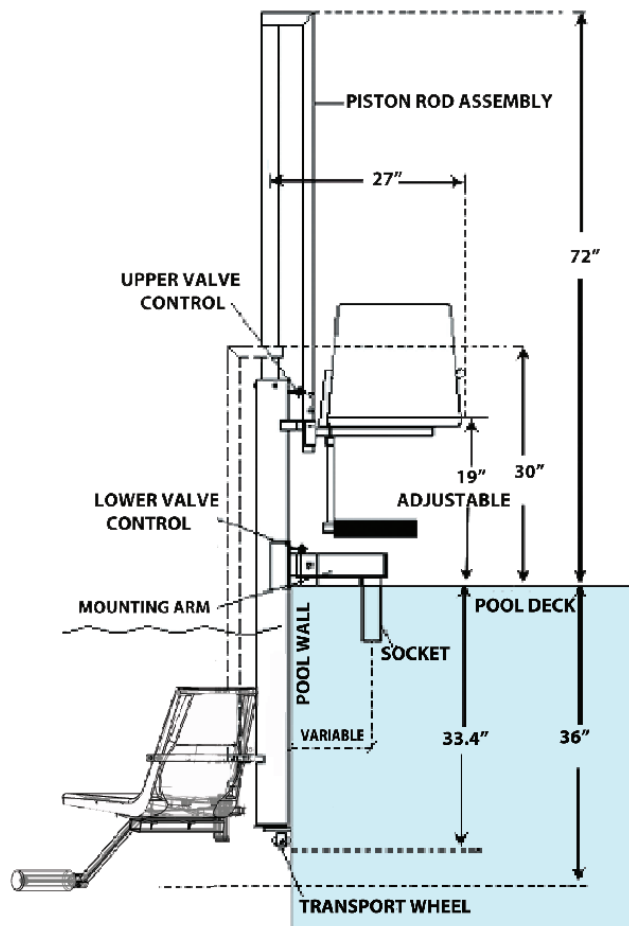
If you have received the socket in advance of the lift without instructions as to how far away from the pool edge to install the socket, or if any questions remain, consult with the engineers at Aquatic Access before installing the socket.

SOCKET INSTALLATION

Some states and localities require the grounding of any metal object within five feet of the pool edge, but this is sometimes difficult in retrofit versus new installations. Each socket has a grounding lug on the bottom to connect to a grounding rod. Electrolysis (staining of the stainless steel) may result if the lift is not properly grounded. Consult your local building codes for grounding information.

The socket is located in the seat box and is attached under the seat.

A 4" carbide core drill makes an excellent clean hole in solid concrete. The center line of the socket hole for your installation should be _____" from the pool wall or _____" from the edge of the deck. Drill the hole at least 8" deep. It is necessary that the top of the socket be flush with the deck's surface. With the socket positioned in the hole **with the notch facing the water**, use a level to be certain the socket is plumb and straight, and pour the anchor cement around the socket. Place a combination square with level full depth into the socket to assure that the socket is vertical in all directions as the cement sets (about 15 minutes). Allow the cement to cure overnight before installing the pool lift.



WATER CONNECTIONS

The pool lift is operated by city/household water pressure with no electricity needed.

Our system is designed for most efficient operation at approximately 55-65 PSI operating (open flow) pressure to lift 400 lb., the maximum lift capacity. Less pressure is required to lift less weight.

There are several ways to determine your water pressure. You can purchase a 0-100 PSI Water Pressure Gauge from your local hardware store, or you can ask your water company or fire department what the pressure is. Be aware that pressure gauges measure the static pressure of a water line, which is higher than the open flow or operating pressure.

If your static water pressure measurement is greater than 70 PSI, a reducer must be used between the water sources and the lift or damage to the lift may result. Purchase a reducer at your local plumbing supply store. Aquatic Access Inc. is not liable or responsible for damage caused by excessive water pressure.

Most installations will operate with a garden hose connected to a convenient faucet. However, on new deck construction, a recessed water connection with a shut-off valve may be plumbed in and a short appliance hose can serve as a connection. If a recessed water source is installed, when you are facing the pool, and the lift is between you and the water, the recessed water source should be placed to the RIGHT side of the socket, or the side opposite the turning seat.

Operating Water Pressure

Weight Lifted

(Add ~10% for static water pressure measurement)

PRESSURE	POUNDS	KILOGRAMS
31-36 PSI	200	91
43-51 PSI	300	136
55-65 PSI	400	181

Lifting capacity was tested at lift connection on a baseline unit with operating water pressure while lifting (open flow pressure) and under ideal mounting conditions pursuant to installation instructions. Static water pressure measurement will be approximately 10% higher.

Installation variables may also require a higher water pressure than listed. These may include:

1. The cylinder not being installed and maintained in a vertical position,
2. The wheelbase mounting plate not adjusted to touch the pool wall to insure that the cylinder remains vertical,
3. The post being inserted into the socket with the key not fitting properly into the socket notch,
4. The T-support bracket not being tightened enough to prevent movement.
5. Options and accessories, which may increase the weight of the lift and the pressure requirements.

Occasionally, an additional support bracket may be required for lift stability. This may reduce the ease of portability by requiring a tool for lift removal. Contact manufacturer for more information.

In true low water pressure situations, electric pumps are available to provide sufficient water pressure for up to a 400 lb. lifting capacity.

PREPARING TO INSTALL LIFT

To assemble the lift, you will need two adjustable wrenches to tighten the nuts and bolts provided.

In most cases, the lift ships from our factory in two cartons. The long carton contains the cylinder assembly, the wheelbase mounting plate, and the wheel assembly. The wheel assembly is wrapped in bubble wrap and attached to the hose with a zip tie. In the other carton, you will find the seat assembly, the socket, and any accessories you ordered with your lift.

LIFT ASSEMBLY

Slide the mounting arm onto the inner telescope and attach T-support bracket using the bolt and nut supplied with the T-foot support. Additional torque on this bolt will squeeze the walls together on the outer mounting arm telescope to eliminate looseness with the inner telescope. The T-support bracket attaches on the side of the cylinder opposite the valve.

To attach wheel assembly, detach the wheelbase mounting plate from bottom of cylinder by removing the two bolts. Insert the same bolts through holes in wheel assembly, wheel base mounting plate, and base of cylinder.

If your installation includes a vinyl-liner wall pad assembly, you will find it packed under the seat assembly. Attach it to the ends of wheelbase mounting plate with the bolts and nuts supplied with the vinyl-liner wall pad. When properly adjusted, the pad should be flush against the pool wall with the cylinder vertical. Tighten bolts after adjustment.

Insert lift fully into socket and make sure the post's tab fits into the notch in the socket. Check adjustment of wheelbase mounting plate (and vinyl-liner wall pad, if used), making sure that it touches the pool wall firmly. Note: the wheelbase mounting plate can be rotated 180° to achieve a better adjustment. Remove lift to adjust. Tighten bolts after satisfactory adjustment.

Failure to maintain a tight fit between the wheel base mounting plate (and vinyl-liner wall pad, if used) against the pool wall can result in movement of the cylinder which may prevent achievement of lifting capacities at advertised water pressures.

Re-insert lift into socket. Check for secure contact of wheelbase mounting assembly (and vinyl-liner wall pad if used) against the pool wall and t-support bracket on deck when cylinder is vertical.

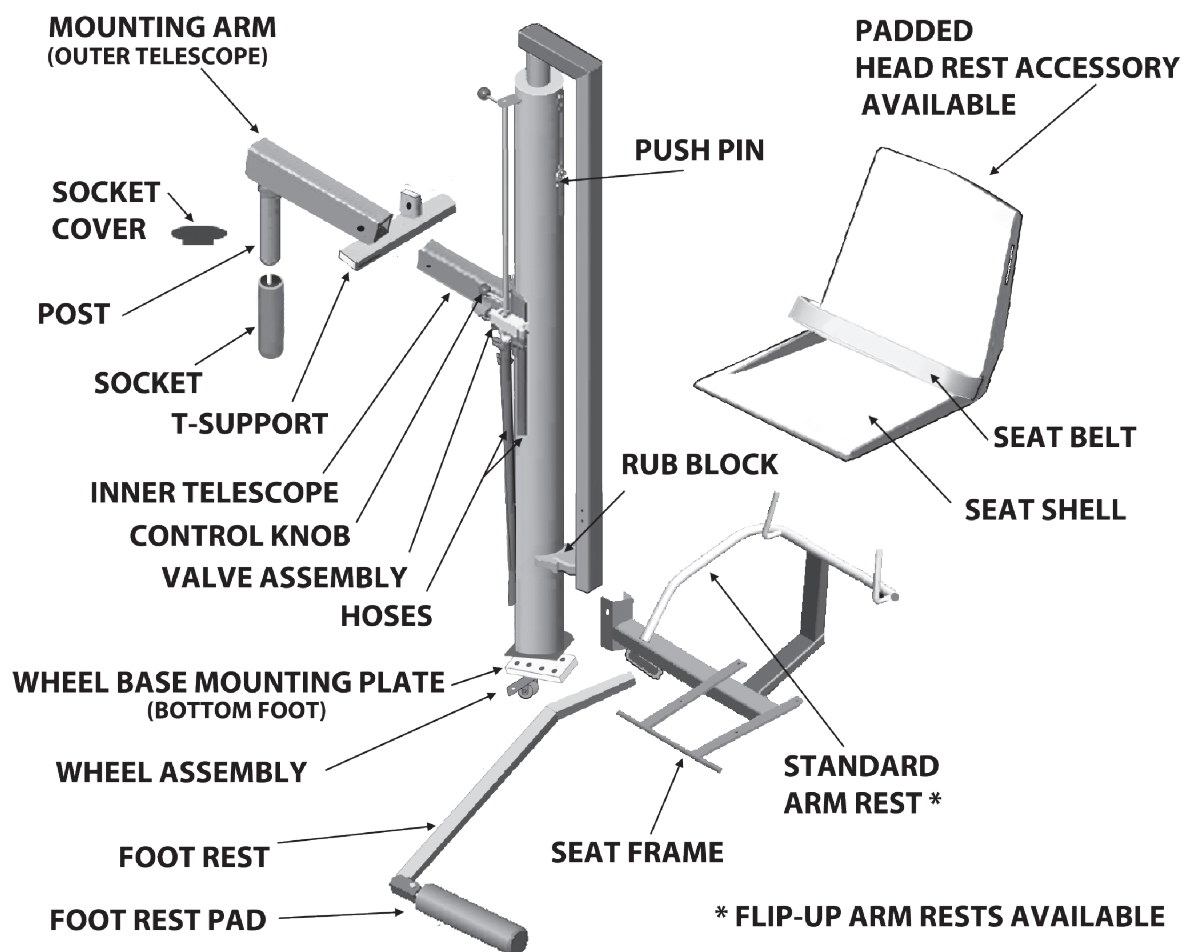
Attach seat assembly to piston rod frame with the bolt provided. Adjust seat height by selecting an appropriate hole on piston rod frame. Tighten lock nut securely, making sure bolt has penetrated nylon insert of lock nut. Two bolt threads should be visible past the nylon insert.

To install the footrest, first loosen the T-bolt under the side of the seat, and then insert the top of the footrest tube into the holder. Slide in to desired length and turn T-bolt handle to tighten.

If the optional headrest has been ordered, follow the same procedure as footrest to install the headrest in the headrest bracket on the seat back.

Optional seat belts are installed by sliding the belts through the upper and/or lower slots cut into the side edges of the seat.

Attach hose and turn on the water. Raise and completely lower the seat several times to bleed off any air trapped in the cylinder before anyone uses the lift.



SAFETY PROCEDURES

Your IGAT model swimming pool lift is not a toy, but a tool that enables a physically challenged individual to access water activities. It is designed with safety as a primary concern, but exercise prudence when using the lift. With proper care and usage, your IGAT swimming pool lift will serve many years. Here are a few tips for safe usage of your lift.

Never allow more than one person on the lift at a time.

Keep fingers, towels and loose clothing away from moving parts.

Do not hang towels or robes on lift at any time.

Do not allow people to climb on or hang from lift.

Do not allow playing or rough-housing on or around the lift.

Do not jump or dive from lift.

Turn water supply OFF and secure lift with push pin when the lift is to be left unused for eight hours or longer.

Always run the seat up and down through several cycles after turning the water supply on. This bleeds air out of the cylinder which could cause unexpected movement.

Be certain swimmer is settled in the seat before operating lift.

Always place swimmer's feet on the footrest.

Never allow seat occupant's mouth to submerge beneath the water.

Do not exceed weight and pressure limits.

Do not use lift during an electrical storm or high wind.

Always drain water from cylinder before exposing lift to temperatures below freezing.

Never use any sort of oil or petroleum-based product on the inside of the lift. It will damage the piston.

SAFETY TIPS: Be sure to turn off the water each night, and to bleed off the air again each time the water is turned on again.

Even when the seat occupant operates the lift, we agree with the American Red Cross recommendation that everyone should "always swim with a buddy."

SERVICE AND MAINTENANCE

Be sure to clean the lift's metal surfaces frequently. Never use steel wool or other abrasives on metal surfaces, but clean them gently with Formula 409® or a similar product. Apply a good quality car wax and buff to a shine to protect metal surfaces from a corrosive environment.

INSPECTION OF LIFT

The lift should be inspected each day before use. Check for hose damage, loose connections, and any corrosion or damage to any parts of the lift routinely before using the lift with a swimmer.

Perform a more thorough inspection of the lift every three months if the unit is in use all year around:

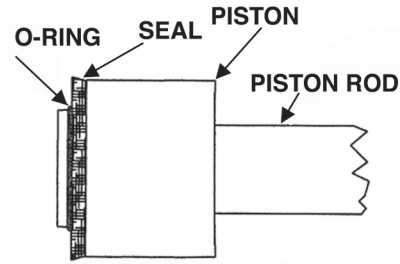
1. Remove cylinder with inner telescoping mounting arm from outer telescope and examine both thoroughly, inside and outside, for evidence of corrosion.
2. Examine bolts for corrosion or wear. Check for wear on lanyard and pushpin as well as other parts. Check screws and hose clamps periodically to make sure they are tight. Replace any parts that are corroded.
3. If the stainless has become discolored from chlorine and other chemicals in the pool, clean the lift only with a soft cloth or Scotchbrite® pad. After cleaning and rinsing, apply car wax and buff to help maintain a bright appearance. **Never use steel wool to clean the lift.** Prolonged exposure to the elements may result in some discoloration and crazing of non-metallic components.
4. When the lift is installed in a wood deck, check often for the wood for signs of wood decay. Replace worn or damaged decking as necessary. It is the responsibility of the owner to check the deck for structural integrity.

DISASSEMBLY OF LIFT AND REPLACEMENT OF PISTON SEAL

1. Remove seat assembly from lift and disconnect water supply. Drain water from lift.
2. Remove lift from socket.
3. Remove four bolts at top of lift. (See illustration.)

4. Pull the piston rod assembly completely out of cylinder. Be careful not to damage seal.

5. Remove O-ring and then seal from bottom of piston. Clean seal and inspect for signs of cuts, abrasions or tears. Replace seal if damaged. If original seal is in good condition, reinstall on piston and then replace O-ring. Make sure O-ring is seated firmly in groove.



DETAIL OF PISTON

6. Inspect cylinder for signs of dirt or debris. Formula 409® can be used to clean the inside of the cylinder and seal, or you can rinse out the cylinder with clean water. It is easier to seat the seal when the inside surface of the cylinder is damp with either Formula 409® or water. Never use any oil or petroleum-based product inside the cylinder, as it will damage the piston and seal.

7. Carefully slide piston rod assembly back into cylinder. Take care not to damage seal while replacing piston rod assembly into cylinder.

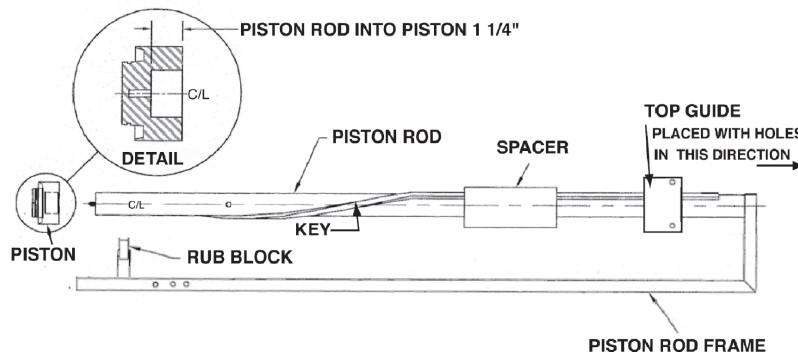
8. Push piston rod assembly in until piston rests on the bottom of the cylinder.

9. Align holes in top guide with holes at top of main cylinder. Install bolts and attach pushpin, but do not tighten bolts completely yet. (See illustration.)

10. Install lift into socket. Connect water supply. Purge air by running the lift up and down several times.

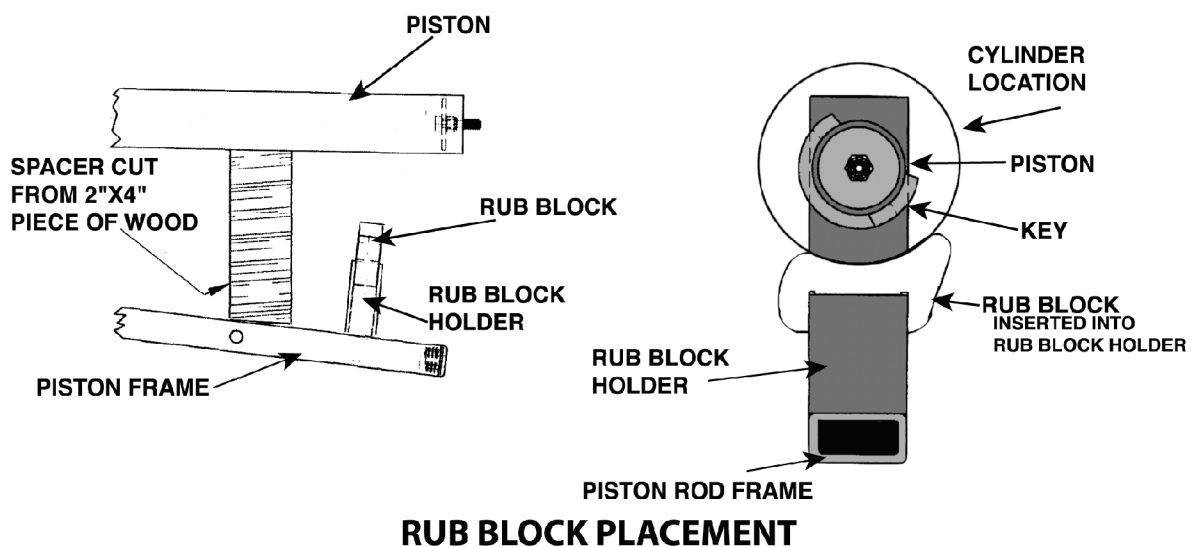
11. When lift nears top position tighten four bolts securely. Do not over tighten bolts. This could cause stripping of the threads in the plastic top guide.

12. Attach seat assembly.



REPLACEMENT OF THE PISTON AND/OR THE TOP GUIDE

1. Follow directions for Disassembly of Lift and Replacement of Piston Seal, steps 1-3.
Remove piston from end of piston rod using a rubber or plastic mallet. Go to step 5 of this section if you are only replacing the piston and not replacing the top guide.
2. Remove old top guide and replace with new top guide. Note that the threaded holes in the top guide are off center. The holes need to be positioned so that they are towards the top of the lift. (See illustration.) Install spacer on piston rod. Clean spacer if it is dirty.
3. Install piston on end of piston rod using a rubber or plastic mallet. Hit bottom of piston until piston is firmly seated. Piston should be able to rotate freely after being attached. (See detail in illustration.)
4. Go to step 6 of Disassembly of Lift and Replacement of Piston Seal (page 7) and continue through step 14.



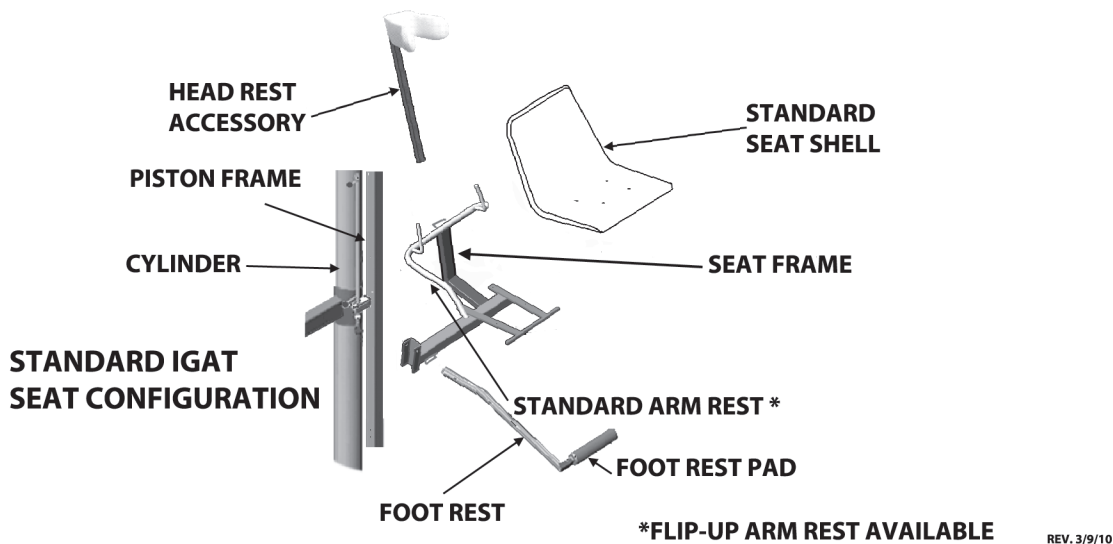
REPLACEMENT OF RUB BLOCK

It is not necessary to disassemble the lift in order to replace the rub block.

1. Insert a small piece of 2\"x 4\" wood between piston rod and piston frame to spread apart. See illustration.
2. Remove rub block. Install new rub block (See illustration for orientation of rub block) and remove block of wood.

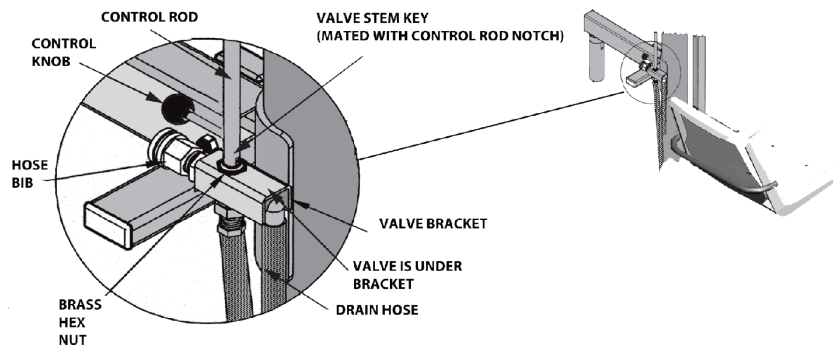
REPLACEMENT OF SEAT SHELL

1. Remove footrest and head rest from chair if applicable. Remove chair from lift.
2. Unscrew nuts which attach to seat frame to shell and remove shell.
3. Attach seat frame to seat shell and tighten bolts.
4. Attach seat to lift and install footrest and head rest.



REPLACEMENT OF VALVE ASSEMBLY

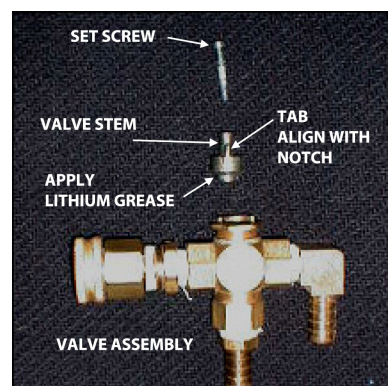
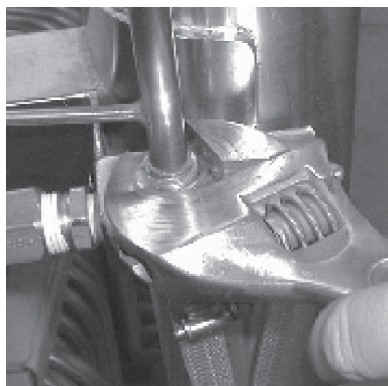
1. Disconnect water supply.
2. Remove hoses from the valve assembly and unscrew brass nut that secures the valve-to-valve bracket. (See illustration above.)
3. Install new valve by reversing process above.



VALVE DETAIL IGAT-180

REPLACEMENT OF VALVE STEM

1. Disconnect the water supply.
2. Unscrew the brass nut that secures the valve to the valve bracket so that the valve drops down where it can be accessed. Set the nut aside for reassembly. Hold valve so the protrusion for the control rod is facing you.
3. Apply lithium grease (provided with replacement valve stem) to the end of the new valve stem and replace stem in valve assembly, matching alignment of the protrusion. Make certain that the square shaft is completely seated in the square hole. Reinsert the valve assembly into the valve bracket and secure with the brass nut.
4. Reconnect the water supply.



TRANSPORTING THE LIFT

1. Lower the seat on your unit to the down position.
2. Turn control knob to OFF.
3. Turn off the water and disconnect the water line from the unit.
4. Lift the unit out of the socket and roll away.
5. Place socket cover over the socket in the deck.

TROUBLESHOOTING

Symptom	Cause	Remedy
Seat bounces on descent	Air in the cylinder	Purge air out by running the lift up and down two or three times. See operating label.
Air in Cylinder Every Day	Air entering hose or cylinder if seat is left in the down position and the water is shut off.	Purge air out by running the lift up and down two or three times. See operating label
Lift rises slower than normal	Low Water Pressure (Heavier than usual swimmer on lift; defective hose, dirt in valve could also cause) Lift kept under pressure.	None. Fluctuations in city water pressure are not unusual. (Replace defective part or clean valve) Turn off water each night.
Waters squirts from top of cylinder	Large amounts of water are getting past the seal.	Often this corrects itself. If not, then clean or replace the seal.
White, gray or brown chalky deposit.	High pH, high total alkalinity, high calcium content (hard) water	Clean unit with soft cloth or Scotchbrite® pad, apply car wax to protect finish.
Corrosion of Metal Parts	Low pH, Low total alkalinity, low calcium content (soft) water.	Clean unit with soft cloth or Scotchbrite® pad, was with car wax to protect finish.
Water leakage from top of valve	Seal around valve stem defective	Replace defective part.
Chair doesn't come up all the way	Deposits or dirt in valve, malfunction of valve	Clean or replace valve.
Electrolysis	Improper grounding of unit	Add a ground to unit.

REMINDER

Be sure to mail your unit's warranty card back to Aquatic Access Inc., 417 Dorsey Way, Louisville, KY 40223-2388. Please make a note of your lift's serial number below and store these instructions in a safe place for future reference.

Model _____ Serial Number _____

Date of Purchase _____ Purchased from _____

SERIAL NUMBER

MODEL NUMBER

WEIGHT CAPACITY

This illustration is of a generic Aquatic Access label and is here only to provide location of pertinent numbers found on every Aquatic Access label.

Please refer to the label attached to your lift for important information and instructions for your Aquatic Access lift.

You will find a label similar in style to this one on every Aquatic Access lift cylinder.

Please do not remove that label from your lift. You will need the serial number should you ever require replacement parts for your lift.

The label on the lift cylinder also contains instructions for use and safety procedures.

AQUATIC ACCESS

POOL LIFT MODEL

Serial #

MAXIMUM WEIGHT CAPACITY

VARIABLE AT 55/65 PSI/ 3.8-4.5 BAR

WATER PRESSURE NOT TO EXCEED 70 PSI/4.8 BAR OR DAMAGE TO LIFT WILL RESULT. USE A REDUCER BETWEEN WATER SOURCE AND LIFT IF NECESSARY.

BEFORE USE BY A SWIMMER

1. In seat-down position, mount lift into deck socket.
2. Turn control knob to down position.
3. Connect supply hose and turn on water.
4. With water supply, operate Pool Lift control knob to move seat several strokes up and completely down. If the seat will not move, repeat this step until the seat moves. Air inside must be removed for safe operation.

INSTRUCTIONS FOR USE

1. Turn control knob to raise seat, which will automatically turn down over down.
2. Insert seat into pool. Do not allow seat to prevent descent.
3. Seat the swimmer. Swimmer must be on footrest or injury may result.
4. Remove swimmer from seat. Turn control knob to lower the swimmer into the water. Seat turns automatically to top of travel.
5. Reverse the seat for swimming.

NOTE: Speed of seat movement should be controlled by turning control knob. Do not allow seat to move too fast. Experiment to find the best settings for your water supply.

When lift is in use for 8 hours or longer, turn off water and seat. Do not allow seat in raised position and do not allow hose to become entangled. Then turn off the water and turn control knob to the DOWN position. When ready to use lift again, turn on water and purge air from the lift as described above (#4 in Before Use by a Swimmer).

TO REMOVE LIFT FROM DECK

1. Remove seat and lower to footrest position.
2. Turn off water and disconnect supply hose.
3. Lift out of socket and store on water.

DO NOT STORE LIFT IN BELOW-FREEZE TEMPERATURES.

IMPORTANT SAFETY WARNINGS

1. Never allow more than one person on the lift at a time.
2. Keep fingers, toes, loose clothing away from moving parts.
3. Do not allow towel or clothes caught in any time.
4. Do not allow people climb on or hang from lift.
5. Do not allow anyone to lay on or around the lift.
6. Do not use lift for diving.
7. Turn water supply OFF and disconnect with push pin when lift is to be unused for eight hours or longer.
8. Always bleed air out of seat and do so through several cycles of turning water supply on. This bleeds air out of the cylinder which could cause unexpected movement.
9. Be certain swimmer is seated in the seat before operation.
10. Always swim with feet on footrest.
11. Never allow seat to be submerged beneath water.
12. Do not exceed weight and pressure limits.
13. Do not use lift during a electrical storm or high wind.
14. Always disconnect water cylinder before exposing lift to atmosphere to prevent low pressure.
15. Never use lift for anything other than swim-based products. Use in the pool will damage the piston.

UP DOWN STOP

1921 Production Drive Louisville, KY 40299-2110 USA
800.325.5438 (LIFT) 502.425.5817

AquaticAccess.com

Rev.10/6/10

REV.10/6/10

Sample Label to Indicate Location of Numbers Only

ADDENDUM: TECHNICAL SPECIFICATIONS: Model IGAT-180/135

United States Patent #5,465,433

LIFTING CAPACITY	400 lb. @ 55 PSI / 181 kg @ 3.8 Bar operating pressure (or approximately 60 PSI static pressure.
OPERATION	Standard city water pressure will generally provide plenty of pressure for normal operation. A pump can be used to raise pressure if necessary. However, do not use a high volume pump. The correct pump would provide three to five gallons (US) per minute at 40 PSI (2.8 Bar) to 70-PSI (4.8 Bar) maximum pressure.
ROTATION	Automatic 135° Turn
MATERIALS	304 & 316L Stainless, UHMW plastic, Brass and Rubber
OVERALL SIZE	HEIGHT 6'2.5" (1892 mm or 189.2 cm)
RANGE OF MOTION	Standard lift provides 44" (1118 mm or 112 cm) vertical travel. Custom travel can be provided.
PORTABILITY	Lift can be removed with no tools and stored out of sight. Lift drops into socket for use.
WARRANTY	The IGAT pool lift offers a 6 year Limited Warranty on all structural components and a 2 year Limited Warranty on the valve, plastic and rubber components.