



# Aquatic Access Inc.

## Pool Lift Model IGAT-180 AD



### Installation Guide Instruction Manual

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# POOL LIFT MODEL IGAT-180 ABOVE-DECK

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

## INSTALLATION

### SOCKET PLACEMENT

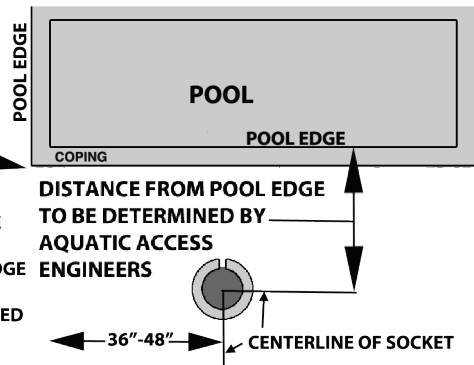
The socket location is mutually agreed upon by the customer or installer and Aquatic Access.

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. A distance of 42" – 48" from the deck to pool floor is ideal for installation.

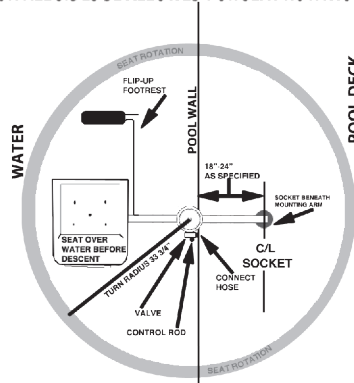
SOCKET SHOULD BE AT LEAST 4" FROM ANY EXPANSION JOINT

POOL CORNER

CENTERLINE OF SOCKET SHOULD BE A MINIMUM OF 36" FROM ANY POOL EDGE OR OBSTRUCTION 48" IS RECOMMENDED



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



The lift should normally be located at least 36" away from pool corners and ladders that could interfere with the turn of the seat. The socket should also 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.

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 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 5" carbide core drill makes an excellent clean hole in solid concrete. The centerline of the socket hole should be \_\_\_\_\_" from the pool wall or \_\_\_\_\_" from the edge of the deck. Drill the hole at least 12" deep. Some customers have found it useful to insert a piece of pipe that is at least 24" long full depth into the socket. Tape the top end of the socket to the pipe to prevent any liquid cement from entering the top of the socket. This assures a clean socket interior when the pipe is removed after the cement is hard. Pour a small amount of anchor cement into the bottom of the hole. After placing the socket into the hole so that its top edge is flush with the surface of the deck and the notch in the top of the socket is facing the pool, pour the anchor cement around the socket. A spirit level should be held along the extension pipe to assure that the socket is vertically plumb while the cement sets (about 15 minutes). Allow the cement to cure overnight before proceeding.

## **LIFT ASSEMBLY**

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1. Insert lift into socket.
2. Attach seat assembly to cylinder assembly with the bolt provided. Adjust seat height by choice of 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.
3. On the IGAT-180AD, which normally includes a footrest, first unscrew 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 clockwise to tighten.
4. 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.
5. Seat belts are installed by sliding the belts through the upper and/or lower slots cut into the side edges of the seat.

## **WATER CONNECTIONS**

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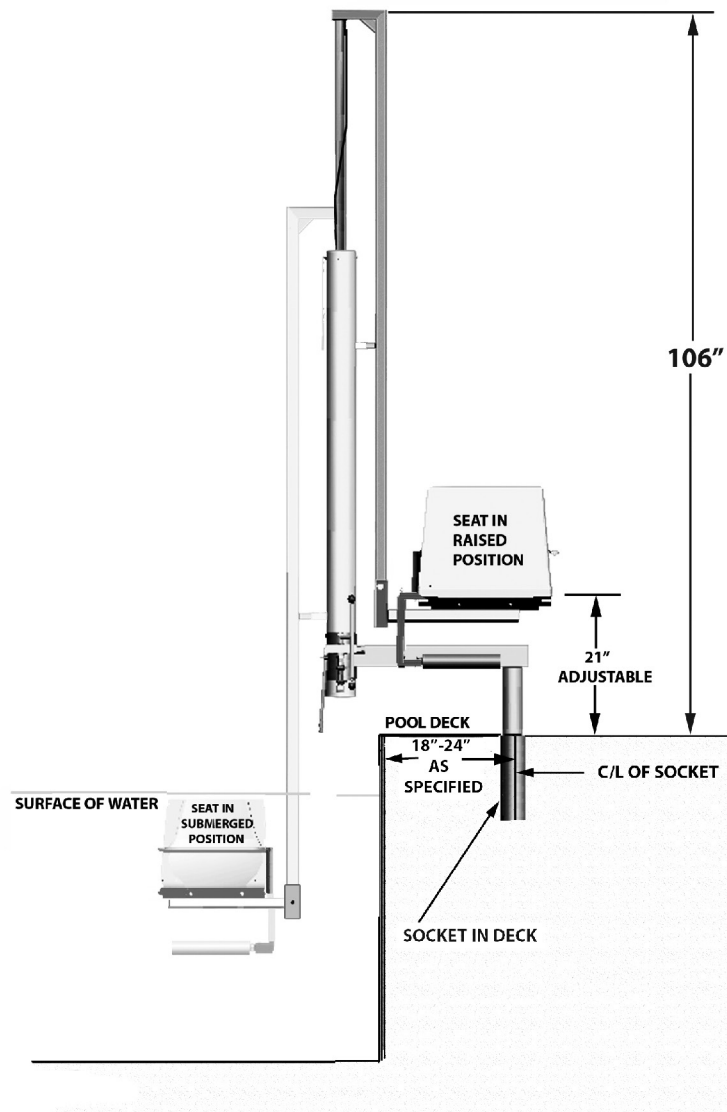
The pool lift is operated by city/household water pressure, with no electricity needed. Our system is designed for most efficient operation at 60-PSI static pressure or 55 PSI operating (open flow) pressure to lift 350 lbs. Note that the pressure requirement for a faucet or hose connection is approximately 10% higher to achieve the rated load.

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 from 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.

Height requirements for a standard IGAT-180 AD installation are illustrated on the right.



### Weight Lifted at Open Flow Water Pressure

(Add approximately 10% for static water pressure)

PSI	Bars	Pounds	Kilograms
28-30 PSI	1.93-2.06 Bars	150	68
41-45 PSI	2.83-3.10 Bars	250	113
55-65 PSI	3.79-4.48 Bars	350	159

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 variable may also require a higher water pressure than listed. These may be the result of the cylinder not being installed and maintained in a vertical position.

In true low water pressure situations, electric pumps are available to provide sufficient water pressure for up to a 350 lb. lifting capacity.

## **SAFETY PROCEDURES**

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Your IGAT model swimming pool lift is not a toy, but a tool that enables a physically impaired individual to access water activities. It is designed with safety as a primary concern, but normal prudence is expected to be exercised by the user of our 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.

1. Never allow more than one person on the lift at a time.
2. Keep fingers, towels and loose clothing away from moving parts.
3. Do not hang towels or robes on lift at any time.
4. Do not allow people to climb on or hang from lift.
5. Do not allow playing or rough-housing on or around the lift.
6. Do not jump or dive from lift.
7. Turn water supply OFF when the lift is to be left unused for eight hours or longer.
8. Be certain swimmer is settled in the seat before operating lift.
9. Do not exceed weight and pressure limits.
10. Do not use lift during an electrical storm or high wind.
11. Always drain water from cylinder before exposing lift to temperatures below freezing.
12. Never use any sort of oil or petroleum-based product on the inside of the cylinder; it will damage the piston and seal.

**SAFETY TIP: Even when lift is operated by the seat occupant, we recommend that another person be nearby in case of emergency.**

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.

Rev. 10/6/10

# 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 does not move in this motion, repeat this step until it moves inside must be removed for safe operation.

INSTRUCTIONS FOR:

1. Turn control knob to raise seat, which will automatically turn you over down.
2. Insert seat into pool. Do not allow for unloading to prevent denting.
3. Seat the swimmer, if the seat is placed feet on footrest. Swimmer must be on footrest or injury may result.
4. Remove swimmer from seat and turn control knob to lower the swimmer into the pool. Seat turns automatically at top of travel.
5. Reverse control knob to swimmer.

NOTE: Speed of seat travel should be controlled by turning control knob up or down position. If pressure is very low, seat may move too slowly. Experiment to find the best settings for your water pressure.

When lift is to be used for 8 hours or longer, turn off water and seat down, or place seat in raised position and insert pump to hold seat there. Then turn off the water, turn control knob to the DOWN position. When ready to use lift, turn on water and purge air from the lift cylinder as specified above (#4 in Before Use by a Swimmer).

TO REMOVE LIFT:

1. Remove seat and lower it to footrest position.
2. Turn off water so that it does not supply hose.
3. Lift out the seat 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 firm, dry towel or cloth hanging away from moving parts.
3. Do not hang towel or clothes on any time.
4. Do not allow people climbing on or around the lift.
5. Do not allow anyone hanging on or around the lift.
6. Do not use or disassemble lift.
7. Turn water supply OFF and seal with push pin when lift is to be unused for eight hours or longer.
8. Always bleed seat down 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 allow swimmer to get on footrest.
11. Never allow seat to be submerged beneath water.
12. Do not exceed weight and pressure limits.
13. Do not use during a electrical storm or high wind.
14. Always keep water cylinder covered before exposing lift to atmosphere to prevent corrosion.
15. Never use solvent or petroleum-based products on the lift as they will damage the piston.

REV. 10/6/10

1921 Production Drive Louisville, KY 40299-2110 USA  
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**AquaticAccess.com**

INSTRUCTIONS FOR YOUR LIFT WILL BE FOUND IN THIS AREA OF THE LABEL

INSTRUCTIONS FOR YOUR LIFT WILL BE FOUND ON THE CYLINDER OF YOUR LIFT

Sample Label to Indicate Location of Numbers Only



# SERVICE AND MAINTENANCE

## INSPECTION OF LIFT

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

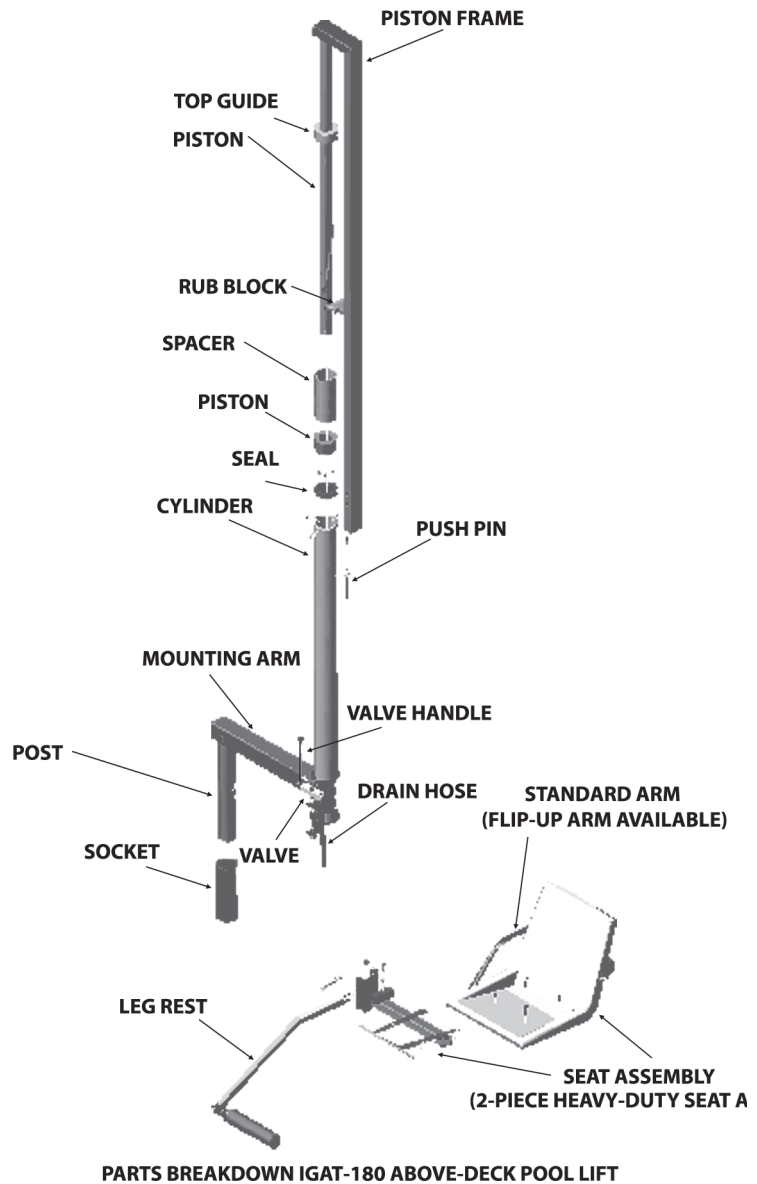
Perform a more thorough inspection of the lift every three months if the unit is in use all year round:

1. Examine bolts for corrosion, or wear. Check for wear on lanyard and pull-pin as well as other parts. Inspect unit more frequently if unit is in highly corrosive atmosphere or has high use such as at a public pool or therapy center.

2. 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 deck for signs of decay. Replace worn or damaged decking as necessary. It is the responsibility of the owner to check the deck for structural integrity.



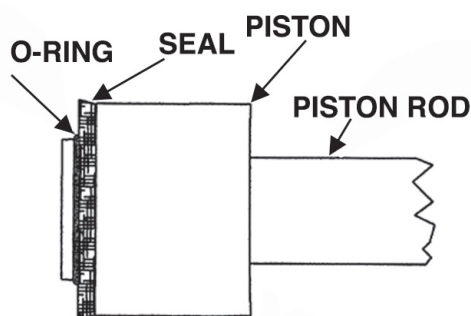
PARTS BREAKDOWN IGAT-180 ABOVE-DECK POOL LIFT

## DISASSEMBLY OF LIFT AND REPLACEMENT OF PISTON SEAL

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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.
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 good reinstall on piston and then replace O-ring. Make sure O-Ring is seated firmly in groove.



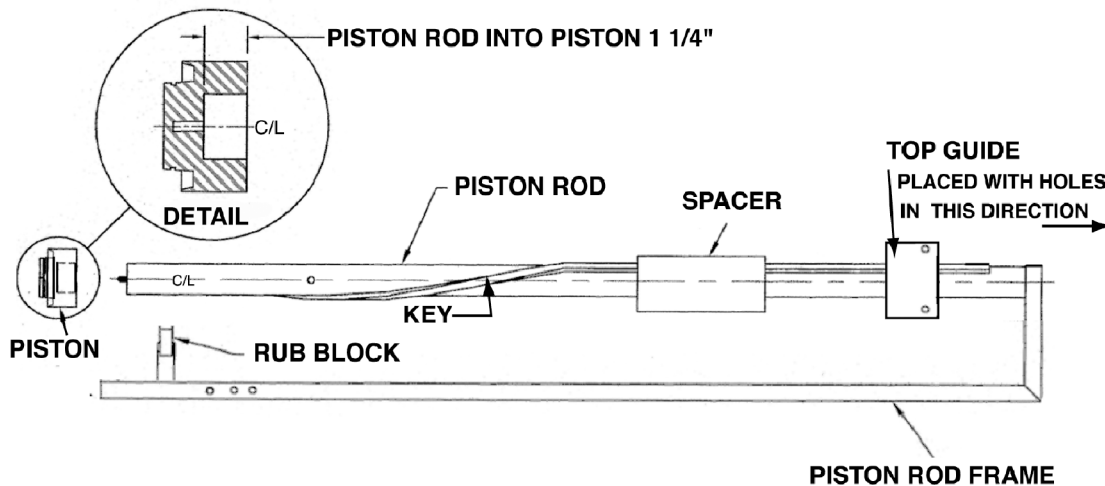
**DETAIL OF PISTON**

6. Inspect cylinder for signs of dirt or debris. Formula 409® can be used to clean the inside of the cylinder and seal. Wrap a soft bath towel around a broom handle and push it through the unit, taking care not to scratch the inside of the cylinder wall. 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 lift.
9. Align holes in top cylinder bushing with holes at top of main cylinder. Install bolts and attach pull-pin, but do not tighten bolts completely yet. (See illustration)
10. Install lift into socket. Connect water supply. Purge air as normal.
11. When lift reaches top position tighten four bolts securely. Do not over tighten bolts to avoid stripping the threads in the plastic.
12. Attach seat assembly.

## REPLACEMENT OF THE PISTON AND/OR THE TOP GUIDE

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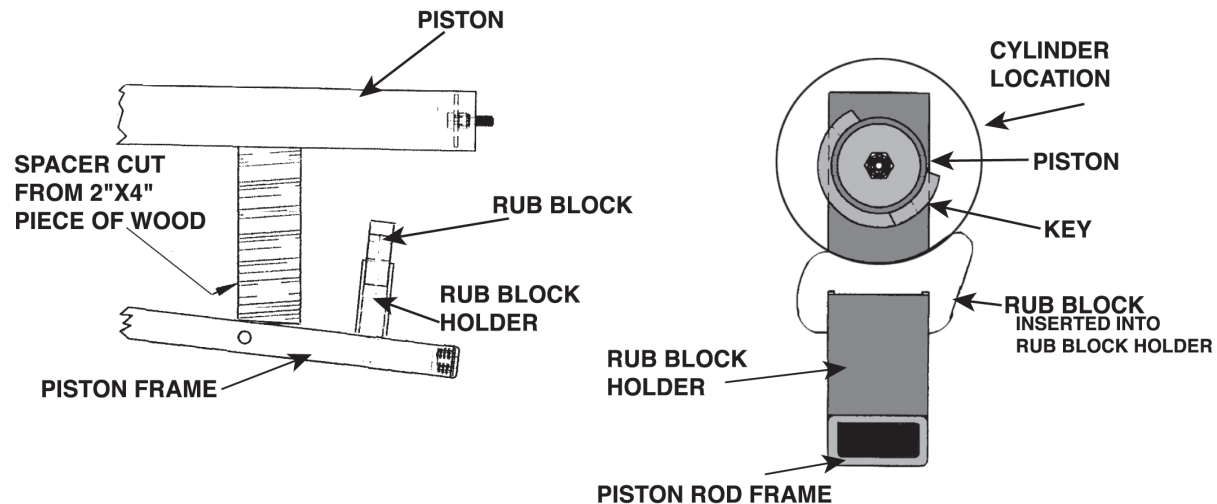
1. Follow directions for Disassembly of Lift and Replacement of Piston Seal, steps 1-3.
2. Remove piston from end of piston rod using a rubber or plastic mallet. Go to step 5 of this section if you are only replacing the piston and not replacing the top guide.
3. Remove old top cylinder bushing and replace with new top cylinder bushing. Note that the threaded holes in the top bushing are off center. The holes need to be positioned so that they are towards the top of the lift. (See illustration)
4. Install spacer on piston rod. Clean spacer if it is dirty.
5. 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)
6. Go to step 6 of Disassembly of Lift and Replacement of Piston Seal and continue through step 11.



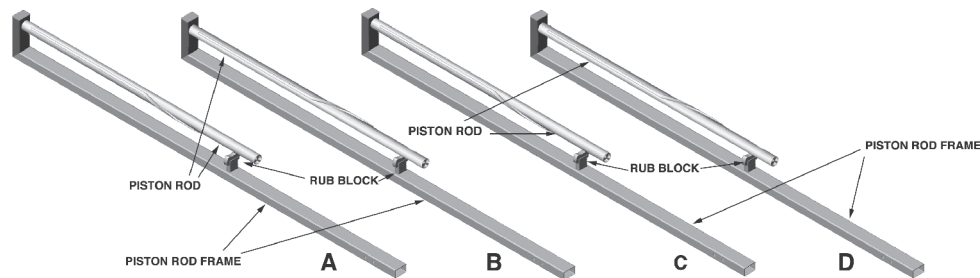
## REPLACEMENT OF RUB BLOCK

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1. Follow directions for Disassembly of Lift and Replacing Piston Seal.
2. Insert a small block of wood or plastic between piston rod and piston frame to spread apart. (See illustration)
3. Remove rub block. Install new rub block. (See illustration for orientation of rub block.)
4. Go to step 6 of Disassembly of Lift and Replacement of Piston Seal and continue through step 11.



**Detail Showing Rub Block between the Piston Rod and the Piston Frame**



**Orientation of Rub Block for (A) IGAT-180 Above Deck and IGAT-180/135 Above Deck, (B) IGAT-180 Above Deck Opposite Turn and IGAT 180/135 Opposite Turn, (C) IGAT-90 Above Deck, and (D) IGAT-90 Above Deck Opposite Turn.**

## REPLACEMENT OF SEAT SHELL

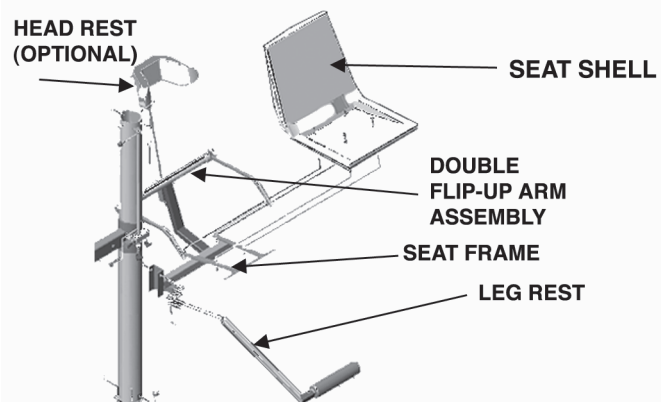
1. Remove footrest and head rest from chair if applicable and remove chair from lift.

2. To replace seat shell unscrew nuts which attach to seat frame and arms to shell.

3. Attach seat frame to new seat shell and tighten bolts.

4. Attach arms to new seat. Replace nuts and bolts. Lower hole(s) on seat will have to be drilled by customer using a 1/4" drill bit.

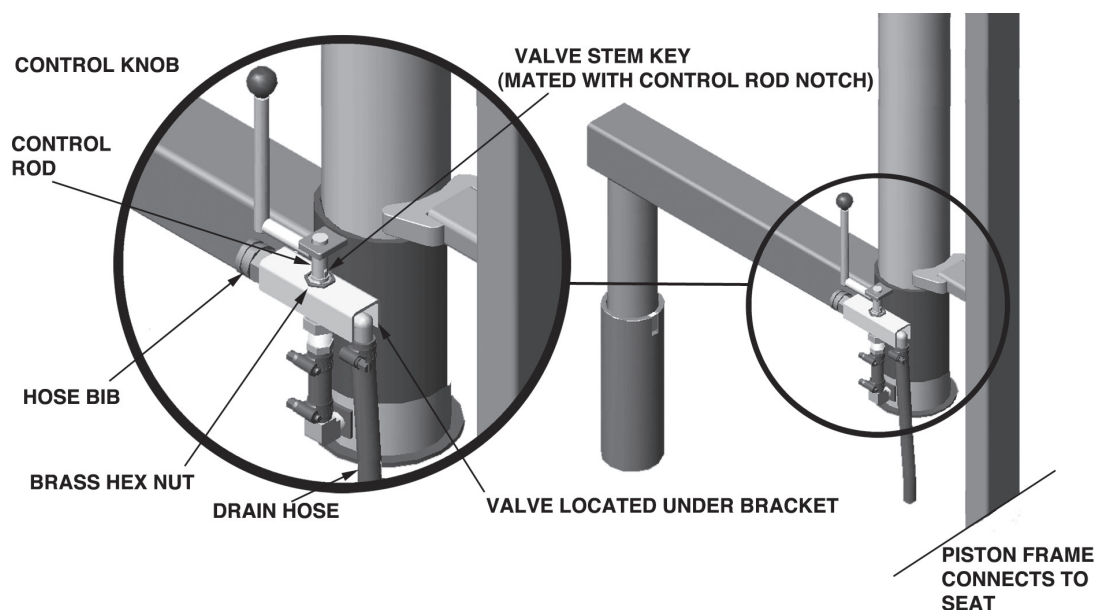
5. Attach seat to lift and install footrest and head rest.



## REPLACEMENT OF VALVE ASSEMBLY

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



## REMINDER

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Remember to mail in your warranty card to Aquatic Access Inc.

Make a note of the serial number and date of purchase below. This information will be needed should you wish to contact Aquatic Access. You will find the serial number on the label on the cylinder portion of your lift.

Serial Number \_\_\_\_\_

Purchased from \_\_\_\_\_

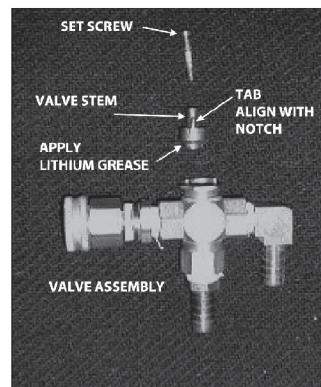
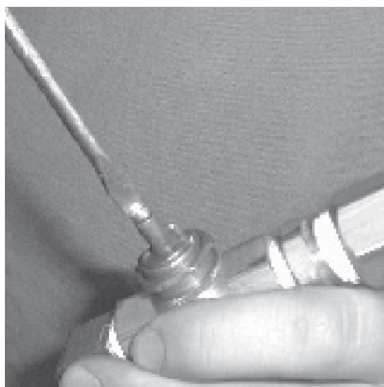
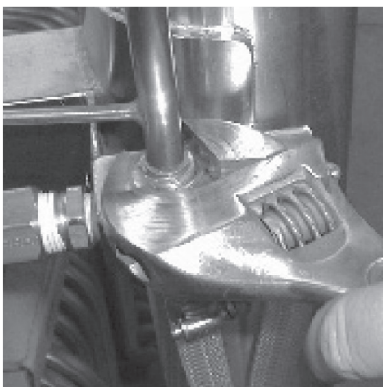
Date of Purchase \_\_\_\_\_

Notes:

## REPLACEMENT OF VALVE STEM

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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 the valve so the tab that mates with the control rod
3. Apply lithium grease (provided with the replacement valve stem) to the end of the new valve stem and replace stem in the valve assembly, matching alignment of the tab. 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

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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 carry away.
5. Place socket cover over the socket in the deck.

## TROUBLESHOOTING

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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, apply 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.

## **ADDENDUM: TECHNICAL SPECIFICATIONS: Model IGAT-180 AD**

**United States Patent #5,465,433**

LIFTING CAPACITY	350 lb. @ 55-65 PSI / 159 kg@ 3.8-4.5 Bars operating pressure (10% higher if static pressure)
STATIC LOAD TEST	525 lb. / 238 kg
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 180° Turn
MATERIALS	304 & 316L Stainless, UHMW plastic, Brass and Rubber
OVERALL SIZE	HEIGHT 110" (2790 mm)
RANGE OF MOTION	Standard lift provides 44" (1124 mm) 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 carries a 6 year Limited Warranty on all structural components and a 2 year Limited Warranty on the valve, plastic and rubber components.

**Aquatic Access Model IGAT-180AD Instructions Revised 2/13/15**