

# Aqua Buddy® V2 350

2460017



**SPECTRUM**  
**AQUATICS®**  
A **PLAYCORE** Company

7100 Spectrum Lane ~ Missoula MT 59808  
800.791.8056 ~ [www.spectrumproducts.com](http://www.spectrumproducts.com)

You have purchased a Spectrum Products Aqua Buddy® V2 350 assisted access lift. Providing the unit is installed correctly and properly maintained, it will furnish you with many years of trouble-free use. It is important to read this entire manual prior to beginning assembly or operation.

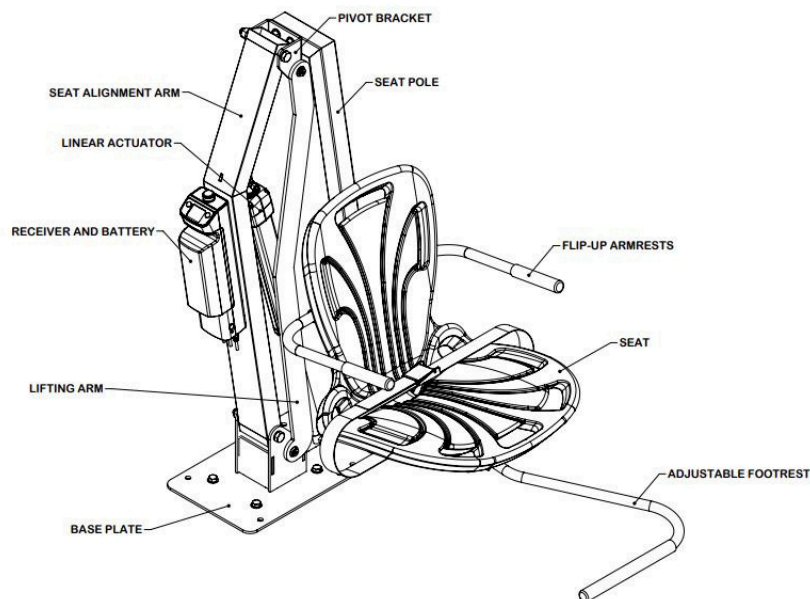
## Shipping Information:

Each lift will arrive partially assembled in one box. Before accepting the lift from the carrier, inspect for visible damage and match the contents with those listed below. Spectrum is not responsible for lost or damaged freight.

The box will contain all structural components and hardware. The following is a list of the components included with your shipment from Spectrum. Use Components and Hardware Figure below as a reference to identify each item listed.

1	Aqua Buddy Lift Assembly	1	Seat and 5/16" Hardware
1	Actuator and Hardware	1	Footrest Assembly and 3/8" Hardware
1	Handset	1	Rechargeable Battery
1	Cradle Charger	2	Armrest Assemblies and 3/8" Hardware
4	½"-13x2" 303 SS Drop-In Anchors	4	½"-13x1" 304L SS Hex Cap Screws with Washers, 1x ½" External Tooth Washer

## Components and Hardware:

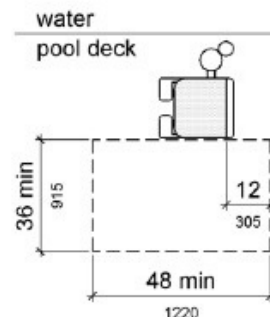


## Installation Overview

Read all instructions before attempting to assemble or install the lift.

### Clear Deck Space:

The lift must be installed in a location that is clear from obstacles and other hazards in order to be compliant with ADA guidelines. Clear deck space is defined by the figure to the right. This rectangle is 48" long (along the pool wall) and 36" wide. The clear deck space shall have a slope not steeper than 1:48.



### Seat Centerline/Depth:

When resting on deck, the seat centerline must be at least 16" from the edge of the pool. The seat must submerge at least 18" in order to meet ADA compliance. The Aqua Buddy Lift will support pools with a water draft (vertical measurement of deck to water level) up to 10" for ADA compliance.

### Pool/Spa Depth:

To comply with ADA guidelines the lift must be installed where the water depth does not exceed 48". If the entire pool is deeper than 48" this requirement does not apply.

### Anchor Location/Installation:

In order to be ADA compliant, the plate centerline must be placed between 19" and 23.5" from the pool/spa wall (or any feature that sticks out past the pool/spa wall, such as a coping). However, the plate centerline can be placed as close as 9" from the pool/spa wall if ADA compliance is not of concern. The lift is installed with four (4) drop-in 1/2"-13 internal threaded stainless steel anchors. **Ensure all ADA conditions above are met and lift fits properly at intended location on pool deck before beginning installation.**

The following tools will be required to complete assembly of the lift:

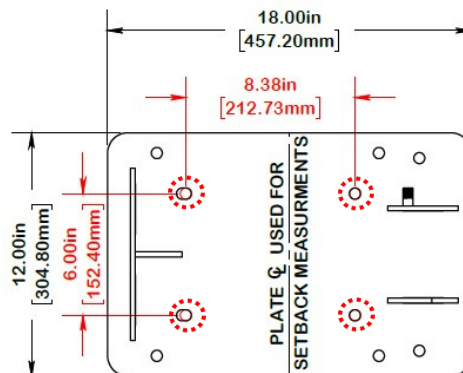
- Safety Glasses, Dust Mask
- Tape Measure
- Marker, Pen or Pencil
- Hammer or Mallet
- 1/4" and 5/8" Masonry Drill Bits
- Drill / Hammer Drill
- Vacuum
- 3/4" Wrench
- 8 AWG copper wire (used for bonding)
- Ring Terminal for use with 8AWG wire and 1/2" hardware (used for bonding)
- (1) 304L Stainless Steel 1/2" External Tooth Washer (provided, used for bonding)
- (4) 304L Stainless Steel 1/2"-13x2" Drop-In Anchors (provided)
- (4) 304L Stainless Steel Screws Hex Cap 1/2"-13x1" with Washers (provided)

## Hole Pattern Selection Instructions

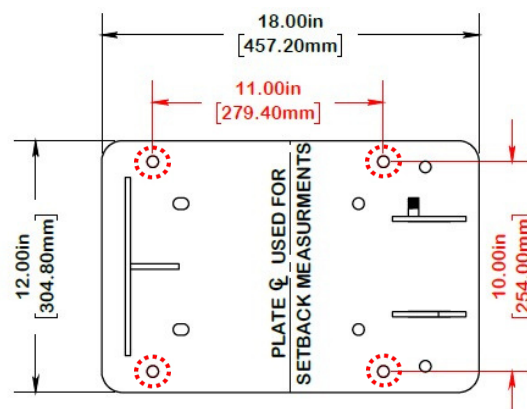
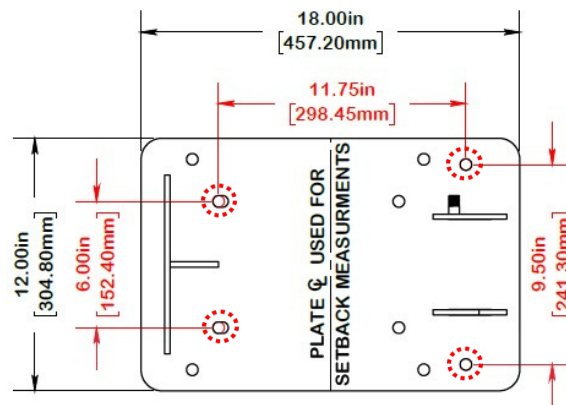
The user should decide which of the following hole patterns to use before beginning the process of installing the Aqua Buddy Lift. Each hole pattern requires 4 anchoring locations:

New Facility/Existing Facility Recommended Installation: Use this hole pattern for placing this lift in a location

hasn't previously had a swim lift installed, whether it be a new or existing facility. **When installing, be sure to mark intended anchor locations using the curves of the slotted holes CLOSEST to the pool wall.**

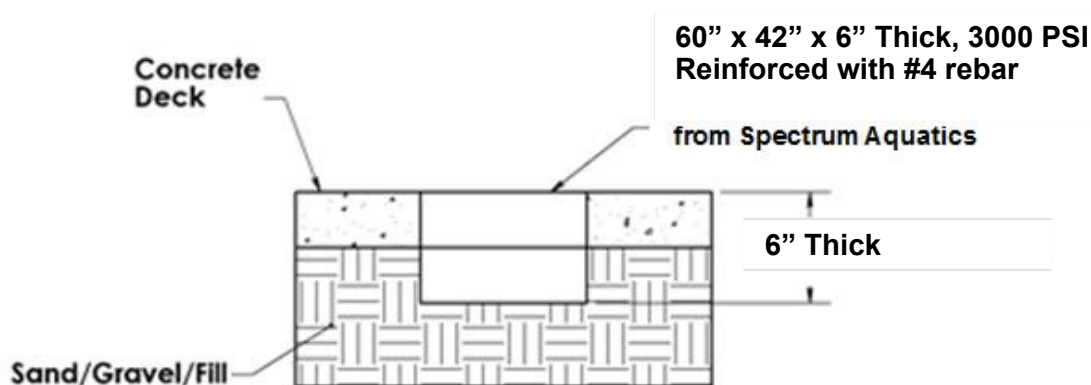


Retrofit Hole Pattern Installations: Use either of the two hole patterns shown below if replacing an existing swim lift on a pool deck. Utilize the hole pattern that matches your existing anchors. ½"-13 mounting screws provided are intended for new anchor installations. Mounting hardware length may require variance for existing anchors.



### Anchor Installation (New and Existing Concrete)

- a. Using the anchor plate on the lift and one of the anchor patterns listed above, mark locations for the drop-in anchors using a marker, pen or pencil. Ensure that this positioning will work for the lift and pool. **If utilizing the recommended hole pattern, be sure to mark intended anchor locations using the curves of the slotted holes CLOSEST to the pool wall.**
- b. Minimum requirements for concrete slab shall be at least 48"x48"x6" thickness, 3000psi, reinforced with #4 rebar. If your pool deck does not meet these requirements, the pool deck must be cut and replaced with a new slab that meets these requirements. An engineer stamped letter can be furnished by Spectrum if requested. If the deck cannot be replaced, please contact Spectrum Aquatics for further direction.



- c. Note that in the case of a new concrete installation, the concrete must be cured to a minimum of 75% or seven days before anchor placement.
- d. Locate a bonding source to bond (ground) the anchor. The steel rebar-bonding grid of the pool deck is the best choice for bonding the anchor. Attach a No. 8 solid copper wire (NEC Section 680-22) from the bonding grid to one of the four anchor locations. To ensure proper bonding of the lift through powder coat finish, it is important to place the ½" external tooth washer between the hex cap of the mounting screw and the base plate of the lift for the specific anchor point that is grounded.
- e. Use a ¼" masonry drill bit to drill the four (4) holes two inches deep. Ensure that all 4 holes are drilled perpendicular to deck surface. The deck surface must not have a slope in any direction steeper than 1:48 to meet ADA requirements. Ensure there is not a sharp change in slope at Aqua Buddy installation location in order to ensure the full surface of the plate rests uniformly on the deck.
- f. Place tape on a 5/8" masonry drill bit. This tape should sit exactly 2 inches above the bottom of the bit. Drill downwards into the existing holes from the previous step, making **sure the holes remain level. Do not drill deeper than 2 inches.**

- g. Completely vacuum out the four holes.
- h. Install the drop-in anchors that have been provided. Place the anchors into the holes, locate the setting tool and strike the setting tool with a hammer or mallet multiple times. The anchor bottoms will separate and press against the concrete.
- i. Place the lift anchor plate over the drop-in anchors. Secure the lift using the stainless steel hex cap screws and washers provided. The screws should be tightened to 22 foot-pounds.

## **Assembly Instruction**

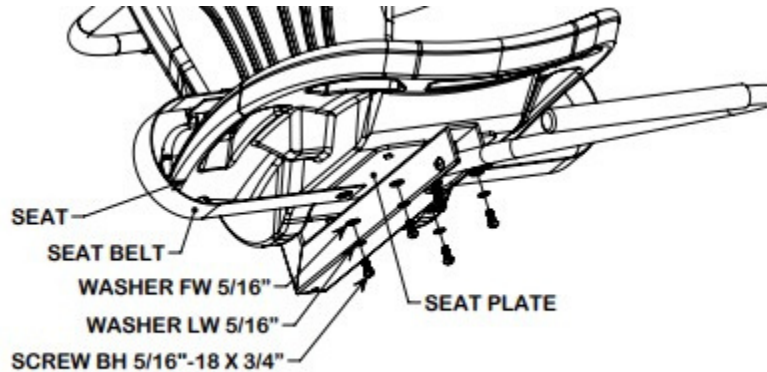
The following tools will be required to complete assembly of the lift:

- (2) 9/16" ratchet and/or open-end wrench
- (1) 3/16" hex key (allen wrench)
- (1) 7/32" hex key (allen wrench) (provided)

### **Lift Assembly**

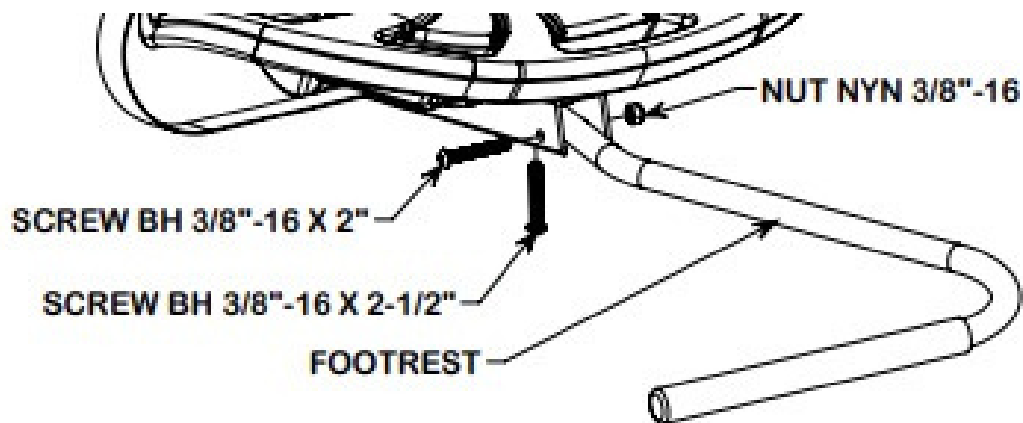
- a. Fully charge the lift battery.
- b. Secure the anchor plate to the drop-in anchors installed in the deck.
- c. Tilt the battery into the receiver located on the actuator housing tubing until it locks into place.
- d. Plug the handset into the left port on the control box, making sure the connector is properly aligned.
- e. Test lift operation by pushing the up and down toggle switch on the handset to ensure the lift is operational (See Page 7 for instructions on using handset). Run the actuator into the fully retracted position by pressing the up button until the actuator stops moving. Leave the lift in this position for the following steps.

- f. Attach the seat to the bottom plate using:
- (4) 5/16"-18 Button Head Screws  $\frac{3}{4}$ " length
  - (4) 5/16" Flat washers
  - (4) 5/16" Lock washers



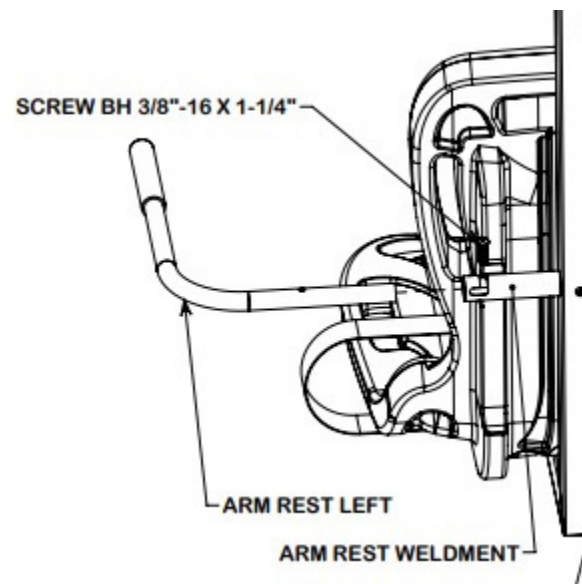
- g. Attach the footrest to the bottom seat plate assembly using:
- (1) 3/8" – Hex bolt 2" length
  - (1) 3/8" Flat washers
  - (1) 3/8" Nylock nut

***Tighten the bolt until the flat washers are snug and back off until the footrest pivots freely. Adjust footrest to desired height using installed 3/8" - button head bolt.***



- h. Attach the armrests to the seat pole using:
- 2 – 3/8" Button Head Screw 1-1/4" length

*It is important to tighten the 3/8" screws until they drive into the far side of the arm rest tubing to ensure proper installation of the arm rest parts.*





# Operator's Guide

## Lift Operation

**WARNING!** Read all operating instructions before operating the lift. Make sure that all individuals using the lift have read the instructions and have been made aware of all safety precautions.

**WARNING!** Operate the lift exactly as described in the instructions above. Failure to do so may result in damage to the lift or personal injury.


**WARNING!** Do not exceed the maximum lifting capacity of 350 lbs. This may result in damage to the lift or personal injury.

**WARNING!** Use extreme caution when transferring to or from the lift; it is the responsibility of the user to allow for safe operation of this lift.


## Basic Lift Operation.



### **Lifting (UP)**

Pressing the  button causes the seat to rise. The seat will continue to rise as long as the button is pressed or until the lift reaches its highest extent. Releasing the button at any time during travel will also cause the lift to stop.

### **Lowering (DOWN)**

Pressing the  button causes the seat to lower. The seat will continue to lower as long as the button is pressed or until the lift reaches its lowest extent. Releasing the button at any time during travel will also cause the lift to stop.

## Battery Control Panel Instructions and Operation



### **Emergency Knob & Button:**

The emergency button will operate at any level of battery life. Pressing the button will stop all lift motion. To resume normal lift operation procedures, the knob must be turned in the clockwise direction.

### **Battery Light:**

If either of the two arrow buttons are pressed, the battery light will illuminate. The battery light has a total of three bars. If all of the bars are illuminated the battery is at or near full capacity. Two illuminated bars indicates the battery should be charged soon. A single bar illuminated means the battery should be charged before the next chair lift cycle.

Note: The control system will beep audibly every 5 seconds once the battery reaches ~20% capacity remaining. If this beep is present the battery should be charged before using the lift.

## **To enter the Pool or Spa:**

- A. Ensure the lift is over the deck in the upright position for a transfer by pressing and holding the “up” button until lift movement stops.
- B. Flip up the armrest and carefully transfer into the lift seat.
- C. Once the armrest is lowered after transfer, lower the lift into the water using the “down” button on the wired handset until the seat reaches a satisfactory entry position.
- D. Flip up the armrest and carefully move away from the lift.
- E. Clear the lift from the pool by holding the “up” button on the wired handset until the lift rests on the deck.

## To Exit the Pool or Spa:

- A. Recall lift chair into water to the previous depth upon transferring from the lift seat to the pool using the “down” button on the wired handset.
- B. Flip up the armrest and carefully transfer into the lift seat from water.
- C. Lower the armrest.
- D. Lift the seat using the “up” button on the wired handset until the lift motion stops on top of the deck.
- E. Flip up the armrest and carefully transfer from the lift seat to mobility device.

## Battery Charging & Installation

The battery comes partially charged, but will need charging after the first several hours of use. Charging time is approximately 12 hours for the first few charges and four hours after the first two full battery cycles. The lift comes with a battery charging cradle for use in dry locations. Charge the battery as follows:

Plug the battery charger into a standard electrical outlet\*. The green LED on the charger will illuminate and indicate that the charger is on.

Plug the charging cable into the charging port on the battery cradle. Place battery in charging cradle. If the battery is up to the charged voltage, the LED on the charger will stay green. If the charger determines that the battery needs to be charged, the LED on the charger will change to amber.

The amber LED will turn green when the battery is fully charged. This charger has internal monitoring circuitry that will not overcharge the battery, if the battery is left on the charger for extended periods of time the charger will go into short charging cycles at intervals to keep the charge level at optimal.

### **\*Charger accepts 110 VAC**

When the battery is fully charged, remove it from the charging cradle and install the battery on the lift. The battery capacity indicator on the receiver will show a green LED, indicating that the battery is fully charged and installed properly. When the LED changes to amber the lift is still OK to use. However, when the LED changes to red, or an audible tone is heard during a lift cycle, the battery pack needs to be recharged.

**To keep the battery from discharging to the point of causing damage, it is important to charge the battery at least once monthly, even if the battery has not been installed on the lift.**

After initial break-in, the battery should last approximately 90 cycles at the full 350-lb load rating of the lift before it needs recharging. The battery will need to be replaced after 500 to 800 charge cycles or three to four years if properly maintained (approximately 20,000 lifting cycles).

## Care and Maintenance

The following should be performed periodically to ensure safe and dependable use.

1. The Aqua Buddy lift comes standard with a powder coat finish. Do not use stainless steel solvents or abrasive scratch pads while cleaning the lift.
2. Clean all structural components with a warm sponge and a diluted solution of detergent or dishwashing soap. This reduces the chances of scratching or damaging the finish during cleaning.
3. Check all electrical connections – Check any external electrical cables for wear and/or breakage in the outer insulation.
4. Check all mechanical connections – inspect the hardware on all moving parts and make sure they are snug. Lubricate all pivot points with light oil (3-1).
5. To maintain the battery properly, the battery must be fully charged monthly. If the battery goes for longer than three months without a charge, the battery will have significantly reduced capacity.
6. Apply dielectric grease to the battery connections and receiver connections where the battery and receiver meet.

## Troubleshooting

<b>Problem:</b>	<b>Cause:</b>	<b>Solution:</b>
1. Lift will not operate at all:	Low battery (Lift) – Control box beeps audibly every 5 sec  Handset not completely plugged in Low battery	Recharge battery  Fully plug in handset
2. The seat will not raise or lower:	Battery not installed properly Receiver malfunction	Recharge battery Reinstall battery Replace receiver*
3. The seat's motion isn't smooth or sticks at a certain point during travel:	Excessive wear to pivot points  Excessive wear to actuator	Lubricate Pivot points with light oil (3-1) or Silicone Spray  Replace actuator*
4. The seat travels much slower than normal:	Low battery	Recharge battery
5. The lift makes much more noise or unusual noises during operation:	Pivot points galling	Lubricate pivot points with light oil (3-1) or Silicone Spray  Replace battery*
6. Battery will not charge:	Bad battery (red LED on charger – not turning orange or green in 4 hours or less)	

\*Please contact your local distributor or Spectrum Customer Service to order parts 406.532.6321