



# ML300 POOL LIFT – CEC COMPLAINT MODELS

## OWNER'S MANUAL & MAINTENANCE PROCEDURES



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**PRODUCT REGISTRATION**


Stay informed about the latest product updates and safety information. Visit [srsmith.com/en-us/customer-service/product-registration/](http://srsmith.com/en-us/customer-service/product-registration/) to register your lift **TODAY!**

# DECK PROFILE SHEET CONFIRMATION

Aquatic access lifts are application specific. A completed Deck Profile Sheet helps to ensure the lift purchased for the application will work in accordance to ADA guidelines. S.R. Smith reviews all submitted Deck Profile Sheets as a service to our customers, free of charge. Before installing the pool lift, the installer must review and confirm the information provided on the Deck Profile Sheet. If the description of the application does not match the installation site, a new Deck Profile Sheet must be completed and submitted to S.R. Smith.

**NOTE: FAILURE TO COMPLETE AN ACCURATE DECK PROFILE SHEET MAY RESULT IN THE LIFT NOT MEETING ADA COMPLIANCE GUIDELINES.**

To complete the Deck Profile Sheet online, visit [www.srsmith.com/liftprofile](http://www.srsmith.com/liftprofile), contact Customer Service at (800) 824-4387 or email [sales@srsmith.com](mailto:sales@srsmith.com).



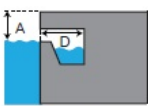
## deck profile sheet **POOL LIFT\***

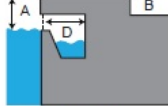
\*Deck profile sheet must accompany your pool lift order

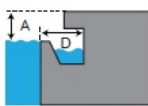
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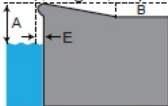
**1. Preferred Lift:**  PAL  PAL2  Splash!  Splash! 300  aXs  multiLift  ML300


**2. Gutter Configuration:**

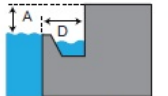
Fully recessed gutter  



Fully recessed gutter w/parapet  


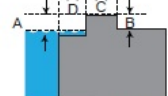
Partially recessed gutter  


Bull Nose Coping  


Standard backyard pool  


Rollout gutter  


Flush gutter and deck w/ or w/o bullnose  


Florida Rollout w/curb  


If none of the images above match your gutter configuration, please draw the shape on a separate piece of paper and attach.

---

**3. Facility Type (check one):**  Health Club  Hospitality  Public Pool  Residential  Commercial

**4. Deck (check one):**  New Construction  Pre-existing

**5. Deck Material (check one):**  Concrete  Pavers

**6. Distance from pool deck to water line (A):** \_\_\_\_\_

**7. Height of curb (B):** \_\_\_\_\_

**8. Width of curb (C):** \_\_\_\_\_

**9. Width of gutter (D):** \_\_\_\_\_

**10. Bull Nose Radius (E):** \_\_\_\_\_

**11. Decorative stone setback:** \_\_\_\_\_

**12. Is your pool located on the ground level?**  Yes  No

**POOL**  Check this box to confirm that you have verified the location of the lift will meet the ADA Clear Deck Space Requirement (1009.2.3):

"On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36" wide minimum and shall extend forward 48" minimum from a line located 12" behind the rear edge of the seat."

**Note:** Pool lifts are application specific. Please provide accurate measurements for your pool in the space provided. S.R.Smith will confirm that the lift selected will meet the location and installation requirements based on the ADA Design Standards (2010) or suggest an alternative lift that will meet the requirements. S.R.Smith bears no responsibility due to misapplication of a lift without a completed Deck Profile Sheet on record.

Fax this completed form to 503.266.4334, email to [lifts@srsmith.com](mailto:lifts@srsmith.com), or complete the form online at [www.srsmith.com/liftprofile](http://www.srsmith.com/liftprofile). Call toll free 800.824.4387

Name of Distributor Lift Will Be Purchased From

City

State

Your Name

Email

Phone

Property or Project Name

PO Number

---

**S.R. Smith Use Only**

APPROVAL# \_\_\_\_\_

PAL  PAL HI/LO  PAL SPA  PAL2  
 SPLASH  SPLASH HI/LO  SPLASH ER  SPLASH ER HI/LO  SPLASH SPA  
 SPLASH 300  SPLASH W/ROUND POST  AXS  MULTILIFT  ML300

SF-720-003

B/2016

# **READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE BEGINNING INSTALLATION.**

## **INTRODUCTION**

The purpose of this document is to provide information relating to the installation, safe operation, care, and maintenance of the **ML300**.

### **Intended Lift User**

S.R. Smith's lifts have been designed to assist individuals requiring assistance entering or exiting a swimming pool or spa. The user must not exceed the weight limit of the product (300 lb/136 kg). It is the responsibility of the lift owner to ensure that safety procedures are put in place and a risk assessment is completed. Mental or physical disabilities may require assisted transfer, and the owner is responsible for determining the number of qualified attendants to complete the poolside transfer and the number of persons required to be in the water, ready to receive and assist the user. The seat belt must be attached to the seat and fully fastened and used during each transfer.

Our goal is to provide our customers with the most advanced and innovative designs offering exceptional quality at affordable prices. All of our lifts meet the specifications set forth by the Access Board - ADAAG 2004. The lift system and AC powered battery charger complies with EN60601-1-2, 2007/03.

### **Using the ML300**

Obey all User Instructions listed in the Owner's Manual whenever using lift. Obey all Caution, Warning, Operating Instruction(s) and Labels located on the lift whenever using. It is the responsibility of the lift Owner to ensure that the correct safety procedures have been put in place and a risk assessment carried out. If a User is mentally challenged or has physical disabilities these issues must be taken into account to determine the number of persons required to complete the transfer onto the seat and the number of persons required to be in the water, ready to receive the User. If the ML300 will be used by a disabled person living on their own, a communication device should be installed in the area of use to call for assistance in the event of an emergency. Only persons healthy enough for water activities should use the ML300. Users should consult with their physician to determine if water activities are appropriate for the User. Keep fingers and hands clear of lift arms during use.

#### **Model / Product**

**No.** \_\_\_\_\_

**Product Name**



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SN S



**24 VDC**

# WARNINGS AND SAFETY SUMMARY



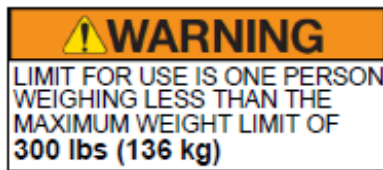
**DANGER – FAILURE TO FOLLOW THESE WARNINGS, INSTRUCTIONS AND THE OWNER'S MANUAL MAY RESULT IN SERIOUS INJURY OR DEATH**

## **WARNING**

- **ADULT USE ONLY**—Use by children with adult supervision only. Only persons healthy enough for water activities should use the ML300. Users should consult with their physician to determine if water activities are appropriate for the user.
- Seat belt is to be used at all times during user transfer.
- **NO JUMPING/DIVING/CLIMBING**—Do not jump/dive from or climb on lift.
- Limit for use is **ONE PERSON** weighing less than the maximum weight limit of—300lbs (136kg) for the ML300. Use only for transfer of user not as a hoist or crane.
- **PINCH/CRUSH HAZARD**—Always keep hands and fingers clear of lift arms during use.
- The battery must be completely removed from lift and located away from pool deck for charging.

## **CAUTION**

- **BATTERY CHARGE LEVEL**—Check Battery Level before each use. Battery must show GREEN >50% charge level before use. When YELLOW <50% charge level is shown the battery must be fully charged before use. When RED <25% charge level is shown the lift must not be used and the battery must be fully charged before use.
- **DAMAGE MAY RESULT**—Do not allow excessive moisture to collect in the battery case, it can affect battery and lift performance and could lead to battery failure and/or the lift failing to operate.



## ADA GUIDELINE SUMMARY\* (USA Only)

### 1009.2.1 Pool Lift Location

Pool lift shall be located where the water level does not exceed 48". If entire pool water level exceeds 48", place pool lift where convenient.

### 1009.2.2 Seat Location

In the raised position, the centerline of the seat shall be located over the deck a minimum of 16" from the edge of the pool.

### 1009.2.3 Clear Deck Space

On the side of the seat opposite the water; a clear deck space shall be provided parallel with the seat. The space shall be 36" wide minimum and shall extend forward 48" minimum from a line located 12" behind the rear edge of the seat.

### 1009.2.4 Seat Height

The lift shall stop at 16" – 19" measured from the deck to the top of the seat surface when in the loading position.

### 1009.2.8 Submerged Depth

The lift shall submerge the seat a minimum of 18" below the stationary water level.

\*Compliance with ADA is the responsibility of the pool owner. Visit [www.ada.gov](http://www.ada.gov) for complete guidelines.

## PRODUCT OVERVIEW

The ML300 Aquatic Lift is a semi-portable lift system designed so that individuals with disabilities and mobility impairments can have access to residential, hospitality and multiunit facility swimming pools or spas. The ML300 is powered by a 24 volt rechargeable battery operated by a screw driven electronic actuator that provides the lifting and lowering motions. Following all instructions in the owner's manual and all product labels is necessary to achieve safe, reliable and proper performance of the lift and avoid injury. This ensures consistent safe operation and minimizes service problems.

The ML300 has a mast height of 42 in / 106.6 cm above the deck. It is intended to be used with simple pool gutter configurations having a deck to water distance of no more than 8 inches, see Table 1 and Figure 10 to determine if the ML300 will work on a specific pool. The maximum weight capacity for ML300 is 300 lb/136 kg. Only persons healthy enough for water activities should use the ML300. Users should consult with their physician to determine if water activities are appropriate for the user.

## ML300 - PRODUCT COMPONENTS

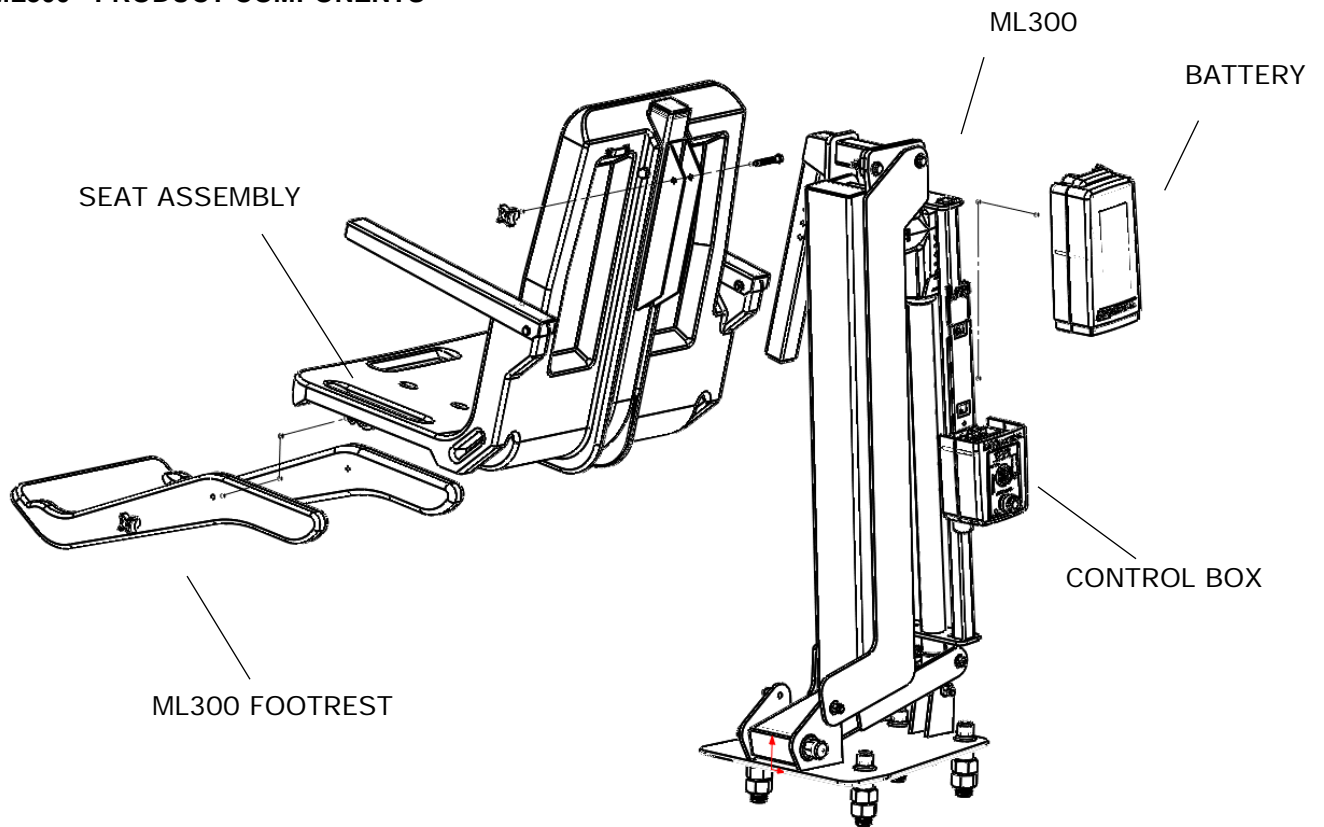


Figure 1 ML300

## COMPONENT DESCRIPTION

The lift is made up of several main components:

**ML300 Assembly-** Primary lift assembly includes frame components, mounting base, and actuator. All metal lift components are manufactured from stainless steel or aluminum and powder-coated for additional corrosion protection. The standard ML300 seat assembly is a right mount configuration but can be field mounted to the left side.

**Plastic Protective Pad-** The protective plastic pad is designed to be attached to the bottom side of the ML300 mounting plate and act as a protective barrier to prevent damage to the ML300 base plate or the pool deck.

**Seat Assembly -** The seat is manufactured from roto-molded plastic with a stainless steel frame. The seat comes standard with a seatbelt. The seatbelt must be used during each use. It is recommended that the seat be rinsed off with fresh water between each use and cleansed daily with a disinfectant solution of 1:100 dilution of household bleach to fresh water and then rinsed with fresh water. In the event of a contamination incident such as patient/user excreta - cleanse seat and seatbelt immediately with the above disinfectant solution. Do not use seatbelt if it is damaged or becomes worn.

The armrests are designed for support when transferring onto the seat. They can be rotated up out of the way during transfer.

The lift seat assembly is designed to be used exclusively with S.R. Smith aquatic access lifts.

**Footrest-** The footrest is constructed of roto-molded plastic and is easily removable.

**Control Box -** The LiftOperator unit controls all lift operations identical to the user hand set. Two cables connect to the bottom of the Control Box to enable operation of the lift. The largest connector is for the hand control. Connector # 2 is for the actuator cable (green stripe).

### Touchpad Control –

The touchpad control arrow keys can be used in the event that the hand control is out of reach or fails. Simply press and hold the arrow for the desired action for one movement at a time – Up, Down, Left, Right Releasing the Arrow stops movement.

### Battery Level LED Indicators –

The Battery Level LED Indicators show battery charge levels. The LED's will illuminate when either the touchpad control or the hand control is activated and will stay lit for 10 seconds. At greater than 50% the LED glows Green, at less than 50% the LED glows Amber, and less than 25% the LED glows red and indicates the battery requires charging. If the less than 25% LED glows red, do not operate the lift. Remove the battery and fully charge before use.

### Service Required LED –

The Service Required LED will illuminate when the battery pack has been removed/replaced 120 times - approximately once every 4 months. This indicates that required maintenance for the lift must be completed. Please see the maintenance section of the Lift Owner's Manual for the requirements. The Service Required LED can be reset by inserting a standard FAT-formatted USB mass storage device (not included) into the USB Port on the bottom of the controller. **When the service light is illuminated the lift must not be used until required maintenance is performed.**



CONNECTOR 2  
(ACTUATOR  
CABLE)

## Emergency Stop Button –

In the event of an emergency, or if you need to stop lift movement immediately, pressing the Emergency Stop Button (red button on the control) will stop all lift movement. At the same time an audible alert will sound for 10 sec. then pause for 5 sec. and then the sequence will repeat until the button is reset by turning it in the direction of the arrows on the button (clockwise). The Emergency Alert LED will also flash Red when the button is pressed and will remain flashing until the button is reset.

The Emergency Alert (audible and LED) can be activated by pressing any two buttons on the hand control at the same time (provided with the lift). This will stop all lift movement and activate the audible alert and the Red LED will flash. Once both buttons are released, the lift will return to normal operation and the emergency audible alert will silence.

## USB Port –

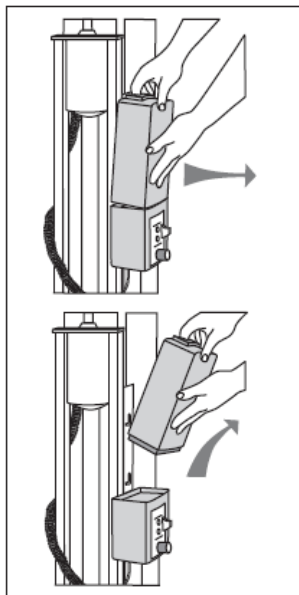
The LiftOperator control contains a USB port that is used to download the performance log of the lift. Using any standard FAT file formatted USB memory stick (widely available through retail outlets) insert the stick into the slot on the bottom of the control on the far right hand side. Press any of the touchpad control arrows; all three of the Battery Level LED's will flash. During downloading the Green greater than 50% Battery Level LED will flash. If the unit has a problem downloading the performance log the Red less than 25% LED will flash. Remove the USB from the port and re-insert it. If the Red 25% LED flashes again, confirm that the USB you are using is FAT file formatted. The information from the USB can be downloaded to a PC for review and/or copied to a spread sheet. The performance log will retain approximately 7,600 events. Once the file is full it will remove the oldest event and replace with the newest. After the summary data, the events are shown with the oldest first. The first column is the time in seconds from that last event. The second column is the text describing the event. The third column is duration of the activity noted in seconds.

An example of a short log file:

<u>Activity</u>	<u>Description</u>
dev_id_upper,0	Programing data
dev_id_lower,1	Programing data
fw_rev,90	Firmware rev.
batt_volt_float,24929	Non-loaded battery voltage in millivolts
batt_volt_load,21487	Loaded battery voltage in millivolts
batt_capacity,99	Estimated battery capacity in %
charge_starts,8	Number of times charging was attempted
charge_completes,1	Number of times charging was finished successfully
0,power_on,1	Connecting Battery Pack
2,alert_pressed,	Emergency Button pressed
3,alert_released,	Emergency Button released
8,lift_up,2	Lift movement - up
5,lift_down,2	Lift movement - down
4,turn_left,2	Lift movement - turn left
3,turn_right,1	Lift movement - turn right
3,log_write,	USB File Download



**Battery Pack** - The battery pack is located on top of the Control Box and is removable.



**To remove - pull the battery pack away from the mounting plate so that the latch on the battery pack clears the side tabs on the mounting plate - then lift the battery pack up and away from the Control Box.**

**To replace - align the battery pack with the mounting plate so that the latch will drop over the center tab and that the bottom of the battery pack will fit in the recessed area on top of the Control Box. Lower the battery pack in place so that the latch is fully captured by the mounting plate and the battery pack drops fully seated onto the Control Box.**

The battery pack should be charged daily. Do not allow battery to fully discharge, as it will shorten battery life. Whenever battery is removed from Control Box or lift is not in use it is important to connect battery to the charger. This ensures battery is fully charged and ready for use.

The battery charger has an LED indicator to show charging status. The following describes LED indicator operation.

**Amber Light Flashing** – The amber light flashing indicates that the battery charger has AC power and the microprocessor is functioning properly. If the amber light continues to flash, either the battery voltage is too low (battery pack needs to be replaced), or the battery charger is not properly connected to the battery.

**Amber Light on Steady** – Whenever the amber light is on steady, a battery is connected properly to the charger and the charger is charging the battery. The amber light will remain on until the charger completes the charging stage.

**Green Light Flashing** – When the charger shows a green flashing light, the battery is 80% charged. Whenever possible, leave the battery on the charger until the green light is solid.



**Green Light on Steady** - When the green light stops flashing and remains on steady, the battery is fully charged and can be returned to service. The battery can and should be left on the charger when not in use.

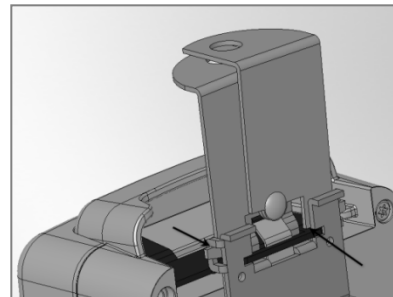
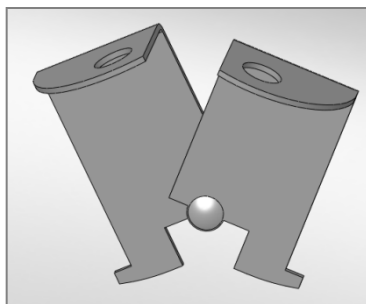
Batteries have a normal lifespan of between 2-3 years, depending on use and care. A fully charged battery will provide approximately 30 to 40-lifting cycles, depending on the weight of the users. Prior to use the battery charge level should be checked by observing the LED indicator on the charger plug to ensure sufficient charge level. See warranty policy regarding battery replacement.

It is not necessary to fully discharge the battery prior to charging. Battery should be charged daily and cannot be overcharged. It takes up to twelve hours to fully charge depending upon battery usage. Do not allow battery to fully discharge, as it will shorten battery life. Whenever battery is removed from Control Box or the lift is not in use it is important to connect battery to charger. This ensures battery is fully charged and ready for use.

Do not drop the battery, as it could cause the unit to fail. If the battery case is cracked do not use and replace the battery. Do not place battery on a conductive surface. During temperature extremes beyond the range of 41 F (5 C) to 104 F (40 C) remove battery and place in a controlled environment or battery life may be shortened.

**Battery Disposal** - The batteries located inside the battery pack are recyclable and shall be disposed of in accordance with applicable local, state/provincial or federal/national regulations.

**Locking Plate Assembly** - The battery pack can be secured to the mounting plate using the provided lock plate assembly. To install open the lock plate so that the bottom tabs are moved close to one another to allow the lock plate to be inserted into the slots on the mounting plate secured to the lift. Close the lock plate assembly so that the tabs are captured by the slots. Insert a padlock (not provided) through the holes on the lock plate assembly to secure it.



**Hand Control** – The two button unit controls lift movement. The arrows indicate direction of movement. Control is fully waterproof and meets IP67 standards. **See Figure 2. For complete parts breakdown see Appendix A and B**



Figure 2. Hand Control

## UNPACKING & ASSEMBLY INSTRUCTIONS

REFER TO THE DIAGRAMS (Figure 1 and Appendix A) FOR PARTS IDENTIFICATION.

## READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE BEGINNING INSTALLATION

Prior to opening the shipping pallet, carefully inspect the external condition of the shipping materials for any visible damage. It is important that any damage be noted on the Bill of Lading prior to signing for the delivery. Contact either S.R. Smith or your dealer immediately to notify us of any damage or missing parts.

Ensure mounting anchors have been installed in the correct location in the pool deck for proper lift operation. It is recommended that the anchor be installed by a person familiar with installing pool deck equipment.

The ML300 is shipped on a covered pallet and is mostly assembled. Position crate close to deck anchors for easier assembly and set up.

### Unpacking & Assembly Procedure for the ML300:

1. Carefully remove plastic covering from crate.
2. Carefully remove any wood bracing from crate.
3. Remove seat assembly and footrest and set aside for attachment.
4. Remove lift and plastic mounting pad from crate. Use the double sided tape on the plastic pad to adhere the plastic pad to the bottom side of the mounting plate. Be sure that the holes in the plastic pad are aligned with the mounting holes in the ML300 base plate.
5. Align holes in the mounting plate with deck anchors.
6. Locate the deck mounting hardware in the accessory carton and use the hardware to fasten the ML300 to the anchors as shown in **Figure 3**. Tighten the bolts down until the lock washers are fully compressed. **Note: Anti-seize compound must be used on the stainless steel mounting bolts to prevent seizing in the deck anchors.**
7. Refer to pages 11-15 for deck anchor installation specifications and instructions.

**Tools Required:**         $\frac{3}{4}$ " Socket or Wrench

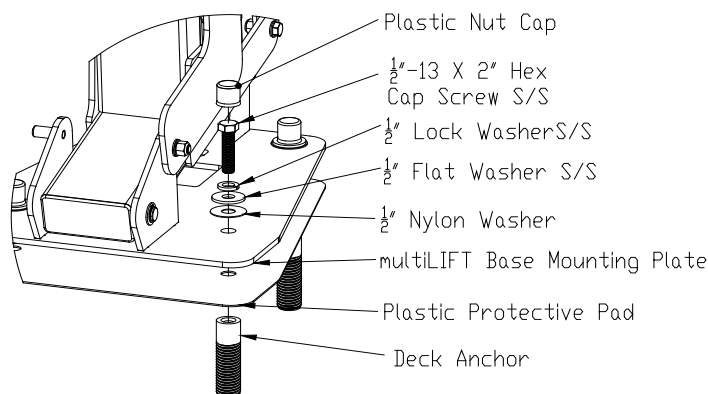
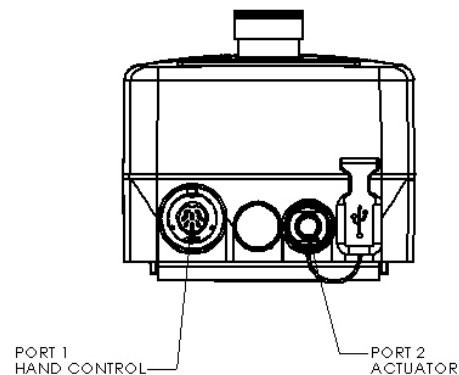


Figure 3. Mounting Hardware

8. The LiftOperator Control is pre-assembled on the ML300 (see LiftOperator Owner's Manual for more information). Remove the hand control from accessory carton and unwrap. Insert plug into large socket on the LiftOperator control box as shown in **Figure 4**. Make sure plug is secure.
9. Ensure that the actuator plug is secured in the socket as shown in **Figure 4**.
10. Attach battery to LiftOperator control box making sure that the battery latch bracket locks into the slots on the control unit mounting bracket. To remove the battery from the control unit, pull outward on the battery handle until the battery latch bracket clears the slots in the control unit mounting bracket, then pull upward, see **Figure 5**

Figure 4. Control Box



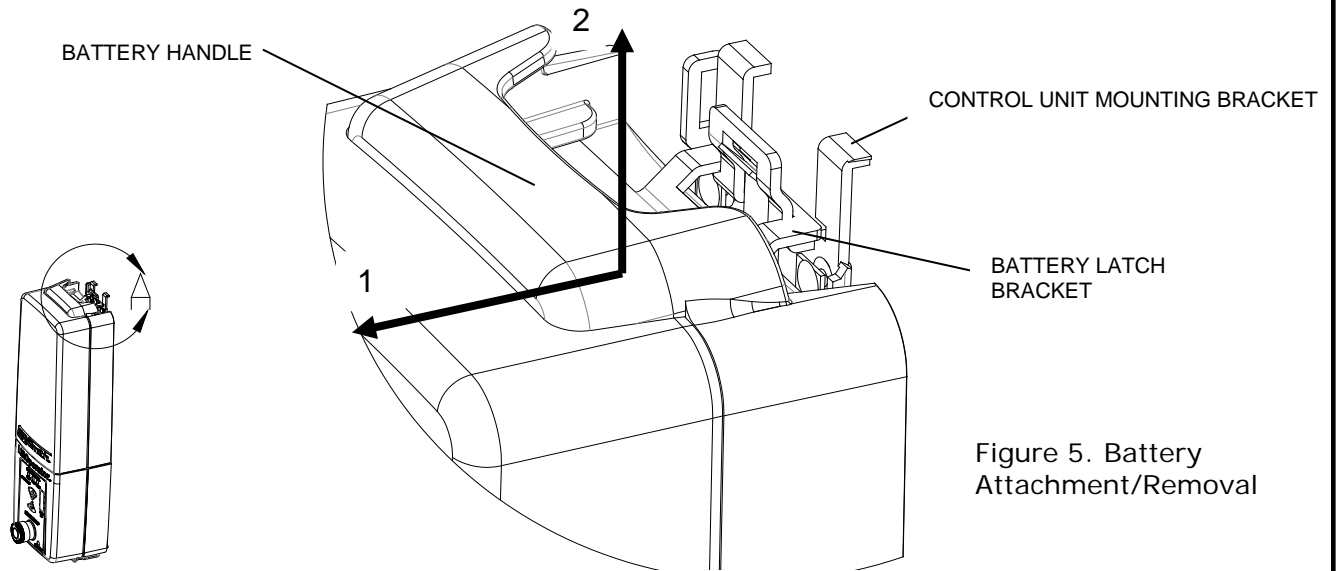


Figure 5. Battery Attachment/Removal

11. Check all controls and emergency stop button for proper operation. See LiftOperator Owner's Manual for details.
12. Attach seat assembly with bolt and thumbnut in appropriate hole. Refer to **Figure 10** and **Table 1** to determine the correct seat mounting hole to use. Also see **Figure 6**.

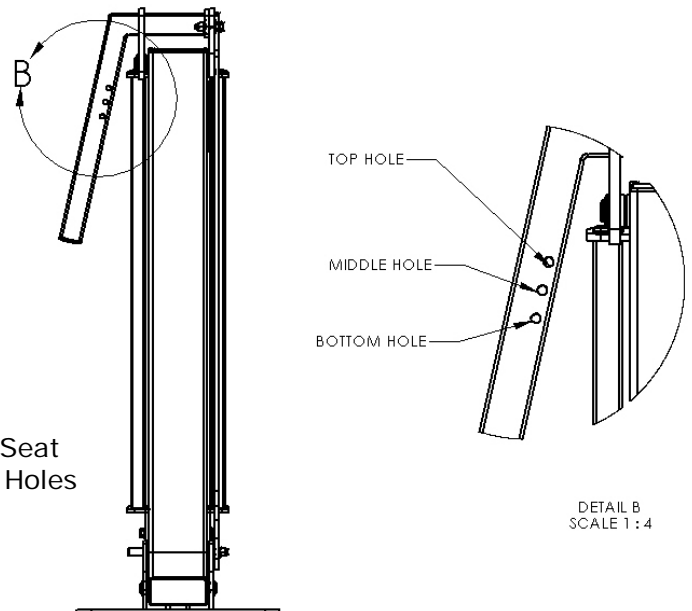
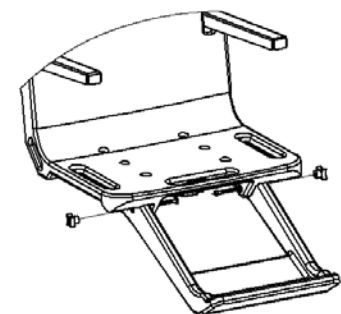


Figure 6. Seat Mounting Holes

13. Attach footrest to seat with bolts and thumbnuts as shown in **Figure 7**.

Figure 7. Footrest



14. The ML300 comes standard with the seat mounted on the right side of the lift as shown in **Figure 9**. The seat can be moved to the left side of the lift by following the instructions found in **Appendix D**.

15. If the deck slope where the lift is mounted is causing the lift seat not to be level, the seat angle can be adjusted by loosening the bolts shown in **Figure 8**, adjusting the seat to level, and retightening the bolts.

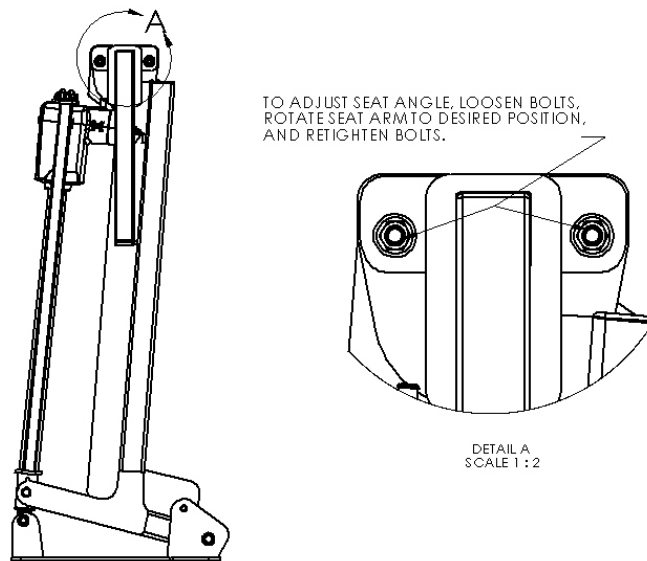


Figure 8. Seat Leveling

### USING THE ML300

Obey all User Instructions listed in the Owner's Manual whenever using lift. Obey all Caution, Warning, Operating Instruction(s) and Labels located on the lift whenever using. It is the responsibility of the lift Owner to ensure that the correct safety procedures have been put in place and a risk assessment carried out. If a User is mentally challenged or has physical disabilities these issues must be taken into account to determine the number of persons required to complete the transfer onto the seat and the number of persons required to be in the water, ready to receive the User. If the ML300 will be used by a disabled person living on their own, a communication device should be installed in the area of use to call for assistance in the event of an emergency. Only persons healthy enough for water activities should use the ML300. Users should consult with their physician to determine if water activities are appropriate for the User. Keep fingers and hands clear of lift arms during use.

## ML300 Transferring Diagram

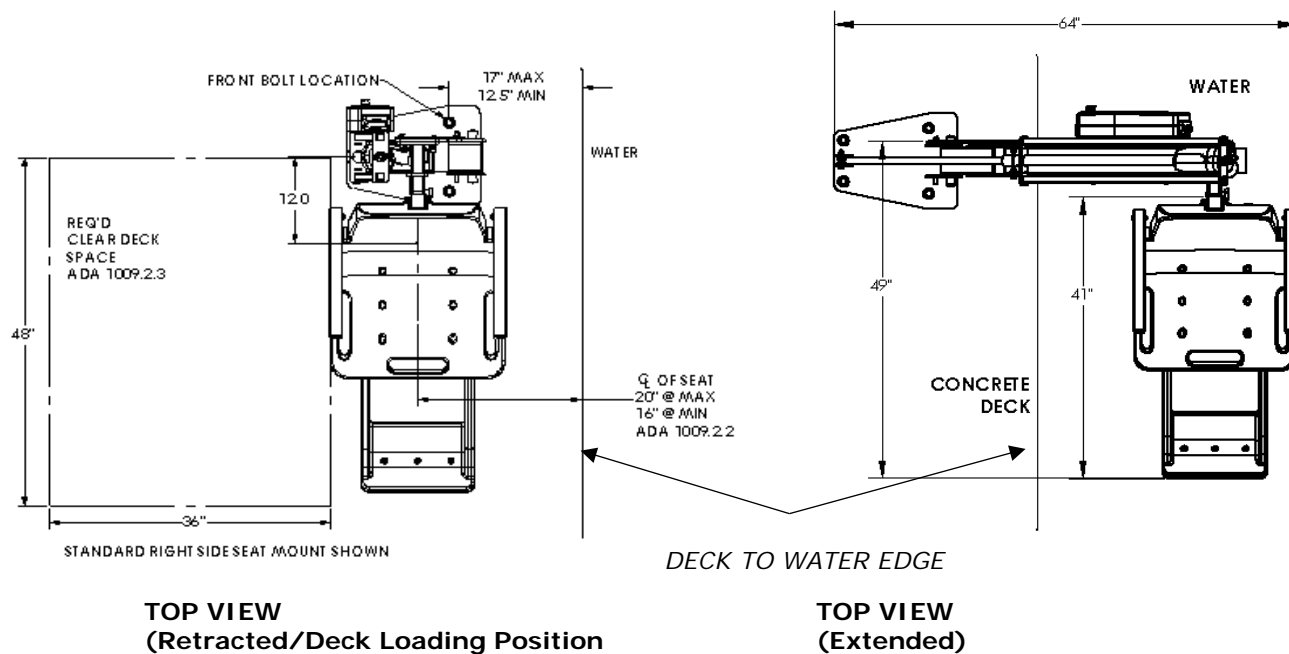


Figure 9. Transferring

### TRANSFERRING THE USER TO THE WATER

Once the unit is positioned for use, use the following procedure to transfer to the seat and into the water. Only persons healthy enough for water activities should use the ML300. Users should consult with their physician to determine if water activities are appropriate for the User:

- Check battery level of LiftOperator to ensure charge is adequate for operation (at least 50% charge recommended).
- Use the buttons on the hand control or control unit front panel to raise the seat to the deck loading/unloading position as shown in **Figure 9**.
- Transfer user onto the seat, ensuring that the user's weight is centered on seat. Armrests can be rotated up if necessary (optional US/standard on EU models). If user has a wheelchair, keep the wheelchair close by for easy retrieval.
- Fasten Seat Belt - thread loose end of belt strap through buckle - pull tight - to close - press latch down on belt material.
- Use the hand control or control unit front panel to lower the seat into the water. The waterproof hand control can remain connected to seat if user is operating lift.
- Unfasten Seat Belt - grasp latch and lift up, pull loose end from latch.
- When finished, return to the seat, ensuring user's weight is centered on seat.
- Fasten Seat Belt.
- Use the buttons on the hand control or control unit front panel to return the seat to the deck loading/unloading position.
- Unfasten Seat Belt.
- Transfer off of the seat

**IN CASE OF HAND CONTROL FAILURE**

**Lifting failure** - In the event of a hand control failure, or if the hand control is out of reach, there are control buttons built into the touch pad of the control box.

**If the ML300 will be used by a disabled person at an unsupervised location, a reliable communication device must be installed in the area of use to call for assistance in the event of an emergency.**

**POOL DECK INSTALLATION FOR THE ML300**

**Ensure the anchors have been installed in the correct location in the pool deck for proper lift operation. It is recommended that the anchor be installed by a person familiar with installing pool deck equipment. The pool owner is responsible for ensuring that all applicable ordinances are followed when installing the lift.**

The optimal mounting distance for the deck front anchors is 12.5"/ 31.75 cm from the edge of the pool. The front anchors can be installed up to a maximum of 17"/43.18 cm from the edge of the pool, but the deck edge clearance decreases the farther the lift is installed from the pool edge. The setback distance from the pool edge to the front anchor locations varies depending upon pool geometry. The ML300 is designed to be used with simple pool edge designs with deck to water level differences of 0" to 8" maximum. Review **Figure 10** and **Table 1** to determine the correct seat mounting location and anchor installation setback for your pool.

Please contact S.R.Smith with any questions concerning deck anchor placement or if the ML300 will work in your application.

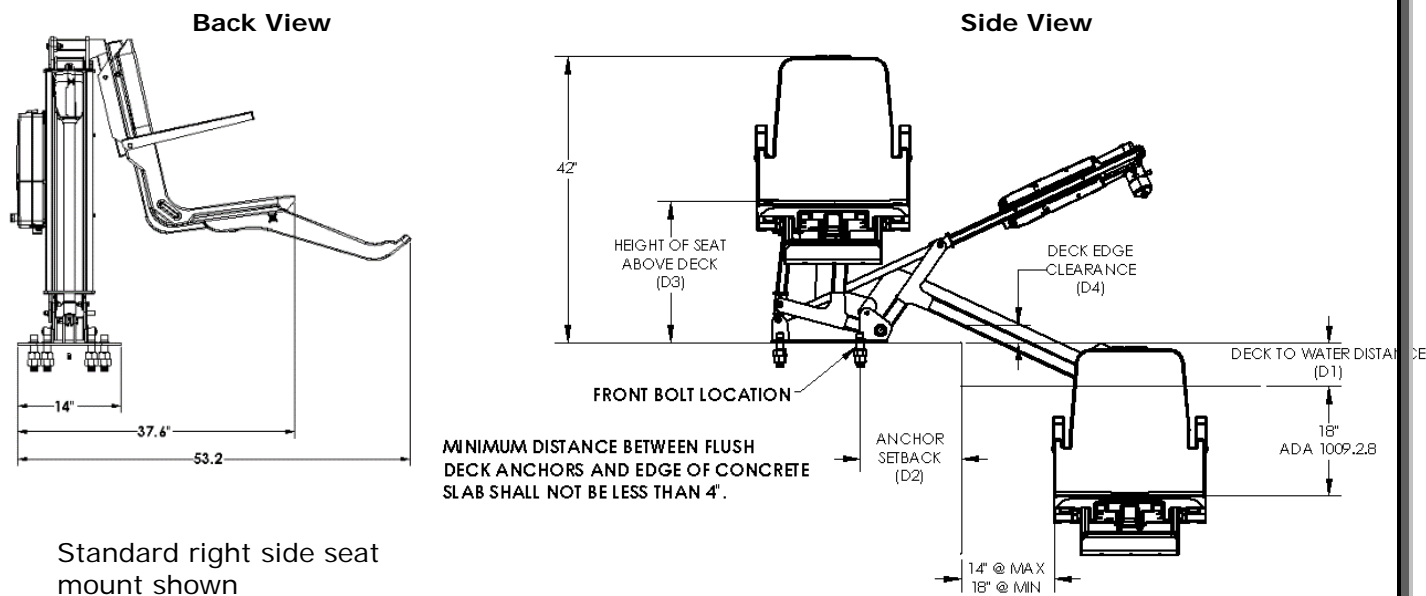


Figure 10. Installation Layout

Table 1. Installation Layout

Deck to Water Distance (D1)	Max Setback Distance (D2)	Seat Mounting Hole Location	Height of Seat Above Deck (D3)	Deck Edge Clearance (D4)
0"-6"	17"	Top Hole	18"	1.25"
7"	14.75"	Middle Hole	17"	2.25"
8" (Maximum)	12.5"	Bottom Hole	16"	3.25"

## INSTALLING ANCHORS INTO EXISTING CONCRETE DECK

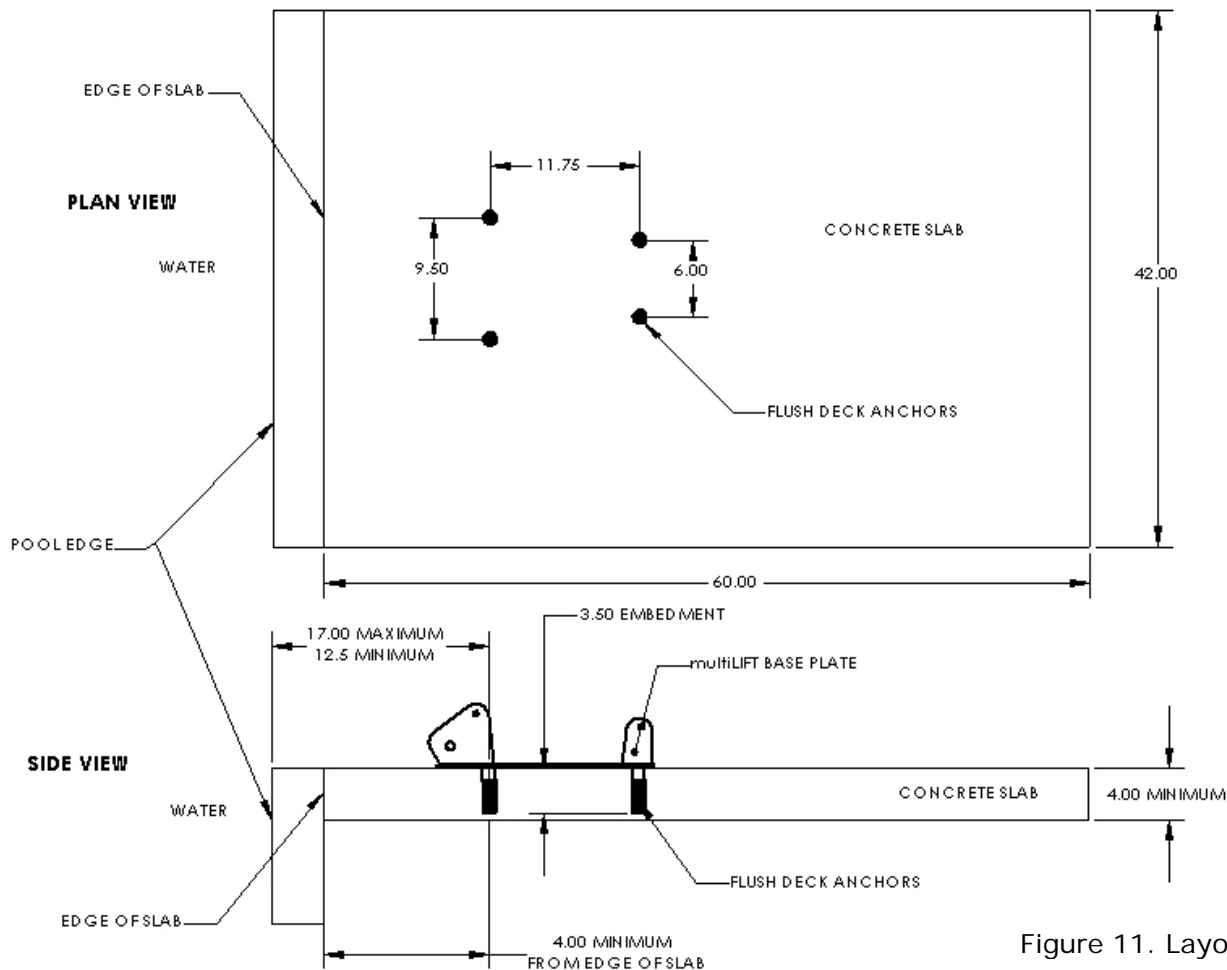


Figure 11. Layout

Follow these guidelines to make sure that your anchors are installed properly:

1. Minimum concrete slab requirements for the ML300:
  - Slab dimensions should be at least 42" X 60" X 4", reinforced. See **Figure 11** above.
  - Anchors shall be installed at a minimum of 4" or greater from the edge of the slab or expansion joint.
  - Existing slab shall exhibit no signs of cracking or deterioration.
2. S.R. Smith recommends using Simpson SET epoxy adhesives or equivalent for installation of the deck anchors. Use epoxy adhesives per the manufacturer's instructions.
3. Use **Figure 10** and **Table 1** to determine the proper location to install the lift, making certain that the front anchors are located the correct distance from the pool edge.
4. Layout and mark the hole locations on the deck using the ML300 Anchor Set Jig as a template.
5. Drill four holes 1.125" diameter and 3.625" deep in the locations marked in step 2. Note: The hole that the bondable anchor will be inserted into will need to be slightly deeper than the others. It is recommended that the anchors are placed into each hole prior to pouring the epoxy to ensure that the holes are drilled to the proper depth.



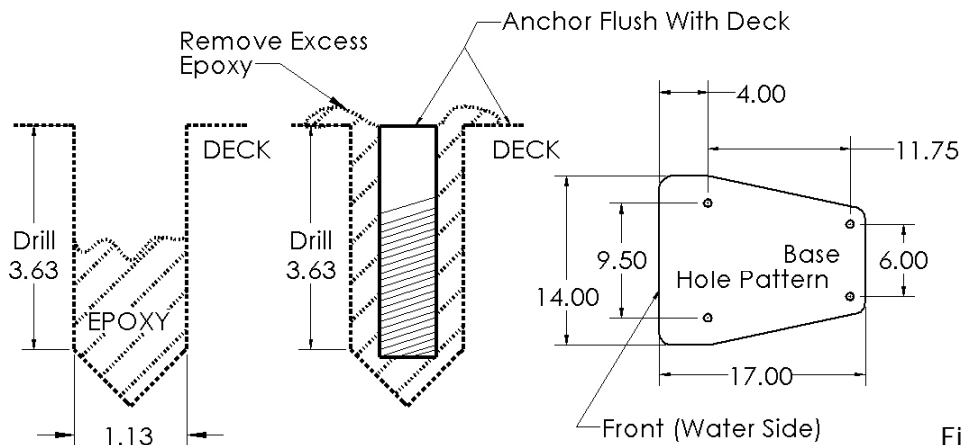


Figure 12. Deck Anchor Installation

6. Clean all dust and debris from the holes.
7. **Bond at least one of the flush deck anchors per local codes.** Contact your local Authority having jurisdiction for the bonding requirements in your area. A threaded hole for attaching a bonding screw is provided on bottom side of one of the deck anchors. Use the screw provided with the deck anchor kit to attach the bonding wire to the deck anchor. See **Figure 13**.

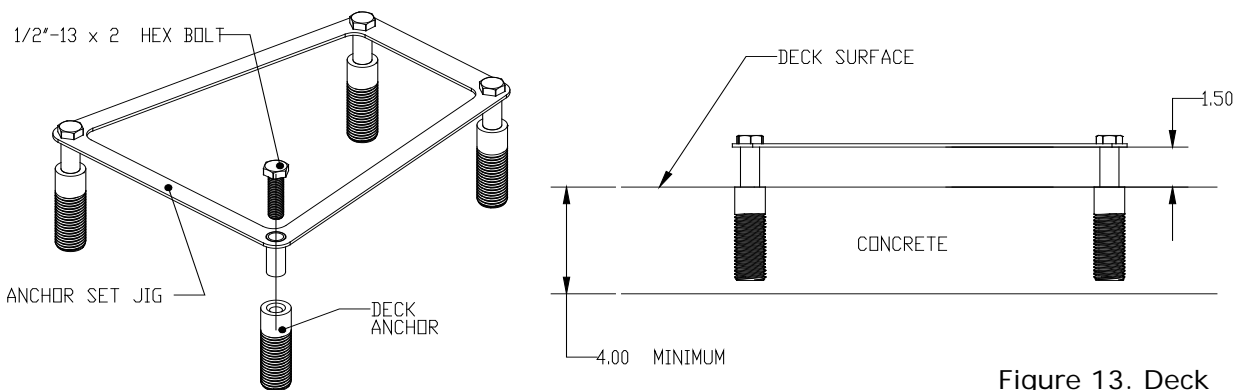
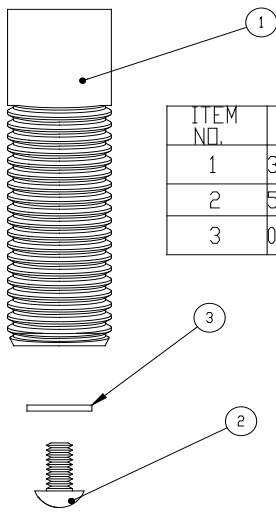


Figure 13. Deck Anchor Installation

8. The ML300 Anchor Jig must be used to ensure that the anchors are held in the correct position until the epoxy is cured. To use the Anchor Jig, place the ½"-13 X 2" Hex Bolts through the tubes in the Anchor Jig and thread the bolts into the anchors until the top surface of the anchors contact the bottom of the Anchor Jig tubes. See **Figure 13**.
9. Blocks can be used as spacers between the deck surface and the Anchor Jig to ensure that the tops of the anchors are flush with the deck surface.
10. Fill holes approximately half full with epoxy.
11. Insert deck anchors, making sure that the anchors are flush with the top of the deck.
12. Remove any excess epoxy immediately.
13. Allow the epoxy to cure per the manufacturer's instructions.
14. Once the epoxy has cured, install the lift per the installation instructions.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-6700-T	DECK ANCHOR, BONDABLE	1
2	5-401	RDH, SLTD, B18.6.3	1
3	05-14-111	1/4" X 5/8" FLAT WASHER S/S	1

Figure 14. Deck Anchor Bonding

**INSTALLING ANCHOR JIG INTO NEW CONCRETE DECK**

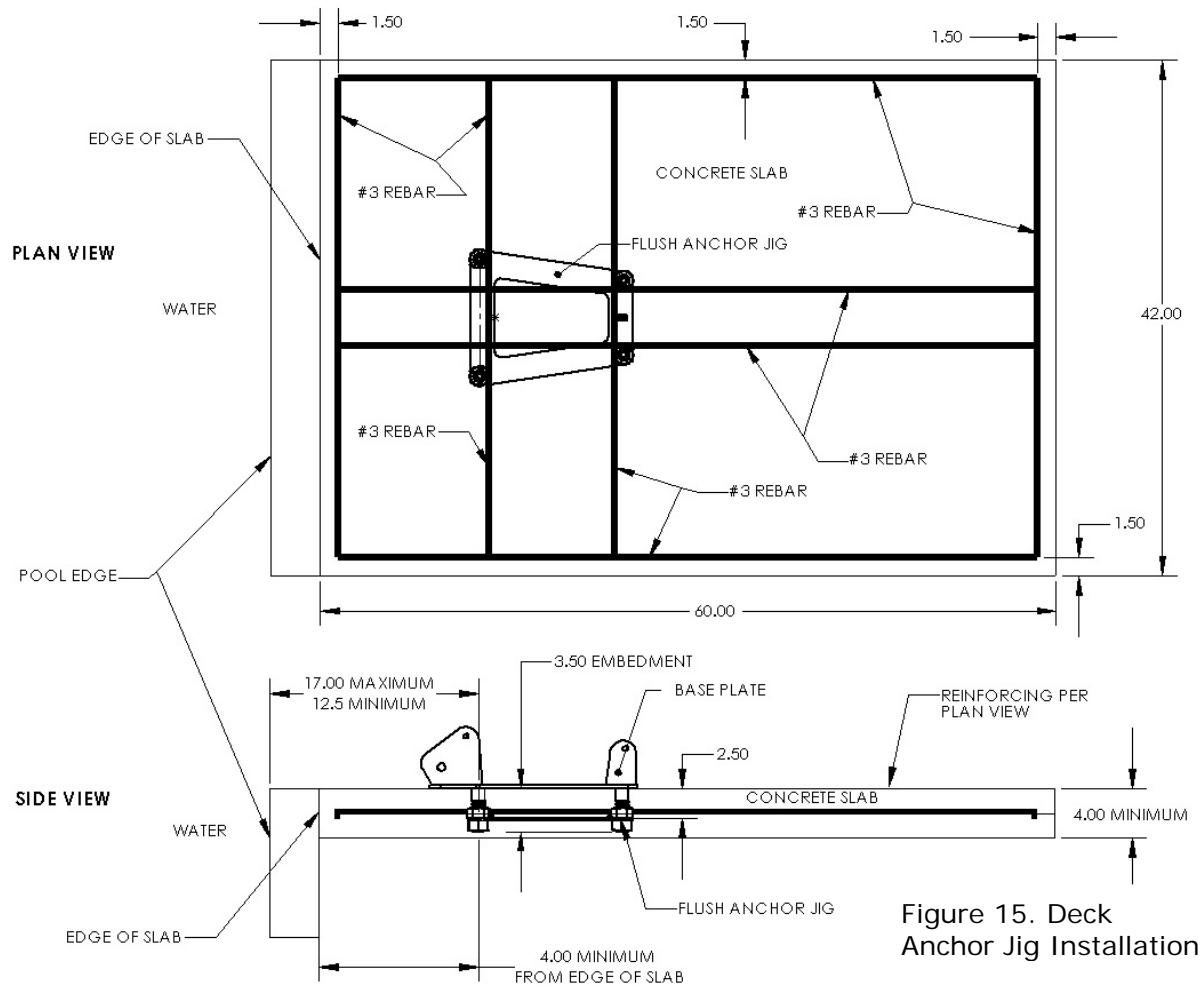


Figure 15. Deck Anchor Jig Installation

Follow these guidelines to make sure that your anchor jig is installed properly:

1. Minimum concrete slab requirements for the ML300:
  - Slab dimensions should be at least 42" X 60" X 4", see **Figure 15** above.
  - Anchors shall be installed at a minimum of 4" or greater from the edge of the slab or expansion joint.
  - Normal weight of concrete = 150 lbs/ft<sup>3</sup>
  - Concrete minimum compressive strength at 28 days to be F'c =2500 psi.
  - Reinforcing bars shall conform to ASTM A615 Grade 60, deformed.
2. Use **Figure 10** and **Table 1** to determine the proper location to install the lift, making certain that the front anchors are located the correct distance from the pool edge.
3. Assemble the deck anchors to the anchor jig as described in **Appendix E**.
4. Install the anchor jig and reinforcing rods per **Figure 15**.
5. **Use the bonding lug provided on the anchor jig to attach the bonding wire per local codes.** Contact your local Authority having jurisdiction for the bonding requirements in your area.
6. Make sure that the top of the anchors are flush with the top surface of the slab.
7. Allow concrete to cure per manufacturer's instructions.
8. Once the concrete has cured, install the lift per the installation instructions.

## STANDARD ACCESSORIES/OPTIONAL ACCESSORIES

The following items are included with all pool lift models:

- Seat Belt Assembly - Nylon water-resistant belt for added security.
- Battery/Charger – 24-volt rechargeable battery.

Optional accessories may be purchased for your ML300 lift through your Authorized Reseller. The following accessories are available:

**Console/Battery Cover – P/N 910-1000:** Protects battery and control unit from exposure to moisture

**Total Cover - P/N 500-5200:** Made of weather resistant nylon material to keep unit protected from elements when not in use.

**Deck Anchor Kit P/N 300-6700A** – Includes 4 flush deck anchors.

**New Construction Anchor Jig P/N 500-5000** – Includes anchor jig, and hardware minus the flush deck anchors. See anchor jig assembly info **Appendix E**.

## MAINTENANCE and CLEANING

A maintenance program will prolong the life of your lift. Keep all electronic components clean and dry. Keep the console/battery cover installed at all times to prevent moisture from collecting on the control box and battery. Excessive moisture collection can affect battery and lift performance and could lead to battery failure and/or the lift failing to operate. If the lift is used outdoors, an optional full cover is available and recommended.

Owners of lifts should be aware of any applicable local, state/provincial or federal/national regulations regarding the inspection and or testing of lifts.

**The following schedule shall be performed to insure proper operation with the Daily items performed before each use:**

Maintenance Performed	Daily	Weekly	Monthly
Check battery level before each use / Charge battery daily	✓		
Wipe Control Box and battery connection with a clean dry rag	✓		
Examine lift for any damage, lose or missing hardware	✓		
Test for normal operation	✓		
Make sure all cable connections are properly secured			✓
Inspect lift frame, mast, support arm and seat assembly for rust			✓
<b>Cleansing Performed – after each use</b>			
Rinse seat and seatbelt with fresh water between each use - Cleanse seat and seatbelt with a disinfectant solution of 1:100 dilution of household bleach to fresh water and then rinse with fresh water and dry entire lift daily. In the event of a contamination incident such patient/user excreta - cleanse seat and seatbelt immediately with the disinfectant solution*	✓		
Cleanse all battery connections with a nylon scouring pad			✓
Cleanse all metallic surfaces with a cleaner wax to maintain the finish of the lift			✓

\* When using the disinfection solution avoid direct contact with the skin and eyes. In the event of a contamination incident - immerse the seat belt in the disinfection solution for 10 min. and then rinse thoroughly with fresh water.

## TROUBLE SHOOTING

Visit [srsmith.com/en-us/customer-service/lift-troubleshooting](http://srsmith.com/en-us/customer-service/lift-troubleshooting) to view our library of pool lift maintenance and troubleshooting videos.

Lift does not function:

1. Be sure the battery is fully charged before troubleshooting. The battery is fully charged when the charge indicator LED located near the battery charging port is green. If the battery charge indicator light is solid red, let the battery continue to charge until the light turns green. If the battery charge indicator LED is flashing red, it indicates that there is a fault with the battery and the battery should be replaced.
2. Check battery charge level. With the battery connected to the control box, pressing any button on the hand control, or the control box front panel, will turn on the control box and the battery indicator LEDs will show the charge level of the battery. If the Battery charge level is less than 25% and the battery has been fully charged, the battery needs to be replaced. If no lights come on after the battery is connected to the control box and after pushing buttons on the control box, verify that the battery is properly connected to the control box. If the battery has been checked per step 1, then the issue is likely with the control box, and the control box will need to be replaced.

Lift will not raise and lower when using the hand control:

1. Check hand control connection to control box. Be sure plug is pushed in all the way.
2. Check hand control connection to control box for damaged pins.
3. Check connection cable for damage.
4. Use the buttons on the front panel of the control box to raise and lower the lift. If the lift raises and lowers when using the buttons on the front of the control box, the hand control should be replaced.

If none of the above steps work in getting the lift to function, call S.R. Smith for assistance.

## LONG-TERM STORAGE

When storing the lift for an extended period of time:

- Wash seat with disinfectant solution and then rinse with fresh water and dry entire lift
- Keep the battery on the charger in a dry temperature controlled area
- Cover unit and store in a dry location away from pool chemicals

*Questions/Comments - Contact us at 800.824.4387 or 503-266-2231 or [info@srsmith.com](mailto:info@srsmith.com). For information regarding Authorized Resellers worldwide visit [www.srsmith.com](http://www.srsmith.com)*

## WARRANTY INFORMATION

**The S.R. Smith warranty becomes effective on the date of manufacture.**

To initiate a warranty replacement, Please follow the process outlined below.

1. **Take photos of the damaged product.**
  - a) The photo must include the entire unit (i.e. board and stand or slide from a distance).
  - b) Also include one photo or more of the damaged area.
2. **Write down or take photo of the serial # sticker from the product.**

S.R. Smith provides a serial # for every board, lift, stand, slide and rail product we produce. The sticker with the serial number for our boards, stands and slides is a silver, 1" long rectangular sticker found on the side or bottom of the item. The serial # sticker for our rail products is clear and 2" long. It will be found on the inside of the topmost curve. The serial # number sticker for the lifts is silver and 2 ½" x 3 ¼". It is located on the mast.
3. **Attach the photos and the serial # to a written request for replacement under the S.R. Smith warranty.** Please include the following information:
  - a) Product name and description. (i.e.: board length/color, curve direction of slide, etc.)
  - b) Date of purchase and/or date of installation.
  - c) Description of damage.
  - d) Shipping address with a contact name and phone number.
4. **Return to us by mail or email at <http://www.srsmith.com/en/customer-service/warranty-information/> the photos, serial # sticker and your written request to:**

S.R. Smith, LLC  
PO Box 400  
1017 SW Berg Pkwy  
Canby, OR 97013  
Attn: Warranty Specialist

**\*\*Please Note:** Missing information will result in a processing delay and possibly denial of your claim.

Should you have any questions regarding this process, please contact S.R. Smith's Warranty specialist at 800.824.4387 or 503-266-2231 or email [warranty@srsmith.com](mailto:warranty@srsmith.com)

## **Batteries**

All batteries are inspected prior to shipment and should be free from defect. See warranty policy regarding battery replacement due to defect. Batteries have a normal lifespan of between 2-3 years, depending on use and care.

Battery should be charged daily. Do not allow battery to fully discharge, as it will shorten battery life. Whenever battery is removed from Control Box or lift is not in use it is important to connect battery to charger. This ensures battery is fully charged and ready for use.

Do not drop the battery, as it could cause the unit to fail. If the battery case is cracked do not use and replace. Battery has contacts located on the bottom of the housing. Do not place on a conductive surface that can cause a short. During temperature extremes beyond the range of 41 F (5 C) to 104 F (40 C) remove battery and place in a controlled environment.

Keep the console/battery cover installed at all times to prevent moisture from collecting on the control box and battery. Excessive moisture collection can affect battery and lift performance and could lead to battery failure and/or the lift failing to operate.

## **BATTERY DISPOSAL**

The battery is recyclable and shall be disposed of in accordance with applicable local, state/provincial or federal/national regulations.

## SPECIFICATIONS

### ML300

#### 1. Dimensions/Capacity

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Height	42"/106.7cm
Seat Width	23"/58.5cm
Overall Length-extended	62"/157.5 cm
Storage Length-w/o chair	18"/ 45.72cm
Unit Weight-inc. chair	118 lb/ 53.52 kg
Unit Weight-w/o chair	88 lb/ 39.9 kg
Power	24v DC
Battery Life	30 cycles (approx.)
Lifting Capacity	300 lb/ 136 kg
Anchor Reaction Load:	
Vertical	467 lb/ 211.8 kg
Torque	1158 ft lb/ 1570 Nm

#### 2. Actuator

Type	Screw Type Mechanical Actuator
Maximum Thrust	1680 lb/7472N
Voltage	24v DC
Maximum Amp Draw	9
Maximum Speed	0.59 inch/sec./1.49cm/sec.

#### 3. Battery

Power	24 VDC, IP65 Gel Lead Acid
Temperature Range	41 F (5 C) to 104 F (40 C)

#### 4. Range of Motion Information

Vertical Travel	42"/106.7 cm
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#### 5. Noise

Noise level below 50 dB (A), measured according to DS/EN ISO 3746"

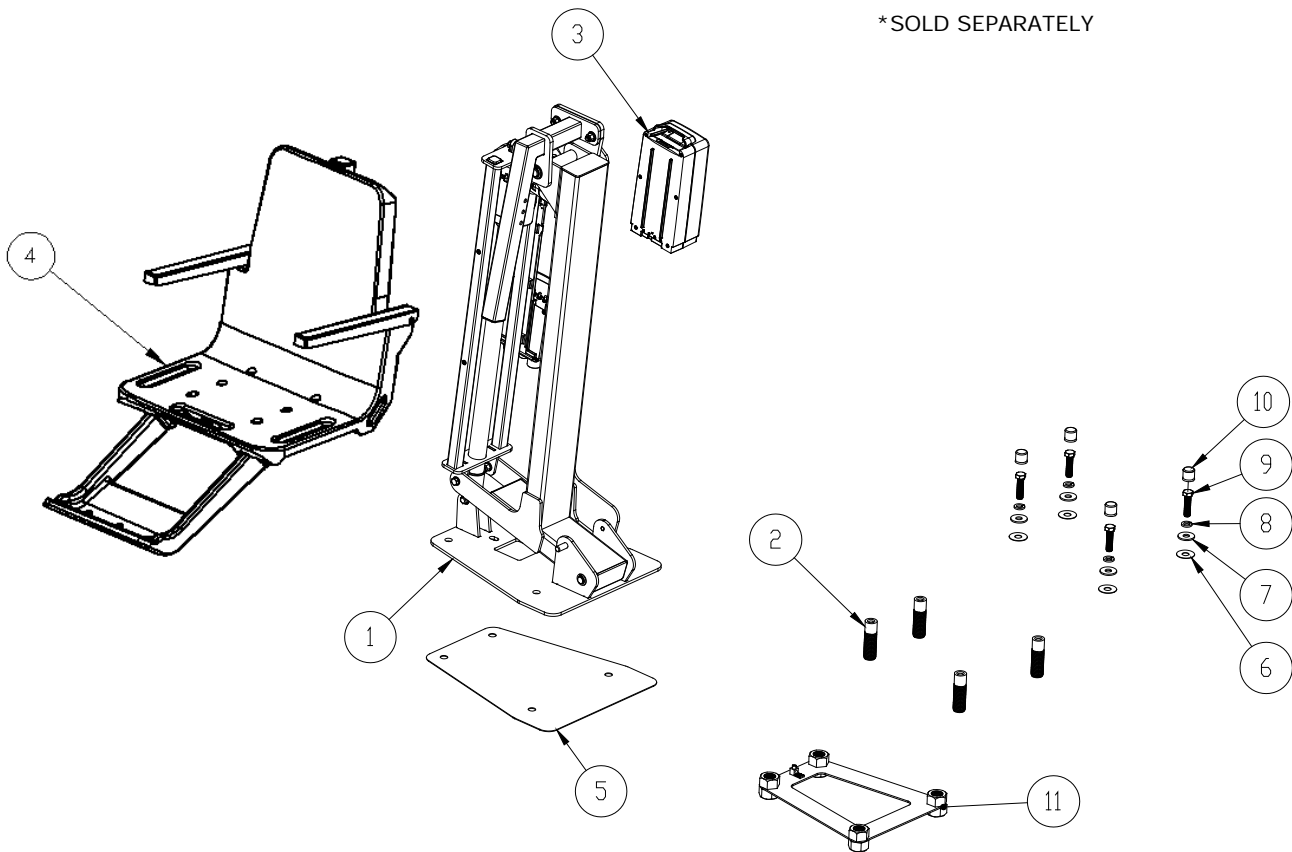
#### 6. Materials and Finish Information

Frame	Powder Coated Stainless Steel
Arms	Powder Coated Aluminum
Mast	Powder Coated Stainless Steel
Seat Assembly	Seat: Rotomolded Plastic Frame: Powder Coated Stainless Steel
Covers	Urethane coated nylon

# APPENDIX A: ML300 ASSEMBLY

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	575-0000A	LIFT ASSEMBLY	1
2	300-6700A	FLUSH DECK ANCHOR KIT	1
3	1001495-BC	BATTERY ASSEMBLY	1
4	160-8000	SEAT ASSY w/ FOOTREST	1
5	6-700B	SOFTPAD, HDPE 1/16"	1
6	05-616	1/2" X 1-1/2" ROUND NYLON WASHER	4
7	05-14-132	FLW, RGLR, B18.22.1	4
8	05-14-115	LOCK WASHER, 1/2", SSSL	4
9	800-0129	HHCS 1/2 -13 X 2", 316 SSSL	4
10	05-618-20	NUT CAP, 1/2 "	4
11	500-5000*	NEW CONSTRUCTION JIG	1
12	500-5000A*	NEW CONSTRUCTION JIG w/ANCHORS	1

\*SOLD SEPARATELY

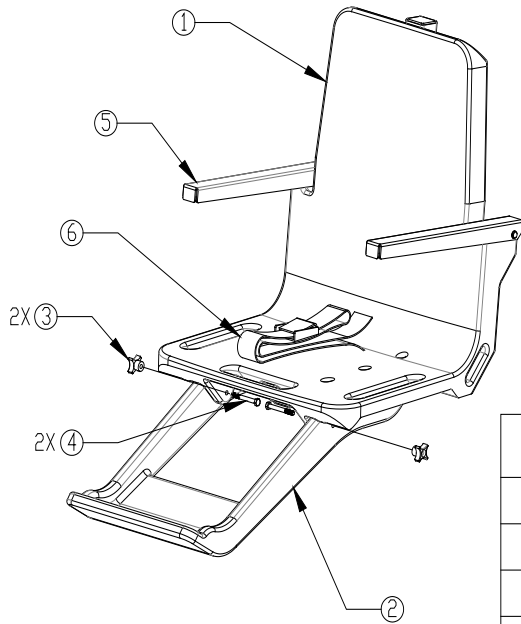






ITEM NO.	PART NUMBER	DESCRIPTION	Default / QTY.
1	14550	BASE ASSEMBLY	1
2	14770A	ACTUATOR ARM ASSY W/ BUSHINGS	1
3	14660A	ACTUATOR CAGE ASSY W/ BUSHINGS	1
4	14990	CONTOL AXLE ASSY	1
5	14880A	SEAT ARM ASSY W/ BUSHINGS	1
6	14440A	SUPPORT ARM W/ BUSHINGS	1
7	800-0119	THRST BSHG .375"ID X .75"OD X .0625"LG	1
8	800-0106	THRST BSHG .375"ID X .75"OD X .125"LG	3
9	05-32-111	3/8" NYLON PROTECTIVE WASHER	9
10	800-2024	3/8 FLAT WASHER SS	7
11	800-0111	BOLT 3/8" SHLDER DIA, 3/4" L SHLDER, 5/16"-18 THRD, S/S	2
12	800-0140	LOCK NUT, 5/16-18, HEX S/S	2
13	100-7000	600MM ACTUATOR	1
15	800-0146	WASHER, .406"ID X .75" OD X (.08-.11" THICK), S/S	2
16	800-0117	HHCS .375" x 1.625" S/S	2
17	800-2026	3_8-16 x 2 1_4 Hex Bolt	1
18	800-0112	3/8 LOCK NUT S/S	4
19	800-0103	1/4" SET SCREW	1
20	800-0116	BOLT, SHOULDER 3/8" DIA X 1" LG X 5/16-18" THRD S/S	1
21	800-0120	5/16"-18 JAM LOCK NUT S/S	1
22	800-0121	THRST BUSH .75"ID x 1.25"OD x .0625" LG	1
23	800-0142	Stud, 5/8"-11 Threaded Both Ends X 6.875 Long	1
24	800-0126	SHIM S/S .75"ID X 1.125"OD X .062LG"	1
25	800-0127	Push-on Round FDA Cap Fits 3/8" OD, 1" Inside Height	1
26	800-0128	BLK FOAM, 1.5"WD x 3.5"LG CUT	1
27	1001498	LIFT OPERATOR MOUNT PLATE	1
28	400-7001-BC	CONTROLLER ASSEMBLY, 2 BUTTON	1
29	800-2014	10-24 PAN HEAD PHILLIPS BOLT SS 18-8	4
30	1001494	SCREW, #10-24 x 3/8" PAN HD TORX	1
31	800-0143	NUT, JAM (THIN), NYLON LOCK 3/4"-10, S/S	1
32	05-631	5/8" X 1-3/4" NYLON WASHER	2
33	800-0145	WASHER, 5/8"ID X 1 1/2" OD X 1/16" THICK, S/S	2
34	800-0144	NUT, NYLON LOCK, 5/8"-11, S/S	2
35	05-14-102	5/16" FLAT WASHER S/S	2
36	1001601	HAND CONTROLLER (NOT SHOWN)	1

# APPENDIX C: ML300 SEAT (160-8000)



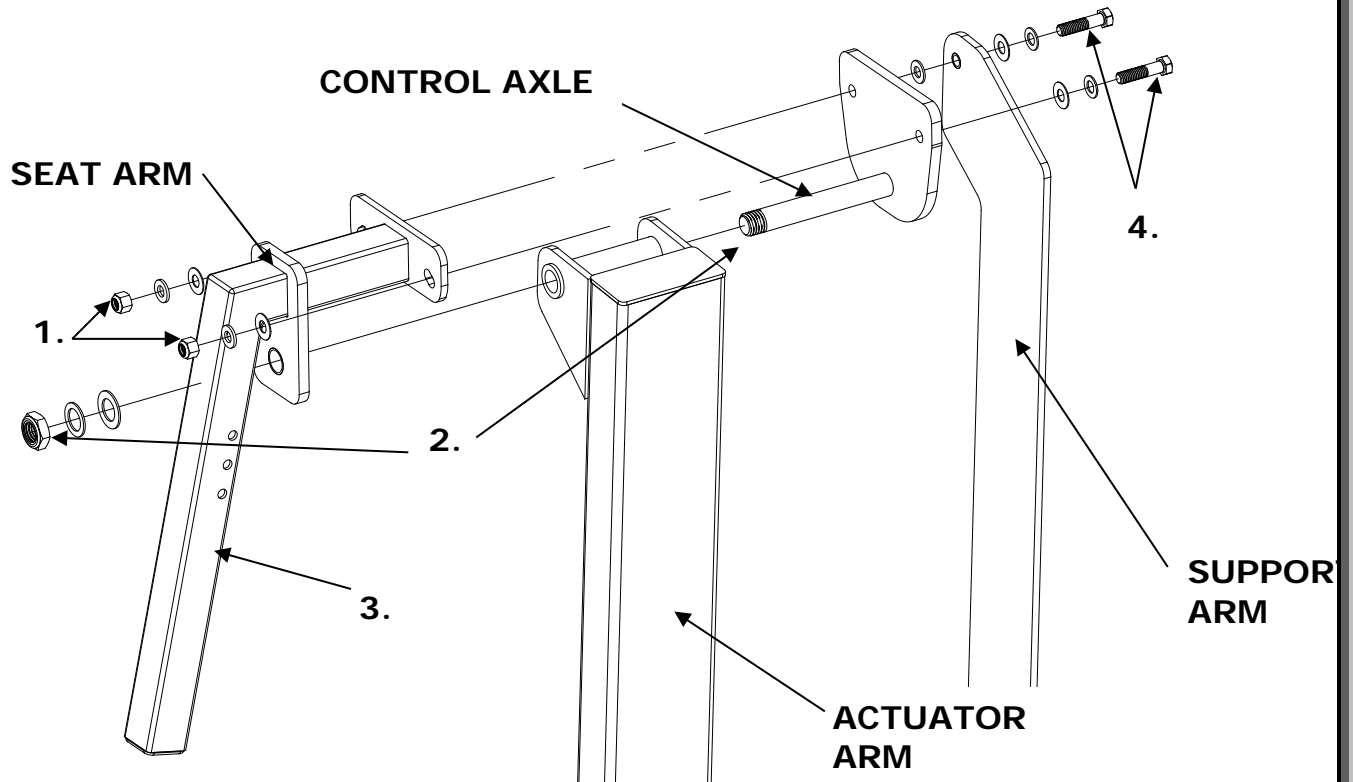
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	160-8000A	SEAT ASSEMBLY, STANDARD W/ARMS	1
2	160-2700	Footrest revision 8.2.11	1
3	800-2039	PLASTIC 4-ARM KNOB	2
4	800-2042	SCREW, HEX HD, 5/16-18 X 2.75 L, SSSL	2
5	170-3000A	ARMREST ASSEMBLY KIT	1
6	900-1000	SEAT BELT ASSEMBLY	1

## FOOT RESTS

- ATTACH THE FOOTREST USING THE THUMBSCREWS AND 2 3/4" LONG HEX BOLT
  - (800-2042 AND 800-2039)

**\*ARMRESTS (PROVIDED WITH SEAT 160-8000A)**

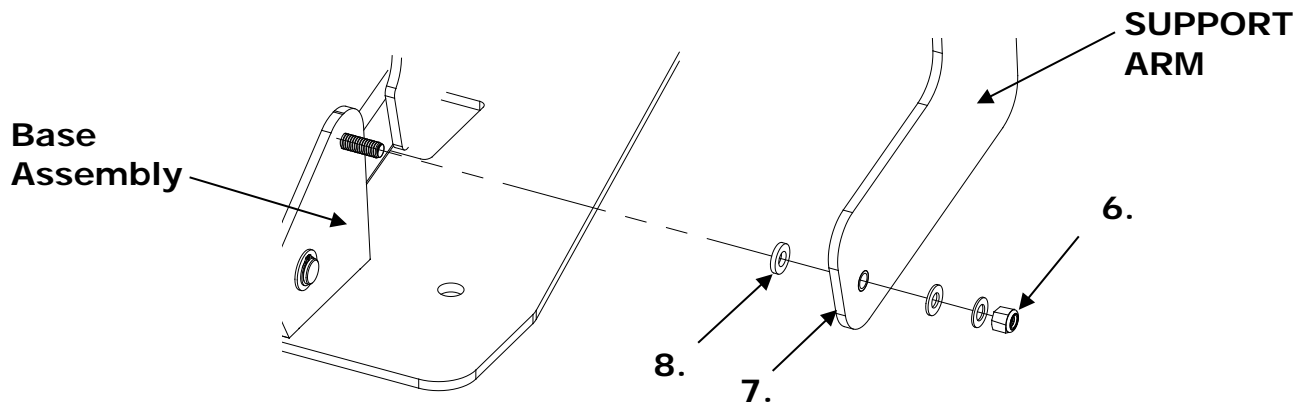
## APPENDIX D: ML300 Seat Right to Left Conversion



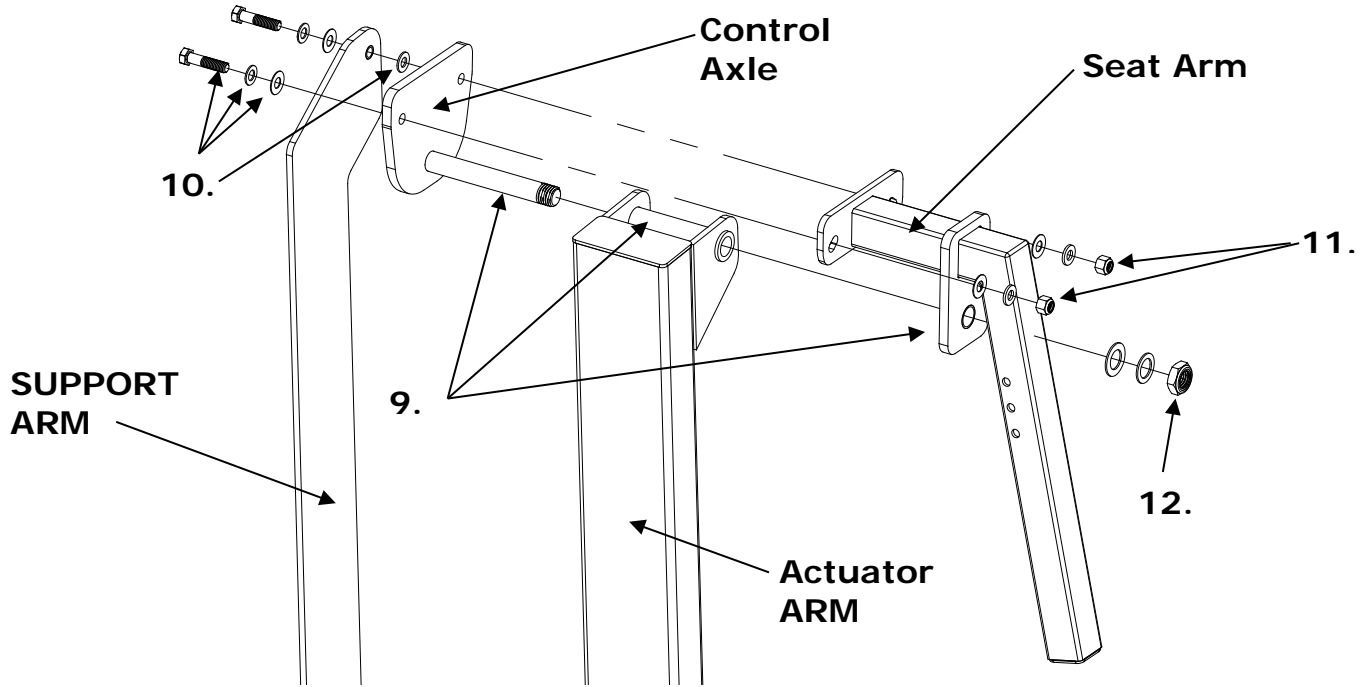
**Note:** Appendix B can be used as a reference for hardware order of assembly.

The following directions describe the process for moving the ML300 seat from the right (standard) mounting configuration to left mounting configuration.

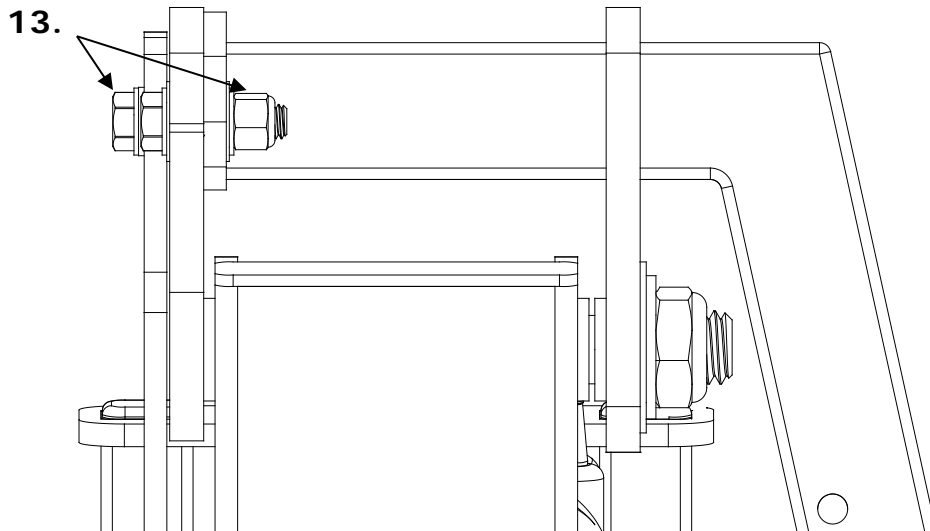
1. Remove the two lock nuts from the top pivot assembly.
2. Remove the  $\frac{3}{4}$ " lock nut from the end of the Control Axle.
3. Slide the Seat Arm off of the  $\frac{3}{4}$ " Control Axle.
4. Remove the  $\frac{3}{8}$ " hex bolts from the Support Arm and Control Axle.
5. Next, carefully rotate the Support Arm out of the way.



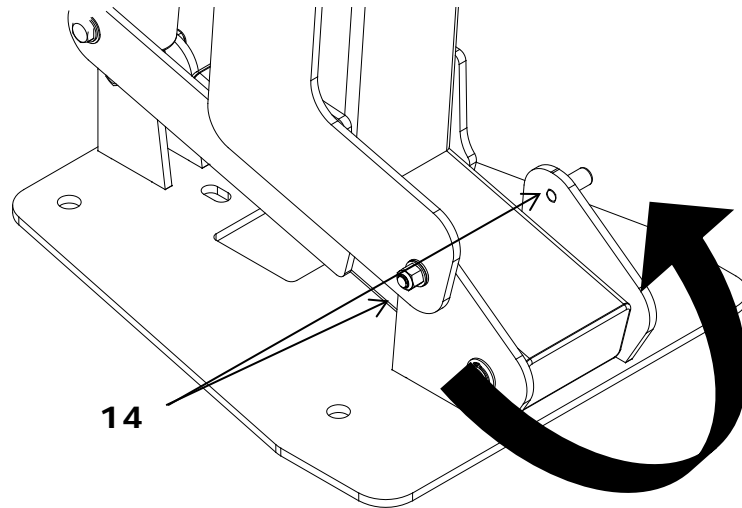
6. Remove the  $\frac{3}{8}$ " lock nut that secures the bottom of the Support Arm to the Base Assembly.
7. Slide the Support arm off the stud and set aside.
8. Remove the  $\frac{1}{8}$ " thick thrust bushing from the stud.



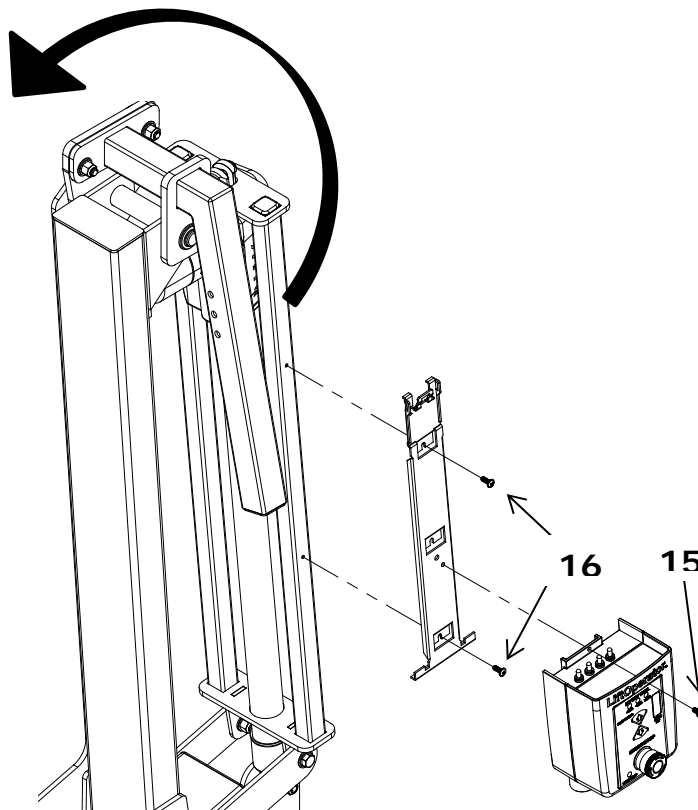
9. Insert the  $\frac{3}{4}$ " Control Axle into the Actuator Arm from the opposite side of the lift, and slide the Seat Arm back over the axle from the other side.
10. Align the holes for the  $\frac{3}{8}$ " hardware and replace the  $\frac{3}{8}$ " Hex bolts, with washer and nylon washer back through the components as pictured above. Note that the  $\frac{1}{16}$ " Bronze Thrust Bushing is to be placed between the Support Arm and Control Axle.
11. Use the  $\frac{3}{8}$ " hex nuts to secure the bolts installed in step 10.
12. Secure the control Axle using the Bronze Thrust Bushing, S/S washer, and  $\frac{3}{4}$ " Lock Nut.



13. Tighten the Hex Bolt passing through the Support Arm up until snug, then and additional  $\frac{1}{4}$ " turn. The other Hex Bolt can be tightened until the Seat Arm and Control Axle are secured tightly together.

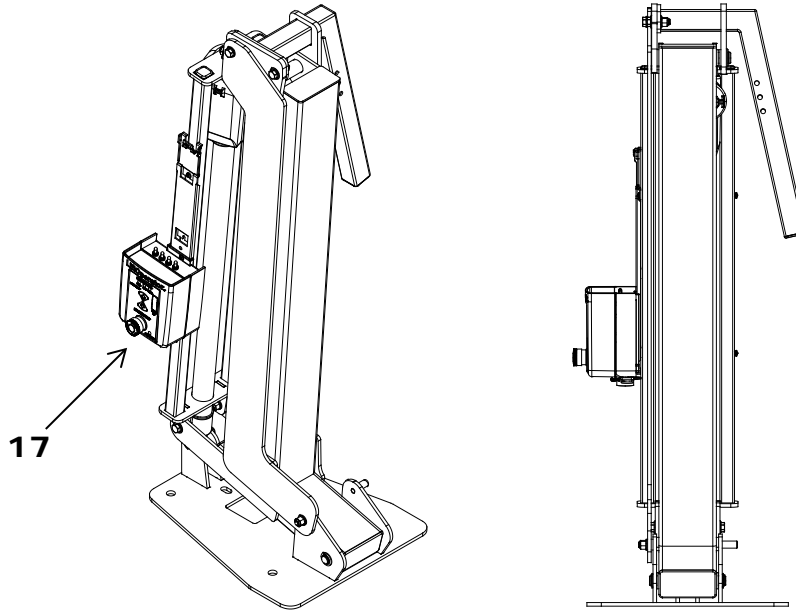


15. Remove the White Plastic Cap from the stud on the opposite side of the lift and replace it on the stud from which the Support Arm was removed. Attach the tension arm onto stud with the 1/8" Thrust Bushing placed between the base bracket and Support Arm. Secure the Support Arm using the nylon washer, stainless steel washer and lock nut.



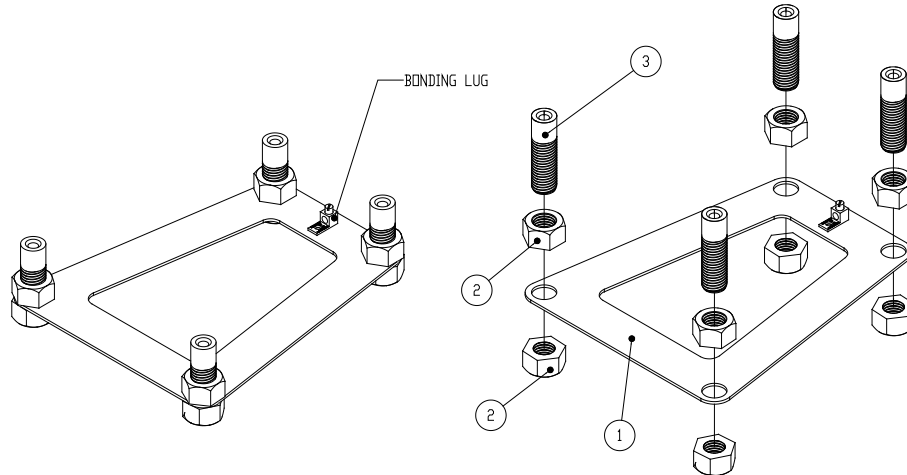
15. Switch the control box to the opposite side by removing the torx head screw and detaching the control box from the mounting bracket. This allows access to the Phillips screws holding the mounting bracket to the lift frame.

16. Remove both the Phillips screws and replace the mounting bracket to the opposite side of the frame with the Phillips screws installed on the opposite side of the frame. Replace the Phillips screws where the mounting bracket was removed.

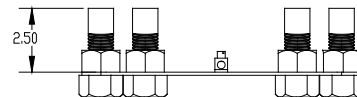


17. With the Control Box secure in place, test the unit by attaching the battery and making sure the lift functions correctly. Check all hardware and make sure it is tightened securely before using the lift.

## **APPENDIX E: New Construction Jig (500-5000A)**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	300-6701	New Construction Anchor Jig	1
2	800-0132	Hex Nut, 1"-8 Galvanized Steel	8
3	300-6700	Flush Deck Anchor	4



### **NEW CONSTRUCTION ANCHOR JIG**

WHEN ASSEMBLING THE FLUSH DECK ANCHORS TO THE NEW CONSTRUCTION JIG, MAKE SURE THAT THE DISTANCE BETWEEN THE TOP SURFACE OF THE JIG AND THE TOP OF EACH ANCHOR IS 2.5", AS SHOWN IN THE DIAGRAM ABOVE.

\* FLUSH DECK ANCHORS (300-6700) SOLD SEPARATE \*KIT NUMBER 300-6700A (QTY 4)