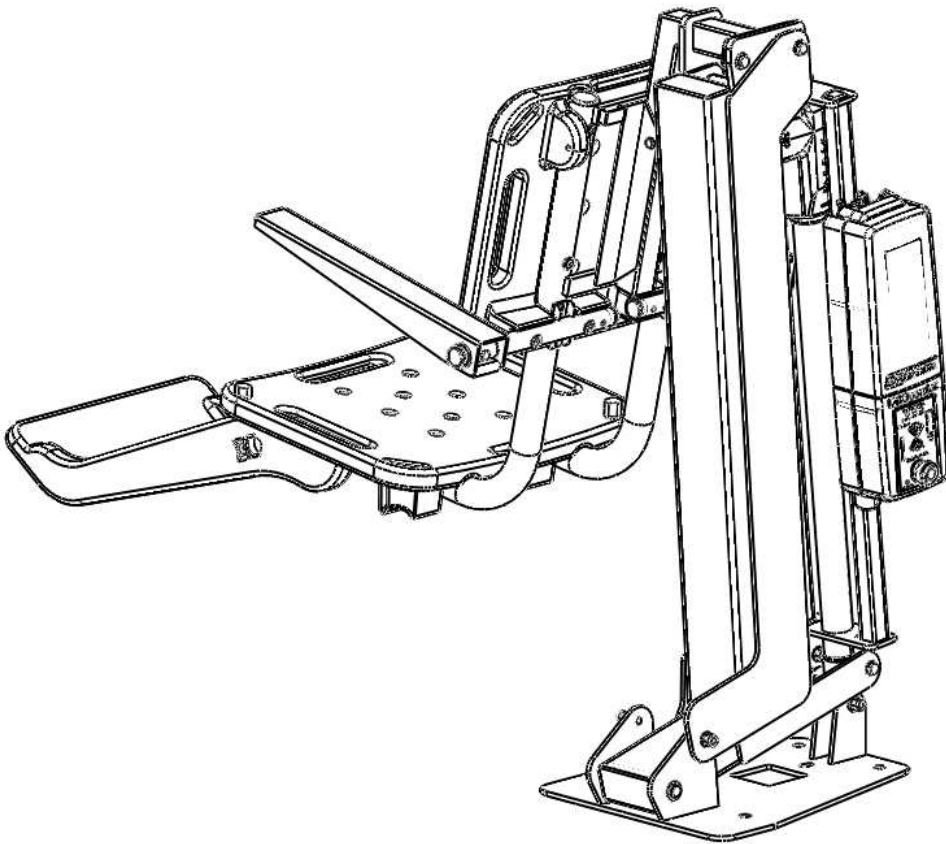


# ML300

## Owner's Manual and Maintenance Procedures



1017 SW Berg Parkway  
Canby, OR 97013  
Phone: 503.266.2231  
Toll Free: 800.824.4387  
[www.srsmith.com](http://www.srsmith.com)

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## 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 lifts

\*Deck profile form must accompany your pool lift order.

1. Preferred Lift:  PAL  Splash!  aXis  multiLift

2. Gutter Configuration:

Fully recessed gutter  Fully recessed gutter w/ perspex  Partially recessed gutter  Above ground spa

Rollout gutter  Flush gutter and deck w/ or w/o bulbnose  Standard backyard pool  Other: (please draw)

3. Deck Material (check one):  Concrete  Pavers

4. Distance from pool deck to water line (A):

**If applicable:**

5. Height of curb (B):

6. Width of curb (C):

7. Width of gutter (D):

8. Decorative stone setback:

Note: As pools may vary, please insert accurate measurements for your pool in the space provided. Manufacturer will configure the lift to match your unique poolside specifications. Order cannot be processed without the required fields entered above.

**Fax this completed form to 503.266.4334 or email to sales@srsmith.com**

Name of Distributor Lift Will Be Purchased From:  City:  State:

Your Name:  Email:  Phone:

Project Name:  PO Number:

toll free 800.824.4387  
fax 503.266.4334  
web [www.poollifts.com](http://www.poollifts.com)

SR-720-003 10/2011

# **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 correct stabilizing system (seat belt or stability vest) 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**

---

  
**S.R. Smith, LLC**  
PO Box 400  
1017 SW Berg Parkway  
Canby, Oregon 97013 USA  
Phone: 503-266-2231  
Fax: 503-266-4334  
www.srsmith.com  
Assembled in USA

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.

## ML300 AQUATIC LIFT SYSTEM

### 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

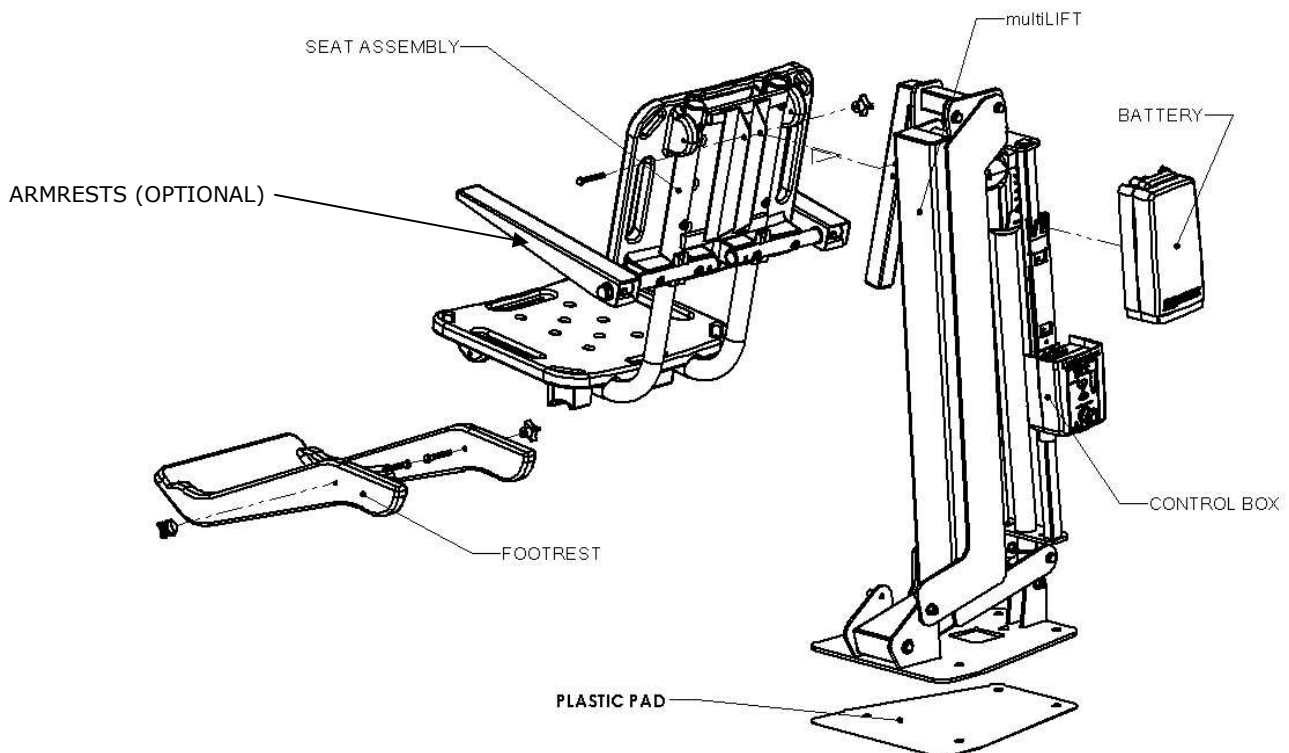


Figure 1 ML300

## 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. There are two available forms of safety devices – the seat belt which comes standard, and the optional stability vest. The seat has attachment points for both devices and both are easy to attach. Be sure to select the appropriate safety device for the intended user.

- It is recommended that people with limited or no body movement at or below the waist shall use the seat belt restraint when using the lift.
- It is recommended that people with limited or no body movement at or below the shoulders shall use the optional stability vest restraint when using the lift.

The seat belt or optional stability vest 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 or stability vest immediately with the above disinfectant solution. Do not use seatbelt or stability vest if it is damaged or becomes worn.

The optional armrests (US only - standard on EU models) are designed for support when transferring onto the seat. They can be rotated up out of the way during transfer. If the lift did not include the optional arm rests they can be purchased separately and easily installed at a later date.

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.

**LiftOperator Control Box** – LiftOperator controls all lift operations. **For more information on the control box see the LiftOperator Owner's Manual, P/N 700-0500.**

**LiftOperator Battery** - The battery is located on top of the control box and is removable. It 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. The LED indicators on the battery can be checked to determine the battery charge level.

Do not drop battery as it could cause the unit to fail. If battery case is cracked do not use and replace. Do not place battery on a conductive surface. Placing battery on a conductive surface may cause a short. Battery has contacts located on bottom of housing. 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 can be shortened. **For more information on the battery see the LiftOperator Owner's Manual, P/N 700-0500.**

**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**.



Figure 2. Hand Control

For complete parts breakdown see Appendix A and B

## 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.

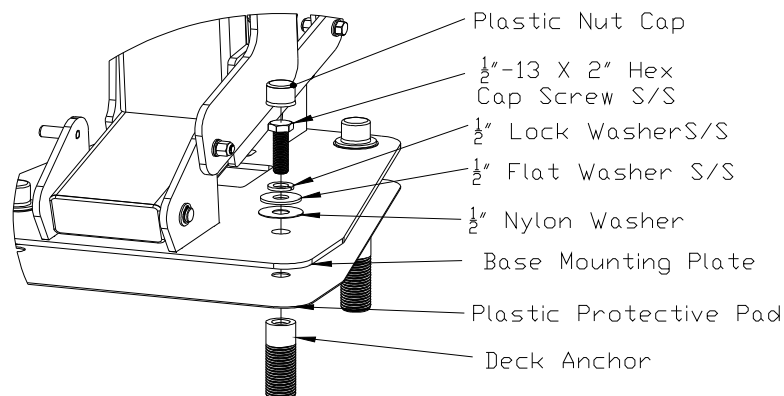


Figure 3. Mounting Hardware



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**.

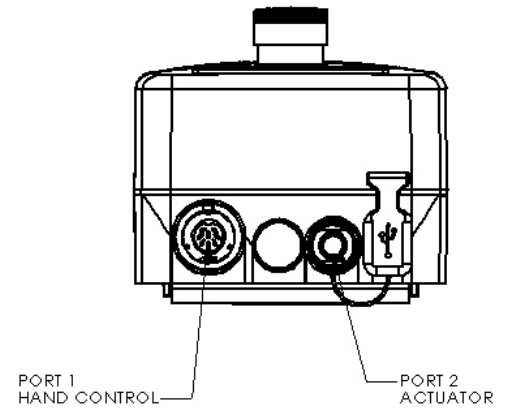


Figure 4. Control Box

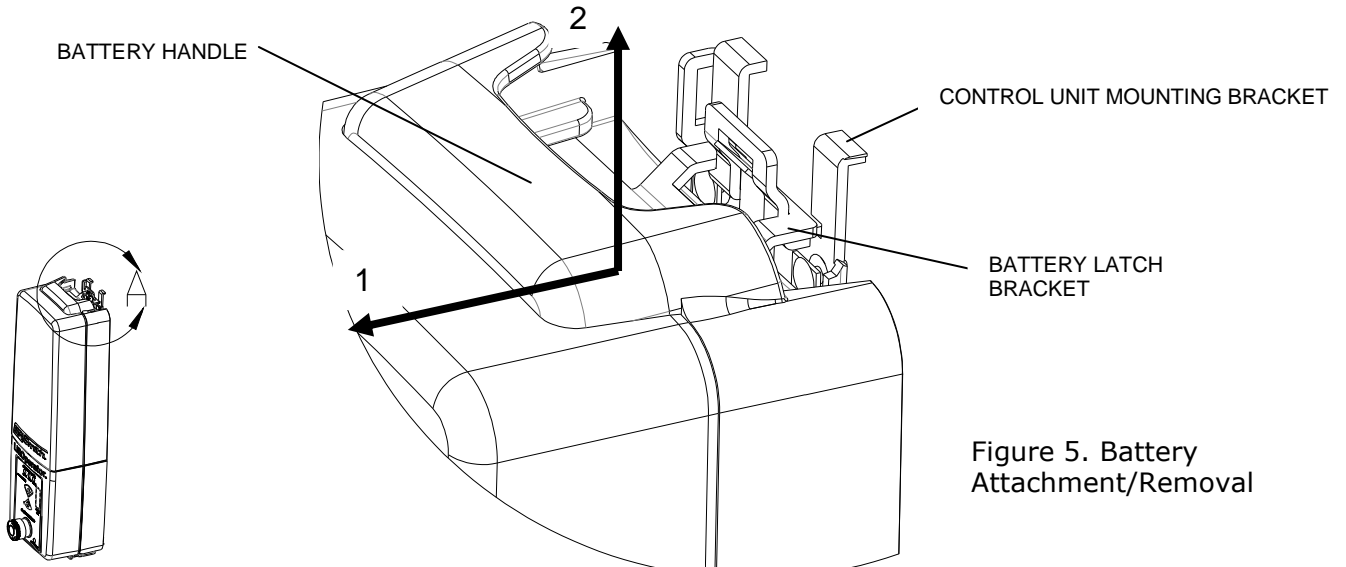


Figure 5. Battery Attachment/Removal

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**.

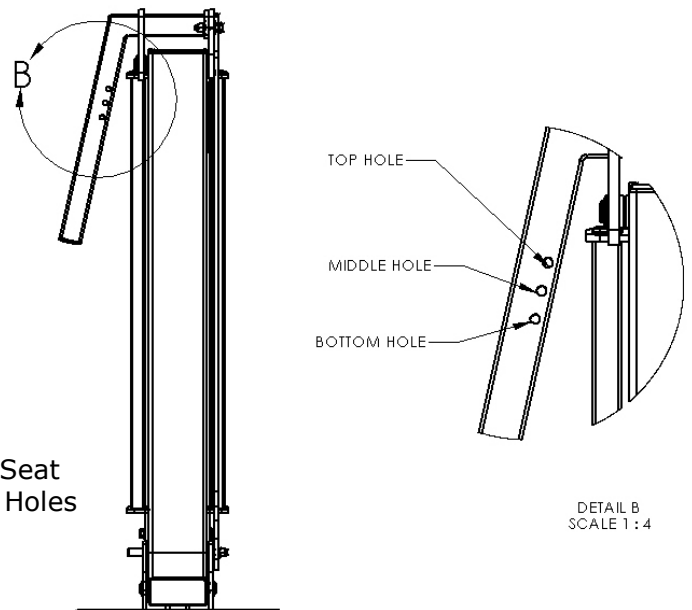


Figure 6. Seat Mounting Holes

DETAIL B  
SCALE 1:4

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

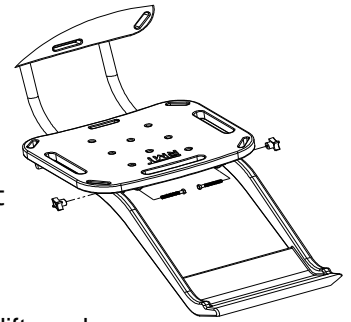


Figure 7. Footrest

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.

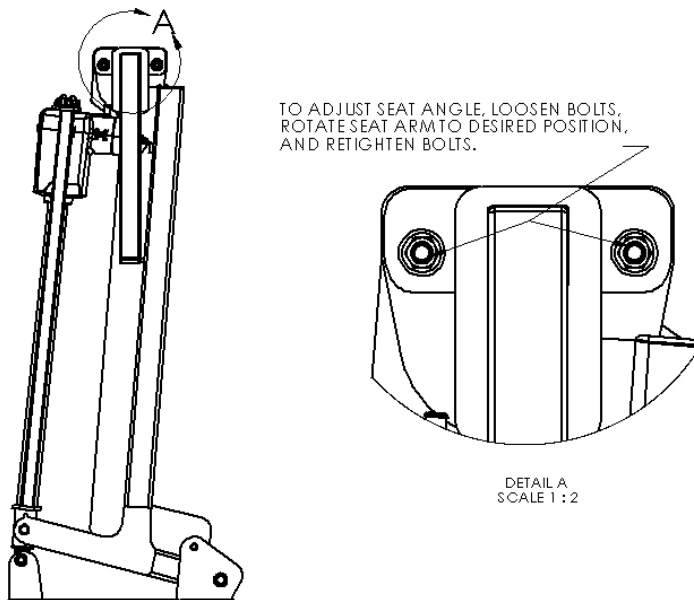


Figure 8. Seat Leveling

## USING THE ML300

Obey all User Instructions listed in the Owners 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

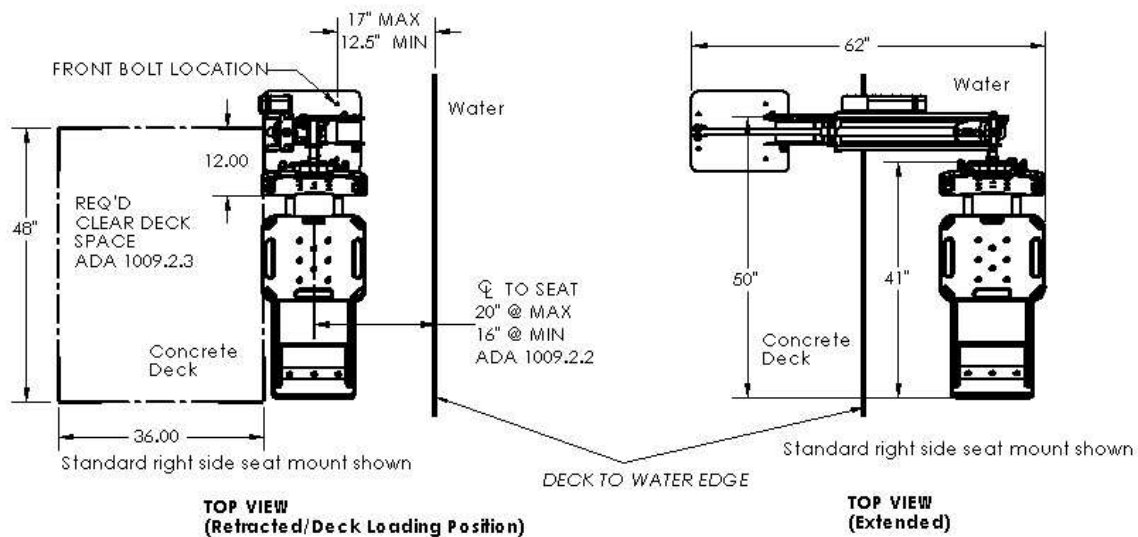


Figure 9. Transferring

### 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.
- Or fasten optional Stability Vest - Position shoulder straps onto shoulders and attach straps to clips on bottom panel of the Stability Vest - pull shoulder straps tight.
- 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.
- Or unfasten optional Stability Vest - unclip shoulder straps and transfer into water.
- When finished, return to the seat, ensuring user's weight is centered on seat.
- Fasten Seat Belt or optional Stability Vest.
- 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 or optional Stability Vest.
- 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 installation.

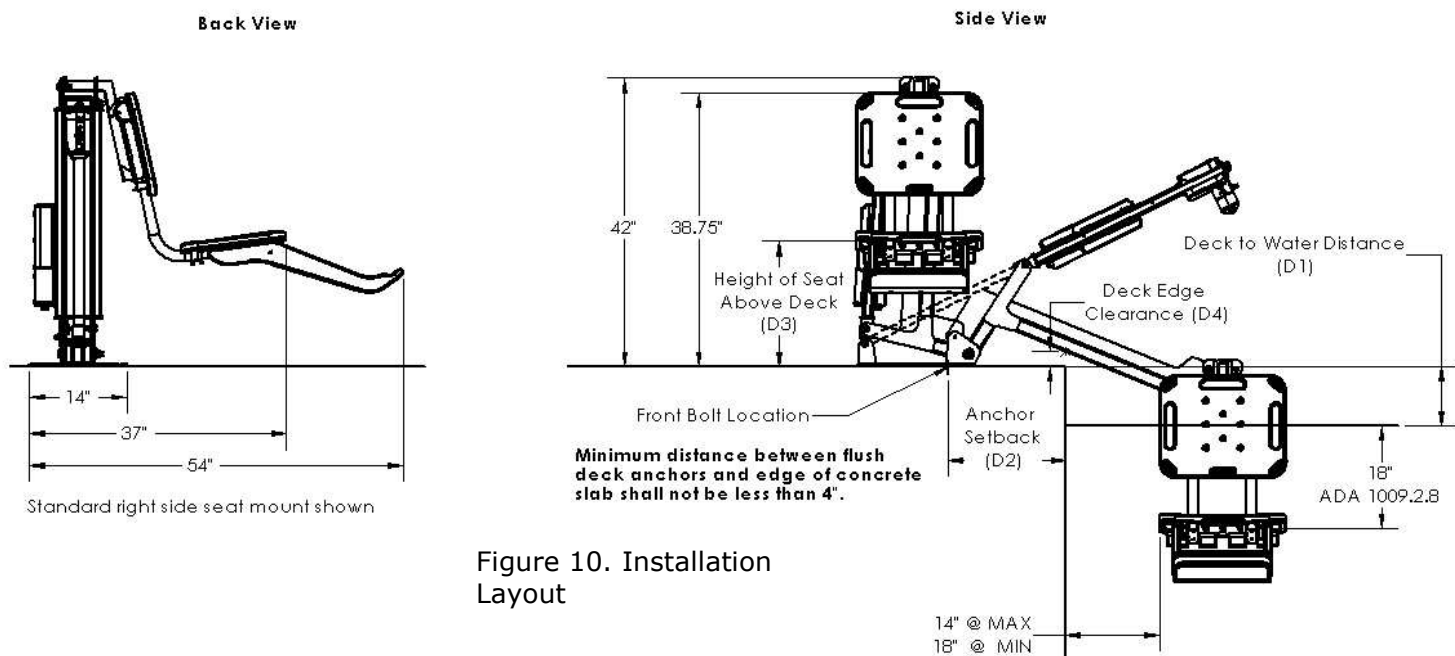


Figure 10. Installation Layout

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

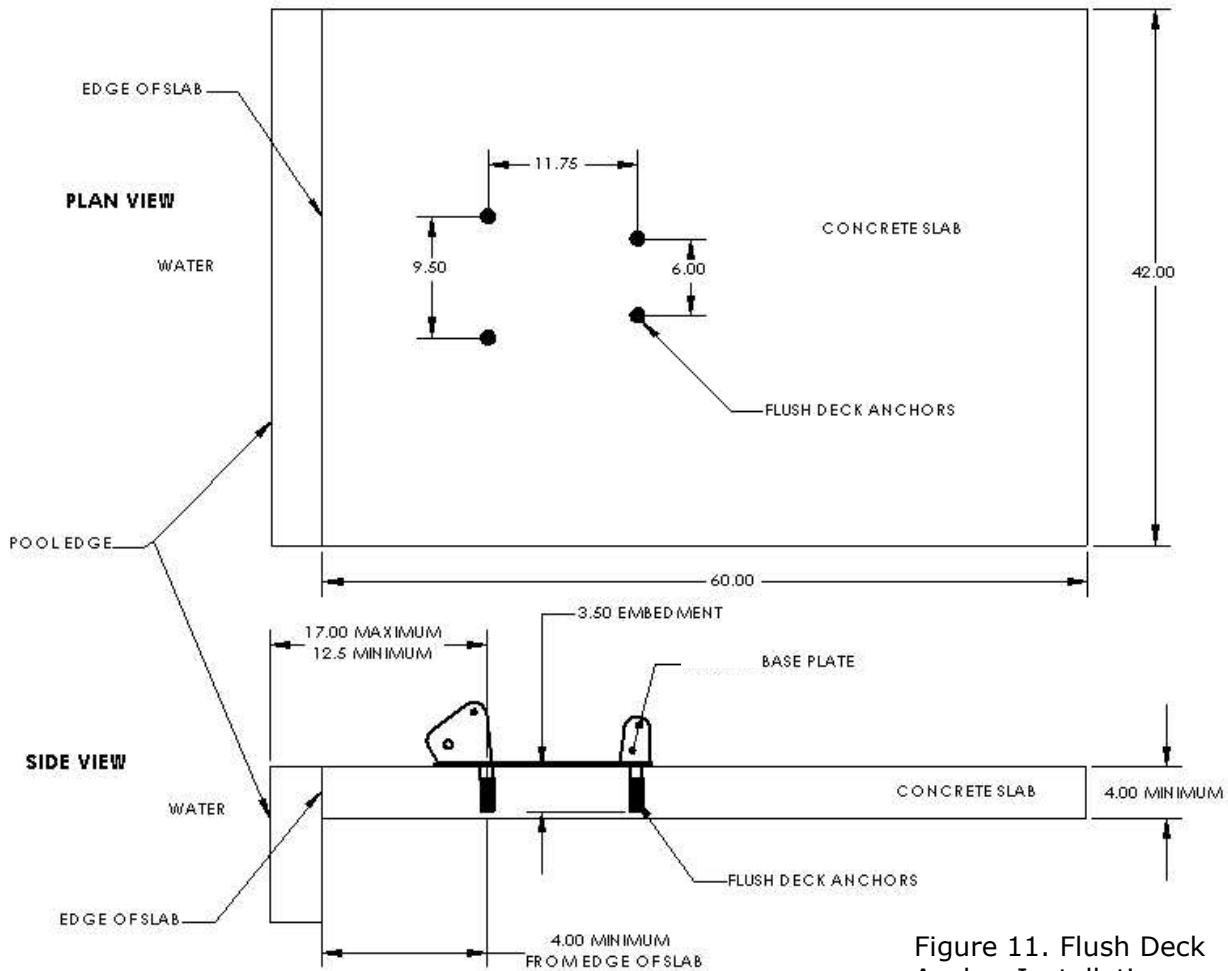


Figure 11. Flush Deck Anchor Installation Layout

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.

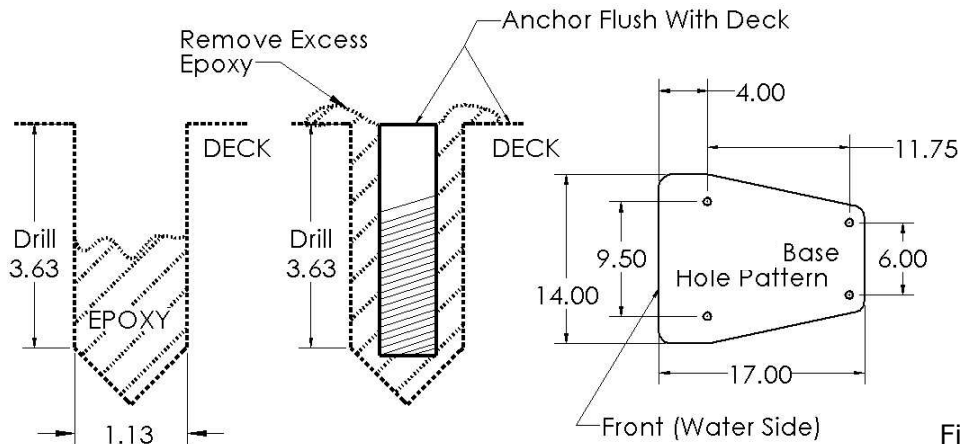


Figure 12. Deck Anchor Installation

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**.

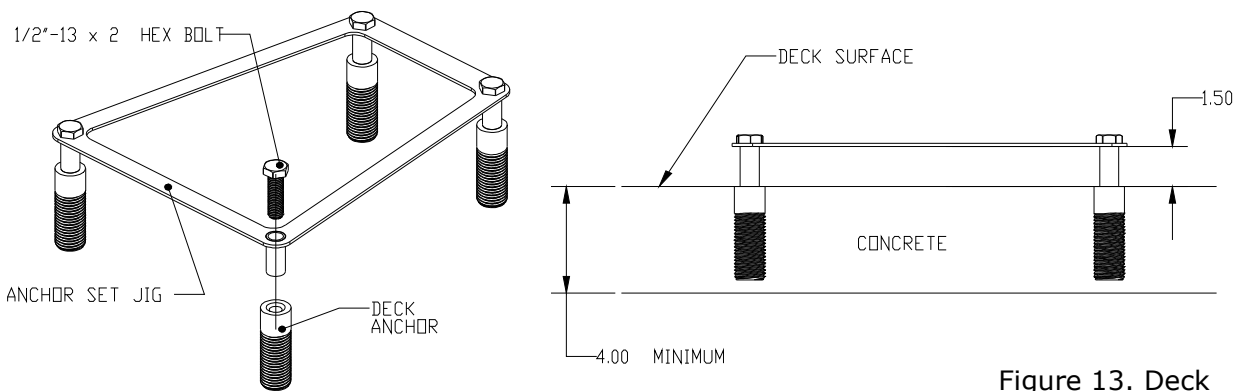


Figure 13. Deck Anchor Installation

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 1/2"-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.



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

**Stability Vest - P/N 900-2000:** Five point restraint for individuals who need higher degree of stability than provided with standard seat belt.

**Total Cover - P/N 575-5100:** Made of weather resistant nylon material to keep unit protected from elements when not in use.

**Arm Rest Assembly – P/N 170-1000:** Powder coated stainless steel arm rests for increased sense of security. Reference **Appendix C** for details.

**Seat Pad - P/N 890-1000:** Waterproof seat pad designed to enhance comfort during transfer.

**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**.

**Lift Operator Single Channel Controller with Activation Key P/N 1001545** – Activation key can be used to prevent unauthorized use of the lift. **For more information on the control unit with activation key see the Lift Operator Owner's Manual, P/N 700-0500.**



## 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, loose 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/stability vest with fresh water between each use - Cleanse seat and seatbelt/stability vest 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/stability vest 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 or stability vest in the disinfection solution for 10 min. and then rinse thoroughly with fresh water.*

## TROUBLE SHOOTING

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

S.R. Smith, LLC warrants to the original retail purchaser that products manufactured by S.R. Smith, when properly assembled and installed in accordance with S.R. Smith's assembly and installation instructions, and properly used and maintained, shall be free from defects in material and workmanship for a period of three (3) years from the date of original manufacture except for the following items: WetDek™ (1 year) and PoolSonix™ (2 years). The original retail purchaser must follow the procedure set forth below when submitting a warranty claim. S.R. Smith will repair or replace, at its option, the product, and return it to the owner freight prepaid. Determination of repair or replacement shall be solely at the discretion of S.R. Smith. Aquatic lift systems, components and batteries have a separate warranty, set forth below.

All Aquatic Lifting Systems have a three (3) year warranty on the frame, excluding the powder coated paint finish, which may become scratched with normal use. All electronic and motor components, with the exception of batteries, have a full two (2) year warranty. Within the warranty period, S.R. Smith will repair or replace any item deemed to be found defective. Lift batteries come with a one-year pro-rated warranty. During the first 90 days of ownership, batteries will be covered 100%. If a battery failure occurs between day 91 and day 365, batteries are covered at 50% of the original cost. Normal maintenance and care of the unit, including charging of the battery when not in use is recommended. Do not store the unit, battery or components near or around chemicals.

The warranty is non-transferable and is subject to the following terms and conditions ([View complete S.R. Smith Terms & Conditions](#)):

S.R. Smith shall not be responsible for the cost of removal or replacement of any defective S.R. Smith product, nor for any other expenses or for damages which might be incurred in such removal and replacement.

**This warranty specifically excludes fading of materials, microbiological staining of diving boards or pool slides and rust or corrosion of any metallic products or parts. Refer to S.R. Smith care and maintenance instructions for regular maintenance and cleaning of S.R. Smith Products. Maintenance instructions can be found at [www.srsmith.com/care.php](http://www.srsmith.com/care.php).**

This warranty relates only to defects in materials and workmanship and does not include damage or failure resulting from other causes, including, but not limited to Acts of God, misuse or abuse, accident or negligence, fire, improper assembly or installation, chipping or flaking of powder or vinyl coatings, or ice damage. Damage induced by the improper use of chemicals is not covered by this warranty. In the event that products are altered or repaired by anyone without the prior written approval of S.R. Smith, all warranties are void.

**IMPORTANT: WEIGHT LIMIT ON DIVING BOARDS, JUMP BOARDS, STANDS, SLIDES, LADDERS AND LADDER STEPS SHALL BE NOT MORE THAN 250 POUNDS. EXCEPTIONS: FRONTIER IV BOARD AND BASE NOT MORE THAN 400 POUNDS. TURBOTWISTER AND TYPHOON SLIDES NOT MORE THAN 275 POUNDS. CYCLONE SLIDE NOT MORE THAN 175 POUNDS. VORTEX SLIDES NOT MORE THAN 325 POUNDS.**

S.R. Smith shall not be liable for any consequential, special or incidental damages, including, but not limited to any damages for loss of use of pools or injury to person or property, and any claims therefore are hereby specifically disclaimed and excluded. Some states do not allow the exclusion or limitation of incidental, special or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. The warranty is extended to, and enforceable only by the original retail purchaser.

If any S.R. Smith products fail during the warranty period as a result of a defect in material or workmanship covered by this warranty, the original retail purchaser must notify S.R. Smith via [www.srsmith.com/warranty.php](http://www.srsmith.com/warranty.php). This notice from the original retail purchaser must contain all pertinent product information as outlined in the warranty claim form. S.R. Smith will determine if the product is to be returned to the factory or will ask that ( 1 ) the defective area and ( 2 ) the part of the product stamped with the serial number be removed and returned. Product pieces must be cleaned and returned freight prepaid to S.R. Smith's facility at either 1017 SW Berg Parkway, Canby, OR 97013 or 105 Challenger Drive, Portland, TN 37418 as determined by S.R. Smith.

THE WARRANTY SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, WHICH ARE HEREBY DISCLAIMED AND EXCLUDED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE.

THE SOLE AND EXCLUSIVE REMEDIES FOR BREACH OF ANY AND ALL WARRANTIES WITH RESPECT TO THE PRODUCTS SHALL BE LIMITED TO REPAIR OR REPLACEMENT AT S.R. SMITH'S DESIGNATED FACTORY OR IN PLACE AT S.R. SMITH'S OPTION. IN NO EVENT SHALL S.R. SMITH'S LIABILITY EXCEED THE ENTIRE AMOUNT PAID TO S.R. SMITH BY THE ORIGINAL PURCHASER FOR THE FAILED OR DEFECTIVE PRODUCT.

IN NO EVENT SHALL S.R. SMITH BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, PUNITIVE OR EXEMPLARY DAMAGES OR LOST PROFITS FROM ANY BREACH OF THIS LIMITED WARRANTY OR OTHERWISE.

No representative of S.R. Smith, nor any of its agents, distributors or dealers has any authority to alter in any manner the terms of this warranty and S.R. Smith is not responsible for any undertaking, representation or warranty made by any other person beyond the warranty expressly set forth in this warranty.

## Warranty Procedures

**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. **Remove the serial # sticker from the product.**
  - a) S.R. Smith provides a serial # for every board, 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.
3. **Attach the photos and the serial # sticker 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 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 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
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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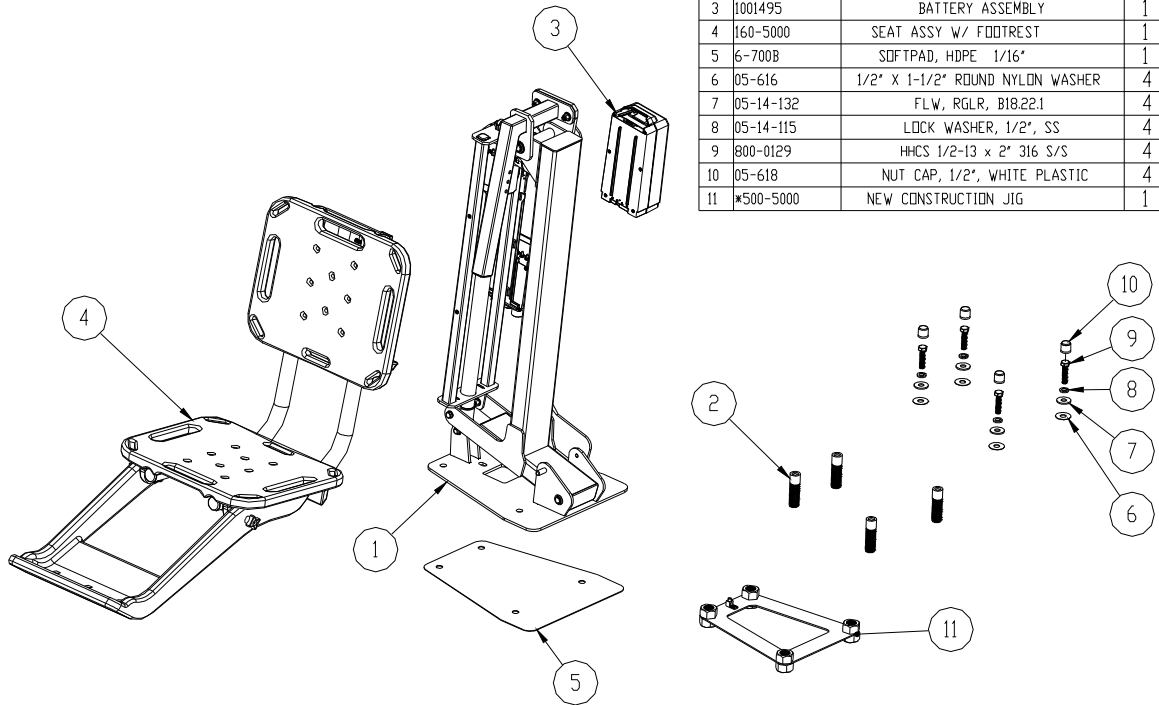
#### 5. Noise

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: Roto-Molded Plastic Frame: Powder Coated Stainless Steel
Covers	Urethane coated nylon

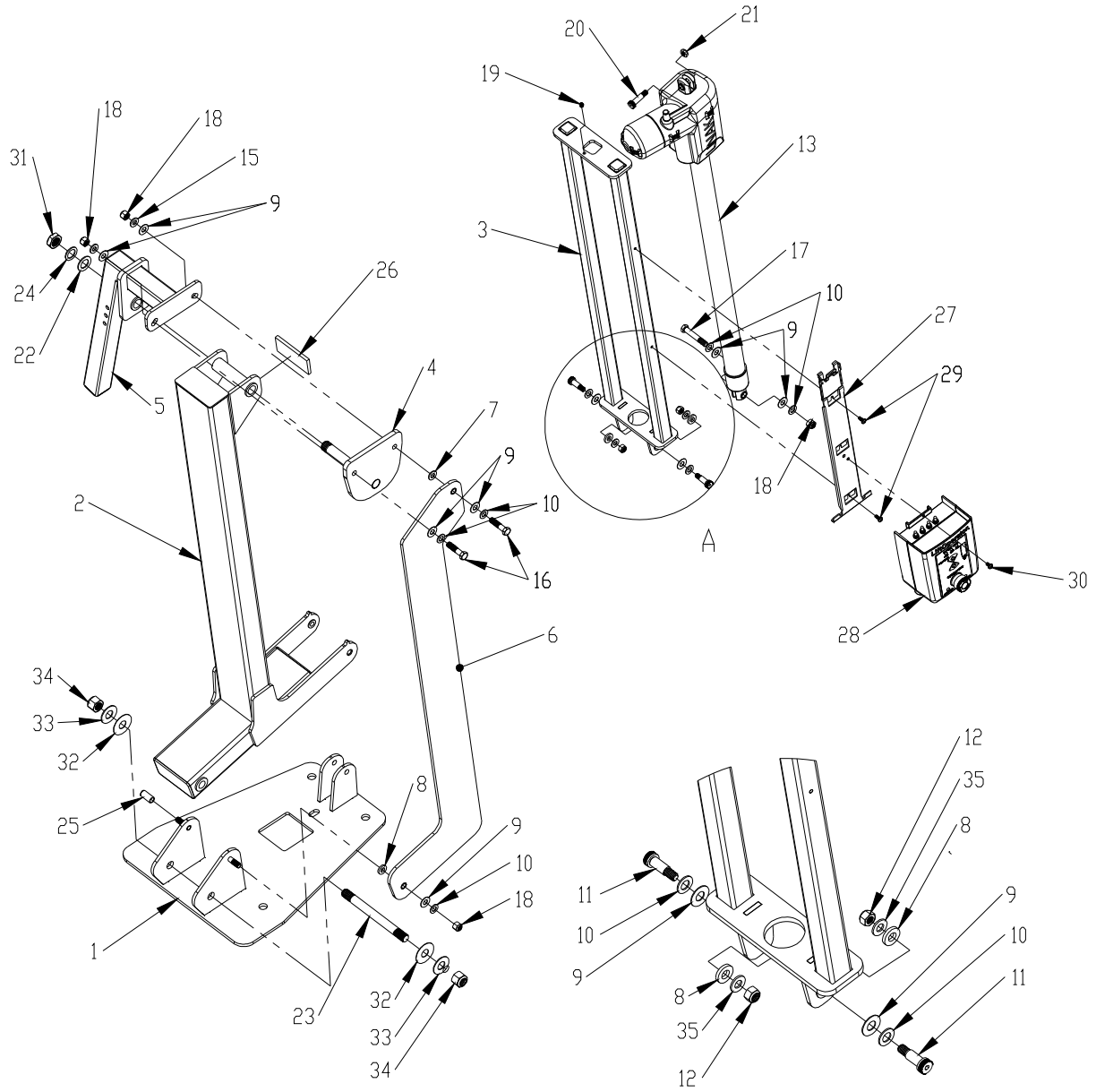
# APPENDIX A: ML300 ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	575-3000A	LIFT ASSEMBLY	1
2	300-6700A	FLUSH DECK ANCHOR KIT	1
3	1001495	BATTERY ASSEMBLY	1
4	160-5000	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", SS	4
9	800-0129	HHCS 1/2-13 x 2" 316 S/S	4
10	05-618	NUT CAP, 1/2", WHITE PLASTIC	4
11	*500-5000	NEW CONSTRUCTION JIG	1

*\*500-5000 NEW CONSTRUCTION JIG SOLD SEPARATELY*

# APPENDIX B: ML300 EXPLODED View

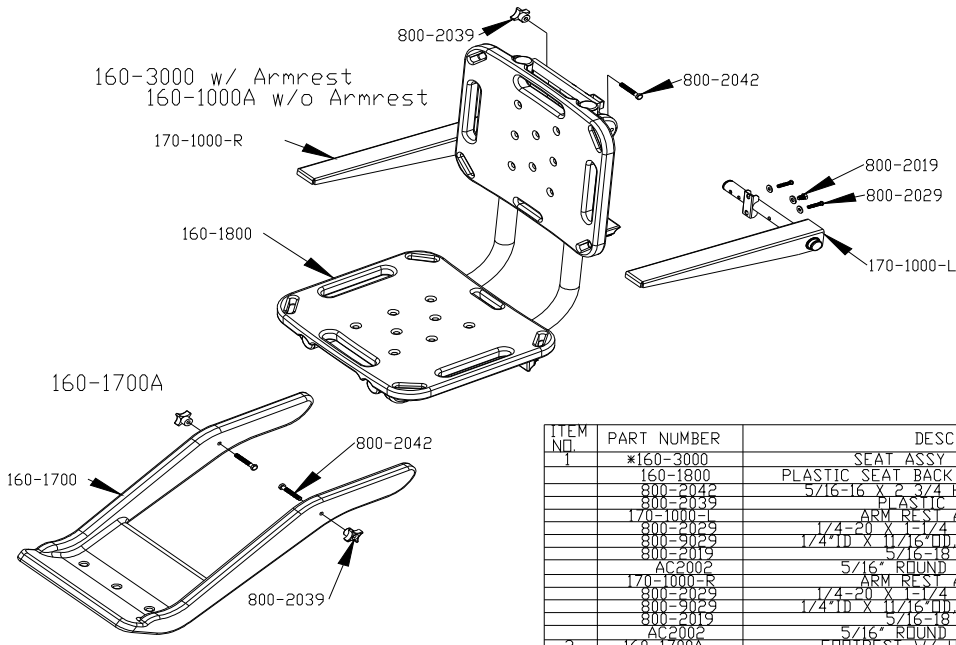


DETAIL A

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	1001499	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



# APPENDIX C: ML300 CHAIR



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	*160-3000	SEAT ASSY W/ ARMS, WHITE	1
	160-1800	PLASTIC SEAT BACK - WHITE FOR 1.5" FRAME	2
	800-2042	5/16-16 X 2 3/4 HEX CAP SCREW 316SS	1
	800-2039	PLASTIC 4-ARM KNUB	1
	170-1000-R	ARM REST ASSEMBLY LEFT	1
	800-2029	1/4"-20 X 1-1/4 PHENI PHIL M/S 316SS	2
	800-2029	1/4"ID X 1/16"OD, WHITE NYLON WSHR	2
	800-2019	5/16-18 x 1/2" HHCS	1
	AC2002	5/16" ROUND NYLON WASHER	1
	170-1000-L	ARM REST ASSEMBLY LEFT	1
	800-2029	1/4"-20 X 1-1/4 PHENI PHIL M/S 316SS	2
	800-2029	1/4"ID X 1/16"OD, WHITE NYLON WSHR	2
	800-2019	5/16-18 x 1/2" HHCS	1
	AC2002	5/16" ROUND NYLON WASHER	1
2	160-1700A	FOOTREST W/ HARDWARE	1
	160-1700	Footrest	1
	800-2039	PLASTIC 4-ARM KNUB	2
	800-2042	5/16-16 X 2 3/4 HEX CAP SCREW 316SS	2

### FOOT RESTS

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

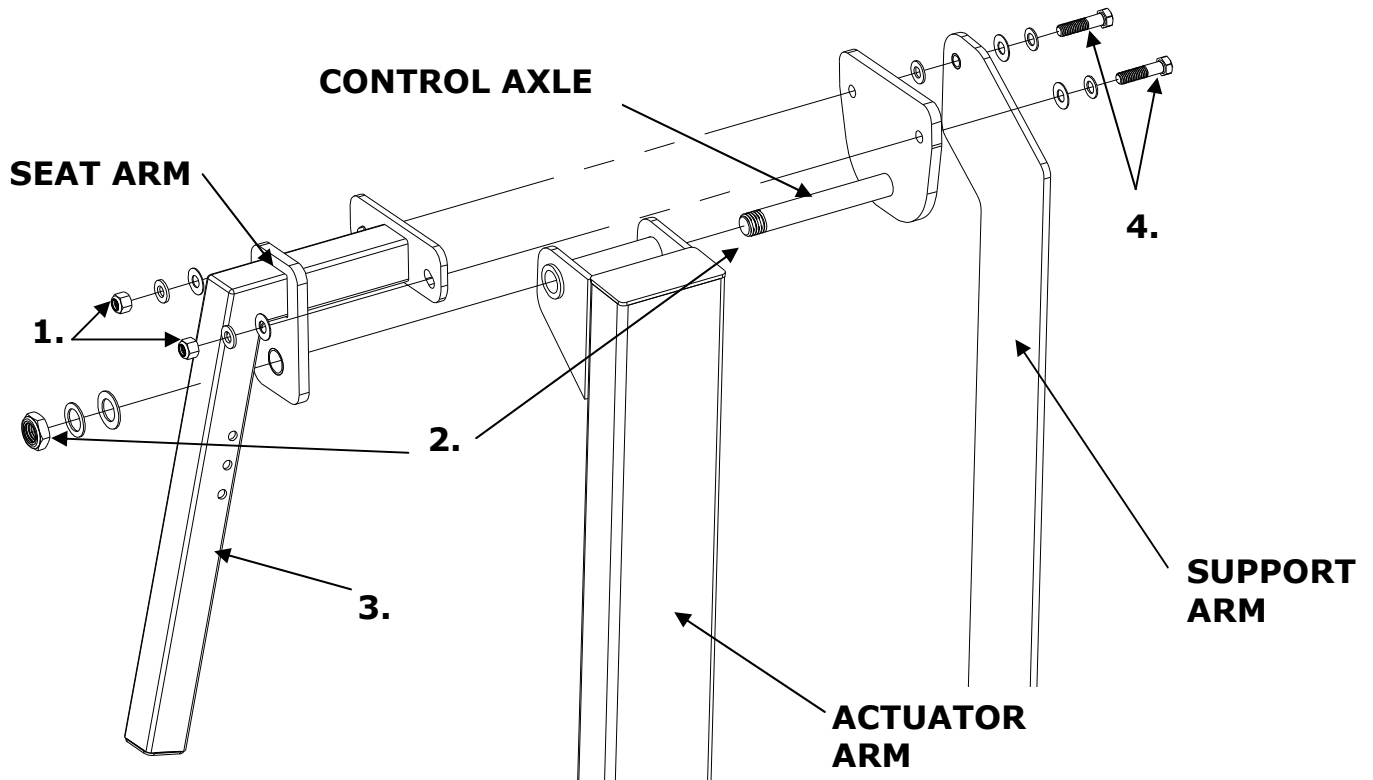
### \*ARMRESTS (HARDWARE PROVIDED WITH ARMREST CHAIR 160-5005)

- POSITION THE ARM OVER THE THREE HOLES REAR OF THE BACKREST THAT MATCH THAT OF THE SEAT ARM. INSURE THE TUBE OF THE SEAT ARM IS CRADLED IN THE PLASTIC SEAT BACK.
  - (160-1800 TO 170-1000-L or -R)
- ATTACH THE ARMRESTS USING THE 5/16" THREAD X 1/2" LONG HEX BOLT AND IT'S 5/16" NYLON WASHER TO THE 1.5" DIAMETER SEAT FRAME TUBE. DO NOT TIGHTEN COMPLETELY.
  - (800-2019 with AC2002)
- MOVE THE ARMREST AS NEEDED TO ALIGN THE 1/4"-20 THREAD X 1 1/4" PHILLIPS SCREWS THROUGH THE ARMREST TUBE AND INTO THE PLASTIC SEAT BACK'S BRASS INSERTS.
- ONCE ALL SCREWS ARE STARTED, PROCEED WITH FULLY TIGHTENING ALL OF THE SCREWS

575-3000 ML300 without ARMREST

575-3005 ML300 with ARMREST \*comes with seat 160-5005

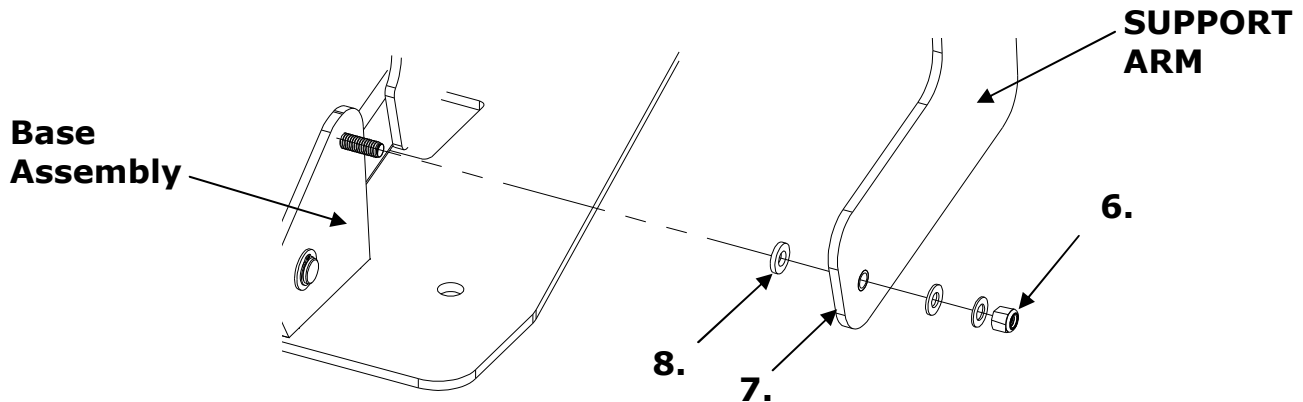
## APPENDIX D: ML300 Chair Right to Left Conversion



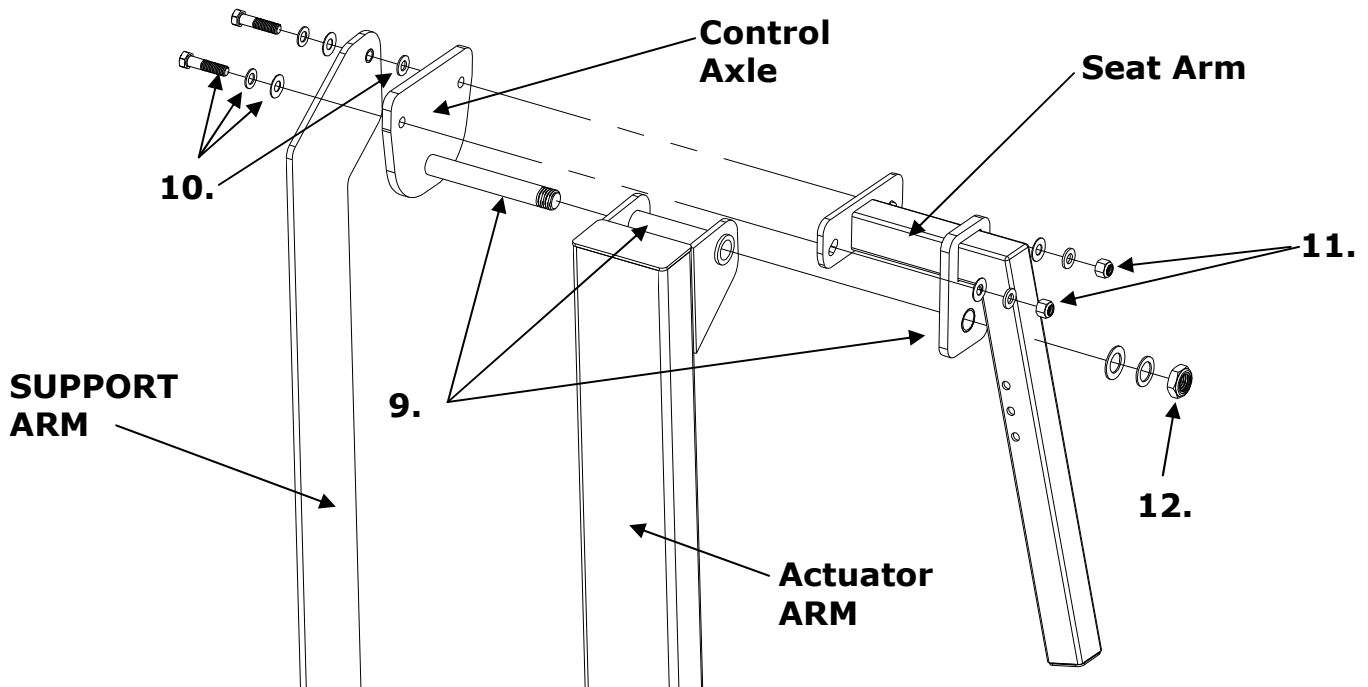
**Note:** Appendix B can be used as a reference for hardware order of assembly.

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

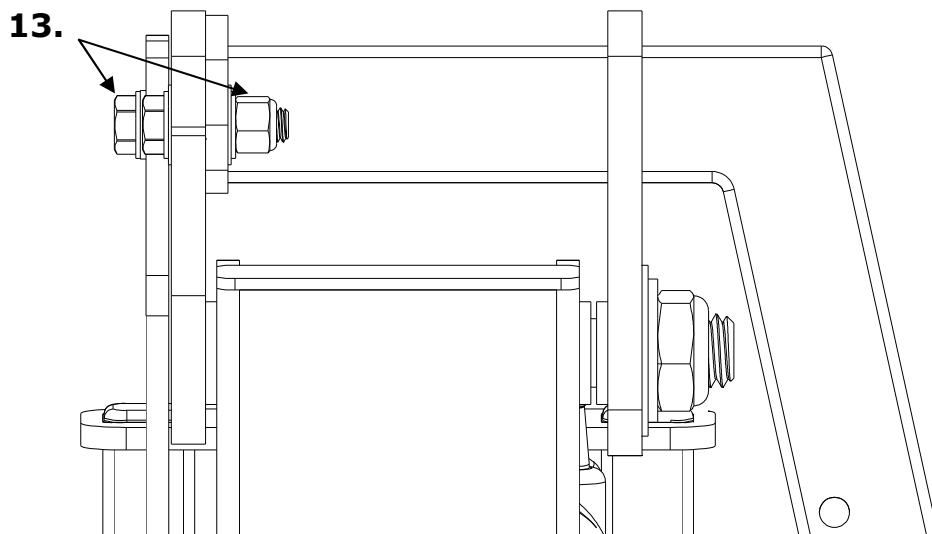
1. Remove the two lock nuts from the top pivot assembly.
2. Remove the  $\frac{3}{4}$ " lock nut from the end of the Control Axle.
3. Slide the Seat Arm off of the  $\frac{3}{4}$ " Control Axle.
4. Remove the  $\frac{3}{8}$ " hex bolts from the Support Arm and Control Axle.
5. Next, carefully rotate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



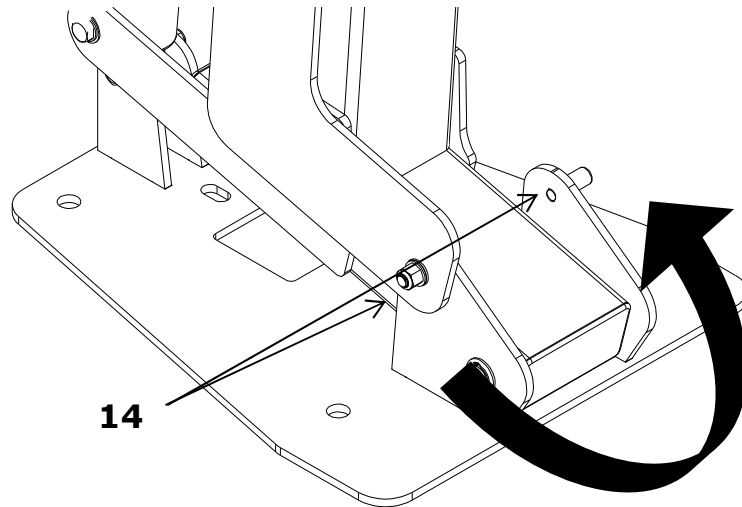
6. Remove the 3/8" lock nut that secures the bottom of the Support Arm to the Base Assembly.
7. Slide the Support arm off the stud and set aside.
8. Remove the 1/8" thick thrust bushing from the stud.



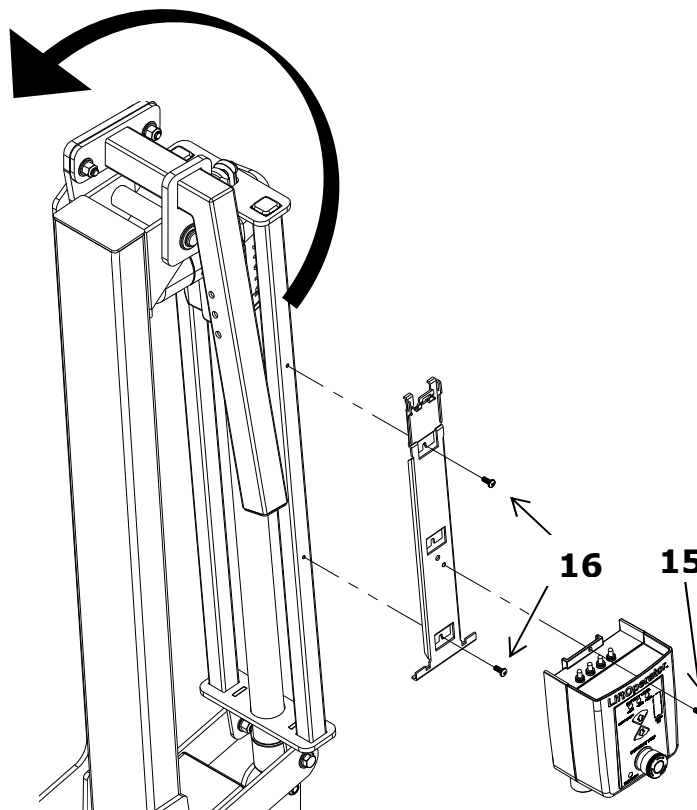
9. Insert the 3/4" Control Axle into the Actuator Arm from the opposite side of the lift, and slide the Seat Arm back over the axle from the other side.
10. Align the holes for the 3/8" hardware and replace the 3/8" Hex bolts, with washer and nylon washer back through the components as pictured above. Note that the 1/16" Bronze Thrust Bushing is to be placed between the Support Arm and Control Axle.
11. Use the 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 3/4" Lock Nut.



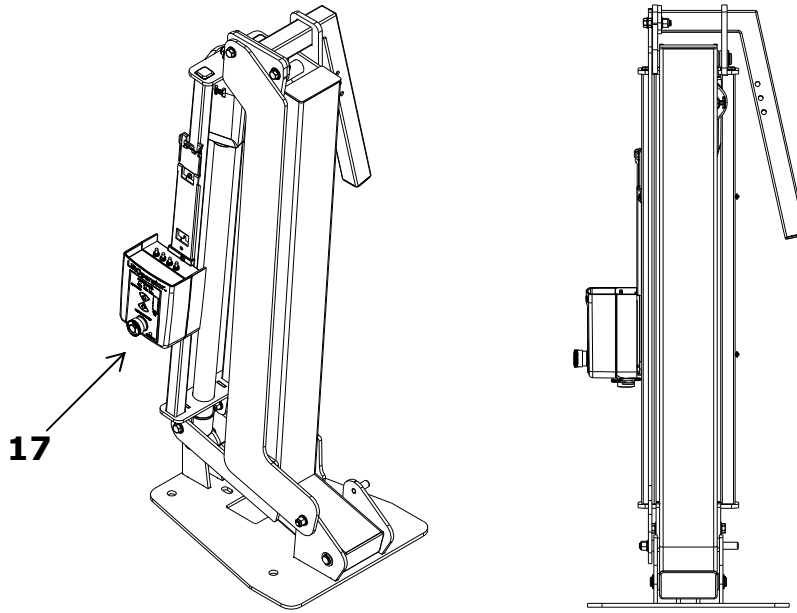
13. Tighten the Hex Bolt passing through the Support Arm up until snug, then an additional 1/4" turn. The other Hex Bolt can be tightened until the Seat Arm and Control Axle are secured tightly together.



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.

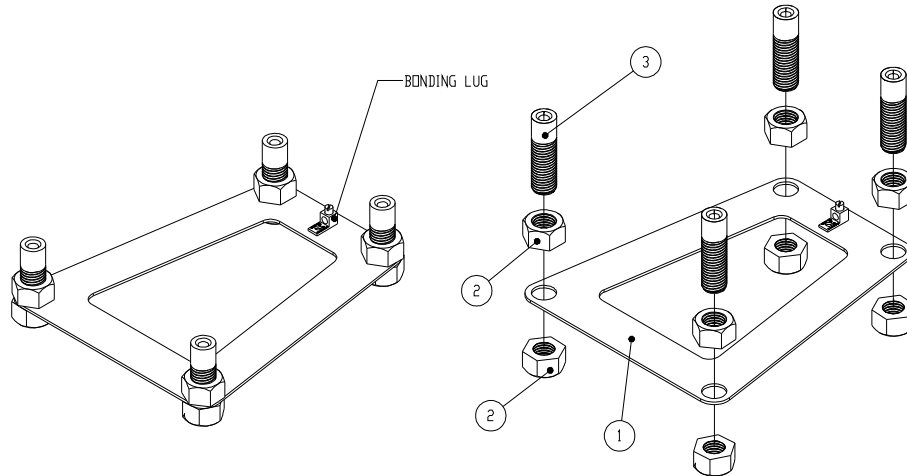


15. Switch the control box to the opposite side by removing the torx head screw and detaching the control box from the mounting bracket. This allows access to the Phillips screws holding the mounting bracket to the lift frame.
16. Remove both the Phillips screws and replace the mounting bracket to the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

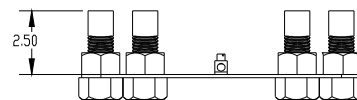


17. With the Control Box secure in place, test the unit by attaching the battery and making sure the lift functions correctly. Check all hardware and make sure it is tightened securely before using the lift.

## **APPENDIX E: New Construction Jig**



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)