RMIAQUATICS



OWNER'S MANUAL

for PAL and Splash! Aquatic Lifts

INTRODUCTION

The purpose of this document is to provide information relating to the operation, care, and maintenance of RehaMed International's line of Aquatic Lifting Products.

Our goal is to provide our customers with the most advanced and innovative designs that offer exceptional quality at affordable prices. We design and manufacture our products so that all individuals with disabilities and mobility impairments can have access to, and enjoyment from the recreation activity of their choice. All of our lifts meet the specifications set forth by the Access Board and are 100% ADA compliant. Please feel free to contact us directly if you have any questions about our current product line or have needs that we may be able to assist you in meeting in the future.

CONTACT INFORMATION



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THE PAL-PORTABLE AQUATIC LIFT



Product Overview

The PAL-Portable Aquatic Lift is designed to provide the greatest flexibility for swimming facilities seeking to provide access to more than one pool or spa, or to accommodate a user's desire to enter a single pool in multiple locations. The PAL is completely portable, is battery powered, and is operated by a screw driven actuator. This design insures consistent operation and elimination of service problems that occur with water powered pool lifts. The PAL is available in a Hi-Lo version to accommodate facilities with both in-ground pools and above-ground spas.

The PAL can be adapted to virtually any pool configuration. A poolside configuration worksheet is requested with each order prior to shipping so the lift is configured to match customer's specifications. If you have questions regarding the PAL's adaptability to pool's configurations, please contact either your vendor or RehaMed directly.

PAL PRODUCT COMPONENTS

REFER TO THE DIAGRAM ON PG.7 FOR COMPONENT IDENTIFICATION.

All PAL and Splash! Products – Standard Components in all Units

Control Box. Forms the bottom of the control console; this unit controls the mechanical operations of the lift. Three wire leads connect to the rear of the Control Box. The largest receptacle is the connection for the Hand Control. The connector next to the hand control connector, marked number 1, is the receptacle for the Actuator lead. The connector next to the actuator connector, marked number 2, is the receptacle for the 24-volt motor lead.

Battery. The removable battery is located on top of the control box. The battery should be charged daily. Do not allow battery to fully discharge, as this would shorten the life of the battery.



Battery Cover. The provided nylon battery cover should be placed over the battery when the system is in use.

Hand Control. Initiates the actions of the lift. The two top buttons control the lifting actions of the unit. The bottom pair of buttons controls the side to side movement of the lift. The right button turns the main mast to the right, and the left button turns the main mast to the left.



Mast. This vertical piece is bolted to the base assembly.

Actuator. Attached to the top of the mast, this part powers the up and down movements of the lift.

Rotation Motor Assembly. Consists of mounting plate, 24-volt motor, and small gear.

Hub Assembly. Consists of hub, bearings, shaft, large gear and mast mounting plate.

Horizontal Support Arms. These two support arms connect the mast to the chair support arm. The longer horizontal support arm (actuator arm) connects to the actuator and initiates the lifting movements.

Chair Support Arm. Connects the chair to the horizontal support arms.

Seating System. The seating system used with all RMT aquatic lifts is the product of years of feedback from our customers and information gathered from focus groups comprised of users of our lifts. Unlike most seats that are standard "life guard type" plastic shells, this is the first such system that is designed specifically for disabled swimmers.

The seat itself is both deeper and higher to both provide a more stable platform for sitting, as well as being able to better accommodate swimmers with reduced trunk stability. The seat has been flattened considerably to eliminate any ridge that would hamper transferring. The sections of the seat have attachment points for both the standard seat belt assembly as well as our optional stability vest. The standard, molded plastic footrest is removable and will float upwards to prevent damage if the user lowers the chair too low over the deck.

The optional armrests have been significantly improved and strengthened, which will allow them to be used for support when transferring onto the seat. They can be rotated out of the way during a transfer and can now be added to a seat after the fact, without the need to purchase an entire new seat assembly.

PAL / PAL Hi-Lo - Base Assembly Only

The Base Assembly is made up of several components as described below:

Casters. These are the wheels on which the PAL moves. The front wheels are rigid and the back wheels are swivel and locking casters to facilitate movement of unit.

Main Frame. This is the rectangular piece that is fixed to the casters. The main frame is made up of several components:

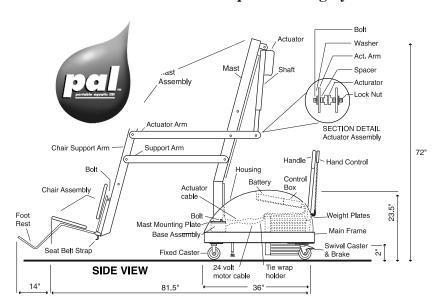
Stabilizing Arms. These arms pull out to level the unit and should always be engaged when the unit is in use.

Counter Weights. These 17 plates weigh approximately 40 pounds each and are housed in the counter weight receptacle of the main frame. The weights should be placed horizontally into the receptacle to facilitate handling.

Housing. ABS Plastic covering to cover main frame components from weather. Needs to be in place prior to installing the mast assembly.

Handle. Connects to the Main Frame through openings in the housing.

UNPACKING & ASSEMBLY INSTRUCTIONS



PAL-Portable Aquatic Lifting Systems

REFER TO THE DIAGRAM (above) FOR PARTS IDENTIFICATION.

READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE UNCRATING PAL.

Prior to opening the pallet, inspect the external condition for any visible damage. It is important that any damage be noted on the Bill of Lading. Contact RMT Aquatics or your dealer immediately to notify of missing or damaged parts.

The **PAL** is shipped on a cardboard covered pallet. This pallet is VERY HEAVY. You will need to gather the following tools to begin the unpacking and assembly of your unit:

- a Phillips head screwdriver or powered drill to remove the cardboard
- a 3/4" socket wrench
- · a small flat blade screwdriver
- a knife or cutters to cut the shrink-wrap and bands.

Unpacking Procedure for the PAL

- 1. Cut open the enclosure bag at the base of the unit and gently remove plastic from unit.
- 2. Cut internal bands and remove chair assembly and housing.
- 3. Remove the accessory box and counterweight plate from the plate enclosure.
- 4. Remove and unwrap the handle located under the frame.
- 5. Remove the main frame from the pallet. Position the main frame close to the pallet and lock the wheels.
- 6. Carefully transfer the 16 remaining counterweight plates from the pallet into the plate enclosure on the main frame. Each plate weighs approximately 40 pounds so be careful not to pinch fingers or drop when placing into plate enclosure. Be sure that the plates lie flat on top of each other. If any plate appears to rock, remove that plate, flip it over, and place it back into the enclosure. On frame, remove twist-tie securing 24v motor cable, position cable on top of counterweights.
- 7. Place housing on frame.
- 8. Remove 2 lock nuts and washers from mast mounting hub on base assembly.
- Position mast assembly thru housing and attach to studs located on base assembly with lock nuts and washers. Fully tighten with 3/4" socket wrench.
- 10. Remove twist-tie and uncoil actuator cable at bottom of mast.
- 11. Lift and slide the housing part way up the mast to gain access to frame area under housing.
- 12. Run actuator cable along with the 24v motor cable across the top of the weights and insert through the hole in the rear of the housing near the control box.
- 13. Insert actuator cable (with the "o" ring) into receptacle #1 on the control box.
- 14. Insert 24v motor cable into receptacle #2 on control box. Make sure both plugs are pushed in all the way.
- 15. Return housing to normal position and insert handle into slots.
- 16. Remove and unwrap hand control from accessory carton. Insert connector into large receptacle on control unit and hang hand control on handle.
- 17. Attach battery to control unit mounted on housing.
- 18. Cover battery with furnished nylon material battery cover to protect battery from moisture.

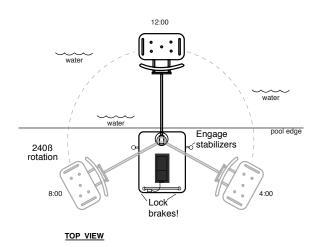
- 19. Lock wheels to prevent movement.
- 20. Check up and down controls for proper operation.
- 21. Check the side to side controls for proper operation.
- 22. Attach chair assembly with lock pin into the appropriate hole. To facilitate storage, chair can be attached facing inward, which will require less space.
- 23. Attach foot rest to seat using pins.

Please call RMT Aquatics at 800-577-4424 if you have any problems or questions with assembly.

Positioning For PAL Only

Four things to REMEMBER when positioning PAL for use.

- The PAL is Heavy. It is easy to roll, but DO NOT roll too fast or it may be hard to stop.
- Position the PAL in an area that allows plenty of room for transferring to and from a wheelchair.
- Make sure that both of the stabilizing arms are deployed.
- Make sure to engage the locks on the back of the wheels.



PAL Positioning Diagram

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THE **SPLASH!** -SEMI-PORTABLE AQUATIC LIFT SYSTEMS



Product Overview

The Splash!-aquatic lifting system is a semi-portable lift system designed for swimming facilities seeking to provide universal access to their pools. The Splash! is battery powered and is operated by a screw driven actuator. This design insures consistent operation and elimination of service problems that occur with water powered pool lifts. The Splash! is available in a Hi-Lo version to accommodate facilities with both in-ground pools and aboveground spas; and a Heavy Duty (HD) model to accommodate up to 375 lbs. The Splash! Mariner provides access to watercraft and can be mounted to a floating boat dock. The Splash! Mariner utilizes a sling seat to place the user onto a boat seat, eliminating the need for transfers. To facilitate moving unit, an optional caddie can be purchased. The Caddie is designed to lift unit out from anchor socket and roll to storage or another location if desired. Caddie also serves as a convenient storage rack for the lift when not in use.

SPLASH! PRODUCT COMPONENTS

SEE PAGE 4 FOR COMPONENTS COMON TO ALL LIFTS

Splash! / Splash! Hi-Lo / Splash! HD / Splash! Mariner Base Assembly Only

Base Assembly. The part of the Splash! that mounts to the pool deck or boat dock. The Base Assembly is made up of several components as described below:

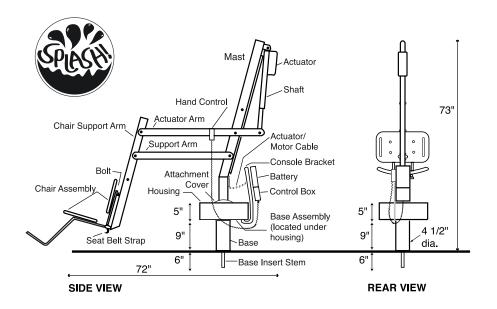
Base Insert Stem. This piece slides into the anchor sleeve that is installed on the pool deck or dock. The insert can either be round or square to adapt to the designated sleeve.

Control Console Bracket. This tubular component bolts to the base assembly and provides a mounting base for the control console.

Housing. ABS plastic covering to cover base assembly components from weather. Needs to be in place prior to installing the mast assembly.

Attachment Cover. Slides down over housing to cover hardware (bolts and washers).

Splash! - Semi-Permanent Aquatic Lifting Systems



REFER TO THE DIAGRAM (above) FOR PARTS IDENTIFICATION.

READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE UNCRATING SPLASH!.

Prior to opening the pallet, inspect the external condition for any visible damage. Note specific damage identified on Bill of Lading. Contact RMT Aquatics or dealer your immediately to notify of missing or damaged parts.

The **SPLASH!** is shipped on a cardboard covered pallet. You will need to gather the following tools to begin the unpacking and assembly of your unit:

- a Phillips head screwdriver or powered drill to remove the cardboard
- a 3/4" socket wrench.
- a small flat blade screwdriver,
- a knife or cutters to cut the shrink-wrap and bands.

Unpacking Procedure for the Splash!

For easiest assembly, move pallet to an area near the deck anchor where the Splash! will be used.

- 1. Cut open the enclosure bag at the base of the unit and gently remove plastic from unit.
- 2. Carefully cut black bands around components
- 3. Remove the housing cover, accessory box, and chair assembly. Remove plastic wrap from housing cover.
- 4. Remove the base assembly from the pallet and insert into mounting sleeve/anchor on pool deck.
- 5. Remove 2 lock nuts and washers from the mounting hub on the base assembly. Place housing cover over base unit. Line up holes in cover with holes on base assembly.
- 6. Position mast assembly onto housing cover and attach to studs with lock nuts and washers. Fully tighten with 3/4" socket wrench. Slide attachment cover down to cover bolts.
- 7. Remove twist-tie and uncoil actuator cable at bottom of mast.
- 8. Make sure that console clears the housing and adjust if necessary.
- 9. Run actuator cable to console bracket and insert into receptacle #1 on the control box. Be sure plug is pushed in all the way.
- 10. Remove and unwrap hand control from accessory carton. Insert connector into large receptacle on control unit.
- 11. Attach battery to control unit mounted on console.
- 12. Check up and down control for proper operation.
- 13. Check side to side control for proper operation.
- 14. Attach chair assembly to chair support arm with lock pin into the appropriate hole. To facilitate storage, chair can be attached facing inward, which will require less space.
- 15. Attach foot rest to seat with attached pins.

Please call RMT Aquatics at 800-577-4424 if you have any problems or questions with assembly.

POOL DECK INSTALLATION FOR THE **SPLASH!**

The Splash! is attached to the pool deck using any standard anchor commonly used for starting blocks or backstroke flag stanchions. For our standard Splash!, we recommend a standard anchor with a 1.90 inside diameter and 6 inches of depth. For our Splash! HD or Extended Reach models, we prefer a 2 1/2" square anchor (see photos below).

The sleeve should be totally encapsulated in concrete. Make sure there are no air pockets or empty space around the sleeve. The optimal mounting distance for the anchor is 18 inches from the pool's edge. However, the design of the Splash! allows it to be used with virtually any pool gutter configuration. To insure proper installation, a pool site configuration worksheet is requested with each order prior to shipping so manufacturer can build the lift to match the customer's specifications. If unsure of proper placement of your Splash!, contact your vendor or RMT Aquatics directly.



Standard Deck Anchor



Heavy Duty Deck Anchor

Installing an Anchor in a Concrete Deck

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

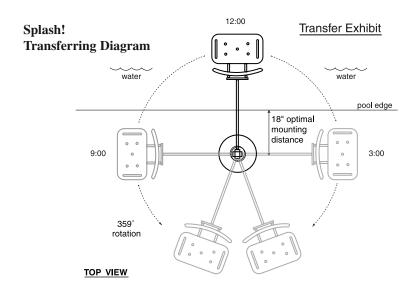
- 1. Determine the proper location to install the lift, making certain that the anchor location is within 18" from the pool edge.
- 2. Use a core drill to cut a hole into the deck. For Standard Round Anchors, be sure the hole is at least 3 1/2 inches in diameter. For Square Anchors, be sure your hole is at least 5 inches in diameter. Make sure the hole is at least 7 inches deep. This will likely be deeper than the deck is thick, but the depth is important to insure that the anchor is totally encapsulated in cement.
- 3. Clean all debris from the hole.
- 4. Place the anchor into the hole. **Important!! Be sure that the anchor is both plumb and flush with the surface of the deck.**
- 5. Mix anchoring cement, such as Rock It.
- 6. Fill cavity with anchoring cement. Be careful to keep cement out of the anchor sleeve.
- 7. Allow the cement to cure according to manufacturer's instructions.

TRANSFERRING

(For PAL and Splash! units):

Once the unit is positioned for use, use the following procedure to transfer to the seat and into the water for desired aquatic activity:

- Rotate the seat to either side of the lift that is the most comfortable
 position for transfer. The unit can be rotated to allow plenty of room for
 those who may assist with the transfer.
- Raise or lower the seat to proper transfer height.
- Transfer onto the seat, insuring that the user's weight is centered on the seat. If the user is in a wheelchair, keep the wheelchair close by for easy retrieval.
- · Attach seat belt or stability vest, if needed.
- Raise the seat so there is ample legroom for travel.
- Rotate seat to the 12:00 position, over the water.
- Lower the seat into the pool. The hand control is submersible, so leave it connected to the seat while swimming.
- When finished in the pool, return to the seat, insuring that the user's weight is centered on the seat.
- · Re-Attach seat belt or stability vest, if needed.
- Raise the seat high enough so there is ample legroom for travel.
- Rotate the seat to the original transfer position.
- Raise or lower the seat to proper transfer height.
- · Remove seat belt or vest.
- · Transfer off of the seat.



MAINTENANCE

Minimal maintenance will prolong the life of your lift. All electronic components should be kept clean and dry. The control box and battery should be protected from exposure to water. A small waterproof cover is provided with each lift to cover the control box when in use. This cover must be used to protect electronic components from sudden rainstorms or dousing with pool water. If the lift is used outdoors, an optional full cover is available and should be considered.

The following schedule should be performed to insure proper operation:

Maintenance Performed	Daily	Weekly	Monthly
Rinse seat with fresh water and dry entire lift	1		
Charge the battery	/		
Wipe control box and battery connection with a clean, dry rag	1		
Examine the lift for any damage	/		
Test for normal operation	/		
Spray gear assembly with LPS3 Heavy-Duty Inhibitor™ or other anti-corrosion product		1	
Clean all connection areas with Scotch Brite™ pad			1
Clean all metal surfaces with a cleaner wax to maintain the finish of the lift			1
Make sure that all nuts and bolts on the unit are secure			1

LONG-TERM STORAGE

The following should be performed when storing the lift for an extended period of time:

- Rinse seat with fresh water and dry entire lift
- Spray gear assembly with LPS3 Heavy-Duty Inhibitor or other anti-corrosion product
- Keep the battery on the charger in a dry area
- Cover unit and store in a dry location

TROUBLE SHOOTING

Be sure the battery is fully charged before troubleshooting.

Unit does not rotate

Does unit raise or lower?

Yes.

- 1. Check connection to Control Box. Be sure plug is pushed in all the way.
- 2. Check hand control connection to Control Unit for damaged pins.
- 3. Check connections on terminal block located on frame for loose wires.
- 4. Check connection cable for damage.
- 5. Reverse the motor cables as follows: Locate the area on the control box where the cables are attached. Remove the actuator cable from receptacle #1 and replace it with the 24v motor cable from receptacle #2. Activate the up and down buttons on the hand control. If the unit rotates, the problem is likely the hand control. If the unit does not rotate, the problem is likely the 24v motor.

No.

- 1. Check battery charge level.
- 2. Check battery connection.
- 3. Use another fully charged battery. If unit continues to not function, replace the control unit.

Unit does not Raise or Lower

Does unit rotate?

Yes.

- 1. Check connection to Control Box. Be sure plug is pushed in all the way.
- 2. Check hand control connection to Control Unit for damaged pins.
- 3. Check connection cable for damage.
- 4. Locate Emergency Buttons on top of Control Unit. Activate these buttons using a ball point pen. If unit operates properly, the problem is likely the hand control. If unit does not operate properly, the problem is likely the actuator.

No.

- 1. Check battery charge level.
- 2. Check battery connection.
- 3. Use another fully charged battery. If unit continues to not function, replace the control unit.

If these steps have not corrected your problem, call us at 800-577-4424.

SPECIFICATIONS

Splash!/Hi-Lo/

HD /Mariner PAL/PAL-Hi-Lo

1. Dimensions/Capacity

Overall Height 73 inches 73 inches

Base Dimensions 18 inches Dia. Hgt. 23.5, 1gth.37.25,

width 29.25 inches

Total Weight 140 lbs. HD-160 lbs. 845 pounds

Overall Length (footprint) 70-76" (fully extended) 85-91" (fully extended)

53" in stored position, 66" in stored position

Power 24v DC 24v DC

Battery Life 30 cycles (approx.) 30 cycles (approx.)

Lifting Capacity 300 lbs. HD-375 lbs. 300 pounds

2. Actuator

Lifting: Linak LA32Mechanical Actuator

Max. Thrust: 1680 lb. Voltage: 24 VDC

Max. Amp: 9

Max. Speed: 0.59 inch/sec.

3. Motor

Rotation: ITT SWMK 403.033

24 VDC 13 RMP

Gearing Ratio: 9:1

4. Battery

Power: Linak Battery Pack BAJ1

24 VDC, IP65 Gel Lead Acid

5. Range of Motion:

All Units

Lifting: Variable to configure to each pool.

44"- 58" total travel from highest to lowest point w/ standard

actuator.

Seat Depth: 18-20" below water line. Rotation: **Splash!** 359°, **PAL** 240°

6. Materials and Finish

PAL Only

Frame: Powder Coated Stainless Steel Handle: Powder Coated Aluminum Housing: Vacuum Formed ABS Plastic

Casters: Front Tente 8477 Precision Ball Bearing, Stainless Steel, 5"

total lock swivel

Rear: Tente 5328 Precision Ball Bearing, Stainless Steel, 5" fixed

Polyurethane Tread

Splash! Only

Base: Powder Coated Stainless Steel Housing: Vacuum Formed ABS Plastic

All Units:

Arms: Powder Coated Aluminum

Mast: Powder Coated, Zinc Plated Steel

Seat Assembly: Seat: Blow Molded Plastic

Frame: Powder Coated Stainless Steel

US Patent No. 5,790,995

PAL-Portable Aquatic Lift, the **PAL** logo, the **Splash!**, and the **Splash!** logo are registered trademarks of RehaMed International, LLC.

BATTERY CHARGING

The rechargeable battery should be cradled onto the charging unit when the lift is not in use. A fully charged battery will provide approximately 30 lifting cycles,

depending on the weight of the users. The battery has no memory, so it is not necessary to fully discharge the battery prior to charging. Battery is fully charged prior to shipping, but should be checked by looking at LCD indicator on control unit prior to using to insure charge level.



Green light indicates connection to power source. Orange light indicates battery is charging. When battery is fully charged, orange light will go off. Set battery on charger in a vertical position to insure good connection.

STANDARD ACCESSORIES/ OPTIONAL ACCESSORIES

The following items are included with all Pool lift models:

Console Cover: Protects battery and control unit from exposure to water.

Seat Belt Assembly: Nylon, water resistant belt for added security.

Battery/Charger: 24 volt rechargeable battery.

Additional Accessories may be purchased for your Unit

Stability Vest: Five point restraint for individuals who need higher degree of stability than provided with standard seat belt.

Total Cover: Made of attractive blue, weather resistant nylon material to keep unit protected from elements when not in use. Available for all units.

Arm Rests: Powder coated stainless steel arm rests for increased sense of security.

Spine Board Attachment: Can be used to covert lift for use with any standard spine board. (Spine Board not included)

Caddie for Splash!: Highly recommended for all Splash! models. Designed to lift unit out from anchor socket and roll to storage or other location if desired.

Anchor/Cap/Wrench: Standard deck sleeve measuring 1.9 diameter x 6" depth. The cap covers hole when unit not in place. Wrench unscrews cap from anchor.

Seat Pad: Waterproof seat pad designed to enhance comfort and minimize potential skin damage that could occur during transfer.





WARRANTY

All RMT Aquatic Lifting Systems offer a Lifetime Warranty on frame, excluding powder coated paint finish, which may become scratched with normal use. All electrical and motor components offer a full One-Year Warranty. Within the warranty period, we will repair or replace any part found to be defective upon our examination, but will not pay shipping costs or other expenses. To obtain warranty service, call or write to us at the address provided on the inside front cover of this manual. This warranty is an exclusive remedy and we are not responsible for any consequential or incidental damages or injury to person or property. This warranty shall not apply to any product which has been subject to misuse, negligence or accident, or has been damaged in shipment, or misapplied, or which have been modified or repaired by unauthorized persons. This warranty only applies to products owned by persons purchasing directly from the manufacturer or from our approved distributors or dealers.

PART LIST

Part Number	Description
100-3200	LA32 Actuator
400-3400	LA34 Actuator
100-1100	Control Unit
100-1200	Battery
100-1300	Battery Charger
100-1400	Hand Control
100-1500	24v Motor
100-4000	Hub Assembly
100-3000	Motor Mount Assembly
100-5000	Mast Assembly
100-6000	Actuator Arm
100-7000	Support Arm
100-8000	Seat Arm
100-9000	Seat Assembly
100-9010	Plastic Seat
100-9012	Foot Rest
200-1000	PAL Main Frame
200-1017	Rigid Caster
200-1018	Swivel Caster
200-3000	Counter Weight Plates
200-4000	Housing Assembly
200-2001	Stabilizer Tube
100-4006	Small Gear
300-1000	Splash! Base Assembly
300-2000	Splash! Console Assembly
300-3000	Mast Collar
300-4000	Splash! Housing
400-1000	Splash HD Mast Assembly
400-4000	Splash Extended Reach Mast Assembly
450-1000	Hi/Lo Mast Assembly
450-5000	Hi/Lo Seat Assembly
100-9060	Locking Pin for Seat
400-2000	HD Actuator Arm
450-2000	H/L Actuator Arm
450-3000	H/L Tension Arm



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