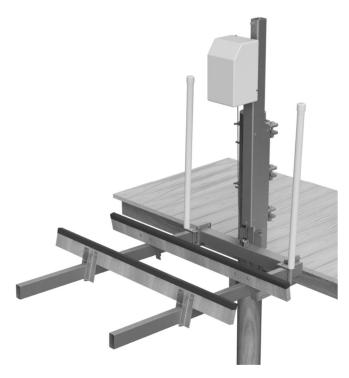
# BOAT LIFTS



# ROTOMAG

## 1500

All Model Rotomags

### Installation Instructions

Boat Lifts Unlimited 1901 Betson Ct Odenton, MD 21113 United States

Prior to Installation:

- a) This lift requires 110V 15A electric, adequate electricity should be available.
- b) For piling mounted lifts, the minimum height is 28" above the deck. The piling must be driven into the ground and secured to a dock or seawall. Inspect pilings for rot or decay before installation.
- c) Obtain any local permits if necessary.

DO NOT USE ANY POWER TOOLS WHILE STANDING IN THE WATER. IF ELECTRICITY MUST BE USED NEAR THE WATER ENSURE THE CIRCUIT IS PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TO REDUCE THE RISK OF ELECTRICAL HAZARDS.



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### **ROTOMAG 1500 lb. Lift** Installation Instructions

#### \*Please read the instructions completely before starting\*

#### 1) Selecting the Mounting Piling

- Choose a piling to mount the **Rotomag**.
- Timber pilings should be at least 10" in diameter.
- The **Standard Piling Mount (**item 13) requires a minimum of 43" of piling above the pier deck.
- The **Stubby Piling Mount** (item 13a) requires a minimum of 28" of piling above the pier deck.
- The piling **must be tied back** to the dock or seawall for stability.

#### 2) Installing the Piling Mount

- The **top of the piling mount** must be a minimum of 44" above the pier deck (applies for all mounts).
- Mount the piling mount as shown in Figure #01 & #02:
  - The mount should be installed **90 degrees from the waterside** face of the piling.
  - Which side of the piling you select for mounting will be the same side the lift will rotate towards.
  - **The mount must be plumb.** If the mount is not plumb the lift will be difficult to rotate. In most cases, having the top of the mount lean slightly back toward the pier will help make rotating the lift easier when loaded.
- Install (2) 5/8" Hex Bolts in the holes on the 4" face of the mount first to ensure your mount is plumb.
- In some cases, if you have an **out of plumb or odd shaped piling** you may have to carve the piling or add shims for the bent ears to fit tightly against the piling. If you must add shims between the bent ear and piling, they should be washers or plates that take up all available space.
- Then install (6) 5/8" Hex Bolts in the rounded ears on the mount.
- When tightening these bolts there should not be space that allows the ear to be bent. If this is the case, you must carve or add shims to take up the space.

#### 3) Mounting the Housing & Mast

- Follow Figure #03 for assembly.
- The **Rotomag Housing** (item 1) has rollers, bolts, plates, and cable loop end installed.
- It will be easiest to install the Rotomag Mast (item 2b) into the housing before mounting the housing on the piling mount.

• With the stop bolt in the top hole of the mast, and the mast in the housing, stand the two parts and install the hinge hardware as shown in Figure #03.

#### 4) Installing Arms, Bunks, & Guides

- Bolt the Rotomag Arm Base (item 2) to the Rotomag Mast (item 2b) as shown in Figure #04
- Bolt the Rotomag Arm 6' (item 2a) to the Base as shown in Figure #05.
- Attach PVC guide pole bases onto the arms close to the dock.
- The guide poles serve as a reference for the bunk location when the arms are submerged.
- Measure the width of the vessel:
  - 1. Example: If the vessel is **6' wide**, mark **3' from the guide poles** on each arm.
- To install bunks with the correct lean:
  - 1. Place **2"x6"x6' boards, carpet side up** on the arms, ensuring equal overhang at the front and back.
  - 2. Mark the arms 24" apart (12" from center in both directions) for initial spacing.
  - 3. Assemble the Bunk Brackets (item 7f) using Hex Bolts (item 9a).
  - 4. Position the brackets against the **vertical 2x6s**, letting the **top Hex Bolt rest on the Arm**. Mark the wood using the holes in the brackets for drilling.
  - 5. Drill the holes and secure the carriage bolts with the heads on the wood side.
  - 6. Rotate the bunks slightly to create the proper angle, then **secure them in place**. Figure#08

#### 5) Installing the Winch & Cable

- Mount the AMS 1500 Winch (item 3) to the water-side of the Rotomag Housing (item 1).
- Install the 7" Cast Aluminum Drive Pulley on the gear's drive shaft. The pulley should be oriented with the set screw facing the gears. Install the 4L280 or AX27 Drive Belt. Ensure both pulleys are parallel. The belt should have no more than 1/4" of play to ensure proper tension.
- Install the tag-end of the **cable** following Figure #07.
- Apply **tension** and **turn the switch to the UP position** to wind the cable neatly onto the drum.
- Keep hands clear and adjust grip as needed.
- Once the cradle is lifted off the pier deck, stop the lift. **Rotate the cradle out** above the water and install the Snap Pin (item 7c) as shown in Figure #08. Keep in mind when the lift is loaded the cradle may need to be rocked to remove the pin.

#### 7) Final Adjustments & Boat Positioning

- Install the cover and tighten all nuts and bolts.
- Lower the lift to a depth where the boat can be positioned over it.
- Ensure the boat's center of gravity is centered fore and aft on the forks.
- If the lift struggles to raise, the weight distribution is likely incorrect causing the lift to bind. Adjust the boat position and try again.
- Adjust the **bunks and guide poles** as needed to securely hold the boat.

#### **Required Tools:**

✓ Hammer	√ 1/2" Wrench
✓ Drill	✓ 7/16" Nut Driver
✓ Phillips Screwdriver	✓ 3/8" Nut Driver
✓ Ratchet	✓ 15/16" Deep Socket
✓ 11/16" Auger Bit	✓ 3/4" Deep Socket
✓ 3/8" Drill Bit	✓ 9/16" Deep Socket
✓ 9/16" Wrench	✓ 15/16" Wrench
✓ Protective Gloves	√ 3/4" Wrench

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#### **IMPORTANT**

#### FOR ELECTRIC WINCH MODELS

Apply Mobil Centaur Moly 2 grease to the winch gears. Use the two grease fittings located on either side of the worm gear. If the gears are not lubricated, the lift will bind and wear the gears producing fine powder and a scraping noise. This is only for electric models.

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#### **IMPORTANT**

DO NOT HARDWIRE THIS LIFT OR LEAVE IT PLUGGED IN WHILE NOT IN USE. IF THE GROUND WIRE IS CONNECTED TO THE CIRCUIT, ELECTROLYSIS WILL OCCUR. THIS WILL CORRODE THE MOUNTING HARDWARE AT AN ACCELERATED RATE.

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If you have any questions during installation, Boat Lifts Unlimited Inc. has a team of knowledgeable experts ready to assist you.

 Call us: 1-800-268-5911 (Mon-Fri, 8 AM - 4 PM EST) – Ask for Technical Support
Email us anytime: info@magnumlift.com
Text us: 410-674-3100

For support outside our business hours, please email us, and we'll get back to you as soon as possible.

We're committed to ensuring your installation goes smoothly!

#### **ROTOMAG LOAD SHEET**

**Standard Parts List** 

PART #	ITEMS	QTY
1	Rotomag Housing (Prefabbed w all hardware)	1
2	Rotomag Arm Base	1
2a	Rotomag Arm 6'	2
2b	Rotomag Mast 12' / 14' (not represented to scale)	1
3	AMS 1500 Winch with Controls	1
3a	8" Aluminum Drive Pulley	1
3b	4L280 or AX27 Drive Belt	1
3c	Stainless Steel 1500 Winch Cover Plate	1
3d	Plastic 1500 Winch Cover	1
Зe	1/4" x 1/2" Thread Forming Hex Bolts	4
5	4' PVC Guide Pole	2
6	2" x 6" x 6' Treated Bunk with Carpet	2
7	Rotomag Parts Box	1
7a	Rotomag Sheave	1
7b	3/4" Nylatron Washers	6
7c	1/2" x 4.5" Snap Pin	1
7d	PVC Guide Pole Caps	2
7e	1500 Guide Pole Stanchions	2
7f	1500 Bunk Brackets (4) Lefts & (4) Rights	8
8	5/8" x 1.5" Galvanized Hex Bolts	8
8a	5/8" Galvanized Nuts	16
8b	5/8" Galvanized Washers	8
9	3/8" x 2.5" Galvanized Carriage Bolts	8
9a	3/8" x 3" Galvanized Hex Bolts	8
9b	3/8" x 5" Galvanized Hex Bolts	2
9c	3/8" Galvanized Nuts	18
10	1/2" x 3" Stainless Steel Hex Bolt	1
10a	1/2" x 1.5" Galvanized Hex Bolts	3
10b	1/2" Stainless Steel Lock Nut	1
10c	1/2" Galvanized Lock Washers	3
10d	1/2" Galvanized Nuts	3
10e	1/2" Galvanized Washers	3
11	3/4" x 5.5" Galvanized Hex Bolts	2
11a	3/4" x 4.5" Galvanized Hex Bolts	3
11b	3/4" x 1.5" Galvanized Hex Bolts	1
11c	3/4" Galvanized Lock Washers	5
11d	3/4" Galvanized Nuts	6
12	3/16" Malleable Clamp	1
15	1/4" Stainless Steel Cable (bolted to item 1)	1

The items listed above are standard with the ROTOMAG. Please see other page for mounting options and upgrades. Part #'s are for reference within this manual ONLY. They do not reflect the manufacturers Part #'s.

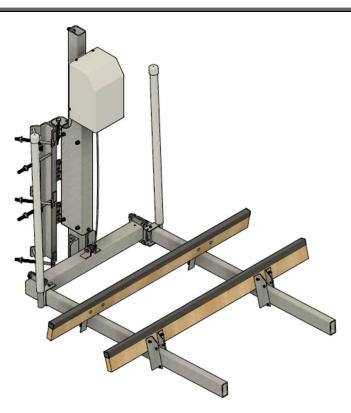
#### **ROTOMAG LOAD SHEET**

#### Additional Parts List

PART #	STANDARD [≥ 44"] PILING MOUNTED ITEMS	
13	Standard Rotomag Piling Mount	1
8c	5/8" x 14" Galvanized Hex Bolts	8

PART #	PART # STUBBY [≥ 28"] PILING MOUNTED ITEMS	
13a	Stubby Rotomag Piling Mount	1
8c	5/8" x 14" Galvanized Hex Bolts	7
8d	5/8" x 16" Galvanized Hex Bolts	1

PART #	SEAWALL MOUNTED ITEMS	
13a	SEAWALL Rotomag Mount (prefabbed with all brackets hardware)	1
#	5/8" Anchor Bolts *NOT INCLUDED*	6



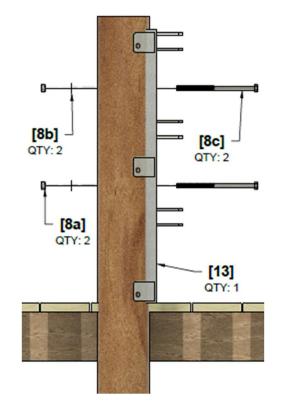
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#### Figure 01(Standard)

uses the following		
PART # ITEMS QTY		QTY
13	Standard Rotomag Piling Mount	1
8c	5/8" x 14" Galvanized Hex Bolts	2
8a	5/8" Galvanized Nuts	2
8b	5/8" Galvanized Washers	2

#### Figure 01(Stubby)

uses the following		
PART #	ITEMS	QTY
13	Stubby Rotomag Piling Mount	1
8d	5/8" x 16" Galvanized Hex Bolts	1
8c	5/8" x 14" Galvanized Hex Bolts	1
8a	5/8" Galvanized Nuts	2
8b	5/8" Galvanized Washers	2



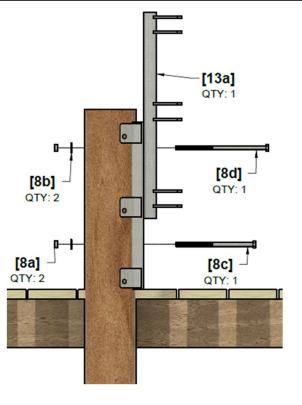
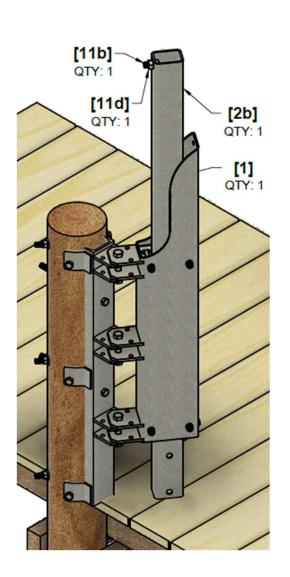


	Figure 02(Standard) uses the following			Figure 02(Stubby uses the following	)
PART #		QTY	PART #		QT
8c	5/8" x 14" Galvanized Hex Bolts	6	8c	5/8" x 14" Galvanized Hex Bolts	6
8a	5/8" Galvanized Nuts	6	80 8a	5/8" Galvanized Nuts	6
8b	5/8" Galvanized Washers	6	8b	5/8" Galvanized Washers	6
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\* The Mast (Item 2b) is not depicted to scale to accommodate the formatting of this manual.

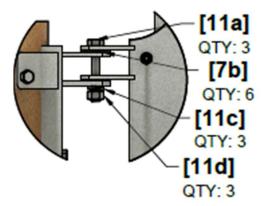
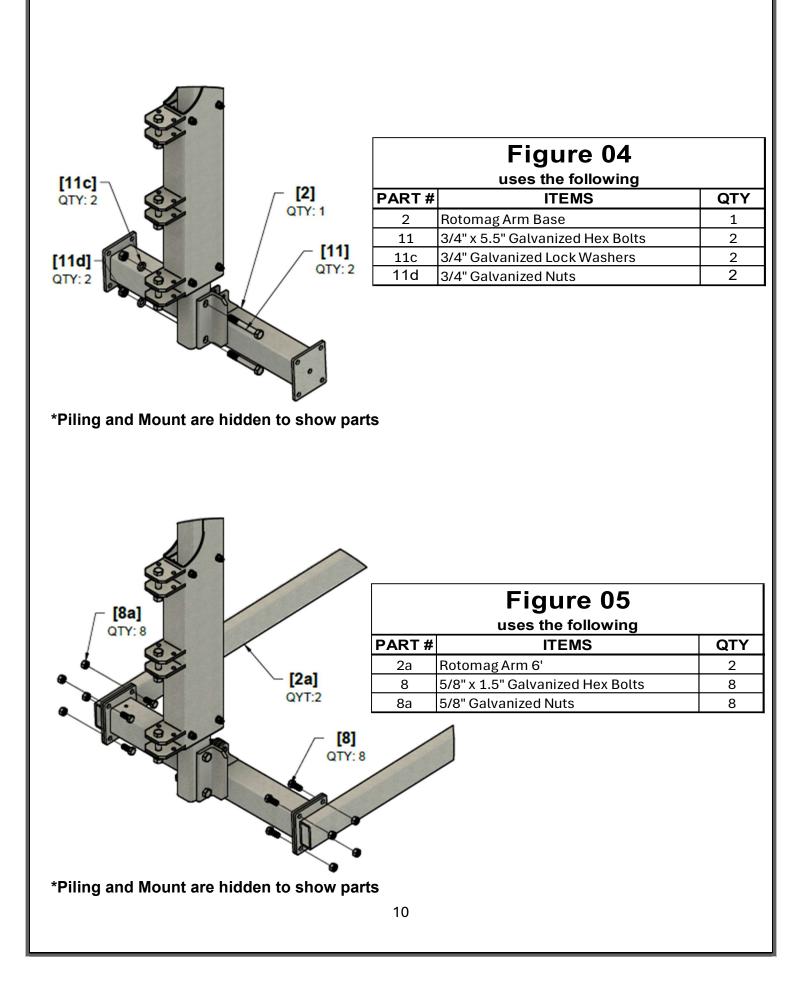


Figure 03		
	uses the following	-
PART #	ITEMS	QTY
1	Rotomag Housing (Prefabbed with all hardware & cable)	1
2b	Rotomag Mast 12' / 14' (not represented to scale)	1
11b	3/4" x 1.5" Galvanized Hex Bolts	1
11d	3/4" Galvanized Nuts	4
11a	3/4" x 4.5" Galvanized Hex Bolts	3
11c	3/4" Galvanized Lock Washers	1
7b	3/4" Nylatron Washers	6



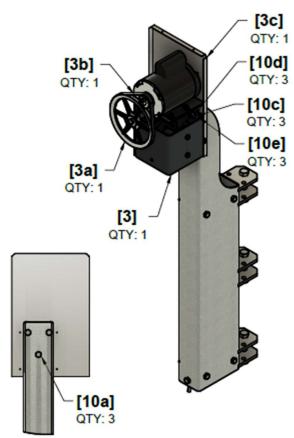
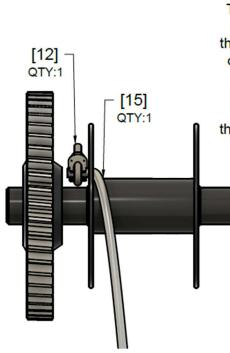


Figure 06		
	uses the following	
PART #	ITEMS	QTY
3	AMS 1500 Winch with Controls	1
За	8" Aluminum Drive Pulley	1
3b	4L280 or AX27 Drive Belt	1
Зc	Stainless Steel 1500 Winch Cover Plate	1
10a	1/2" x 1.5" Galvanized Hex Bolts	3
10e	1/2" Galvanized Washers	3
10c	1/2" Galvanized Lock Washers	3
10d	1/2" Galvanized Nuts	3

#### \*Some parts are in figures to show others



The tag end of the cable (item 15) is fed through the oblong hole in the side of the spool. The Clamp (item 12) is tightened directly onto the cable. Remove any tape from the cable to ensure proper installation.

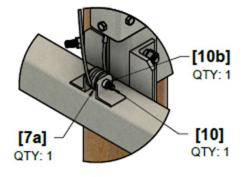


Figure 07 uses the following				
PART #	PART # ITEMS QTY			
12	3/16" Malleable Clamp	1		
10	0 1/2" x 3" Stainless Steel Hex Bolt 1			
10b	1/2" Stainless Steel Lock Nut	1		
7a	Rotomag Sheave	1		
15	1/4" Stainless Steel Cable (Bolted to item 1)	1		

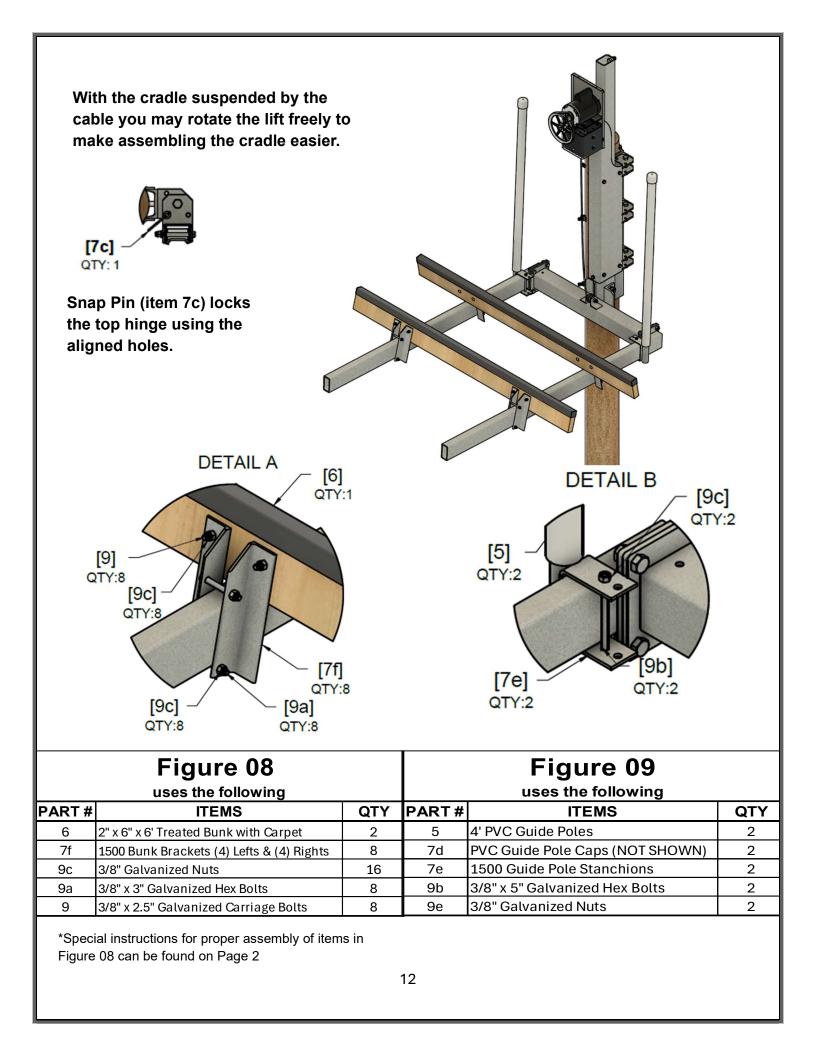
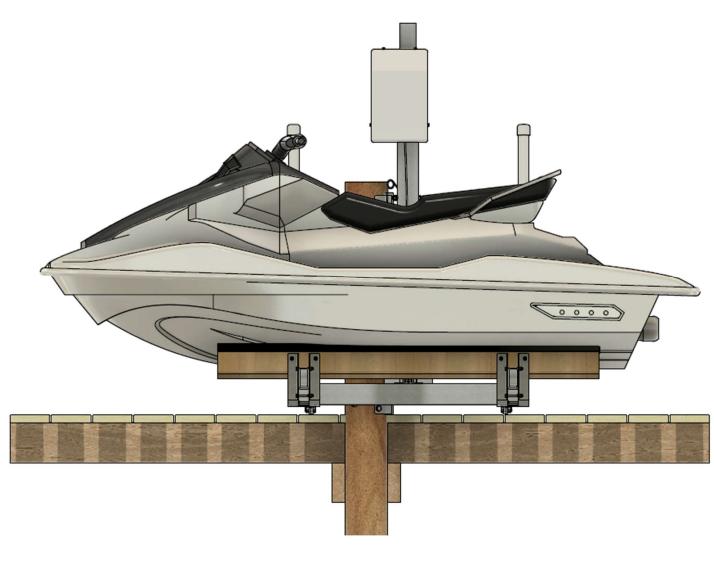




	Figure 10 uses the following			
PART #	PART # ITEMS QTY			
3d	Plastic 1500 Winch Cover	1		
3e 1/4" x 1/2" Thread Forming Hex Bolts		4		



\*\*See Page 2 for details about vessel positioning.

