



MAGNUM
BOAT LIFTS



MINI MAG

1500

1500E | 1500M | 1500ER | 1500LA

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 12" 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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Mini Mag 1500 lb. Lift Installation Instructions

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

1) Selecting the Mounting Piling

- Choose a piling to mount the Mini Mag.
- Timber pilings should be at least 8" in diameter.
- Square pilings should be at least 6" x 6".
- The piling must be tied back to the dock or seawall for stability.

2) Installing the Track

- Before mounting the track, install the 5/8" x 1.5" stop bolt and nut (item 8 & 8a) at the **bottom** of the track (item 2).
- Mount the track as shown in **Figure #02**:
 - The **top of the track** must be at least **2 feet above** the dock or seawall cap.
 - The **bottom of the track** should extend at least **3 feet below low water**.
 - The track **does not need to reach the bottom**.
- Install 5/8" dock washers (item 8c) behind the head of each 5/8" carriage mounting bolt (item 8b).
- The track should have a slight **backward pitch** toward the dock.
- If the piling is not **plumb**, use a **wooden shim** between the **channel spacer** and the track to correct alignment.

3) Assembling the Lift Arms

- Follow **Figure #01** for assembly.
- Ensure the **dot welded on the 4x4 tube frame** is facing down. This ensures the arm will be level when loaded.
- Attach the **backbone and shoulder pieces (items 1 & 1a)** with the bolts facing away from the track.
- If needed, attach the **6' arms (item 1b)** later.

4) Installing the Rollers & Arms

- Grease the **stainless-steel axles** and install the **poly rollers (item 7c)** onto the arms.
- Apply grease to the **inside walls of the track** to lubricate the rollers.
- Use a clamp to create a **temporary ledge 3 feet down from the top** of the track.

- Insert the arms into the track and **lower them until the Backbone (item 1) rests on the clamp.**

5) Installing the Winch & Cable

- Mount the **AMS 1500 winch** (electric or manual) to the **top of the track.**
- 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 have proper tension.
- Install the **cable** following **Figures #05.**
- 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.

6) Installing the PVC Guide Poles & Bunks

- 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 **2x6x6' 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 9c).**
 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.**

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 |

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.

DO NOT APPLY ANY LUBRICANTS TO MANUAL WINCH MODELS

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 TRACK 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!

1500E MINI MAG LOAD SHEET

Standard Parts List

PART #	ITEMS	QTY
1	1500 Bolt-on Arm Backbone	1
1a	1500 Bolt-on Arm Shoulder	1
1b	1500 Arm 6'	2
2	Mini Mag Track 8' / 10' / 12'	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
3e	1/4" x 1/2" Thread Forming Hex Bolts	4
4	1/4" Stainless Steel Cable with Loop 14' / 18' / 22'	1
5	4' PVC Guide Pole	2
6	2" x 6" x 6' Treated Bunk with Carpet	2
7	1500E Parts Box	1
7a	Electric Winch Mounts	2
7b	3" Nylon Sheave	1
7c	Poly Rollers	4
7d	PVC Guide Pole Caps	2
7e	Mini Mag Guide Pole Stanchions	2
7f	1500 Bunk Brackets (4) Lefts & (4) Rights	8
8	5/8" x 1.5" Galvanized Hex Bolts	13
8a	5/8" Galvanized Nuts	13
9	3/8" x 1" Galvanized Carriage Bolts	4
9a	3/8" x 1" Galvanized Hex Bolts	4
9b	3/8" x 2.5" Galvanized Carriage Bolts	8
9c	3/8" x 3" Galvanized Hex Bolts	8
9d	3/8" x 5" Galvanized Hex Bolts	2
9e	3/8" Galvanized Nuts	26
10	1/2" x 2.5" Stainless Steel Hex Bolt	1
10a	1/2" x 1.5" Stainless Steel Carriage Bolt	1
10b	1/2" Stainless Steel Lock Nut	1
10c	1/2" Stainless Steel Nut	1
10d	1/2" Stainless Steel Lock Washer	1
10e	1/2" Galvanized Steel Washers	3
11	3/16" Malleable Clamp	1

The items listed above are standard with the 1500E please refer to page 5 for mounting options and upgrades.

Part #'s are for reference within this manual ONLY. They do not reflect the manufacturers Part #'s

1500E MINI MAG LOAD SHEET
Additional Parts List

PART #	STANDARD PILING MOUNTED ITEMS	QTY
7g	Galvanized Backing Channels	2
8a	5/8" Galvanized Nuts	2
8b	5/8" x 14" Galvanized Hex Bolts	2
8c	5/8" Galvanized Dock Washers	2
8d	5/8" Galvanized Washers	2

PART #	SEAWALL MOUNTED ITEMS	QTY
12	Seawall Mount	1
8a	5/8" Galvanized Nuts	2
8c	5/8" Galvanized Dock Washers	2
8d	5/8" Galvanized Washers	2
8e	5/8" x 2.5" Galvanized Carriage Bolts	2

1500M (MANUAL WINCH) MINI MAG LOAD SHEET

Standard Parts List

PAR T #	ITEMS	QT Y
1	1500 Bolt-on Arm Backbone	1
1a	1500 Bolt-on Arm Shoulder	1
1b	1500 Arm 6'	2
2	Mini Mag Track 8' / 10' / 12'	1
3f	1500lb Manual Winch	1
3g	Manual Winch Mount	1
3h	Winch Handle	1
3i	Spring	1
3j	Handle Nut	1
3k	Cable Tie-Off Butterfly Washer	1
3m	Cable Tie-Off Carriage Bolt	1
3n	Cable Tie-Off Locking nut	1
3p	1/4" Stainless Steel Cable with Stop 25'	1
5	4' PVC Guide Pole	2
6	2" x 6" x 6' Treated Bunk with Carpet	2
7b	3" Nylon Sheave	1
7c	Poly Rollers	4
7d	PVC Guide Pole Caps	2
7e	Mini Mag Guide Pole Stanchions	2
7f	1500 Bunk Brackets (4) Lefts & (4) Rights	8
8	5/8" x 1.5" Galvanized Hex Bolts	13
8a	5/8" Galvanized Nuts	13
9	3/8" x 1" Galvanized Carriage Bolts	4
9a	3/8" x 1" Galvanized Hex Bolts	6
9b	3/8" x 2.5" Galvanized Carriage Bolts	8
9c	3/8" x 3" Galvanized Hex Bolts	8
9d	3/8" x 5" Galvanized Hex Bolts	2
9e	3/8" Galvanized Nuts	28
10	1/2" x 2.5" Stainless Steel Hex Bolt	1
10a	1/2" x 1.5" Stainless Steel Carriage Bolt	1
10b	1/2" Stainless Steel Lock Nut	1
10c	1/2" Stainless Steel Nut	1
10d	1/2" Stainless Steel Lock Washer	1
10e	1/2" Galvanized Steel Washers	3

The items listed above are standard with the 1500M please refer to page 8 for mounting options and upgrades

Part #'s are for reference within this manual ONLY. They do not reflect the manufacturers Part #'s

1500M (MANUAL WINCH) MINI MAG LOAD SHEET

Additional Parts List

PAR T #	STANDARD PILING MOUNTED ITEMS	QT Y
7g	Galvanized Backing Channels	2
8a	5/8" Galvanized Nuts	2
8b	5/8" x 14" Galvanized Hex Bolts	2
8c	5/8" Galvanized Dock Washers	2
8d	5/8" Galvanized Washers	2

PAR T #	SEAWALL MOUNTED ITEMS	QT Y
12	Seawall Mount	1
8a	5/8" Galvanized Nuts	3
8b	5/8" x 14" Galvanized Hex Bolts	1
8c	5/8" Galvanized Dock Washers	3
8d	5/8" Galvanized Washers	3
8e	5/8" x 2.5" Galvanized Carriage Bolts	2

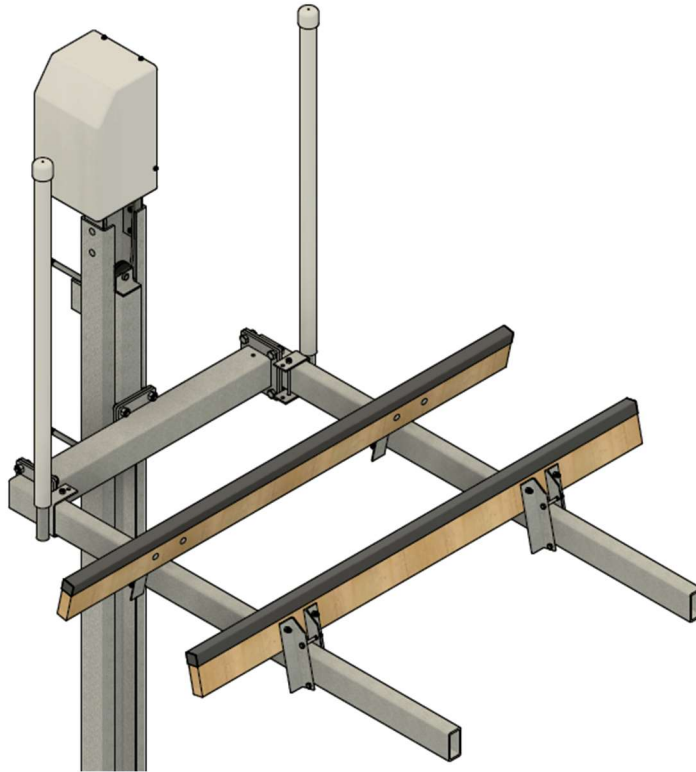
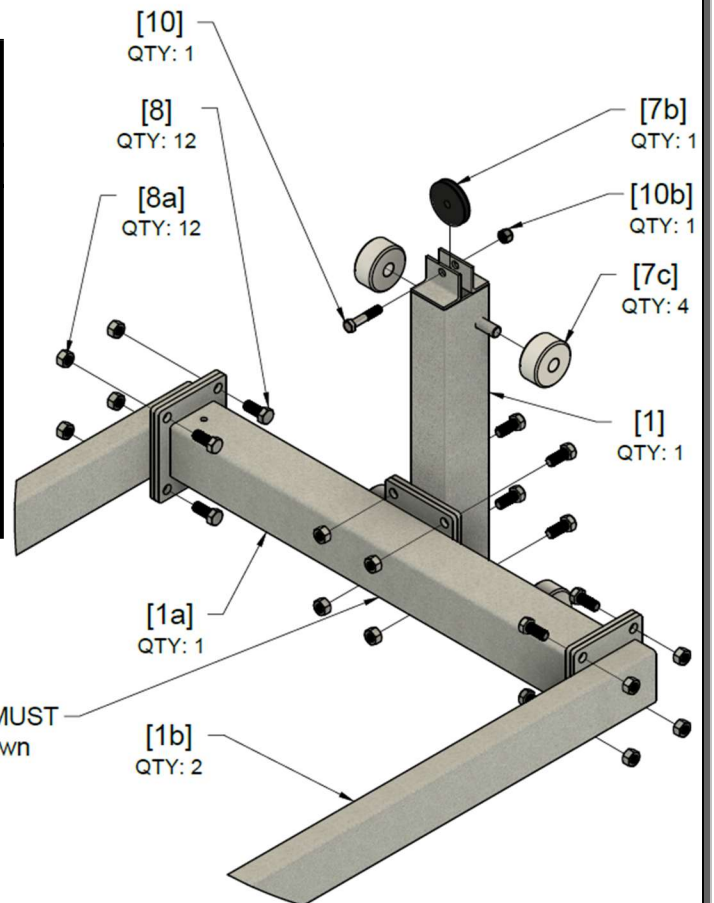


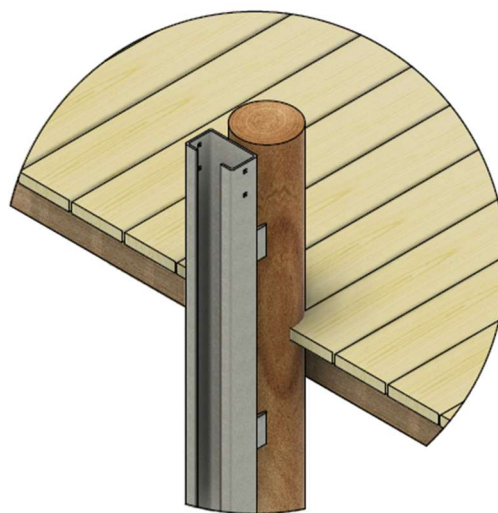
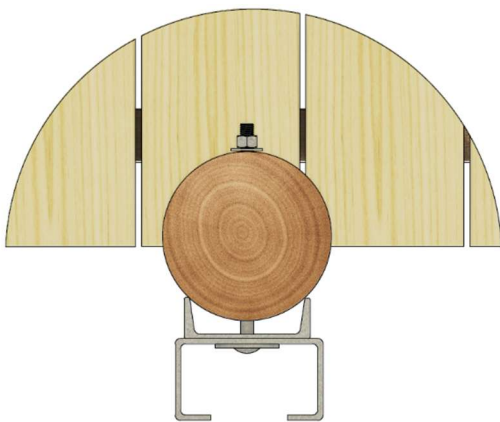
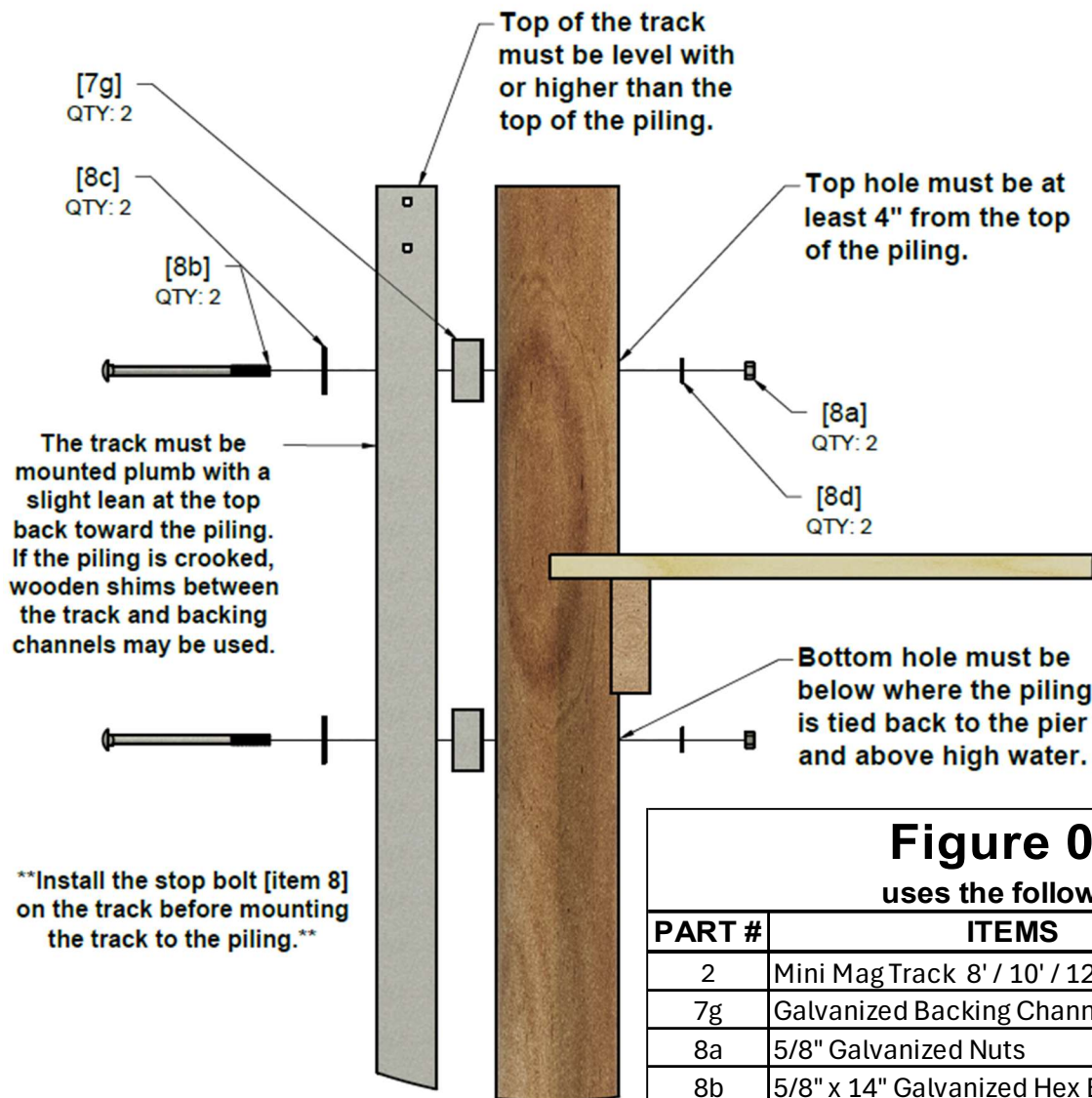
Figure 01

uses the following

PART #	ITEMS	QTY
1	1500 Bolt-on Arm Back Bone	1
1a	1500 Bolt-on Arm Shoulder	1
1b	1500 Arm 6'	2
7b	3" Nylon Sheave	1
7c	Poly Rollers	4
8	5/8" x 1.5" Galvanized Hex Bolts	12
8a	5/8" Galvanized Nuts	12
10	1/2" x 2.5" Stainless Steel Hex Bolt	1
10b	1/2" Stainless Steel Lock Nut	1



dot-weld MUST
face down



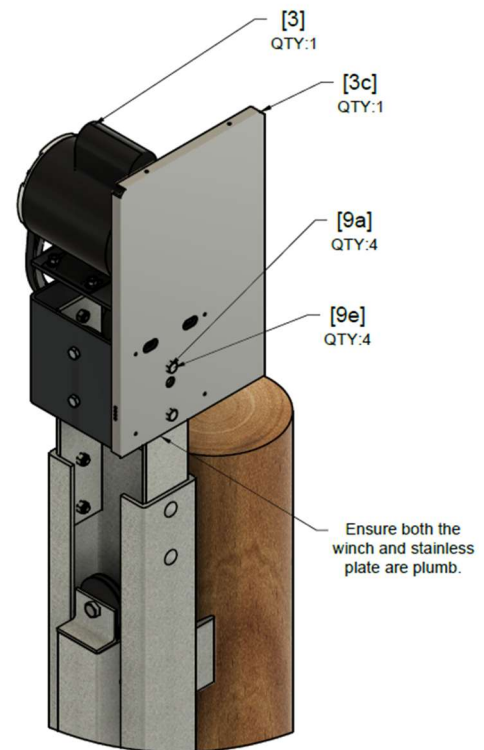
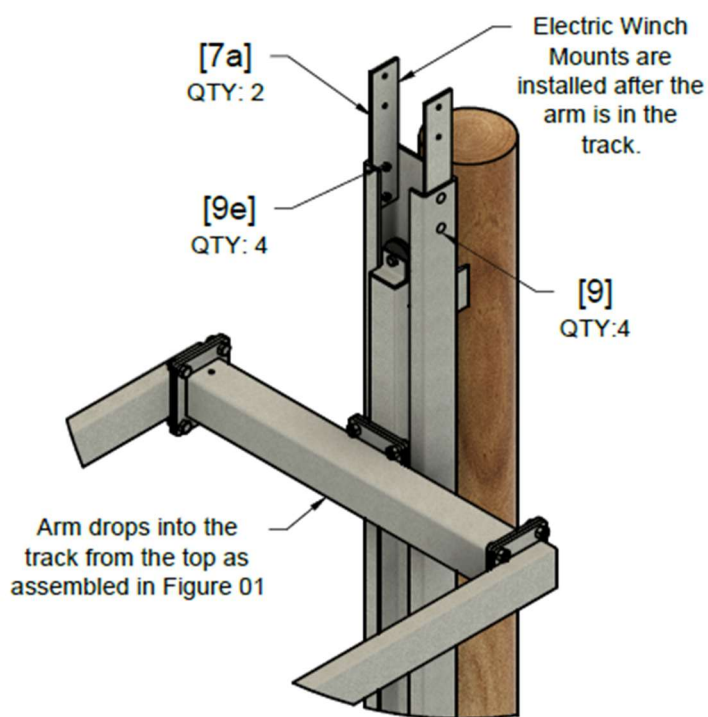


Figure 03

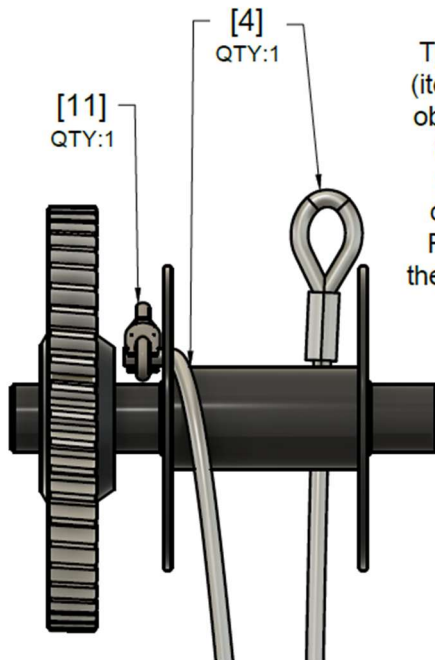
uses the following

PART #	ITEMS	QTY
7a	Electric Winch Mounts	2
9	3/8" x 1" Galvanized Carriage Bolts	4
9e	3/8" Galvanized Nuts	4

Figure 04

uses the following

PART #	ITEMS	QTY
3	AMS 1500 Winch with Controls	1
3c	Stainless Steel 1500 Winch Cover Plate	1
9a	3/8" x 1" Galvanized Hex Bolts	4
9e	3/8" Galvanized Nuts	4



The tag end of the cable (item 4) is fed through the oblong hole in the side of the spool. The Clamp (item 11) is tightened directly onto the cable. Remove any tape from the cable to ensure proper installation.

*The loop end of the cable bolts directly to the gear box using the slotted hole farthest from the pier. See Figure 06.

Figure 05

uses the following

PART #	ITEMS	QTY
11	3/16" Malleable Clamp	1
4	1/4" Stainless Steel Cable with Loop 14' / 18' / 22'	1

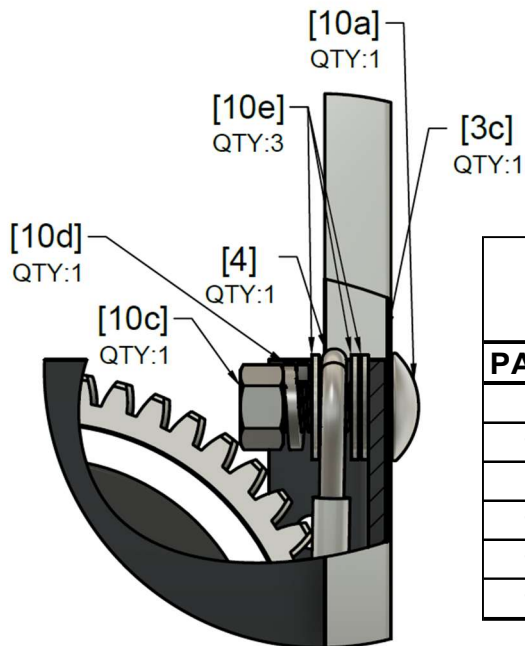


Figure 06

uses the following

PART #	ITEMS	QTY
4	1/4" Stainless Steel Cable with Loop 14' / 18' / 22'	1
10a	1/2" x 1.5" Stainless Steel Carriage Bolt	1
3c	Stainless Steel 1500 Winch Cover Plate	1
10e	1/2" Galvanized Steel Washers	3
10d	1/2" Stainless Steel Lock Washer	1
10c	1/2" Stainless Steel Nut	1

The loop end of the cable (item 4) is secured to the winch frame using the following hardware in the shown order.

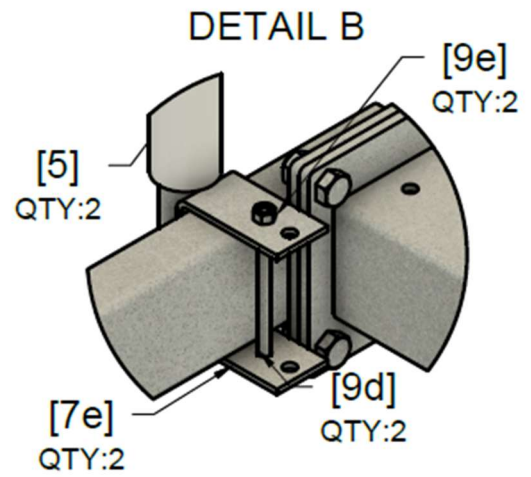
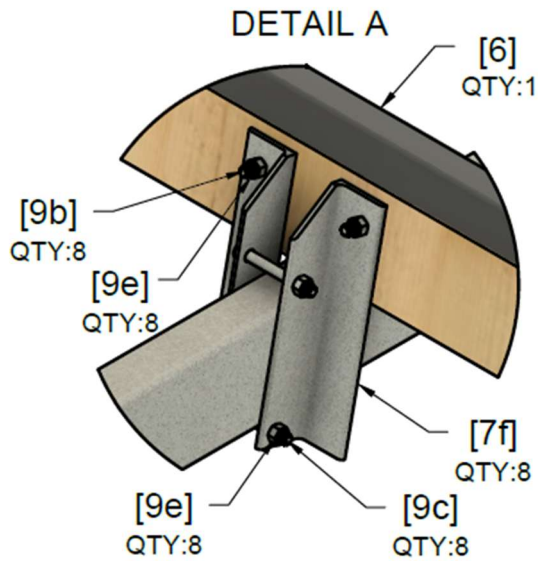


Figure 07

uses the following

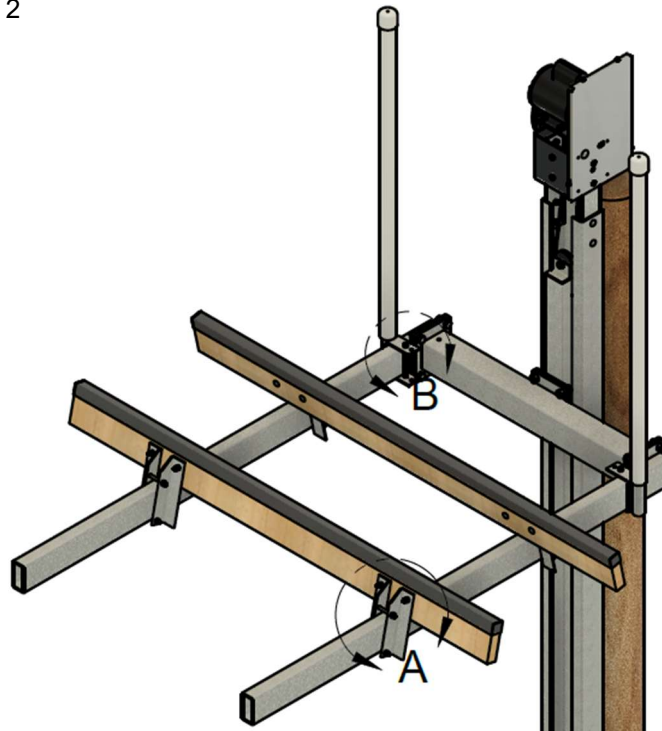
PART #	ITEMS	QTY
6	2" x 6" x 6' Treated Bunk with Carpet	2
7f	1500 Bunk Brackets (4) Lefts & (4) Rights	8
9c	3/8" x 3" Galvanized Hex Bolts	8
9b	3/8" x 2.5" Galvanized Carriage Bolts	8
9e	3/8" Galvanized Nuts	16

Figure 08

uses the following

PART #	ITEMS	QTY
5	4' PVC Guide Poles	2
7d	PVC Guide Pole Caps (NOT SHOWN)	2
7e	Mini Mag Guide Pole Stanchions	2
9d	3/8" x 5" Galvanized Hex Bolts	2
9e	3/8" Galvanized Nuts	2

*Special instructions for proper assembly of items in Figure 07 can be found on Page 2



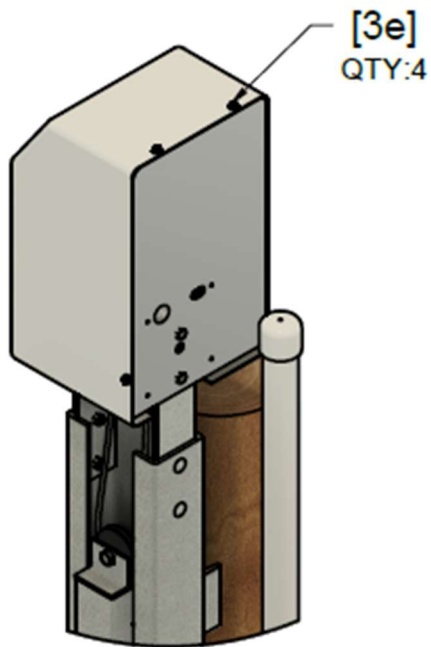
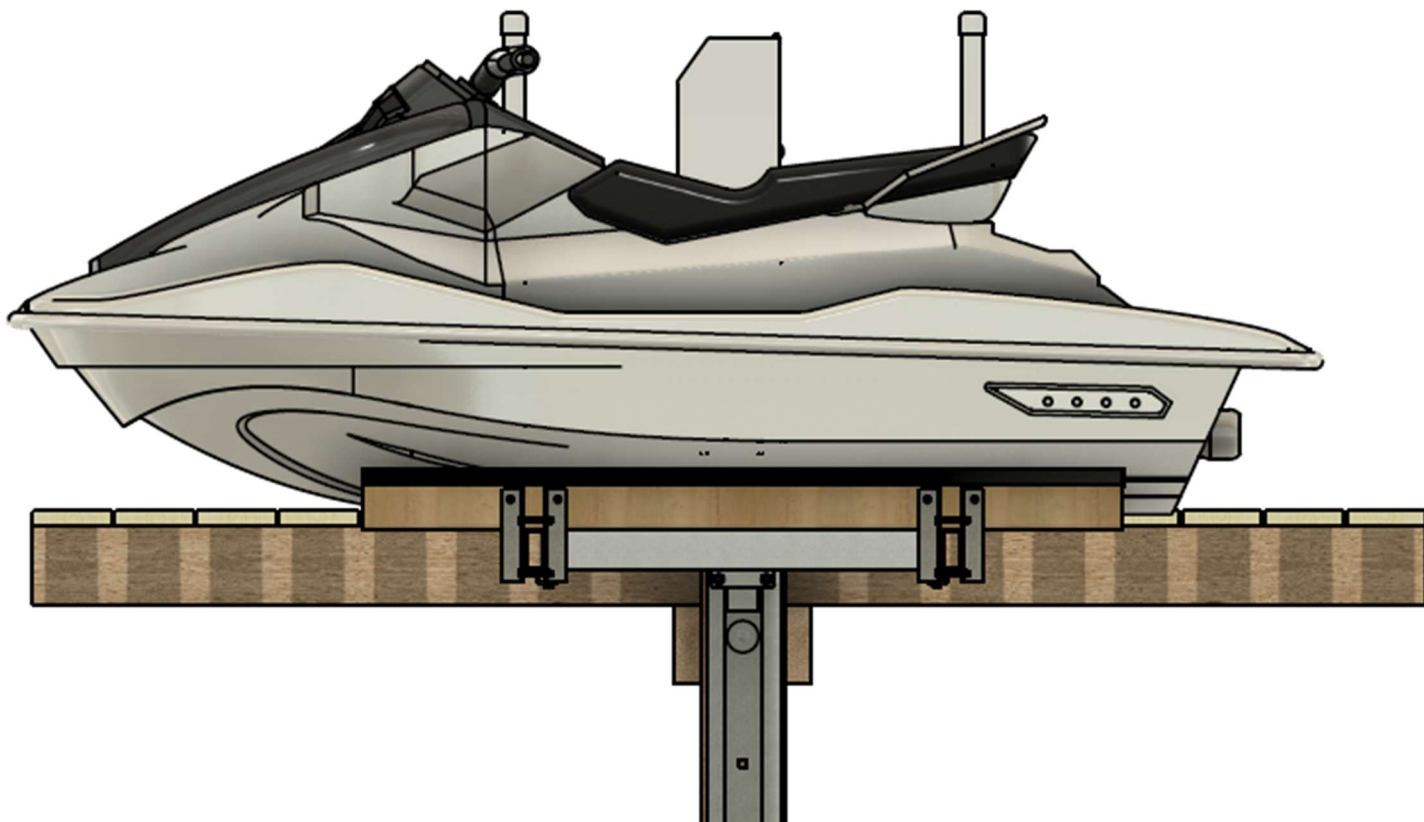
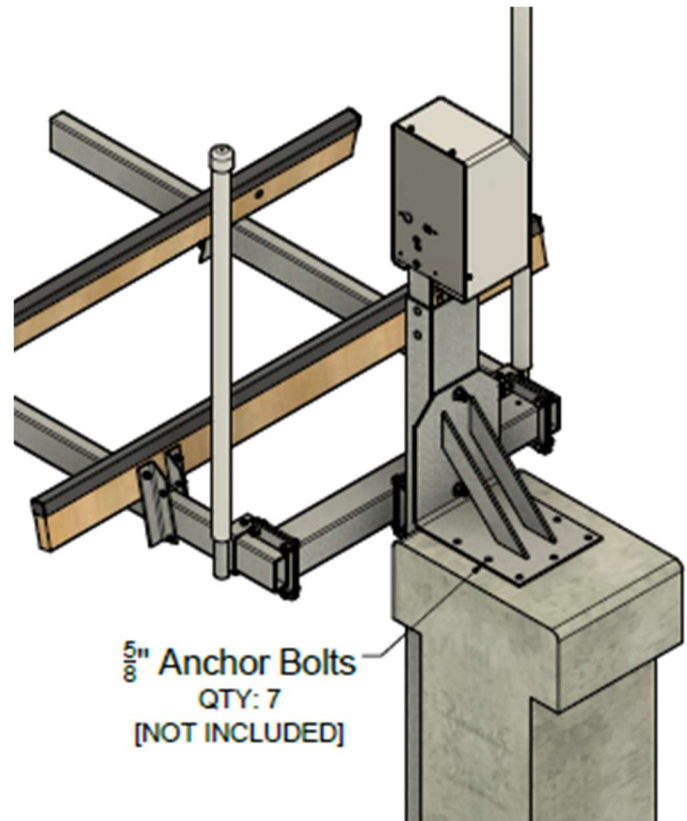
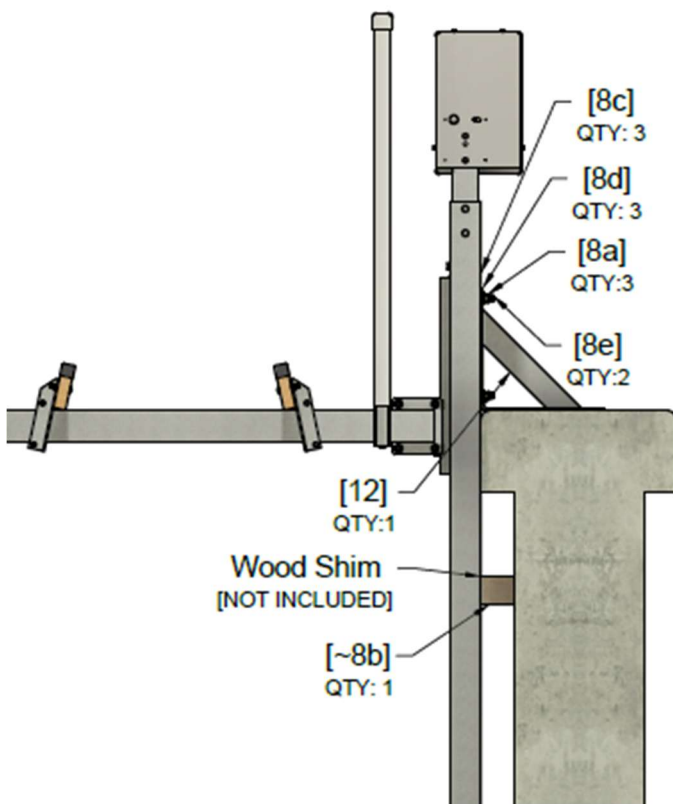


Figure 09
uses the following

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.

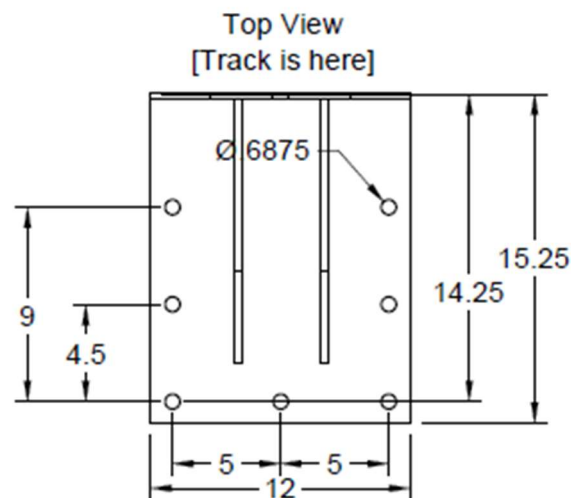


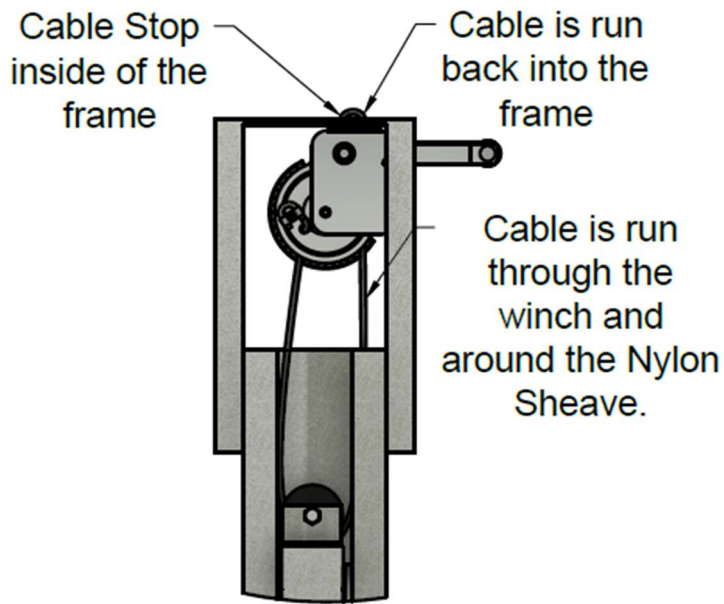
Figures 10 & 11

uses the following

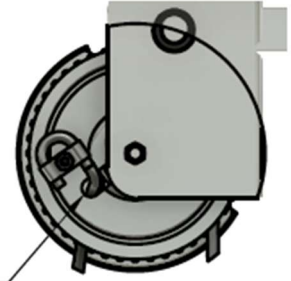
PART #	ITEMS	QTY
12	Seawall Mount	1
8a	5/8" Galvanized Nuts	3
8b	5/8" x 14" Galvanized Hex Bolts	1
8c	5/8" Galvanized Dock Washers	3
8d	5/8" Galvanized Washers	3
8e	5/8" x 2.5" Galvanized Carriage Bolts	2

Wood shim for lowest mounting bolt not supplied. Dimensions will be custom to any style seawall, must allow the track to be secured tightly. [~8b] This bolt is supplied but may not be applicable for every install. When using drop-in anchor bolts for this connection, do not use the Dock Washers. The Arm Backbone only has 7/8" Clearance to the track wall.





Tag end runs from the inside of the spool out and around the tie-off as displayed.



Secure the Handle [item 3h] to the shaft using the hardware in the following order.

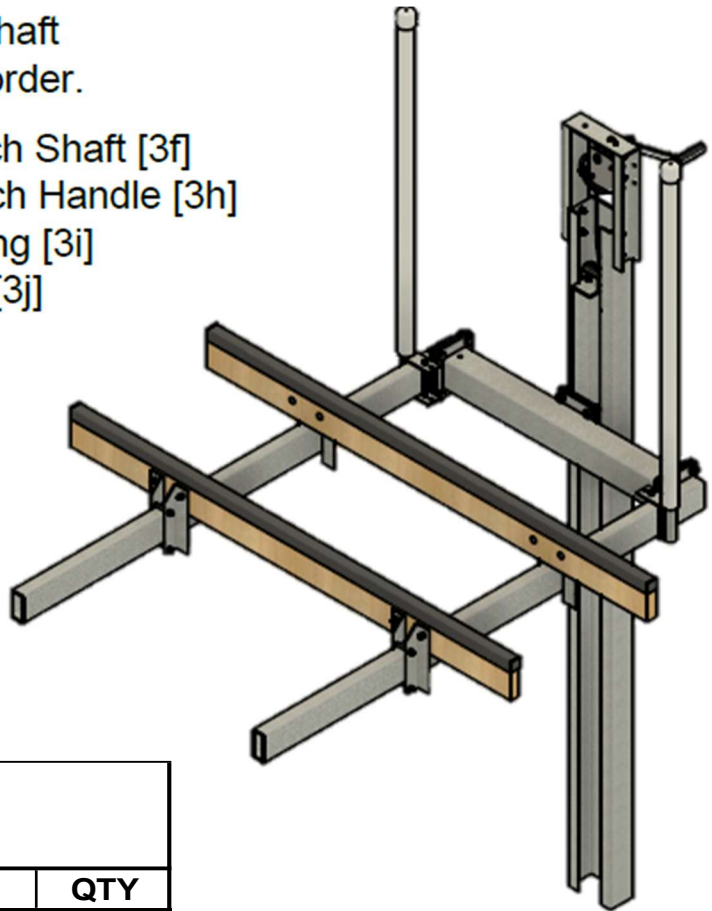
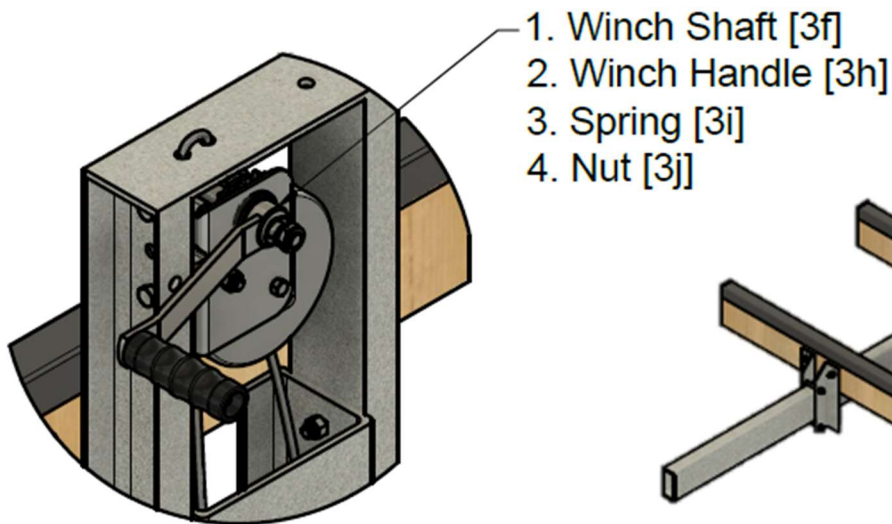
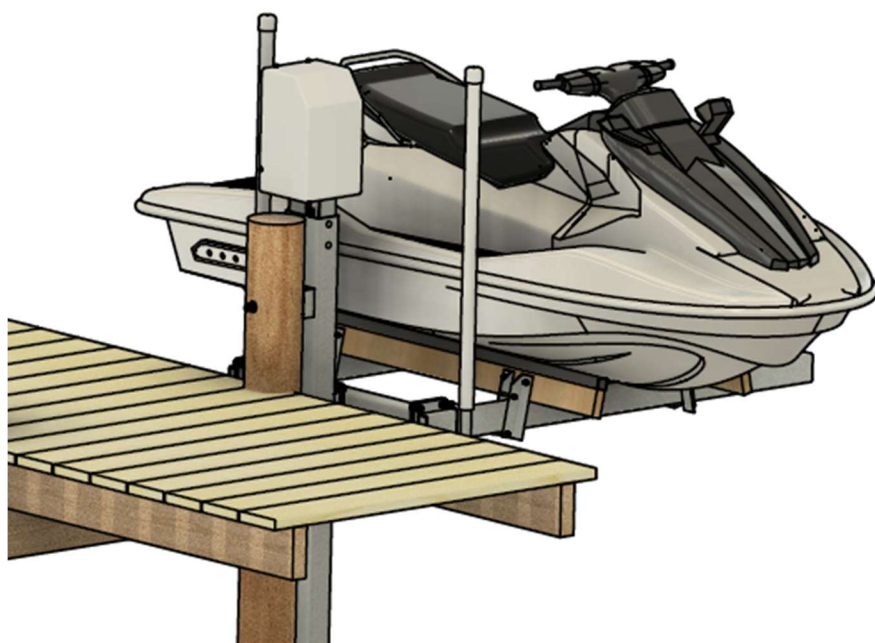
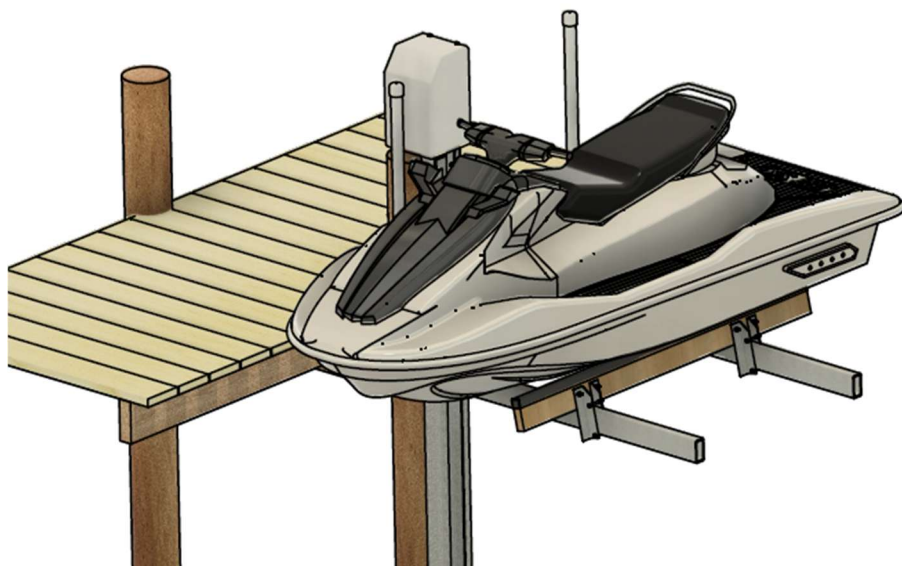


Figure 12

uses the following

PART #	ITEMS	QTY
3f	1500lb Manual Winch	1
3h	Winch Handle	1
3i	Spring	1
3j	Handle Nut	1



MINI MAG