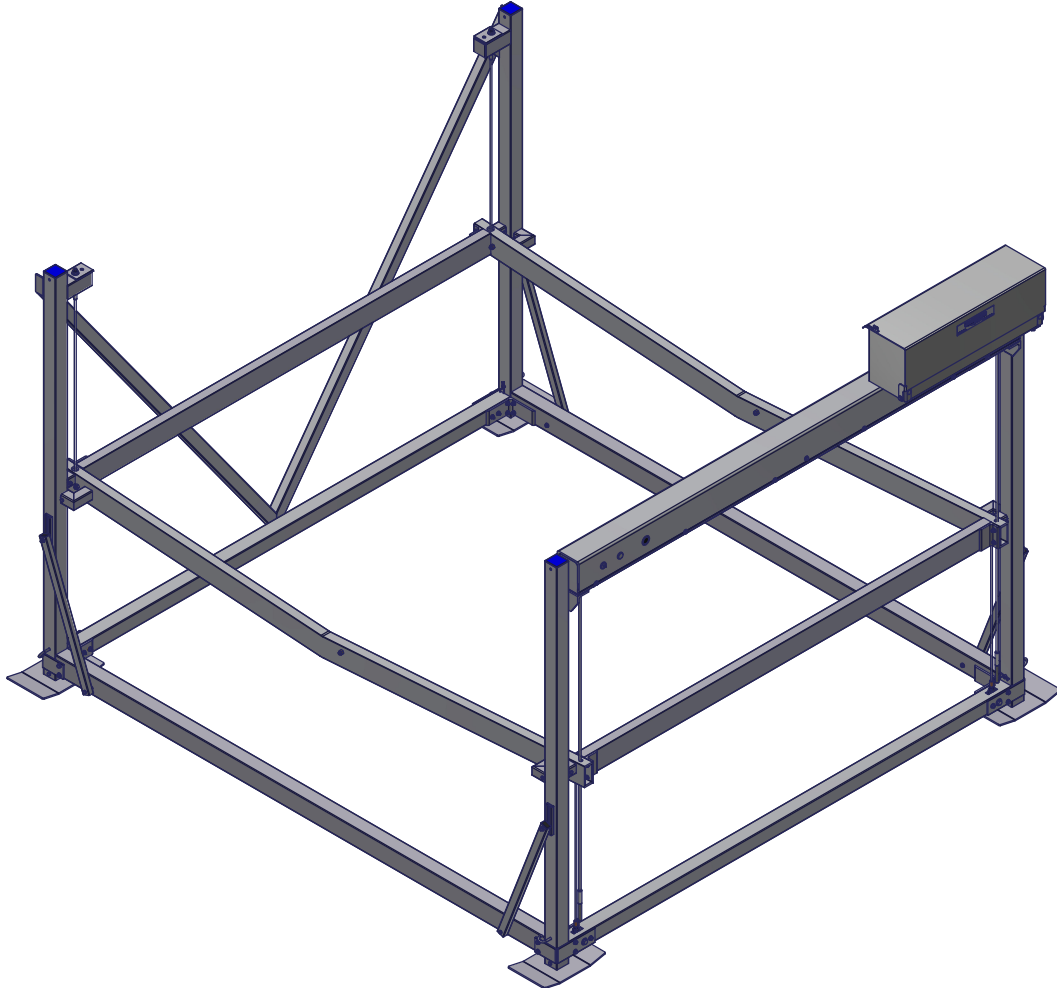


Vertical Hydraulic

Frame Assembly Instructions

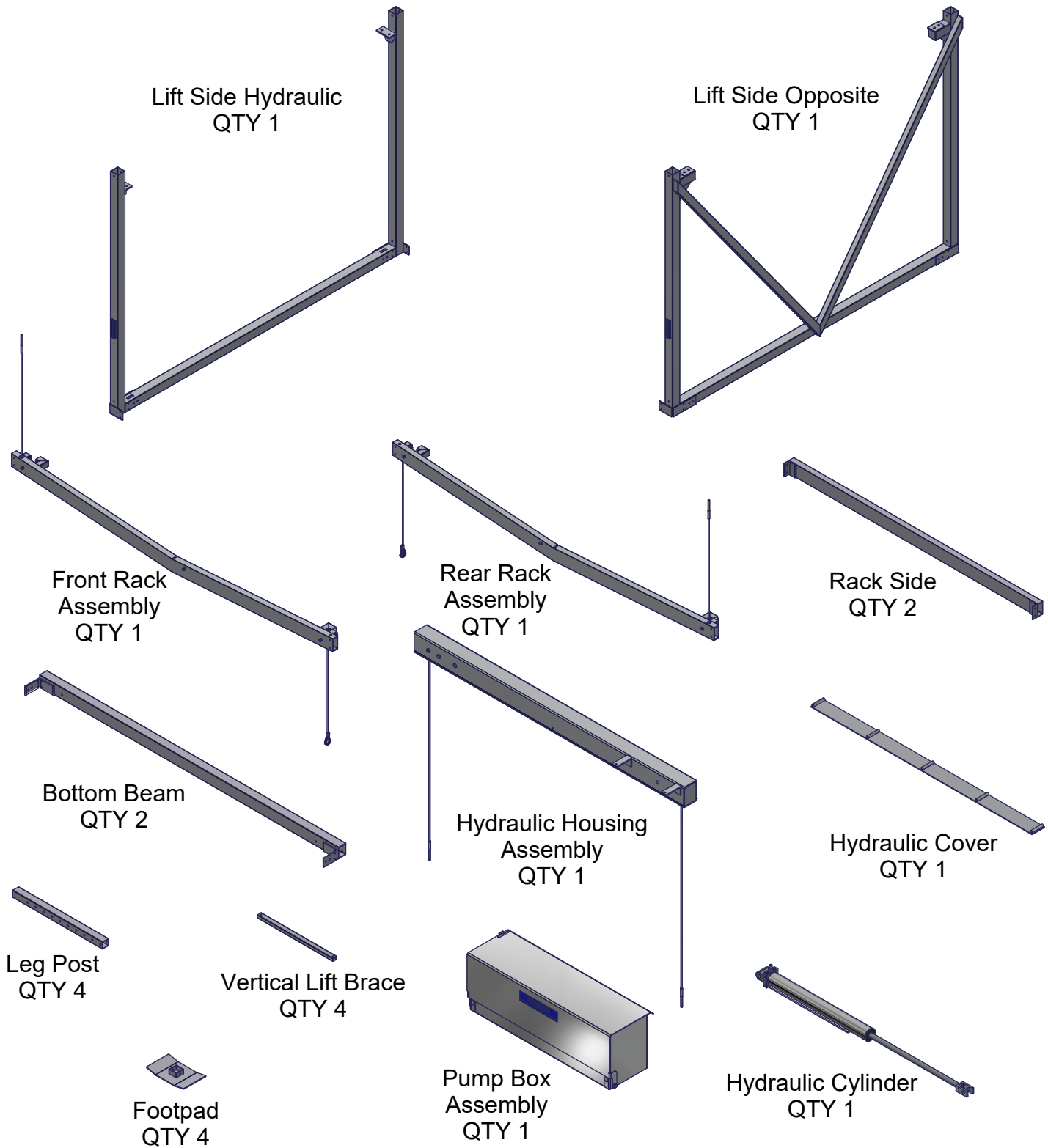
Models: 4010 - 5010 - 5510 Pontoon - 6010



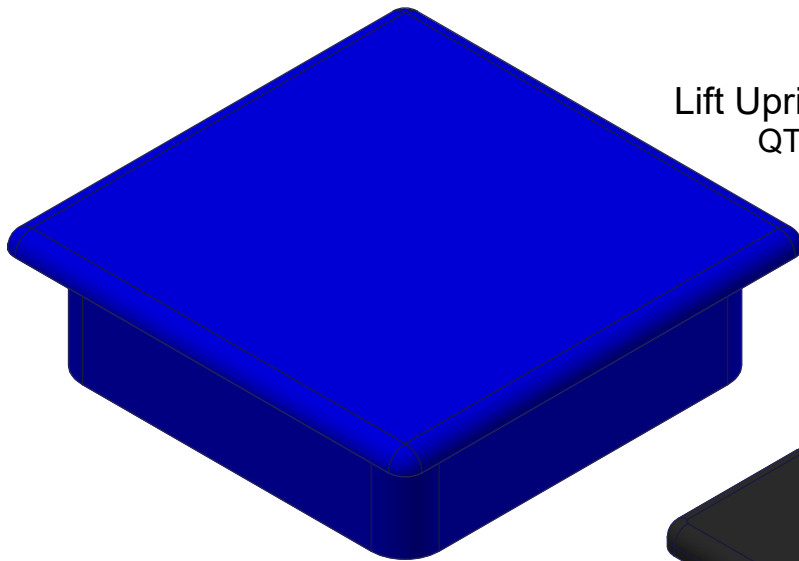
⚠ WARNING - PUT SAFETY FIRST

1. NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL MAY RESULT IN PERSONAL INJURY OR DEATH AND WILL INVALIDATE THE WARRANTY.
2. Before attempting to install or operate this hoist, study and fully understand the proper operating procedures and safety precautions outlined in this owner's manual.
3. Never exceed the recommended weight capacity of your lift. The lifted weight will include hull, engine, fuel, battery, and added accessories or gear. Weigh your fully loaded boat at a certified scale to be absolutely sure of the total weight.
4. To avoid personal injury or death do not allow anyone on, in or under the lift while operating.
5. If you have any questions about assembly, installation, operation or suitability of this product, contact an authorized dealer or ShoreMaster directly at 1-800-328-8945.

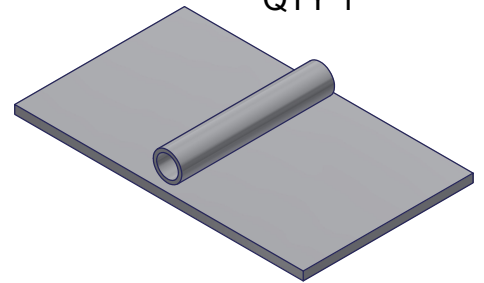
Parts List



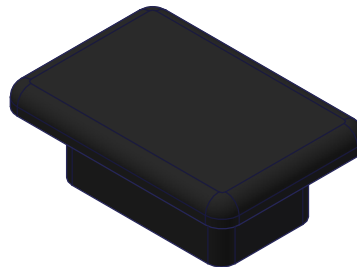
Hardware Box 1078255



Lift Upright Cap
QTY 4

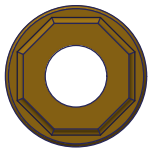


9.0 Channel Cover
(1/4 Scale)
QTY 1

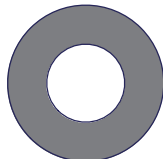


Vertical Lift Brace Cap
QTY 4

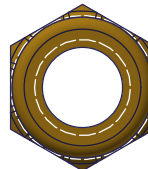
Bolt Bag 1070649 - Hydraulic Housing



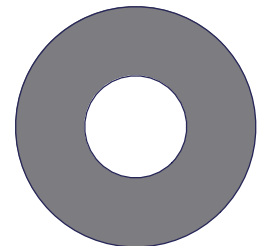
3/8 Brass
Flange Nut
QTY 7



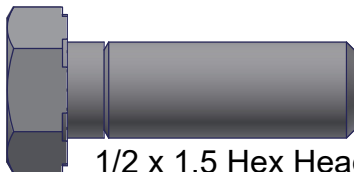
3/8 Flat
Washer
QTY 7



1/2 Brass
Nyloc Nut
QTY 4



1/2 Flat
Washer
QTY 8

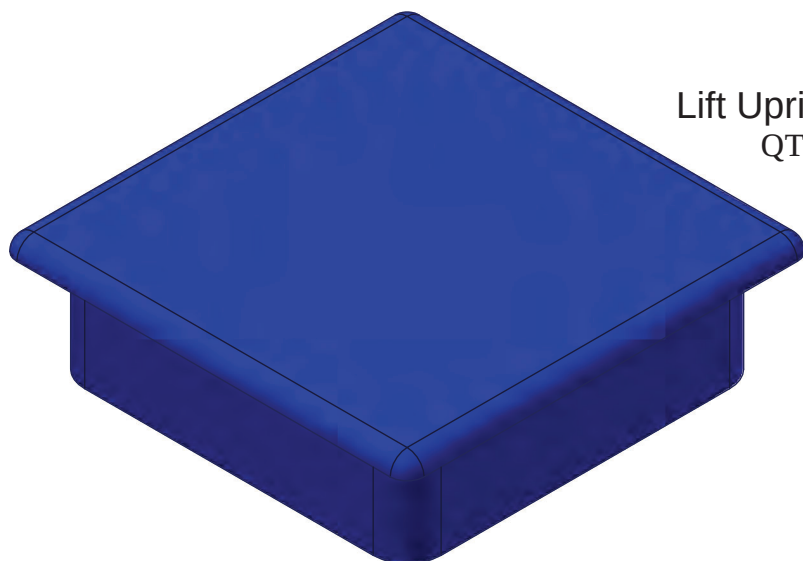


1/2 x 1.5 Hex Head Bolt
QTY 4

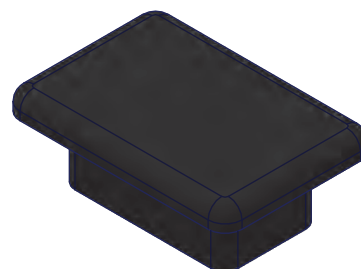


3/8 x 6.0 Hex Head Bolt
QTY 7

Pontoon Hardware Box 1072266

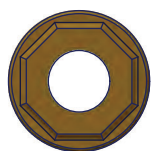


Lift Upright Cap
QTY 4



Vertical Lift Brace Cap
QTY 4

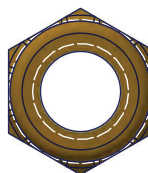
Bolt Bag 1070317 - Hydraulic Housing



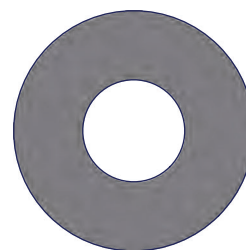
3/8 Brass
Flange Nut
QTY 9



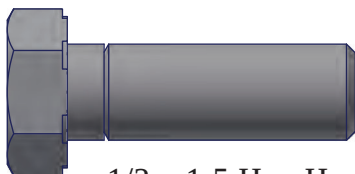
3/8 Flat
Washer
QTY 9



1/2 Brass
Nyloc Nut
QTY 4



1/2 Flat
Washer
QTY 8

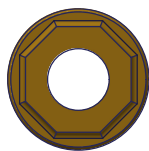


1/2 x 1.5 Hex Head Bolt
QTY 4

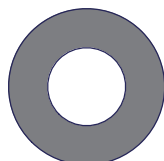


3/8 x 6.0 Hex Head Bolt
QTY 9

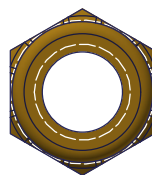
Bolt Bag 1070557 - Lift Vertical Hydraulic



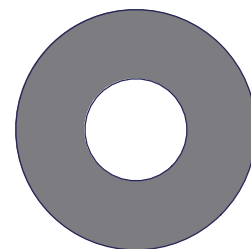
3/8 Brass
Flange Nut
QTY 42



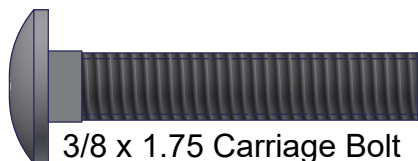
3/8 Flat
Washer
QTY 30



1/2 Brass
Nyloc Nut
QTY 4



1/2 Flat
Washer
QTY 6



3/8 x 1.75 Carriage Bolt
QTY 4



3/8 x 1.25 Hex Bolt
QTY 8



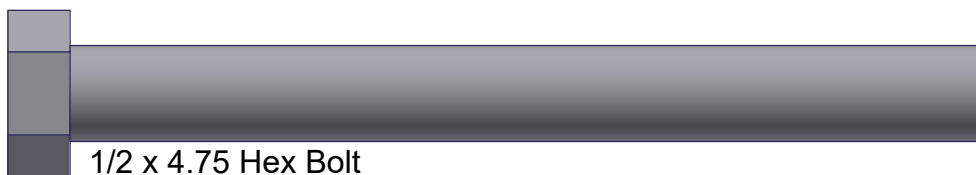
3/8 x 3.5 Hex Bolt
QTY 4



3/8 x 4.25 Hex Bolt
QTY 22

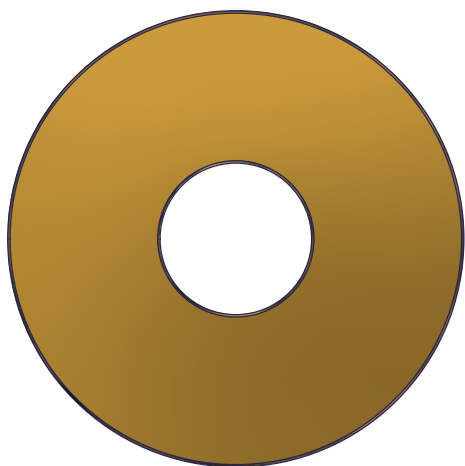


3/8 x 4.5 Hex Bolt
QTY 4

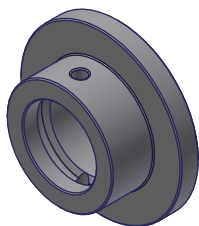


1/2 x 4.75 Hex Bolt
QTY 2

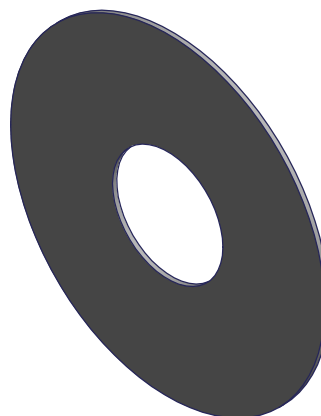
Hardware Bag 1078239 - Pins, Bushings, Sheaves



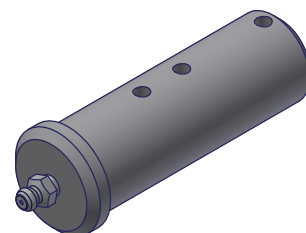
4.75 Sheave
QTY 2



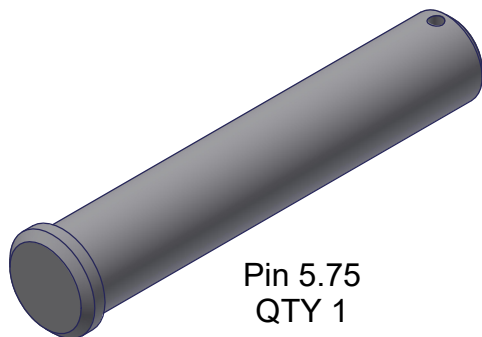
Bushing
QTY 2



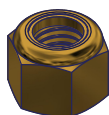
Spacer
QTY 1



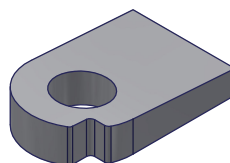
Pin 3.125
QTY 1



Pin 5.75
QTY 1



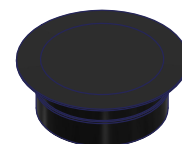
5/8 Nyloc Nut
QTY 2



Angled Washer
QTY 2

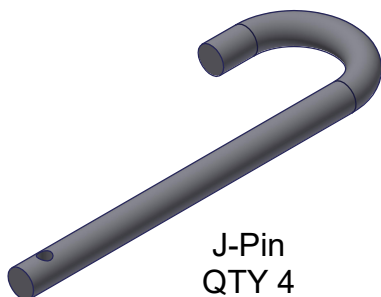


Cotter Pin
QTY 2

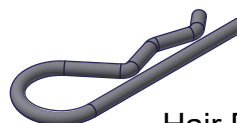


Hole Plug
QTY 2

Hardware Bag 1007518 - Leg Pins

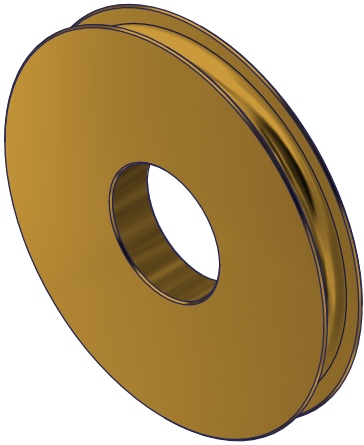


J-Pin
QTY 4

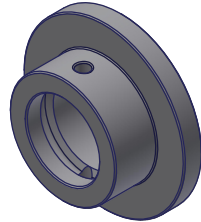


Hair Pin
QTY 4

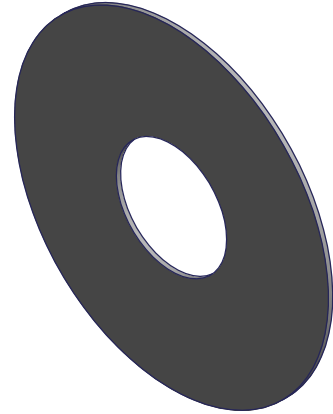
Hardware Bag 1078240 - Pins and Sheaves 5510 VHL - Pontoon



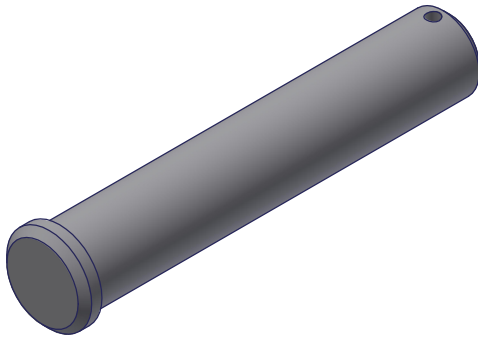
4.75 Sheave
QTY 2



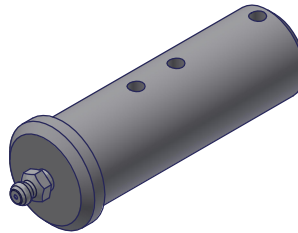
Bushing
QTY 2



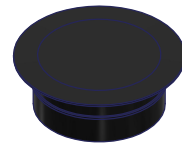
Spacer
QTY 2



Pin 5.75
QTY 1



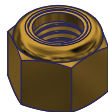
Pin 3.125
QTY 1



Hole Plug
QTY 2



Cotter Pin
QTY 2

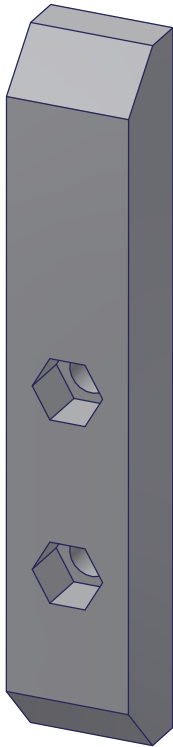


5/8-11 Nyloc Nut
QTY 2

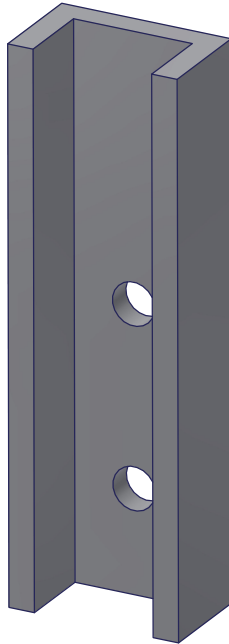


5/8 Washer SS
QTY 2

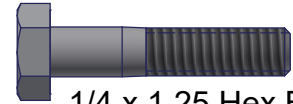
Hardware Bag 1071198 - Guide Plates



UHMW Guide
QTY 2



Guide Channel
QTY 2

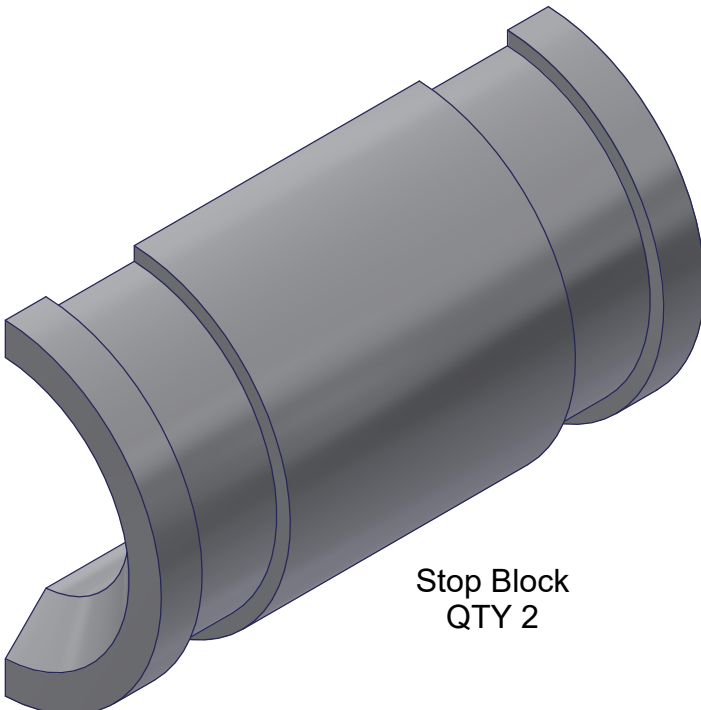


1/4 x 1.25 Hex Bolt
QTY 4

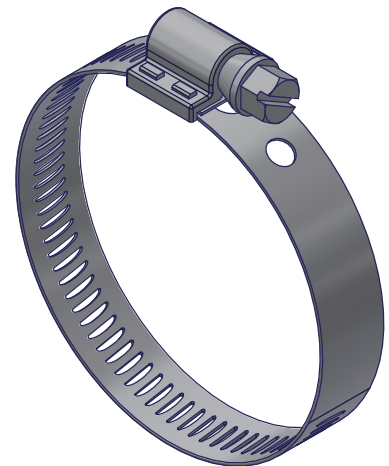


1/4 Brass
Nyloc Nut
QTY 4

Hardware Bag 1071231 - Stop Block Kit



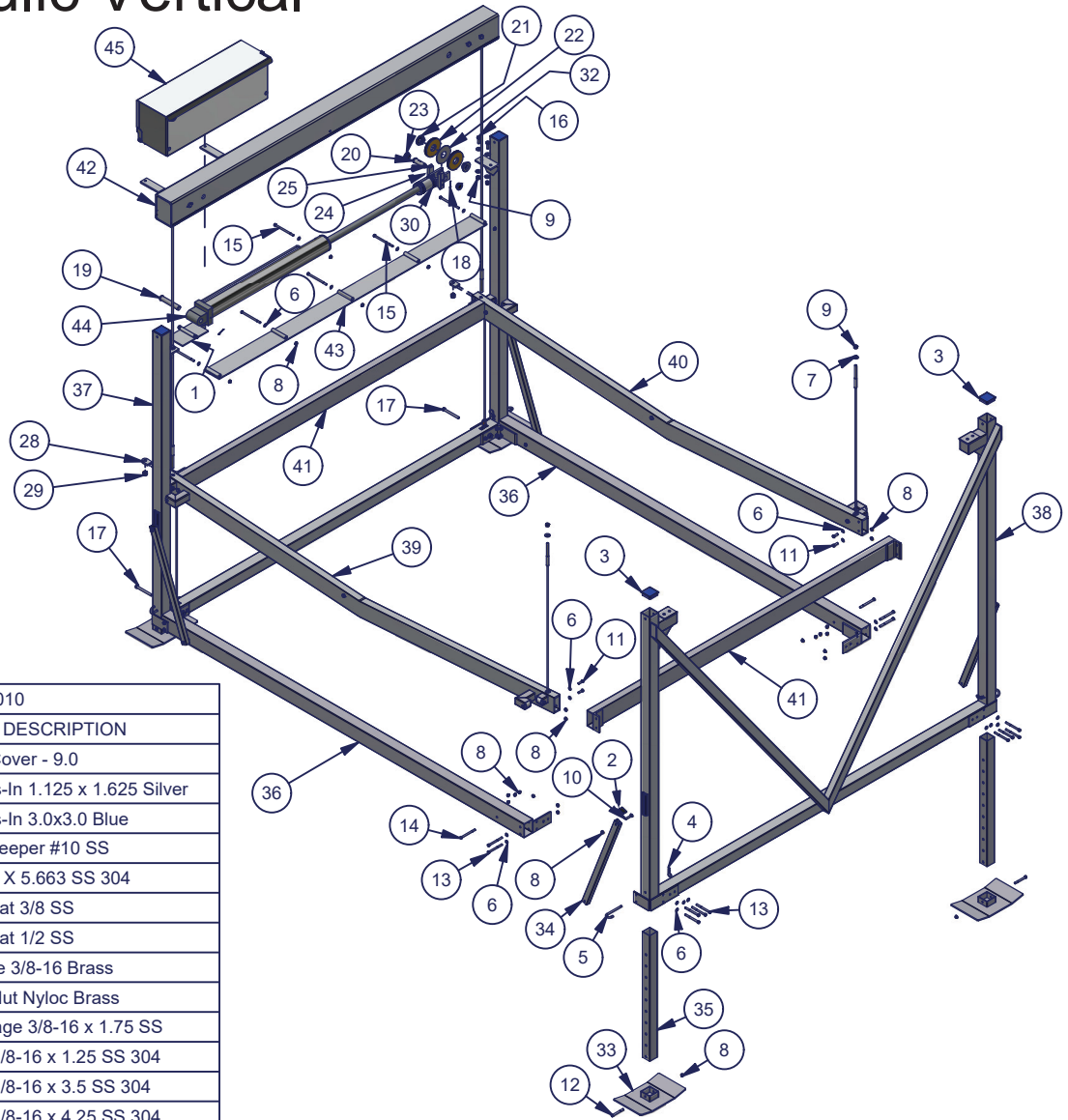
Stop Block
QTY 2



Hose Clamp
QTY 2

4010 Hydraulic Vertical

Part Number: 1078145



Hardware Box - 4010

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1070855	Cylinder Cover - 9.0
2	4	1000986	Cap Press-In 1.125 x 1.625 Silver
3	4	1001034	Cap Press-In 3.0x3.0 Blue
4	4	1002278	Hair Pin Keeper #10 SS
5	4	1002600	Pin-J .375 X 5.663 SS 304
6	37	1002599	Washer Flat 3/8 SS
7	14	1002565	Washer Flat 1/2 SS
8	49	1001802	Nut Flange 3/8-16 Brass
9	8	1001795	1-2 - 13 Nut Nyloc Brass
10	4	1001959	Bolt Carriage 3/8-16 x 1.75 SS
11	9	1002422	Bolt Hex 3/8-16 x 1.25 SS 304
12	4	1002434	Bolt Hex 3/8-16 x 3.5 SS 304
13	22	1002443	Bolt Hex 3/8-16 x 4.25 SS 304
14	4	1002441	Bolt Hex 3/8-16 x 4.5 SS 304
15	7	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
16	4	1002377	Bolt Hex 1/2-13 x 1.5 SS 304
17	2	1032266	Bolt Hex 1-2-13 x 4.75 SS 304
18	2	1011722	COTTER PIN .125 X 1.5
19	1	1070288	Pin 1.0625 x 5.75 SS 17-4 - No Zerk
20	1	1070290	Pin 3.125 SS - Grease Zerk
21	2	1070472	Bushing - 2.375 OD x .875
22	2	1070476	Sheave 4.75 OD x 0.563 - Yellow
23	2	1046708	Hole Plug - PIP 1.4375 - Black
24	2	1071196	Prt Channel 1.25x.751x.1875x4.0
25	2	1071197	UHMW Guide Plate - VHL
26	4	1002400	Bolt Hex 1/4-20 x 1.25 SS 304
27	4	1001797	Nut Hex 1/4-20 Brass
28	2	1078172	Prt Washer Angled 5/8 - 4k-8k VHL
29	2	1024332	Nut Nyloc 5/8-11 Brass
30	2	1071206	Hydraulic Stop Block 5in. x 1.5 ID
31	2	1071215	Hose Clamp - 2.75 Dia - SS
32	1	1072631	Spacer - VHL 5.5k - 8k

Lift Bundle - 4010

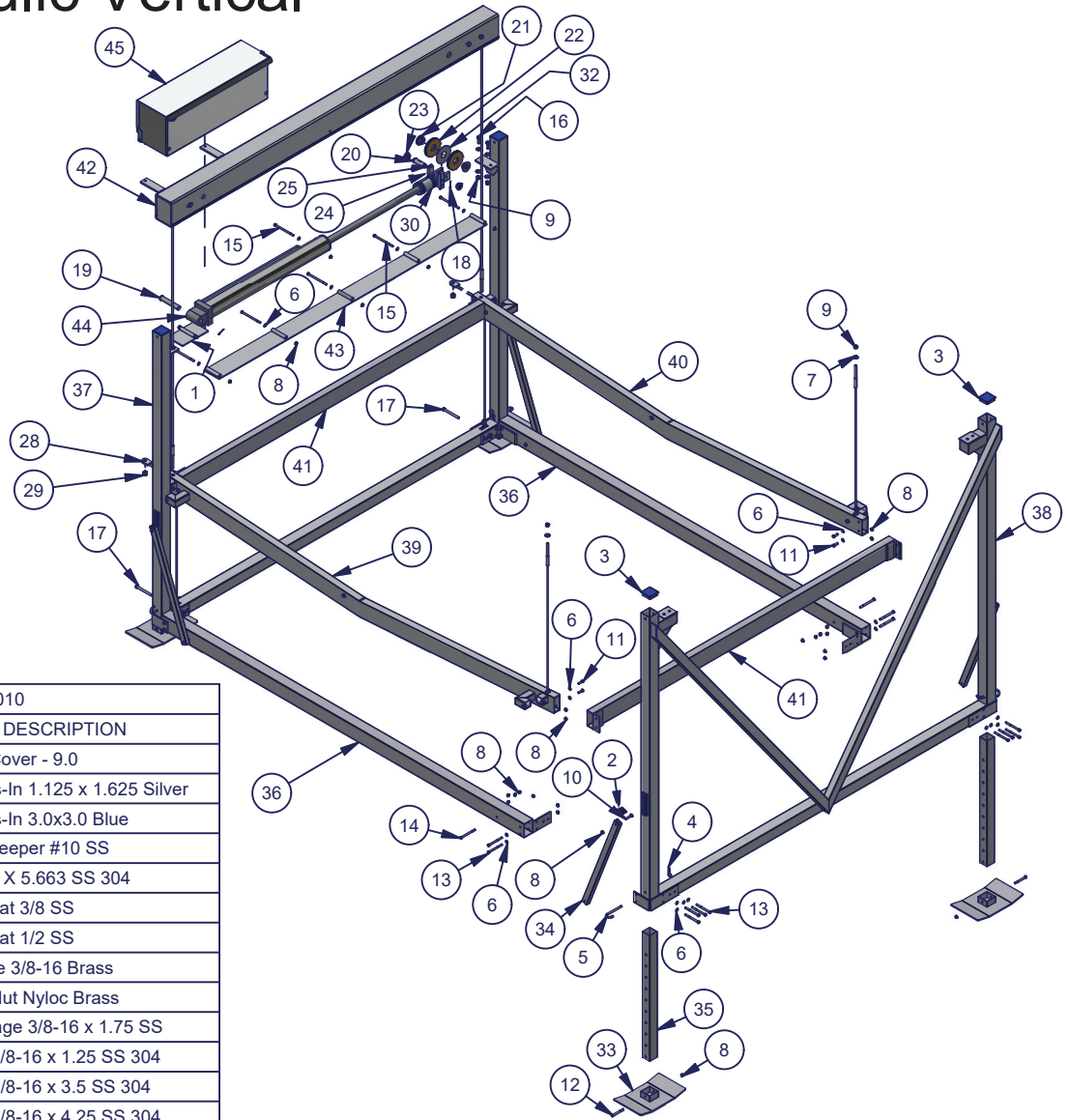
ITEM	QTY	PART NUMBER	DESCRIPTION
33	4	1007404	Wdmt Lift Foot Pad - C3
34	4	1003084	Vertical Lift Brace
35	4	1003944	Leg Post C-3 Lift - 36.0
36	2	1078211	Bottom Beam - 4010 Vertical Hydraulic
37	1	1078213	Lift Side Hyd - 4010 Vertical Hydraulic
38	1	1078212	Lift Side Opp - 4010 Vertical Hydraulic
39	1	1070680	Rack Front 4010 Vertical Hydraulic
40	1	1070689	Rack Rear 4010 Vertical Hydraulic
41	2	1078214	Rack Side - 4010 Vertical Hydraulic
42	1	1070695	Hydraulic Cylinder Housing - 108.25
43	1	1070677	Vertical Hydraulic Cylinder Cover- 88.75

Hydraulics - 4010

ITEM	QTY	PART NUMBER	DESCRIPTION
44	1	1048256	Hydraulic 3.5x35 Cylinder
45	1	1078217	12VDC Pump&Remote-6010 (2000 psi)

5010 Hydraulic Vertical

Part Number: 1078146



Hardware Box - 5010

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1070855	Cylinder Cover - 9.0
2	4	1000986	Cap Press-In 1.125 x 1.625 Silver
3	4	1001034	Cap Press-In 3.0x3.0 Blue
4	4	1002278	Hair Pin Keeper #10 SS
5	4	1002600	Pin-J .375 X 5.663 SS 304
6	37	1002599	Washer Flat 3/8 SS
7	14	1002565	Washer Flat 1/2 SS
8	49	1001802	Nut Flange 3/8-16 Brass
9	8	1001795	1-2 - 13 Nut Nyloc Brass
10	4	1001959	Bolt Carriage 3/8-16 x 1.75 SS
11	9	1002422	Bolt Hex 3/8-16 x 1.25 SS 304
12	4	1002434	Bolt Hex 3/8-16 x 3.5 SS 304
13	22	1002443	Bolt Hex 3/8-16 x 4.25 SS 304
14	4	1002441	Bolt Hex 3/8-16 x 4.5 SS 304
15	7	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
16	4	1002377	Bolt Hex 1/2-13 x 1.5 SS 304
17	2	1032266	Bolt Hex 1-2-13 x 4.75 SS 304
18	2	1011722	COTTER PIN .125 X 1.5
19	1	1070288	Pin 1.0625 x 5.75 SS 17-4 - No Zerk
20	1	1070290	Pin 3.125 SS - Grease Zerk
21	2	1070472	Bushing - 2.375 OD x .875
22	2	1070476	Sheave 4.75 OD x 0.563 - Yellow
23	2	1046708	Hole Plug - PIP 1.4375 - Black
24	2	1071196	Prt Channel 1.25x.751x.1875x4.0
25	2	1071197	UHMW Guide Plate - VHL
26	4	1002400	Bolt Hex 1/4-20 x 1.25 SS 304
27	4	1001797	Nut Hex 1/4-20 Brass
28	2	1078172	Prt Washer Angled 5/8 - 4k-8k VHL
29	2	1024332	Nut Nyloc 5/8-11 Brass
30	2	1071206	Hydraulic Stop Block 5in. x 1.5 ID
31	2	1071215	Hose Clamp - 2.75 Dia - SS
32	1	1072631	Spacer - VHL 5.5k - 8k

Lift Bundle - 5010

ITEM	QTY	PART NUMBER	DESCRIPTION
33	4	1007404	Wdmt Lift Foot Pad - C3
34	4	1003084	Vertical Lift Brace
35	4	1003944	Leg Post C-3 Lift - 36.0
36	2	1070670	Bottom Beam - 5010 Vertical Hydraulic
37	1	1070675	Lift Side Hyd - Vertical Hydraulic
38	1	1070679	Lift Side Opp - Vertical Hydraulic
39	1	1070680	Rack Front 5010 Vertical Hydraulic
40	1	1070689	Rack Rear 5010 Vertical Hydraulic
41	2	1070676	Rack Side - Vertical Hydraulic
42	1	1070695	Hydraulic Cylinder Housing
43	1	1070677	Vertical Hydraulic Cylinder Cover

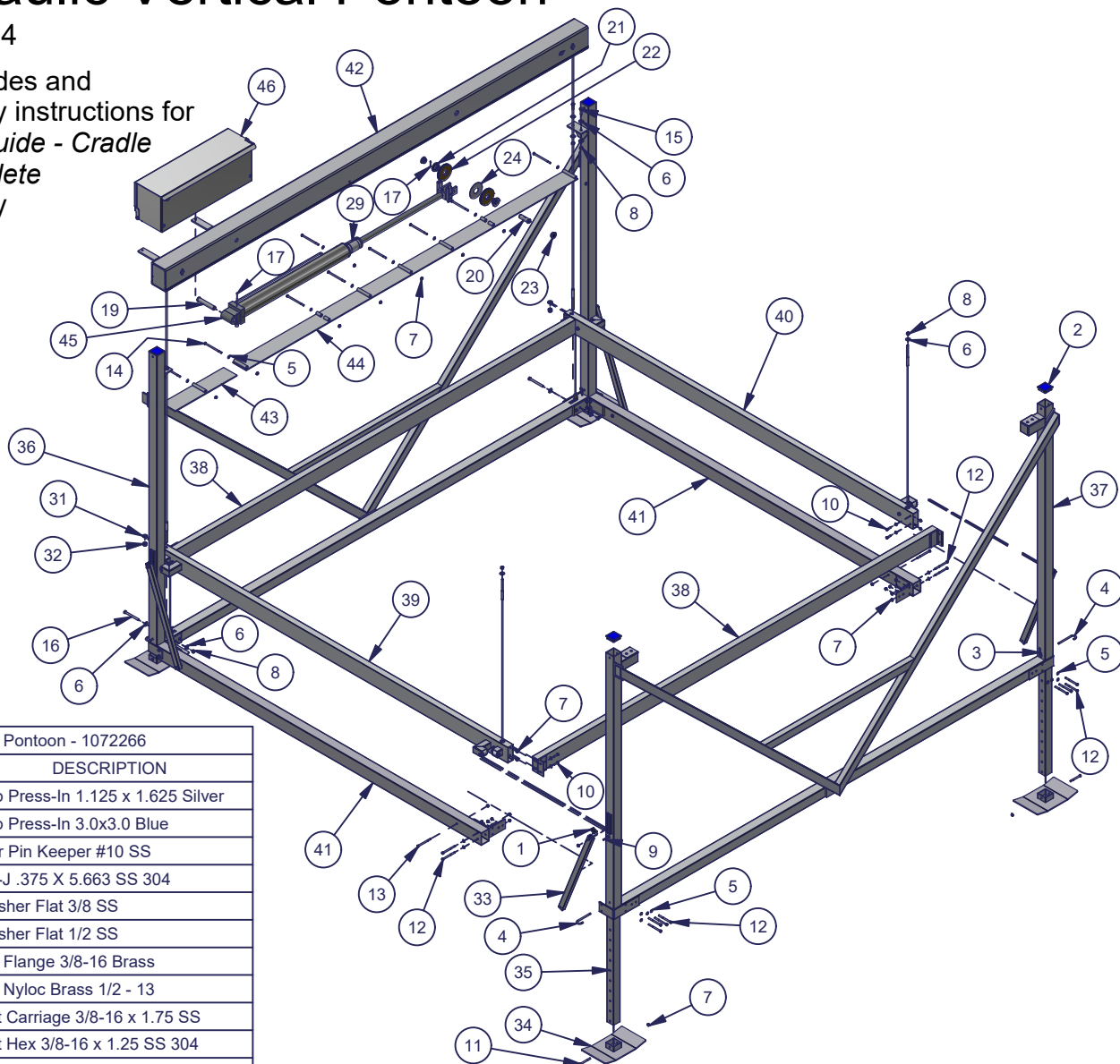
Hydraulics - 5010

ITEM	QTY	PART NUMBER	DESCRIPTION
44	1	1048256	Hydraulic 3.5x35 Cylinder
45	1	1078167	12VDC Pump&Remote-5010 (2200 psi)

5510 Hydraulic Vertical Pontoon

Part Number: 1072304

Sold with pontoon guides and cradles. See assembly instructions for **1024695 - Pontoon Guide - Cradle Bracket 4/5500 Complete (Set of 4)** for assembly instructions.



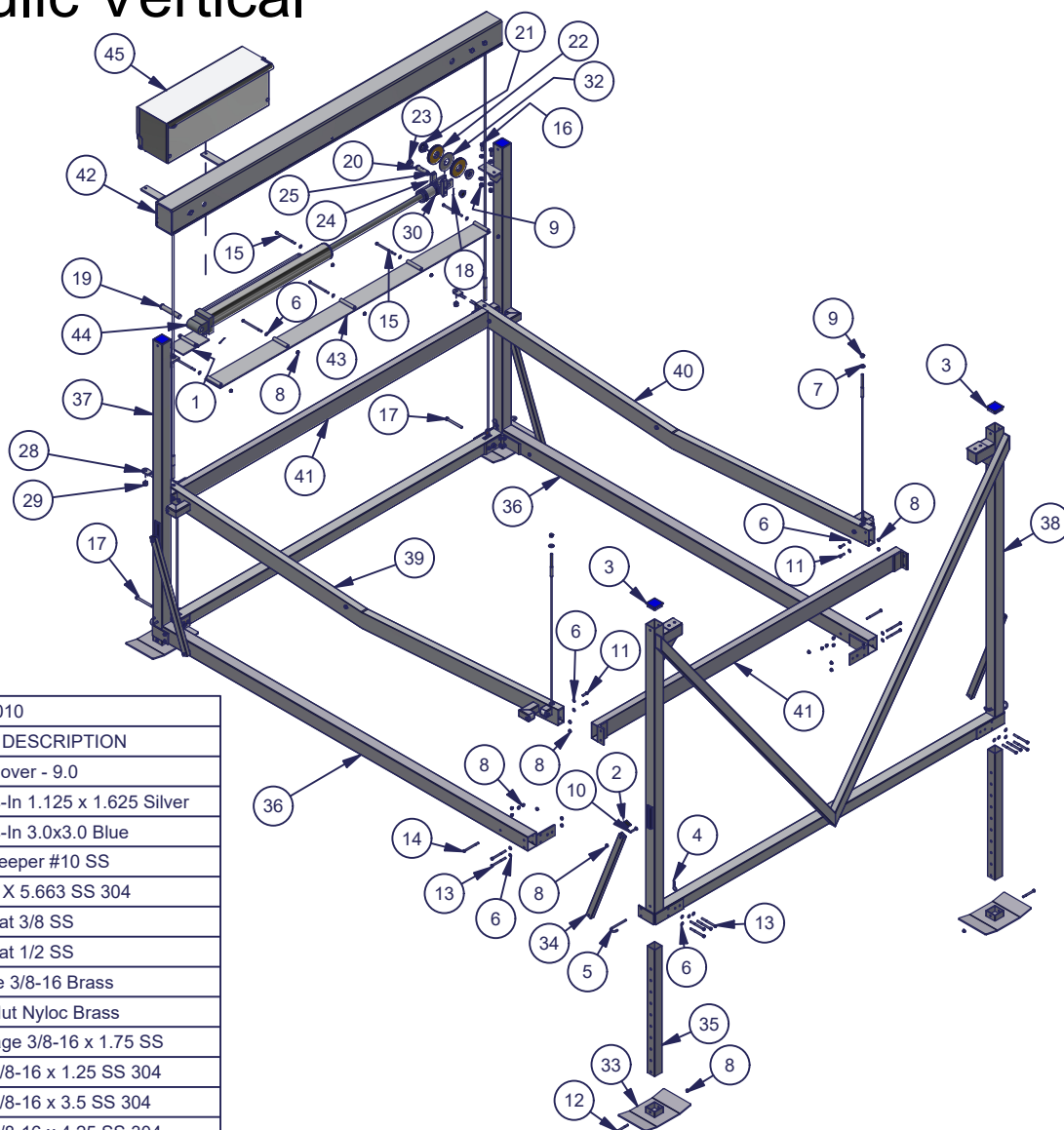
Hardware Box - 5510 Pontoon - 1072266			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	1000986	Cap Press-In 1.125 x 1.625 Silver
2	4	1001034	Cap Press-In 3.0x3.0 Blue
3	4	1002278	Hair Pin Keeper #10 SS
4	4	1002600	Pin-J .375 X 5.663 SS 304
5	39	1002599	Washer Flat 3/8 SS
6	14	1002565	Washer Flat 1/2 SS
7	51	1001802	Nut Flange 3/8-16 Brass
8	8	1001795	Nut Nyloc Brass 1/2 - 13
9	4	1001959	Bolt Carriage 3/8-16 x 1.75 SS
10	9	1002422	Bolt Hex 3/8-16 x 1.25 SS 304
11	4	1002434	Bolt Hex 3/8-16 x 3.5 SS 304
12	22	1002443	Bolt Hex 3/8-16 x 4.25 SS 304
13	4	1002441	Bolt Hex 3/8-16 x 4.5 SS 304
14	9	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
15	4	1002377	Bolt Hex 1/2-13 x 1.5 SS 304
16	2	1032266	Bolt Hex 1-2-13 x 4.75 SS 304
17	2	1011722	COTTER PIN .125 X 1.5
19	1	1070288	Pin 1.0625 x 5.75 SS 17-4 - No Zerk
20	1	1070290	Pin 3.125 SS - Grease Zerk
21	2	1070472	Bushing - 2.375 OD x .875
22	2	1070476	Sheave 4.75 OD x 0.563 - Yellow
23	2	1046708	Hole Plug - PIP 1.4375 - Black
24	1	1072631	Spacer - VHL 4k - 8k
25	2	1071196	Prt Channel 1.25x.751x.1875x4.0
26	2	1071197	UHMW Guide Plate - VHL
27	4	1002400	Bolt Hex 1/4-20 x 1.25 SS 304
28	4	1001798	Nut Nylock Hex 1/4-20 Brass
29	2	1071206	Hydraulic Stop Block 5in. x 1.5 ID
30	2	1071215	Hose Clamp - 2.75 Dia - SS
31	2	1002615	Washer 5/8 - 11 x 1.5 OD SS
32	2	1024332	Nut Nyloc 5/8-11 Brass

Lift Bundle - 5510 Pontoon - 1072263			
ITEM	QTY	PART NUMBER	DESCRIPTION
33	4	1003084	Vertical Lift Brace
34	4	1007404	Wdmt Lift Foot Pad - C3
35	4	1003944	Leg Post C-3 Lift - 36.0
36	1	1072677	Lift Side Opp - Vertical Hydraulic - 5510
37	1	1072244	Lift Side Hyd - Vertical Hydraulic - 5510
38	2	1072254	Rack Side 5510 Pontoon Vertical Hydraulic
39	1	1072255	Rack Front 5510 Pontoon Vertical Hydraulic
40	1	1070689	Rack Rear 5510 Pontoon Vertical Hydraulic
41	2	1070670	Bottom Beam - 6010 Vertical Hydraulic
42	1	1072256	Assy Hydraulic Cylinder Housing 156.25
43	1	1070864	Wdmt Vertical Hydraulic Cylinder Cover - 22.875
44	1	1072252	Wdmt Vertical Hydraulic Cylinder Cover - 122.75

VHL Hydraulics - 5510 / 6010			
ITEM	QTY	PART NUMBER	DESCRIPTION
45	1	1048256	Hydraulic 3.5x35 Cylinder
46	1	1070300	12VDC Pump&Remote-6010 (2400 psi)

6010 Hydraulic Vertical

Part Number: 1070625



Hardware Box - 6010

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1070855	Cylinder Cover - 9.0
2	4	1000986	Cap Press-In 1.125 x 1.625 Silver
3	4	1001034	Cap Press-In 3.0x3.0 Blue
4	4	1002278	Hair Pin Keeper #10 SS
5	4	1002600	Pin-J .375 X 5.663 SS 304
6	37	1002599	Washer Flat 3/8 SS
7	14	1002565	Washer Flat 1/2 SS
8	49	1001802	Nut Flange 3/8-16 Brass
9	8	1001795	1-2 - 13 Nut Nyloc Brass
10	4	1001959	Bolt Carriage 3/8-16 x 1.75 SS
11	9	1002422	Bolt Hex 3/8-16 x 1.25 SS 304
12	4	1002434	Bolt Hex 3/8-16 x 3.5 SS 304
13	22	1002443	Bolt Hex 3/8-16 x 4.25 SS 304
14	4	1002441	Bolt Hex 3/8-16 x 4.5 SS 304
15	7	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
16	4	1002377	Bolt Hex 1/2-13 x 1.5 SS 304
17	2	1032266	Bolt Hex 1-2-13 x 4.75 SS 304
18	2	1011722	COTTER PIN .125 X 1.5
19	1	1070288	Pin 1.0625 x 5.75 SS 17-4 - No Zerk
20	1	1070290	Pin 3.125 SS - Grease Zerk
21	2	1070472	Bushing - 2.375 OD x .875
22	2	1070476	Sheave 4.75 OD x 0.563 - Yellow
23	2	1046708	Hole Plug - PIP 1.4375 - Black
24	2	1071196	Prt Channel 1.25x.751x.1875x4.0
25	2	1071197	UHMW Guide Plate - VHL
26	4	1002400	Bolt Hex 1/4-20 x 1.25 SS 304
27	4	1001797	Nut Hex 1/4-20 Brass
28	2	1078172	Prt Washer Angled 5/8 - 4k-8k VHL
29	2	1024332	Nut Nyloc 5/8-11 Brass
30	2	1071206	Hydraulic Stop Block 5in. x 1.5 ID
31	2	1071215	Hose Clamp - 2.75 Dia - SS
32	1	1072631	Spacer - VHL 5.5k - 8k

Lift Bundle - 6010

ITEM	QTY	PART NUMBER	DESCRIPTION
33	4	1007404	Wdmt Lift Foot Pad - C3
34	4	1003084	Vertical Lift Brace
35	4	1003944	Leg Post C-3 Lift - 36.0
36	2	1070670	Bottom Beam - 6010 Vertical Hydraulic
37	1	1070675	Lift Side Hyd - Vertical Hydraulic
38	1	1070679	Lift Side Opp - Vertical Hydraulic
39	1	1070680	Rack Front 6010 Vertical Hydraulic
40	1	1070689	Rack Rear 6010 Vertical Hydraulic
41	2	1070676	Rack Side - Vertical Hydraulic
42	1	1070695	Hydraulic Cylinder Housing
43	1	1070677	Vertical Hydraulic Cylinder Cover

Hydraulics - 6010

ITEM	QTY	PART NUMBER	DESCRIPTION
44	1	1048256	Hydraulic 3.5x35 Cylinder
45	1	1070300	12VDC Pump&Remote-6010 (2400 psi)

Frame Assembly Instructions

WARNING - PUT SAFETY FIRST

NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL MAY RESULT IN PERSONAL INJURY OR DEATH AND WILL INVALIDATE THE WARRANTY.

Your safety is the most important issue related to this product.

- Fully read and understand each step before proceeding with that step.
- Wear protective gloves, clothing and eyewear when assembling and installing the lift.
- Do not assemble, install or use this product if items are missing or damaged.

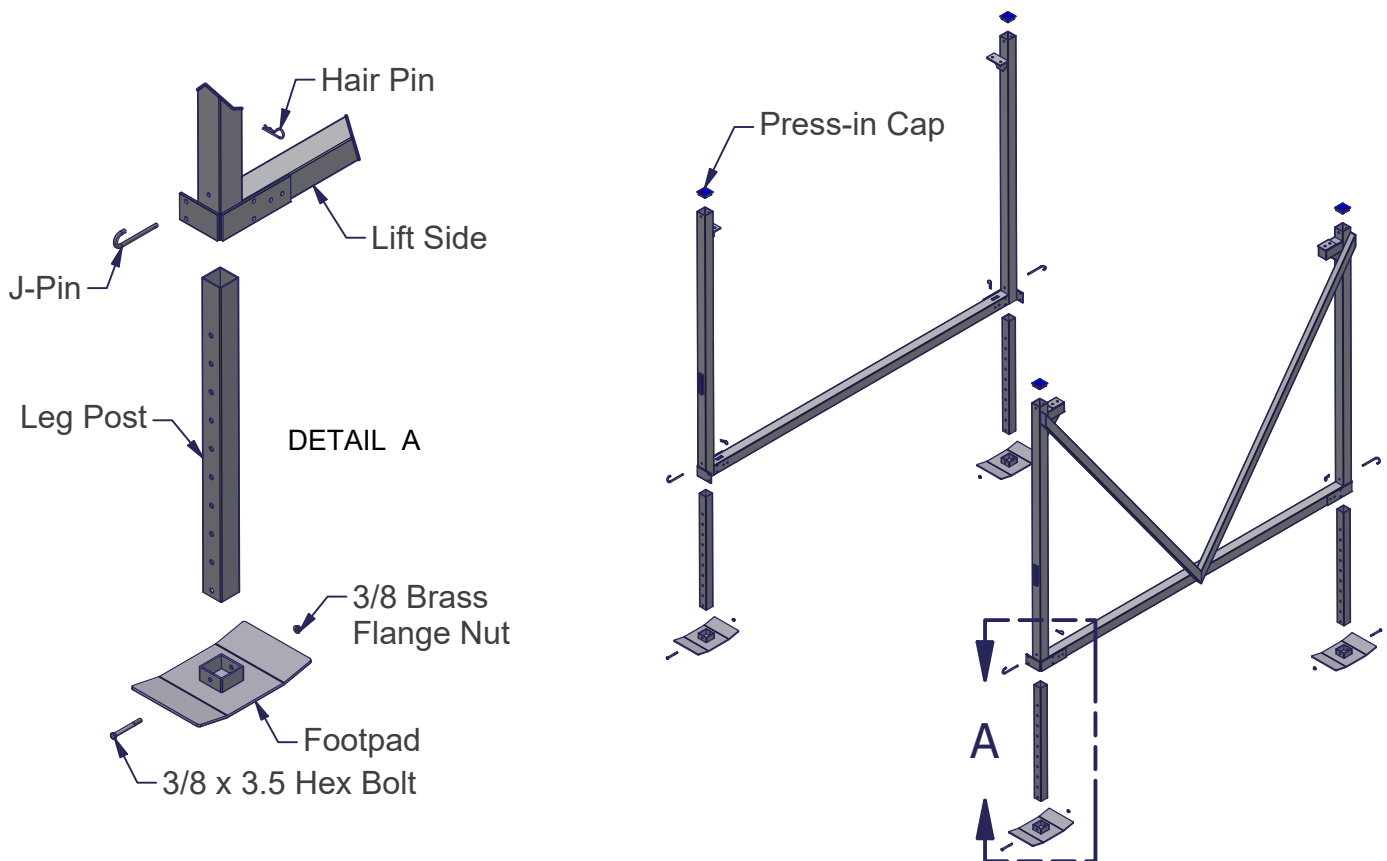
For ease of assembly find a flat area with plenty of room to assemble lift. The following tools will be needed for assembling lift:

- | | | |
|----------------------|-----------------------------|-------------------------------|
| 1. One 7/16 Wrench | 2. Two 1/2" Wrenches | 3. Two 9/16" Wrenches |
| 4. Two 3/4" Wrenches | 5. Flat Blade Screwdriver | 6. Measuring Tape |
| 7. Mallet | 8. Pliers (for cotter pins) | 9. Tin Snips (to open bundle) |

Only hand tighten bolts and nuts until lift is completely assembled.

STEP 1

Press blue caps into uprights as shown if the lift is not getting a canopy installed. Insert all four leg posts into foot pads. Secure using one 3/8 x 3.5 hex bolt and one 3/8 brass flange nut in each place. Insert leg posts into lift sides as shown. Secure with one J-Pin and hair pin for each leg post.

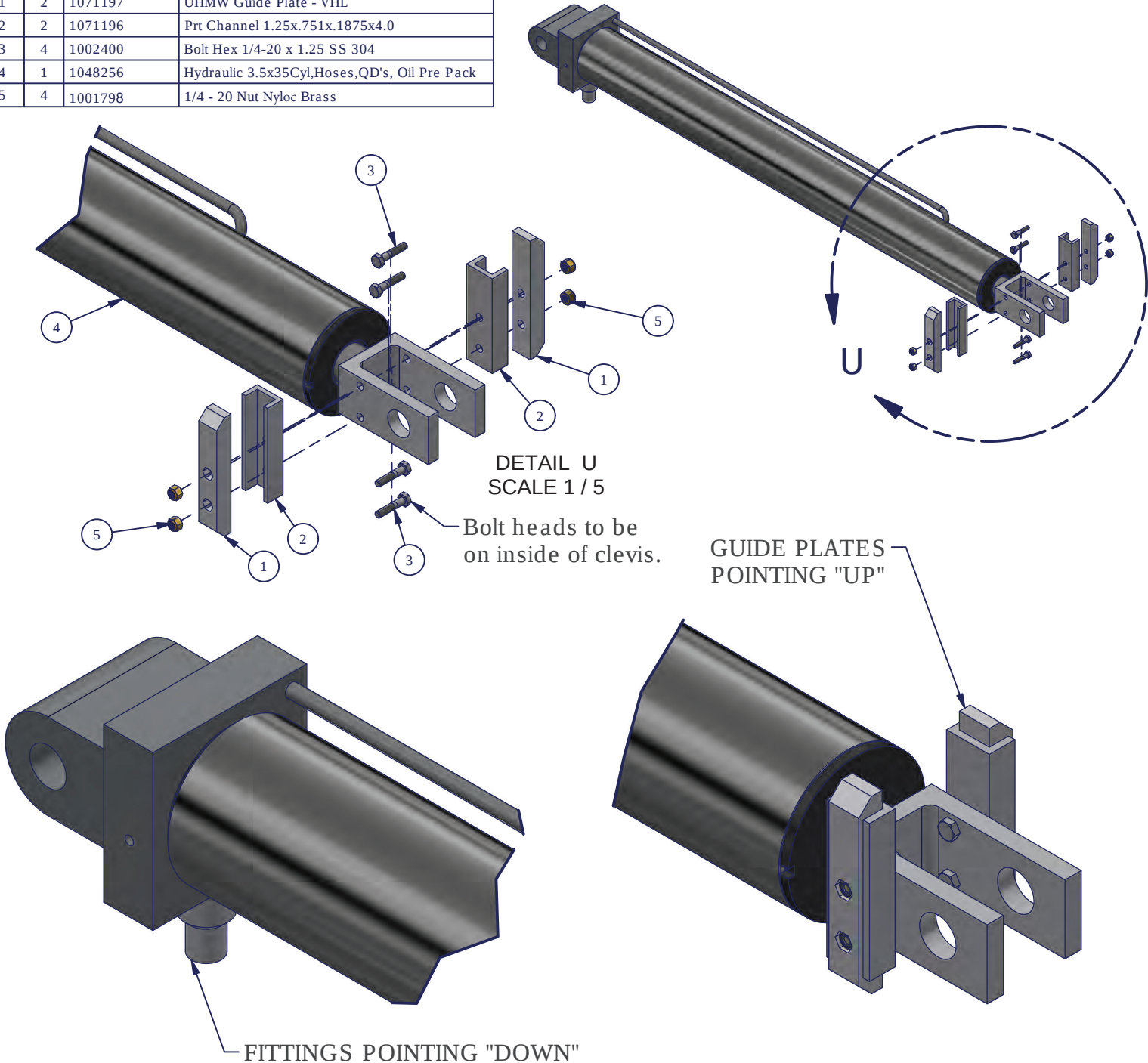


STEP 2

Assemble the cylinder guide plates. Insert two 1/4" nyloc nuts into the UHMW guide plates with threads pointing inward, then insert UHMW guide plate into the support channel and line up holes, finally take two 1/4 x 1.25 hex bolts and insert into the holes on the clevis from the inside outward. Insert the bolts through the support channels and into the UHMW guide plates and thread into the previously inserted 1/4" nuts.

NOTE: Position the guide plates so the taller ends are pointing UP when the hydraulic fittings are pointing DOWN. If necessary, you can turn the clevis for proper alignment.

Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	2	1071197	UHMW Guide Plate - VHL	
2	2	1071196	Prt Channel 1.25x.751x.1875x4.0	
3	4	1002400	Bolt Hex 1/4-20 x 1.25 SS 304	
4	1	1048256	Hydraulic 3.5x35Cyl,Hoses,QD's, Oil Pre Pack	
5	4	1001798	1/4 - 20 Nut Nyloc Brass	



STEP 3

Place the cylinder into the hydraulic cylinder housing assembly.

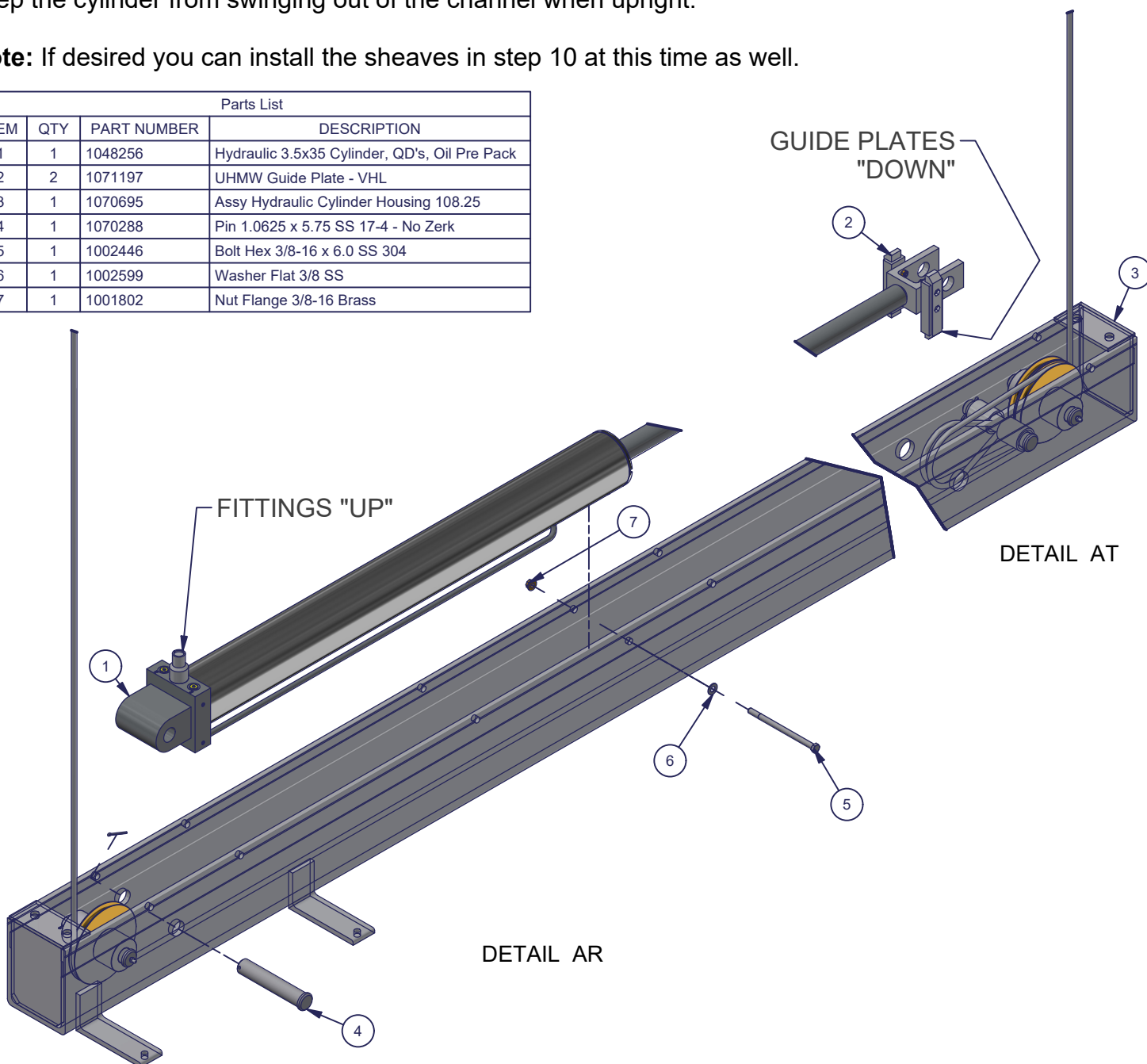
The cylinder housing comes with the corner sheaves and cables pre-assembled. The cable ends that are inside the channel are made into a loop. These loops are where the sheaves on the hydraulic cylinder will be placed later on.

First, place the fittings end of the hydraulic cylinder into the channel with the fittings facing out of the channel. Pin in place using the non-greaseable 5.75 pin through the channel and the end of the cylinder, secure in place with cotter pin. Swing the clevis end of the cylinder down into the channel with the guides pointing into the channel.

Place one 3/8 x 6.0 bolt with flat washer through the channel. Use the set of holes near the middle of the channel, it will be the only set of 3/8 holes not located on the groove in the channel wall. This bolt is to keep the cylinder from swinging out of the channel when upright.

Note: If desired you can install the sheaves in step 10 at this time as well.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1048256	Hydraulic 3.5x35 Cylinder, QD's, Oil Pre Pack
2	2	1071197	UHMW Guide Plate - VHL
3	1	1070695	Assy Hydraulic Cylinder Housing 108.25
4	1	1070288	Pin 1.0625 x 5.75 SS 17-4 - No Zerk
5	1	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
6	1	1002599	Washer Flat 3/8 SS
7	1	1001802	Nut Flange 3/8-16 Brass



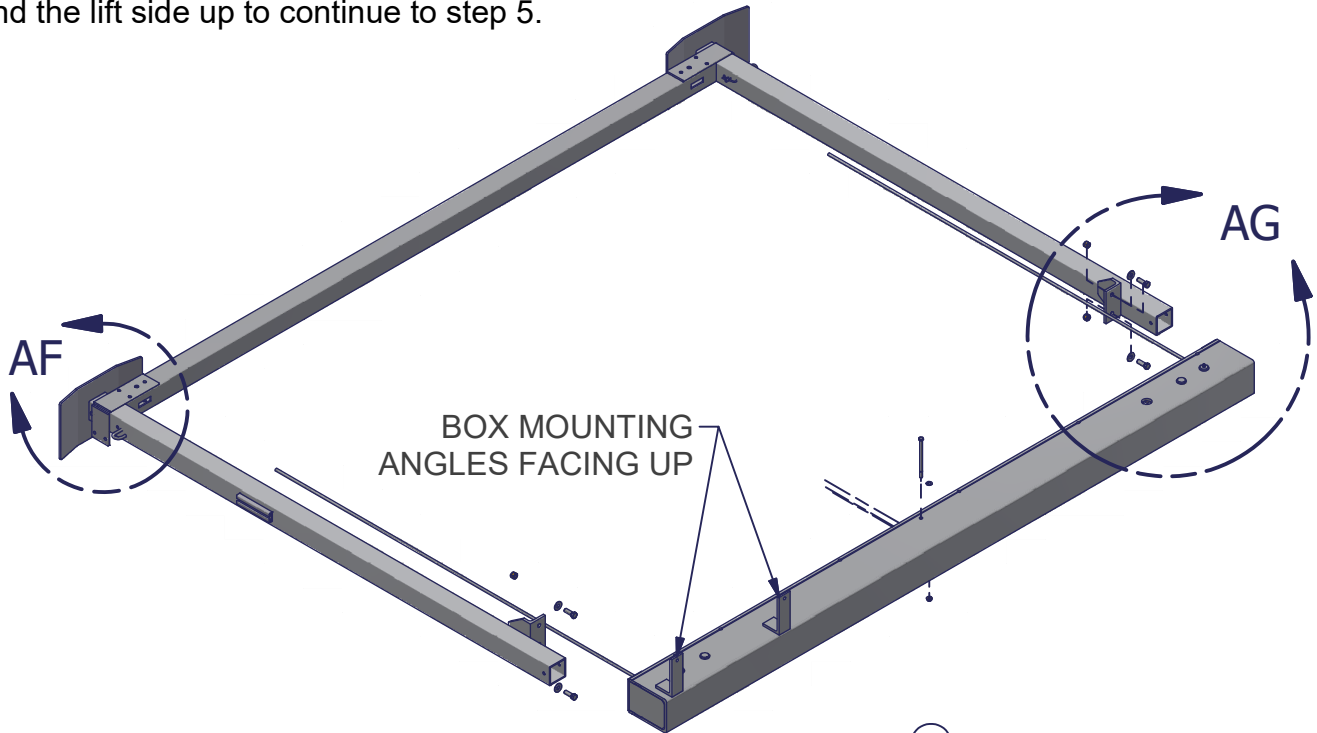
STEP 4

Lay the lift side hydraulic on a flat even surface with the lift side bottom angles facing the ground.

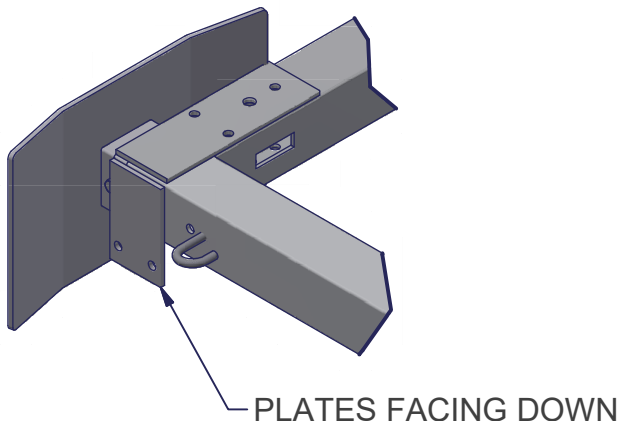
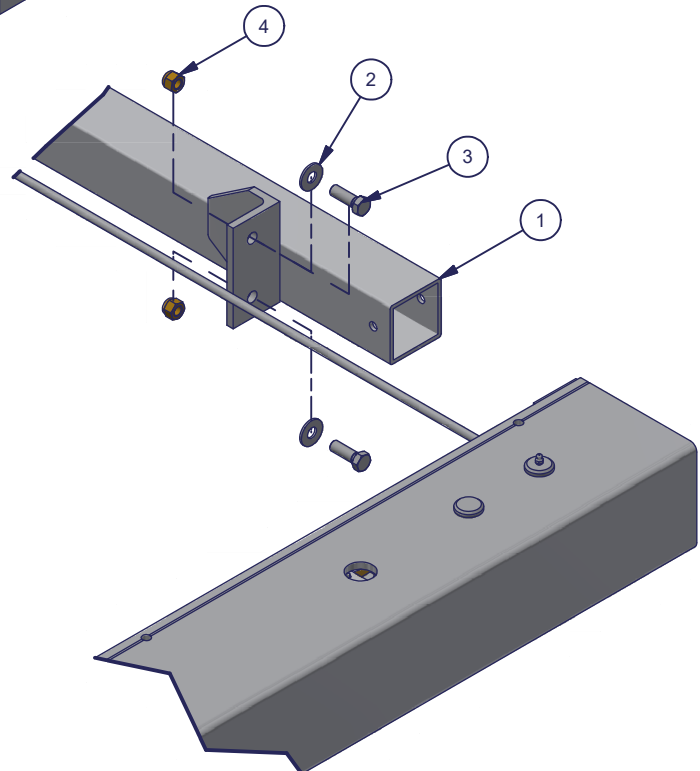
Take the hydraulic housing assembly from step 3 and bolt it to the mounting angles on the lift side so that the hydraulic pump mount angles are facing up.

Secure to the lift side using four 1/2 x 1.5 hex bolts, eight 1/2 flat washers, and four 1/2 brass nyloc nuts.

Stand the lift side up to continue to step 5.



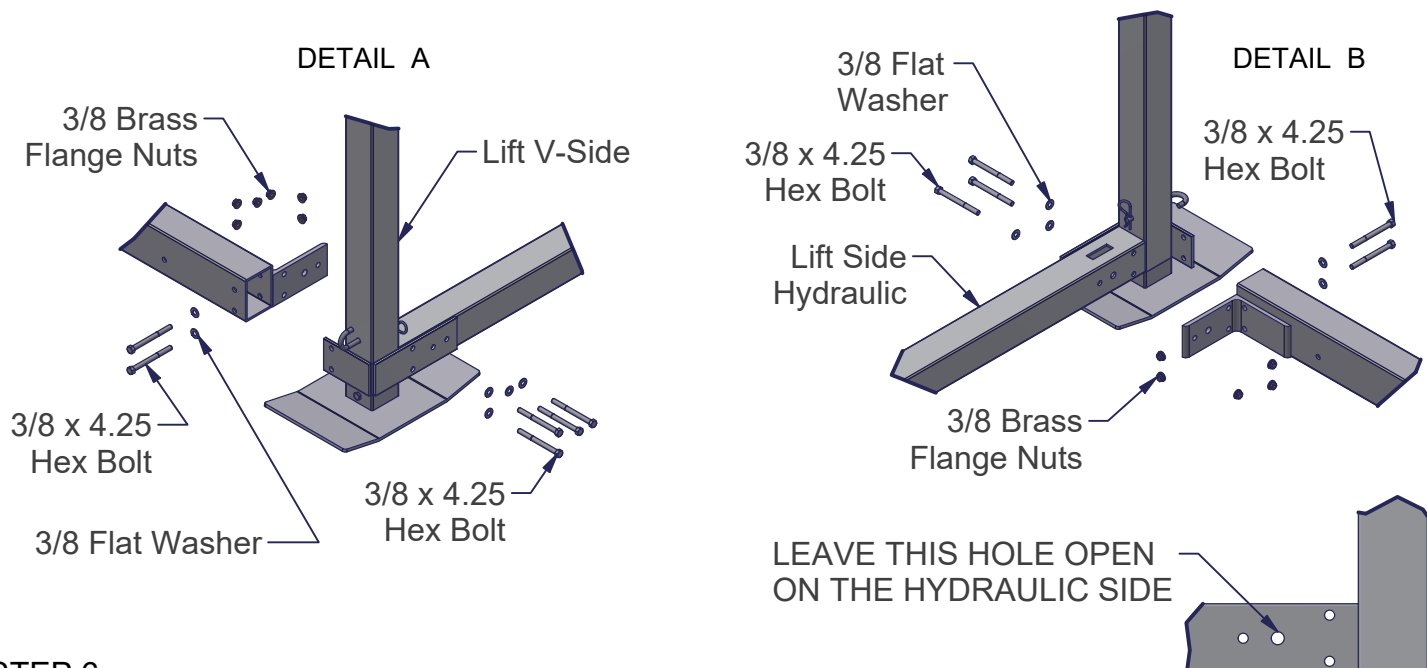
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1070675	Wdmt Lift Side Hydraulic
2	8	1002565	Washer Flat 1/2 SS
3	4	1002377	Bolt Hex 1/2-13 x 1.5 SS 304
4	4	1001795	1-2 - 13 Nut Nyloc Brass
5	1	1070695	Assy Hydraulic Cylinder Housing 108.25
6	1	1001802	Nut Flange 3/8-16 Brass
7	1	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
8	1	1002599	Washer Flat 3/8 SS



STEP 5

Attach bottom beams to the front and rear of both lift sides. Secure the ends of the bottom beams to the lift v-side using six 3/8 x 4.25 hex bolts, six 3/8 flat washers, and six 3/8 brass flange nuts in both corners as shown in Detail A.

Secure the ends of the bottom beams to the hydraulic lift side using five 3/8 x 4.25 hex bolts, five 3/8 flat washers, and five 3/8 brass flange nuts in both corners as shown in Detail B. Leave the larger middle hole on the lift side open for now. This will be used to anchor the leveling cables in a later step.

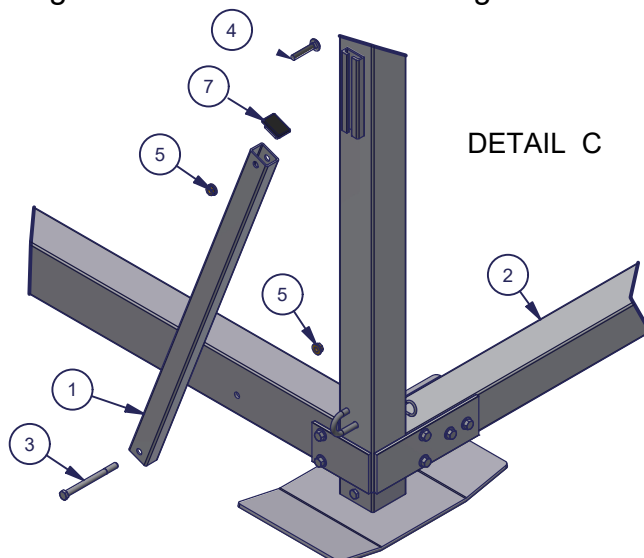


STEP 6

Attach the brace tube to the lift sides and bottom beams. Secure each brace tube to the bottom beams with one 3/8 x 4.5 hex bolt, and one 3/8 brass flange nut - as shown in Detail "C". Secure each brace tube to the T-Slot of the lift sides with one 3/8 x 1-3/4 carriage bolt and one 3/8 brass flange nut - as shown in Detail "C".

Press one silver cap into the top of each brace tube.

Parts List		
ITEM	PART NUMBER	DESCRIPTION
1	1003084	Vertical Lift Brace
2	1070679	Wdmt Lift Side Opp - Vertical Hydraulic
3	1002441	Bolt Hex 3/8-16 x 4.5 SS 304
4	1001959	Bolt Carriage 3/8-16 x 1.75 SS
5	1001802	Nut Flange 3/8-16 Brass
6	1070670	Bottom Beam - 6010 Vertical Hydraulic
7	1000986	Cap Press-In 1.125 x 1.625 Silver

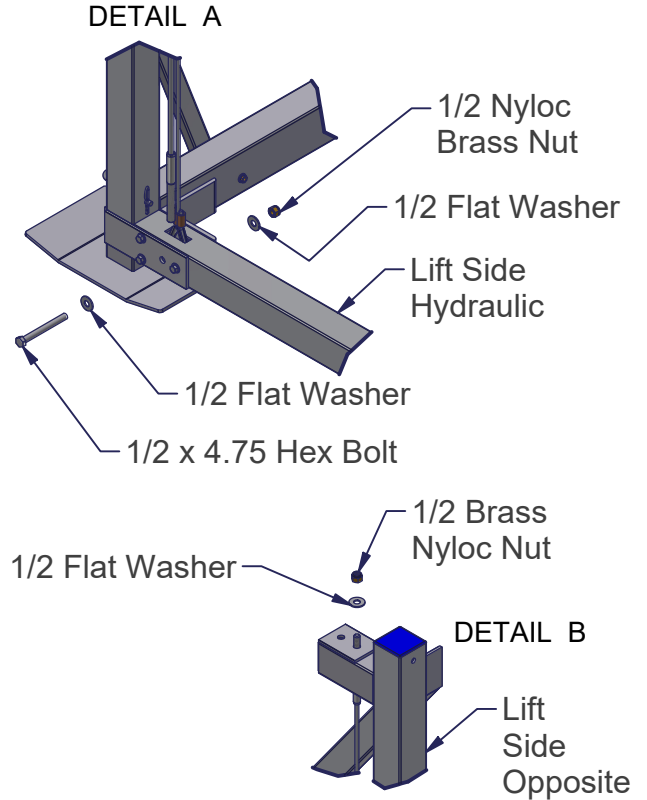
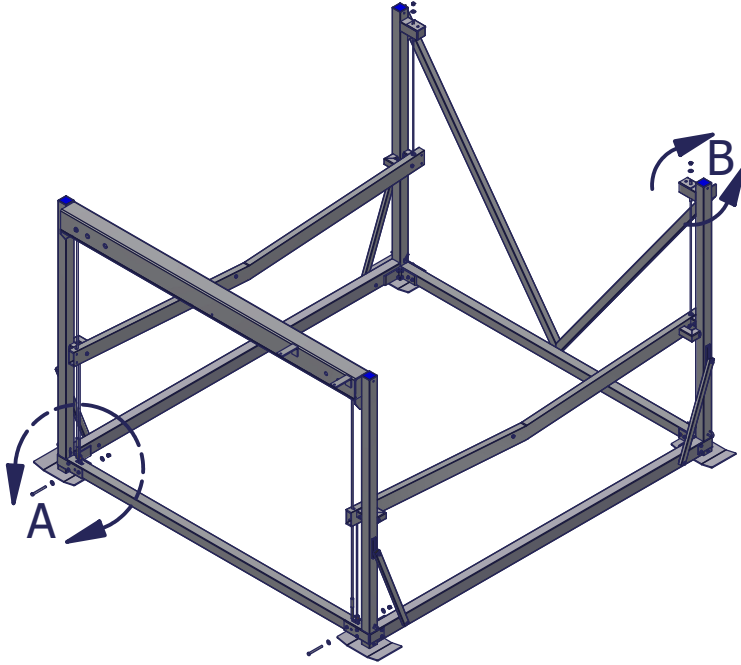


Note: Take two measurements between the two lift sides, one at the top and one at the bottom. The measurement should be the same at the top and bottom of the lift sides.

STEP 7

Attach front and rear racks to lift frame. Place the racks in the lift so that the looped/thimble ends of the cables are inserted into the bottom of the lift side hydraulic. Secure in place using one 1/2 x 4.75 bolt, two 1/2 flat washers, and one 1/2 nyloc brass nut for each cable.

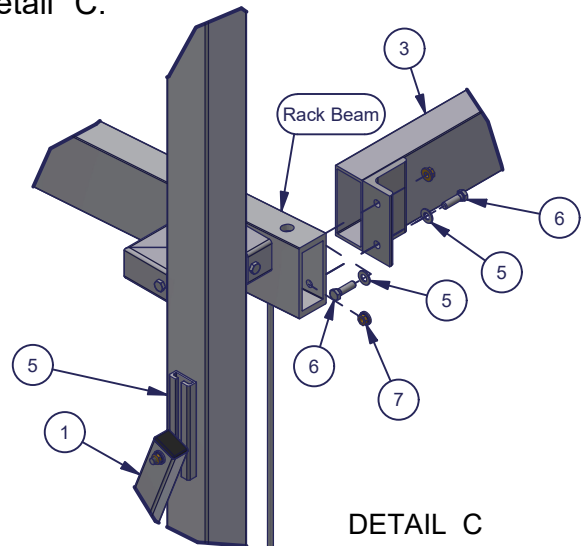
Insert the swaged end of the cable through the hole closest to the lift upright in the top tube of the lift side opposite. Secure in place with one 1/2 flat washer and one 1/2 nyloc nut per cable. Tighten until there's about 3/8 of the swage sticking out of the top of the nut.



STEP 8

Attach the rack sides to the front and rear racks. Secure at each end with two 3/8 x 1.25 hex bolts, two 3/8 flat washers and two 3/8 brass flange nuts - as shown in Detail "C."

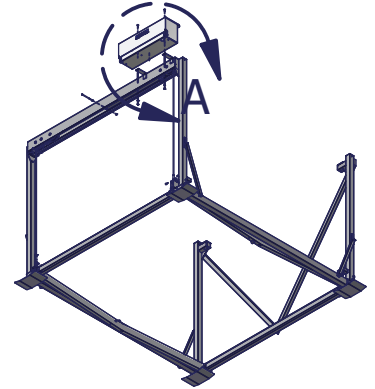
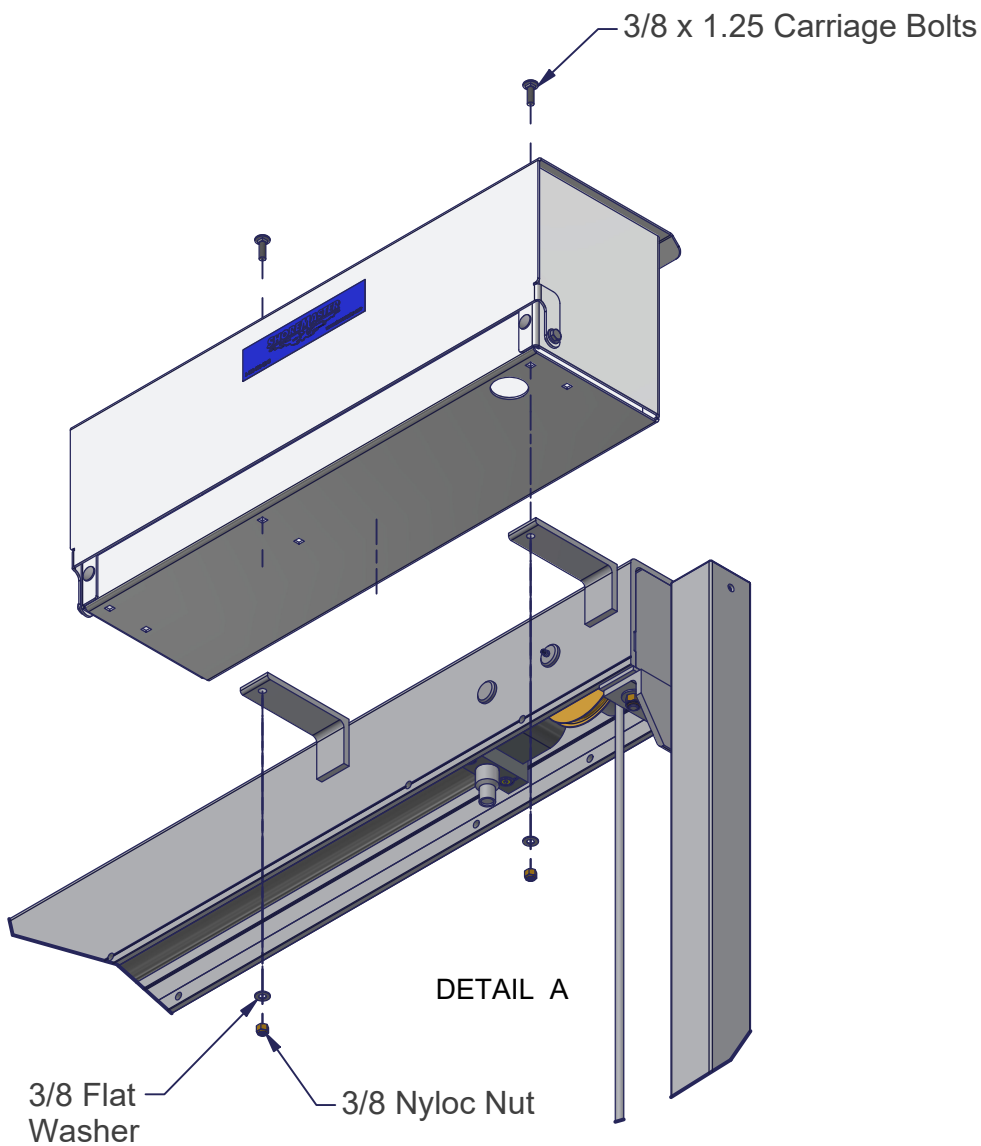
NOTE: The top bolts on the side of the rack beam with the lifting cables should be flipped around so the head of the bolt is on the inside of the rack to provide clearance for the angled washer and nut for the swaged end of the lifting cable (as shown).



Parts List		
ITEM	PART NUMBER	DESCRIPTION
1	1003084	Vertical Lift Brace
2	1070679	Lift Side Opp - Vertical Hydraulic
3	1070676	Rack Side - Vertical Hydraulic
4	1070680	Rack Front 6010 Vertical Hydraulic
5	1002599	Washer Flat 3/8 SS
6	1002422	Bolt Hex 3/8-16 x 1.25 SS 304
7	1001802	Nut Flange 3/8-16 Brass

STEP 9

Place the hydraulic box onto the hydraulic housing. Place two 3/8 x 1.25 carriage bolts through the box and into the mounting angles on the hydraulic housing as shown. Secure in place using 3/8 flat washers and 3/8 brass nyloc nuts.



Review the hydraulic box instructions for hydraulic pump setup. Once pump is operational and the hydraulic lines are attached to the hydraulic cylinder, press and hold the "Down" button on the control panel or remote to extend the hydraulic cylinder until fully extended.

STEP 10

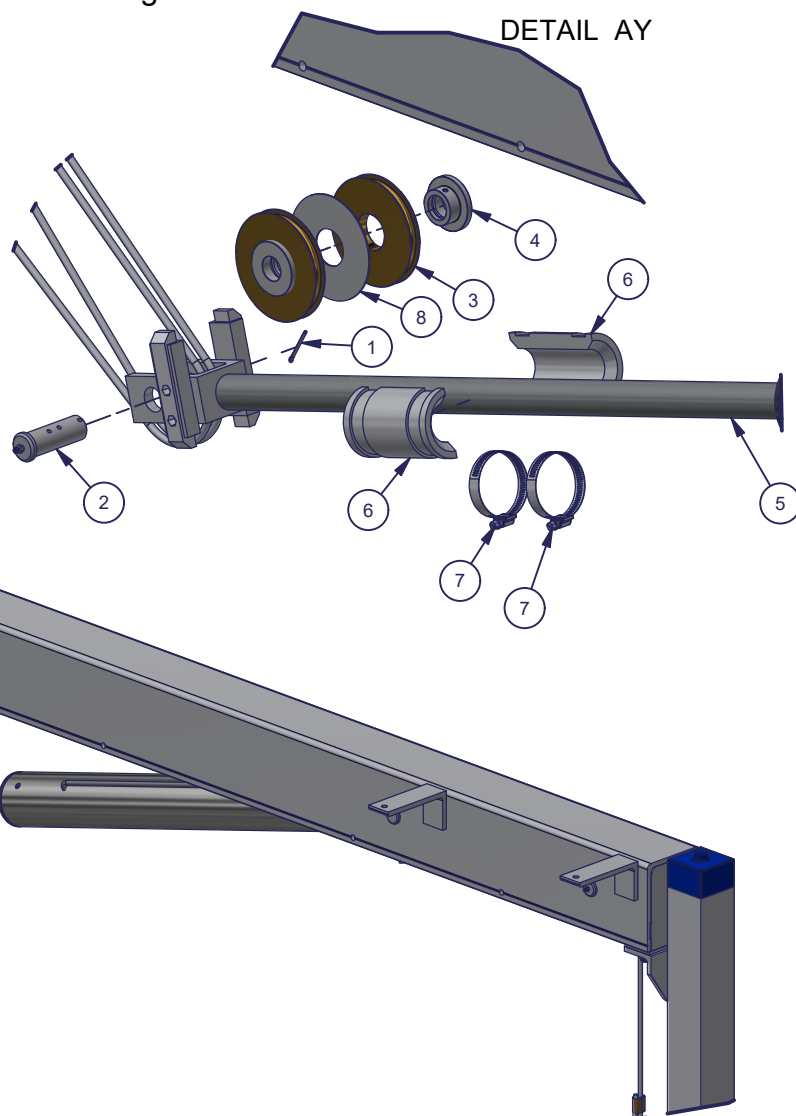
With the cylinder completely extended, swing the cylinder down just enough to get access to the clevis end. You'll need to remove the bolt from step 3 that holds the cylinder up. This bolt can then be moved to the 3/8 hole nearest the hydraulic fittings to hold the cylinder in place. Be sure to place the bolt back in the right location after assembling the sheaves and cable loops.

NOTICE do not let the cylinder hang freely as this may damage the hydraulic hose ends or cylinder fittings.

Adjust the cables so the loop ends roughly line up with the clevis. Place one 4.75 inch sheave into each cable loop. Then place one .875 bushing into the outside of each sheave and place the spacer (item 8) between the sheaves. Make sure there are no cables crossing each other or twists in the cable. The long cable should stay toward the outside of the lift, and the short cable toward the inside of the lift. Place this assembly into the clevis end of the hydraulic cylinder. Secure in place with the 3.125 greaseable pin and cotter pin.

Place each half of the stop block around the cylinder rod. Secure in place with the two supplied band clamps. This assembly is to prevent the lift from over-traveling.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	1011722	COTTER PIN .125 X 1.5
2	1	1070290	Assy Pin 3.125 SS - Grease Zerk - Double
3	2	1070476	Sheave Steel 4.75 OD - Yellow Zinc
4	2	1070472	Bushing Vertical Hydraulic - 2.375 OD x .875
5	1	1048256	Hydraulic 3.5x35 Cylinder, QD's, Oil Pre Pack
6	2	1071206	Hydraulic Stop Block 5in. x 1.5 ID
7	2	1071215	Hose Clamp - 1.75 to 2.75 Dia .500 W - 410 SS
8	1	1072631	Spacer - VHL 5.5k - 8k



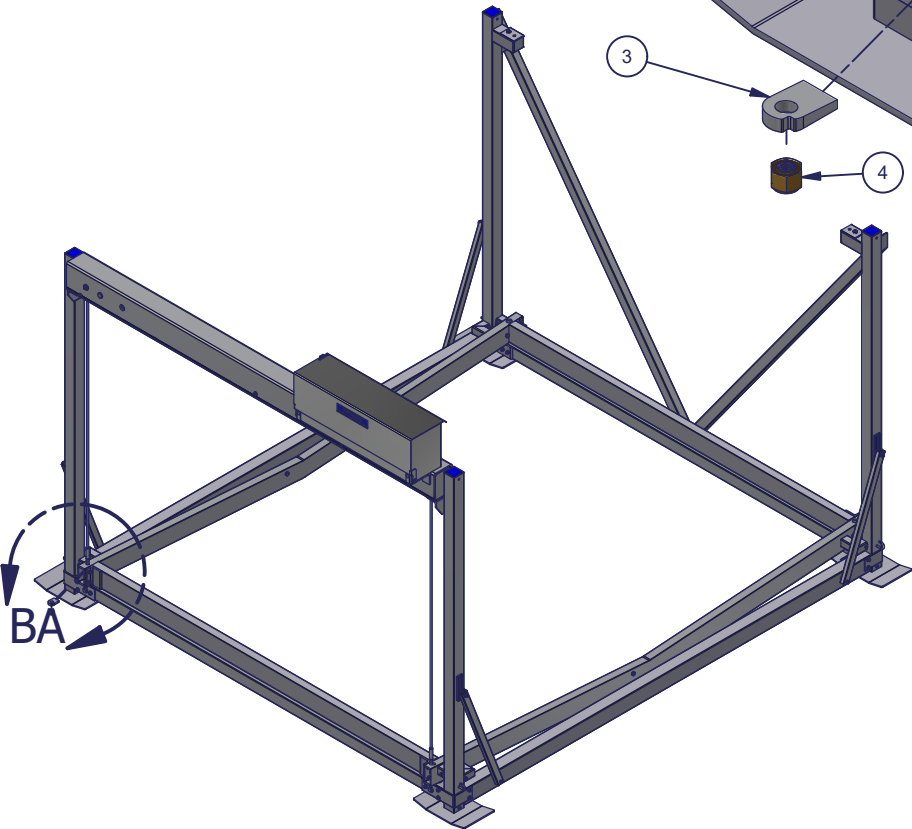
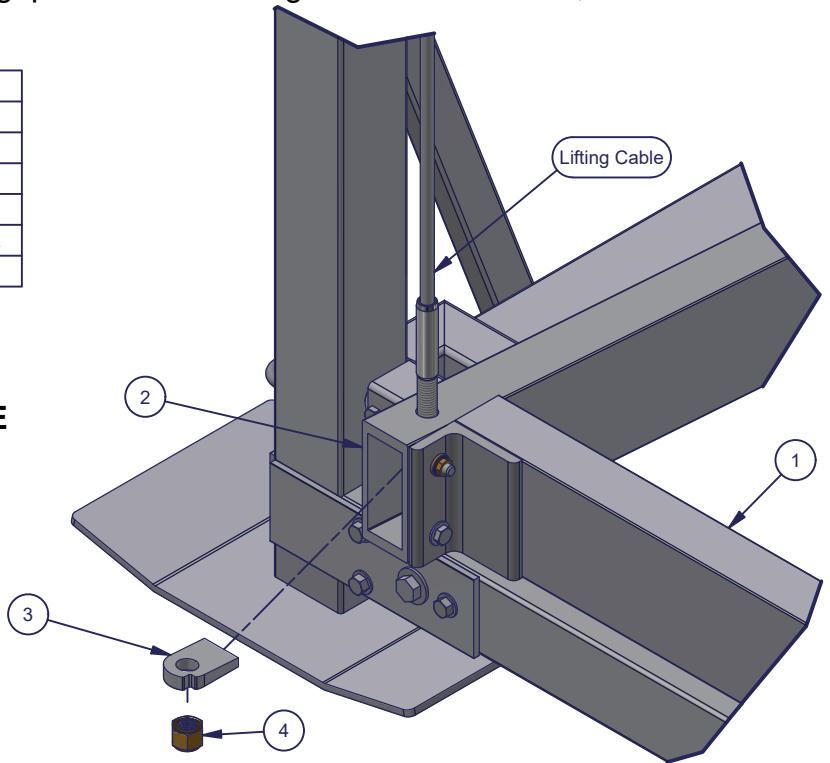
STEP 11

With the cylinder completely extended, cables and sheaves assembled in the cylinder, and the cylinder supported by the 3/8 x 6.0 bolt to be completely horizontal, pull down on the lifting cables and make sure they're not caught up in anything in the hydraulic cylinder housing.

Insert the Swaged end of the lifting cables into the hole in the top of the Rack Beams. Insert an Angled Washer (item 3) into the Rack Beam and onto the threads of the lifting cable. **MAKE SURE THE LONG END OF THE WASHER FACES INWARD SO THE CABLE WILL SIT TRUE AND THE NOTCHED PART OF WASHER FACES THE BOLT HEAD FOR CLEARANCE.** Next insert a 5/8 Nyloc Nut into the Rack Beam and thread onto the Swaged end of the lifting cable. Make sure there is at least 1/4" of threads sticking out past end of nut. Adjust to level rack. A good way to tighten the 5/8 Nyloc Nut is to use a closed end wrench to go onto the nut and use a vise grips to turn the swaged end of the cable, take the wrench on and off the nut and turn with the vise grips.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	--	Wdmt Rack Side - Vertical Hydraulic
2	2	--	Assy Rack Beam Vertical Hydraulic
3	2	1078172	Prt Washer Angled 5/8 - 4k-8k VHL
3	2	1002615	Washer Flat 5/8 X 1.5 OD SS - Pontoon Lift
4	1	1024332	Nut Nyloc 5/8-11 Brass

NOTE: DO NOT USE ANGLED WASHER WITH THE PONTOON LIFT, USE A 5/8 FLAT WASHER.



DETAIL BA
SCALE 1/6

STEP 12

With the lift empty, hold the "UP" button on the control panel or remote and check that everything is operating smoothly and cables are routed correctly.

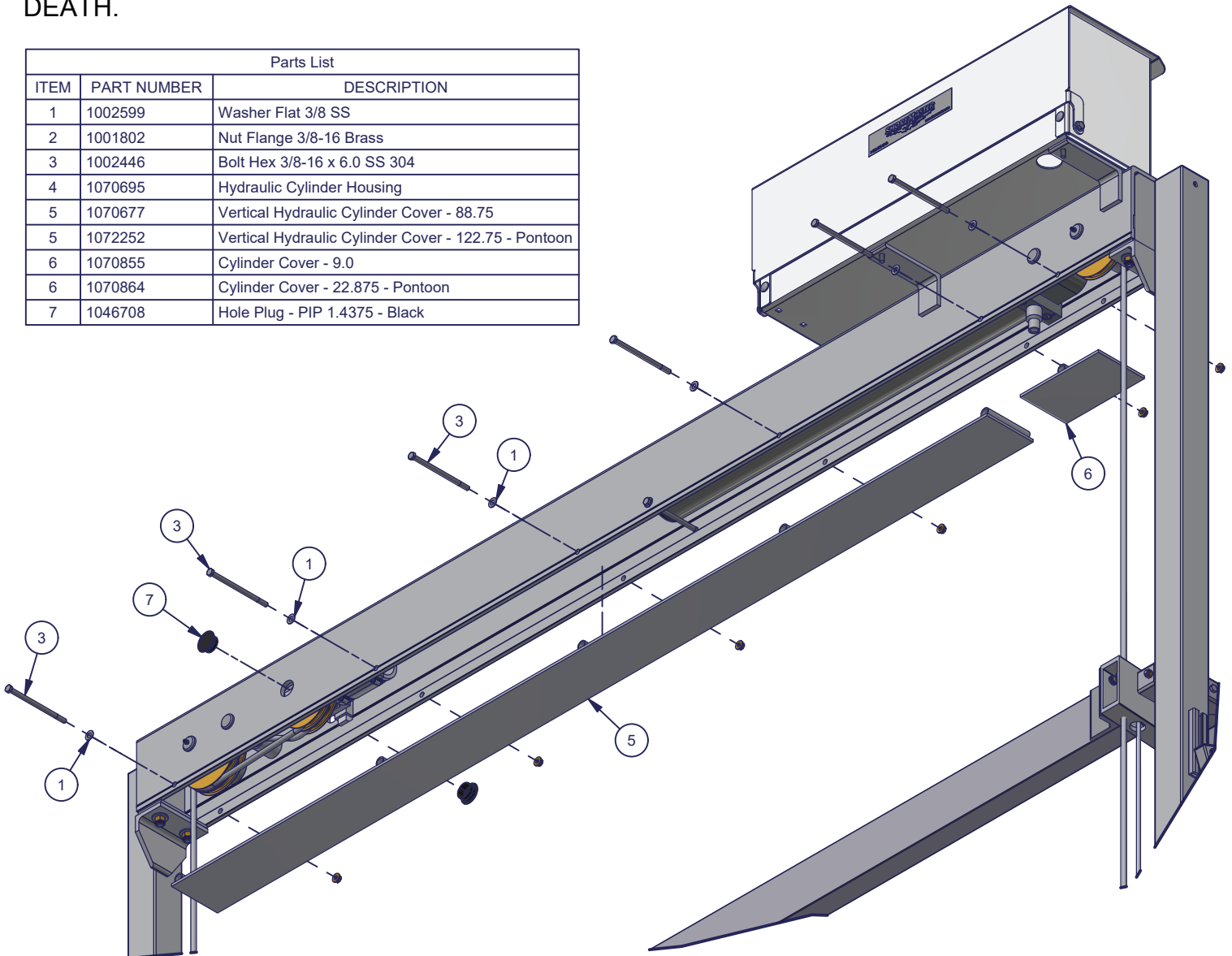
Grease all pins that have the grease zerk install. There is one pin on the inside of the channel accessible through the 1.375 hole in the channel when the cylinder is completely extended. There are two other greaseable pins in each end of the channel.

Place cap plugs into the 1.375 holes in the channel.

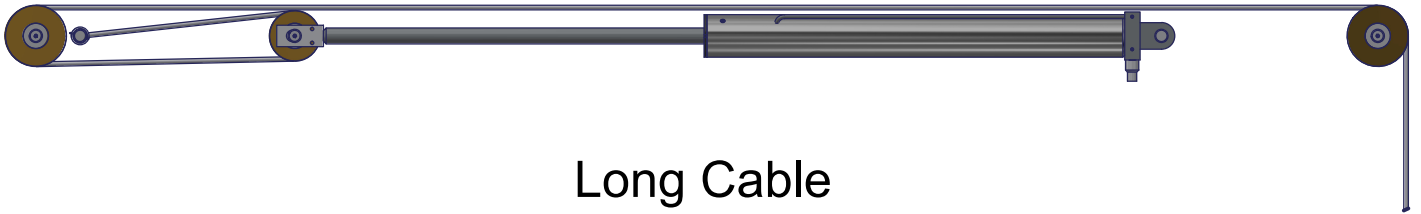
Place the covers on the underside of the cylinder housing. Secure in place with 3/8 x 6.0 hex bolts, 3/8 flat washers, and 3/8 brass flange nuts. Tighten all hardware.

⚠ DANGER DO NOT REMOVE CYLINDER HOUSING COVER WITH WEIGHT ON THE LIFT RACK. DOING SO WILL CAUSE DAMAGE TO LIFT AND MAY CAUSE PERSONAL INJURY OR DEATH.

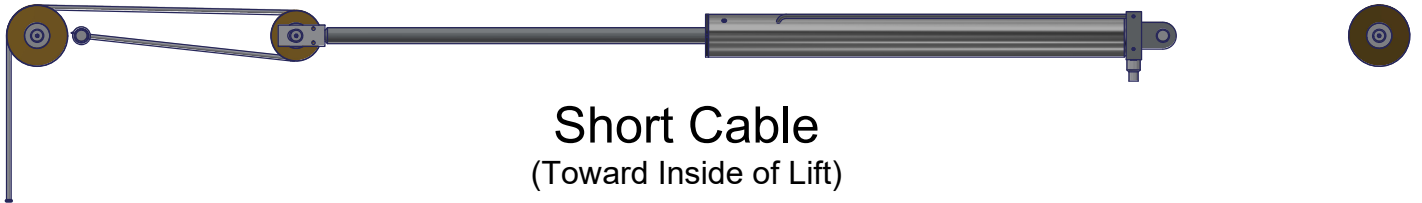
Parts List		
ITEM	PART NUMBER	DESCRIPTION
1	1002599	Washer Flat 3/8 SS
2	1001802	Nut Flange 3/8-16 Brass
3	1002446	Bolt Hex 3/8-16 x 6.0 SS 304
4	1070695	Hydraulic Cylinder Housing
5	1070677	Vertical Hydraulic Cylinder Cover - 88.75
5	1072252	Vertical Hydraulic Cylinder Cover - 122.75 - Pontoon
6	1070855	Cylinder Cover - 9.0
6	1070864	Cylinder Cover - 22.875 - Pontoon
7	1046708	Hole Plug - PIP 1.4375 - Black



Lifting Cable Routes

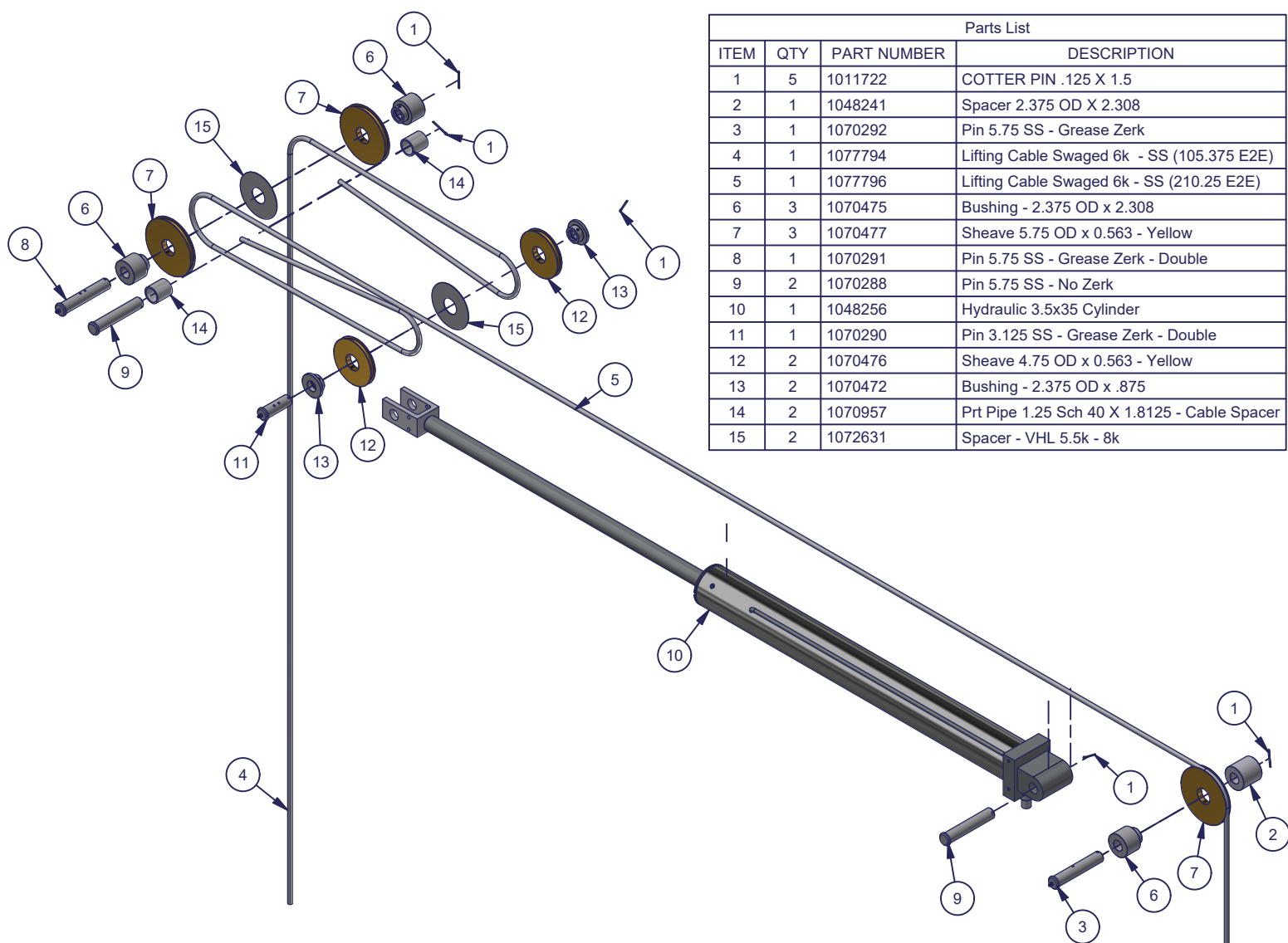


Long Cable
(Toward Outside of Lift)



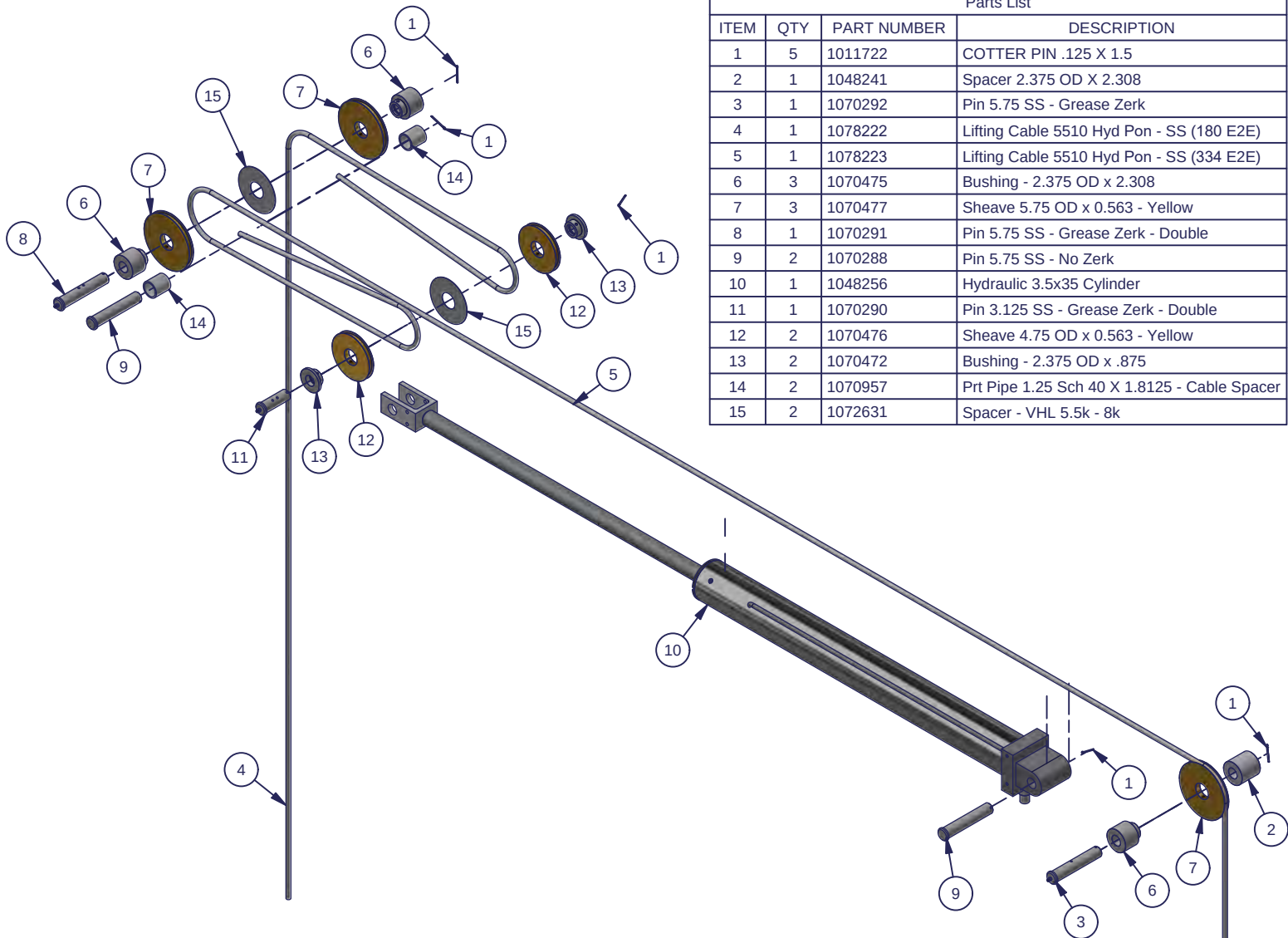
Short Cable
(Toward Inside of Lift)

Lifting System Diagram



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	1011722	COTTER PIN .125 X 1.5
2	1	1048241	Spacer 2.375 OD X 2.308
3	1	1070292	Pin 5.75 SS - Grease Zerk
4	1	1077794	Lifting Cable Swaged 6k - SS (105.375 E2E)
5	1	1077796	Lifting Cable Swaged 6k - SS (210.25 E2E)
6	3	1070475	Bushing - 2.375 OD x 2.308
7	3	1070477	Sheave 5.75 OD x 0.563 - Yellow
8	1	1070291	Pin 5.75 SS - Grease Zerk - Double
9	2	1070288	Pin 5.75 SS - No Zerk
10	1	1048256	Hydraulic 3.5x35 Cylinder
11	1	1070290	Pin 3.125 SS - Grease Zerk - Double
12	2	1070476	Sheave 4.75 OD x 0.563 - Yellow
13	2	1070472	Bushing - 2.375 OD x .875
14	2	1070957	Prt Pipe 1.25 Sch 40 X 1.8125 - Cable Spacer
15	2	1072631	Spacer - VHL 5.5k - 8k

Lifting System Diagram - Pontoon



Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	5	1011722	COTTER PIN .125 X 1.5	
2	1	1048241	Spacer 2.375 OD X 2.308	
3	1	1070292	Pin 5.75 SS - Grease Zerk	
4	1	1078222	Lifting Cable 5510 Hyd Pon - SS (180 E2E)	
5	1	1078223	Lifting Cable 5510 Hyd Pon - SS (334 E2E)	
6	3	1070475	Bushing - 2.375 OD x 2.308	
7	3	1070477	Sheave 5.75 OD x 0.563 - Yellow	
8	1	1070291	Pin 5.75 SS - Grease Zerk - Double	
9	2	1070288	Pin 5.75 SS - No Zerk	
10	1	1048256	Hydraulic 3.5x35 Cylinder	
11	1	1070290	Pin 3.125 SS - Grease Zerk - Double	
12	2	1070476	Sheave 4.75 OD x 0.563 - Yellow	
13	2	1070472	Bushing - 2.375 OD x .875	
14	2	1070957	Prt Pipe 1.25 Sch 40 X 1.8125 - Cable Spacer	
15	2	1072631	Spacer - VHL 5.5k - 8k	

Installation Instructions

⚠ WARNING NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL MAY RESULT IN PERSONAL INJURY OR DEATH AND WILL INVALIDATE THE WARRANTY. Do not under any circumstances, endanger yourself or risk damage to your lift or boat when installing.

-Situations will widely vary between installation sites. ShoreMaster recommends that your dealer, or other trained boat lift installer, train you and perform the initial installation.

-To protect your skin and eyes always wear leather gloves, clothing and safety glasses when assembling and installing the lift.

-Do not assemble, install or use this product if items are missing or damaged.

The following are guidelines or suggestions for installation.

STEP 1

Measure the water depth of the position you want to locate the lift. Measurements should be taken at both the projected position of the end nearest shore and end furthest from shore.

STEP 2

Before installing, adjust lift legs so the boat can float into position before raising, while still allowing a high enough position so the boat can be fully raised up and out of the water.

STEP 3

Carefully place the lift into position alongside the dock. Ask your dealer about a wheel caddy unit to allow your lift to be rolled into position.

STEP 4

Lake and river bottoms can frequently be uneven. Ensure that your lift is level. Measure the distance from the top of the cross beam to the water surface. The distance at each of the four corners of the lift should be within two inches of each other. If they are not, adjust the legs accordingly.

Note: If the lift legs will extend 3 feet or more, ShoreMaster recommends deep water braces to stabilize and strengthen the lift. Ask your dealer for more information.

⚠ WARNING

To avoid personal injury or death the lift must be resting on the water bottom in a level, secure, and stable position for safe operation. An unstable lift installation could result in tipping of the lift during operation, causing damage to watercraft and a crushing or pinching injury to the operator or bystanders.

STEP 5

After loading and operating the lift proceed to the operating instructions, remove the boat, and recheck that the lift remains level.



Operating Instructions

WARNING

When first using the boat lift after installation, the weight of the boat may cause the lift to settle and become unbalanced. To avoid personal injury or death, make sure people are not inside, under, or in the immediate vicinity of the lift until you are certain the lift has stabilized.

 **WARNING** NOT COMPLYING WITH THE PROCEDURES AND PRECAUTIONS OUTLINED IN THIS MANUAL MAY RESULT IN PERSONAL INJURY OR DEATH AND WILL INVALIDATE THE WARRANTY. Do not under any circumstances, endanger yourself or risk damage to your lift or boat when installing.

Now that you have installed and leveled the lift, you are ready to raise your boat for the first time. Prior to use, see to it that anyone who may use the lift looks upon the unit not as a toy but a piece of heavy equipment that deserves your respect and good judgment.

- Before allowing anyone to operate the lift, be sure they fully understand the proper operating procedure.
- Do not exceed maximum capacity of the lift; overloading may cause mechanical failure and serious personal injury.
- Do not allow anyone who is in the water within 6 feet of the lift.
- Do not allow anyone on, in, or under the lift while operating.

When operating the lift, the following procedures must be adhered to:

STEP 1

Be sure the cradles or bunks (sold separately) are positioned below the water surface so they will not interfere with the boat floating into position.

STEP 2

Properly balance and center the boat on the lift prior to raising. The boat should be positioned with the center of gravity near the middle of the lift. For most rear engine mounted boats, this requires you to position the boat mostly forward in the lift.

STEP 3

Carefully bring the lift up until the bunks or cradles have secured the boat. Then, stop the lift and check to see that the bunks or cradles have automatically positioned themselves to the shape of the hull, as they are designed to do. If so, continue bringing the boat out of the water until it is about one foot above the surface. Stop the lift again and check the stability of the lift, particularly to see that it is fairly level and will not topple over. Finally, continue lifting the boat while paying close attention to the positioning of the lift until it is in the full upright and over center position.

STEP 4

After loading and operating the lift, remove the boat and recheck that the lift remains level. (See STEP 4 of the Installation Instructions on previous page). If the lift is not level, the legs should be adjusted accordingly. Because the lift may settle and become unbalanced, the lift levelness should be rechecked two weeks after installation and periodically as needed.

WARNING

To prevent serious personal injury or death, NEVER go under your boat when it is in the upright position. The lift is not intended as a maintenance platform. Always store your boat in the over center position. The over-center position will help prevent the boat from lowering if you experience a hydraulic leak or slippage.



Storage and Off-Season Suggestions

Be sure to prevent rainwater from accumulating in your boat if you plan to leave it on the lift for a long-term storage. Rainwater accumulating in your bilge can quickly increase your gross weight over the lift capacity.

STEP 1

At all times, make sure that you adjust the height of the lift to limit wave action against the hull. A moving boat as a result of wave action will damage the lift and can take the boat off the lift.

STEP 2

ShoreMaster recommends disconnecting the hydraulics box and storing it indoors for the winter, or if you are not planning on using the lift for prolonged periods. To do this, simply disconnect the hoses from your hydraulics box by using the *quick disconnects* and connect the hoses together. This will ensure that the connecting hardware will remain clean.

⚠ WARNING To avoid personal injury or death, do not disconnect the hoses with the boat on the lift or the lift in the upright position. If the hoses are disconnected while the lift is in the upright position or with a boat on the lift, the lift may fall.

TIP: Do not disconnect the hoses when the lift is pressured against the upper or lower stops.

STEP 3

Booster-charge your battery using a 10-A charger at the beginning and end of the season. A mid-season boost may be required for heavy use. Prior to performing a booster charge, see the *Battery Tips Section* of the hydraulics box instructions (included with hydraulic box or available on the ShoreMaster website).

STEP 4

If your waterway freezes during the winter, you will need to remove your lift, as it will be damaged by ice flows.

STEP 5

Your lift can be left in any position when not in use (without a boat on the lift), although we do recommend leaving the lift in the up position to prevent the bunks from becoming "slimy" and to avoid creating a hidden underwater obstruction.

STEP 6

Each spring and fall, inspect nuts and bolts for damage, wear, or loose connections. At the same time, inspect the frame, cables, pulleys and pins for unusual wear, damage, or bent parts. Tighten, repair, or replace parts as needed. ShoreMaster dealers usually offer service visits. Please contact your dealer if you are unable or unwilling to perform maintenance or service to the lift.