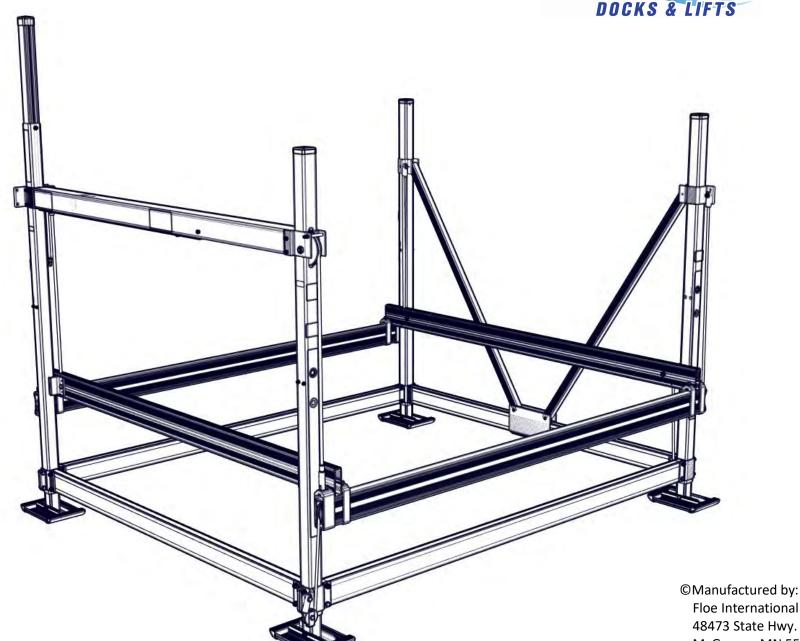
FLOE VSD 3800 BOAT LIFT

P/N 511-38075-01 LIFT FRAME WITH PATENTED EASY LEVEL LEG SYSTEM **ASSEMBLY INSTRUCTIONS**



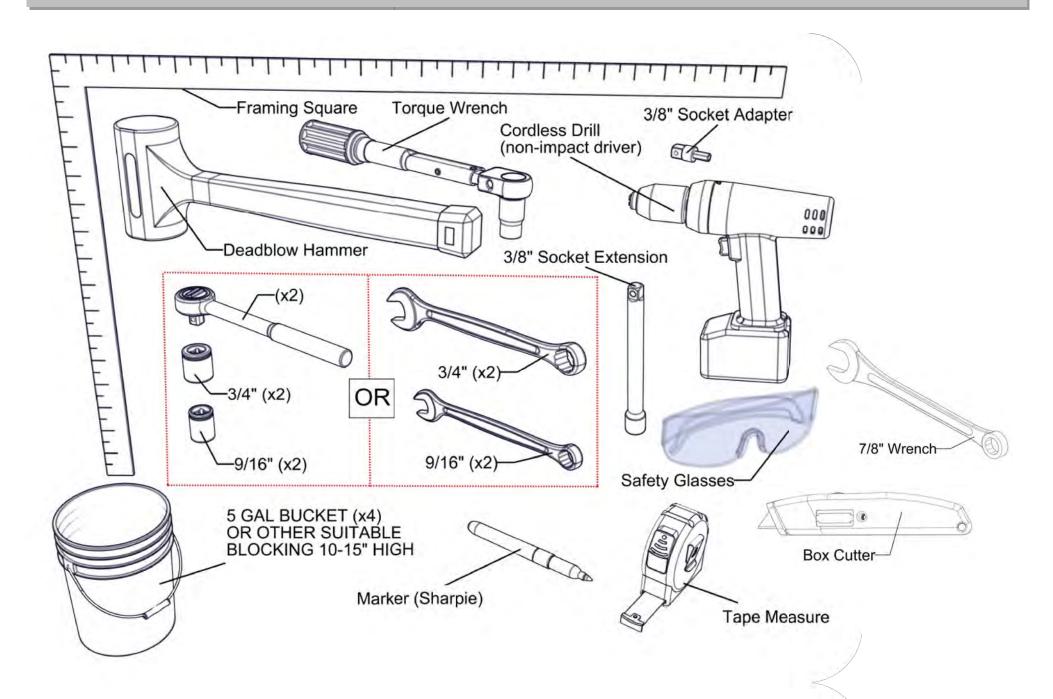




Instruction P/N 611-38075-01 Rev H Issued 5/7/2018

Floe International Inc. 48473 State Hwy. 65 McGregor, MN 55362 www.floeintl.com

Required Tools



Hardware Card Contents

	С	ard C	Contents (511-04255-00)	
Step	Part Numbers	QTY	Descriptions	Torques
	001-70215-00	6	HHCS, 1/2-13 x 3" ss 18-8	60 ft. lbs.
	001-70217-00	8	HHCS, 1/2-13 x 3 1/2" ss 18-8	45 ft. lbs.
(1)	001-70210-00	8	HHCS, 1/2-13 x 1 3/4" ss 18-8	45 ft. lbs.
	001-70219-00	2	HHCS, 1/2-13 x 4" ss 18-8	60 ft. lbs.
	001-71023-00	48	FLAT WASHER, .5 ID x .75 OD ss	
	001-76072-00	24	NUT, 1/2-13 ALUMINUM NYLOCK	
	001-70218-00	4	HHCS, 1/2-13 x 3 3/4" ss 18-8	20 ft. lbs.
(2)	001-76072-00	4	NUT, 1/2-13 ALUMINUM NYLOCK	
	004 70074 00	0	NULT O/O 4C ALLIMANULINA NIVI OOK	
	001-76071-00	8	NUT, 3/8-16 ALUMINUM NYLOCK	05 ft 11-
(3)	001-70115-00	4	HHCS, 3/8-16 x 3" ss 18-8	35 ft. lbs.
	001-70117-00	4	HHCS, 3/8-16 x 3 1/2" ss 18-8	05 ft II
	001-70124-00	2	HHCS, 3/8-16 x 5 1/2" ss 18-8	35 ft. lbs.
	001-70127-00	1	HHCS, 3/8-16 x 7" ss 18-8	35 ft. lbs.
(4)	001-76071-00	6	NUT, 3/8-16 ALUMINUM NYLOCK	05.61.11
	001-70121-00	3	HHCS, 3/8-16 x 4 1/2" ss 18-8	35 ft. lbs.
= (2	004 70200 00	0	LUICE 1/2 12 v 1 1/2" oc 10 0	AE ft lbc
(5)	001-70209-00	8	HHCS, 1/2-13 x 1 1/2" ss 18-8	45 ft. lbs.
(5)	001-70245-00	1	HHCS, 1/2-20 x 1 3/4" ss 18-8	50 ft. lbs.
	001-76350-00	8	NUT, 1/2-13 ALUMINUM	

			continued	
Step	Part Numbers	QTY	Descriptions	Torques
-	001-70211-00	4	HHCS, 1/2-13 x 2" ss 18-8	45 ft. lbs.
	001-76072-00	5	NUT, 1/2-13 ALUMINUM NYLOCK	
	001-70227-00	1	HHCS, 1/2-13 x 7" ss 18-8	45 ft. lbs.
(6)	002-04140-00	1	CABLE HOLDER	
	007-06201-00	1	3" CLAMP SHEAVE	
	001-70109-00	4	HHCS, 3/8-16 x 1 1/2" ss 18-8	10 ft. lbs.
	001-71017-00	8	3/8" SAE FLAT WASHER	
	001-76071-00	4	NUT, 3/8-16 ALUMINUM NYLOCK	05.61.11
(7)	001-70124-00	4	HHCS, 3/8-16 x 5 1/2" ss 18-8	35 ft. lbs.
	001-76071-00	4	NUT, 3/8-16 ALUMINUM NYLOCK	

Assembly Image Definitions					
5mg ⊗	Tighten without Clamping	Ę	Centerline		
1	Hardware Card #		Check, Inspect, Verify		
<u>^</u>	Important Notice				

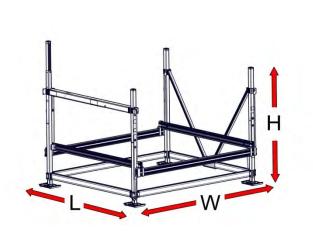
Warnings

IMPORTANT NOTE:
DO NOT USE IMPACT WRENCH
WHEN ADJUSTING THE EASY
LEVEL LEGS

Tips

- Torque nuts to specification, not bolts.
- Place parts and fasteners in designated locations prior to each step.
- Before tightening fasteners to specified torque, ensure that the lift is square.
- Measure from corner to corner (A to C/B to D) to verify that the lift is square.
- Measure distance between corner posts (A to B, B to C, C to D, A to D) above frame beam and at the top of the corner post to verify that the lift is square.
- Ensure that the lift is level and square before proceeding to install the V-Brace or Ball Screw Tube.
- Assemble cradle clamps with given bolt and nut before installing onto cradle beam.
- Use a marker to denote fasteners which have been tightened to the specified torque.
- Read instructions and understand them before attempting assembly.

Pre-Assembly Prep

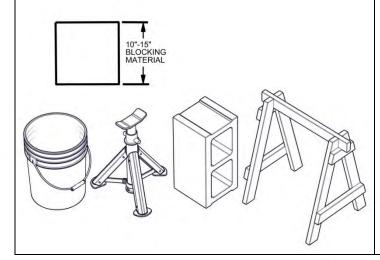


Lift Dimensions

Length: 114" Width: 130" Height: 120"

Work Space

Level work space Allow space to organize parts



Material

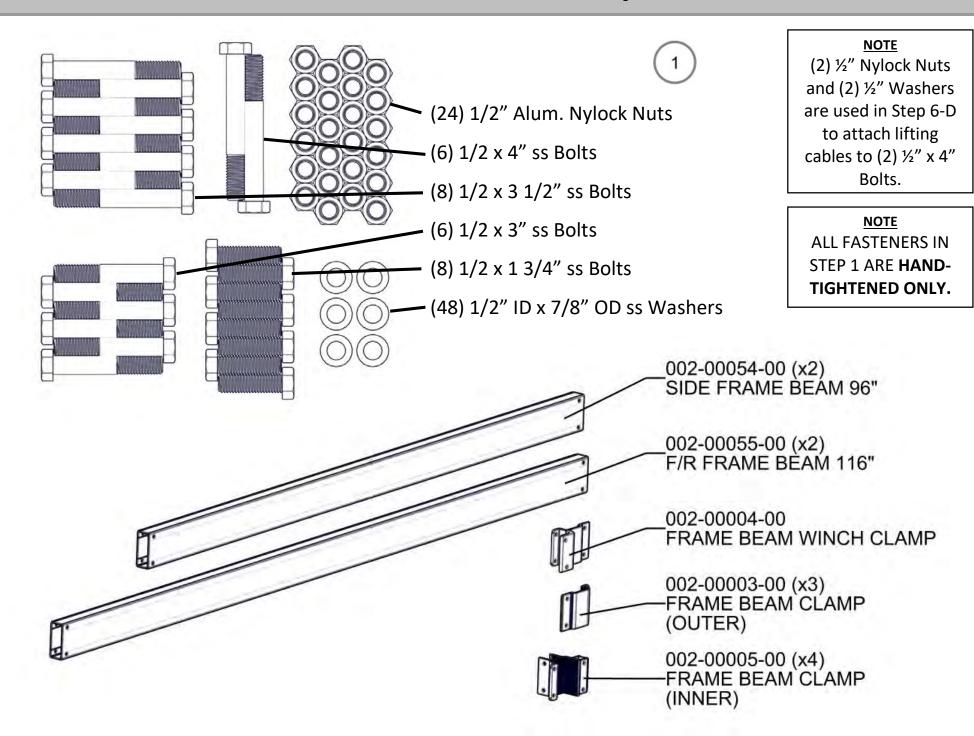
Blocking may be anything 10"-15" in height. (5 gallon bucket, jack stands, blocks, saw horses)

QTY

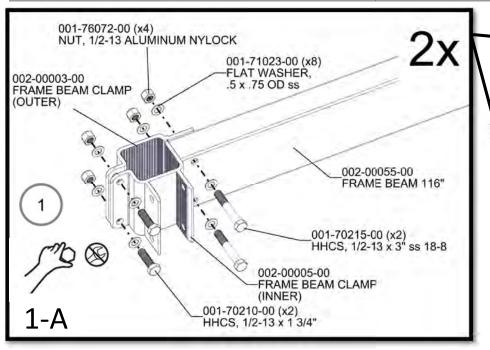
4 (2 for each side)

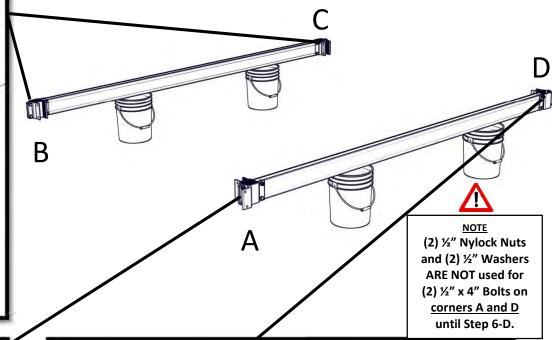
Purpose

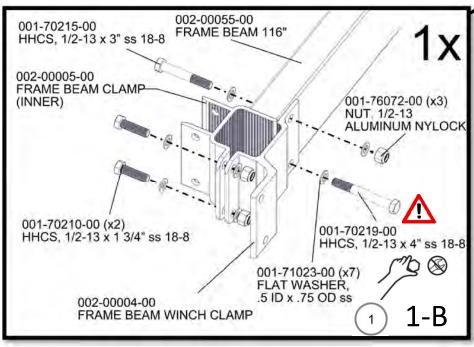
Blocking used to support lift during assembly steps 1 and 2

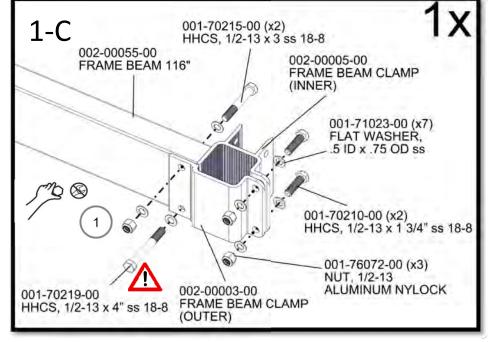


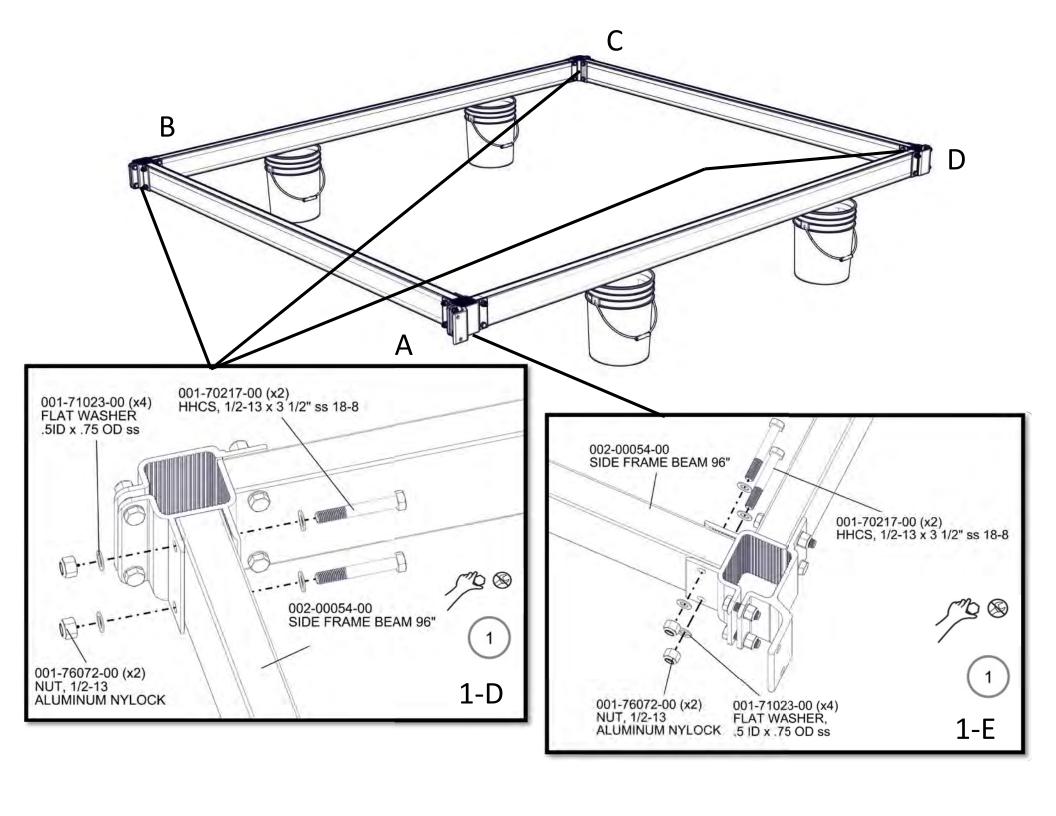
Assembly for Step 1



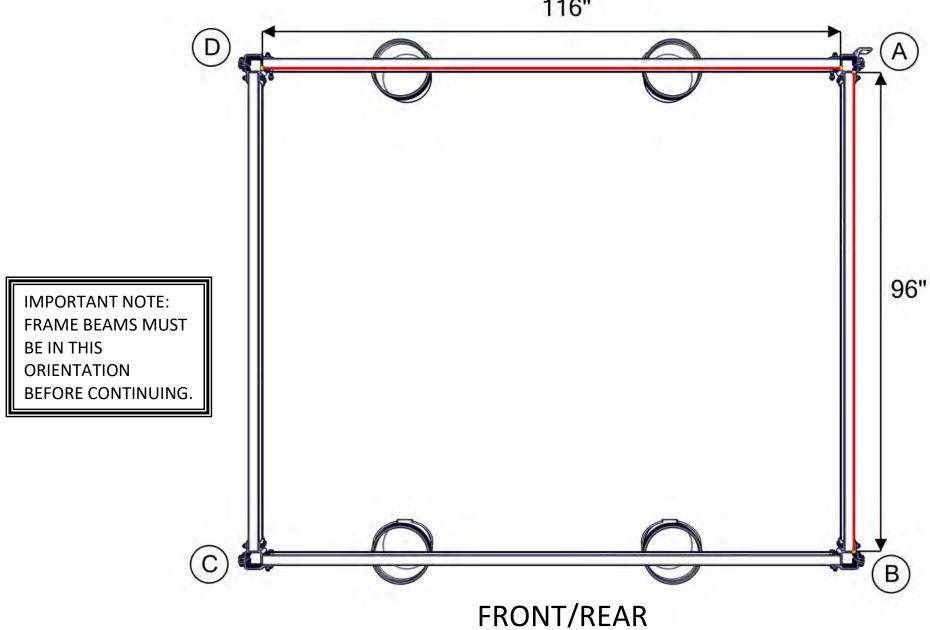


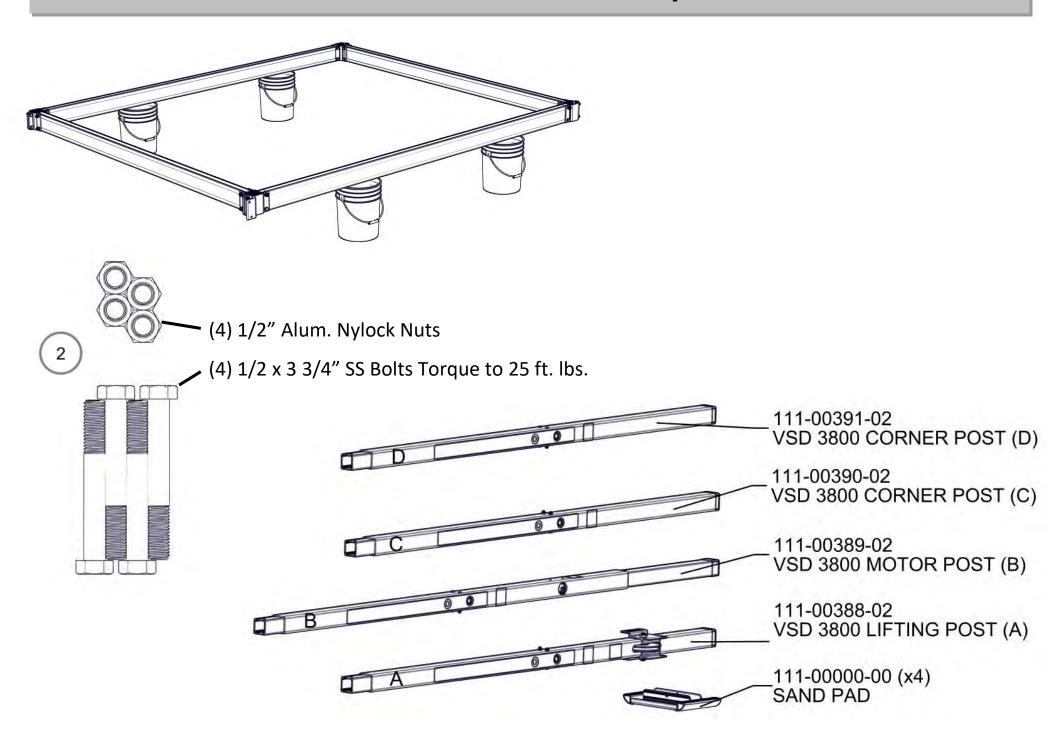




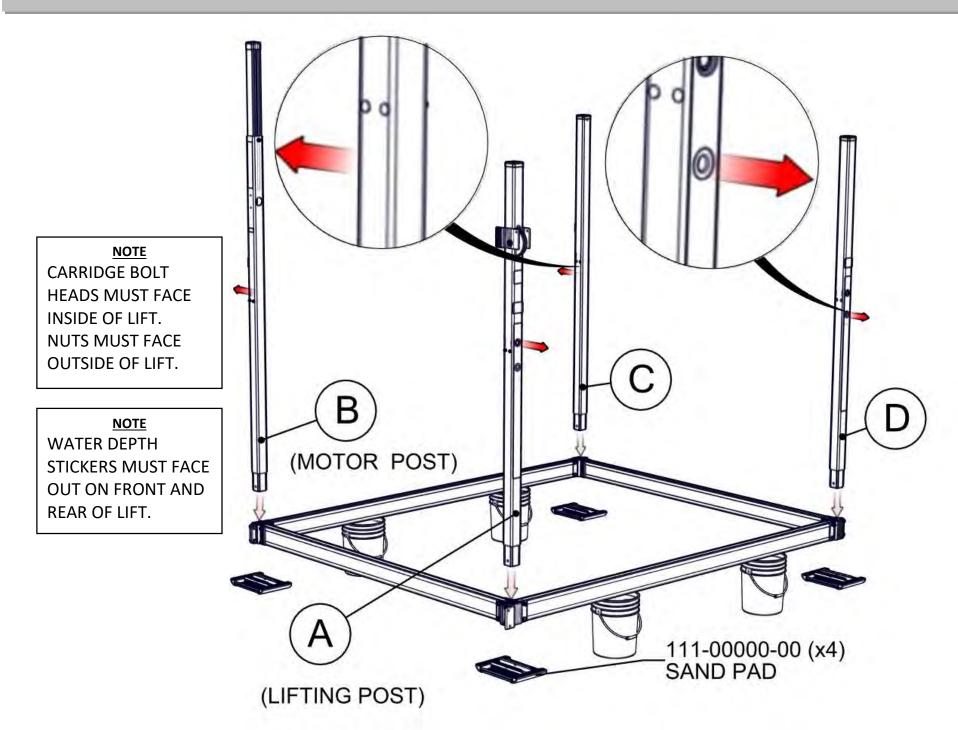


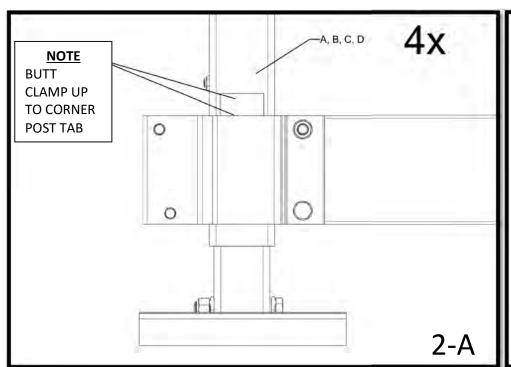
FRONT/REAR 116"

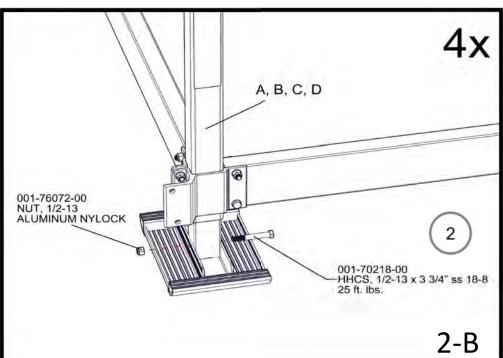


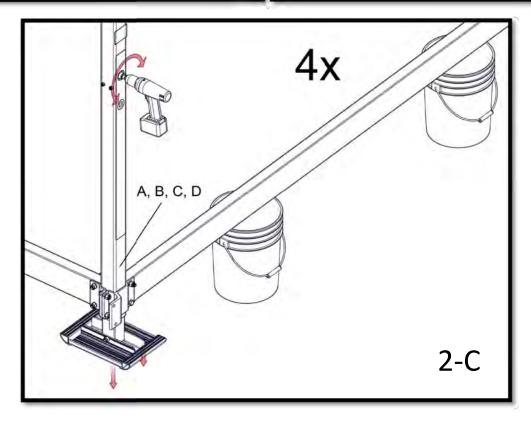


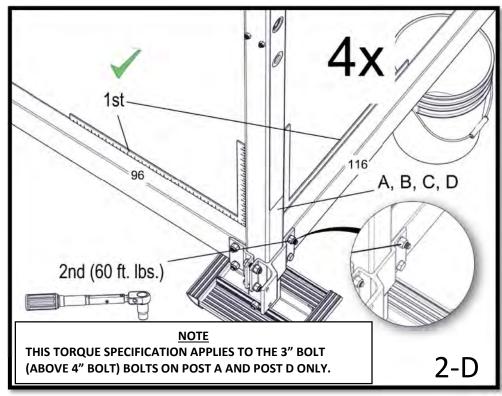
Assembly of Step 2

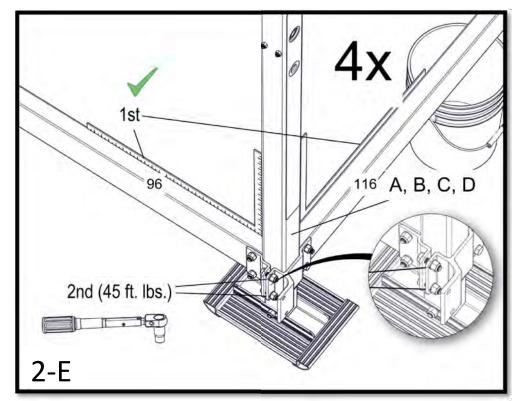


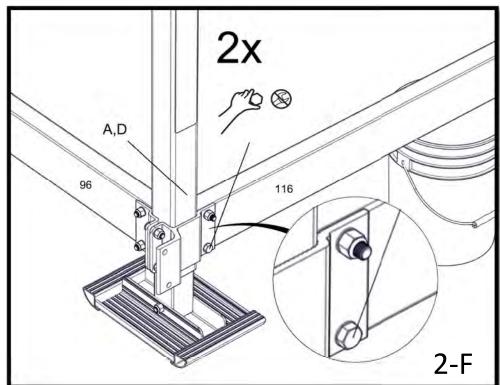


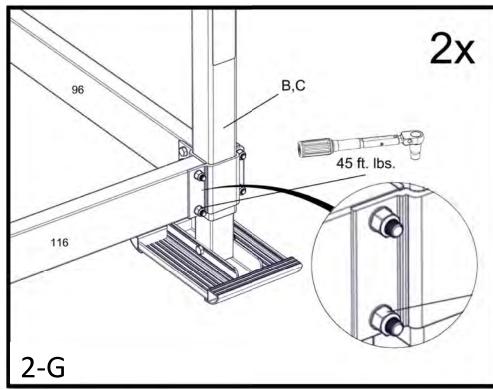


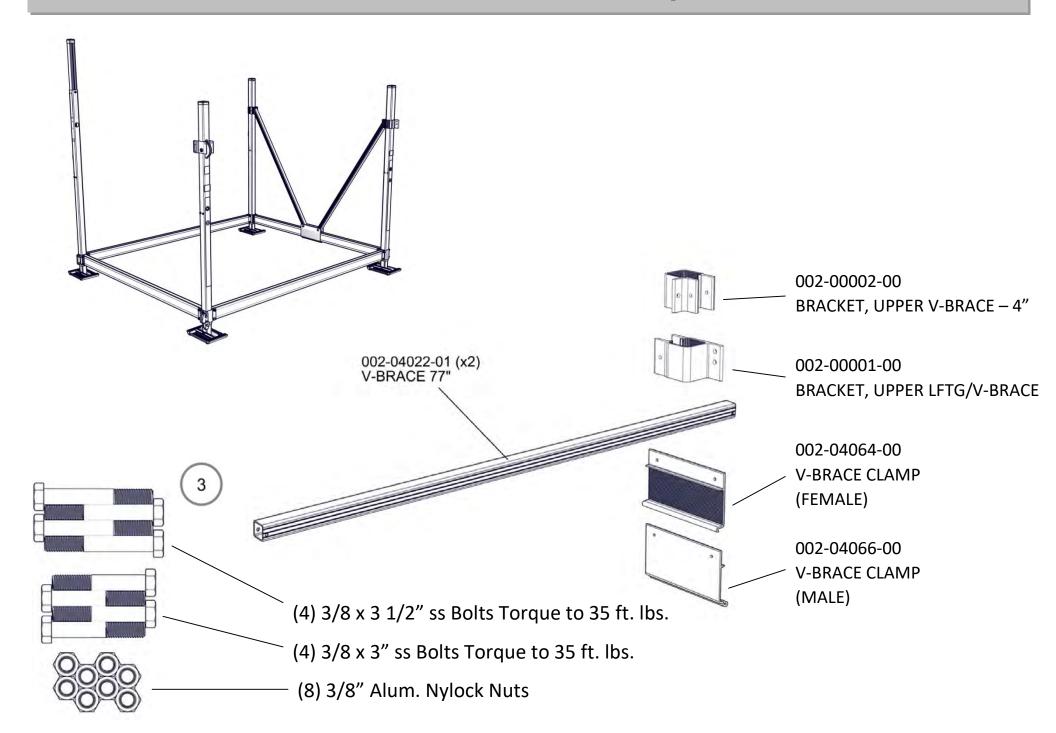






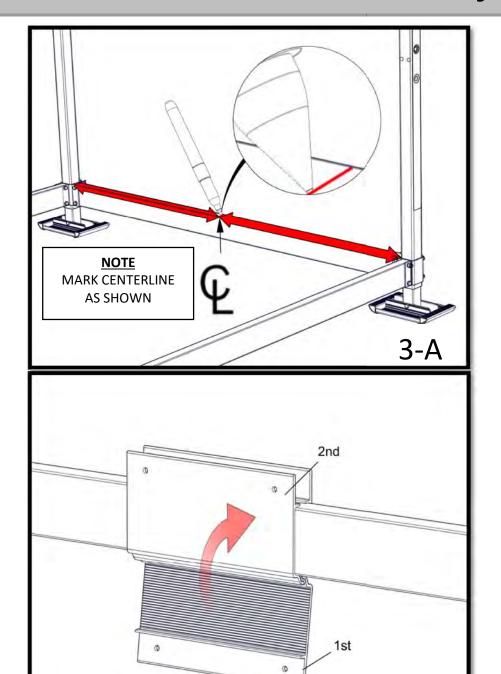


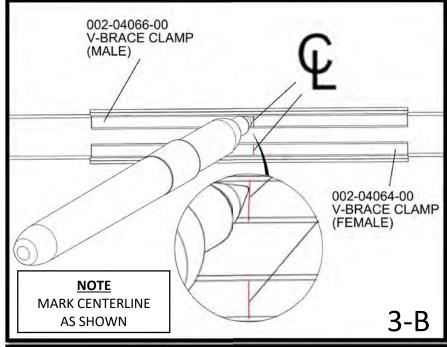


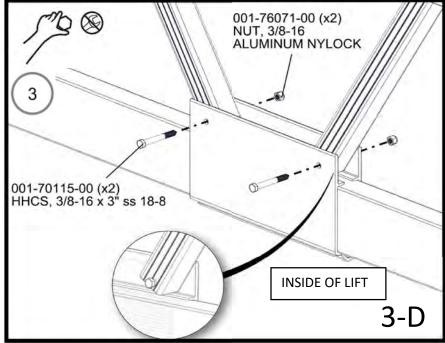


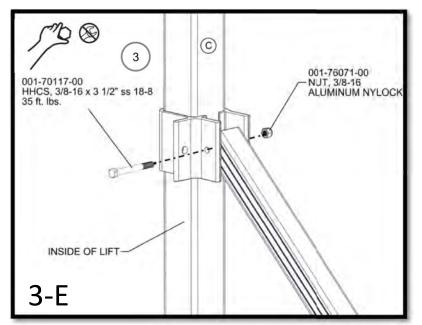
Assembly of Step 3

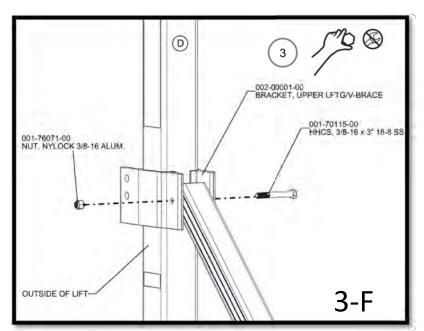
3-C

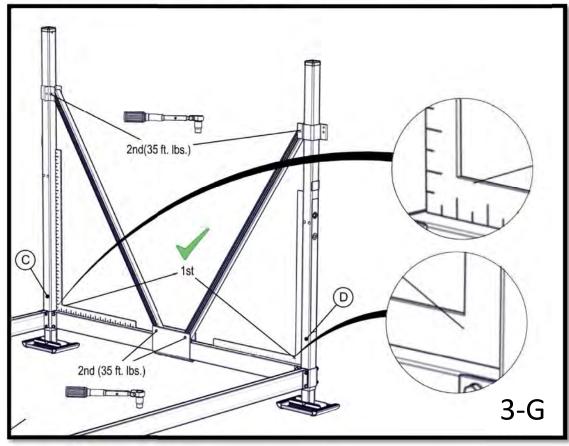


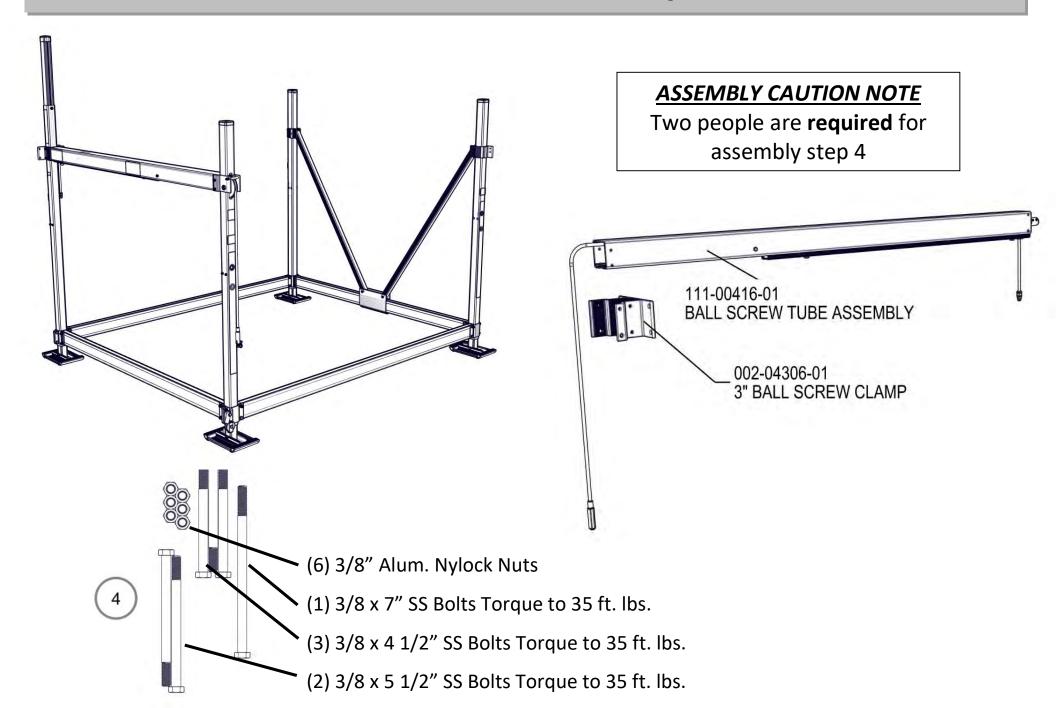




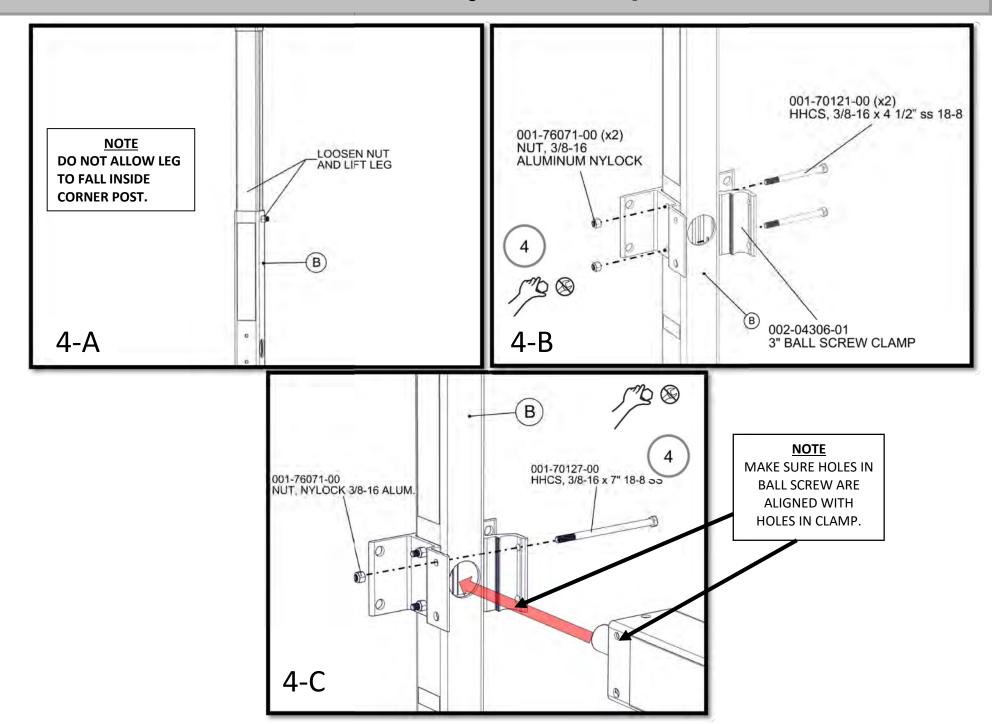


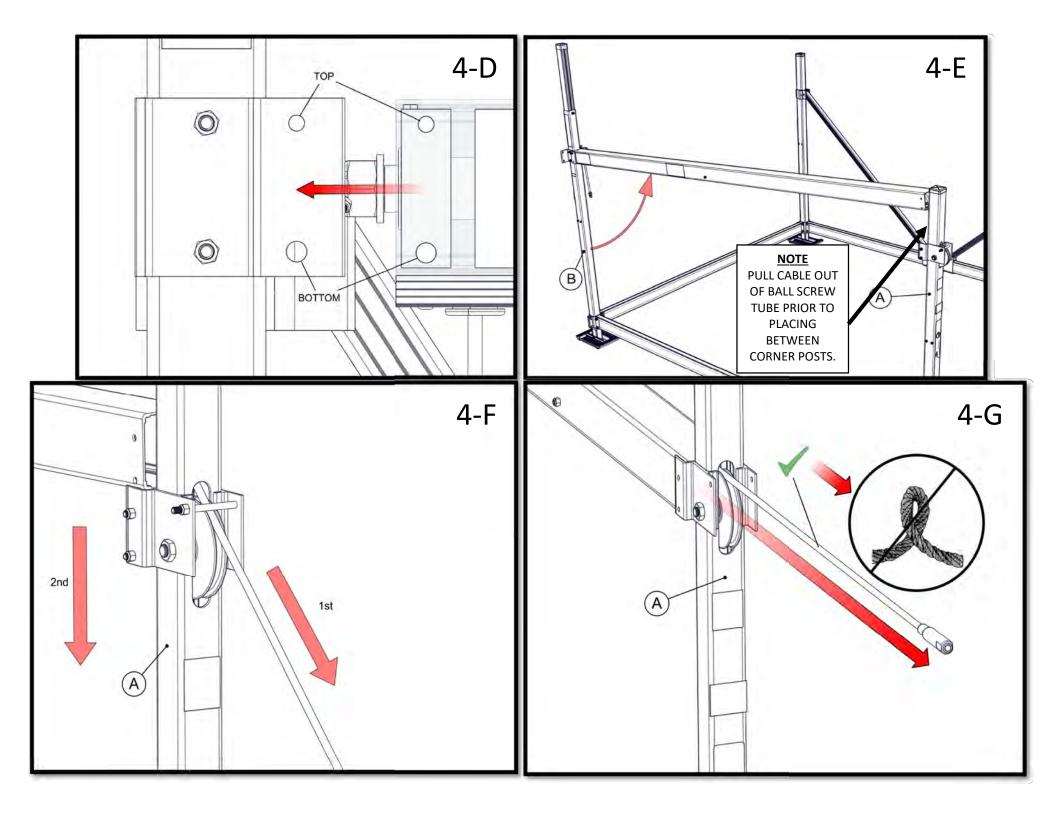


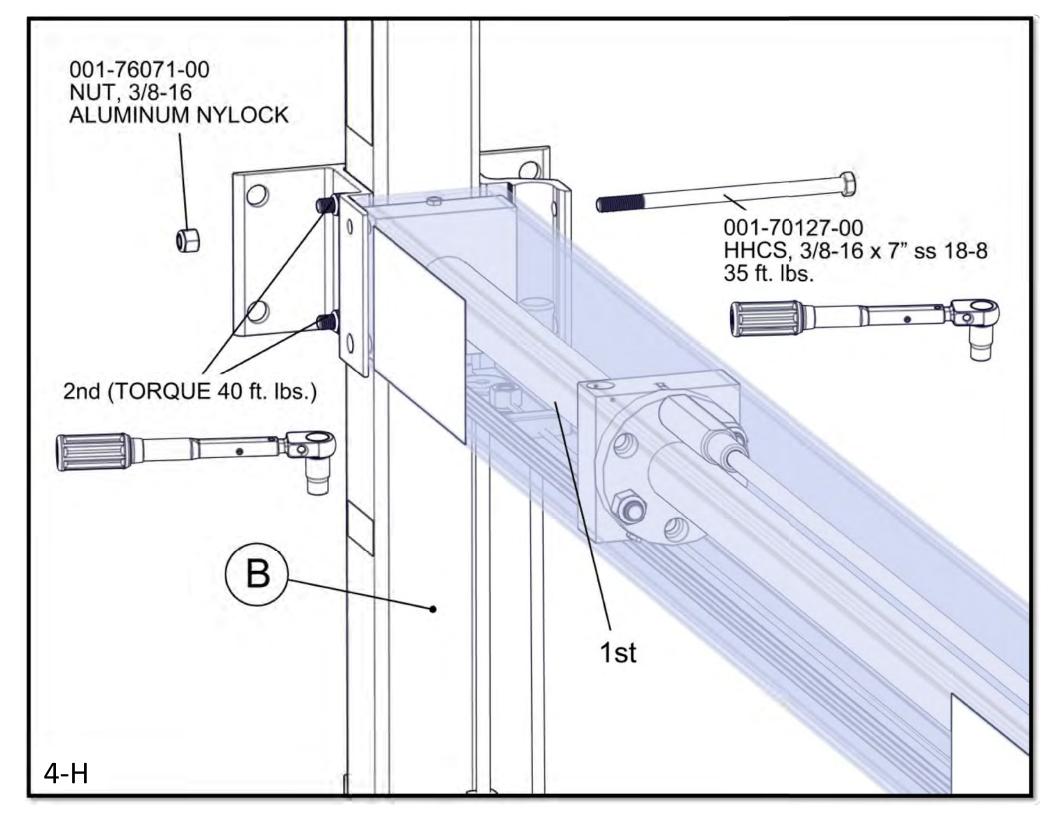


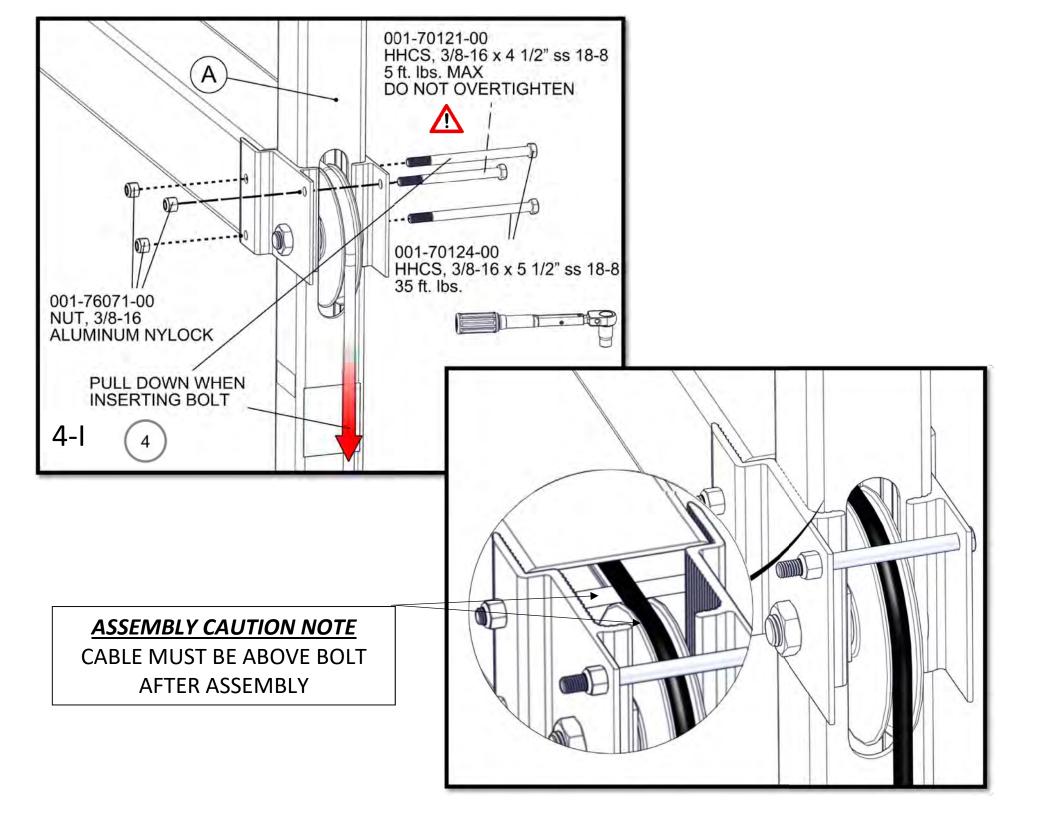


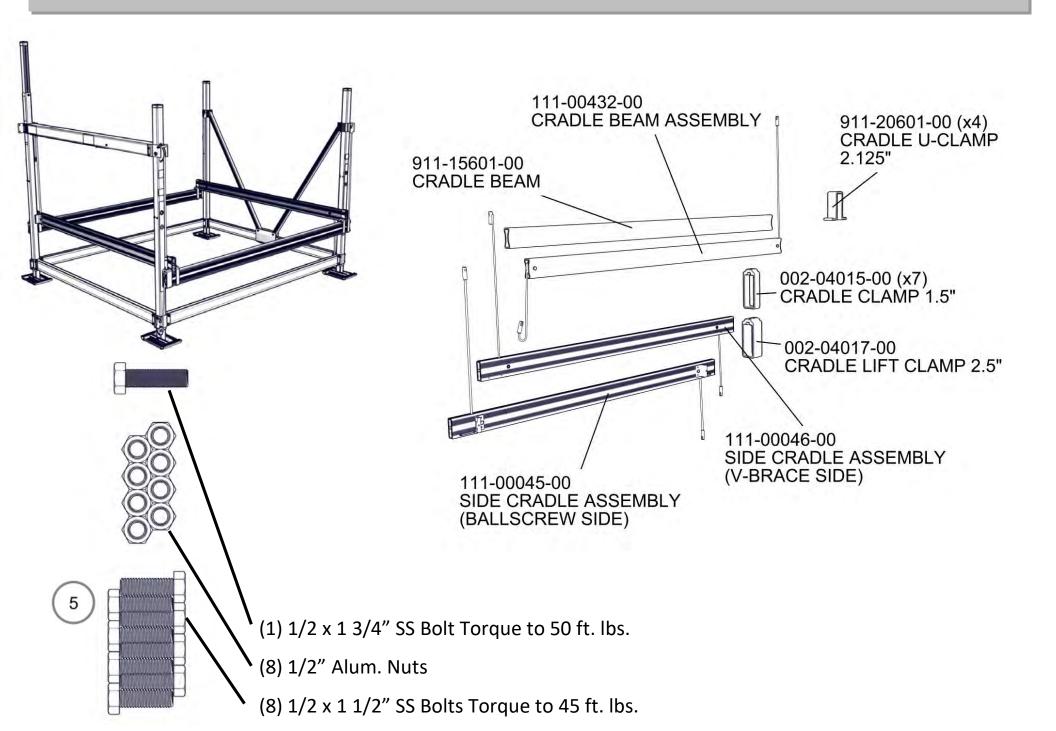
Assembly of Step 4



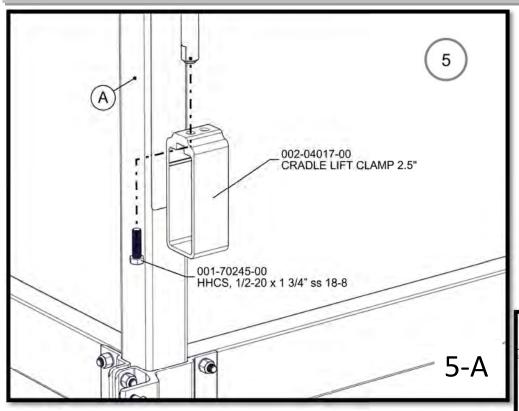


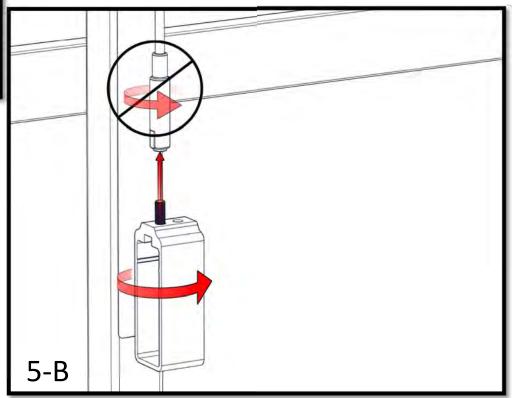


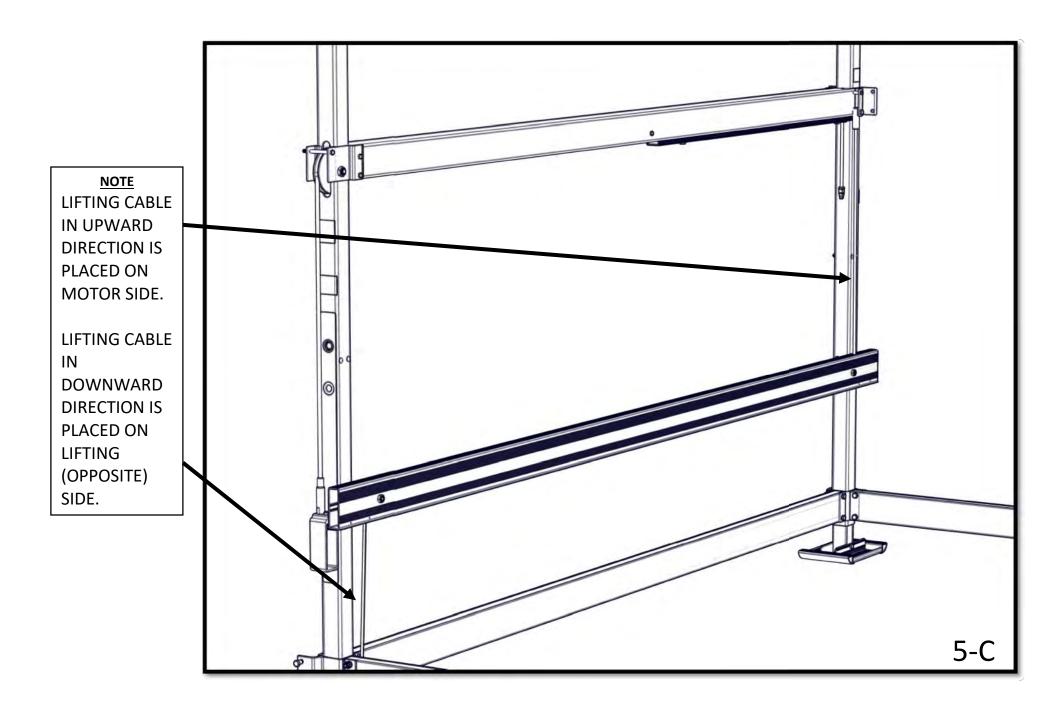


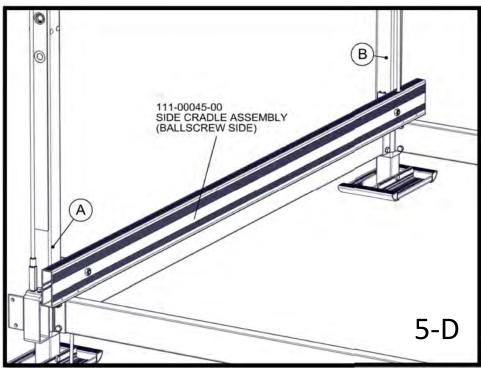


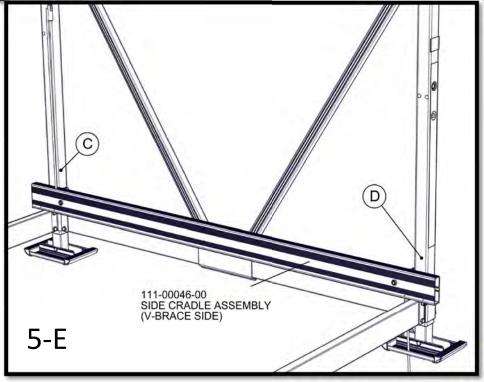
Assembly of Step 5

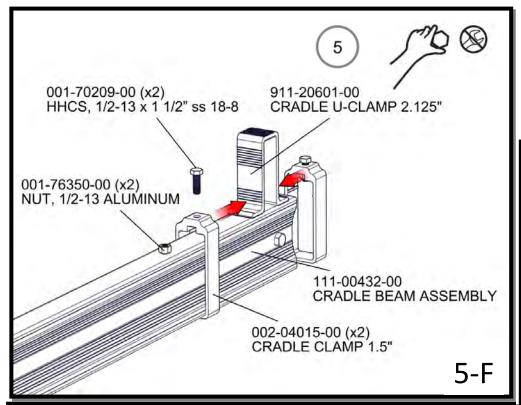


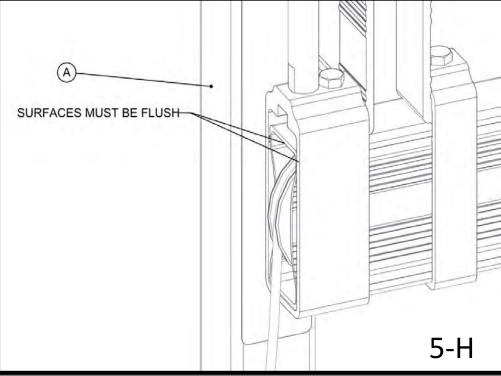


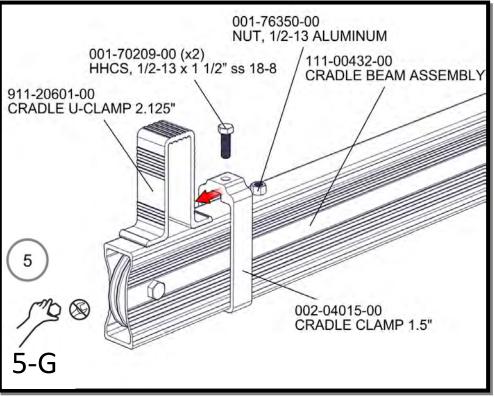


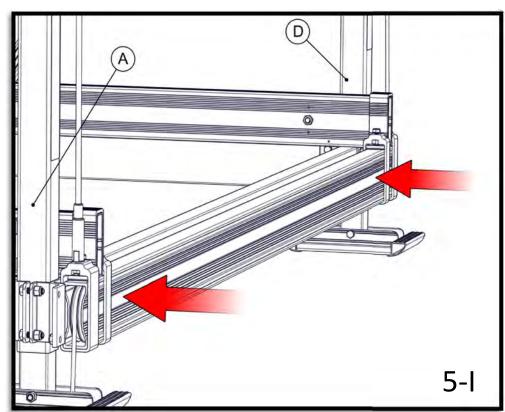


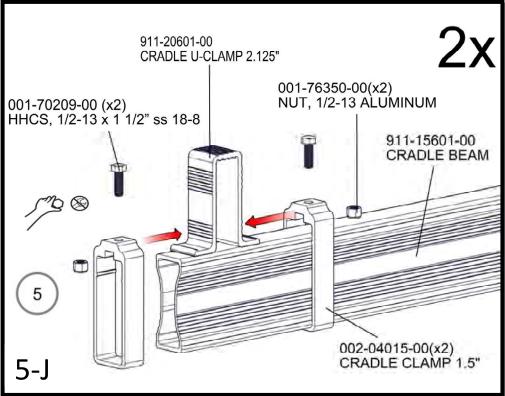


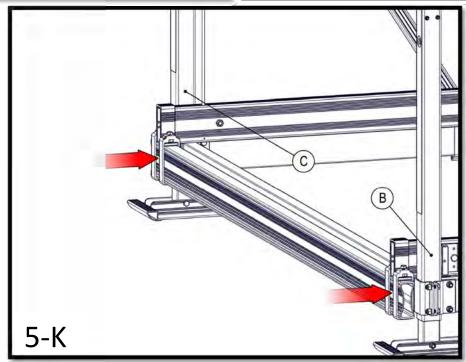


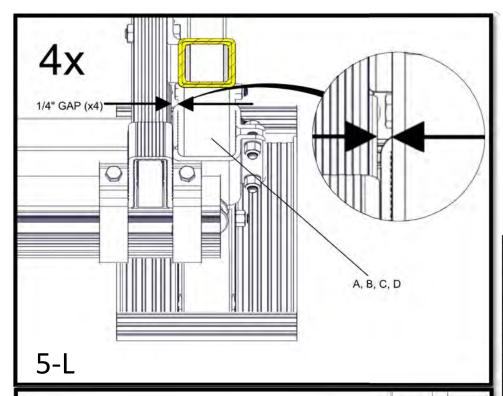


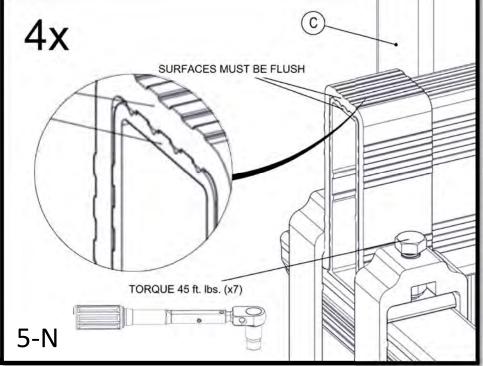


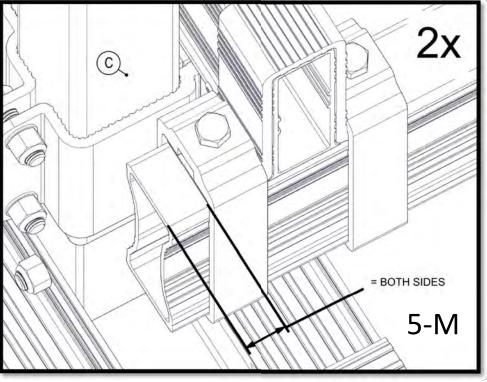


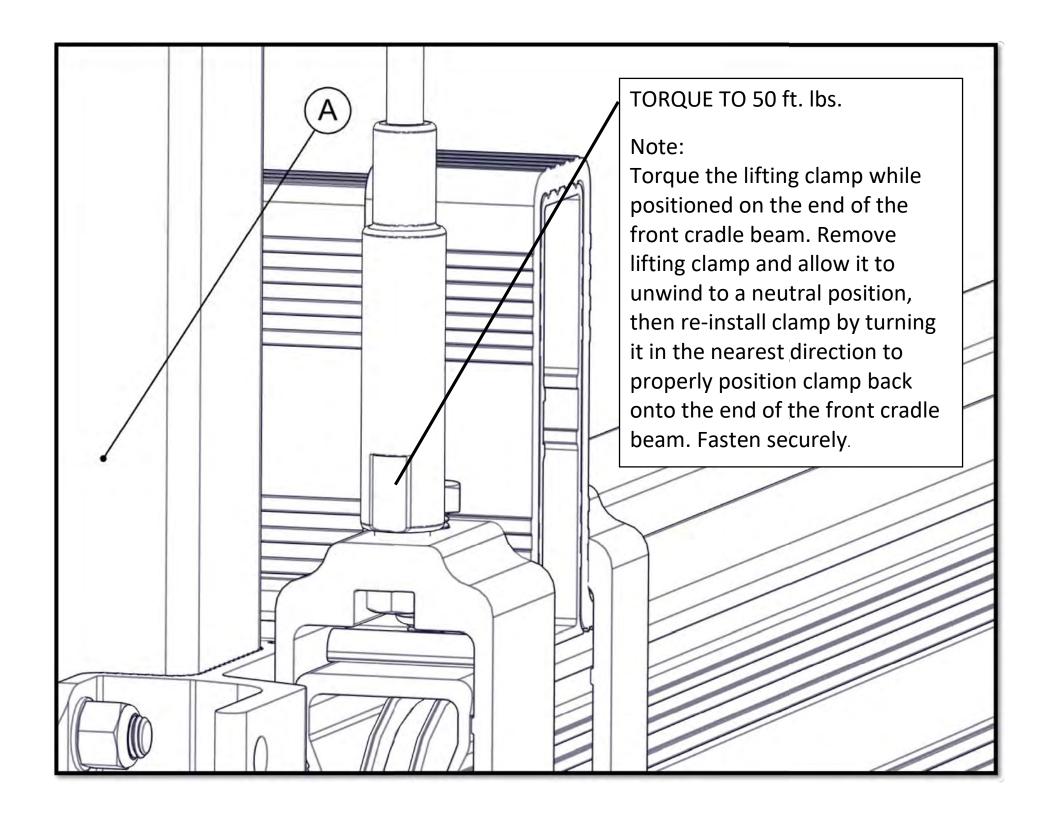


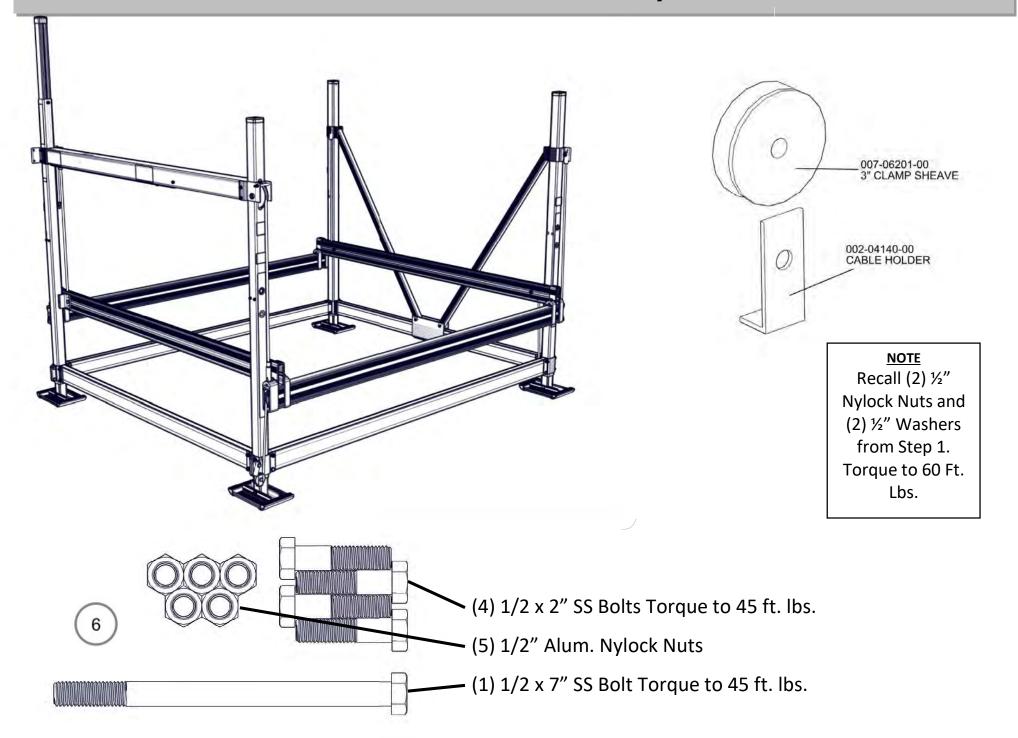




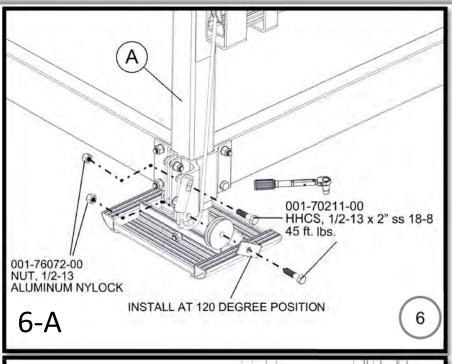


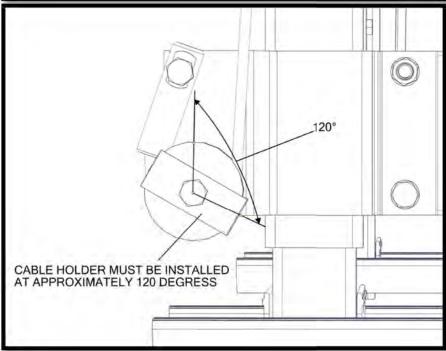


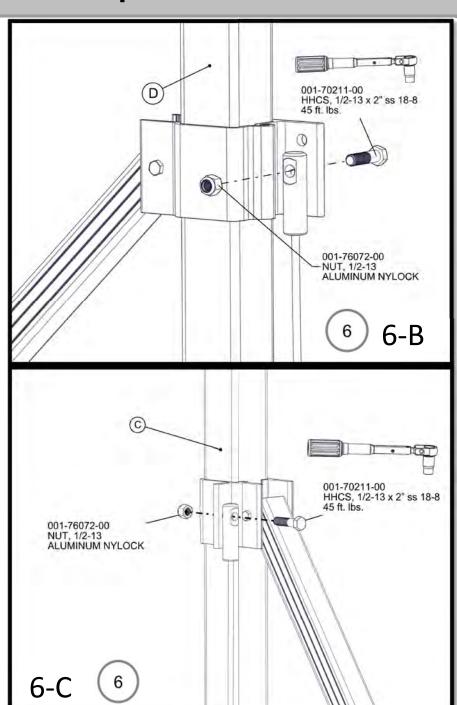


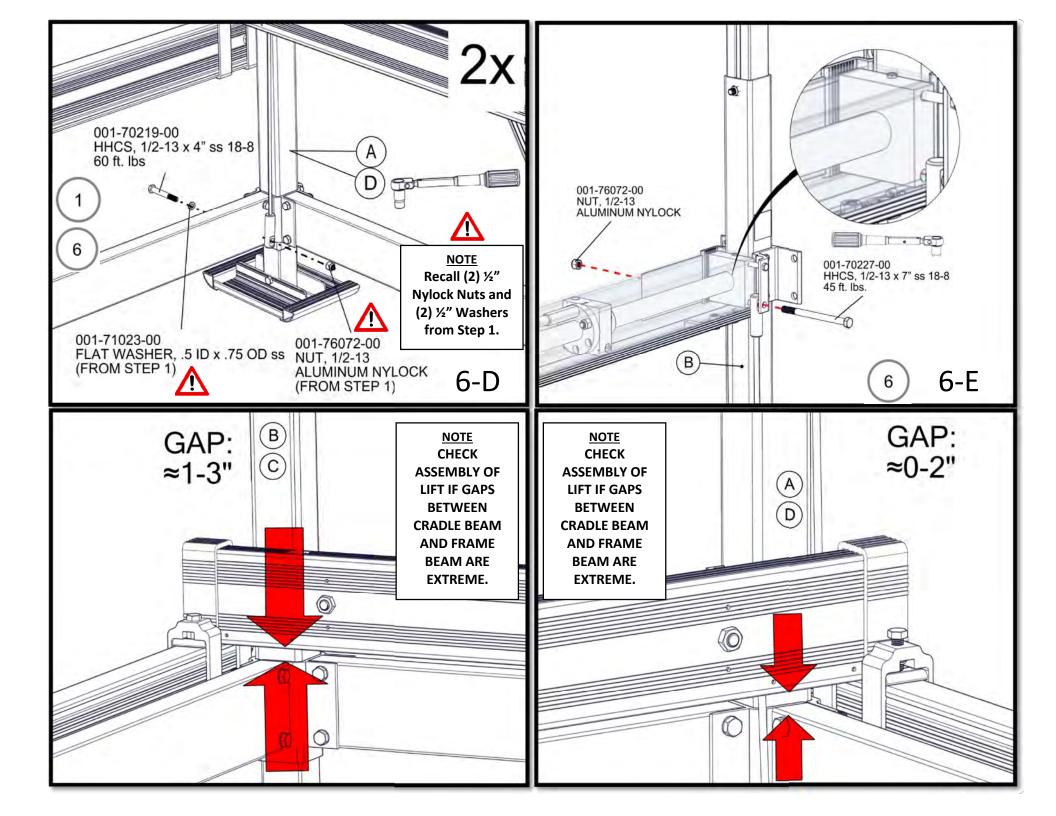


Assembly of Step 6

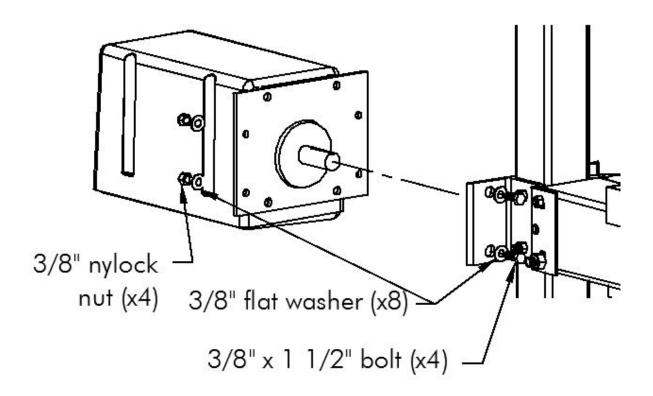








Step 7



The drive train (SOLD SEPARATELY) can now be attached to the lift. Note that the rigid coupler on the drive train and ball screw mate together. With the drive train being held in place, attach it to the lift using (4)3/8" x 1 1/2" bolts, (4) nylock nuts, and (8) flat washers as shown in Fig 7A. Torque to 10 ft/lbs. Make sure the bolt threads clear the nylock before using torque wrench.

See Note:

NOTE:

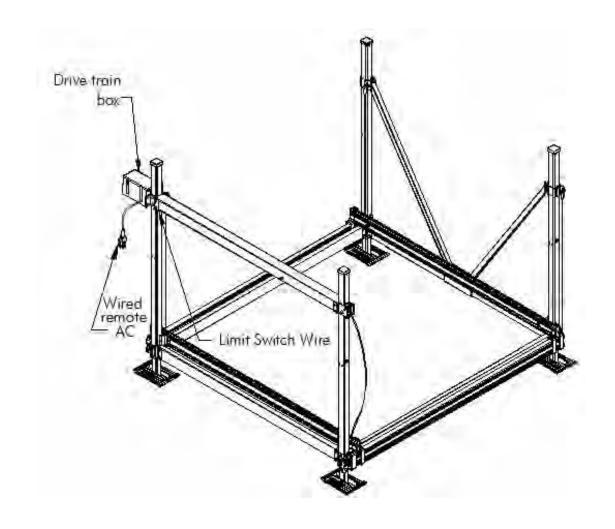
Apply a generous amount of Anti-Seize from the small packet included, to the inside of the Rigid Coupler and to the Motor Shaft before attaching the Drive Unit to the Lift's Frame.

STEP 7 AC

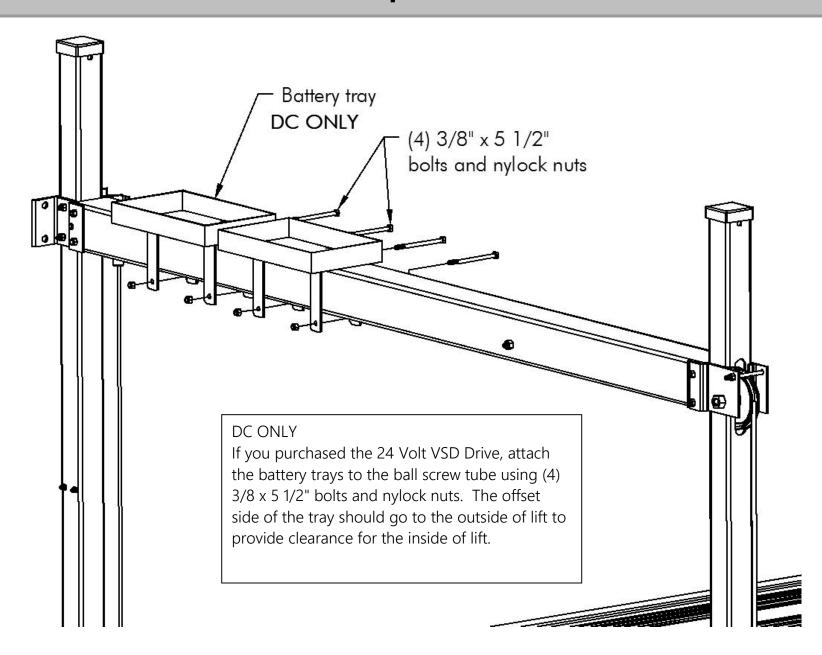
The drive train can now be connected to the power source. It is very important that this connection be made in accordance with State and Local Regulations. **SEE WARNING:**



POWER CONNECTION TO THE FLOE 120 VOLT AC VSD DRIVE UNIT MUST BE MADE BY A QUALIFIED LICENSED ELECTRICAL CONTRACTOR USING THE APPROPRIATE 20 AMP G.F.I.C. (GROUND FAULT INTERRUPT CIRCUIT) PROTECTION DEVICE. THIS UNIT MUST BE LOCATED AT THE LEAD END OF THE POWER SUPPLY TO PREVENT ANY UNPROTECTED CURRENT FROM COMING IN CONTACT WITH WATER. FAILURE TO DO SO MAY RESULT IN SEVERE INJURY OR POSSIBLE DEATH AND WILL VOID THE WARRANTY.

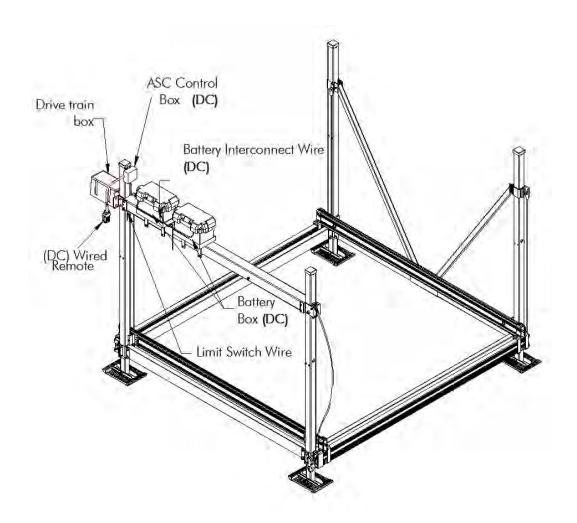


Step 7 DC



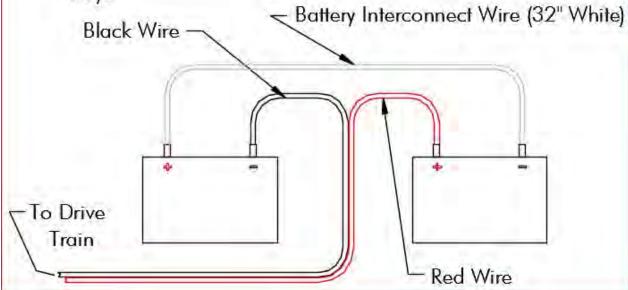
Before installing cap on corner post, insert 1/2"x3/4" bolt through top hole with head inside post. If lift has canopy, discard 1/2 x 3/4 bolt that came with the ASC box. Remove nut from1/2x11/4" bolt holding canopy insert. Attach ASC box to bolt, install nut, torque to 60ft/lbs with canopy or a 1/2 turn past snug for no canopy. Stick Dual Lock on corner post, press firmly together.

Insert a 12 volt battery into each battery box (DC ONLY). Plug the wired remote into the plug on the ASC labeled "Wired Remote". Plug the limit switch wire into the ASC plug Labeled "Limit Switch". See Fig. 7B. Secure all wires using the supplied Velcro. If canopy is to be installed on the lift, the wired remote can be strung along a canopy hoop and hung next to the dock and secured to the canopy hoop with Velcro.



VSD-3800 Boat Lift (DC ONLY) 24 Volt Battery Connection Diagram

- Connect the red wire from the ASC to the positive post of one battery. Connect the black wire from the ASC to the negative post of the other battery.
- 2. Connect the 32" white battery interconnect wire to the negative post of the first battery and the positive post of the other battery. See diagram below. Place the covers on the battery boxes and strap it through the slots on the battery tray.



VSD Pre-installation Check List

Prior to installing your lift please follow this check list to confirm proper operation.

- 1. Raise the lift up to confirm operation of upper limit switch. Approach the upper limit switch cautiously by pressing the UP button in short bursts as you near the top of the lift travel. A properly working limit switch will stop the lift before the ball screw reaches its limit of travel. If the limit switch does not stop the lift and the ball nut reaches the end of the ball screw you will be able to see the drive unit twisting slightly, indicating that the motor is trying to run. Also, you probably would have heard the ball nut hitting the metal stop at the end of the screw. The brake will still click when stopped at the limits.
- 2. Lower the lift down to confirm operation of lower limit switch. Again, as you approach the bottom of the lift travel press the DOWN button in short bursts. The lift should stop with a small amount of slack in the lifting cable after the cable contacts the lift frame. If the limit switch does not stop the lift and the ball nut reaches the end of the ball screw you will be able to see the drive unit twisting slightly indicating that the motor is trying to run. Also, you probably would have heard the ball nut hitting the metal stop at the end of the screw.

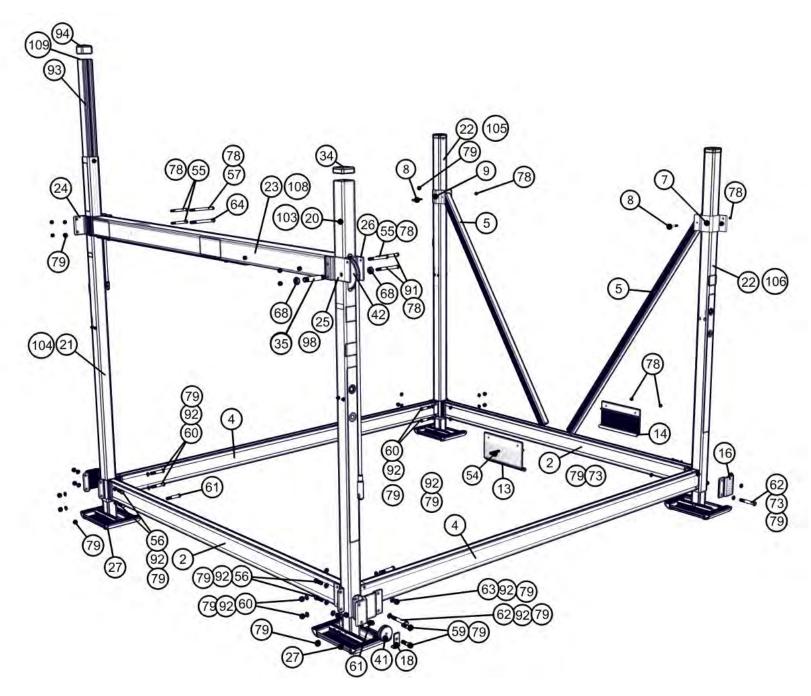
If either limit switch does not stop the lift correctly, contact FLOE customer service and do not use the lift until the problem is corrected.

- 3. Listen for unusual noises during lift operation. Squeaking may indicate that the lift may not have been greased. Both the thrust bearing and the ball nut MUST be greased before using the lift. Please see owners' manual for details.
- 4. If you have a wireless remote it would be good idea to test it at this time. There is no need to go all the way to the limit switches since those were tested above. Also check the inside (amber) light and the mast light if you have one. The lights come on when their buttons are pressed and go off with a second press or after about 7 minutes of no light button activity.

JFT P	/N 511-380	75-01					
VO.	PART NO.	QTY.	DESCRIPTION	NO.	PART NO.	QTY.	DESCRIPTION
1	002-04015-00	7	CRADLE CLAMP 1.5"	59	001-70211-00	4	HHCS, 1/2-13 X2" SS 18-8
2	002-00050-00	2	SIDE FRAME BEAM 96" (.100)	60	001-70217-00	14	HHCS, 1/2-13 X3 1/2" SS 18-8
3	002-04017-00	1	CRADLE LIFT CLAMP 2.5"	61	001-70218-00	4	HHCS, 1/2-13 X3 3/4" SS 18-8
4	002-00055-00	2	F/R FRAME BEAM 116" (.125)	62	001-70221-00	2	HHCS, 1/2-13 X 4 1/2" SS 18-8
5 6	002-04022-01 002-04031-00	2	V-BRACE 77" CRADLE GUIDE	63 64	001-70215-00 001-70227-00	2	HHCS, 1/2-13 X3" SS18-8 HHCS, 1/2-13 X7" SS18-8
7		2	BRACKET, UPPER LFTG./V-BRACE	65	001-70227-00	2	HHCS, 5/8-11 X1 3/4" SS18-8
8	002-00001-00 001-70117-00	4	HHCS, 3/8-16 X3 1/2" 18-8 SS	66	001-70310-00	4	HHCS, 5/8-11 X2 1/2" SS 18-8
9	002-00002-00	2	BRACKET, UPPER V-BRACE - 4"	67	001-16369-00	1	HHCS, 3/4-16 X4" GRADE 5 PLAIN
10	002-04040-00	2	SDE CRADLE 109"	68	001-70817-00	2	NUT, JAM 3/4-10 SS 18-8
11	001-40365-00	1	FLATWASHER, M24 ZINC	69	001-70816-00	6	NUT, JAM 5/8-11 SS 18-8
12	002-00066-00	1	CRADLE BEAM 121" (.110)	70	001-70861-00	8	NUT, JAM 5/16-18 ALUMINUM NYLOCK
13	002-04064-00	1	V-BRACE CLAMP (FEMALE)	71	001-71017-00	8	3/8" SAE FLAT WASHER
14	002-04066-00	1	V-BRACE CLAMP (MALE)	72	001-71021-00	19	1/2" FLAT WASHER SAE SS 18-8
15	002-00005-00	3	FRAME BEAM CLAMP (INNER)	73	001-71022-00	32	1/2" FLAT WASHER USS SS 18-8
16 17	002-00003-00 002-00004-00	1	FRAME BEAM CLAMP (OUTER) FRAME BEAM WINCH CLAMP	74 75	001-26969-00 001-26911-00	4	PIN, GROOVE 5/32" X 1 1/8" ZINC DOWEL PIN 3/16" X7/8"
18	002-0004-00	1	CABLE HOLDER	76	001-26911-00	8	CARRIAGE BOLT, 5/16-18 X3 1/2" SS 18-8
19	002-04314-00	4	LEVEL LEG BRACKET (3")	77	001-74402-00	16	FLATWAHER 5/8" X 1 1/4" X .060" SS
20	002-00044-01	1	POST, CORNER "A" LIFTING	78	001-76071-00	15	NUT, 3/8-16 ALUMINUM NYLOCK
21	002-00045-01	1	POST, CORNER 'B' MOTOR	79	001-76072-00	44	NUT, 1/2-13 ALUMINUM NYLOCK
22	002-00046-01	2	POST, CORNER "C & D"	80	111-00248-00	1	BALL NUT BLO CK ASSEMBLY
23	111-00415-01	1	BALL SCREW TUBE WELDMENT	81	001-73454-00	1	SHCS, 10-32 X1 3/4" SS 18-8
24	002-04306-01	1	3" BALL SCREW CLAMP	82	001-76073-00	1	NUT, 10-32 ALUMINUM NYLOCK
25	002-04307-00	1	3" PULLEY CLAMP (OUTER)	83	001-93524-00	1	NUT, SLOTTED M24 X1.5
26 27	002-04308-00	1 4	3" PULLEY CLAMP (INNER)	84 85	001-70245-00	8	HHCS, 1/2-20 X1 3/4" SS18-8
28	111-00000-00 111-00216-01	4	SAND PAD INNER SCREW LEG WELDMENT	86	001-76069-00 007-05223-00	1	5/8" FLAT WASHER - NYLON RIGID COUPLER
29	911-15502-00	1	CRADLE BEAM 121" (.110)	87	007-05223-00	1	3/16" SQ. X2" KEY
30	911-20601-00	4	CRADLE U-CLAMP 2.125"	88	111-38500-00	1	LIMIT SWITCH ASSY 3800/5000
31	006-10202-00	4	CRADLE GUIDE WEAR PAD	89	001-70203-00	2	HHCS, 1/2-13 X3/4" SS 18-8
32	006-10206-00	8	SIDE CRADLE SHEAVE SPACER	90	007-05126-00	1	M8 X1 GREASE ZERK (FLUSH)
33	006-11001-00	4	UHMW - 3/16" X 1/2" X 5" LG.	91	001-70124-00	2	HHCS, 3/8-16 X 5 1/2" SS 18-8
34	006-15200-00	3	3" CORNER POST CAP	92	001-71023-00	16	FLAT WASHER, .5 ID X.75 OD SS
35	007-04154-00	1	3/4" SHEAVE PIN	93	911-14201-00	1	ADJUSTABLE INSERT
36	111-00311-00	1	ASSY BEARING BLOCK W/BEARING	94	006-15022-00	1	CAP, MNYL - CANO PY/WINCH INSERT
37 38	007-05013-00 007-05023-00	4	BALL SCREW END STOP PLATE TOP BEVEL GEAR - 1:1	95 96	006-10021-00 006-22202-00	1	UHMW BALLSCREW SUPT. SLEEVE STEEL SLEEVE 1" X 2.25" LG
39	007-05023-00	4	BOTTOM BEVEL GEAR - (FAB)	97	000-22202-00	8	HHCS, 1/2-13 X 1 1/2" SS 18-8
40	007-15024-00	4	BEVEL GEAR ADJUSTMENT SCREW	98	007-07707-00	2	SPACER PULLEY 3800/5000
41	007-06201-00	1	3" CLAMP SHEAVE	99	002-03323-01	4	PLATE, 1X2" X3/16" THK (WELDED TO CORNER POST)
42	111-00201-00	1	ASSY, 6" LIFTING SHEAVE	- 55	332 33020 31		10 00111211 001
43	007-07700-00	4	SPACER TUBE - 1.297"	Q ID	V COLLY VIDE ILLO		
44	007-07701-00	2	SPACER TUBE - 1.055"	-	ASSEMBLIES		
45	007-09000-00	2	SIDE LEVELING CABLE - 166.125"	100	111-00045-00		SIDE CRADLE ASSEMBLY (A)
46	007-09300-00	1	FRONT LEVELING CABLE - 200 1/4"	404	111 00010 00		INCLUDES ITEMS 6, 10, 31, 32, 33, 43, 45, 49, 66, 69
47	007-09126-00	1	LIFTING CABLE 102 3/4"	101	111-00046-00		SIDE CRADLE ASSEMBLY (B)
48	011-15005-00	6	1727mm BALL SCREW 40-10mm W/NUT	100	111 00417 00		INCLUDES ITEMS 6, 10, 31, 32, 33, 43, 45, 49, 66, 69
49 50	111-00107-00 001-70123-00	1	5" SHEAVE W/BUSHING HHCS, 3/8-16 X 5" SS 18-8	102	111-00417-00		FRONT CRADLE ASSEMBLY (.145) INCLUDES ITEMS 12, 44, 46, 49, 65, 69
51	001-70123-00	1	SHCS, 1/2-20 X1 1/4" BLACK	103	111-00388-02		V3800 CORNER POST ASSY (A)
52	001-33092-00	1	FLAT WASHER SAE 3/4" ZINC	100	111 00000 02		INCLUDES ITEMS 20, 25, 26, 34, 35, 42, 68, 70, 76, 99, 107
53	001-70109-00	4	HHCS, 3/8-16 X1 1/2" SS18-8	104	111-00389-02		V3800 CORNER POST ASSY (B)
54	001-70115-00	4	HHCS, 3/8-16 X3" SS 18-8				INCLUDES ITEMS 22, 34, 70, 76, 99, 107
55	001-70121-00	3	HHCS, 3/8-16 X 4 1/2" SS 18-8	105	111-00390-02		V3800 CORNER POST ASSY (C)
56	001-70210-00	8	HHCS, 1/2-13 X 1 3/4" SS 18-8				INCLUDES ITEMS 22, 34, 70, 76, 99, 107
57	001-70127-00	1	HHCS, 3/8-16 X7" SS 18-8	106	111-00391-02		V3800 CORNER POST ASSY (D)
58	001-70207-00	1	HHCS, 1/2-13 X 1 1/4" SS 18-8	45=	111 05551 5		INCLUDES ITEMS 22, 34, 70, 76, 99, 107
				107	111-00234-01		WELDT, INNERLEG 2-38 NEW EXTR
				400	111 00446 04		INCLUDES ITEMS 19, 28, 38, 39, 40, 72, 74, 75, 77, 85
				108	111-00416-01		3800/5000# BALL SCREW TUBE ASSEMBLY INCLUDES ITEMS 11, 23, 36, 37, 47, 48, 50, 51, 52, 63,
							67, 78, 79, 80, 83, 86, 87, 88, 89, 90, 95, 98
				109	111-00411-01		CANO PY/ WINCH POST
		-		1.00	55111 61	_	INCLUDED ITEMS 58, 72, 79, 93, 94

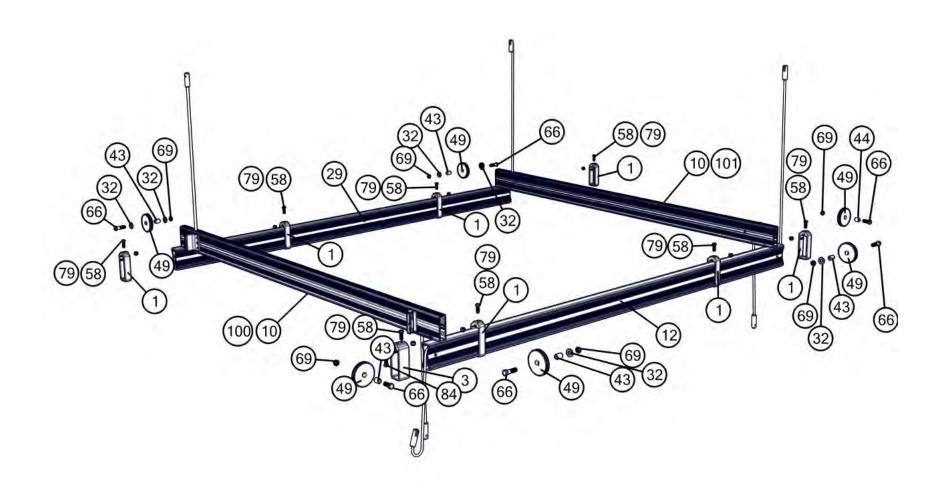
VSD 3800 Frame Exploded View A

LIFT P/N 511-38075-01



VSD 3800 Frame Exploded View B

LIFT P/N 511-38075-01



VSD 3800 Frame Exploded View C

LIFT P/N 511-38075-01

