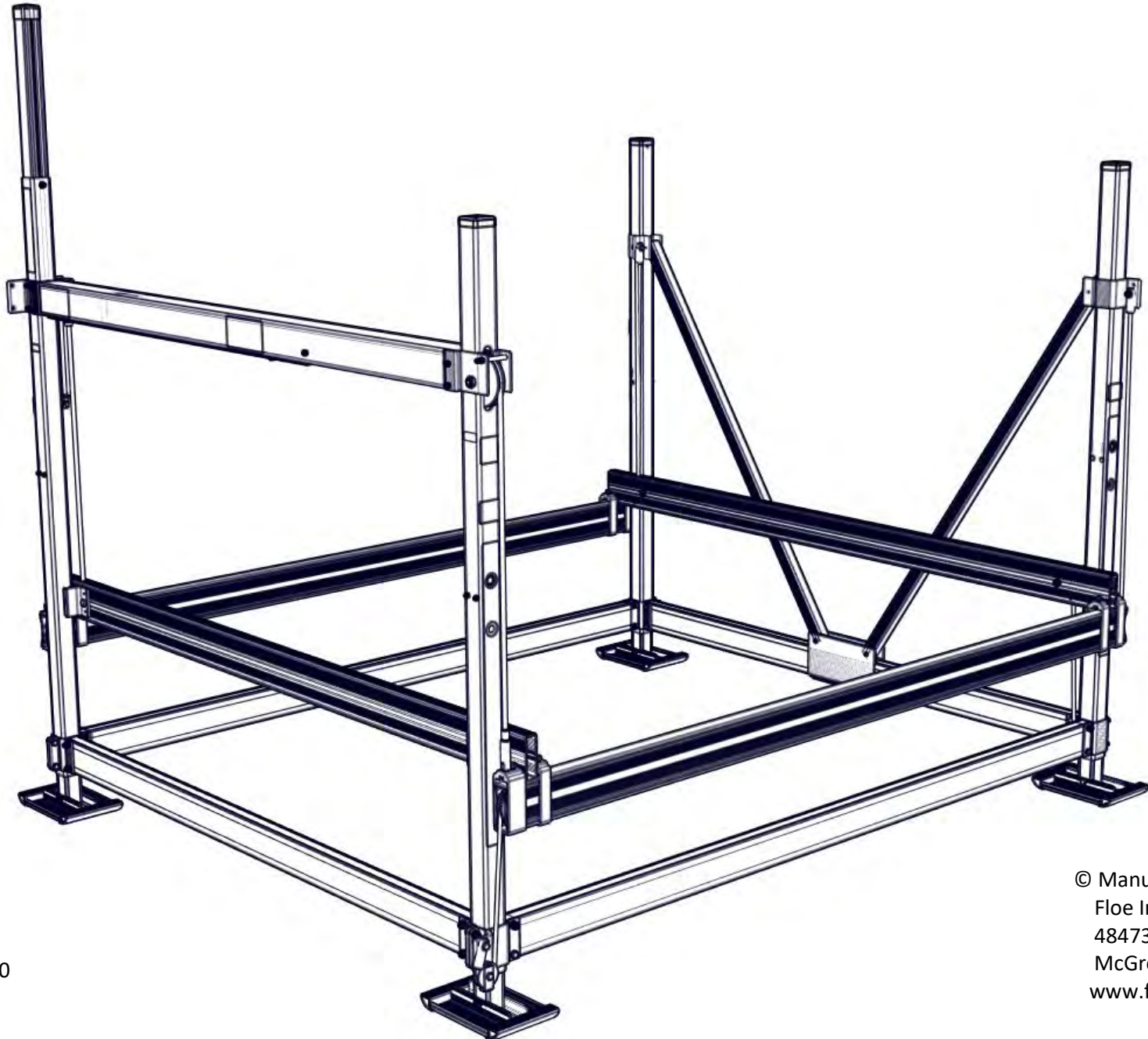


# FLOE VSD 5000 119" BOAT LIFT

P/N 511-50080-00 LIFT FRAME

WITH PATENTED EASY LEVEL LEG SYSTEM

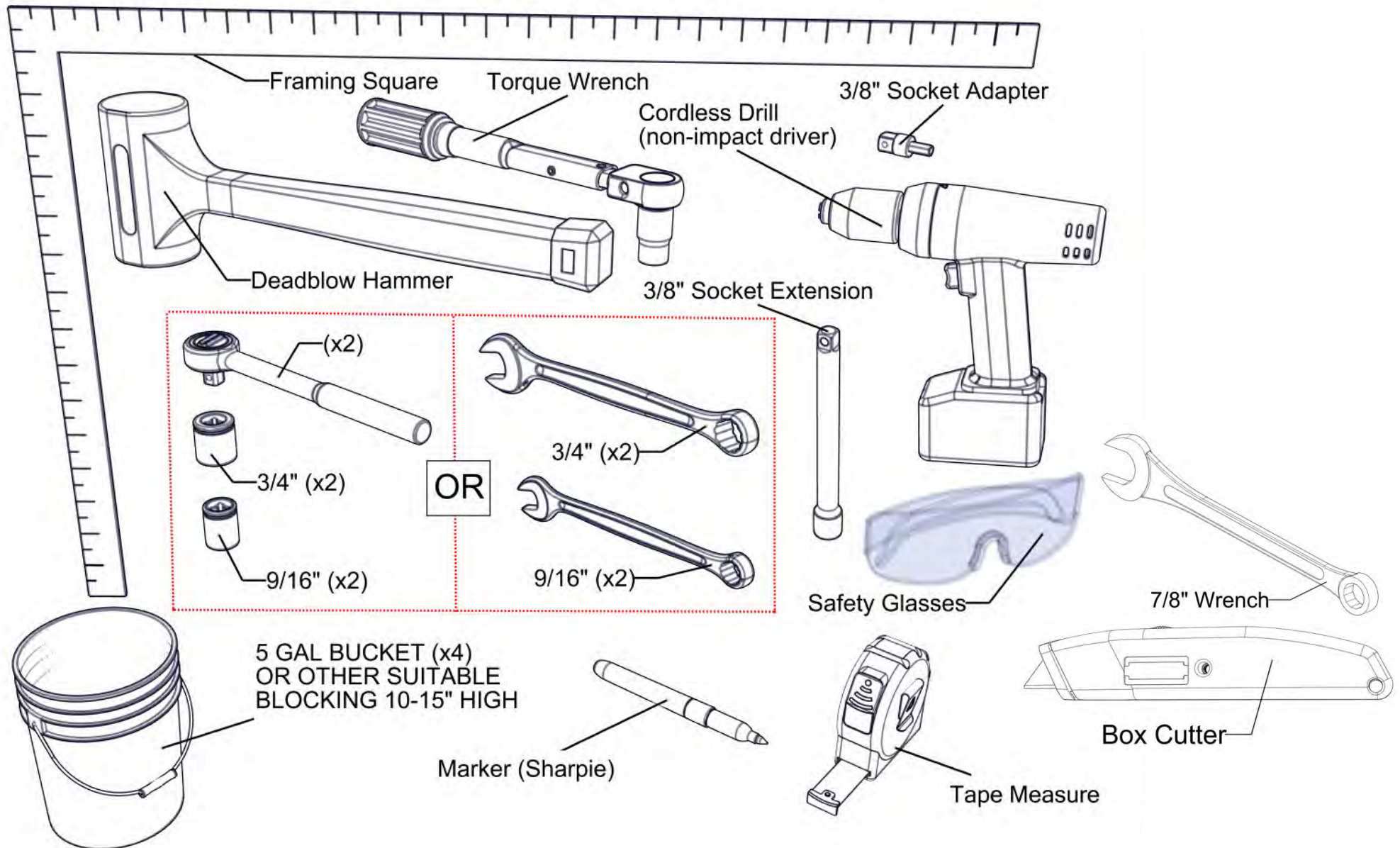
ASSEMBLY INSTRUCTIONS



Instruction P/N 611-50080-00  
Issued 7/19/22

© Manufactured by:  
Floe International Inc.  
48473 State Hwy. 65  
McGregor, MN 55760  
[www.floeintl.com](http://www.floeintl.com)

# Required Tools




# Hardware Card Contents

Card Contents (511-04255-00)				
Step	Part Numbers	QTY	Descriptions	Torques
1	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.
	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	
2	001-70218-00	4	HHCS, 1/2-13 x 3 3/4" ss 18-8	20 ft. lbs.
	001-76072-00	4	NUT, 1/2-13 ALUMINUM NYLOCK	
3	001-76071-00	4	NUT, 3/8-16 ALUMINUM NYLOCK	
	001-70115-00	2	HHCS, 3/8-16 x 3" ss 18-8	35 ft. lbs.
	001-70117-00	2	HHCS, 3/8-16 x 3 1/2" ss 18-8	
4	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.
	001-76071-00	6	NUT, 3/8-16 ALUMINUM NYLOCK	
	001-70121-00	3	HHCS, 3/8-16 x 4 1/2" ss 18-8	35 ft. lbs.
5	001-70209-00	8	HHCS, 1/2-13 x 1 1/2" ss 18-8	45 ft. lbs.
	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
6	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.
	002-04140-00	1	HOLDER, CABLE	
	007-06201-00	1	SHEAVE, 3" FRONT CABLE ½" ID	
7	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	35 ft. lbs.
	001-70124-00	4	HHCS, 3/8-16 x 5 1/2" ss 18-8	
	001-76071-00	4	NUT, 3/8-16 ALUMINUM NYLOCK	

## Assembly Image Definitions

	Tighten without Clamping		Centerline
	Hardware Card #		Check, Inspect, Verify

# Warnings

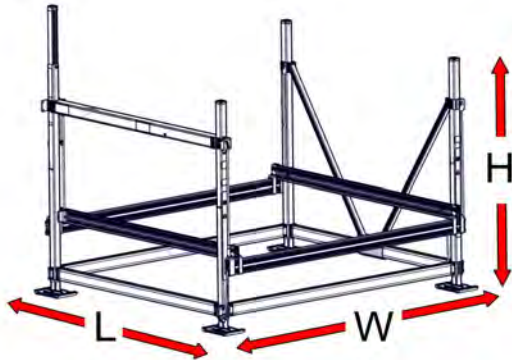
IMPORTANT NOTE:  
DO NOT USE IMPACT WRENCH  
WHEN ADJUSTING THE EASY  
LEVEL LEGS

# 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"

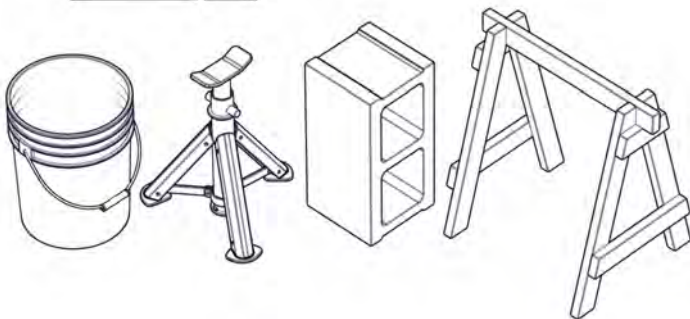
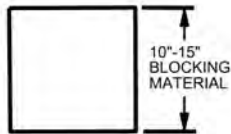
Width: 135 3/8"

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

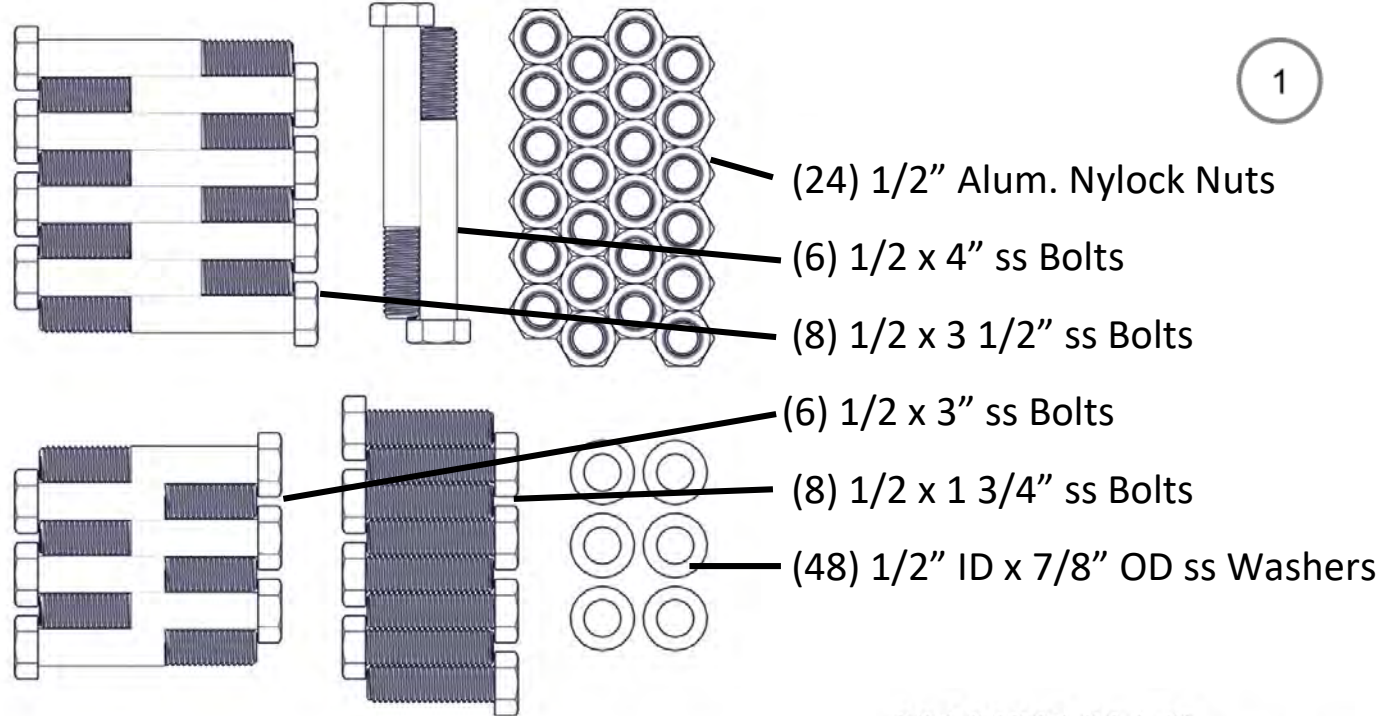
4 (2 for each side)

## Purpose

Blocking used to support lift during assembly steps 1 and 2

# Contents for Step 1

1

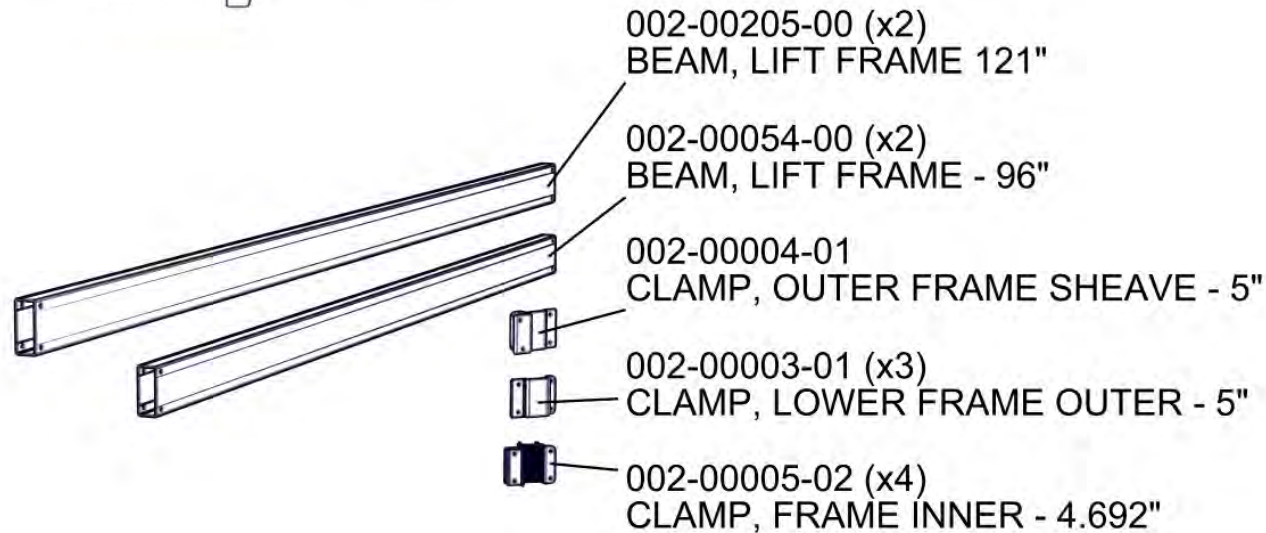


## **NOTE**

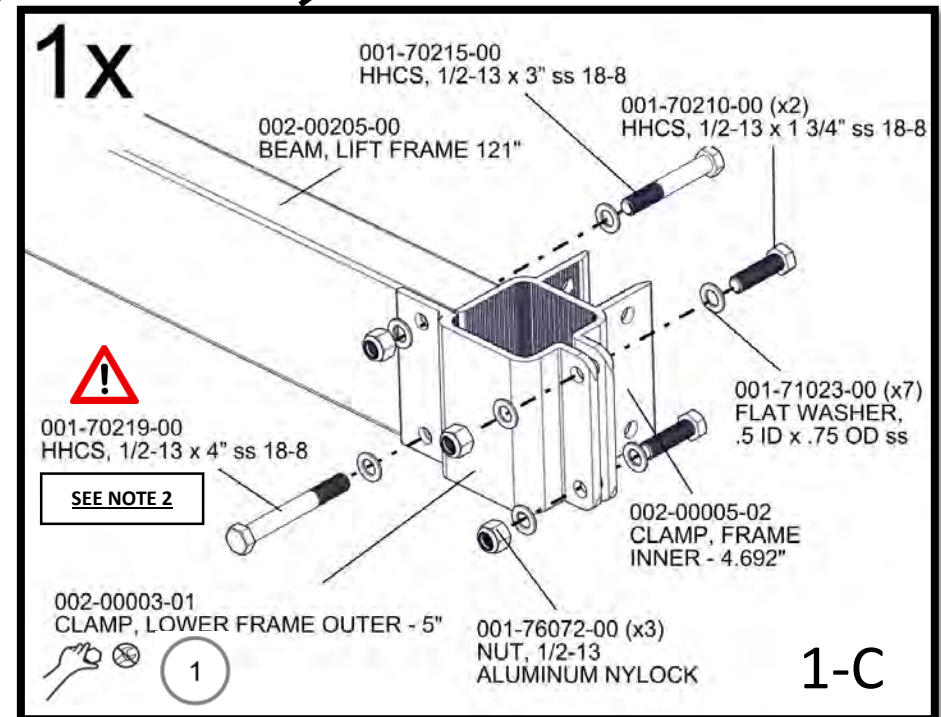
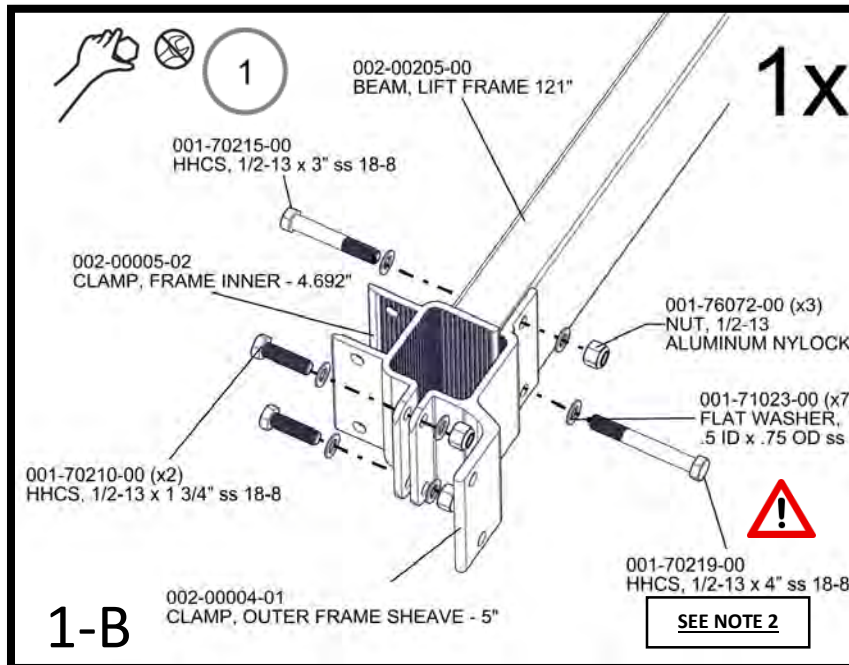
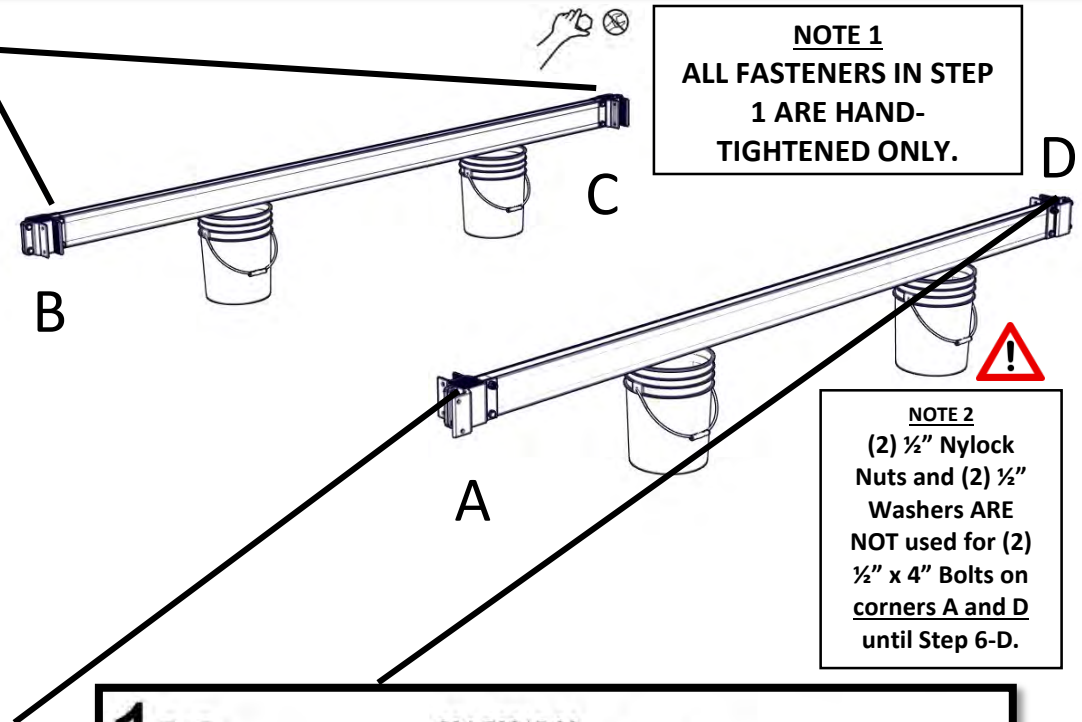
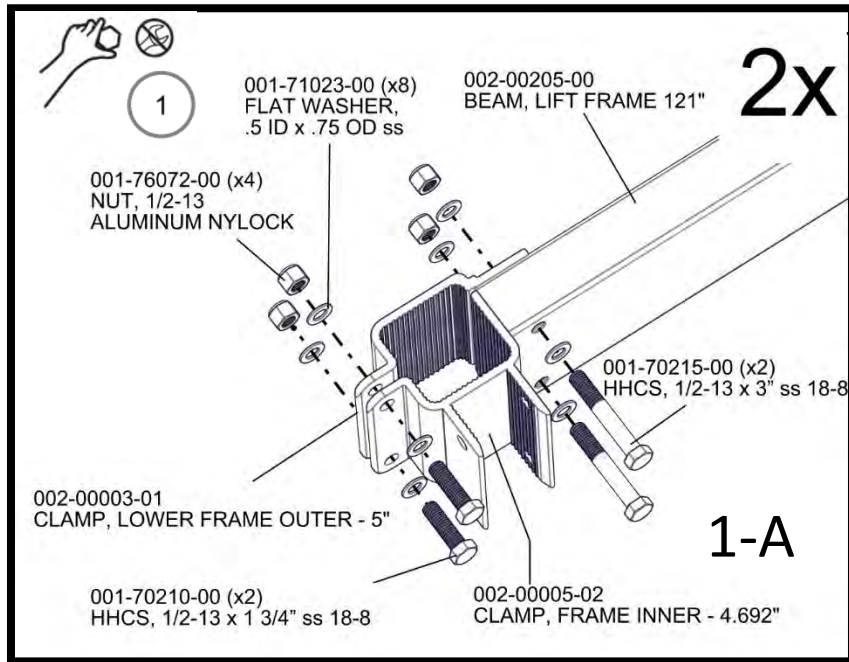
(2) 1/2" Nylock Nuts and (2) 1/2" Washers are used in Step 6-D to attach lifting cables to (2) 1/2" x 4" Bolts.

## **NOTE**

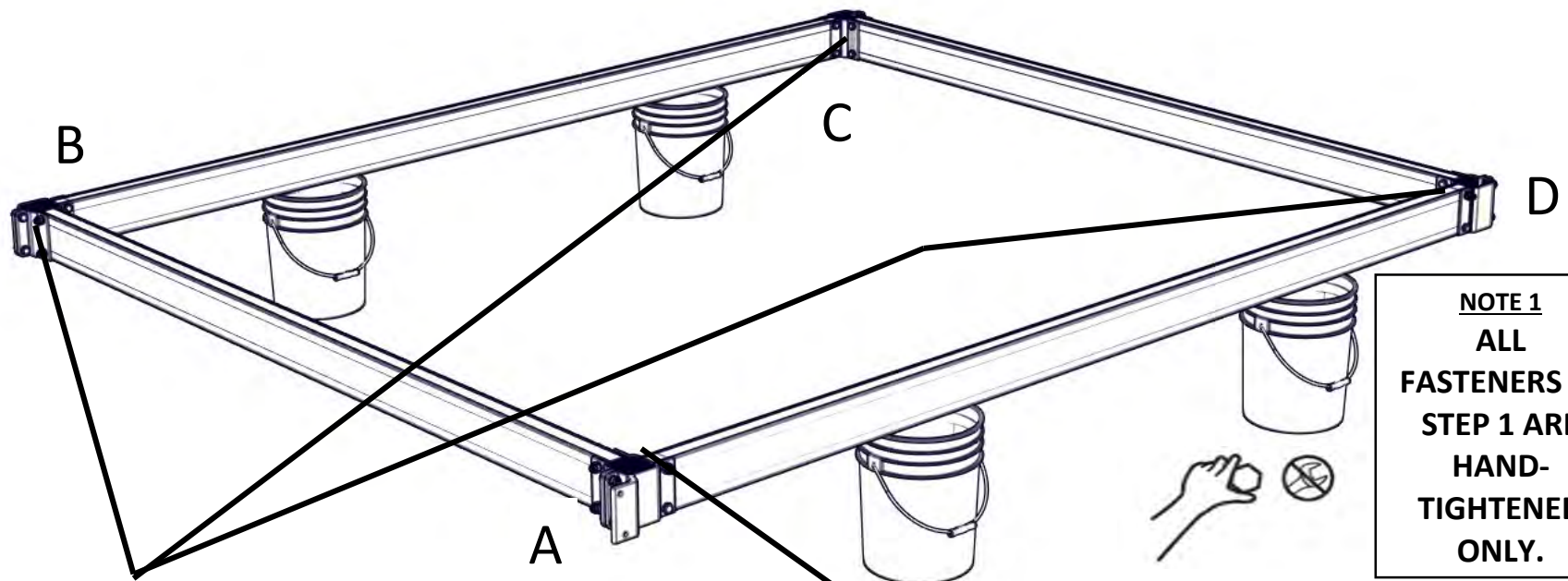
ALL FASTENERS IN STEP 1 ARE **HAND-TIGHTENED ONLY.**



# Assembly for Step 1







001-71023-00 (x4)  
FLAT WASHER  
.5ID x .75 OD ss

001-70217-00 (x2)  
HHCS, 1/2-13 x 3 1/2" ss 18-8

**CORNER B IS SHOWN  
FOR CORNERS C AND D.  
IMAGE IS MIRRORED  
(NUTS ARE ON OUTSIDE  
OF LIFT, BOLTS ARE ON  
INSIDE OF LIFT)**

002-00054-00  
SIDE FRAME BEAM 96"

001-76072-00 (x2)  
NUT, 1/2-13  
ALUMINUM NYLOCK



1

1-D

002-00054-00  
SIDE FRAME BEAM 96"

001-70217-00 (x2)  
HHCS, 1/2-13 x 3 1/2" ss 18-8

001-76072-00 (x2)  
NUT, 1/2-13  
ALUMINUM NYLOCK

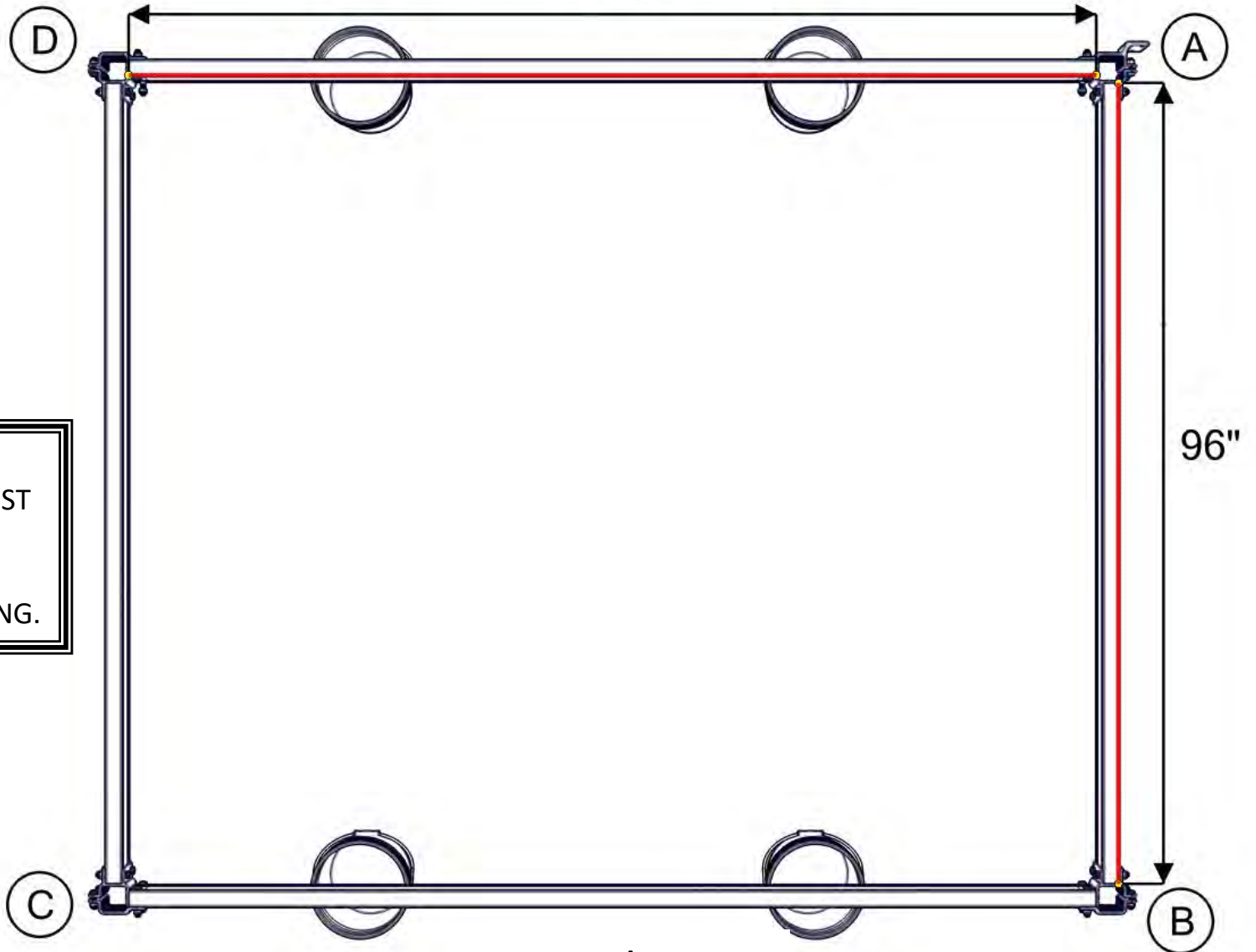
001-71023-00 (x4)  
FLAT WASHER,  
.5 ID x .75 OD ss



1

1-E

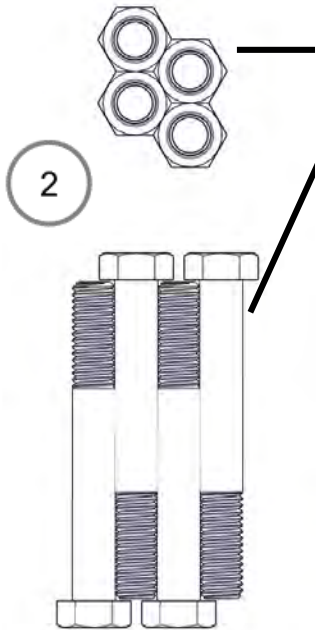
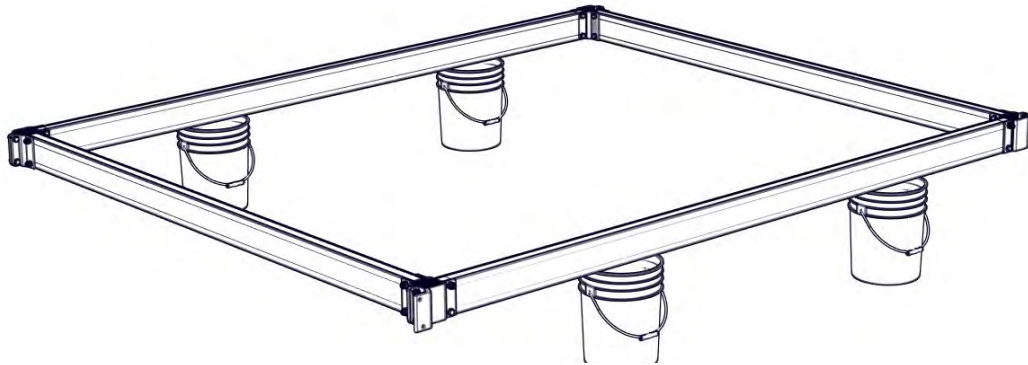
FRONT/REAR  
121"



IMPORTANT NOTE:  
FRAME BEAMS MUST  
BE IN THIS  
ORIENTATION  
BEFORE CONTINUING.

FRONT/REAR

# Contents for Step 2



(4) 1/2" Alum. Nylock Nuts

(4) 1/2 x 3 3/4" SS Bolts Torque to 20 ft. lbs.

111-00420-02  
ASS'Y, CORNER POST "D" VSD5000

111-00419-02  
ASS'Y, CORNER POST "C" VSD5000

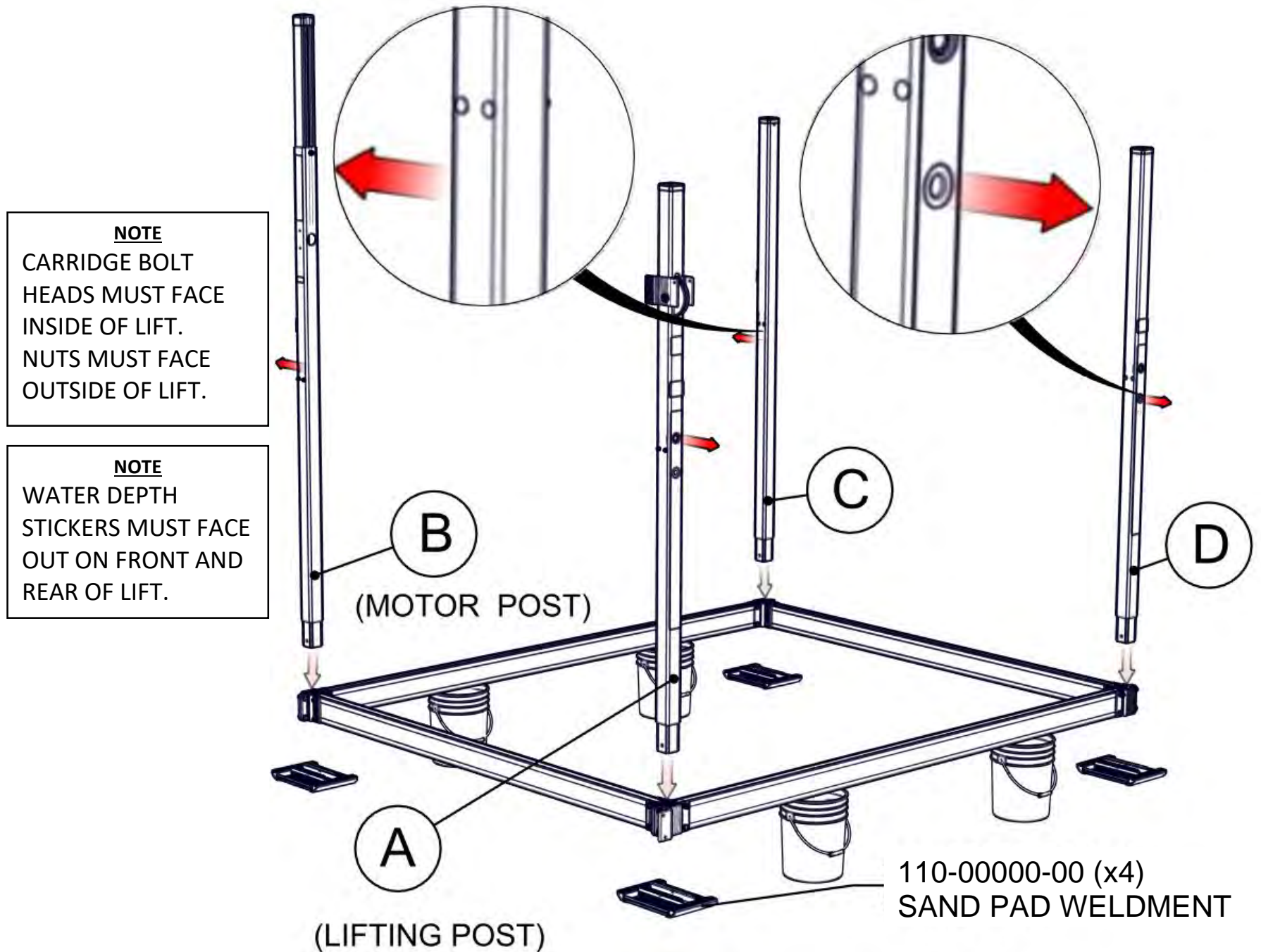
111-00418-02  
ASS'Y, CORNER POST "B" VSD5000

111-00431-02  
ASS'Y, CORNER POST "A" LIFTING

111-00000-00 (x4)  
SAND PAD WELDMENT

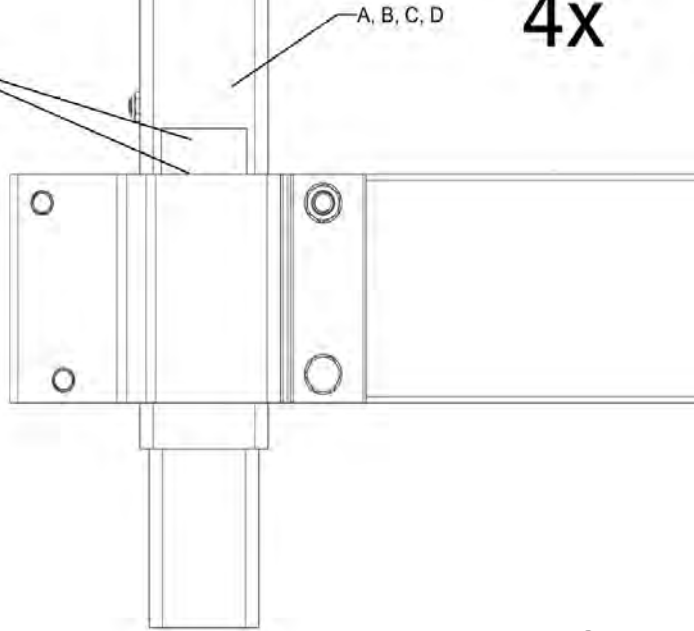


# Assembly of Step 2



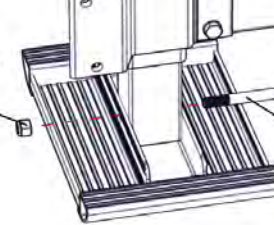


**NOTE**  
BUTT  
CLAMP UP  
TO CORNER  
POST TAB



2-A

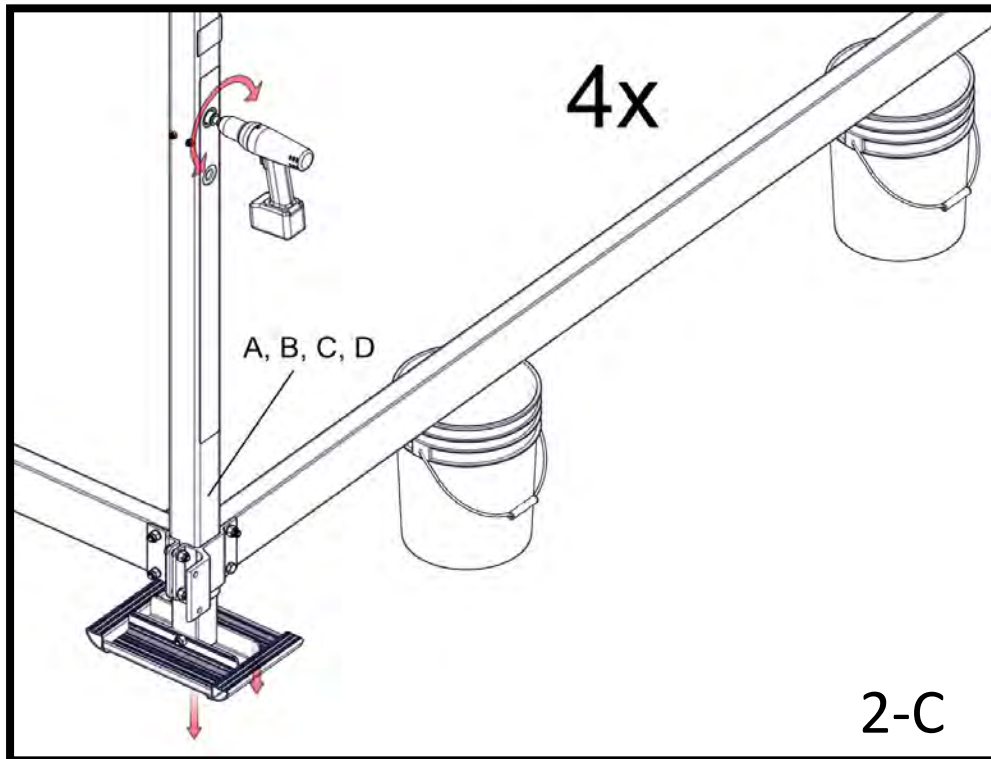
001-76072-00  
NUT, 1/2-13  
ALUMINUM NYLOCK



001-70218-00  
HHCS, 1/2-13 x 3 3/4" ss 18-8  
25 ft. lbs.

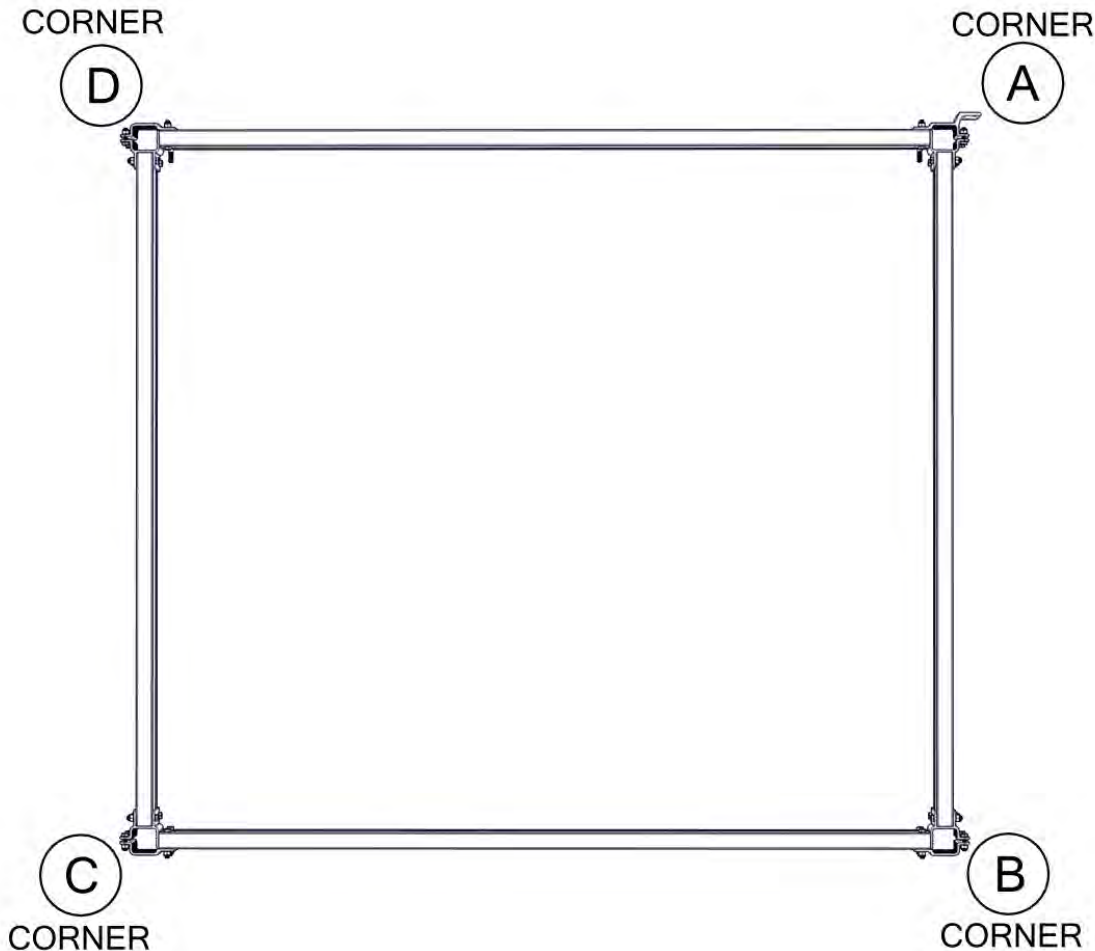
2

2-B



2-C

# Frame Beam Clamp Torque Sequence



## **NOTE**

FRAME BEAM CLAMPS NEED TO BE TIGHTENED IN THE PROPER SEQUENCE.

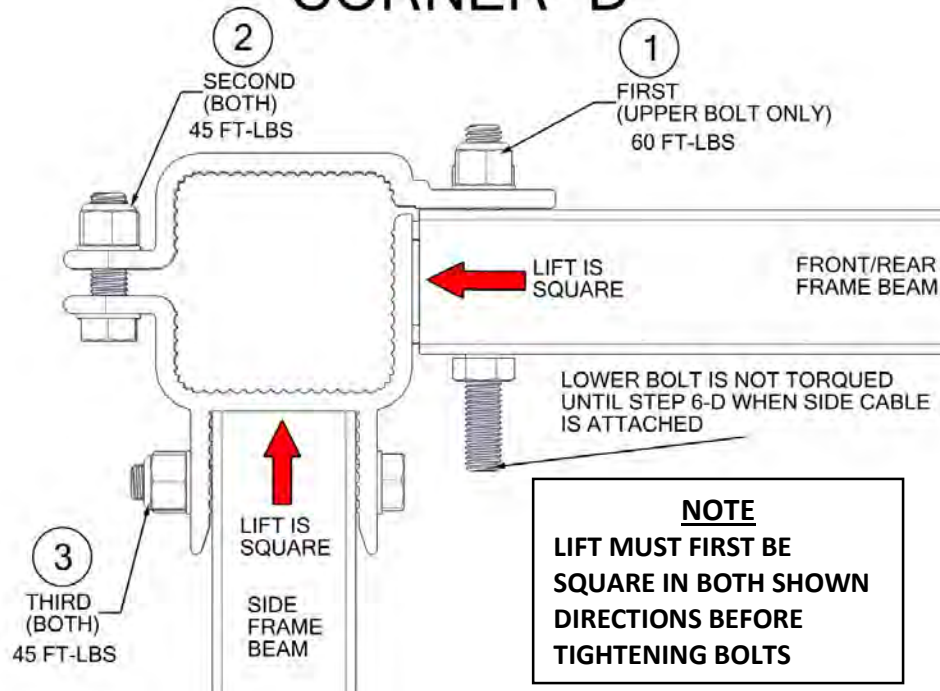
EACH CORNER IS SHOWN ON THE NEXT THREE PAGES WITH THE SEQUENCE OF WHICH ORDER THE BOLTS SHOULD BE TORQUED.

LIFT MUST BE SQUARE BEFORE ANY BOLTS ARE TORQUED.

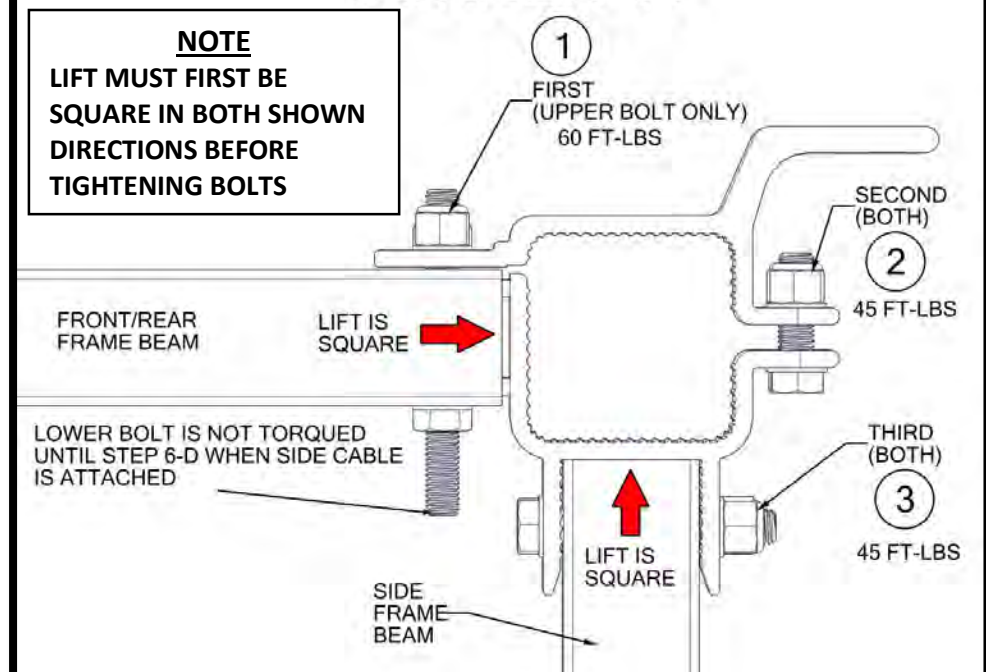
BOTH BOLTS IN THE SHOWN ORDER ARE TORQUED, UNLESS DENOTED (CORNER "A" & CORNER "D": ONLY ONE BOLT IS TORQUED. THE OTHER BOLT (LOWER) SHOULD NOT HAVE THE WASHER AND NUT PLACED ON THEM UNTIL STEP 6-D WHEN THE SIDE LEVELING CABLES ARE ATTACHED).

IF BOLTS ARE NOT TIGHTENED IN PROPER TORQUE SEQUENCES, FRAME BEAM CLAMPS WILL BE SEATED POORLY. THIS MAY RESULT IN POOR LIFT PERFORMANCE AND DAMAGE TO LIFT COMPONENTS.

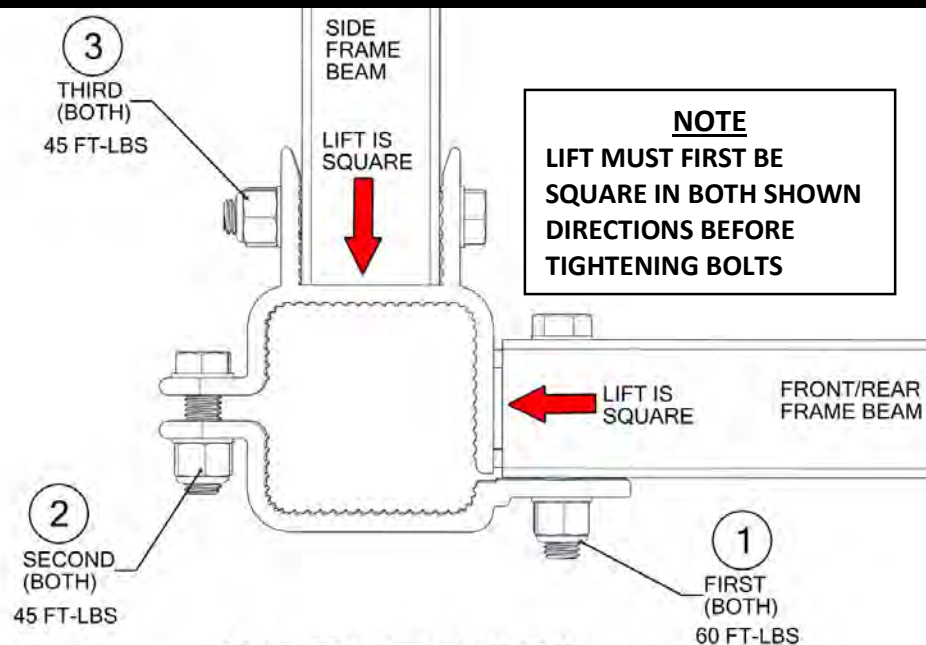
## CORNER "D"



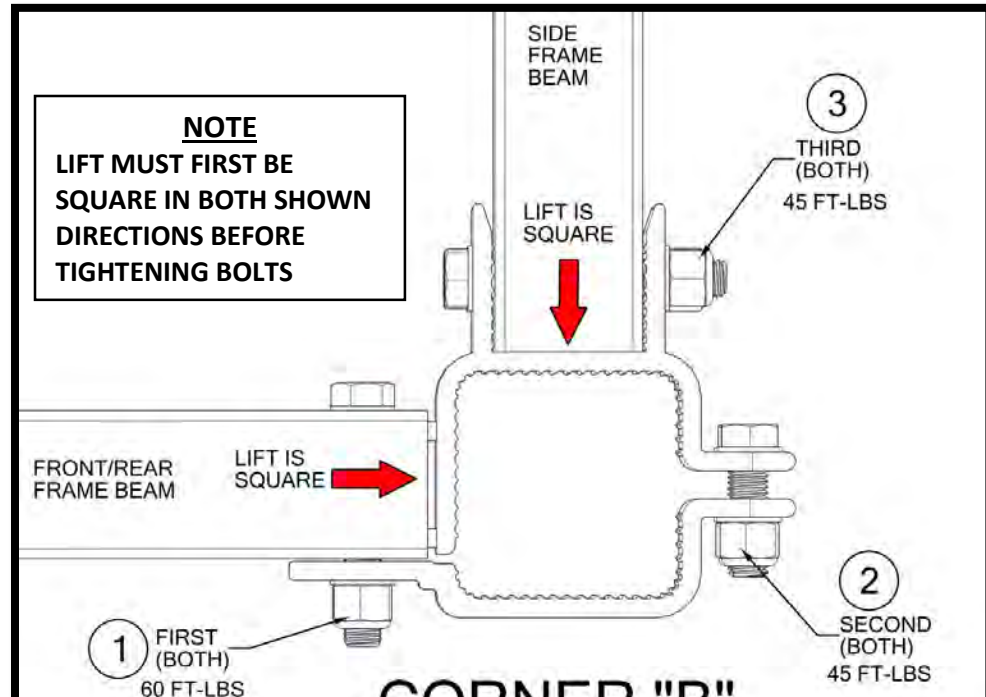
## CORNER "A"



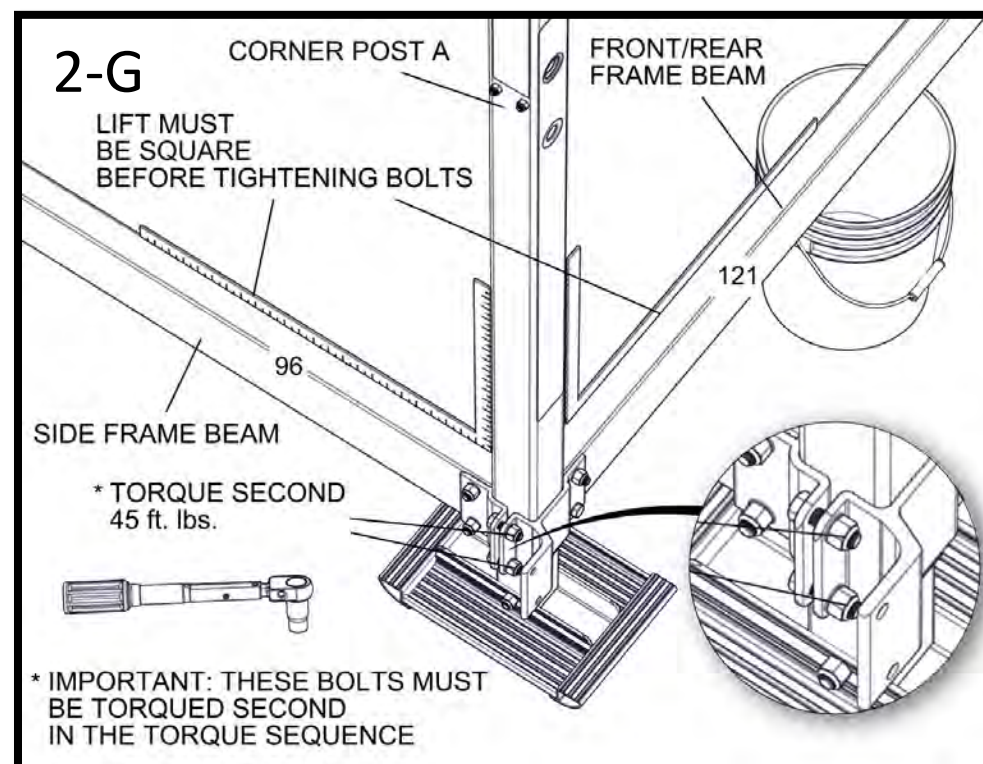
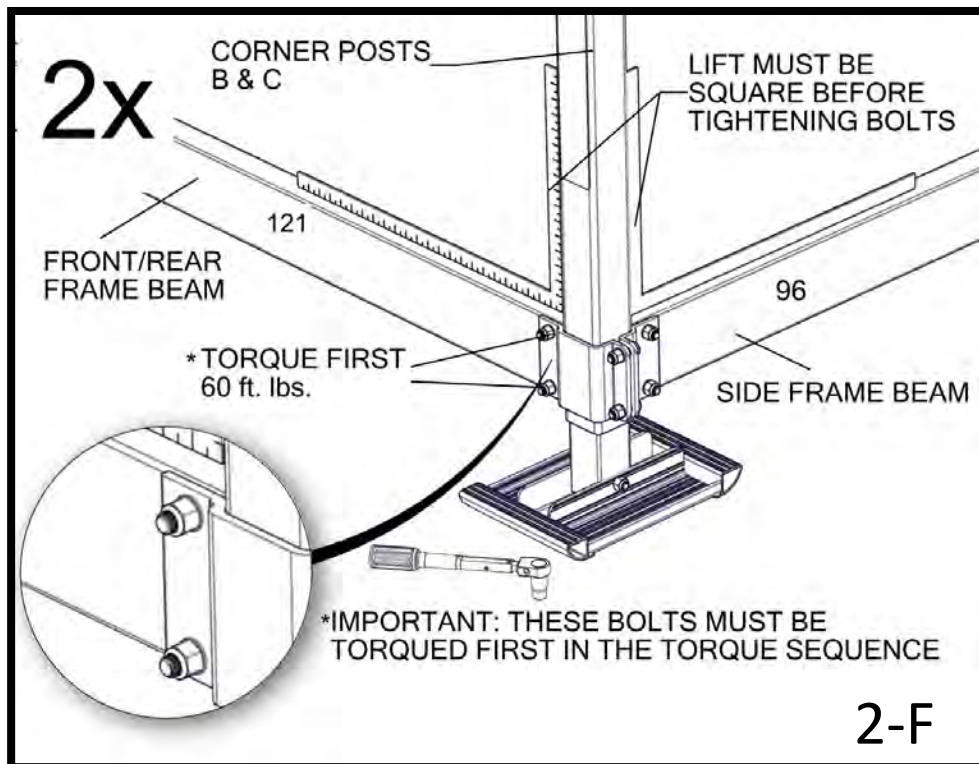
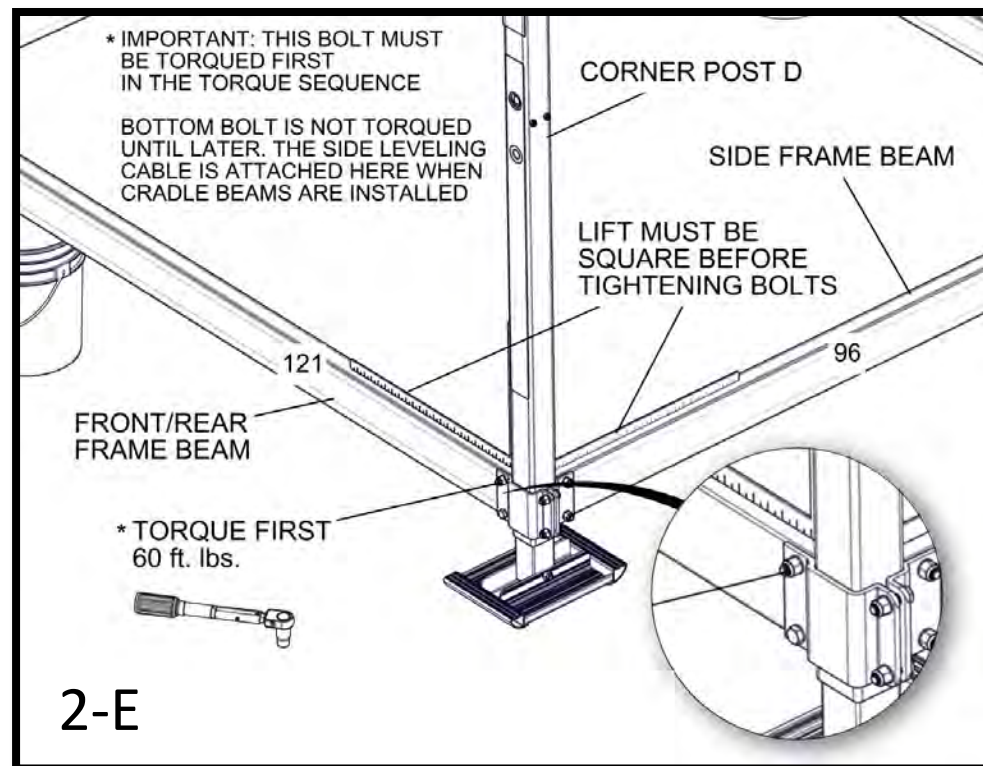
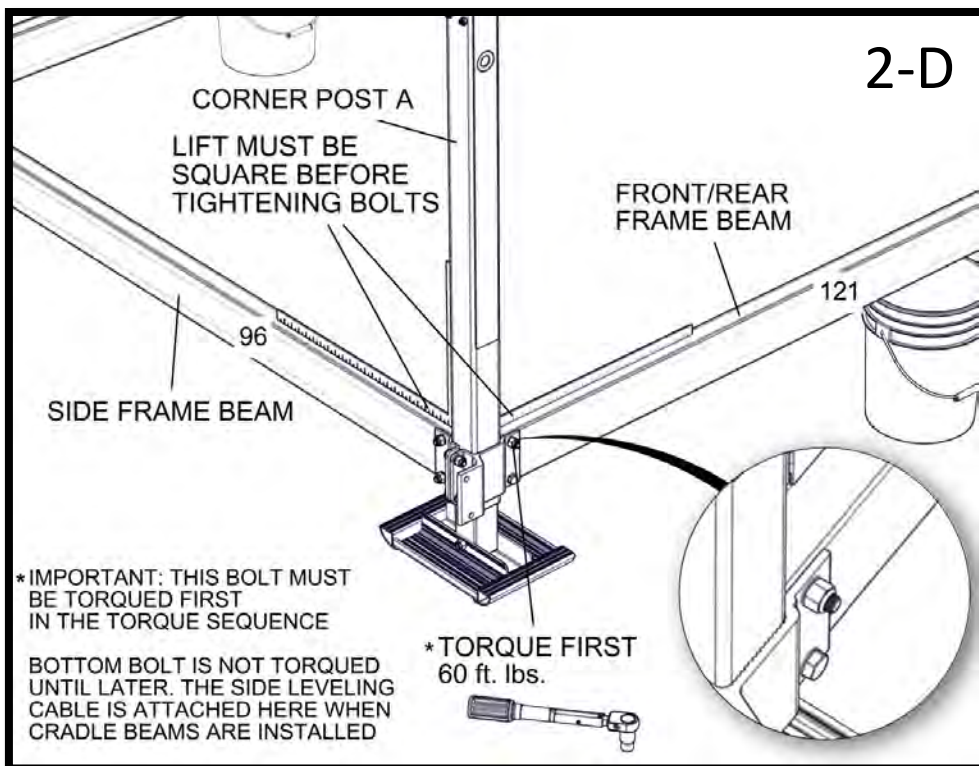
## CORNER "C"



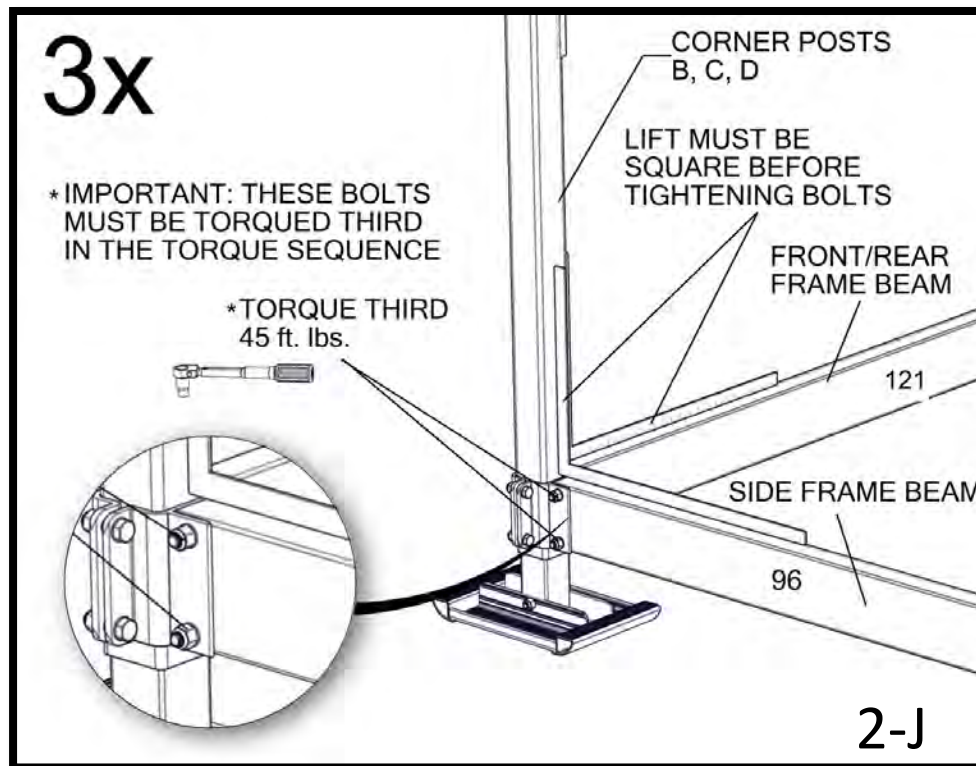
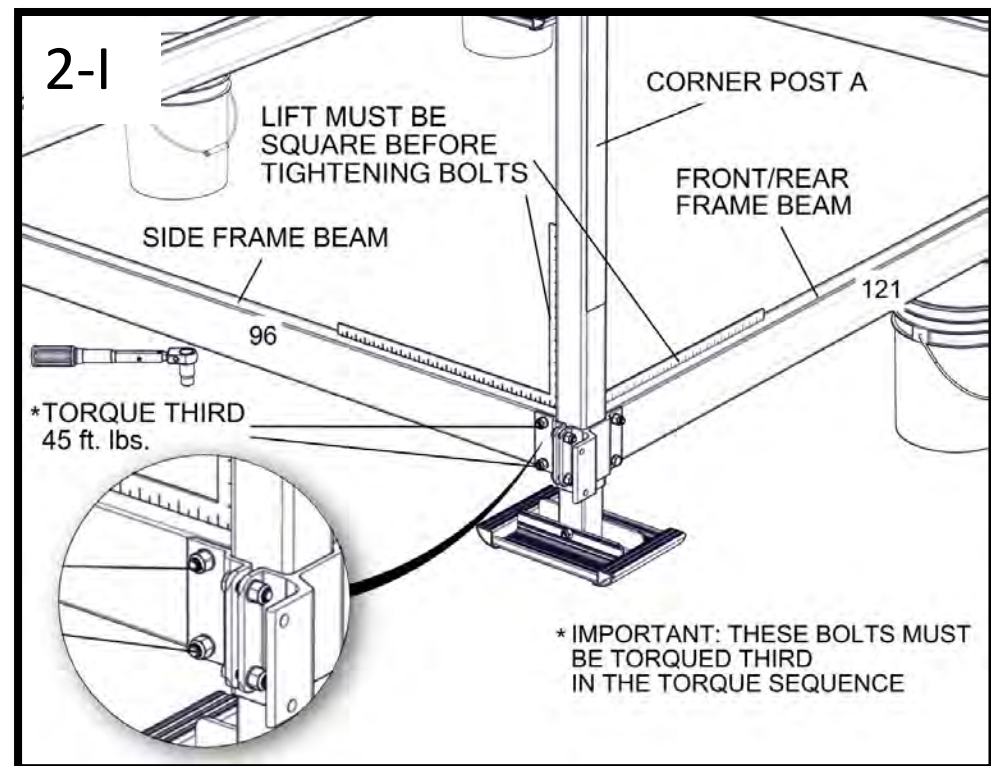
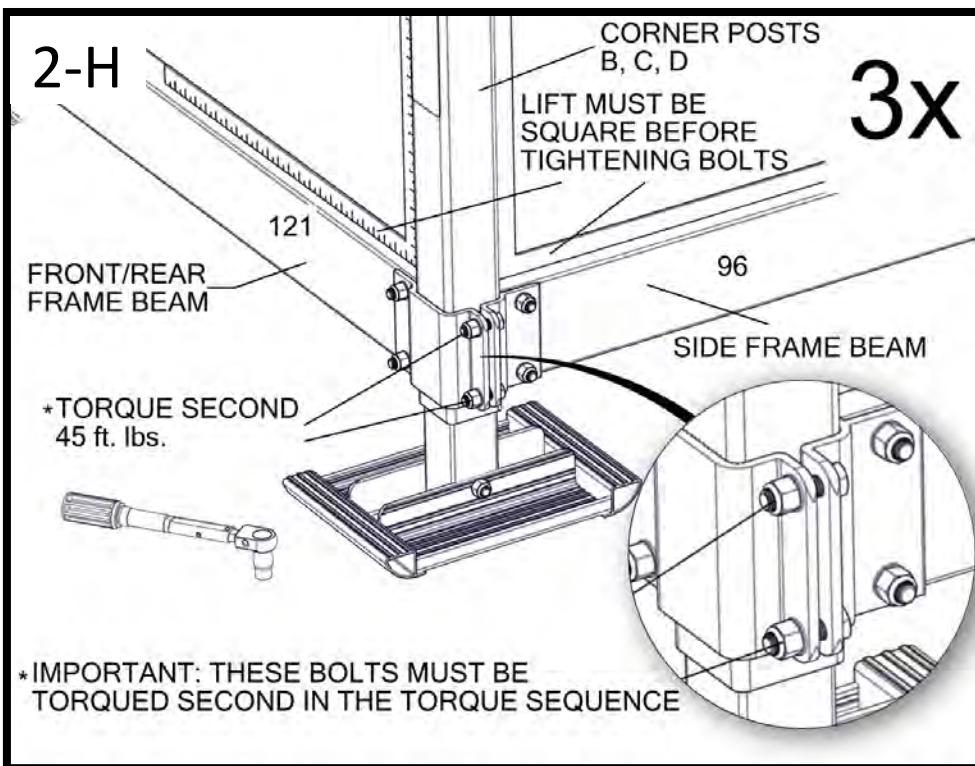
## CORNER "B"



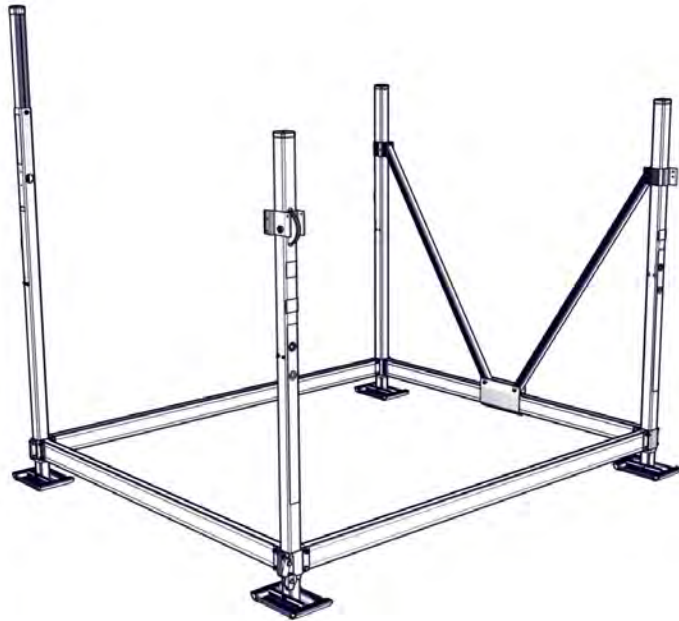




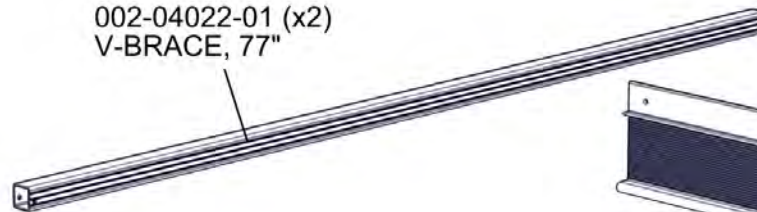




# Contents for Step 3



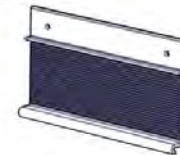
002-04022-01 (x2)  
V-BRACE, 77"



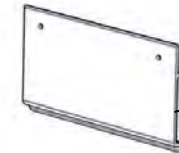
002-00002-00  
BRACKET, UPPER V-BRACE – 4"



002-00001-00  
BRACKET, UPPER LFTG/V-BRACE

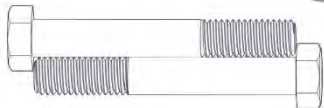


002-04066-00  
CLAMP, V-BRACE (R) 14.5"

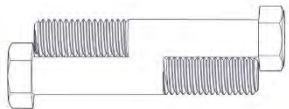


002-04064-00  
CLAMP, V-BRACE (L) 14.5"

3



(2) 3/8 x 3 1/2" ss Bolts Torque to 35 ft. lbs.

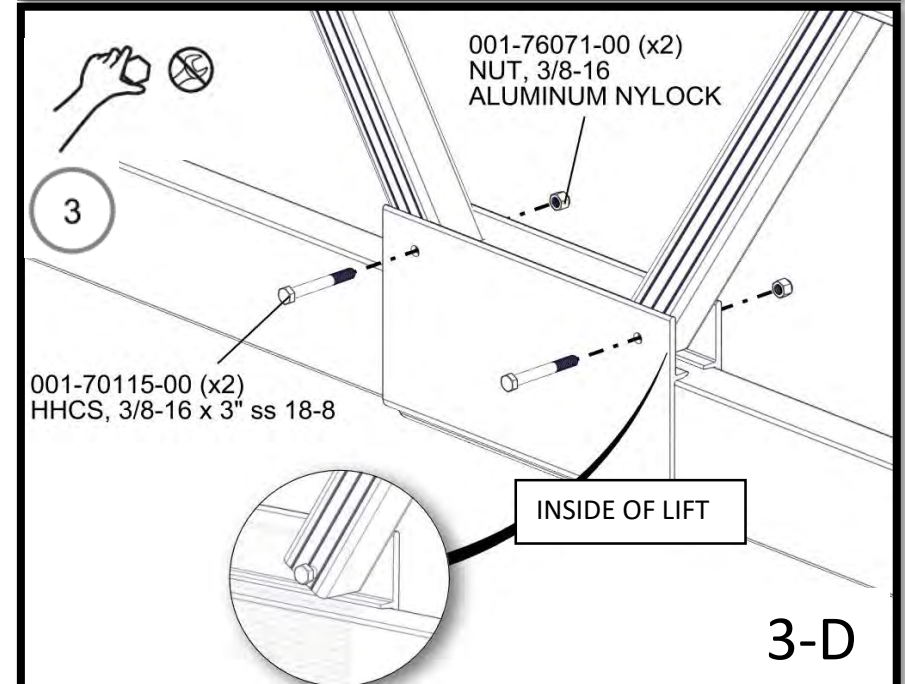
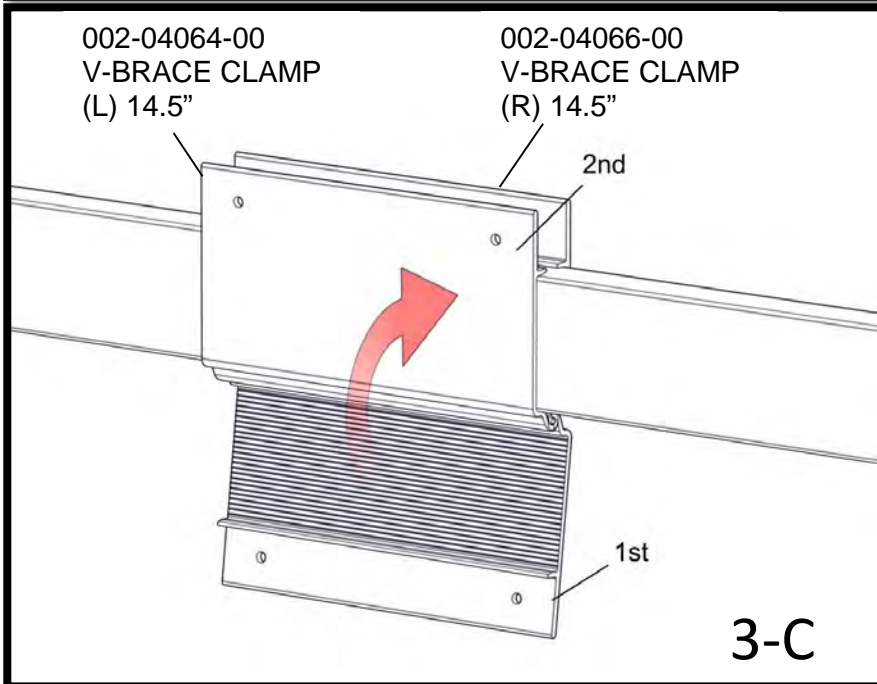
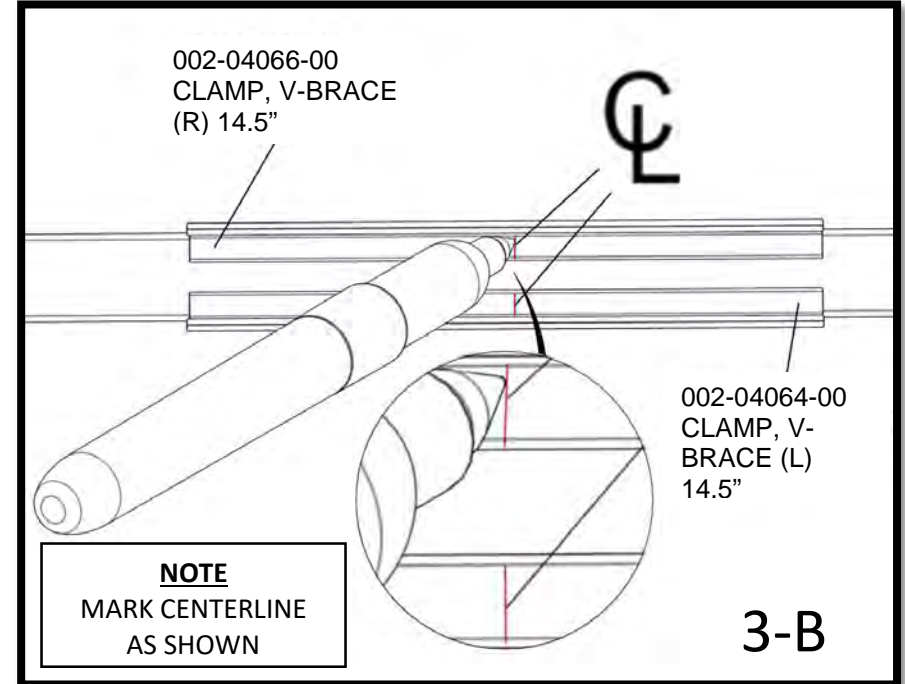
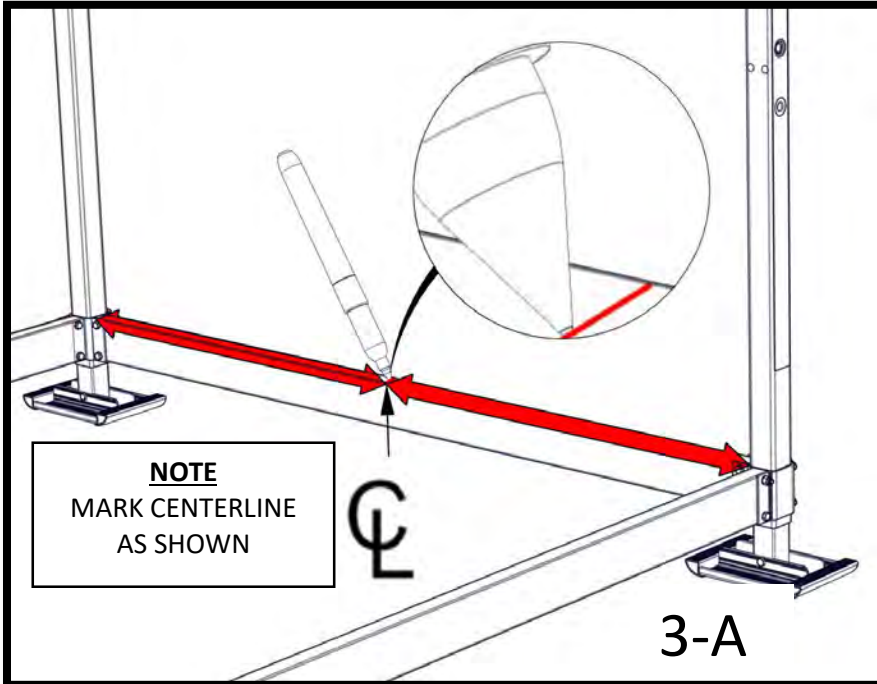


(2) 3/8 x 3" ss Bolts Torque to 35 ft. lbs.

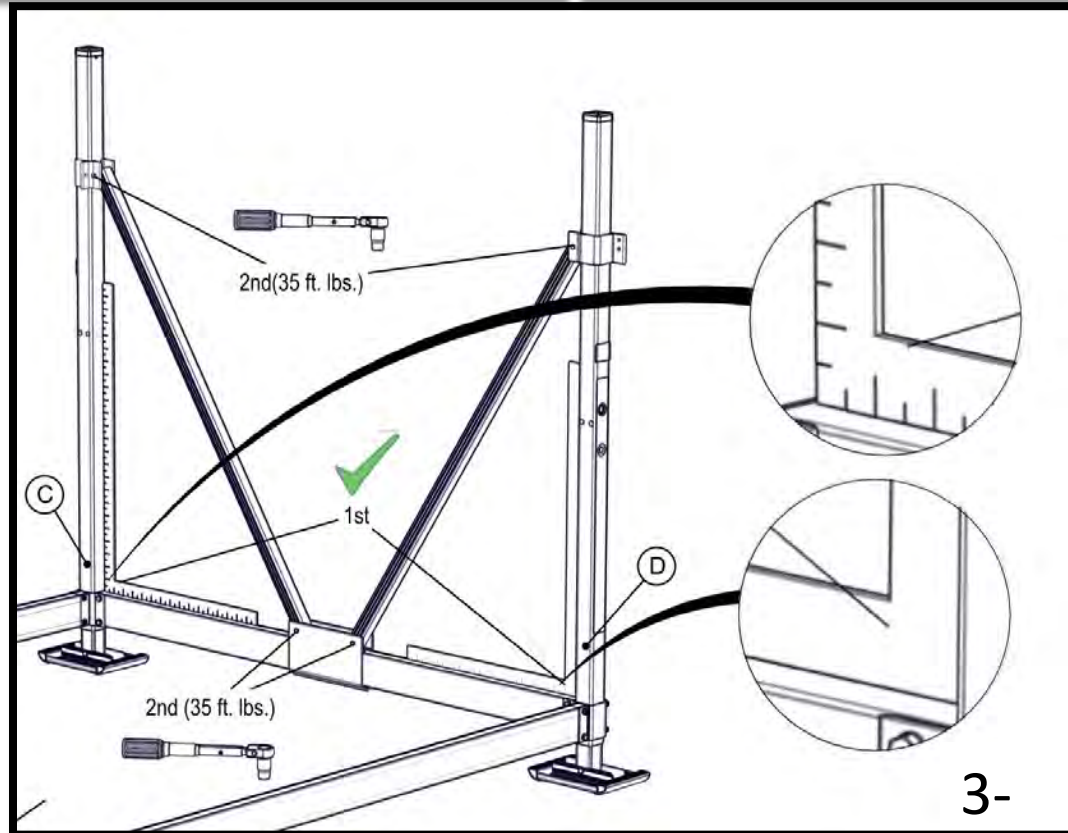
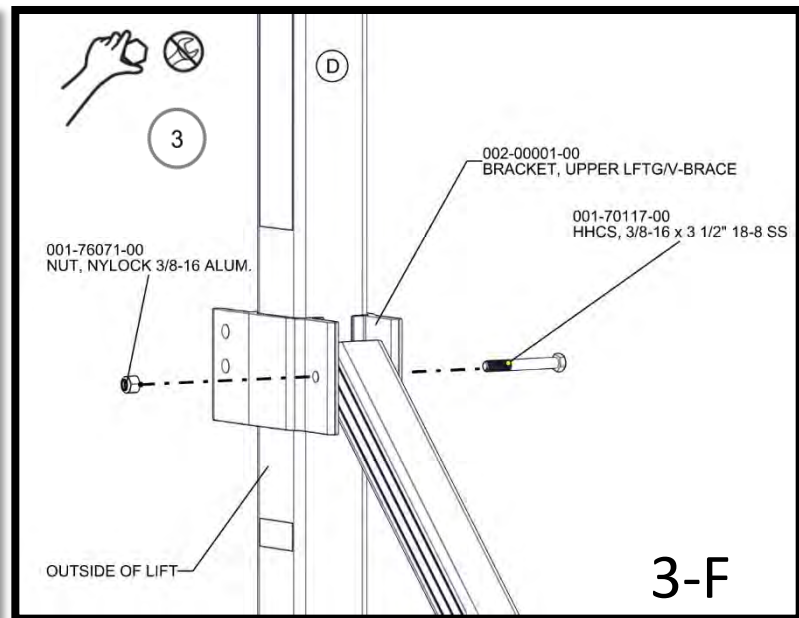
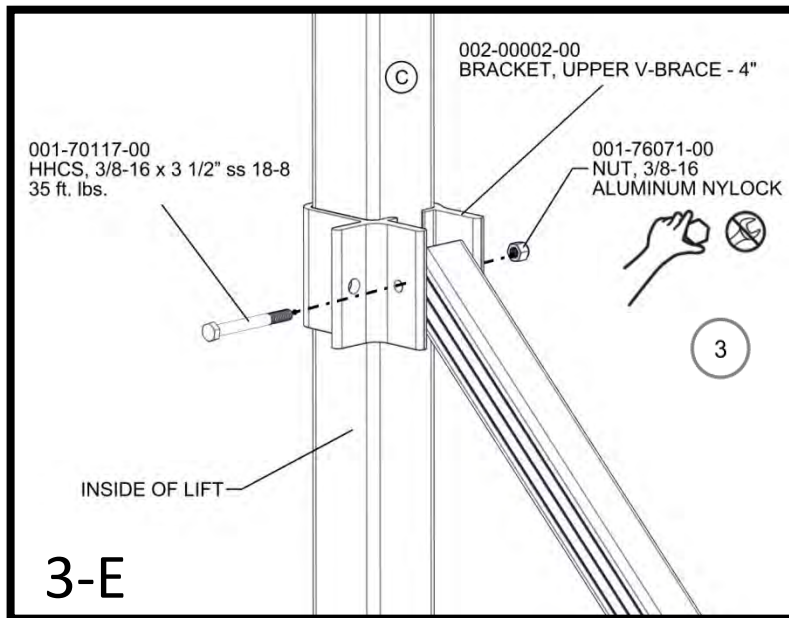


(4) 3/8" Alum. Nylock Nuts

# Assembly of Step 3

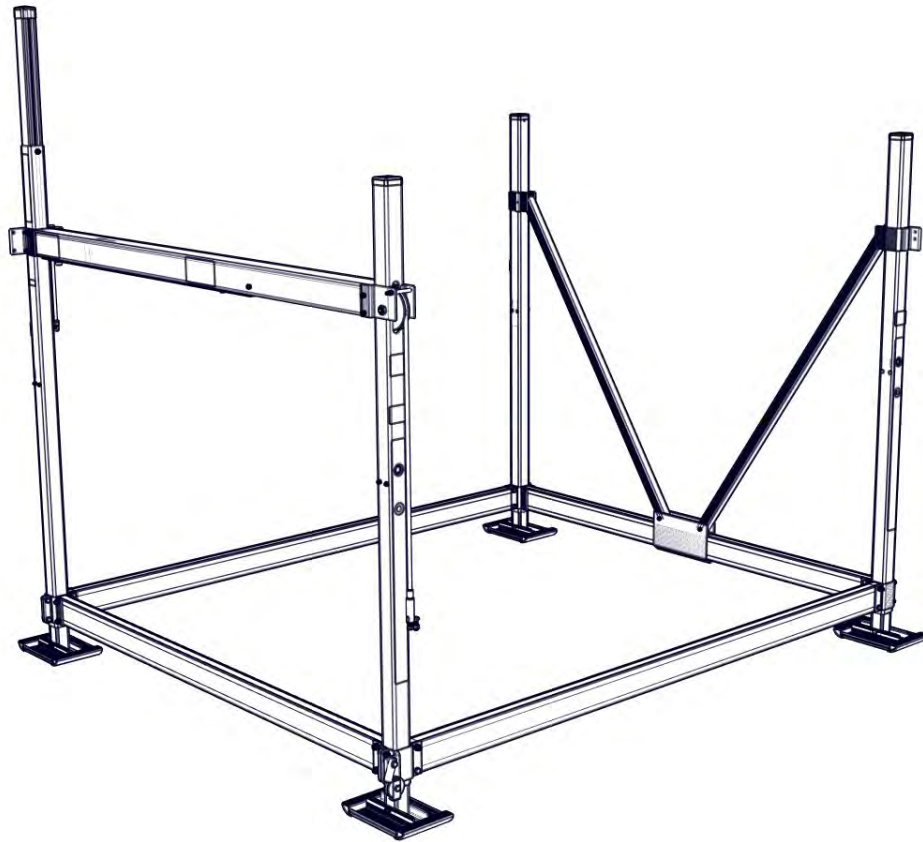






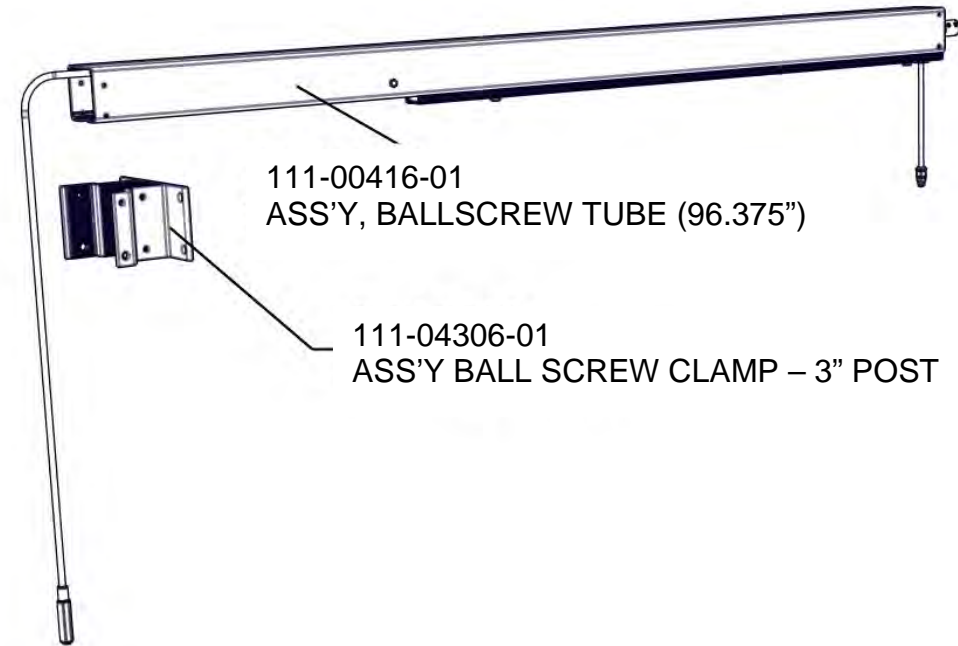


# Contents for Step 4



## **ASSEMBLY CAUTION NOTE**

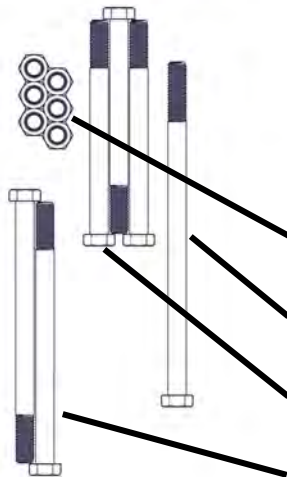
Two people are **required** for assembly step 4



111-00416-01  
ASS'Y, BALLSCREW TUBE (96.375")

111-04306-01  
ASS'Y BALL SCREW CLAMP – 3" POST

4



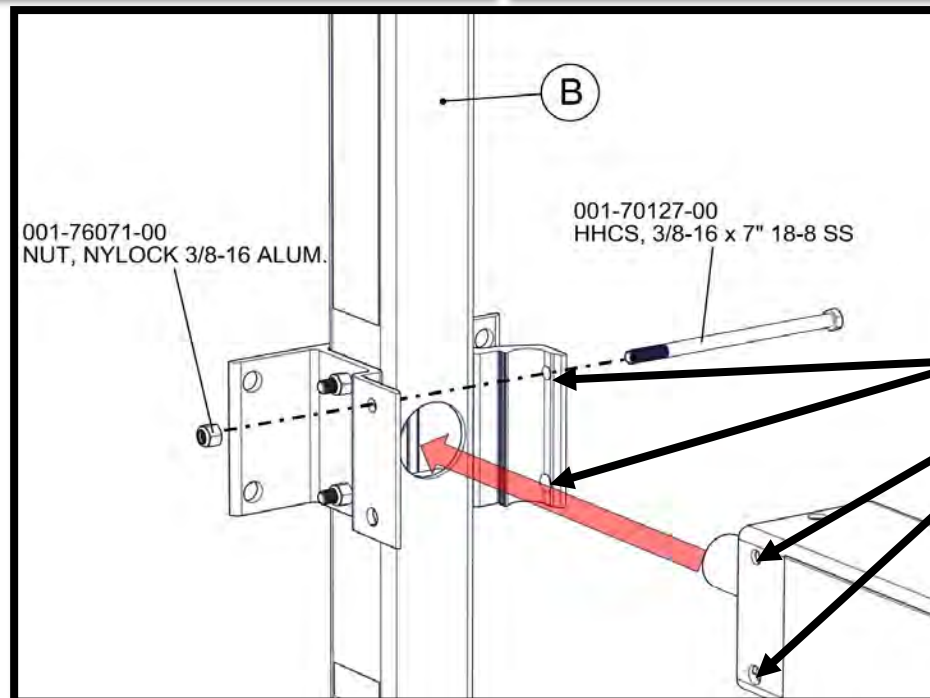
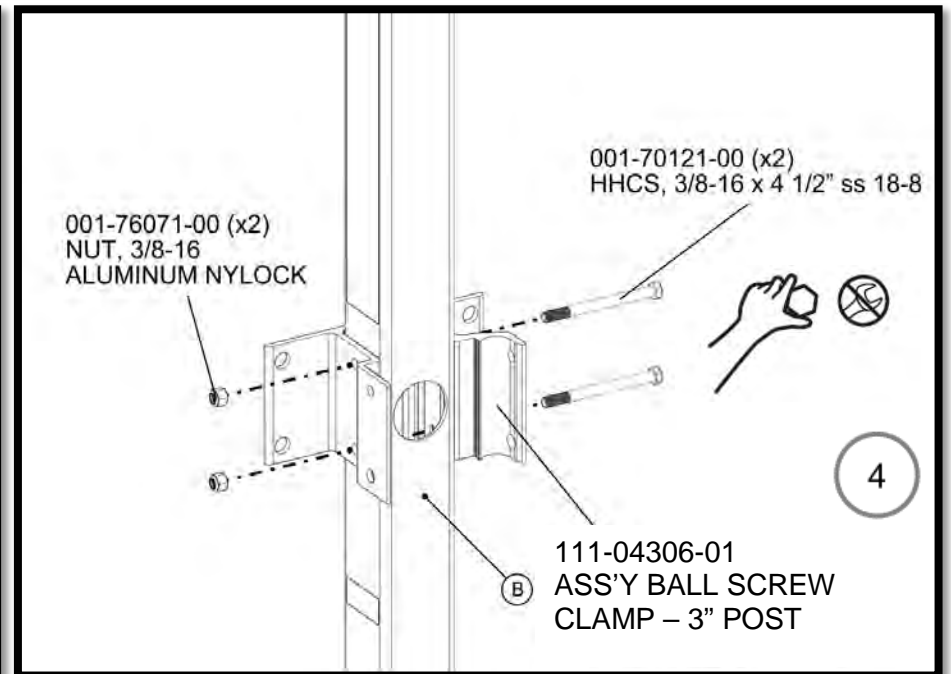
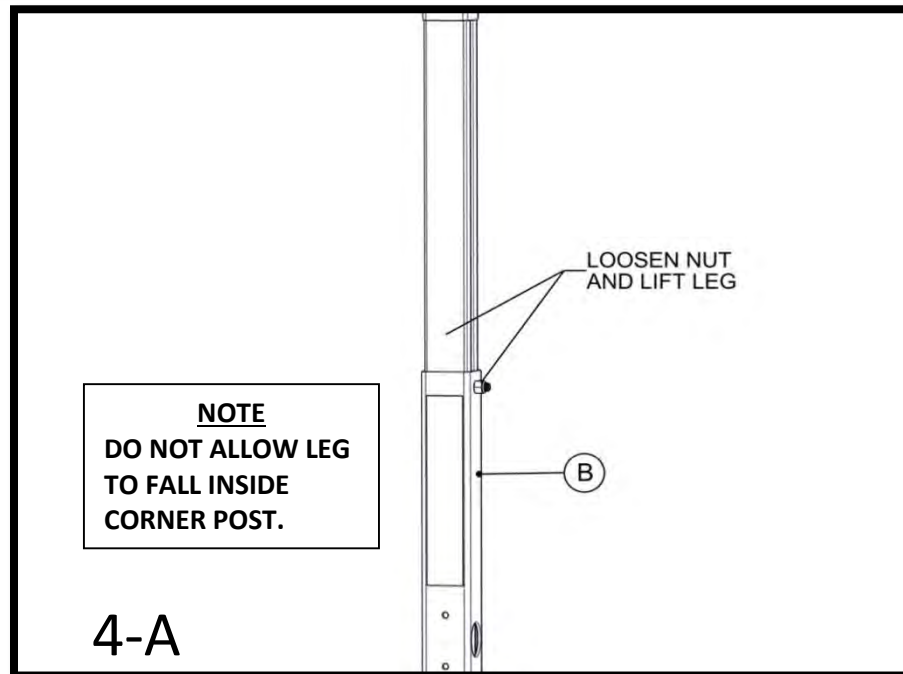
(6) 3/8" Alum. Nylock Nuts

(1) 3/8 x 7" SS Bolts Torque to 35 ft. lbs.

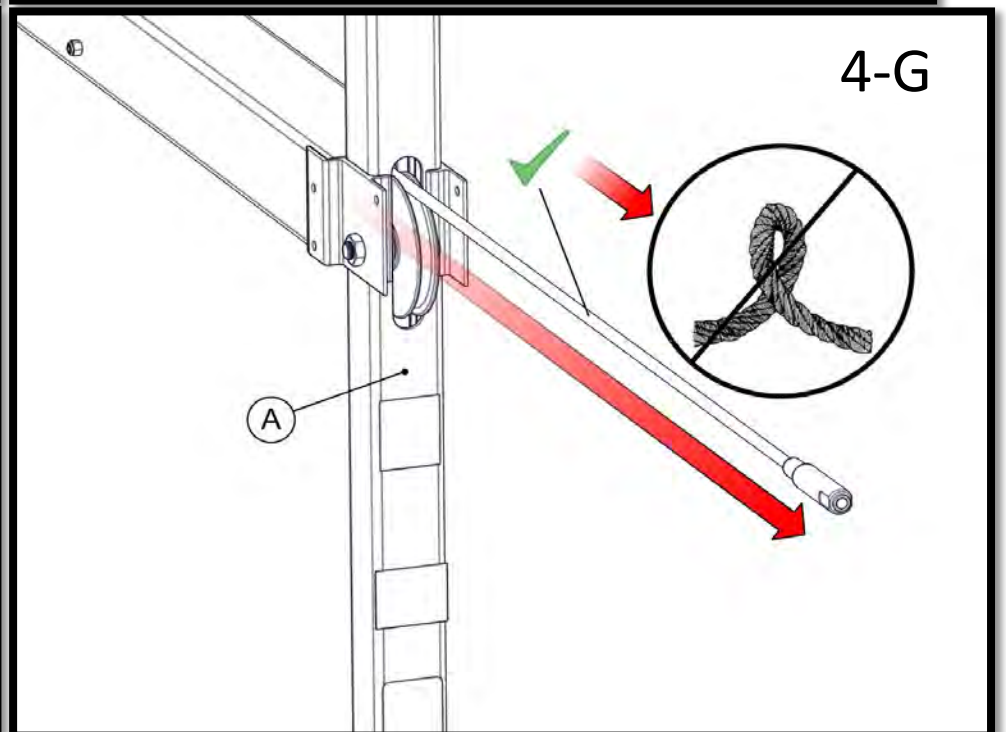
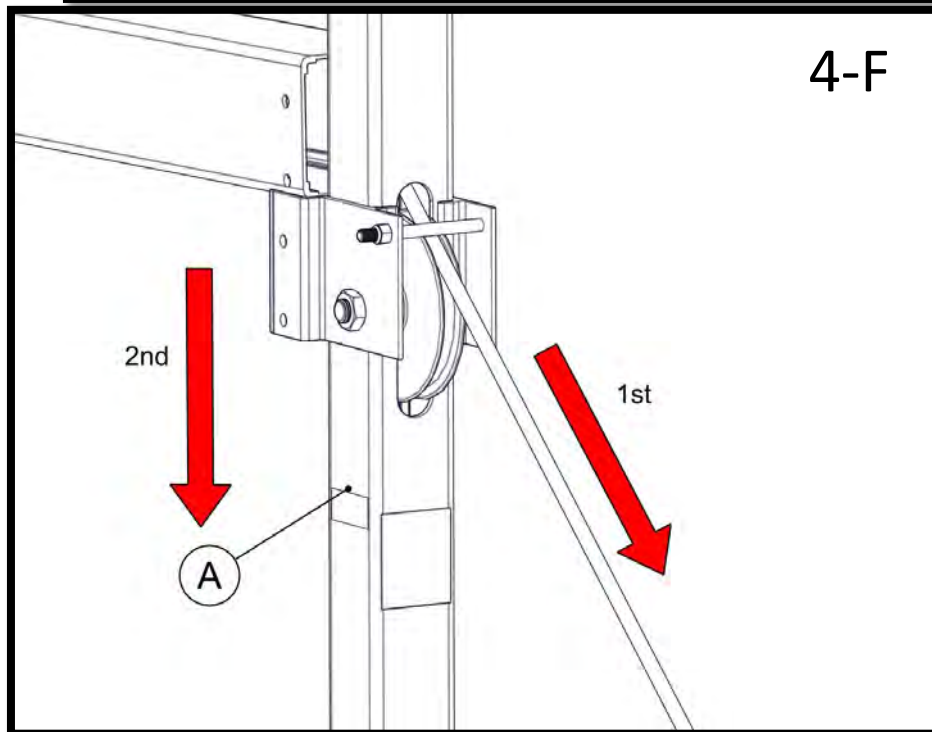
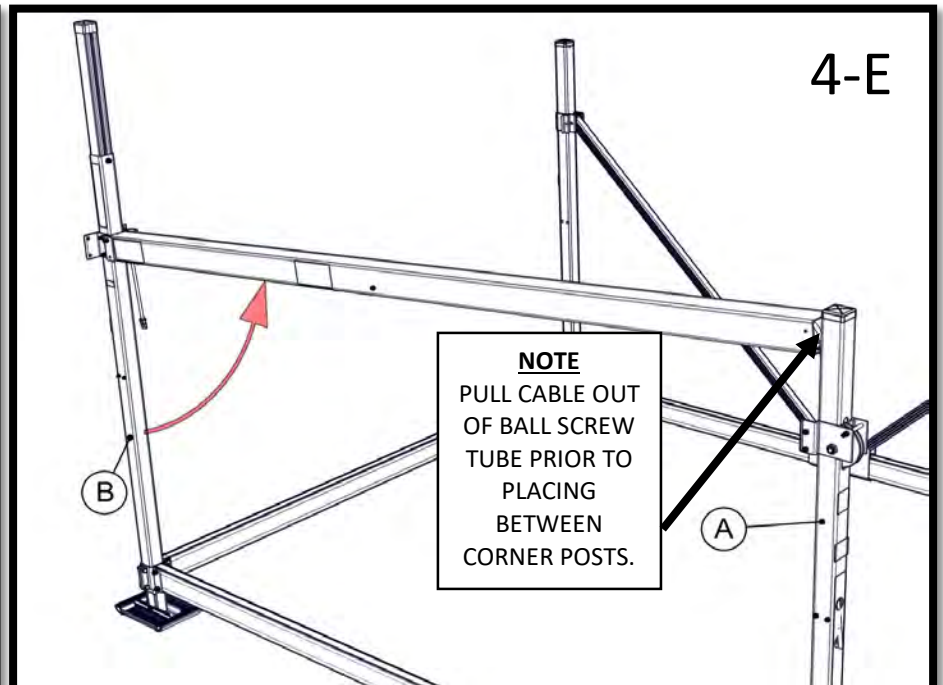
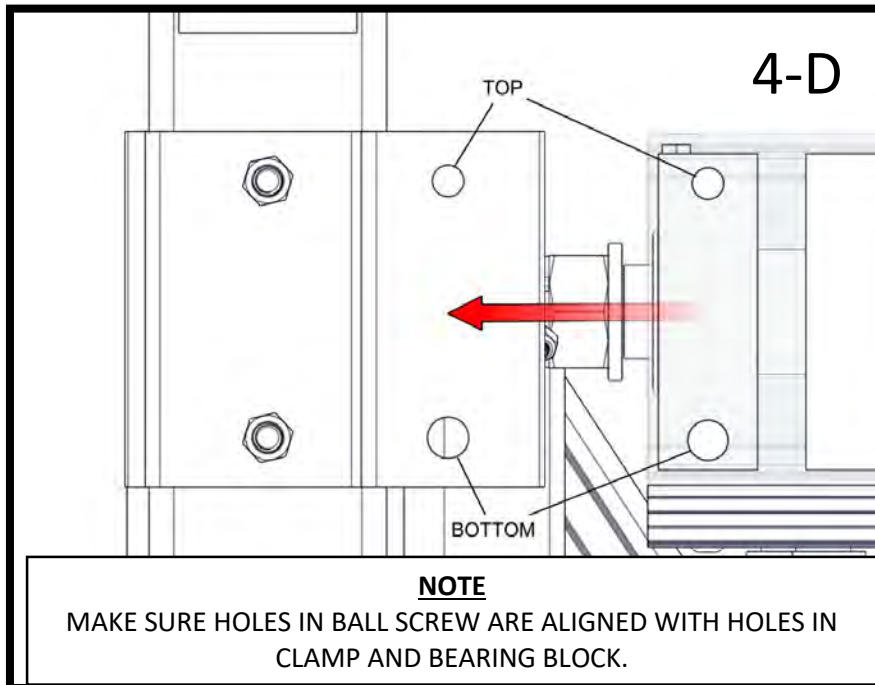
(3) 3/8 x 4 1/2" SS Bolts Torque to 35 ft. lbs.

(2) 3/8 x 5 1/2" SS Bolts Torque to 35 ft. lbs.

# Assembly of Step 4



**NOTE**  
MAKE SURE HOLES IN  
BALL SCREW ARE  
ALIGNED WITH  
HOLES IN CLAMP  
AND BEARING  
BLOCK.



001-76071-00  
NUT, 3/8-16  
ALUMINUM NYLOCK

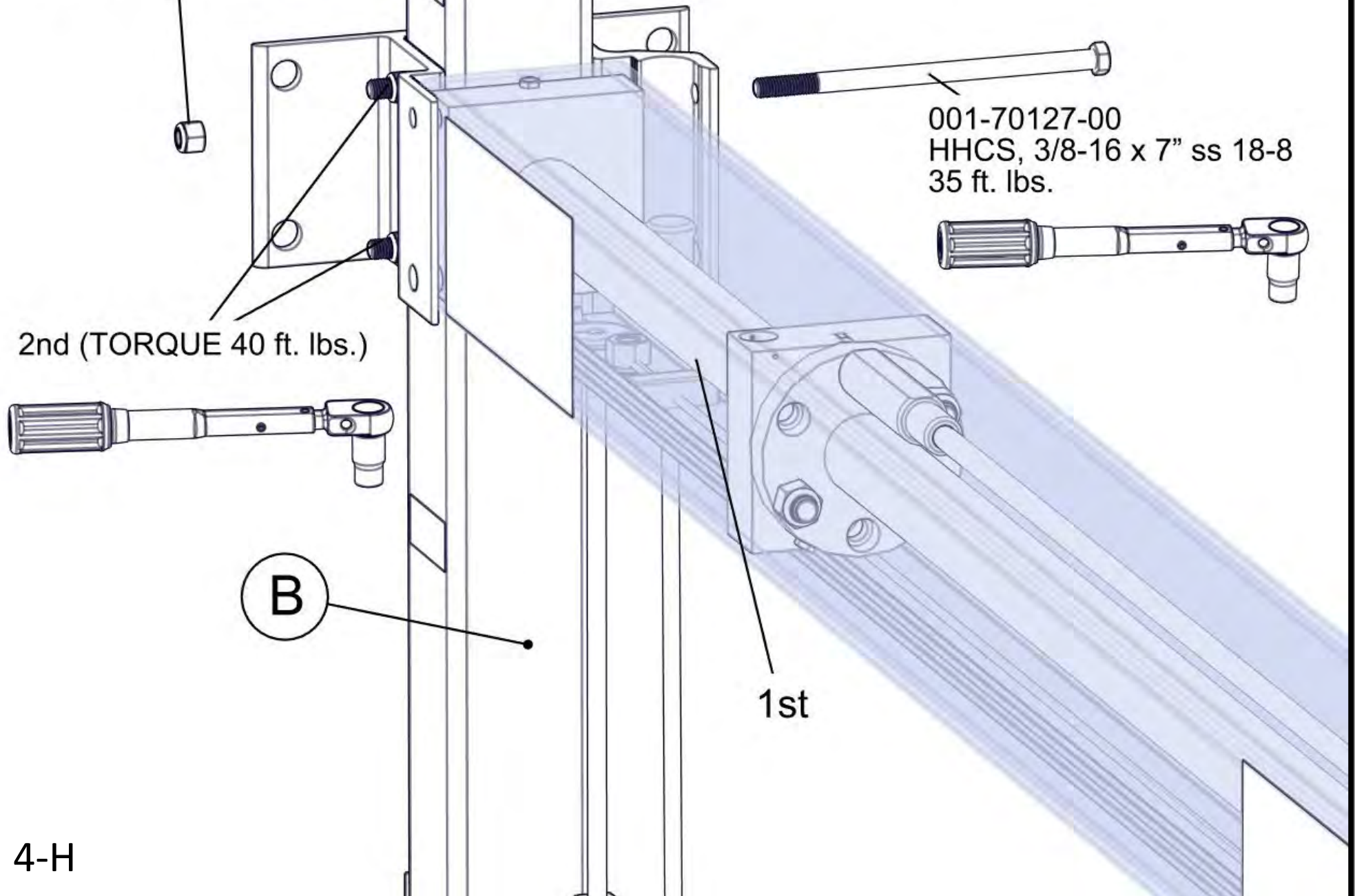
001-70127-00  
HHCS, 3/8-16 x 7" ss 18-8  
35 ft. lbs.

2nd (TORQUE 40 ft. lbs.)

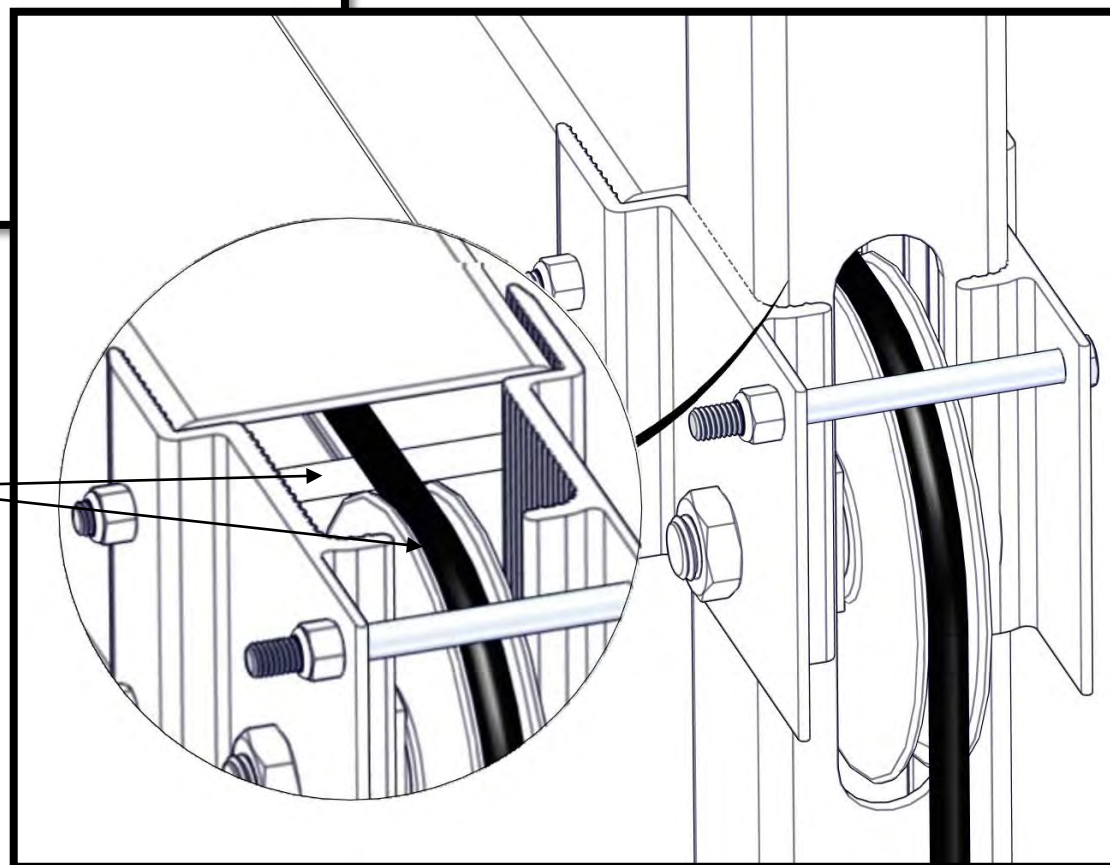
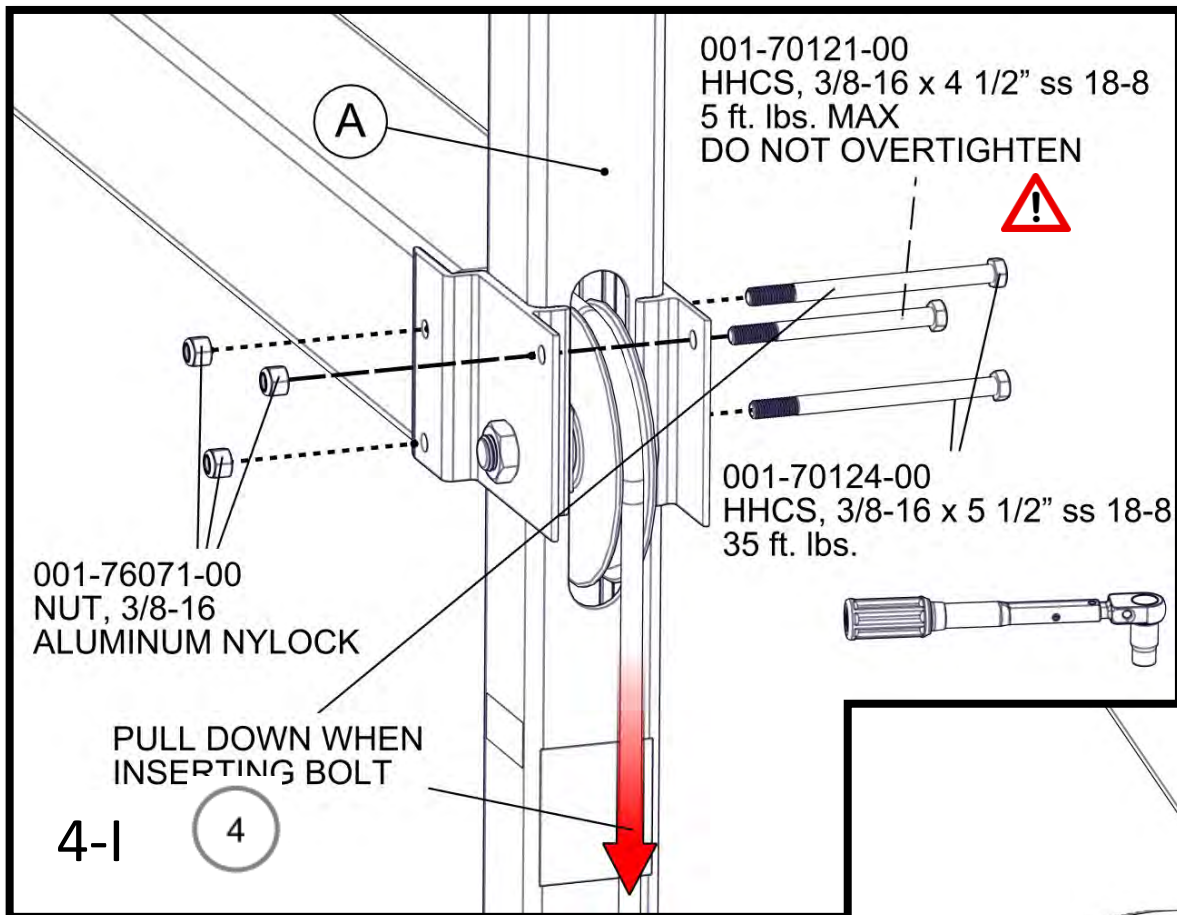
B

1st

4-H

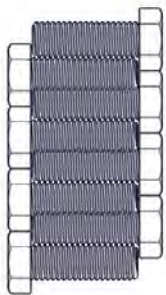
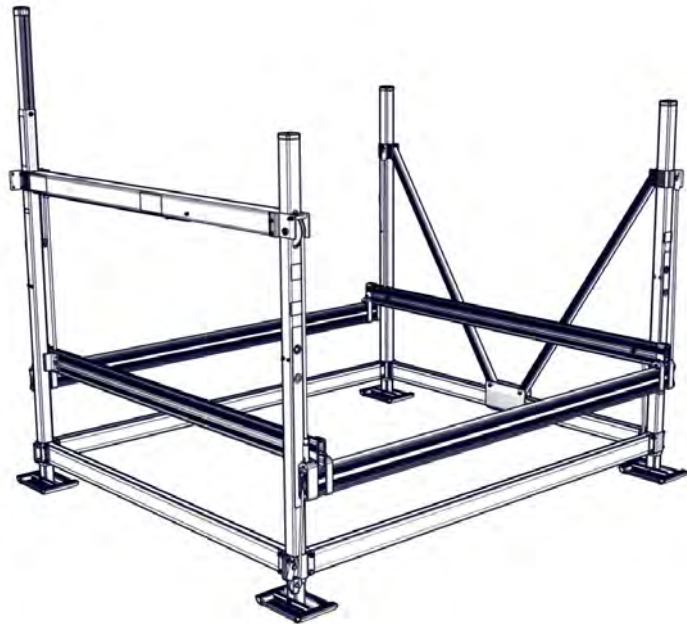






**ASSEMBLY CAUTION NOTE**  
CABLE MUST BE ABOVE BOLT  
AFTER ASSEMBLY

# Contents for Step 5



5

(1) 1/2 x 1 3/4" SS Bolt Torque to 50 ft. lbs.

(8) 1/2" Alum. Nuts

(8) 1/2 x 1 1/2" SS Bolts Torque to 45 ft. lbs.

111-00046-00  
ASS'Y, SIDE CRADLE BEAM (B)

911-15605-00  
BEAM, F/R CRADLE - 126.375"

111-00045-00  
ASS'Y, SIDE CRADLE BEAM (A)

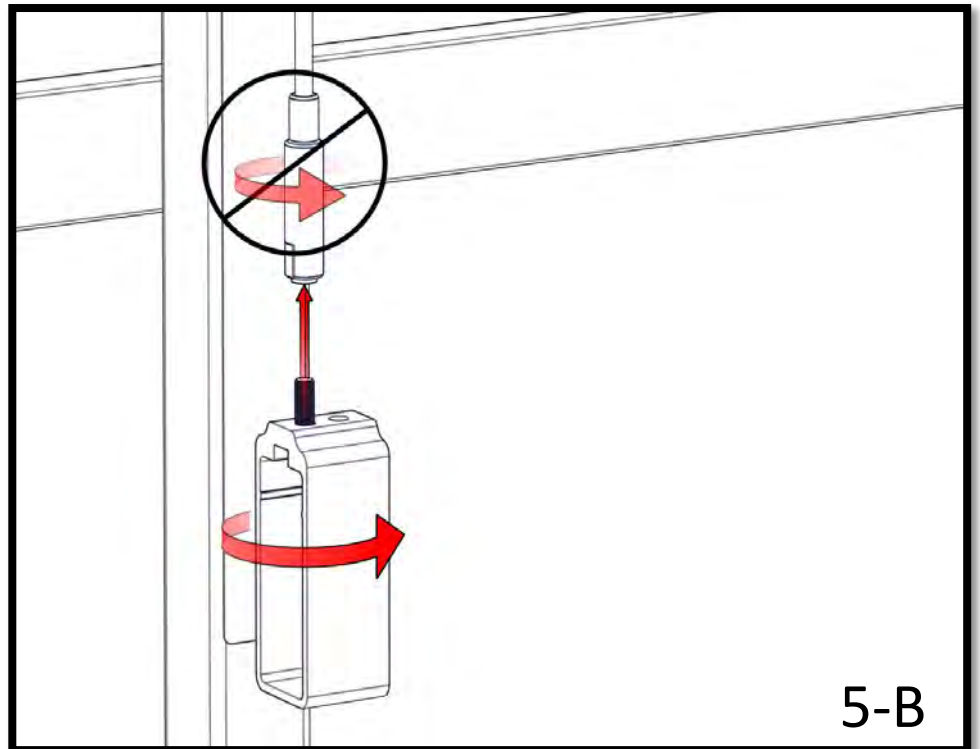
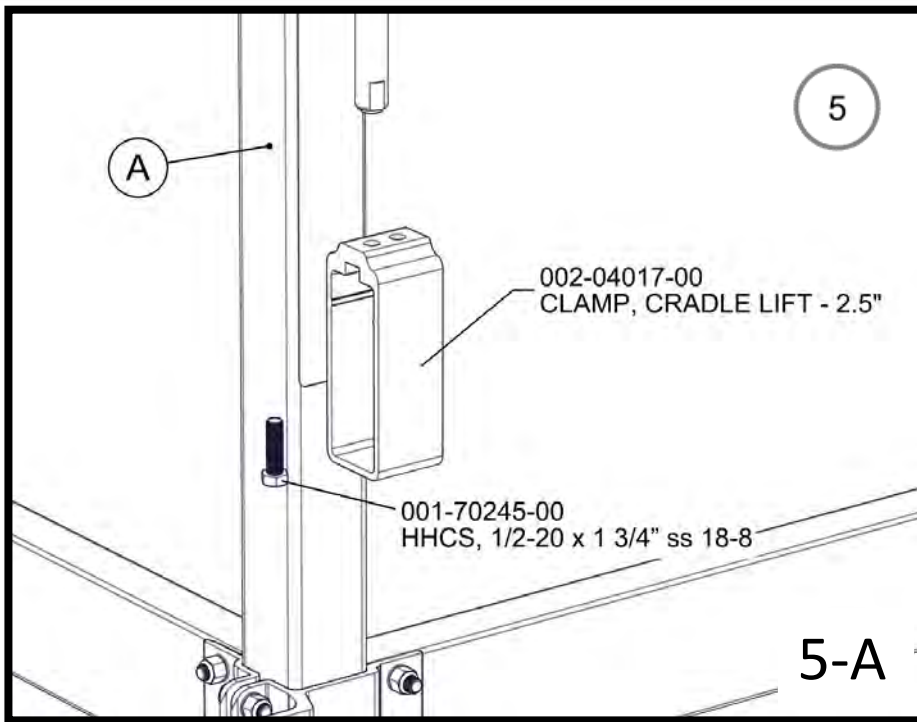
111-00470-00  
ASS'Y, END CRADLE 126.375"

002-04015-00 (x7)  
CLAMP, CRADLE - 1.5"

002-04017-00  
CLAMP, CRADLE LIFT - 2.5"

911-20601-00 (x4)  
CRADLE U-CLAMP  
2.125"

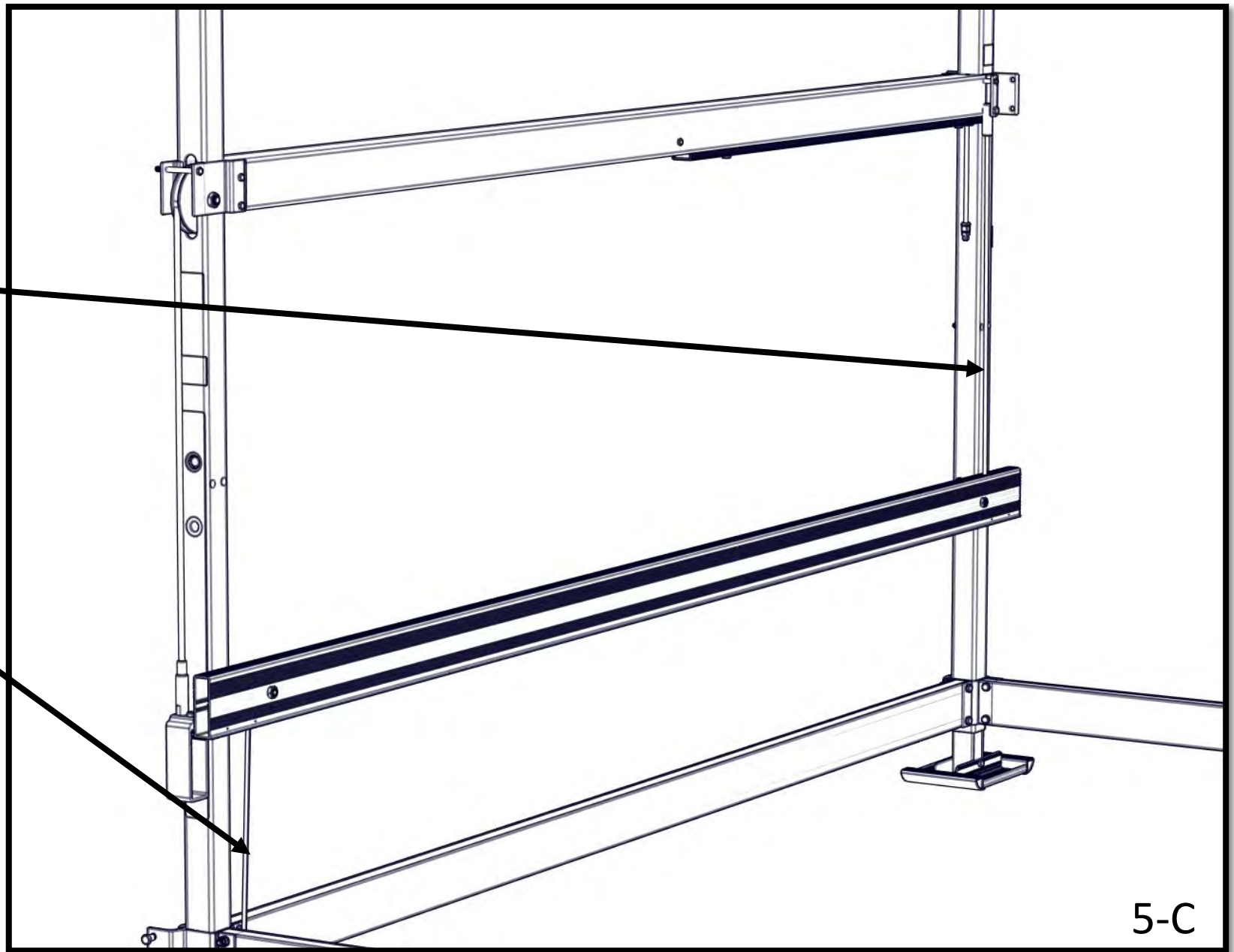
# Assembly of Step 5



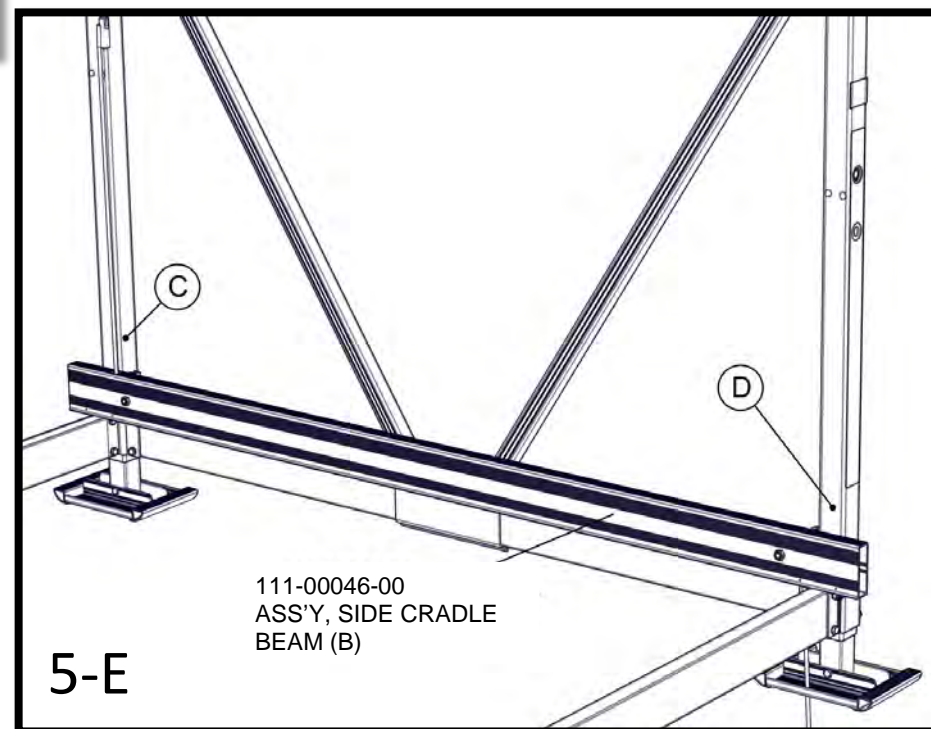
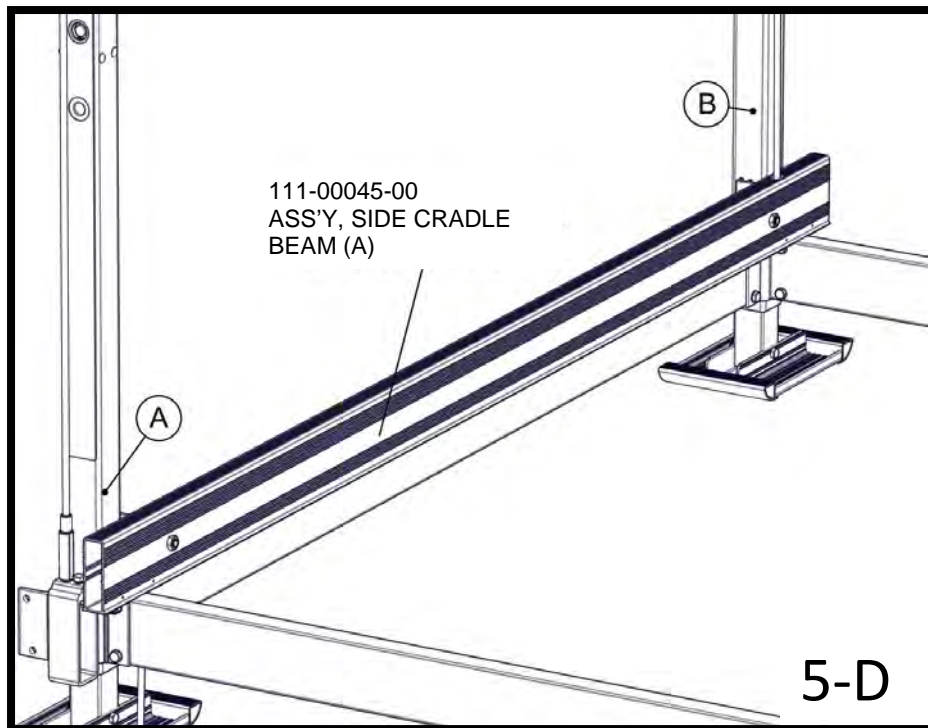
**NOTE**

LIFTING CABLE  
IN UPWARD  
DIRECTION IS  
PLACED ON  
MOTOR SIDE.

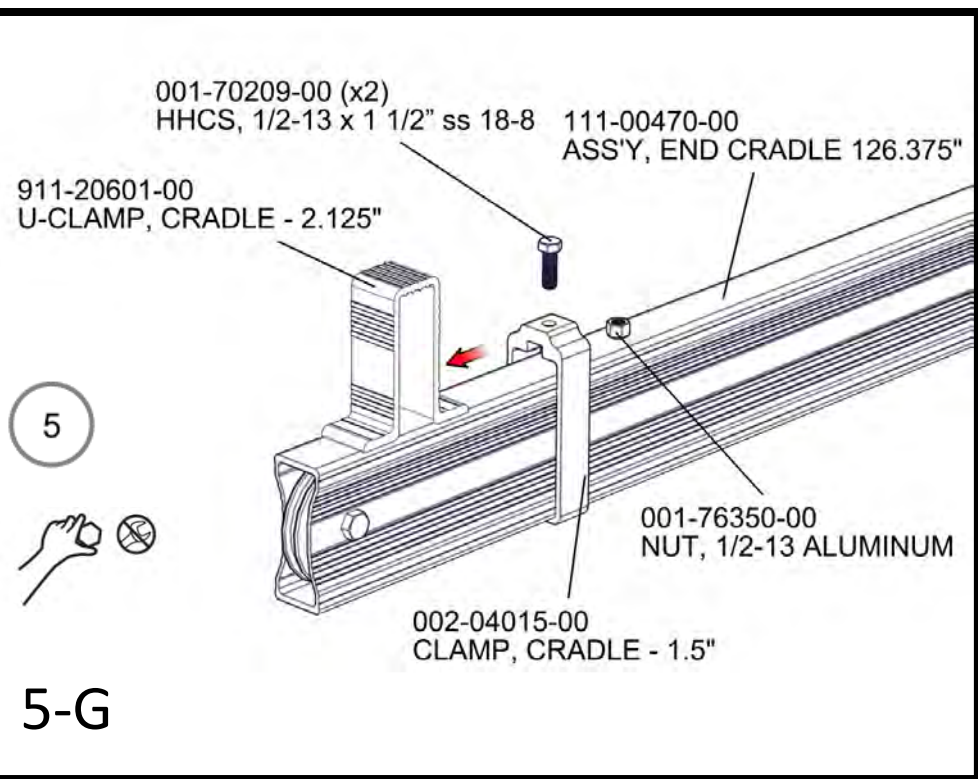
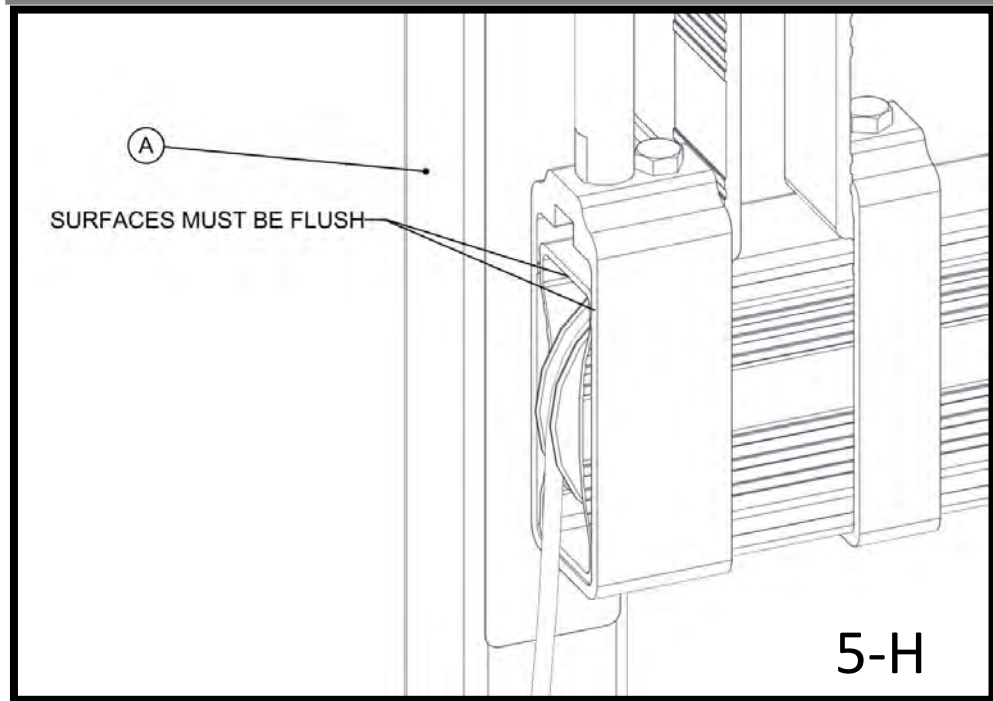
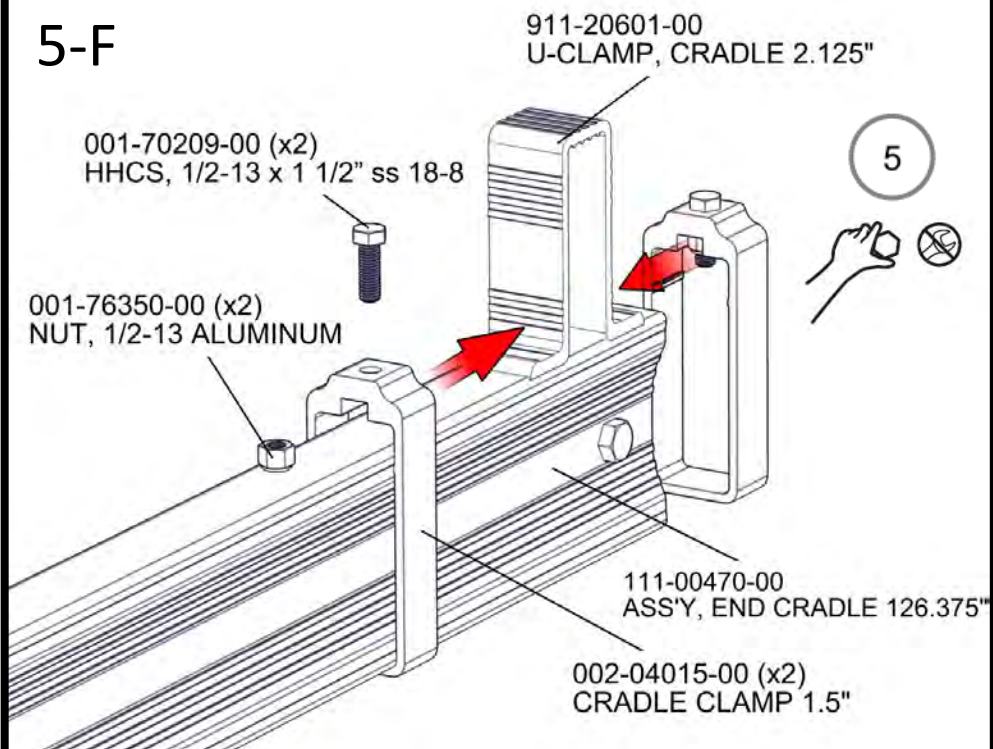
LIFTING CABLE  
IN  
DOWNWARD  
DIRECTION IS  
PLACED ON  
LIFTING  
(OPPOSITE)  
SIDE.

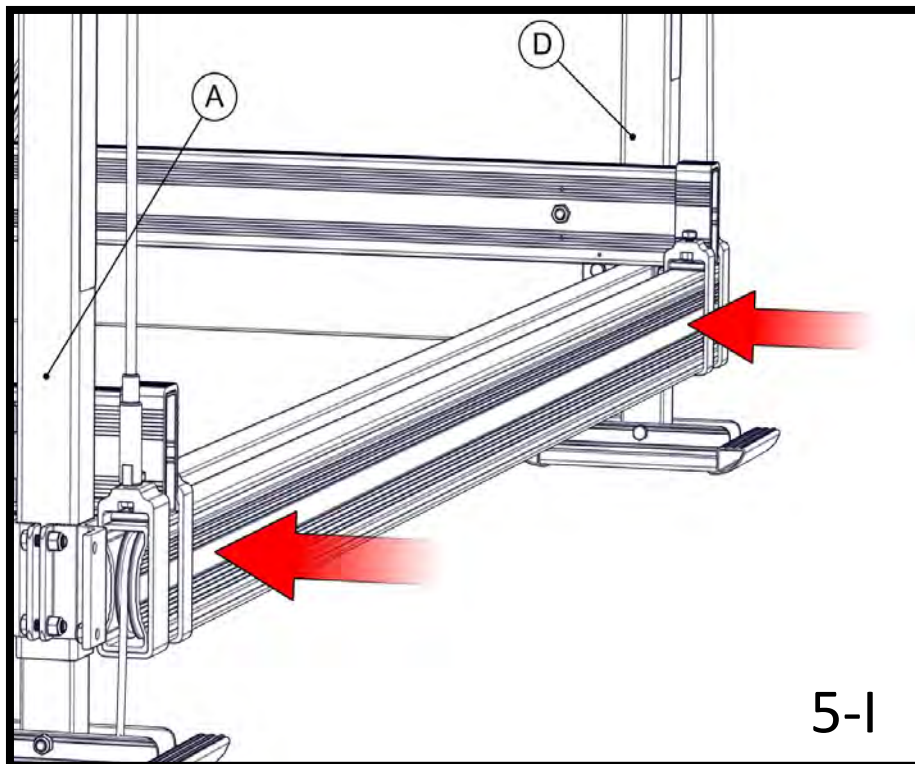




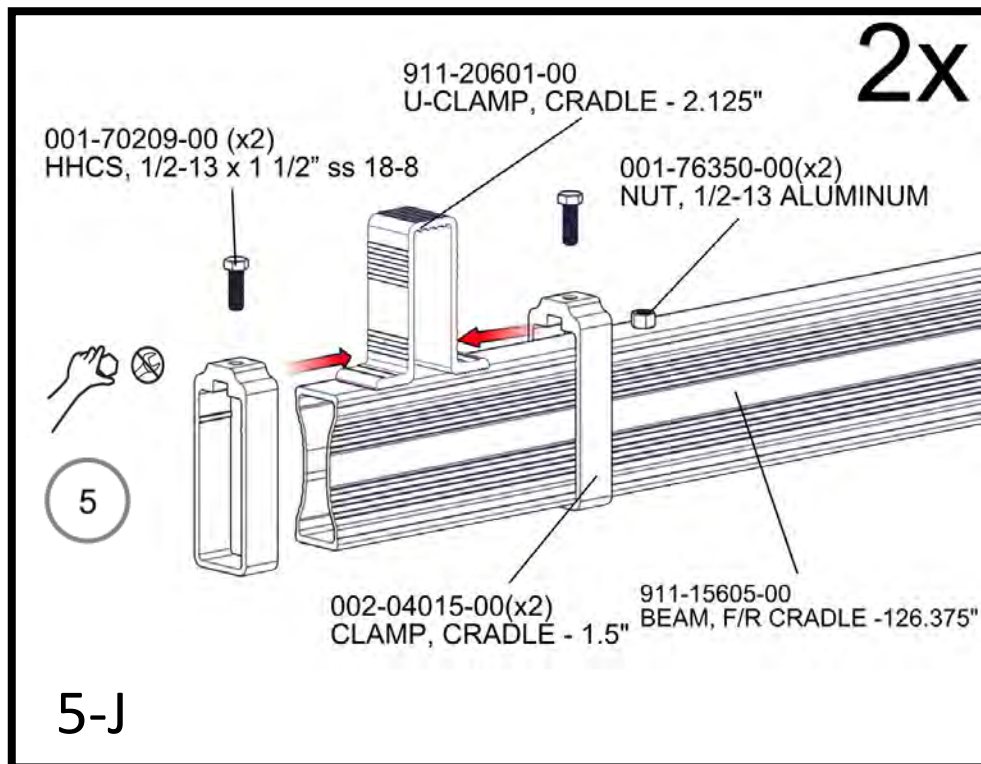


5-F

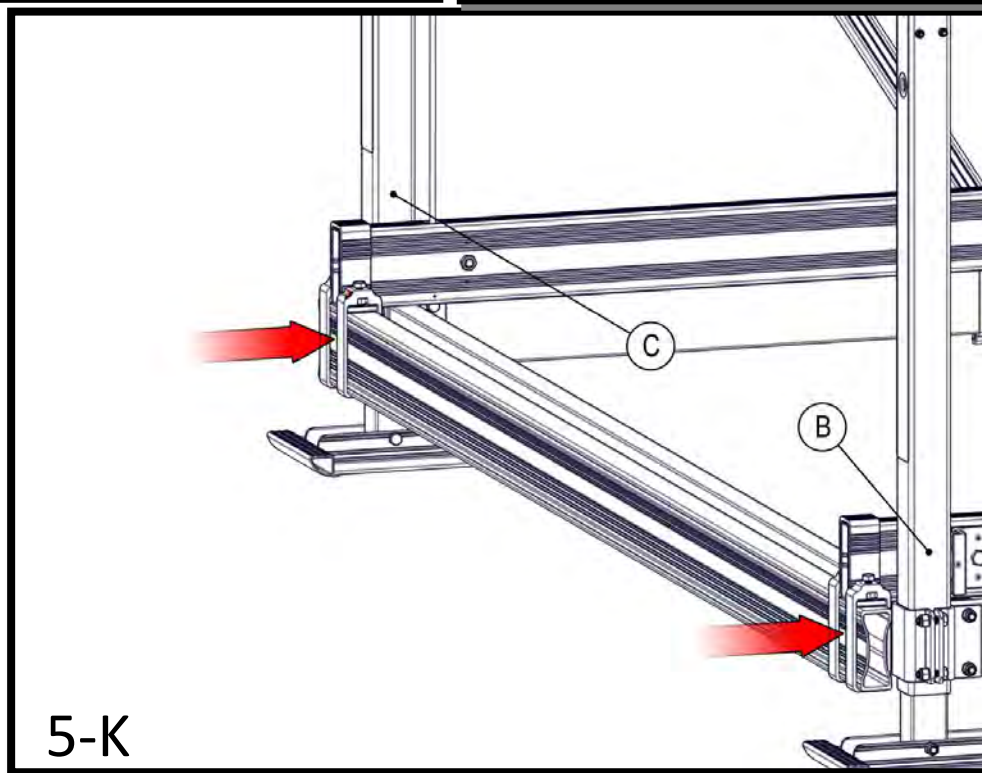




5-I

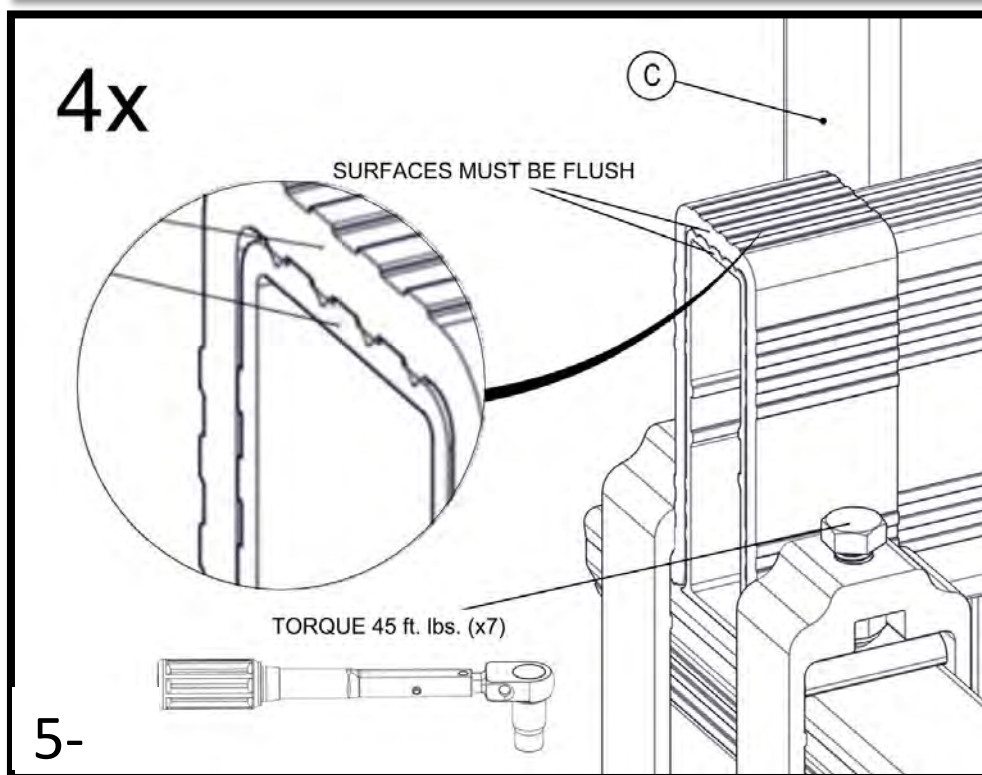
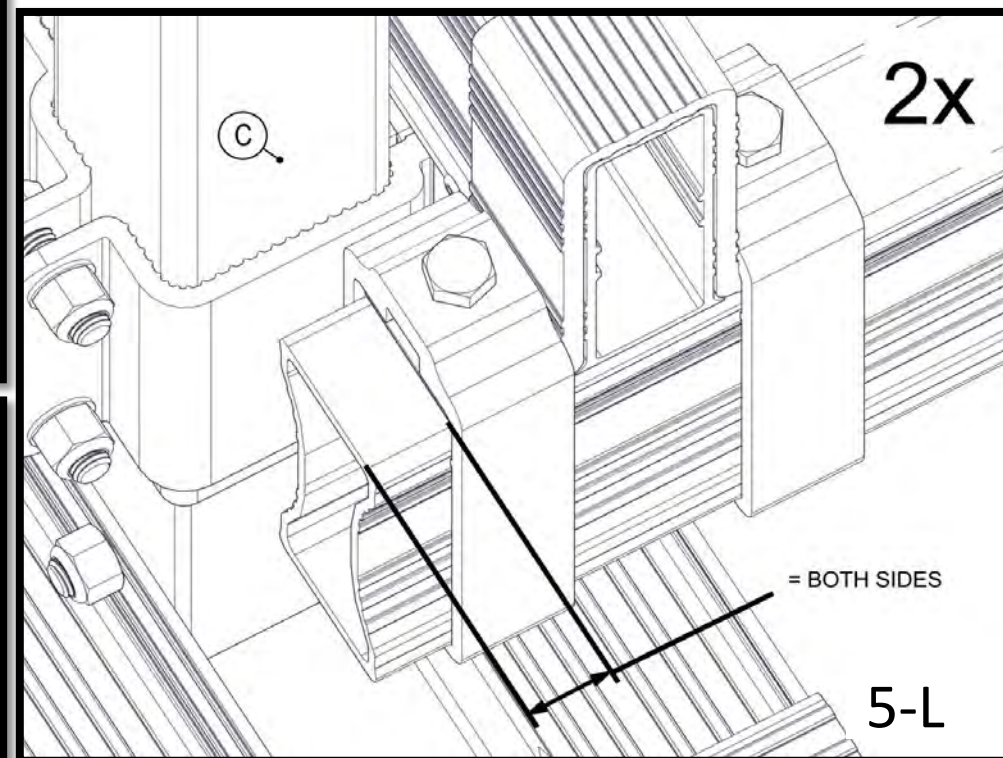
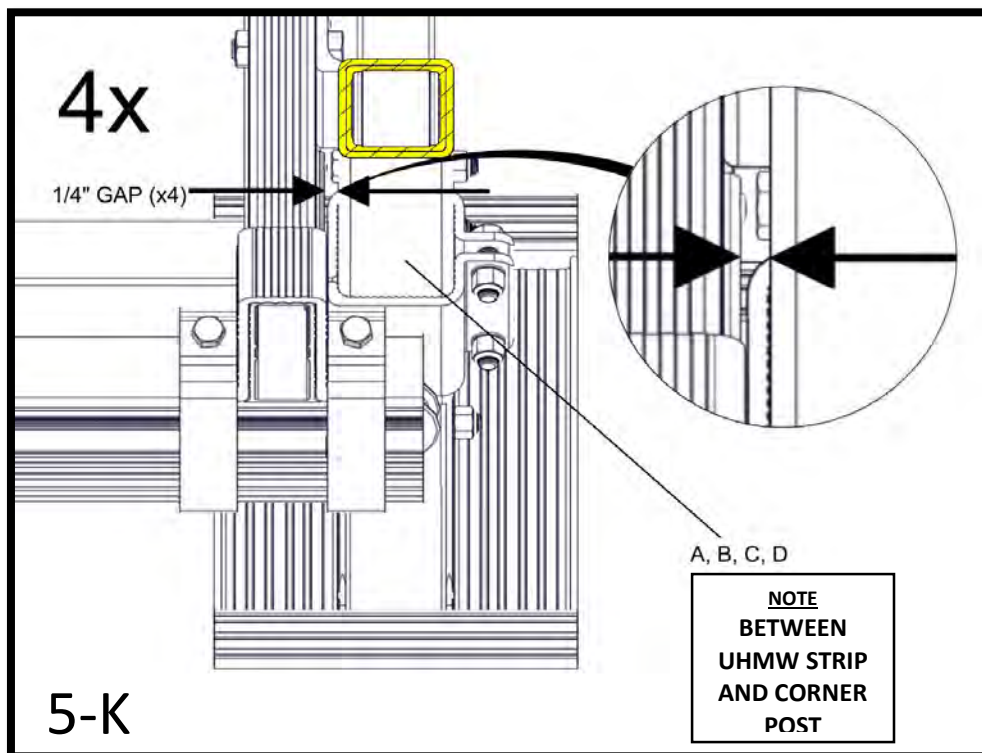


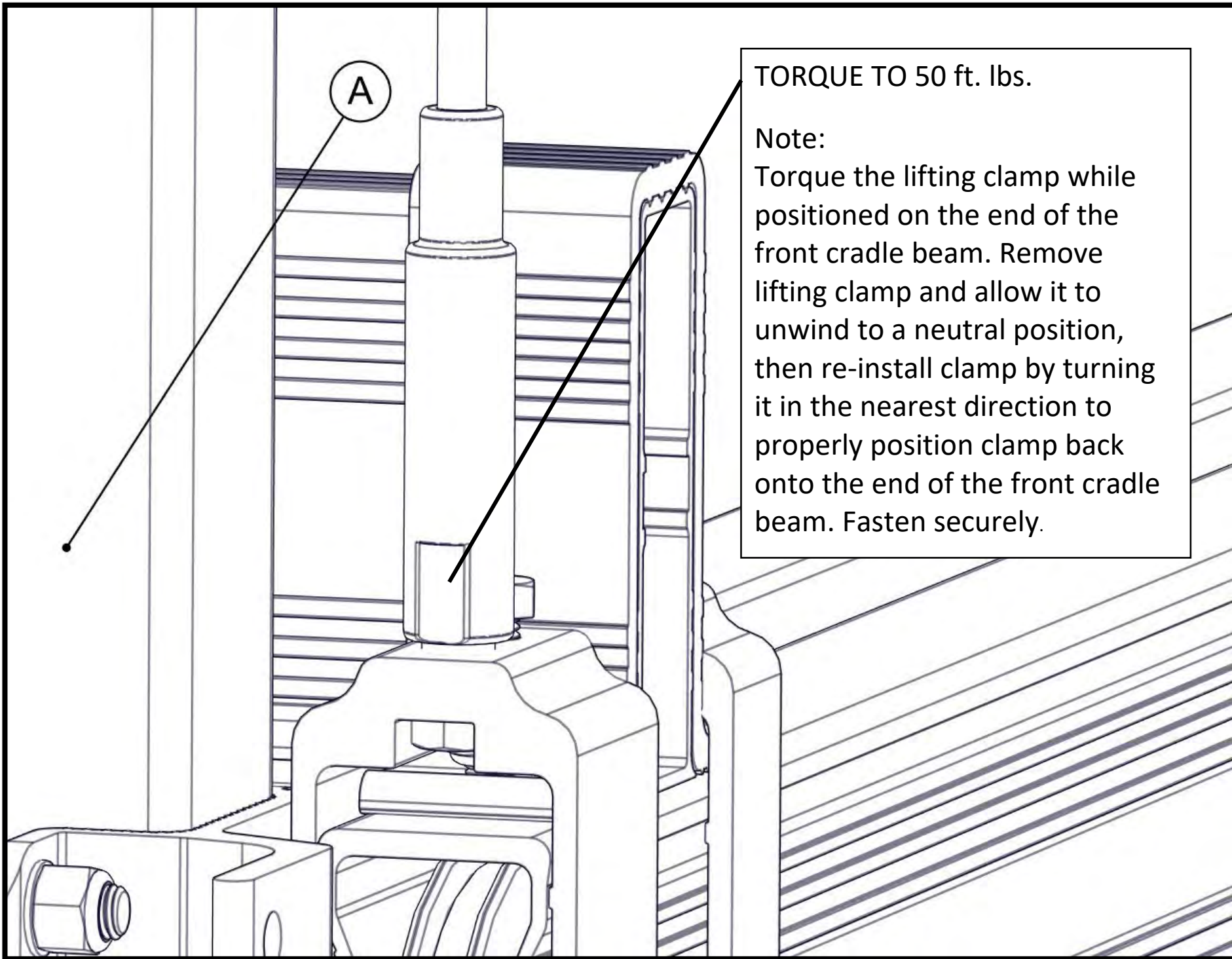
5-J



5-K







A

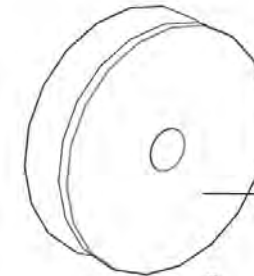
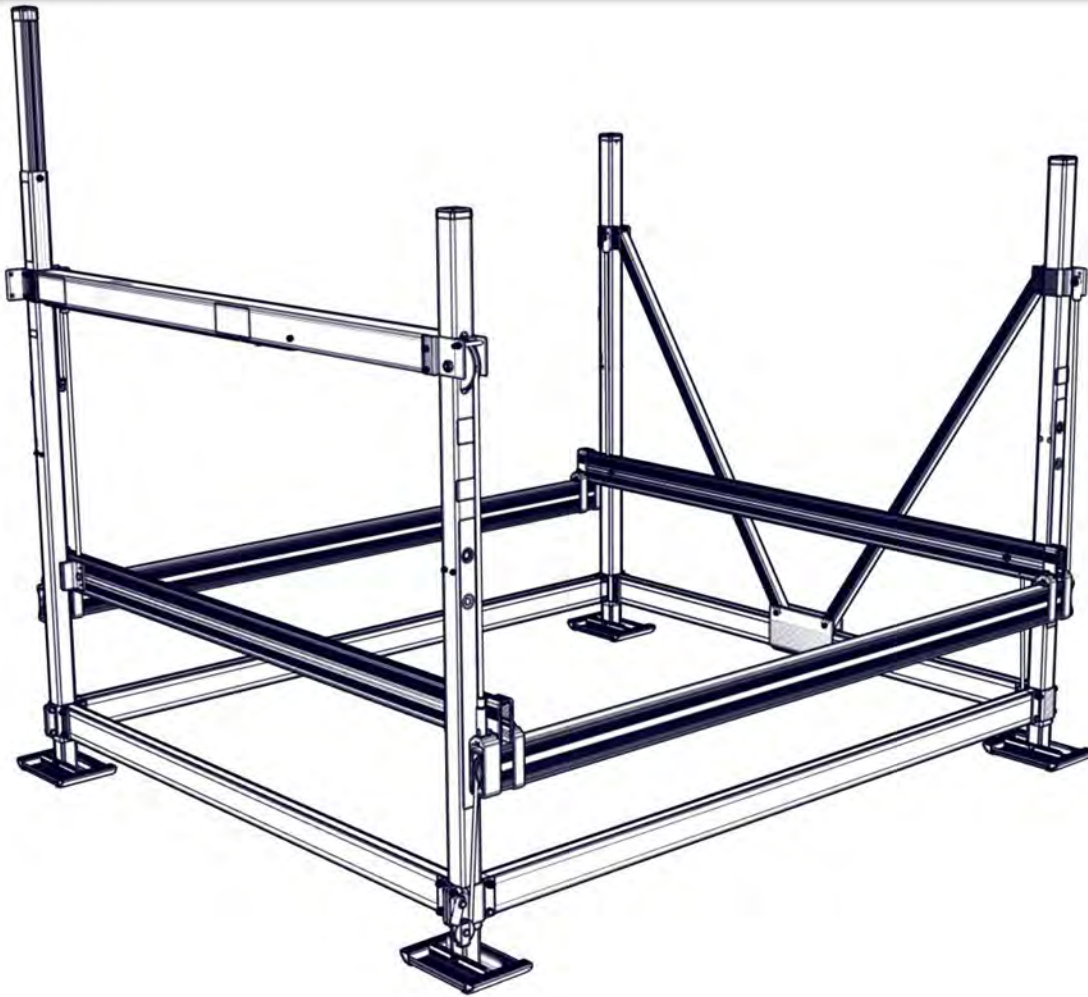
TORQUE TO 50 ft. lbs.

Note:

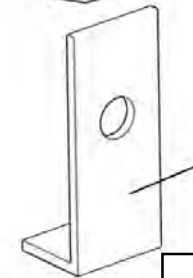
Torque the lifting clamp while positioned on the end of the front cradle beam. Remove lifting clamp and allow it to unwind to a neutral position, then re-install clamp by turning it in the nearest direction to properly position clamp back onto the end of the front cradle beam. Fasten securely.



# Contents for Step 6



007-06201-00  
SHEAVE, 3" FRONT  
CABLE 1/2" ID

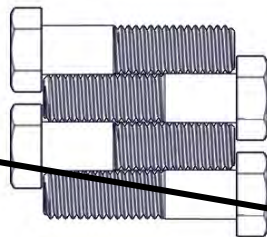
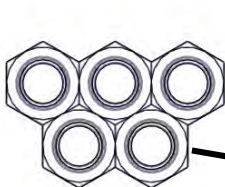


002-04140-00  
HOLDER, CABLE

## **NOTE**

Recall (2) 1/2" Nylock Nuts and (2) 1/2" Washers from Step 1. Torque to 60 Ft. Lbs.

6



(4) 1/2 x 2" SS Bolts Torque to 45 ft. lbs.

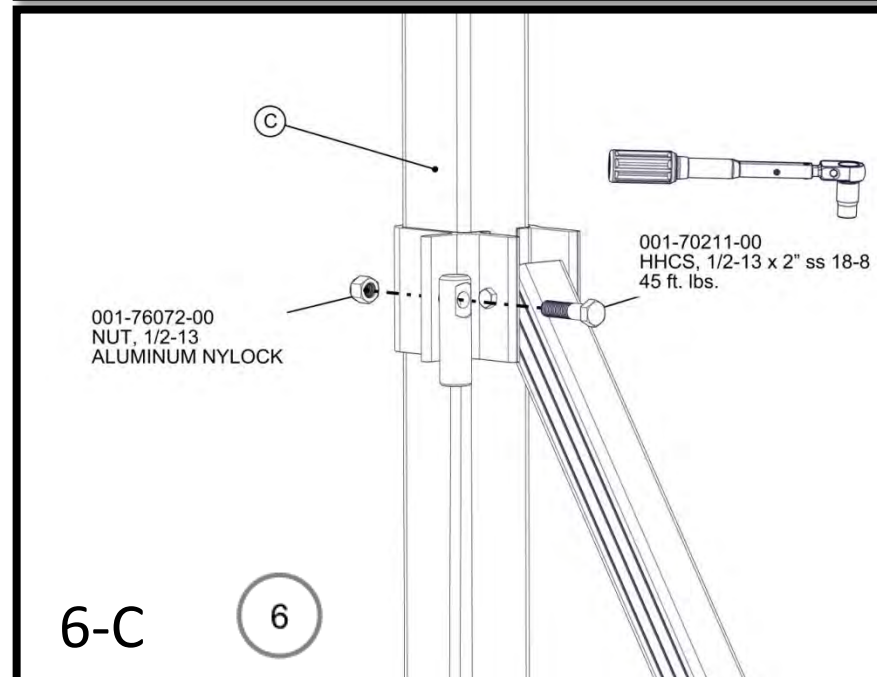
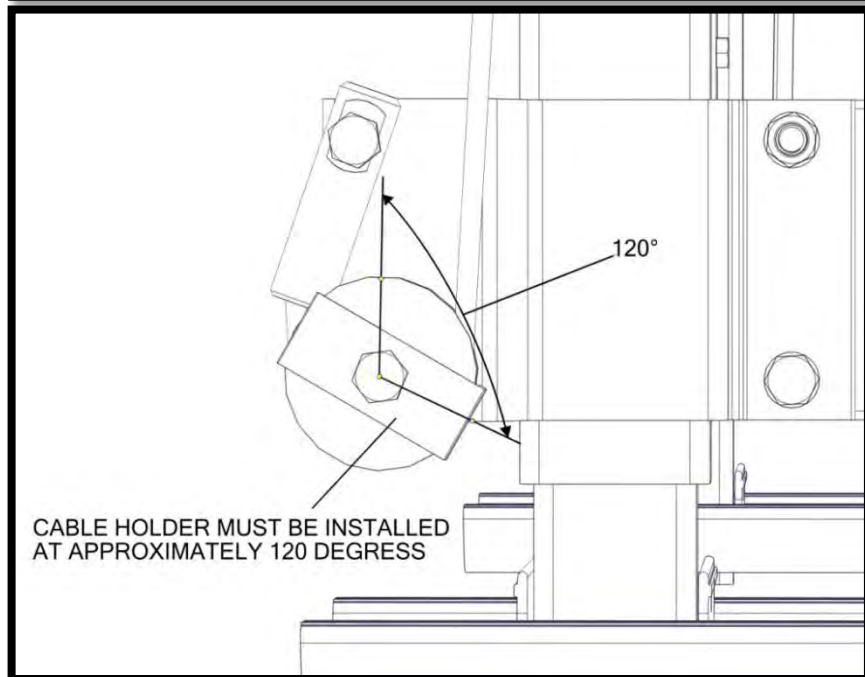
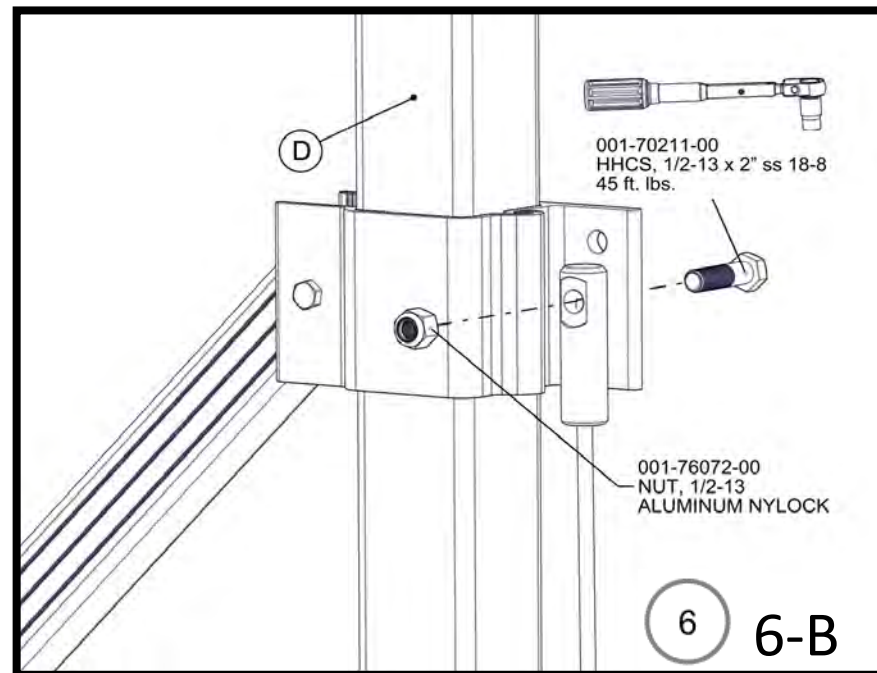
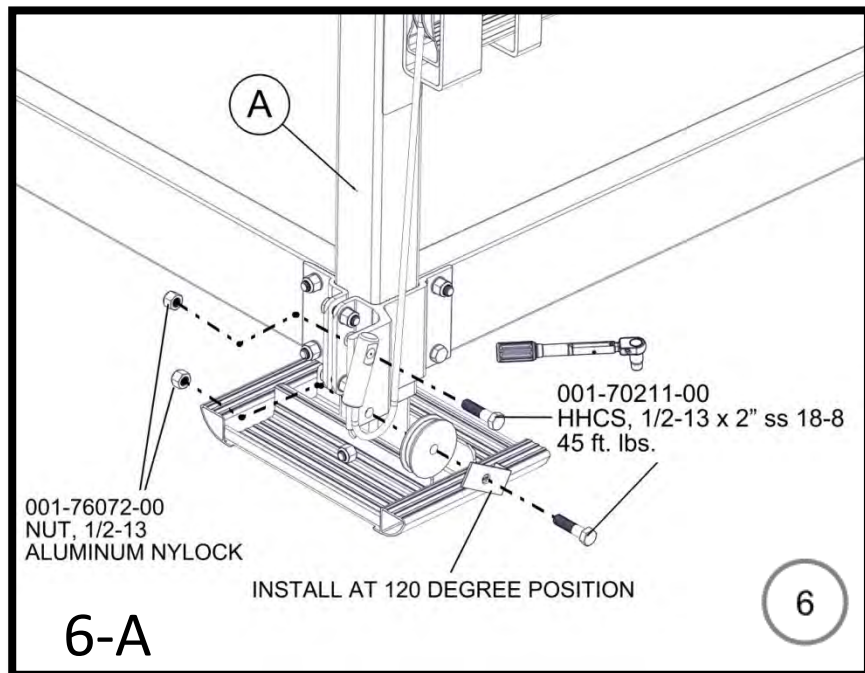
(5) 1/2" Alum. Nylock Nuts

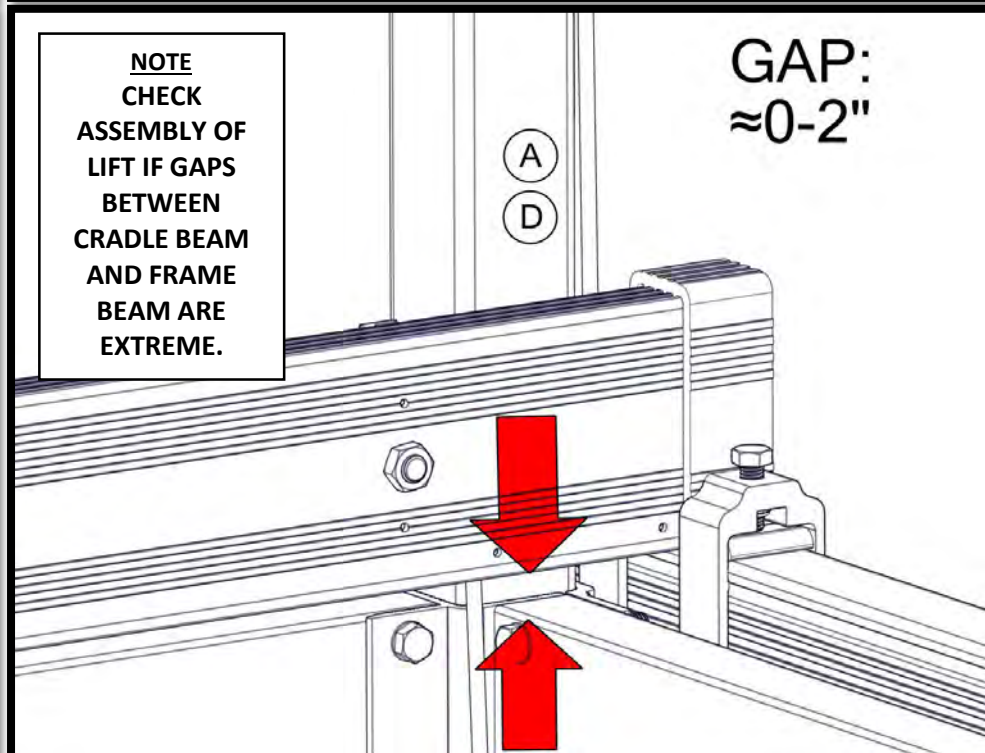
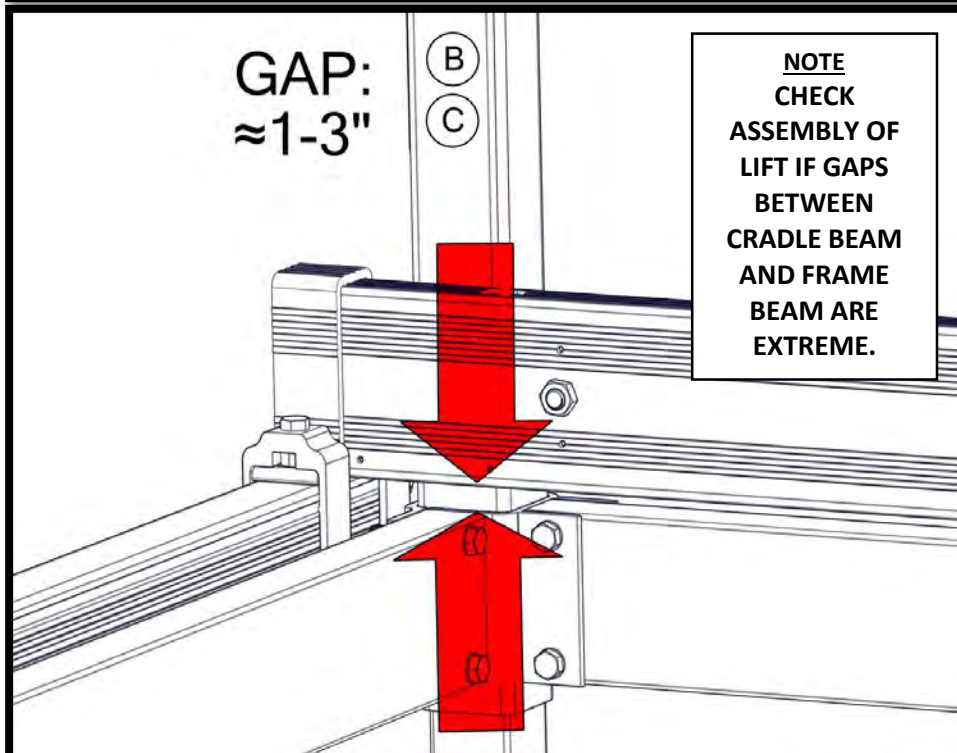
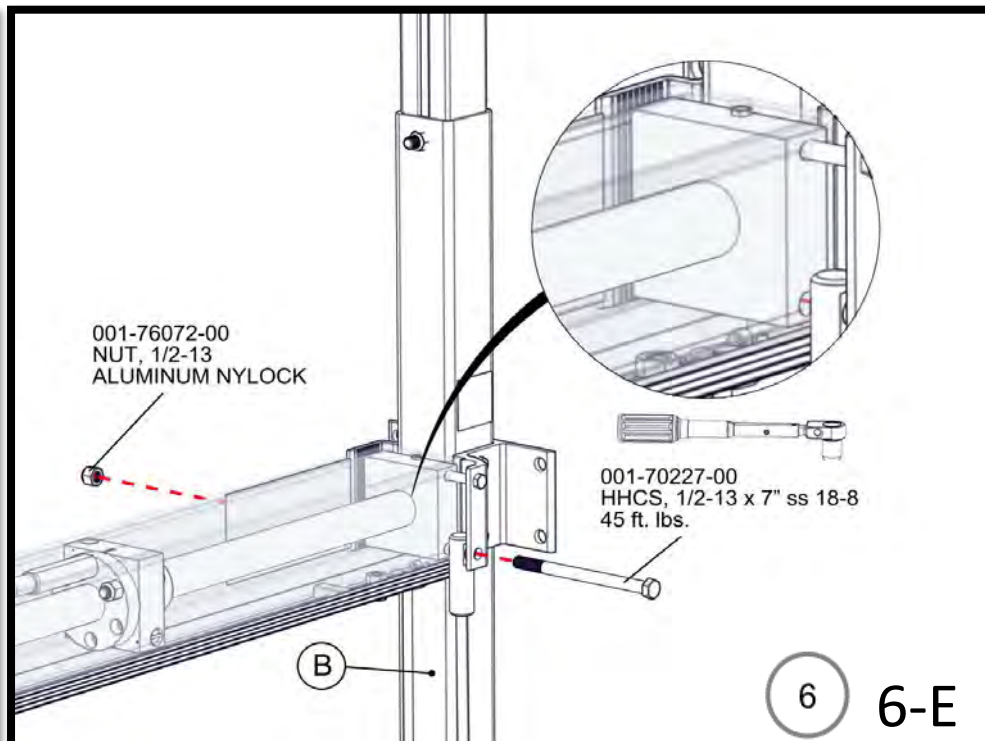
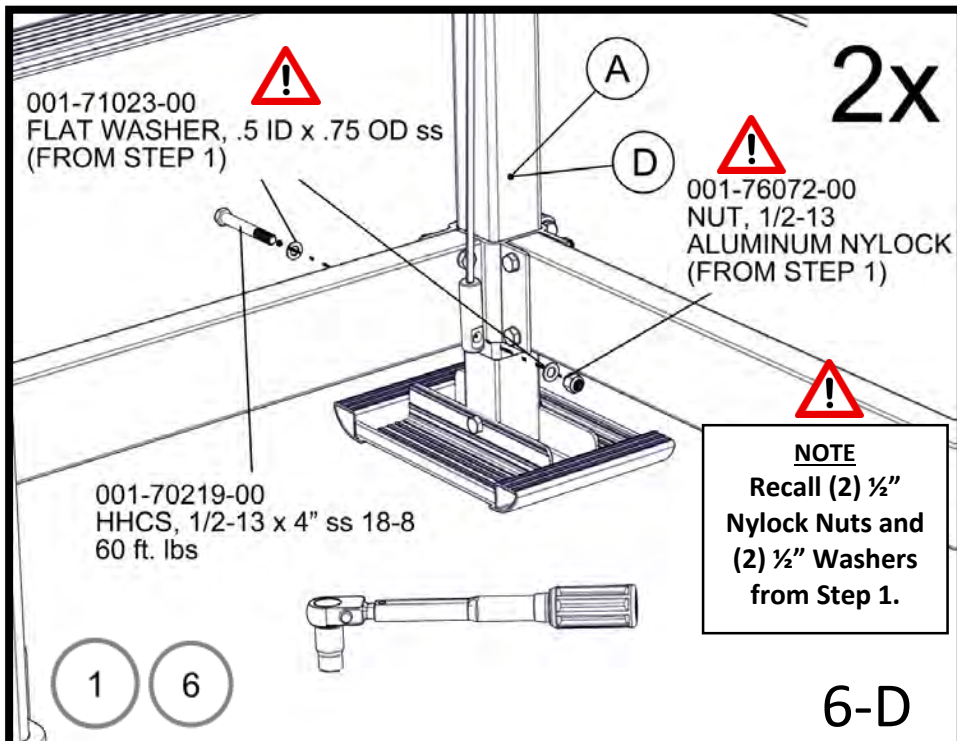


(1) 1/2 x 7" SS Bolt Torque to 45 ft. lbs.

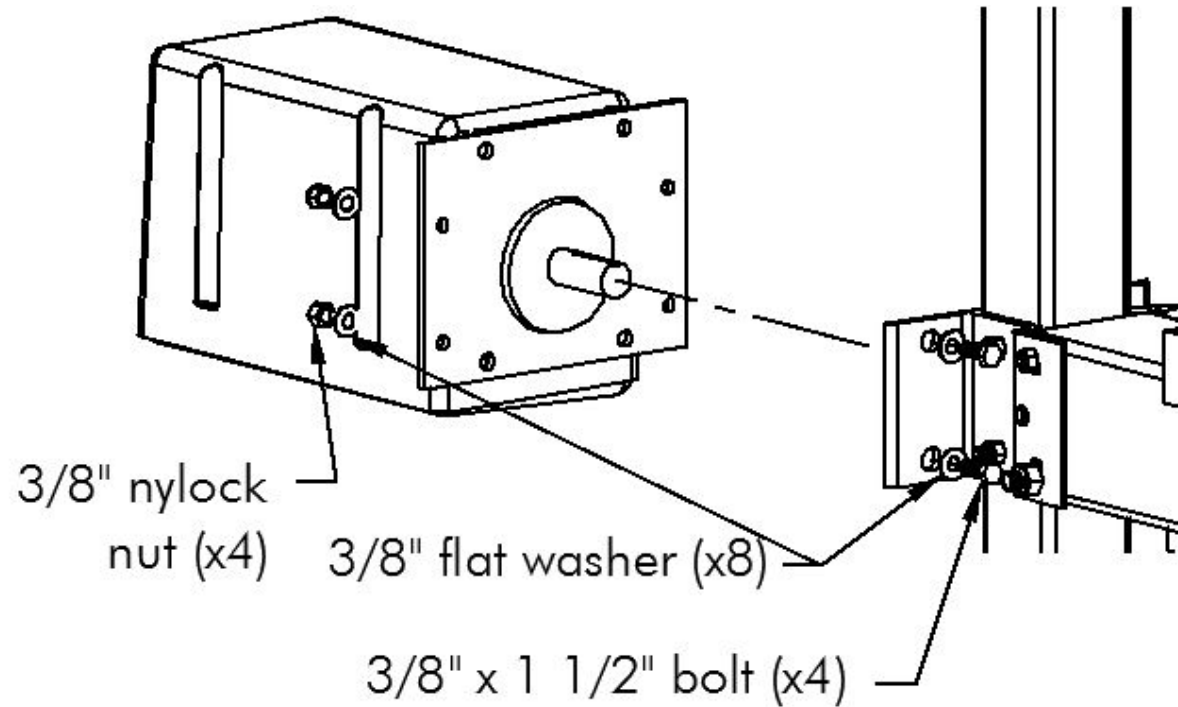


# Assembly of Step 6





# 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.



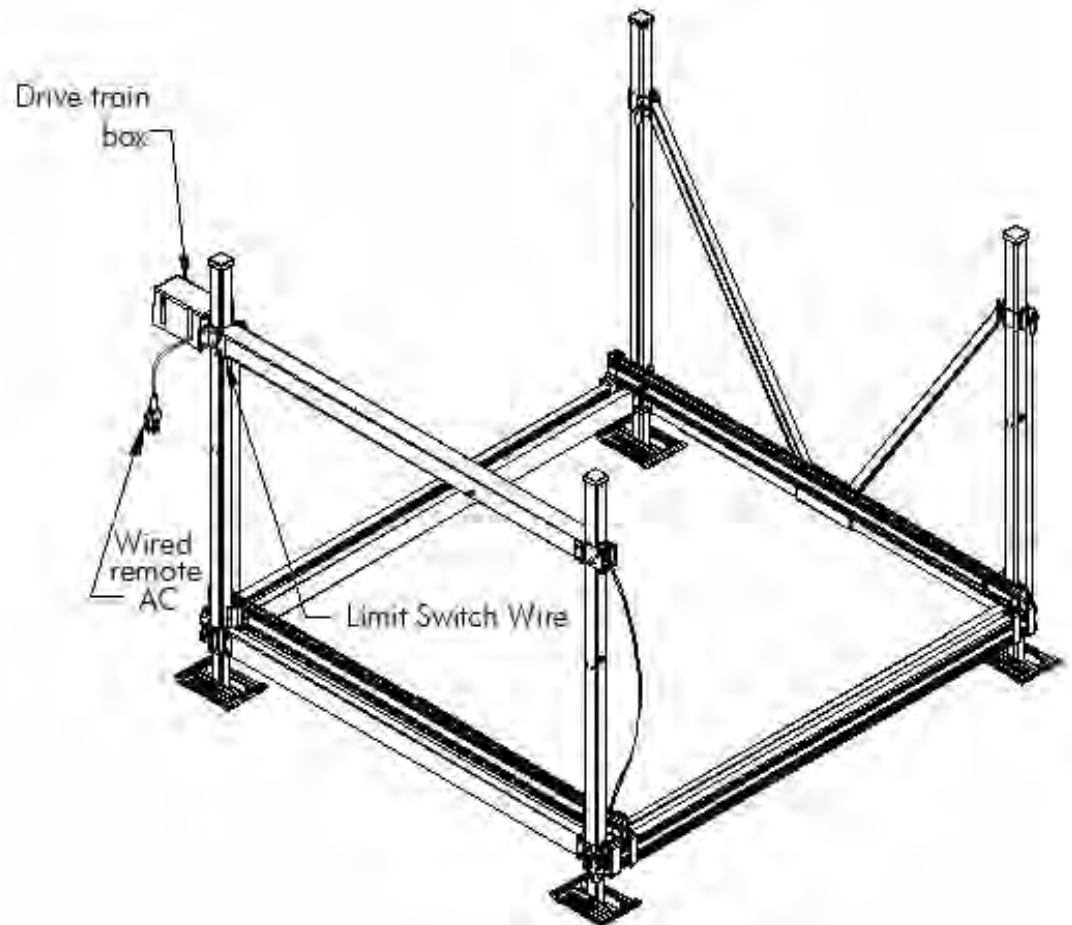
# STEP 7 AC

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:**

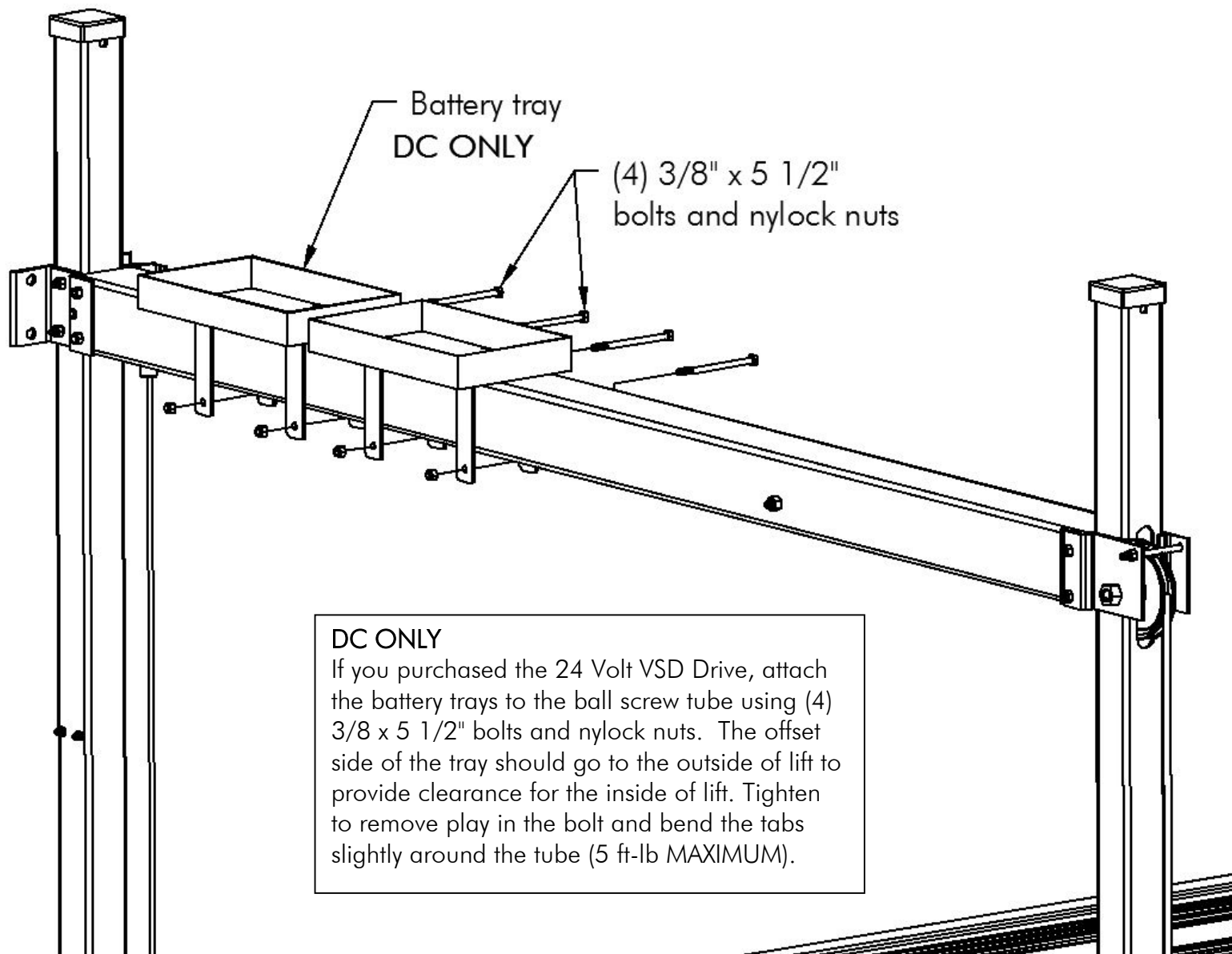
**WARNING**

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.

MP-11023-00

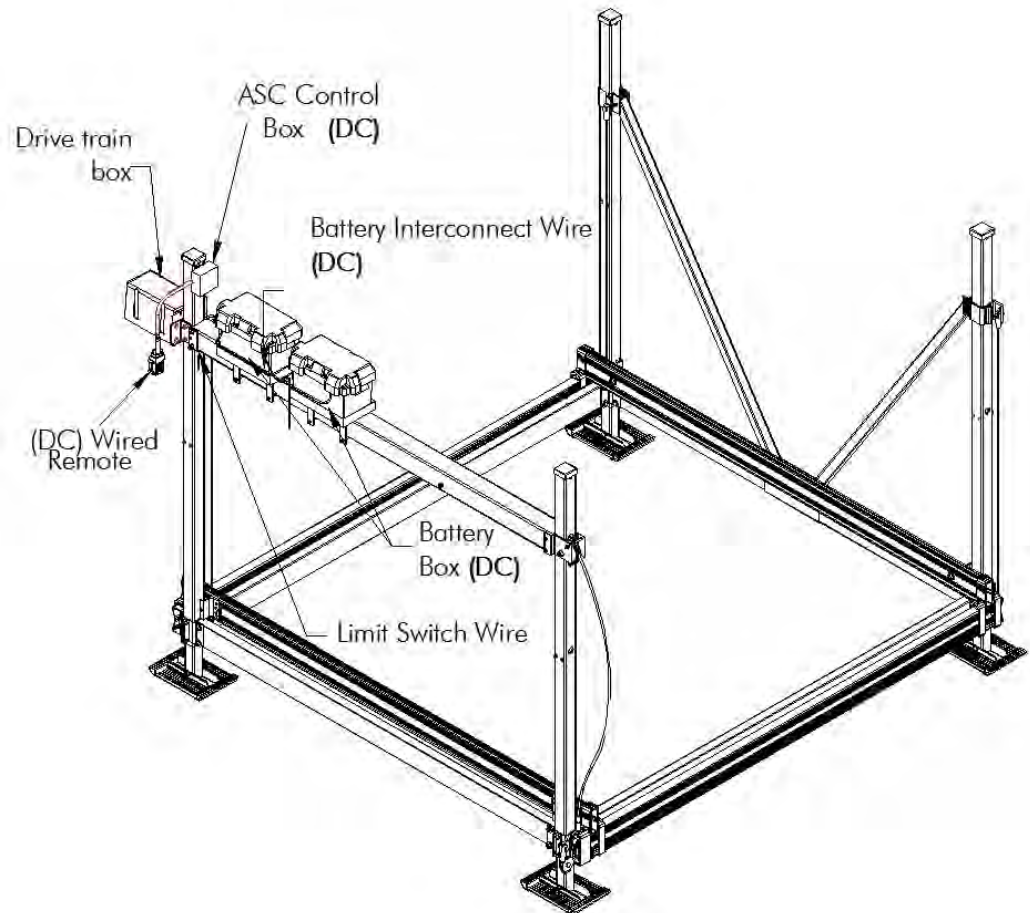


# Step 7 DC



Before installing cap on corner post, insert 1/2"x 3/4" 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 from 1/2 x 1 1/4" bolt holding canopy insert. Attach ASC box to bolt, install nut, torque to 60 ft/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.

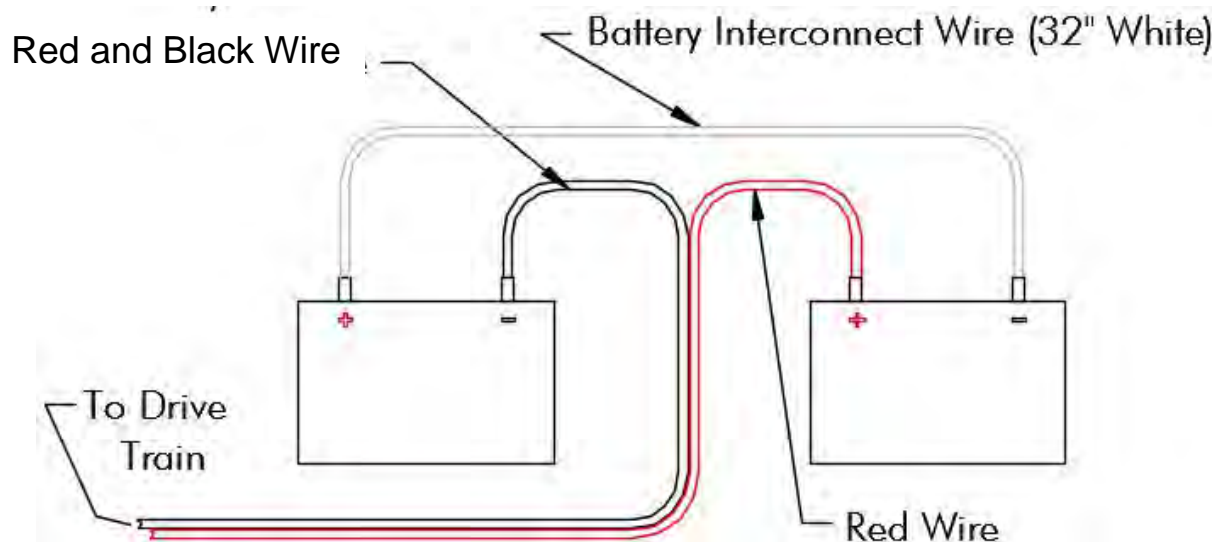




## **VSD 5000 WIDE BOAT LIFT (DC ONLY) 24 VOLT BATTERY CONNECTION DIAGRAM**

1. Connect the red wire from the ASC to the positive post of one battery. Connect the red and 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. Attach battery volt meter (included with battery box, see included instructions (red-positive, black-negative)), place the covers on the battery boxes and strap it through the slots on the battery tray. See VSD Drive instructions for more information.



### ***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.

# VSD5000 BILL OF MATERIALS

511-50080-00	Lift, Frame VSD5000 119"		
NO.	PART NUMBER	DESCRIPTION	QTY.
1	001-16369-00	HHCS, 3/4-16 x 4" Grade 8 Plain	1
2	001-23877-00	SHCS, 1/2-20 x 1 1/2" (Black)	1
3	001-26911-00	Pin, Dowel 3/16" x 7/8"	4
4	001-71525-00	Spring Pin, 5/32" x 1-1/8" 420 SS Slotted	4
5	001-33092-00	Flat Washer, SAE 3/4" Zinc	1
6	001-40365-00	Flat Washer, M24 Zinc	1
7	001-70109-00	HHCS, 3/8-16 x 1 1/2" 18-8 ss (NOT SHOWN)	4
8	001-70115-00	HHCS, 3/8-16 x 3" 18-8 ss	2
9	001-70117-00	HHCS, 3/8-16 x 3 1/2" 18-8 ss	2
10	001-70121-00	HHCS, 3/8-16 x 4 1/2" 18-8 ss	3
11	001-70123-00	HHCS, 3/8-16 x 5" 18-8 ss	1
12	001-70124-00	HHCS, 3/8-16 x 5 1/2" 18-8 ss	6
13	001-70127-00	HHCS, 3/8-16 x 7" 18-8 ss	1
14	001-70203-00	HHCS, 1/2-13 x 3/4" 18-8 ss	2
15	001-70207-00	HHCS, 1/2-13 x 1 1/4" 18-8 ss	1
16	001-70209-00	HHCS, 1/2-13 x 1 1/2" 18-8 ss	8
17	001-70210-00	HHCS, 1/2-13 x 1 3/4" 18-8 ss	8
18	001-70211-00	HHCS, 1/2-13 x 2" 18-8 ss	4
19	001-70215-00	HHCS, 1/2-13 x 3" 18-8 ss	8
20	001-70217-00	HHCS, 1/2-13 x 3 1/2" 18-8 ss	8
21	001-70218-00	HHCS, 1/2-13 x 3 3/4" 18-8 ss	4
22	001-70219-00	HHCS, 1/2-13 x 4" 18-8 ss	2
23	001-70227-00	HHCS, 1/2-13 x 7" 18-8 ss	1
24	001-70245-00	HHCS, 1/2-20 x 1 3/4" 18-8 ss	1
25	001-70310-00	HHCS, 5/8-11 x 1 3/4 ss 18-8	2
26	001-70313-00	HHCS, 5/8-11 x 2 1/2 ss 18-8	4
27	001-70816-00	Nut, Jam 5/8-11 ss 18-8	6
28	001-70817-00	Nut, 3/4-10 Jam ss	2
29	001-70861-00	Nut, Nylock 5/16-18 - Alum	8
30	001-71017-00	Flat Washer, 3/8" SAE ss 18-8 (NOT SHOWN)	8
31	001-71021-00	Flat Washer, 1/2" 18-8 SS	3
32	001-71023-00	Flat Washer, .5 IDx.875 OD ss	48
33	001-71024-00	Flat Washer, 5/8"x1.25"x.060 SS	16
34	001-71027-00	Flat Washer, 1/2" USS ss 18-8	1
35	001-73454-00	SHCS, 10-32 x 1 3/4" 18-8 ss	1



# VSD5000 BILL OF MATERIALS

NO.	PART NUMBER	DESCRIPTION	QTY.
36	001-74402-00	CB, 5/16-18 x 3 1/2 ss 18-8	8
37	001-76069-00	Flat Washer, 5/8 (Lift) Nylon	8
38	001-76071-00	NUT, NYLOCK 3/8-16 ALUM.	19
39	001-76072-00	NUT, NYLOCK 1/2-13 ALUM.	36
40	001-76073-00	Nut, Nylock 10-32 Alum	1
41	001-76350-00	Nut, 1/2-13 Alum	8
42	002-00001-00	Bracket, Upper Lftg./V-Brace	1
43	002-00002-00	Bracket, Upper V-Brace - 4"	1
44	002-00003-01	Clamp, Lower Frame Outer - 5"	3
45	002-00004-01	Clamp, Outer Frame Sheave - 5"	1
46	002-00005-02	Clamp, Frame Inner – 4.692" Ext. Version	4
47	002-00054-00	Beam, Lift Frame .125 - 95.938"	2
48	002-00067-00	Post, Corner "A" Lifting VSD5000	1
49	002-00070-00	Post, Corner "B" Motor Pontoon	1
50	002-00071-00	Post, Corner "C & D" Pontoon	2
51	002-00205-00	Beam, Lift Frame.125 - 121.0"	2
52	002-00206-00	Beam, End Cradle 126.375" (.145")	1
53	002-04015-00	Clamp, Cradle - 1.5"	7
54	002-04017-00	Clamp, Cradle Lift - 2.5"	1
55	002-04022-01	V-Brace 76.938" x .125"	2
56	002-04031-00	Guide, Cradle (Ext.) - 4.25"	4
57	002-04040-00	Beam, Side Cradle 109"	2
58	002-04064-00	Clamp, Lower V-Brace (L) 14.5"	1
59	002-04066-00	Clamp, Lower V-Brace (R) 14.5"	1
60	002-04140-00	Holder, Cable	1
61	002-04307-00	Clamp, Pulley (Outer) 3" Post	1
62	002-04308-00	Clamp, Pulley (Inner) 3" Post	1
63	002-04314-00	Bracket, Level Leg - 2.563"	4
64	006-10021-00	Sleeve, UHMW Ball Screw Support	1
65	006-10202-00	Pad, Wear - 1/2 x 7/8" x 2"	4
66	006-10206-00	Spacer, Side Cradle Sheave	8
67	006-11001-00	UHMW, 1/4" x 1/2" x 5"	4
68	006-15022-00	Cap, Vinyl-Canopy/Winch Insert	1
69	006-15200-00	Cap, Vinyl 3" Sq. Lift Corner	3
70	006-22202-00	Sleeve, Steel 1" x 2.25" Lg.	1
71	007-04154-00	Pin, Sheave, 3/4" VSD3200/5000	1
72	007-05013-00	Plate, End Stop (Ball Screw)	1
73	007-05023-00	Bevel Gear, Top 1:1	4

# VSD5000 BILL OF MATERIALS

NO.	PART NUMBER	DESCRIPTION	QTY.
74	007-05079-01	Screw, Bevel Gear Adjustment	4
75	007-05126-00	Fitting, Grease M8 x 1 (Flush)	2
76	007-05223-00	Coupler, Rigid .75x1.5x2 Lg.	1
77	007-05242-00	Key, 3/16" x 2"	1
78	007-06201-00	Sheave, 3" Front Cable 1/2" ID	1
79	007-07700-00	Spacer, 1.297" (Side Cradle)	4
80	007-07701-00	Spacer, 1.055" (.090" Front)	2
81	007-07707-01	Spacer, Lifting Pulley VSD 3.8-5K	2
82	007-09000-00	Cable, Side Leveling 166.125"	2
83	007-09126-00	Cable, Lifting -102.750"	1
84	007-09511-00	Cable, Front Leveling 205.688"	1
85	007-15024-00	Bevel Gear, Bottom (Fab)	4
86	007-93526-00	Nut, Round M24 x 1.5 (Zinc Plated)	1
87	011-15005-00	Ball Screw, 40-10mm - 1727mm	1
88	111-00000-00	Sand Pad Weldment	4
89*	111-00045-00	Ass'y, Side Cradle Beam (A)	1
90*	111-00046-00	Ass'y, Side Cradle Beam (B)	1
91	111-00107-00	Ass'y, Sheave 5" - 5/16" Cable	6
92	111-00156-00	Ass'y, Cradle Guide (Ext.)	4
93	111-00201-00	Ass'y, 6" Lifting Sheave 38/5000#	1
94	111-00216-01	Weld't, Inner Leg 2000-5000#	4
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	4
96	111-00248-00	Ass'y, Ball Nut Block	1
97	111-00311-00	Ass'y, Bearing Block w/bearing	1
98*	111-00411-01	Ass'y, Canopy/Winch Insert	1
99	111-00415-01	Weld't, Ball Screw Tube 96.375"	1
100*	111-00416-01	Ass'y, Ball Screw Tube 96.375"	1
101**	111-00418-02	Ass'y, Corner Post "B" VSD5000	1
102**	111-00419-02	Ass'y, Corner Post "C" VSD5000	1
103**	111-00420-02	Ass'y, Corner Post "D" VSD5000	1
104**	111-00431-02	Ass'y, Corner Post "A" Lifting	1
105*	111-00470-00	Ass'y, End Cradle 126.375" (.145")	1
106	111-04306-01	Ass'y, Ball Screw Clamp-3" post	1
107	111-38500-01	Ass'y, Limit Switch 3800-5000 Pon.	1
108	911-14201-00	Canopy/Winch Insert, 38"	1
109	911-15605-00	Beam, F/RCradle-.145-126.375"	1
110	911-20601-00	U-Clamp, Cradle 2.125	4

\*ITEMS 89, 90, 95, 98, & 100-105 ARE BROKEN DOWN FURTHER

\*\*REPLACEMENT CORNER POST FULL ASSEMBLIES ARE AVAILABLE (ITEMS 101-104)

# SUB-ASSEMBLIES

NO.	PART NUMBER	DESCRIPTION	QTY.
89*	111-00045-00	Ass'y, Side Cradle Beam (A)	1
26	001-70313-00	HHCS, 5/8-11 x 2 1/2 ss 18-8	2
27	001-70816-00	Nut, Jam 5/8-11 ss 18-8	2
57	002-04040-00	Beam, Side Cradle 109"	1
66	006-10206-00	Spacer, Side Cradle Sheave	4
67	006-11001-00	UHMW, 1/4" x 1/2" x 5"	2
79	007-07700-00	Spacer, 1.297" (Side Cradle)	2
82	007-09000-00	Cable, Side Leveling 166.125"	1
91	111-00107-00	Ass'y, Sheave 5" - 5/16" Cable	2
92	111-00156-00	Ass'y, Cradle Guide (Ext.) (INCLUDES ITEMS 56 & 65)	2

NO.	PART NUMBER	DESCRIPTION	QTY.
90*	111-00046-00	Ass'y, Side Cradle Beam (B)	1
26	001-70313-00	HHCS, 5/8-11 x 2 1/2 ss 18-8	2
27	001-70816-00	Nut, Jam 5/8-11 ss 18-8	2
57	002-04040-00	Beam, Side Cradle 109"	1
66	006-10206-00	Spacer, Side Cradle Sheave	4
67	006-11001-00	UHMW, 1/4" x 1/2" x 5"	2
79	007-07700-00	Spacer, 1.297" (Side Cradle)	2
82	007-09000-00	Cable, Side Leveling 166.125"	1
91	111-00107-00	Ass'y, Sheave 5" - 5/16" Cable	2
92	111-00156-00	Ass'y, Cradle Guide (Ext.) (INCLUDES ITEMS 56 & 65)	2

NO.	PART NUMBER	DESCRIPTION	QTY.
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	1
3	001-26911-00	Pin, Dowel 3/16" x 7/8"	1
4	001-71525-00	Spring Pin, 5/32" x 1-1/8" 420 SS Slotted	1
33	001-71024-00	Flat Washer, 5/8"x1.25"x.060 SS	4
34	001-71027-00	Flat Washer, 1/2" USS ss 18-8	1
36	001-76069-00	Flat Washer, 5/8 (Lift) Nylon	2
63	002-04314-00	Bracket, Level Leg - 2.563"	1
73	007-05023-00	Bevel Gear, Top 1:1	1
74	007-05079-01	Screw, Bevel Gear Adjustment	1
85	007-15024-00	Bevel Gear, Bottom (Fab)	1
93	111-00216-01	Weld't, Inner Leg 2000-5000#	1



# SUB-ASSEMBLIES

<u>NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
98*	111-00411-01	Ass'y, Canopy/Winch Insert	1
15	001-70207-00	HHCS, 1/2-13 x 1 1/4" 18-8 ss	1
31	001-71021-00	FLAT WASHER, 1/2" 18-8 SS	1
39	001-76072-00	NUT, NYLOCK 1/2-13 ALUM.	1
68	006-15022-00	Cap, Vinyl-Canopy/Winch Insert	1
108	911-14201-00	Canopy/Winch Insert, 38"	1

<u>NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
100*	111-00416-01	Ass'y, Ball Screw Tube 96.375"	1
1	001-16369-00	HHCS, 3/4-16 x 4" Grade 8 Plain	1
2	001-23877-00	SHCS, 1/2-20 x 1 1/2" (Black)	1
5	001-33092-00	Flat Washer, SAE 3/4" Zinc	1
6	001-40365-00	Flat Washer, M24 Zinc	1
11	001-70123-00	HHCS, 3/8-16 x 5" 18-8 ss	1
14	001-70203-00	HHCS, 1/2-13 x 3/4" 18-8 ss	2
19	001-70215-00	HHCS, 1/2-13 x 3" 18-8 ss	2
31	001-71021-00	FLAT WASHER, 1/2" 18-8 SS	2
35	001-73454-00	SHCS, 10-32 x 1 3/4" 18-8 ss	1
38	001-76071-00	NUT, NYLOCK 3/8-16 ALUM.	1
39	001-76072-00	NUT, NYLOCK 1/2-13 ALUM.	2
40	001-76073-00	Nut, Nylock 10-32 Alum	1
64	006-10021-00	Sleeve, UHMW Ball Screw Support	1
70	006-22202-00	Sleeve, Steel 1" x 2.25" Lg.	1
72	007-05013-00	Plate, End Stop (Ball Screw)	1
75	007-05126-00	Fitting, Grease M8 x 1 (Flush)	2
76	007-05223-00	Coupler, Rigid .75x1.5x2 Lg.	1
77	007-05242-00	Key, 3/16" x 2"	1
83	007-09126-00	Cable, Lifting -102.750"	1
86	007-93526-00	Nut, Round M24 x 1.5 (Zinc Plated)	1
87	011-15005-00	Ball Screw, 40-10mm - 1727mm	1
96	111-00248-00	Ass'y, Ball Nut Block	1
97	111-00311-00	Ass'y, Bearing Block w/bearing	1
99	111-00415-01	Weld't, Ball Screw Tube 96.375"	1
107	111-38500-01	Ass'y, Limit Switch 3800-5000 Pon.	1

# SUB-ASSEMBLIES

NO.	PART NUMBER	DESCRIPTION	QTY.
101**	111-00418-02	Ass'y, Corner Post "B" VSD5000	1
29	001-70861-00	Nut, Nylock 5/16-18 - Alum	2
36	001-74402-00	CB, 5/16-18 x 3 1/2 ss 18-8	2
49	002-00070-00	Post, Corner "B" Motor Pontoon	1
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	1
98*	111-00411-01	Ass'y, Canopy/Winch Insert	1

NO.	PART NUMBER	DESCRIPTION	QTY.
102**	111-00419-02	Ass'y, Corner Post "C" VSD5000	1
29	001-70861-00	Nut, Nylock 5/16-18 - Alum	2
36	001-74402-00	CB, 5/16-18 x 3 1/2 ss 18-8	2
50	002-00071-00	Post, Corner "C & D" Pontoon	1
69	006-15200-00	Cap, Vinyl 3" Sq. Lift Corner	1
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	1

NO.	PART NUMBER	DESCRIPTION	QTY.
103**	111-00420-02	Ass'y, Corner Post "D" VSD5000	1
29	001-70861-00	Nut, Nylock 5/16-18 - Alum	2
36	001-74402-00	CB, 5/16-18 x 3 1/2 ss 18-8	2
50	002-00071-00	Post, Corner "C & D" Pontoon	1
69	006-15200-00	Cap, Vinyl 3" Sq. Lift Corner	1
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	1

\*\*REPLACEMENT CORNER POST FULL ASSEMBLIES ARE AVAILABLE (ITEMS 101-104)

## SUB-ASSEMBLIES

NO.	PART NUMBER	DESCRIPTION	QTY.
104**	111-00431-02	Ass'y, Corner Post "A" Lifting	1
28	001-70817-00	Nut, 3/4-10 Jam ss	2
29	001-70861-00	Nut, Nylock 5/16-18 - Alum	2
36	001-74402-00	CB, 5/16-18 x 3 1/2 ss 18-8	2
48	002-00067-00	Post, Corner "A" Lifting VSD5000	1
61	002-04307-00	Clamp, Pulley (Outer) 3" Post	1
62	002-04308-00	Clamp, Pulley (Inner) 3" Post	1
69	006-15200-00	Cap, Vinyl 3" Sq. Lift Corner	1
71	007-04154-00	Pin, Sheave, 3/4" VSD3200/5000	1
81	007-07707-01	Spacer, Lifting Pulley VSD 3.8-5K	2
93	111-00201-00	Assy, 6" Lifting Sheave 38/5000#	1
95*	111-00234-01	Ass'y, Easy-Level Inner Leg V2000-VSD5K (Pont)	1

NO.	PART NUMBER	DESCRIPTION	QTY.
105*	111-00470-00	Ass'y, End Cradle 126.375" (.145")	1
25	001-70310-00	HHCS, 5/8-11 x 1 3/4 ss 18-8	2
27	001-70816-00	Nut, Jam 5/8-11 ss 18-8	2
52	002-00206-00	Beam, End Cradle 126.375" (.145")	1
80	007-07701-00	Spacer, 1.055" (.090" Front)	2
84	007-09511-00	Cable, Front Leveling 205.688"	1
91	111-00107-00	Ass'y, Sheave 5" - 5/16" Cable	2

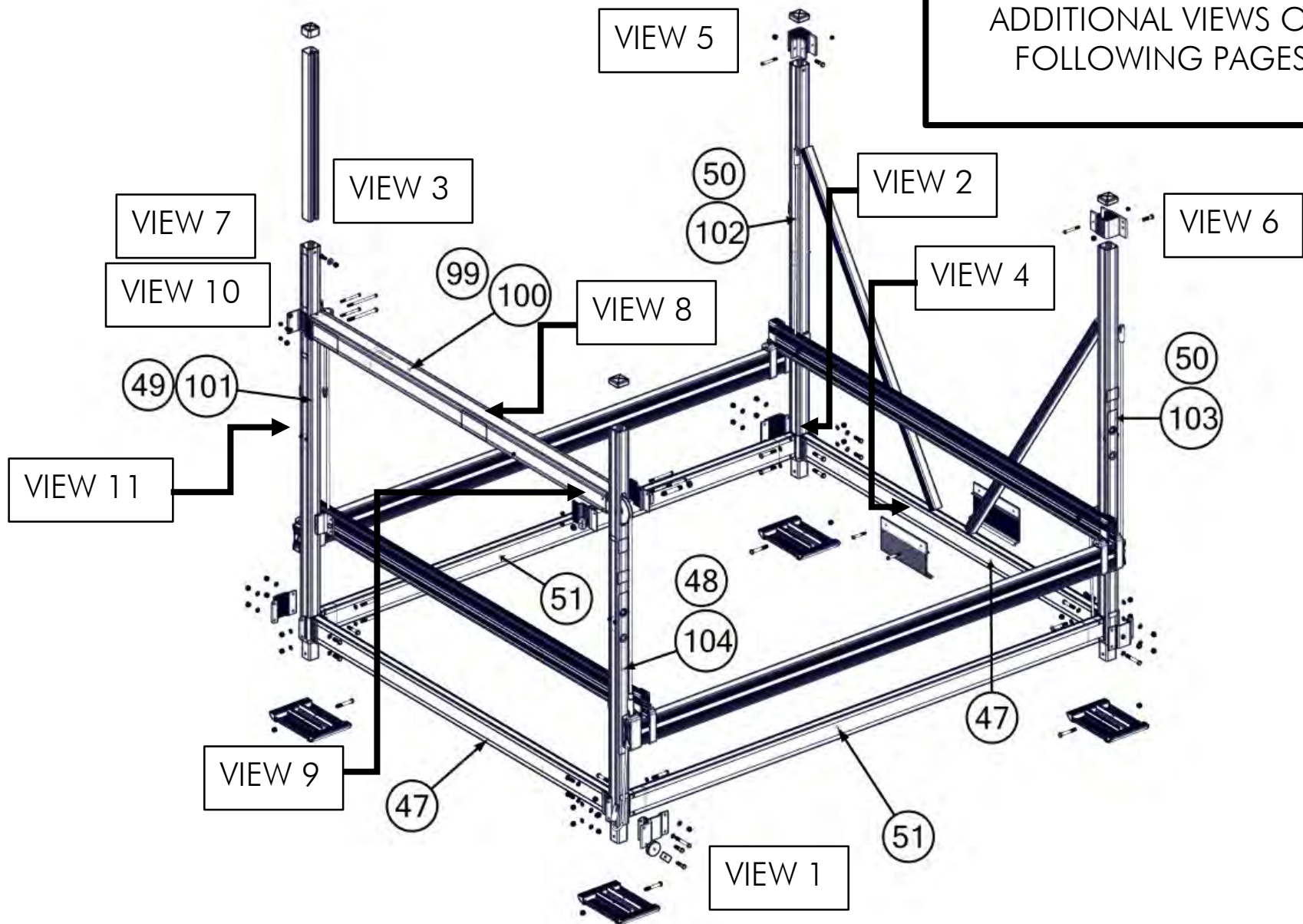
\*\*REPLACEMENT CORNER POST FULL ASSEMBLIES ARE AVAILABLE (ITEMS 101-104)



# VSD 5000 Frame Exploded View A

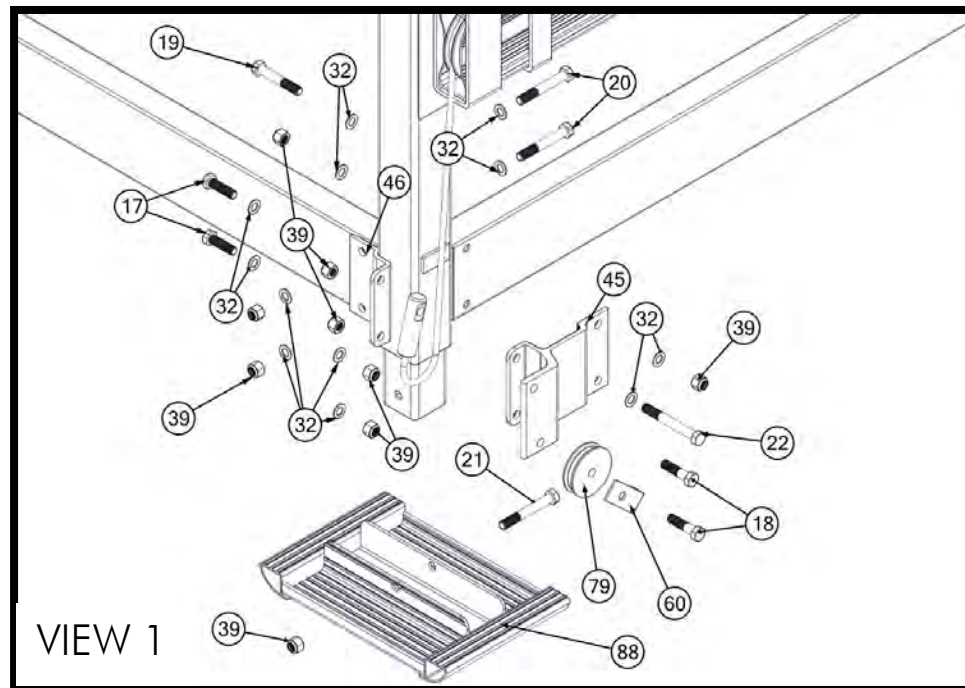
LIFT P/N 511-50080-00

NOTE:  
ADDITIONAL VIEWS ON  
FOLLOWING PAGES



# VSD 5000 Frame Exploded Views 1 & 2

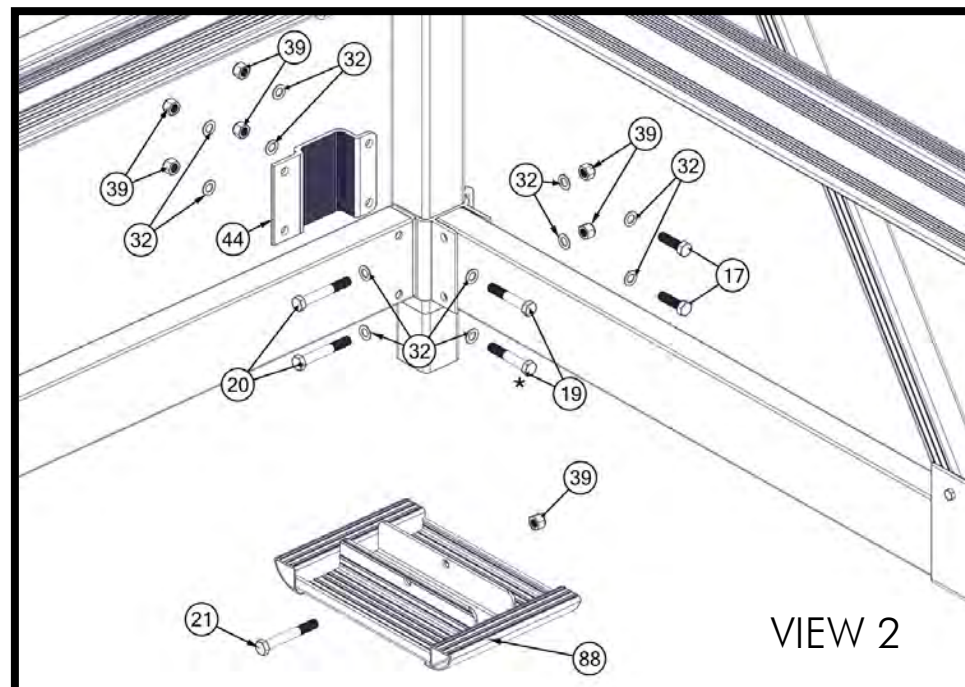
LIFT P/N 511-50080-00



## NOTE (VIEW 2):

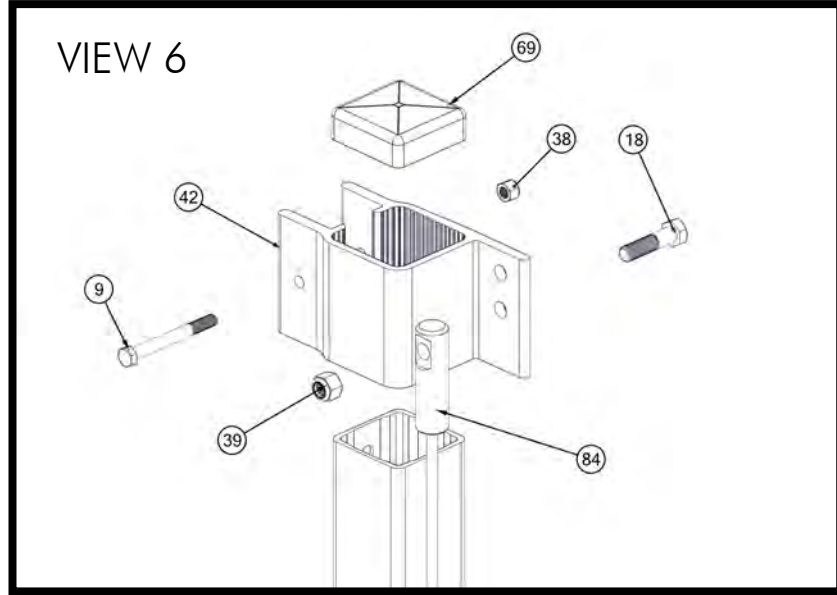
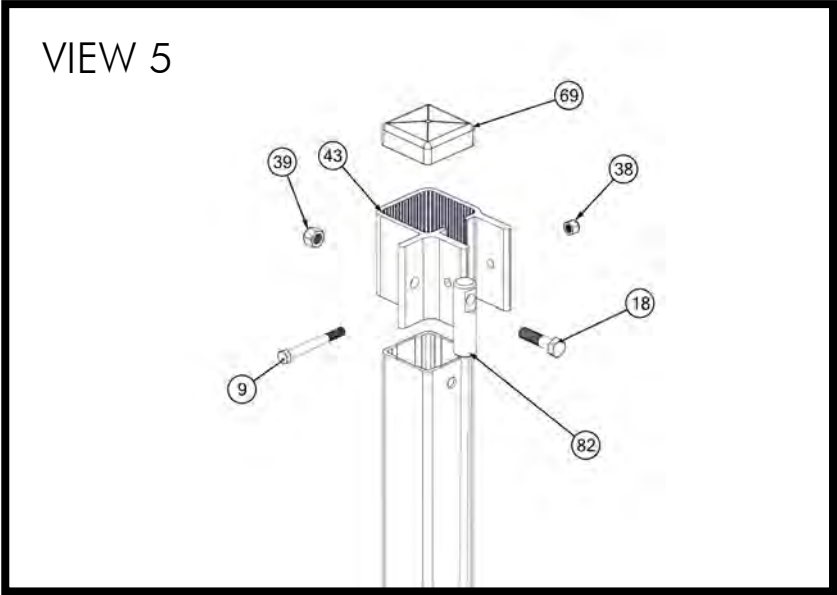
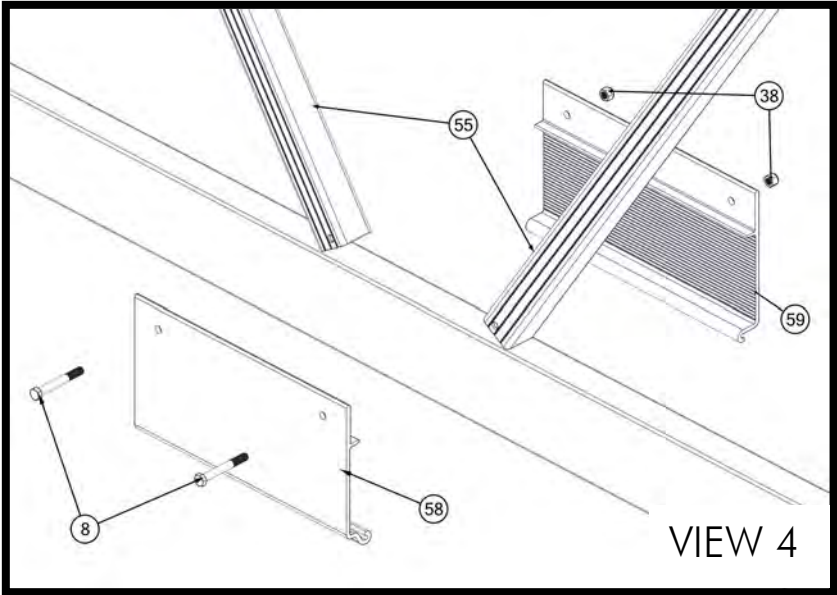
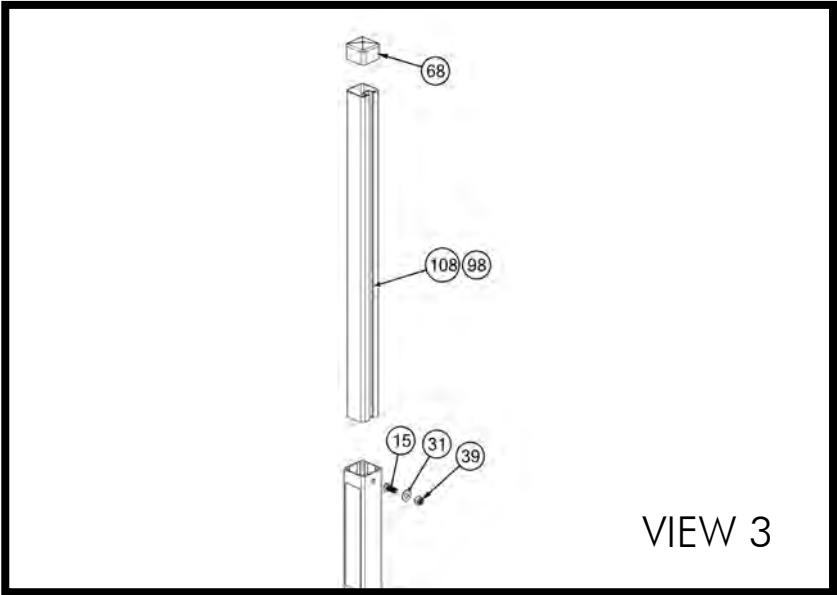
CORNER "C" IS SHOWN. BOTTOM BOLT (MARKED) IS REPLACED WITH ITEM 22 AT CORNER "D".

FOR CORNER "B", SAME ITEMS ARE USED AS SHOWN IN VIEW 2.



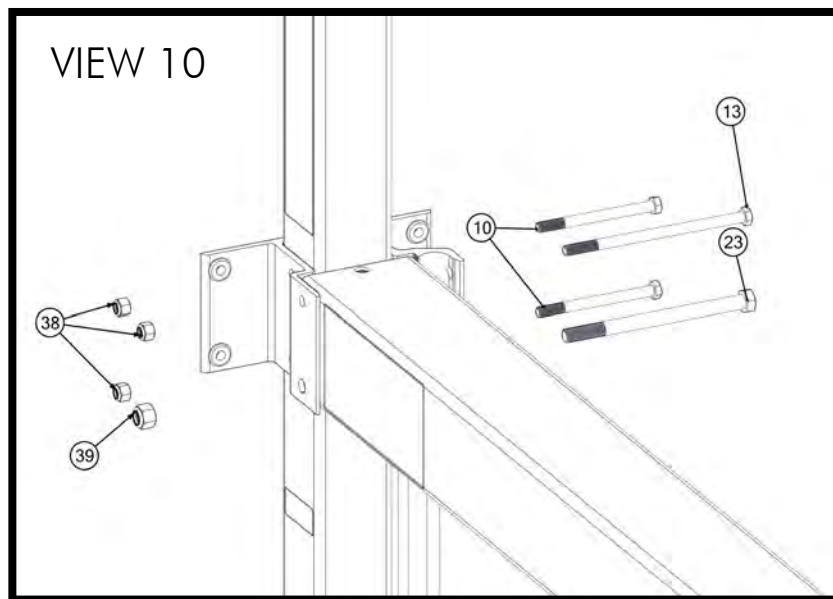
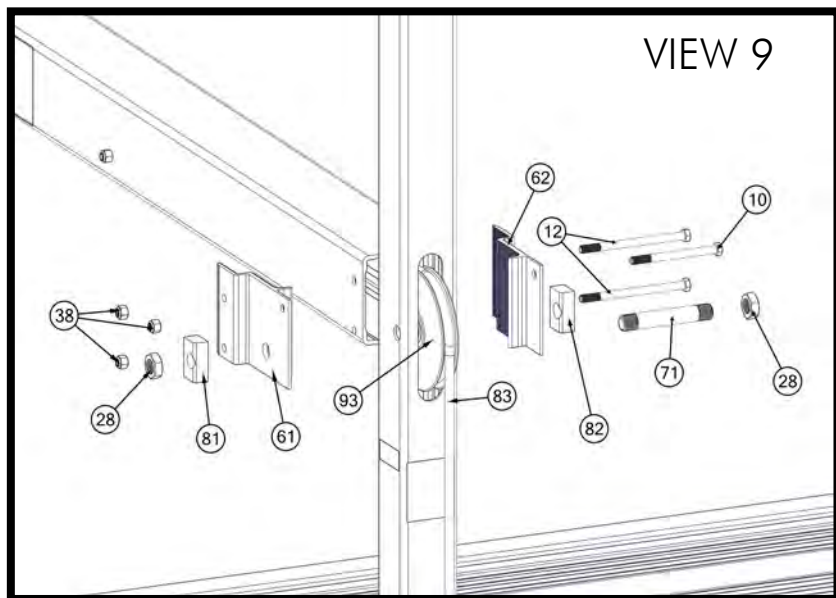
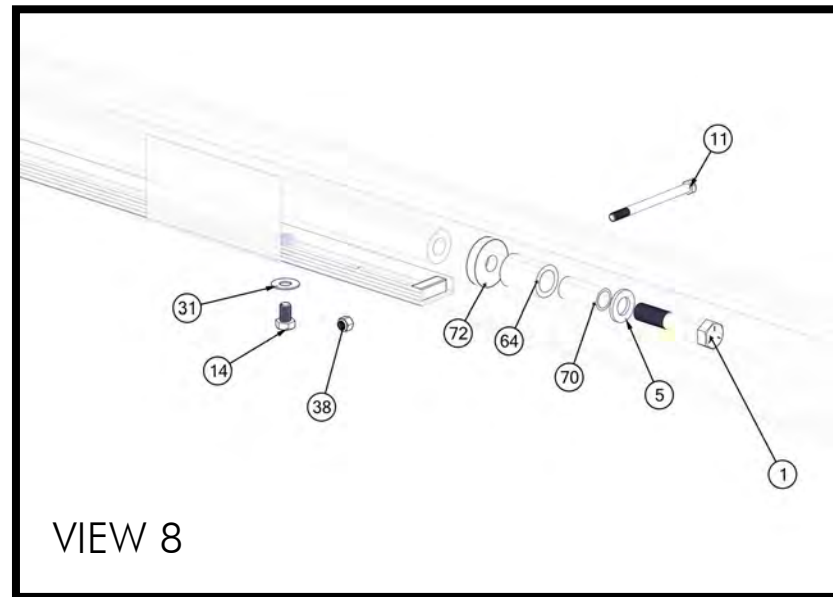
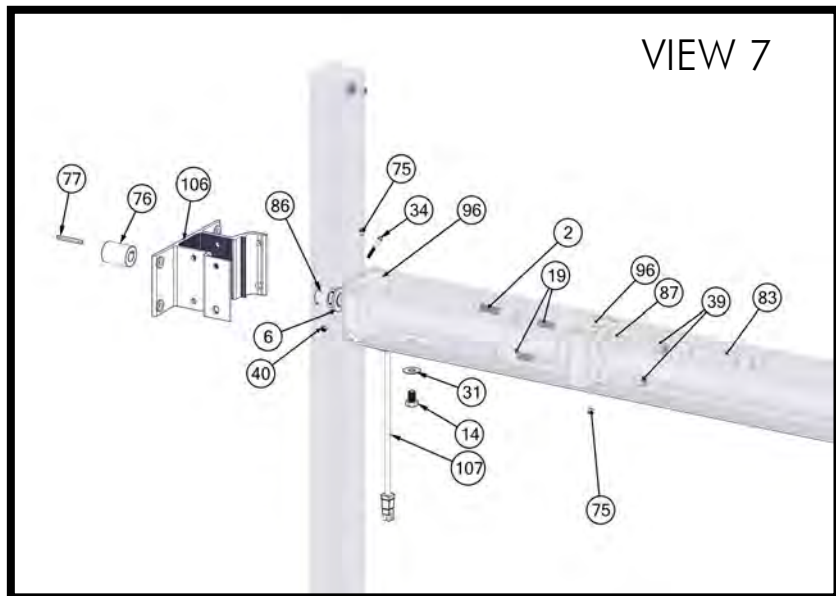
# VSD 5000 Frame Exploded Views 3-6

LIFT P/N 511-50080-00



# VSD 5000 Frame Exploded Views 7-10

LIFT P/N 511-50080-00

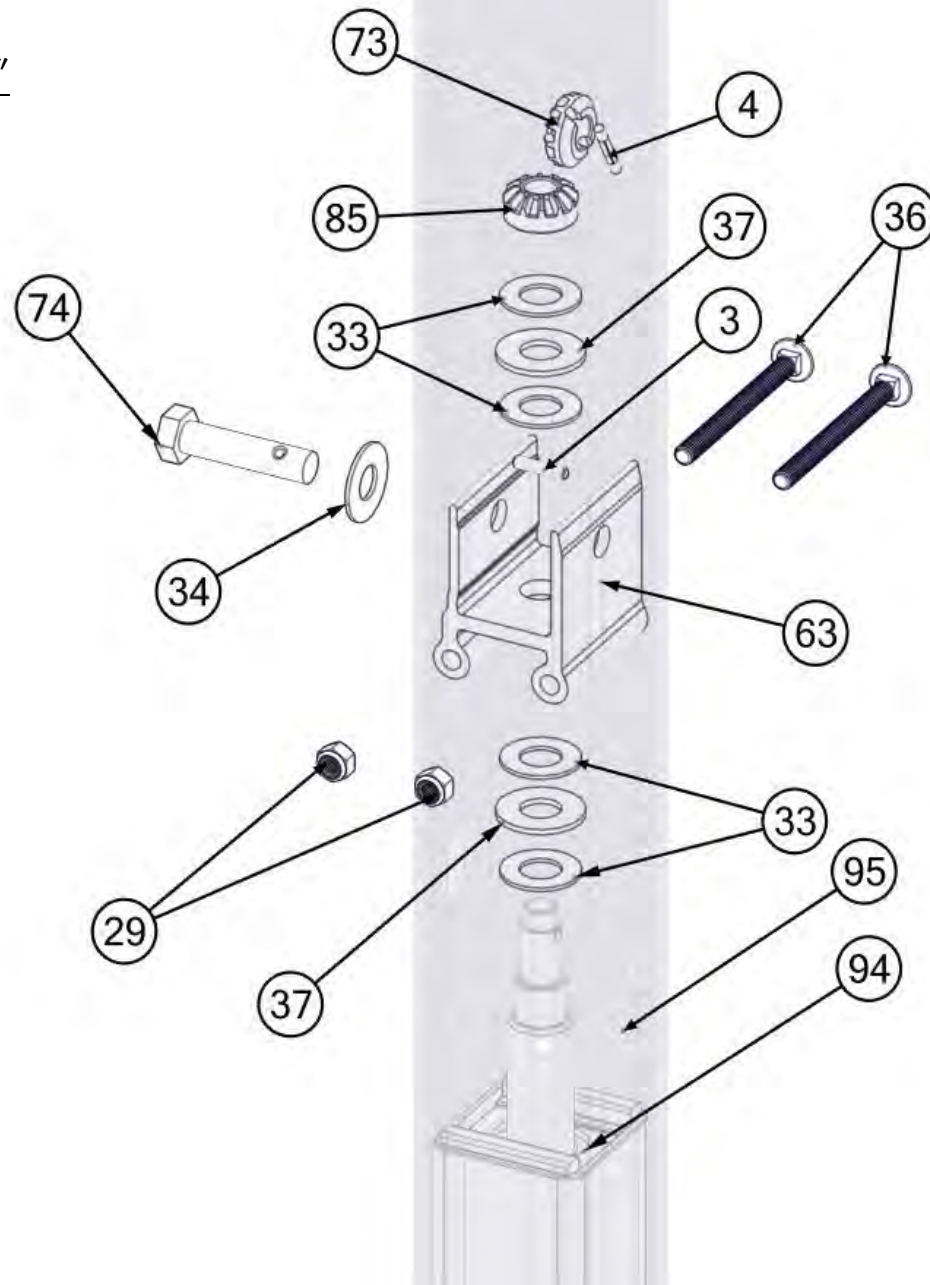




# VSD 5000 Frame Exploded View 11

LIFT P/N 511-50080-00

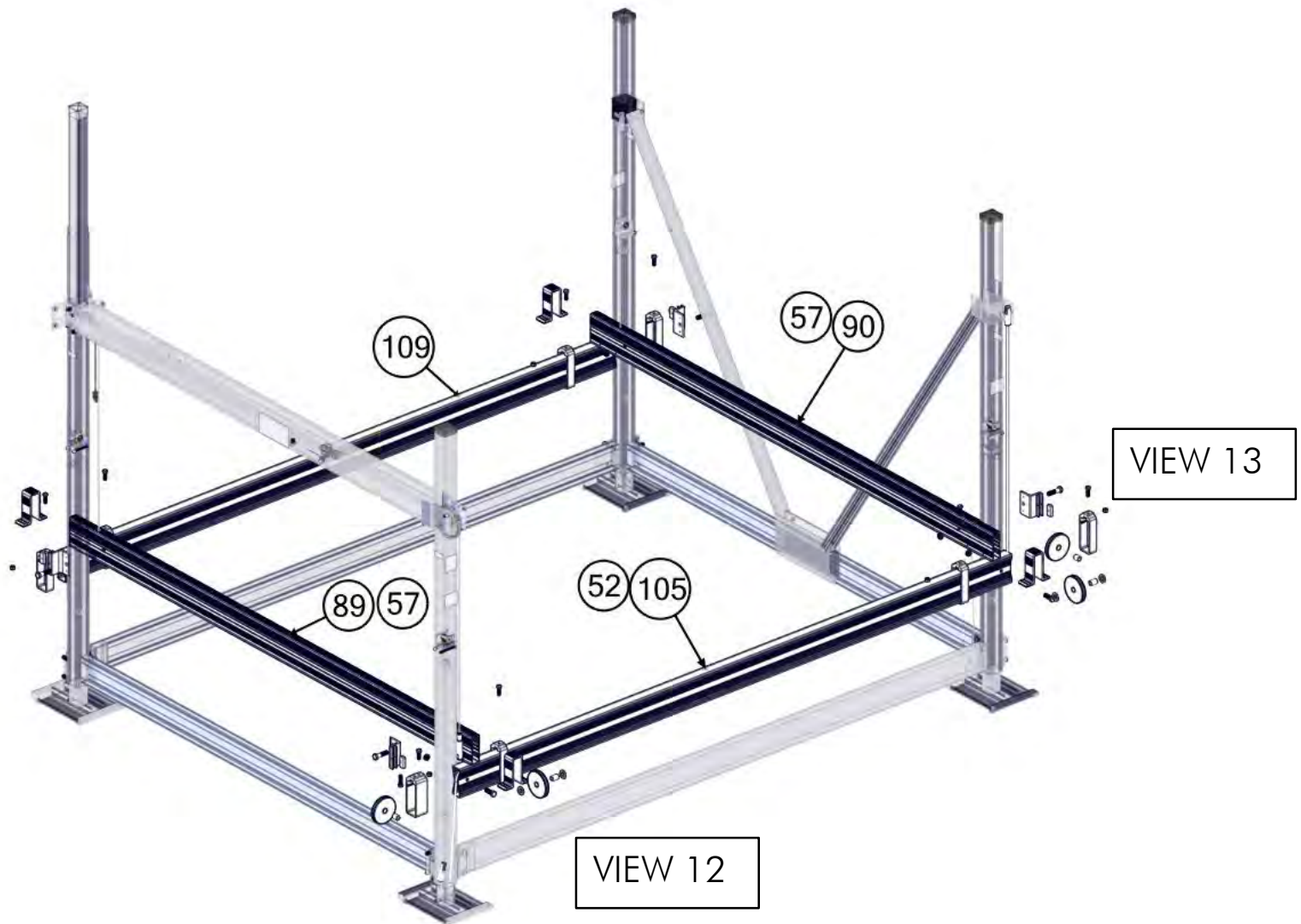
CORNER POSTS  
"A", "B", "C", "D"



# VSD 5000 Frame Exploded View B

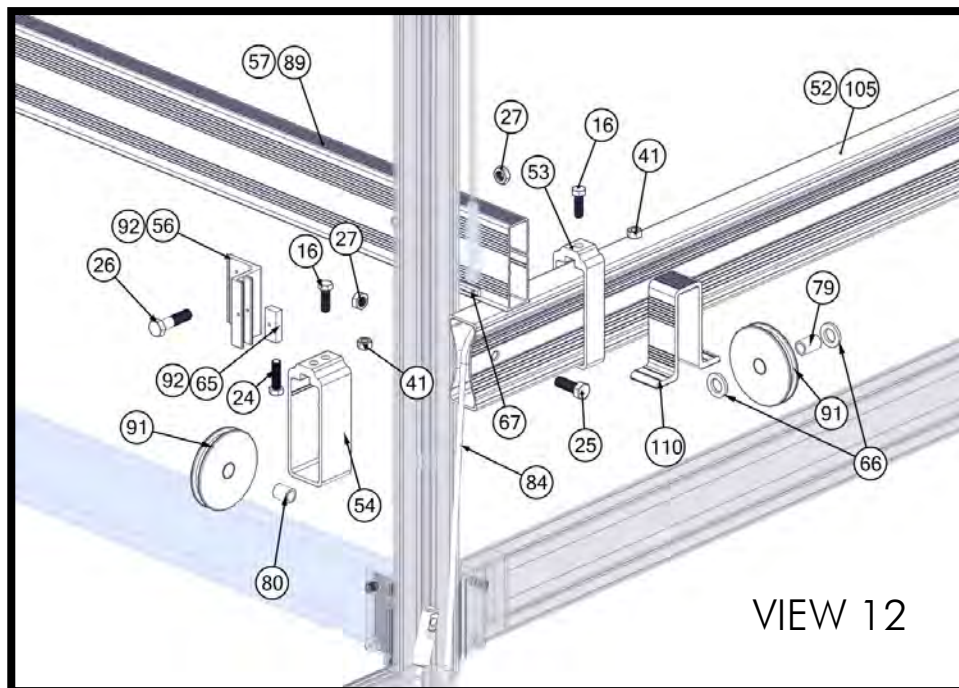
LIFT P/N 511-50080-00

NOTE:  
ADDITIONAL VIEWS ON  
FOLLOWING PAGES

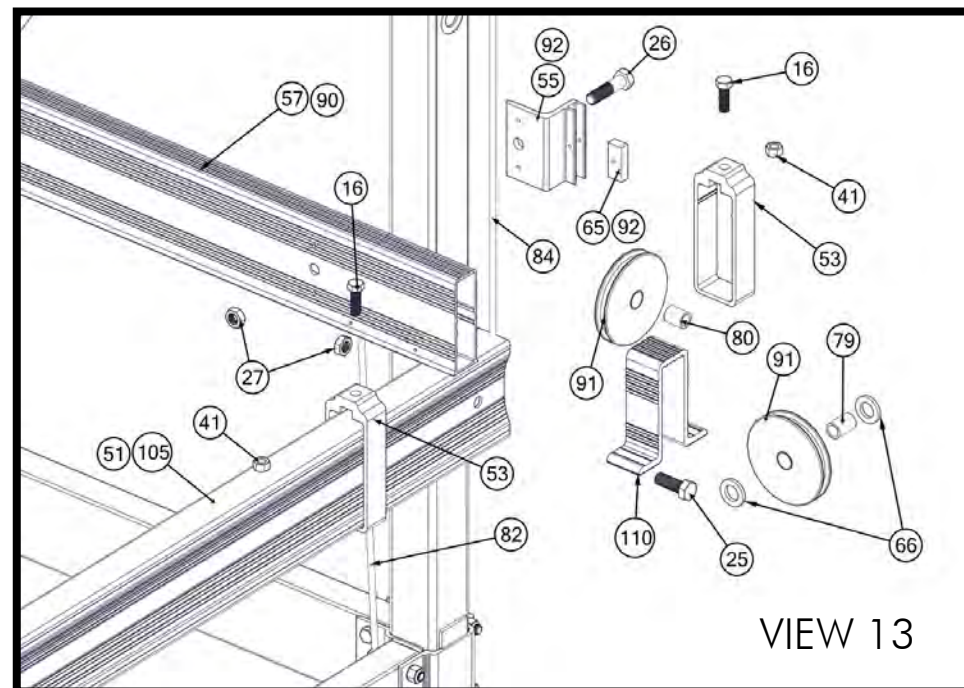


# VSD 5000 Frame Exploded Views 12 & 13

LIFT P/N 511-50080-00



NOTE (VIEW 13):  
CORNER "D" IS SHOWN. FOR  
CORNERS "B" & "C", ITEMS  
25, 27, 80, & 91 ARE EXEMPT  
(QUANTITY OF 1 PER  
CORNER). ITEM 51/105 IS  
REPLACED WITH ITEM 109.



# NOTES



# NOTES

# NOTES

