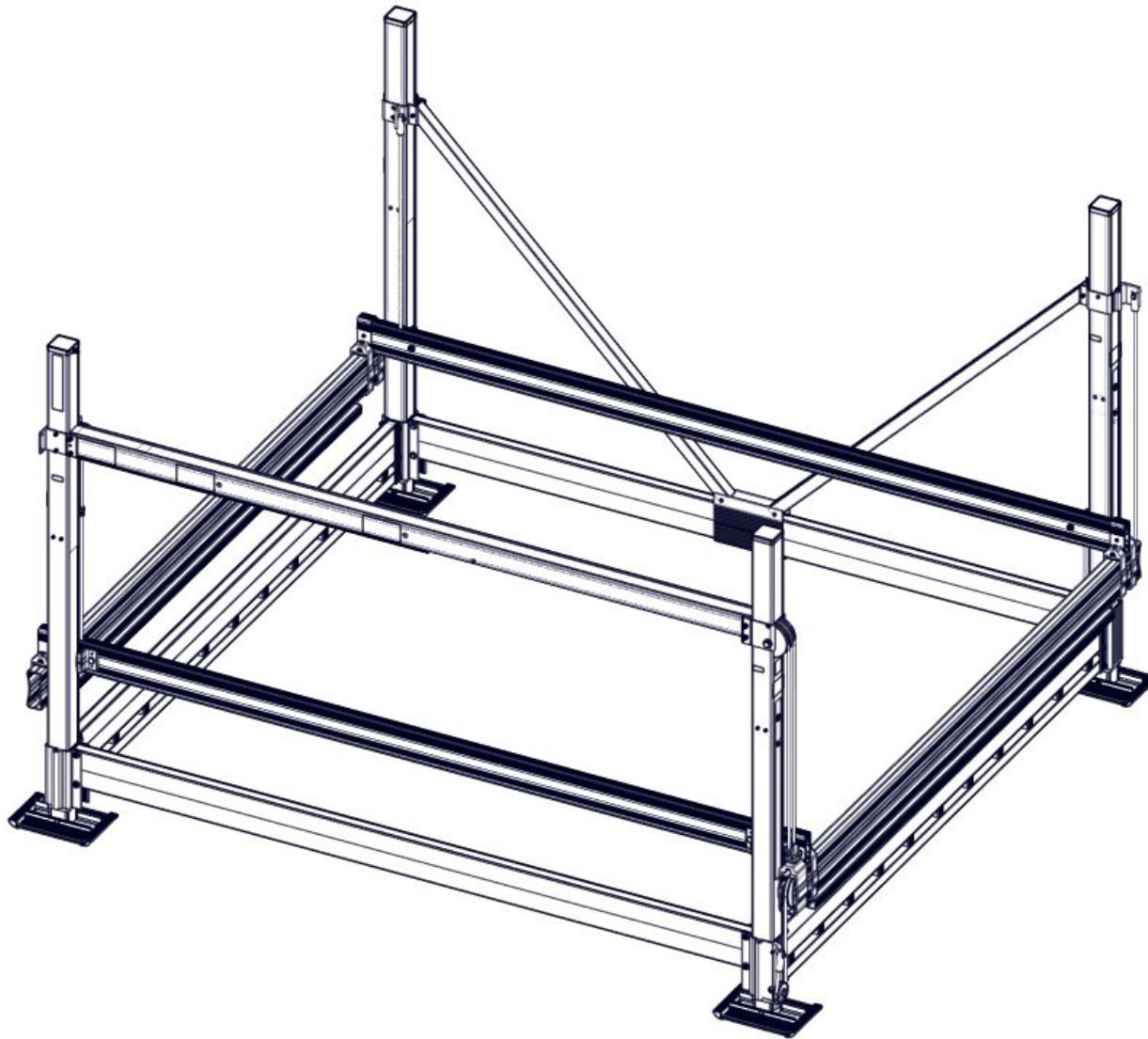


FLOE VSD 10000W BOAT LIFT

P/N 511-90080-00 LIFT FRAME
WITH PATENTED EASY LEVEL LEG SYSTEM
ASSEMBLY INSTRUCTIONS



TOOLS REQUIRED

- (2) 9/16" SOCKETS/WRENCHES
- (2) 3/4" SOCKETS/ WRENCHES
- (2) 1-1/8" SOCKETS/WRENCHES
- TORQUE WRENCH
- LOCKING PLIERS
- FRAMING SQUARE
- CLAMP (MIN. 8" OPENING)

Instruction P/N 611-90080-00
Issued 6/20/23

©Manufactured by:
Floe International Inc.
48473 State Hwy. 65
McGregor, MN 55760
www.floeintl.com

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.

WARNINGS

- DO NOT USE IMPACT WRENCH WHEN ADJUSTING THE EASY LEVEL LEGS.

Bag Contents (511-04244-00)

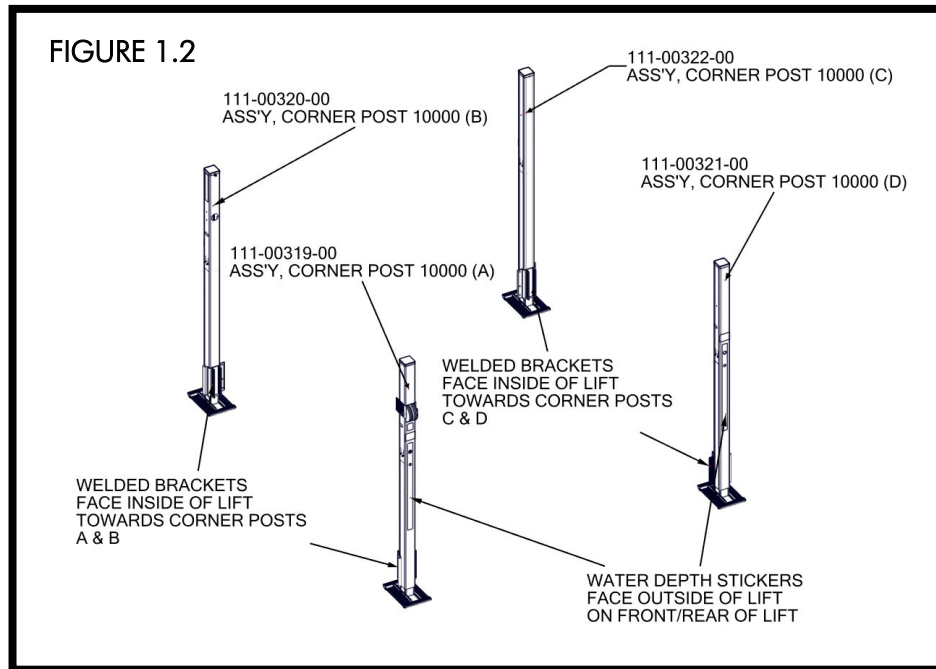
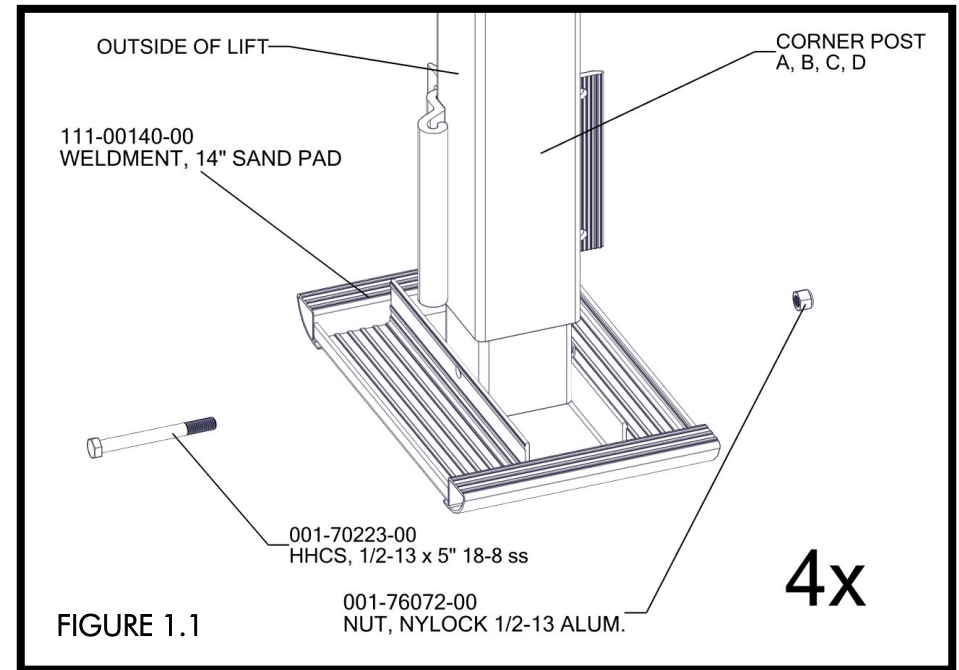
| Step | Part Numbers | QTY | Descriptions | Torque |
|------|--|-----------------------------------|---|--------------------------------|
| 1 | 001-70223-00 001-76072-00 | 4 4 | HHCS, 1/2-13 x 5" ss 18-8 NUT, NYLOCK 1/2-13 ALUM. | 25 ft. lbs. |
| 2 | 001-70123-00 001-70219-00 001-71022-00 001-76072-00 001-70125-00 001-76071-00 001-70225-00 | 1 8 16 12 2 3 4 | HHCS, 3/8-16 x 5" 18-8 ss HHCS, 1/2-13 x 4" ss 18-8 FLAT WASHER, 1/2" USS ss 18-8 NUT, NYLOCK 1/2-13 ALUM. HHCS, 3/8-16 x 6" 18-8 ss NUT, NYLOCK 3/8-16 ALUM. HHCS, 1/2-13 x 6" 18-8 ss | 80 ft. lbs. 35 ft. lbs. |
| 3 | 001-70118-00 001-70117-00 001-76071-00 001-70125-00 | 2 2 6 2 | HHCS, 3/8-16 x 3 3/4" ss 18-8 HHCS, 3/8-16 x 3 1/2" ss 18-8 NUT, NYLOCK 3/8-16 ALUM. HHCS, 3/8-16 x 6" 18-8 ss | 35 ft. lbs. |
| 4 | 001-70219-00 001-71022-00 001-76072-00 | 10 20 10 | HHCS, 1/2-13 x 4" ss 18-8 FLAT WASHER, 1/2" USS ss 18-8 NUT, NYLOCK 1/2-13 ALUM. | 80 ft. lbs. |
| 5 | 001-70107-00 001-70394-00 001-70211-00 001-76071-00 001-76072-00 | 8 1 8 8 8 | HHCS, 3/8-16 x 1 1/4" 18-8 ss HHCS, 3/4-16 x 2" ss HHCS, 1/2-13 x 2" 18-8 ss NUT, NYLOCK 3/8-16 ALUM. NUT, NYLOCK 1/2-13 ALUM. | 35 ft. lbs. 80 ft. lbs. |

continued

| Step | Part Numbers | QTY | Descriptions | Torque |
|------|--------------|-----|-------------------------------|--------------|
| 6 | 001-70213-00 | 2 | HHCS, 1/2-13 x 2 1/2" ss 18-8 | 80 ft. lbs. |
| | 001-70223-00 | 2 | HHCS, 1/2-13 x 5" ss 18-8 | |
| | 001-76072-00 | 6 | NUT, NYLOCK 1/2-13 ALUM | |
| | 001-70212-00 | 3 | HHCS, 1/2-13 x 2 1/4" ss 18-8 | |
| | 001-71022-00 | 4 | FLAT WASHER, 1/2" USS ss 18-8 | 80 ft. lbs. |
| | 001-70365-00 | 1 | HHCS, 3/4-10 x 3" ss | |
| | 001-76354-00 | 1 | NUT, 3/4-10 ALUM | |
| | 001-71077-00 | 1 | LOCK WASHER, 3/4"SPLIT SS | |
| 7 | 001-70817-00 | 1 | NUT, 3/4 - 10 JAM ss | 100 ft. lbs. |
| | 001-70110-00 | 4 | HHCS, 3/8-16 x 1 3/4" ss 18-8 | 5 ft. lbs. |
| | 001-71017-00 | 8 | FLATWASHER, 3/8" SAE ss 18-8 | |
| | 001-76071-00 | 4 | NUT, NYLOCK 3/8-16 ALUM. | 25 ft.lbs. |
| | 001-70124-00 | 4 | HHCS, 3/8-16 x 5 1/2" ss 18-8 | |
| | 001-76071-00 | 4 | NUT, NYLOCK 3/8-16 ALUM | |
| | 001-70365-00 | 1 | HHCS, 3/4-10 x 3" ss | |

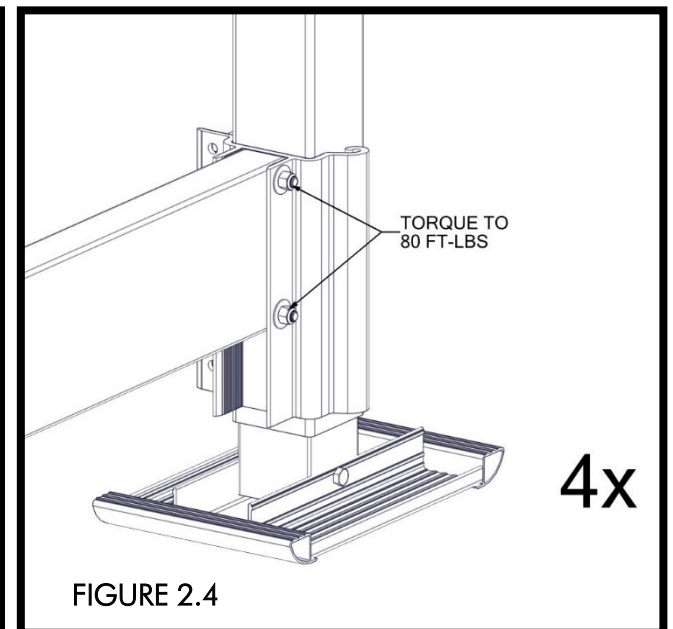
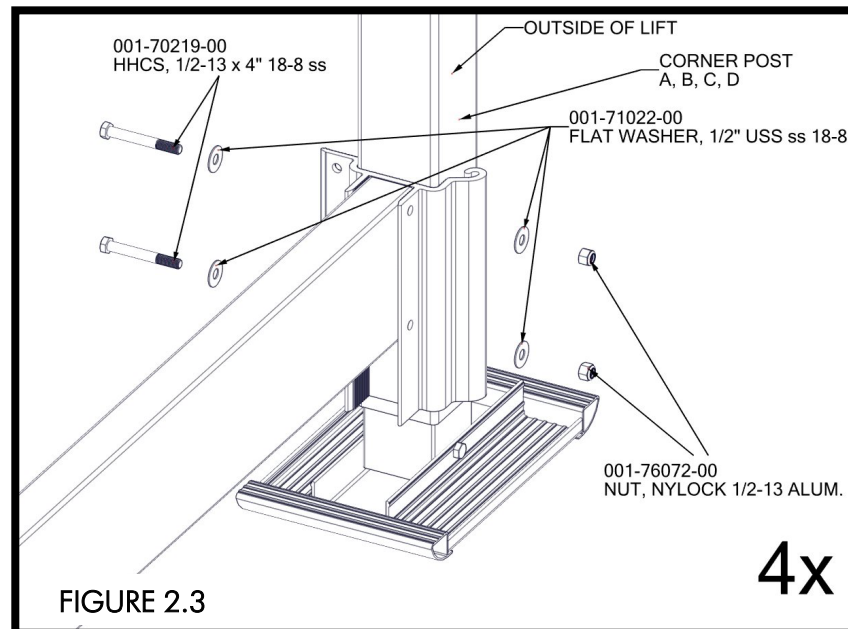
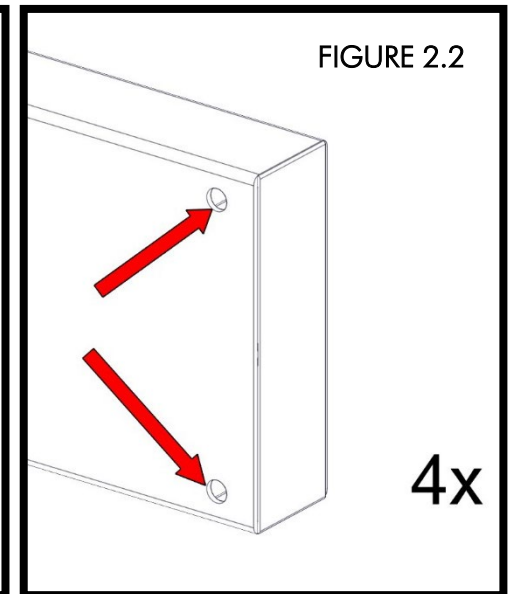
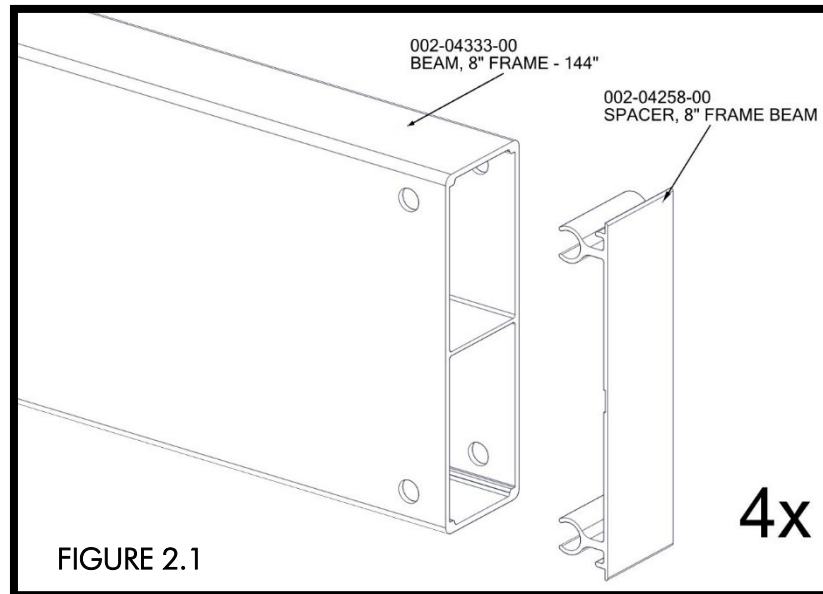
STEP 1

- ATTACH SAND PADS TO ALL FOUR CORNER POST ASSEMBLIES USING CORNER POST ASSEMBLIES USING (4) ½" x 5" BOLTS AND (4) ½" NYLOCK NUTS. TORQUE TO 25 FT-LBS (FIGURE 1.1).
- ARRANGE CORNER POSTS AS SHOWN IN FIGURE 1.2.



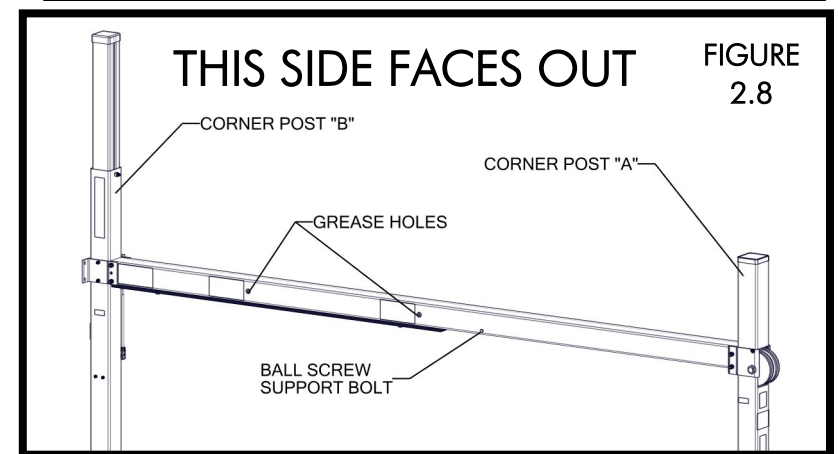
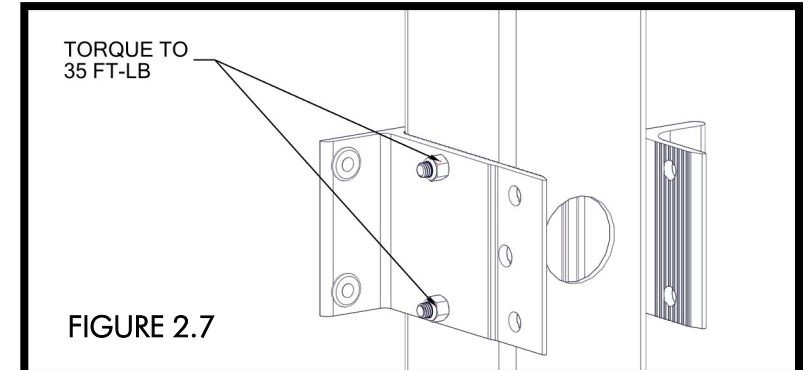
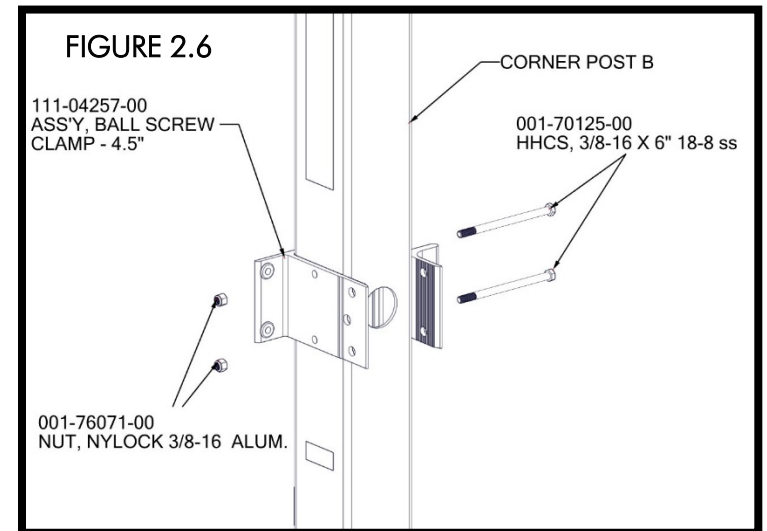
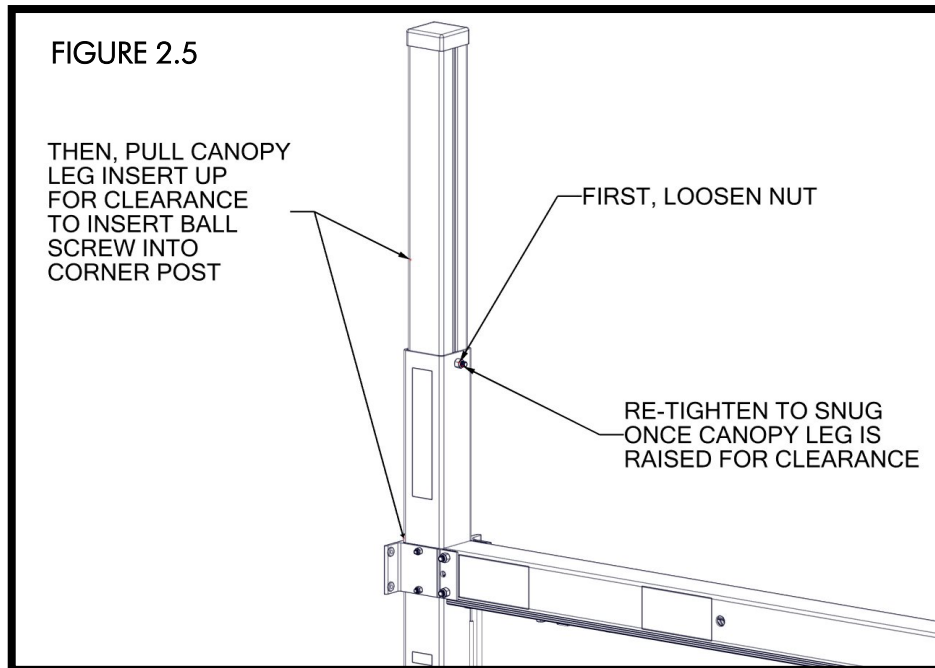
STEP 2

- INSERT FRAME BEAM SPACERS INTO ENDS OF 144" FRAME BEAMS AND ENSURE HOLES IN FRAME BEAM LINE UP WITH CLAMP (FIGURE 2.1 & 2.2).
- ATTACH FRAME BEAMS TO PRE-ATTACHED LOWER CORNER POST CLAMPS USING (2) $\frac{1}{2}$ x 4" BOLTS, (4) $\frac{1}{2}$ " WASHERS, AND (2) $\frac{1}{2}$ " NYLOCK NUTS (FIGURE 2.3). TORQUE TO 80 FT-LBS (FIGURE 2.4). REPEAT FOR EACH CORNER.



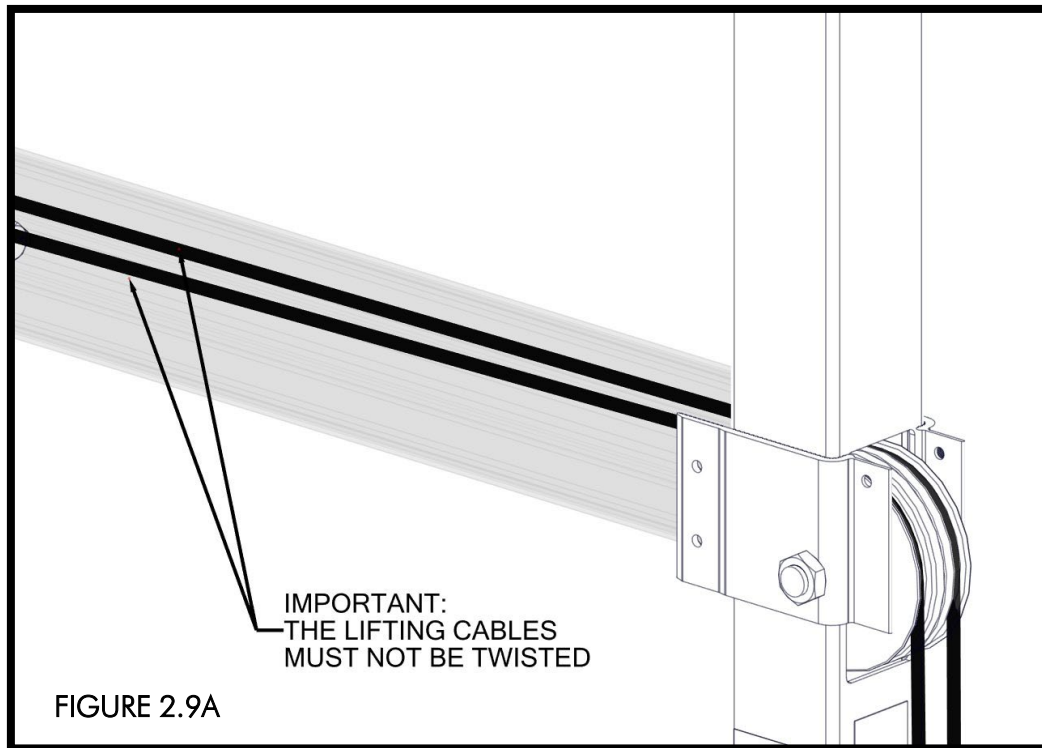
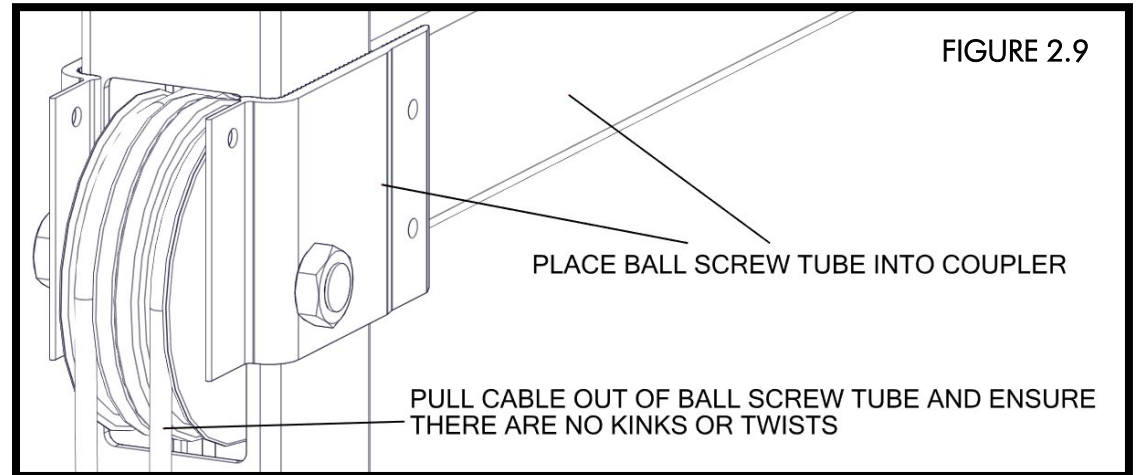
STEP 2

- LOOSEN NUT HOLDING INSERT IN CORNER POST, THEN PULL CANOPY LEG UP FOR CLEARNACE TO INSERT BALL SCREW INTO CORNER POST, AND RE-TIGHTEN NUT TO SNUG ONCE CANOPY LEG IS RAISED FOR CLEARANCE (FIGURE 2.5).
- ATTACH BALL SCREW CLAMP TO CORNER POST USING (2) 3/8 x 6" BOLTS, AND (2) NYLOCK NUTS (FIGURE 2.6). TORQUE TO 35 FT-LBS (FIGURE 2.7).
- ORIENT BALL SCREW TUBE BETWEEN CORNER POSTS "A" & "B" WITH GREASE HOLE AND SUPPORT BOLT VISIBLE ON OUTSIDE OF LIFT (FIGURE 2.8).



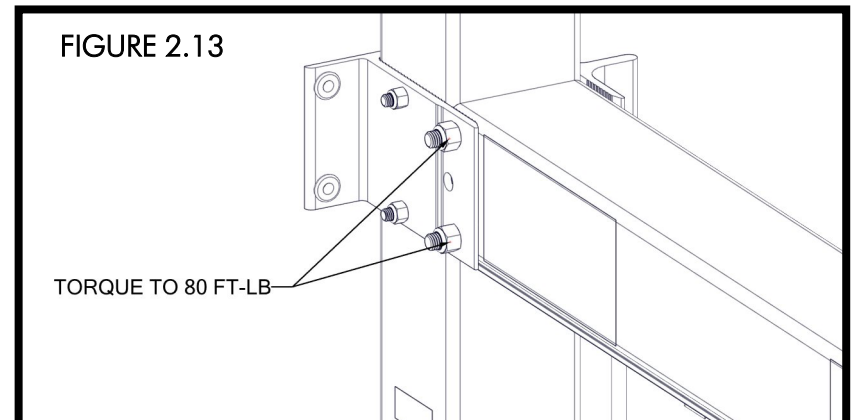
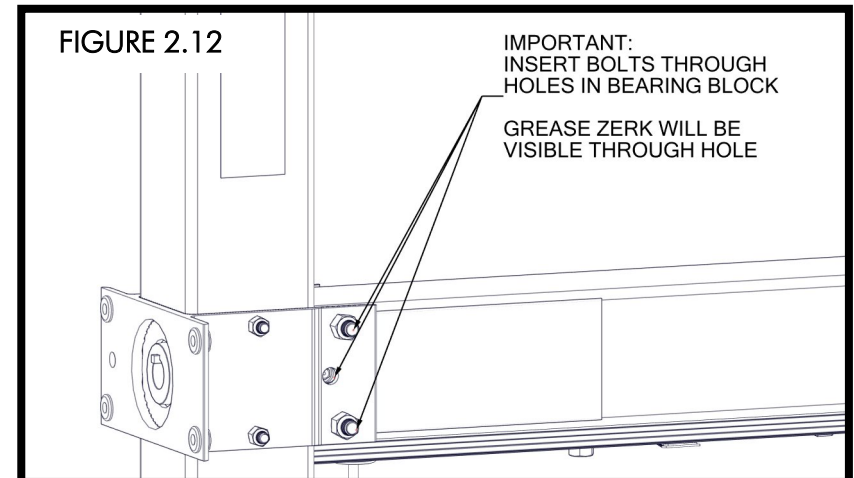
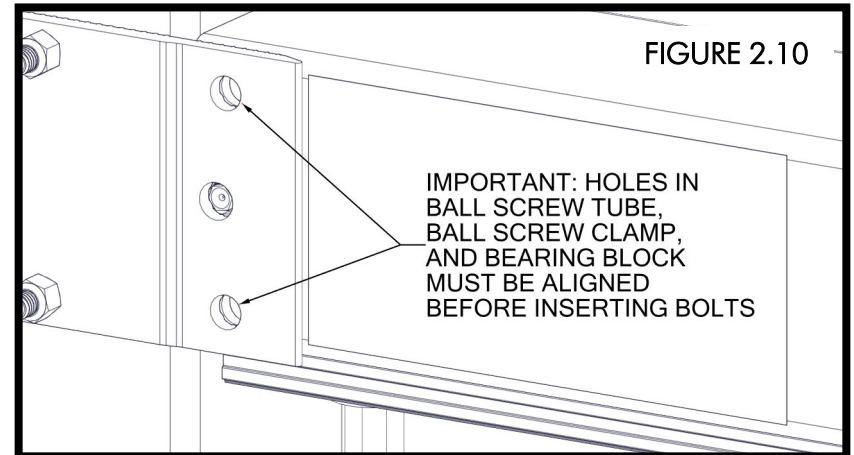
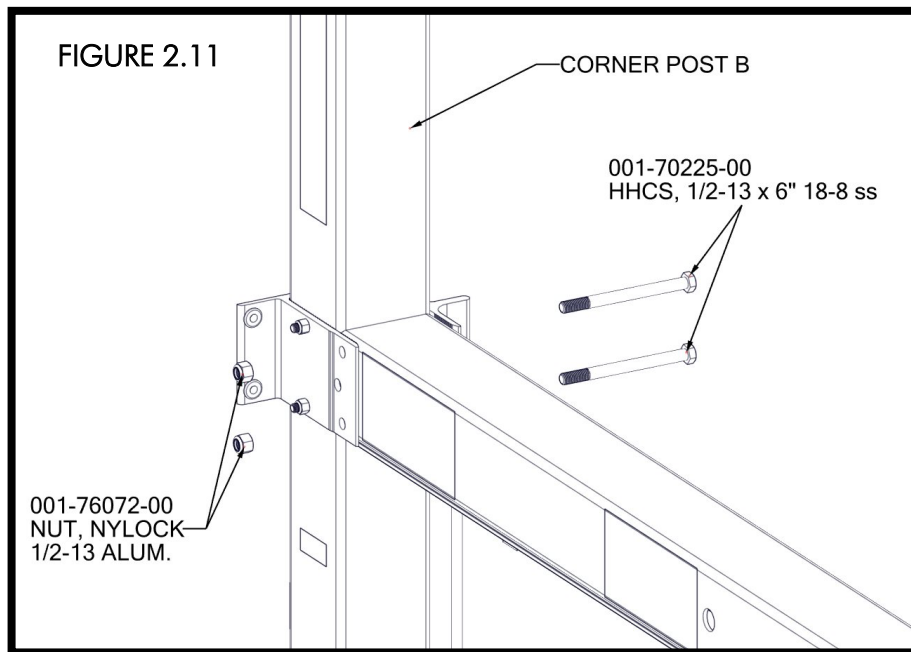
STEP 2

- PULL CABLE OUT OF BALL SCREW, ALIGN ON PULLEY, AND ENSURE THAT THERE ARE NO KINKS OR TWISTS. PLACE BALL SCREW INTO COUPLER. (FIGURES 2.9 & 2.9A).



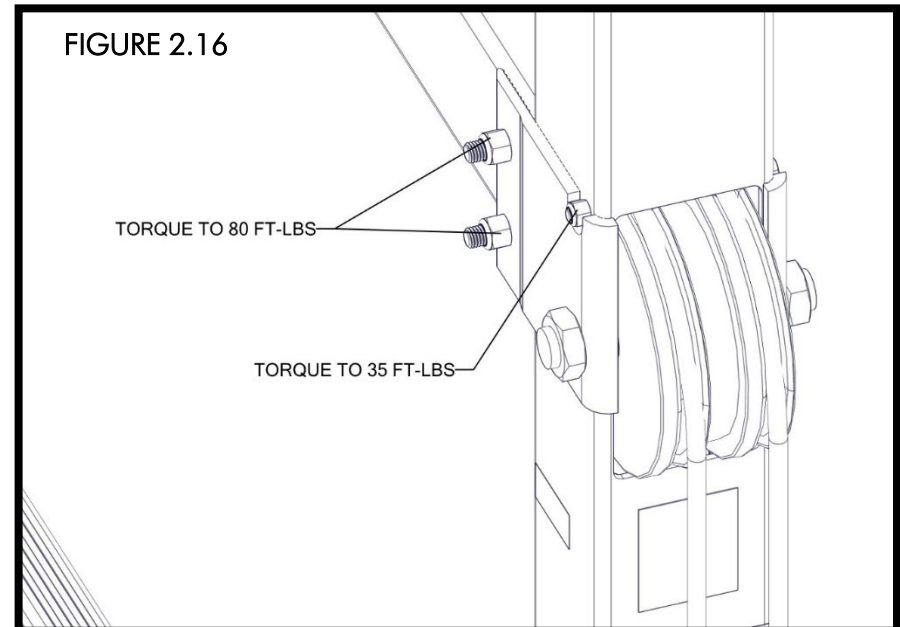
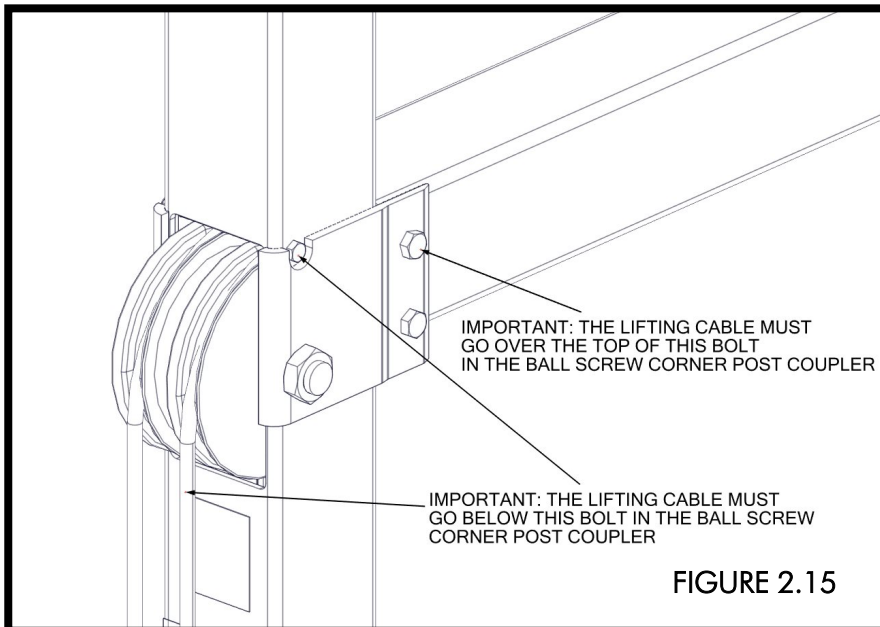
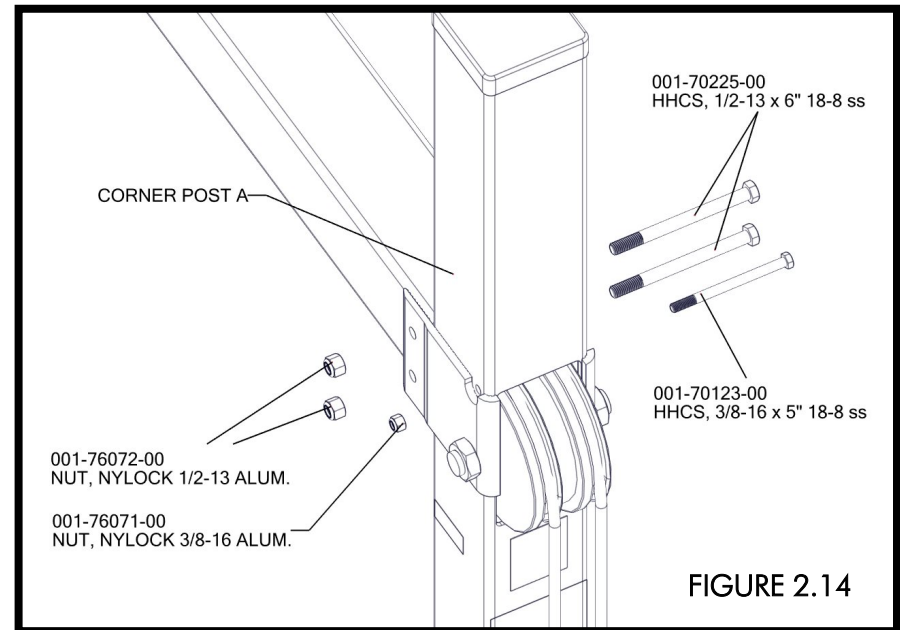
STEP 2

- IMPORTANT NOTE: HOLES IN BALL SCREW, BALL SCREW CLAMP, AND BEARING BLOCK MUST BE ALIGNED BEFORE INSERTING BOLTS.
(FIGURE 2.10)
- ATTACH BALL SCREW TO BALL SCREW CLAMP USING (2) $\frac{1}{2}$ x 6" BOLTS AND (2) $\frac{1}{2}$ NYLOCK NUTS (FIGURE 2.11).
- IMPORTANT NOTE: BOLTS MUST BE INSERTED INTO THE BALL SCREW AND BEARING BLOCK (FIGURE 2.12).
TORQUE $\frac{1}{2}$ " NUT TO 80 FT-LBS (FIGURE 2.13).



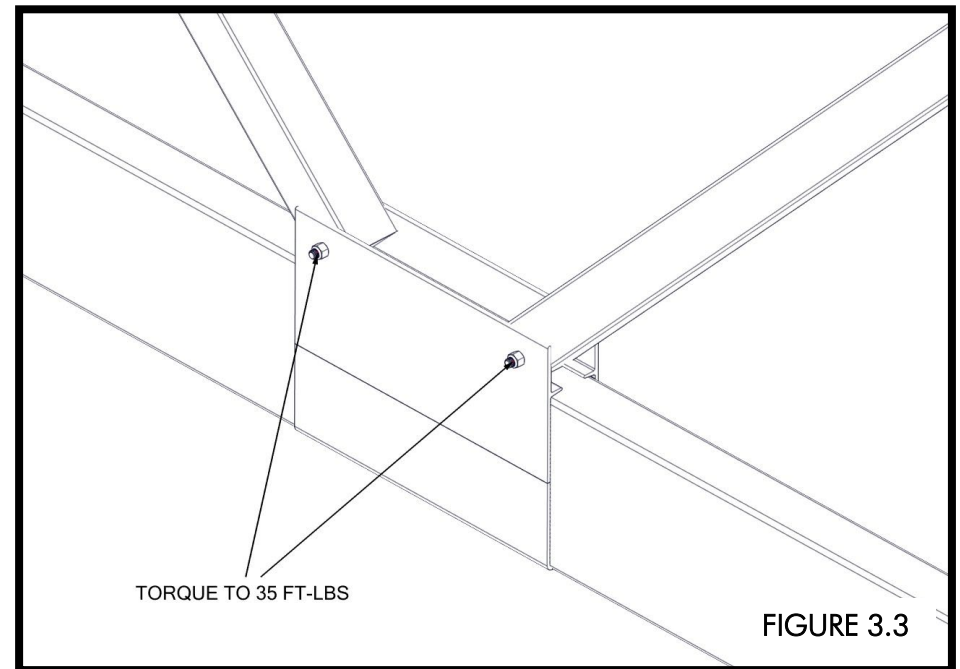
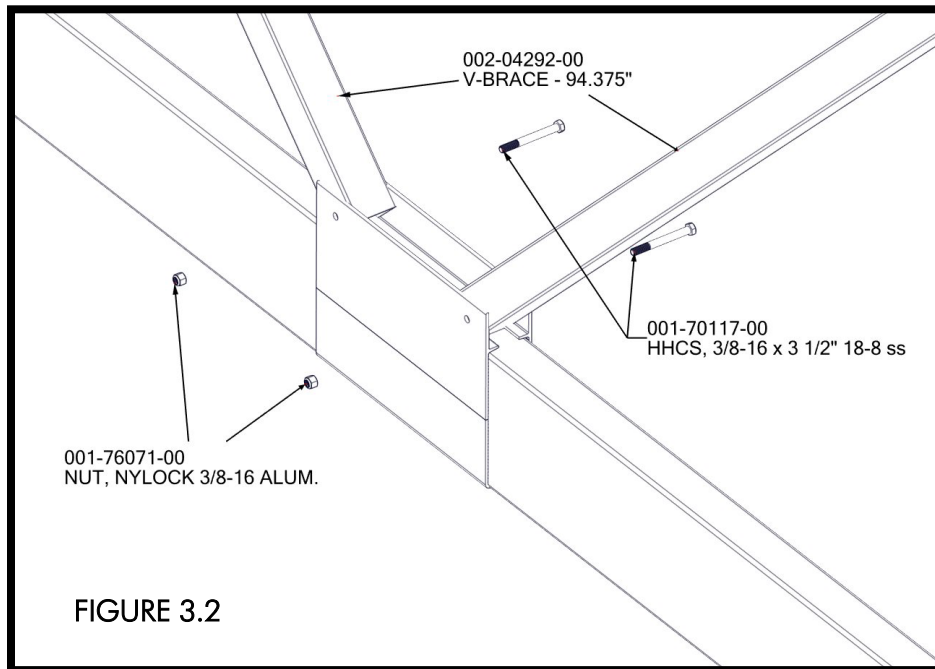
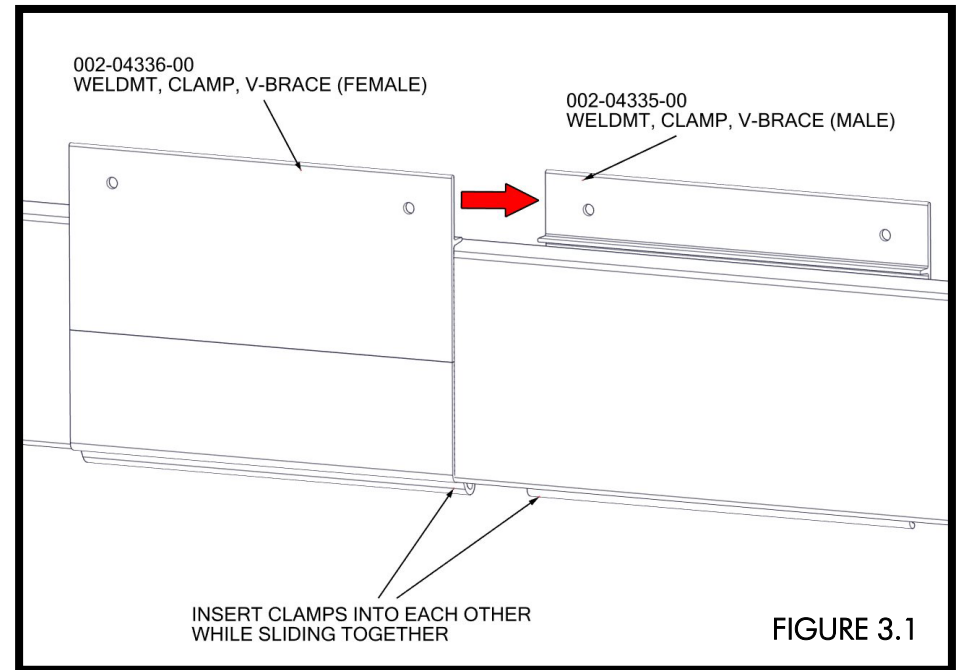
STEP 2

- ATTACH CABLE END OF BALL SCREW TUBE TO COUPLER ON CORNER POST "A" USING (2) 1/2" x 6" BOLTS AND (2) 1/2" NYLOCK NUTS. INSTALL 3/8" x 5" BOLT AND NYLOCK NUT INTO REMAINING HOLE ON COUPLER. (FIGURE 2.14).
- IMPORTANT: LIFTING CABLE MUST GO OVER UPPER 3/8" x 5" BOLT AND UNDER 3/8" x 5" BOLT IN BALL SCREW CORNER POST COUPLER (FIGURE 2.15). TORQUE 1/2" NUTS TO 80 FT-LBS AND 3/8" NUTS TO 35 FT-LBS. (FIGURE 2.16).



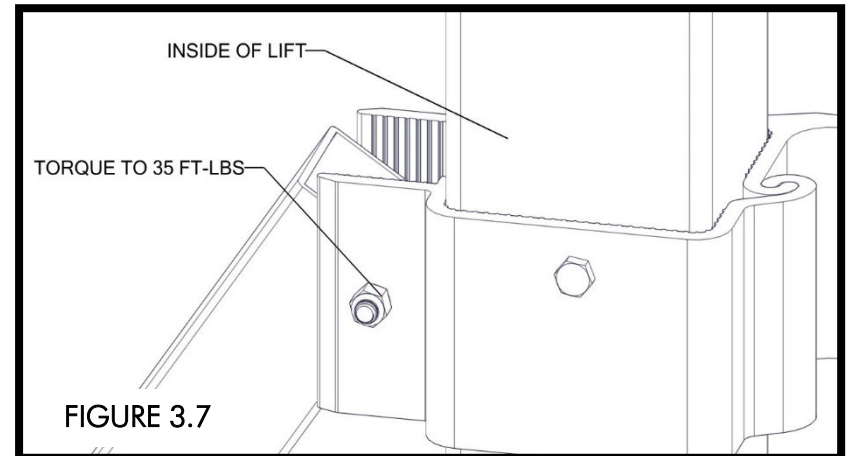
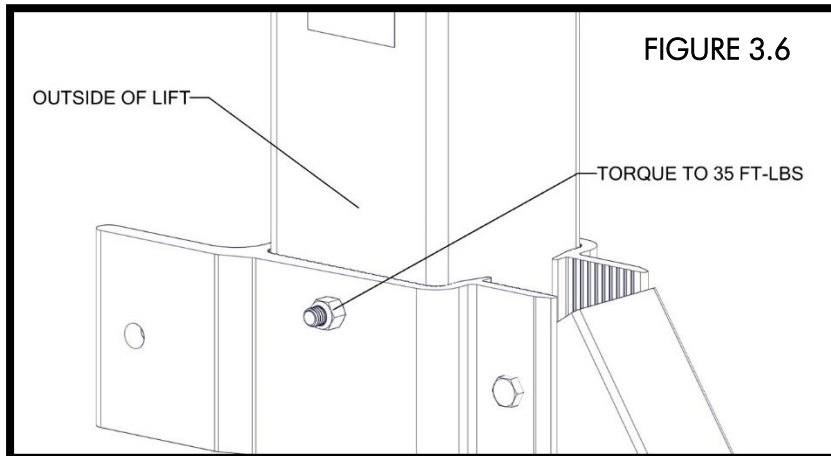
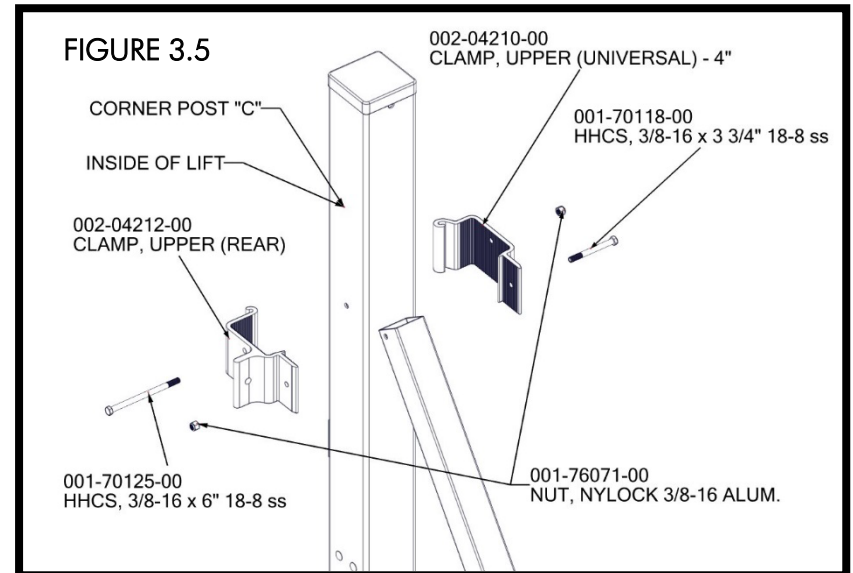
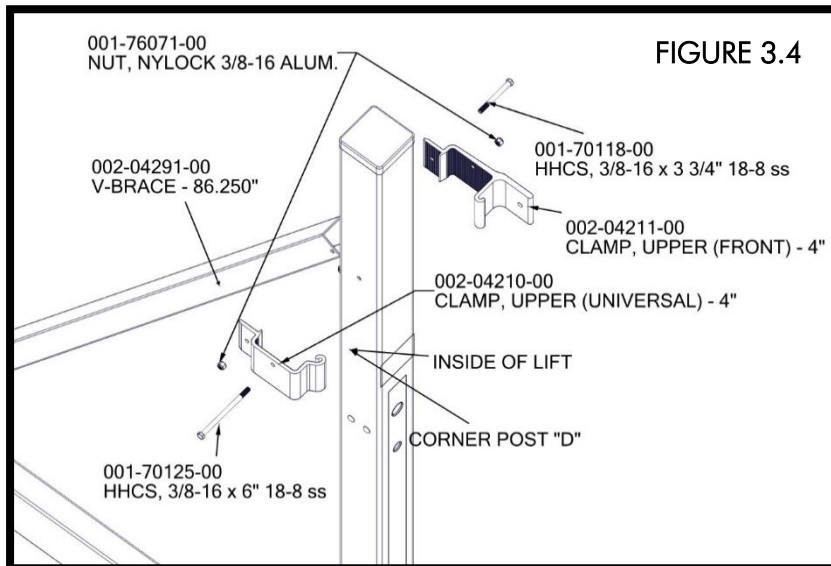
STEP 3

- SLIDE LOWER V-BRACE CLAMPS TOGETHER ON FRAME BEAM BETWEEN CORNER POSTS "C" & "D" (FIGURE 3.1)
- FASTEN CLAMPS TO V-BRACES USING (2) 3/8" x 3 1/2" BOLTS AND (2) 3/8" NYLOCK NUTS (FIGURE 3.2). TORQUE TO 35 FT-LBS (FIGURE 3.3).



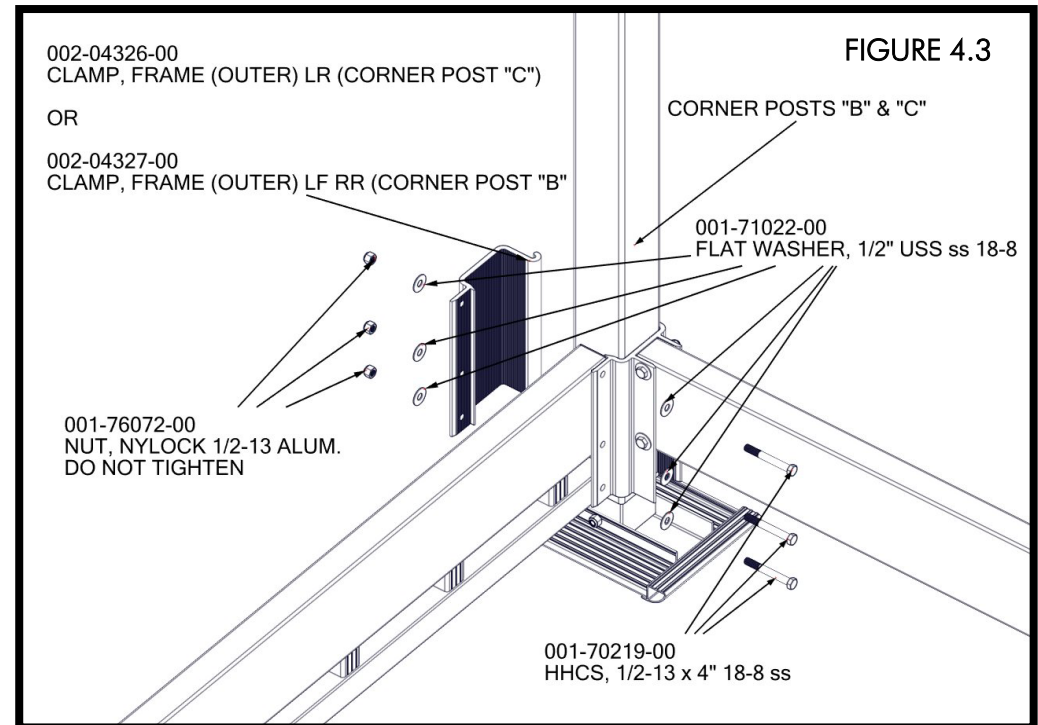
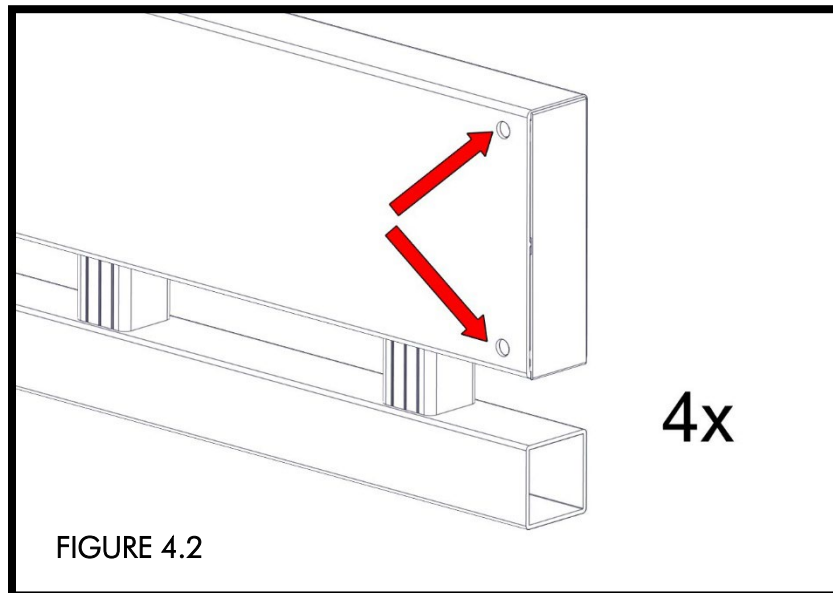
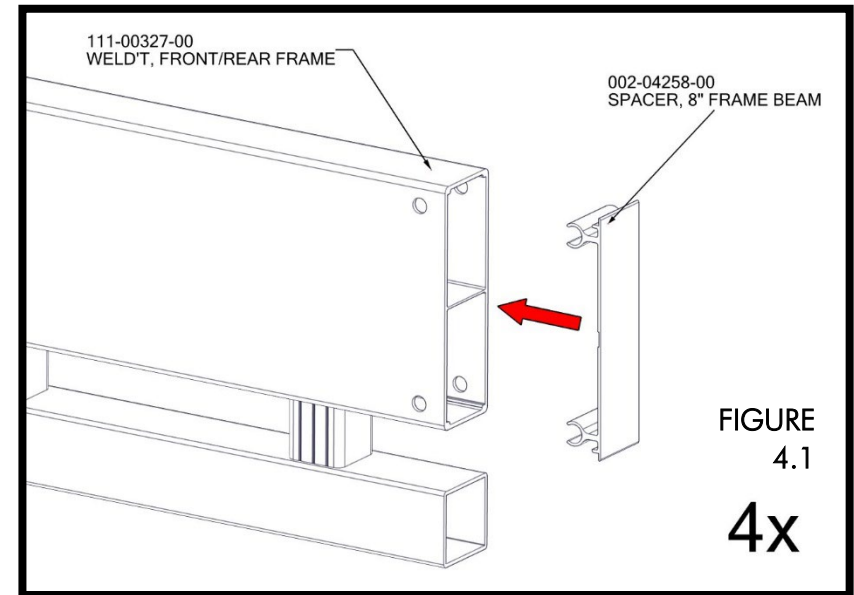
STEP 3

- ATTACH UPPER V-BRACE CLAMPS TO CORNER POSTS "C" & "D" USING (2) 3/8" x 6" BOLTS AND (2) 3/8" NYLOCK NUTS (FIGURE 3.4 & 3.5). TORQUE TO 35 FT-LBS (FIGURE 3.6).
- ATTACH V-BRACES TO UPPER V-BRACE CLAMPS USING (2) 3/8" x 3 3/4" BOLTS AND (2) 3/8" NYLOCK NUTS (FIGURE 3.4 & 3.5). TORQUE TO 35 FT-LBS (FIGURE 3.7).



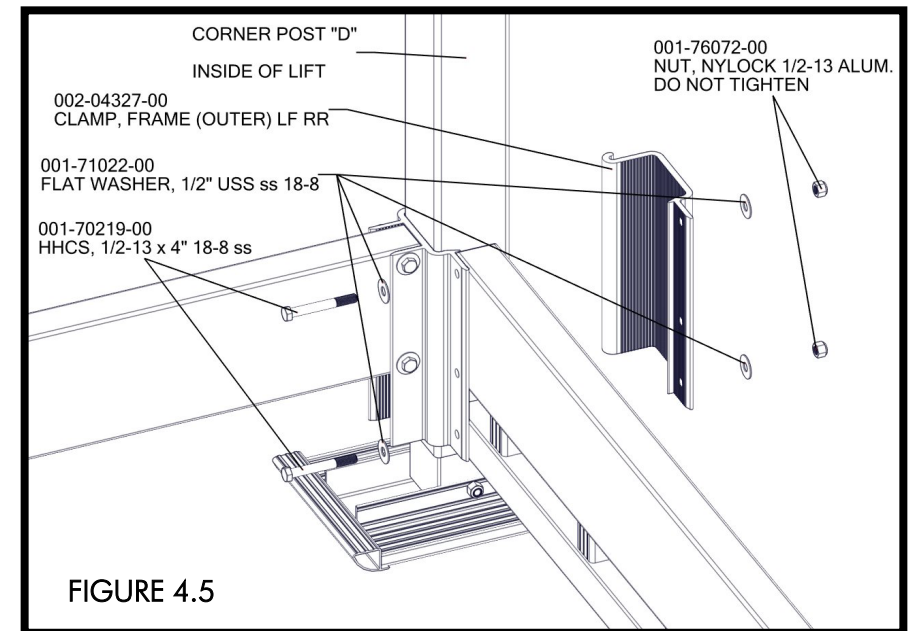
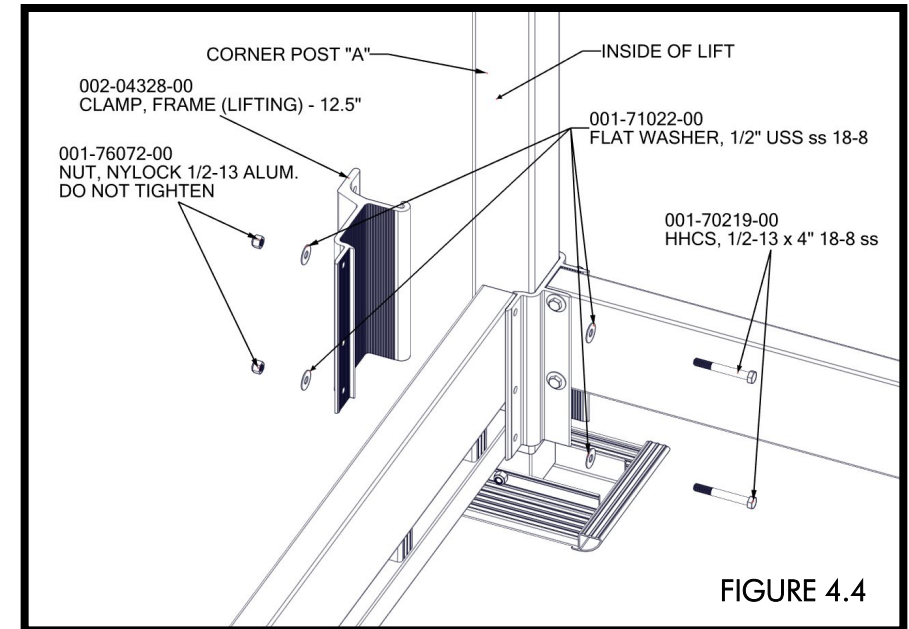
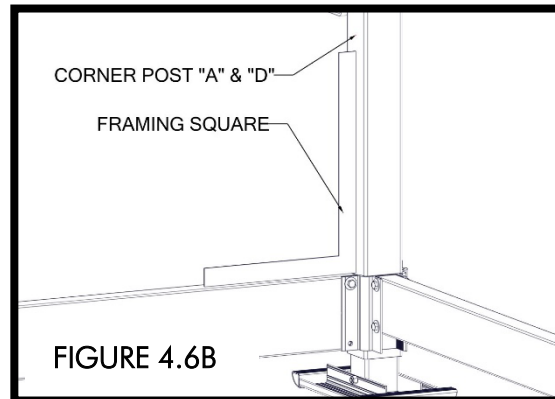
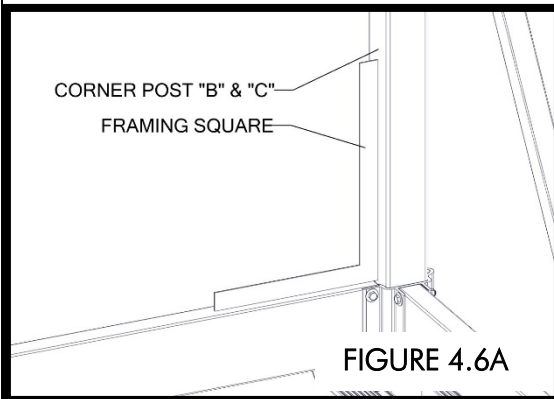
STEP 4

- INSERT FRAME BEAM SPACERS INTO ENDS OF 130" FRAME BEAMS AND ENSURE HOLES IN FRAME BEAM LINE UP WITH CLAMP. (FIGURE 4.1 & 4.2).
- ATTACH A FRAME BEAM BETWEEN CORNER POSTS "B" AND "C" USING OUTER FRAME CLAMPS AND (6) 1/2" x 4" BOLTS, (12) 1/2" FLAT WASHERS, AND (6) 1/2" NYLOCK NUTS (FIGURE 4.3). DO NOT TIGHTEN.



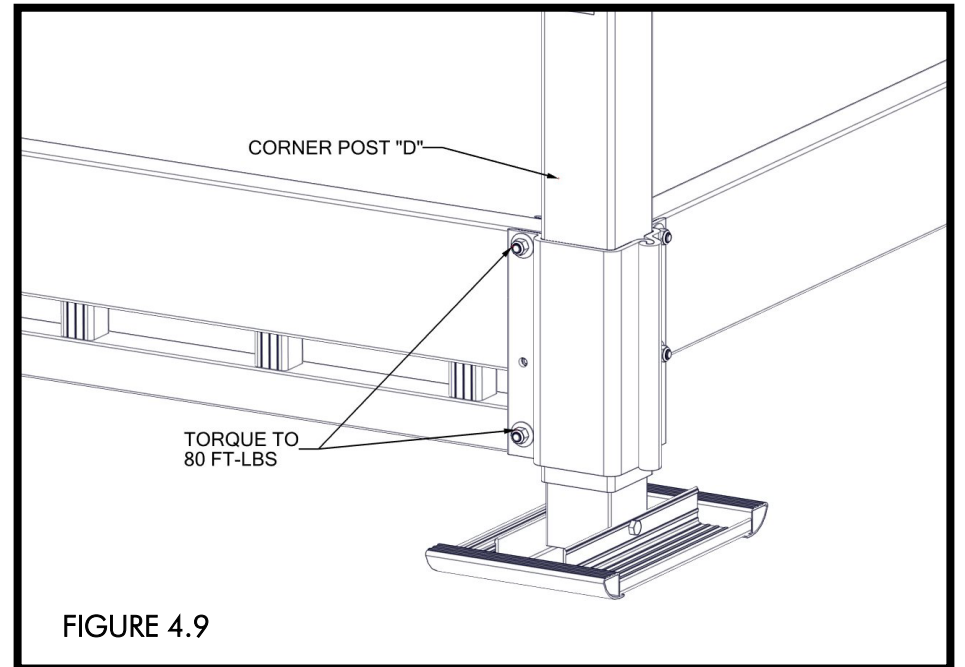
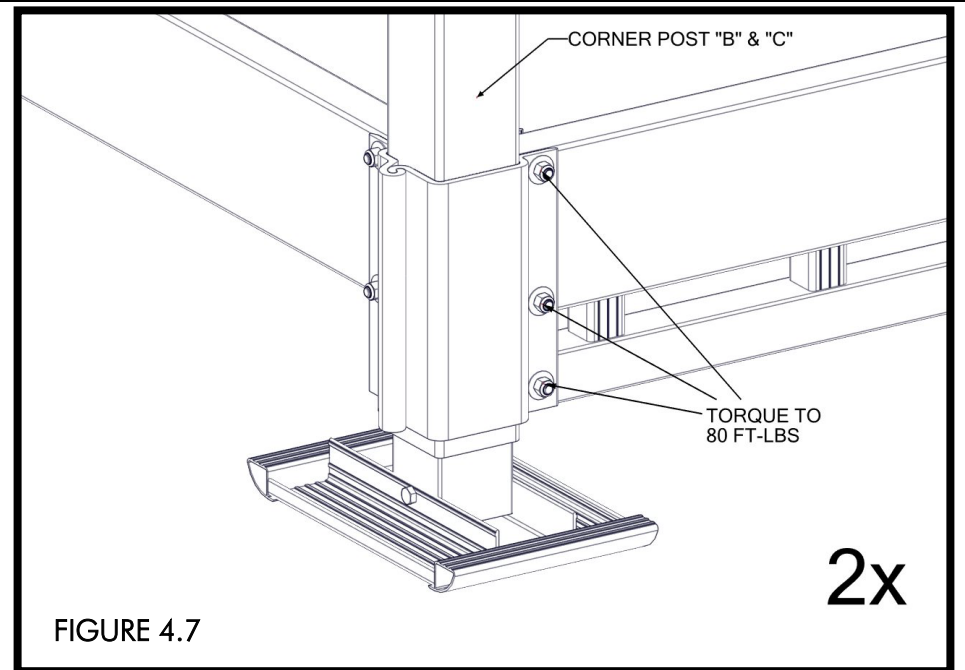
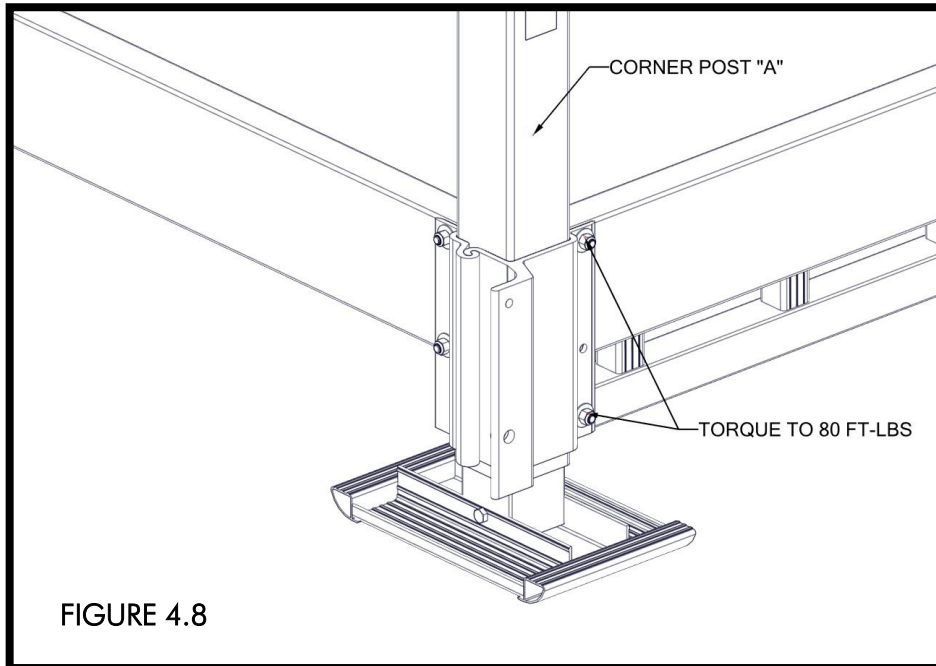
STEP 4

- ATTACH A FRAME BEAM BETWEEN CORNER POSTS "A" AND "D" USING (4) 1/2" x 4" BOLTS, (8) 1/2" FLAT WASHERS, AND (4) 1/2" NYLOCK NUTS (FIGURE 4.4 & 4.5). DO NOT TIGHTEN.
- NOTE THAT BOLTS FOR MIDDLE HOLES IN CORNERS A & D WILL BE INSTALLED IN STEP 6.
- USE A FRAMING SQUARE TO ENSURE THAT THE LIFT FRAME IS SQUARE BEFORE PROCEEDING TO THE NEXT STEP. (FIGURE 4.6A & 4.6B).



STEP 4

- ONCE LIFT IS SQUARE, TORQUE ALL NUTS TO 80 FT-LBS. (FIGURE 4.7, 4.8, & 4.9)



STEP 5

- PLACE THE LEFT & RIGHT SIDE CRADLE BEAMS ON TOP OF THE FRAME BEAMS. THE END WITH THE CABLE COMING THROUGH THE TOP OF THE SIDE CRADLE BEAM IS PLACED BY CORNER POSTS "B" AND "C"

THE END WITH THE CABLE COMING THROUGH THE BOTTOM OF THE SIDE CRADLE BEAM IS PLACES BY CORNER POSTS "A" AND "D" (FIGURE 5.1).

- NOTE: A 1/4" GAP MUST BE MAINTAINED BETWEEN UHMW WEAR STRIP AND CORNER POST (FIGURE 5.2).

FIGURE 5.1

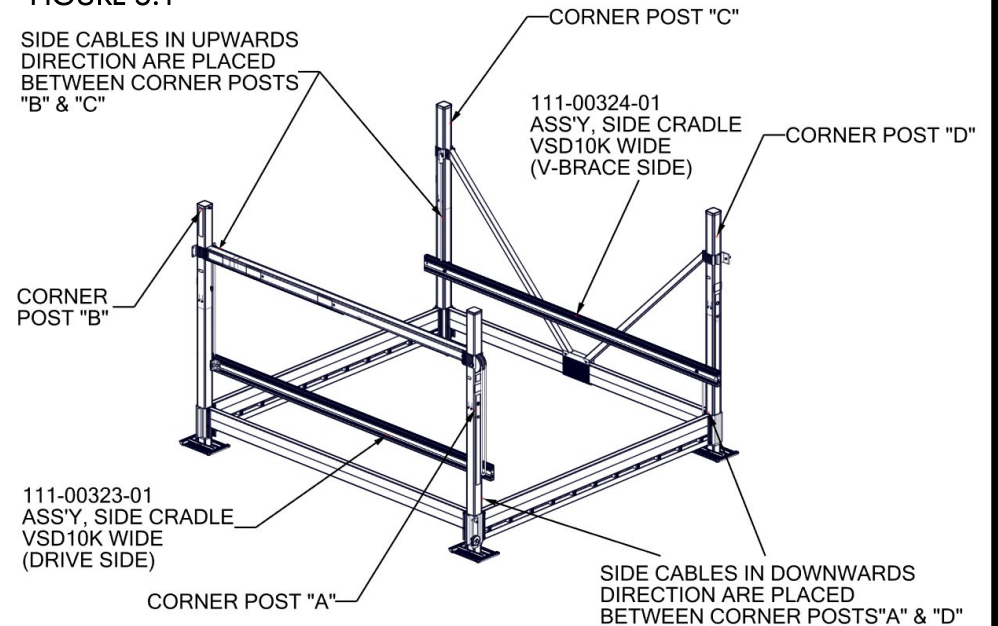
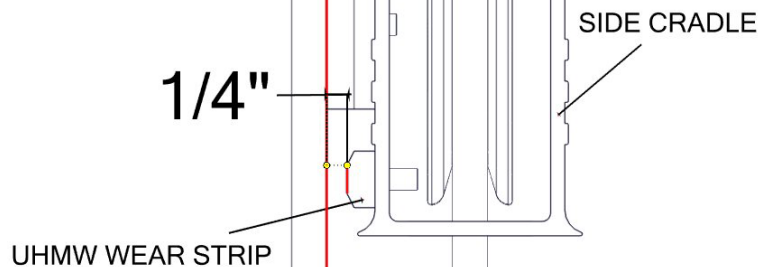


FIGURE 5.2

CORNER POST
"A", "B", "C", "D"



STEP 5

- ATTACH LIFTING CABLE CLEVIS TO THE CRADLE LIFT CLAMP USING A 3/4"-16 x 2" BOLT (FINE THREAD). MAKE SURE THE BOLT IS SEATED IN THE SLOT OF THE CLAMP WHEN TIGHTENING THE CABLE CLEVIS. DO NOT TIGHTEN THE CLEVIS COMPLETELY AT THIS POINT. (FIGURE 5.3).
- INSTALL A 1/2" x 2" BOLT THROUGH THE OTHER HOLE IN LIFTING CLAMP WITH A 1/2" NYLOCK IN THE SLOT ON THE INSIDE OF THE CLAMP. DO NOT TIGHTEN (FIGURE 5.4).
- INSTALL A 1/2" x 2" BOLT THROUGH THE HOLE IN EACH CRADLE CLAMP WITH A 1/2" NYLOCK NUTS IN THE SLOT ON THE INSIDE OF THE CLAMP. DO NOT TIGHTEN (FIGURE 5.5).

FIGURE 5.3

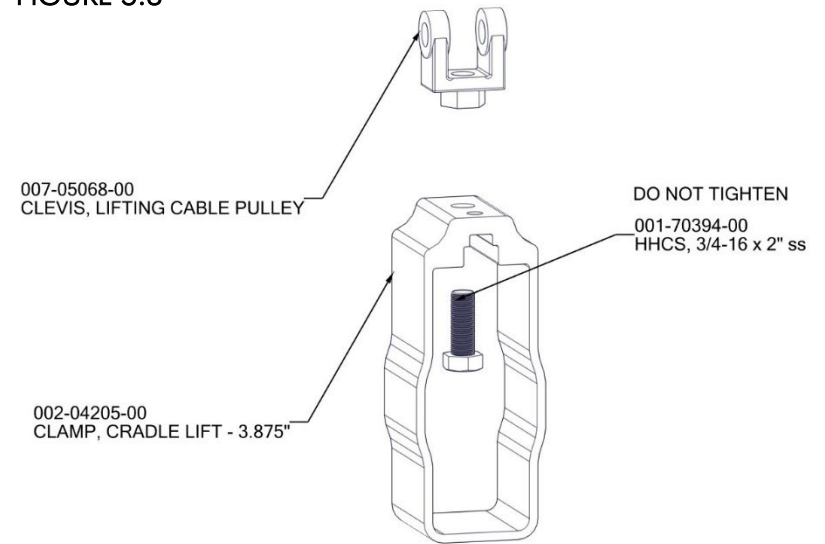


FIGURE 5.4

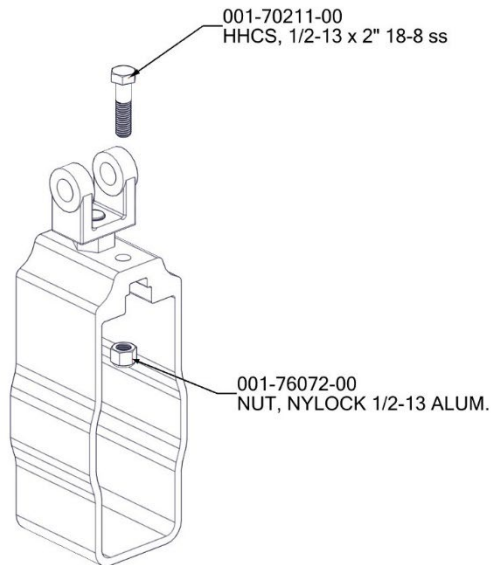
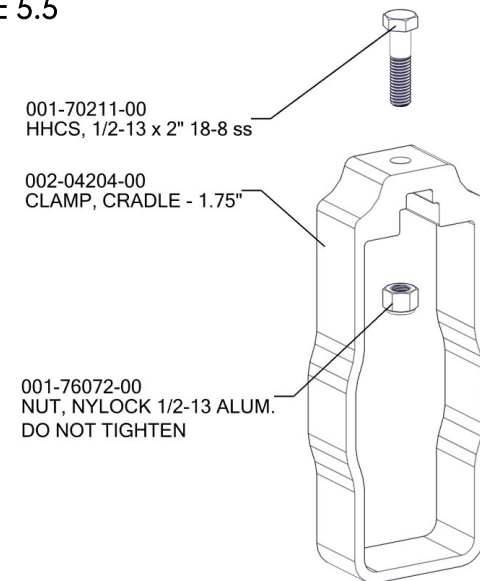


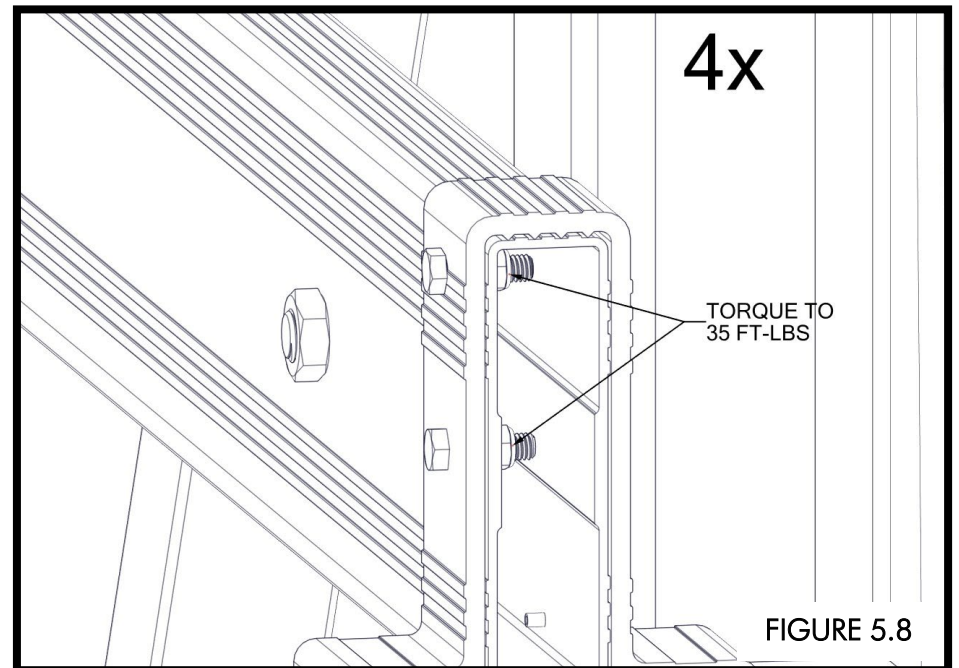
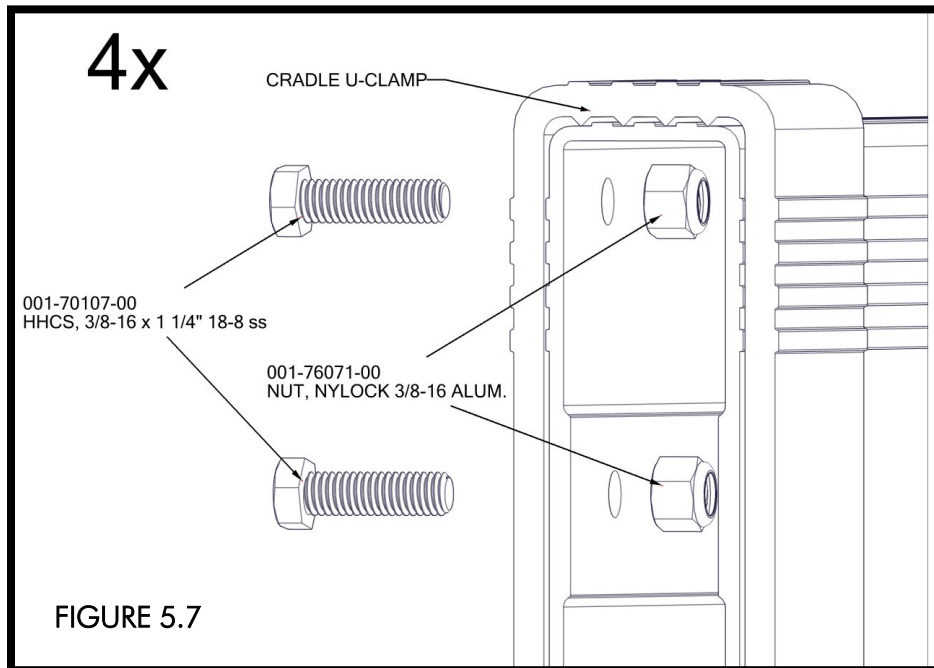
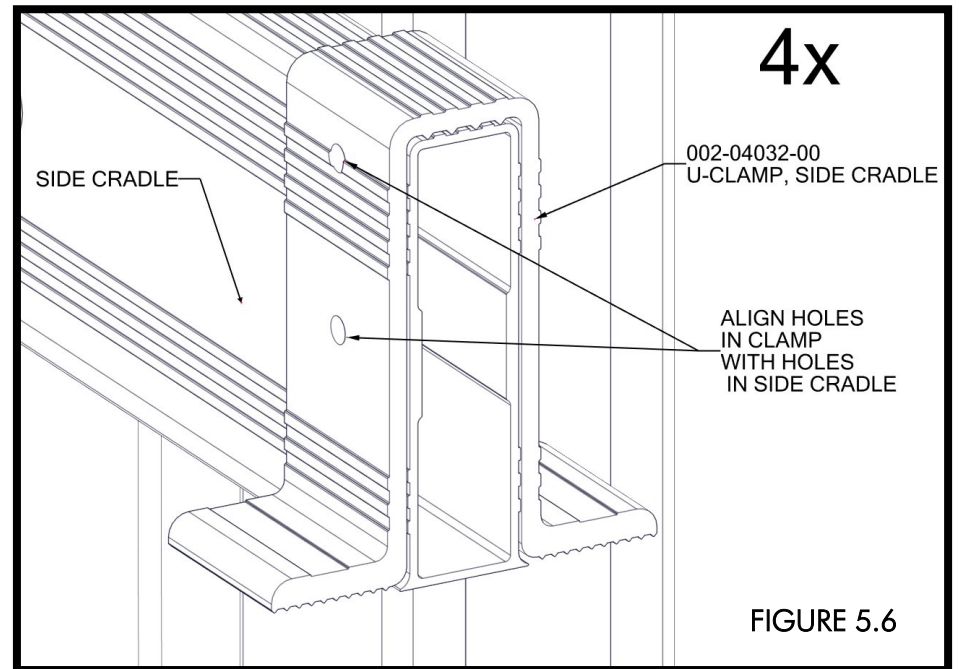
FIGURE 5.5



7x

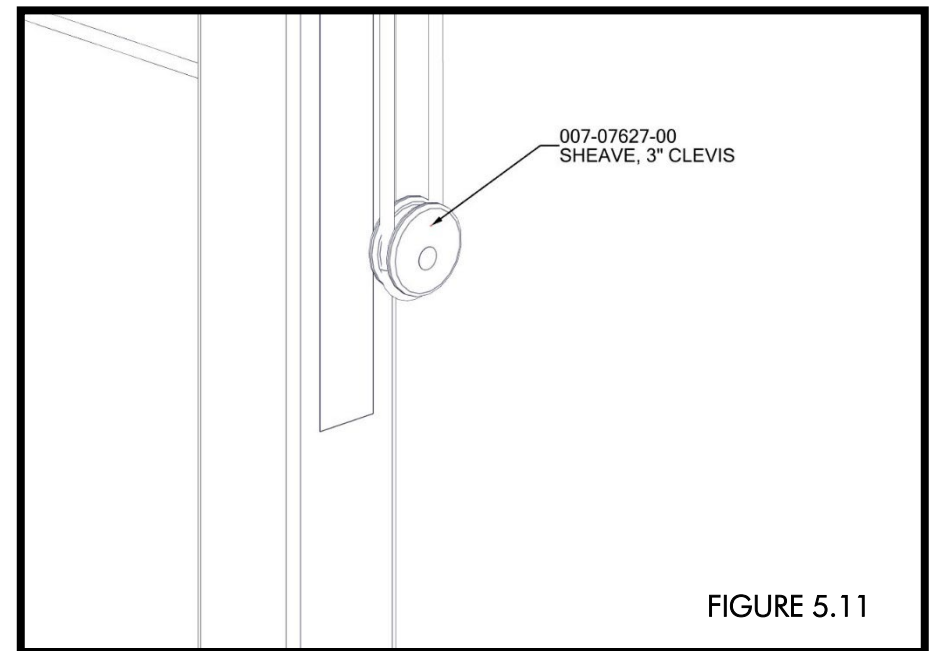
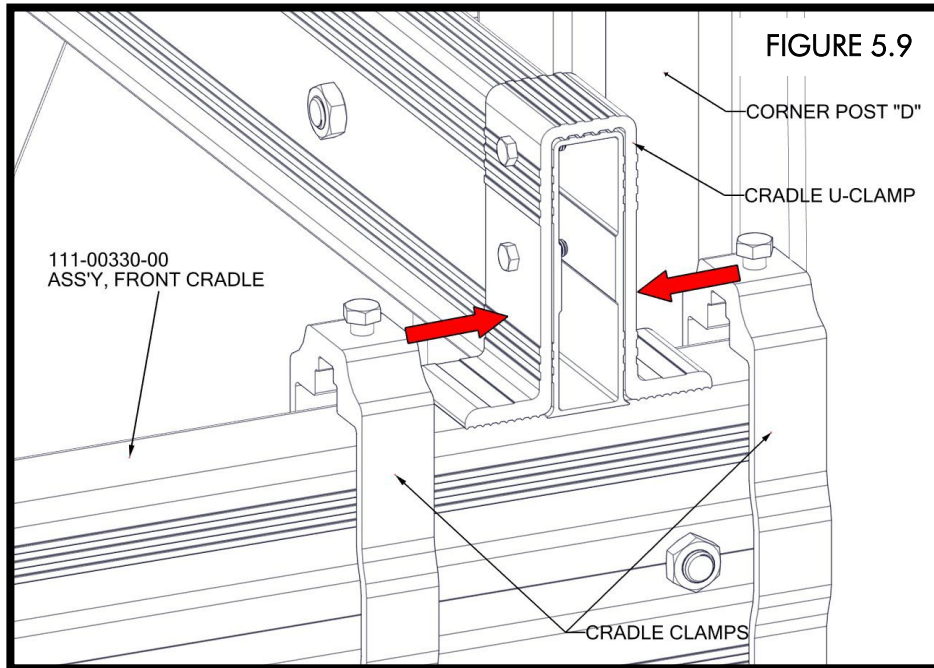
STEP 5

- PLACE A CRADLE U-CLAMP ON BOTH CORNERS OF EACH SIDE CRADLE BEAM AND ALIGN THE HOLES ON THE INSIDE OF THE SIDE CRADLE BEAMS (FIGURE 5.6).
- ATTACH CRADLE U-CLAMPS USING (2) 3/8" x 1 1/4" BOLTS AND (2) NYLOCK NUTS (FIGURE 5.7).
- TORQUE TO 35 FT-LBS (FIGURE 5.8).



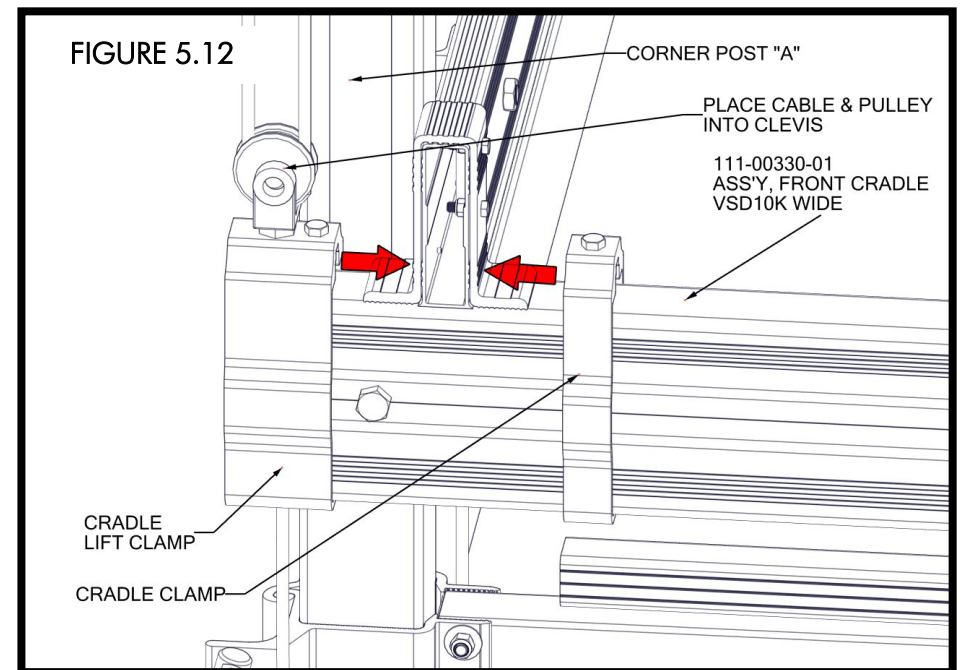
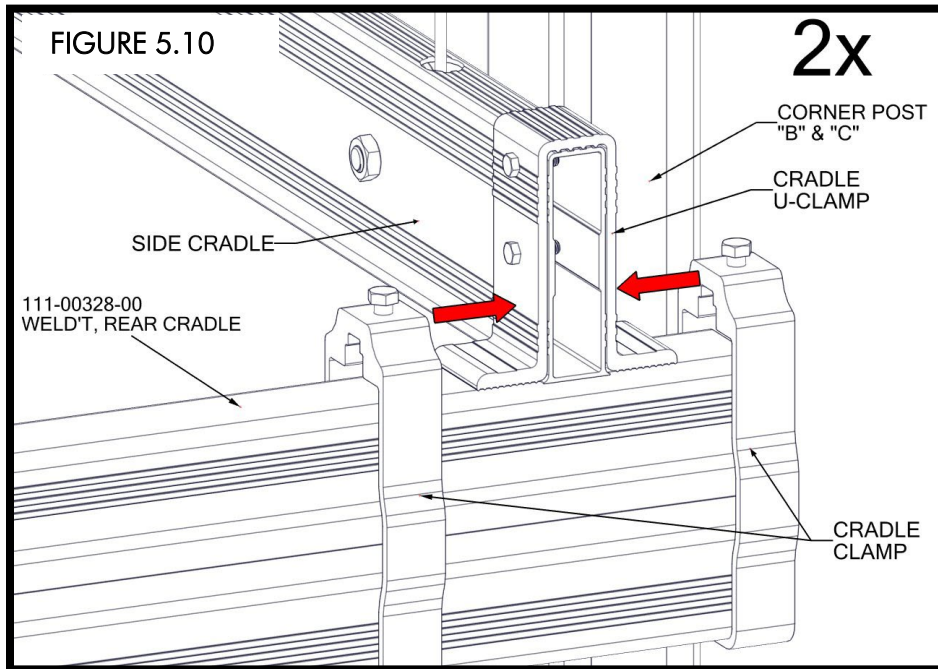
STEP 5

- ATTACH FRONT AND REAR CRADLE BEAMS TO SIDE CRADLE BEAMS USING PRE-ASSEMBLED CRADLE CLAMPS (FIGURE 5.9, 5.10, & 5.12).
- PLACE THE LIFTING CABLE INTO THE 3" SHEAVE (FIGURE 5.11).



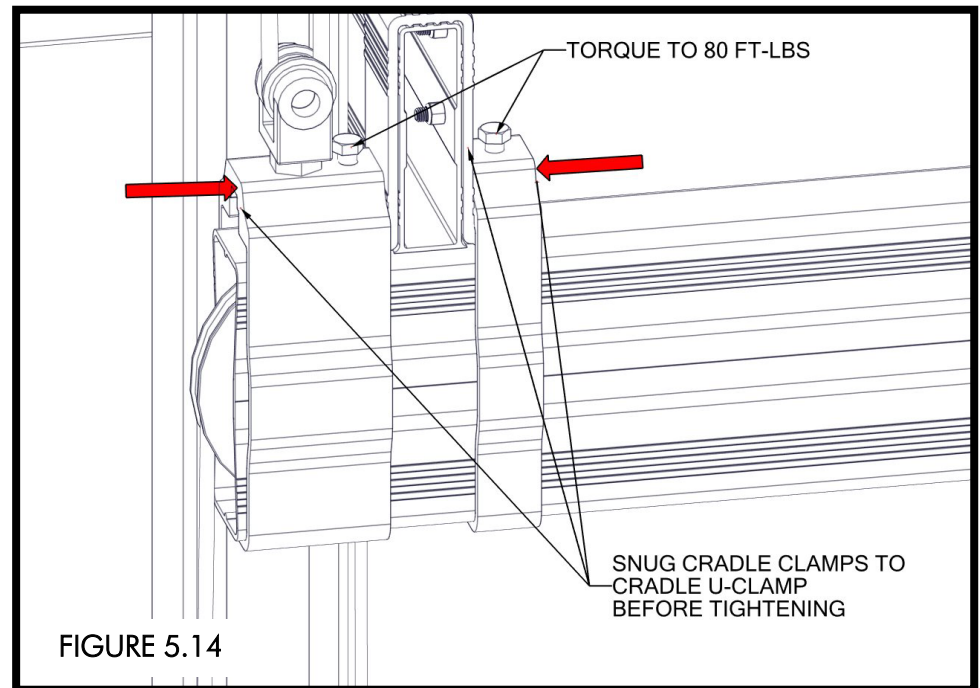
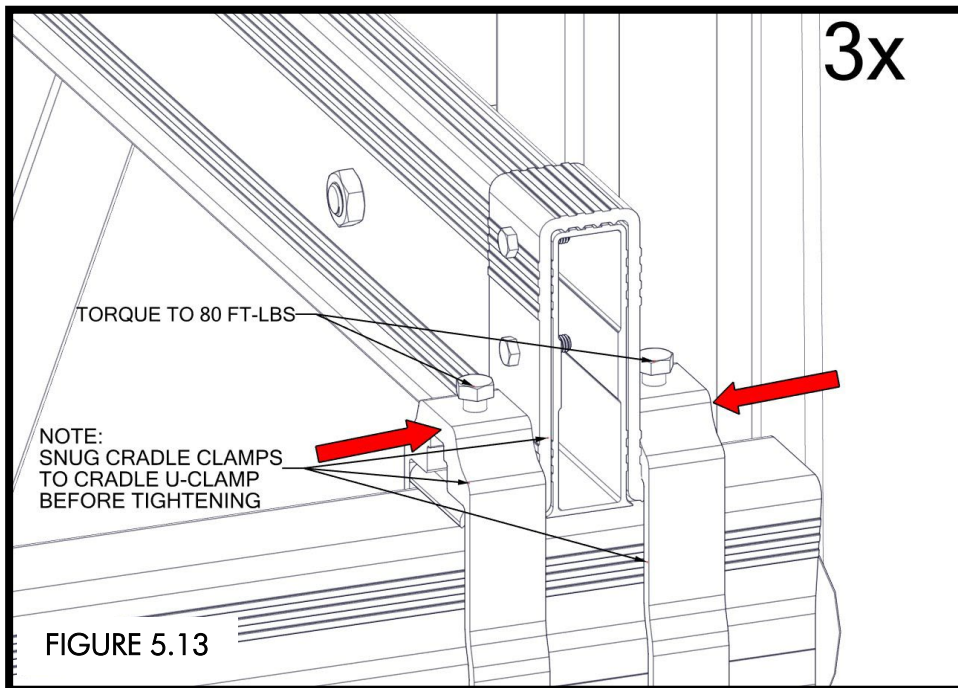
STEP 5

- ATTACH FRONT AND REAR CRADLE BEAMS TO SIDE CRADLE BEAMS USING PRE-ASSEMBLED CRADLE CLAMPS (FIGURE 5.9, 5.10, & 5.12).



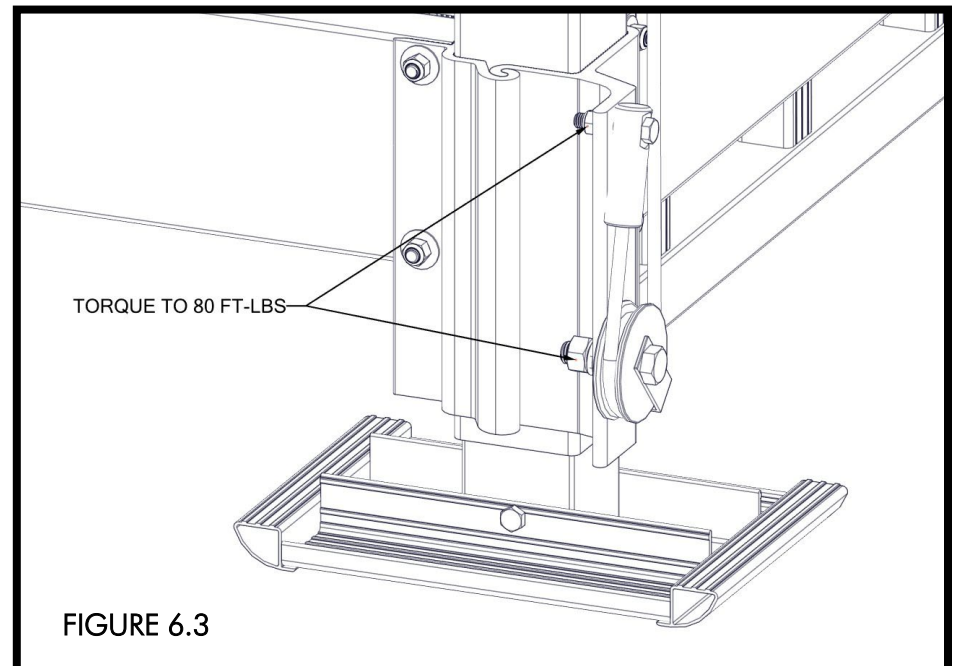
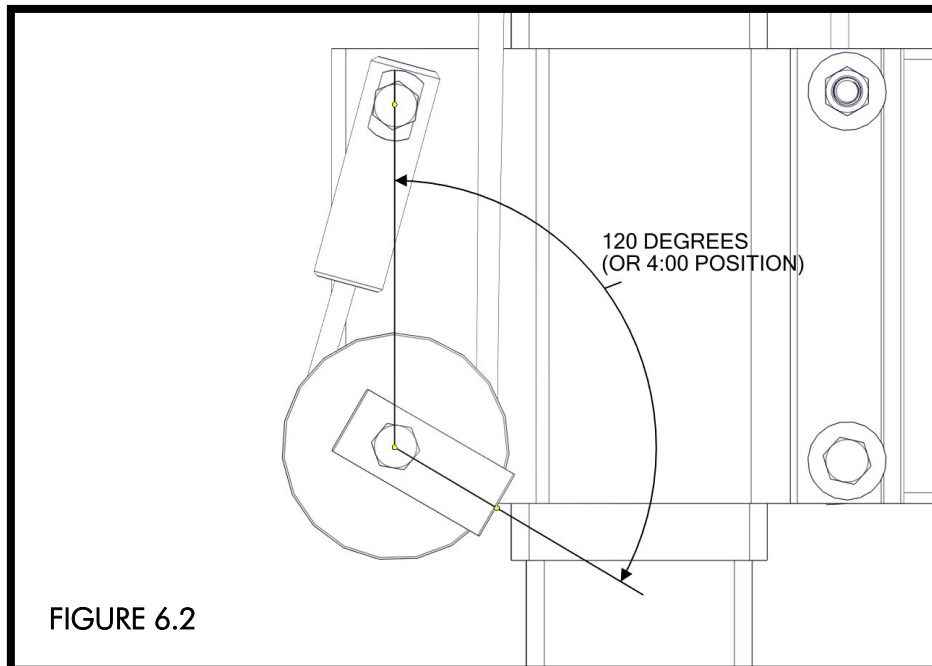
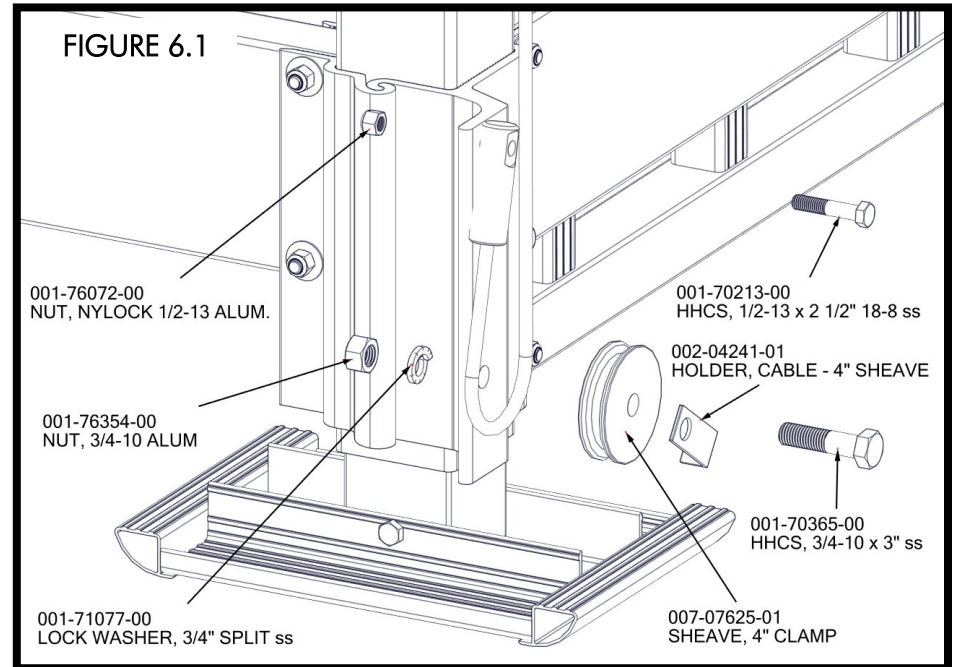
STEP 5

- USING A PAIR OF C-CLAMP PLIERS (MIN. 8" OPENING), SNUG CRADLE CLAMPS TO CRADLE U-CLAMPS BEFORE TIGHTENING $\frac{1}{2}$ " x 2" BOLTS.
CONFIRM $\frac{1}{4}$ " GAP BETWEEN SIDE CRADLE BEAMS AND CORNER POST (FIGURE 5.2)
- TORQUE TO 80 FT-LBS (FIGURE 5.13 & 5.14).



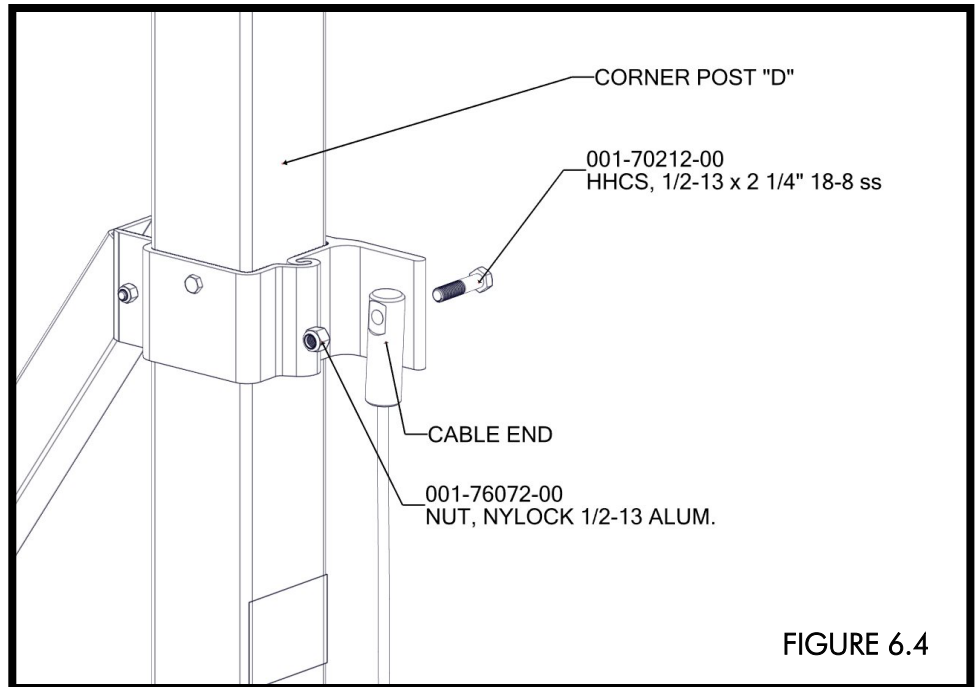
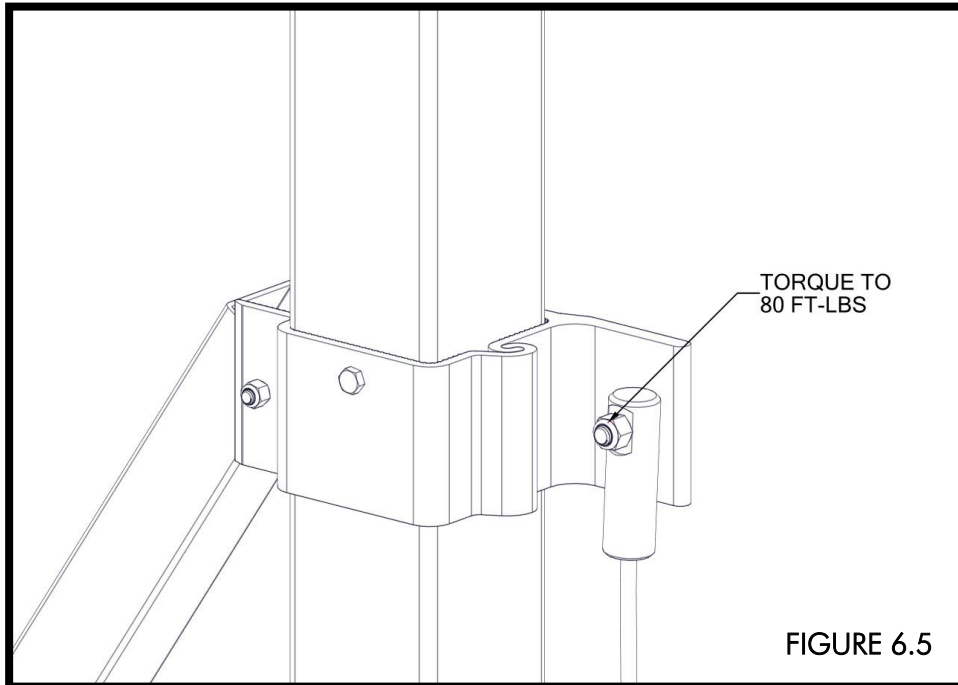
STEP 6

- WRAP FRONT LIFTING CABLE AROUND SHEAVE AND ATTACH TO LIFTING CLAMP ON CORNER POST "A" WITH A $\frac{3}{4}$ " x 3" BOLT, $\frac{3}{4}$ " LOCK WASHER AND $\frac{3}{4}$ " NUT. ATTACH CABLE END TO LOWER CLAMP WITH $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " BOLT AND $\frac{1}{2}$ " NYLOCK NUT (FIGURE 6.1).
- CABLE HOLDER IS PLACED AT APPROXIMATELY 120 DEGREES FROM VERTICAL CLOCKWISE (OR AT A 4:00 POSITION) (FIGURE 6.2).
- TORQUE TO 80 FT-LBS (FIGURE 6.3).



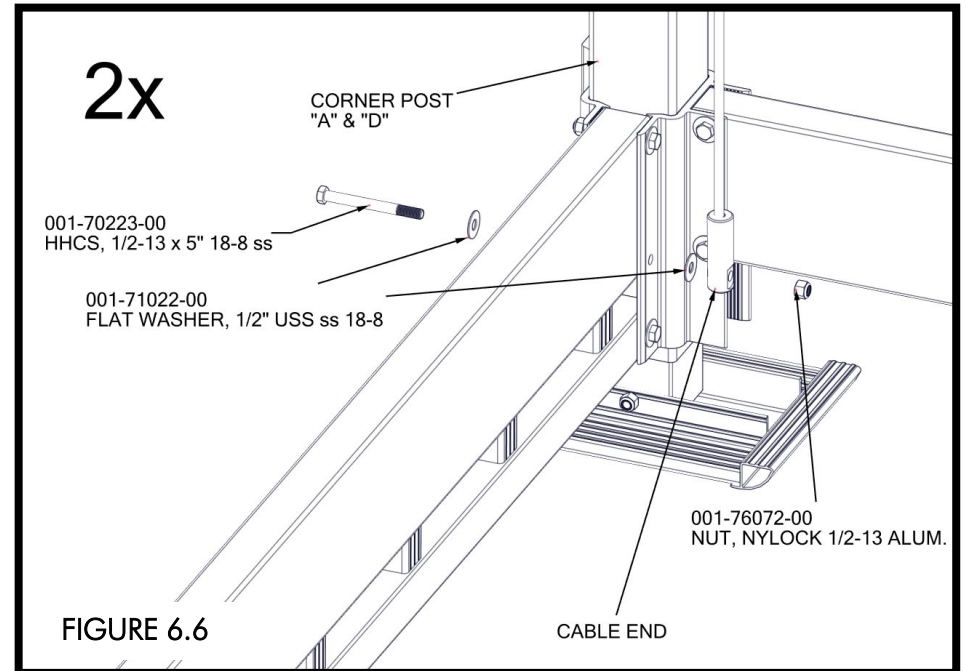
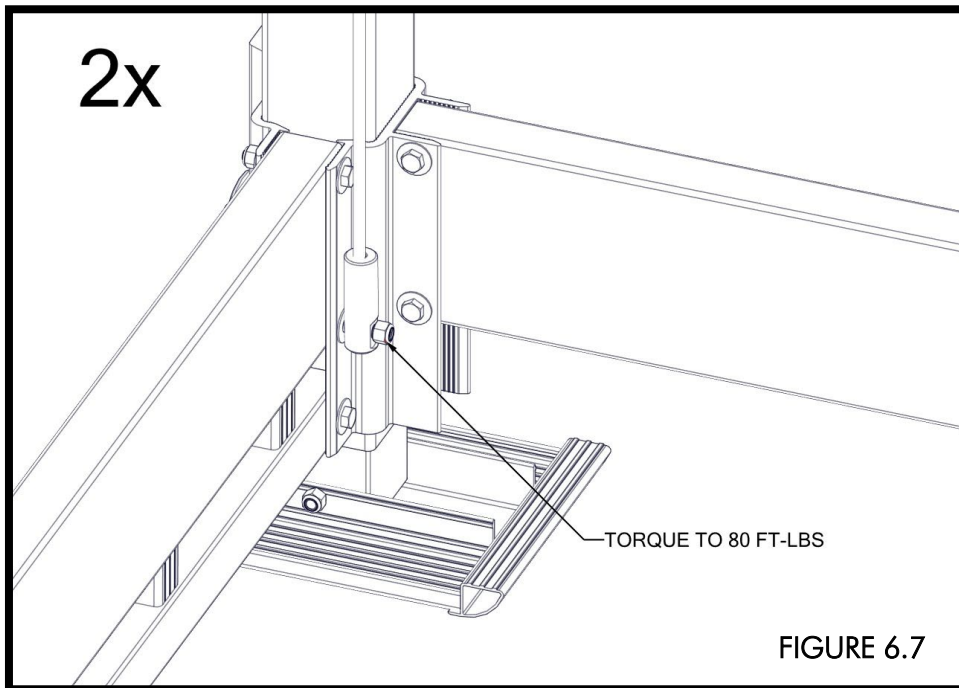
STEP 6

- WHILE LIFTING OPPOSITE END OF FRONT CRADLE BEAM, ATTACH OTHER END OF CABLE TO UPPER V-BRACE CLAMP ON CORNER POST "D" WITH A $\frac{1}{2}$ " x 2 $\frac{1}{4}$ " BOLT AND $\frac{1}{2}$ " NYLOCK NUT (FIGURE 6.4).
- TORQUE TO 80 FT-LBS (FIGURE 6.5).



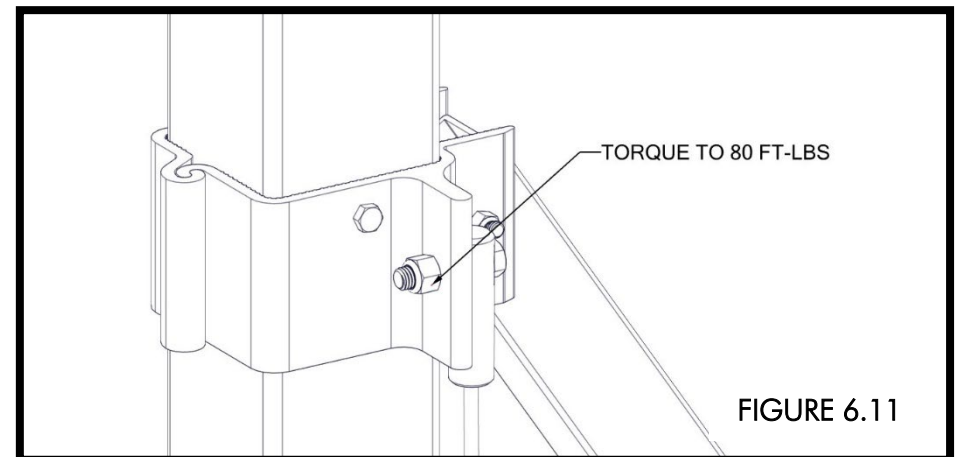
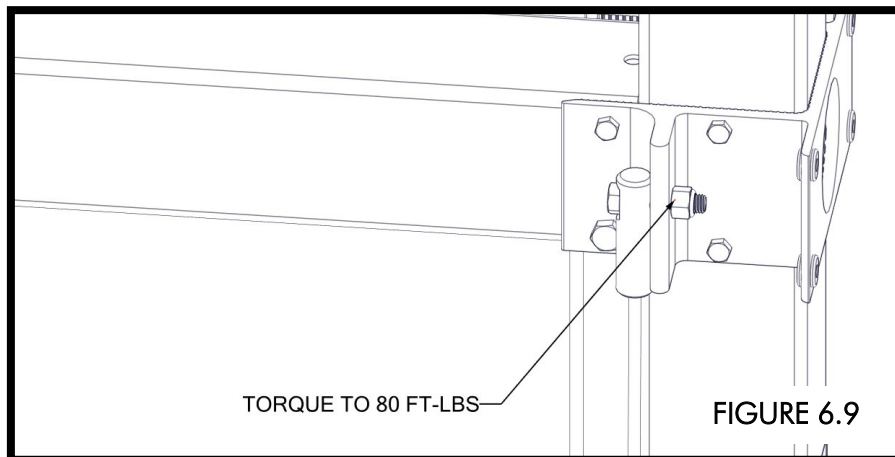
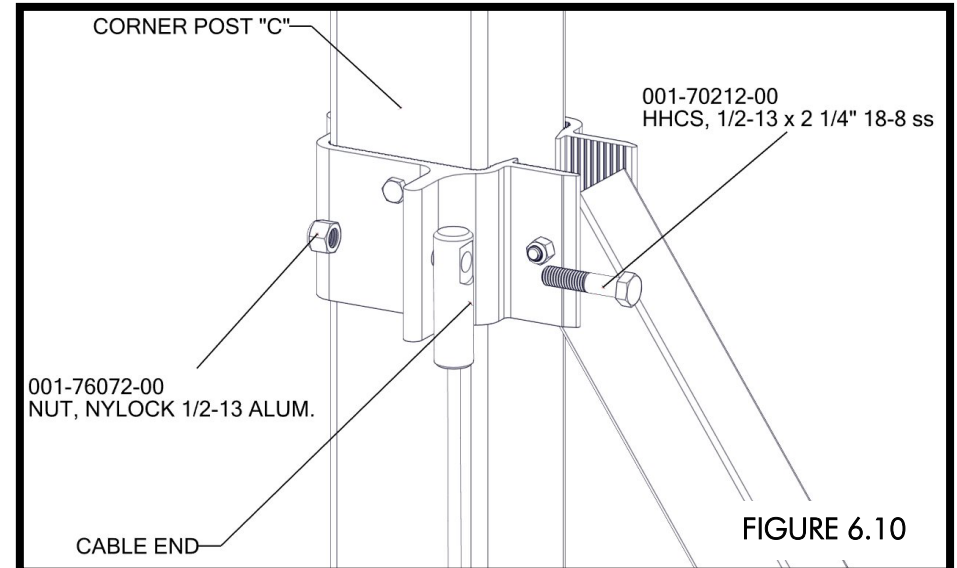
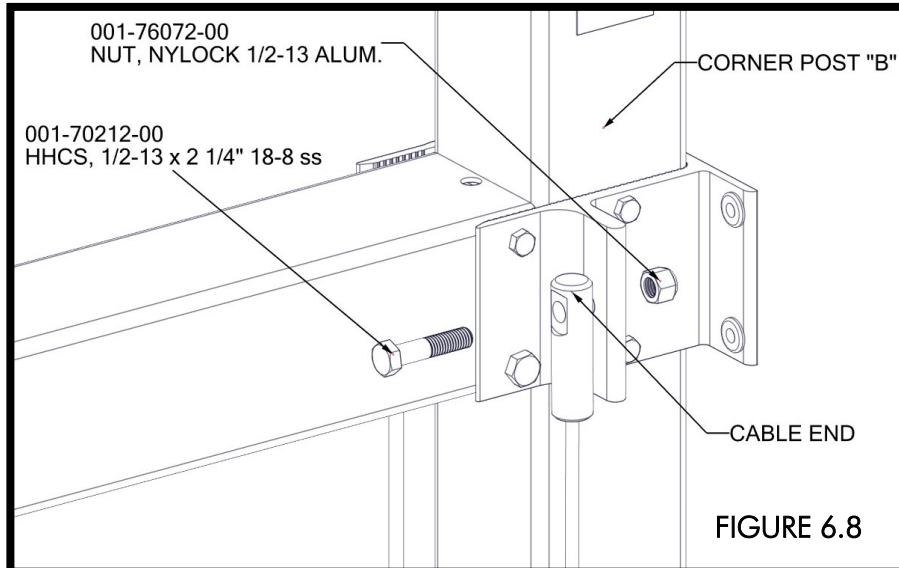
STEP 6

- ATTACH SIDE LEVELING CABLES TO MIDDLE HOLES ON LOWER FRAME CLAMPS ON CORNERS "A" & "D" BY USING A 1/2" x 5" BOLT, (2) 1/2" FLAT WASHERS, AND A 1/2" NYLOCK NUT (FIGURE 6.6).
- TORQUE TO 80 FT-LBS (FIGURE 6.7).



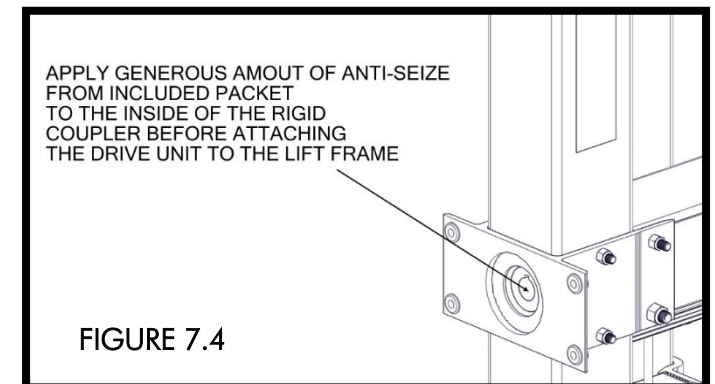
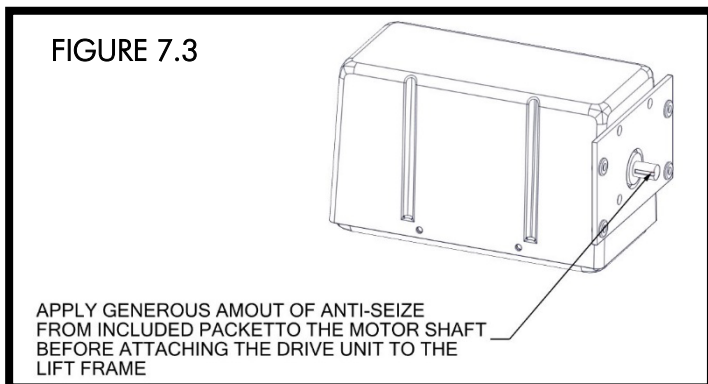
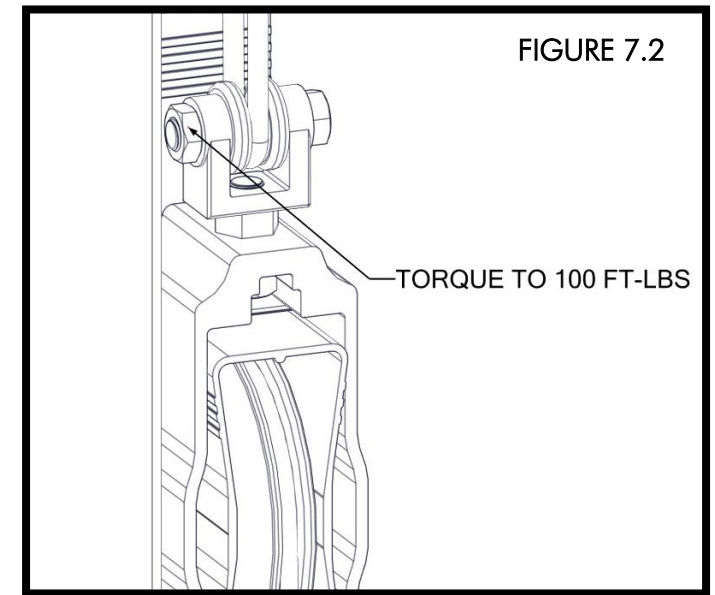
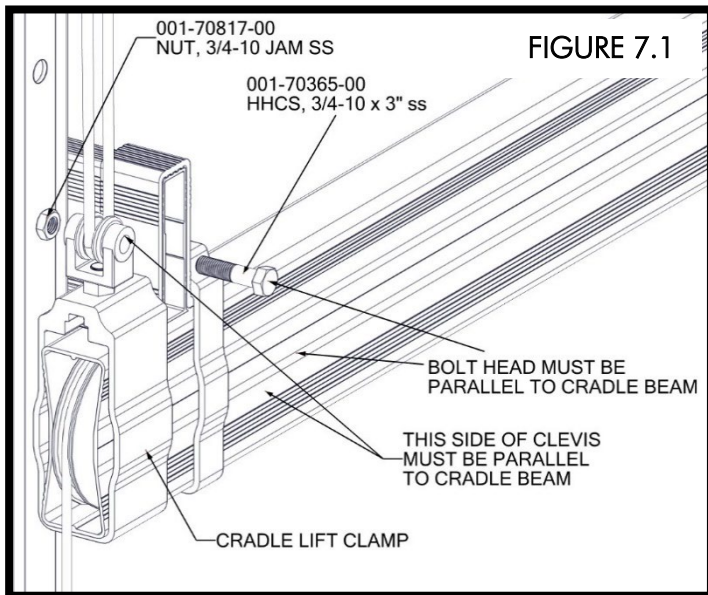
STEP 6

- THE SIDE LEVELING CABLE END PLACED AT CORNER POSTS "B" & "C" ARE ATTACHED WITH A 1/2" x 2 1/4" BOLT AND 1/2" NUT (FIGURE 6.8 & 6.10).
- TORQUE TO 80 FT-LBS (FIGURE 6.9 & 6.11)



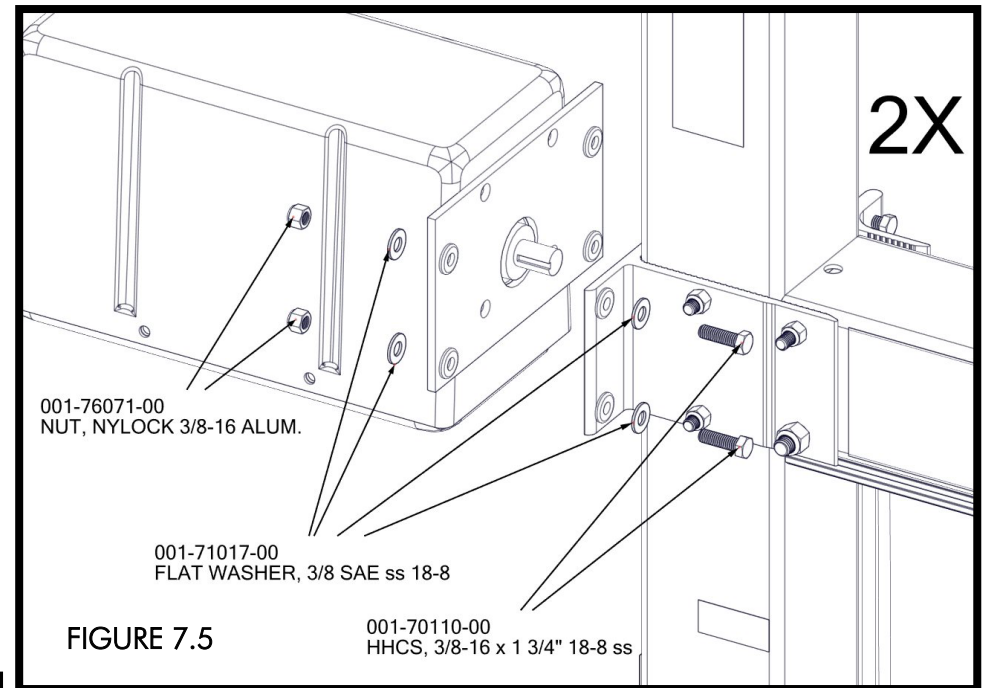
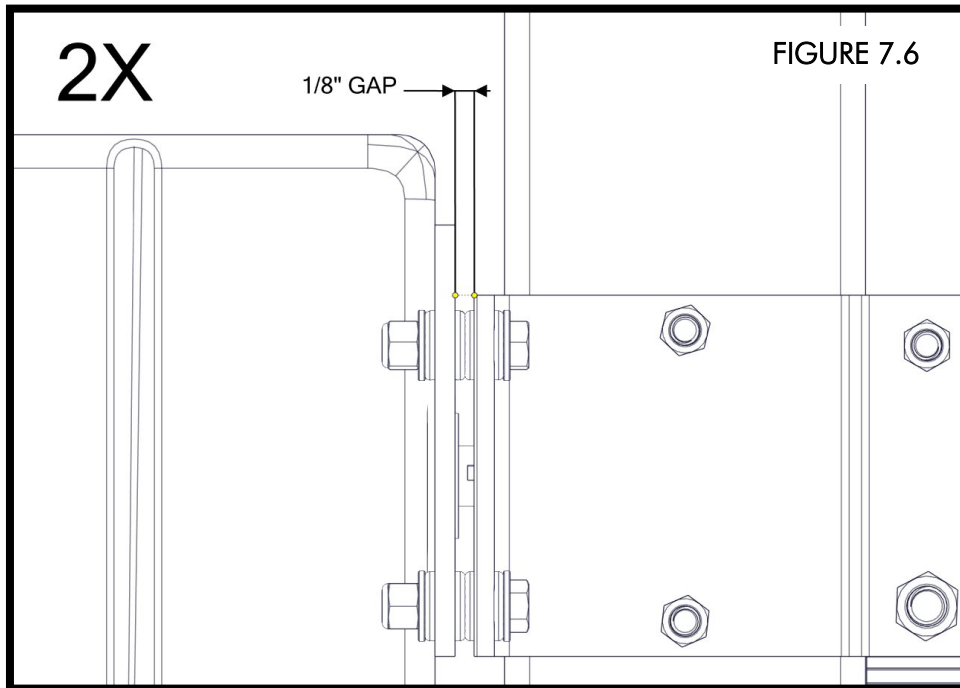
STEP 7

- FINISH TIGHTENING LIFT CLEVIS. THE SIDE OF THE CLEVIS SHOWN BELOW IN FIGURE 7.1 MUST BE PARALLEL TO THE FRONT CRADLE BEAM. IF NOT, REMOVE CLEVIS AND ROTATE BOLT IN SLOT UNTIL CLEVIS IS PARALLEL WHEN TIGHT. MAKE SURE THERE ARE NO TWISTS IN THE LIFTING CABLE AND ATTACH THE 4" SHEAVE AND CABLE LOOP TO THE CABLE CLEVIS USING A $\frac{3}{4}$ " x 3" BOLT AND $\frac{3}{4}$ " JAM NUT. THE BOLT HEAD WILL BE PARALLEL TO THE CRADLE BEAM (FIGURE 7.1).
- TORQUE TO 100 FT-LBS (FIGURE 7.2)
- APPLY A GENEROUS AMOUNT OF ANTI-SEIZE FROM INCLUDED PACKET TO THE INSIDE OF THE OF THE RIGID COUPLER AND TO THE MOTOR SHAFT BEFORE ATTACHING THE DRIVE UNIT TO THE LIFT FRAME (FIGURE 7.3 & 7.4).



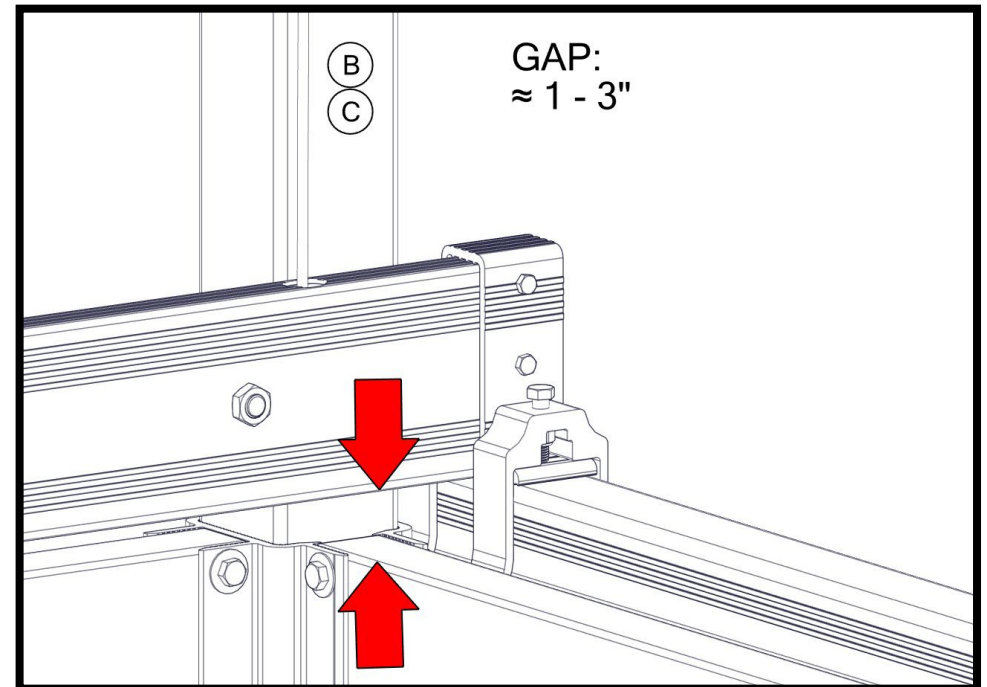
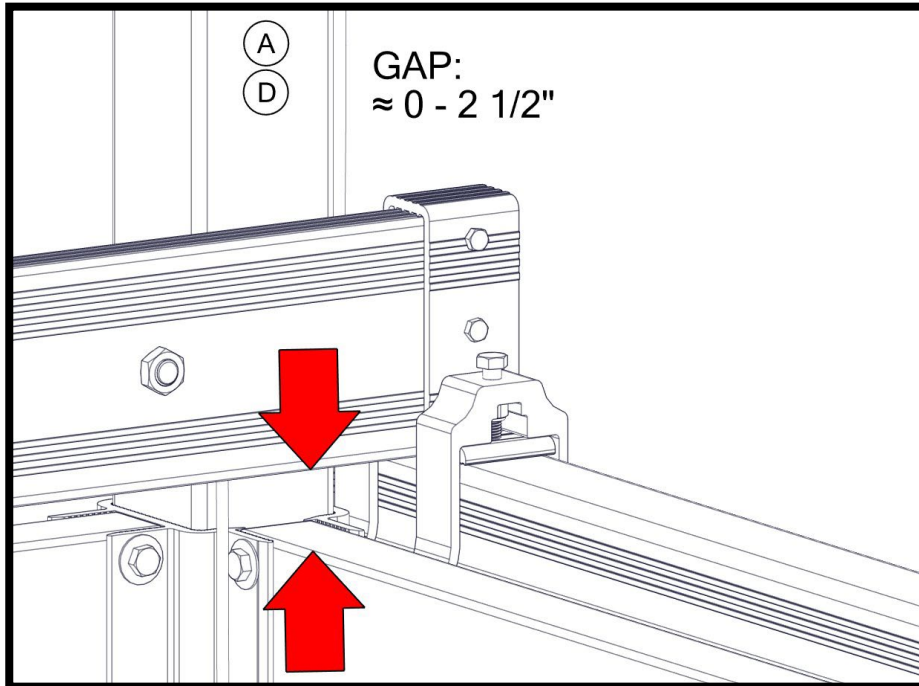
STEP 7

- THE DRIVE TRAIN (SOLD SEPERATELY) CAN NOW BE ATTACHED TO THE BALL SCREW CLAMP. NOTE THAT THE RIGID COUPLER ON THE BALL SCREW AND THE DRIVE TRAIN MATE TOGETHER. WHILE HOLDING THE DRIVE TRAIN IN PLACE, ATTACH TO BALL SCREW CLAMP USING (4) 3/8" x 1 3/4" BOLTS, (4) 3/8" NYLOCK NUTS, AND (8) 1/2" FLAT WASHERS (FIGURE 7.5).
- TIGHTEN FASTENERS UNTIL THERE IS AN 1/8" GAP BETWEEN THE BALL SCREW CLAMP AND MOTOR PLATE (FIGURE 7.6).



STEP 7

- REFER TO FIGURES BELOW TO VERIFY THE GAP BETWEEN THE BOTTOM OF THE SIDE CRADLE BEAMS AND THE TOP OF THE FRAME BEAMS. CHECK THE ASSEMBLY OF THE LIFT IF THESE MEASUREMENTS ARE EXTREME.



STEP 7

- DC ONLY: SLIDE BATTERY TRAYS OVER THE BALL SCREW TUBE WITH THE WIDE OVERHANG SIDE OF THE TRAY TO THE OUTSIDE OF THE LIFT TO PROVIDE MORE CLEARANCE. FASTEN WITH (4) 3/8" x 5 1/2" BOLTS WITH (4) 3/8" NYLOCK NUTS. DO NOT TIGHTEN COMPLETELY UNTIL WIRING IS COMPLETE TO ALLOW FOR ADJUSTMENT (FIGURE 7.7).

PLACE BATTERIES AND BATTERY BOXES INTO TRAYS (FIGURE 7.8)

- PLUG THE WIRED REMOTE INTO THE ASC. USE THE SUPPLIED VELCRO TO RUN THE WIRE TO THE DESIRED LOCATION OF THE REMOTE (FIGURE 7.9).

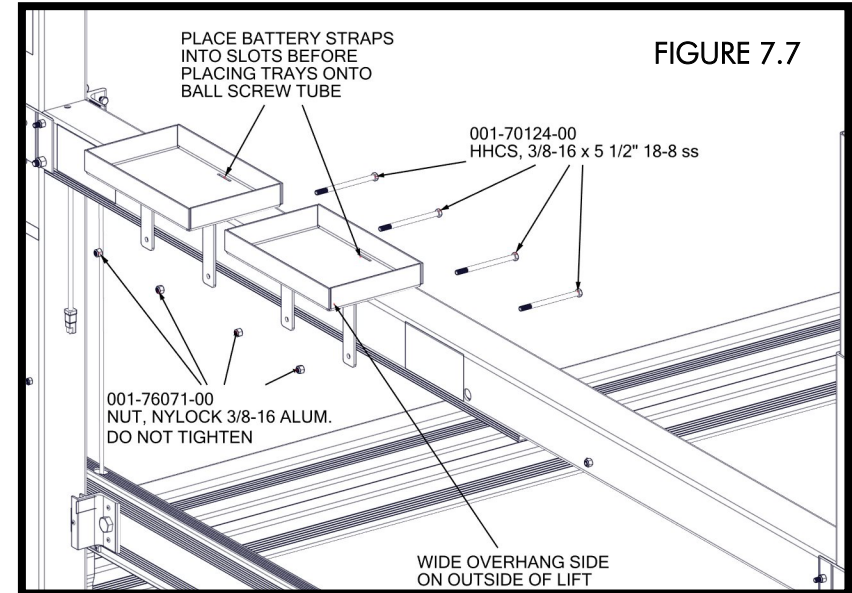


FIGURE 7.7

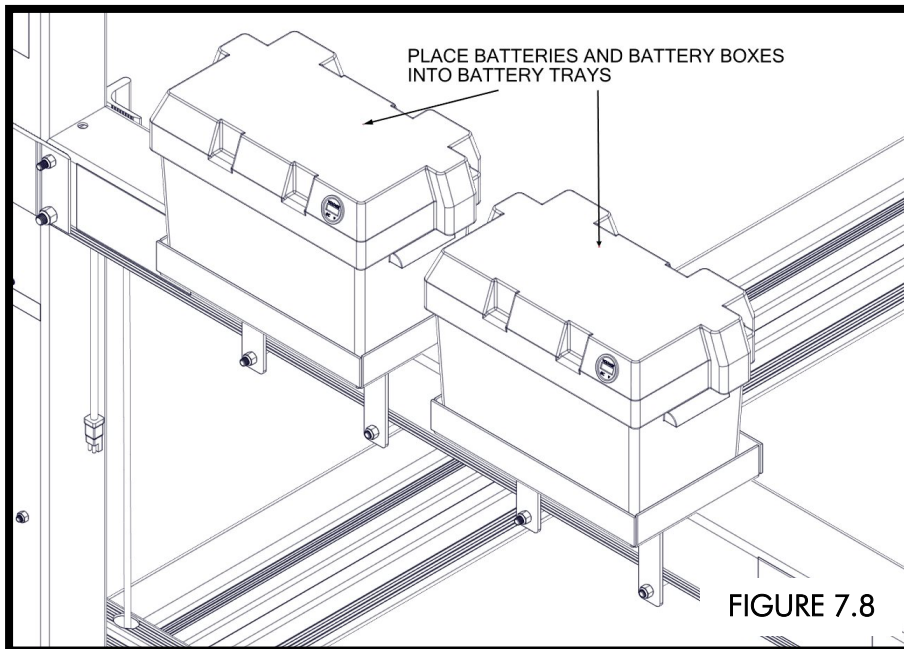


FIGURE 7.8

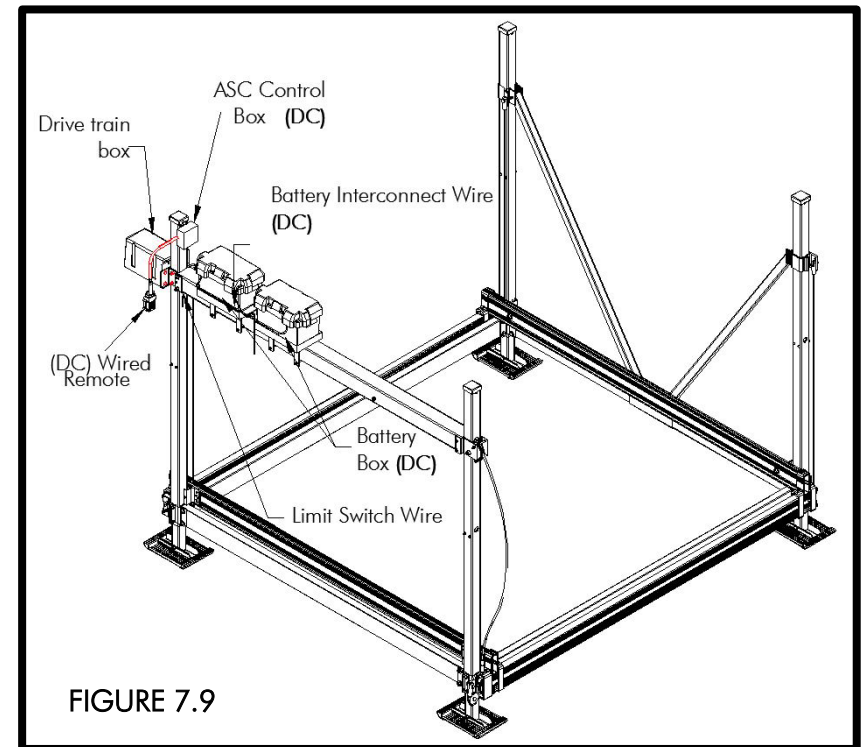


FIGURE 7.9

STEP 7 (IF USING CANOPY)

- REMOVE THE NUT, BOLT, AND WASHER FROM THE ASC AS THEY WILL NOT BE NEEDED (FIGURE 7.10).

REMOVE NUT FROM $\frac{1}{2}$ " x $1 \frac{1}{4}$ " BOLT HOLDING CANOPY INSERT (FIGURE 7.11).

ATTACH ASC BOX TO BOLT WITH NUT FROM CORNER POST, AND TORQUE TO 60 FT-LBS (FIGURE 7.12).

REMOVE NUT, BOLT, AND WASHER FROM ASC

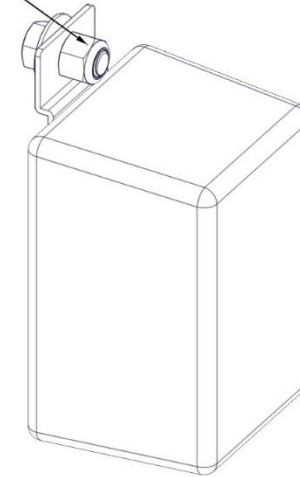


FIGURE 7.10

REMOVE NUT ATTACHING CANOPY INSERT TO CORNER POST.
REUSE FOR ATTACHMENT OF ASC.



FIGURE 7.11

ATTACH ASC TO BOLT WITH NYLOCK NUT
AND TORQUE TO 60 FT-LBS

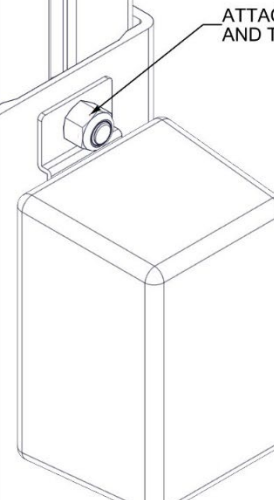
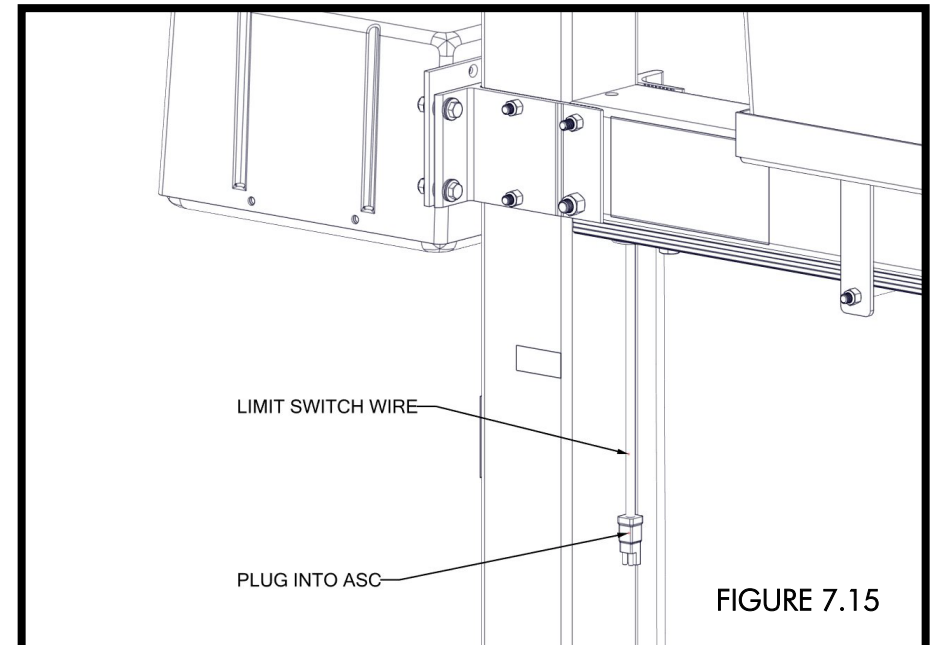
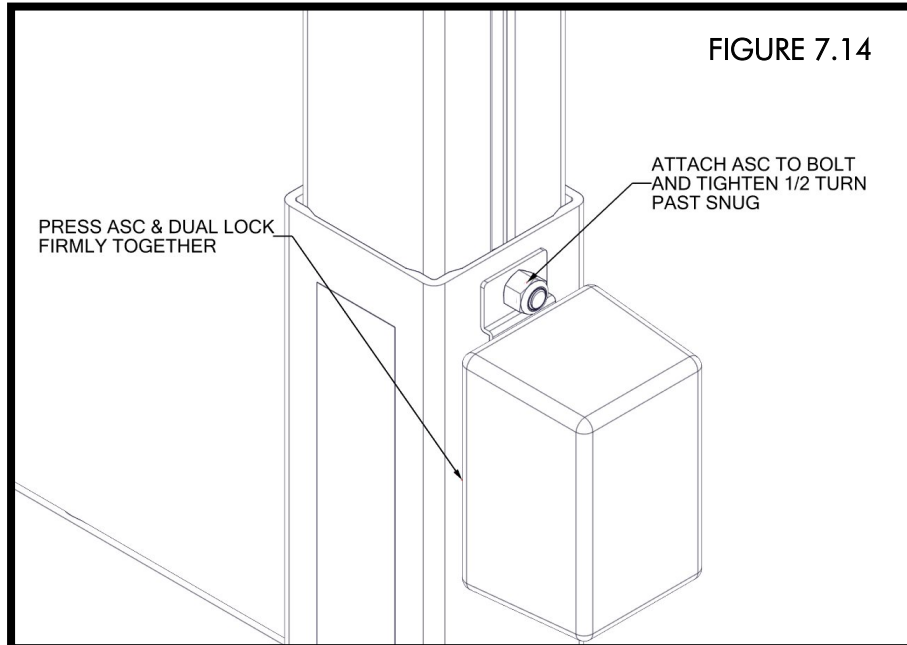
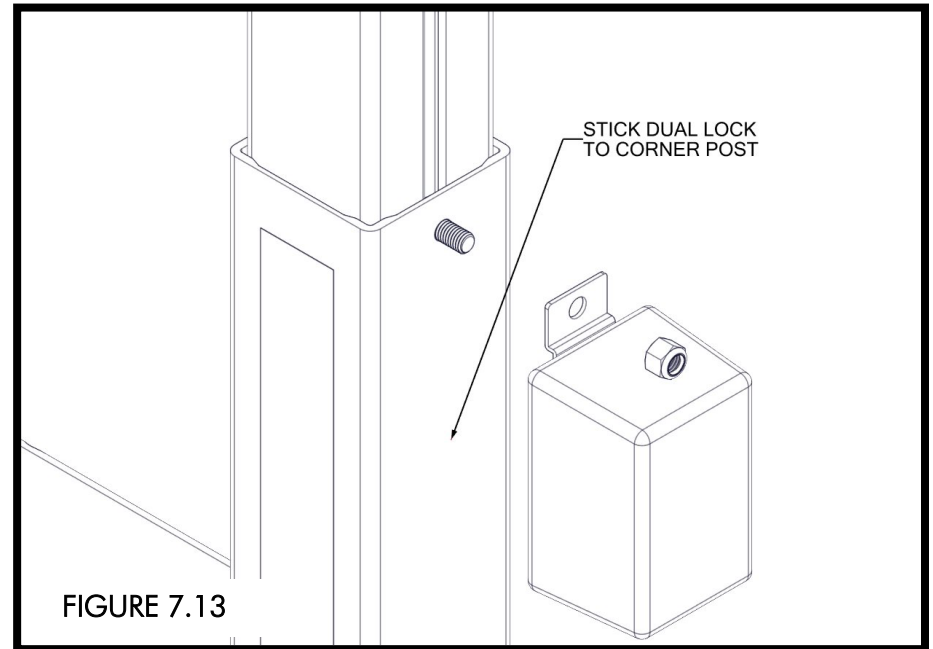


FIGURE 7.12

STEP 7 (NO CANOPY)

- STICK DUAL LOCK ON CORNER POST BELOW LOCATION OF ASC. ATTACH THE UNIT TO THE UPPER HOLE IN CORNER POST AND TIGHTEN $\frac{1}{2}$ TURN PAST SNUG. PRESS ASC AND DUAL LOCK FIRMLY TOGETHER (FIGURE 7.13 & 7.14)
- PLUG LIMIT SWITCH WIRE INTO THE ASC PLUG MARKED "LIMIT SWITCH" THE LIMIT SWITCH WIRE IS LOCATED ON THE CHANNEL ON THE BOTTOM SIDE OF THE BALL SCREW TUBE. (FIGURE 7.15).



STEP 8

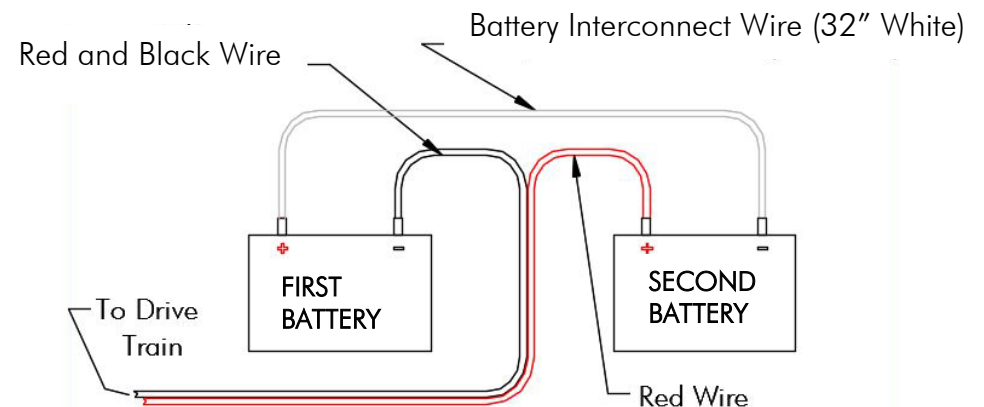
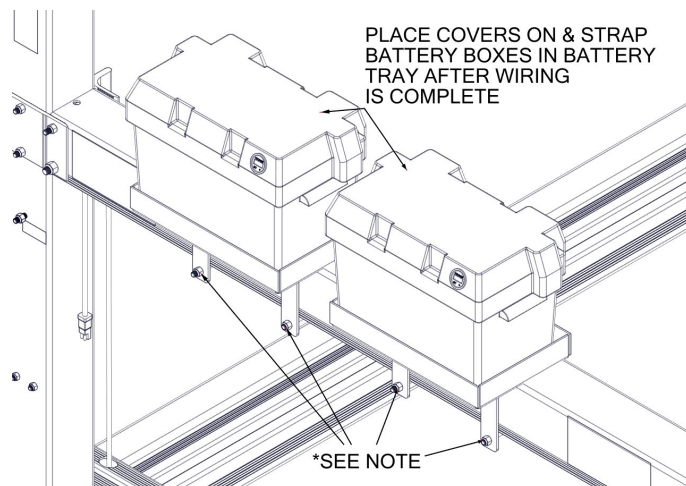
AC ONLY - THE DRIVE TRAIN CAN NOW BE CONNECTED TO THE POWER SOURCE. IT IS VERY IMPORTANT THAT THIS CONNECTION BE MADE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

SEE WARNING:



1. **DC ONLY - 24 VOLT BATTERY SETUP (SEE VSD DRIVE INSTRUCTIONS FOR ADDITIONAL DETAILS)**

- CONNECT REMAINING RED AND RED & BLACK WIRES FROM THE ASC WITH RING TERMINALS TO THE BATTERIES. THE RED WIRE IS CONNECTED TO THE POSITIVE POST ON THE SECOND BATTERY AND THE RED & BLACK WIRE IS CONNECTED TO THE NEGATIVE POST ON THE FIRST BATTERY.
- CONNECT THE WHITE BATTERY INTERCONNECT CABLE TO THE POSITIVE POST OF THE FIRST BATTERY AND THE NEGATIVE POST OF THE SECOND BATTERY.
- AT THIS TIME, ATTACH THE BATTERY VOLT METER (INCLUDED WITH BATTERY BOX, SEE INCLUDED INSTRUCTIONS (RED-POSITIVE, BLACK-NEGATIVE)).
*NOTE: TIGHTEN BATTERY TRAY FASTENERS TO REMOVE PLAY IN THE BOLT AND BEND THE TABS SLIGHTLY AROUND THE TUBE (5 FT-LB MAXIMUM).



STEP 8

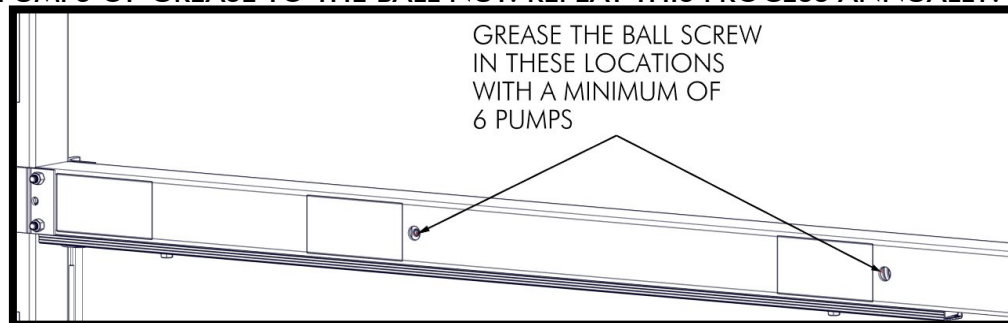
VSD PRE-INSTALLATION CHECKLIST

PRIOR TO INSTALLING YOUR LIFT, PLEASE FOLLOW THIS CHECKLIST 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 CRADLE 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.

PRIOR TO INSTALLING YOUR LIFT, PLEASE FOLLOW THIS CHECKLIST TO CONFIRM PROPER OPERATION.

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 OWNER'S MANUAL FOR DETAILS. THE BALL SCREW MUST BE PERFORMED AT BOTH OF THESE LOCATIONS SHOWN IN THE FIGURE BELOW. RAISE THE CRADLE UNTIL THE GREASE ZERK IN THE BALL NUT IS VISIBLE THROUGH EACH HOLE AND ADD A MINIMUM OF SIX PUMPS OF GREASE TO THE BALL NUT. REPEAT THIS PROCESS ANNUALLY.



4. IF YOU HAVE A WIRELESS REMOTE, IT WOULD BE A 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 IN THE PREVIOUS STEPS. 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.

VSD 10,000W LIFT FRAME BILL OF MATERIALS

LIFT P/N 511-90080-00

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--|-----|
| 1 | 001-23369-00 | SHCS, 7/16-14 x 4" (Black) | 4 |
| 2 | 001-26911-00 | Pin, Dowel 3/16" x 7/8" | 4 |
| 3 | 001-71525-00 | Spring Pin, 5/32" x 1-1/8" 420 SS Slotted | 4 |
| 4 | 001-29156-00 | Nut, Jam Nylock 1/4-20 18-8 ss | 1 |
| 5 | 001-70040-00 | HHCS, 1/4-20 x 2" 18-8 ss | 1 |
| 6 | 001-70107-00 | HHCS, 3/8-16 x 1 1/4" 18-8 ss | 8 |
| 7 | 001-70110-00 | HHCS, 3/8-16 X 1 3/4" 18-8 ss (NOT SHOWN IN EXP VIEWS) | 4 |
| 8 | 001-70117-00 | HHCS, 3/8-16 x 3 1/2" 18-8 ss | 2 |
| 9 | 001-70118-00 | HHCS, 3/8-16 x 3 3/4" 18-8 ss | 2 |
| 10 | 001-70123-00 | HHCS, 3/8-16 x 5" 18-8 ss | 3 |
| 11 | 001-70124-00 | HHCS, 3/8-16 x 5 1/2" 18-8 ss (NOT SHOWN IN EXP VIEWS) | 4 |
| 12 | 001-70125-00 | HHCS, 3/8-16 x 6" 18-8 ss | 4 |
| 13 | 001-70203-00 | HHCS, 1/2-13 x 3/4" 18-8 ss | 2 |
| 14 | 001-70207-00 | HHCS, 1/2-13 x 1 1/4" 18-8 ss | 1 |
| 15 | 001-70211-00 | HHCS, 1/2-13 x 2" 18-8 ss | 8 |
| 16 | 001-70212-00 | HHCS, 1/2-13 x 2 1/4" 18-8 ss | 3 |
| 17 | 001-70213-00 | HHCS, 1/2-13 x 2 1/2" 18-8 ss | 4 |
| 18 | 001-70219-00 | HHCS, 1/2-13 x 4" 18-8 ss | 18 |
| 19 | 001-70223-00 | HHCS, 1/2-13 x 5" 18-8 ss | 6 |
| 20 | 001-70225-00 | HHCS, 1/2-13 x 6" 18-8 ss | 4 |
| 21 | 001-70363-00 | HHCS, 3/4-10 x 2 1/2" ss | 4 |
| 22 | 001-70365-00 | HHCS, 3/4-10 x 3" ss | 4 |
| 23 | 001-70394-00 | HHCS, 3/4-16 x 2" ss | 1 |
| 24 | 001-70817-00 | Nut, 3/4-10 Jam ss | 7 |
| 25 | 001-70819-00 | Nut, 1" Jam ss | 2 |
| 26 | 001-70861-00 | Nut, Nylock 5/16-18 - Alum | 8 |
| 27 | 001-71017-00 | Flat Washer, 3/8" SAE ss 18-8 (NOT SHOWN IN EXP VIEWS) | 8 |
| 28 | 001-71021-00 | Flat Washer, 1/2" 18-8 SS | 4 |
| 29 | 001-71022-00 | Flat Washer, 1/2" 18-8 USS ss 18-8 | 40 |
| 30 | 001-71024-00 | Flat Washer, 5/8" x 1.25" x .060" SS | 16 |
| 31 | 001-71027-00 | Flat Washer, 1/2" USS ss 18-8 | 4 |
| 32 | 001-74404-00 | CB, 5/16-18 x 5" ss 18-8 | 8 |
| 33 | 001-76069-00 | Flat Washer, 5/8 (Lift) Nylon | 8 |
| 34 | 001-76071-00 | Nut, Nylock 3/8-16 ALUM. | 26 |
| 35 | 001-76072-00 | Nut, Nylock 1/2-13 ALUM. | 42 |
| 36 | 001-76354-00 | Nut, 3/4-10 Alum. | 1 |
| 37 | 001-93531-00 | SHCS, M24-3.0 x 160 mm Cl 12.9 Z | 1 |
| 38 | 001-93532-00 | Nut, M24-3.0 DIN 93.4 Z CL8 | 1 |
| 39 | 002-04032-00 | U-Clamp, Side Cradle | 4 |
| 40 | 002-04204-00 | Clamp, Cradle - 1.75" | 7 |
| 41 | 002-04205-00 | Clamp, Cradle Lift - 3.875" | 1 |
| 42 | 002-04210-00 | Clamp, Upper (Universal) - 4" | 2 |
| 43 | 002-04211-00 | Clamp, Upper (Front) - 4" | 1 |
| 44 | 002-04212-00 | Clamp, Upper (Rear) | 1 |
| 45 | 002-04226-00 | Guide, Cradle | 2 |
| 46 | 002-04245-00 | Bracket, Level Leg - 4" | 4 |
| 47 | 002-04254-00 | Holder, Cable - 4" Sheave | 1 |
| 48 | 111-04257-00 | Ass'y, Ball Screw Clamp - 4.5" (Includes Clamp: 002-04257-00 & Grommets: 003-40001-00 Qty:4) | 1 |
| 49 | 002-04258-00 | Spacer, 8" Frame Beam | 8 |
| 50 | 002-04292-00 | V-Brace - 94.375" | 2 |
| 51 | 002-04323-00 | Post, Corner (Motor) | 1 |
| 52 | 002-04324-00 | Post, Corner | 2 |
| 53 | 002-04325-00 | Post, Corner (Lifting) | 1 |
| 54 | 002-04326-00 | Clamp, Frame (Outer) LR | 1 |
| 55 | 002-04327-00 | Clamp, Frame (Outer) LF RR | 2 |
| 56 | 002-04328-00 | Clamp, Frame (Lifting) - 12.5" | 1 |
| 57 | 002-04329-00 | Clamp, Frame (LF RR) - 12.5" (Welded to Corner Post) | 2 |
| 58 | 002-04330-00 | Clamp, Frame (RF LR) - 12.5" (Welded to Corner Post) | 2 |
| 59 | 002-04331-00 | Beam, Side Cradle -162.5" | 1 |
| 60 | 002-04333-00 | Beam, 8" Frame - 144" | 2 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--|-----|
| 61 | 002-04335-00 | Weldment, Clamp, V-Brace (Male) | 1 |
| 62 | 002-04336-00 | Weldment, Clamp, V-Brace (Female) | 1 |
| 63 | 002-04337-00 | Clamp, Pulley (Inner) | 1 |
| 64 | 002-04338-00 | Clamp, Pulley (Outer) | 1 |
| 65 | 002-04341-00 | Beam, Side Cradle-162.5" (B) | 1 |
| 66 | 006-10202-00 | Pad, Wear - 1/2 x 7/8" x 2" | 2 |
| 67 | 006-10207-00 | Spacer, Side Cradle Sheave | 8 |
| 68 | 006-10208-00 | Spacer, Front Cradle Sheave | 4 |
| 69 | 006-10210-00 | H Block, UHMW Support - Ball Screw | 1 |
| 70 | 006-11002-00 | UHMW, 1/2" x 6.5" x .25" | 4 |
| 71 | 006-15016-00 | Cap, Vinyl - Lg. Winch Post | 1 |
| 72 | 006-15500-00 | Cap, Vinyl 4.500" Sq. x 1.5" | 4 |
| 73 | 007-05023-00 | Bevel Gear, Top 1:1 | 4 |
| 74 | 007-05068-00 | Clevis, Lifting Cable Pulley | 1 |
| 75 | 007-05079-01 | Screw, Bevel Gear Adjustment | 4 |
| 76 | 007-05126-00 | Fitting, Grease M8 x 1 (Flush) | 2 |
| 77 | 007-05222-00 | Key, 1/4" SQ x 3" long | 1 |
| 78 | 007-05224-00 | Coupler, Rigid 1"x2"x3" | 1 |
| 79 | 007-05390-00 | Plate, End Stop (Ball Screw) | 1 |
| 80 | 007-05232-00 | Plate, Steel (Ball Screw) | 1 |
| 81 | 007-05550-01 | Pin, Sheave - 1" x 6.69" Zinc Yellow | 1 |
| 82 | 007-07627-00 | Sheave, 3" Clevis | 1 |
| 83 | 007-07628-00 | Sheave, 4" Clamp | 1 |
| 84 | 007-07704-00 | Spacer, 1.297 Side Cradle | 4 |
| 85 | 007-07705-00 | Spacer, 1.938" Front Cradle | 2 |
| 86 | 007-07709-00 | Spacer, Pulley .312" | 2 |
| 87 | 007-07710-00 | Spacer, Pulley .312" | 1 |
| 88 | 007-09156-00 | Cable, Side Leveling - 221.25" | 2 |
| 89 | 007-09153-00 | Cable, Front Leveling 231" | 1 |
| 90 | 007-09176-00 | Cable, Lifting-281.0" 10K Wide | 1 |
| 91 | 007-15024-00 | Bevel Gear, Bottom (Fab) | 4 |
| 92 | 007-93534-00 | Nut, Round M30 x 1.5 (Zinc Plated) | 1 |
| 93 | 011-15020-00 | Ball Screw, 50-10mm - 2159 mm (NOT SHOWN IN EXP VIEWS) | 1 |
| 94 | 011-15025-00 | Ass'y, Ball Screw 10,000# (USES #93 & #76) | 1 |
| 95 | 111-00136-00 | Ass'y, 10000# Inner Leg | 4 |
| 96 | 111-00140-00 | Weldment, 14" Sand Pad | 4 |
| 97 | 111-00197-00 | Weldment, Inner Screw Leg 10K | 4 |
| 98 | 111-00199-00 | Ass'y, 6" Side Level Sheave | 4 |
| 99 | 111-00200-00 | Ass'y, 7 1/4" Sheave | 2 |
| 100 | 111-00251-00 | Ass'y, Cradle Guide (USES #46 & #67) | 4 |
| 101 | 111-00319-00 | Ass'y, Corner Post 10000 (A) | 1 |
| 102 | 111-00320-00 | Ass'y, Corner Post 10000 (B) | 1 |
| 103 | 111-00321-00 | Ass'y, Corner Post 10000 (D) | 1 |
| 104 | 111-00322-00 | Ass'y, Corner Post 10000 (C) | 1 |
| 105 | 111-00323-01 | Ass'y, Side Cradle VSD 10K Wide (Drive Side) | 1 |
| 106 | 111-00324-01 | Ass'y, Side Cradle VSD 10K Wide (Non-Drive Side) | 1 |
| 107 | 111-00326-00 | Ass'y, 10000# Ball Screw tube | 1 |
| 108 | 111-00327-00 | Weld't, Front/Rear Frame | 2 |
| 109 | 111-00328-00 | Weld't, Rear Cradle | 1 |
| 110 | 111-00329-00 | Weld't, Front Cradle | 1 |
| 111 | 111-00330-01 | Ass'y, Front Cradle VSD 10K Wide | 1 |
| 112 | 111-00331-00 | Weld't, Ball Screw Tube-10000# | 1 |
| 113 | 111-00332-00 | Ass'y, Ball Nut Block | 1 |
| 114 | 111-00338-00 | Ass'y, Bearing Block-10,000# | 1 |
| 115 | 111-00367-00 | Ass'y, 7" Lifting Sheave | 2 |
| 116 | 111-90000-00 | Ass'y, Limit Switch 10000# | 1 |
| 117 | 911-21302-00 | Canopy Insert, Lrg. Lift - 44" | 1 |
| 118 | 007-08307-00 | Bar, Cable End Attachment 10K | 2 |
| 119 | 001-23877-00 | SHCS, 1/2-20 X 1-1/2" (Black) | 2 |
| 120 | 006-10210-00 | H Block, UHMW Support - Ballscrew | 1 |

VSD 10,000W LIFT FRAME BILL OF MATERIALS

LIFT P/N 511-90080-00

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|---|-----|
| 95 | 111-00136-00 | Ass'y, 10000# Inner Leg | 1 |
| 2 | 001-26911-00 | Pin, Dowel 3/16" x 7/8" | 1 |
| 3 | 001-71525-00 | Spring Pin, 5/32" x 1-1/8" 420 SS Slotted | 1 |
| 28 | 001-71021-00 | Flat Washer, 1/2" 18-8 SS | 2 |
| 30 | 001-71024-00 | Flat Washer, 5/8" x 1.25" x .060" SS | 4 |
| 33 | 001-76069-00 | Flat Washer, 5/8 (Lift) Nylon | 2 |
| 46 | 002-04245-00 | Bracket, Level Leg - 4" | 4 |
| 73 | 007-05023-00 | Bevel Gear, Top 1:1 | 1 |
| 75 | 007-05079-01 | Screw, Bevel Gear Adjustment | 1 |
| 91 | 007-15024-00 | Bevel Gear, Bottom (Fab) | 1 |
| 97 | 111-00197-00 | Weldment, Inner Screw Leg 10K | 1 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--------------------------------------|-----|
| 101 | 111-00319-00 | Ass'y, Corner Post 10000 (A) | 1 |
| 25 | 001-70819-00 | Nut, 1"-8 Jam ss | 2 |
| 26 | 001-70861-00 | Nut, Nylock 5/16-18 - Alum | 2 |
| 32 | 001-74404-00 | CB, 5/16-18 x 5" ss 18-8 | 2 |
| 53 | 002-04325-00 | Post, Corner (Lifting) | 1 |
| 58 | 002-04330-00 | Clamp, Frame (RF LR) - 12.5" | 1 |
| 63 | 002-04337-00 | Clamp, Pulley (Inner) | 1 |
| 64 | 002-04338-00 | Clamp, Pulley (Outer) | 1 |
| 72 | 006-15500-00 | Cap, Vinyl 4.500" Sq. x 1.5" | 1 |
| 81 | 007-05550-01 | Pin, Sheave - 1" x 6.69" Zinc Yellow | 1 |
| 86 | 007-07709-00 | Spacer, Pulley .312" | 2 |
| 87 | 007-07710-00 | Spacer, Pulley .312" | 1 |
| 95 | 111-00136-00 | Ass'y, 10000# Inner Leg | 1 |
| 115 | 111-00367-00 | Ass'y, 7" Lifting Sheave | 2 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--------------------------------|-----|
| 102 | 111-00320-00 | Ass'y, Corner Post 10000 (B) | 1 |
| 14 | 001-70207-00 | HHCS, 1/2-13 x 1 1/4" 18-8 ss | 1 |
| 26 | 001-70861-00 | Nut, Nylock 5/16-18 - Alum | 2 |
| 28 | 001-71021-00 | Flat Washer, 1/2" 18-8 SS | 1 |
| 32 | 001-74404-00 | CB, 5/16-18 x 5" ss 18-8 | 2 |
| 35 | 001-76072-00 | Nut, Nylock 1/2-13 ALUM. | 1 |
| 51 | 002-04323-00 | Post, Corner (Motor) | 1 |
| 57 | 002-04329-00 | Clamp, Frame (LF RR) - 12.5" | 1 |
| 71 | 006-15016-00 | Cap, Vinyl - Lg. Winch Post | 1 |
| 94 | 111-00136-00 | Ass'y, 10000# Inner Leg | 1 |
| 117 | 911-21302-00 | Canopy Insert, Lrg. Lift - 44" | 1 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|------------------------------|-----|
| 103 | 111-00321-00 | Ass'y, Corner Post 10000 (D) | 1 |
| 26 | 001-70861-00 | Nut, Nylock 5/16-18 - Alum | 2 |
| 32 | 001-74404-00 | CB, 5/16-18 x 5" ss 18-8 | 2 |
| 52 | 002-04324-00 | Post, Corner | 1 |
| 57 | 002-04329-00 | Clamp, Frame (LF RR) - 12.5" | 1 |
| 72 | 006-15500-00 | Cap, Vinyl 4.500" Sq. x 1.5" | 1 |
| 95 | 111-00136-00 | Ass'y, 10000# Inner Leg | 1 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|------------------------------|-----|
| 104 | 111-00322-00 | Ass'y, Corner Post 10000 (C) | 1 |
| 26 | 001-70861-00 | Nut, Nylock 5/16-18 - Alum | 2 |
| 32 | 001-74404-00 | CB, 5/16-18 x 5" ss 18-8 | 2 |
| 52 | 002-04324-00 | Post, Corner | 1 |
| 58 | 002-04330-00 | Clamp, Frame (RF LR) - 12.5" | 1 |
| 72 | 006-15500-00 | Cap, Vinyl 4.500" Sq. x 1.5" | 1 |
| 93 | 111-00136-00 | Ass'y, 10000# Inner Leg | 1 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--|-----|
| 105 | 111-00323-01 | Ass'y, Side Cradle VSD 10K Wide (Drive Side) | 1 |
| 21 | 001-70363-00 | HHCS, 3/4-10 x 2 1/2" ss | 2 |
| 23 | 001-70817-00 | Nut, 3/4-10 Jam ss | 2 |
| 65 | 002-04341-00 | Beam, Side Cradle-162.5" (B) | 1 |
| 67 | 006-10207-00 | Spacer, Side Cradle Sheave | 4 |
| 70 | 006-11002-00 | UHMW, 1/2" x 6.5" x .25" | 2 |
| 84 | 007-07704-00 | Spacer, 1.297 Side Cradle | 2 |
| 88 | 007-09156-00 | Cable, Side Leveling - 221.25" | 1 |
| 98 | 111-00199-00 | Ass'y, 6" Side Level Sheave | 2 |
| 100 | 111-00251-00 | Ass'y, Cradle Guide (USES #46 & #67) | 2 |

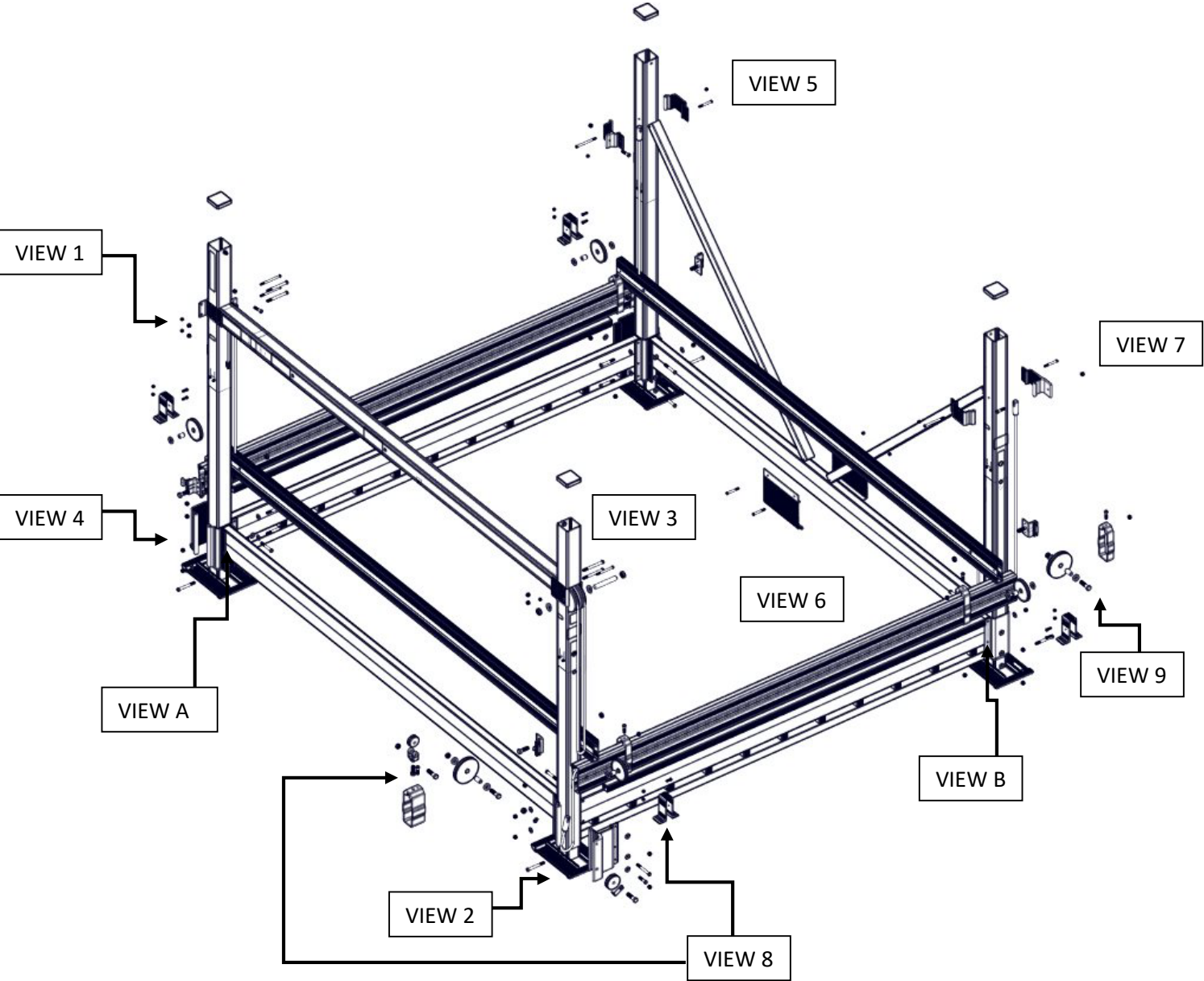
| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|--|-----|
| 106 | 111-00324-01 | Ass'y, Side Cradle VSD 10K Wide (Non-Drive Side) | 1 |
| 21 | 001-70363-00 | HHCS, 3/4-10 x 2 1/2" ss | 2 |
| 24 | 001-70817-00 | Nut, 3/4-10 Jam ss | 2 |
| 59 | 002-04331-00 | Beam, Side Cradle -162.5" | 1 |
| 67 | 006-10207-00 | Spacer, Side Cradle Sheave | 4 |
| 70 | 006-11002-00 | UHMW, 1/2" x 6.5" x .25" | 2 |
| 84 | 007-07704-00 | Spacer, 1.297 Side Cradle | 2 |
| 88 | 007-09156-00 | Cable, Side Leveling - 221.25" | 1 |
| 98 | 111-00199-00 | Ass'y, 6" Side Level Sheave | 2 |
| 100 | 111-00251-00 | Ass'y, Cradle Guide (USES #46 & #67) | 2 |

| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|------------------------------------|-----|
| 107 | 111-00550-00 | Ass'y, Ball Screw Tube 10K Wide | 1 |
| 1 | 001-23369-00 | SHCS, 7/16-14 x 4" (Black) | 4 |
| 4 | 001-29156-00 | Nut, Jam Nylock 1/4-20 18-8 ss | 1 |
| 5 | 001-70040-00 | HHCS, 1/4-20 x 2" 18-8 ss | 1 |
| 10 | 001-70123-00 | HHCS, 3/8-16 x 5" 18-8 ss | 1 |
| 13 | 001-70203-00 | HHCS, 1/2-13 x 3/4" 18-8 ss | 2 |
| 28 | 001-71021-00 | Flat Washer, 1/2" 18-8 SS | 2 |
| 34 | 001-76071-00 | Nut, Nylock 3/8-16 ALUM. | 1 |
| 37 | 001-93531-00 | SHCS, M24-3.0 x 160 mm CI 12.9 Z | 1 |
| 38 | 001-93532-00 | Nut, M24-3.0 DIN 93.4 Z CL8 | 1 |
| 69 | 006-10210-00 | H Block, UHMW Support - Ball Screw | 1 |
| 76 | 007-05126-00 | Fitting, Grease M8 x 1 (Flush) | 1 |
| 77 | 007-05222-00 | Key, 1/4" SQ x 3" long | 1 |
| 78 | 007-05224-00 | Coupler, Rigid 1"x2"x3" | 1 |
| 79 | 007-05390-00 | Plate, End Stop (Ball Screw) | 1 |
| 80 | 007-05232-00 | Plate, Steel (Ball Screw) | 1 |
| 90 | 007-09176-00 | Cable, Lifting-281.0" 10K Wide | 1 |
| 92 | 007-93534-00 | Nut, Round M30 x 1.5 (Zinc Plated) | 1 |
| 94 | 011-15025-00 | Ass'y, Ball Screw 10,000# | 1 |
| 112 | 111-00331-00 | Weld't, Ball Screw Tube-10000# | 1 |
| 113 | 111-00332-00 | Ass'y, Ball Nut Block | 1 |
| 114 | 111-00338-00 | Ass'y, Bearing Block-10,000# | 1 |
| 116 | 111-90000-00 | Ass'y, Limit Switch 10000# | 1 |
| 118 | 007-08307-00 | Bar, Cable End Attachment 10K | 2 |
| 119 | 001-23877-00 | SHCS, 1/2-20 X 1-1/2" (Black) | 2 |

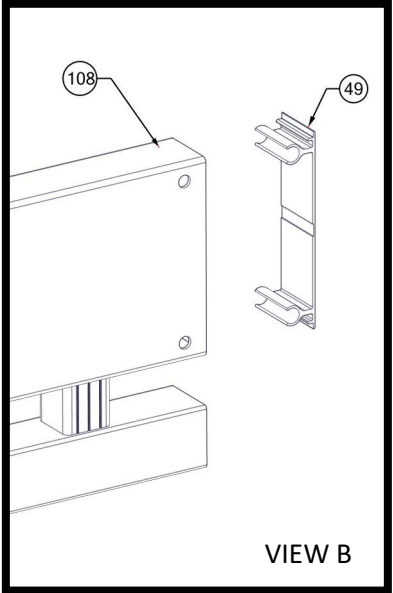
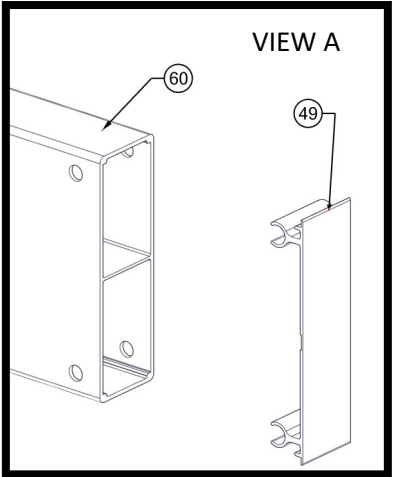
| NO. | PART NUMBER | DESCRIPTION | QTY |
|-----|--------------|----------------------------------|-----|
| 111 | 111-00330-01 | Ass'y, Front Cradle VSD 10K Wide | 1 |
| 22 | 001-70365-00 | HHCS, 3/4-10 x 3" ss | 2 |
| 24 | 001-70817-00 | Nut, 3/4-10 Jam ss | 2 |
| 68 | 006-10208-00 | Spacer, Front Cradle Sheave | 4 |
| 85 | 007-07705-00 | Spacer, 1.938" Front Cradle | 2 |
| 89 | 007-09153-00 | Cable, Front Leveling - 231" | 1 |
| 99 | 111-00200-00 | Ass'y, 7 1/4" Sheave | 2 |
| 110 | 111-00329-00 | Weld't, Front Cradle | 1 |

VSD 10,000W LIFT FRAME EXPLODED VIEW MAIN

LIFT P/N 511-90080-00

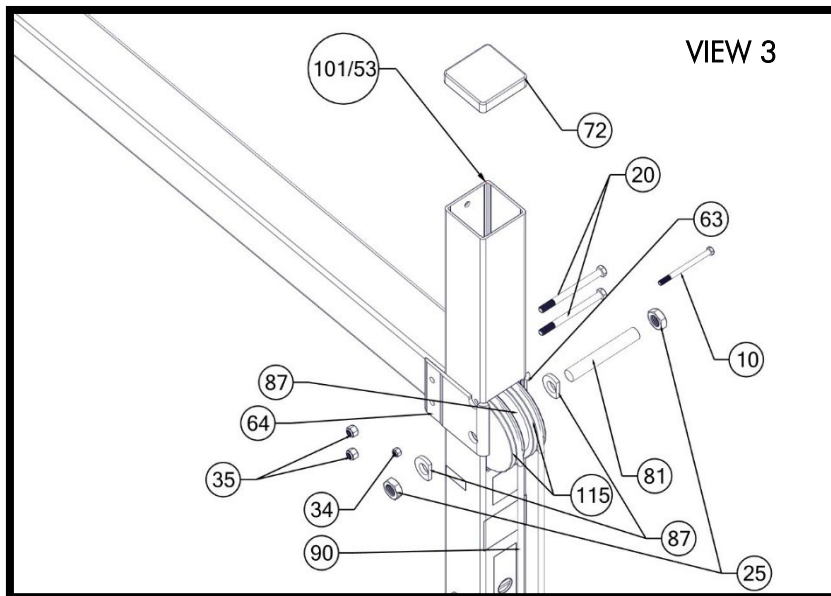
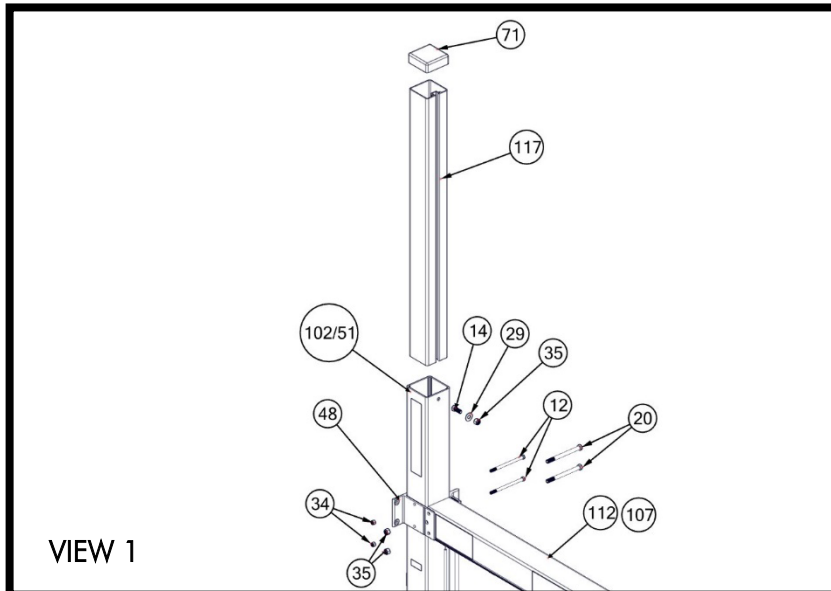


NOTE:
ADDITIONAL VIEWS ON
PAGES 36-40



VSD 10,000W LIFT FRAME EXPLODED VIEWS 1-4

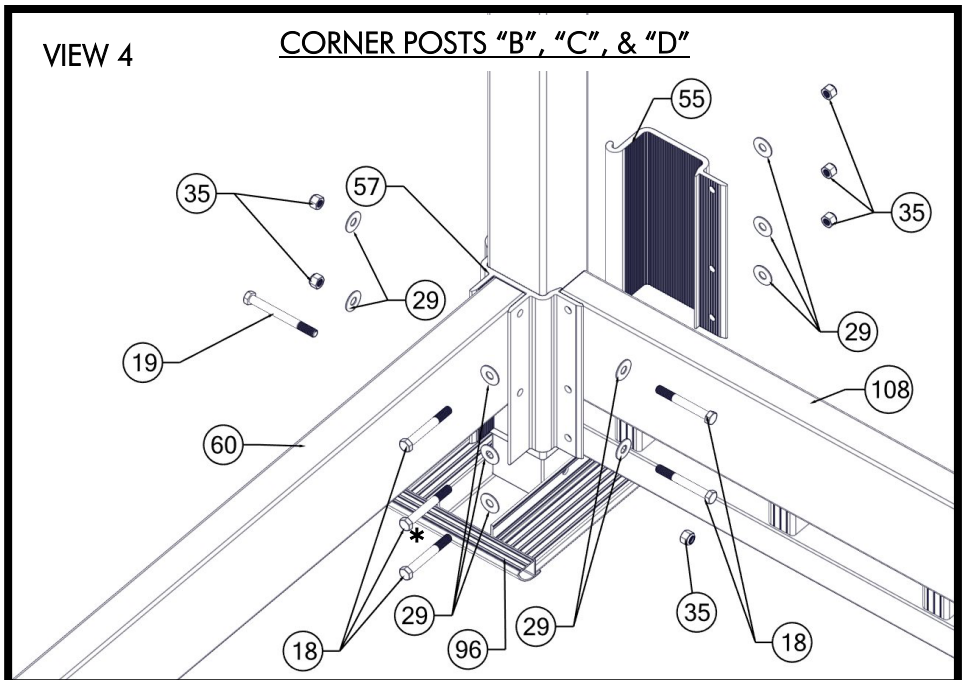
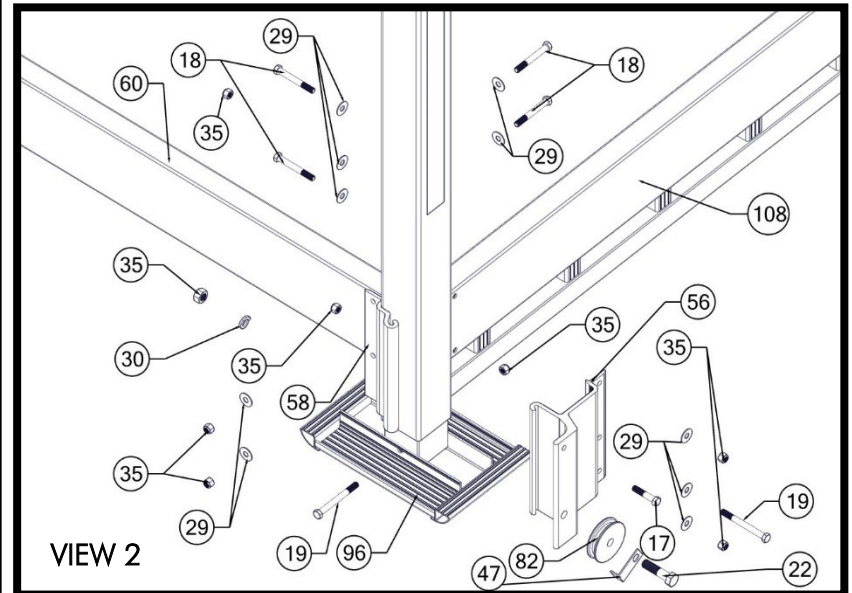
LIFT P/N 511-90080-00



NOTE (VIEW 4):

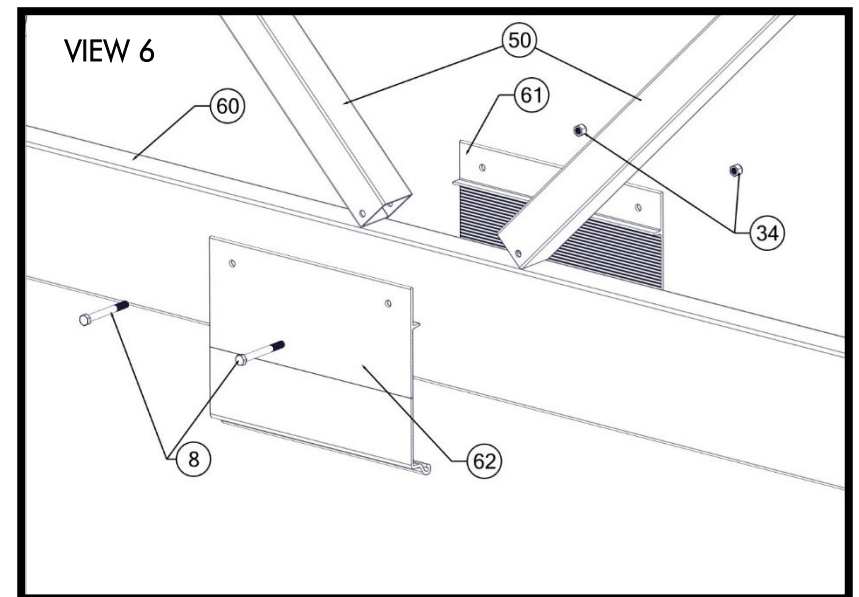
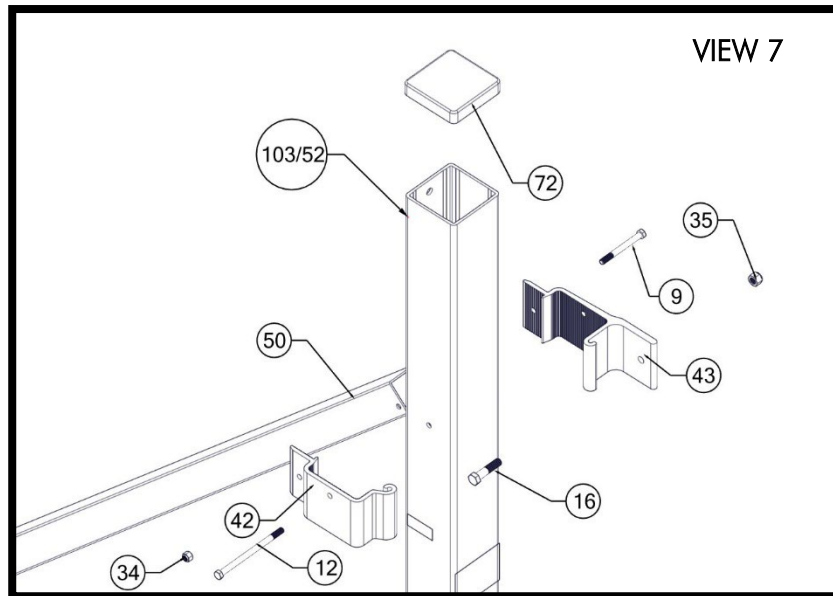
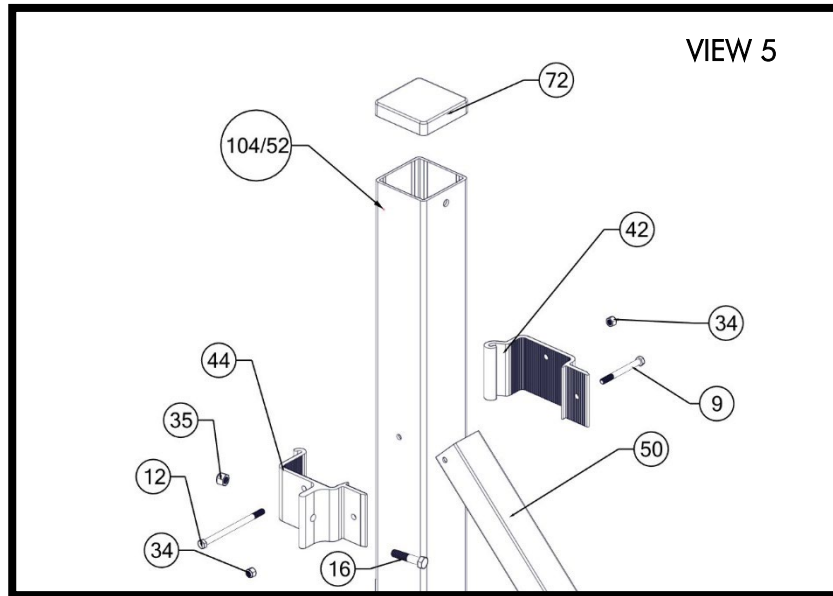
CORNER "C" USES ITEM 58 IN PLACE OF 57 AND ITEM 54 IN PLACE OF ITEM 55.

CORNER "D" USES SAME ITEMS. ITEM 18 HAS QUANTITY OF (4). MIDDLE BOLT (*MARKED) IS REPLACED WITH ITEM 19.



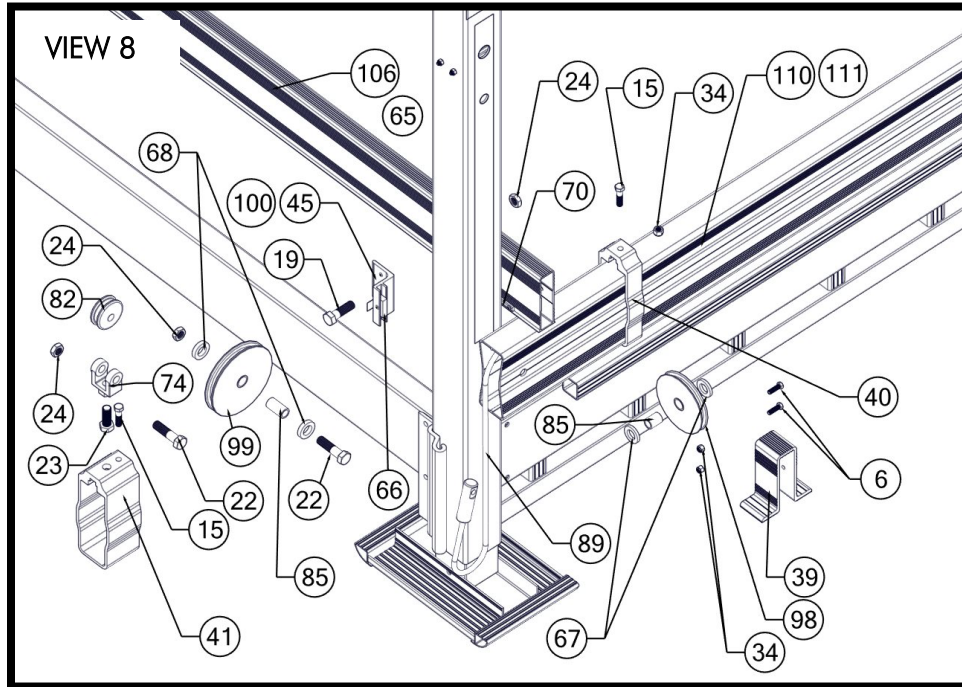
VSD 10,000W LIFT FRAME EXPLODED VIEWS 5-7

LIFT P/N 511-90080-00



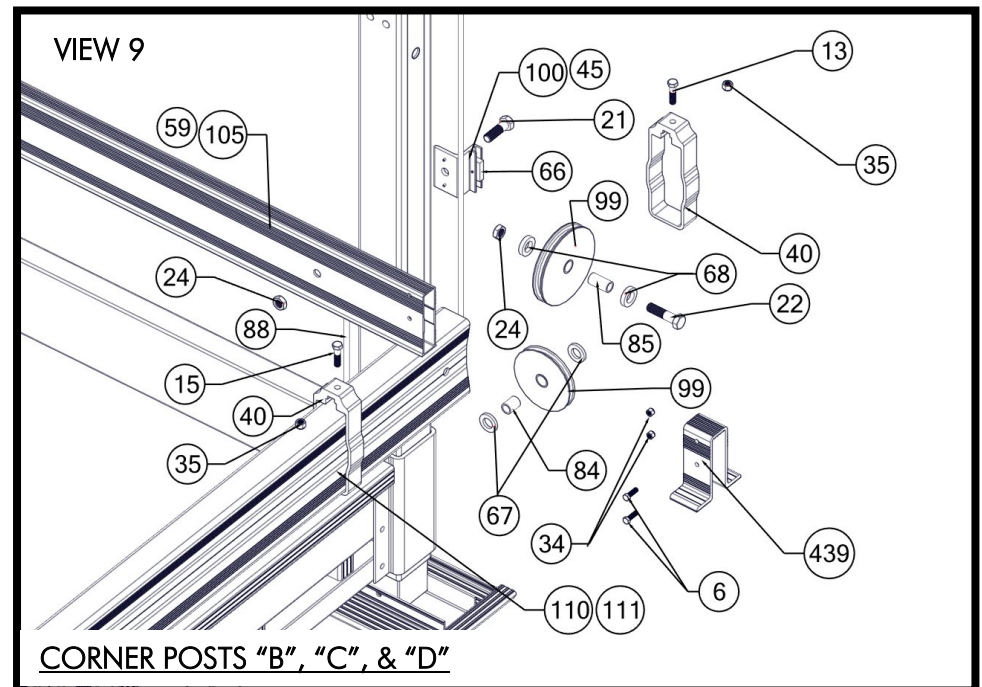
VSD 10,000W LIFT FRAME EXPLODED VIEWS 8 & 9

LIFT P/N 511-90075-01



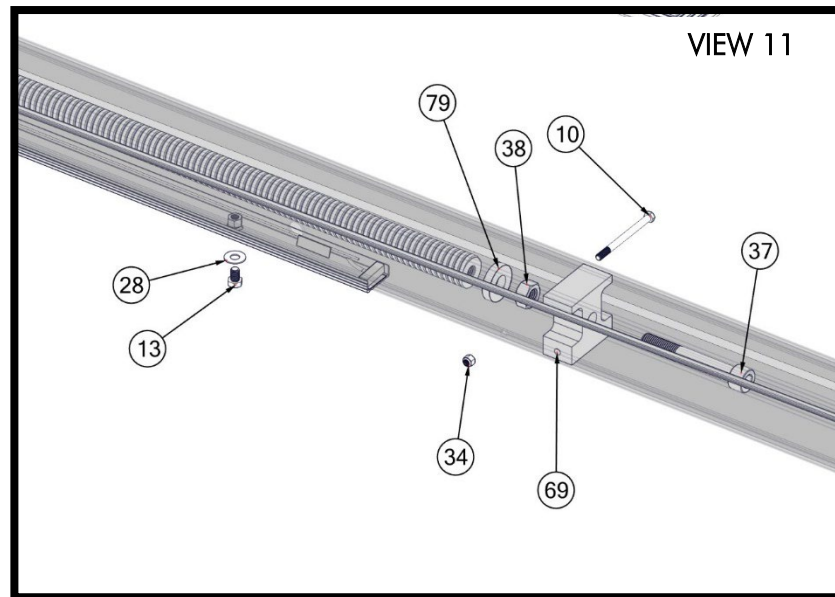
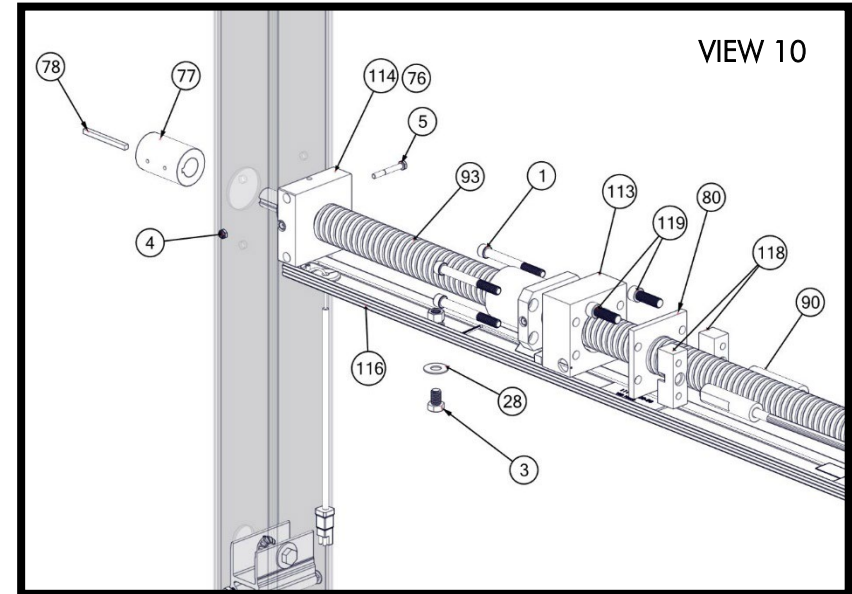
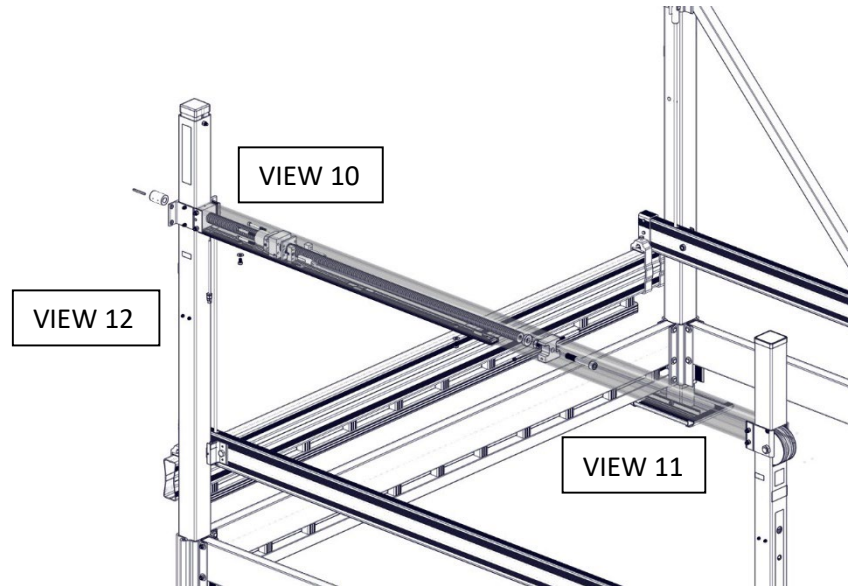
NOTE (VIEW 9):

CORNER "D" IS SHOWN IN THIS VIEW. FOR CORNERS "B" & "C", ITEMS 20, 22, 69, 88, AND 98 ARE EXEMPT. ITEMS 109 & 110 ARE REPLACED WITH ITEM 108.



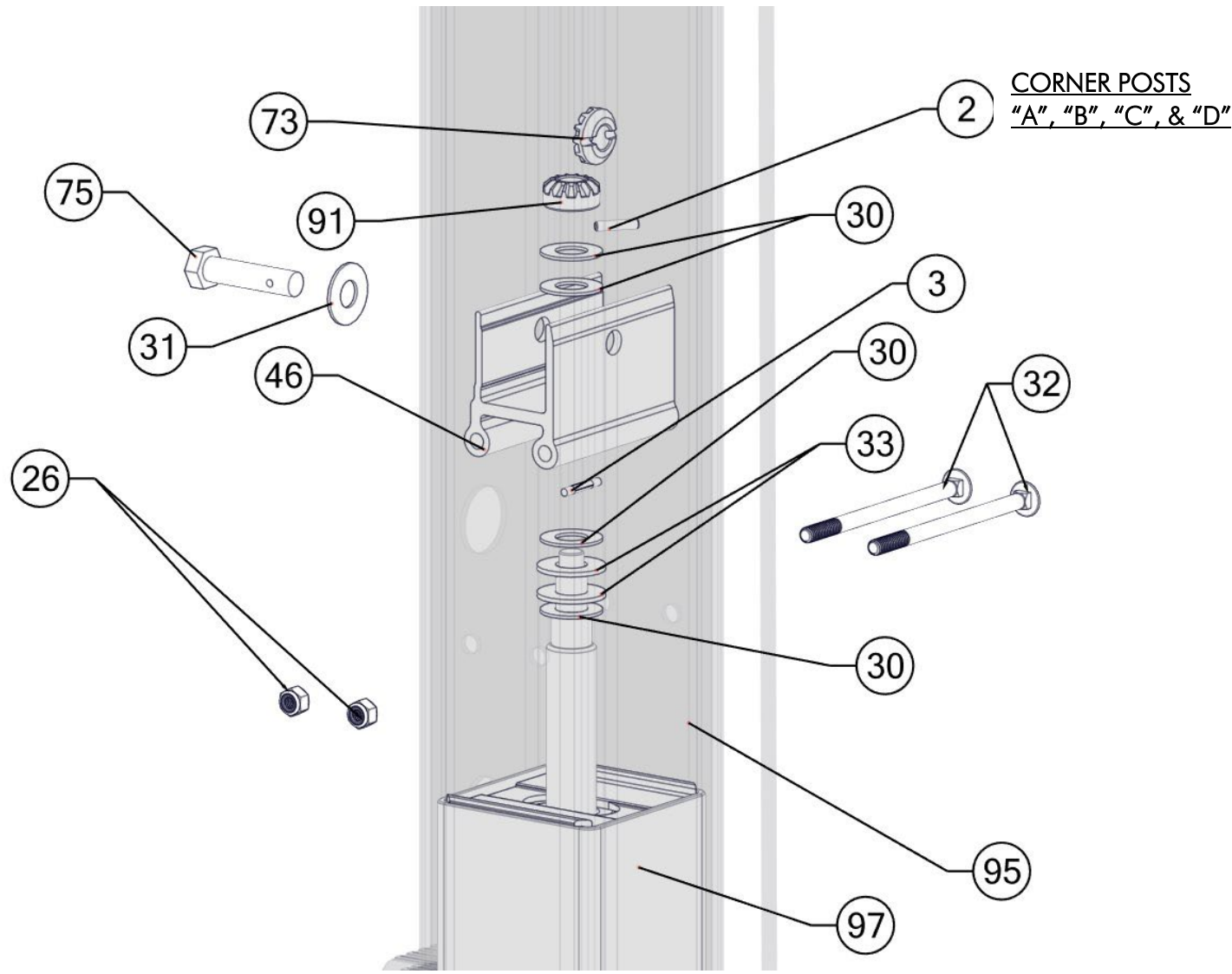
VSD 10,000W LIFT FRAME EXPLODED VIEWS 10 & 11

LIFT P/N 511-90080-00



VSD 10,000 LIFT FRAME EXPLODED VIEW 12

LIFT P/N 511-90080-00



NOTES

NOTES

