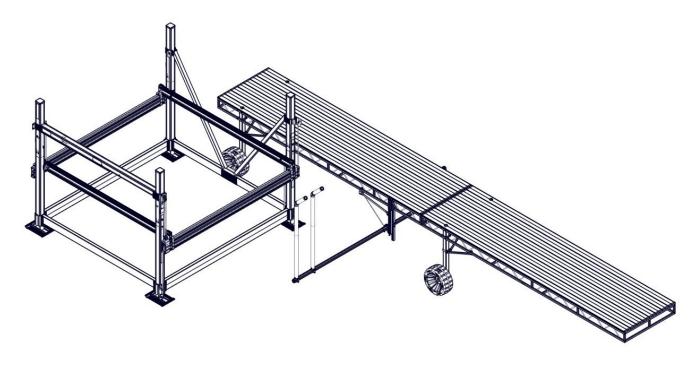
FLOE BOW FLEX INDICATOR ROLL-IN DOCKS

DOCKS & LIFTS

ASSEMBLY INSTRUCTIONS KIT P/N 510-00500-00



*DOCK & LIFT NOT INCLUDED

TOOLS REQUIRED

- -7/16 SOCKETS/WRENCHES
- -9/16" SOCKETS/WRENCHES
- -3/4" SOCKETS/WRENCHES
- -7/32" HEX SOCKET
- -TAPE MEASURE
- #2 PHILLIPS BIT (SCREWDRIVER OR DRILL)
- **-TORQUE WRENCH**

IMPORTANT NOTE:

THE BOW FLEX INDICATOR IS **NOT** A BOW STOP. CAUTION MUST BE USED WHEN PARKING A BOAT WITH THIS KIT INSTALLED. BOATS SHOULD BE DRIFTED INTO FINAL POSITION ON BOAT LIFT. FAILURE TO DO SO WILL RESULT IN DAMAGE TO DOCK, BOAT, BOAT LIFT, AND/OR LIFT/DOCK ACCESSORIES.

INSTRUCTION P/N: 610-00500-00

RELEASED 4/1/18

© Manufactured by: Floe International Inc. 48473 State Hwy. 65 McGregor, MN 55362 www.floeintl.com

BILL OF MATERIALS

P/N 210-00500-00		KIT, BOW FLEX 4' ROLL-IN	
NO.	<u>Part number</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	002-00247-00	Pocket, Bow Flex Mounting	2
2	110-00258-00	Weld't, Bow Flex PVC Upright	2
3	110-00259-00	Weld't, Bow Flex Containment	2
4	110-00260-00	Ass'y, Bow Flex Upright	2
5	110-00261-00	Weld't, Bow Flex Bungee Arm	1
6	110-00263-00	Ass'y, Bow Flex Deflector	2
7	510-99500-00	Hardware Bag, Bow Flex 4' Roll In	1

P/N 210-00501-00		KIT, BOW FLEX MAIN TUBE	
NO.	<u>Part number</u>	<u>DESCRIPTION</u>	<u>QTY</u>
8	910-14201-00	Flag Pole/ Insert - 144"	1

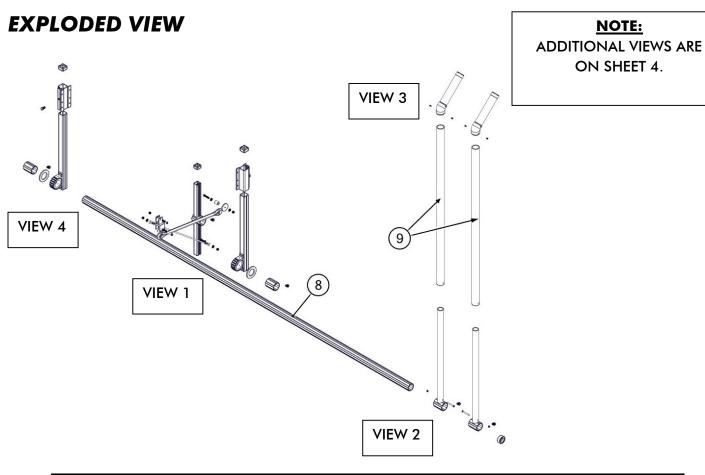
P/N 210-00503-00		KIT, BOW FLEX PVC	
NO.	<u>Part number</u>	<u>DESCRIPTION</u>	<u>QTY</u>
9	011-01708-00	Pipe, 2" Schedule 40 PVC – 59.875"	2

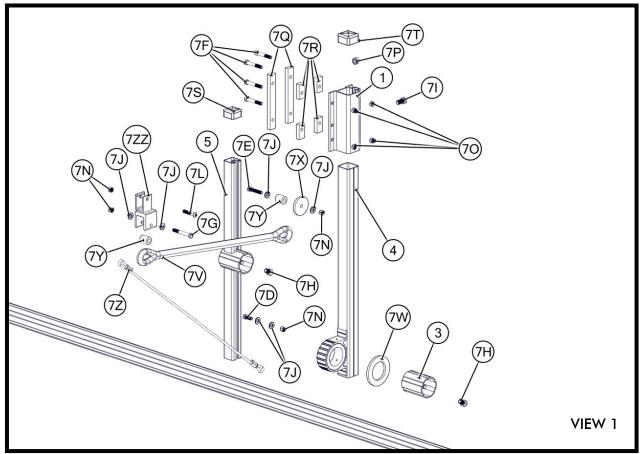
P/N 510-99500-00		HARDWARE BAG, BOW FLEX 4' Roll In	
NO.	<u>Part number</u>	DESCRIPTION	<u>QTY</u>
7A	001-00500-00	Fasteners, Bow Flex	1
7B	001-00501-00	Hardware, Bow Flex 4' Roll In Mounting	1
7C*	001-62070-00	HHCS, 1/4-20 x 2 3/4" 18-8 SS	2
7D*	001-70105-00	HHCS, 3/8-16 x 1" 18-8 ss	1
7E*	001-70111-00	HHCS, 3/8-16 x 2" 18-8 ss	1
7F**	001-70113-00	HHCS, 3/8-16 x 2 ½" 18-8 ss	8
7G**	001-70115-00	HHCS, 3/8-16 x 3" 18-8 ss	1
7H*	001-70203-00	HHCS, 1/2-13 x 3/4" 18-8 ss	5
71*	001-70205-00	HHCS 1/2-13 X 1" SS 18-8	2
7J**	001-71017-00	Flat Washer, 3/8" SAE ss 18-8	6
7K*	001-72928-00	PHSMS, 10-12 X 1/2" 18-8 SS	4
7L**	001-73819-00	BHCS, 3/8-16 x 2" ss 18-8	1
7M*	001-75001-00	Nylock, 1/4-20 Alum.	2
7N**	001-76071-00	Nut, Nylock 3/8-16 ALUM.	4
70**	001-76349-00	NUT, 3/8-16 ALUM	8
7P*	001-76350-00	Nut, 1/2-13 Alum	2
7Q**	002-02203-00	Plate, Dock Accessory	4
7R**	002-02204-00	Spacer, Dock Accessory	8
7S	006-14605-00	Cap, Grey 1.7 x1.7 x 1	1
7T	006-15210-00	Cap, Vinyl 2" Sq. Lift Corner	2
7U	010-00088-00	Cap, Vinyl - 2.375" ID x 1" Large Hole	1
7V	010-00089-00	Bungee, 24" w/ Molded Ends	1
7W	010-00091-00	Washer, 4" OD 2.52" ID	2
7X	010-00092-00	Washer, 2.5" OD, .406"ID	1
7Y	010-00093-00	Bushing, 1" OD, .5" ID - 1.125"	2
7Z	110-00262-00	Cable, Bow Flex Limiter	1
7ZZ	110-00265-00	Weld't, Bungee Mount Roll In	1

*8C-8E, 8H-8K, 8M,8N, AND 8P ARE INCLUDED WITH P/N 001-00500-00

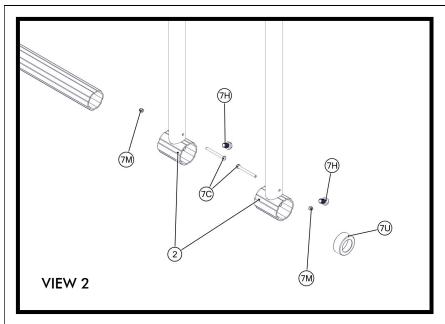
SHEET 2 OF 24

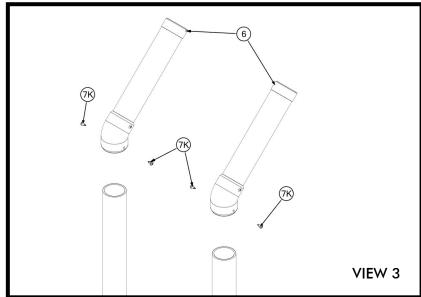
**8F, 8G, 8J, 8L, 8N, 8O, 8Q, 8R ARE INCLUDED WITH P/N 001-00501-00

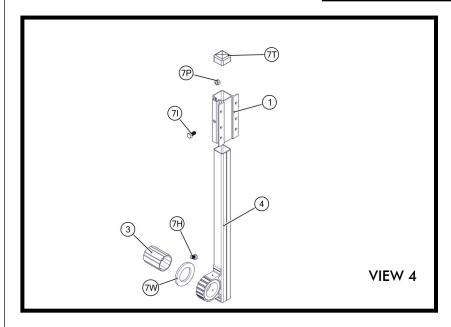




SHEET 3 OF 24







SHEET 4 OF 24

BILL OF MATERIALS

PRE-INSTALLATION

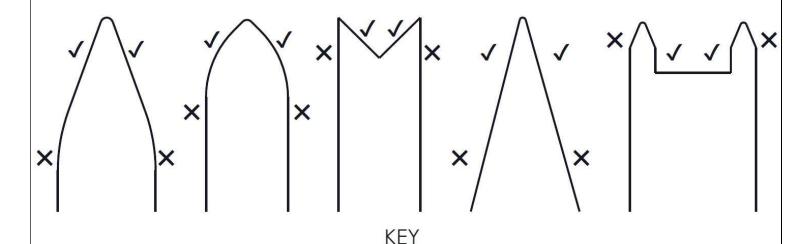
-UPRIGHT POSITIONING

THE BOW FLEX UPRIGHTS SHOULD BE POSITIONED TO FULLY ENGAGE THE BOW WHEN THE BOAT IS POSITIONED CORRECTLY ON THE LIFT. THE PVC UPRIGHTS WILL BE VERTICAL AND AT THE FRONT OF THE BOW WHEN THE BOAT IS PARKED.

THE PVC UPRIGHTS SHOULD NOT BE BENT FORWARD OR TOWARDS THE SIDES OF THE HULL.

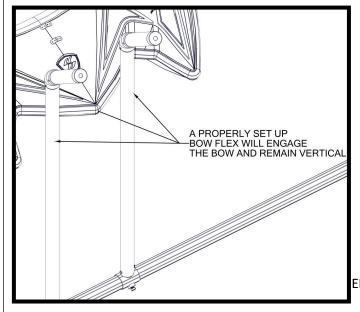
EXAMPLES OF DIFFERENT HULL DESIGNS ARE SHOWN BELOW WITH RECOMMENDED UPRIGHT PLACEMENTS.

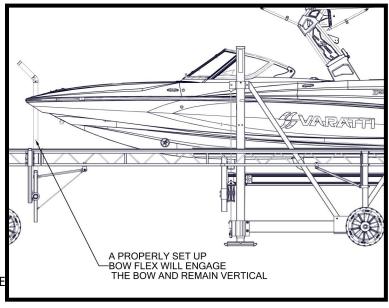
SEE NEXT PAGE ON HOW TO MEASURE FOR PLACEMENT.



✓ CORRECT

× WRONG

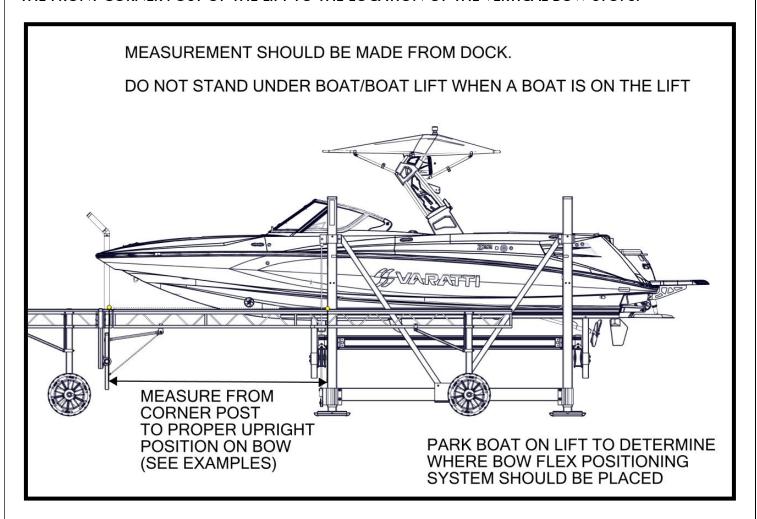




PRE-INSTALLATION

-DETERMINE LOCATION RELATIVE TO BOAT LIFT

BEFORE INSTALLING THE BOW FLEX POSITION INDICATOR, PARK THE BOAT ON THE BOAT LIFT. THEN, TAKE A MEASUREMENT FROM THE CORNER POST TO THE LOCATION ON THE BOW WHERE THE BOW FLEX UPRIGHTS SHOULD BE LOCATED. THE RECORDED MEASUREMENT WILL BE THE DISTANCE FROM THE FRONT CORNER POST OF THE LIFT TO THE LOCATION OF THE VERTICAL BOW STOPS.

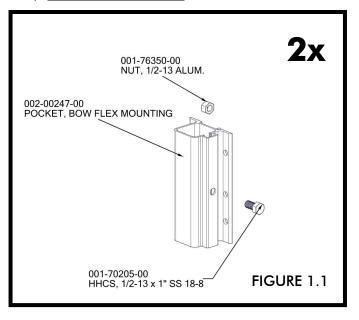


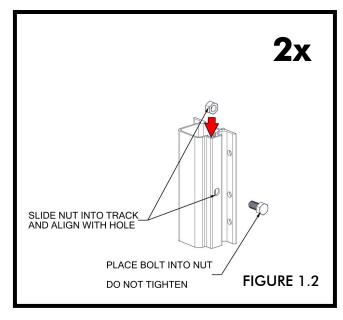
ASSEMBLY

STEP 1

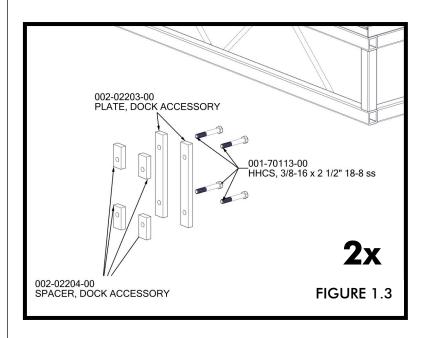
-MOUNTING BRACKET INSTALLATION

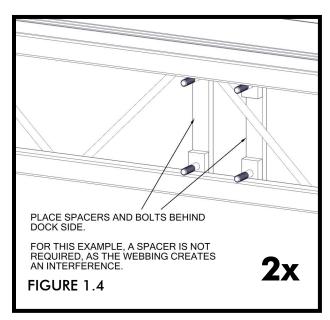
INSTALL ½" NUT AND ½" X 1" BOLT (FIGURE 1.1) INTO EACH MOUNTING POCKET BY SLIDING NUT INTO TRACK, ALIGNING WITH HOLE IN POCKET, AND PLACING BOLT INTO NUT AND HOLE (FIGURE 1.2). **DO NOT TIGHTEN.**



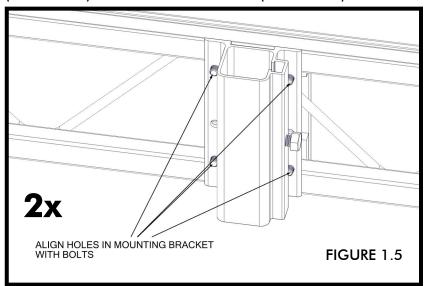


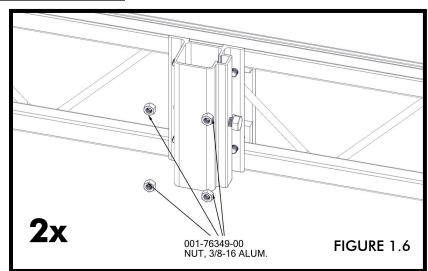
INSTALL SPACERS AND 3/8" X 2 1/2" BOLTS (FIGURE 1.3) ONTO DOCK SIDE (FIGURE 1.4). SMALL SPACERS MAY OR MAY NOT BE USED, DEPENDING ON PLACEMENT OF SYSTEM ON DOCK. FOR THIS EXAMPLE, ONE SPACER IS NOT USED, AS THE WEBBEING CREATES AN INTERFERENCE.

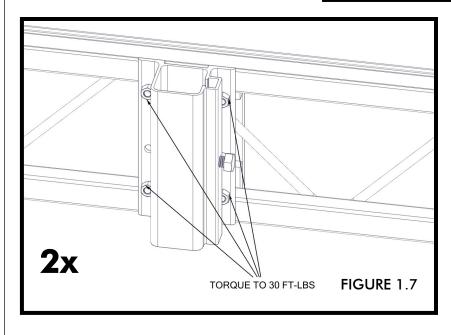




PLACE MOUNTING POCKETS ONTO BOLTS (FIGURE 1.5) AND PLACE A 3/8" NUT ON EACH BOLT (FIGURE 1.6). TORQUE TO 30 FT-LBS (FIGURE 1.7).



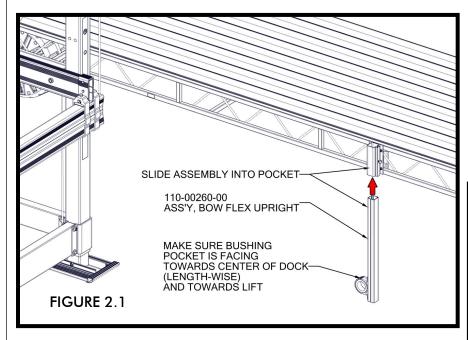


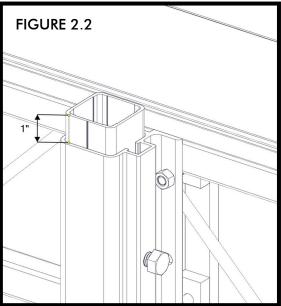


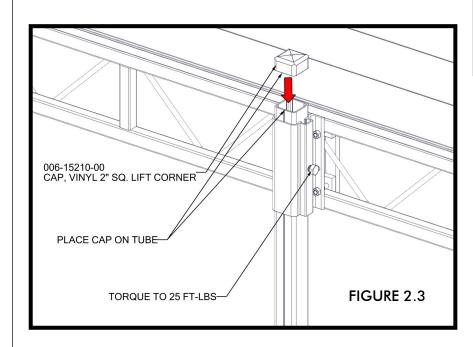
STEP 2

-LOWER TUBE MOUNT UPRIGHT ASSEMBLIES INSTALLATION

SLIDE UPRIGHT ASSEMBLY INTO POCKET. THE BUSHING POCKET MUST FACE TOWARDS CENTER OF DOCK (LENGTH-WISE) (FIGURE 2.1). POSITION TOP OF TUBE 1" FROM TOP OF BRACKET (FIGURE 2.2). TORQUE BOLT TO 25 FT-LBS (FIGURE 2.3).



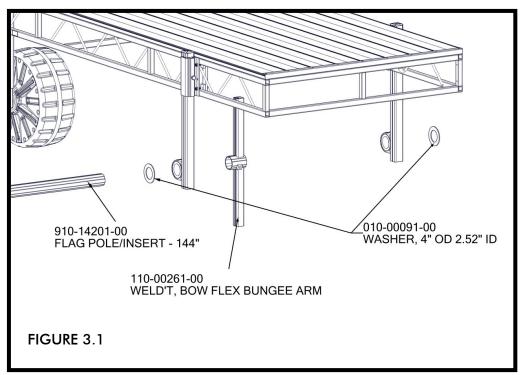


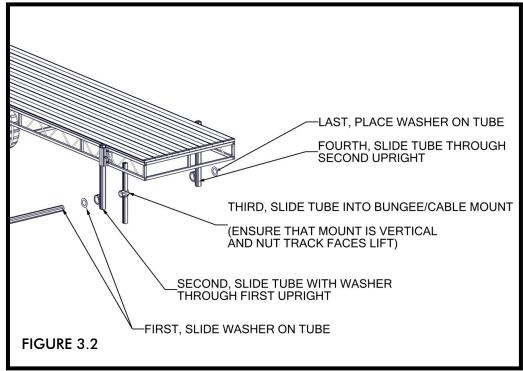


STEP 3

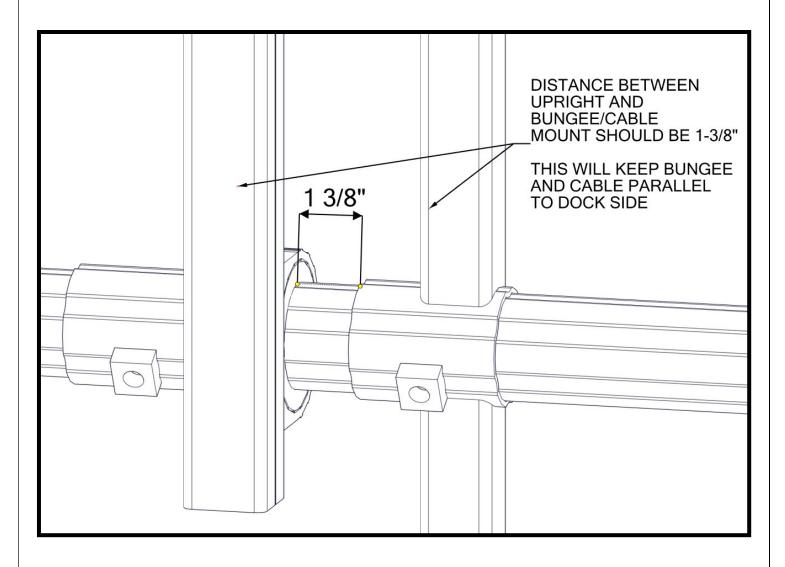
- -LOWER MOUNT TUBE INSTALLATION
- -BUNGEE/CABLE MOUNT INSTALLATION

INSTALL LOWER MOUNT TUBE AND BUNGEE/CABLE MOUNT (FIGURE 3.1) BY FOLLOWING FIGURE 3.2. THE BUNGEE/CABLE MOUNT MUST BE VERTICAL AND THE NUT TRACK MUST FACE TOWARDS THE LIFT.

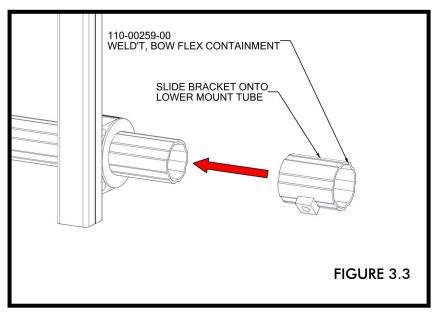


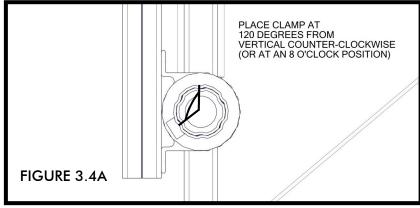


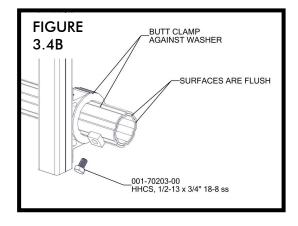
DISTANCE BETWEEN UPRIGHT AND BUNGEE/CABLE MOUNT SHOULD BE 1-3/8". THIS WILL KEEP BUNGEE AND CABLE PARALLEL TO DOCK SIDE (FIGURE 3.2A).

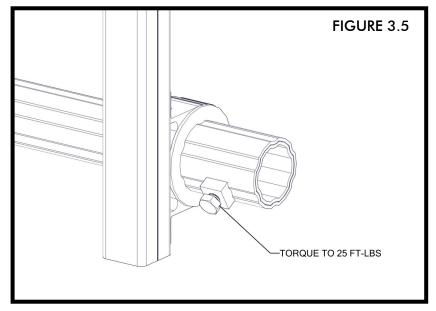


SLIDE CLAMP ONTO OTHER END OF LOWER MOUNT TUBE (FIGURE 3.3). CLAMP IS INSTALLED AT 120 DEGREES FROM VERTICAL COUNTER-CLOCKWISE (OR AT AN 8 O'CLOCK POSITION) (FIGURE 3.4A). BUTT AGAINST WASHER AND ATTACH USING $\frac{1}{2}$ " x $\frac{3}{4}$ " BOLT (FIGURE 3.4B). SURFACE BETWEEN CLAMP AND LOWER MOUNT TUBE MUST BE FLUSH. TORQUE TO 25 FT-LBS (FIGURE 3.5).

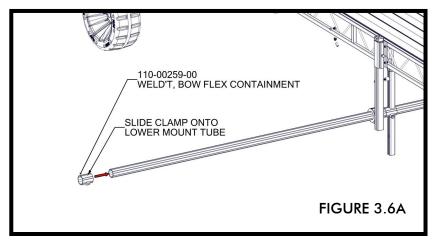


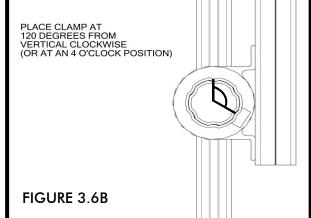


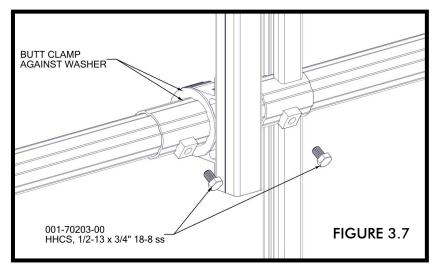


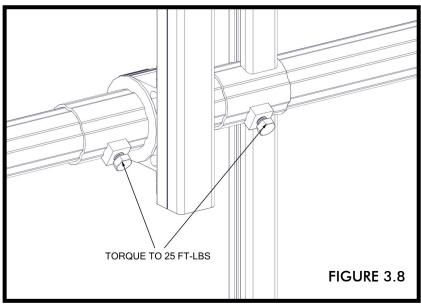


SLIDE CLAMP ONTO LOWER MOUNT TUBE (FIGURE 3.6A). CLAMP IS INSTALLED AT 120 DEGREES FROM VERTICAL CLOCKWISE (OR AT A 4 O'CLOCK POSITION) (FIGURE 3.6B). BUTT CLAMP AGAINST WASHER (FIGURE 3.7) AND ATTACH CLAMP AND BUNGEE/CABLE MOUNT WITH $\frac{1}{2}$ " X $\frac{3}{4}$ " BOLTS (FIGURE 3.7). TORQUE BOLTS TO 25 FT-LBS (FIGURE 3.8).







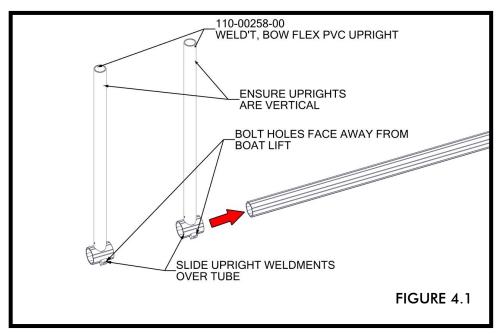


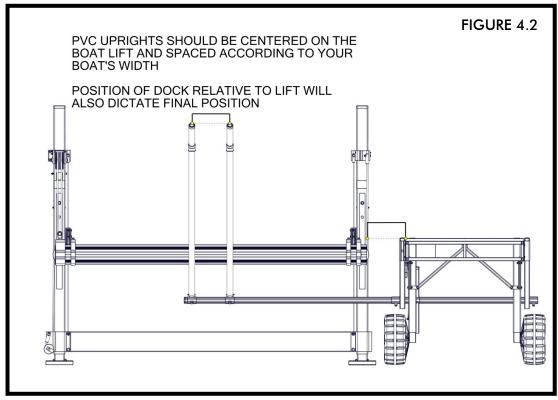
SHEET 13 OF 24

STEP 4

- -PVC UPRIGHT INSTALLATION
- -PVC TUBING INSTALLATION

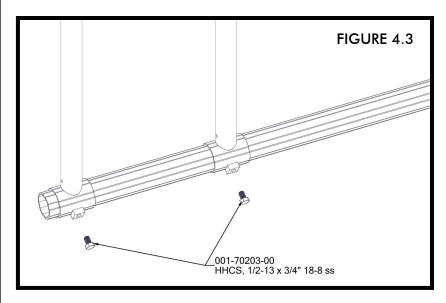
SLIDE PVC UPRIGHT WELDMENTS OVER LOWER MOUNT TUBE (FIGURE 4.1) ENSURE UPRIGHTS ARE VERTICAL AND BOLT HOLES FACE AWAY FROM BOAT LIFT. PVC UPRIGHTS SHOULD BE CENTERED ON THE BOAT LIFT AND SPACED ACCORDING TO YOUR BOAT'S WIDTH. POSITION OF DOCK RELATIVE TO LIFT WILL ALSO DICTATE FINAL POSITION OF PVC UPRIGHTS (FIGURE 4.2).

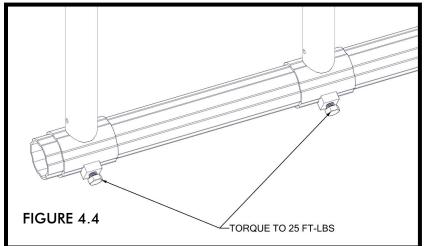




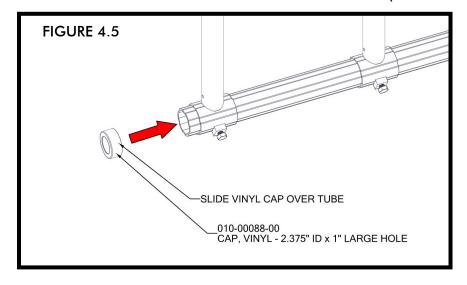
SHEET 14 OF 24

ATTACH UPRIGHTS TO LOWER MOUNT TUBE WITH $\frac{1}{2}$ " X $\frac{3}{4}$ " BOLTS (FIGURE 4.3) AND TORQUE TO 25 FT-LBS (FIGURE 4.4).



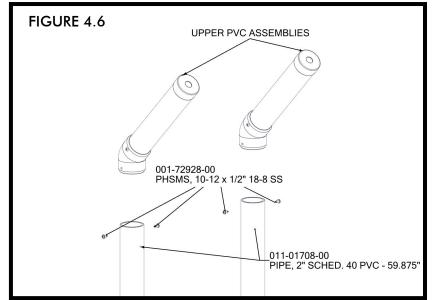


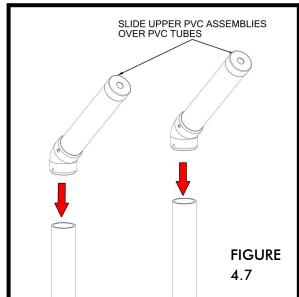
SLIDE VINYL CAP WITH LARGE HOLE ONTO END OF LOWER MOUNT TUBE (FIGURE 4.5).

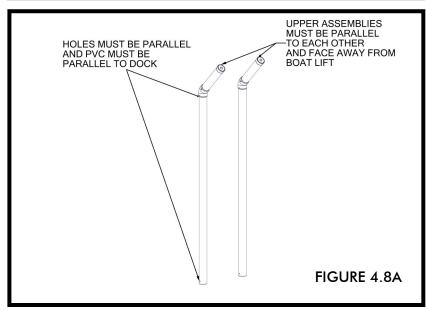


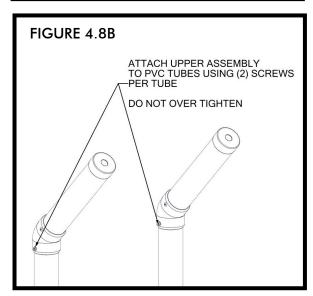
SHEET 15 OF 24

UPPER PVC ASSEMBLIES WITH SMALL HOLE VINYL CAPS ARE ATTACHED TO TOP OF PVC TUBES USING (4) 10-12 X ½" PHILLIPS SCREWS (FIGURE 4.6). SLIDE PVC ASSEMBLIES ONTO PVC TUBES (FIGURE 4.7). HOLES ON UPPER ASSEMBLIES MUST LINE UP WITH HOLES ON LOWER PART OF TUBE (FIGURE 4.8A). ATTACH USING SCREWS (FIGURE 4.8B). **DO NOT OVER TIGHTEN.**







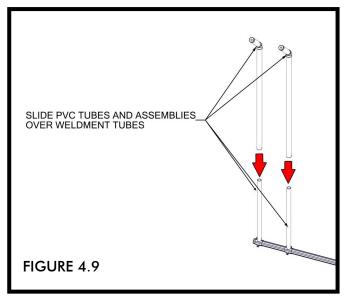


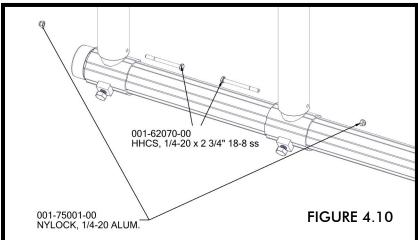
NOTE:

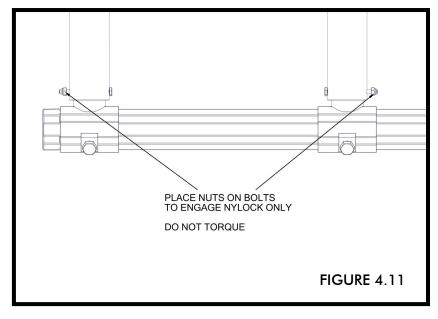
PVC TUBES MAY HAVE TO BE CUT TO LENGTH TO PREVENT INTERFERENCE WITH TILTED MAXIS CANOPIES. CUT MUST BE MADE FROM END OF TUBES WITHOUT PREDRILLED HOLES.

NOTE:

BE CAREFUL NOT TO STRIP SCREWS WHEN ATTACHING UPPER ASSEMBLIES TO PVC TUBES. SLIDE PVC TUBES AND ASSEMBLIES OVER WELDMENT TUBES (FIGURE 4.9) AND ATTACH USING $\frac{1}{4}$ " X 2 $\frac{3}{4}$ " BOLTS AND $\frac{1}{4}$ " NUTS (FIGURE 4.10). NUTS SHOULD ONLY BE TIGHTENED TO ENGAGE NYLOCK AND REMOVE PLAY IN BOLT. **DO NOT TORQUE** (FIGURE 4.11).





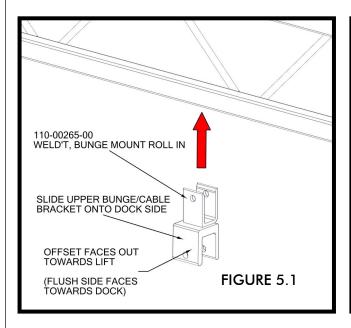


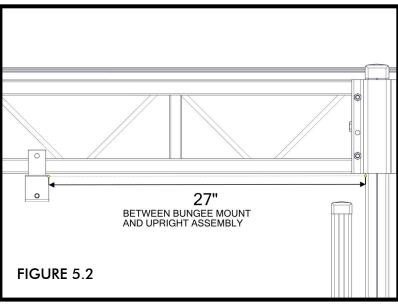
SHEET 17 OF 24

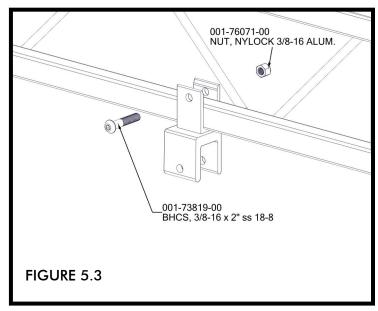
STEP 5

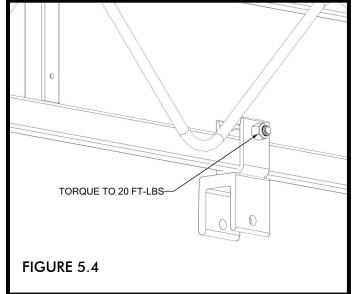
- -BUNGEE INSTALLATION
- -LIMITING CABLE INSTALLATION

SLIDE BUNGEE MOUNT ONTO DOCK SIDE. OFFSET ON BRACKET MUST FACE TOWARDS LIFT (FLUSH SIDE FACES TOWARDS DOCK) (FIGURE 5.1). POSITION 27" FROM UPRIGHT ASSEMBLY (FIGURE 5.2). ATTACH BUNGEE MOUNT TO DOCK SIDE USING 3/8" X 2" BOLT AND 3/8" NYLOCK NUT (FIGURE 5.3). TORQUE TO 20 FT-LBS (FIGURE 5.4).

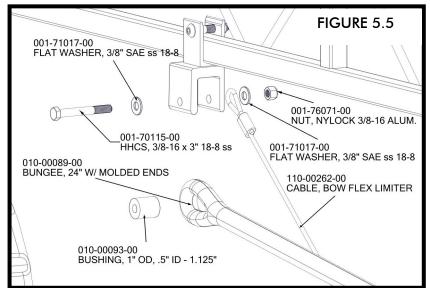


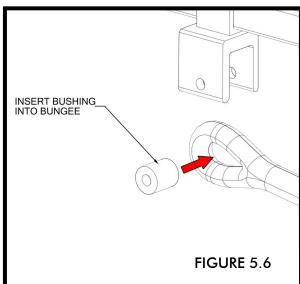


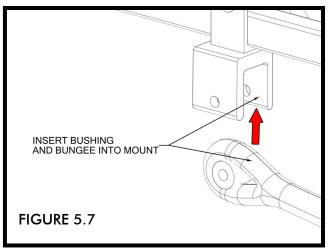


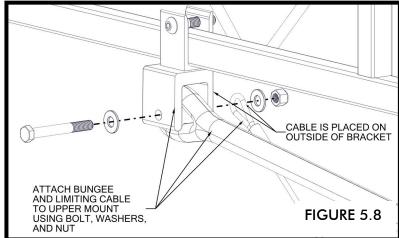


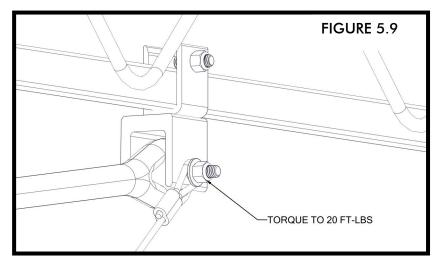
ATTACH BUNGEE AND CABLE TO UPPER BUNGEE/CABLE BRACKET USING 3/8" X 3" BOLT, (2) 3/8" WASHERS, BUSHING, AND 3/8" NYLOCK NUT (FIGURE 5.5). FIRST, INSERT BUSING INTO BUNGEE (FIGURE 5.6), THEN SLIDE BUSHING AND BUNGEE INTO BUNGEE/CABLE BRACKET (FIGURE 5.7), AND ATTACH WITH HARDWARE (FIGURE 5.8). NOTE THAT CABLE IS PLACED ON OUTSIDE OF BRACKET. TORQUE TO 20 FT-LBS (FIGURE 5.9).





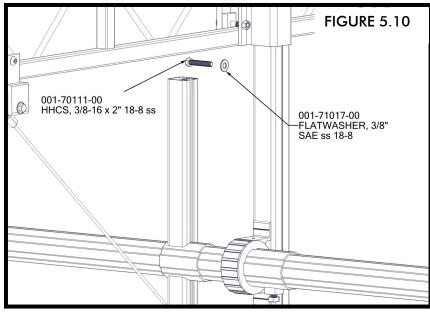


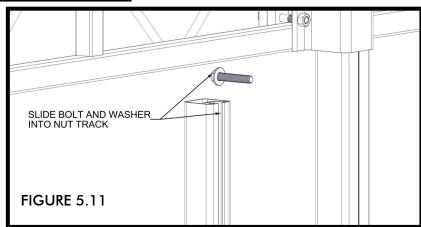


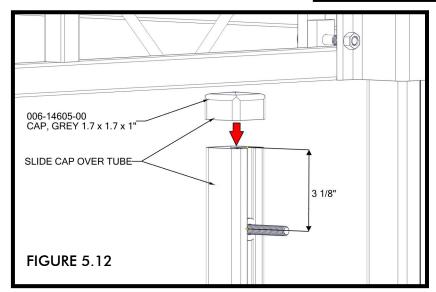


SHEET 19 OF 24

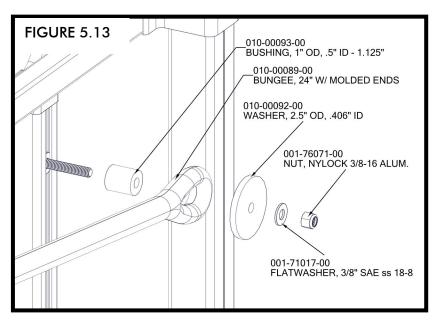
INSTALL A 3/8" X 2" BOLT AND 3/8" WASHER (FIGURE 5.10) INTO THE INTO BUNGEE/CABLE MOUNT BY SLIDING BOLT AND WASHER INTO NUT TRACK (FIGURE 5.11). CENTER OF BOLT AND WASHER MUST BE 3 1/8" FROM TOP OF TUBE. SLIDE CAP OVER TUBE (FIGURE 5.12).

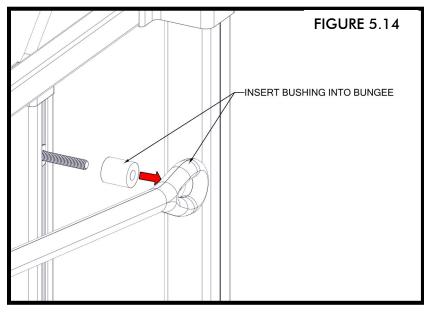


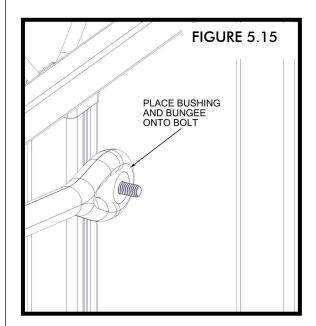




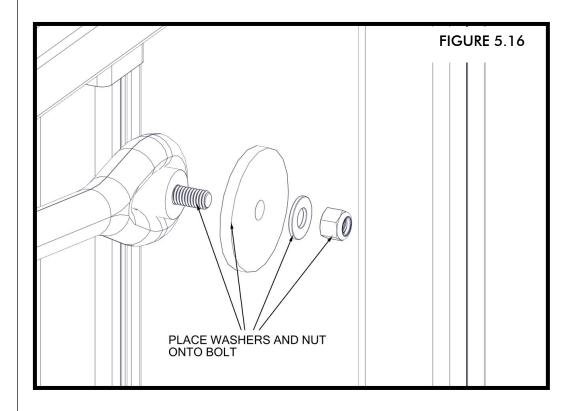
OTHER END OF BUNGEE IS ATTACHED TO BUNGEE/CABLE MOUNT WITH A BUSHING, PLASTIC WASHER, 3/8" WASHER, AND 3/8" NYLOCK NUT (FIGURE 5.13). FIRST, INSERT BUSHING INTO BUNGEE (FIGURE 5.14), THEN PLACE BUNGEE AND BUSHING ONTO BOLT (FIGURE 5.15).

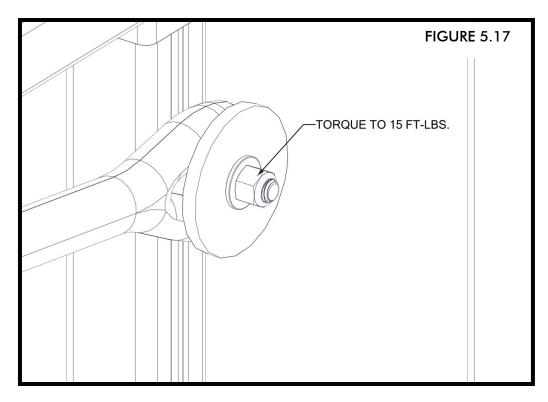




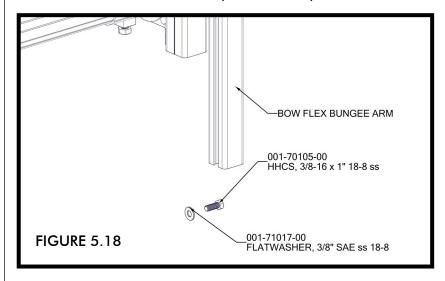


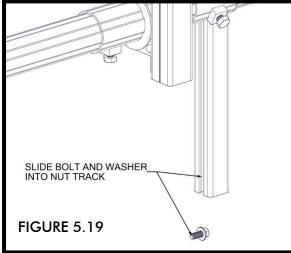
PLACE WASHERS ONTO BOLT (FIGURE 5.16) AND TORQUE NUT TO 15 FT-LBS (FIGURE 5.17).



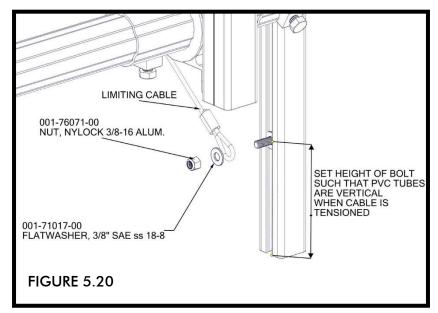


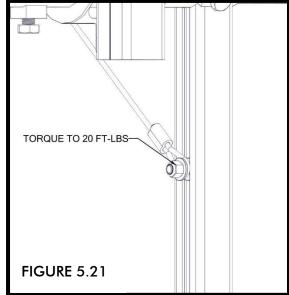
INSTALL 3/8" X 1" BOLT AND 3/8" WASHER (FIGURE 5.18) INTO BUNGEE ARM BY SLIDING BOLT AND WASHER INTO NUT TRACK (FIGURE 5.19). SET HEIGHT OF BOLT SUCH THAT PVC TUBES ARE VERTICAL WHEN CABLE IS TENSIONED (FIGURE 5.20).





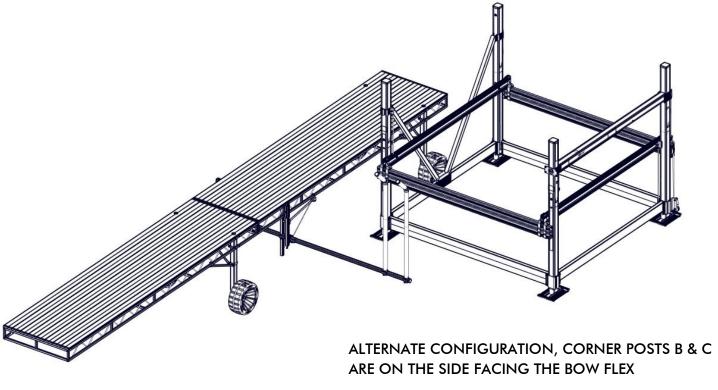
OTHER END OF LIMITING CABLE IS ATTACHED TO BOLT USING A 3/8" WASHER AND 3/8" NYLOCK NUT (FIGURE 5.20). TORQUE NUT TO 20 FT-LBS (FIGURE 5.21).

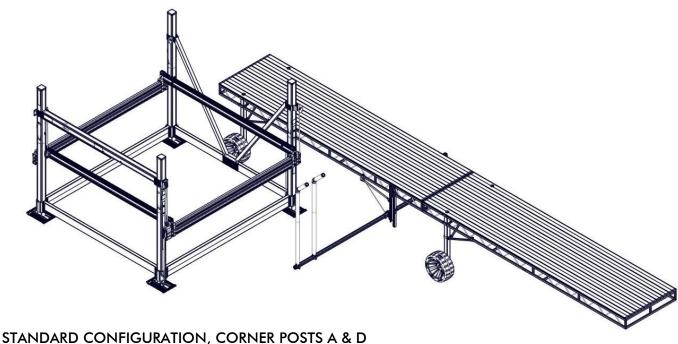




ALTERNATE CONFIGURATION

THE BOW FLEX CAN BE INSTALLED ON EITHER SIDE OF THE DOCK. THE ASSEMBLY PROCESS IS THE SAME, BUT MIRRORED. IN THE ALTERNATE CONFIGURATION, THE MOTOR SIDE (CORNER POSTS B &C) ARE ON THE SIDE FACING THE BOW FLEX. IN THE STANDARD CONFIGURATION, THE LIFTING SIDE (CORNER POSTS A & D) ARE ON THE SIDE FACING THE BOW FLEX. THIS KEEPS THE V-BRACE SIDE OF THE LIFT NEXT TO THE DOCK. AN EXAMPLE OF EACH SETUP IS SHOWN BELOW.





STANDARD CONFIGURATION, CORNER POSTS A & D
ARE ON THE SIDE FACING THE BOW FLEX