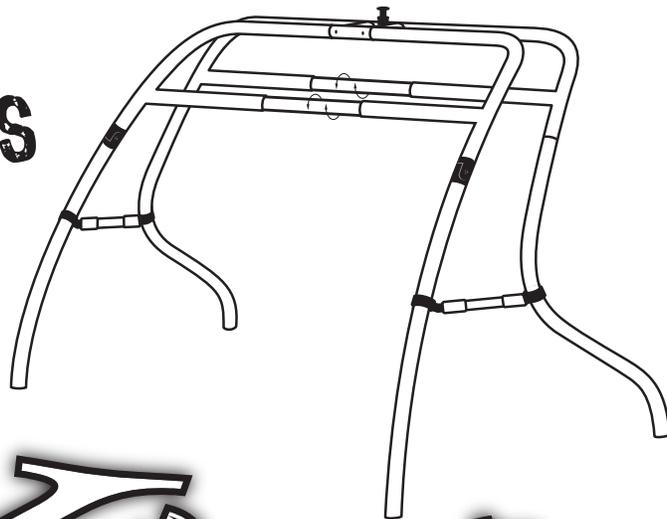


# CROSSBAR tower INSTALLATION INSTRUCTIONS

FLY HIGH



# Pro X Series

**!!! CAUTION !!!**

**BE SURE TO READ CAREFULLY ALL INSTRUCTIONS AND FAMILIARIZE YOURSELF WITH ALL PARTS AND COMPONENTS OF YOUR NEW FLY HIGH PRO X SERIES TOWER BEFORE PROCEEDING.**

## IMPORTANT THINGS TO KNOW BEFORE INSTALLATION:

- Leave the plastic on the arms and as many parts as possible to protect the tower and boat from scratches until installation is completed.
  - Keep a vacuum cleaner handy to vacuum up areas immediately after drilling.
  - A few friends to occasionally assist are helpful; one friend to help is necessary.
  - A drill and a 3/4" socket with ratchet and a 3/4" wrench are needed.
  - All other tools are included as follows: 1/2" drill bit, 4 allen wrenches, sizes: 3/16", 7/32", 5/16", and 3/8".
  - Most important before drilling is to find where to mount the tower. Usually around the center of the boat, or just behind the windshield or driver, is the best place for the rear base to be located. Also, you must be sure where the tower will rest when it is folded down. (To help with this, preassemble the tower off your boat, using instructions 1 through 5, and have your friends hold it on the boat where it might go. Then lay it down to see where it rests.)
  - Be sure to check under gunnel for obstructions, cables, etc. before drilling holes.
1. It is easiest to preassemble the tower off the boat by building it upside down. First, lay the horizontal H section on the floor with the ski tow hitch underneath. (Put down tarp or carpet to avoid scratching the tower.) **SOME PARTS COME PRE ASSEMBLED**

2. Attach the rear vertical bar to the rear top 90° elbows. Line up the holes in the rear vertical bars with the tapped holes in the aluminum insets on the rear top 90° elbows, and insert and tighten the 3/8-16 x 3/4" (BOLT G) button head socket cap screws (two on each side).

3. Attach the front vertical bars to the front two 90° elbows. Place the flats together making sure the white delron washer is in place. Be sure the lubricating washers (should be shipped in place but check to make sure) are on the 1/2-18 x 1" (BOLT E) socket head shoulder bolts, and insert and tighten them on both sides. Straighten the front vertical bars until the 1/2" holes line up, then put 1/2 x 2" (BOLT D) ball lock hitch pins in both sides. Make sure the front vertical bar matches the front 90° elbow. This is done by matching the "R"s together and the "L"s together. **FIG. 1**

YOUR SATISFACTION IS IMPORTANT TO US. IF YOU HAVE ANY QUESTIONS, OR IF FOR ANY REASON YOU ARE DISSATISFIED, PLEASE CONTACT US RIGHT AWAY AT

**414-964-3668 - OR - 1-800-932-0685**

WE ARE CONFIDENT YOU WILL BE PLEASED WITH OUR PRODUCT AND OUR SERVICE.

4. Measure the width of the boat approximately where you will mount the rear vertical bars. By turning the inside section of the rear adjustable supports, adjust the width of the tower so the bases of the rear vertical bars are the same width as the boat where you are planning to mount the rear base plates. **FIG. 3**

5. Center the horizontal H section, line up the holes in the rear top 90° elbows with the corresponding holes on each side of the horizontal H section, and temporarily pin them with the 1/2-13 x 2.5" (BOLT C) button head socket cap screws. (Do not use nuts yet because you might have to readjust before putting on the nuts for final assembly.) **SEE BACK**

6. Now you can get your friends (one on each leg is best and safest to not scratch the boat) to hold the tower in the approximate place on the boat. (Again, right behind the windshield or behind the driver, around or just behind the center of the boat is best.) Check and see if the tower lies down and rests properly when it is folded down. Check to see if it is possible to mount the rear bases on top of the gunnels or on the sides of the gunnels. See if the front vertical bars can mount in a good spot. Then mark where the rear bases go and set the tower back on the floor. (The front vertical bars should be mounted 48" to 70" in front of the rear bases, and the horizontal H section should be somewhat horizontal.) **SEE BACK**

7. Lay the rear base in the desired location on both sides of the boat. The rectangular rear bases have to be mounted parallel to the boat. **SEE BACK & FIG. 4**

8. Mark and drill 1/2" holes on each side of the rear base. (Remember to check that the underside is clear as previously noted.) **FIG. 4**

9. Insert 1/2-13 x 3.5" (BOLT A) hex head cap screws through the base and fiberglass of the boat. **FIG. 4**

10. Place the base plate underneath the gunnels of the boat on the bolts. Put 1/2" washers on the bolts then put the 1/2" lock nuts on the bolts. (Be sure the base plate lies flat on the fiberglass as previously noted.) **FIG. 4**

11. Tighten, very securely, all of the lock nuts on both sides. (A 3/4" socket with ratchet or another 3/4" wrench or adjustable wrench is necessary.) **FIG. 4**

12. Lift the tower back onto the boat, preferably with one friend on each leg. **SEE BACK**

13. Bolt the rear base with the ball placed between the ball plates and secure it using two 1/2-13 x 0.75" (BOLT F) socket head cap screws. Tighten very securely, and do the same on both sides of the boat. (The rear adjustable cross support may have to be adjusted to adjust the width to properly fit before mounting the rear vertical bars to the ball on the rear base.) **FIG. 6**

14. To find where to mount the front bases, rotate the front adjustable support until the arms are at approximately the right width where you want the front bases mounted. Swivel the front 90° elbows on the horizontal H section until the arms are where you want to mount them. (This can be on top of the gunnels in front of the windshield or on the side of the gunnels along the windshield.) Also, you will have to lean the rear vertical bars forward or backward to find the desired location. The horizontal H section should be somewhat horizontal from front to back and the bases should be 48" to 70" apart. (Ultimately, 60" +/- 6".) **FIG. 3**

15. Mark where the front bases will be mounted. (Again, remember to check underneath, as noted earlier, for obstructions and accessibility.) **FIG. 6**

16. Drill 1/2" holes on each side of the boat for the front bases. (Be sure they are located across from each other. [Measure twice, drill once.] **FIG. 6**

17. Insert 1/2-13 x 3.5" (BOLT B) flat head socket bolts through the front bases and the

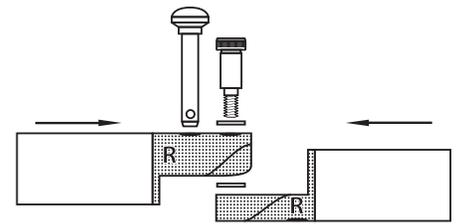


figure 1 - arm connection

\*be sure plastic washers are in place



figure 2 - meeting point

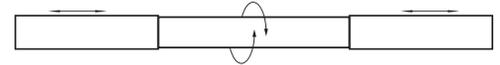


figure 3 - adjustable support arms

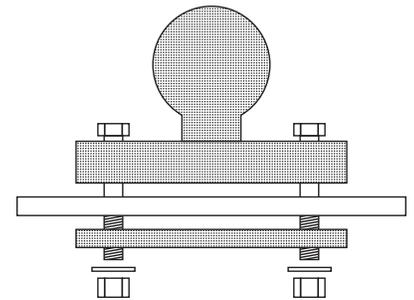


figure 4 - rear mount plate

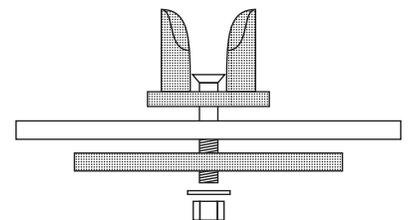


figure 5 - front mount plate



figure 6 - rear mount clamp

fiberglass of the boat. **FIG. 6**

18. Place the base plates underneath the gunnels of the boat on the bolts. Put 1/2" washers and 1/2" lock nuts on the bolts. (Be sure the plate lies flat on the fiberglass underneath.) **FIG. 6**

19. Tighten, very securely, all of the lock nuts on both sides of the boat. **FIG. 6**

20. Pin the front vertical bars to the front bases on each side using 1/2 x 2" (BOLT D) long ball lock hitch pins. Rotate the base until the slots on the base and the front bars line up. If it is necessary to adjust the rear width, pull the 1/2-13 x 2.5" (BOLT C) button head socket cap screws out of the top horizontal H section. (Be sure not to strip or damage the threads. You may have to relieve pressure to do this by twisting the cross support so you do not damage the threads.) **SEE BACK**

21. Adjust the front and rear adjustable cross supports until it is at its correct width. This can be checked by viewing the tower from the front and rear of the boat and see how it looks. **FIG. 3**

22. Slide the horizontal H section from side to side until the corresponding holes on each side of the horizontal H section line up with the corresponding holes on both rear top 90° elbows. **SEE BACK**

23. Put both 1/2-13 x 2.5" (BOLT C) button head socket cap screws through both of the holes in the rear top 90° elbows on both sides.

**SEE BACK**

24. Put the 1/2-13 nylock nuts on both screws and tighten very securely. **SEE BACK**

25. View again to make sure the front width is correct. Measure and make sure the front of the horizontal H section is centered between both of the front top 90° elbows.

**SEE BACK**

26. When you are satisfied, drill a 1/2" hole in the front of the horizontal H section right where the holes line up in the front top 90° elbows. (It is best to drill through the top hole wall, then drill through the bottom hole wall. It is too hard to drill straight through and line up.) **SEE BACK**

27. Put 1/2 x 2" (BOLT D) ball lock hitch pins into the holes in the front top 90° elbows. **SEE BACK**

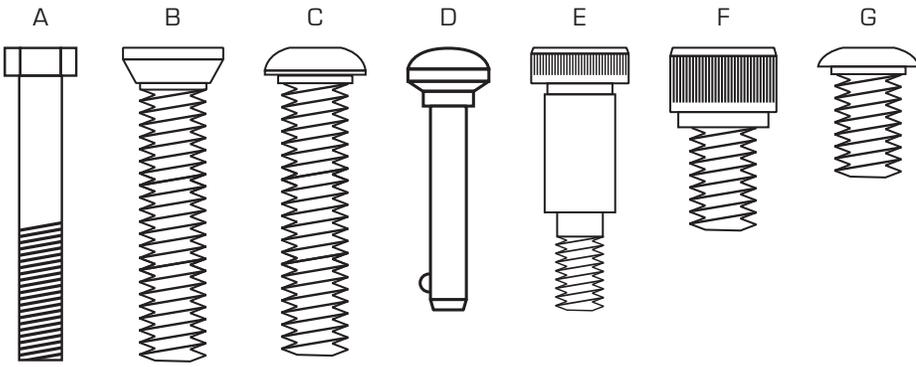
28. You can now adjust the front and rear adjustable cross supports, in or out, to take up any unnecessary flex and help stabilize the tower.

From now on you can fold your tower up or down in seconds with the help of a friend. To fold it down, pull the 1/2 x 2" (BOLT D) ball lock hitch pins out of the front vertical bar bases, and the front vertical bar swivels. Fold the tower down and fold the front vertical bars in. (If needed, the top horizontal H section pins can be pulled to fold the tower down even further.)

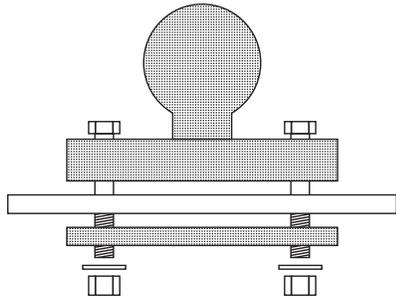
**NOTE: FOLD DOWN CAUTIOUSLY TO PREVENT DAMAGE.**

For assembly problems, please call: 414-964-3668 or 1-800-932-0685.

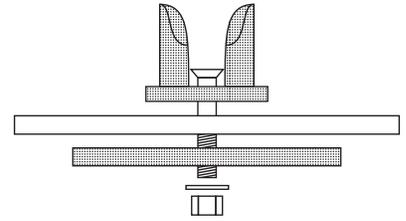
We are sure that with a quality installation you will enjoy the best-made tower in the world for a long time. So please call with any installation or performance questions.



- A - rear mount base bolt 1/2-13x3.5"
- B - front mount base bolt 1/2-13x3.5"
- C - horizontal "H" section bolt 1/2-13x2.5"
- D - quick connect pin 1/2 x 2"
- E - front arm connection bolt 1/2 x 1"
- F - rear mount clamp bolt 1/2-13x0.75"
- G - rear arm connection bolt 3/8-16x0.75"



rear mount base - attaches to rear vertical bar



front mount base - attaches to front vertical bar

