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Pro X Series Tower Installation Instructions

WARNING

FAILURE TO ADHERE TO ALL WARNINGS COULD CAUSE DAMAGE TO EQUIPMENT OR VEHICLE, PERSONAL INJURY OR EVEN DEATH.

BE AWARE OF YOUR SURROUNDINGS AND ALWAYS STAY CLEAR OF BRIDGES, OVERHANGING TREES, LOW HANGING POWER LINES AND ANY OTHER OBSTACLES • DO NOT USE TO PULL KITES, PARA SAILORS OR STRANDED BOATS • BE SURE TO CHECK ALL HARDWARE FOR WEAR AND PROPER INSTALLATION PRIOR TO EACH USE • ALWAYS WEAR SAFETY GLASSES WHEN DRILLING THROUGH METAL • YOU WILL NEED AT LEAST FOUR PEOPLE FOR SOME STEPS OF THE INSTALLATION PROCESS • FAILURE TO ADHERE TO ALL WARNINGS AND NOTES COULD CAUSE PERSONAL INJURY OR DAMAGE TO YOUR BOAT.

WARNING

THE USE OF THIS PRODUCT INVOLVES INHERENT RISKS OF INJURY OR DEATH. TO REDUCE THESE RISKS THE INDIVIDUAL MUST ALWAYS STAY WITHIN THEIR LIMITS AND AT SPEEDS THAT DO NOT EXCEED THEIR LEVEL OF SKILL. THIS PRODUCT ALLOWS WAKEBOARDERS TO ATTAIN MORE HEIGHT AND IT IS STRONGLY RECOMMENDED THAT EACH USER TAKES A SLOW APPROACH TO THE WAKE UNTIL THEY FULLY ADJUST TO THE DIFFERENCE IN FEEL AND HOW THE TOWER WORKS.

- 1- Read through all directions and warnings completely before installing this product.**
- It's easiest to preassemble the tower off the boat by building it upside down. Place a tarp on the ground to avoid scratching the tower. Lay the top section on the ground with the delron swivel facing down.
- Attach the rear vertical bars to the rear elbows. Line up the holes in the rear vertical bars with the tapped holes in the aluminum insets. Insert and tighten (four on each side) the 3/8-16x3/4" button head socket cap screws (G). Make sure that they're turning freely to avoid cross-threading or stripping.
- Now to attach the front vertical bars to the front elbows. Check the markings (R / L) at the attaching points to ensure a proper match (Figure 3). Make sure the white delron washer is in place between the two parts. Also be sure the black lubricating washers (they're shipped in place but check to make sure) are on the head side of where the 1/2-18x1" socket head shoulder bolts screw in (E). Insert and tighten the bolts on both arms. Make sure that they are turning freely to avoid cross-threading or stripping. Straighten the front vertical bars until the 1/2" holes line up and insert 2" hitch pins (D).
- Determine whether you will install the mounting bases on top or on the sides of the gunnels. Measure the width of the boat where you will be mounting both the front and rear vertical bars.
- Turn the center of the adjustable crossbars to adjust the width of the tower to match the width of the boat where you are planning to install the front and rear mount bases. (Figures 1 & 2)

7- There are two types of clamps for the support braces, one has a hitch pin and one has a bolt. (Figure 5)

8- Attach the support brace clamps to the vertical bars. The hitch pin clamps mount to the front vertical bars and the bolt clamps mount to the rear vertical bars. Attach all 4 clamps at their approximate place of final installation and tighten them just enough so they don't slide up or down the vertical bars.

9- Attach the support braces to the clamps using the hitch pins and bolts. To adjust the length of the braces, simply turn the inside section of the brace.

10- Once connected, use the braces to adjust the distance between the front and rear vertical bars. Adjust them to the approximate distance between the points where you plan to install their respective mounting bases.

11- Each rear vertical bar uses a clamp (two separate pieces) to attach to its rear mounting base. Piece **A** is installed in the vertical bar and swivels 360°. Piece **B** is smaller and shaved down on the lower end. (Figure 4)

12- Attach the rear mounting bases to the tower by securing each ball between pieces **A** and **B**. Use two 1/2-13x3/4" socket head cap screws (F). Be sure to tighten them firmly.

IMPORTANT- Notice that piece B of the clamp is shaved down on the lower end. This allows for clearance when folding the tower. It is imperative that you install this piece on the side of the clamp where the gunnel is sloped upward (Figure 4). Failure to do this will cause the clamp to bind, which could cause damage to the tower or boat. IF YOU HAVE ANY QUESTIONS ABOUT THIS, PLEASE CONTACT US PRIOR TO CONTINUING.

13- Pin the front mounting bases to the tower using 2" hitch pins (D).

NOTE- Next step requires a minimum of 4 people.

14- Now lift the tower, flip it over and set on the ground in the upright position

15- Center the horizontal H section, line up the holes in the rear elbows with the corresponding holes on each side of the horizontal H section, and temporarily pin them using the 2" hitch pins (D). The horizontal H section must be centered.

NOTE- For the next step, try to avoid the use of shop rags because they may have abrasive materials in them which can scratch you boat.

16- With 4 people, raise the tower and walk it over the boat from the rear. Use rags / towels to rest the tower on the boat.

17- Place the tower on the boat where it will be installed. The best placement for the tower is directly behind the windshield or driver (around or just behind the center of the boat).

18- Carefully fold the tower down to see where and how it rests when installed at your chosen position. Does everything look good? You may have to move it a little to make it rest in the right spot.

19- Once everything is set to where you want it, carefully raise the tower back to the vertical position.

20- Use a reference point on the boat (such as the back of the windshield) to measure where you will install the rear mounting bases. Be sure that the reference point you use is identical on both sides, giving you equal distances. Use masking tape or a grease pencil to mark *around* each rear mounting base.

21- Decide where you want the braces to be on both sides. They can be installed anywhere and at any angle you choose as long as they are below the connection points for the vertical bars to the top of the tower.

22- Adjust the braces appropriately and tighten their clamps completely.

NOTE- For the next step, the distance between each front and rear vertical bar must be between 48"-70".

23- With the rear mounting bases in position, make any necessary adjustments to the front vertical bars by using the front adjustable crossbar and braces. Measure all your mounting points to ensure everything is symmetrical.

24- Check to make sure all the mounting bases are resting flush on the boat.

25- Use masking tape or a grease pencil to mark *around* each front base.

26- Once you have made your markings, carefully raise the tower and walk it off the back of the boat.

27- Remove the mounting bases from the tower and realign the bases on the boat. Mark your drilling points.

28- *PRIOR TO DRILLING:* Double check to ensure that the underside is clear of obstructions (wires, cables, etc.) and that the under-plates will fit flush to the inside of the gunnel (check all 4 mount points). Make adjustments if necessary.

29- Drill 1/2" holes to through all your points to install the mounting bases.

NOTE- Use anti-seize on the mounting bolts to help with future removal of mounting bases

30- Insert the proper bolts through each of the mounting bases and holes you drilled (Figures 1 & 2).

31- Slide the under-plates over the bolts on the underside of the gunnel. Use washers and nuts to secure the mounting bases. Tighten the rear mounting base bolts firmly. *Don't completely tighten the front mounting bases yet.* You should be able to turn them slightly to help align them with the front vertical bars.

32- With 4 people, raise the tower and walk it over the boat from the rear.

33- First you must attach the rear vertical bars. Secure each ball between the clamp pieces **A** and **B**. The rear adjustable crossbar may need to be adjusted slightly for the vertical bars to fit the mounting bases properly. Be sure the clamp pieces are on the correct side of the ball as shown in Figure 4.

34- Align the front arms with their mounting bases. Once they are aligned, finish tightening the bolts on the bases. Be sure you tighten them firmly.

35- Pin the arms to the mounting bases using 2" hitch pins.

36- Once all four vertical bars are secured to their mounting bases, step back and walk around the boat to make sure the tower looks exactly how you want it to. Also check that everything lines up and that the horizontal H section is centered.

37- Make any necessary adjustments to the tower using the adjustable crossbars and braces.

38- *BEFORE DRILLING THE HOLES IN THE NEXT STEP:* You will be drilling through metal so you will want to cover as much of the boat as possible with old sheets, blankets or tarps to catch any metal shavings produced during the drilling process. **ALWAYS WEAR EYE PROTECTION WHEN DRILLING THROUGH METAL.**

NOTE- *It's best to have a sharp / new 1/2" drill bit for the next step. Drilling through metal with a dull bit will make it difficult and increases the chances of errors. DON'T DRILL AT HIGH SPEEDS, LET THE DRILL BIT DO THE WORK. ALSO OCCASIONALLY BACK OFF THE PRESSURE TO CLEAR ANY SHAVINGS FROM THE HOLE.*

39- SAFETY GLASSES!!!! We recommend that you start by drilling through the top holes first, then drill from the bottom for the lower holes. Use the existing holes in the outside portion of the top section as guides to drill 1/2" holes through the front of the horizontal H section. If necessary, deburr the tower using a file.

40- Carefully brush any metal shavings off the tower. Remove the coverings from the boat and *thoroughly vacuum* the interior of the boat. You can also vacuum the areas where you drilled for the mounting bases.

41- Remove the pins from the rear of the horizontal H section and insert them through the holes you just drilled.

42- Insert 1/2-13x2.5" button head socket caps screws (C) through the holes in the rear of the horizontal H section that the hitch pins were originally in. Secure and tighten them firmly with 1/2" nylon lock nuts.

43- Now adjust the rear adjustable crossbar inward until the tower is rigid. This will take up any unnecessary flex and help stabilize the tower. Turn the inside section until it is as tight as you can get it by hand.

TO FOLD THE PRO X SERIES TOWER - **(1)** pull the pins from the front mounting braces. **(2)** fold the tower back. **(3)** pull the pins from the braces. **(4)** pull the pins from the front vertical bars and fold them in.

WE RECOMMEND THAT YOU KEEP A SMALL TUBE OF CLEAR SILICONE GREASE IN THE BOAT AND OCCASIONALLY APPLY A LIGHT COAT TO THE PINS. THIS WILL HELP KEEP THEM IN GOOD WORKING CONDITION AND EASE THEIR INSTALLATION AND REMOVAL.

