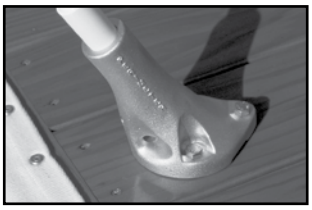
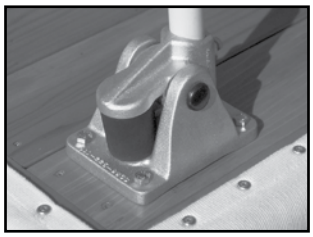
Mooring Whips Installation and Operating Instructions

Thank you for purchasing a Taylor Made Mooring Whip. Taylor Made Products manufactures the highest quality docking and protective products on the market and has developed state-of-the-art mooring whip systems that will provide premium protection for your boat for years to come under normal boating conditions.

The parts listed below have been included with your mooring whip system.


Fixed Angle Base


Rocker Arm Base

"Standard Mooring Whips" (Models MW.080, MW.120, MW.140, MW.160)

1. Two fixed angle Aluminum-Magnesium bases.
2. Two solid two-part .813" dia. tapered fiberglass mooring whip poles with roller tips. (The MW.080 model consists of two one-piece poles)
3. Six stainless steel 3/8" bolts, nuts, and washers.
4. Two 5/16" solid braid nylon mooring whip lines to be used with poles.
5. Two black whip cleats (with neoprene strips) for whip line adjustment.
6. Two 3/8" nylon dock lines.
7. One epoxy adhesive packet (not needed for the MW.080 model).
8. One 5/32" Hex Key.

"Premium Mooring Whips" (Models PMW.1400, PMW.1600, PMW.1800)

1. Two self-regulating, variable angle ("Rocker Arm") Aluminum-Magnesium bases.
2. Two solid two-part 1.0" dia. tapered fiberglass mooring whip poles with roller tips.
3. Eight stainless steel 3/8" bolts, nuts, and washers.
4. Two 5/16" nylon mooring whip lines to be used with poles.
5. Two black whip cleats (with neoprene strips) for whip line adjustment.
6. One epoxy adhesive packet.


Whip Cleat (unassembled)


Whip Cleat (assembled)

The following tools are necessary for installation:
Two 9/16" and one 1/2" socket, open or crescent wrenches, a drill with 3/8" bit, a small knife, and a Phillips head screwdriver. Fixed angle Mooring Whips also require a 5/32" Hex Key (included).

How to Use the Mooring Whip System

Boarding The Boat:

1. To board the boat when the whip is in use, simply unfasten one of the whip lines from the whip cleat. This will release the whip pressure. The released tension will cause the pole to retract upward, allowing that end of the boat to return to dock for easy boarding. The other end of the boat will remain held securely in position away from the dock.
2. After the engine has been started and boarding is complete, release the second whip line and all of the dock lines from the boat cleats.
3. Leave dock lines out of water and ready for return attachment.
4. Motor away from the dock after re-confirming that the dock and whip lines are detached from the boat.

Docking the Boat:

1. Pull the boat approximately 3- 4' from the dock. The "bow hand" should have the bow lines within reach before you stop. First place the bow breast and spring line loops, then the bow whip line loop, on the inboard bow cleat. This will secure the bow.
2. The "stern hand" then places the stern breast and spring lines over the inboard boat stern cleat. Simply pull the stern of the boat to the dock for disembarking. After the boat is secure, place the loop of the stern mooring whip line over the boat stern inboard cleat on top of the dock line loops.
3. From the dock, pull down on the tail end of the mooring whip line. This will cause the boat to move away from the dock and the dock lines will pull tight. Continue to pull until the top end of the mooring whip is nearly in the horizontal position and the boat is hard against the dock lines. Secure the whip line to the whip cleat. Repeat the process on the other mooring whip.
4. The boat will now be riding parallel to the dock, at least 3' away, so that it can move about under control. This is called a 'soft mooring' since the boat is not held rigidly. It presents little stress to the boat, dock lines, and the dock itself.

INSTALLATION INSTRUCTIONS

STEP 1 - Join the two-part mooring whip poles together at the couplers, using the enclosed epoxy packet. (This step is not applicable to Model MW.080)

1. Open the adhesive packet and squeeze out both parts of the epoxy solution into about a 2" circle onto a piece of cardboard or other scrap material. Mix the two parts thoroughly with a disposable plastic knife, flat stick or piece of cardboard.
2. Find the Bottom Pole; this pole has a PVC collar at the lower end and a 3.5" sanded portion/45º cut at the upper end. Coat the sanded portion and end of this pole with epoxy. **DO NOT GET EPOXY ONTO ANGLE CUT END OF POLES**
3. With a twisting motion, slowly insert the epoxy-coated male end into the coupler of the corresponding Top Pole. The Top Pole has a fiberglass coupler at the lower end, and a roller tip system at the upper end. The pole will be fully inserted when the 45º angle cuts match up and fit snugly together in the coupler. Allow the excess epoxy to build up at the end of the coupler similar to the end attached at the factory. Feel free to wipe away any additional excess epoxy.
4. Ensure that the poles do not migrate apart while waiting a minimum of five minutes for the epoxy to cure.

IMPORTANT: Warranty is void if poles are not properly bonded together.

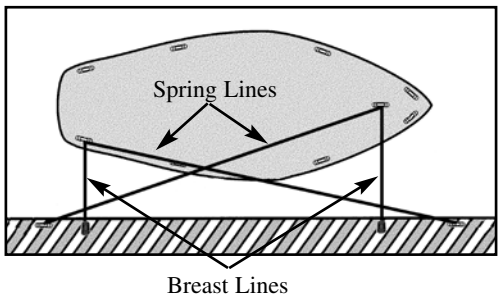
STEP 2 - Install the bases and whip poles.

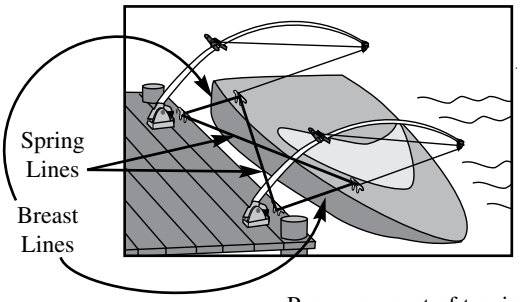
1. Tie-up the boat along the dock in a convenient location.
2. Position the front-end of the base 2" to 4" from the edge of the dock, directly across from the bow and stern deck cleats (or other attachment area of the boat). Premium models should have the adjustable rubber stopper facing the boat.
3. Mark the location of the holes to be drilled in the dock by using the two bases as templates. Each base should hold the poles perpendicular to the boat.
4. Drill holes through the dock at the marked locations. The bolts provided with your Perimeter Mooring Whip System are for use with standard 2" x 6" decking. Be sure whips are parellel with each other and perpendicular to the dock.
5. Align the bases with the holes and secure tightly with the stainless steel bolts, nuts, and washers provided.
6. Thread the 5/16" whip lines through the heavy-duty rollers at the upper end of the Top Poles. Temporarily tie the line around the lower section of whip poles.
7. Insert whip poles into the receiver sockets in each of the respective base units. Position the poles by rotating them as required so that the roller tip is in direct line with the deck cleats and, therefore, will smoothly and freely guide the mooring whip line. Failure to align the roller tips properly will cause the line to chafe prematurely. Tighten the set screws in the base units in order to secure whip poles in base at the proper location.
8. Install the black whip pole cleats on the Bottom Pole at a convenient working height, (typically 3' to 5' from the deck) with cleat horns perpendicular to dock. Use neoprene strips under clamp halves to keep cleat from slipping

STEP 3 - Set your dock lines.

1. ***The Standard or "X" method.*** This method works well with both standard and premium "Mooring Whips" and is suitable for normal docking conditions. This mooring procedure consists of two "spring" lines and two "breast" lines (supplied). The "spring" lines will keep the boat from moving fore and aft along the dock and should be approximately the length of the boat. The"breast" lines determine the distance the boat will ride from the dock and should be long enough as to hold the boat a minimum of 3-5 feet from the dock and never less than 1 1/2 times the tidal change. In order to function properly, it is <u>important that all dock lines have equal tension with no slack</u> when the boat is moored. When properly installed, the "spring" and "breast" lines will form an under and over-lined "X".

Standard or "X" Method

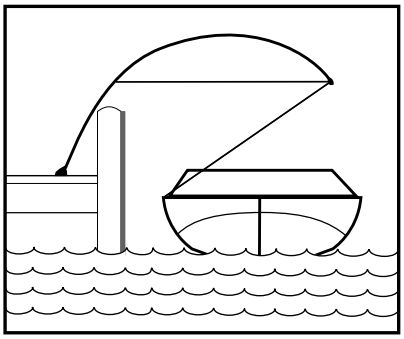




STEP 4 - Set the whip lines.

1. Untie the whip lines from whip poles and tie a bowline knot or loop in the outboard end of each line. This will allow for easy placement over the boat deck cleats. Next, thread the inboard ends of whip lines through the holes located in the center of the whip pole cleats. Tie knots in the ends of lines so that they won't pull free from the cleats.
2. Position the loops in the whip lines over the **<u>inboard</u>** boat deck cleats. From the dock pull down on the whip line. This will pull the boat away from the dock, arch the whip poles, and tighten the dock lines. Tie the whip line off on the whip pole cleat. If your water level and docking conditions are fairly consistent, you can make a bowline knot or loop in the whip line to facilitate easy attachment to the whip pole cleat. When properly installed the boat will be parallel to the dock and will lie approximately 3-5' off of the dock. The whips should be parallel with each other and perpendicular to the dock. Finally, the line that runs from the whip roller tip to the whip pole cleat should be approximately parallel to water level.

Proper amount of tension to put on whip



Distance from dock should be 3-5 ft.

Taylor Made Products™

Mooring Whips
3 Year Limited Warranty

Taylor Made Products hereby warrants that its Mooring Whips have a potential service life of no less than 3 years from the date of purchase. Should the product fail due to faulty workmanship or materials. Taylor Made Products will, at its option, repair or replace the product. In the unlikely event that you encounter any of the aforementioned problems, you will need to contact Taylor Made Products and obtain a Return Goods Authorization (RGA)#. Products returned without an RGA# will be refused, and the product will be returned to sender. To receive a RGA#, call us at 1-800-225-6636. All products returned to us must be accompanied by a proof of purchase, without exception. Freight on defective products is the responsibility of the consumer Repaired or replaced products will be shipped back to the consumer freight prepaid..

Taylor Made Products reserves the unrestricted right at any time to make changes and/or modifications to the design of its products without thereby imposing any obligation upon itself to make corresponding changes or improvements in or upon any product previously manufactured.

Additional Warranty Information:

TAYLOR MAKES NO EXPRESS OR IMPLIED WARRANTIES OTHER THAN WARRANTIES SET FORTH HEREIN, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR FROM ANY COURSE OF DEALING OR TRADE USAGE. TAYLOR SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF OPPORTUNITY OR BUSINESS PROFITS, BUSINESS INTERRUPTION OR ANY OTHER LOSS EVEN IF TAYLOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL TAYLOR BE LIABLE FOR ANY AMOUNT IN EXCESS OF THE PURCHASE PRICE PAID.

Warranty Exclusions

1. Coverage under this warranty applies only to the original purchaser.
2. No person or dealer is authorized to make any representation, warranty, or promises on behalf of Taylor Made Products.
3. This warranty does not include:
    - Defects attributable to neglect or misuse.
    - Defects attributable to unauthorized repairs or improper installation.(including improper epoxy application)
    - Defects attributable to accident or unauthorized use.
    - Defects attributable to transportation/shipping.

About Mooring Whips

1. **What Model to use:** There are two different models of mooring whips. The Standard (fixed angle base) leaves the pole hanging over the water at a 60 degree angle. This model should be used with low profile boats such as bass boats, runabouts and sport boats. The Premium system uses a heavier pole with a rocker arm base which returns the pole to a vertical position when not being used. They are good for pontoon boats, sailboats and center consoles with "T" tops, etc. Weight is more important then length.

2. **Pole Assembly:** All poles except the MW-080 are in two pieces. The two sections of poles are epoxied together at installation time. It is important to make sure that both sections meet inside the coupler. Be sure NOT to epoxy on the angle cut as it may leave a void between the two pieces.

3. **Cleat Assembly:** The whip cleat, which maintains tension on the whip, should be located between waist and chest height. There should be sufficient tension put on the pole so that the tip of the whip is parallel to the horizon. The tip should be almost opposite the whip cleat. If the whip line is moving through the roller when attached there is not enough tension on the pole.

4. **Location of Bases:** The bases should be mounted directly opposite the attach points on the boat. If the boat is larger than the dock a cleat should be installed but a railing stantion can be used. Each base exerts only 65lbs. of pressure on the dock. Bases should be through bolted whenever possible. Concrete anchors also should be used for seawall installations.

5. **Dock Lines:** Dock lines are the most important part of the system. Dock and spring lines keep the boat at the desired spot and keep the whips exactly opposite the attach point on the boat. It is important to keep the boat from moving forward and backward along the dock.

If you have any questions please don't hesitate to call us on our toll free number: **800-225-6636**