

IMPORTANT



Warning: Failure to follow proper installation instructions voids warranty and may lead to product failure and/ or property damage.
Note: Some mooring areas may be too rough for any type of tie-up system.

IMPORTANT NOTES TO ENSURE A SAFE, SECURE INSTALLATION & WARRANTY YOUR NEW MOORING WHIPS

IMPORTANT: Ensure that you have purchased the appropriate DockEdge Mooring Whip for your application.

Weight and water level variations are more critical factors than length in estimating your requirements.

MOORING WHIP PRODUCT CHART "A"

SUPREME EZ-STOW WHIP MODEL:

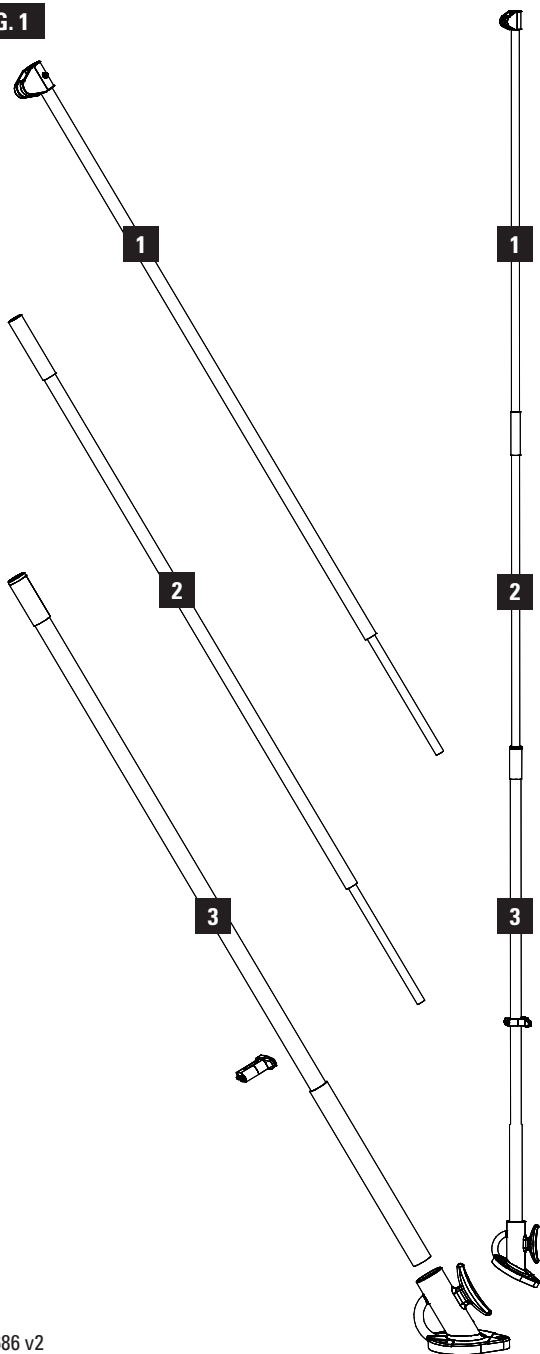
#3330 10 ft. (3.05m)	Craft Up to 21 ft. (6.4 m) Up to 4,000 lb. (1814 kg) Capacity Mooring Distance From Dock - Minimum 4 ft. (1.22 m) 3 Year Limited Warranty against defects in Materials and Workmanship
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DE3330F	2 whip poles (6pc)	2 whip lines	6 lag bolts (for bases)
Whip kit	2 pole cleat assembly (2pc)	1 spring line	6 washers (for bases)
includes:	2 aluminum bases	2 line tensioners	

1 WHIP ASSEMBLY

Identify the sections of the whip as shown in Fig. 1. The diameter of the sections increases in width from top to bottom. With a threading motion turn the each section of the mooring whip into its connecting section until it is fully seated.

FIG. 1



2 INSTALLING THE MOORING WHIP BASES

Mooring whips require a firm, secure footing for mounting.

- The recommended location for mooring whips is on the side of the dock which is most protected from winds. This is preferable to cause the boat to stay clear of the dock rather than be forced towards it.
- Locate the cast aluminum bases 4-5" from the edge of the dock. Fig. 2a
- Align the whip bases with their respective cleats on the bow and stern of the boat making sure that the whips are perpendicular to the edge of the dock. Fig. 2b

The general rule is that the span between the whips should be approximately 2/3 of the boats' overall length. Install additional cleat(s) on the boat if necessary to retain the 2/3 rule. Space whip bases accordingly for such an application.

NOTE: In applications where side cleats are unavailable a center bow or stern cleat of the boat may be used.

- Mark the location of the mounting holes for the bases and drill through the plank with a 1/8" drill bit. Lag down the whip bases with the lag bolts and washers supplied.

NOTE: Concrete docks will require lag bolts and masonry plug inserts. Softwood docks such as cedar should have a 3/8" hole drilled through the dock at each mounting hole location of the base and 3/8" bolts or "carriage" bolts and use washers, lock-washers and nuts or locking nuts in place of the 3/8" lag bolts supplied with your mooring whip kit.

IMPORTANT: If using in a saltwater environment, a nylon washer is recommended between the bolt and the base.

FIG. 2a

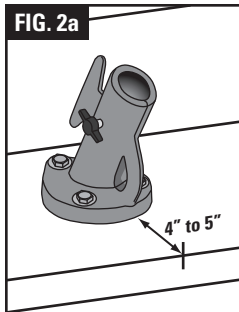
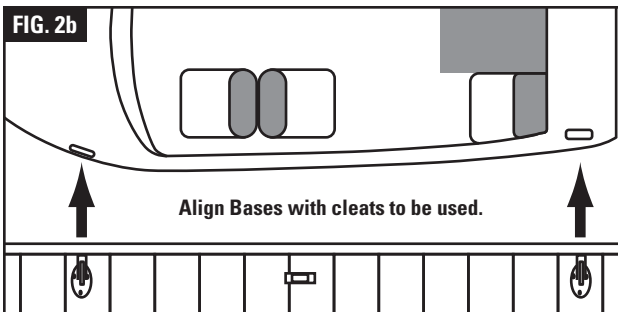


FIG. 2b

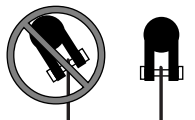


3 WHIP MOUNTING & PREPARATION

- Feed the whip lines over the line pulley at the tips. Insert the whip into the base, making sure the whip is fully seated in the base and so that the whip line is hanging straight down, align the line pulley so that it is perpendicular to the dock surface. (Fig. 3)

FIG. 3

PULLEY TIP



Whip pulley tip assembly is ready for use.

Once the tip has been aligned, tighten the thumb screw on the whip base only enough to prevent the whip from lifting out of the base. Overtightening may damage the fiberglass strand and integrity of the whip.

Pole Cleat - Attach the pole cleat no more than 14 inches from the whip base. See Fig. 4.

The pole cleat can be used to wrap the boats' whip line around for quick release and ease of maneuvering the watercraft towards the dock when required.

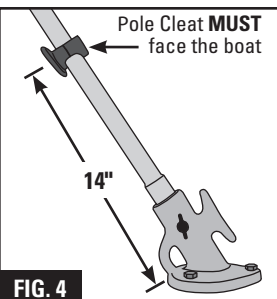


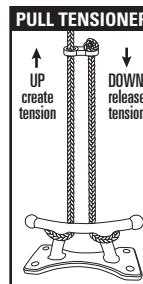
FIG. 4

4 INSTALLATION OF WHIP LINES

- Tie off the dock side end of each whip line to the pole or base cleat, Fig. 4 making sure there is sufficient excess line at both ends to allow for tie-up of the boat with the tensioner, and release of line tension at the dock.
- To adjust for proper tension on the mooring whip lines slip the loops from the lines through the bow and stern cleats of the boat. Using the sliding tension adjuster, place enough tension on the line to just pull the whip tip down. (See Fig. 5 & 6)

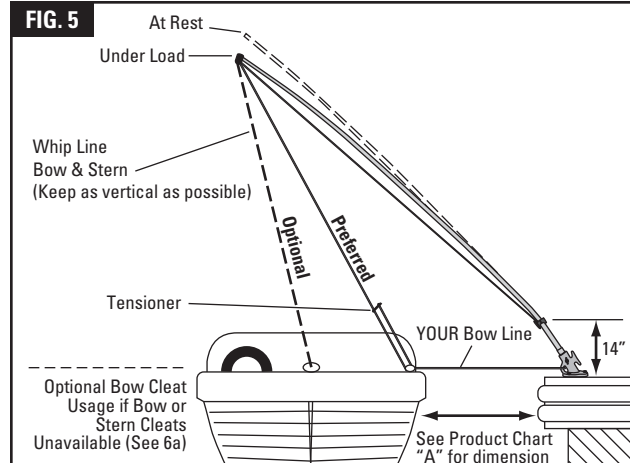
When adjusting whip and/ or spring line tensions DO NOT over-torque the whip. Pull each whip tip down in inches, as the whip is in total length, ie. 10ft. - 10 in.

CAUTION: For installation of mooring whips on stationary docks in locations where water levels fluctuate more than 2 ft., mooring whips **MUST** be adjusted periodically to compensate for these variations. Failure to make adjustments to spring and whip line tension in such conditions may result in damage to the whips and void the manufacturers warranty, see Fig. 5 thru 9. Adjustments are seldom necessary on floating docks, as the dock and boat will rise and fall accordingly.



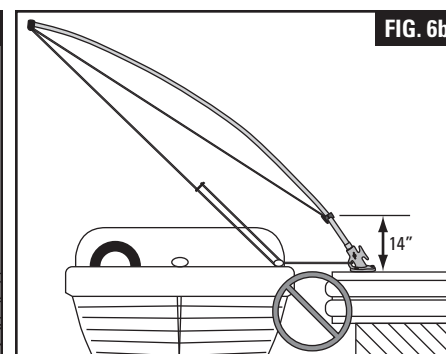
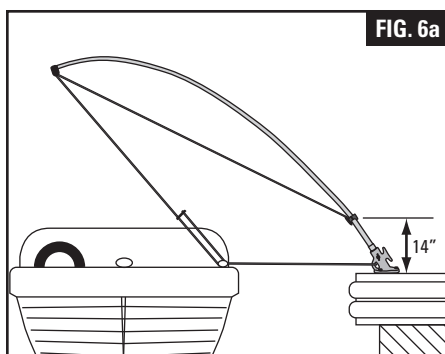
CORRECT INSTALLATION

FIG. 5



INCORRECT INSTALLATIONS

Under no circumstances should any mooring whip be installed with an excess of tension as shown in these diagrams. Doing so will affect the mooring whips ability to protect your water craft and will void the manufacturers warranty.



5 INSTALLATION OF SPRING LINES

- Refer to the Figures 5 through 9 for proper configuration and spring line attachment.
- Spring lines should be attached to the built-in cleat of the mooring whip bases and bow and stern lines should be attached to the integral eyelet of each whip base.

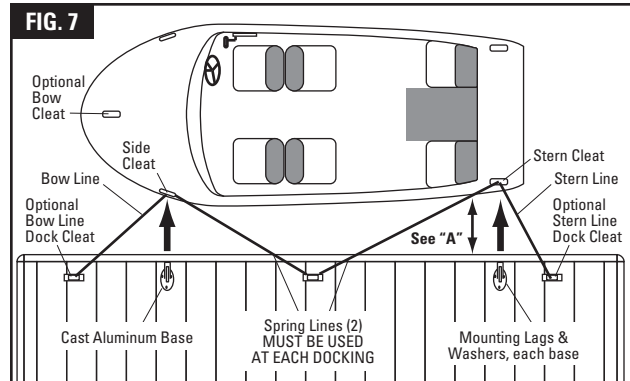
IMPORTANT: Spring lines MUST always be used. Tension must be equal on all lines. Install additional cleat(s) on the boat if necessary to retain the 2/3 rule Discussed in Section 2 "Installing The Mooring Whip Bases".

The boat should lie the distance specified in product chart "A" for your whips.

DO NOT attempt to retain the "Distance from Dock" dimension shown in chart "A" if using oversized whips. Larger whips are intended for larger watercraft with a wider beam and therefore able to retain the recommended "Distance from Dock" dimension. Distance from dock should never be less than 3-4ft.

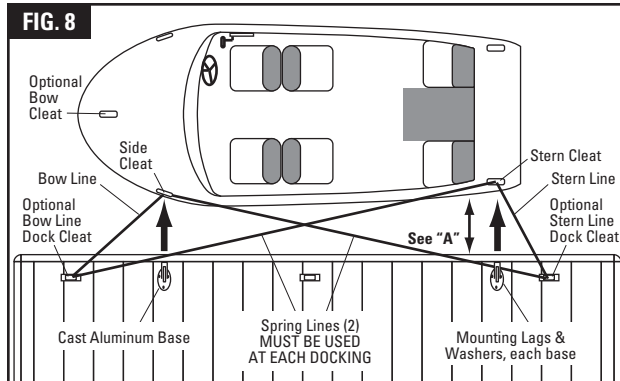
"M" Method - Whips & Whip Lines Not Shown

FIG. 7



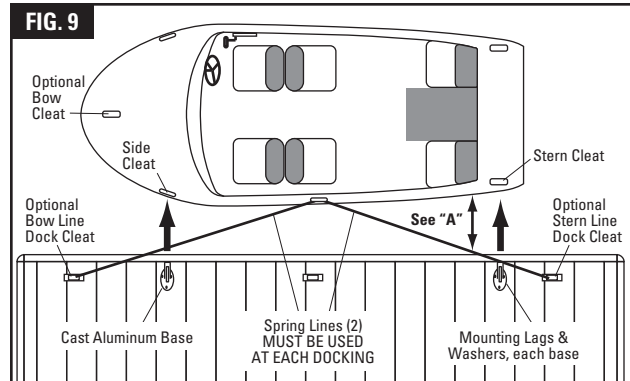
"X" Method - Whips & Whip Lines Not Shown

FIG. 8



"V" Method - Whips & Whip Lines Not Shown

FIG. 9



- Loops in the ends of the bow, stern and spring lines can be made using a "bowline knot" as shown in Fig. 10.
- Once the bow, stern and spring lines have been made to the correct length they should be left on the dock for easy tie-up upon return.

FIG. 10

BOWLINE KNOT



1. Form a loop.
2. Pass the rope's free end through the loop.
3. Loop the end around the main rope and back through the first loop again.

IMPORTANT: When spring lines have been cut to length, seal the cut ends of the lines with a flame (lighter, match or small torch) to prevent fraying.

WINTER STORAGE: For winter storage remove the whips from the aluminum bases only. Leave the aluminum bases mounted to the dock. Multi piece whip assemblies, can be separated for more compact storage. It is recommended that whips be stored in a location that remains above freezing such as a basement or heated garage.