

EXTRACTOR

Sled Tie Down Installation Instructions

Example: Yamaha FX140 (The same instructions apply for all pwc models utilizing this attachment)

Step 1.

You will need to install 1 to 3 stainless steel bow eye cleats provided.

Materials/Tools needed:

- * Drill, with 3/8" (9mm) bit
- * silicone sealant or epoxy adhesive
- * 9/16", 12 or 13mm box end ratchet wrench or adjustable end wrench or socket drive
- * measuring tape
- * 1 to 3 Stainless Bow Eye Cleats
- * 2 to 6 nylock nuts
- * One 3" x 3" x .75" piece of marine plywood or aluminum plate
- * two 5 foot long (1.7 meters) pieces of 3/8" bungee cord
- * one to two 3" stainless quick links, spring snaps and one 10 foot length of 1 inch tubular webbing

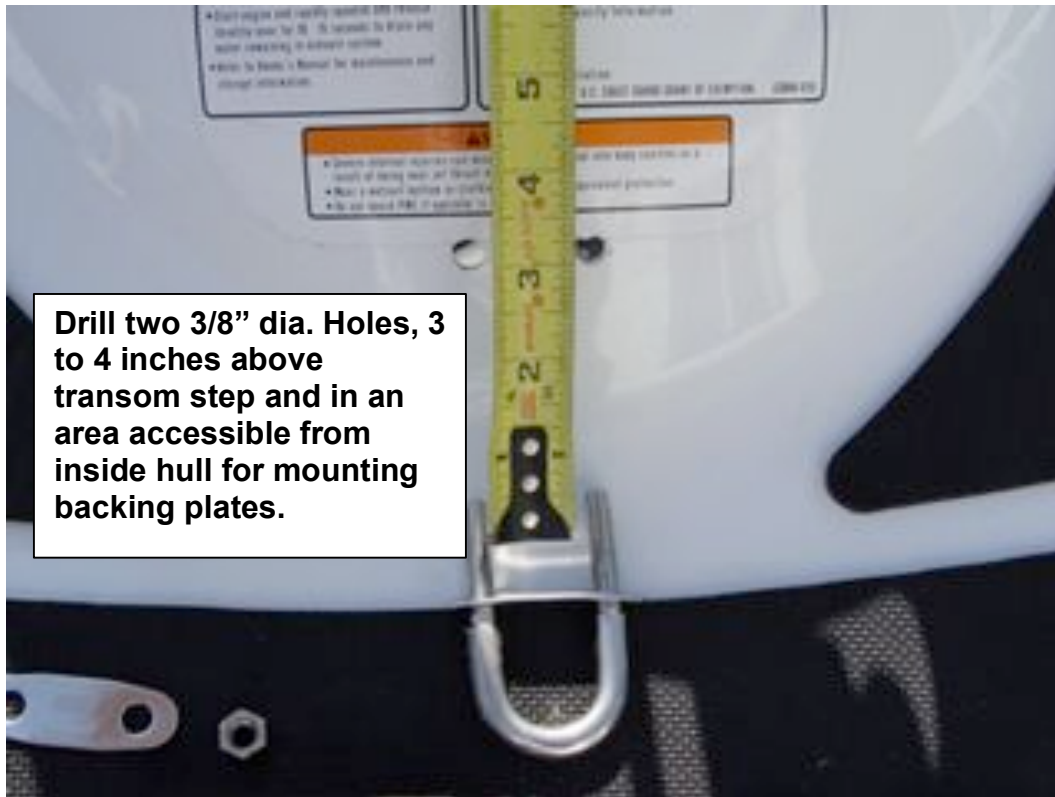


Step 2.

Position center bow eye cleat as low as possible to where the pwc seat housing meets the transom step and where you have enough inside clearance and surface area inside the pwc hull to mount the 3" x 3" piece of plywood or aluminum plate backing. Approximately, 3 inches up from the transom step should be adequate.

THIS IS IMPORTANT SO YOU MAXIMIZE STABILTY AND MINIMIZE SHOCK WHILE TOWING THE SLED

Mark hole location.



Step 3.

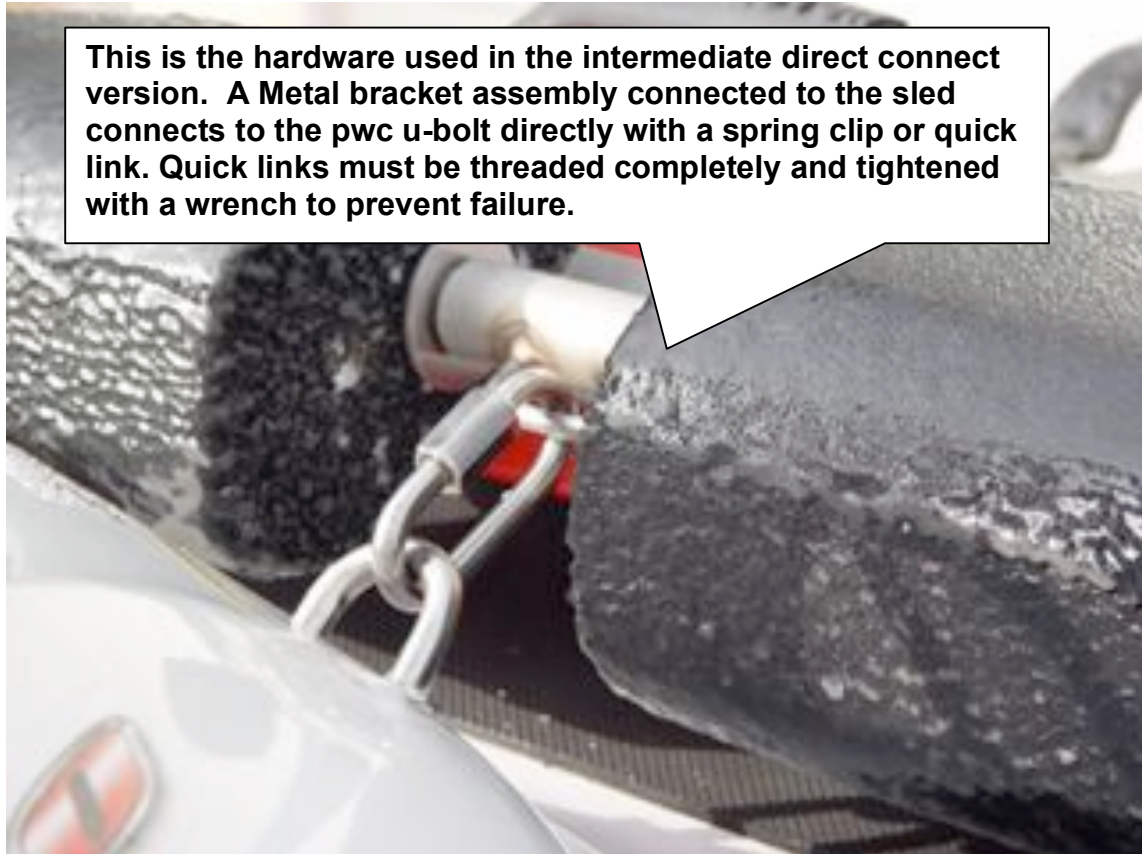
Drill holes with 3/8" diameter drill bit. Apply some silicone or epoxy putty to outside hole perimeter, press bow eye cleat through holes in pwc hull, locate backing plate inside the pwc hull and press plate onto bow eye cleat threaded studs. Locate bow eye cleat washer plate over studs and thread nylock nuts onto the studs. Tighten nuts and torque down backing plate and cleat.



Place u-bolt through holes, locate backup plates onto u-bolt threads, and tighten down with nuts and nyloc nuts.

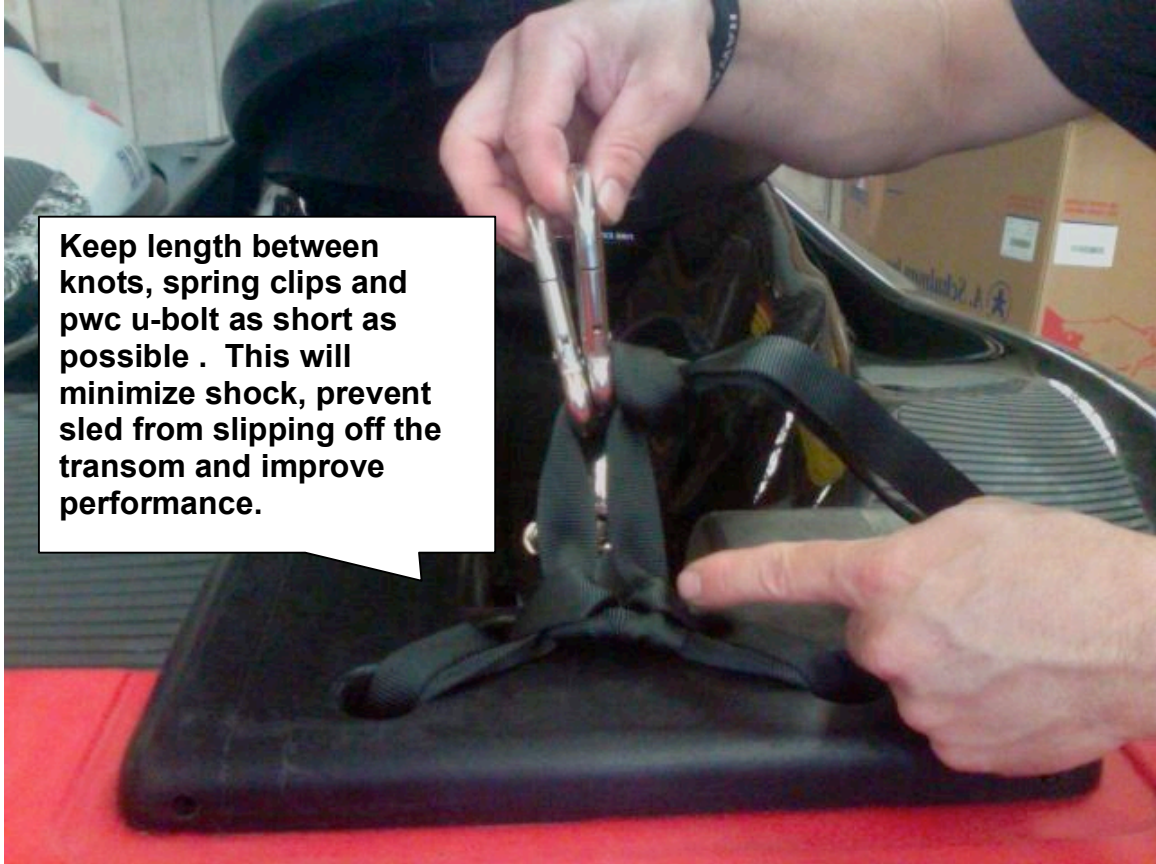
Step 4.

Attach sled to the center pwc U-bolt that you just installed by connecting it with a stainless steel quick link, or spring clip and by tying the shortest knot possible with the nylon webbing provided, if this is a basic tie down version.





Use 1 (one) Spring clip or quick link with PRO model and 2 (two) with Mega models.

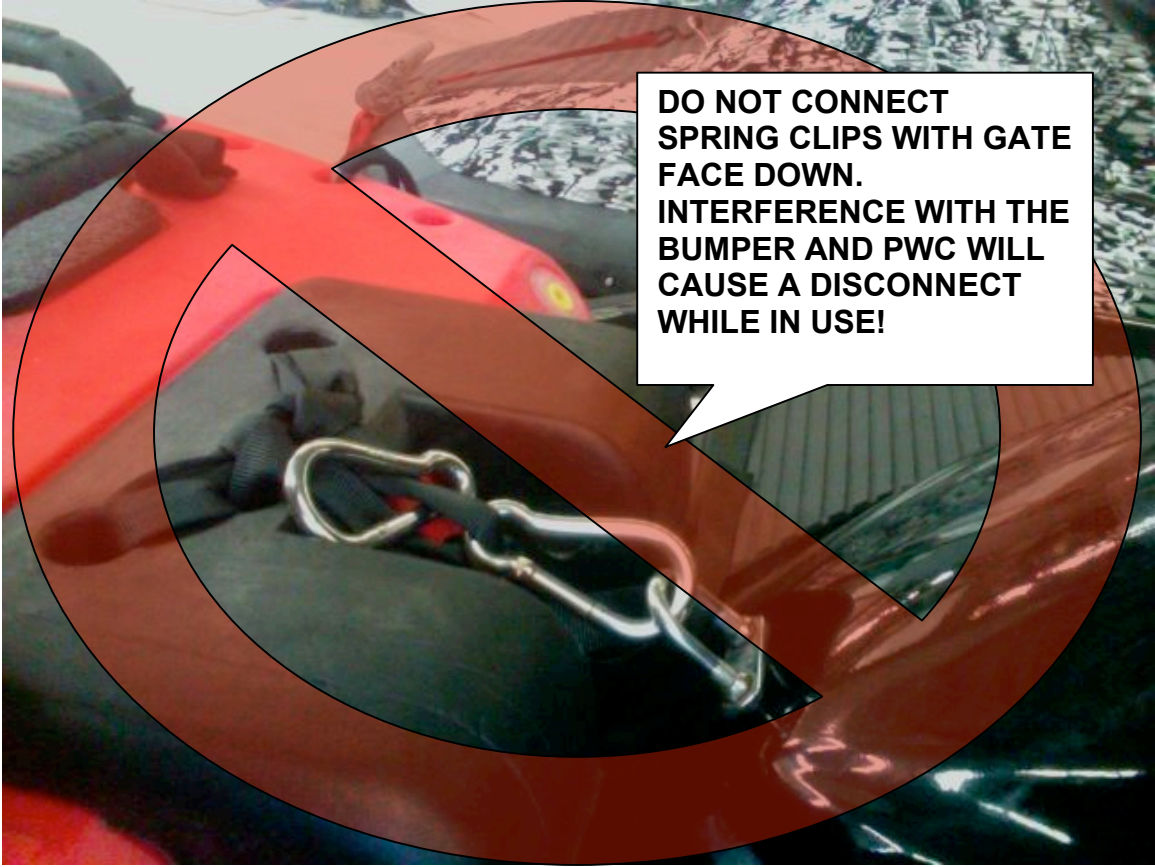


Keep length between knots, spring clips and pwc u-bolt as short as possible . This will minimize shock, prevent sled from slipping off the transom and improve performance.





**Make sure spring clip gates
face up towards the sky!
Otherwise they may
accidentally open and
disconnect during operation.**



**DO NOT CONNECT
SPRING CLIPS WITH GATE
FACE DOWN.
INTERFERENCE WITH THE
BUMPER AND PWC WILL
CAUSE A DISCONNECT
WHILE IN USE!**

LEFT AND RIGHT BUNGEE ATTACHMENTS

Step 5.

The outer left and right bungee attachments need to be placed in a location either parallel to or aft of the bungee holes in the sled so that the sled rides as flat as possible against the transom step and without excessive play causing instability. You also want to position them in an area where the bungees will help lift the outside rail of the sled during a turn, and snap the sled back into the center position after making the turn. SOME PWCS HAVE U-BOLTS ALREADY MOUNTED IN THEIR STERN THAT WORK WELL WITH SOME SLEDS. OTHER PWCS AND SLEDS WILL REQUIRE U-BOLTS MOUNTED ON THE PWC PORT SIDE AND STARBOARD SIDE RUB_RAILS.

The outer left and right bungee attachments need to be placed in a location either parallel to or aft of the bungee holes in the sled so that the sled rides as flat as possible against the transom step and without excessive play causing instability. .

Install the outboard U bolts in the locations as described in the pictures.













Step 6. The left and right side bungees are connected to the left and right bow eye cleats via spring clips.

The bungee cords come pre-looped and knotted. The bungee can be adjusted by adding or removing knots at the end of the bungee cord. The bungee cords can be re-positioned along any of the through holes in the rail of the sled so that they pull straight across or aft of the position of the side u-bolts mounted in the pwc. You want the bungees under enough tension while connected to the u-bolts so that the sled will have resistance when trying to swing the sled left or right. This will allow the sled to snap back to center position and also assist with lifting the outside rail of the sled during a turn.

Step 7.

How to install left and right side mount U-bolts in the PWC

MEASURE AND MARK U-bolt position FROM REAR OF PWC, along the rub rail and the fiberglass flange, where the top half of the pwc fastens to the pwc hull. PLACE THE U-Bolts IN A POSITION AWAY FROM FOOTPATH TO PREVENT POSSIBLE INJURY AND IN AN AREA WHERE THE HOLES CAN BE DRILLED THROUGH THE FLANGE AND THE BACKING PLATES AND NUTS CAN BE ACCESSED FOR TIGHTENING.

Drill Holes.

Add Silicone sealant to outer hole surfaces. Press cleat studs through holes and rest plate against pwc/silicone sealant surface. From inside the hull, locate cleat washer plate and thread nylock nuts. Tighten.





Example: Yamaha XL700

