

Instructions For Cutting Up Your Old Kawasaki Jetski

Buying a Jetski

If you haven't already purchased a Jetski let's take a minute or two to talk about finding and purchasing the right candidate. First, you gain nothing by buying a good looking Jetski with a blown engine. Don't be concerned about the external appearance, in fact, ugly is better because you'll get a better price! Anything you save buying a Jetski that needs engine repairs will soon turn into a loss as one thing leads to another and you put several hundred into the engine before you even get started.

Although you don't really need a title (some states do register the engine) at least know where the Jetski came from to ensure you are not buying stolen property. However, it is understandable when you buy a ski that's been sitting a few years that the title could be lost somewhere in the family's paperwork. No problem, but at least get a bill of sale!

As a general rule you should be able to find a good running JS550cc Jetski in the \$500 price range. Buying a "ugly" ski might even let you get down to the \$200 range. You could opt for a 300cc or 400cc engine, but you are going to find they weigh very close to the 550 and use about the same fuel - so there's no real reason not to go with the 550. If you are careful selecting a Jetski with a good engine - the 550 engine alone can easily be sold for more than you paid for the whole Jetski when it's time to upgrade.

Look at the links section on Jet Jon, I post listing of skis for sale whenever I find one meeting our criteria.

Getting Started

The basic difference in your project and mine is I'm starting with a completely stripped hull. I've used my old Jetski hull on two projects and all the the cutting and glassing has left it "shop worn" to the point that it needed to be replaced. Tim Webb - builder of the Webbjet 14 was kind enough to give me, not one, but two JS550 hulls!

While I'm talking about Tim, he has developed a great method of adding Jetski power to boats. My goal is to show you how to complete the project with common tools in your garage using a Jetski hull for engine mounts, inlet, water seals, etc. Tim's method eliminates all but a small portion of the original Jetski

Hull. His plans are available at [Webbjet14](#) and I encourage you to compare the two methods and select the one that best suites your needs.

The hull I'm using appears to be late eighties, it has the through hull exhaust which I think was introduced after 1986. Minor scratches and gouges on the bottom should be expected as normal wear and tear. Cracks on the sides and patches on the bow area are also very common and nothing to worry about. However, you should avoid using hulls with major cracks on the bottom, engine mount areas, pump mount areas, and especially on the bulkhead in the drive shaft mount area. If your Jetski has cracks in any of these areas to such extent there is concern about hull integrity, you should not use my method.



Tim Webb gave these two hulls to me. Thanks Tim!

Tools

There's more than one way to do just about anything. This project is no different. The tools I used are the tools I had on hand. You can "get by" with far less.

- Extension Cord
- Saws All
- Skill Saw
- Jig Saw
- Hand Saw
- Wood Chisel (old one)
- Metal Ruler
- Tape Measure
- Pencil or marker
- Duct tape or masking tape
- Four clamps
- Small hammer
- Ratchet and socket

Materials

Like the tools, you could probably get by with less materials by cutting strips from fiberglass cloth rather than buying fiberglass tape. Look at the [Fiberglass Stuff](#) link a cheap and reliable material source.

- 2 Quarts - epoxy resin and hardener
- 1 Yard - satin weave boat cloth
- *2 Quarts - talc
- *1 Quart - phenolic microballoons
- 10 Yards - 3" fiberglass tape
- 3 Yards - 6" fiberglass tape
- Freezer bags
- 20 - 2"x1/4"lag bolts, flat washers, lock washers, and nuts
- Sandpaper

**Used for seam filler, 2 parts talc, 1 part microballoons, add resin and mix to thick batter, place in freezer bag, cut off corner of bag and squeeze to apply sealer.*

Time to Cut!

After removing All the mechanical components (consult your Kawasaki repair manual) it's time to begin making the cuts! Looking ahead will help you see where we are going.



1. Tilt the Jetski hull on its side.



2. Look on the inside to find and mark the driveshaft support bulkhead location. You don't want to cut this!



3. Mark the area where you will remove the bow section. The final cut off point will be even with the forward edge of the engine mount stiffeners, so make this "rough" cut a bit longer.



4. Remove the rubber ride pad if you have one. I found pushing a chisel under the mat worked ok.



5. Using the Saws All (or a handsaw you don't like) cut off the joining edge of the two hulls. Neatness doesn't count.



6. Remove the top portion of the forward hull. Start about four inches in front of the bulkhead and cut just under the area where the hulls are joined all the way around to the other side. You will trim more later so it doesn't have to be straight.



7. Starting three inches behind the bulkhead, make a vertical cut through the side of the ride area. Neatness doesn't count.



8. Starting at the back, saw forward just below the hull joint to the previous vertical cut. Cut level to avoid damaging drain lines inside the hull.



9. Once you've cut all the way around a sharp blow will break the floatation foam filling the side.



10. Repeat for the other side.



11. Drill the rivet heads to remove the sponsons (if you have them).



12. Tilt the Jetski hull as shown and trim the top edge of the bulkhead. The metal bracket is still in place on my hull because the bolt heads were stripped.



13. Rough cut completed - Do not cut into the driveshaft bearing support housing!



14. Lift and break free the fiberglass ride area. If you wish you can score a break line just in front of the forward pump mounts (using a grinder). See next photo



15. Discard the fiberglass panel.



16. A score line would have given me an even break - no problem we can clean it up later.



17. It's an awful job, but the foam has to be removed. I used an old wood chisel and about four hours of digging.



18. With the foam removed inspect the lines. I found what caused the demise of this hull. It's previous owner had attempted to add another engine cooling line and drilled through the line on the left (star). With no way to make repairs the hull had to be discarded.



19. Mark down the center of the "humps" on each side and cut as shown. You should have 2 1/2" of hull on each side of the pump housing. The curve out to the edges of the bulkhead is not critical - I freehanded the cut, of course you can make it as nice and smooth as you want.



20. Detail of the bottom cuts.



21. Remove the excess corners by cutting straight down flush with the side of the pump housing. Do not cut into the ride plate bolt housing (star).



22. You will be left with a thin triangle shape. Cut this straight down the seam as shown. I also cleaned up the jagged break line where I removed the fiberglass floor.



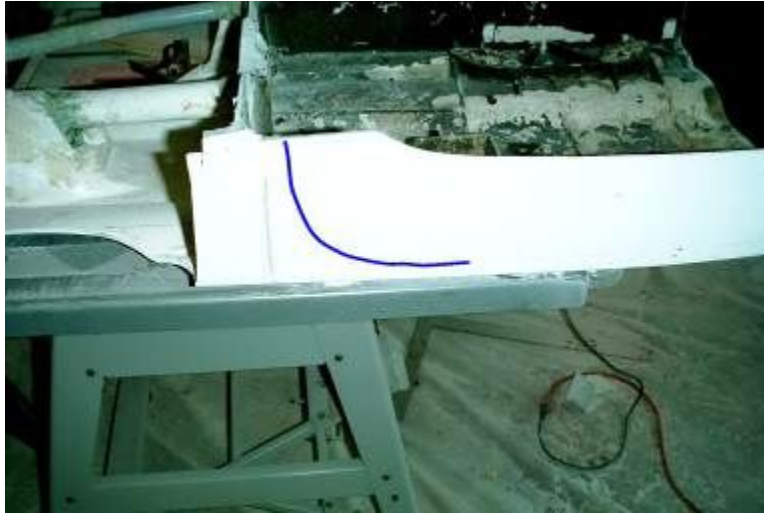
23. Both sides should look like this when completed. I cut along the natural seams that you can easily see on your hull.



24. After trimming the aft top edge of the pump housing and sanding, you should end up with something like this.



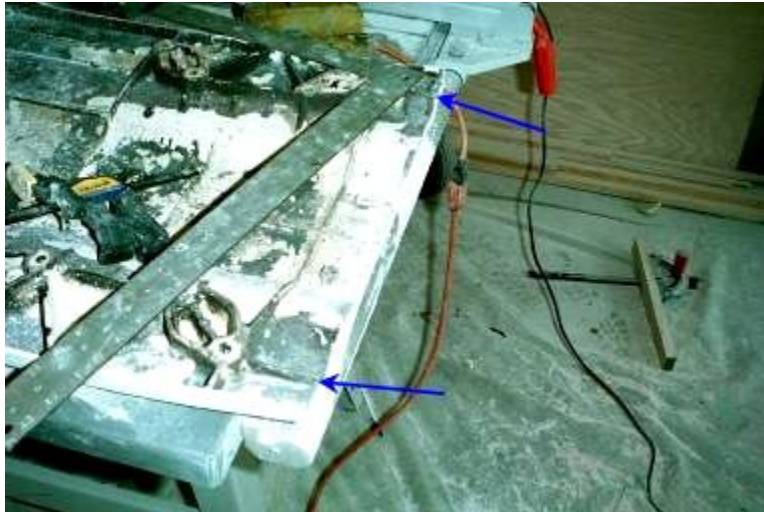
25. To trim the sides, measure to the top of the engine mount supports and then cut just above them from the outside. I found holding my Jigsaw at an angle worked best.



26. You need to leave something to support the bulkhead. To me, a curve looked the best.



27. I hope your hull looks something like this (even better!).



28. Using a straight edge, mark the front even with the forward edge of the engine mount stiffeners and even up the front edge.



29. If you are not using a PWC battery (I use full size) you can trim the battery box and cut a drain groove so it doesn't hold water when you wash the engine bay.



30. Carefully Inspect the bulkhead for cracks. If you find more than a tiny crack or two you probably should go to the Webbjett site and order plans for Tim's installation. His technique replaces the factory bulkhead.



31. After using a 4" side grinder to level the bulkhead she's all cleaned up and ready for the Jetfish! Weight - 24 pounds.



32. The grooves running down the bottom of the Jetski hull are good for Jetskis, but bad for installing them in Jet Jon boats. You could mix a ten pounds batch of filler or you could use spacer strips. I chose scrap wood strips, if you are installing in an aluminum or fiberglass hull you can order high density polyurathene strips from "Industrial Stuff". The strips I cut are 1" wide by 1/2" thick.



33. After working so long on the Jetfish there was no way I was going to cut the bottom without making a template. Bottom Template Drawing (coming)



34. Once you get the Bottom Template completed you can do a trial fit with the wood (or other spacers in place). You'll find this is also helpful for making the transom cutout template.



35. The transom template should have a 1/4" gap all the way around to allow enough space for filler. I just guessed at the transom angle. (it's not too critical, but be reasonable).



36. The templates really makes aligning and marking the bottom simple!



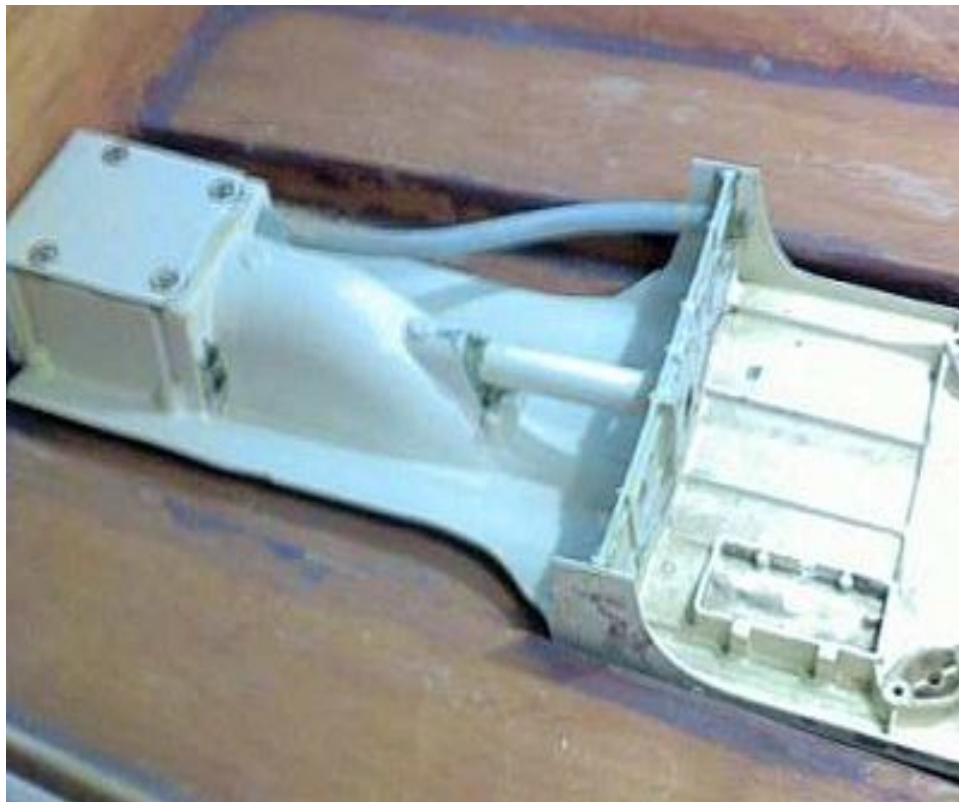
37. Once cut, you should have an area at the transom where the hole on the bottom is wider than the hole in the transom. This is good - it means you did it right! I used a handsaw to make the bottom cut flush with the transom wall.



38. For a "dry fit" lay the hull spacers in place as shown and set the Jetski hull in place.



39. Now you're getting somewhere!



Ready for bolts and filler!



The seam filler I used was made with 1 part phenolic microballoons to 2 parts talc.



Thoroughly mix the two powders. A sturdy "stick" will make mixing much easier.



Add epoxy resin and mix to get a thick batter. It takes a bit pf practice but your goal is thin enough to apply yet thick enough not to be runny.



Place a plastic freezer bag in a spare bucket, then scrape the filler into the bag.



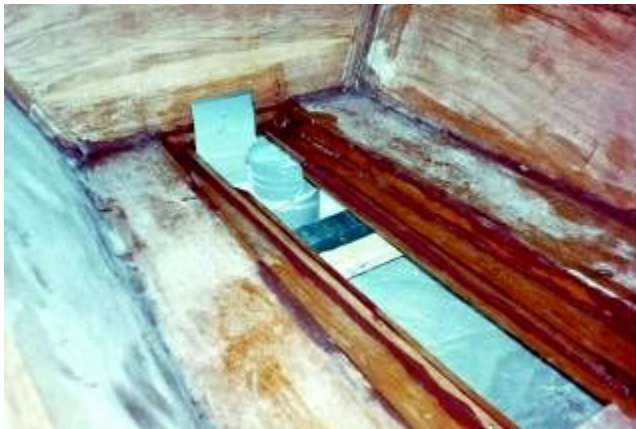
Squeeze the filler down into the corner of the freezer bag.



Using scissors, snip off a corner to make 1/2" opening.



Twisting the bag will keep the filler in the corner. Use pressure and speed to make an even seam.



Seal the seams for the spacers that fit under the jetski hull. Run a heavy bead down the top of the spacer to aid in filling any gaps.



After applying the filler, it's time to position the Jetski hull **BEFORE THE SEALER CURES.**



Jetski hull bolted in with five lag bolts through each spacer. Front and aft seams filled. Time to roll the hull!



Once the hull is rolled over you should have a nice smooth bottom like this.



I just couldn't resist trying the pump!



Filling the seams around the pump housing takes a bit of patience. Be careful not to get resin in the ride plate mount holes.



Next, fill and tape the seams for the rest of the hull. By not completely filling the seam I ended up with a small channel running down each side as a path for air bubbles.



First I added a layer of cloth over the Jetski hull bottom and then installed 1/4"x1" strakes.



When I painted with Easyepoxy I avoided painting the intake area (your choice). I did paint the pump mount area after taking this picture.



Trial fit of the engine. Note the exhaust exit through the hull bottom.

As you can imagine this project is unique to every boat. If you want to see how I did the interior go to Jet Jon and look at the Jetfish project (page 5). Aluminum boats would be a whole different set up. Even so, this series of photos should prove helpful to you as you design and construct your own improved version. I would have to say by far the most important things are to be creative and have fun!

I would be happy to answer any questions you might have on the Jet Jon Forum.