

A trimaran is made up from many smaller items that only come together at the end, so you can get to finish each before moving on to something fresh. For this reason, the project will generally hold your interest for a longer period. You can even start in a variety of different places according to your time, facilities, money, space and even the weather that's available.

So these items are in no fixed order ... but we need to start somewhere.

First thing to create a little sawdust is a **Building Platform** .., a simple, low table with one sheet of plywood cut lengthwise, laid over some 2 x 4's so that it's solid to work on. All the parts can be made on this, starting with joining the 8ft plywood lengths to double their length and then to sheath the inside with a light fiberglass cloth. This must be done before the platform is used for any hull setup.

To get used to the process and still have something to show, most choose to build the **AMAS** first, and as there are two of them, the 2nd one goes fast. These are the outer hulls, floats or pontoons. While the *process* is identical, the two AMAS are not quite. One of the magical things about a small trimaran is that, unlike a catamaran, the two amas are not in the water at the same time, so they can be designed asymmetrical and take technical advantage of that possibility.

That being so, on the W17 they are 'handed' Port or Starboard, so when setting up the small bulkheads around which they are built, those bulkheads need to be flipped 180 degrees for the 2nd ama. Here's an AMA being set up on the Building Platform with two stringers. Note the bevel and moderate twist to the bottom that offers all sorts of advantages in operation. (but see elsewhere for info on this)



Once the stringers and gunwale are on (no beveling needed by the way), the side panels are laid around.

This photo also shows the build system. It's called 'ABC' as it's really that simple. Because there is no chine (corner) piece, those upper edges can be wavy at first. So strips of wood are clamped around the edge and hot-glued in place temporarily, until the bottom is bonded on .. and then, only duct-tape is needed to hold that down. Once cleaned off and glass taped, the exterior has a thin cloth epoxied on. 4oz glass or Dynel is typical used.



Once flipped, the inside corners are epoxied and glass taped, and the center-line deck stringer and blocking then added to later receive the AKAS (crossbeams) after the deck ply is on .. all fully detailed of course in the actual Build Manual. That's about it for the AMAS and the main hull follows generally the same way. However it first starts with a center girder that incorporates the dagger-board case, so there will be no separate fitting of that case to 'get it straight and vertical'. Its automatic. To start the **Main Hull**, this girder is set-up between the cockpit bulkheads.



The **MAIN HULL** follows a similar assembly method to the AMA although being a larger, heavier piece, it's best to totally finish the exterior on the platform before being removed and flipped over. This means glassing and painting and then looking something like this.



Setting up main hull framing

After flipping, the watertight cockpit floor is added, and the rudder mount plus fore and aft decks soon follow. Then it's time to start on the **BEAMS** if they are not already made. Some actually *start* building with them!

As this is a folding trimaran, each beam (aka) is made up of 3 parts. Two curved ends and one straight part stretching over the main hull.

As these beams take a high bending load, they are substantially built, using interior wood framework with an outer covering of plywood.



Once built, this straight part lays on top of the fore-&-aft decks, so these are added first. Typically the hinges will be pre-fitted to the



center beam ends so that the two beams (fore & aft) can be aligned by using long hinge pins as a guide. These must of course be perfectly in-line for the ama to fold smoothly.

The outer beams are curved, and while they involve more work, they are KEY to both the seaworthiness of these boats as well as for its popular appearance. Fairing is added to the forebeam later.



The Build Manual details all this work in great detail, so even first-time builders can readily achieve success. The curved beams can be put aside for the moment while the **main hull cockpit** work is completed. This means adding the seat ply under the main beams and building the **cockpit boxes** at the sides to complete the work. While there are many small parts, they are all simple and square. Here's how the boat will be looking now.



Time to clean up and paint. The next step is to pull the boat outside with some space, attach the outer beams by their hinge-pins and then prop-up the amas at the right height to mount the beam ends on the amas. Again, there's a systematic procedure to get this right but it's all

'spelled out' and builders report its one of the most exciting adrenaline moments of the build. Here is how the boat will now look, with only the forward beam fairing still to be added.



Other work involves making 'the loose parts' that can be made at any time, and these offer interesting projects when the weather outside is not cooperating. Parts such as the rudder assembly, daggerboard, mast, boom and various hatch covers. The rigging and installation of fittings for the tramps etc is very straightforward and fun, and this will complete the boat.

You'll also need a trailer and a simple inexpensive, flat 8' x 4' utility trailer works very well with the addition of a longer tongue and a 2ft wood extension at the rear. You can experiment with removing one of the leaves in the quarter-elliptic leaf spring too, if the ride is too rigid.

So I hope that gives you a quick idea of what building a top-of-the-line small trimaran involves. It could be the best and most fun boat you'll ever own. From many, that's what they tell me!



Mike

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