Intro: Thank you for purchasing an A.C. Model Boats Razor 45. This particular Hull was produced and designed for the Stock, Sport Boater, Part Time Racer and Boaters running at Higher Altitudes with Stock or Mid Mod Zenoah Engines. It is a High Lift and Multi Strake Hull Design with Rear Chine Strakes added at the rear for added stability. The AC Razor 45 has been in the R&D stages for a few years now with many hours of R&D and Testing with significant changes being made to the Prototype Hull before the final production boat was released recently for Public Sale.

Important: The Razor 45 works so well because of its highly modified and sophisticated running surface. To maintain this high level of performance it is important to never paint its running surface or leave the Hull in direct sunlight for extended periods of time. Cover the Hull with a light colored towel or place it in the shade if possible when extreme sun and heat conditions are evident. Never use Bun Gee Straps to secure your boat onto its stand, use Velcro Straps instead. NEVER let someone take a Mold from your Razor 45 as the molding process creates excessive heat and extreme pressure that WILL distort your Hull and “YOU WILL” loose performance and handling in the process which will result in long term damage to your Hull that is non repairable and non reversible.

Building your New Razor 45:

Rudder placement on your new Razor 45 is extremely important. History has shown that the Rudder being placed behind the Propeller will typically help eliminate Bow steer and right steer which could result in either a good handling or an ill handling boat. It is best to mount your Rudder so that the front leading edge of the Rudder Blade is even with the Prop Nut that secures your propeller, or as close to it as possible. Its also a good idea to drill out the water passage in the Rudder Blade with a long 1/8” Drill Bit drilling small sections at a time while removing the shavings often in the passage and from the Bit while drilling. Once drilled use your Dremel and enlarge the water inlet passage on the side and lowest portion of the Blade. This will help get more water to the Engine while underway resulting in better cooling. Drilling all the Barb Fittings to 1/8” will also help to increase your water flow.

Mark out and mount your Hardware to the transom as outlined in the “Specifications Page”, using a Sharp Pencil-works best. Take your time using a Square, a good straight edge and measure twice and drill once. Once all your hardware is mounted place “everything” into the Hull temporarily. This includes an empty Gas Tank, Engine and Mounts, Tuned Pipe and Mount, Radio Box and Mounts, Servos, Battery, Drive Cable and anything else you will have your boat rigged with when its completed. You may have to tape some of the items in place into the Hull to hold them until you mount them permanently. Place a Magic Marker mark at your desired CG on the Keel and place a Brass Tube or Wood Dowel under your boat at the keel on your mark. Balance the Hull and all its components on its Keel on the tube by moving the motor and other internal components at your mark until the Hull will teeter totter or balance on your Brass Tube at your mark. The higher the powered motor the higher (more forward) your CG (Center of Gravity) should be set. Once the Hull is balanced mark the location of all the items and start building and mount them permanently.

You will also need to mark off your Right Stringer and notch it out with a Dremel for adequate clearance for your Carburetor and its Linkage. Then reapply some resin back onto the bare wood where your cut was made.
Once you have tested your boat on the water you may find that some High Lift Propellers may cause your Razor to bounce side to side in the straights or the right side lifting in the turns. This is caused by too much lift in the Prop resulting in the Transom of the boat wanting to lift off the water. In most cases tilting the bottom of your Rudder Blade slightly toward the outside of the boat (somewhat like your right turn fin) will help eliminate this condition.

Specifications Page #1:

1. Speedmaster Rudder Bracket is part # SPD-MB65 which includes a 60/90 Single Feed Rudder. When using the M&D designs Racing Gas Drive you can purchase an M&D Rudder extension from M&D which will place front edge of your Rudder blade at 6 inches and in the proper location in relationship to their drive. When using the Speedmaster Gas Stinger Drive you can also purchase the longer 6 inch Rudder mounting bracket from SM as well. Speedmaster is now producing a variety of Rudder Bracket lengths to help you place your Rudder in the proper position depending on your Drive choice in relationship to your prop as we talked about previously. I have found the 6 inch Rudder Bracket works best on the Razor 45 even when using the Speedmaster Gas Stinger Drive.

2. Center of Gravity (CG)(Balance Point) should be between 13” (Stock Power) to 14” (High Power) measuring from the Transom forward on your keel at your mark. The higher the power the higher your CG (more forward) should be calculated. Keep in mind it’s much easier to add CG with lead weight then it is to deduct weight or to lower your CG once your Boat has been built. To add CG place and secure a Pool Noodle shaped with a pointed end forward through the Bulkhead opening to the Tip of the Bow and then add and secure lead weight at the tip of the Noodle. It’s a quick and easy method to change and raise your CG properly for rougher water conditions too. Locate “your” proper CG as outlined in the “Building your New Razor 45 Page”, this is an extremely important step in the Building Process of your new Hull.

1. Speedmaster Trim Tabs part # SPD200 come 2 in a package and measure 2 ¼ X 1 ¾ and initial testing has proven they work well on this Hull.

2. The bottom of the Trim Tabs should be mounted on the Transom 1/16” above the bottom running surface edge with the inner edge of the tabs starting at 2 1/8” from the Keel. If you plan on racing please check The Rule Book of “your” Sanctioning Body for any Height Limitations. Using the Trim Tab adjustment screws adjust the End Tips of the Tabs down (The Rear Most Part) just above the Running Surface about 1/16” using a straight edge just off the Transom running surface. Trim Tab adjustments will affect the performance and handling of the Razor 45 dramatically; do your final adjustments on the water.

3. Mount your Rudder Blade centered with the right stringer at 2 ½ “.

4. The Rudder Blade length is not trimmed and used at Full Length for best handling and stability.

5. Right Turn Fin is mounted 2” below the running surface and mounted perpendicular to the bottom. I have seen a variety of larger style and shaped Right Turn Fins work very well on the Razor 45. If you plan on racing an Offshore Class or desire better left turns for Sport Boating it’s best to install a smaller Left Turn Fin that extends 1 1/2” below the running surface and perpendicular to the bottom of the left side.
Specifications Page #2:

6. Drive is mounted centered on the transom, with no offset with the centerline of the drive cable placed at 9/16” up from the Keel. Drive Strut Angle will work well when adjusted Neutral (Level) or with slight positive (Rear most part tilted up slightly) with your Final Adjustment being made on the water.

7. Please note that this Hull is a just released, very new design and we are getting Feedback from our Loyal Customers on what works best. Feel free to call me on what works best for you.

8. Good all around performance Propellers:
   Octura 470/3 * 572/3 / Prop Shop 6518/3 * 6717/3 / ABC MW3 / Prather 275.
   There are a variety of new ABC Propellers just released that will work well and that are still in the testing stages.

1. If you have any questions or concerns please feel free to give me a call after 3:00 PM PST.