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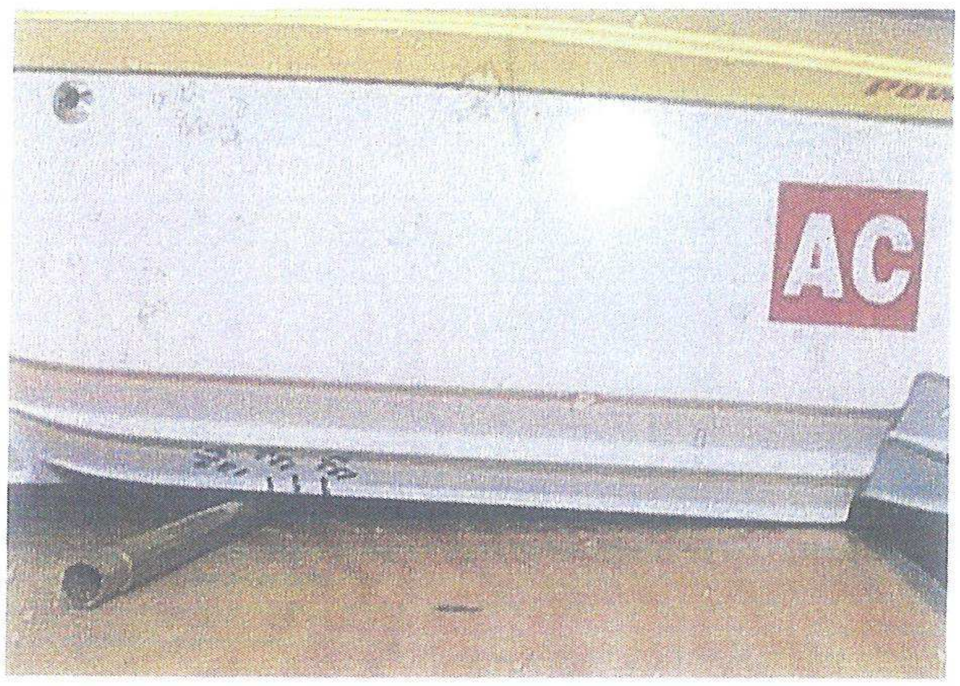
AC Model Boats R42 Cat

Intro: Thank you for purchasing the new A.C. Model Boats R42 Cat. The R in it's name does not stand for Race, and I will tell you the story behind it sometime. This particular Hull was produced and designed for the Full Time Cat Racer. Unlike the Blast Cat 40 this Hull **IS** Hardware sensitive and does require some technical knowledge and ability to set up properly. It is a new Hull design and we are learning new things about it all the time. Please feel free to call me anytime with any questions or newly found set up features.

Important: The R42 Cat 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


Powered by MAD Jackpot Racing


AC

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 R42 Cat 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.

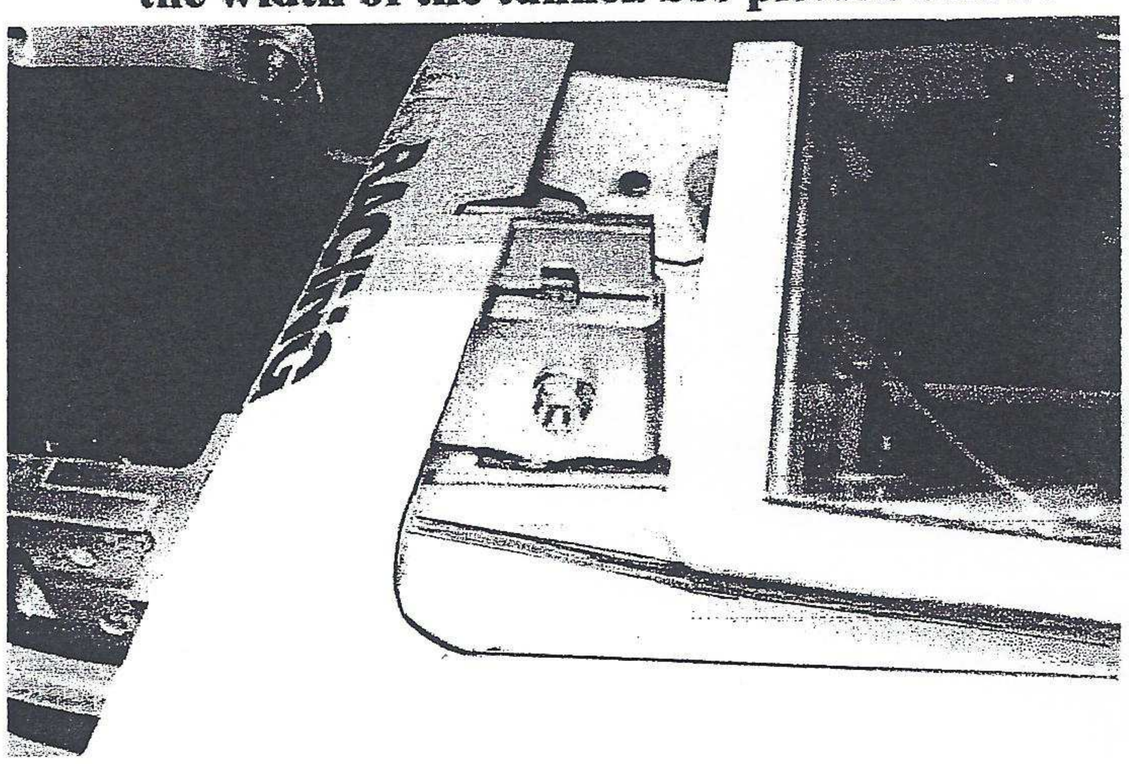
Building your New R42:

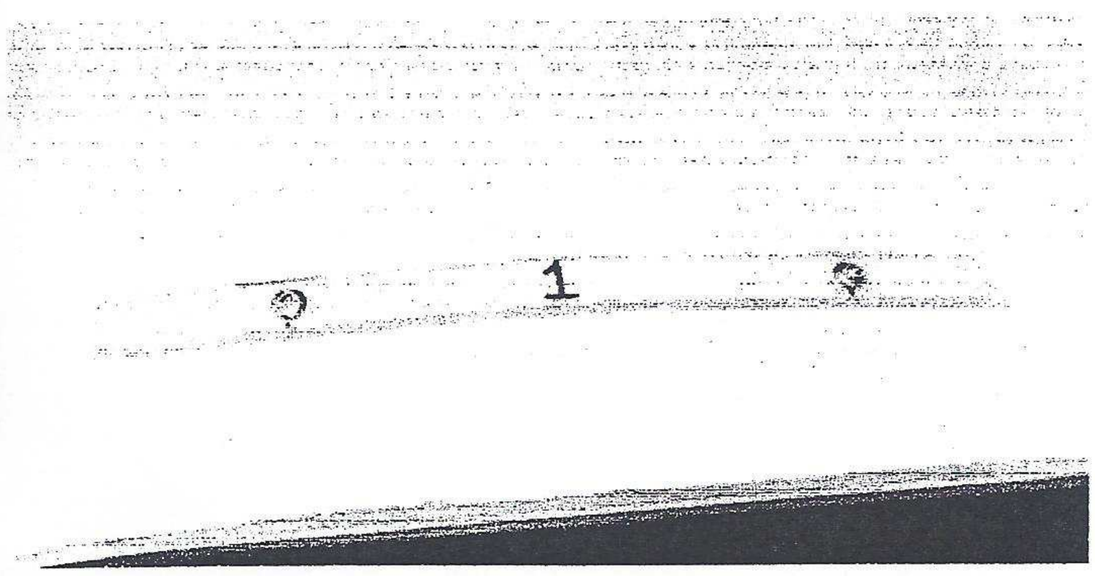
Rudder placement on your new R42 is extremely important. Initial testing has shown that the rudder blade being placed up close to the Transom has worked best. We have also found that the Hull exhibits better turning and handling characteristics with the Speedmaster larger profile 65/90 dual feed rudder blade. It's also recommended that a small "S" Bend be placed in the Stuffing Tube where it goes through the Tunnel floor from the engine. This will make the stuffing tube parallel with the tunnel and not on an angle going to the strut, which is mounted off to the right ¼". Water and air coming through the tunnel at higher speeds could make the hull pull to the left if mounted on an angle inside the tunnel.

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 each sponson and place a Brass Tube or Wood Dowel under your boat at the sponsons on each of your marks. Balance the Hull and all its components on each sponson mark 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 cut 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. Initial Testing has also shown that it's best to rig the boat using a Collet Drive and **NOT** a Square Drive. This hull must be pushed from the engine.

This is a NEW Hull and were learning new things all the time. If you find a new set up please contact me.

If you're a "Full Time Racer", we have also recently found that setting up the hull with the Strut inside the Hull (Bolted on the inside of the Transom) is the best set up, for maximum handling and cornering. With speeds in the 60,s, small strips in the tunnel will also help eliminate any lifting in high wind race conditions. Make strips ¼" wide, 1/8" thick, positioned 1 ½" back in the front of the tunnel, and 75% the width of the tunnel. See picture below.





Specifications Page:

1 Speedmaster Item #141 and Rudder Tee Bracket used with a 65/90 Dual Feed Rudder has been found to work best. Replace the L Bracket that comes with the kit with a Tee Bracket with no rudder extension. Speedmaster Skeg Strut Item # 8000 must also be used. You will also find that the Strut must be mounted to the right of transom center, between 3/16" and 1/4" to prevent propeller right bow torque steer. This will vary depending on power and propeller that is used. It's best to slot your 4 holes on the Transom so it will be adjustable. The new Transom inside Doubler is made of a Fiberglass Composite, so water will not soak into the slotted holes and weaken/soften like wood does. Center of Gravity (CG)(Balance Point) should be between 14" (Stock Power) to 14 3/4" (High Power) measuring from the Transom forward on your Sponsons at your marks. The higher the power the higher your CG (more forward) should be calculated. These CG numbers may change after we find out more about the Hull and do more testing with Stock Power. 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 in each front sponson shaped with a pointed end forward through the Bulkhead opening to the Tip of each sponson and then add and secure lead weight at the tip of the Noodles. It's a quick and easy method to change and raise your CG properly for rougher water conditions too. Please locate "your" proper CG as outlined in the **"Building your New R42 Page"**, this is an extremely important step in the Building Process of your new Hull.

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

2 The Rudder Blade length is not trimmed and used at Full Length for best handling, turning and straight-line stability.

3 **Radio Box:** No matter what Radio Box is used for your build, please try and tuck it in as close to the inside edge of the Transom as possible. If you do have an unavoidable gap there, please add some radio box tape at the opening, and close it up. Massive amounts of air are forced into that area at full speed. I recommend you use my Radio Box with the "Quick Release" mounting system, but most any Radio Box will work.

4 **Propellers:** There are many props being used with Zenoah Power.
Here are a few: 6717/3 6518/3 7016/2 470/3

My AC R42 Hull ID # _____

My Set Up Notes:

R-42 —4—

AC Model Boats: R 42