

Plantraco Micro Racer Shoestring Racer

Preliminary Manual Version 1.1

Thank you for purchasing the Plantraco Micro Racer Shoestring. Many hours have gone into developing this model. We hope you enjoy building this model and have many hours of fun flying it.

Tools:

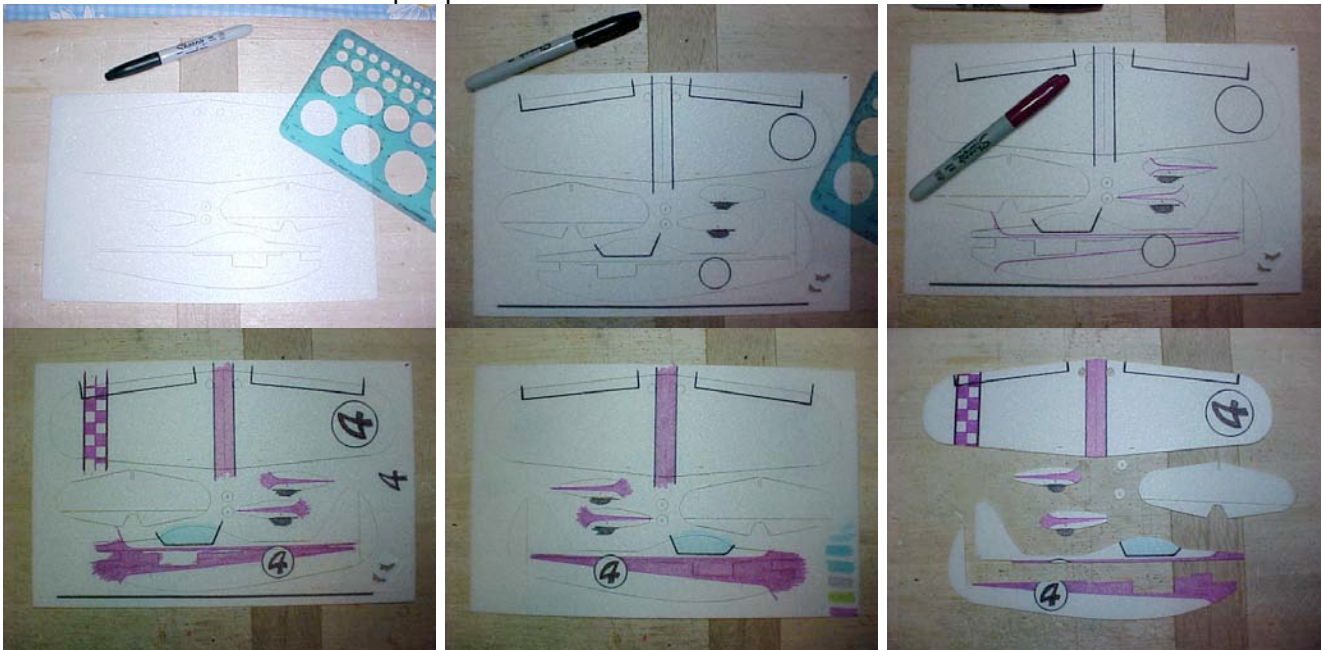
X-Acto knife, straight edge, 5-Minute Epoxy or Foam Safe CA and CA Kicker accelerator, Duco Household cement, Double-stick Foam tape, needle nose pliers, heat source for heat shrink tubing, sanding block

Equipment:

Plantraco 0.9 gm 3 channel receiver, 2 each MicroActs w/Nano connectors, 7mm 3.3Ohm motor with Nano connector and Tri-Turbofan Propeller or 57mm X 20mm (2.25" prop). These parts and more are included in the Deluxe Starter Set #2

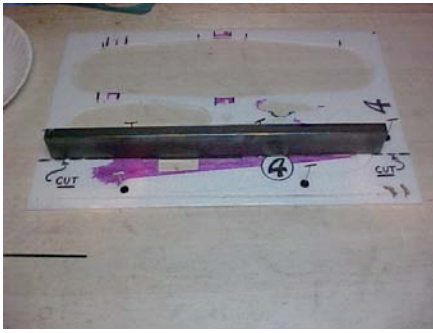
Instructions:

1. First step is to decorate you model. This is done while the parts are still in the carrier sheet. Use Multi-colored Sharpie pens to add detail and color. You won't need to do this step with the Plantraco version of the model since it is pre-printed.

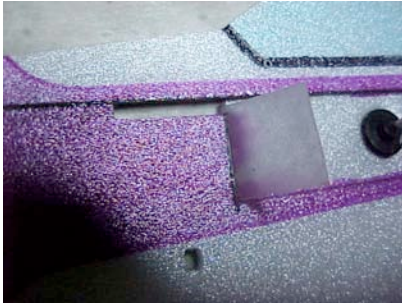


2. Next step is to glue the fuselage halves together with a piece of the supplied carbon fiber strip. Cut the strip so that it will reach from the front of the fuse to the leading edge of the horizontal stabilizer. Glue the two fuselage halves and the carbon fiber together using a **very thin** coat of epoxy.





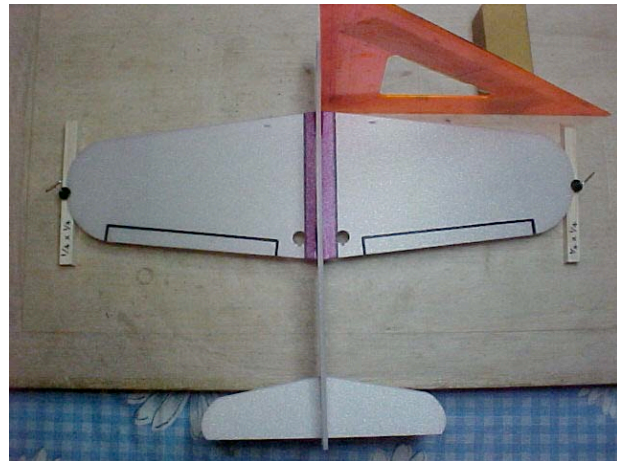
3. Add short piece of carbon fiber strip to front of radio box using a **very thin** coating of epoxy glue.



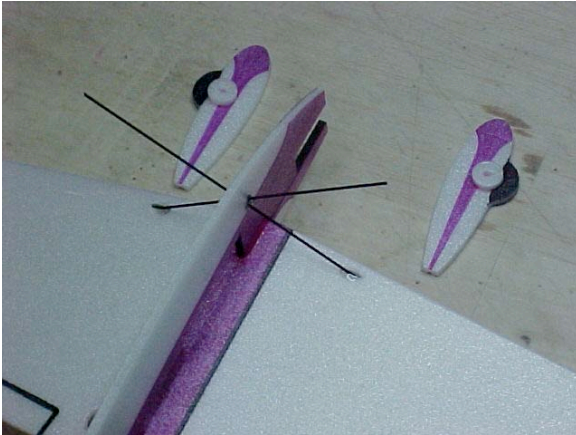
4. While the fuselage is drying, add the dihedral to the wings using foam friendly CA. Raise one wingtip 0.75 inch. Also, now is a good time to add the wheel pant doublers. Note a left and right pant needs to be made.



5. Glue wing to fuse using foam friendly CA. Be sure to align the wing to the fuselage properly before gluing.



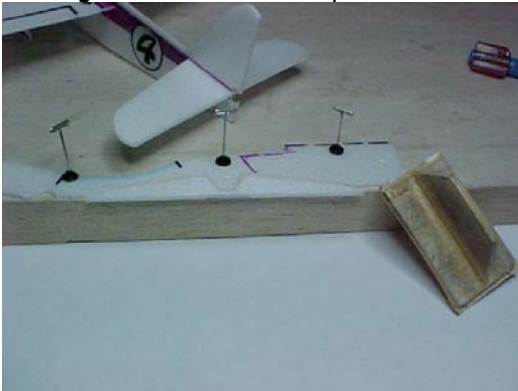
6. Install gear legs (0.8mm carbon rod 2 5/8 inch long) flush with the top of the wing. Use foam friendly CA.



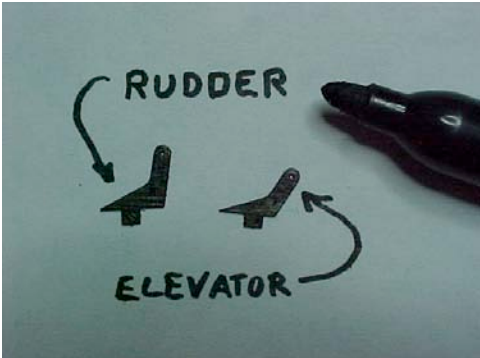
7. Install wheel pants. Use a triangle to align wheel pants vertically and parallel to the fuselage. Use foam friendly CA.



8. Glue horizontal stabilizer into the fuselage. Bevel the leading edge of the elevator and rudder using a sanding block. Add short piece of carbon fiber strip to center section of the elevator. (CA)



9. Install rudder and elevator horns using foam friendly CA.



10. Hinge the elevator and rudder using short pieces of Blenderm.

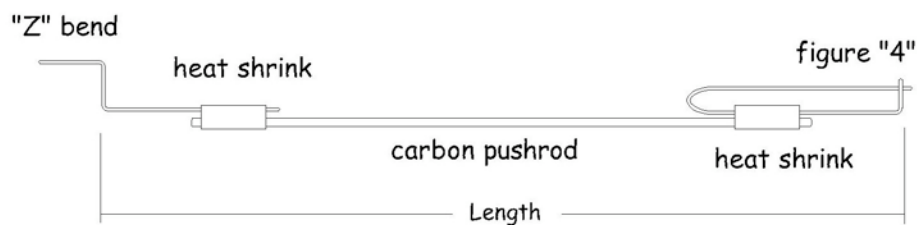


11. You have finished the airframe construction of your MR Shoestring.

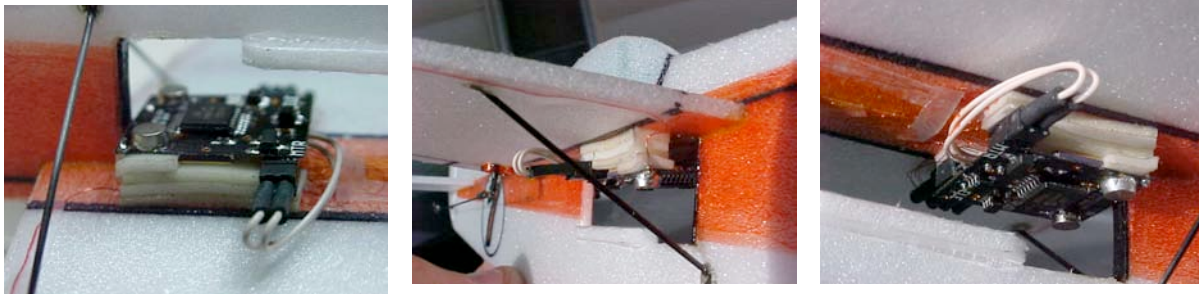


12. Make up 2 pushrods as illustrated below. Use the 0.5mm carbon rod, "Z" bend and figure "4" supplied in this kit. Use heat gun to shrink the heat shrink tight and do NOT glue. Length of the rudder pushrod is 3 1/4 inch and the elevator is 3 3/4 inch.

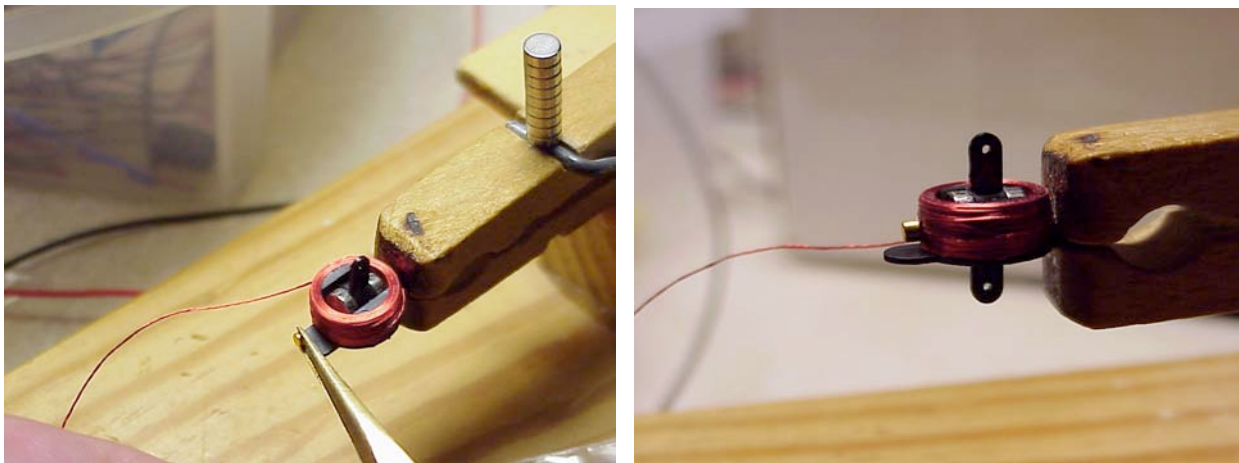
Typical Pushrod Construction



13. Next, install a HFX-900 receiver. Use double-stick foam tape to mount the receiver 1/8 inch from the front of the cutout so the battery will slide in and attach.

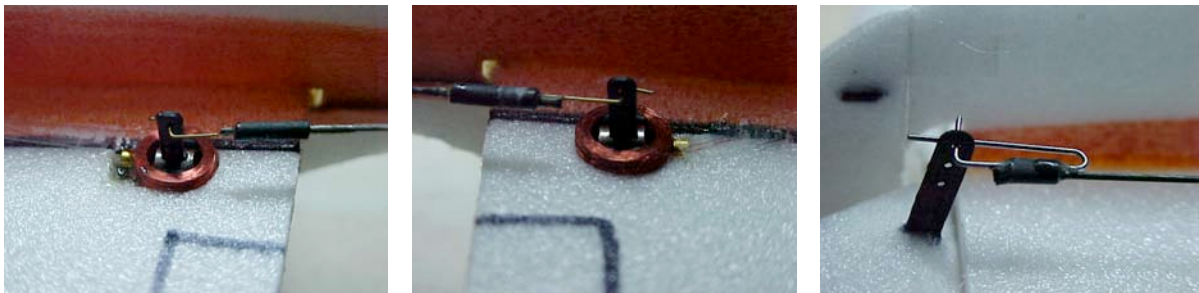


14. Add centering magnets to MicroACTs using Duco Household cement. To mount a centering magnet, first determine the correct orientation. The centering magnet should attract the magnet on the moveable arm. (see below)



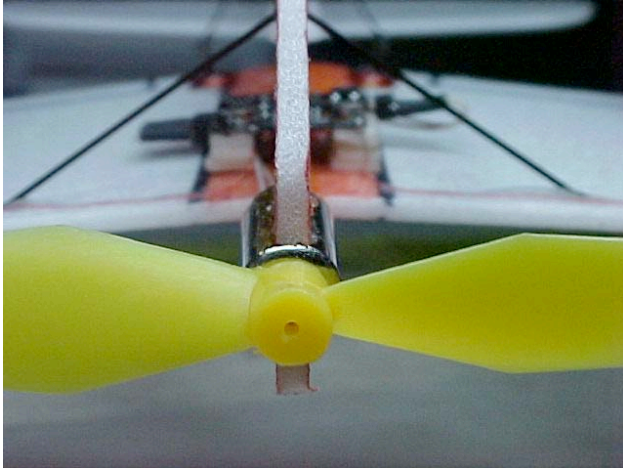
15. Next, add a small drop of *glue to the magnet and mount it on the coil. The attraction will hold it there while the glue dries. Position the magnet to get the output arm perpendicular to the coil.

16. Next mount the MicroACTs in the wing cutouts. and 2 each MicroACTs. Using the supplied pushrods and ends, install pushrods. The actuators are a tight press fit and should not require any glue.

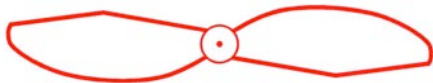


17. Adjust pushrod lengths until the surface are in their neutral positions when the actuators are center. To fix, put a small drop of Ambroid (or Duco, Sigment) glue on the pushrods to keep the "Z" bend and figure "4" from moving.

18. Install the 7mm motor in the motor slot. Set at 0° - 0° or slightly to the right (see picture). If you use Foam Friendly CA, be careful not to get any into the motor!



19. Performance can be improved if the prop is modified to the blade shape shown and then balanced.



Your Micro Racer Shoestring is now ready for flight. After test flying, you may need to adjust the right thrust to equalize the left and right turning performance.

Watch Video of the MicroRacers Kit assembly at:
<http://www.plantraco.com/hobbies/video.html>

Download the latest Instruction Manual version at:

<http://plantraco.com/manuals>

<http://www.microracers.com>

We'll be making updates to this manual soon

Special Thanks to BSD Designs - designers of the Micro Racers Airframes

If you have problems or questions - Email service@plantraco.com or call Plantraco 306-955-1836