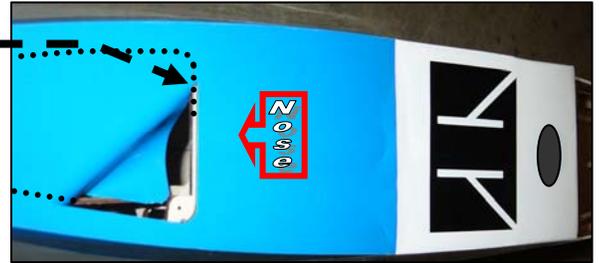


# NEPTUNE V2 ASSEMBLY ADDENDUM

**OPTIONAL NOSE-HATCH:** If you opt to use this compartment, cut and remove the Mylar film around the hatch's precut opening; then, using the supplied precovered hatch and hatch attachment screws, securely close the hatch.



**STEP 1:** The missing text between “of” and “you” should read “... contact between the fuselage formers and the fuselage's sides; if ...”

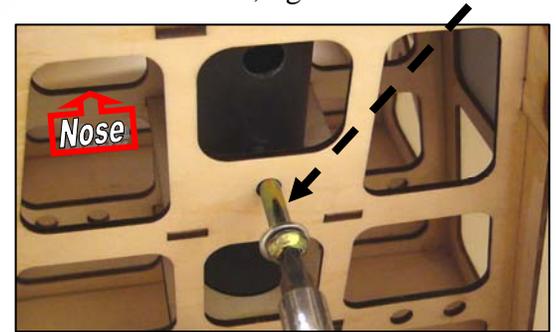
**STEP 2:** You may add support to the rudder and elevator pushrods (pictured in the Instruction Manual) by using the included 2 pieces of 1/8-thick, 3½-inch tall by 1-inch wide balsa to fabricate (i.e., fit to the height of your servo's output arms) a pair of half-height fuselage formers; then, using 5-minute epoxy, secure each half-height fuselage former to the fuselage side and floor and to its pushrod. (Also, one ultra-conservative Neptune customer reports that, instead of using the included all-thread metal rods to attach the clevises, he stiffened the servo-ends of the pushrods by inserting nearly the full length of industry-standard 2-56 2mm diameter 10- to 12-inch long single-ended pushrods, with half their ¾-inch threaded ends twisted into the inner pushrod, and the supplied clevises twisted onto the remaining exposed threads.)

**STEP 11:** The first line of this step should read – “Apply masking tape to hold both wing panel's leading and trailing edges in alignment; secure the two carbon fiber ‘pins’ in the ...”

**STEP 13:** Before performing this step, cut away the Mylar film covering the servo openings in the wing panels.

**STEP 34:** If you find a bit of glue partially obstructing the preinstalled blind-nut's threads, tighten the steel bolt to cut through and get past the obstruction.

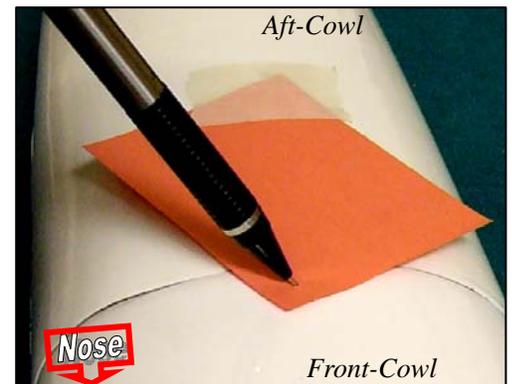
**STEP 37:** To secure the engine/motor pod to the carbon fiber tube, liberally apply 30-minute epoxy mixed with some fibers from a cotton ball to fully saturate the pod's plywood frame with this epoxy/cotton mix at all points of contact between the pod and the carbon fiber tube. Before the epoxy/cotton mixture can fully set, adjust the propellor's left-right angle for zero-degrees and use masking tape to secure this assembly until the epoxy/cotton mixture has fully cured.



**STEP 38:** The missing line of instructions between “fit” and “necessary” should read – “... inside the pod's fuel tank compartment; it may be ....”

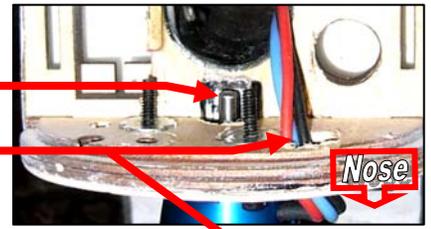
**STEP 39:** See the ‘EP Power Conversion Addendum’ for installing an electric power system.

**STEP 40:** To locate and drill the cowl's mounting holes: a) With only the aft-cowl in place, position a piece of scrap paper on the aft-cowl, extending over and past the front cowl mount's predrilled guide-hole, and secure this piece of paper to the aft cowl with masking tape; b) Using a sharp pencil, punch a small hole in the paper directly over the predrilled guide-hole; c) Leaving the paper in place, position the front cowl over its mounts and snugly against the rear cowl; d) Using the hole in the paper, mark the position of the hole onto the front cowl; e) Remove the front cowl and drill a 1/8-inch hole at the marked position; f) Repeat this process for each of the required mounting holes; g) Before attaching the front cowl, use a 3/32-inch bit to drill out each of the cowl mount's guide holes to fit the supplied cowl mounting screws.



# NEPTUNE V2 EP-CONVERSION ADDENDUM

1. Attach the motor to its X-mount, and test-fit the motor and the supplied cowl to the engine/motor pod's firewall. Mark and drill holes to attach the X-mount to the pod's firewall, then cut a clearance hole in the firewall for the motor's shaft. Using the bolts and blind nuts supplied with the motor, attach the X-mount and motor to the firewall, then cut a hole in the firewall for the motor's three wires.
2. Test-fit the ESC and battery to the pod to help you decide whether to mount your ESC and LiPo battery up inside the engine/motor pod or down inside the fuselage.
3. If both the ESC and the battery can fit inside the engine/motor pod, you have the option to mount them (both) inside the pod. If this is your choice, secure the ESC in the pod with double-sided foam tape and the battery with Velcro.
4. If both the ESC and the battery will not fit inside the pod, or, if you simply wish to lower your Neptune's center of gravity, prepare and solder three motor-wire extensions (we suggest 10-gauge wire) to the motor's three wires, and insulate each solder joint with heat-shrink tubing. Guide these three wires down the carbon fiber tube and out into the fuselage. (Important: *NEVER* lengthen the wires between the battery and the electronic speed control.)



5. Check the engine/motor pod's left/right angle to ensure the propeller is at zero degrees by gently twisting the carbon fiber tube within its mounting hole. Once you are content with the propeller's angle, apply 5-minute epoxy mixed with some fibers from a cotton ball to secure the pod into the fuselage at the base of the carbon fiber tube and to fill the small gap between the carbon fiber tube and the top of the fuselage.



6. Solder the barrel connectors supplied with your motor to the loose ends of the three motor-wire extensions and connect these wires to the ESC, then use double-sided foam tape or nylon wire ties to secure the ESC inside the fuselage.



- a) If you choose to mount your battery in the pre-cut nose hatch, position the ESC inside the fuselage, just aft of the nose-hatch's floor.
- b) If you are using two batteries, mount them both inside the fuselage under the wing (and use the nose hatch area for any necessary nose weight). Or, you may choose to make an additional hatch opening just aft of the pre-cut nose hatch (and in front of the windshield), then Velcro one battery to the fuselage floor under this new opening, and Velcro the second battery in the pre-cut nose hatch.

7. Using the rare-earth magnets preinstalled in the engine/motor pod's aft-cowl, secure the pod's aft-cowl into position on top of the engine/motor pod.



- a) Test-fit (and, if necessary, use a drum sander on your rotary tool to carefully adjust) the front cowl to your firewall, motor's prop. backplate and propeller. When you are content with the fit, attach the front cowl to the firewall with the supplied wood screws, then securely mount your propeller to the motor.
- b) With the motor's three wires connected to ESC's three wires, connect the ESC's BEC/throttle connector to your receiver's throttle channel, and check the motor's rotation direction ...

8. If you are using a computer radio, ensure the transmitter's 'endpoint adjustments' are set to their normal, full-range settings. Set your transmitter's throttle and throttle trim controls to minimum. Switch ON the transmitter and connect the ESC to the battery. Listen for a series of initialization sounds, then slowly raise the transmitter's throttle to no more than 25% of the way up; the motor should rotate in the clockwise direction as viewed from the rear of the airplane. (Carefully run the motor slowly and only for the few seconds necessary to observe its direction of rotation.) If the motor rotated in the clockwise (correct) direction, return the transmitter's throttle to minimum, disconnect the ESC from the battery and switch OFF the transmitter; your Neptune V2's EP-conversion is now complete. However, if the motor powered up in the counterclockwise (wrong) direction as viewed from the rear of the airplane, return the throttle control to minimum, disconnect the ESC from the battery, swap either two of the three ESC-to-motor extension wires, and repeat the above step to ensure the motor rotates in the correct direction; *NOW* your Neptune V2's EP-conversion is complete. Happy Landings!