

HOW TO INSTALL DUAL AILERON SERVOS IN THE VENTURE 60

The Venture 60 was designed to use a single servo for the ailerons because it is a time-tested method that saves weight and expense. However, many modelers prefer to install a servo in each wing panel. Dual aileron servos allow for shorter, stiffer linkages and moving the attach point half way out on the aileron reduces aileron flexing and the potential for flutter.

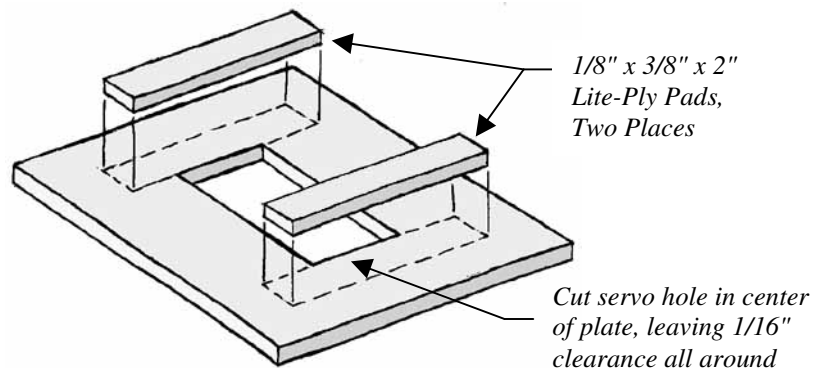
Two options are shown here for adding dual servo mounts to your Venture 60. If you have the Dual Servo Mount Package, you will have all the parts and hardware necessary for either option.

OPTION 1: Exposed Servos *Advantages: Lighter, simpler*

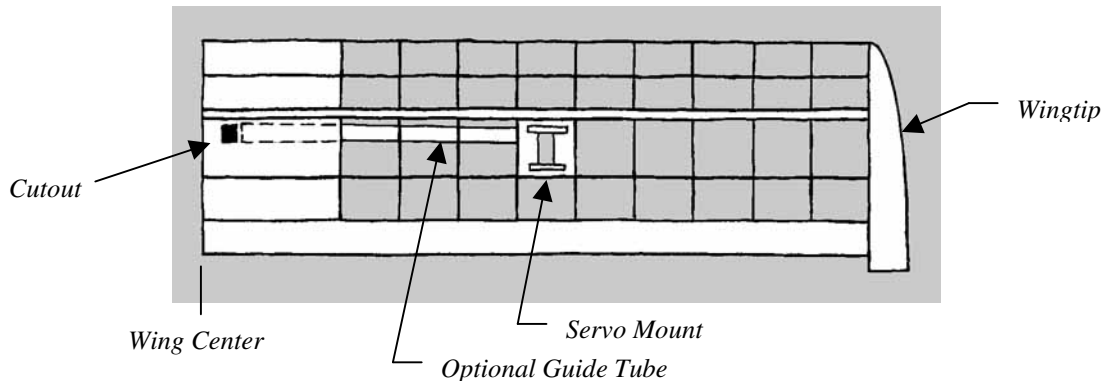
STEP 1 - Cut servo lead holes in ribs before starting wing construction. Cut 3/4" diameter holes in the ribs to pass the servo wires. The exact location is not critical, but it should be the same in all the ribs. If you want guide tubes (not entirely necessary, but nice for guiding servo wires), be sure to install them during wing construction. You can make a lightweight tube by rolling up an 8-1/2" x 14" piece of paper.

STEP 2 - Make the servo mounts as shown in the diagram.

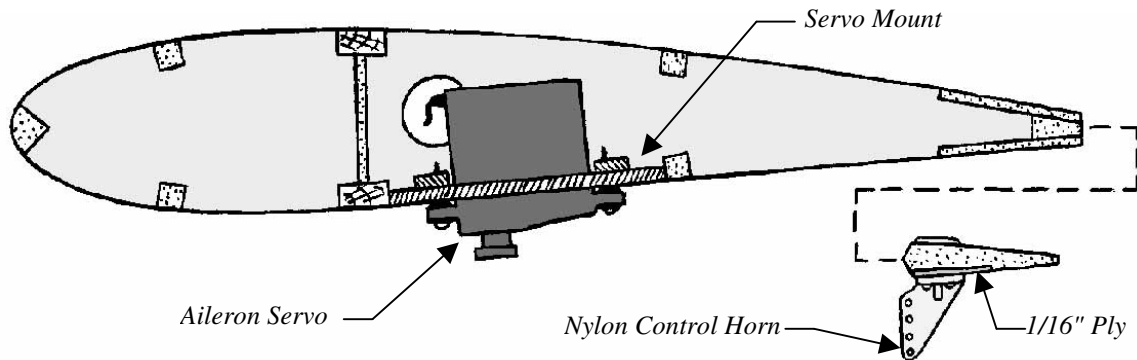
IMPORTANT NOTE!
The servo mount plates are NOT square. Fit the plate to your wing to determine proper orientation.



STEP 3 - Glue the assembled mounts into the wing as shown in the diagram. The mounts should be flush with the bottom surface of the wing. Glue them firmly to the ribs and spars. The lite-ply pads should face up, towards the top of the wing. You must also make a small cutout in the top wing sheeting of each wing panel for the servo wires to pass through.



STEP 4 - Bolt your servos to the mounts using the hardware supplied with your servos. Imbed 1/16" plywood pads in the ailerons to serve as hardpoints for the nylon control horns. Use the threaded rods and clevises supplied in the Venture 60 kit for pushrods.

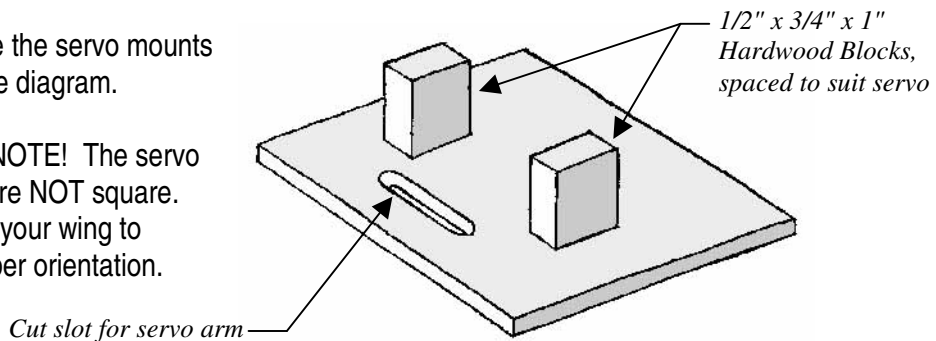


OPTION 2: Internal Servos *Advantages: Neater Appearance, Lower Drag*

STEP 1 - Cut servo lead holes in ribs (same as Step 1 in Option 1)

STEP 2 - Make the servo mounts as shown in the diagram.

IMPORTANT NOTE! The servo mount plates are NOT square. Fit the plate to your wing to determine proper orientation.



STEP 3 - Glue the 1/4" x 3/8" x 3" hardwood rails to the wing ribs as shown below. Use two rails in each panel, recessed 1/8". When dry, install the lite-ply mounts, and drill through each corner into the rails with a 1/16" drill bit. Remove the mounts, and redrill the lite-ply with a 3/32" drill bit. The mounts are held to the rails with four #2 x 1/2" wood screws.

STEP 4 - Bolt your servos to the blocks (same as Step 4 in Option 1).

