

Paramount 61 3D

Product Number 127560

Assembly Instructions

Specifications:

- Wing Span: 54 Inches - Wing Area: 795 Square Inches
- Length: 57 Inches
- Weight Ready to Fly: 5.75—6.5 Lb . (depending on equipment used)
- Control Functions: Rudder, Elevator, Throttle, Aileron
- Radio: 4 Channel / 5 Servos (Standard Size Components)
- Power: .61 2 stroke - .91 4 stroke

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Visit our website at <http://www.globalhobby.com> for more information on the Sportsman Aviation line of R/C models and accessories!

SAFETY WARNING

This R/C airplane is not a toy! If misused or abused, it can cause serious bodily injury and/or damage to property. NEVER fly near power lines or busy roads. Fly only in open areas and preferably at a dedicated R/C flying site. We suggest having a qualified instructor carefully inspect your airplane before its first flight. Please carefully read and follow all instructions included with this airplane, your radio control system and any other components purchased separately.

FINDING HELP AND THE AMA

To make your modeling experience safer and far more enjoyable, we recommend that you get experienced, knowledgeable help with assembly and during your first flights. Your local hobby shop has information about flying clubs in your area, most with qualified flight instructors at no charge. We recommend that you join the largest modeler's organization in the world, the Academy of Model Aeronautics (AMA). AMA publishes a very informative and helpful monthly magazine, provides model aviation insurance coverage, and offers many benefits to make flying R/C models more enjoyable. If there is no hobby shop in your area, the AMA will be able to help you locate a flying field near you, and put you in touch with model flying clubs in your area with qualified instructors.

Academy of Model Aeronautics

5151 East Memorial Drive
Muncie IN 47302-9252
(800) 435-9262
www.modelaircraft.org

OUR GUARANTEE

Global Hobby guarantees this kit to be free from defects in both material and workmanship, at the date of purchase. This does not cover any component parts damaged by use, misuse or modification. In no case shall Global Hobby's liability exceed the original cost of the purchased kit. In that Global Hobby has no control over the final assembly or material used for final assembly, no liability shall be assumed for any damage resulting from the use by the user of the final user-assembled product. By the act of using the final user-assembled product, the user accepts all resulting liability.

SECTION 1: INTRODUCTION

Congratulations on your purchase of the Paramount 61 3D !

- ◆ You'll enjoy full aerobatic capability with any 4 channel radio system, and *all-out wild* 3D Tournament style maneuvers using the latest advanced radio technology!
- ◆ The Paramount 61 is designed for stable and predictable maneuvers and flight characteristics.
- ◆ Intermediate pilots will have the perfect plane capable of advancing your skills to Tournament level!
- ◆ Advanced pilots can make full use of all the latest radios, techniques, and maneuvers!
- ◆ Huge control surfaces and full-airfoil aileron profile delivers unmatched control power at all speeds.
- ◆ The Paramount 61 is built strong yet ultra-light for full vertical maneuver capability.
- ◆ Built from top quality balsa, plywood, and lightweight fiberglass.
- ◆ Covered in real iron-on film in a striking 4 color opaque/transparent color scheme.
- ◆ You'll enjoy fast, easy assembly with simple instructions, detailed photos and graphics.

ABOUT THIS MANUAL

A great deal of time and thought has gone into your Paramount 61 3D, so please read through the instructions once completely, then go back and follow each step in turn to complete your model. Please read through each step before beginning, marking a little check next to each step as you finish to keep track of your progress. Although the model takes only a few evenings to complete, please do not rush through the process. Doing each step properly the first time will save *hours* of frustration and wasted time later.

We recommend having several small containers to hold the various small parts, screws, washers, etc. after you open the plastic bags to prevent misplacing or mixing up the parts. If you do not have a utility workbench, cover your work table with a cloth or thick paper to prevent damage.

Before you begin final assembly of your model, please take a few moments to inspect all of the parts for damage during shipment, or any manufacturing defects. If you find damage or defects, or if you still have questions about properly assembling this model after reading the instructions thoroughly, please contact us at the address below:

Global Services
18480 Bandilier Circle
Fountain Valley, CA 92708

Phone (714) 963-0329 Fax: (714) 964-6236 E-mail: service@globalhobby.net

To serve your needs better, please include your email address with any correspondence you send to us. Your email address will be added to our Customer Service Database so you will automatically receive free updates and tech notices for your particular product. You will also receive repair status updates (if applicable) and other important information about your product as it becomes available.

Global Hobby Distributors **does not** sell, trade, or rent your personal information to others.
Your privacy is important to us.

SECTION 2: RECOMMENDATIONS

Global Hobby Distributors has gone to great effort to provide the R/C hobbyist with a top quality product giving years of service. We strongly recommend you use only the highest quality components and supplies to complete and operate your Paramount 61 3D:

Power

Magnum .61 2 Stroke Glow Engine (or)
Magnum .91 4 Stroke Glow Engine

Double X Blue Silicone Fuel Line



Radio Equipment

Hitec RCD Electron 6 Dual Conversion Receiver #759134
Cirrus 4.8V NiCd Battery #444603
Cirrus Switch Harness w/Charge Cord #444733
Du-Bro 1/4" Protective Foam Rubber #513



Standard size ball bearing servos with nylon gears recommended

Adhesives, Tools and Building Supplies

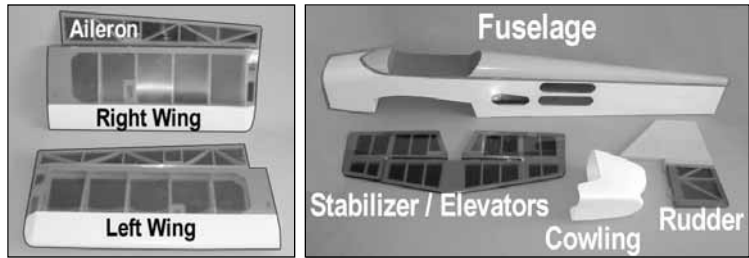
Kwik-Bond #1 Thin CA Glue #887500
Kwik-Bond #2 Thick CA Glue #887510
Kwik-Set CA Glue Activator #887540
Kwik-Bond 5 Minute Epoxy #887560
Kwik-Bond 30 Minute Epoxy #887565
Excel Model Razor Knife (and extra blades) #692801
Small and medium Phillips head screwdrivers
Small and medium Flat head screwdrivers
Scissors
Hand Drill and assorted small drill bits
Small mechanic's pliers, Needle Nose pliers
Adhesive tape
Sandpaper, sanding blocks, emery boards
Epoxy mixing sticks, mixing cups
Rubbing alcohol, paper towels
Acetone or MEK solvent



SECTION 3: KIT CONTENTS

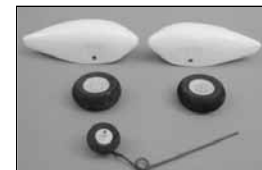
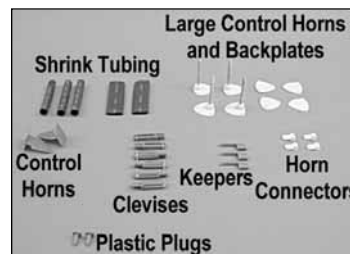
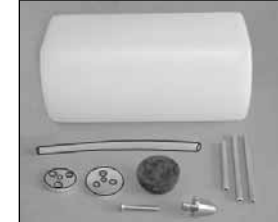
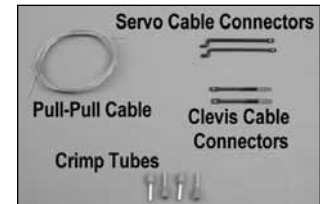
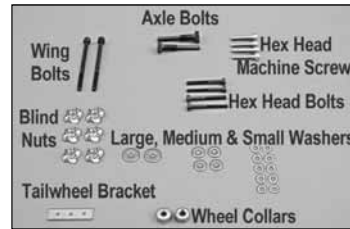
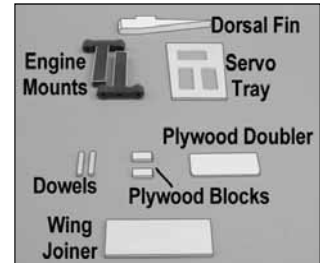
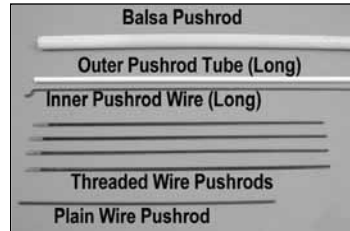
Paramount 61 3D major airframe parts:

- ✓ Fuselage assembly (with hatch)
- ✓ Fiberglass Cowling
- ✓ Right Wing panel assembly (with aileron)
- ✓ Left Wing panel assembly (with aileron)
- ✓ Stabilizer / Elevators assembly
- ✓ Rudder



The Paramount 61 3D also contains:

- ✓ 4 Threaded Wire pushrods
- ✓ Balsa Elevator pushrod
- ✓ Plain Wire pushrod
- ✓ Outer Throttle pushrod tube
- ✓ Inner Throttle pushrod wire
- ✓ 2 Nylon/Glass Engine Mounts
- ✓ Covered Balsa Dorsal Fin
- ✓ Plywood Servo Tray
- ✓ 2 Dowels
- ✓ 2 Plywood Blocks
- ✓ Plywood Wing Joiner
- ✓ Plywood Wing Doubler
- ✓ 2 Wing Bolts
- ✓ 2 Axle Bolts
- ✓ 4 Hex Head Machine Screws
- ✓ 4 Hex Head Bolts
- ✓ 6 Blind Nuts
- ✓ Large, Medium And Small Washers
- ✓ Metal Tailwheel Bracket
- ✓ 2 Wheel Collars
- ✓ Pull-Pull Cable
- ✓ 2 Servo Cable Connectors
- ✓ 2 Clevis cable Connectors
- ✓ 4 Crimp Tubes
- ✓ 2 E-Clips, 2 Washers, EZ Connector
- ✓ 5 set Screws
- ✓ Fuel tank Kit
- ✓ Aluminum Landing Gear
- ✓ Heat Shrink Tubing
- ✓ 4 Large Control Horns and Backplates
- ✓ 4 Horn Connectors
- ✓ 3 Pushrod Keepers
- ✓ 6 Clevises
- ✓ 2 Medium Control Horns and Backplates
- ✓ 4 Medium Wood Screws
- ✓ 4 Short Wood Screws
- ✓ 8 Machine Screws (for Large Control Horns)
- ✓ 16 Servo Mount Wood Screws
- ✓ 4 Small Washer-Head Hatch Screws
- ✓ 2 Axle Nuts
- ✓ 4 Plain Nuts
- ✓ 4 Self-Locking Nuts (for Engine Mounting)
- ✓ Wheels, Wheel Pants
- ✓ Pre-Built Tailwheel Assembly



SECTION 4: METRIC CONVERSION

The fasteners and hardware used in the Paramount 61 3D is Metric, and most U. S. tools and hardware are SAE Standard. To convert dimensions and tool sizes if necessary, please use this chart:

- ⇒ To convert inches into millimeters: Inches x 25.4 = mm
- ⇒ To convert millimeters into inches: Millimeters ÷ 25.4 = in

1/64" = .4mm	3/4" = 19.0mm
1/32" = .8mm	1" = 25.4mm
1/16" = 1.6mm	2" = 50.8mm
3/32" = 2.4mm	3" = 76.2mm
1/8" = 3.2mm	6" = 152.4mm
5/32" = 4.0mm	12" = 304.8mm
3/16" = 4.8mm	18" = 457.2mm
1/4" = 6.4mm	21" = 533.4mm
3/8" = 9.5mm	24" = 609.6mm
1/2" = 12.7mm	30" = 762.0mm
5/8" = 15.9mm	36" = 914.4mm

SECTION 5 COVERING MATERIAL CARE AND MAINTENANCE

Your Paramount 61 3D is covered with a high quality iron-on film, just like what you would use on individually built R/C models. The covering is applied and shrunk tightly at the factory, however because of changes in temperature is it possible that some wrinkles may re-appear. To remove any wrinkles that may have occurred during shipping, please use the following procedure:

Use a good quality model covering iron (we recommend Global Hobby Heat Sealing Iron #360900). Heat the iron to medium heat setting only, and allow the iron to stabilize at this setting. Carefully run the iron over the film covering, allowing the heat to shrink the wrinkles away. If wrinkles remain, raise the temperature of the iron a very small amount at a time, and re-shrink the areas necessary. Use only the minimum amount of heat needed, and remove the iron immediately when the covering becomes taut. Too much heat, or leaving the iron on any particular area for too long will result in burning a hole in the covering.



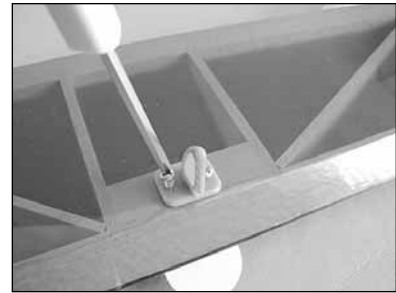
Although it is unlikely to happen, please also make a thorough check for any warps or twists that have developed in the wing, tail and, rudder structures at this time. If there are any warps, use the following method to correct them before assembling the model:

Have a helper hold the warped part firmly, flat on a table, with the warped portion sticking out over the edge. Gently twist the part until it is no longer warped and the film covering shows wrinkles. Be careful not to break the part being repaired! Using the same technique for removing the wrinkles above, use the model covering iron to remove the wrinkles while you and your helper are holding the part straight. When the wrinkles on both sides have been shrunk away while the part is being held straight, the part should remain straight when released. Occasionally it may be necessary to twist the part "just a little further than straight", shrink out the wrinkles, and then the part will relax back into the correct position.

SECTION 6: ASSEMBLING THE PARAMOUNT 61 3D

Step 1: Install Aileron Horns

Locate the 2 small gray **control horns**. Using the control horns as a guide, mark the location of the screw holes on each **aileron**, so that the horn will be directly behind the outboard edge of the servo opening, and the row of holes in the horn as close to the front of the aileron as possible. When satisfied, drill 1/16" holes into the wood block built into the aileron, and apply one drop of thin CA glue to strengthen the holes. When the glue has set, install the horns with the provided medium length wood screws.



Step 2: Glue Aileron Hinges

Using a very sharp hobby knife, remove the plastic film covering at the location of each aileron hinge slot on the ailerons and the rear edge of the wing, so that a small strip of wood is exposed for the glue to soak into. Insert the **EZ-hinges** into the slots and slide the ailerons into place against the wing. Press the ailerons against the trailing edge of the wing, and check that the ailerons operate smoothly and without binding. When satisfied, apply two drops of thin CA glue to both sides of each hinge.



Step 3: Lengthen Aileron Servo Wires

It will be necessary to lengthen the aileron servo wires to be able to connect them to a "Y-Harness" and the receiver. We recommend using pre-made **servo extensions**, although you may lengthen the existing wires by splicing in a piece of 3-conductor wire. If you choose servo extensions, we strongly recommend using **heat shrink tubing** over the connection to prevent the parts from vibrating loose.

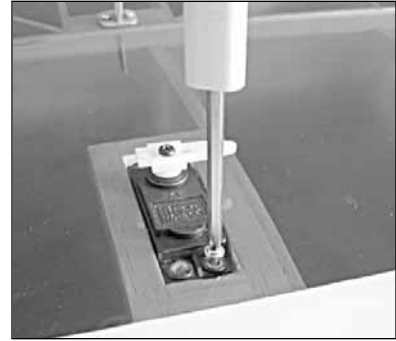


Step 4: Install Aileron Servos

Prepare your aileron servo using the rubber grommets and eyelets provided with your equipment. Remove the covering over the **aileron servo mount holes** in the wing panels, using a sharp blade hobby knife. Tie the end of the lengthened servo wire to the provided **pull-string**, and pull the wire inside the wing and out the access hole near the center of the wing.

Place the aileron servo in the cutout on the bottom of the wing. If necessary, carefully enlarge the opening so the servo fits. When satisfied, drill 1/16" holes into the plywood servo mounting plates built into the wing, using the mounting holes in the servo as a guide. Remove the servo and apply one drop of thin CA glue to each hole to strengthen the wood.

Place the aileron servo back in position with the output arm towards the rear of the wing, and install with four of the washer head screws provided with your servos. Repeat the process to install the other aileron servo.



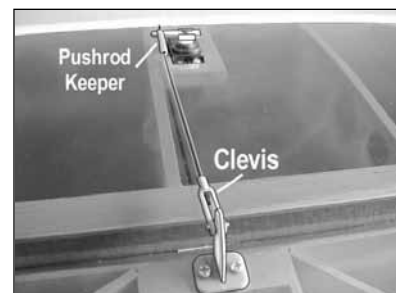
Step 5: Aileron Pushrods

Locate the two threaded **aileron pushrods**. Install a **plastic clevis** halfway onto each aileron pushrod. Remove the servo output arms and trim off the extra portion of the arms if necessary. If necessary, enlarge the holes in the arms to accept the aileron pushrod wire.

Hook up your radio equipment, and make sure the aileron servos are centered with the stick and trim lever neutral. Install the servo arms at 90 degrees (outboard) to the servos, then tighten the servo arm retaining screws. Clip the clevises onto the middle hole in each aileron horn, and position the wire over the outer holes in each servo arm. Mark the location of the wires where they cross the holes.

Using pliers, make a 90 degree bend in each wire at the marked point, and cut the wires leaving approximately 1/4" up from the bend. Slip the wires into the servo arm holes from below, and snap the gray plastic **pushrod keepers** onto the wires to prevent them from coming out of the servo arms.

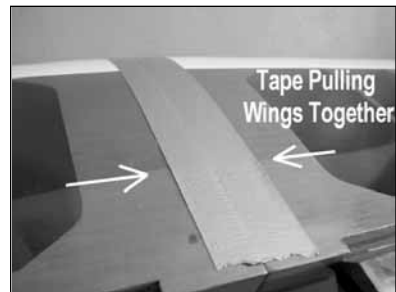
Adjust the clevises until the ailerons are both perfectly neutral with the servo centered, and then clip the clevises onto the aileron horns.



Step 6: Join Wing Panels

Tape the aileron servo wires to the wings out of the way so they will not interfere with the wings being joined. Test fit the wing panels together, with the **plywood wing joiner** installed. If necessary, remove material from the edges or ends of the wing joiner so the panels fit together perfectly. When satisfied, mix up a batch of **5 Minute Epoxy**, and coat the wing joiner, inside of the joiner slots, and exposed wood center wing ribs.

Assemble the wings together with the joiner in place. Check to be sure the leading and trailing edges of the wing halves are lined up exactly. Remove excess epoxy using rubbing alcohol or MEK and paper towels. Wrap the tape completely around the wing joint, making sure the tape pulls the wings together tightly. Re-check the alignment of the wing halves and exact match of the leading and trailing edges while the epoxy is curing. When the glue is dry, remove the tape.



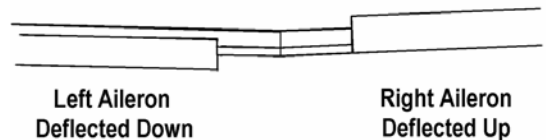
Step 7: Aileron Function Check / Set Throws

Hook up your radio equipment, connecting both of the aileron servos to a “Y-Connector”, and the Y-Connector to your receiver. Verify that moving the transmitter aileron stick to the right moves the right aileron up and the left aileron down.

If necessary, adjust the position of the pushrod wires closer to (or further from) the center of the servo, and/or the position of the clevises closer or further from the ailerons, to achieve the following aileron movements (up and down equally) :

- Low Rate: 1” (for Dual Rate-capable transmitters)
- High Rate: 1.75” (for Dual-Rate “high” Or non-Dual Rate Tx)
- 3D: 3” (for full 3D setup on Exponential-Rate Tx)

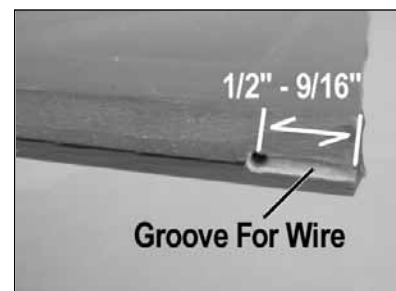
View Looking From Behind Wing
RIGHT Aileron Transmitter Control Movement



Step 8: Install Tailwheel in Rudder

Locate the **tailwheel assembly** and the metal **tailwheel bracket**. Drill a 5/64” diameter hole 3/4” into the forward edge of the **rudder**, approximately 1/2 to 9/16” up from the bottom of the rudder. Carefully cut a groove into the rudder from this hole to the bottom edge, so the tailwheel wire can be flush with the front edge. Make a 90 degree bend in the wire (straight rearward, the same direction as the lower wire coil section is bent). The bend should be 2 inches above the coil section. Clip off the excess wire, leaving approximately 3/4” on the bent part.

Slide the tailwheel wire through the outer hole in the tailwheel bracket, and test-fit the wire into the rudder. Make any adjustments needed so the tailwheel wire fits flush with the front of the rudder, and the tailwheel is aligned straight with the rudder. When satisfied, glue the wire into the tailwheel using a small amount of 5 Minute Epoxy or thick CA.



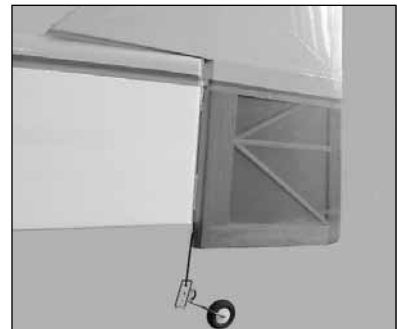
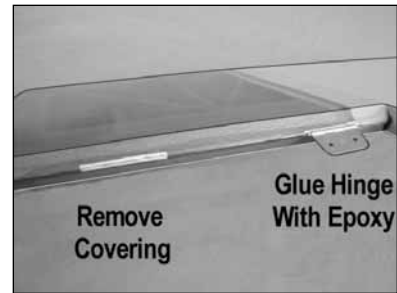
Step 9: Glue Rudder Hinges

Locate the two **metal rudder hinges**. Carefully enlarge the slots in the rudder and the rear fuselage if necessary to allow the hinges to be inserted and removed. Test fit the rudder and hinges to the fuselage, and verify the rudder can be moved easily without binding. Lengthen the slots if necessary to allow a good fit. Remove the hinges. Apply a small drop of oil or grease on the hinge “knuckles” to prevent glue from getting into the hinge. DO NOT get oil or grease on the hinge “blades” where they will be glued. Wipe away any excess oil with MEK and a paper towel.

Note: You should not use 5 Minute Epoxy for this step because you will need plenty of time to fully align the rudder hinges. Use 15 or 30 Minute Epoxy.

Using a model builder’s “glue syringe” apply a small amount of 15 or 30 Minute Epoxy into the hinge slots in the rudder and fuselage, and scrape away all excess epoxy from the outside of the slot. Apply a very thin film of epoxy to the hinge blades. Carefully insert the glued hinge blades into the slots in the rudder, wiping away any excess glue. Make absolutely certain that the hinge pins (hinge axis) are aligned perfectly with each other, are at the same angle, parallel to the edge of the rudder, and inserted into the rudder the same distance.

Now insert the rudder and hinges into the fuselage slots. Wipe away any excess epoxy with paper towels and MEK solvent. Verify once again that the rudder can move freely at least 45 degrees each way, without binding or resistance. Make any adjustments to the hinges, and re-test the rudder. This alignment is critical and must be done before the epoxy sets. When satisfied, set the fuselage and rudder on your workbench with the rudder supported so it cannot move while the epoxy is curing. Continually check to be sure the rudder hinge alignment stays correct until the glue has set.



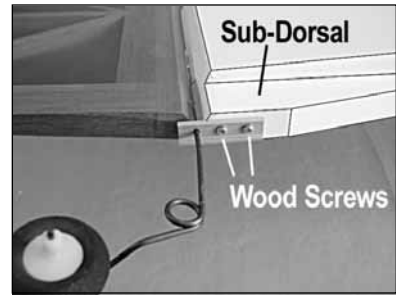
Step 10: Install Sub-Dorsal Fin

Carefully cut away the plastic film covering where the small **sub-dorsal fin** will mount. Test fit the sub-dorsal into place, and mark around the edges onto the fuselage with a pen. Carefully cut away the marked strips of covering from the fuselage, exposing the wood for a good glue joint. Remove the covering from the tab on the sub-dorsal fin where it will contact the wood inside the mounting slot. When satisfied, glue the sub-dorsal fin into place using 5 Minute Epoxy or thick CA glue.



Step 11: Attach Tailwheel Bracket

Swing the tailwheel bracket around until it is sitting on the flat mounting area on the bottom of the sub-dorsal fin. Using the holes in the bracket as a guide, drill two 3/64" diameter holes into the sub-dorsal fin. Apply a drop of thin CA glue to strengthen each hole. When dry, install two of the provided wood screws to secure the tailwheel bracket.

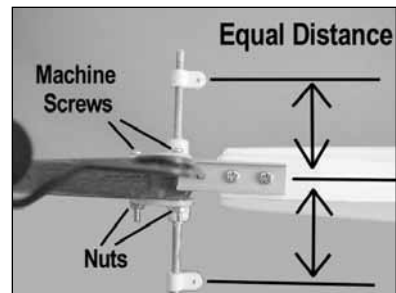


Step 12: Install Rudder Control Horns

Locate two of the large **threaded control horns, horn connectors, machine screws, washers and nuts**. Thread a horn connector halfway onto each of the threaded horns, facing forward (opposite of the base of the horn).

Place one of the horns onto the lower rudder, just above where the tailwheel wire is glued. Align it so the hole in the horn connector is directly above the rudder hinge line. Hold the horn in place with a drop of thin CA if desired. Using the holes in the base of the horn as a guide, drill three 1/16" holes through the rudder.

Insert the thin machine screws through these holes, and then slide the other threaded horn base over the screws on the opposite side. Install three small nuts and washers onto the machine screws, and tighten the nuts to clamp the horns onto the rudder. When satisfied, apply one drop of thin CA glue to the nuts to prevent them from loosening.



Step 13: Prepare Stabilizer and Fuselage

Carefully remove the covering from the fuselage over the **stabilizer mounting slot**. Slide the **stabilizer** into position, with the red side on top. Measure and verify the stabilizer is centered in the fuselage, and that the rear edge of the stabilizer is exactly 90 degrees to the fuselage centerline. Re-check again until you are certain the stabilizer is aligned.

When satisfied, mark the top and bottom of the stabilizer with a pencil where it meets the fuselage. Remove the stabilizer, and using a very sharp hobby knife cut the covering just inside of your marked lines. Cut through the covering only, but do not cut into the wood.

Remove the section of covering film from the center of the stabilizer top and bottom.

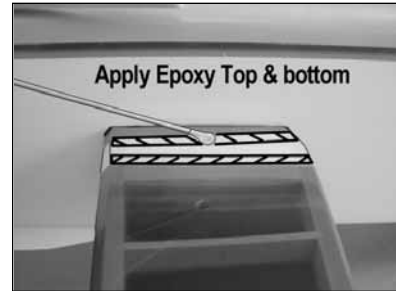


Step 14: Glue Stabilizer to Fuselage

Note: Remember the top of the stabilizer is red and the bottom is blue!

Mix up a batch of 5 Minute Epoxy, and apply a medium thickness film to the exposed wood at the center (top and bottom) of the stabilizer. Slide the stabilizer into position, and then check and re-check the alignment. Wipe away any excess glue that has oozed out of the joint with Alcohol or MEK and paper towels.

Perform another alignment check before the glue has cured. Also check that the stabilizer is not "tilted" to one side or another when looking from the rear of the fuselage. Keep checking the alignment until the epoxy has set completely.



Step 15: Install Elevator Hinges

As you did with the ailerons, remove a small strip of covering from the hinge slots in the **elevator** halves and stabilizer. Place the elevator EZ hinges back into the elevator halves, and slide them into place on the stabilizer. Make sure the elevator halves are aligned properly, and can move at least 45 degrees each way without binding or interference.

When satisfied, apply two drops of thin CA glue to both sides of each hinge.



Step 16: Install Elevator Horns

Place both of the large threaded elevator control horns on the bottom of the elevator halves, very close to the inboard ends, and with the threaded rod portion as close to the elevator hinge line as possible. Hold the horns in place with one drop of thin CA glue if desired.

When satisfied with the proper position of the horns, drill 1/16" holes through the elevator using the three holes in the horn as a guide. Mount the elevator horns and matching backplates using the 2mm machine screws provided. Tighten snug, but do not crush the wood.

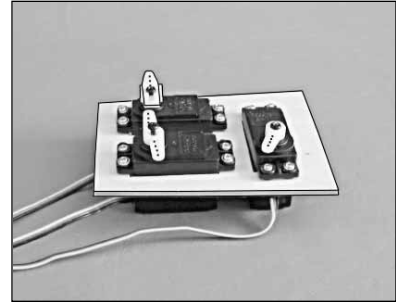
Thread a horn connector halfway onto each threaded horn.



Step 17: Install Servos in Tray

Locate the **plywood servo tray**, your **servos**, and **mounting hardware**. Install the rubber grommets and brass eyelets provided with your servos. If necessary, enlarge the holes in the servo tray to fit your servos. Place the servos in position as shown.

When satisfied, drill the servo mounting holes in the plywood tray using the servos as a guide. Install and tighten the provided wood screws to hold the servos in place on the plywood tray.



Step 18: Install Servo Tray in Fuselage

Apply a **thick bead** of 5 Minute Epoxy to the servo tray mounting rails built into the fuselage sides, and install the servo tray assembly into position.

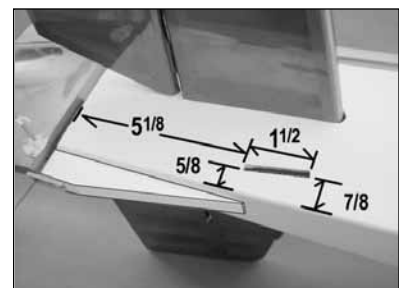
Add more epoxy on the top of the tray where it meets the fuselage sides if necessary to insure that the servo tray is mounted **solidly** in the fuselage.



Step 19: Cut Rudder Cable Exits

Cut a $1\frac{1}{2}$ " x $\frac{1}{8}$ " wide slot on each side of the fuselage for the **rudder cable exits**. The rear of the exit slots is $5\frac{1}{8}$ " forward of the rear edge of the fuselage.

The bottom of the slot is $\frac{5}{8}$ " above the bottom edge of the fuselage at the rear, and $\frac{7}{8}$ " above the bottom edge at the front.



Step 20: Rudder Pull-Pull Cable

Note: On the pull-pull rudder system, the distance between the cable holes used on the servo arm and the servo center, and the distance between the rudder hinge line and the holes in each rudder horn connector must be exactly equal.

Locate the **pull-pull cable**, **aluminum crimp connectors**, and threaded **cable connectors**.

Cut the cable into two equal length pieces. Put one end through an aluminum crimp connector, then through the hole in a **threaded cable connector**, then back into the crimp connector with a little bit sticking out of the aluminum tube and inside the blue plastic end. Squeeze the crimp connector with pliers firmly to crimp the cable in position. Repeat the process to attach the other cable to the other threaded cable adapter. Thread a plastic clevis halfway onto each cable connector, and snap the clevises onto the rudder horn connectors. Slip the cables into the fuselage exits and into the fuselage radio compartment. Note that the cables cross inside the fuselage.

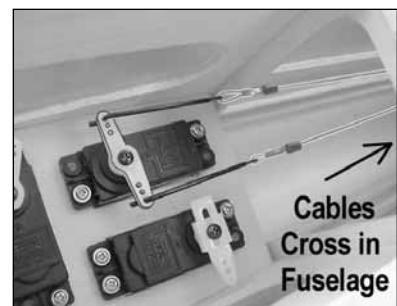
Insert the **Z-Bend cable connectors** into the outer holes in a two-sided servo arm. Hook up your radio equipment, and center the rudder servo. Leave the radio connected and turned on during the pull-pull cable adjustment. Slip an aluminum crimp connector onto the forward end of the rudder cables, then run the cables through the Z-Bend cable connector (remember the cables cross inside the fuselage), then back through the crimp connector. Do not crimp yet. Repeat the process to loosely attach the cable through the connector and Z-bend cable connector on the other side of the servo arm. (Remember the distances must be equal and exactly the same as the distances between the rudder horn and the center of the rudder) Install the servo arm onto the servo, making sure the cables cross only once in the middle of the fuselage.

Hold the rudder in neutral position. Clamp the rudder cable ends together next to each crimp connector at the servo, using a hemostat clamp or strong "alligator clip".

Once again checking to insure the rudder is held in neutral position, loosen the clamp, pull the end of one cable until all the slack is removed, and re-clamp the cable. Repeat this on the other side. Continue to make adjustments back and forth until the cables are both tight, and the rudder is still clamped in neutral position. When satisfied, squeeze the aluminum crimp connectors with pliers to crimp the cables in place. Apply one drop of medium CA glue to the cables in the blue plastic end for added security. Carefully cut off the excess cable.

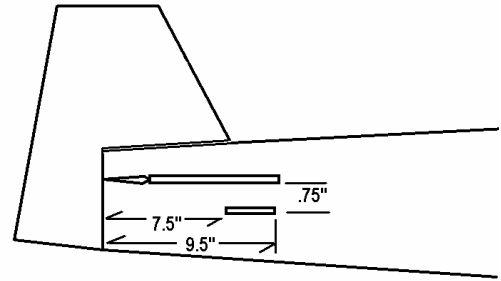
Adjust the horn connectors to achieve the following movement:

- Low Rate: 1" (for Dual-Rate-capable transmitters)
- High Rate: 2" (for non-Dual Rate transmitters)
- 3D Rate: 4" (for 3D using Exponential Rate transmitters)



Step 21: Cut Elevator Pushrod Exits

Using the same technique as you did with the rudder cable exits, cut the two elevator pushrod exits as shown. The rear of the exit is 7 1/2" in front of the rear edge of the fuselage, the front of the exit is 2" further forward, and the exit slot is 3/4" below the stabilizer.



Step 22: Assemble Elevator Pushrod

Locate the **balsa dowel** elevator pushrod, the forward **plain wire**, and two threaded **rear pushrod wires**. Using pliers, make a 90 degree bend in each of the three wires, approximately 1/4" from the un-threaded ends.

Drill one hole into the balsa dowel approximately 1" from the end, and then drill two holes in the other end, approximately 45 degrees apart on the dowel. Mix a small batch of 5 Minute Epoxy, apply liberally to the ends of the wires and the holes in the balsa dowel, and insert the ends of the wires into the epoxy-filled holes.

Apply a thin film of epoxy to the wires and the ends of the pushrods. Slide the provided large **heat shrink tubing** over the ends of the pushrod, and heat the tubing with a heat gun to shrink the tubing onto the pushrod. Wipe away the excess epoxy. Allow the epoxy to cure completely before proceeding with the next step.

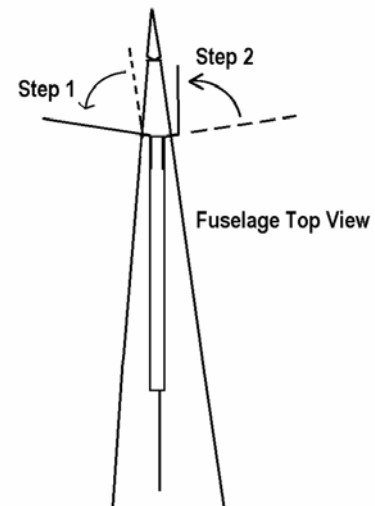


Step 23: Insert Elevator Pushrod

Insert the elevator pushrod into the fuselage through the hole in the firewall, and work it back into the rear fuselage. Work the pushrod toward the tail until you can see the threaded ends through the elevator pushrod exits. Reach into the exits using small forceps, small screwdrivers, etc and pull the threaded ends out through the exits. (Slipping a loop of string into each of the exit slots and hooking the ends around the threaded pushrod ends will make this process easier)

Once the ends have been pushed through the exits, carefully stretch the two wire pushrod ends apart until there is **no** friction or resistance to moving the pushrod back and forth from the servo compartment end. (Step 1 in the drawing at right)

Finally, using small pliers, grasp the wires just outside the fuselage and bend the ends rearward again, so they will reach the threaded elevator control horns. (Step 2) You **must** be able to move the elevator pushrod freely from the front pushrod wire, without interference or difficulty. Make any adjustments necessary before moving to the next step.



Step 24: Hook Up Elevator Pushrod

Thread a plastic clevis halfway onto each threaded end of the elevator pushrod. Clip the clevises onto the elevator horn connectors. Adjust one or both clevises so both elevator halves are even with each other. Verify again that you can hold the forward wire portion of the elevator pushrod, and move the elevators easily without interference.

Hook up your radio equipment, and center the elevator servo and trim lever. Temporarily install a servo arm on the elevator servo, at 90 degrees orientation.

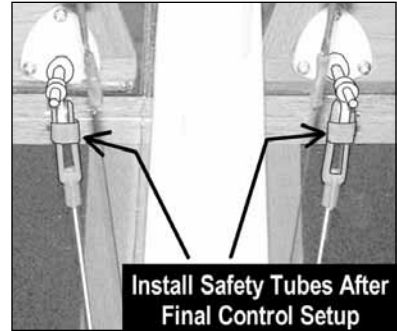
Clamp or hold the elevator halves neutral. Holding the elevator pushrod wire over the servo arm, mark the wire where it crosses the row of holes in the servo arm. Using pliers, make a 90 degree upward bend in the wire at this mark. Cut off the excess wire, leaving approximately 1/4" of wire up from the bend.

Insert the wire into the middle hole in the servo arm, and install one of the plastic pushrod keepers onto the wire to prevent it from coming out of the servo arm. (Or you may use a traditional "Z-bend" in the wire as shown in the photo at right)

Adjust your servo reversing switches if necessary so the elevator moves upward when the transmitter stick is moved back towards you.

Adjust the position of the horn connectors closer or further from the elevators, to achieve the following movement (up and down equally)

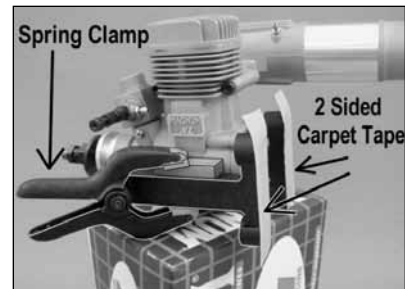
- Low Rate: .75" (for Dual-Rate transmitters on "low")
- High Rate: 1.25" (for Dual rate on "high" or non Dual-Rate Tx)
- 3D: 2.25" (for 3D setup using Exponential Rate Tx)



Step 25: Prepare Engine Mounts

Using spring clamps or C-clamps, temporarily attach your **engine** to the provided **engine mount bearers**. Remove the engine's muffler and needle valve at this time.

Make sure the engine mount bearers are properly positioned and even with each other. Apply a strip of double-stick carpet tape or other strong double-sided adhesive tape, sticking it securely to the back of the mounts, but do not remove the outside backing paper yet.



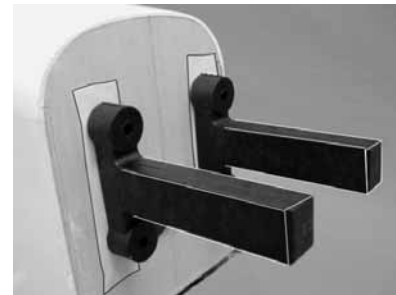
Step 26: Install Engine Mounts

Note: The firewall is angled slightly to provide the correct thrust line, and the fiberglass cowl is shaped to match the fuselage and the engine at this “right-thrust” angle.

Holding the fuselage vertically, set the engine/engine mounts assembly on the firewall, and slide the **fiberglass engine cowl** into place. Align the cowl so that it is evenly positioned on the fuselage. Move the engine around until the propeller mount flange is centered in the hole at the front of the cowl. Check and re-check that the cowl is aligned on the fuselage and the propeller flange is centered in the cowl. When satisfied, remove the cowl carefully, and mark the location of the engine mount bearers onto the firewall. Remove the tape backing and stick the engine/engine mounts assembly onto the firewall on these marks. Place the cowl back in position, and verify once again that the engine propeller flange is still centered in the cowl with the cowl in proper position.

When satisfied, remove the clamps holding your engine and remove the engine, leaving the engine mounts stuck to the firewall in the correct position. Drill 3/16” holes through the firewall using the holes in the engine bearers as a guide. (If your drill bits are not long enough to drill with the engine mounts in place, mark the location of the holes with a thin pen, a dowel with a drop of ink on the end, or a “transfer punch”).

After the holes are drilled, remove the double-sided tape, and place the engine mount bearers back in position. Insert one of the engine mount **blind nuts** into each hole from behind, and insert the engine mount **hex bolts** and **washers** from the front. Thread the hex bolts into the blind nuts, and tighten the bolts with a hex wrench until the “teeth” of the blind nuts are drawn fully up into the plywood firewall.



Step 27: Drill Throttle Pushrod Exit

Mark the location on the firewall where the throttle pushrod outer tube should exit, so that the pushrod will reach the carburetor's throttle control arm. Drill a 3/16” hole on this mark as shown.



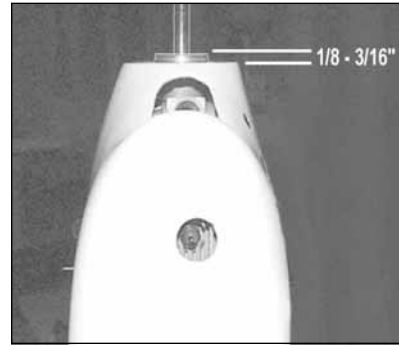
Step 28: Install Engine on Mounts

Note: We recommend that you complete the new engine break-in procedure before installing the engine on the model or before the first flight.

Test fit your engine on the mounts again, and put the cowl into position. If you are using a lighter or smaller engine, move it closer to the front of the engine bearers. If you are using a heavier or larger engine move it closer to the rear. Move the cowl back until the engine's propeller mount flange is 1/8 – 3/16" forward of the front cowl ring for spinner clearance. Regardless of the engine size, the rear edge of the cowl must overlap the firewall by 1/4" or more for proper mounting.

Note: For the recommended Magnum 91 XL, the propeller mount flange should be 4 9/16 " forward of the firewall.

When satisfied, carefully remove the cowl and clamp the engine onto the bearers in the correct position. Mark the engine bearers with a pencil or pen through the holes in the engine's mounting ears. Remove the engine and drill 1/8" holes through the bearers, making sure to drill straight through at 90 degrees. Mount the engine using the **machine bolts, washers, and self-locking nuts** provided.

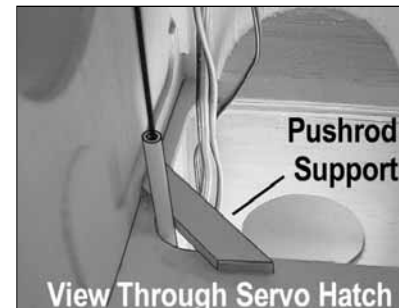
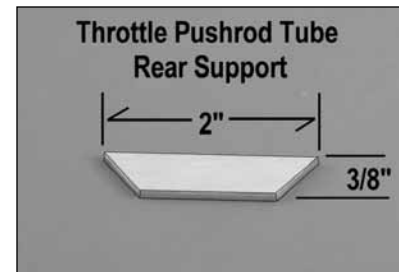


Step 29: Throttle Pushrod Outer Tube

Drill a 3/16" hole in the forward fuselage bulkhead as shown. Insert the provided throttle pushrod outer tube through the firewall hole, through the forward bulkhead hole, **underneath** the middle bulkhead (towards the inside of the fuselage), and slide it back into the servo compartment about 2" from the throttle servo.

Cut the ends of the provided 1/8" x 2" x 3/8" **plywood support strip** at 45 degrees if not done already. Using 5 Minute Epoxy, glue the support strip to the rear bulkhead (at the front of the servo compartment), trapping the tube securely between the bulkhead and the support. Clamp or hold in place until the glue has set.

Apply small amounts of 5 Minute Epoxy to hold the tube against the middle bulkhead, and around the tube at the firewall to hold it securely. When the glue has set, cut off the tube approximately 1/4" in front of the firewall.



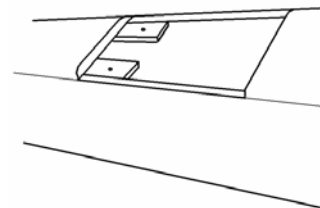
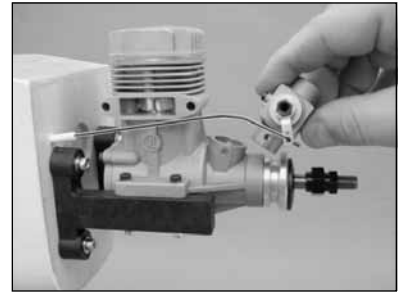
Step 30: Hook Up Throttle Pushrod

Slide the inner **throttle pushrod wire** into place, with the Z-Bend sticking out at the firewall exit. Make any bends necessary for the Z-Bend to reach the carburetor throttle control arm with no resistance or interference. (Due to the angle that the tube goes through the fuselage, for standard type engines it is likely that a 15-20 degree bend in the wire, about one inch behind the Z-Bend will provide friction free operation)

When satisfied, remove the carburetor from your engine, insert the Z-Bend in the carburetor arm, and re-install the carburetor. If necessary, drill out the hole in the carburetor arm to accept the wire, but only enough to do so without excess play.

Hook up your radio equipment and set the throttle stick at full throttle. Install the provided **"EZ pushrod connector"** on your throttle servo arm, and add one or two of the small washers to take up any extra space between the connector and the servo arm. Snap the "E-Clip" in place fully with small pliers to hold the connector in place.

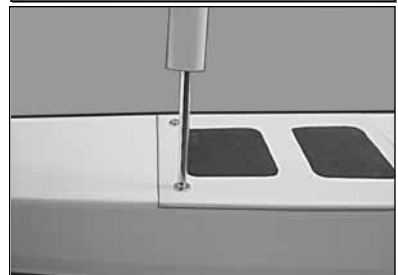
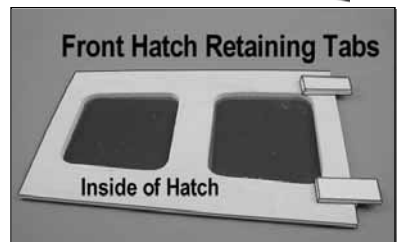
Slide the throttle pushrod wire into the connector and install your servo arm on the servo so it is approximately at a 45 degree forward angle. Install and lightly tighten the pushrod connector **set screw**. Adjust your transmitter's **servo reversing** switch if needed for proper movement. Adjust your transmitter's **ATV function** as needed, so that the throttle operates freely with no servo buzzing, the carburetor opens all the way at full throttle setting, and closes almost fully at low throttle setting. When satisfied, tighten the set screw fully. Cut off the wire leaving $\frac{1}{2}$ " excess for future adjustment.



Step 31: Install Servo Hatch

Locate the four small plywood **hatch hold-down** pieces. Using 5 Minute Epoxy or thick CA, glue two of the pieces to the inside of the fuselage at the rear of the servo compartment hatch opening, flush with the bottom edges of the fuselage at the hatch opening. Mark the inside of the **servo access hatch** $\frac{5}{16}$ " in from each side at the wider front end. Using 5 Minute Epoxy or thick CA, glue the remaining two plywood pieces between these marks, half glued on the hatch and half sticking out forward of the hatch as shown.

Test fit the hatch in place, using the plywood pieces on the forward end as a "tongue" keeping the front of the hatch in place. Trim or sand the plywood pieces if necessary, until a snug fit is achieved. When satisfied, mark the servo access hatch $\frac{1}{2}$ " in-board from each side, $\frac{1}{4}$ " forward of the rear edge of the hatch. Place the hatch in position, and drill $\frac{1}{16}$ " holes through the hatch and the plywood pieces you glued into in the fuselage. Install two of the small wood screws and washers to hold the hatch in position.

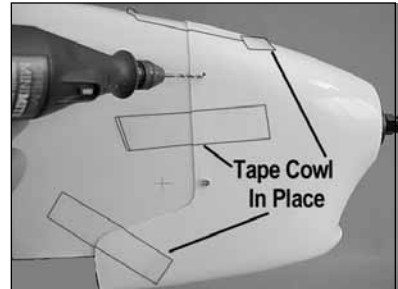
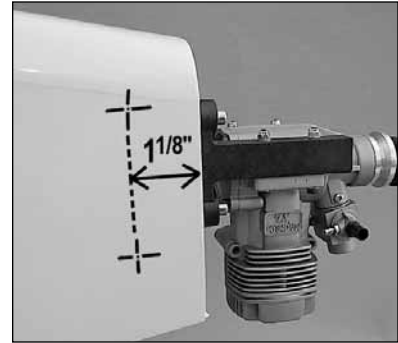


Step 32: Install Engine Cowl

Mark on each side of the fuselage, exactly 1 1/8" behind the face of the firewall as shown. The upper marks should be directly behind the top edge of the engine bearers, and the lower marks should be behind the lower edges of the engine bearers. Make a fifth mark on the "muffler" side of the fuselage, also 1 1/8" behind the firewall and 3/4" above the bottom of the firewall.

Slide the **cowl** into place on the fuselage. Move it around until the engine's propeller flange is 1/8" in front of the forward face of the cowl ring. Check and re-check the proper position of the cowl, and that the engine propeller mount flange is at least 1/8" forward of the cowl for propeller clearance. When satisfied, tape the cowl in place securely, and re-check alignment again.

Measure exactly 1" forward of your marks on the fuselage to locate the mounting holes. Drill 3/64" holes through the cowl and into the edge of the firewall on these marks. Remove the tape, and install the provided "**washer head screws**" to hold the cowl in position.



Step 33: Trim and Final Fit Engine Cowl

Note: Always wear safety glasses when cutting fiberglass or using any powered cutting tool. Always wash hands thoroughly after working with fiberglass. Fiberglass dust or cuttings cause severe itching. Place tape securely over all engine openings to prevent fiberglass dust from getting into the exhaust, needle valve or carburetor.

Remove the cowl from the fuselage. Using a **Dremel rotary hobby tool** or a hand-held micro saw, carefully cut out the **cooling air inlet** section of the cowl, underneath the front ring section. Measure the location of your engine's exhaust stack where it will go through the cowl, and mark the cowl with a felt tip pen. Measure the location of where your engine's needle valve will go through the cowl (or where you will need a hole to access the needle valve with a wrench), and mark the cowl at these locations. Carefully cut, trim, and sand these openings for proper clearance. We strongly recommend you start with openings that are slightly under-size, and trim them a little at a time until you have at least 1/8" clearance from all engine parts. We recommend you remove the cowl each time you must sand or trim, and wash your hands and the cowl with hot water before re-installing the cowl for another test-fit



When satisfied, cut a slit between the rear of the exhaust stack cutout and the rear edge of the cowl, to allow installation and removal. Cut this slit so that the fifth retaining screw on the muffler side will secure the loose section of the cowl below this slit. Remove the tape protecting your engine openings, and install your engine's muffler and exhaust gasket. Slide the cowl into position, working the exhaust stack through the slit carefully. Re-install the five cowl retaining screws, and the needle valve.

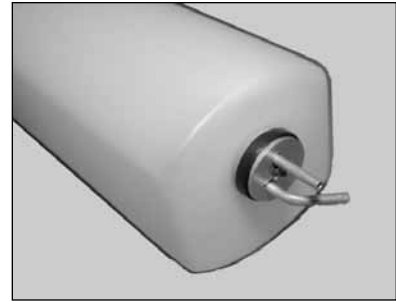
Step 34: Assemble Fuel Tank

Assemble the **fuel tank** front fitting together, with two metal tubes through the rubber stopper and the front/rear metal plates.

Install the provided screw to tighten the fitting lightly, and test fit into the tank. Bend the upper tube so it will be positioned at the very top forward corner of the tank with the fitting installed. Insert the "**clunk weight**" onto the **flexible tube**, and plug the tube onto the other (un-bent) metal tube.

Test fit the fitting into the tank again. Trim the flexible tube if necessary so that the clunk weight can move freely inside the tank, but also reaches the lower rear area of the tank to make use of all available fuel.

When satisfied, install the fitting in the tank and tighten the screw fully to squeeze the fitting in place.



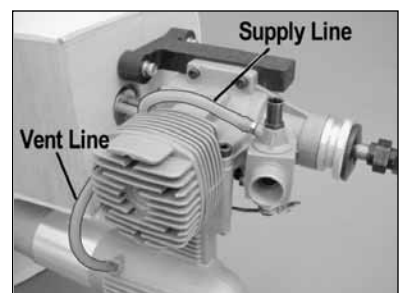
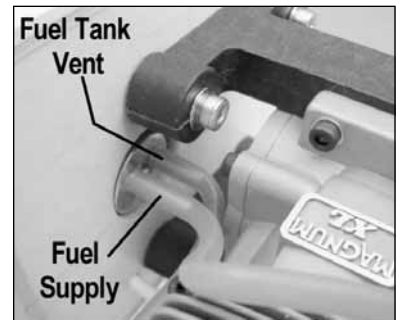
Step 35: Install Fuel Tank

Cut a long piece of silicone **fuel tubing**, and push the ends onto the fuel supply and vent tubes on the fuel tank. Mark the **supply side** tube to identify it later.

Slide the fuel tank into position in the fuselage with the neck seated in the round hole in the firewall and the tubes coming out on the engine side of the firewall. Remember that the tank must be installed with the fittings facing the proper direction when the fuselage is turned right side up.

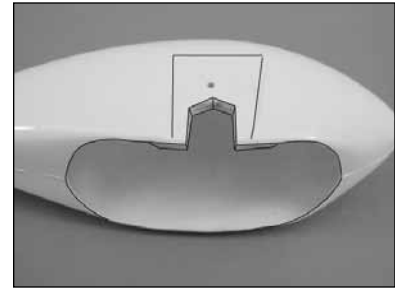
Use plenty of foam rubber inside the fuselage to hold the tank in position. Cut the fuel tube so the **vent side** tube (the open tube at the top front of the tank) reaches the muffler's **pressure fitting**, and the **supply side** tube (clunk weight) reaches the **carburetor** (or remote needle valve) fuel supply fitting.

Push the silicone tubes firmly into place on their respective fittings

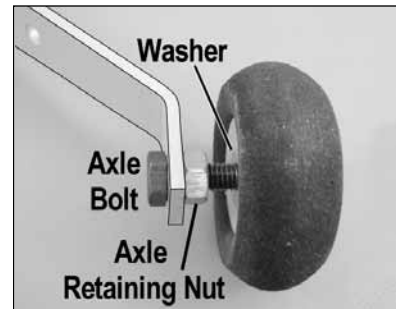


Step 36: Assemble Landing Gear

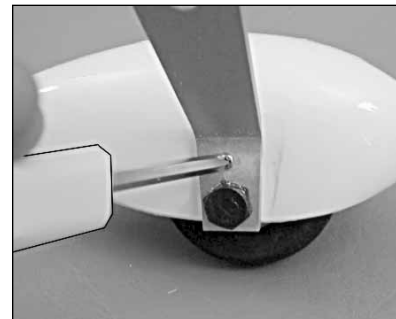
Locate the **aluminum landing gear, wheel pants, axle bolts, axle retainer nuts, the wheels, wheel pants, wheel collars, and set screws**. Cut a slot in each fiberglass wheel pant from the large axle bolt hole to the bottom edge of the wheel opening. The slot should be 10mm (13/32") wide, the same as the width of the axle retainer nuts. Using a file or small abrasive Dremel tool, trim the top of the cutout at a 120 degree angle so the nut will seat perfectly in the wheel pant slot.



Install the machined axle bolts in the landing gear, and install the axle retainer nuts tightly. Make sure the apex of the nut is vertical on the axle bolt and wheel pant, because the position of the nut will determine the angle that the wheel pant is mounted. Slide a large axle washer onto each axle, followed by a wheel, and then the wheel collar retainer. Adjust the position of the wheel collars so that the wheels cannot move in or out on the axle, but so the wheels can still turn freely with no binding. When satisfied, tighten the wheel collar set screws fully.



Slide the correct wheel pant (the right wheel pant has a molded flat spot on its left side to mate with the aluminum landing gear) onto each axle, seating the large nut into the cutouts in the wheel pants. Verify that the wheel pants are aligned evenly, and at the correct angle parallel to the top mounting face of the landing gear).



When satisfied, using the smaller retaining screw hole in the landing gear as a guide, drill a 1/16" hole through the center of the hole in the aluminum and into the wheel pant. Be careful not to damage the wheel. Install the small wood screws to hold the wheel pants in position.

Step 37: Install Landing Gear

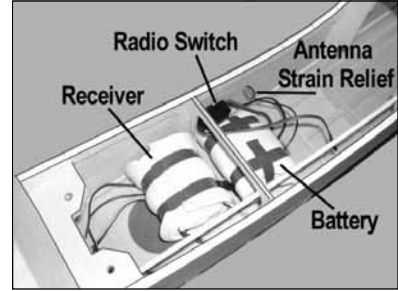
Note: Make sure you do not damage the fuel tank when drilling into the fuselage landing gear mounting plate! Use a piece of tape on the drill bit as a depth gauge, or a "drill stop" which is the same as a small wheel collar.

Test fit the landing gear onto the fuselage, checking to make sure the landing gear is centered left/right. When satisfied, push a felt tip pen through the holes through the landing gear and mark the locations onto the plywood landing gear mounting plate. Drill 3/32" holes on these marks. Apply one drop of thin CA glue to strengthen the holes. Install the landing gear with 4 of the provided wood screws.



Step 38: Install Radio Components

Hook up your radio equipment, connect the servos, on-off switch, and unwrap the receiver antenna. Wrap your receiver and battery in two layers of protective foam such as **Du-Bro #315**, and tape together securely. Place the receiver and battery in the radio compartment as shown, and tape in place temporarily. The battery and receiver can be moved to adjust the balance point (CG) of the model later. (Once the model's final balance point has been established, and the final locations of the receiver and battery have been decided, the components can be wedged in place with foam padding and/or balsa support sticks glued in place with thin CA)

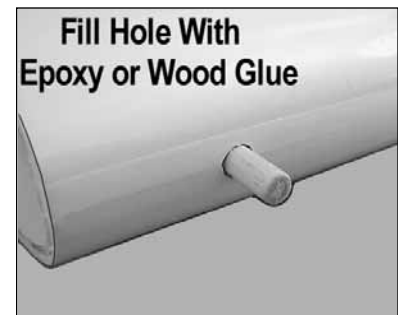


Cut the mounting hole for your radio switch at a location that keeps your hands and arms away from the engine and propeller. We recommend you install the on-off switch approximately one inch above the center of the wing, on the side of the fuselage opposite the muffler. Install the switch with the screws and faceplate provided with your equipment.

Drill a small hole in the fuselage near the switch for the receiver antenna to exit, and use a **strain-relief grommet** or short piece of fuel tubing to prevent damage to the receiver. Tape the antenna to the rear fuselage away from the pushrods and control horns.

Step 39: Install Wing Dowels

Carefully cut away the covering on the leading edge of the wing to expose the holes for the two **wing dowels**. Apply a small amount of 5 Minute Epoxy in the holes and on the lower half of the dowels. Push the dowels firmly into the holes, leaving at least 3/8 – 1/2" in front of the wing. Wipe away any excess epoxy that oozes out of the holes.



Step 40: Install Rear Wing Blind Nuts

Note: Do not use the wing itself as a spacer to pull the blind nuts into position! You might damage the wing. Use a stack of washers, larger nuts, or a thick hardwood block with a hole through it.

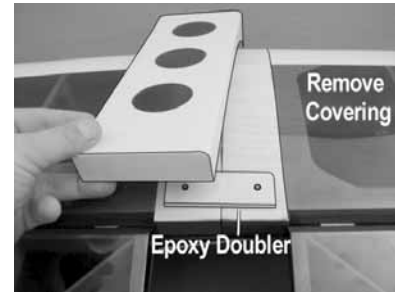
Put your stack of washers, larger nuts, or drilled hardwood block onto the provided **wing bolts** to act as a spacer. Put the bolts and spacers through the holes in the plywood wing mounting plate built into the fuselage, and thread the two blind nuts onto the bolts underneath the mounting plate. Tighten the bolts with a hex wrench until the "teeth" of the blind nuts are drawn fully into the plywood. Remove the bolts and spacers.



Step 41: Wing Bolt Reinforcement and Lower Wing Fairing

Assemble the wing onto the fuselage with the wing bolts finger-tight. Place the large **lower wing/fuselage fairing** into position. Mark the wing at the edges of the fairing with a felt tip pen. Using a very sharp, new hobby knife blade, cut through the covering film just inside these lines, and remove the covering on the lower center section of the wing. Remove the wing.

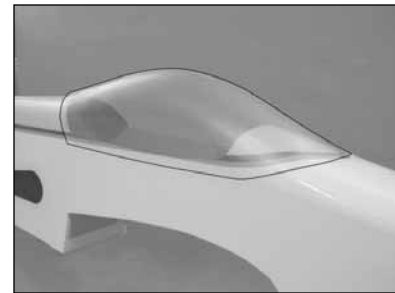
Place the plywood **wing bolt reinforcement doubler** into position on the lower surface of the wing, centered and covering the two wing bolt holes in the wing panels. Make sure the position of the doubler will not interfere with the fairing. Mark the location of the plate, and using 5 Minute Epoxy or thick CA, glue the plate into position. Do not allow any glue in the holes. When the glue has set, drill 5/32" through the plywood plate using the pre-drilled holes in the wing as a guide. Using a thin bead of 5 Minute Epoxy or thick CA, glue the fairing into position.



Step 42: Install Canopy

Note: If you wish to install a pilot figure, do so before beginning this step.

Using sharp scissors, cut the **canopy** section from the clear plastic molded piece. Sand the edges smooth. Place the canopy on the fuselage, make sure it is aligned evenly, and carefully mark around the edge of the plastic onto the fuselage. Clean the plastic covering film with Rubbing Alcohol, leaving just enough of the marked line to position the canopy. Apply a very thin bead of **clear silicone sealant/glue**, or "shoe goo" adhesive just inside this marked line. Place the canopy into position and hold down with tape so it is fully seated all around. When the glue has set completely, remove the tape and apply model aircraft "striping tape" over the joint for added security.



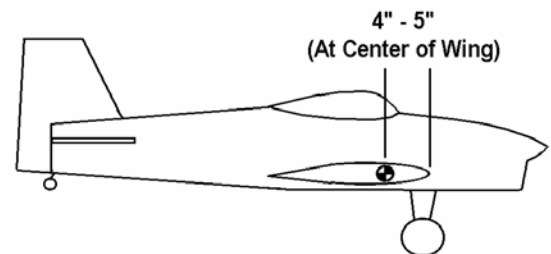
Step 43: Propeller and Spinner

The **Paramount 61 ARF** is designed for a 2 5/16" (58mm) spinner. Install your propeller and spinner in accordance with the safety and installation instructions provided with your equipment. We strongly recommend you balance and safety-check your propeller and spinner before engine test-runs or flight.



Step 44: Balance

Mark on the top of each wing right next to the fuselage, 4 and 5 inches behind the leading edge. Turn the plane upside down and lift it with your fingers between these marks. With all components installed ready to fly but with the fuel tank empty, the model **must** balance between these marks. We strongly recommend the forward position until you are thoroughly familiar with the model's flight characteristics. Move the battery location or add weights if necessary to achieve proper balance.



Section 7: Paramount 61 3D Aerobic Trim / Correction Chart

Trim Feature	Test Maneuver	Observation	Correction
Control Centering	Fly general circles & random maneuvers	Try for hands-off straight and level flight	Re-adjust linkages so the transmitter trim levers are neutral
Control throws	Fly random maneuvers	A: Controls are too sensitive or airplane flies "jerky" B: Controls are not sensitive enough, airplane feels "mushy"	If A: Adjust control linkages to reduce movement If B: Adjust linkages to increase movement
Engine thrust angle	From straight and level flight, quickly chop the throttle for a short distance	A: Plane briefly continues in level attitude B: Plane pitches nose-up C: Plane pitches nose-down	If A: Engine thrust is correct If B: Decrease "down-thrust" angle If C: Increase "down-thrust" angle
Center of Gravity	From level flight, roll plane to 45 degree bank angle and release controls	A: Plane briefly continues in this bank angle B: Nose pitches up C: nose pitches down	If A: Center of gravity is correct If B: Add nose weight If C: Remove nose weight (or add weight at tail)
Yaw	Into the wind, perform inside loops using only elevator. Repeat test using outside loops from inverted entry	A: Wings level throughout B: Plane yaws right in both inside & outside loops C: Plane yaws left in both inside & outside loops D: Yaws right in inside loop, left in outside loop E: Yaws left in inside loop, right in outside loop	If A: Trim settings are correct If B: Add left rudder trim If C: Add right rudder trim If D: Add left aileron trim If E: Add right aileron trim
Lateral Balance	Into the wind, perform inside loops using only elevator	A: Wings level, plane falls to either side at random B: Falls off left , worsening as loops tighten C: Falls off right , worsening as loops tighten	If A: Lateral balance is correct If B: Add weight to right wingtip If C: Add weight to left wingtip
Aileron control system	With the wings level, pull to a vertical climb and neutralize controls	A: Climb continues along same path B: Nose pulls towards an inside loop C: Nose pushes towards an outside loop	If A: Trim settings are correct If B: Raise both ailerons slightly If C: Lower both ailerons slightly

SECTION 8: REPLACEMENT PARTS LIST

Manual.....170310	Pushrod / Horn / Clevis Set170317
Wing Set170311	Hardware Set170318
Fuselage Set170312	Tank Set170319
Stabilizer Set170313	Landing Gear Set (Aluminum)170320
Fiberglass Cowling170314	Wheel Pants Set170321
Canopy (Clear)170315	Tailwheel Assembly170322
Belly Pan170316	Decal Set170323

Global Services stocks a complete line of replacement parts for your Paramount 61 3D. If these parts are not available through your local hobby shop, you may order them direct from:

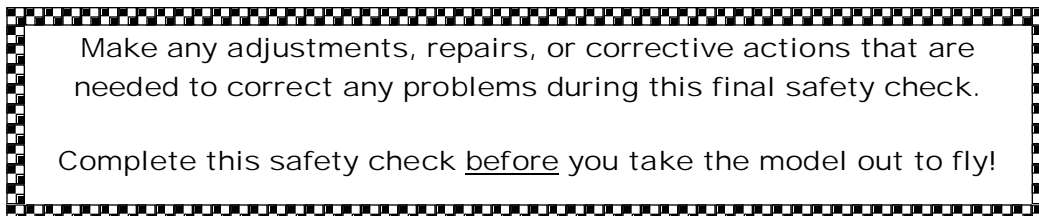
Global Services/Sportsman Aviation
18480 Bandilier Circle
Fountain Valley CA 92708
Phone: (714) 963-0329 Fax: (714) 964-6236 E-mail: service@globalhobby.net

Need help or have any questions? Call us at 1-714-963-0329 or send us an email to service@globalhobby.net

SECTION 9 PRE-FLIGHT SAFETY CHECKS

Before the first flight, you must make a final, thorough check of **all** the parts, systems, and construction of your Paramount 61 3D

- ✓ Check all fasteners, screws, hardware, etc. for security and proper assembly.
- ✓ Check all radio system electrical connectors, routing of servo and antenna wires, so they can not interfere with control functions, etc.
- ✓ Verify installation of protective foam padding around radio receiver and battery, and that the receiver antenna is extended outside the aircraft and not coiled or wrapped.
- ✓ Verify correct control movements and directions, right control stick movement gives right aileron up, control stick moved back towards you gives up elevator.
- ✓ Verify servos, pushrods, and controls operate freely without “buzzing”, binding or interference.
- ✓ Verify balance point with all components installed, working, and ready to fly (between 4 and 5 inches behind the leading edge of the wing at the fuselage sides) with the fuel tank empty.
- ✓ Verify that the manufacturer’s recommendations have been followed and completed for engine break-in.
- ✓ Verify that moving the transmitter stick or lever gives correct direction and movement of the carburetor throttle.
- ✓ Verify that the structure of the model and the glue joints (both factory construction and your own assembly) are secure and have not been damaged by shipment or during the assembly process.



For maximum enjoyment, we strongly recommend having an experienced R/C modeler inspect your Paramount 61 3D for safety and proper function before you go out to the flying field the first time. Before flight, make absolutely certain to have your radio batteries fully charged, and perform a “range check” to verify proper radio range.

Before the first flight (or any flying session) make sure that the transmitter and receiver batteries are fully charged.

PRODUCT EVALUATION FORM

Telling us what you like and don't like determines what model kits we make and how we make them. We would appreciate if you would take a few minutes of your time to answer the following questions about this kit and your modeling interests. Simply fold this form on the dotted lines, seal with tape and mail it to us. Do not use staples and make sure our address faces out.

Global Hobby Distributors will not disclose the information it collects to outside parties and does not sell, trade, or rent your personal information to others. Your privacy is important to us.

<p>1) Kit: Paramount 61 3D # 127560</p> <p>2) Where did you learn about this kit? <input type="checkbox"/></p> <p><input type="checkbox"/> Magazine Ads <input type="checkbox"/> Friend <input type="checkbox"/> Hobby Shop <input type="checkbox"/> Other <input type="checkbox"/> Internet</p> <p>3) What influenced you the most to buy this kit? <input type="checkbox"/> Magazine Ads <input type="checkbox"/> Price <input type="checkbox"/> Type of Model <input type="checkbox"/> Box Art <input type="checkbox"/> Recommendation <input type="checkbox"/> Other <input type="checkbox"/> Internet</p> <p>4) Did you have any trouble understanding the written instructions? If yes, please explain. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>5) Did you have any trouble understanding any of the photographs? If yes, please explain. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>6) Were any of the kit parts: <input type="checkbox"/> Damaged <input type="checkbox"/> Wrong Size <input type="checkbox"/> Missing <input type="checkbox"/> Wrong Shape</p> <p>If you checked any of the boxes above, did you contact our Customer Service Department to resolve the problem? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>7) Was any of the assembly difficult for you? If yes, please explain. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>8) What did you like most about this kit? <input type="checkbox"/> Assembly Manual <input type="checkbox"/> Parts Fit <input type="checkbox"/> Hardware Supplied <input type="checkbox"/> Price <input type="checkbox"/> Other</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>9) What did you like least about this kit? <input type="checkbox"/> Assembly Manual <input type="checkbox"/> Parts Fit <input type="checkbox"/> Hardware Supplied <input type="checkbox"/> Price <input type="checkbox"/> Other</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>10) Are you satisfied with the finished model? If no, please explain. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>11) How does this kit compare to similar kits by other manufacturers? <input type="checkbox"/> Better <input type="checkbox"/> As Good</p>
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What is Your **Age Group**:
 11 - 20 21 - 30 31 - 40 41 - 50 51 - 60 61 - 70 71 +

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How Many **Models** Have You Purchased In the Last Year?
 0 - 1 2 - 4 5 - 7 8 - 10 10 or More

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