



WE GET PEOPLE FLYING

AT-6 Texan .60 ARF

ASSEMBLY MANUAL



Specifications

Wingspan:	67.5 in (1714mm)
Length:	48 in (1219mm)
Wing Area:	706 sq in (45.54 sq dm)
Weight:	7–8.5 lb (3.17–3.85 kg)
Engine:60–.78 2-Stroke .65–1.00 4-stroke
Radio:	5-channels w/5 servos

Congratulations on your purchase of the Hangar 9® At-6 Texan ARF. Although this is an ARF (Almost Ready-to-Fly) kit, it does have some construction features that can be challenging to the less experienced modeler. If you encounter difficulty in any construction sequence, please feel free to contact one of our technicians—we stand ready to provide any assistance we can concerning the construction of your Hangar 9 AT-6 Texan .60-Size ARF.

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Warranty Information

Horizon Hobby, Inc. guarantees this kit to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any parts damage by use or modification. In no case shall Horizon Hobby's liability exceed the original cost of the purchased kit. Further, Horizon Hobby reserves the right to change or modify this warranty without notice.

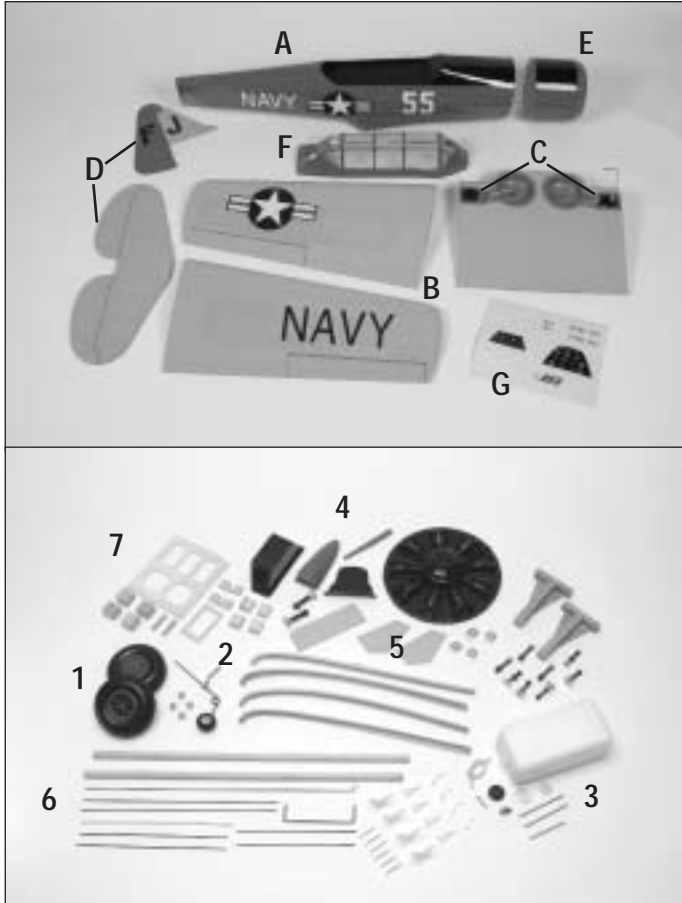
In that Horizon Hobby has no control over the final assembly or material used for the final assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability.

Once assembly of the model has been started, you must contact Horizon Hobby, Inc. directly regarding any warranty question that you have. Please do not contact your local hobby shop regarding warranty issues, even if that is where you purchased it. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance.

If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

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Contents of Kit



Large Parts

- A. Fuselage (HAN1927)
- B. Wing Set w/Joiner (HAN1926)
(does not include retracts)
- C. Mechanical Retract Set (HAN1930)
- D. Tail Set (HAN1928)
- E. Fiberglass Cowl (HAN1929)
- F. Canopy (HAN1936)
- G. Decal Sheet (HAN1932)

Small Parts

- 1. Main wheels (HAN1934)
- 2. Tail wheel assembly (HAN1931)
- 3. Fuel tank
- 4. Scale details (HAN1935)
- 5. Landing gear fairings
- 6. Pushrods (HAN1933)
- 7. Wood parts

Additional Required Equipment

Radio Equipment

- 5-channel radio system (minimum)
- 5 standard servos (JRPS537 recommended or equivalent)
- 1 Low-Profile Retract Servo (JRPS703)

Recommended JR Systems

- JR XF652
- JR XP783
- JR XP8103
- PCM 10X



Recommended Engines

- .60-.78 2-cycle engines
- .72-1.00 4-cycle engines

2-Cycle Engines

- MDS™ .68 FS Pro
- MDS .78 FS Pro
- Evolution Engines™ .61 NT



4-Cycle Engine

- Saito™ .72-1.00



Additional Required Tools and Adhesives

Tools

- Drill
- Drill Bits: 1/16", 1/8", 3/32", 5/32"
- Phillips screwdriver (small, medium)
- Pliers
- Moto-tool w/cut-off wheel
- Hobby knife with #11 blade
- 90-degree triangle
- Straight edge
- Canopy scissors
- Side cutters
- Adjustable wrench
- Hex wrench

Other Required Items

- Mixing sticks for epoxy
- Epoxy brushes
- Rubbing alcohol
- Sanding bar
- Sandpaper (medium)
- Paper towels
- Wax paper
- Felt-tipped pen or pencil
- Measuring device (e.g., ruler, tape measure)
- T-pins
- Radio packing foam

Adhesives

- Thin CA (cyanoacrylate) glue
- Thick CA (cyanoacrylate) glue
- CA remover/debonder
- 6-minute epoxy
- 30-minute epoxy
- Pacer Z-42 Threadlock
- Canopy glue (RC-56)
- Masking tape (3M blue recommended)

Other Items Needed (not included in the kit)

- Propeller (consult your engines instruction manual)
- 18" Servo Extension (JRPA099) (4)
- Large Servo Arm (JRPA212) (1 pk)

Warning

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, preferably at AMA (Academy of Model Aeronautics) approved flying sites, following all instructions included with your radio and engine.

Section 1: Hinging the Ailerons

Parts Needed

- Right and left wing panels w/ailerons
- CA hinges

Tools and Adhesives Needed

- Instant thin CA glue
- CA remover/debonder
- Paper towels
- T-pins (one for each hinge)

Caution: The control surfaces of the AT-6 Texan, including the ailerons, elevators and rudder, come with the hinges installed, but the hinges are not glued in place. The hinge is constructed of a special material that allows the thin CA to “wick” (penetrate) and distribute throughout the hinge, securely bonding them to the wood structure. It is imperative that you properly secure the hinges in CA glue.

Step 1

Carefully remove the aileron from one of the wing panels, noting the position of the hinges. The Texan comes with high-quality CA-type hinges.



Step 2

Remove each hinge from the wing panel and place a T-pin in the center of each hinge as shown. Slide each hinge into the wing panel until the T-pin is snug against the trailing edge of the wing panel.



Step 3

Slide the aileron onto the wing until there is only a slight gap between the wing panel and aileron. The hinge is now centered in the wing panel and the aileron. Remove the T-pins and snug the aileron up against the wing panel.



Section 1: Hinging the Ailerons

Step 4

Deflect the aileron and completely saturate the hinge with thin CA glue. Be sure not to deflect the aileron too far; the top of the aileron should just touch the top of the wing trailing edge. When the hinge is glued in place, there should be no more than a 1/32" gap maintained throughout the length of the aileron.



Step 5

Turn the wing panel over, deflect the aileron in the opposite direction and apply thin CA to the other side of the hinges as in the previous step. Make sure the thin CA penetrates completely into both the aileron and wing panel.



Step 6

Using CA remover/debonder and a paper towel, remove any excess CA glue that has accumulated on the wing or aileron surface. Allow time for both ailerons to completely dry.



Step 7

Firmly grasp the wing and aileron and, applying medium pressure, check that they are securely attached and cannot be pulled apart. Use caution when gripping the wing and aileron as not to crush the structure.



Step 8

Work the aileron up and down several times to "work in" the hinges and check for proper movement.

Step 9

Repeat Steps 1 through 8 for the opposite wing and aileron.

Section 2: Joining the Wing

Parts Needed

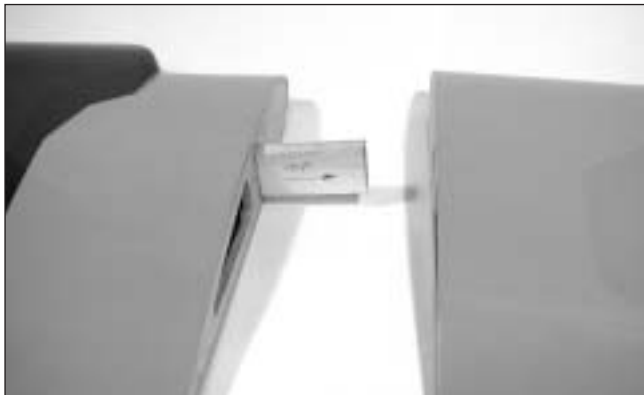
- Center wing section w/retracts installed
- Right wing panel assembly
- Left wing panel assembly
- Wing joiners

Tools and Adhesives Needed

- Ruler
- Masking tape
- 30-minute epoxy
- Rubbing alcohol
- Paper towels

Step 1

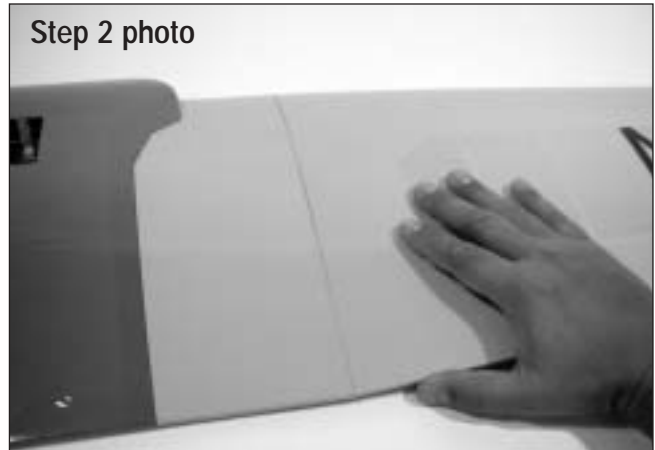
Locate the wing joiners. Note that the "V" in the joiner is not centered. The longer end inserts into the center wing panel. Test fit the joiners into the center section and make sure they insert up to the "V." Mark the joiners for ease of reference while gluing the wing panels together.



Step 2

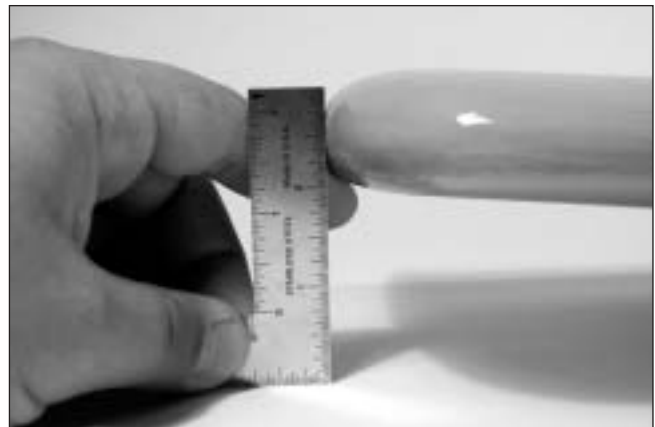
Trial fit the tip panels onto the center section. The panels should meet with no gaps present on the top or bottom.

Step 2 photo



Step 3

Check for correct dihedral angle. Place the wing on a large flat surface with the center panel resting flat on the surface. Each wing tip panel should be 2" from the surface measured to the bottom of the tip panel. If necessary, sand the wing joiner until the proper dihedral is achieved. There should be no gap at the wing joint. Once you are satisfied with the fit, separate the wing panels and remove the wing joiner.



Note: Read through the remaining steps of this section before proceeding to epoxy the wing panels together.

Hint: It is extremely important to use plenty of epoxy when joining the wing panels together. It will also be helpful to use wax paper under the wing joints to avoid gluing the wing to your worktop.

Section 2: Joining the Wing

□ □ Step 4

Mix approximately 1 ounce of 30-minute epoxy. Using an epoxy brush, apply a generous amount of epoxy to the wing joiner cavity of the center wing panel.



□ □ Step 5

Completely coat the long half of the wing joiner with epoxy up to the V-bend. Insert the epoxy coated side of the joiner into the wing joiner cavity up to the mark on the joiner.



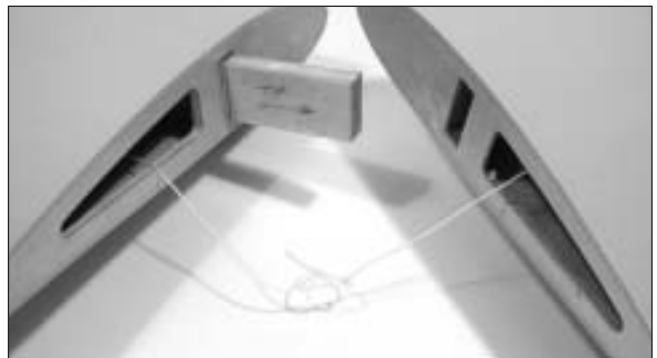
□ □ Step 6

Apply a generous amount of epoxy to the wing tip panel joiner cavity.



□ □ Step 7

Apply epoxy to the exposed portion of the wing joiner and to both wing roots. Locate the servo lead string in the wings center and tip section and tie them together. Try not to get any epoxy on the string.



□ □ Step 8

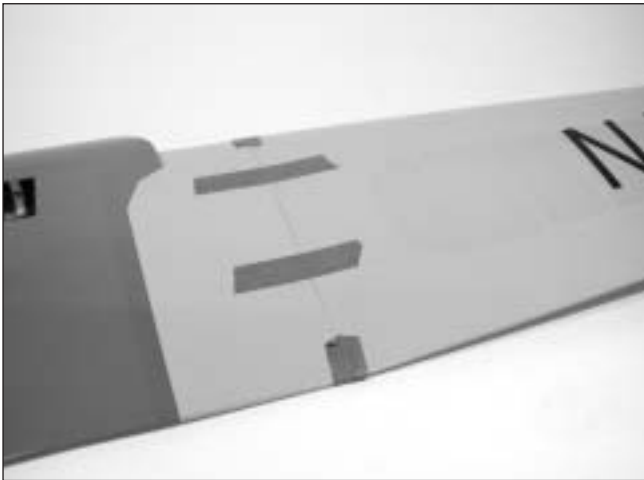
Carefully slide the tip and center wing panels together. Firmly press them together, allowing the epoxy to run out. Use alcohol and paper towels to wipe off the excess epoxy. Check to make sure there are no visible gaps between the two wing panels.



Section 2: Joining the Wing

Step 9

Use masking tape to securely hold the tip panel and center section together. Place the wing assembly back onto the flat work surface (covered with wax paper) and check the dihedral again as in Step 3. Allow the epoxy to setup before joining the opposite tip panel.



Step 10

Repeat the previous Steps 1 through 9 for the opposite wing panel.

Section 3: Installing the Aileron Servos

Parts Needed

- Wing assembly
- Aileron servos w/mounting hardware (2)
- Servo hatch screws (#2 x 3/8") (8)
- 18" servo wire extension (JRPA099) (2)
- Large Servo Arm (JRPA212) (1 pkg)

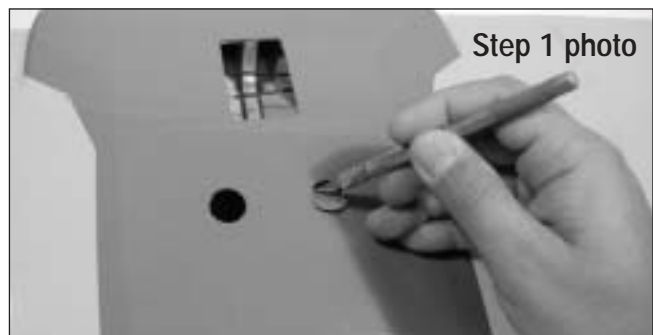
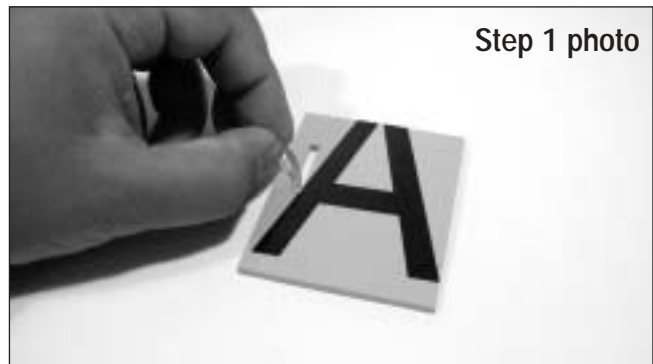
Tools and Adhesives Needed

- Thin CA
- Thick CA
- Phillips screwdriver

Step 1

Locate the aileron hatch on the underside of the wing panel and remove it from the wing. Cut out the slot for the servo arm at this time. Locate the servo lead extension exit holes on the top of the inboard portion of the wing. Using a sharp hobby knife, carefully cut away the covering over the hole.

Note: The aileron servo will be mounted to the hatch.



Section 3: Installing the Aileron Servos

□ □ Step 2

Install the recommended servo hardware (grommets and eyelets) supplied with your radio system onto the aileron servo. Temporarily install a long half servo arm (JRPA212) onto the servo and test fit the servo to the hatch. The servo output shaft and control arm should be centered in the slot of the hatch. Once satisfied, mark the location for the servo mounting blocks.



□ □ Step 3

Locate the servo mounting blocks. Using a few drops of thin CA, tack glue them in place on the marks made in the previous step. Check the fit of the servo between the mounting blocks. When satisfied with the fit, permanently glue the mounting blocks in place by first wicking thin CA between the mounting blocks and the hatch, and then using thick CA create a fillet around the base. Let the CA completely dry before proceeding to the next step.



□ □ Step 4

Place the aileron servo between the mounting blocks and use a felt-tipped pen to mark the location of the four servo mounting screws. Note that the servo must not touch the hatch in order to isolate engine vibration.



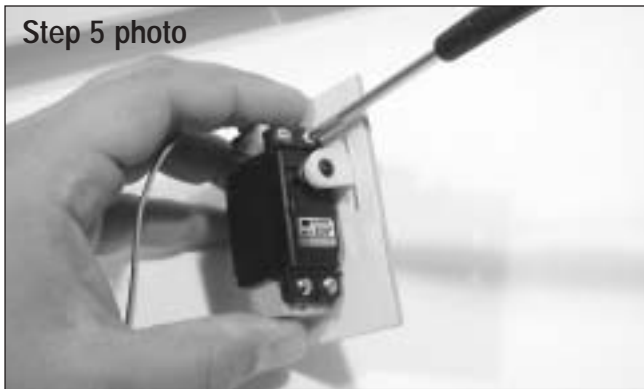
Note: Before mounting the servo, we suggest that you electronically center the aileron servos and install the servo arm to avoid having to remove the servo to mount the servo arm in subsequent steps.

□ □ Step 5

Remove the servo and using a 1/16" drill bit, drill the four servo mount screw holes marked in the previous step. Using the screws supplied with your radio system, mount the servo to the mounting blocks.



Section 3: Installing the Aileron Servos



□ □ Step 6

Locate the aileron Servo Lead Extension (18") (JRPA099) and connect it to the aileron servo lead. Secure the connectors by tying them in a knot or use a commercial connector that prevents the servo lead connections from becoming disconnected.

Hint: It is always a good idea to secure the servo connectors and servo extension together to prevent the wires from becoming unplugged inside the wing.



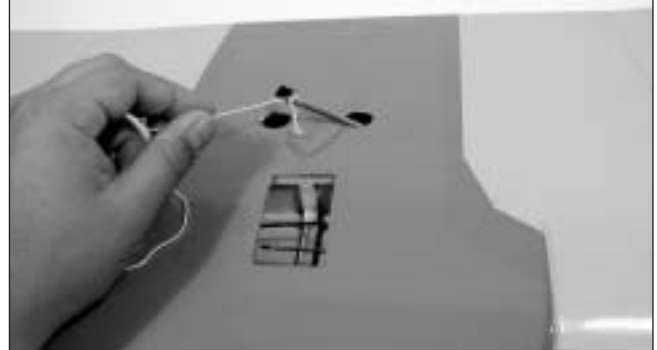
□ □ Step 7

Locate the preinstalled string in the servo hatch opening and tie it to the servo lead extension connector. Locate the other end of the string in the exit hole you uncovered in Step 1 and carefully fish the servo lead and extension through the wing.

Note: Tape the servo extension connector to the topside of the wing to prevent the connector from slipping back into the wing structure.

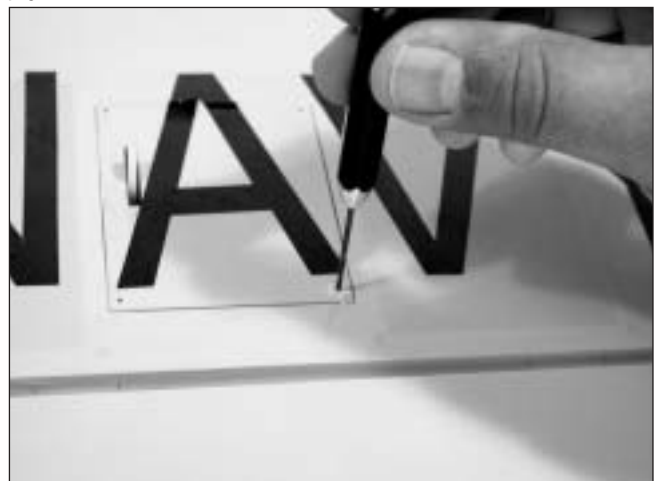


Step 7 photo



□ □ Step 8

Place the servo hatch assembly back into the opening and check the fit. Once satisfied with the fit, measure in from each corner 1/8" and using a 1/16" drill bit, drill the four mounting screw holes through the hatch and plywood tab underneath.



Section 3: Installing the Aileron Servos

Step 9

Locate four #2 x 3/8" wood screws and, using a Phillips screwdriver, secure the hatch to the wing.



Step 10

Repeat Steps 1 through 9 for the opposite aileron servo.

Section 4: Installing the Aileron Control Horns and Linkages

Parts Needed

- Wing assembly
- Horn back plate (2)
- Clevis (2)
- Wire keeper (2)
- Aileron control wire (6" threaded on one end) (2)
- Control horn (2)
- Mounting screws (6)
- Clevis keeper (2)
- Wing strakes (4)

Tools and Adhesives Needed

- Drill
- Pliers
- Triangle
- CA
- 30-minute epoxy
- Felt-tipped pen or pencil
- Phillips screwdriver (small)
- Drill Bit: 1/16"
- Side cutters
- Masking tape
- Paper towels
- Rubbing alcohol

Step 1

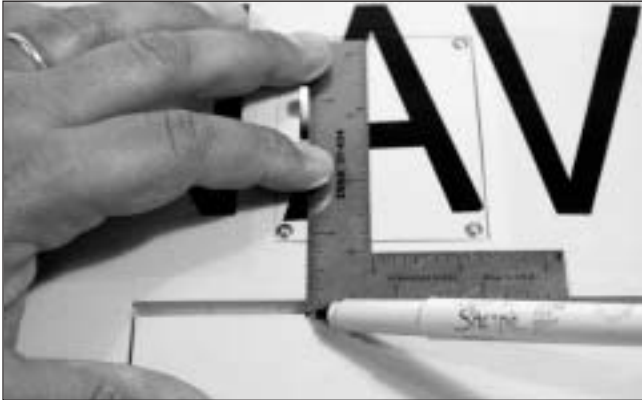
Locate the aileron control horn, back plate and three mounting screws.



Section 4: Installing the Aileron Control Horns and Linkages

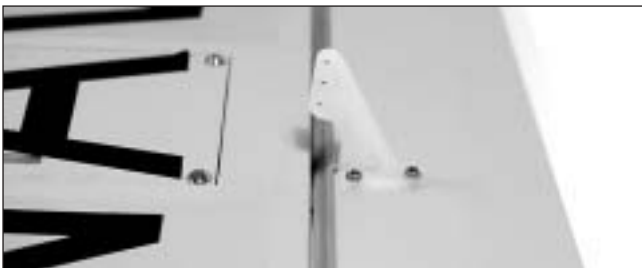
□ □ Step 2

Place the wing assembly upside down on a flat work surface. Place a triangle on the aileron hinge line and slide it up against the servo control arm as shown. Using a felt-tipped pen or pencil, mark the leading edge of the aileron. This will be the location for the center of the control horn.



□ □ Step 3

Place the aileron control horn on the mark made in the previous step, aligning the center of the control horn on the mark. Also align the clevis holes in the horn with the aileron hinge line as show below and mark the location of the three mounting screws.



□ □ Step 4

With the mounting hole locations marked, drill the holes for the mounting screws using a 1/16" drill bit. Be sure to drill straight through the aileron at a 90-degree angle to the flat work surface not to the surface of the aileron.



□ □ Step 5

Using a small Phillips screwdriver, attach the control horn using the provided hardware.



Section 4: Installing the Aileron Control Horns and Linkages

□ □ Step 6

Locate the aileron control wire (6" threaded on one end) and thread on a clevis a minimum of 12 turns. Attach the clevis to the middle hole in the control horn. To hold the aileron at the neutral position, place a piece of masking tape on the aileron to secure it to the wing trailing edge. With the aileron at neutral and aileron servo electronically centered, mark the wire where it crosses the aileron servo arm.



□ □ Step 7

Remove the clevis and wire from the control horn and make a 90-degree bend at the mark made in the previous step. Cut off the excess wire leaving 5/16" remaining after the 90-degree bend.



□ □ Step 8

Re-attach the clevis, securing it to the horn using a clevis keeper. Slide the other end of the wire through the aileron servo arms outermost hole and secure it with a wire keeper as shown.



□ Step 9

Repeat Steps 1 through 8 for the opposite aileron control horn and linkage.

Section 4: Installing the Aileron Control Horns and Linkages

□ Step 10

Locate the wing strake pieces (4), noting the top and bottom. Using CA glue, join the top and bottom strake pieces together forming an airfoil shape. Place the strakes centered over the right and left wing joint and mark their position using a pencil.



□ Step 11

Mix 1/2 ounce of 30-minute epoxy and coat the wing between the lines made in the previous step and install the strakes using the lines as a reference. Tape them in position and clean up the excess using a paper towel and rubbing alcohol.



Section 5: Installing the Retract Servo

Parts Needed

- Wing assembly
- Retract servo-mounting plate (1)
- Balsa retract servo rails (2)
- Retract servo w/hardware (1) (JRPS703)
- Easy connector (2)

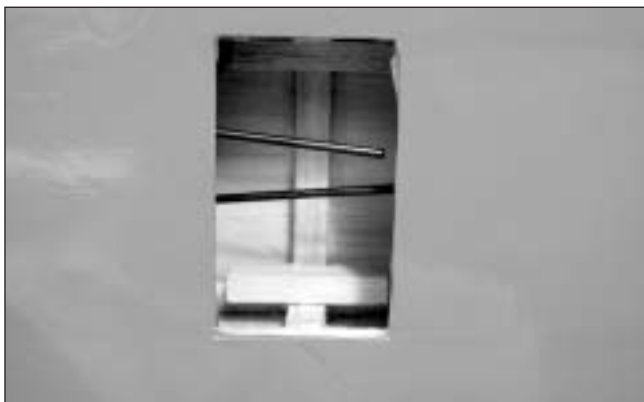
Tools and Adhesives Needed

- CA
- Drill
- Drill Bit: 1/16"
- Side cutters
- Phillips screwdriver
- Felt-tipped pen
- Hobby knife

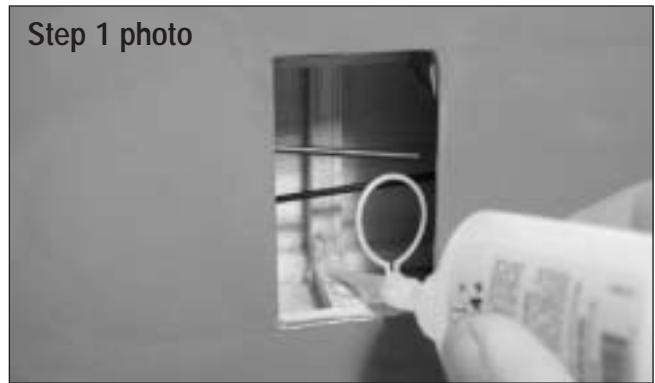
Note: The retract mechanism and retract control wires for the Texan come preinstalled from Hangar 9®. The Texan retract system is designed to use a Low-Profile Retract Servo, such as the JRPS703.

Step 1

Locate the balsa servo mounting rails. Trial fit these into the wing center section as shown. It may be necessary to open up the center notch in the rails to fit over the center root ribs. Trim away the balsa with a sharp hobby knife until the desired fit is achieved. Glue the rails in place using CA.

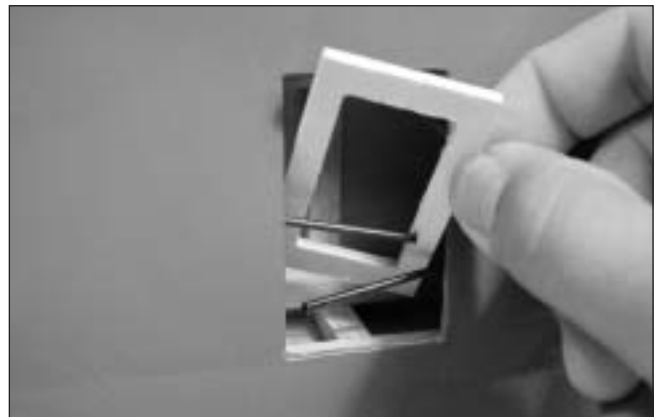


Step 1 photo



Step 2

Trail fit the retract servo mounting plate to the servo rails installed in the wing assembly. Trim the plate if necessary and secure the plate to the servo rails using CA glue.



Step 3

Install the servo mounting hardware included with your retract servo, (rubber grommets and eyelets). With the servo wheel removed, install the servo as shown with the output shaft towards the leading edge of the wing.

Note: It may be necessary to trim a notch into the root ribs to allow clearance for the mounting tabs of the servo.



Section 5: Installing the Retract Servo

Step 4

With the servo in place, use a 1/16" drill bit to drill the pilot holes for the servo mounting screws and secure the retract servo using the screws supplied with the servo.

Caution: Drill only deep enough for the mounting screws. If you drill too deep, the bit will come out through the bottom wing skin.

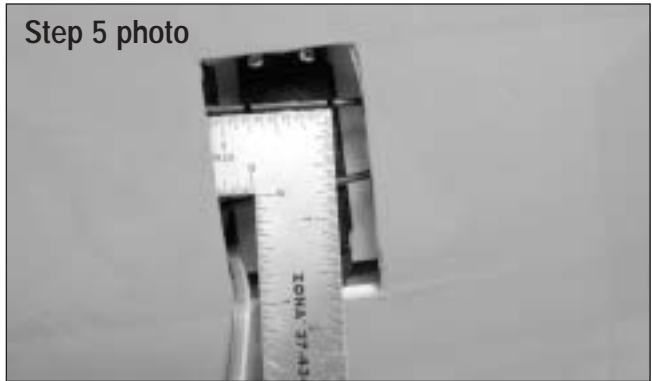


Step 5

Using a felt-tipped pen, mark the retract control wires where they pass over the center of the servo output shaft. Mark the wire in both the extended/locked and retracted/locked position. Then measure the distance between the marks as shown below. In this case the measurement was 3/4".

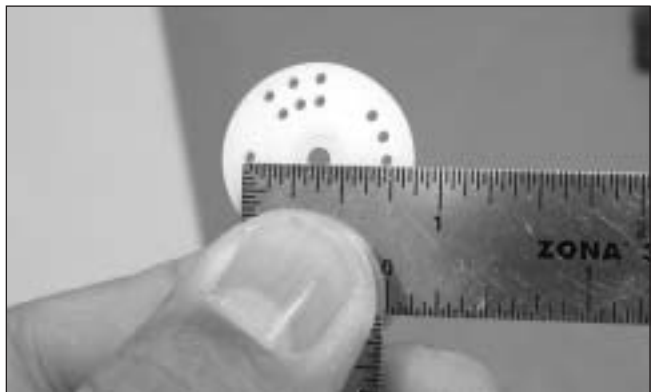


Step 5 photo



Step 6

Next, locate the servo wheel and find the set of holes that match the measurement and install the quick links into that set of holes.



Step 7

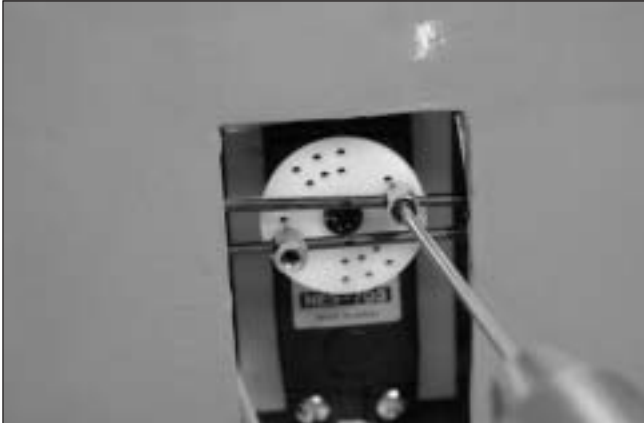
Connect the retract servo to your radio system and electronically move the servo to the extend position. Slide the retract control wires through the quick connects as shown and secure the servo wheel to the retract servo.



Section 5: Installing the Retract Servo

Step 8

With the retract servo in the extended gear position, pull on the retract wires to manually extend the landing gear. Tighten the set screw on the quick connects.

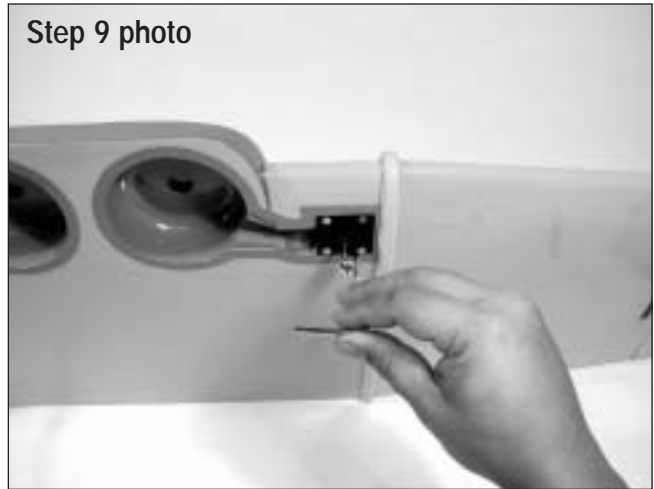


Step 9

Cycle the retract system several times and check to make sure there is no binding. Also check that the landing gear locks in both the retracted and extended position.



Step 9 photo



Section 6: Installing the Main Landing Gear Wheels and Fairings

Parts Needed

- Wing assembly
- Main landing gear wheels (2)
- Large wheel collars w/set screws (4)
- Landing gear fairing (2)
- Fairing mounting straps (4)
- Mounting screws w/washers (8)
- Locknuts (8)

Tools and Adhesives Needed

- Threadlock
- Drill
- Ruler
- Adjustable wrench
- Phillips screwdriver (small)
- Hex wrench (supplied)
- Drill Bit: 1/8"
- Felt-tipped pen or pencil

Step 1

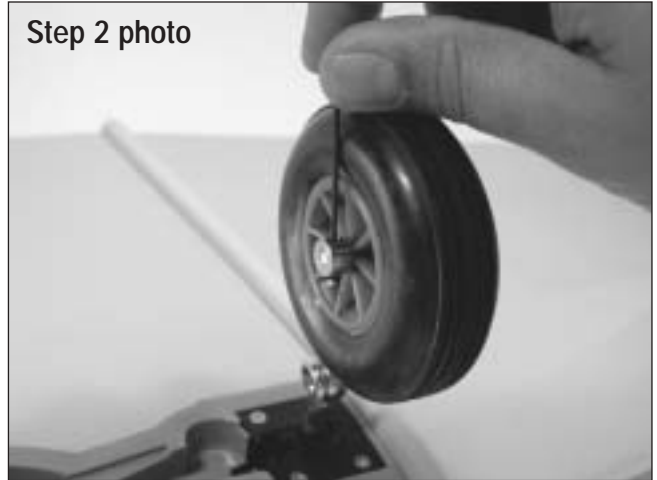
Locate the large wheel collars and slide one onto the landing gear wire as shown. Using threadlock on the setscrew, secure the wheel collar in place.



Step 2

Slide the main landing gear wheel onto the wire and secure the wheel in place with another wheel collar.

Step 2 photo



Step 3

Repeat Steps 1 and 2 for the other main landing gear wheel.

Step 4

With both main wheels installed on the landing gear, check to make sure there is no binding of the wheels in the wheel wells. This is best checked by hooking up the retract servo to your radio system and operating the servo via the transmitter.

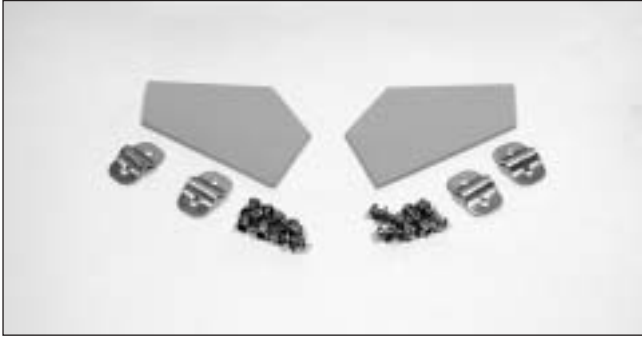


Note: If there is binding, it may be necessary to slightly bend the main landing gear wire to free up the wheel. Two pairs of pliers work well for this, using one pair to hold the base of the wire without putting any pressure on the retract mechanism.

Section 6: Installing the Main Landing Gear Wheels and Fairings

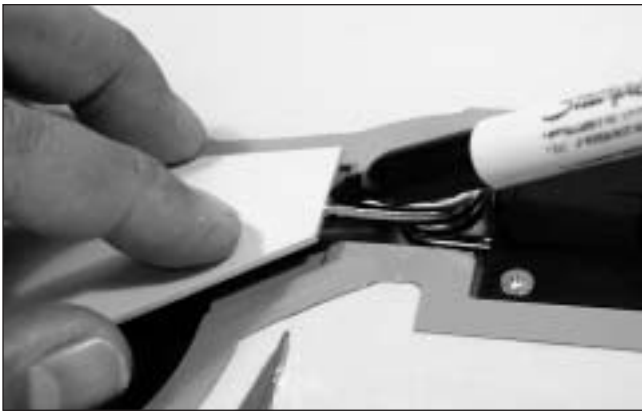
Step 5

Locate the landing gear fairing, two mounting straps, mounting screws, nuts and washers.



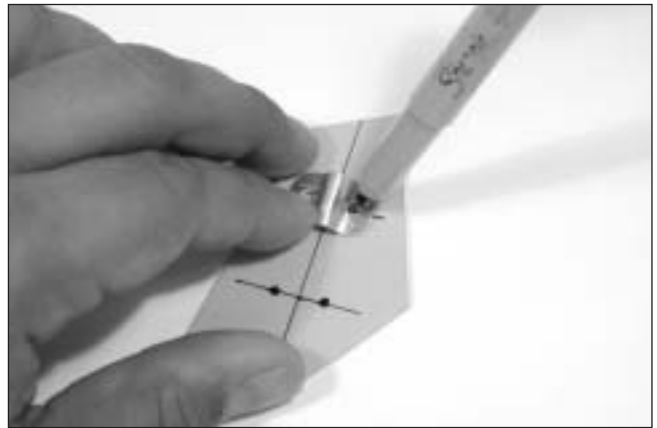
Step 6

With the landing gear retracted, fit the fairing to the bottom of the wing as shown, lining up the fairing with the indentation in the molded wheel well. Use a felt-tipped pen to mark the location of the wire on both ends of the fairing.



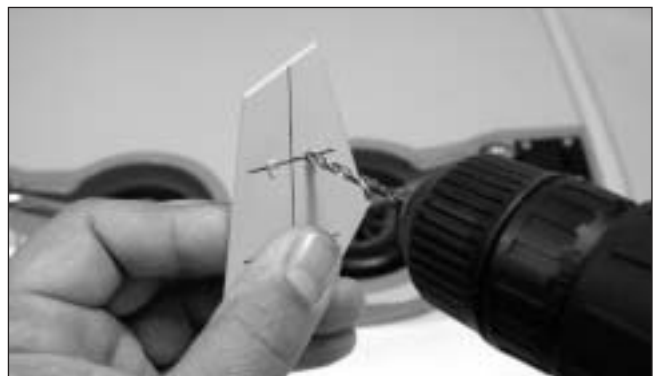
Step 7

Turn the fairing over and draw a line from the top to the bottom using the marks made in the previous step as a guide. Measure 1" from the top and 3/4" from the bottom and make a mark. Draw a line 90-degrees to the first line at the 1" and 3/4" marks. Next, mark the screw hole locations using the straps as a guide.



Step 8

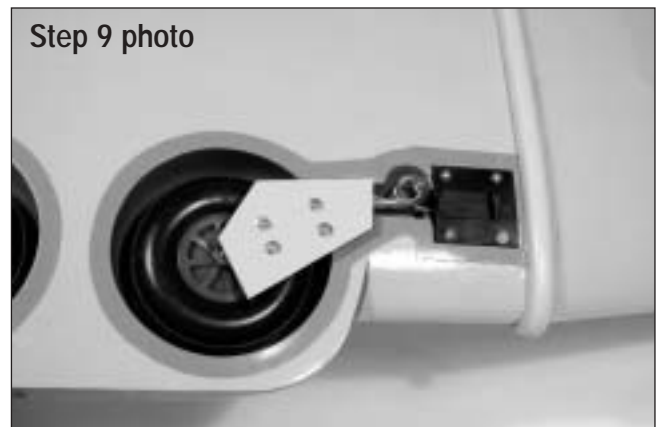
Use a 1/8" drill bit to drill through the fairing as shown.



Section 6: Installing the Main Landing Gear Wheels and Fairings

□ □ Step 9

With the landing gear extended, remove the wheel and mount the fairing to the landing gear using the mounting straps, screws and locknuts. Once both fairings are installed, test the retract unit to ensure the mounting screws do not bind in the wheel well.



Section 7: Mounting the Wing to the Fuselage

Parts Needed

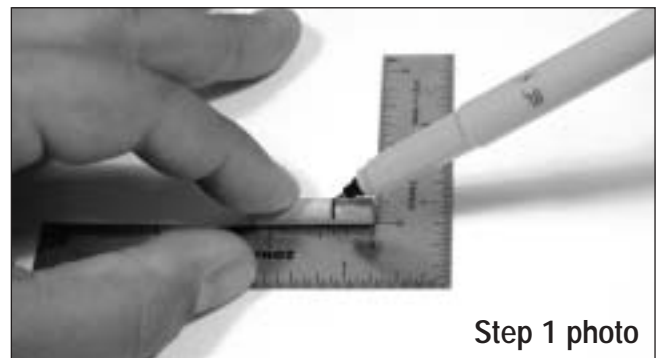
- Fuselage
- Wing assembly
- Wing dowels (2)
- Wing bolt plate
- 1/4" x 20 wing mounting bolts (2)
- 1/4" x 20 blind nuts (2)

Tools and Adhesives Needed

- Hobby knife
- Long ruler
- Hex driver 3/16"
- 6-minute epoxy
- Thin CA
- Slip-joint pliers
- Felt-tipped pen or pencil

□ Step 1

Locate the wing dowels and make a mark 3/8" from one end. Next, glue the wing dowels in place using 6-minute epoxy. Insert the dowels up to the mark made, leaving 3/8" of dowel to key into the mounting holes in the fuselage.



Section 7: Mounting the Wing to the Fuselage

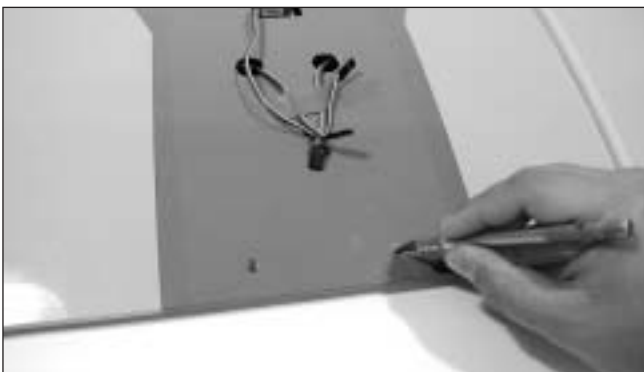
Step 2

Locate the predrilled holes in the fuselage wing mount plate and install the blind nuts into these holes. Seat the nuts completely into the plate using a 3/8" socket and 3/16" hex wrench as shown. Once seated, wick thin CA around the back of the nut to secure it in place.



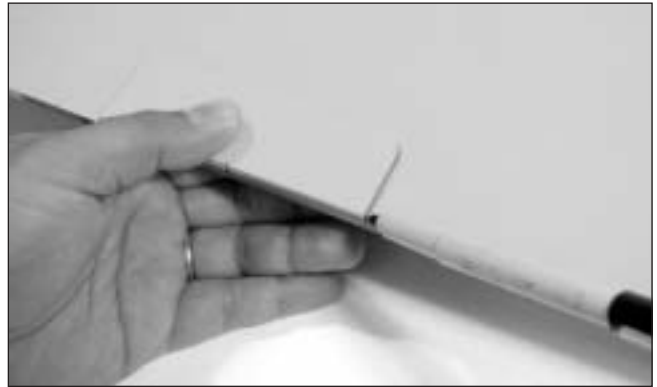
Step 3

Locate the predrilled holes in the wing trailing edge and use a sharp hobby knife to remove the covering as shown.



Step 4

Locate the plywood wing mounting plate. Align the plate with the trailing edge of the wing, centered between the predrilled holes as shown. Mark the outline of the plate with a felt-tipped pen/pencil. Use a sharp hobby knife to trim away the covering 1/16" inside the lines you just drew.



Step 5

Mix 1/2 ounce of 6-minute epoxy and coat both the wing and plywood plate. Align the plate and clamp in place. Wipe away any excess epoxy using rubbing alcohol and paper towels. Allow the epoxy to fully cure.

Caution: Use scrap plywood under the clamps to prevent damage to the balsa wing structure.



Section 7: Mounting the Wing to the Fuselage

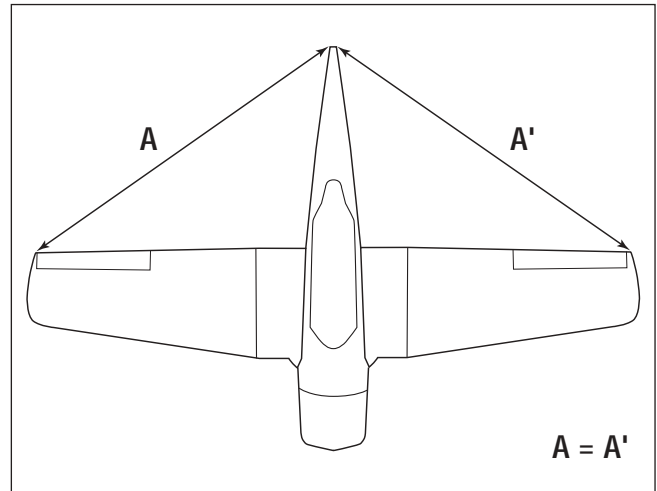
□ Step 6

Once the epoxy has fully cured, use a drill and 1/4" drill bit to drill through the plywood plate. Use the predrilled holes in the wing as a guide.



□ Step 7

Mount the wing to the fuselage using the two provided mounting bolts and washers. Tighten the bolts finger tight and align the wing to the fuselage by measuring from the wing tips to the center rear of the fuselage as shown. The measurements should be equal on both sides. It may be necessary to enlarge the holes in the mounting plate to get the proper alignment.



Section 8: Installing the Tail Group (Horizontal and Vertical Fin)

Parts Needed

- Fuselage assembly
- Wing assembly
- Horizontal stabilizer
- Vertical fin
- Elevator joiner wire (U-shaped)

Tools and Adhesives Needed

- Sharp hobby knife
- Long ruler
- Rubbing alcohol
- Paper towels
- 30-minute epoxy
- T-pin
- Felt-tipped pen or pencil

□ Step 1

The slots for the horizontal and vertical stabilizer are located in the rear of the fuselage. Using a sharp hobby knife, carefully remove the covering over the slots.



Section 8: Installing the Tail Group (Horizontal and Vertical Fin)

□ Step 2

Locate the horizontal stabilizer and elevator assembly and remove the elevators and hinges. Use a felt-tipped pen or pencil and ruler to mark the center of the stabilizer at the trailing edge as shown.



□ Step 3

Mark the center of the stabilizer saddle at the trailing edge of the saddle.



Note: The horizontal stabilizer is positioned all the way forward in the saddle area to allow room for the elevator joiner wire. The wire will be inserted through the saddle area before the horizontal stabilizer is glued in place.

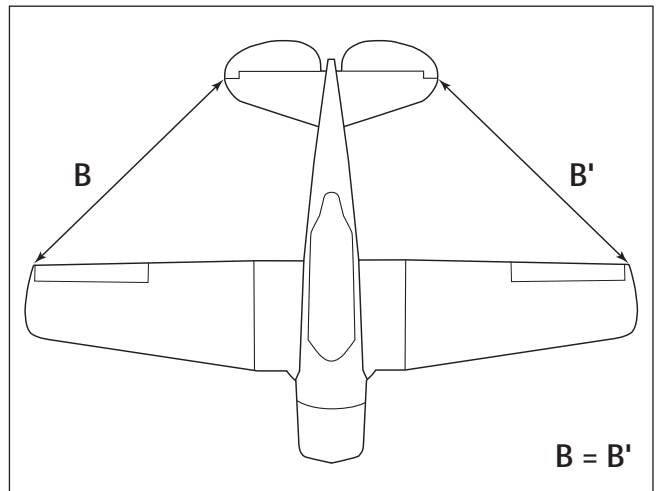
□ Step 4

Slide the horizontal stabilizer through the saddle opening and align the marks you made in the two previous steps. Once you are satisfied with the alignment, carefully place a T-pin through the stabilizer and the saddle at the trailing edge. This will keep the horizontal stabilizer in place during alignment.



□ Step 5

Mount the wing to the fuselage and measure the distance from the wing tip to the tip of the horizontal stabilizers as shown in the illustration below. Carefully adjust the horizontal stabilizer until the measurement is equal on both sides making sure to keep the marks on the stabilizer and saddle aligned.



Section 8: Installing the Tail Group (Horizontal and Vertical Fin)

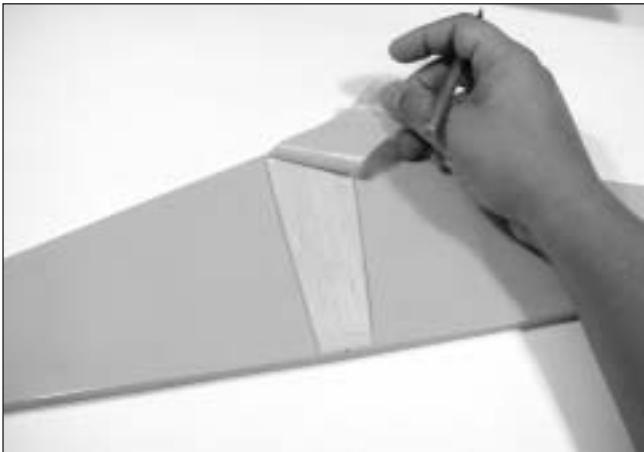
□ Step 6

With the horizontal stabilizer properly aligned, carefully mark the stabilizer with a felt-tipped pen or pencil where it meets the fuselage. Mark both the top and bottom of the horizontal stabilizer.



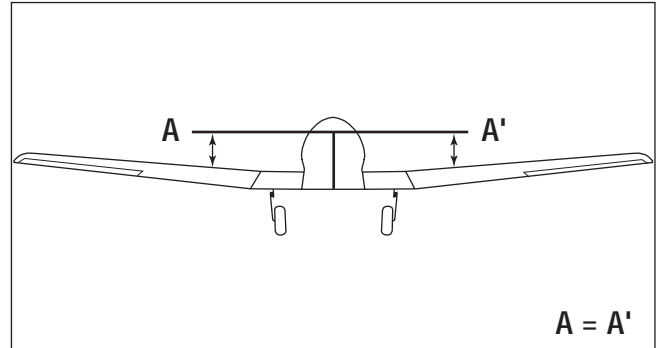
□ Step 7

Remove the stabilizer and use a sharp hobby knife to carefully remove the covering from the center of the stabilizer, cutting 1/16" inside the lines you marked in the previous step. Use only enough pressure to cut the covering and not the wood underneath, as doing so will severely weaken the structure of the horizontal stabilizer.



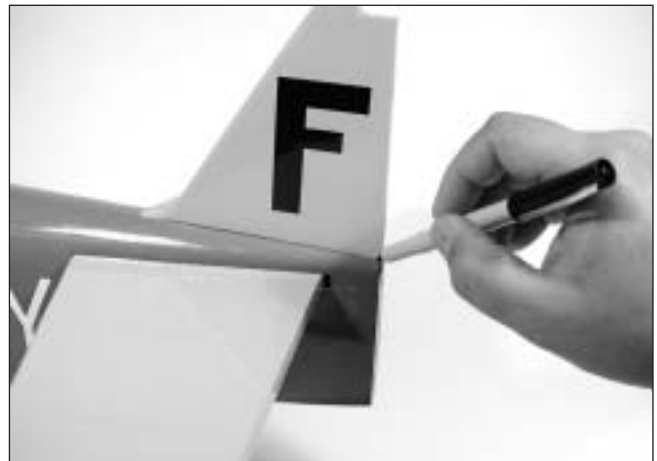
□ Step 8

Re-install the stabilizer into the fuselage. Use the lines drawn in Step 6 to reposition the stab correctly. Looking from behind the plane, check to make sure the horizontal stabilizer is parallel to the wing as shown in the illustration below. If any adjustments are required, lightly sand the stabilizer saddle to bring the horizontal stabilizer into alignment with the wing.



□ Step 9

Locate the vertical fin and rudder assembly and remove the rudder and hinges from the fin. Trial fit the fin into the fuselage as shown, making sure to align the trailing edge of the rudder with the fuselage. Use a felt-tipped pen or pencil to mark both the fin and fuselage where they come together.



Section 8: Installing the Tail Group (Horizontal and Vertical Fin)

Step 10

Remove the fin and use a sharp hobby knife to remove the covering where the fin inserts into the fuselage, cutting 1/16" inside the lines you drew in the previous step. Use only enough pressure to cut the covering, not the wood underneath.



Step 11

Re-install the fin into the fuselage to check the fit.

Note: Read through the remaining steps of this section before proceeding to Step 12 and have all your supplies and parts laid out ready to install.

Step 12

Remove the horizontal stabilizer and vertical fin from the fuselage. Mix 1/2 ounce of 30-minute epoxy and coat the horizontal stabilizer saddle and then coat both sides of the stabilizer center section.



Important: Slide the elevator joiner wire through the saddle area before inserting the stabilizer.

Step 13

Insert the stabilizer into the fuselage and align with the wing. Wipe off the excess epoxy using rubbing alcohol and paper towels.

Hint: Coat the center of the elevator joiner wire with petroleum jelly to keep the epoxy from setting up on the wire.



Step 14

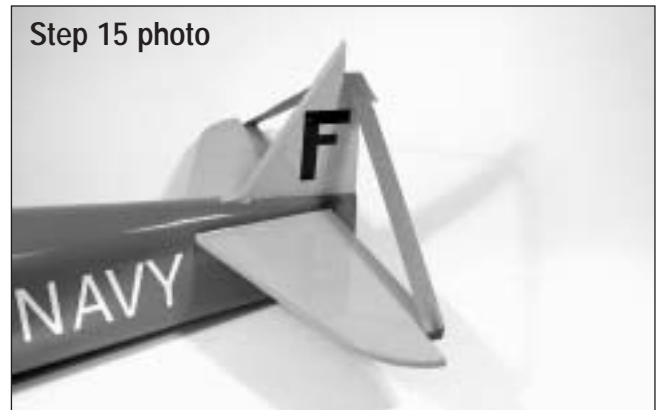
Use the remaining epoxy coat the bottom of the vertical fin and the slot in the fuselage for the fin. Try to keep the epoxy away from the joiner wire. Insert the fin into the fuselage and make sure it is fully seated in the slot. Wipe away any excess epoxy with rubbing alcohol and paper towels.



Section 8: Installing the Tail Group (Horizontal and Vertical Fin)

Step 15

Double-check the alignment of the horizontal stabilizer and vertical fin and use masking tape to secure it in place. Use rubbing alcohol and paper towels to clean the epoxy off of the elevator joiner wire. Allow the epoxy to fully cure.



Section 9: Hinging the Elevators

Parts Needed

- Fuselage assembly
- Hinges (6)
- Left and right elevator halves

Tools and Adhesives Needed

- Thin CA
- CA remover/debonder
- 6-minute epoxy
- Drill
- Drill Bit: 3/32"
- T-pins
- Rubbing alcohol
- Paper towels

Note: The elevator halves are joined together with the U-shaped wire supplied with the kit. This wire will be used to drive both elevator halves and is epoxied into place.

Caution: The included hinges are made of a special material that allows the thin CA to “wick” (penetrate) and distribute throughout the hinge, securely bonding them to the wood structure. It is imperative that you properly secure the hinges in place using high-quality thin CA glue.

Step 1

Locate the left and right elevator halves and temporarily install the elevators to the horizontal stabilizer. Center the elevator joiner wire in the tail of the fuselage and use a felt tipped pen or pencil to mark the outline of the wire onto the elevators.



Section 9: Hinging the Elevators

Step 2

Remove the elevators. Using a 3/32" drill bit, carefully drill the holes into the elevators using the marks you made in the previous step as a guide. Drill directly down the center of the elevator and only as far as needed.

Hint: Use a piece of masking tape on the drill bit as a depth gauge.



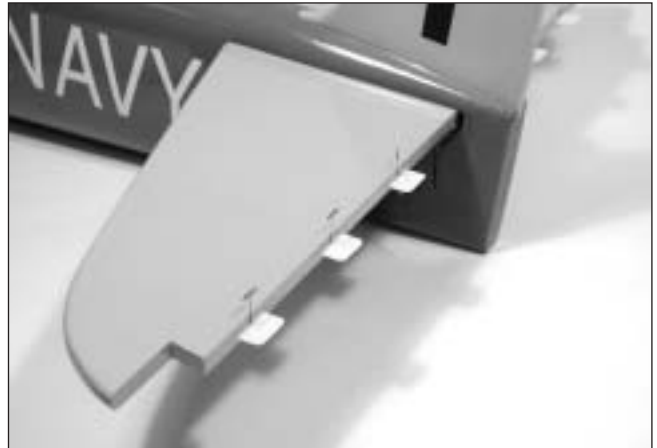
Step 3

Temporarily install the elevators back onto the horizontal stabilizer and check for fit. The elevator halves should be equal to each other and move freely up and down. If the elevators are not equal, you can remove them and carefully bend the joiner wire until they come into alignment. Once satisfied with the fit, remove the elevator halves.



Step 4

Place a T-pin in the center of each hinge and slide the hinges into the horizontal stabilizer until the T-pin is snug against the trailing edge as shown.



Note: In the following steps, you will permanently install the elevators. Do not glue the hinges in place until the joiner wire epoxy has cured.

Step 5

Mix at least 1/4 ounce of 6-minute epoxy. Using a toothpick as an applicator, coat the inside of the joiner wire holes and the wire where it inserts into the elevators.



Section 9: Hinging the Elevators

Step 6

Install each elevator onto the hinges and the joiner wire. Remove the T-pins and push the elevators close to the stabilizer until there is only a slight gap (1/32" or less) at the hinge line. Wipe away any excess epoxy with rubbing alcohol and paper towels. Use masking tape to hold the elevators in place and allow the epoxy to cure completely before moving to the next step.



Step 7

Once the epoxy has cured, deflect the elevators down and use a high-quality thin CA to completely saturate each hinge.



Step 8

Turn the fuselage over and repeat the hinge gluing process by deflecting the elevators in the opposite direction and completely saturate each hinge with thin CA. Wipe away any excess CA using CA remover/debonder and a paper towel. Allow the CA to completely dry.



Section 9: Hinging the Elevators

Step 9

Once the CA has dried, check the hinges for security by trying to pull the elevators from the stabilizer. Use only slight pressure and be sure not to crush the wood structure of the stabilizer or elevator.



Section 10: Installing the Rudder and Tail Wheel Assembly

Parts Needed

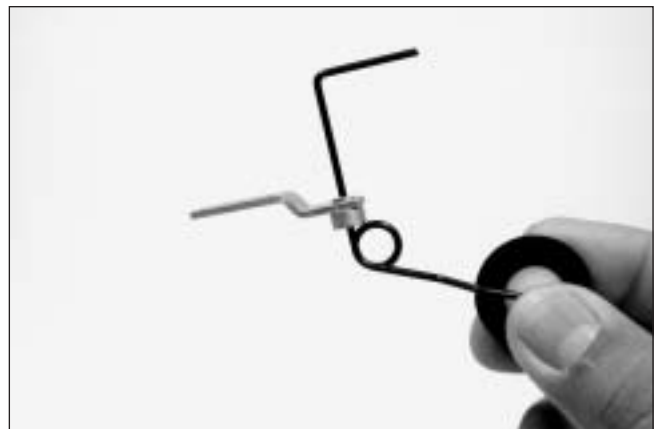
- Fuselage assembly
- Rudder
- Hinges
- Tail wheel assembly

Tools and Adhesives Needed

- Thin CA
- CA remover/debonder
- 6-minute epoxy
- Sharp hobby knife
- Drill
- Drill Bit: 3/32", 1/16"
- Pliers
- Rubbing alcohol
- Paper towels

Step 1

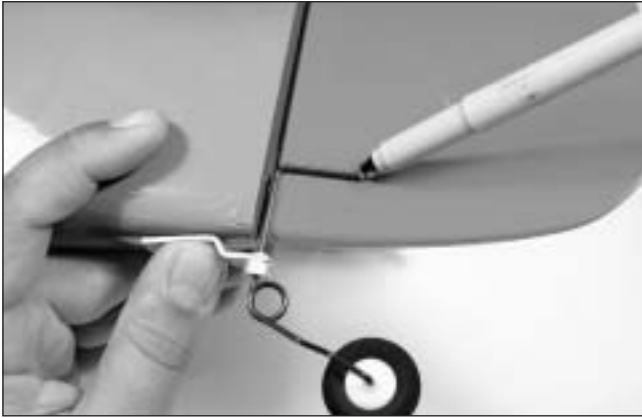
Locate the tail wheel assembly and use pliers to make a 90-degree bend 1" up from the bushing as shown. Measure over 1" from the bend and trim off the excess wire. This portion of the wire will be inserted into the rudder.



Section 10: Installing the Rudder and Tail Wheel Assembly

□ Step 2

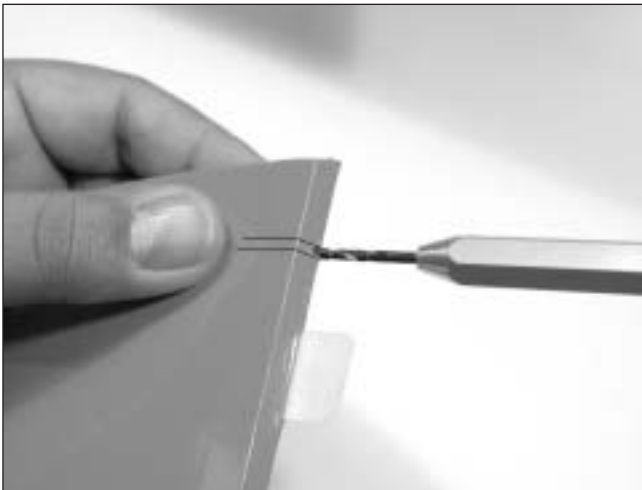
Temporarily install the rudder using the hinges provided; do not glue the hinges at this time. Hold the tail wheel assembly up to the fuselage as shown and mark the location where the wire will insert into the rudder. Remove the rudder.



□ Step 3

Using a 3/32" drill bit, drill the rudder following the marks you made in the previous step. Make sure to drill straight into the rudder.

Hint: Use a piece of masking tape on the drill bit as a depth gauge to avoid drilling too deep.



□ Step 4

Use a sharp hobby knife to make a notch in the bottom portion of the rudder to accept the tail wheel wire and allow the rudder to seat properly against the vertical fin.



□ Step 5

Mix at least 1/4 ounce of 6-minute epoxy and use a toothpick to coat the inside of the hole you drilled in the rudder. Also coat the wire that inserts into the rudder. Use caution not to get epoxy into the tail wheel assembly bushing. Secure the wire to the rudder with masking tape and allow the epoxy to cure.



Section 10: Installing the Rudder and Tail Wheel Assembly

Step 6

Install the rudder hinges placing a T-pin through the center of each hinge to keep it centered while installing the rudder.



Step 7

Align the tail wheel assembly bracket with the center of the fuselage and drill the screw mounting holes using a 1/16" drill bit. Using the two provided screws, mount the bracket to the fuselage as shown.



Step 8

Deflect the rudder fully in one direction and saturate each hinge with thin CA. Deflect the rudder in the opposite direction and saturate each hinge again with thin CA. Allow the CA to dry. Use CA remover/debonder to wipe off any excess CA on the rudder hinge line.



Step 9

Once the CA has completely dried, check the rudder for security by trying to pull the rudder from the fuselage. Use only enough pressure to test for security and be careful not to damage the wood structure of the rudder or fin.



Section 11: Installing the Elevator and Rudder Control Horns

Parts Needed

- Fuselage
- Wing
- Control horn w/back plate (2)
- Control horn screws (6)

Tools and Adhesives Needed

- Drill
- Drill Bit: 1/16"
- Ruler
- Felt-tipped pen or pencil
- Phillips screwdriver (medium)

Important: When installing the control horns, the holes in the control horns where the pushrod attaches must be directly in line with the control surface hinge line.

Step 1

To locate the elevator control horn position, measure over 1" from the fuselage on the bottom left side of the horizontal stabilizer along the elevator hinge line. Mark the elevator as shown with a felt-tipped pen or pencil. This mark will be the center of the elevator control horn location.



Step 2

Place the center of the control horn on the elevator at the mark made in the previous step. Mark the position of the control horn mounting holes with a felt-tipped pen or pencil.



Step 3

Remove the control horn and drill 1/16" holes through the elevator as marked. Make sure to drill these holes parallel to each other to allow the back plate of the horn to fit properly.



Section 11: Installing the Elevator and Rudder Control Horns

□ □ Step 4

Using the provided screws and back plate, attach the elevator control horn and fasten in place with a Phillips screwdriver.



□ Step 5

Measure 1 3/8" up from the bottom of the rudder on the right side of the rudder. Mark the location with a felt-tipped pen or pencil. This mark will serve as the center for the rudder control horn.



□ Step 6

Center the control horn over the mark you've just made. Make sure the horn is positioned over the hinge line, just like you did for the elevator. Using a felt-tipped pen or pencil, mark the mounting screw hole locations on the rudder.



□ Step 7

Drill the mounting holes with a 1/16" drill bit and install the rudder control horn, using the screws and back plate provided.



Section 12: Assembling the Fuel Tank

Parts Needed

- Clunk (fuel pickup)
- Fuel pickup tubing
- Rubber stopper
- Metal tubes (1 short, 2 long)
- Metal caps (2)
- Fuel tank
- 3mm screw

Tools and Adhesives Needed

- Hobby knife
- Screwdriver (medium)

Note: The stopper provided with the Texan has three holes that are not bored completely through the stopper. The holes are for the pickup, fill and vent lines. For these instructions you will only be using two holes: one for the fuel pickup and one for the fuel vent. Only open the third hole if you are going to use a separate fill line.

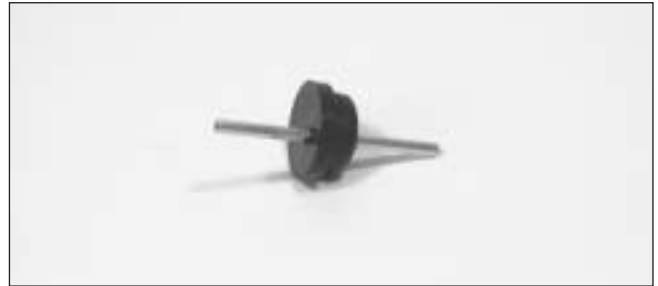
Step 1

Locate the tank parts.



Step 2

Locate the rubber stopper. Insert the shorter metal fuel tube into one of the holes in the stopper so that an equal amount of tube extends from each side of the stopper. This tube will be the fuel tank pickup that provides fuel to the engine.



Step 3

Slide the smaller of the two caps over the tube on the smaller end of the rubber stopper. The small end will be inserted into the fuel tank. The larger cap is placed on the other side of the rubber stopper that makes the cap. Loosely install the 3mm screw through the stopper.



Step 4

Locate one of the longer metal fuel tubes and bend it carefully using your fingers. This will be the fuel tank vent tube.



Section 12: Assembling the Fuel Tank

□ Step 5

Slide the vent tube into one of the two remaining holes in the stopper from the tank (small cap) side.



□ Step 6

Locate the short piece of silicone fuel tubing and the fuel tank clunk. Install the clunk onto one end of the silicone tubing and the other end onto the fuel tank pickup tube (straight tube) in the stopper.



□ Step 7

Carefully insert the assembly into the fuel tank. Note the position of the vent tube; it must be at the top portion of the fuel tank to function properly. Also, it may be necessary to shorten the length of the fuel pickup tubing to make sure the clunk does not rub against the back of the fuel tank. You should be able to turn the tank upside down, which allows the clunk to freely drop to the top of the tank.



□ Step 8

Tighten the 3mm screw carefully—do not over tighten. This allows the rubber stopper to form a seal by being slightly compressed, thus sealing the fuel tank opening.



Important: Be sure to differentiate between the vent and the fuel pick-up tube. Once the tank is mounted inside the fuselage, it will be difficult to tell the tubes apart.



Note: The fuel tank will be installed in the next section.

Section 13: Mounting the Engine

Parts Needed

- Engine
- Fuselage assembly
- Engine mount
- Assembled fuel tank
- Foam (not included)
- Engine mounting hardware:
 - 8-32 x 1 1/4" bolt (8), 8-32 blind nut (4)
 - 8-32 lock nut (4), #8 washer (8)

Tools and Adhesives Needed

- Hex wrench: 9/64"
- Hobby knife
- Drill
- Drill Bit: 1/8"
- Measuring device
- Adjustable wrench
- Felt-tipped pen or pencil

Note: The Texan comes with oval-shaped holes cut out in the firewall to accept the 8-32 blind nuts for mounting the engine mount rails. This allows for different sized engines to be used.

For 2-stroke engines, you will need to install a Pitts-style muffler to allow clearance to the firewall. For this model, we used a Bisson Pitts muffler (BIS04061) with the Evolution .61 2-stroke (EVOE0610) engine.

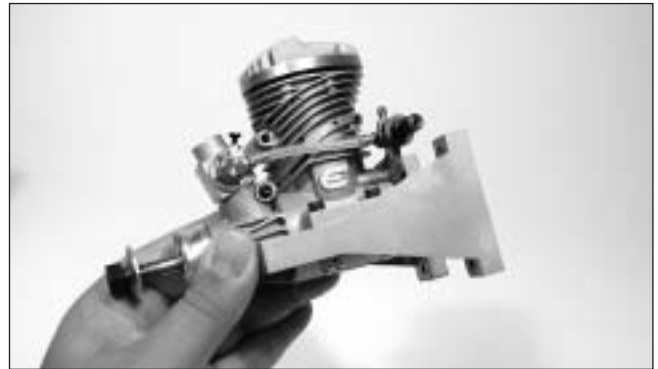
Step 1

Locate the engine mounting rails and associated hardware.



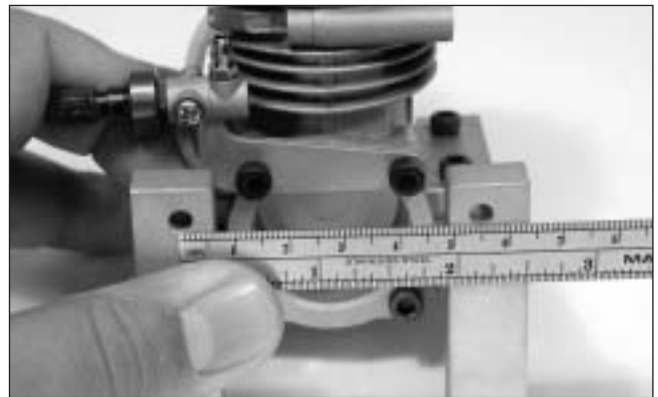
Step 2

Temporarily install the engine to the rails using four 8-32 bolts, washers and lock nuts.



Step 3

Measure the distance between the mounting holes (measure the holes on center) and transfer that measurement to the firewall. This will be the location for the 8-32 blind nuts. Remove the engine from the rails.



Section 13: Mounting the Engine

□ Step 4

Install the 8-32 blind nuts from inside the fuselage. Seat the blind nuts by tightening the bolts. Remove the bolts and carefully glue the blind nuts in place with thin CA. Be sure not to get any CA on the threads of the blind nuts.



□ Step 5

Install the engine mount rails using threadlock and a 9/64" hex wrench. Next, loosely mount the engine to the rails and measure 5 1/2" from the firewall to the prop drive washer of the engine. Tighten the mounting hardware to secure the engine in place.



□ Step 6

Determine the proper location for the throttle pushrod. Mark the location with a felt-tipped pen or pencil and drill the firewall for the pushrod tube using a drill and 5/32" drill bit. Remove the engine if necessary.



□ Step 7

Test fit the throttle pushrod tube through the firewall and into the fuselage. Once satisfied with the fit, mix 1/4 1/4 ounce of 6-minute epoxy and glue the pushrod into the firewall. Allow the epoxy to cure.



Section 13: Mounting the Engine

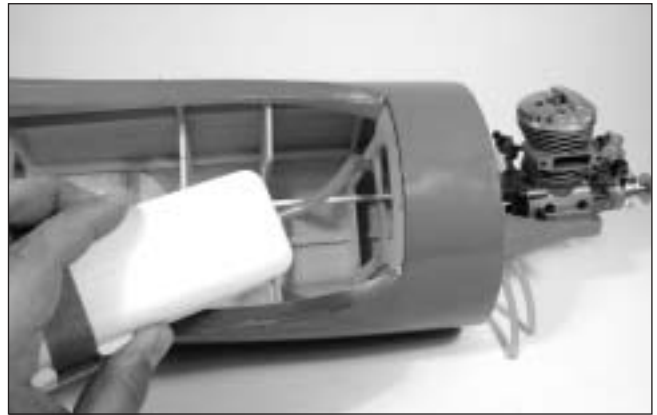
□ Step 8

Install the throttle control wire into the tube and connect the throttle control wire to the throttle. You may need to remove the throttle control horn or the carburetor to connect the Z-bend to the throttle arm.



□ Step 9

Connect two pieces of fuel tubing 12" in length to the fuel tanks pickup and vent tubes. Install the fuel tank into the front of the fuselage. The stopper and fuel tubes should come through the round hole cut in the firewall. Use foam to hold the tank in place and protect against vibration.



Note: Make the proper fuel line connections following the engine manufacturers instructions.

Section 14: Installing the Radio

Parts Needed

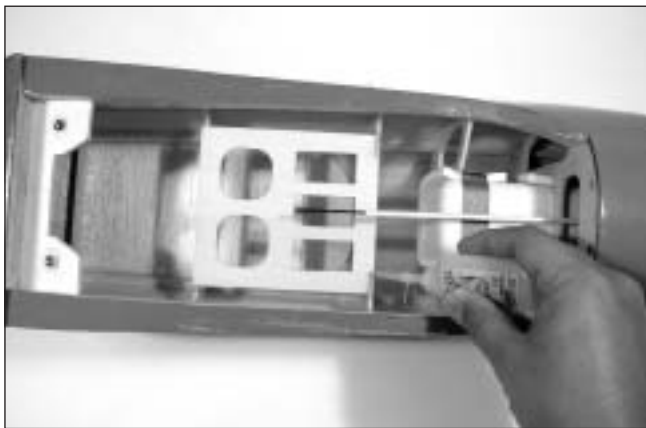
- Fuselage assembly
- Plywood servo tray
- Foam
- Servos (3) (not included)
- Receiver
- Receiver battery
- Servo Lead Extensions 12" (3) (JRPA098)

Tools and Adhesives Needed

- Hobby knife
- Thin CA
- Drill
- Drill Bit: 1/16"

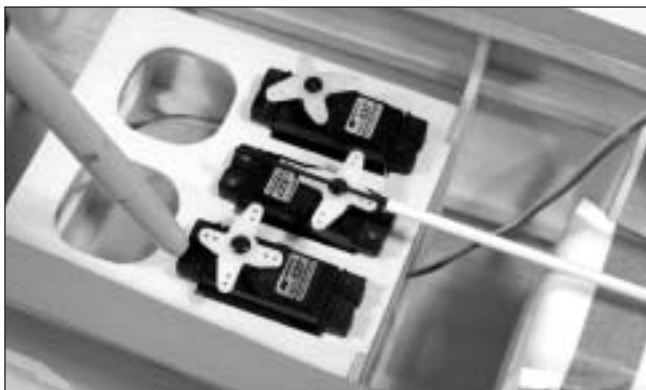
Step 1

Using thick CA, glue in the plywood servo tray, oriented as shown. Note the former is notched to accept the servo tray.



Step 2

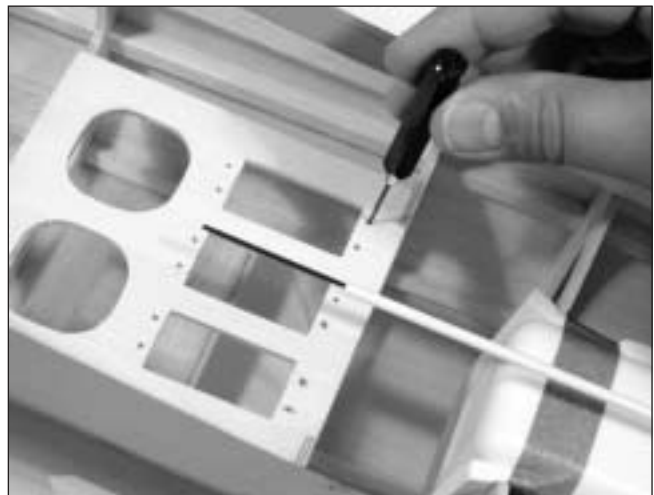
Install the recommended servo hardware (grommets and eyelets) supplied with your radio system onto three servos (elevator, rudder, throttle). Temporarily install the three servos into the openings and mark the location of the servo mounting screws.



Step 3

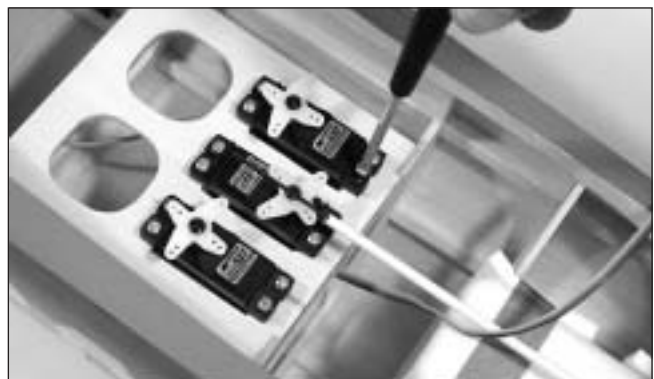
Remove the servos and drill the holes for the servo mounting screws using a 1/16" drill bit.

Hint: Place a drop of thin CA onto each screw hole to harden the wood around the hole. Allow the CA to completely dry before installing the servos.



Step 4

Install the servos as shown. The output shaft of the throttle servo (center servo) is towards the front and the elevator and rudder output shafts are to the rear. Secure the servos using the screws provided with the servos.



Section 14: Installing the Radio

Step 5

Mount the radio switch into the side of the fuselage. Use caution not to cut through the balsa stringers that run the length of the fuselage. Glue small scraps of plywood to the balsa sheeting to give the mounting screws something to bite into.



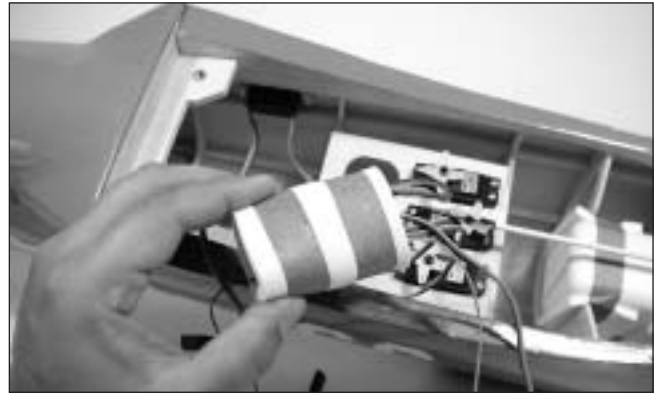
Step 6

Connect the 12" servo extensions (ailerons and retract servos), servo leads and switch harness to the proper channels in your receiver.



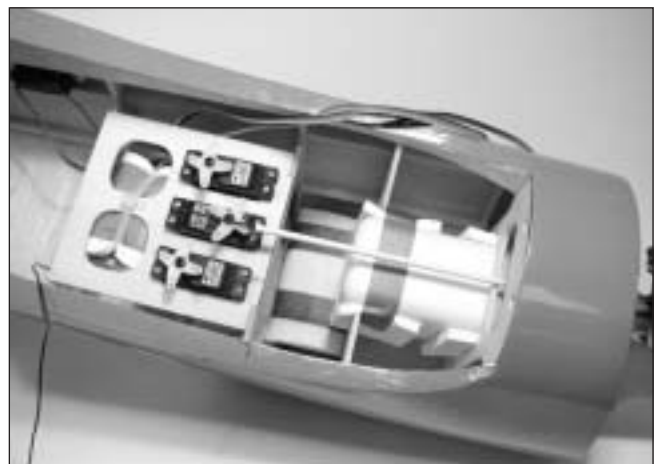
Step 7

Wrap the receiver in protective foam to prevent damage that may be caused from engine vibration. Secure the receiver to the servo tray as shown.



Step 8

Wrap the receiver battery in protective foam as you did with the receiver and temporarily mount it in the fuselage. You may need to move the battery forward or aft to balance the model in Section 19.



Section 14: Installing the Radio

Step 9

Route the antenna out through the bottom of the fuselage and secure it to the tail wheel with rubber bands as shown.



Section 15: Installing the Rudder and Elevator Linkage

Parts Needed

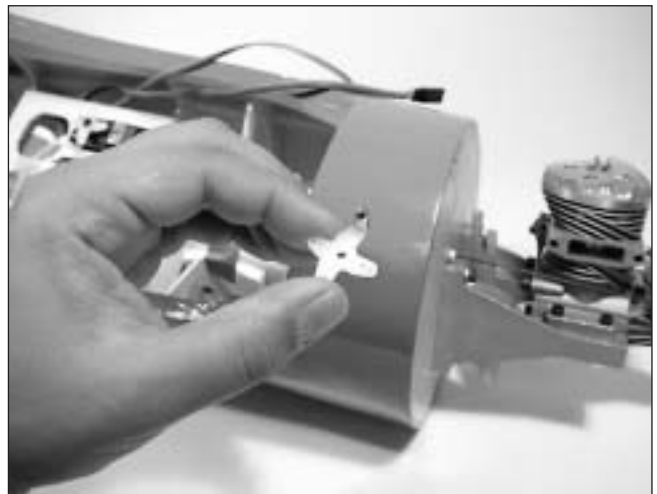
- Fuselage assembly
- EZ connector (1)
- Wire keeper (2)
- Control wires (2 long-threaded on one end, 2 short-no threads)
- Wood dowels (2)
- Nylon clevis w/keeper (2)
- Heat shrink tubing (4)

Tools and Adhesives Needed

- Hobby knife
- Heat gun
- Masking tape
- Paper towels
- Pliers
- 6-minute epoxy
- Rubbing alcohol

Step 1

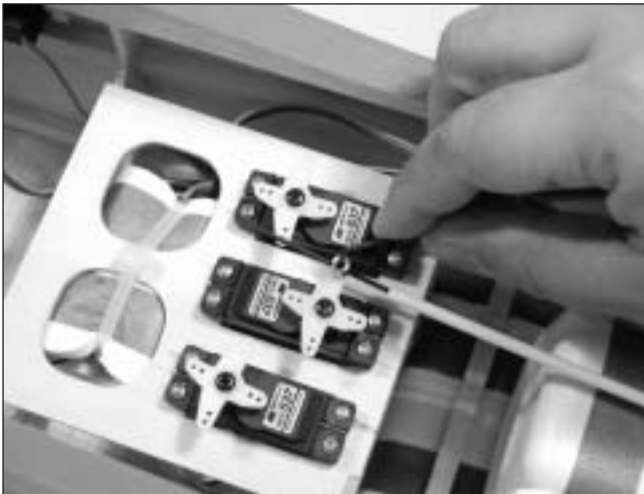
Mount the EZ connector to the servo arm supplied with your radio system as shown.



Section 15: Installing the Rudder and Elevator Linkage

Step 2

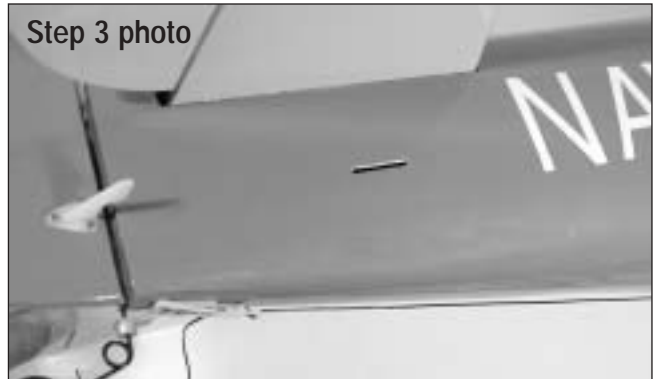
With the radio system turned on and the throttle stick centered, slide the EZ connector through the wire and mount the arm to the servo. With the throttle stick centered move the throttle arm on your engine to the center of its throw (1/2 throttle) and tighten the setscrew on the EZ connector.



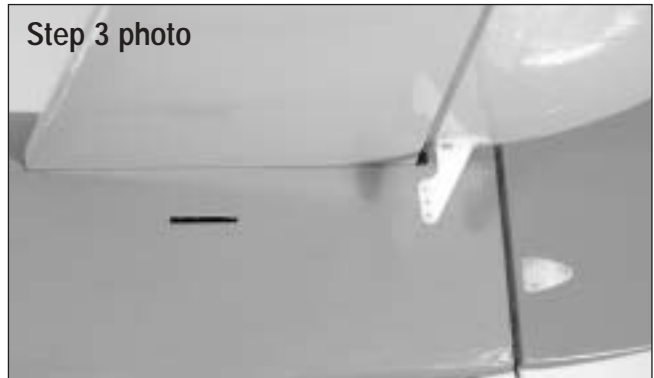
Step 3

Using a sharp hobby knife, locate and remove the covering over the slots for the rudder (right side) and elevator (left side).

Step 3 photo

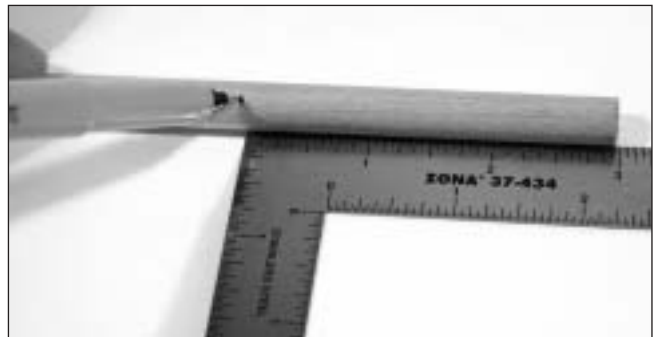


Step 3 photo



Step 4

To assemble the elevator pushrod, locate one of the wood dowels. Measure 3" from one end and drill a 5/64" hole.



Section 15: Installing the Rudder and Elevator Linkage

Step 5

Locate a long control wire threaded on one end. Measure 1/4" from the non-threaded end and make an L-bend. The L-bend will insert into the dowel. Notch the dowel to allow the wire to seat into the wood as shown.



Step 6

For the other end of the pushrod, measure 3" from the end of the dowel. In this case, drill the 5/64" hole 90-degrees to the previous hole and use the shorter non-threaded wire.

Step 7

Mix a small amount of 6-minute epoxy and glue the wires to the dowel. Use masking tape to hold the wire while the epoxy cures.



Step 8

Once the epoxy has set, remove the masking tape and slide the heat shrink tubing (provided) and use a heat gun to shrink the tubing in place.



Step 9

For the rudder pushrod, repeat Steps 4 through 8 with the only difference being the measurement for the threaded wire. Measure 2" from the end of the dowel for the threaded wire; the non-threaded wire is 3" from the end the same as the elevator.

Note: The pushrods cross each other in the fuselage. The elevator servo is on the right side of the fuselage and the rudder pushrod is on the left.

Section 15: Installing the Rudder and Elevator Linkage

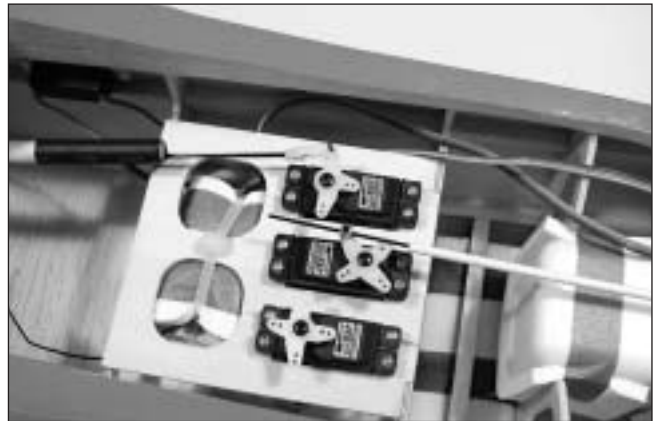
Step 10

Install the elevator control rod through the slot in the rear of the fuselage. Thread a nylon clevis onto the wire a minimum of 10 turns and connect the clevis to the control horn. Install a clevis keeper (1/4" piece of fuel tubing) to prevent the clevis from opening.



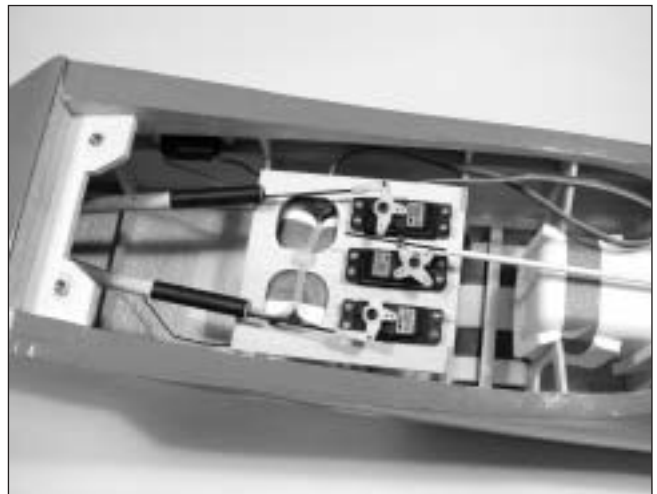
Step 11

With the elevator at neutral and the servo centered, mark the wire where it crosses the servo arm. Make an L-bend and clip of the excess wire leaving 5/16" after the bend. Secure the wire to the servo arm with an L-bend keeper.



Step 12

Repeat Steps 10 and 11 for the rudder pushrod.



Section 16: Attaching the Cowl

Parts Needed

- Fuselage assembly
- Cowl
- Mounting screws (4)
- Wood mounting blocks (4)

Tools and Supplies Needed

- Medium sandpaper
- Hobby knife
- Masking tape
- 12-minute epoxy
- Rubbing alcohol
- Paper towels
- Felt-tipped pen or pencil
- Moto-tool with cut-off wheel and sanding drum

Step 1

Locate the four wood cowl mounting blocks.



Step 2

Mark the location for the mounting blocks. The upper mounting blocks are located where the blue and black covering meet. The lower blocks are mounted in line with the wing saddle. Make adjustments to these locations to prevent interference with the engine and muffler you use.



Step 3

The blocks will be positioned flush with the fuselage sides. Sand a radius on the blocks to match the shape of the fuselage. Sand the firewall where the blocks attach to the fuselage.



Section 16: Attaching the Cowl

Step 4

Mix 1/4 ounce of 12-minute epoxy and glue the blocks in place. Use masking tape and T-pins to secure the blocks as the epoxy cures.



Step 5

If you are using the dummy radial engine supplied with the kit, glue it in at this time using 6-minute epoxy. Make all the necessary cut outs to allow the drive washer to come through the center of the dummy engine. Also open up the area between the cylinders.



Step 6

Center the cowl on the fuselage and using a 1/16" drill bit, carefully drill the four cowl mounting screw locations. Drill through the cowl and into the mounting blocks.



Step 7

Mount the cowl using the #2 wood screws provided. Once mounted, make the appropriate cutouts in the cowl for the muffler exhaust and engine cooling.



Section 17: Attaching the Canopy

Parts Needed

- Fuselage
- Painted canopy
- Plastic cockpit detail
- Plastic air scoop
- Decal sheet
- #2 wood screws (4)

Tools and Adhesives Needed

- Canopy scissors
- 6-minute epoxy
- Canopy glue
- Rubbing alcohol
- Paper towels

Note: The Texan canopy from Hangar 9[®] comes painted.

Step 1

Locate the cockpit detail included with the Texan. We have included the rear seat instrument panel pod and rear seat back.



Step 2

Cut out the rear cockpit instrument decal and install it on the rear pod as shown.



Step 3

Cut out the front cockpit instrument decal and install it on the front cockpit dash as shown. 1/7



Step 4

Mix a small amount of 6-minute epoxy and glue the pod and seat back to the cockpit as shown. You may wish to install a pilot figure at this time also.

Hangar 9's[®] 1/7 -scale U.S. WWII Pilot figure (HAN8311) is recommended.



Section 17: Attaching the Canopy

Step 5

Carefully cut out the canopy following the outline. Glue the canopy to the fuselage using RC560 canopy glue. Tape the canopy in place using masking tape and allow the glue to dry over night. For added security, use four #2 wood screws placed on the corners of the canopy.



Step 6

Mount the plastic air scoop detail to the left side of the fuselage. Locate the scoop just behind the cowl and centered on the fuselage. Use a flexible adhesive like Shoe-Goo or silicone sealant.



Section 18: Application of Decals

Parts Needed

- Fuselage assembly
- Decal sheet

Tools and Adhesives Needed

- Scissors
- Hobby knife
- Spray bottle w/water
- Paper towels

Step 1

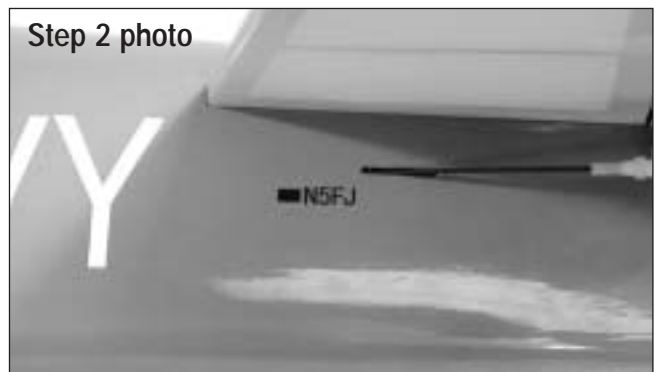
Use the photos to locate the position of the decals on the Texan. Use a water spray bottle with 2–3 drops of dish soap added to the water and spray both the fuselage and sticky side of the decal. This will allow you to reposition the decal if necessary.

Section 18: Application of Decals

□ Step 2

Once satisfied with the position, use a paper towel to squeegee out the water and any air bubbles. Allow the decal to dry over night.

Note: There may be some clouding under the decal, but this will go away as the decal dries.



Control Throws and Center of Gravity

The following control throws offer a good place to start with your first flights. We recommend only one rate setting for the Texan. As you become more familiar with the handling of your model, you may wish to add a second rate setting.

Recommended Control Throws

Aileron	5/16" up, 5/16" down
Elevator	7/8" up, 7/8" down
Rudder	1" right and left

Recommended CG Location

An important part of preparing the aircraft for flight is properly balancing the model. This is especially important when various engines are mounted.

Caution: Do not inadvertently skip this step!

The recommended Center of Gravity (C.G.) location for the AT-6 Texan 60 is 4 3/4" behind the leading edge of the wing. If necessary, move the battery pack or add weight to either the nose or the tail until the correct balance is achieved. Stick-on weights are available at your local hobby shop and work well for this purpose.

Preflight at the Field

Range Test Your Radio

Step 1

Before each flying session, range-check your radio. This is accomplished by turning on your transmitter with the antenna collapsed. Turn on the radio in your airplane. With your airplane on the ground, you should be able to walk 30 paces away from your airplane and still have complete control of all functions. If not, don't attempt to fly! Have your radio equipment checked out by the manufacturer.

Step 2

Double-check that all controls (aileron, elevator, throttle, rudder) move in the correct direction.

Step 3

Before you fly, be sure that your batteries are fully charged per the instructions included with your radio.

Adjusting your Engine

Step 1

Completely read the instructions included with your engine and follow the recommended break-in procedure.

Step 2

At the field, adjust the engine to a slightly rich setting at full throttle and adjust the idle and low-speed needle so that a consistent idle is achieved.

Step 3

Before you fly, be sure that your engine idles reliably, transitions, and runs at all throttle settings. Only when this is achieved should any plane be considered ready for flight.

2003 Official AMA National Model Aircraft Safety Code

Effective January 1, 2003

Model Flying MUST be in accordance with this Code in order for AMA Liability Protection to apply.

GENERAL

- 1) I will not fly my model aircraft in sanctioned events, air shows or model flying demonstrations until it has been proven to be airworthy by having been previously, successfully flight tested.
- 2) I will not fly my model higher than approximately 400 feet within 3 miles of an airport without notifying the airport operator. I will give right-of-way and avoid flying in the proximity of full-scale aircraft. Where necessary, an observer shall be utilized to supervise flying to avoid having models fly in the proximity of full-scale aircraft.
- 3) Where established, I will abide by the safety rules for the flying site I use, and I will not willfully and deliberately fly my models in a careless, reckless and/or dangerous manner.
- 4) The maximum takeoff weight of a model is 55 pounds, except models flown under Experimental Aircraft rules.
- 5) I will not fly my model unless it is identified with my name and address or AMA number, on or in the model. (This does not apply to models while being flown indoors.)
- 6) I will not operate models with metal-bladed propellers or with gaseous boosts, in which gases other than air enter their internal combustion engine(s); nor will I operate models with extremely hazardous fuels such as those containing tetranitromethane or hydrazine.

- 7) I will not operate models with pyrotechnics (any device that explodes, burns, or propels a projectile of any kind) including, but not limited to, rockets, explosive bombs dropped from models, smoke bombs, all explosive gases (such as hydrogen filled balloons), ground mounted devices launching a projectile. The only exceptions permitted are rockets flown in accordance with the National Model Rocketry Safety Code or those permanently attached (as per JATO use); also those items authorized for Air Show Team use as defined by AST Advisory Committee (document available from AMA HQ). In any case, models using rocket motors as a primary means of propulsion are limited to a maximum weight of 3.3 pounds and a G series motor. (A model aircraft is defined as an aircraft with or without engine, not able to carry a human being.)
- 8) I will not consume alcoholic beverages prior to, nor during, participation in any model operations.
- 9) Children under 6 years old are only allowed on the flight line as a pilot or while under flight instruction.

RADIO CONTROL

- 1) I will have completed a successful radio equipment ground range check before the first flight of a new or repaired model.
- 2) I will not fly my model aircraft in the presence of spectators until I become a qualified flier, unless assisted by an experienced helper.
- 3) At all flying sites a straight or curved line(s) must be established in front of which all flying takes place with the other side for spectators. Only personnel involved with flying the aircraft are allowed at or in the front of the flight line. Intentional flying behind the flight line is prohibited.
- 4) I will operate my model using only radio control frequencies currently allowed by the Federal Communications Commission. (Only properly licensed Amateurs are authorized to operate equipment on Amateur Band frequencies.)

2003 Official AMA National Model Aircraft Safety Code

Continued

5) Flying sites separated by three miles or more are considered safe from site-to site interference, even when both sites use the same frequencies. Any circumstances under three miles separation require a frequency management arrangement which may be either an allocation of specific frequencies for each site or testing to determine that freedom from interference exists. Allocation plans or interference test reports shall be signed by the parties involved and provided to AMA Headquarters. Documents of agreement and reports may exist between (1) two or more AMA Chartered Clubs, (2) AMA clubs and individual AMA members not associated with AMA Clubs, or (3) two or more individual AMA members.

6) For Combat, distance between combat engagement line and spectator line will be 500 feet per cubic inch of engine displacement. (Example: .40 engine = 200 feet.); electric motors will be based on equivalent combustion engine size. Additional safety requirements will be per the RC Combat section of the current Competition Regulations.

7) At air shows or model flying demonstrations a single straight line must be established, one side of which is for flying, with the other side for spectators.

8) With the exception of events flown under AMA Competition rules, after launch, except for pilots or helpers being used, no powered model may be flown closer than 25 feet to any person.

9) Under no circumstances may a pilot or other person touch a powered model in flight.

Organized RC Racing Event

10) An RC racing event, whether or not an AMA Rule Book event, is one in which model aircraft compete in flight over a prescribed course with the objective of finishing the course faster to determine the winner.

A. In every organized racing event in which contestants, callers and officials are on the course:

1. All officials, callers and contestants must properly wear helmets, which are OSHA, DOT, ANSI, SNELL or NOCSAE approved or comparable standard while on the racecourse.

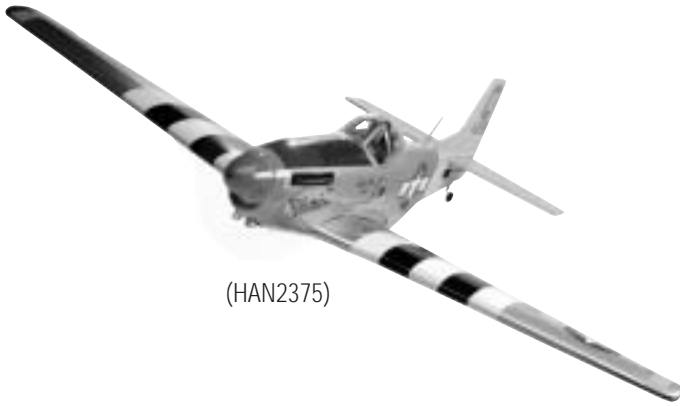
2. All officials will be off the course except for the starter and their assistant.

3. "On the course" is defined to mean any area beyond the pilot/staging area where actual flying takes place.

B. I will not fly my model aircraft in any organized racing event which does not comply with paragraph A above or which allows models over 20 pounds unless that competition event is AMA sanctioned.

C. Distance from the pylon to the nearest spectator (line) will be in accordance with the current Competition Regulations under the RC Pylon Racing section for the specific event pending two or three pylon course layout.

11) RC Night flying is limited to low performance models (less than 100 mph). The models must be equipped with a lighting system that clearly defines the aircraft's attitude at all times.



(HAN2375)

Patterned after “Marie”—the plane piloted by Captain Freddie Ohr—it even features his name and ID number on the fuselage.

Ounce for ounce, Evolution's .61 NT is the best value in its class. It easily outperforms many of its more expensive competitors (11,200 RPM with an APC 12 x 6), provides silky smooth transition, and gives you the unparalleled tuning ease of SetRight needle valves. No other .61 offers as much bang for the buck.



(EVOE0610)



(HAN1875)

The Cessna 182 Skylane has been among the world's most popular airplanes for almost 50 years. Now you can experience the spirit of the Cessna in this giant-scale dream—Hangar 9's 1.50-sized replica of the real thing. The Hangar 9® Cessna 182 Skylane 1.50 ARF, based on the latest version of the real plane, is an easy-to-assemble, easy-to-fly blast that boasts scale details never before seen in an ARF model.



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