



SUPER FLYING MODEL
MANUFACTURE

TRI-60



SPECIFICATIONS

WING SPAN: 1845mm

WING AREA: 58.69 sq.dm²

LENGTH: 1414mm

WEIGHT: 3600 g

RADIO: 4 channels

ENGINE: .60 - .90 (2C)

.90 - .120 (4C)

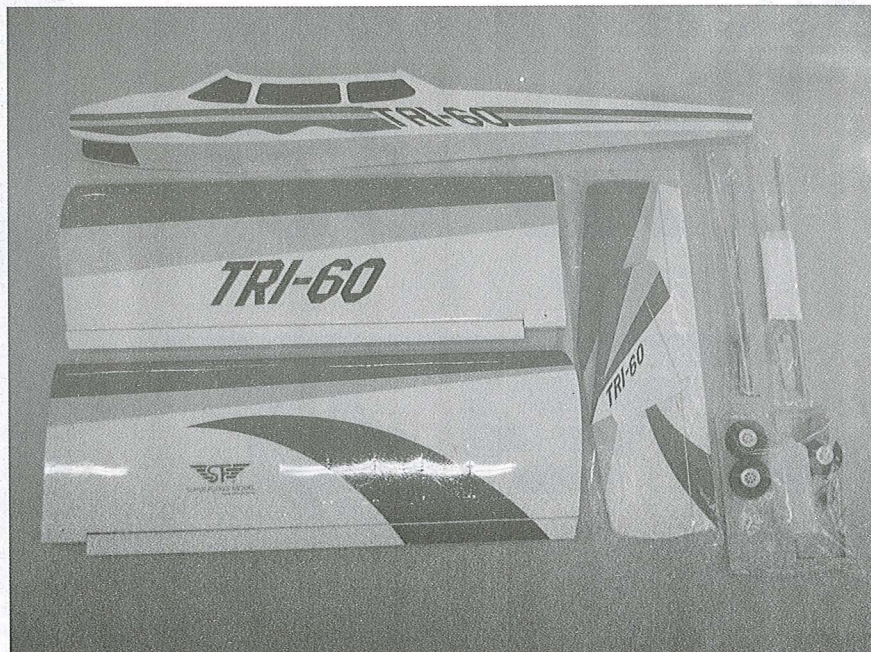
No. 8702

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, following all instructions included with your radio.

Before beginning the assembly, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.

INSTRUCTION MANUAL



Contents of Kit / Parts Layout

Recommended radio and electronic equipment (Not included in kit):

45g servo x 4
 Receiver x 1
 30cm Extension x1

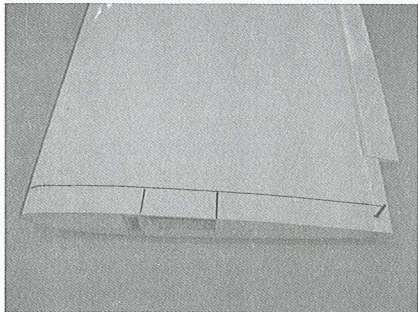
Engine .60 (2C) / .90 (4C) x1
 Receiver Battery 4.8V x 1
 Switch x 1 piece

Tools and suppliers needed (not included in kit)

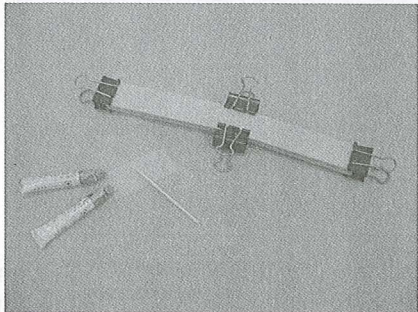
Phillips screwdriver #0, #1, #2
 2mm/1.5mm/3.0mm drill
 Curved scissors
 1.5/2.0 Hex Wrench
 Hobby knife
 Ruller

Pliers
 Z-bender
 Epoxy 5-10 minutes
 Pen
 CA glue

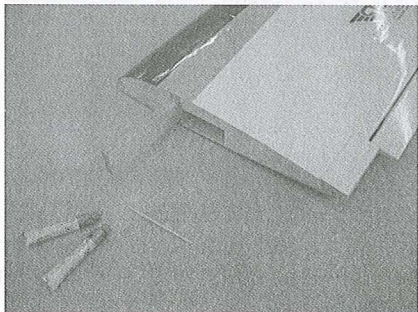
Sanding paper
 Cross wrench



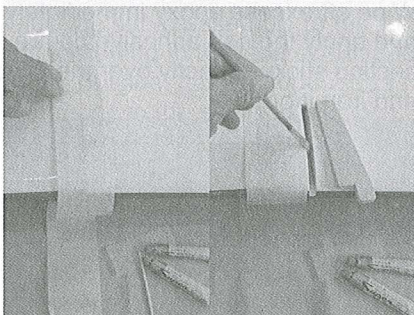
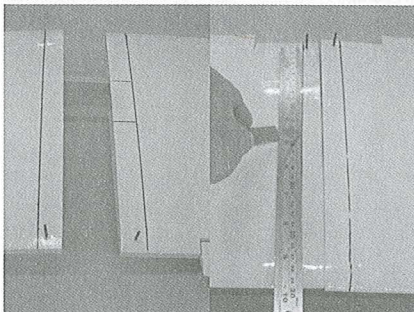
Use epoxy in this stage. Mark the position of the cut-out on the underside of the wing to suit your servo.



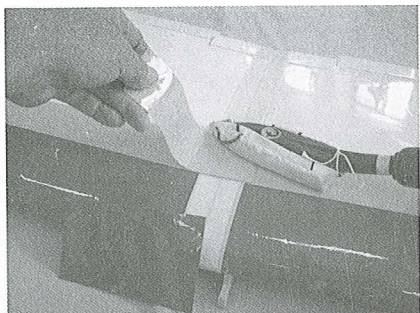
Glue together the dihedral braces with their edges flush. Wipe off excess resin immediately and clamp the parts together with clothes pegs until the glue has dried completely. Sand the edges of the dihedral brace if necessary.



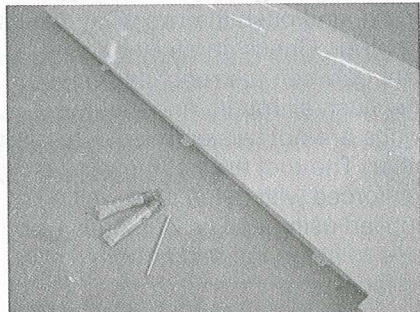
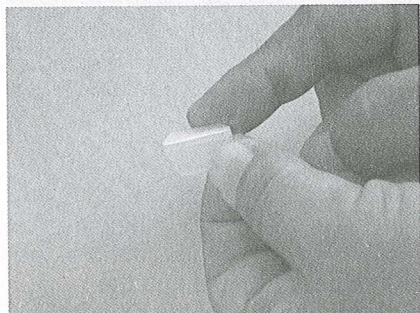
Glue the dihedral brace in the right-hand wing panel using plenty of epoxy.



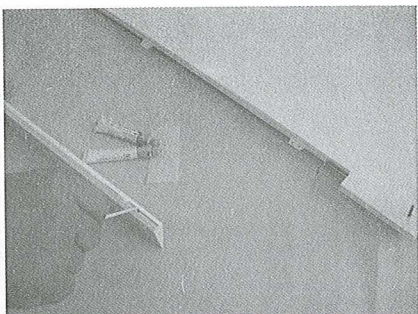
While the glue is still soft apply plenty of epoxy to the root rib of the left-hand wing panel and the projecting tongue of the dihedral brace, and push the two wing panels together. Check carefully that the joint between the root ribs is close and flush all round, and that the wings are not twisted relative to each other. The root area of the wing is reinforced with nylon tape which is applied using epoxy. Cut strips of tape to fit the top and bottom surfaces.



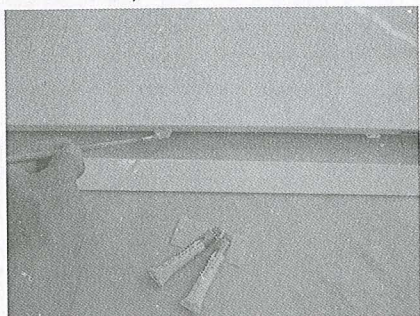
Wipe off excess epoxy immediately and apply the self-adhesive centre section sticker directly over the joint and iron it on.



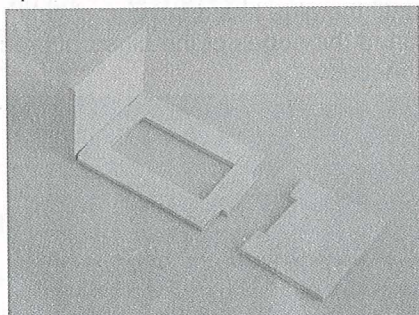
Remove the ailerons from the wing. Squeeze epoxy into the holes for the hinges. Push the hinges into the wing trailing edge as far as the pivot axis.



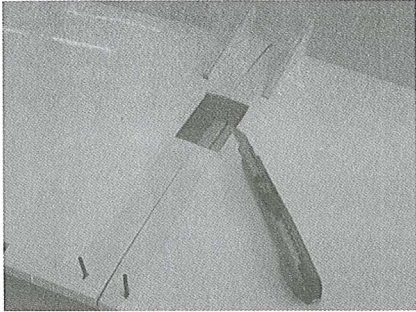
Squeeze epoxy into the holes for the aileron torque rods.



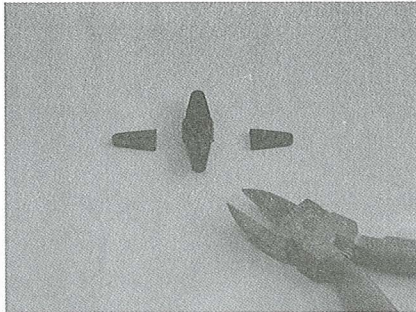
Put epoxy to the hinges. Fit ailerons onto the hinges and push them up to the wing. Take care that no glue gets into the torque rod sleeves, and check that the ailerons move freely up and down.



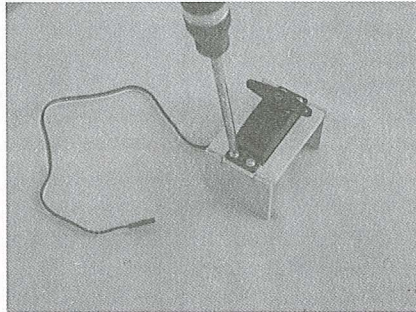
Trim the servo plate to fit our aileron servo if necessary, and glue it to the supports.



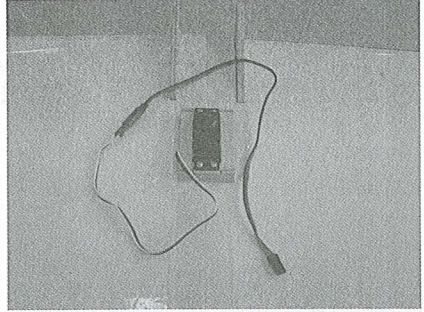
Centre the servo plate on the wing at the marked position (stage 1), mark the outline of the opening for the servo and cut it out carefully.



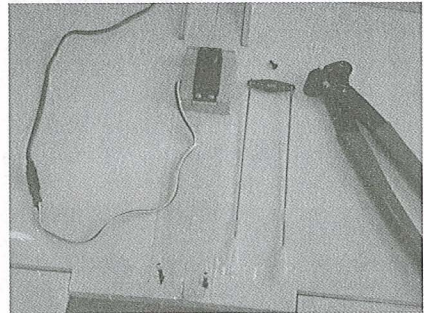
Cut down the cruciform output lever as shown.



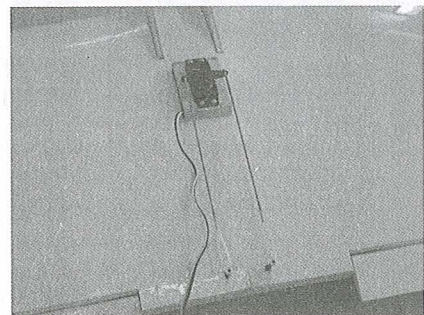
Install the aileron servo using the fixing hardware supplied with it.



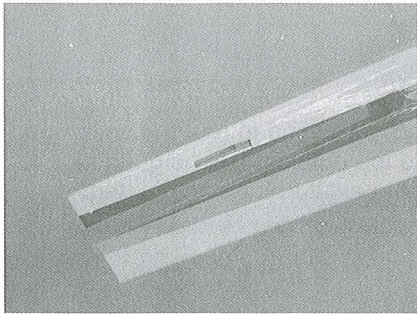
Glue the servo assembly to the wing, not forgetting to rout the servo lead to the outside. It is as good idea to connect it to the servo extension lead at this stage for connection to the receiver.



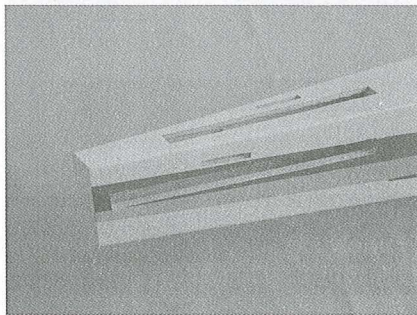
Fit the clevises on the preformed pushrods and connect them to the cruciform servo output lever. Screw the aileron horns onto the torque rods as far as they will go.



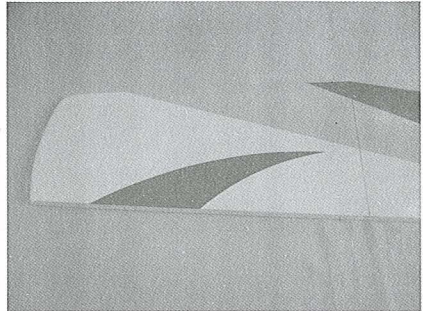
Check that the servo is at neutral, place the output arm on the servo shaft and tighten the retaining screw. Set the ailerons to centre and adjust the aileron pushrods to the correct length by screwing the clevises in or out. Connect them to the torque rod horns.



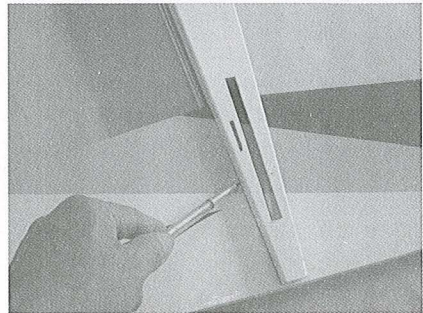
Locate the various openings for the tail panels, the pushrods and the wing dowels in the fuselage which are covered by film, and remove the film to expose them.



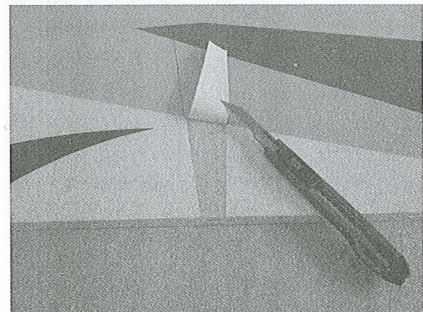
Cut out the tail-plane slots at the tail end so that the tail-plane can be slid into place later.



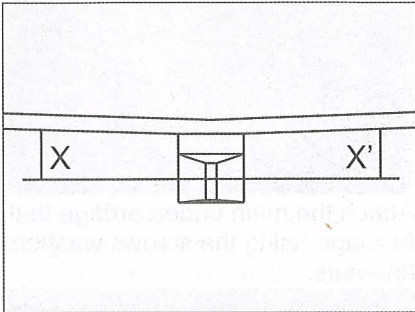
Remove the elevator from the tail-plane. Squeeze epoxy into the holes for the hinges. Re-position the hinges. Mark the centerline on the tail-plane.



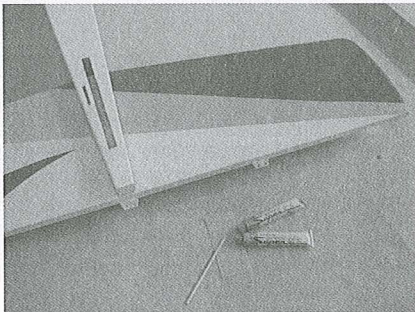
Slide the tail-plane into the slots in the fuselage and set it exactly central. The centerline is visible through the slot for the fin. Draw a line along the fuselage on both sides of the tail-plane, top and bottom, using a felt-tip pen.



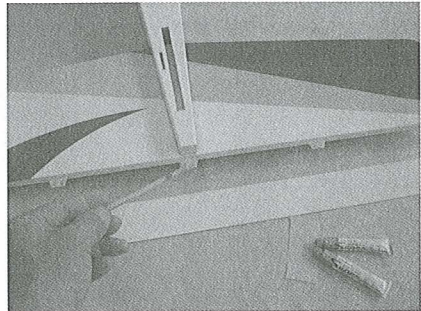
Very carefully run a balsa knife just inside the marked lines to score the covering film and peel off the film to expose the wood at the joint position. Take great care not to cut into the wood.



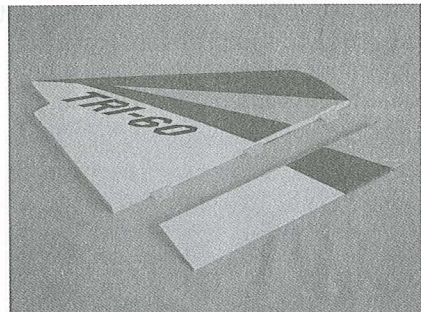
Place the completed wing on the fuselage and secure it with the wing bolts. Check that the wing is central on the fuselage when viewed from above and from the front.



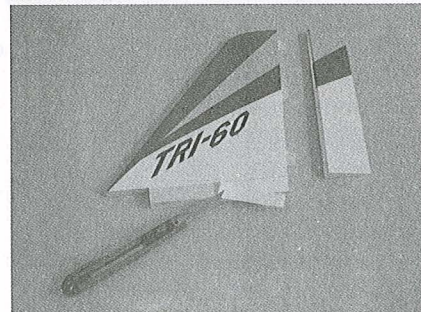
Apply epoxy to the joint areas of the tail-plane. Slide the panel into the fuselage slots and immediately check its alignment with the wing. Wipe off excess resin and leave the joint to set hard.



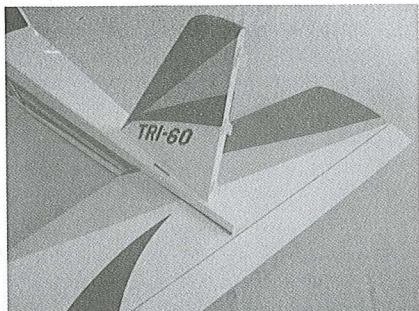
Squeeze epoxy into the holes for the hinges. Fit the elevator again.



Separate the rudder from the fin. Glue the hinges in the fin as described.

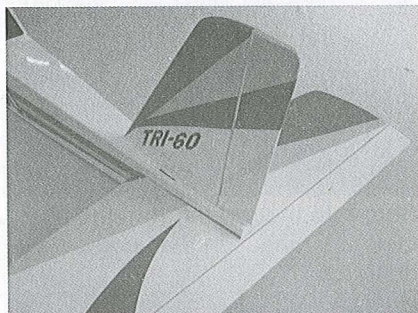


Expose the bare wood at the joint surfaces of the fin as already described for the tailplane.

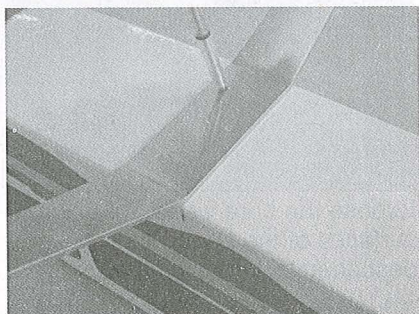


Glue the fin to the fuselage and set it at right-angles to the tailplane.

Check that the bottom of the fin rests squarely on the tailplane. Note that the bottom face of the fin must be glued to the top of the tailplane.

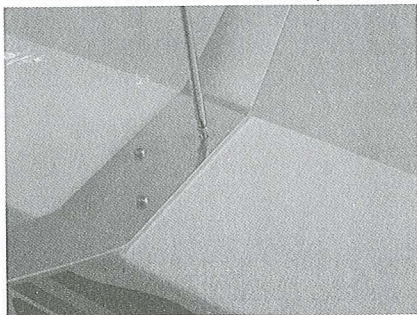


Squeeze epoxy into the holes for the hinges as already described and fit the rudder again.

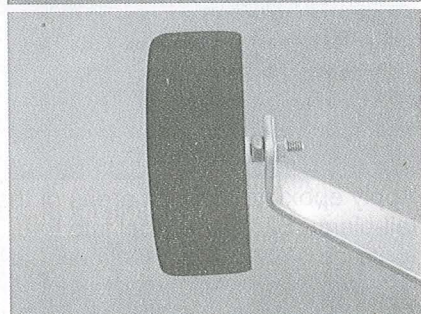
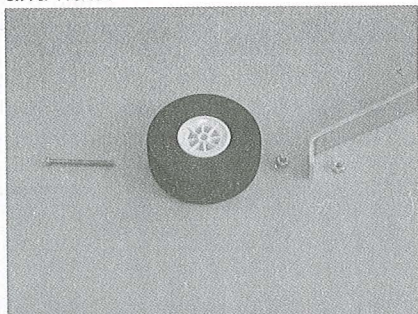


Place the main undercarriage on the underside of the fuselage in the stated position and set it at right-angles to the fuselage centerline.

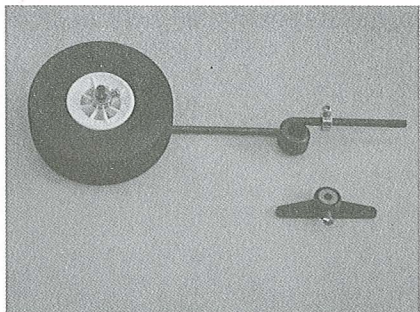
Mark the position of the fixing screw holes and drill them 4mm ϕ .



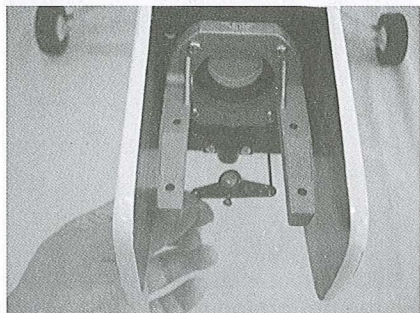
Attach the main undercarriage to the fuselage using the screws washers and nuts.



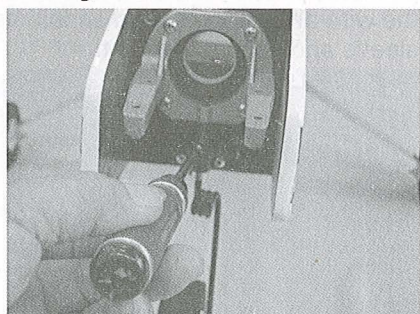
Slip the wheels on the wheel axzles and tighten the nuts to the point where the wheels just rotate freely. Secure the screws with loctite.



Fit the third wheel on the noseleg unit and secure with a collet and screw. Fit the second collet on the long shank of the undercarriage unit. Fit the third screws in the noseleg steering arm.



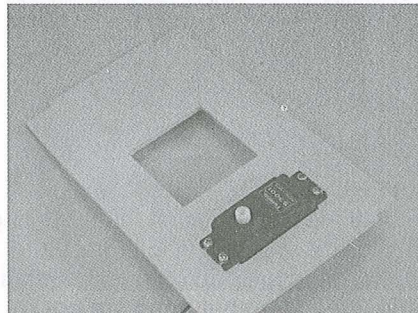
Connect the pushrod to the steering arm. Slip the pushrod into the fuselage from the front.



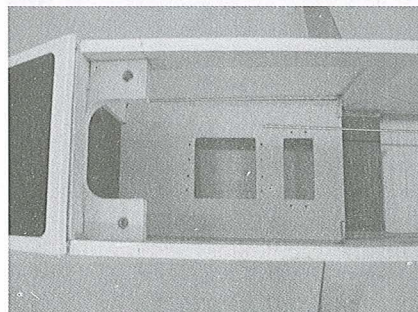
Insert the noseleg unit in the noseleg bush from the underside, and fit the steering arm at the same time.



Pack up the fuselage in such a way that the model is standing perfectly upright. Adjust the position of the collet and steering arm until the noseleg is securely held. Tighten the screws.

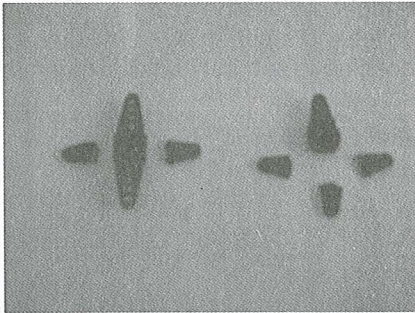
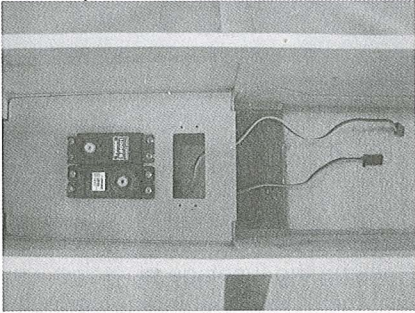


Adjust the servo plate to fit your servos if necessary, and drill the holes for the servo retaining screws. Note: drill the holes for the throttle servo retaining screws at this stage.

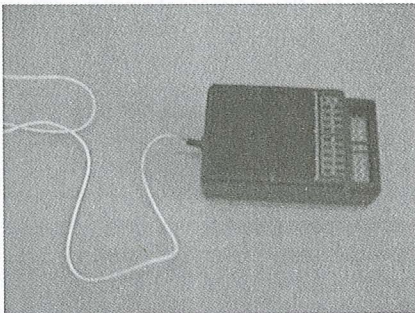


Glue the servo plate in the fuselage. Check from the transmitter that the

servos are at neutral, then remove the output discs.

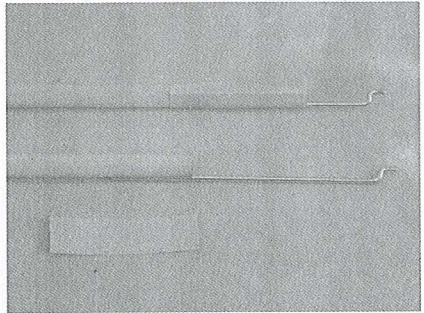


Install the servos using the mounting hardware supplied with them. Cut down the cruciform output levers as shown. The output arms are not fitted permanently until the pushrods have been completed.

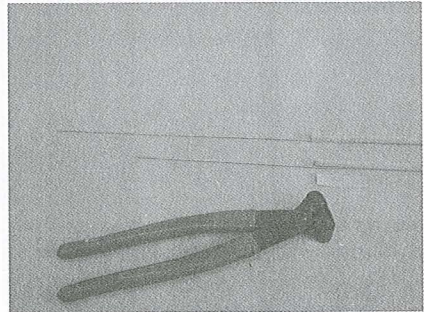


Unwind the flexible wire aerial attached to the receiver. Mark the strain relief from a spare piece of servo output arm and thread it onto the aerial. The receiver is not

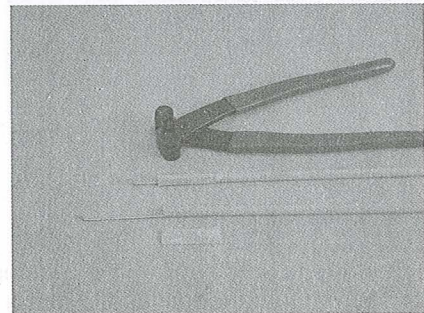
installed permanently until the power system has been installed.



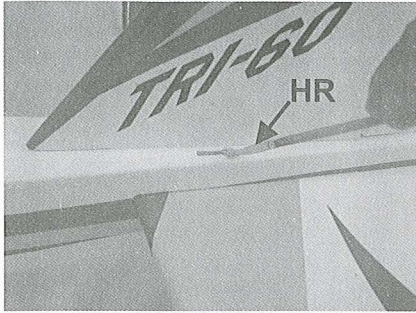
View of pushrod components. Cut the heat-shrink sleeving into four pieces each 50mm long.



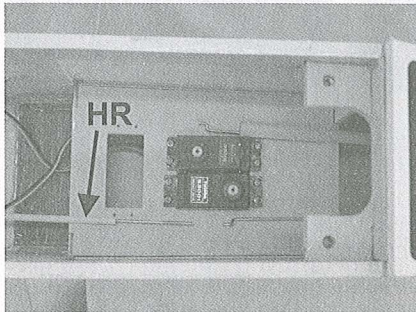
Fit the preformed pushrods and into the wooden pushrods. Slip a piece of heat-shrink sleeve onto each pushrod, position the sleeve over the wire and apply heat to shrink the sleeve and secure the joint.



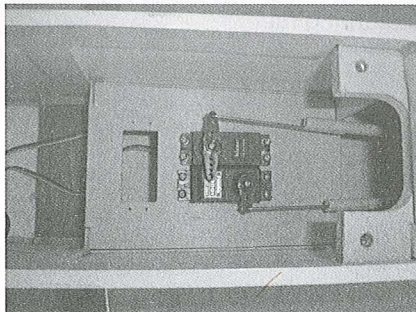
Fit the wire pushrods and secure with heat-shrink sleeves as before.



The pushrods are fitted into the fuselage with the help of the jig tube HR. Slip the tube through the rear slot for the rudder pushrod and slide it forward into the fuselage. Fit the tail end of the rudder pushrod into the tube and pull the tube back from the tail end until the wire pushrod end exits the slot.

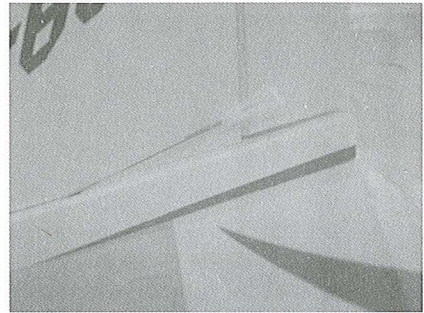


Install the completed elevator pushrod in the same way.

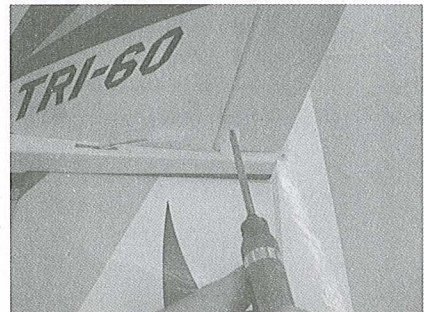


Connect to the servo output arms to the pushrods. Fit the output arms on

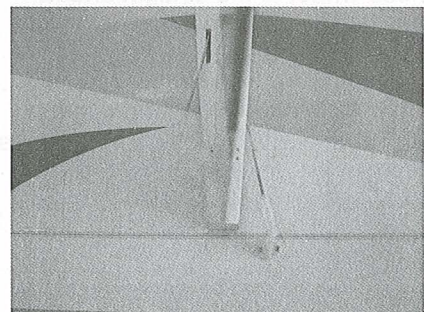
the servos in the position shown in the plan view and fit the retaining screws.



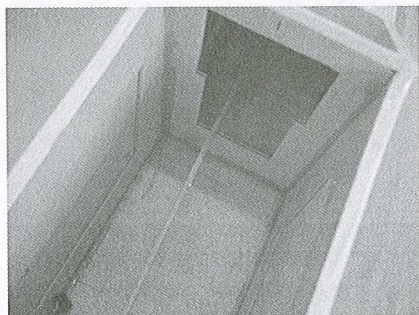
Screw the clevises on the threaded pushrod ends.



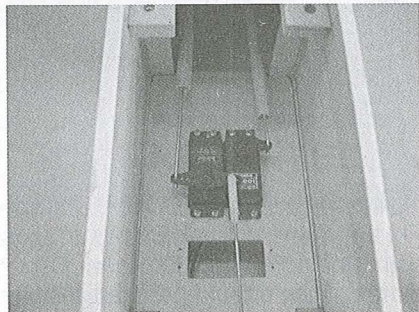
Fix the horns to the control surfaces using the screws and spreader plates. They should be fitted exactly in line with the pushrods. Check that the linkage holes in the horns are exactly in line with the control surface hinge axis.



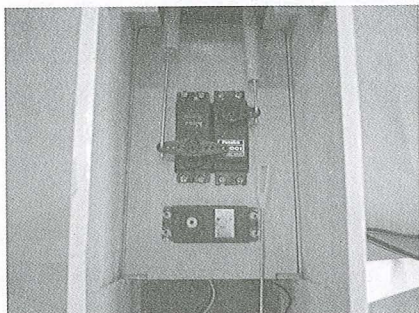
Connect the clevises to the horns. Adjust the linkages accurately by screwing the clevises in or out.



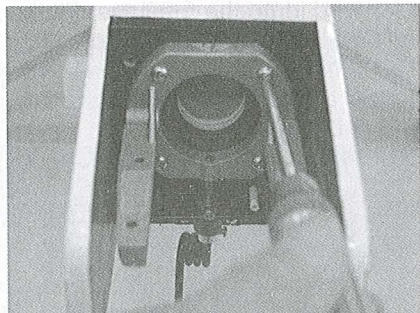
Cut the guide tube to length and slip it onto the nose gear steering pushrod from inside the fuselage. Push it through until it appears on the front side of the nose bulkhead.



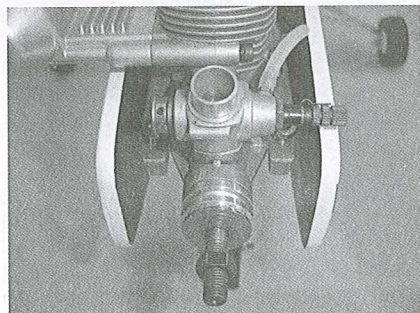
Screw the clevis on the inside end of the pushrod. Check that the rudder is at centre, then set the nose-wheel to the straight ahead position and connect the clevis to the servo output arm, on the opposite side to the rudder pushrod. Check that the nose gear steering arm is at right-angles to the fuselage centerline. Glue the guide tube to the fuselage on the inside; it should end flush with the front of the nose bulkhead.



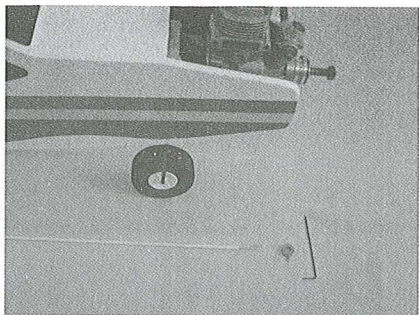
Cut down the cruciform output lever. Install the throttle servo using the mounting hardware supplied with the servo.



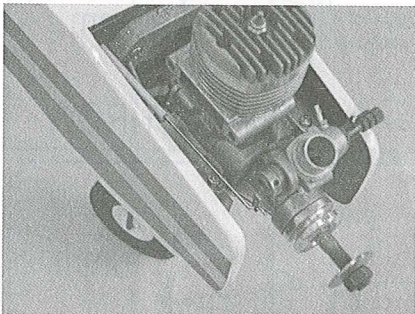
Attach the motor mount to the front face of the fuselage using the screws. Secure the screws with Loctite. We recommend that you apply sanding sealer or fuel-proofer to the inside of the fuel tank compartment to prevent the wood absorbing fuel.



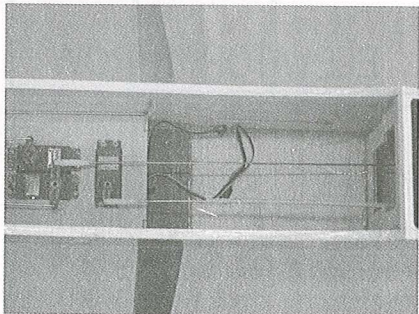
Install the glowplug motor using the screws and the plates.



The guide tube for the throttle pushrod is cut from the remainder of the jig tube HR. Cut the tube to length. Loosen the throttle arm on the carburetor. Slip the pushrod into the guide tube. Connect the pushrod to the carburetor throttle arm.

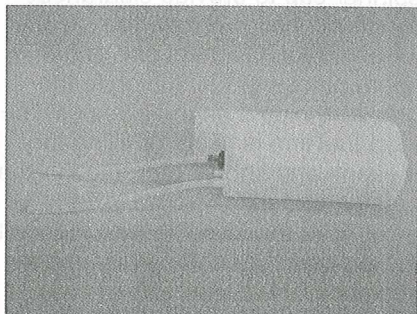


Slip the completed pushrod in the fuselage and fix the throttle arm.

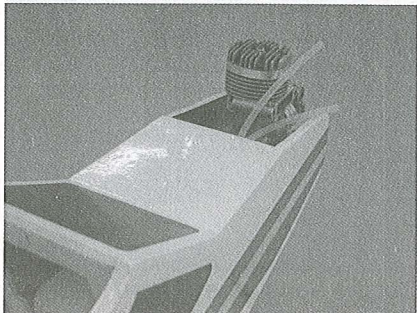


Connect the clevis to the cruciform output lever. Set the carburetor barrel to centre and the servo to neutral. Fix the cruciform output

lever to the servo. Glue the guide tube to the inside of the nose bulkhead.



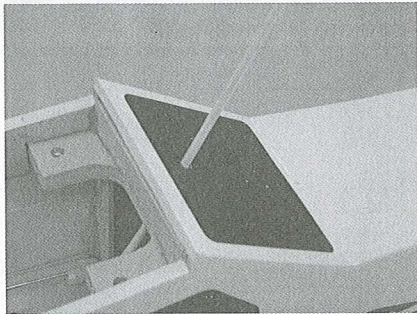
Assemble the fuel tank.



Install the fuel tank and sealing plate in the fuselage, threading the fuel lines forward as you do so. Shorten the feed line (from the clunk weight) to the point where it can easily be connected to the carburetor needle valve, but without requiring sharp bends. Fix the fuel tank with foam rubber.



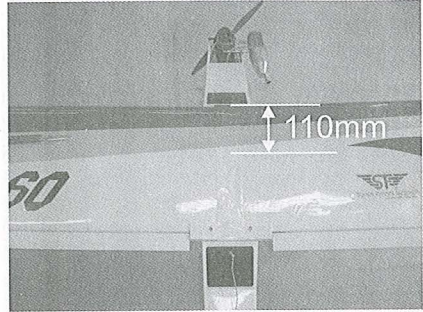
Fit the propeller and spinner on the motor. You may need to trim the spinner cap to provide clearance for the propeller. Screw the silencer to the motor. Connect one of the spare pieces of fuel tubing to the pressure nipple on the silencer. The third fuel line is used for filling the fuel tank and should be routed to the outside through the cowl. After you have filled the fuel tank for a flight, fit the screw in the end of this tube to seal it.



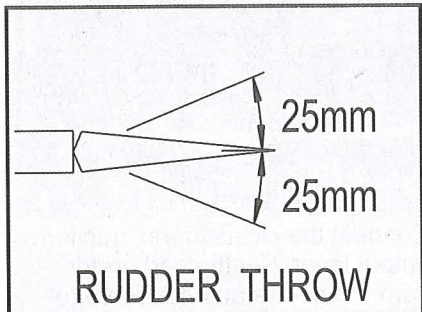
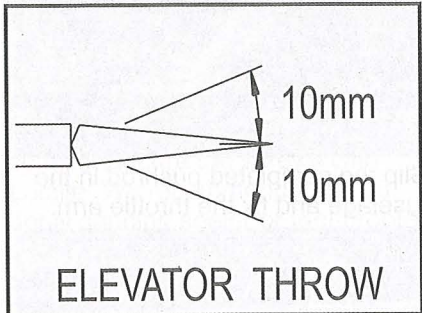
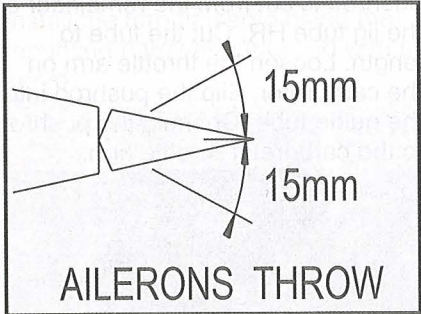
Cut the aerial sleeve from the jig Tube HR , drill a hole in the top of the fuselage and glue the sleeve in it.



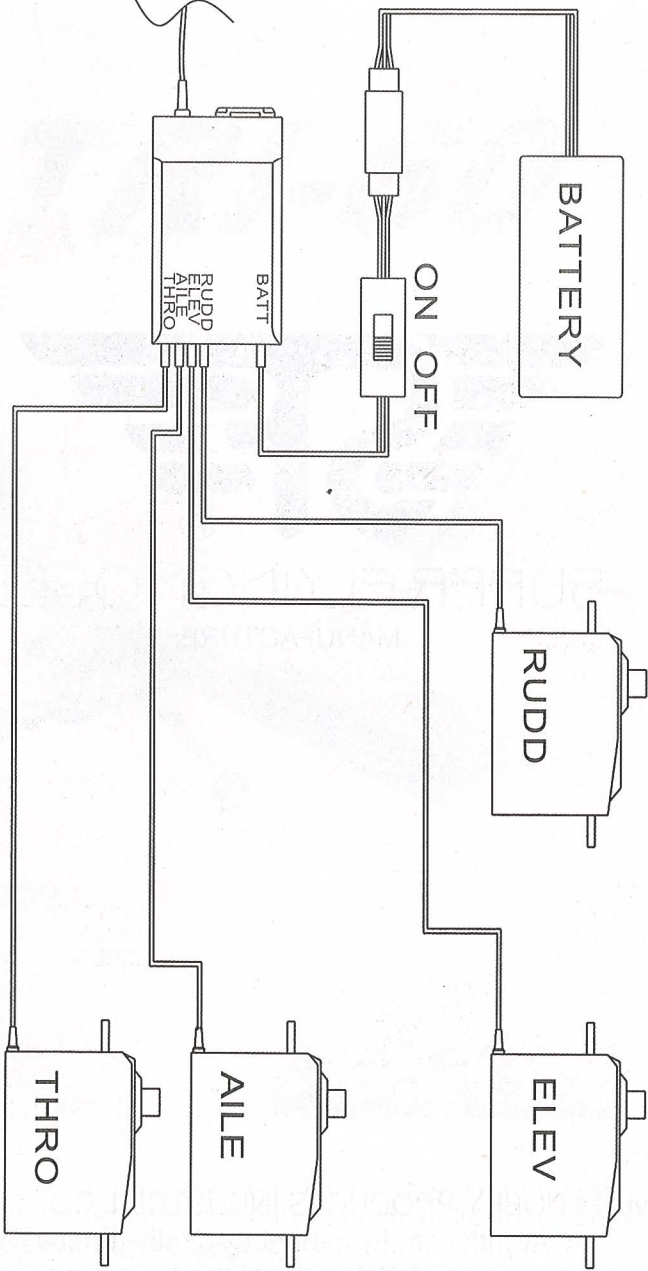
Fix the switch in the left-hand fuselage side. The left-hand side is best because it is remote from the exhaust and use 4x45mm screws (2 pcs) and 4x10 washers (2 pcs) to secure the main wing in place.

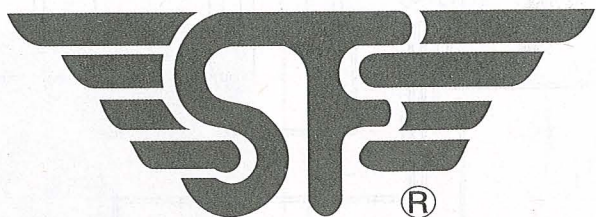


CG is 110mm from the leading edge.



Cable connection diagram





SUPER FLYING MODEL
MANUFACTURE

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