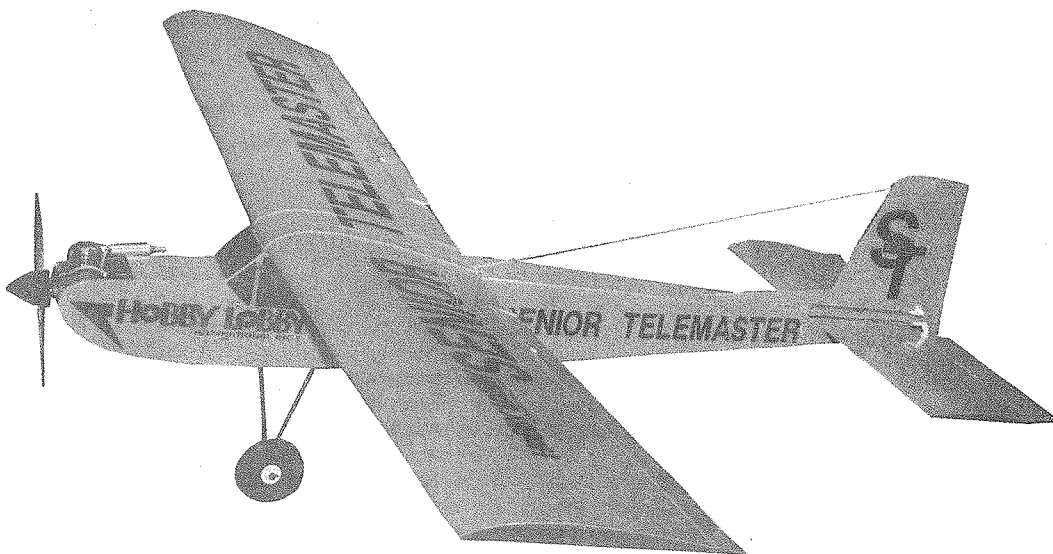


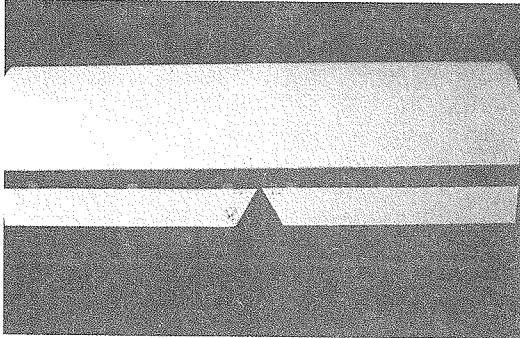
HOBBY LOBBY
INTERNATIONAL, INC.

SENIOR TELEMASTER



WING SPAN	95"
WING AREA	1330 SQ. IN.
RADIO	4 CHANNEL
ENGINE	40-60 (2C)

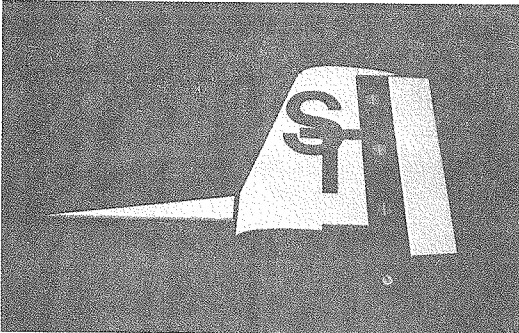
STEP 2



ELEVATOR AND HORIZONTAL STABILIZER ASSEMBLY

Following the same procedure as outlined in step 2, attach the elevator hinges to the horizontal stabilizer. **NOTE: BE SURE TO REMOVE ALL EXCESS EPOXY.** After the epoxy cures work the hinge until movement is free.

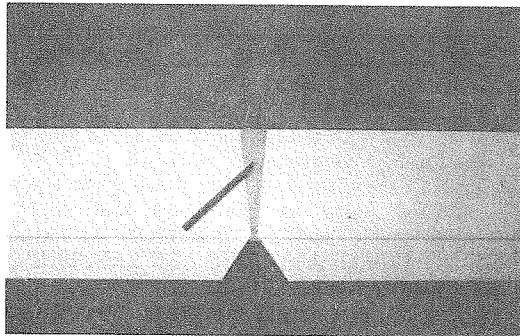
STEP 3



RUDDER AND VERTICAL STABILIZER ASSEMBLY

Following the same procedure as outlined in step 2, attach the rudder hinges to the vertical stabilizer. **NOTE: BE SURE TO REMOVE ALL EXCESS EPOXY.** After the epoxy cures work the hinge until movement is free.

STEP 4



PREPARATION OF HORIZONTAL & VERTICAL STABILIZER

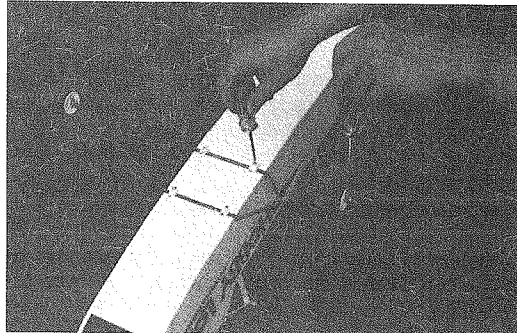
The following steps identify the preparation necessary before epoxying the horizontal and vertical stabilizers to the fuselage.

1. Lay the horizontal stabilizer onto the notch at

the rear of the fuselage and center it evenly on both sides.

2. Hold stabilizer firmly after centering. Using a sharp pencil make a mark along both sides of the top of the horizontal stabilizer next to the fuselage sides.
3. Apply epoxy in an even coat to the non-covered section of the horizontal stabilizer. Center the stabilizer and position in place on the fuselage. Secure with T-pins and allow to cure. **NOTE: RECHECK FOR ALIGNMENT TO THE MAIN WING. WIPE OFF EXCESS EPOXY THAT SQUEEZES OUT.** Allow epoxy to cure.
4. Trial fit vertical stabilizer into the slot in fuselage. Ensure that it is 90 degrees angle is obtainable to the horizontal stabilizer. Adjust as necessary. **NOTE: THE ALIGNMENT IS VERY IMPORTANT FOR PROPER FLIGHT PERFORMANCE.**
5. Apply epoxy to the uncovered portion of vertical stabilizer and insert into the slot in the fuselage. **NOTE: RECHECK FOR A 90 DEGREE ANGLE, WIPE OFF EXCESS EPOXY AND ALLOW TO CURE.**

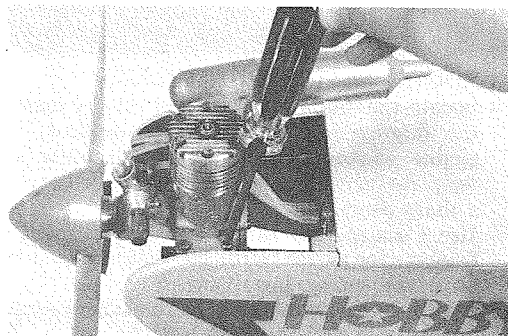
STEP 5



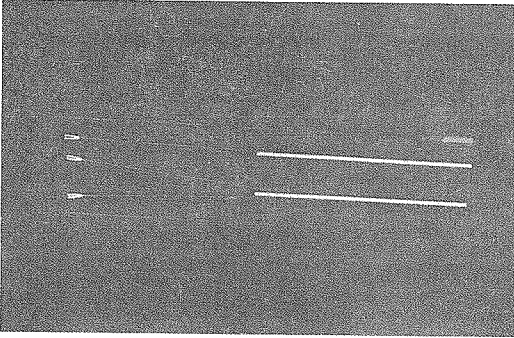
LANDING GEAR ASSEMBLY

1. Locate the landing gear slots in the bottom of the fuselage. Using a sharp razor knife, remove the covering film from the slots area only.
2. Insert the struts into the slots and up into the pre-drilled holes. Position the 2 retaining straps over the slots and drill holes with a 1/16" drill bit. Using the supplied screws, mount the struts.
3. Place the wheels on the ends of the struts and secure them with the supplied wheel collar set screws.

STEP 6



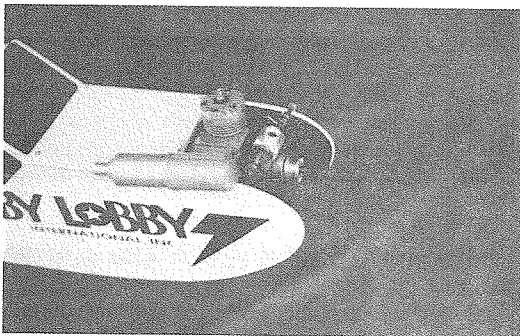
STEP 11



ASSEMBLY OF RUDDER AND AILERON PUSH ROD

1. To determine the length of both rudder and elevator push rods, place the threaded steel rod overlapping 1 inch on the end of the dowel and temporarily scotch tape in place.
2. Temporarily scotch tape the plain (non-threaded) rod over the opposite end of each dowel rod with 1 inch of overlap.
3. Position the push rods along the outside of the fuselage, lining them up with the servo and control horn. Adjust for length, allowing for making "Z" bends in the servo end of the rods.
4. Make an "L" bend in each wire the length of the diameter of the wooden push rod at the ends of the plain steel control rod. Mark the position of the "L" on the wooden push rod (approximately 3/4" from the end).
5. Drill holes in the wood push rods at the position of the "L" marks. Insert the short bend of the steel control rods into the holes and epoxy them flush and parallel to the center axis. Allow the epoxy to cure.
6. Remove any excess steel control rod protruding through the wooden push rod and file smooth. Position heat shrink tubing over this area and using a heat gun, shrink the tubing.
7. Repeat steps 4, 5 and 6 for the threaded steel rod ends.

STEP 12



THROTTLE AND STEERING CONTROL ARM LOCATION

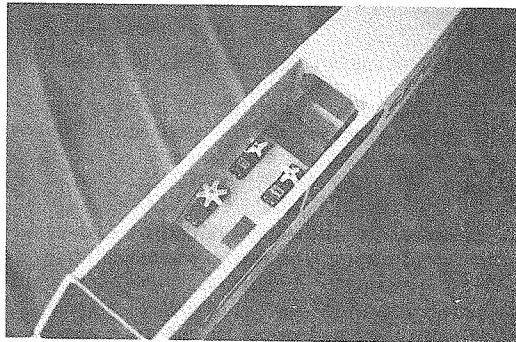
Read and understand step 16 prior to proceeding with this step. Try not to locate push rods in an area that will interfere with the fuel tank.

1. On the same side of the firewall as the engine's throttle arm, determine the best location for the

throttle control rod to exit. Mark this spot with a pencil. NOTE: THE CONTROL ROD MUST NOT RUB OR INTERFERE WITH THE MUFFLER OR ENGINE MOUNT. ALSO, THIS SHOULD BE THE STRAIGHTEST, MOST DIRECT ROUTE TO THE THROTTLE SERVO. (SEE PICTURE IN STEP 14).

2. Drill a small hole (3/32") through the bulkhead and firewall in the position determined in step 1.

STEP 13



ELEVATOR AND RUDDER CONTROL ROD EXIT LOCATION

1. Using control rods constructed in step 12, determine the best location for these rods to exit at the rear of the fuselage. This can be done by looking through the fuselage from the radio compartment and visually estimating these locations. NOTE: THE ELEVATOR CONTROL ROD SHOULD EXIT AT THE REAR OF THE FUSELAGE ON THE SAME SIDE AS THE ELEVATOR SERVO IS MOUNTED, IN THE MOST DIRECT PATH FROM THE SERVO ARM TO THE ELEVATOR CONTROL HORN. THE EXIT LOCATION IS USUALLY IN THE AREA JUST IN FRONT OF THE MOST REAR BULKHEAD.
2. Mark the exit location for the elevator control rod using a sharp pencil.
3. Determine the exit location for the rudder control rod following the same procedure as outlined above. NOTE: THE RUDDER CONTROL ROD WILL ATTACH TO THE INSIDE (FUSELAGE CENTER) OF THE RUDDER SERVO. THE CONTROL ROD WILL EXIT THE TOP OF THE FUSELAGE ON THE SAME SIDE OF THE FUSELAGE AS THE RUDDER SERVO IN A DIRECT LINE WHICH WILL BE MOVED TOWARDS THE TOP OF THE REAR FUSELAGE SIDE.
4. Using a sharp pencil mark the location for the exit of the rudder control rod.
5. Using the exit location marks, measure 3/4 inch fore and aft and drill a small hole (3/32") in each location. Cut and remove the piece between them to create the oval slots for the control rods to exit.

2. Place servo into wing aileron servo tray as shown. Mark mounting holes location. Remove servo and pre-drill holes for servo mounting screws. **NOTE: BE SURE SERVO HORN IS TO THE REARMOST POSITION AS SHOWN.**
3. Replace servo into tray and fasten securely with the servo wire pulled free to the side.
4. Determine the desired length of the two aileron control rods and attach the threaded ends with clevises to the control horns and the end with "Z" bends to the servo arm.
5. Temporarily attach aileron servo to the receiver aileron extension wire. Turn on the radio system and center the aileron servo per manufacturer's instructions. Fasten servo arm with servo arm control screw. **NOTE: BE SURE TO TIGHTEN AILERON SERVO ARM SCREW.**
6. With aileron servos in neutral, adjust the bottom surface of the ailerons to be parallel with the bottom surface of the wing.

STEP 18



INSTALLING ANTENNA

1. Pull antenna wire through antenna hole from step 9 and run it along the fuselage and out to the tip of the vertical or horizontal stabilizer to fasten the antenna to.
2. Insert a T-pin into the tip of the vertical or horizontal stabilizer. **NOTE: TIE A SMALL RUBBER BAND TO BOTH THE T-PIN AND ANTENNA WIRE TO FLEX IF WERE TO COME IN CONTACT WITH ANY OBJECTS AND AVOID DAMAGE TO THE ANTENNA WIRE.**

STEP 19



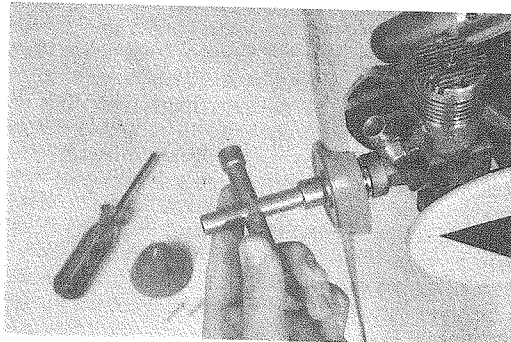
INSTALLING MAIN WING

1. Attach aileron servo to receiver.
2. Place main wing into position and secure to fuselage with 16 or more rubber bands. The best

method is to run the rubber bands in a crisscross pattern as shown.

3. Insert main dihedral brace into one half. Insert other dihedral brace into same wing half. Push other wing half fully on to both dihedral braces. The wing halves will be held together by the friction of the wing hold-on rubber bands.
4. Once wing is secure, check the wing alignment in relation to the horizontal and vertical stabilizer by viewing it from the front, rear, and top. Minor adjustments can be made by moving the wing slightly and re-securing it with rubber bands.

STEP 20



INSTALLATION OF SPINNER AND PROPELLER

1. Place spinner backplate onto the engine crankshaft up to engine drive hub/washer.
2. Place propeller onto engine crankshaft up to spinner backplate.
3. Place engine propeller washer and locking nut onto crankshaft. Tighten locknut securely onto crankshaft.
4. Position the spinner over the propeller with the notches aligning with the propellers and secure with 2 screws. Secure by inserting screws through spinner and into the spinner backplate. **NOTE: THIS SPINNER IS DESIGNED TO FIT MOST PROPELLERS. IF YOUR PROPELLER DOES NOT FIT EASILY INTO THE SPINNER NOTCHES YOU MAY NEED TO CUT OR SHAVE THE NOTCHES TO FIT. BE CAREFUL TO REMOVE THE SAME AMOUNT OF MATERIAL FROM EACH NOTCH.**

STEP 21

