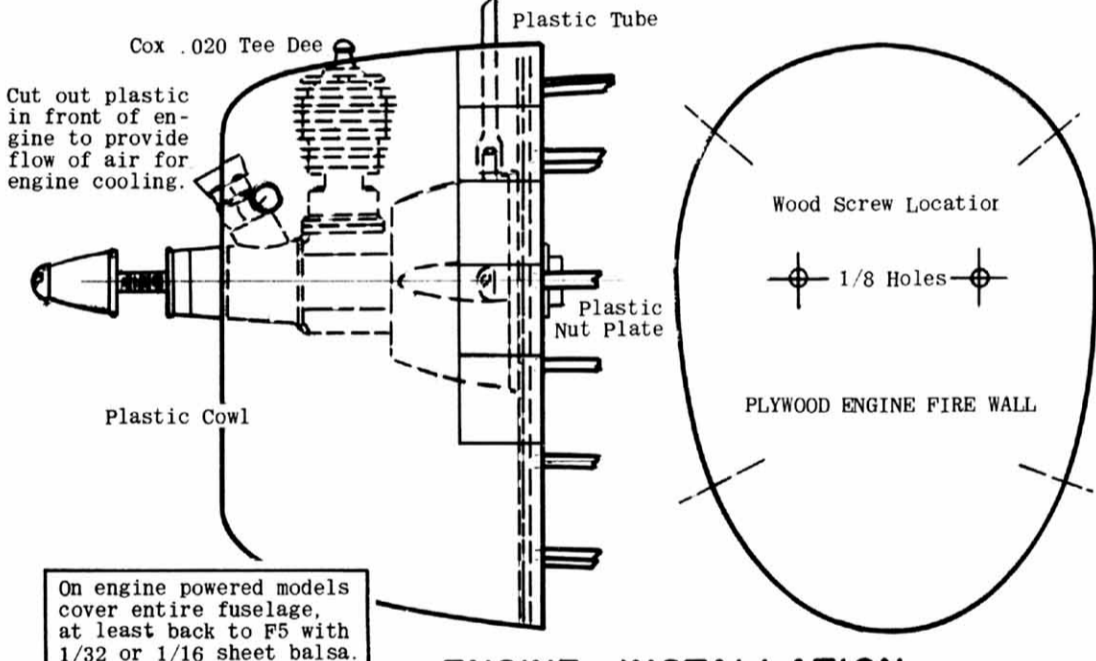


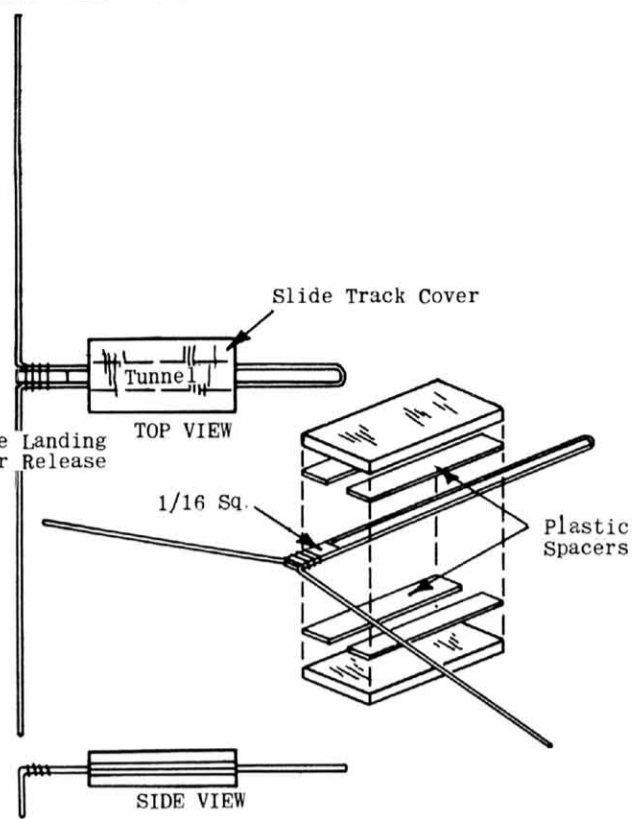
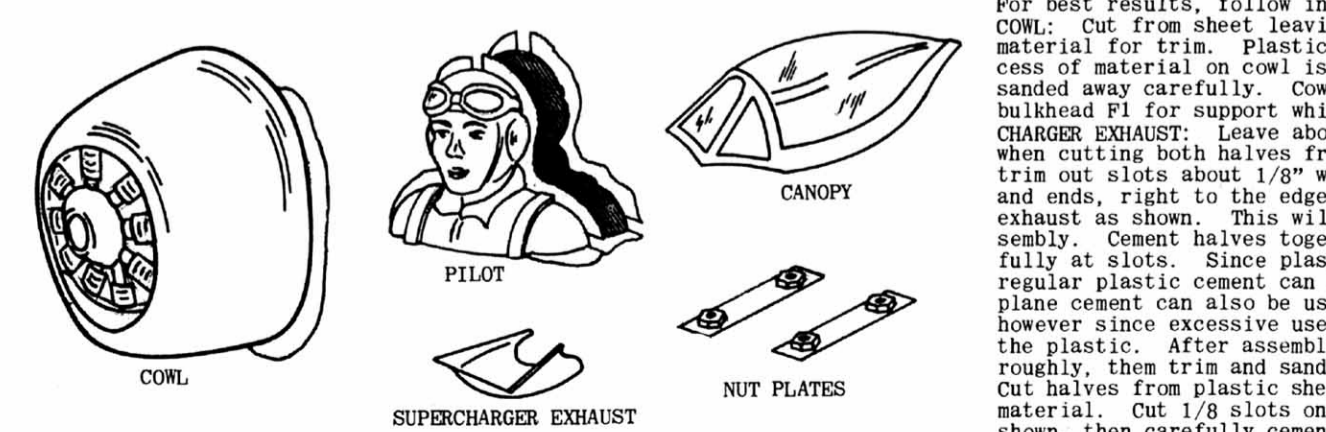
## LANDING GEAR INSTALLATION

Landing gears are operational in flight, on rubber powered models only. Installation is simple and action is positive, if directions are followed carefully. Cut out center keel L3 from F2 to F5, and at the same time cut off bottom of F3, leaving sides intact. Make hole and cement eyelet in center of bulkhead F6, directly above keel. Assemble landing gear Tee slide track as shown and described in detail note. Track (with landing gear release inserted) is now cemented securely to top of center ribs. Front of track is 5/16" back of front 1/16 square spar. Use two heavy coats of cement on this installation and allow to dry thoroughly, making sure release Tee slides freely inside track. Rear thread is inserted through eyelet, pulled snug, and tied securely to rear hook while hook is in vertical position.



## ENGINE INSTALLATION

Engine is used if model is being built for control line, free flight or radio. Engine and installation material not provided in kit. Drawing shows installation of Cox .020 Tee Dee Engine, however any other similar engine may be used. Obtain a piece of 1/16 plywood and cut engine fire wall as shown on full size drawing, drilling holes indicated. Mount engine to fire wall with #2 nuts and bolts. Cut plastic nut plates from molded sheet and secure cement to back of fire wall over nuts, drilling holes through, so that bolts can protrude. Use cement generously. Nut plate keeps nuts from turning, so engine can be removed by just unscrewing bolts from front. When dry, remove engine. Notch F1 if necessary to clear nut plates. Then secure fire wall to front of F1. Cut molded engine cowl from plastic sheet as described in detail note and fit over plywood fire wall and F1. Trim out top

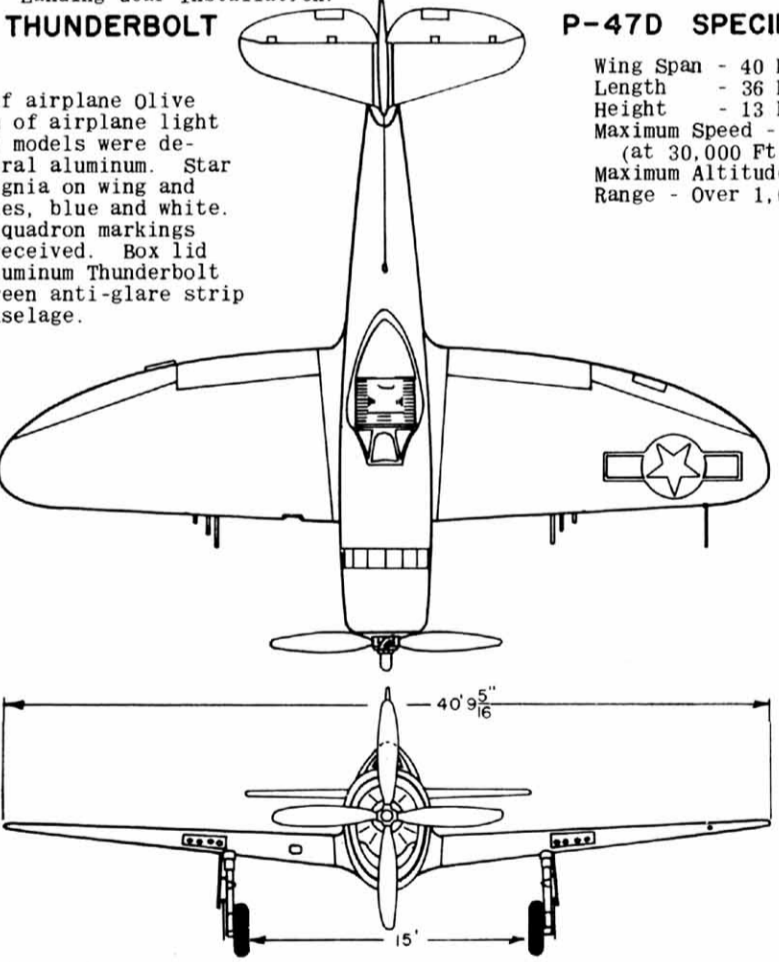


## SLIDE RELEASE DETAIL

Make main landing gear slide release by cutting two slide track covers 1/16 x 3/8 x 3/4 from scrap balsa, grain running as shown. Cut a strip of plastic (from plastic parts sheet) 1/8 wide, and cement a double layer to each side and between track covers to form tunnel as shown. Long U section of Tee shaped wire-landing-gear release should slide snugly yet freely in tunnel between plastic spacers. Allow to dry thoroughly. Cement a 1/4" length of 1/16 square balsa between wire on open end of wire-landing-gear release as shown. Allow to dry thoroughly, then trim flush on top and bottom. Wrap top or three turns of thread around very end to keep it together, coating knot with cement. When dry, insert into slide, and tie a 12" length of thread to rear. Use good grade of strong thread (not supplied in kit). Cement assembly into fuselage and complete installation of system as described in Operational Landing Gear Installation.

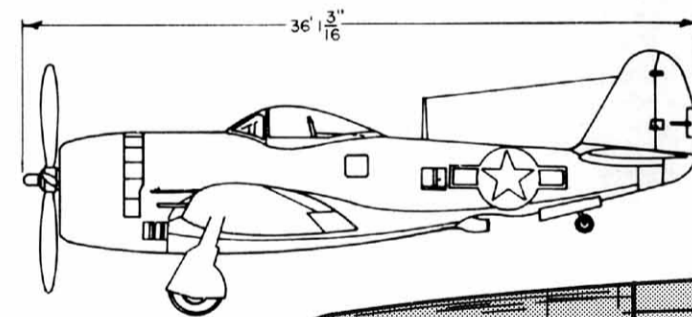
## REPUBLIC THUNDERBOLT

COLOR SCHEME: Entire top of airplane Olive Drab; bottom of airplane light grey. Later models were delivered natural aluminum. Star and bar insignia on wing and fuselage sides, blue and white. Individual squadron markings added when received. Box lid shows all aluminum Thunderbolt with dark green anti-glare strip at top of fuselage.



## P-47D SPECIFICATIONS AND COLOR SCHEME

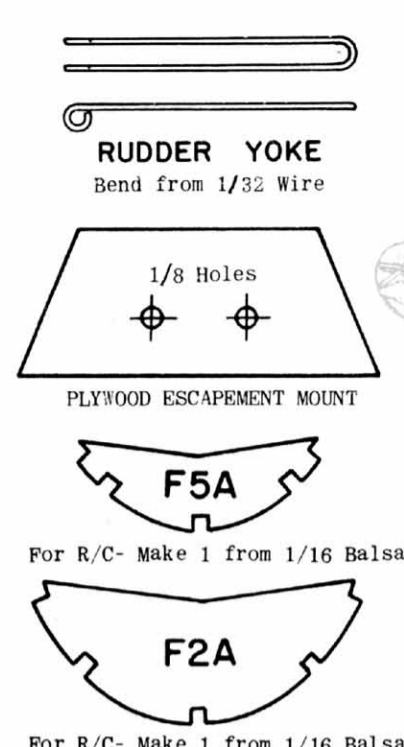
Wing Span - 40 Ft. 9-5/16 In.  
Length - 36 Ft. 1-3/16 In.  
Height - 13 Ft. 8-3/16 In.  
Maximum Speed - 433 M.P.H. (at 30,000 Ft.)  
Maximum Altitude - Over 40,000 Ft.  
Range - Over 1,000 Miles  
Engine - Pratt & Whitney R-2800, 2,000 H.P.  
Propeller - 12 Ft. 2 In. Dia.  
Weight Loaded - 1400 Lbs.  
Armament - 8 - 50 Cal. Mach. Guns  
Bomb Load - 2 - 1000 Lb.  
Rockets - 3 to 5 on each side



## PLASTIC PARTS DETAIL

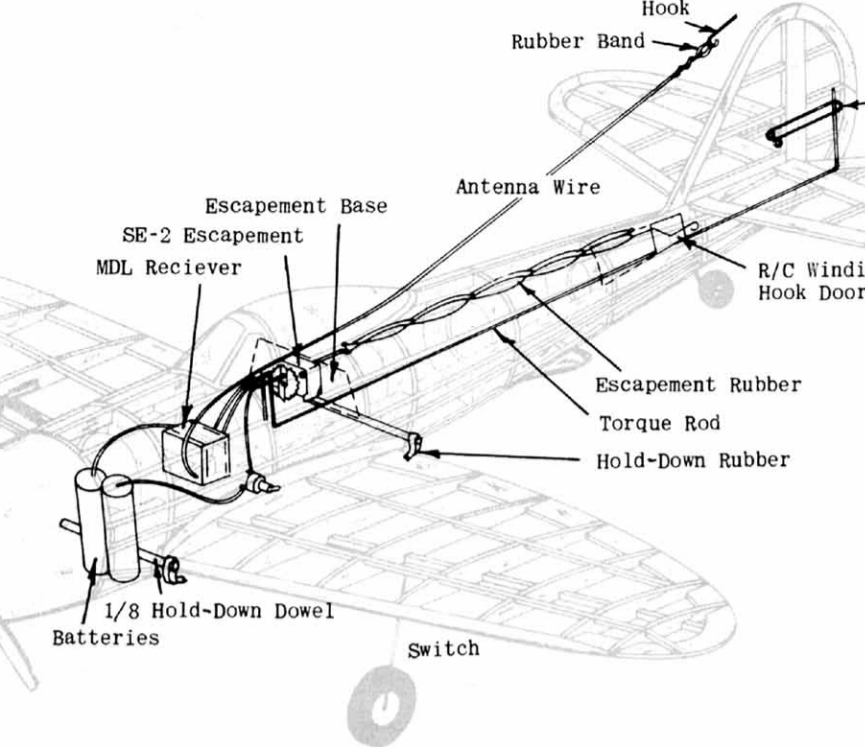
For best results, follow instructions carefully. COWL: Cut from sheet leaving about 1/16 of material for trim. Plastic trims easily. Excess of material on cowl is now trimmed and sanded away carefully. Cowl may be placed on bulkhead F1 for support while sanding. SUPERCHARGER EXHAUST: Leave about 1/8 excess material when cutting both halves from sheet. Carefully trim out slots about 1/8" wide on top & bottom and ends, right to the edge of the supercharger exhaust as shown. This will permit accurate assembly. Cement halves together, lining up carefully at slots. Since plastic is Polystyrene, regular plastic cement can be used, or model airplane cement can also be used. Use sparingly however since excessive use of cement may distort the plastic. After assembly, allow to dry thoroughly, then trim and sand off smooth. PILOT: Cut halves from plastic sheet, leaving about 1/8 material. Cut 1/8 slots on all four sides as shown, then carefully cement together in same

manner as supercharger exhaust. When dry, trim and sand smooth. NUT PLATES: Cut from sheet right along trim line and install as described in Engine Installation. PAINTING: Regular plastic model paint or enamel can be used. Model airplane dope can be used only if applied in LIGHT spray coats, allowing plastic to dry thoroughly between coats. Excessive use of dope may deform plastic. Parts may be used red as provided or if painting parts a lighter color than red, apply a light coat of silver, followed by a light coat of white before painting final color. Darker paints may be applied directly to red plastic. When cementing parts in place on model, use light coats of cement applied sparingly. If necessary, use more than one coat, but DO NOT APPLY A THICK COAT AT ANY TIME. Install cowl as described in either Final Assembly Note or Engine Installation. Cement finished supercharger exhaust to bottom of fuselage behind F6, and pilot against back of cockpit, as shown on side view.



## RADIO CONTROL INSTALLATION

Test models used, and drawing shows, Citizen-Ship MDL Receiver, SE2 Escapement; used with SPX Transmitter. This equipment and other material necessary is not provided in kit. On radio models wing is removed. Pin, BUT DO NOT CEMENT, wing into position. Make F2A & F5A using patterns. Cement F2A to bottom of leading edge, and PIN it to F2. Do likewise with F5A on trailing edge. Since wing is removable, be sure cement is not accidentally placed on adjoining bulkheads. Complete bottom of wing installation as described in Final Assembly Note, however all stringers are cut through at seams between double bulkheads. Cement a 2-3/4" length of 1/8 dowel across front of F2 and rear of F5 on top of stringer in line with bottom of L6. Dowels protrude evenly from fuselage on both sides. Remove center keel L3 between F2 and F3. For strength and durability, it is recommended that front half or entire fuselage be covered with 1/32 sheet balsa. Balsa is also covered with silkspan as described in note. Cut rudder apart at location shown by dotted lines, then assemble together with cloth hinges. Bend wire from 1/32 wire and

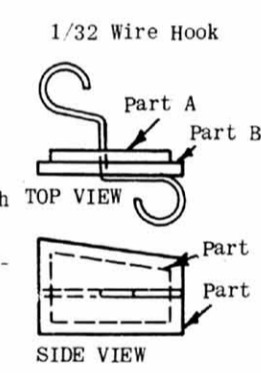


**CAUTION:**  
Do not fly control line models in the vicinity of electric power lines!

**HINGE DETAIL**  
Use cloth tape for hinges. Cement only on top and bottom, alternating hinges as shown above. Keep cement out of hinged area between sections.

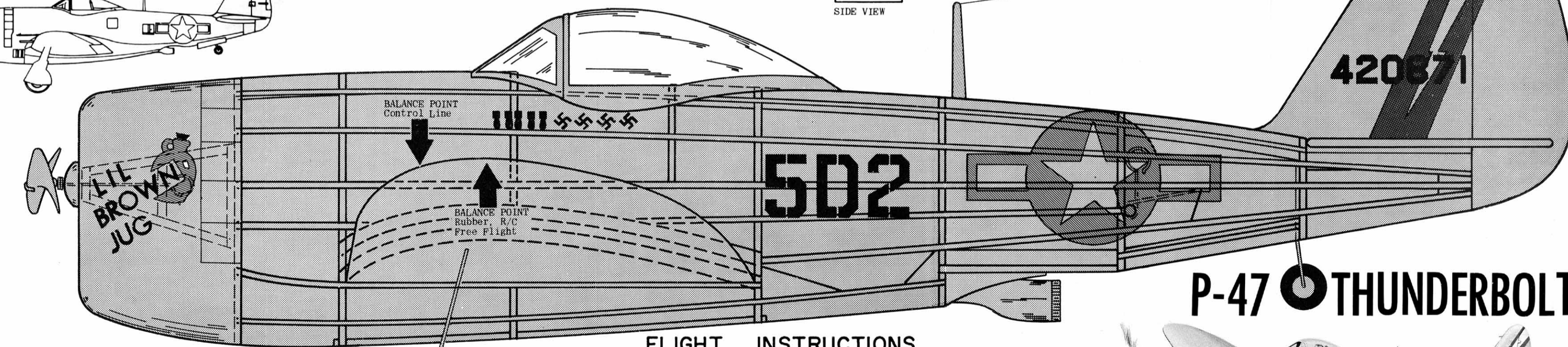
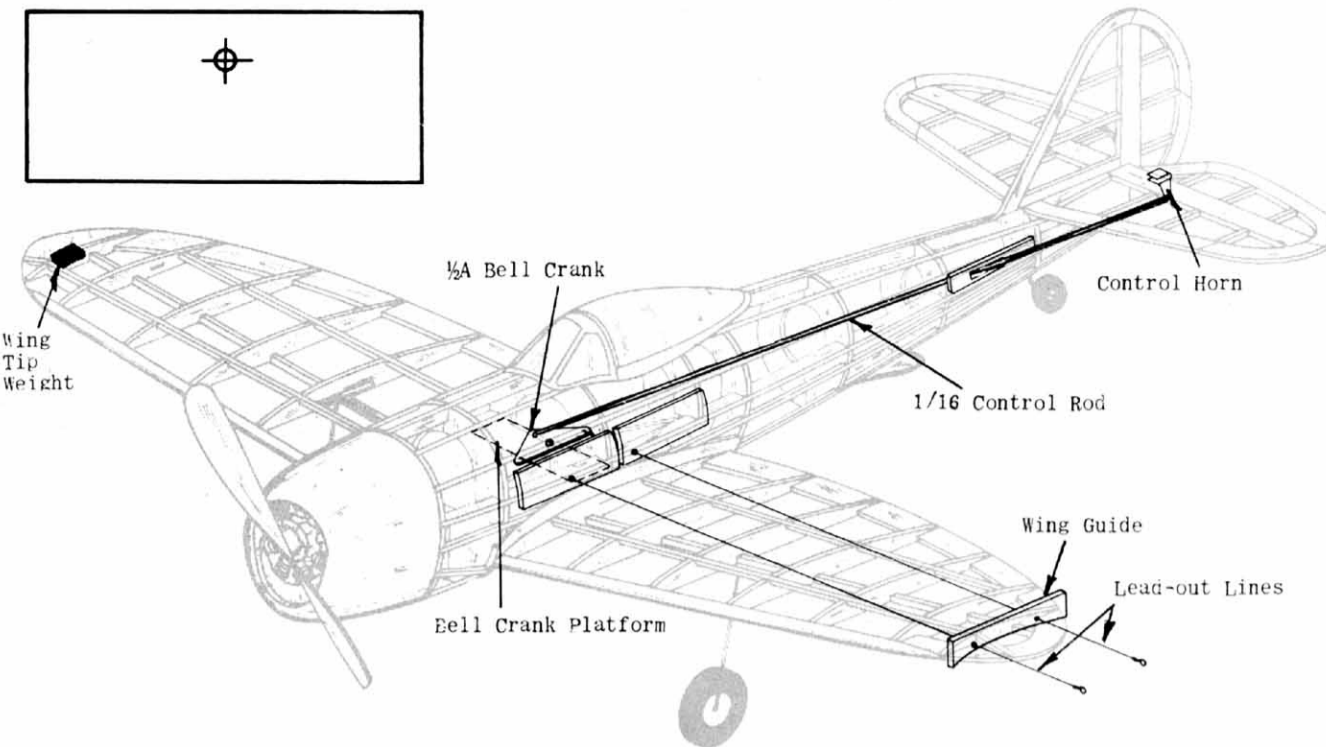
## R.C. WINDING HOOK DOOR

Cut out stringer above side keel between F7 and F8 and inset 1/16 balsa flush. Cut out section to shape of part A (see sketch) and cement it to a piece of 1/16 balsa cut to shape of section B, grain running crosswise, to form door. Bend half of hook shown from 1/32 wire and push straight end through door. Bend hook in other end and cement securely to door in position shown. Place loop of rubber between escapement and inner door hook.



## CONTROL LINE INSTALLATION

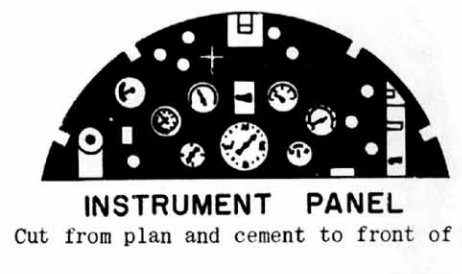
Materials required are not provided in kit. Install controls after Fuselage Step 4 has been completed. Obtain 1/16 plywood and cut out bell crank platform using drawing provided, drilling hole indicated. Fill in area between F2 and F4, from side keel L5 to stringer above it, with scrap 1/16 sheet balsa, flush with outside of frame; also area from F7 to F8, between L5 and stringer above, in same manner. Cut 1/8 slot in rear for control rod as shown. Mount 1/2A bell crank to plywood platform as described in installations that come with bell crank. Cut two 15" lengths of lead-out lines and fasten them to bell crank. Cement platform securely in fuselage against front of F3, and top of L5's. Lead-out lines come through fuselage at holes drilled for them as shown. Use cement generously, applying at least two coats on installation. Cover fuselage with tissue as described in detail note. Cut stabilizer in half through wide main spar, as indicated by dotted lines. Round edges and install control horn at location shown on drawing, then join together with cloth hinges shown. Cement stabilizer horizontally to top rear of fuselage. Tape elevators in neutral position (in line with stabilizer, neither up or down). Obtain a piece of 1/16 music wire at least 15" long for control rod, and bend 1/4" of one end at right angle. Loosen bell crank and insert rod from bottom with spur vertical, then secure



## FLIGHT INSTRUCTIONS

When model has been completed, it must balance 1" from front of wing at wing tip ribs W7 as shown on side view. DO NOT ATTEMPT TO FLY MODEL UNTIL BALANCE HAS BEEN ACHIEVED, add weight if necessary. Model is now ready. Pick a calm day for test flying. Wind propeller clockwise approximately 100 turns and launch into any prevailing wind slightly nose down at a point on the ground approximately 50 feet ahead of you. If model noses up and then falls off and stalls, (AFTER MODEL WAS BALANCED) then bend elevators down slightly using hot breath in same manner as steam. If model dives, bend elevators up. If model veers too much to one side, bend rudder to opposite side. Take offs require more power and therefore more turns in main motor. For longer flights and competition it is recommended that the loops of rubber be lubricated

with model lubricant (available at most hobby shops) or Castor Oil. Apply sparingly AND KEEP OFF KNOT OR IT WILL COME UN-DONE! Use winder which you can make by tightening hook into hand drill. To store winds in motor, stretch rubber out three to five times original length, then proceed to wind, moving slowly back to model. Feeling rubber from time to time to be certain it does not get so taut that it breaks. Upon reaching the nose, motor should be completely wound. When replacing rubber motor, purchase contest grade T56 brown rubber at your favorite hobby shop. Engine powered free flight models are tested and flown in same basic manner as above and is described in Flight Instructions at end of Radio Control Installation Note. GOOD LUCK AND GOOD FLYING!!!



**INSTRUMENT PANEL**  
Cut from plan and cement to front of F3



**Sterling MODELS**  
PHILA. PA. USA

KIT A-4  
WING SPAN 22"

