

SQUIRREL High Performance Model Airplane

Safety - Do not chase plane onto roadway or other dangerous places. Do not climb trees, buildings, posts or any structure. Children need supervision. Do not put parts in mouth. Choking hazard. Keep propeller away from eyes.

Rubber-Power.com
Free Instruction video, tips & support at Web
Share experiences, comments, photo & video with designer@rubber-power.com.

Flight Distance: 10-200m **Weight:** 10g **Calories:** 0
Assembly Time: Expert 10m, Beginner 40-60m

Apply very little tacky glue w. toothpick unless glue stick is stated. Place balsa **against table** while applying glue stick.

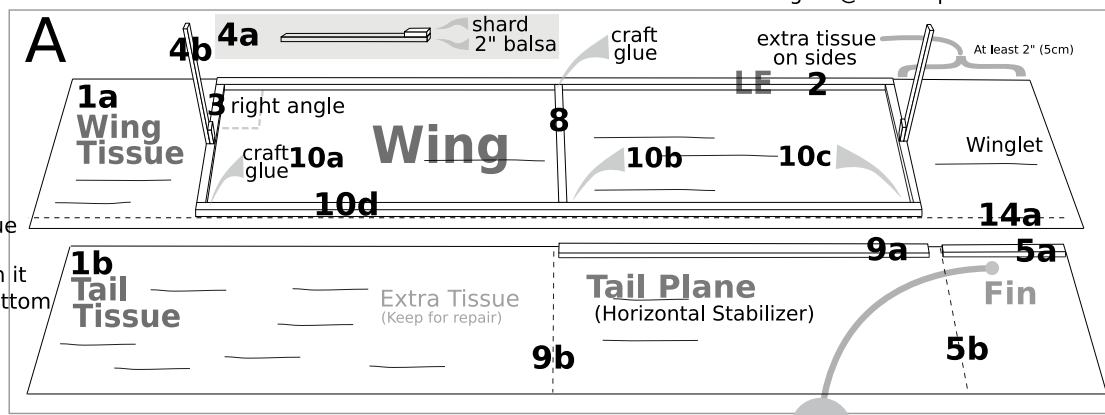
0 - Visit www.rubber-power.com

1 - Lay **two** strips of tissue down. See **step 1a/1b (fig. A)**.

2 - Locate **one** thin 12" strip for Leading Edge (LE). Glue stick it to furthest tissue edge leaving at least 2" (5cm) extra tissue on sides.

3 - Add craft glue to end of 2" strip to join it to back of LE at right angle. Glue stick bottom to stick to tissue. Repeat other wing tip.

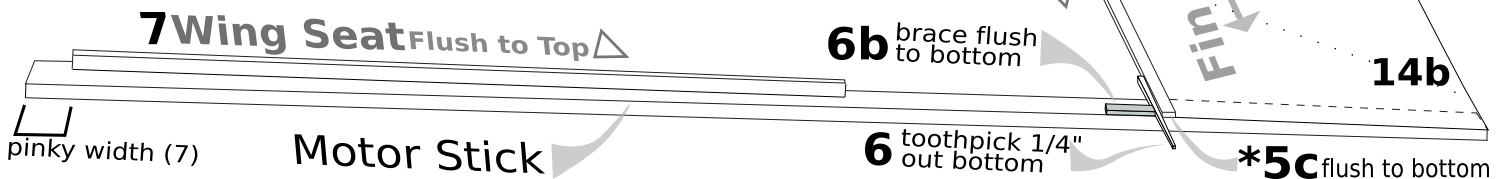
4 - Glue balsa shard <1/2", (1cm) to 2" strip (see **4a**). Glue assembly on top (see **4b**). Repeat for other side.



B Motor Stick Assembly

Front Back

Top Bottom



5 - Glue 2" strip to edge of tissue for fin (see 5a). Cut with scissors (5b). Glue fin to 12" (**thick**) motor stick (fig. B, 5c). Tissue runs to back of motor stick.

6 - Break toothpick in half. Glue thick piece to motor stick and front of fin (fig B). It hangs underneath about 1/4" (5mm). Glue balsa shard (<1/2", <1cm) brace in front of tooth pick.

7 - Glue 6" (13cm) strip to motor stick to form wing seat. Glued to **side** but flush with **top**. It is a pinky width from front of motor stick.

8 - Add glue to end of 2" wing center and glue stick to bottom (fig. A). Use 6" strip to find center of 12" wing.

9 - Craft glue 6" strip to tissue (9a). Snip off (9b). Add **glue to bottom of fin** just behind toothpick (fig C, 9c). Add glue all the way to back of motor stick. Tissue faces motor stick, glue tail plane. For glue drying, balance motorstick on table edge so tail plane is in the air.

10 - Add glue to back of strips (see 10a, 10b & 10c, fig. A). Add glue stick to 12" strip. Glue in place. **DO NOT CUT** extra tissue at sides.

11 - Glue 4" (10cm) wing handle fig. D)

12 - Glue shard (<1/2", <1cm) to **bottom of wing** as shim. Side with shim becomes front of wing (fig. E).

Mini Inspection

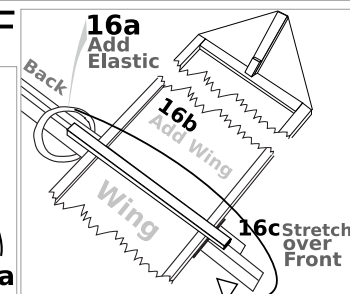
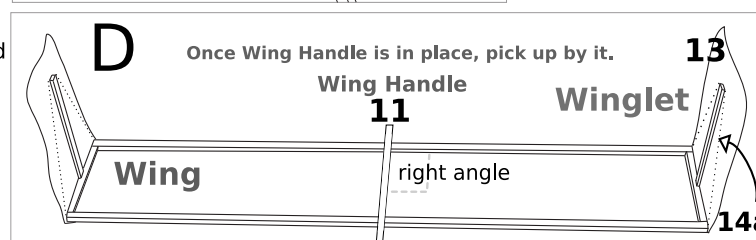
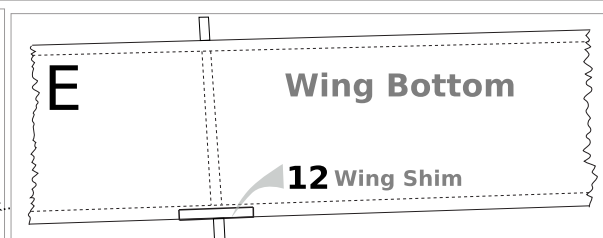
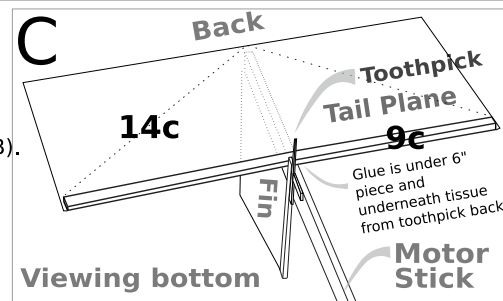
- Are the four joints at the four corners of the wing glued securely?
 - Is the tailplane glued securely to the Motor Stick?
 - Are the winglets secure?
- If not, glue again and wait till dry. Use scrap balsa to splint joints if desired.

13 - Holding balsa upright with finger and add glue to outer side (Fig. D). While holding balsa upright press tissue against it from bottom up. Repeat other side.

Add Cover to any glue containers.

14 - Snip extra tissue from winglets (fig D), fin (fig B) and tail plane (fig C).

15 - Tie 20" (45cm) elastic into a 10" loop using square knot (if not already tied). Hook 10" loop to metal loop at back of propeller. The knot goes furthest from propeller. Put propeller down.



16 - Loop elastic onto motor stick (16a, Fig. F). Place wing on wing mount with shim in front. Shim faces down and winglets face up (16b). While holding wing in place by wing handle, stretch elastic over top of wing and back onto front of motor stick (16c). Move wing carefully so that it's about 1" from the front.

17 - Mount propeller on motor stick. Prop. shaft below motor stick. Large elastic will hang down.

Pictures - Submit pictures to Web site and share with friends.

Handling - Pick up a Squirrel by **nose**. When retrieving from bushes or other predicaments, move slowly and carefully. Store in small box with wing removed or larger box with wing installed. Avoid water or moisture.

Winding - Wind propeller clockwise from front with one hand while using the other hand to hold motor stick **underneath wing**. If elastic is too long to hook on toothpick prewind it as follows. The hand that is pinching the plane from underneath can also hold the elastic band so that it is stretched from back of propeller. 30-40 turns can now be added till the elastic is knotting up. Then carefully hook the elastic on the toothpick. You will need about 150-200 turns for test flights and 400 turns for regular flying. Be careful, too many turns and the elastic can break causing damage.

Flying - If plane is new or has not been flown for a while it will need some trim flights (test flights) in order to find the right wing position. Start with a wing adjustment about 1" (2.5cm) from front. Test airplane with about 200 winds. Hold plane by motor stick **underneath wing** with one hand and use other hand to hold propeller. When launching, release propeller, then **wait 1 second** before launching gently. Launch level. If the plane fails to climb with 200 turns, move wing forward (perhaps 1mm at a time). If the plane chugs around with its nose in the air or stalls repeatedly, move wing back a bit.. Repeat launch with 200 turns and adjusting wing until it flies nicely. Then start increasing winds for each flight till you reach 400-500 turns. With care your Squirrel can last years. **Happy Flying!**

Tips - See video instruction at www.Rubber-Power.com.
-Flies best with no wind or <5km/h.
- Write your name and phone number on your Squirrel.
- Add tick marks to motor stick to note wing position once wing is adjusted.
- Decorate your Squirrel with different colored tissue, markers and ink stamping.
- Attach paper aileron to rear of either wing for turning. Also can attach paper rudder to leading edge of fin.

Supplies - Scissors, Tacky Glue (eg. Aleene's), Glue Stick **Materials** - 1/16 x 3/16" Balsa Strips: 2-12", 2-6", 6-2", 1-4", 4-1/2"; 1/8 x 3/8 x 12" Motor Stick, Toothpick, Propeller with mount (5-6"), 10" Elastic Motor Loop

