

Squirrel Workshop Preparation

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Use this sheet to prepare a Squirrel Workshop.

Updates to this instruction sheet are available at www.Rubber-Power.com.

Suggestions and improvements are very welcome!



Checklist

Squirrel Parts

- 1/16 x 3/16 x 12" bag (Wing LE and TE)
- 1/16 x 3/16 x 6" bag (Stabilizers)
- 1/16 x 3/16 x 2" bag (Ribs, Winglets, Fins)
- 1/16 x 3/16 x 1" bag (Shims)
- 1/8 x 3/8 x 12" bag (Motor Sticks)
- 1/8 x 3/8 x 4" bag (Wing Seats)
- 1/8 x 1/4 x 1/2" bag (Motor Block)
- Toothpicks
- Thread Spool
- #8 elastics
- Pre-cut Tissue
- Propellers with Hardware
- Rubber Motors

Workshop Tools

- Scissors (1 set for every 3 builder)
- Glue Sticks (1 per builder)
- White Glue (1 bottle)
- Wax paper to distribute glue

Demonstration Collateral

- Squirrel Mentor Sheet (1 per Mentor)
- Squirrel Take-Home Sheet (1 per Builder)
- Signup sheet (1 per Builder)
- Demo Squirrels (As many as you have)
- Other Demo Model (Some other Model)

Other Collateral

- Prizes
- Take home kits
- Take home materials (printouts etc.)
- Piggy Bank for Collecting Material Costs

Your tool kit

- Winder
- Lubrication (Armour All)
- Winding Stooze
- Stop Watch
- Hobby Knife (instructors and adults only)
- Spare Rubber
- Spare Balsa
- Spare Tissue
- Rubber Stripper
- Micrometer
- Scale
- Rubber Stamp
- Notebook
- Binoculars
- Digital Camera
- Video Camera

Facility

- Assistants
- Facility (Tables, chairs, flying area)
- Name tags

Safety

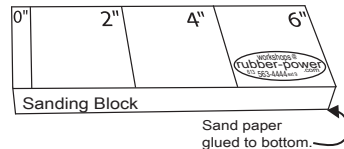
This is a different kind of activity than most model building so keep in mind that the likelihood of cutting your fingers is much greater because of repetition.

During workshop, never leave a hobby knife around. If you use one, put it back in your pocket with the cover on.

Don't use Superglue or CA glue. Be patient!

Preparation

Use a cutting block made of a piece of wood with lines on it. It is handy to white glue sand paper to the other side of your cutting block. Also, mark the cutting block so that it is easy to cut the various sizes.



3/16 x 1/8" Balsa Strips

Cut sheet into 12" pieces. I buy mine in 36 x 3 x 1/16" so that comes to three sheets 12" segments. Stack the sheets. Cut with metal ruler and a sharp knife. If you can't cut the stack of three, then do them one at a time. No need to measure, just guess. When you get near the end of a sheet, it starts to get difficult because the sheet is getting thin like a strip and it moves underneath the ruler. In that case, put the narrow sheet on the table beside another sheet. The second sheet will support the ruler and make cutting easier.

Sort the strips as you cut them into two piles: Warped and not warped.

It's easy to cut your fingers if they overrun the edge of the ruler!

From the warped pile, take the best ones and make the 6" pieces.

Take the rest and make the 2" and 1". You may want to mark the ones used to make the 1" shims with a marker so that younger people don't mix them up with Motor Blocks.

1/8 x 3/8" Balsa Strips

Cut 1/8" sheet into 12" lengths. **If the wood is hard cut them a little smaller.** Use ruler to cut 3/8 strips off. Take the worst ones and make the 4" (these measurements are not critical).

Motor Blocks

Motor Blocks are only necessary if you are using Motor Sticks that are smaller than 3/8". Make some 1/4 strips from the 1/8 sheet and cut the motor blocks from it.

Tissue

Cut out with scissors several at a time to a size of about 17 x 6". The grain should run along the long side.

Workshop Methodology

Flying demonstration: Get a Squirrel or some other airplane flying in the room.

Discussion of gluing techniques and Building demonstration.

Hand out wood and tissue while you supervise building. Hand parts out in the order that they need them. Explain what to do with each part as it is handed out. Make sure everyone is caught up before you move on to the next part. As you go around you can see how they're doing. If the builders are young (under 10), it's a good idea to have them stay in their seat and raise their hand for questions. They will have a tendency to follow you around.

Once the planes are drying do another flying demonstration. This time it's to illustrate how to adjust the wing position. You'll want to secretly adjust the wing, launch and have the builders shout out which way to move the wing.

By the time you are done with the trimming demonstration, you are ready to inspect the planes. As you check them out, attach the wing with the #8 Elastic and hand out the Prop and Motor.

Announce that in 20m there will be a simultaneous launch and the longest in the air wins a prize.

Use an egg timer to signal when to launch. Once you get the warning ding, set it for 1 minute for the real launch. Award prize. Repeat every few minutes until out of time. Thank everyone for coming.

Tips

Its important to have a good high performance airplane such as the 18" Outdoor Squirrel with alternate wing and landing gear. This provides a beautiful slow flight and is an important part of the experience for new comers.

Bring your friends. Children may need a lot of supervision.

Have a building party. Invite your friends to it and then if they are interested, invite them to help with one of your workshops.

If builders are under 9 years old, invite their parents or another relative or friend that is over 9 to help with their needs.

Accept that different people learn differently. Some will look at pictures, some will look at the demo models and others will read the text in the hand out.

Collecting material and workshop fees helps screen the participants and helps people see the value of the workshops.

If a child is having difficulty. Use their model to explain the steps to other children. Then you are helping them at the same time.



5m

10m

50m

55m

60m

80m

90m

120m