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Designed by Steve Good

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General Pattern Information

You may use this pattern to make as many of the project as you like. You are free to use any technique including mass production to build the project. The pattern may be copied and given to others provided the entire book is kept intact. You may not sell the pattern or include it in another commercial package of any type.

Steve Good retains the right to the pattern. If you have any questions about the use of this pattern please contact me at steve@stevedgood.com

Printing Instructions

When printing this pattern it is important to print it full size. When you bring up the print dialog box look in the "Page Sizing & Handling" section. Make sure the "Actual Size" is selected before you hit print.

You also only need to print the page/s you need. After the print dialog opens look for the "Pages to Print" section. You can print the current page or a range of pages. This will help save ink by not printing the title/instruction pages.

Page Sizing & Handling ⓘ

Size	Poster	Multiple	Booklet

○ Fit
◉ Actual size ⬅
○ Shrink oversized pages
○ Custom Scale: 100 %
☐ Choose paper source by PDF page size
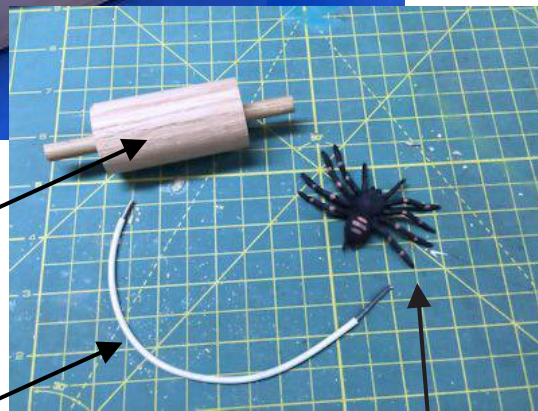
Pages to Print
◉ All
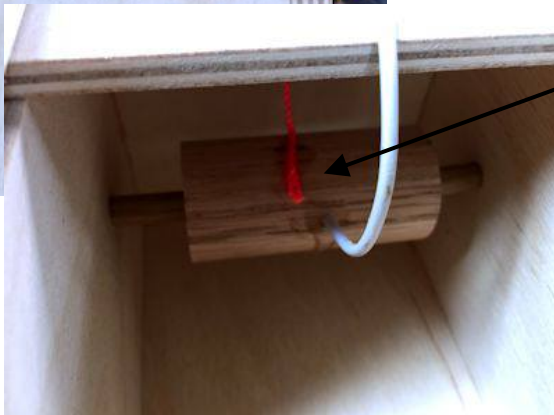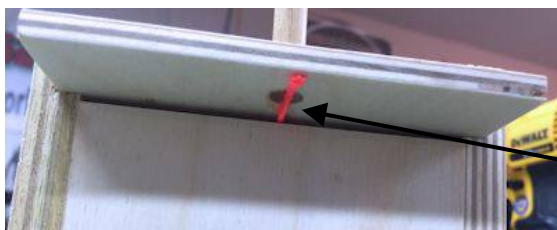○ Current page ⬅
○ Pages 1 - 34
▶ More Options

This is a picture of the finished box and the mechanical parts that go in the box.

Axle

Wire

Spider

String glued to the axle and the bottom of the cover. This turns the axle when the lid is opened and pulls the wire with the spider out of the box.

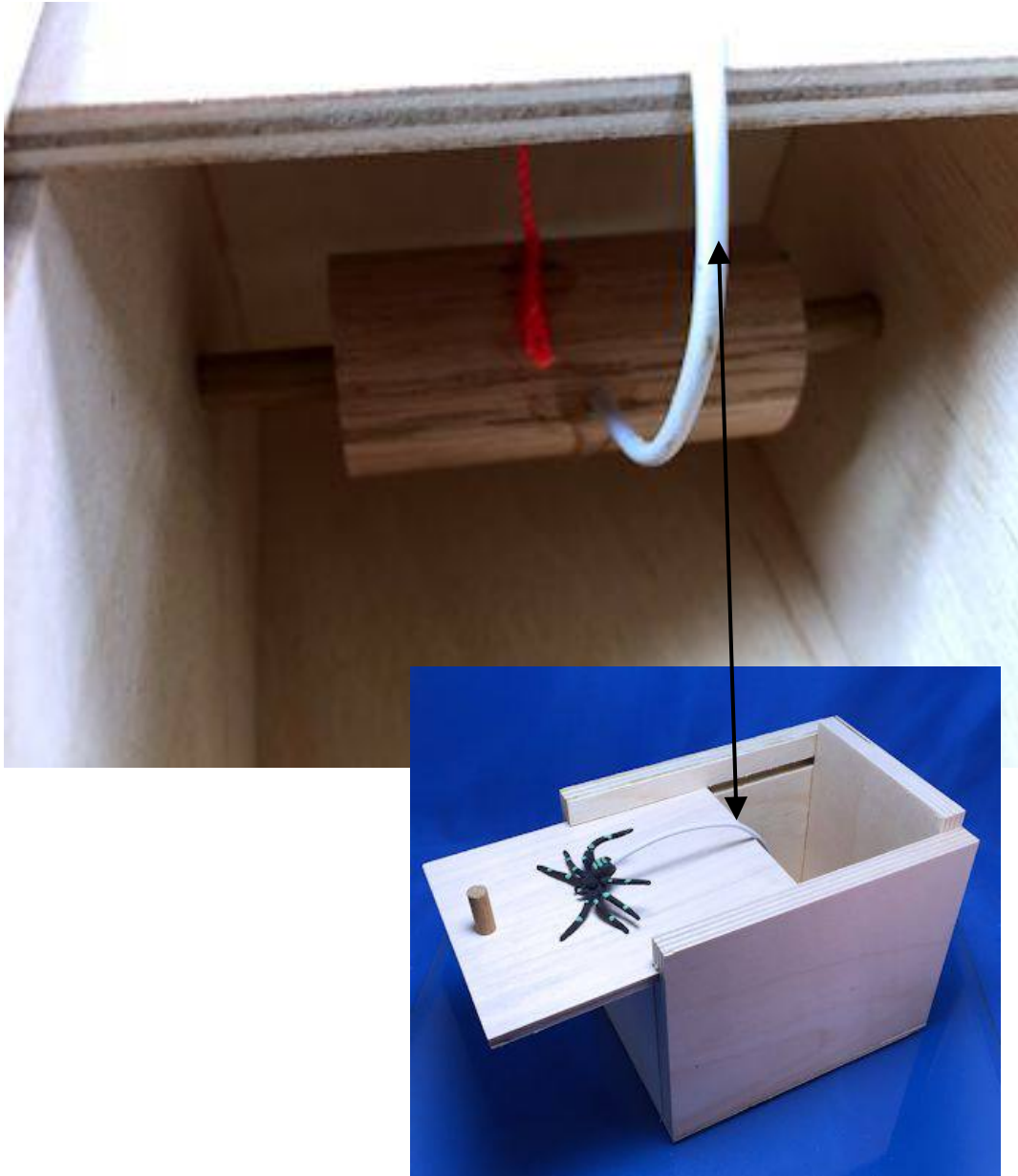Watch a video demonstration at this link

Here is the Amazon link to purchase the small spiders.

Amazon.com

This is a look at the mechanics inside the box
We will build this to fit inside the box.

The plans for building the box are at the end of
this book. This first section is building the axle.

The hardest part of this build is getting the wire bent to the
correct shape so the spider moves freely. You will have to
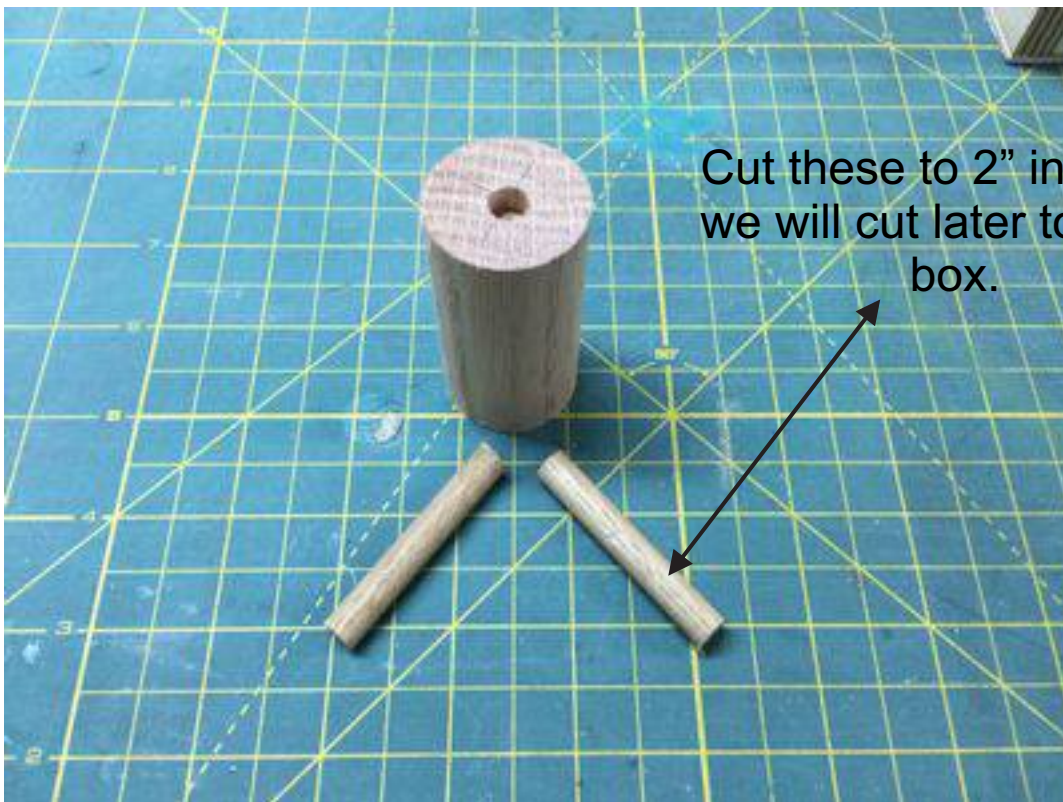experiment a few time to get the movement correct.

Cut a 1.25" diameter dowel to a length of 2.5"
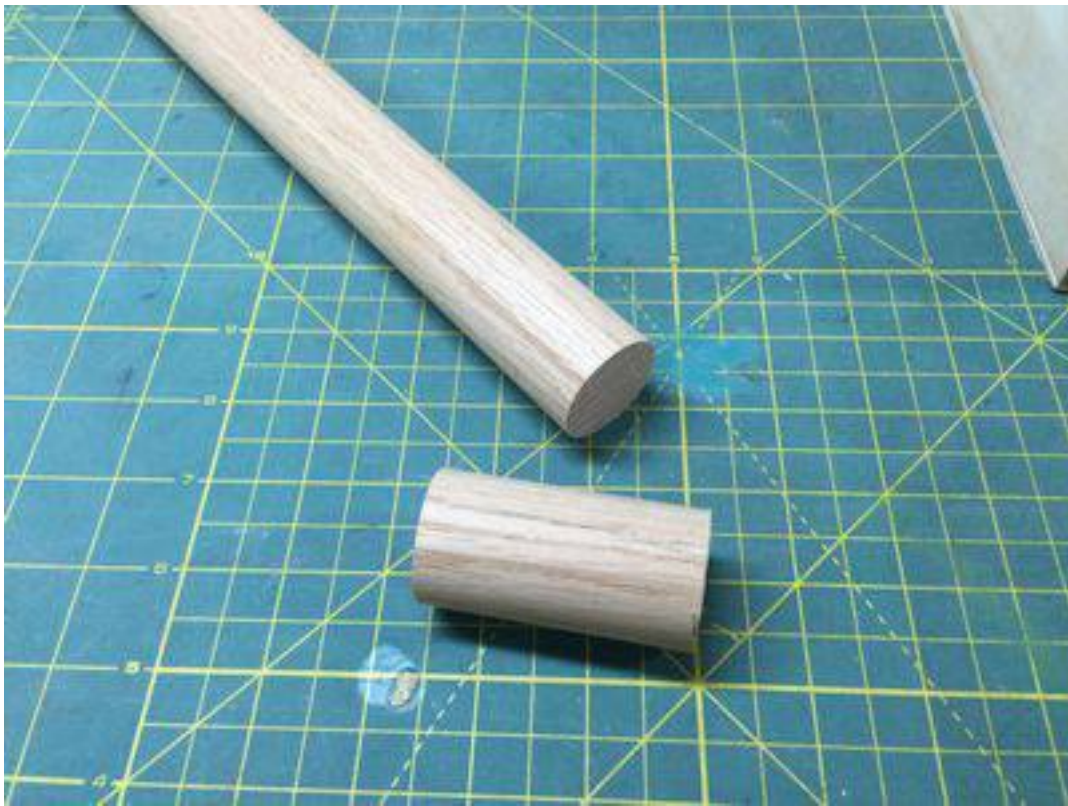
Find the center point of each end of the dowel\
we just cut.

I'm using 5/16" diameter dowel to complete the axle. Drill a hole in each end to a depth of 1/2". Use a drill bit that allows you to insert each 5/16" dowel snugly.

Cut these to 2" in length we will cut later to fit the box.

Note that the assembled axle is too long.
We will cut it to fit the width of the box as we
assemble the box.

The box will have holes drilled on each side to hold the axle. You want to cut the axle to fit between the right and left side of the box. Mark and cut the axle. Make sure it moves freely with just a little end play.
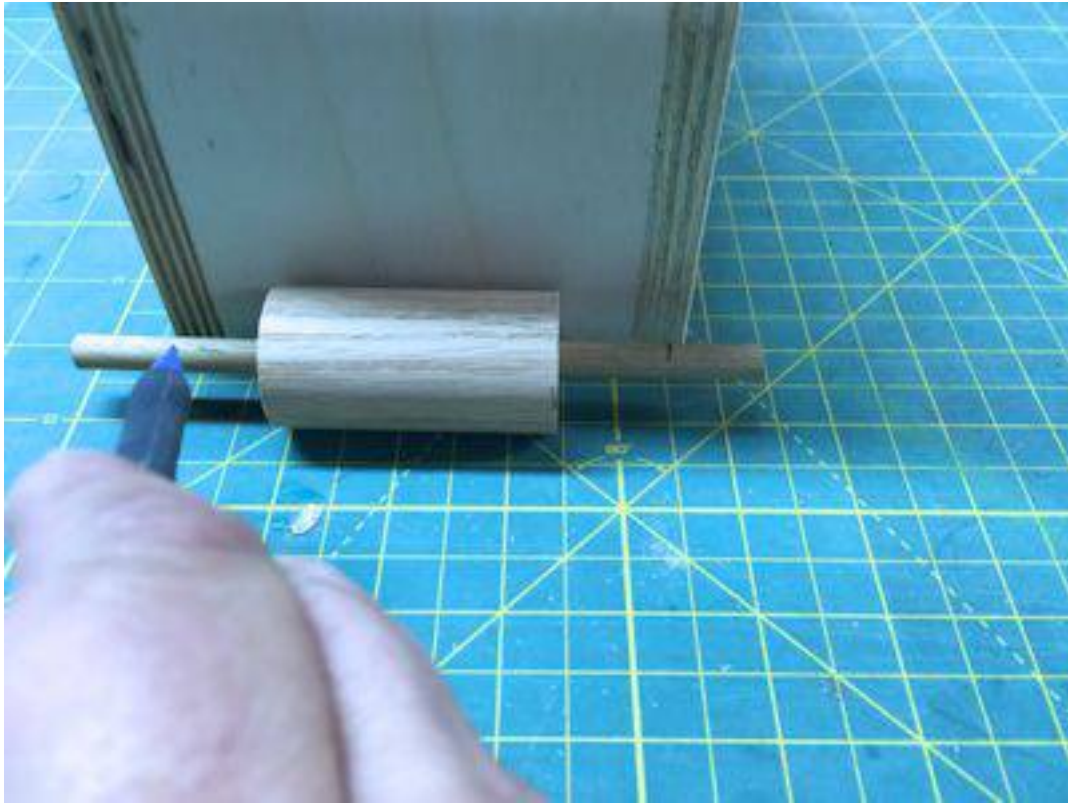
I'm using a wire coat hanger to make the lift wire. Cut it longer than you think you will need. Trim to fit ans you bend the wire for correct action inside the box.
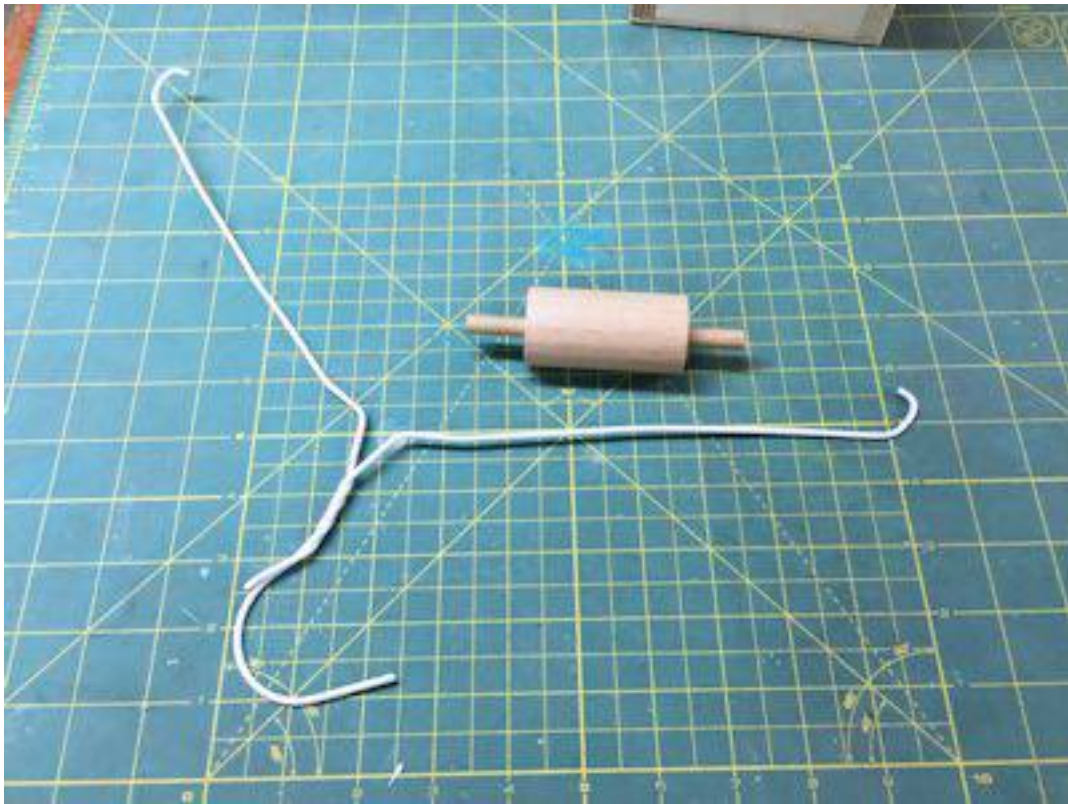
Use a drill bit that will allow you to epoxy the wire into the dowel. Drill the hole about 1/2" deep.

If you wire has coating strip some off of each end.
Epoxy the wire into the axle and give it an approximate
bend to shape. We will adjust the bend after it is in the
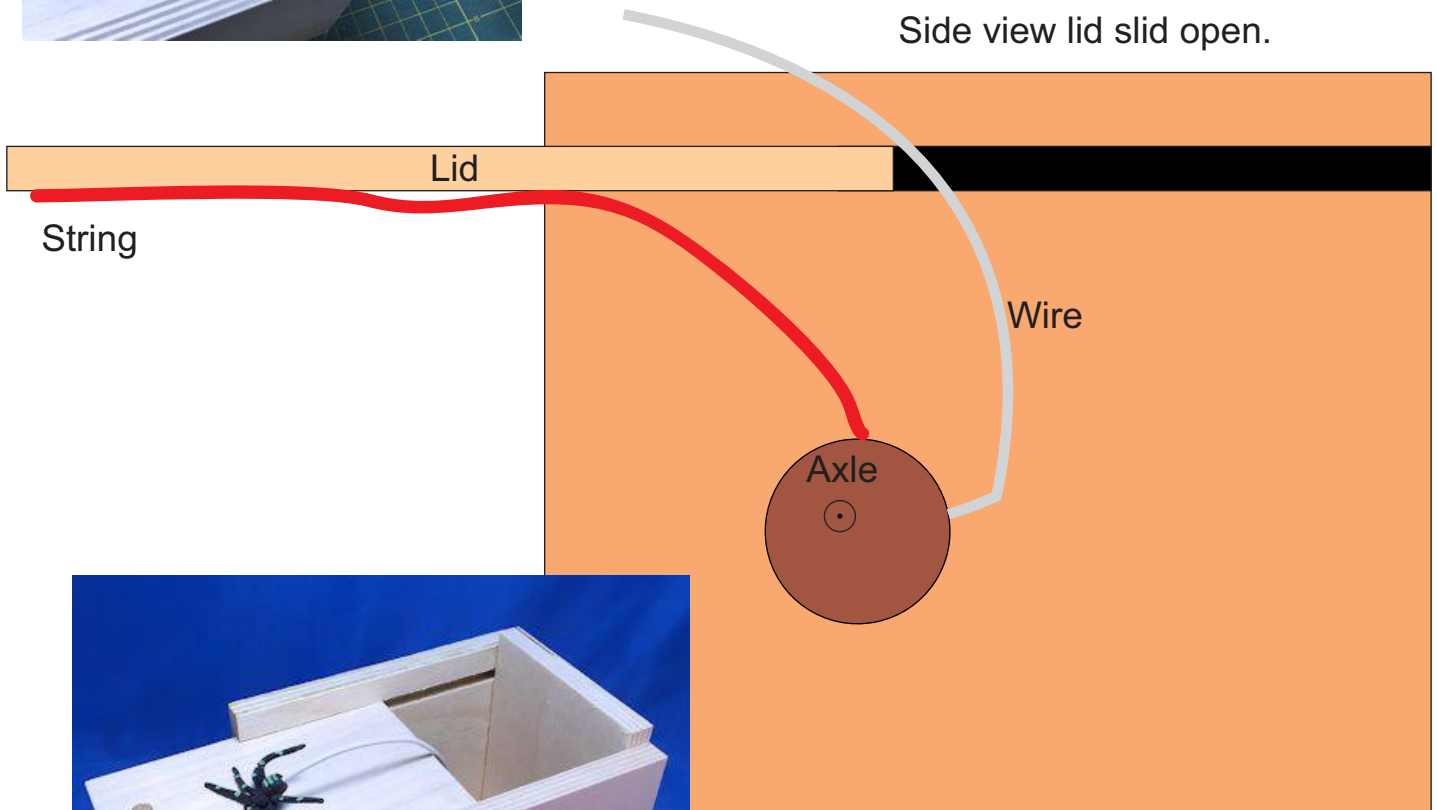box.

This is the finished axle assembly. You don't have to glue the spider on yet. Just insert the wire into the butt of the spider and all the way to the head.

Side view with the lid closed.

Lid

String glued to axle and front bottom of the lid.
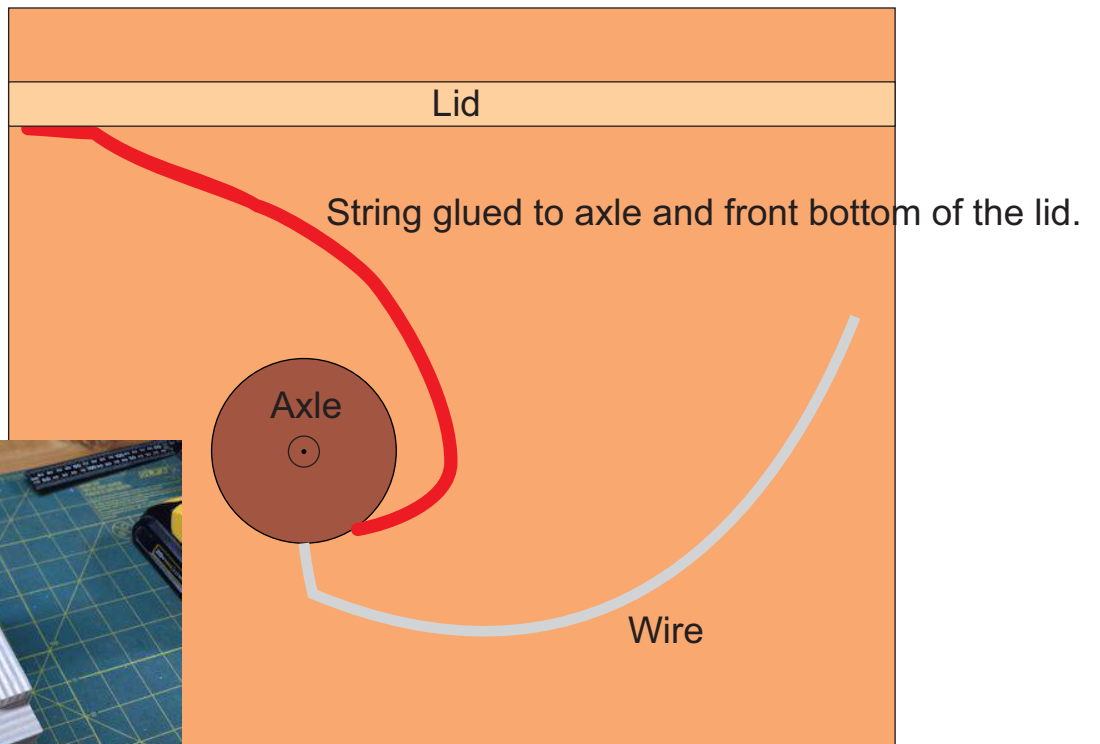
Axle

Wire

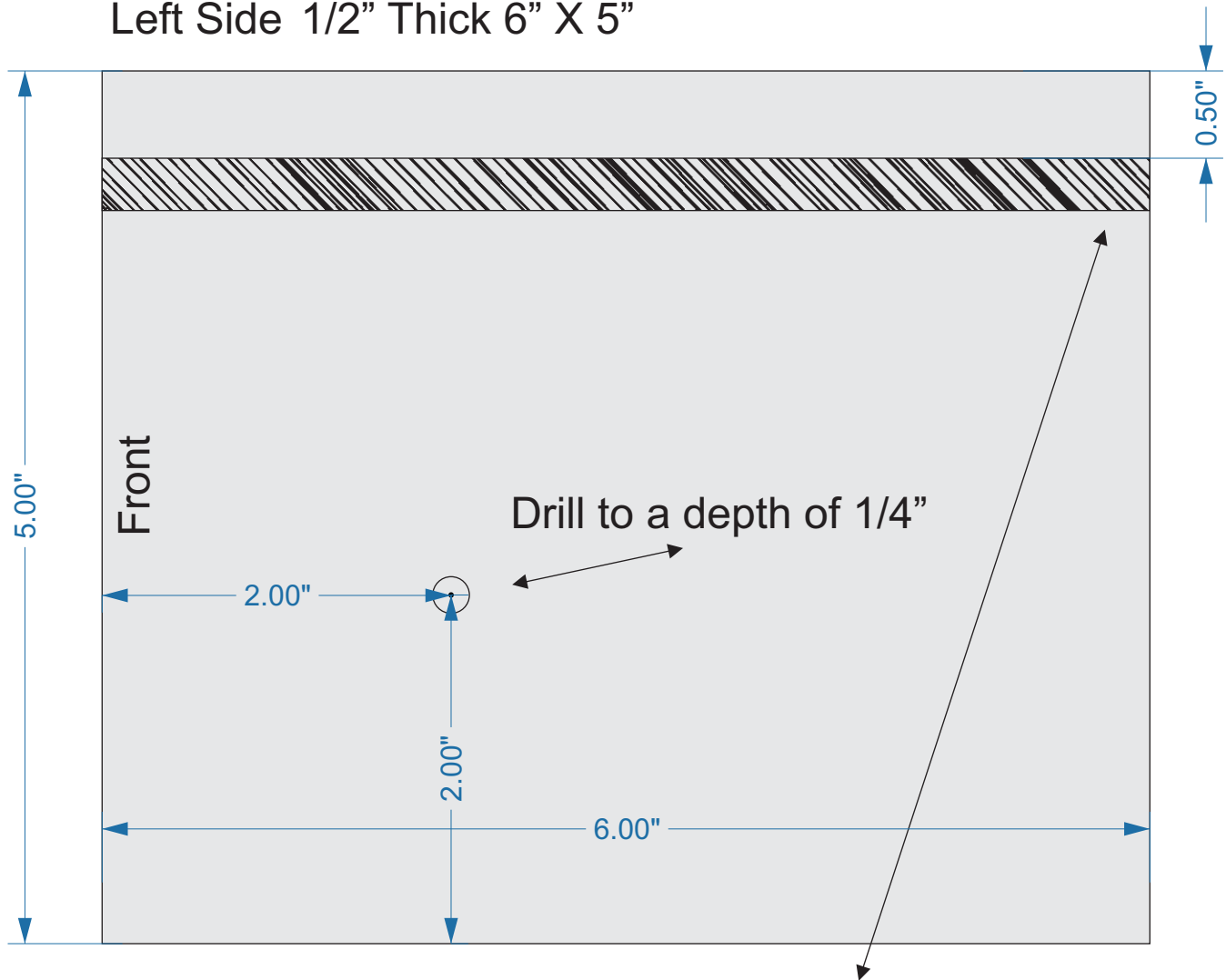Side view lid slid open.

Wire

Lid

String

Axle

Work with the wire until the action works like the action in the video demonstration.

You can super glue or staple the string to the bottom of the box and the axle. Cut the string longer than needed. Trim the string to length when you are sure the spider comes all the way out.
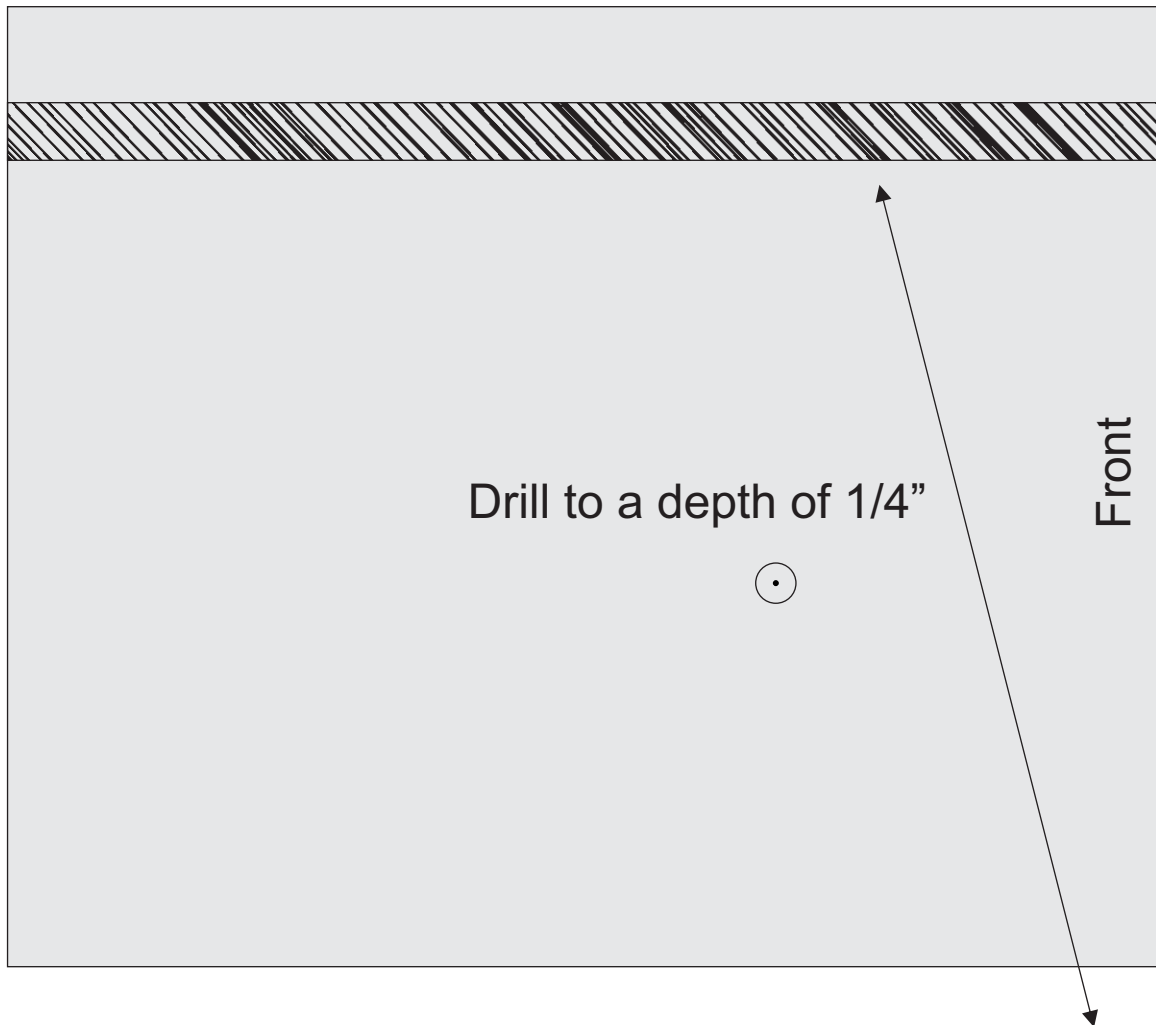
Left Side 1/2" Thick 6" X 5"

0.50"

Front

5.00"

2.00"

2.00"

6.00"

Drill to a depth of 1/4"

Groove routed to a depth of 1/4"
The groove needs to be slightly wider that 1/4" so the 1/4" thick door slides smoothly. I used a 1/4" router bit to make the initial groove. I then moved the fence about 1/16" and made the second pass. Make the initial pass in both boards. Move the fence and make the second pass in both boards.

Right Side 1/2" Thick 6" X 5"

Front

Drill to a depth of 1/4"

⊙

Groove routed to a depth of 1/4" The groove needs to be slightly wider that 1/4" so the 1/4" thick door slides smoothly. I used a 1/4" router bit to make the initial groove. I then moved the fence about 1/16" and made the second pass. Make the initial pass in both boards. Move the fence and make the second pass in both boards.
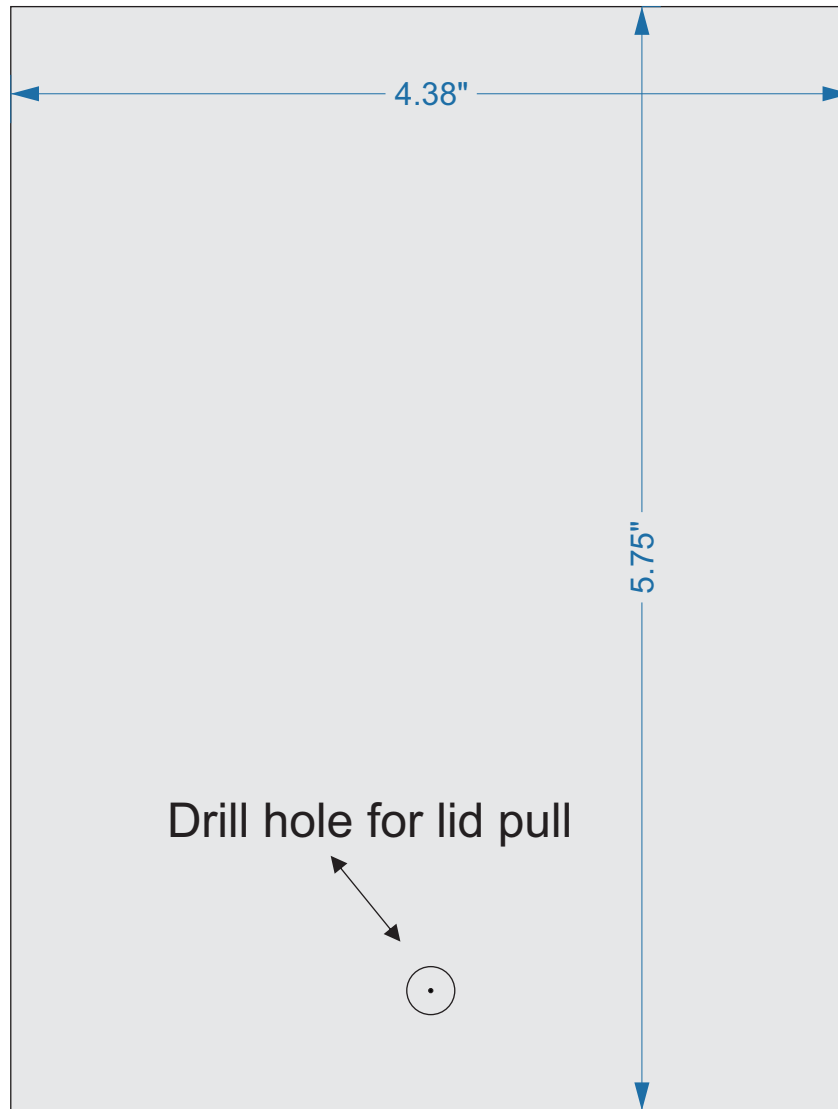
Back 1/2" Thick 4" X 5.25"
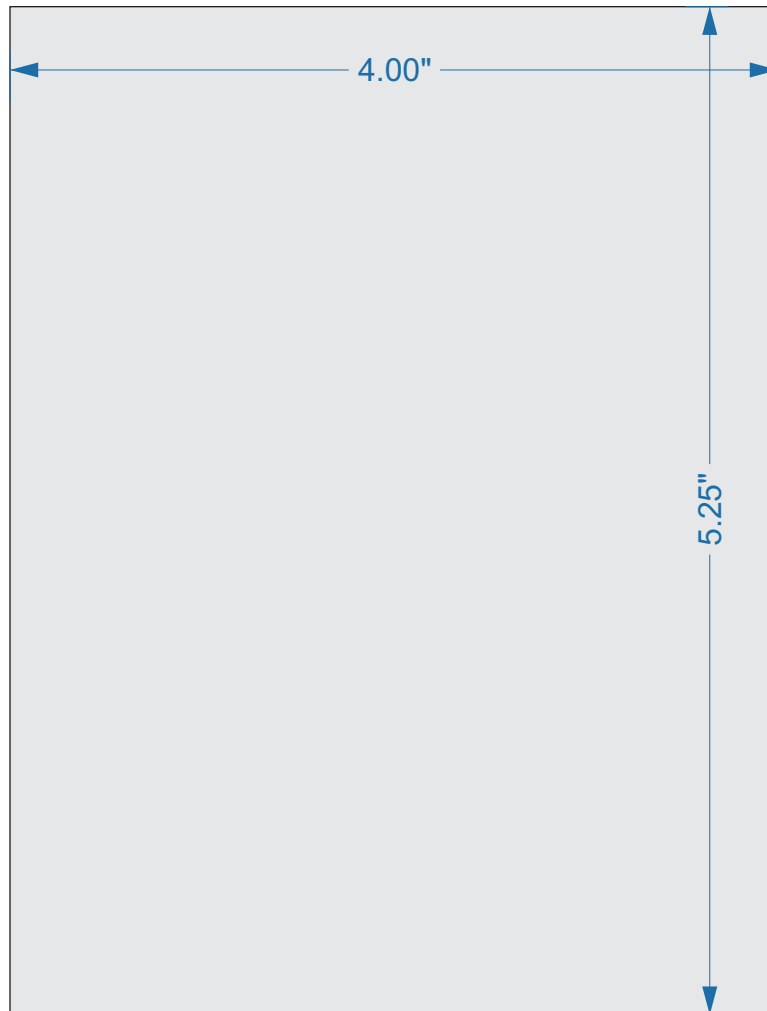
Front 1/2" Thick 4" X 4"

Lid 1/4" Thick ~4 3/8" X 5 3/4"

4.38"

5.75"

Drill hole for lid pull

⊙
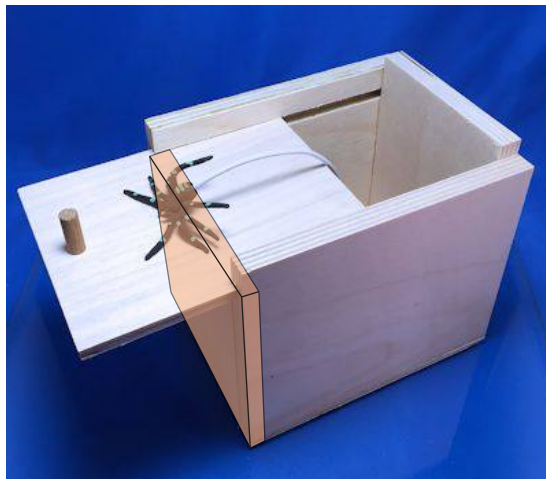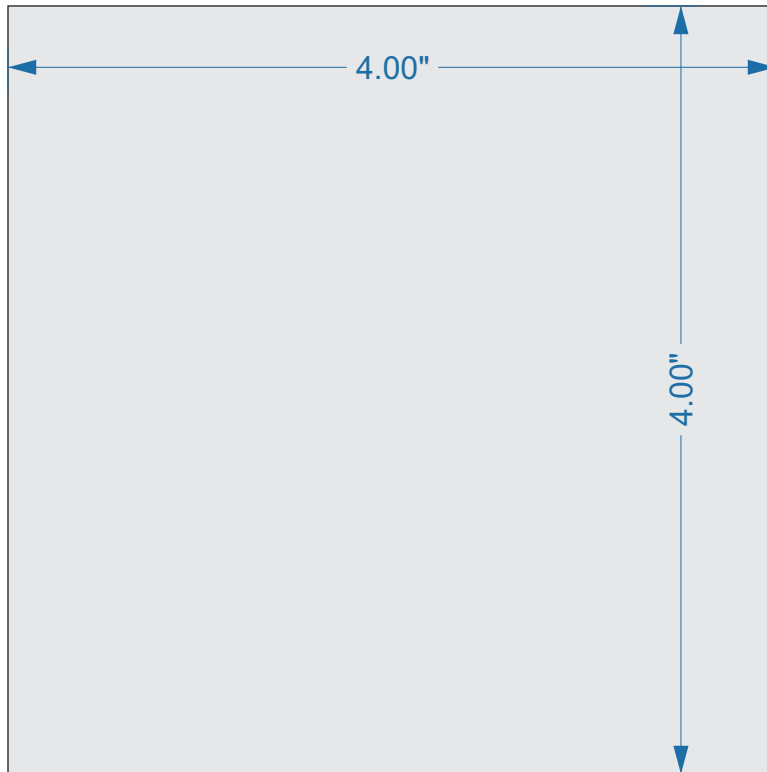
The width of the lid will be cut to fit the width
of the grooves in the box so it slides in and out
without binding.

Bottom 1/4" Thick 5" X 6"

5.00"

6.00"