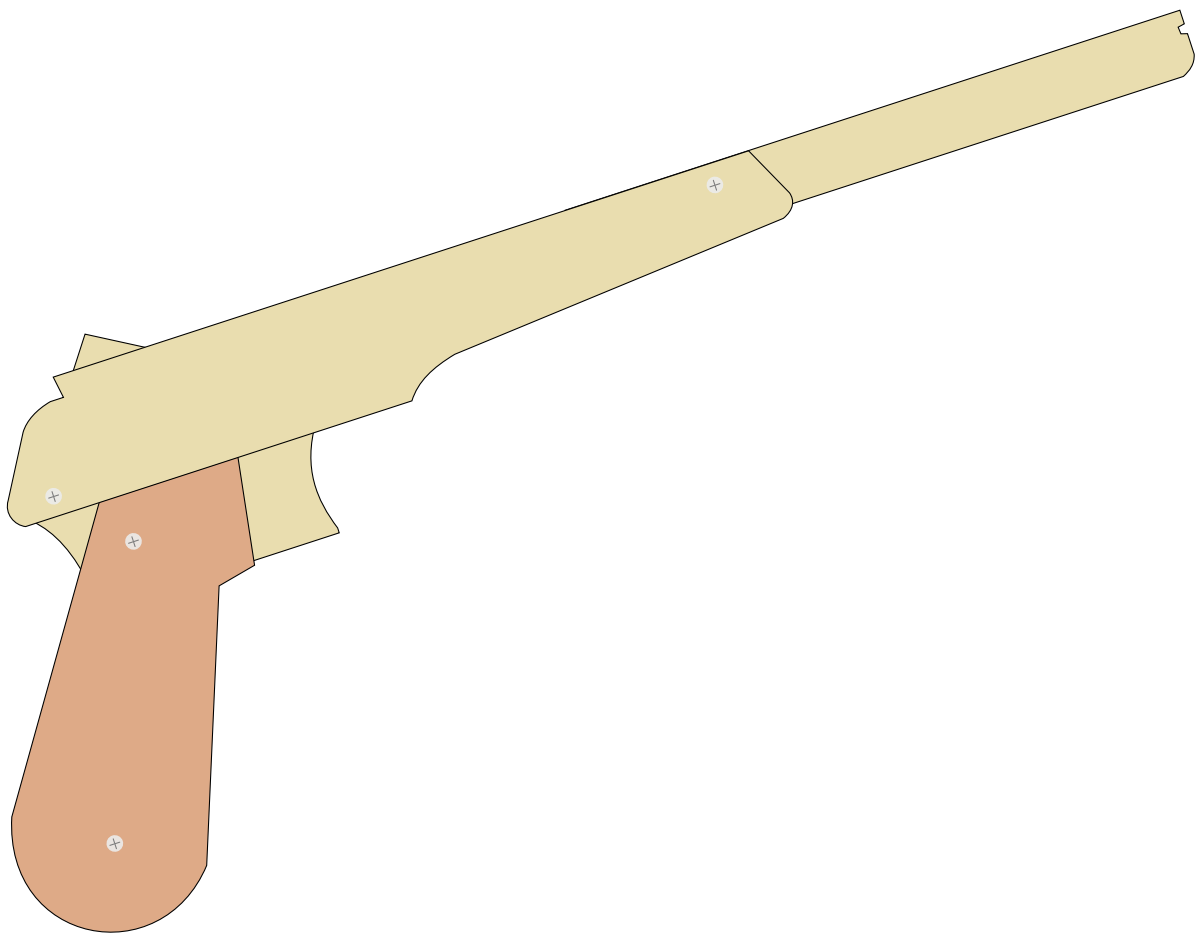


Building Guide for the P210 ESFESTA

Single shot Rubber Band Gun

For Scroll Saw



Free plan

Building Guide for the P210 ESFESTA, Single shot Rubber Band Gun
(for Scroll saw)

	page	print size
Introduction - - - - -	3	A4
Names of parts - - - - -	4	A4
Materials - - - - -	5	A4
Tools - - - - -	6	A4
Templates for cutting - - - - -	7 ~ 8	A4
Assembling - - - - -	9 ~ 10	A4
How to shoot - - - - -	11	A4
1/1 scale drawing (for A4) - - - - -	12	A4
80% scale drawing (for A4) - - - - -	13	A4
1/1 scale drawing (for A3) - - - - -	14	A3

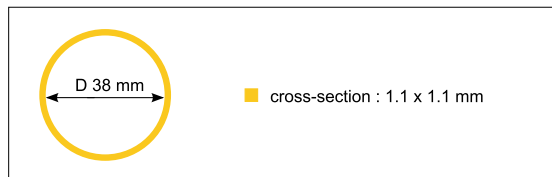
*For A3 printer users

This document provides instructions for building the "P210 ESFESTA, Single shot Rubber Band Gun" using a scroll saw.

Note -

1. You will require access to a printer (A4 (8.3 x 11.7 in) printable) and a scroll saw for this project.
2. No refund can be provided after purchase, due to the digital distribution of this document.
3. This gun is designed for "No.16 rubber band" defined in Japanese Industrial Standards (JIS).
If you can not get the true Japanese No.16 rubber bands, please use this diagram to source a similar rubber band in your location.

reference: No.16 rubber band specification in JIS



4. Please source and prepare the necessary materials yourself. I cannot provide materials or a kit. I solely offer plans for purchase.
5. Due to variation in individual skill, I offer no warranty for the result of your work.
Build and/or use this Rubber Band Gun at your own risk.
6. Build and use at your own risk. I do not assume any liability for injury or damage incurred.
7. Copyright <http://oggcraft.jp/>. All Rights Reserved.
You are allowed to use this document for personal hobby use only.
You are prohibited to sell the kit, completed product, or the plan that you have built on the basis of this document.

About the P210 ESFESTA -

I made the P210 ESFESTA and posted an article on the web in 2006.
It is a single shot Hand Gun with a "Ramp-Release-system".

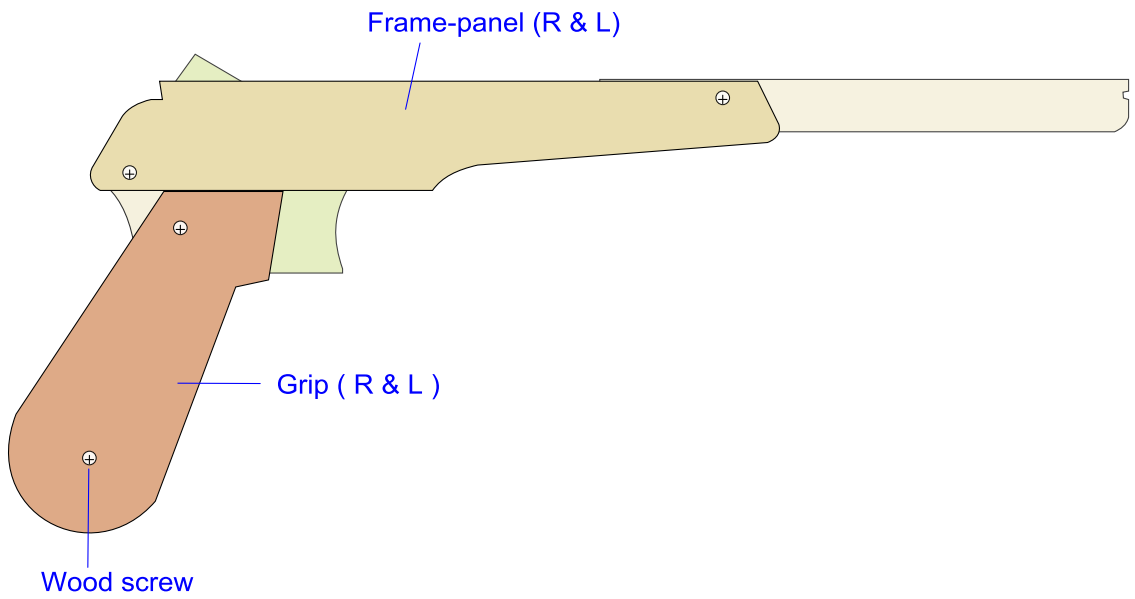
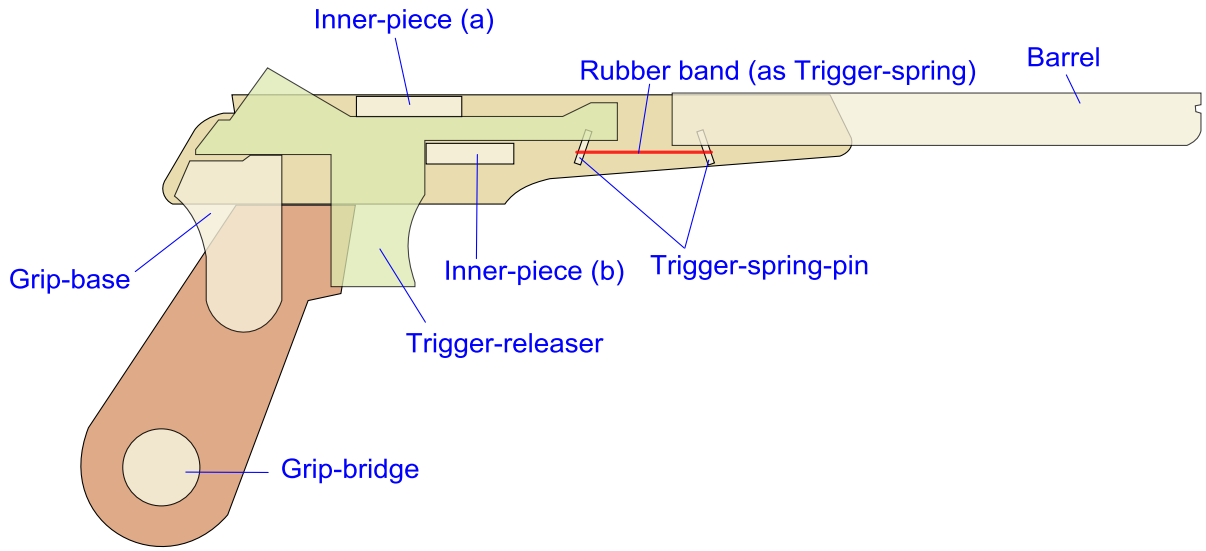
- The article -

<English site> http://oggcraft.jp/eng/eng_howto_esfesta.html

<Japanese site> http://oggcraft.jp/howto_esfesta.html



- The ESFESTA made in 2006 -



Names of parts	Material
Barrel Trigger-releaser Inner-pieces Grip-base Grip-bridge	Plywood ----- thickness 5 ~ 10 mm
Frame-panels	Wooden board ----- thickness 3 mm
Grips	Your choice of ----- thickness 5 ~ 7 mm wood
Trigger-spring-pins	Wooden round stick ----- diameter 2 ~ 2.5 mm
etc.	Wood screw x 4 Rubber Band

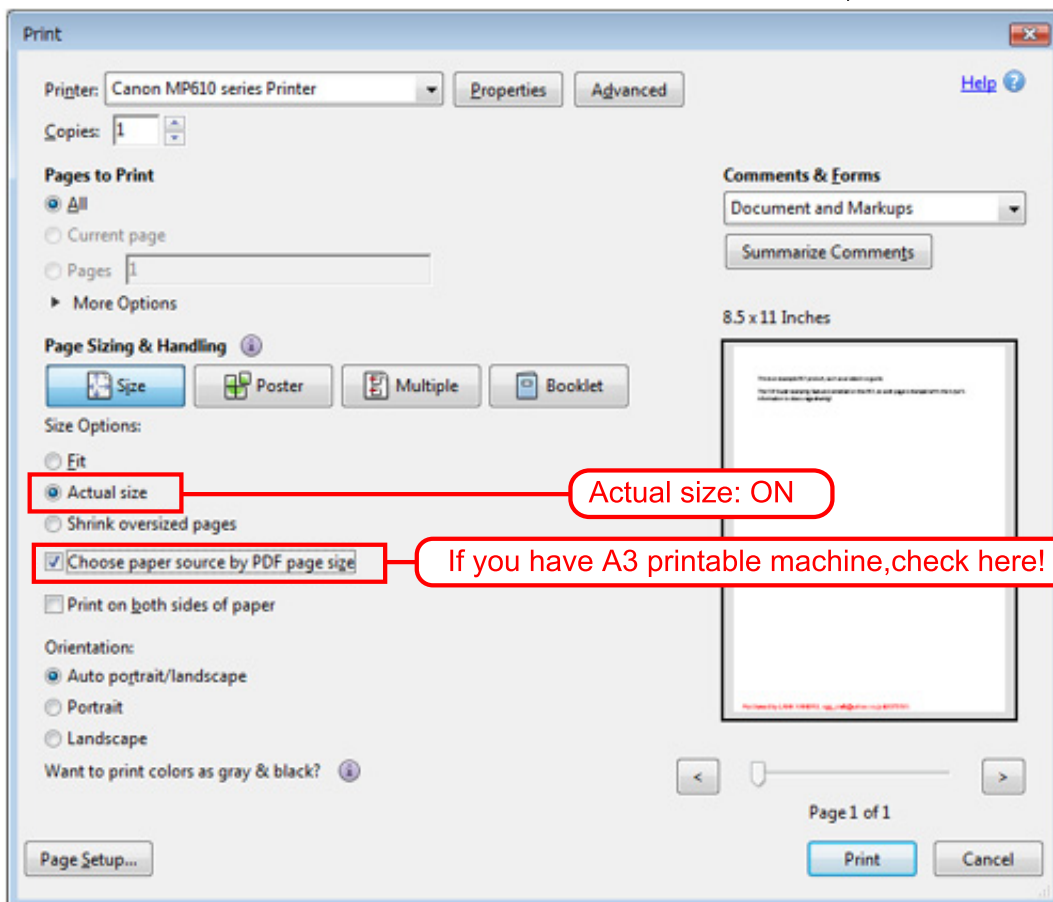
- **Printer** (A4 (8.3 x 11.7 in) printable)
- **Scroll saw machine**
- Drill press (or Pin vice)
- Screw driver
- Scissors
- Craft knife
- Sandpaper
- Wood glue
- Temporary spray adhesive (Removable glue)
- Removable double sided tape

Especially, **Printer** and **Scroll saw machine** are indispensable.

Note -

If you can not print this PDF file at a 1:1 scale, you need to set up the configuration of your PDF Reader.

example: Adobe Reader X



Templates for cutting (actual size)

Material: Plywood 9 ~ 10 mm thickness

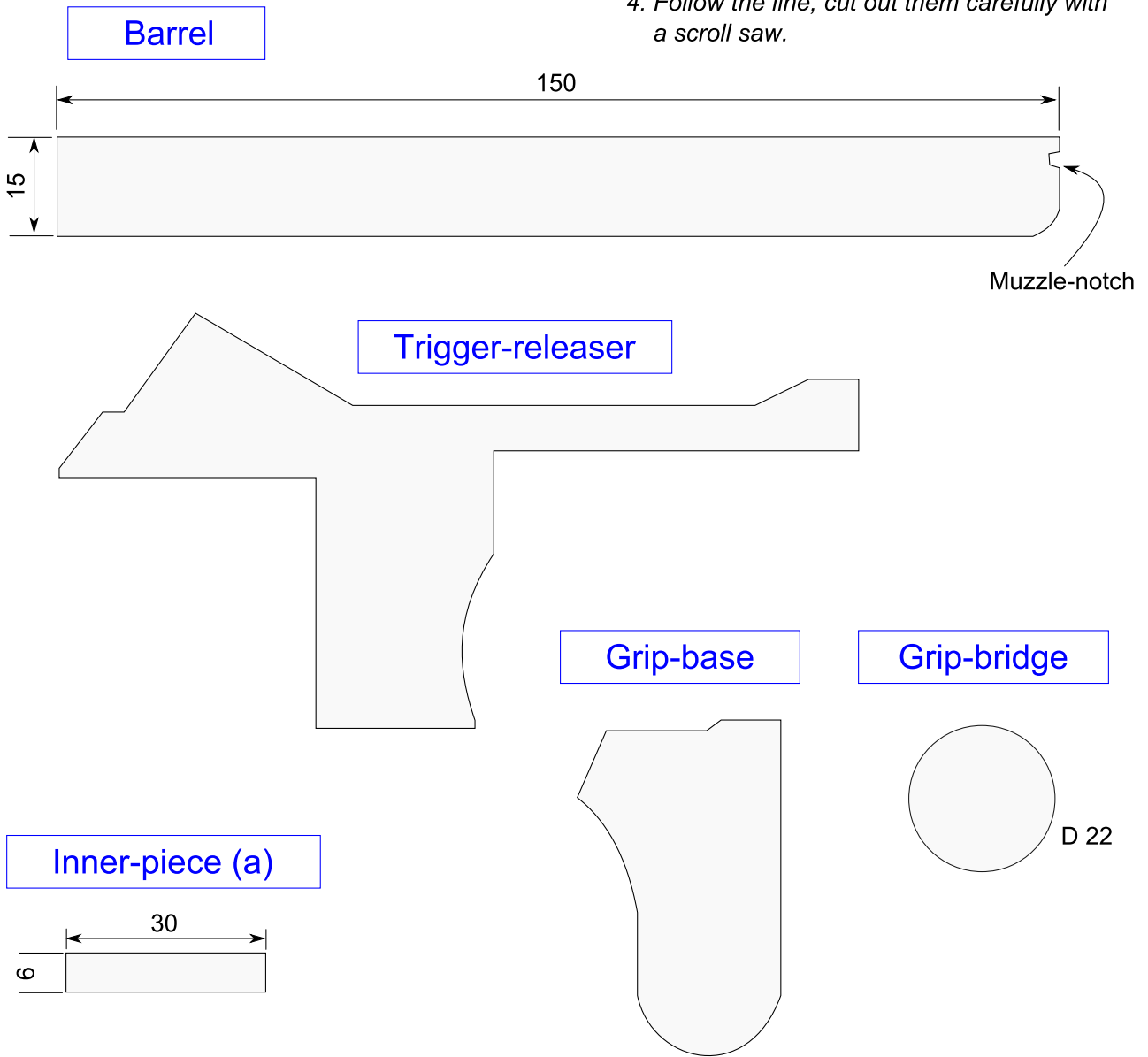
1. Print out this page on A4 paper.

(mm)

2. Cut out the templates with a scissors.

3. Adhere them on wood with a temporary spray adhesive (Removable glue).

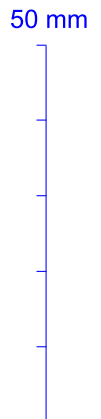
4. Follow the line, cut out them carefully with a scroll saw.



Your cutting skill will directly affect the work's accuracy.

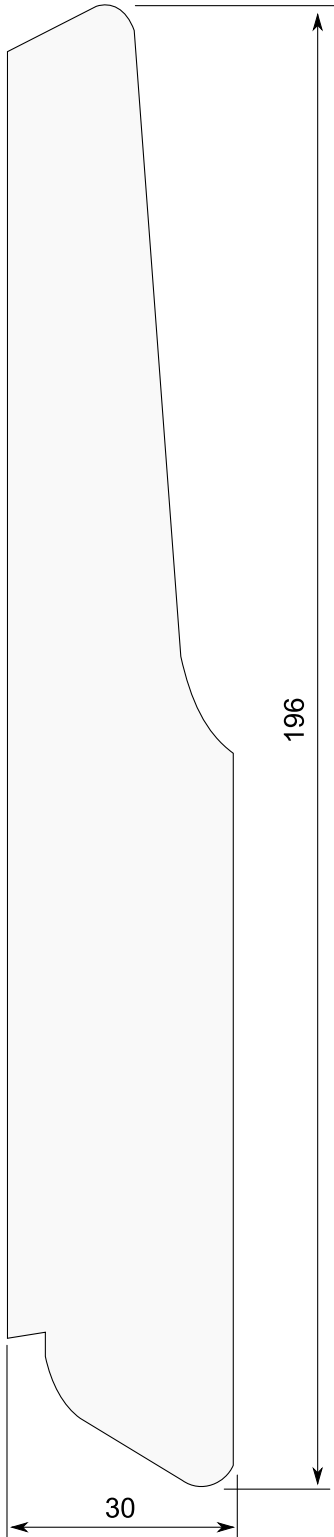
- All parts -
After cutting, remove paper and ensure a smooth finish (removing all burrs) with sandpaper or craft knife.

- Tips -
Some items are duplicated having both L and R sides, i.e. **Frame-panels** and **Grips**, after stacking a pair of wood with double-sided tape, you should cut out the L and R items at the same time.



Frame-panel x 2 (R & L)

Material:
Wooden board 3 mm thickness



1. Print out this page on A4 paper.
2. Cut out the templates with a scissors.
3. Adhere them on wood with a temporary spray adhesive (removable glue).
4. Follow the line, cut out them carefully with a scroll saw.

(mm)

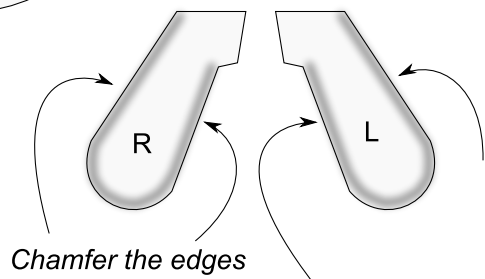
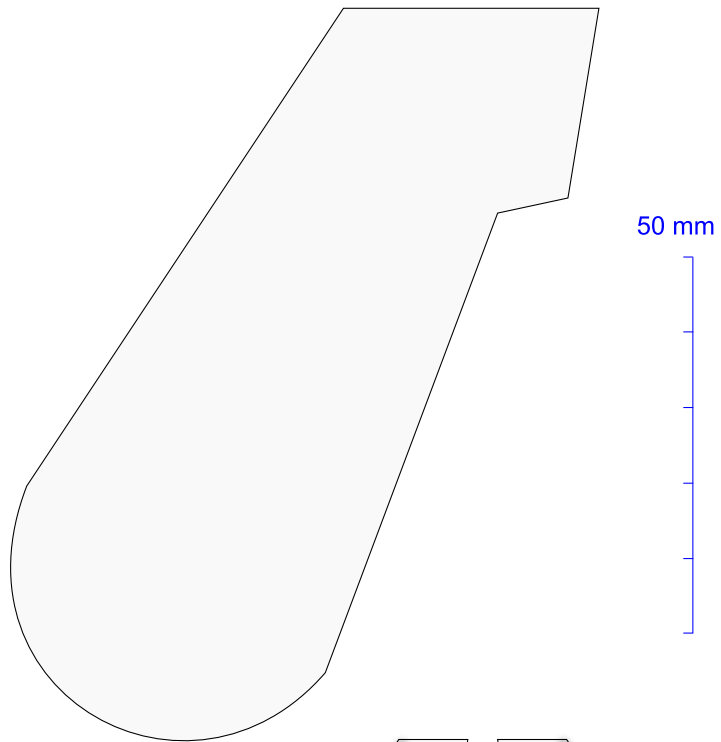
Trigger-spring-pin x 2

Material: Wooden round stick
D 2 ~ 2.5 mm Length 10 mm x 2

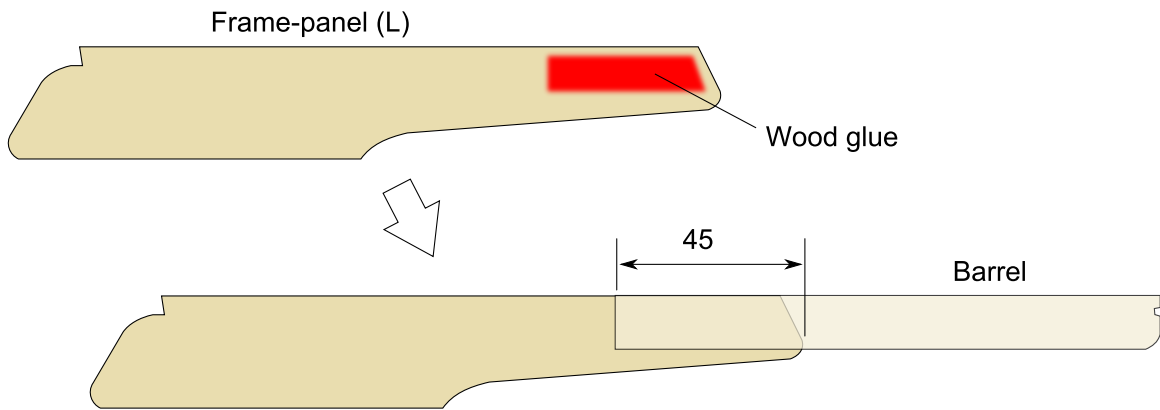


Grip x 2 (R & L)

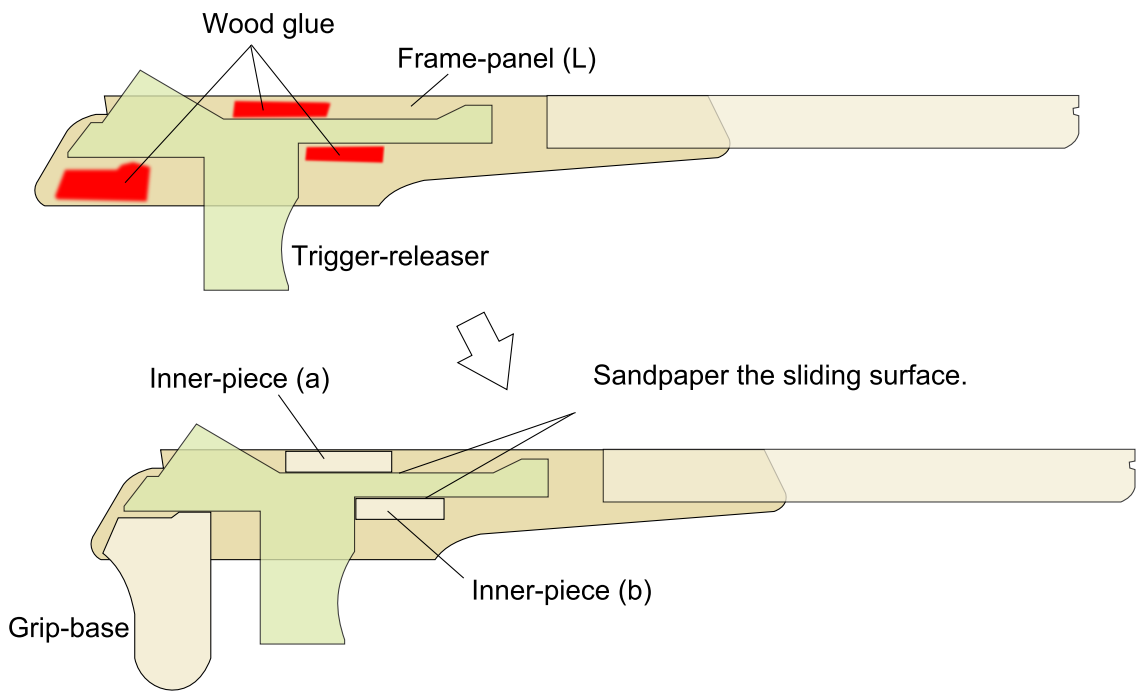
Material: Your choice of wood
thickness 5 ~ 7 mm



- 1** Glue the Barrel to the Frame-panel (L). (mm)

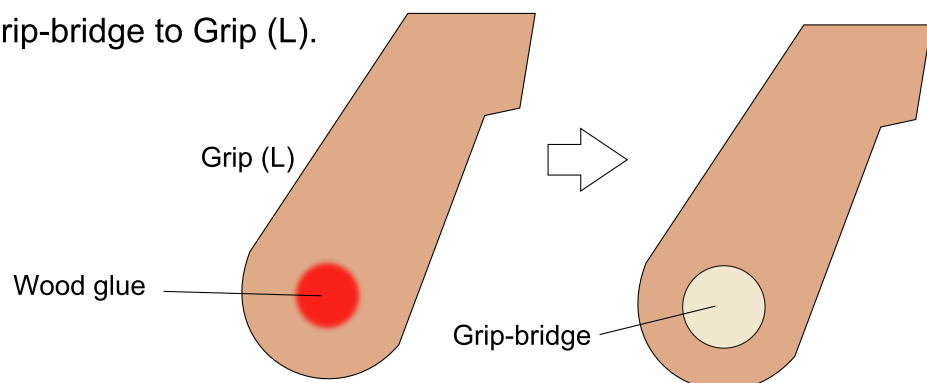


- 2** Set the Trigger-releaser on the Frame-panel (L) as the diagram below indicates, and glue the Inner-piece (a), (b) and Grip-base to the Frame-panel (L).

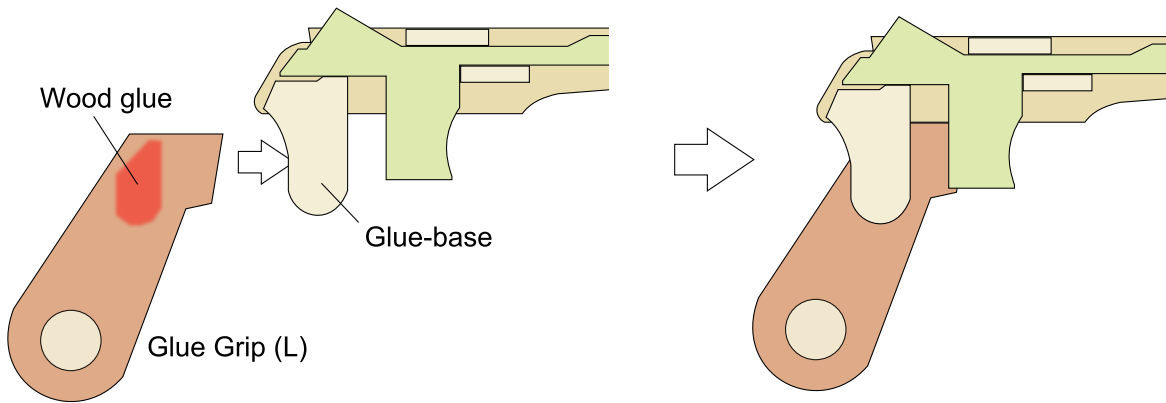


Just in case, remove the Trigger-releaser until the glue dries.

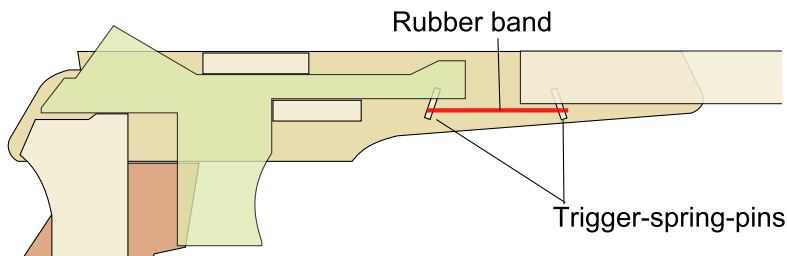
- 3** Glue the Grip-bridge to Grip (L).



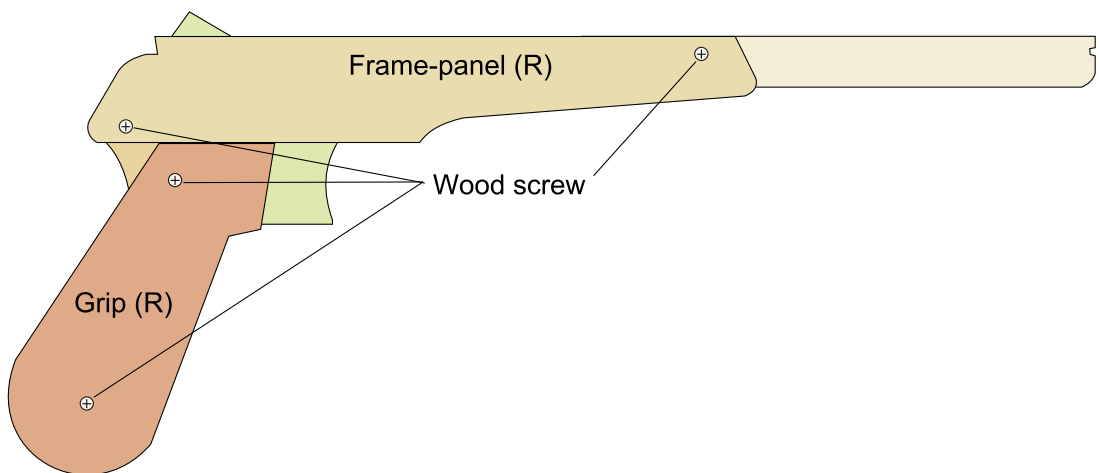
4 Glue the Grip (L) to the Grip-base.



5 Drill holes to the Trigger-releaser and Barrel, then insert the Trigger-spring-pins to the holes. Attach a rubber band between the pins as a Trigger-spring.



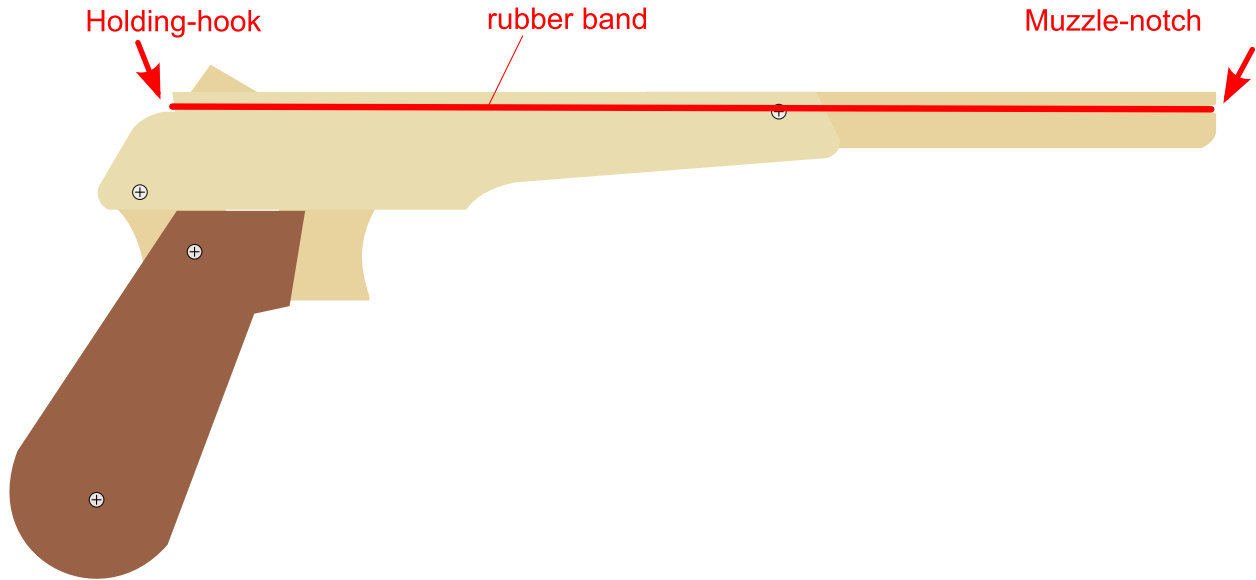
6 After drilling prepared holes, screw the Frame-panel (R) and Grip (R) to the work.



Finished

Loading -

1. Load rubber bands from the Muzzle-notch to the Holding-hook.



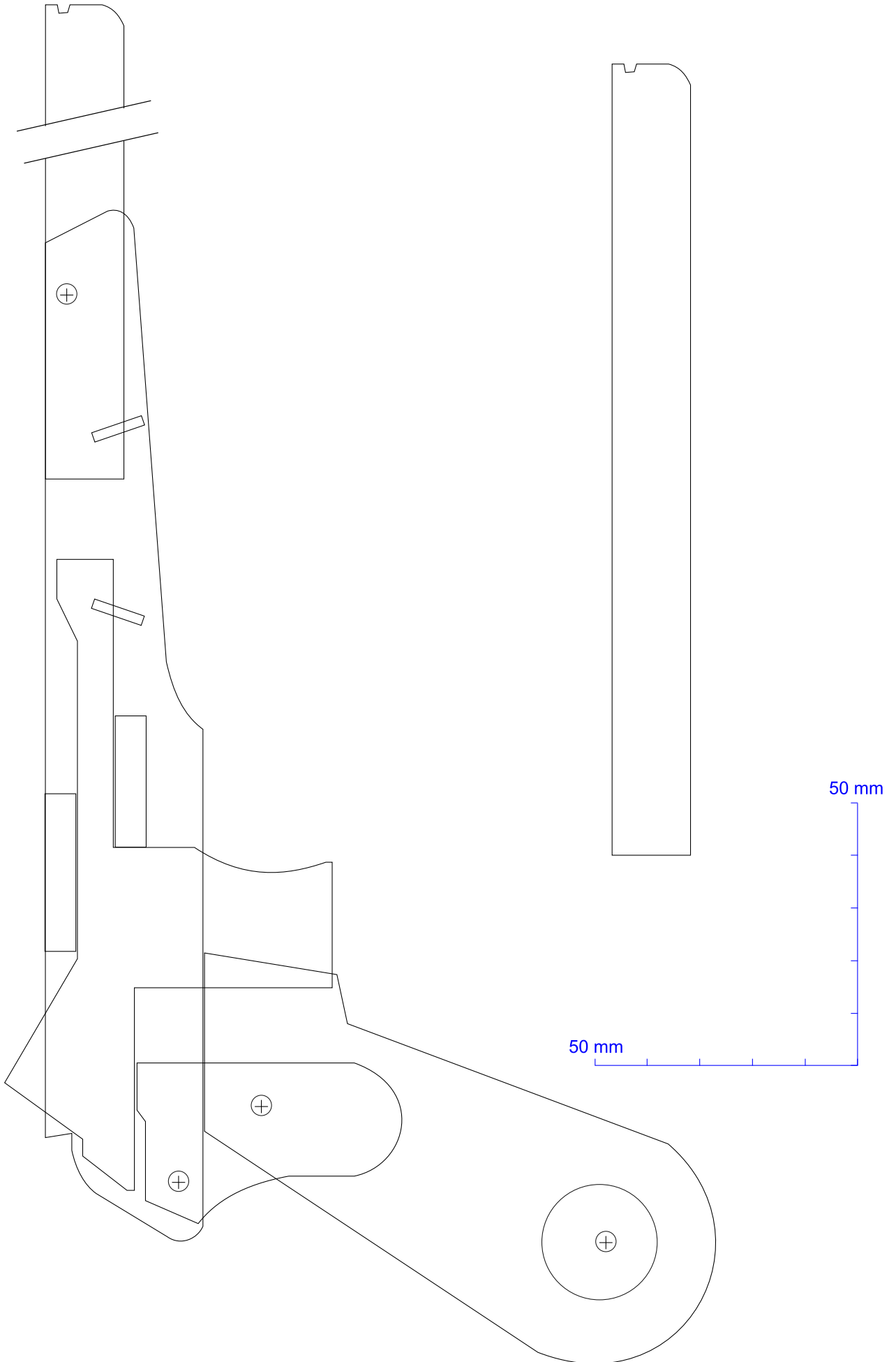
Shooting -

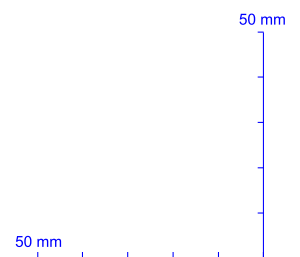
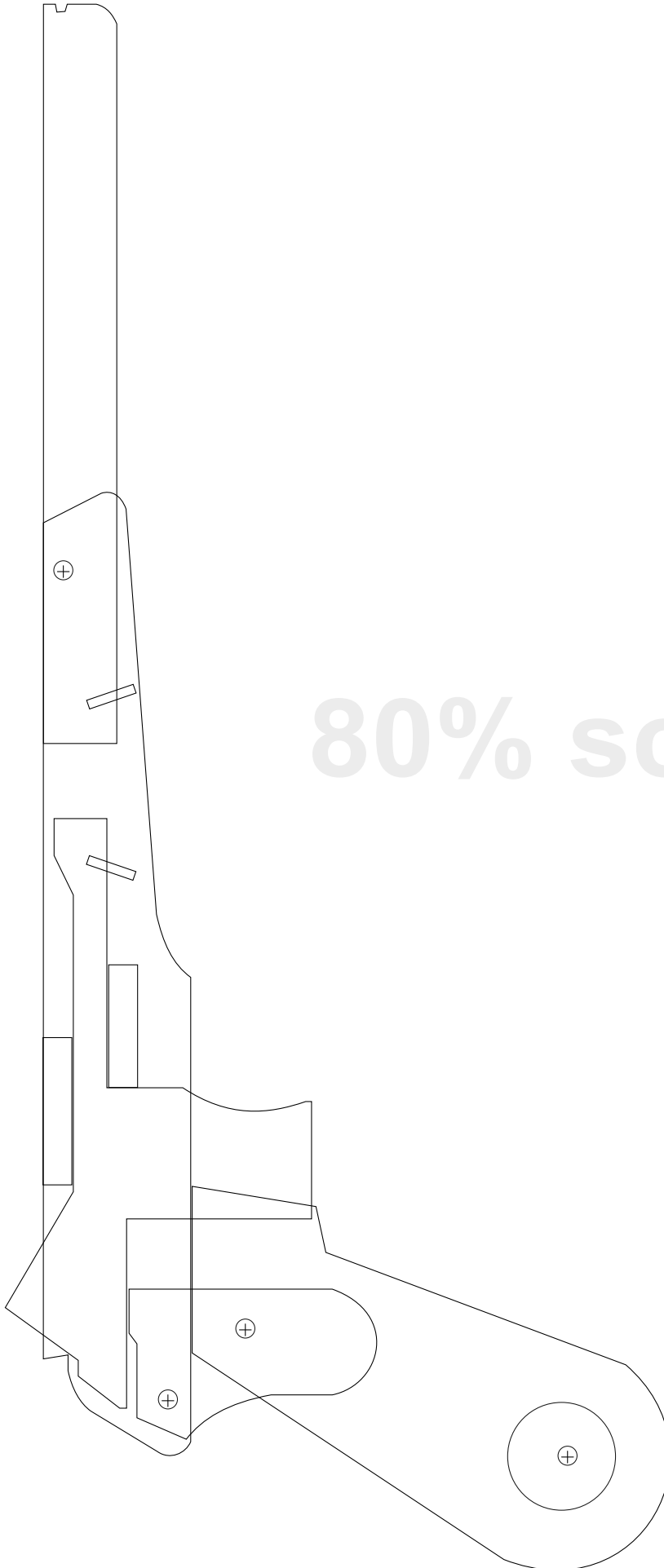
1. When the Trigger is pulled, the ramp of the Releaser lifts up the rubber band and release it.

Note -

This gun is a single shot gun, do not over-load. Do not aim the gun at another person. Use it at your own risk. I do not assume any liability for injury or damage incurred.

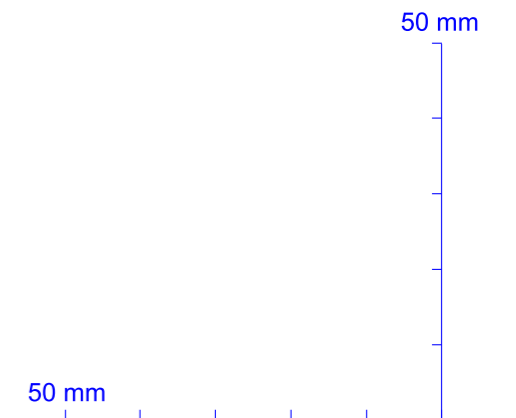
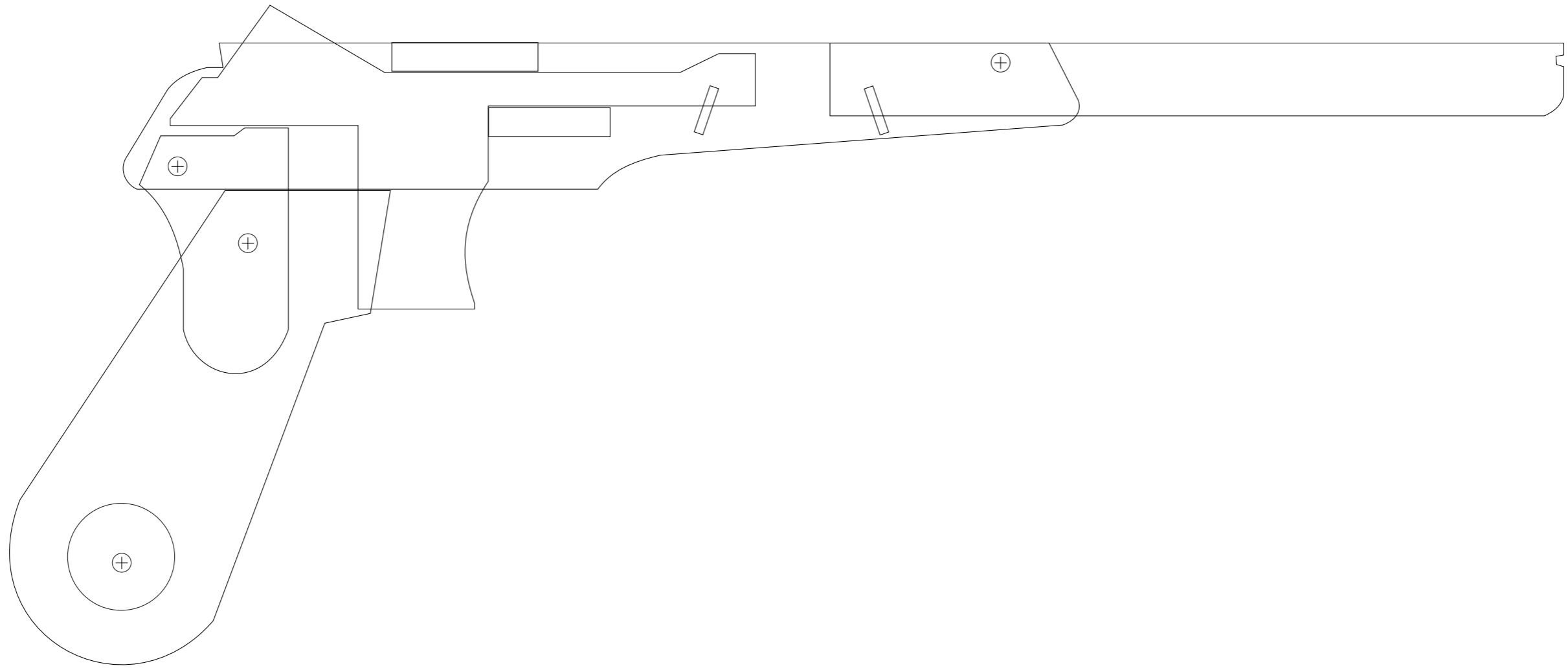
P210 ESFESTA





You can print out this drawing at a 1:1 scale with an A3 printer.

P210 ESFESTA



<http://www.youtube.com/user/oggcraft/> <http://oggcraft.jp/>