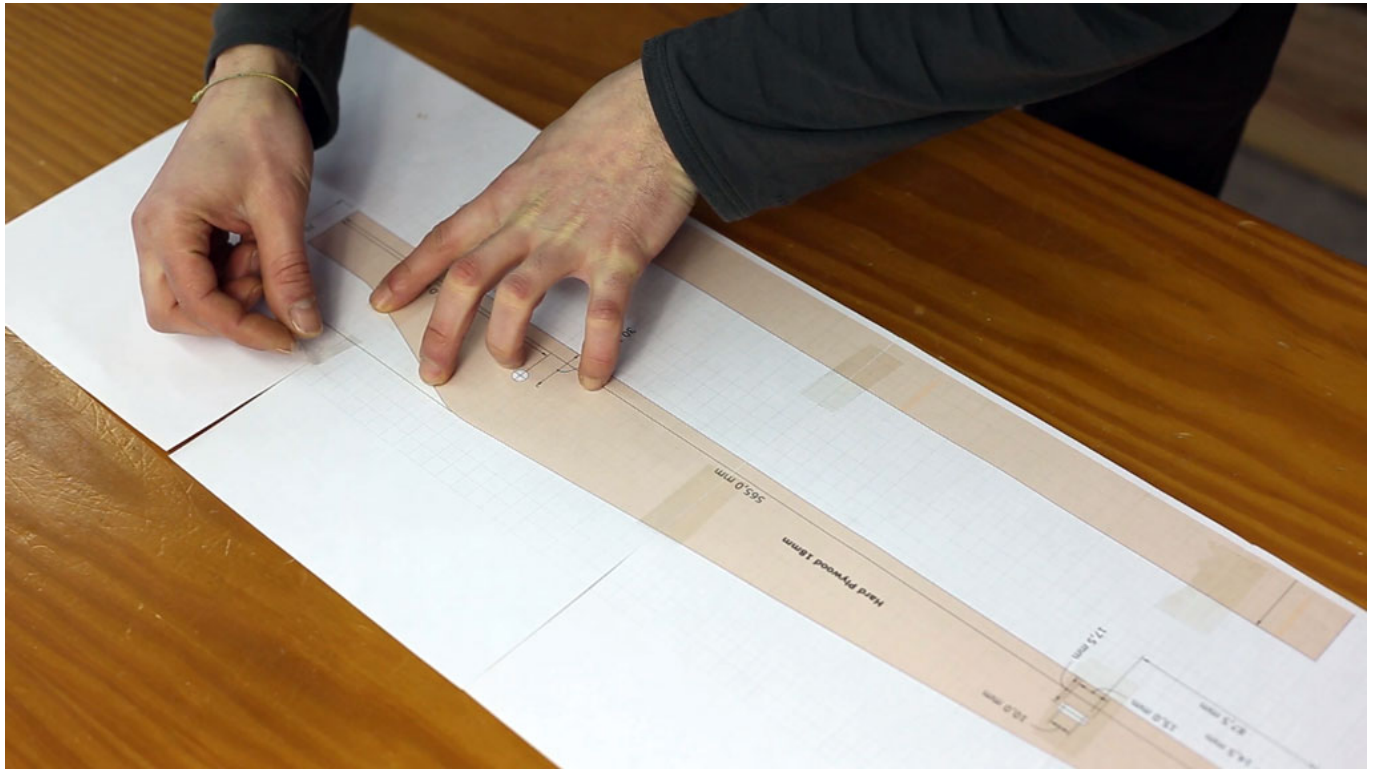


SCROLL SAW

A very easy to build Scroll Saw and another one to use as an accessory for the **portable workshop**. I will use my jig saw as motor, hard plywood and some screws.



As always, we start cutting all parts taking the dimensions from the plans.



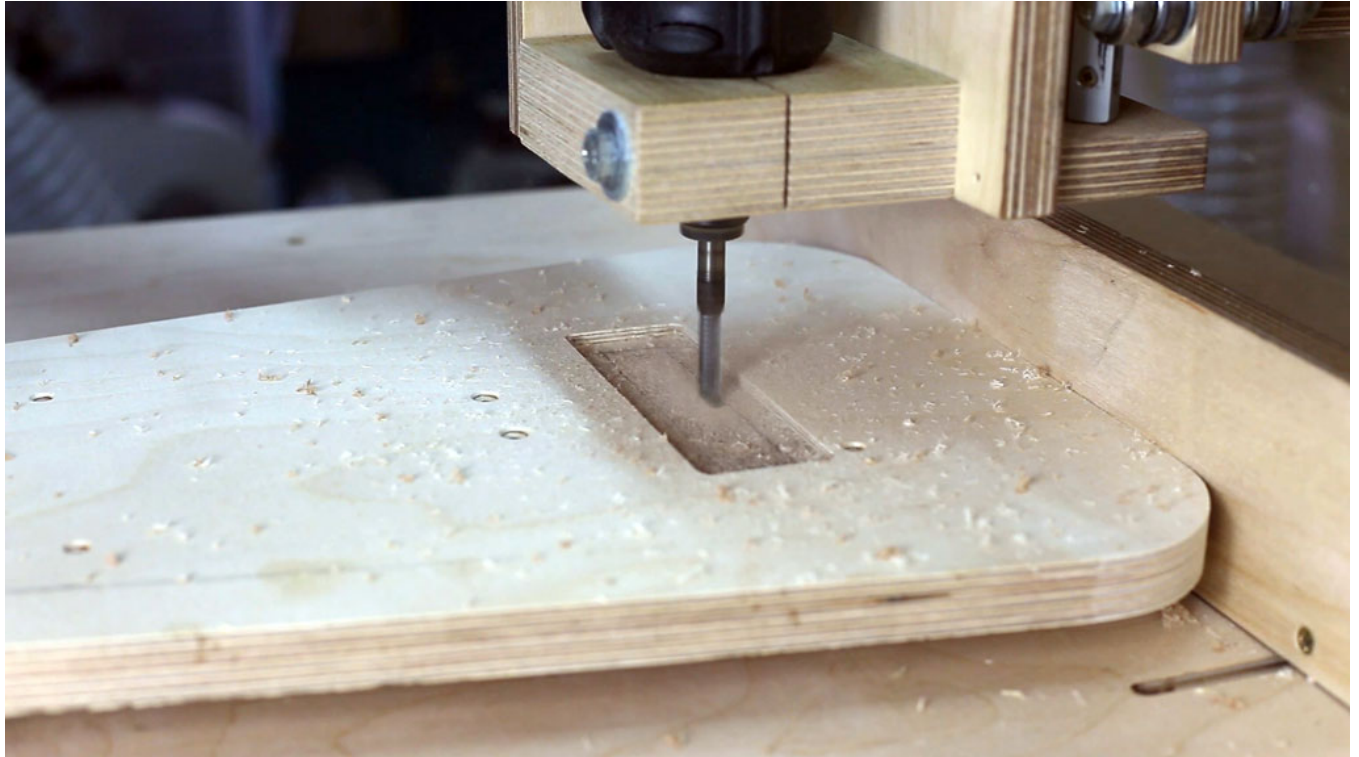
Put all the printable templates together and glue them to the plywood to ease cutting and drilling it.



Sand the edges on the **belt sander table**.



Make the calibration slot drilling three straight holes, then finish it with the rasp and make the holes to insert the bearings.



And the groove for the quick access cover in the **3D Router**. Now, mill in the back the place for holding the jig saw. This will give it a great stability and will make easier to assemble it.



Assemble the parts for the stand with screws, using clamps to avoid the pieces from moving. Now it is ready for sand and varnish.



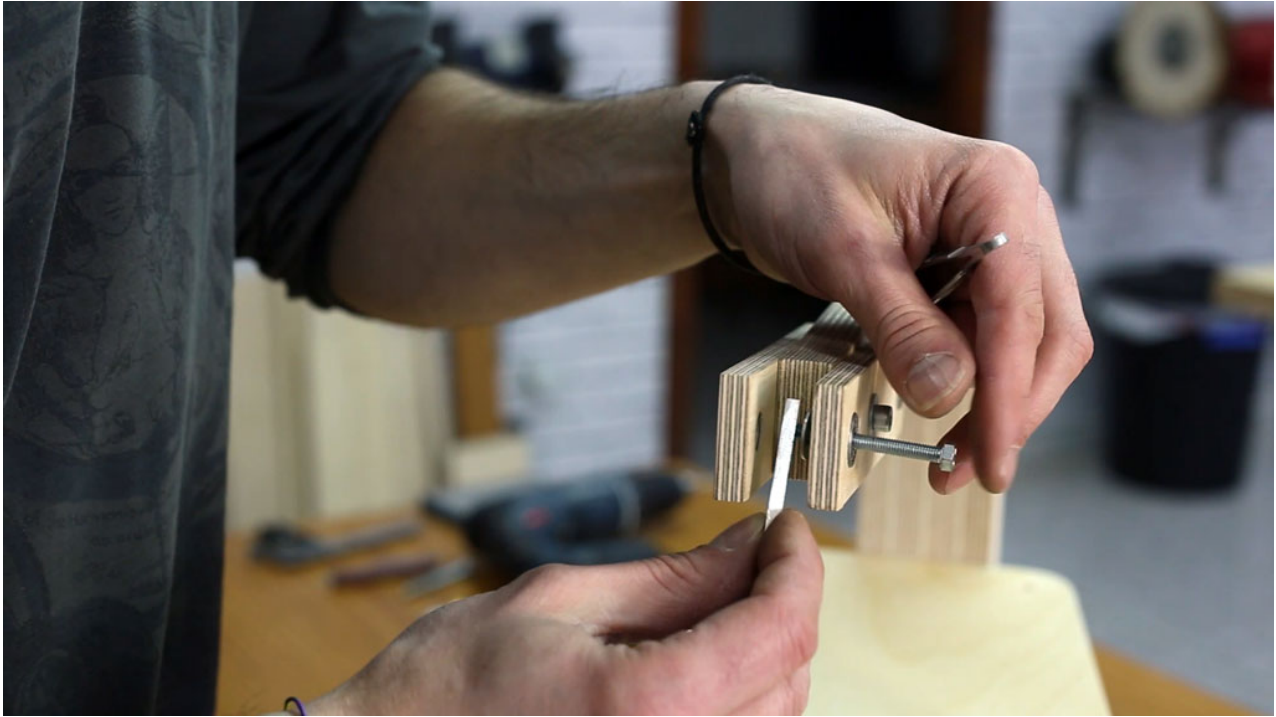
Assemble it all and insert the bearings.



Here you need to use a lock-nut to prevent it loosening due to vibrations.
No need to over-tighten.



Cut and prepare the spring and install it using two eye bolts. One open and another one closed.



Cut and mechanize the aluminum plate to hold the blade. This system is necessary to allow a small oscillation due to the up and down movement of the blade.



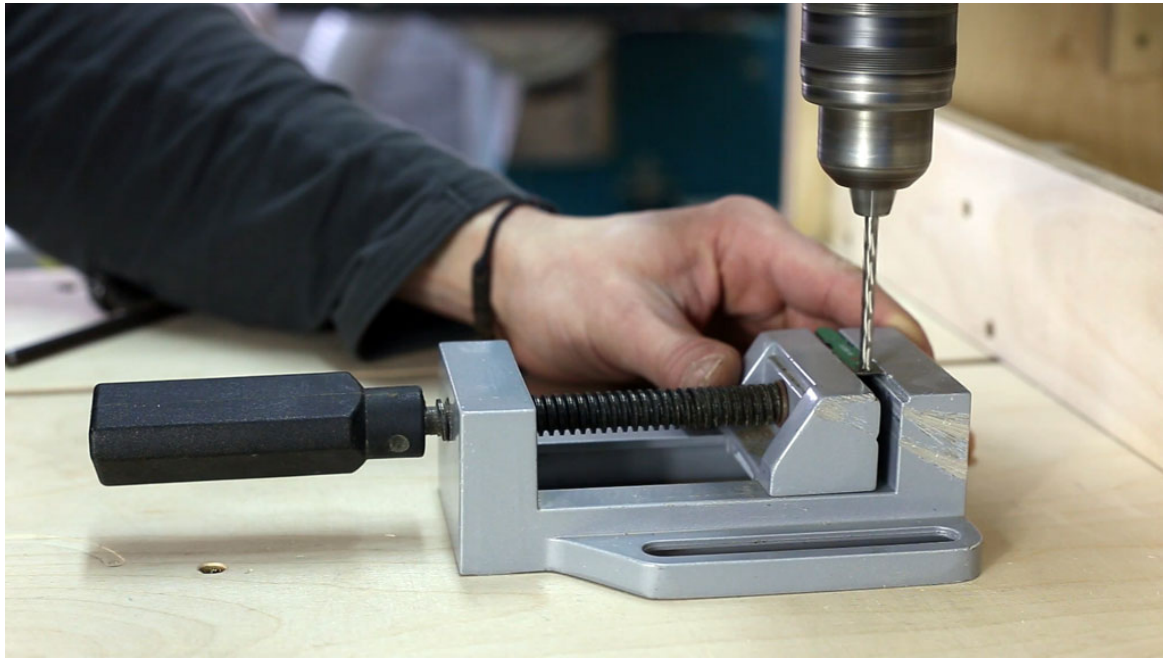
Here we'll also use a lock-nut.



Let's start this second video making the access to the power button and speed control, which, of course, will be different depending on the model you are gonna use.



Now prepare the fastening system of the blade, to do this, make a groove up to half of the bolt so we can get a higher contact surface area. Assemble it and tighten the nut without moving the bolt.



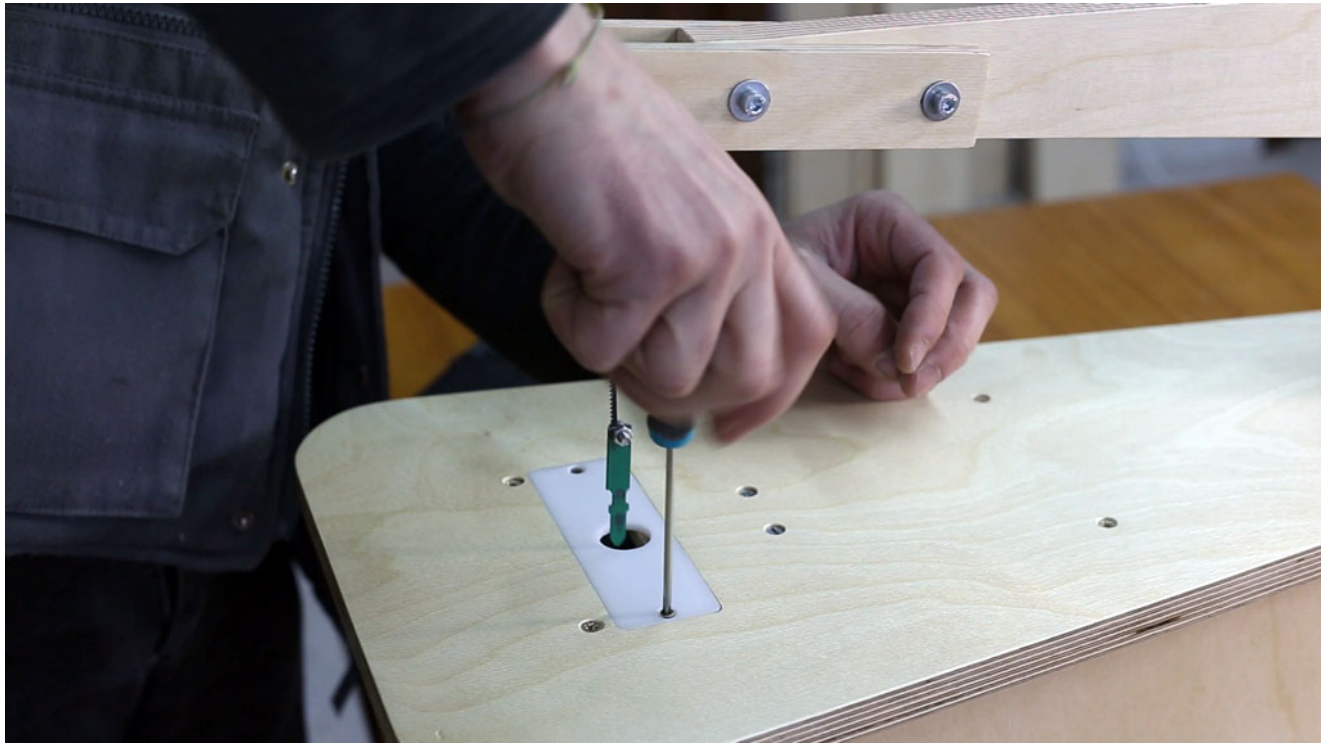
Cut the top of an used blade to make the quick release system. You better use one for metal because they are a little wider. Also make a groove in the other bolt and insert the blade.



To place and remove the blade, we must proceed like this. First, hold the top and pressing down, insert it in the jig saw.



Check square of the blade in both axes, and calibrate it if needed moving the plate through the bolt. And in the other axis, using the side bolts.

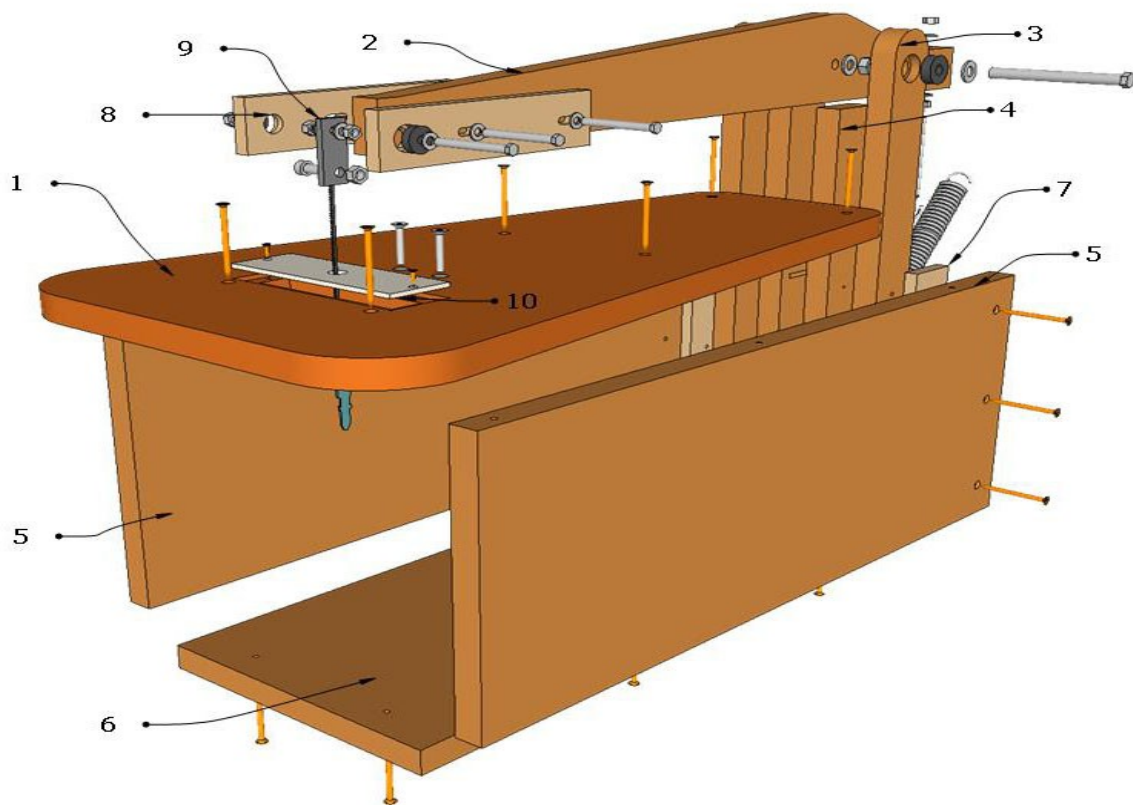


Try if it works and now we can make the quick access cover using opal methacrylate. Remember to always work at low speeds with these plastic materials.

Scroll Saw

Hard plywood:

- 1- 520 x 280 x 18mm
- 2- 565 x 70 x 18mm
- 3- 388 x 40 x 18mm (2 pieces)
- 4- 325 x 40 x 18mm (2 pieces)
- 5- 500 x 200 x 18mm (2 pieces)
- 6- 500 x 200 x 18mm
- 7- 200 x 40 x 9mm (2 pieces)
- 8- 150 x 35 x 9mm (2 pieces)
- 9- 40 x 16 x 4mm (Aluminium Plate)
- 10- 120 x 40 x 3mm (Opal Metacrylate)



Bolts and Screws

Allen Socket Head



Allen Flat Head



Hexagonal



Allen Round Head



Carriage



Wood



Eye



Hexagonal



Nuts

Nylon Insert Lock



Wing



Tee



Threaded Insert



Flat



Washers

Spring



Internal Teeth



External Teeth



Flat



Hinges
Kitchen Door



L



Profiles
Pipe



Springs

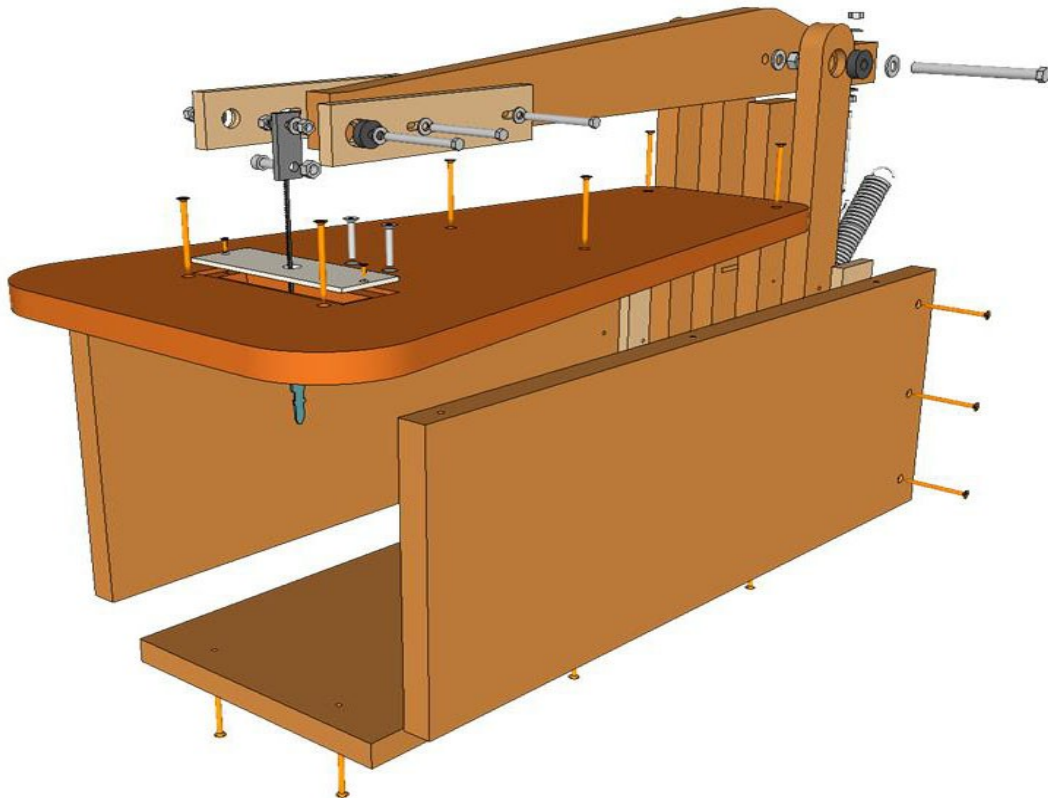


Bearings
608

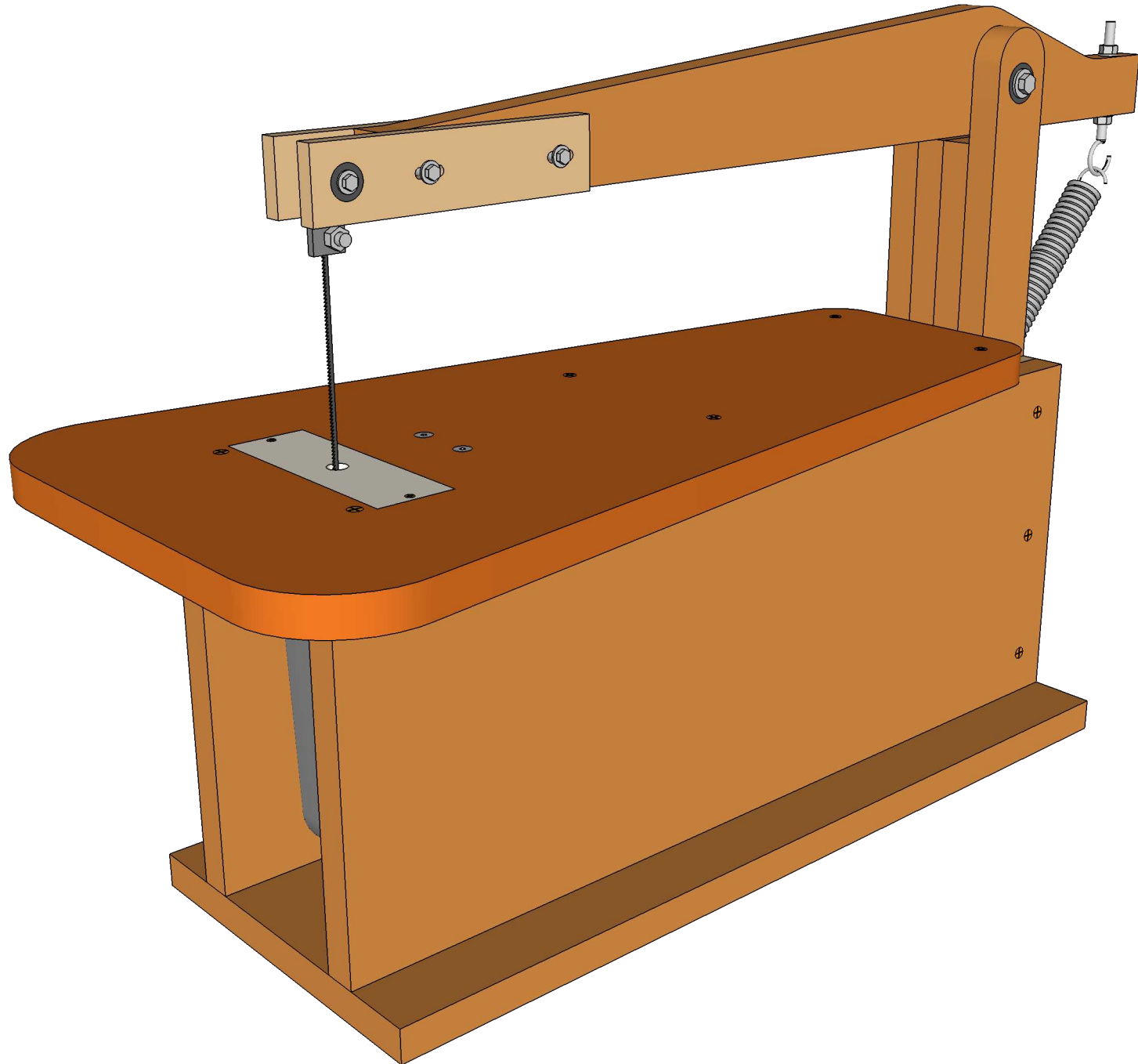


Scroll Saw Fasteners

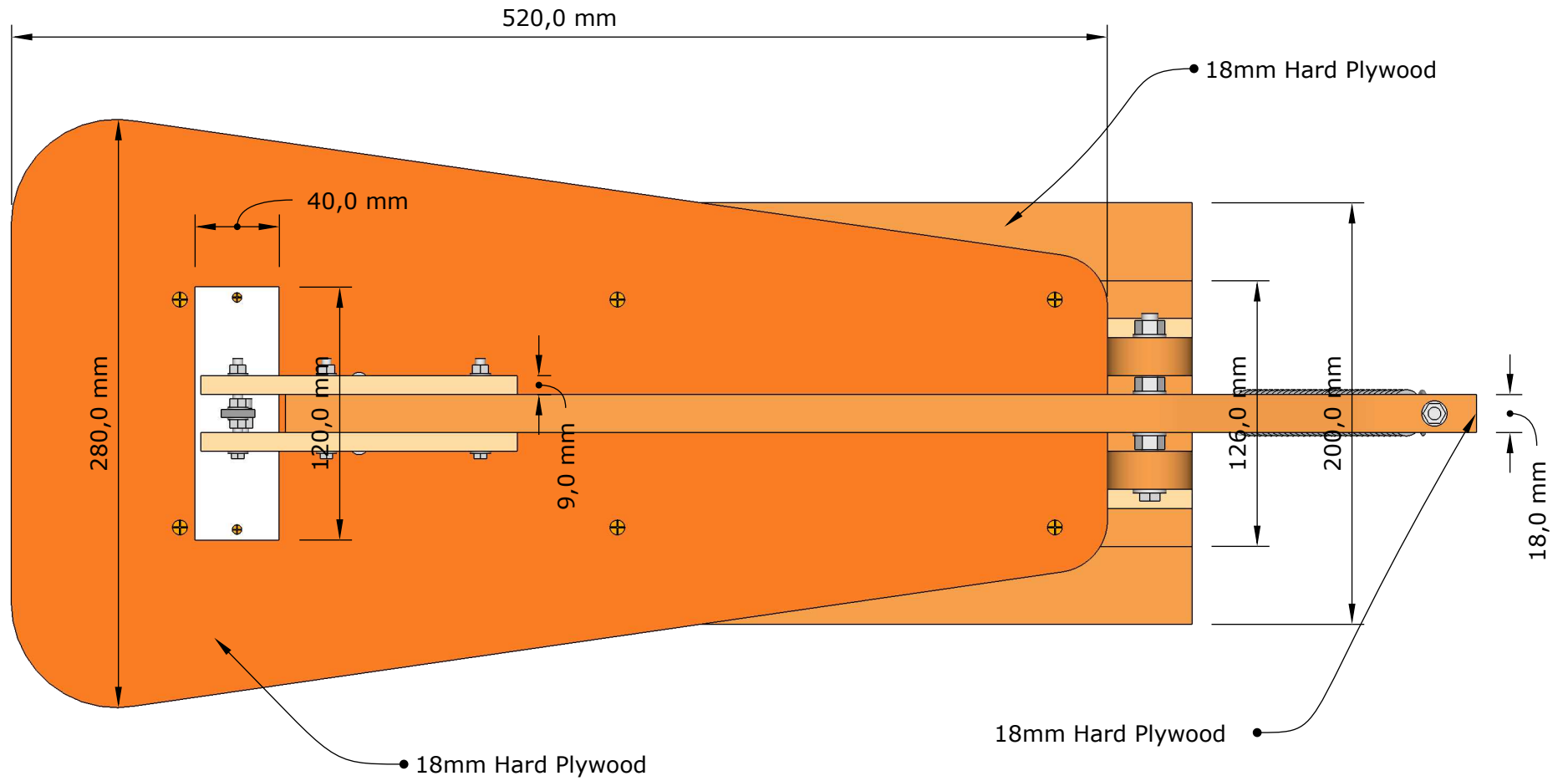
- 1 M8 90mm Hexagonal Head Screw
- 1 M8 LockNut
- 2 M8 Nuts
- 4 M8 Washers
- 1 M6 15mm Allen Soket Head Screw
- 1 M6 Eye 70mm
- 1 Wood Eye
- 2 M6 Nuts
- 1 M6 LockNuts
- 2 M6 Washers
- 3 M5 45mm Hexagonal Head Screw
- 6 M5 Washers
- 3 M5 Nuts
- 2 M4 25mm Flat Head Screw
- 1 M4 Washer
- 1 M4 10mm Allen Socket Head Screw
- 1 Number 23 Metal Spring 114mm long
- 2 608 Bearing
- 2 625 Bearing



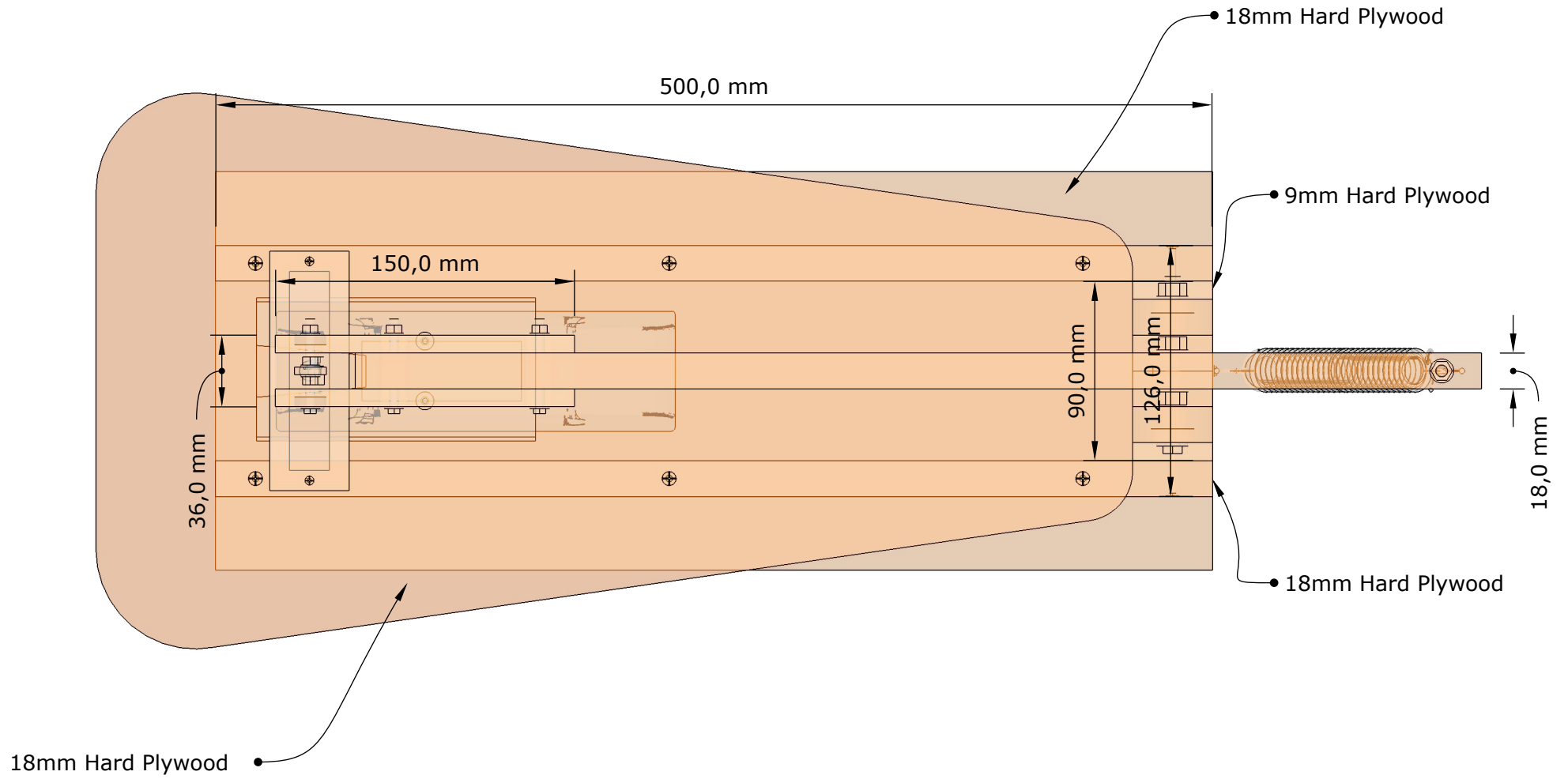
Scroll Saw ISO



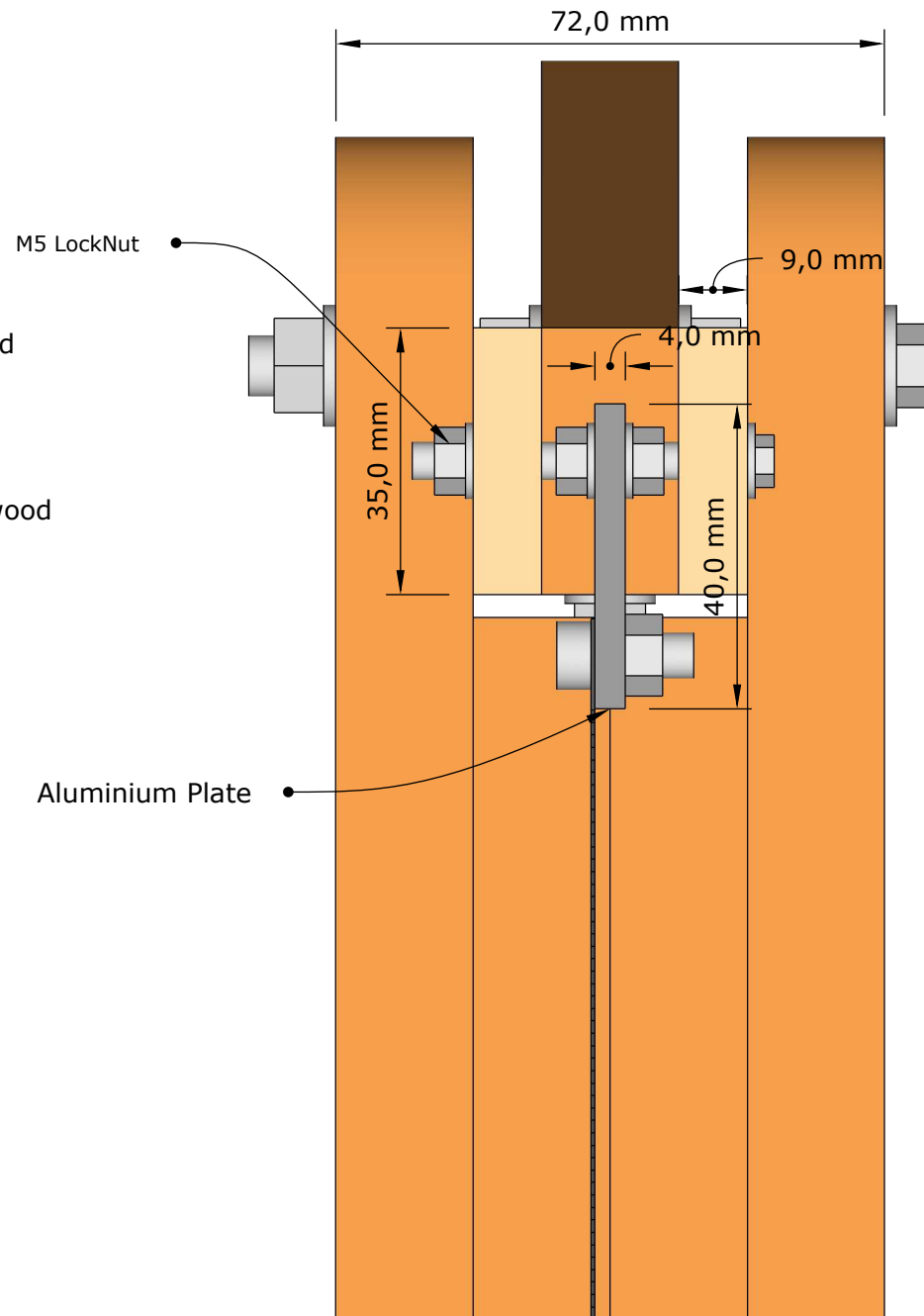
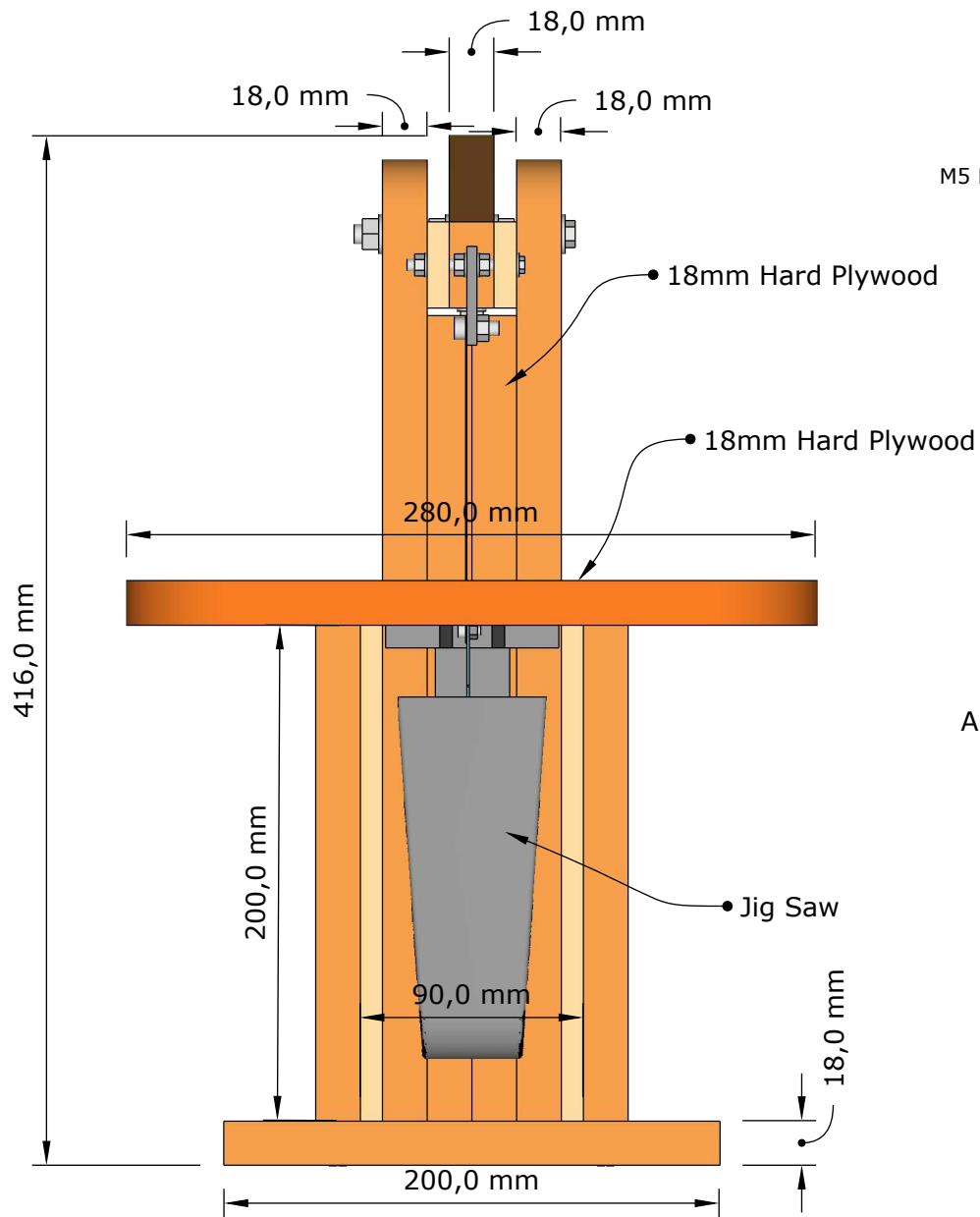
Scroll Saw Top 1/3 Scale



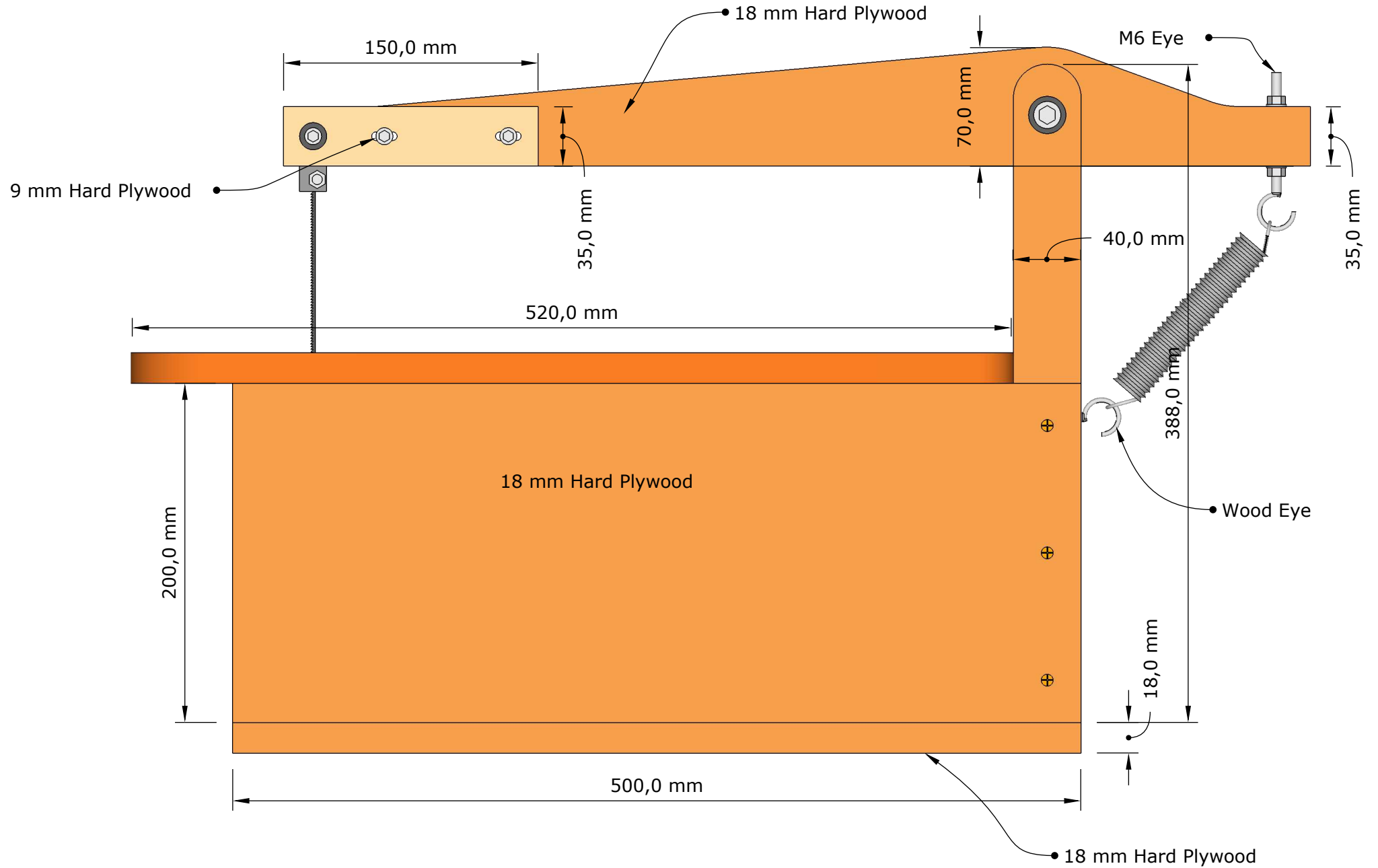
Scroll Saw Top X Ray 1/3 Scale



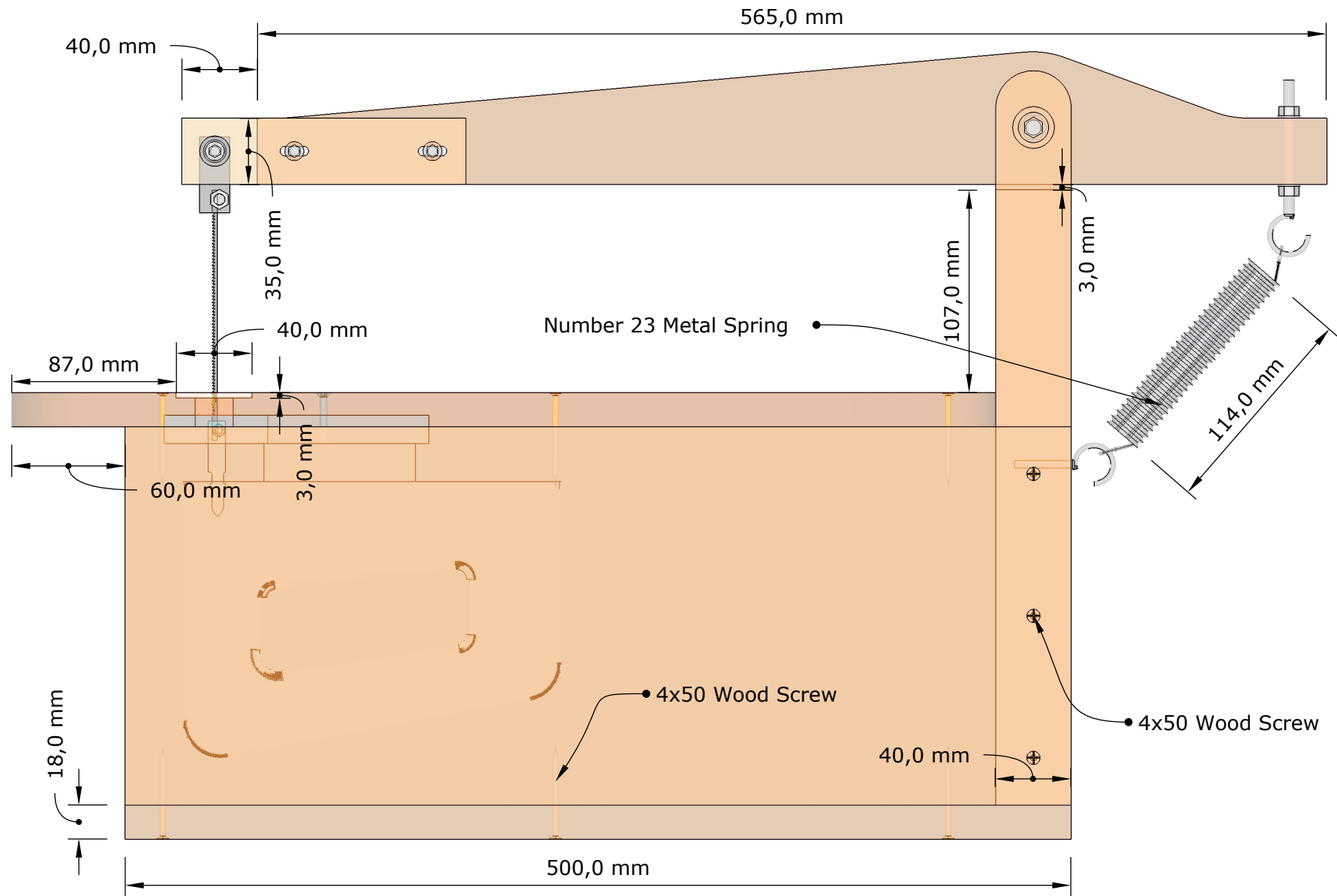
Scroll Saw Front 1/3 Scale



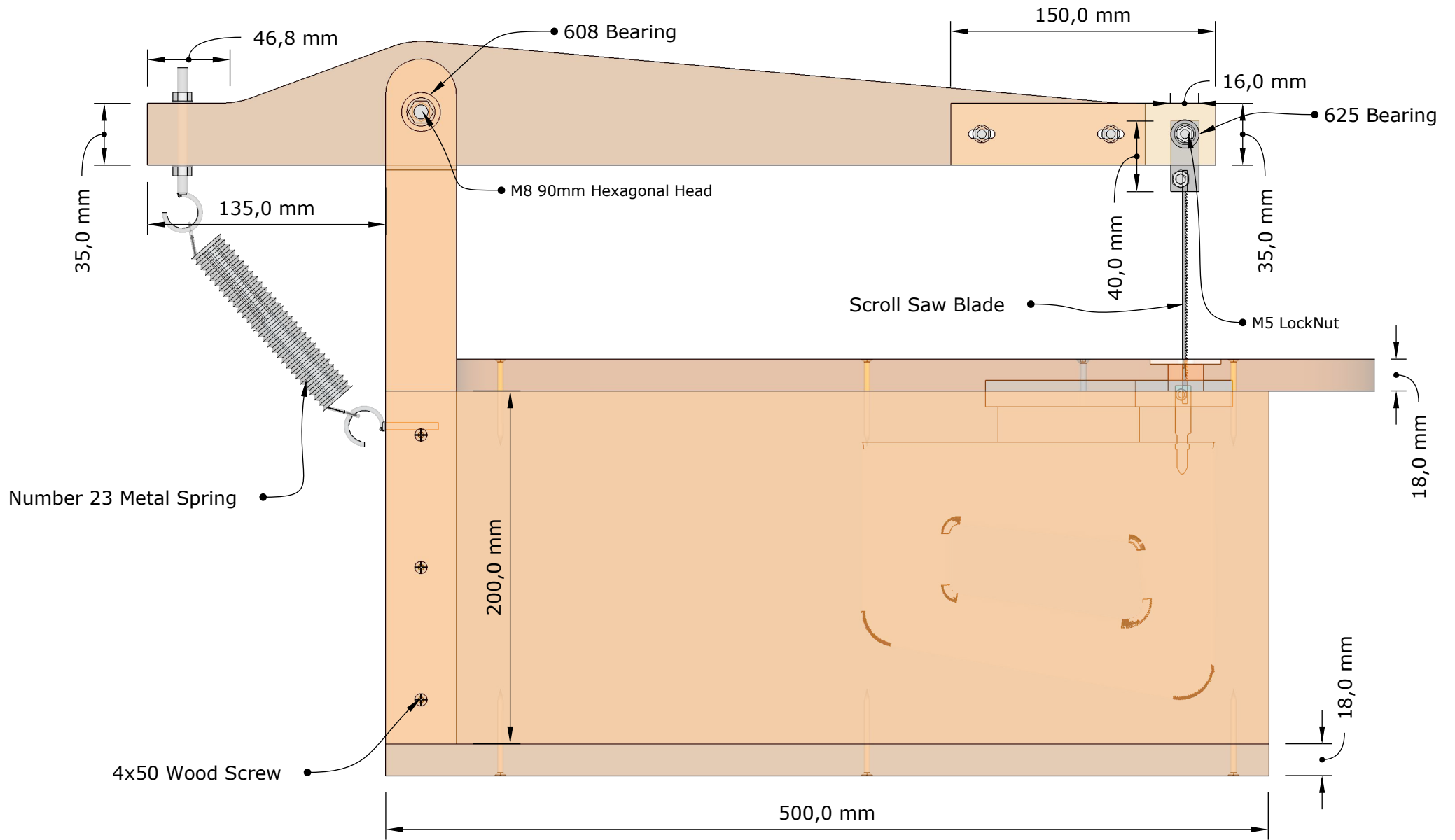
Scroll Saw Right 1/3 Scale

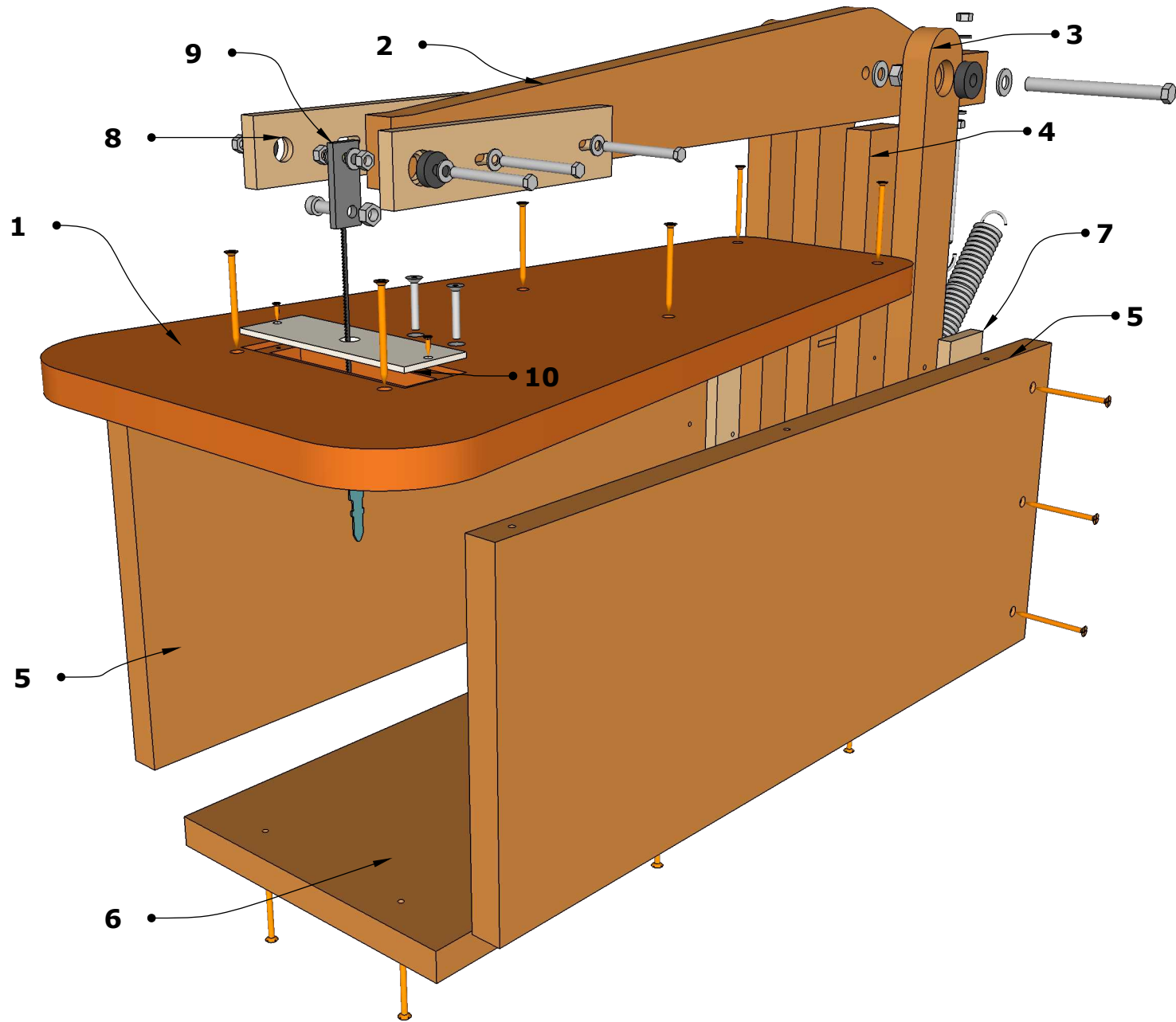


Scroll Saw Right X Ray 1/3 Scale

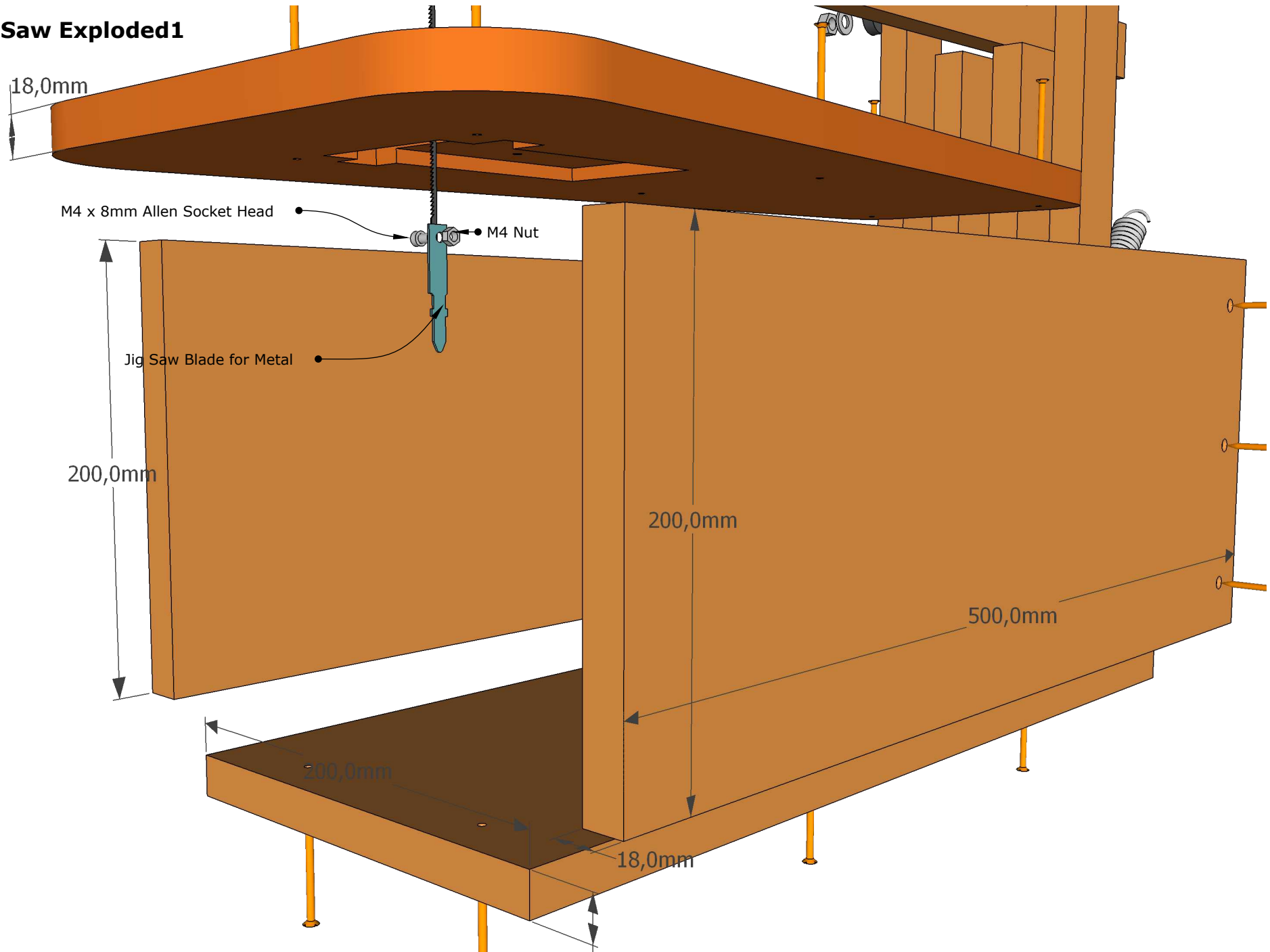


Scroll Saw Left 1/3 Scale

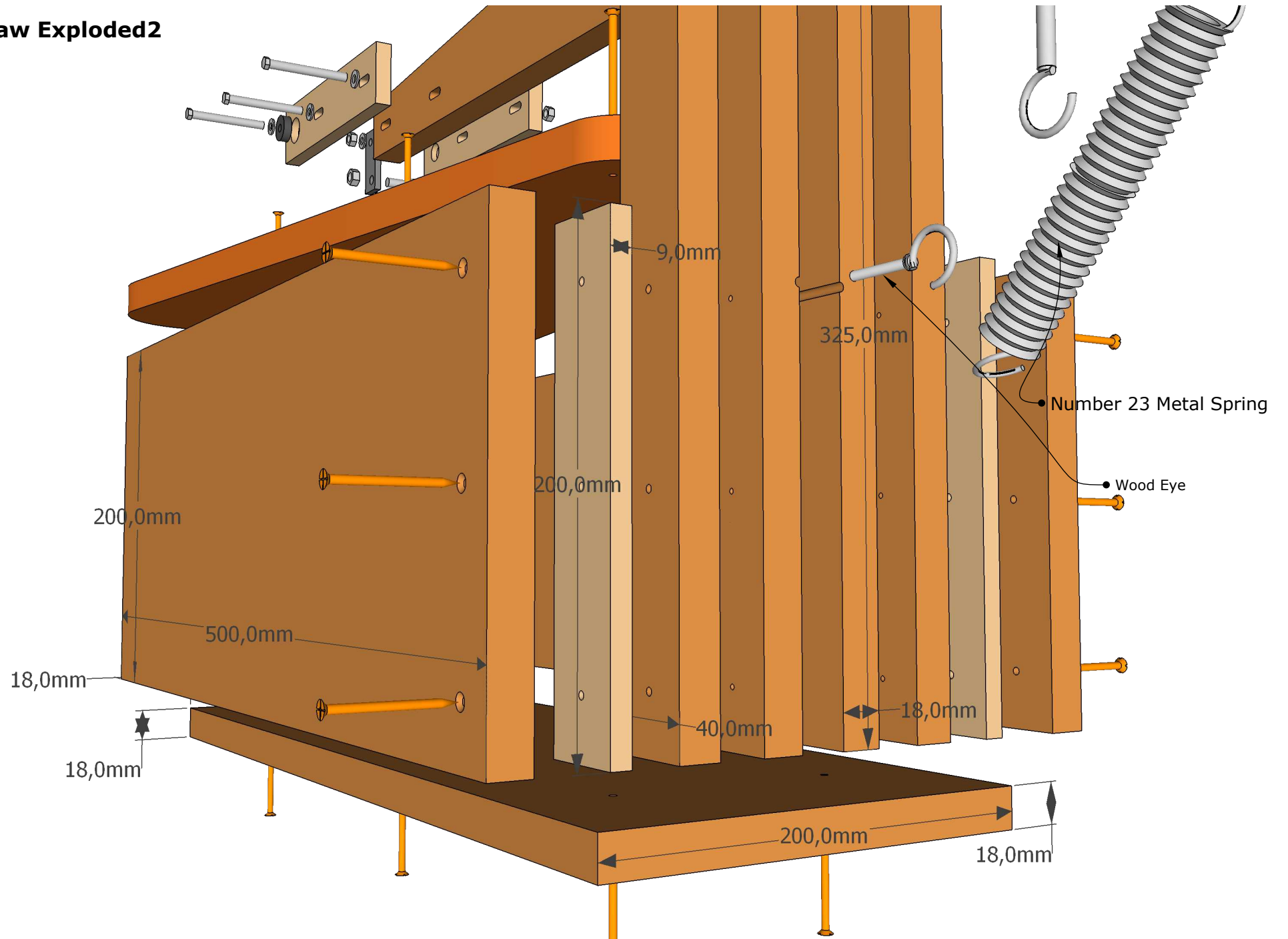




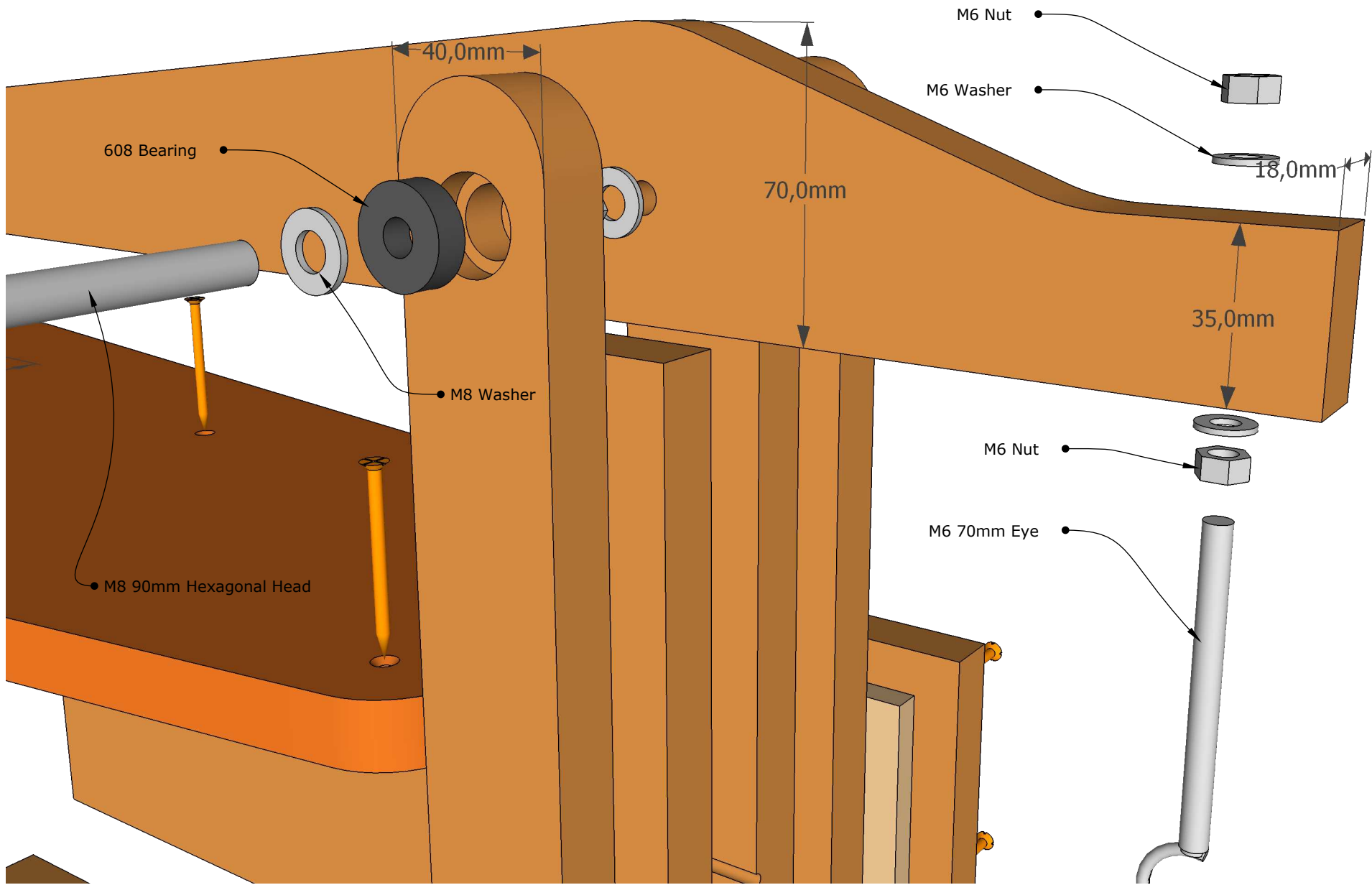
Scroll Saw Exploded1



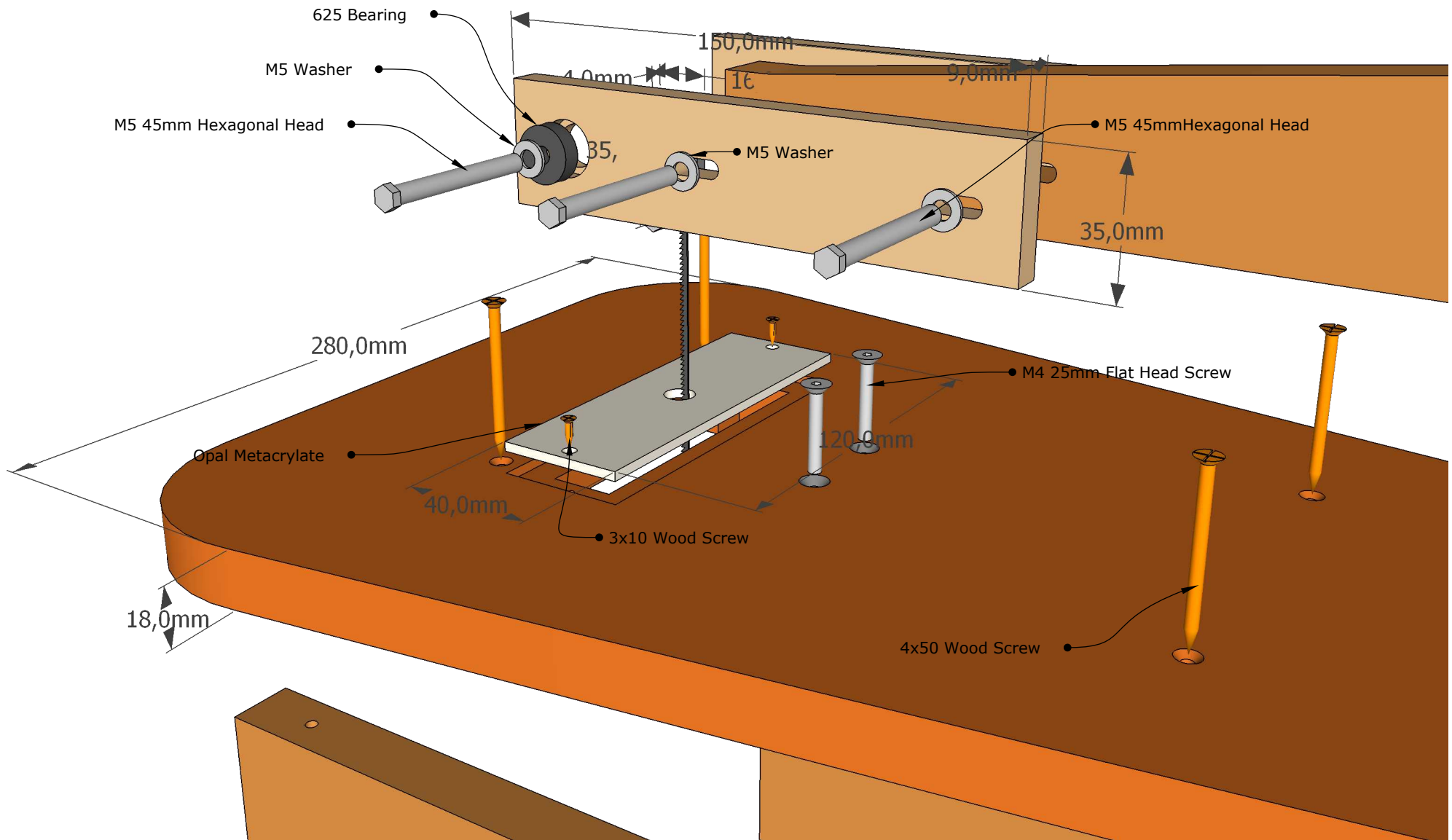
Scroll Saw Exploded2



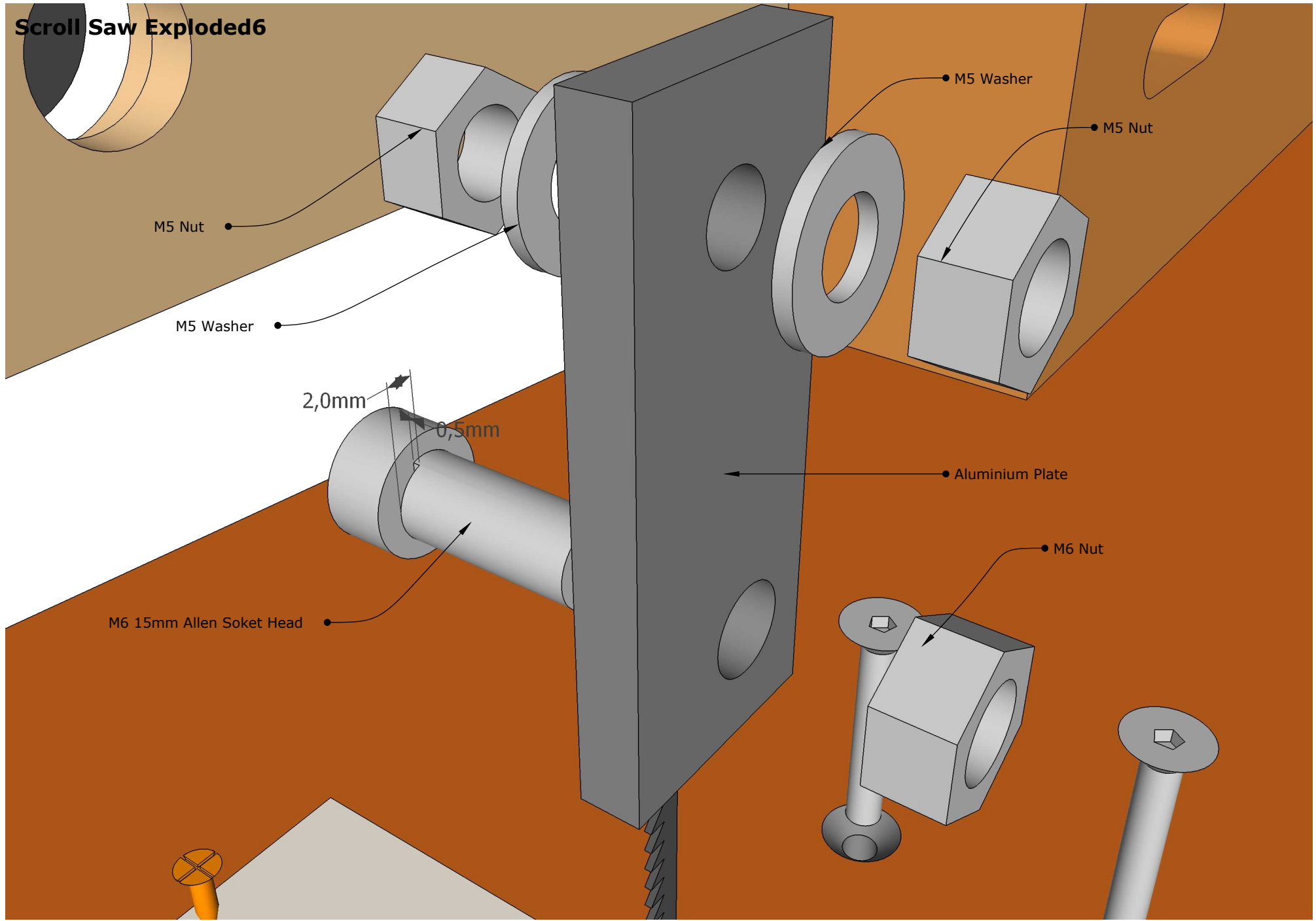
Scroll Saw Exploded4



Scroll Saw Exploded5



Scroll Saw Exploded6



M5 Nut

M5 Washer

2,0mm

0,5mm

M6 15mm Allen Soket Head

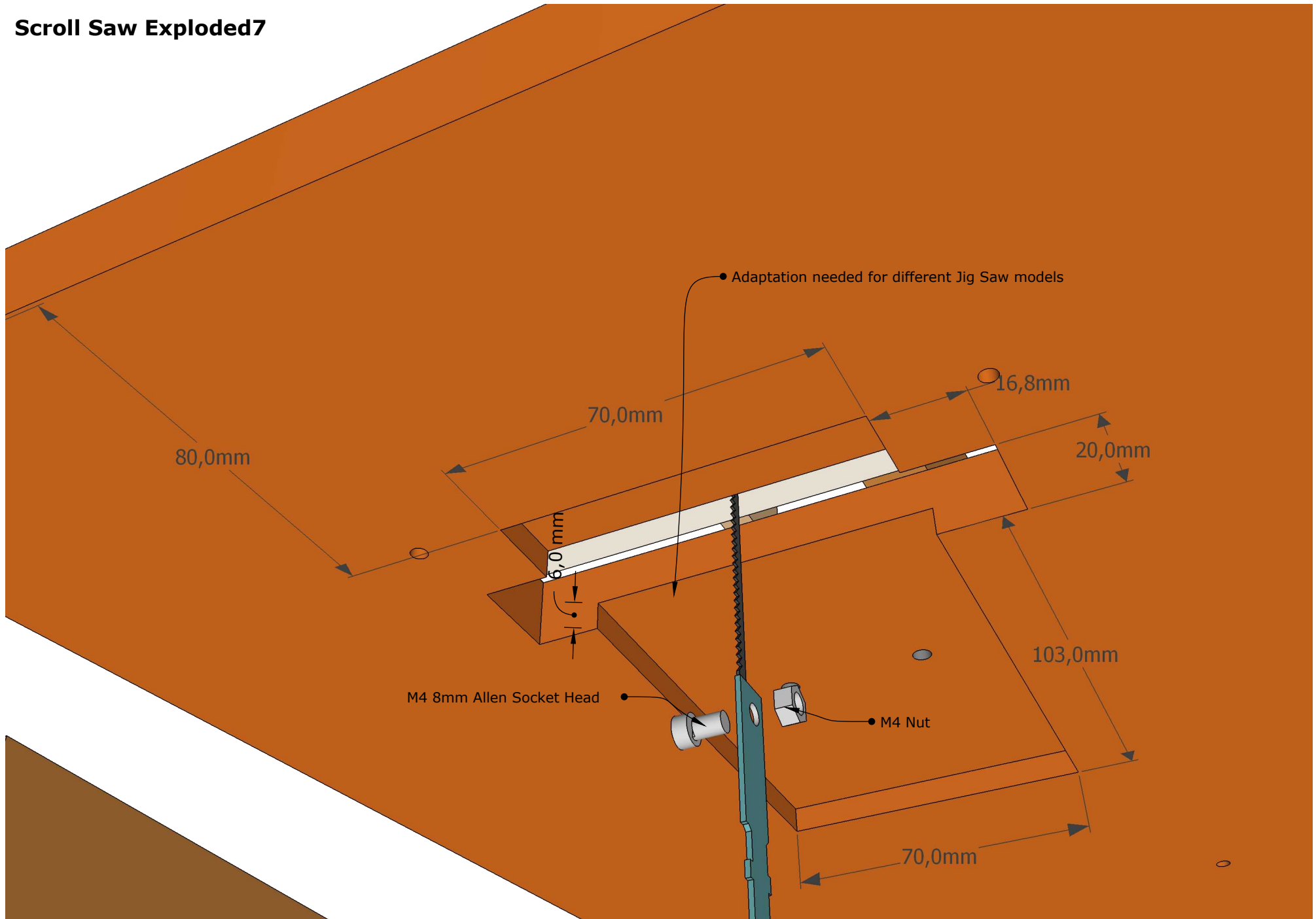
M5 Washer

M5 Nut

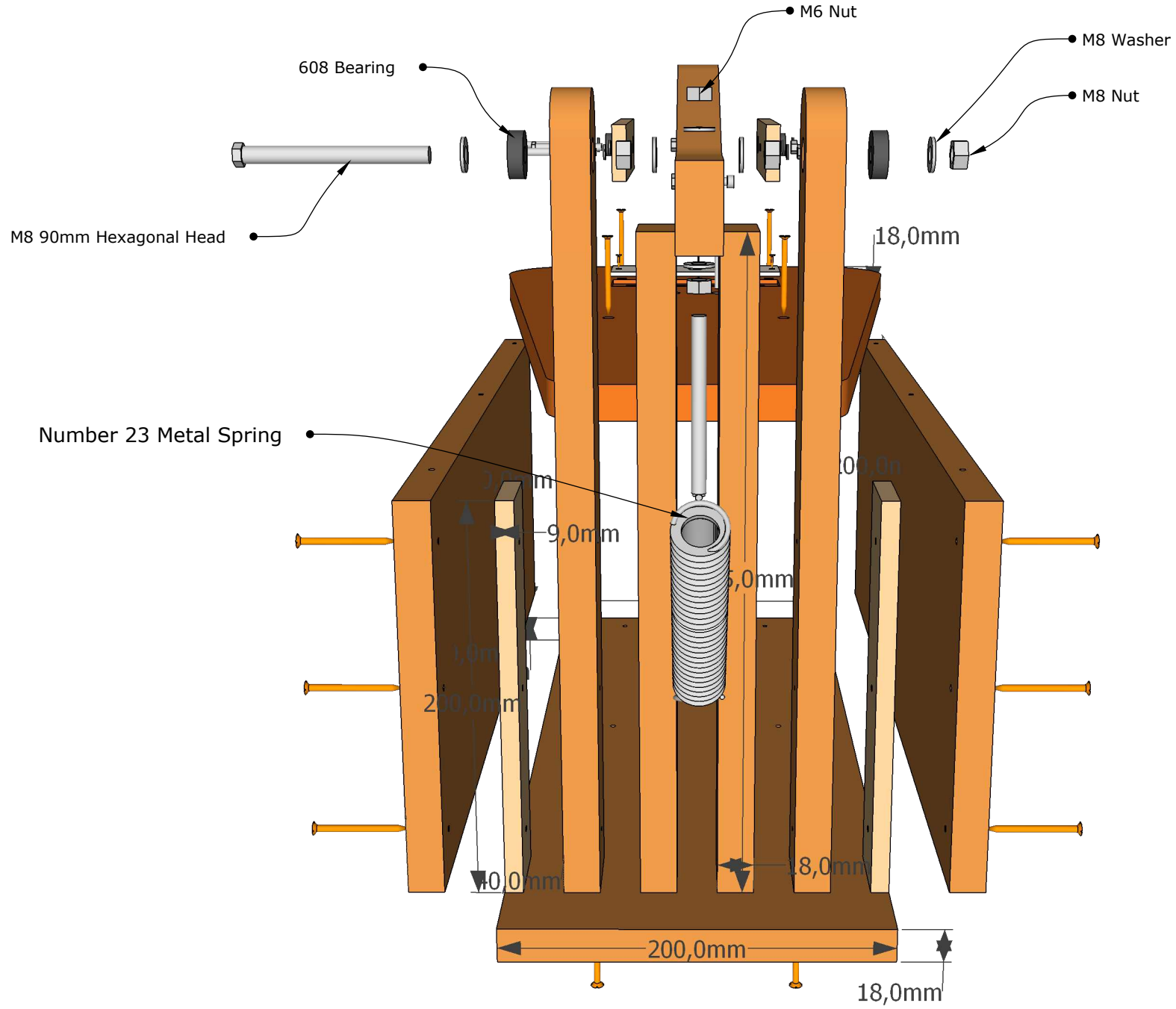
Aluminium Plate

M6 Nut

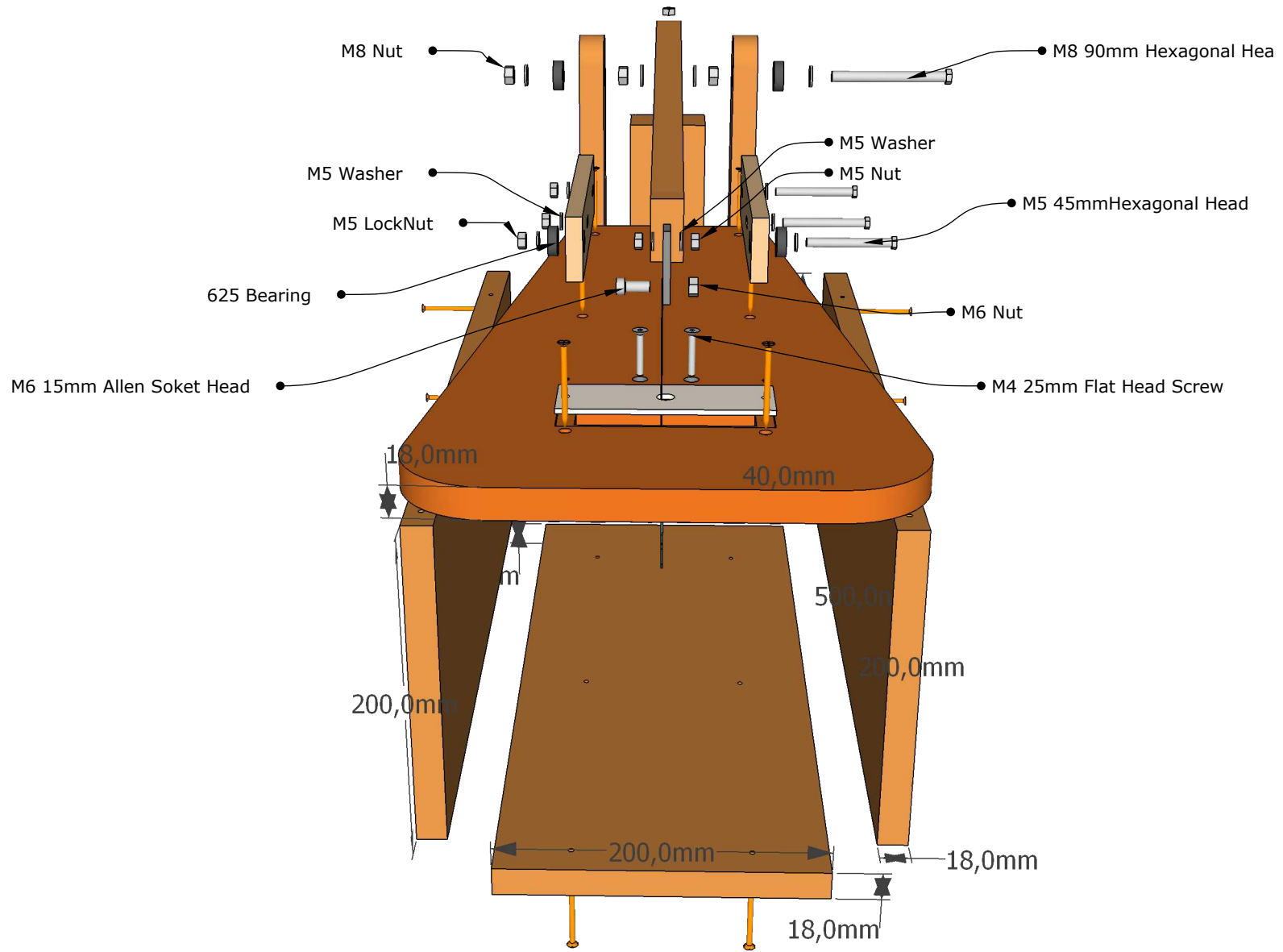
Scroll Saw Exploded7



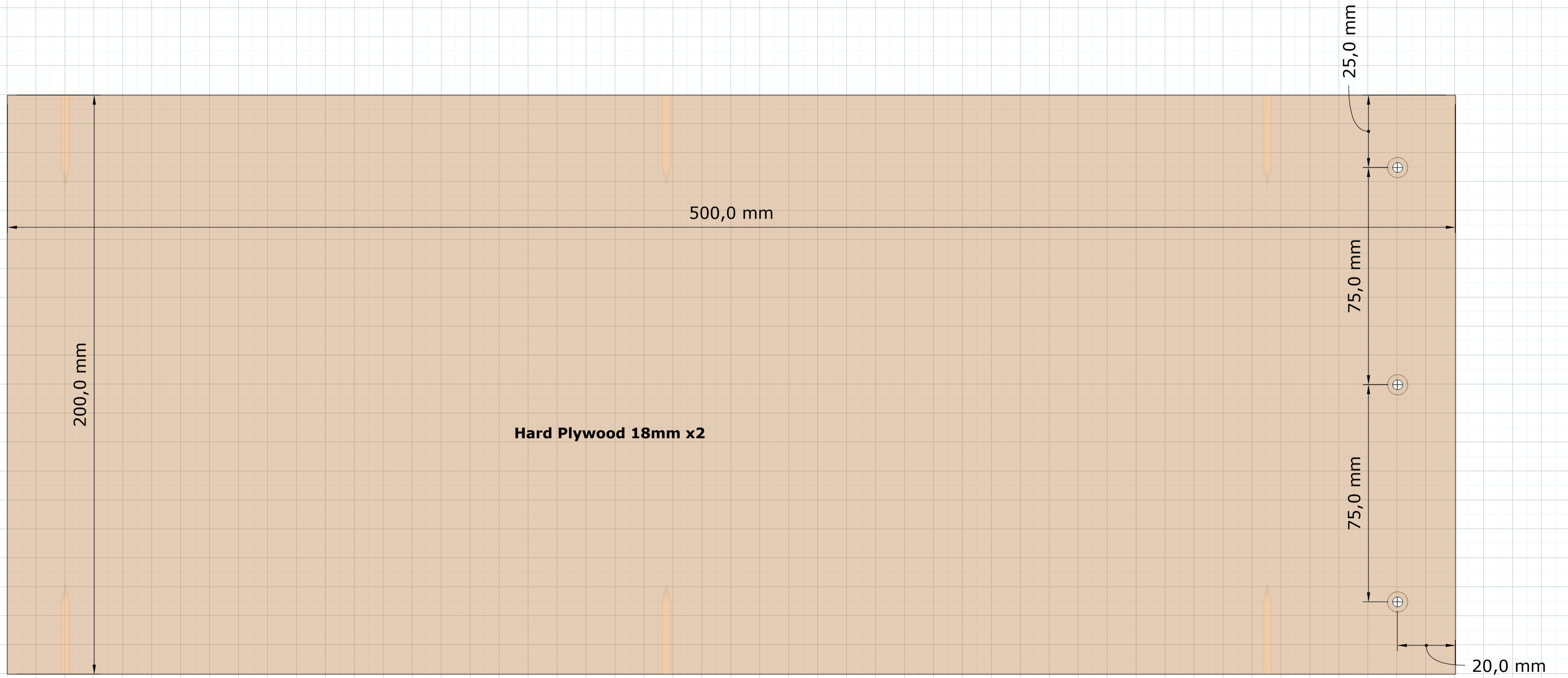
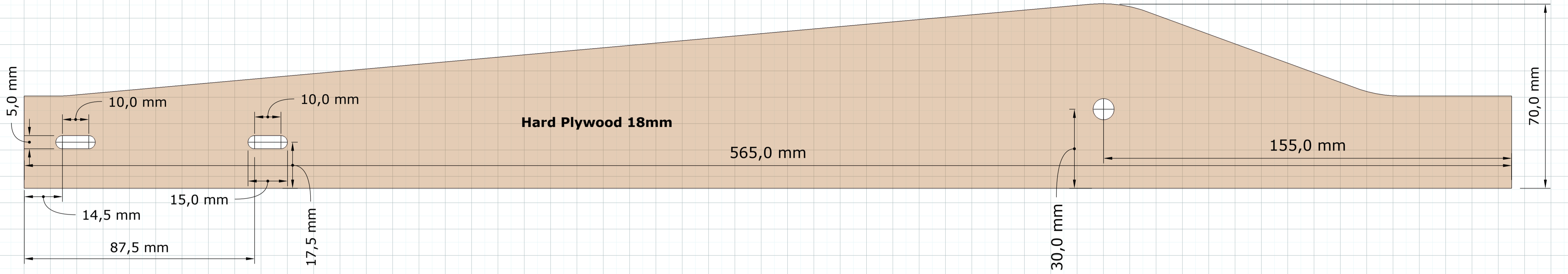
Scroll Saw Exploded8



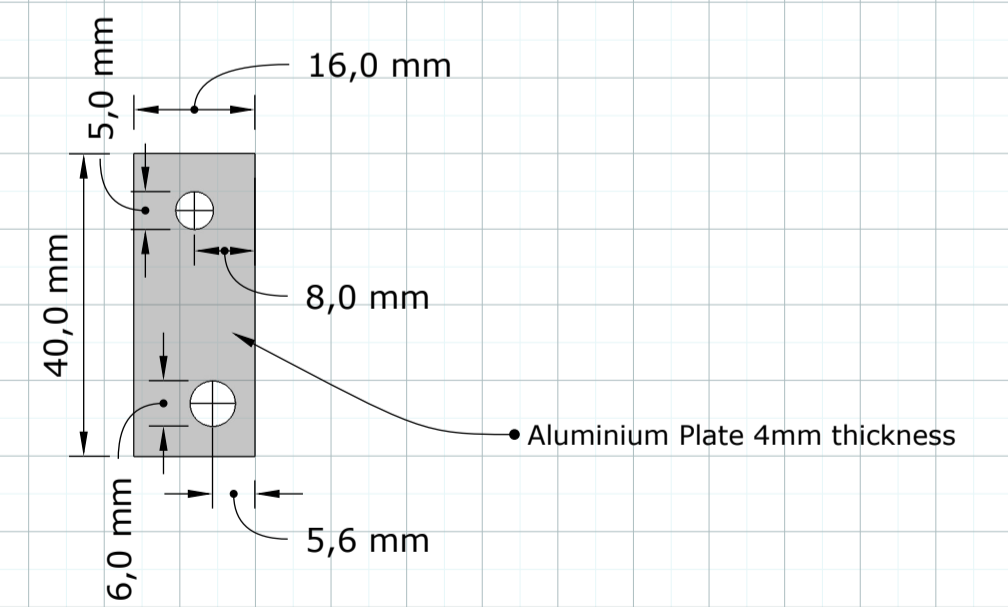
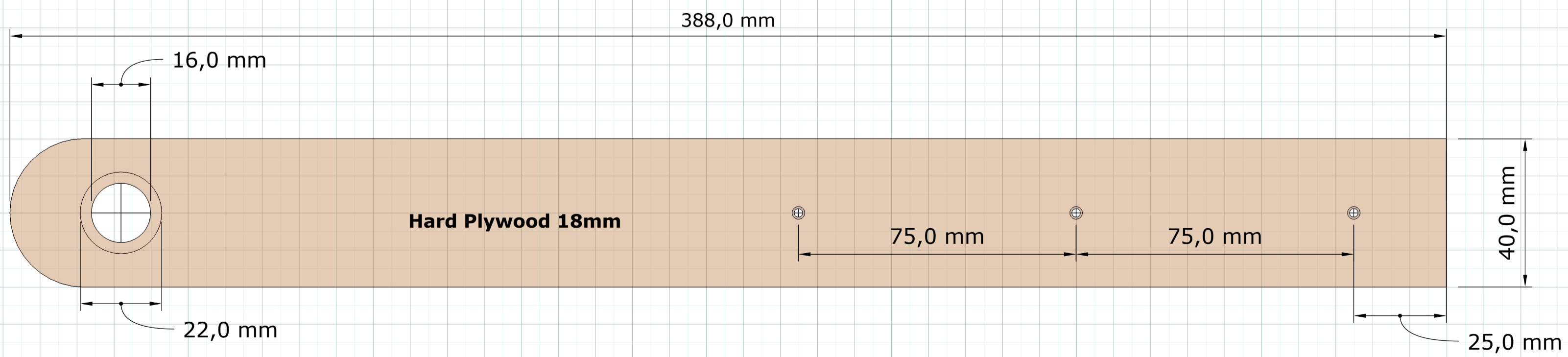
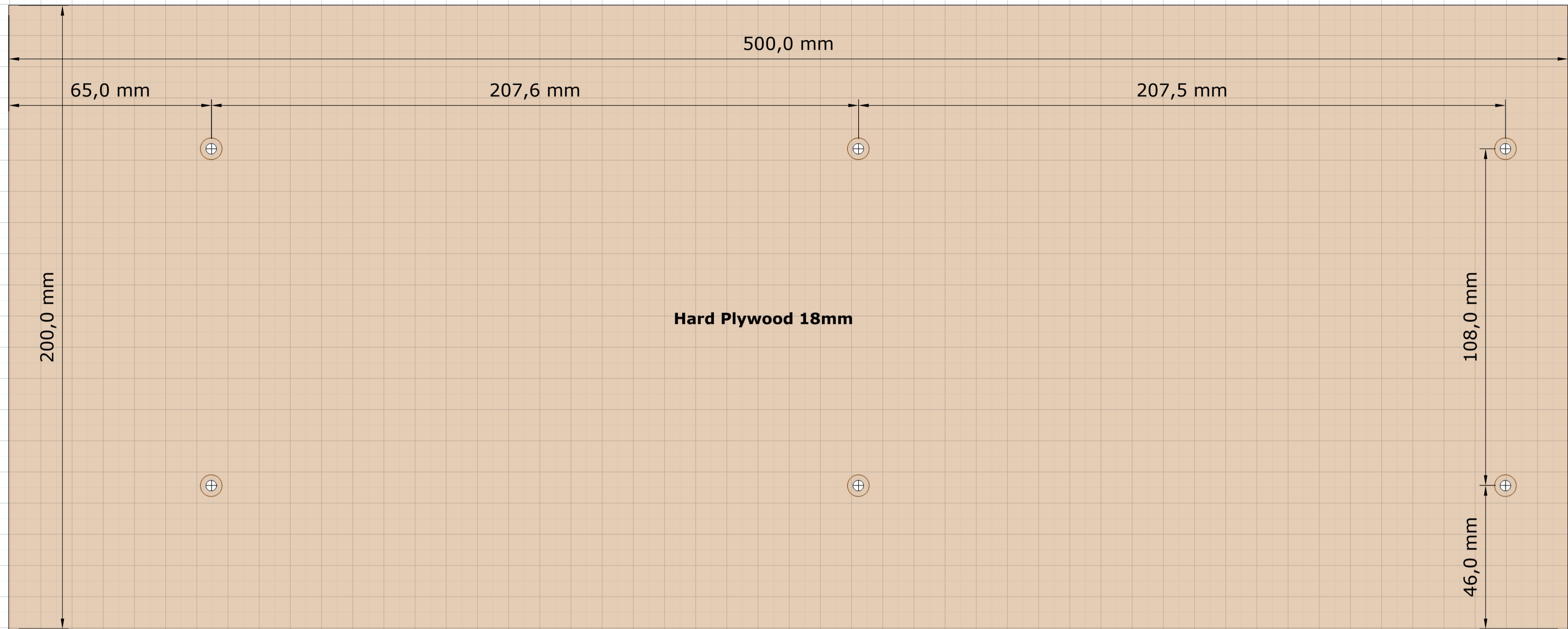
Scroll Saw Exploded9



Printable Template1



Printable Template2



Printable Template3

