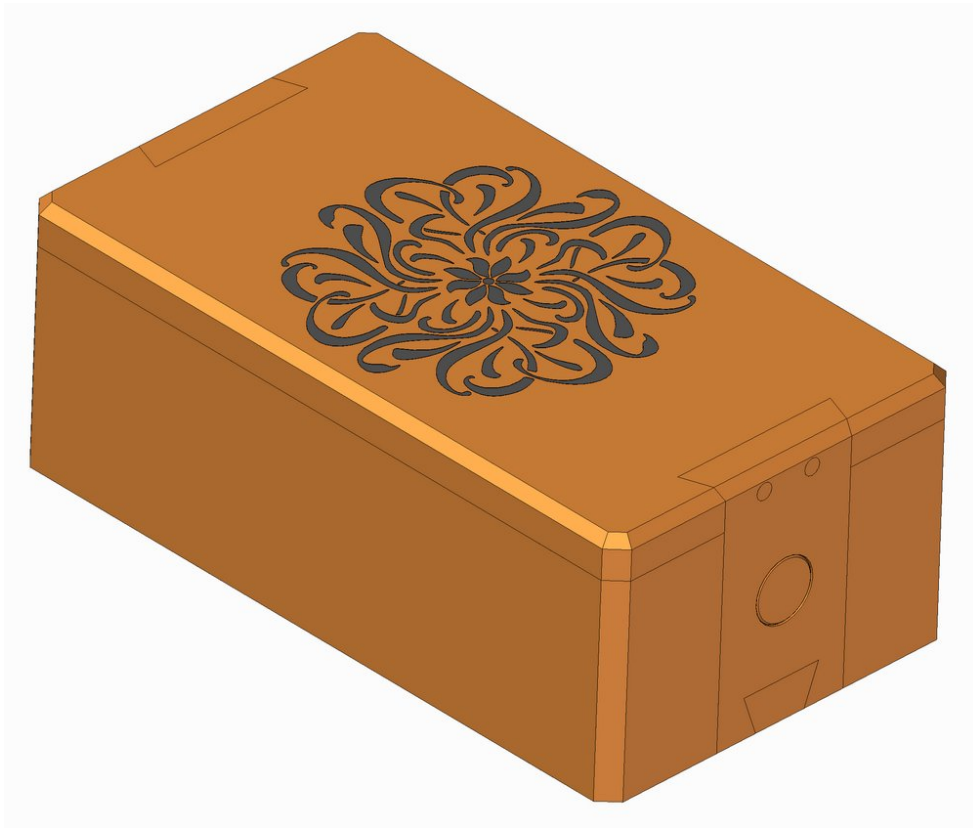


Wooden puzzle box plan



The puzzle box (also called the secret lock box or a trick box) is a box with the secret. These boxes can only be opened with a subtle movement or pushes of right box parts. Japanese artisans made the most beautiful and complicated wooden puzzle boxes long time ago. Then the rest of the world craftsman began with making of these wonderful woodworking objects. If you are one of these craftsmen, you will realize that making a secret lock box is a fun and intriguing project. After that, this amazing puzzle box will have the honorary place in your home. You can keep valuable papers in it or jewelry and you will have no worry that someone will access its contents. And another amusing part of this woodworking piece is when you offer to your friends or family member to figure out, how to open it. I am sure, that you will have to show them, and they will surely be delighted and wish to have wooden puzzle box of their own.

This wooden puzzle box, whose plan we are offering here to you, is quite interesting because it has two opening mechanisms. It was created after we saw a plan for the making of a simpler version of the puzzle box in a woodworking journal. The plan inspired us to modify it, and as a result we present you a completely new variant of the puzzle box.

If you carefully study the drawings, the box assembly can be divided into the following parts:

- the box lid (Part 2) to which the dovetailed sides (Parts 3) are glued with dowels (Parts 4);
- the box body (Part 1) in which bullets (Parts 7) and spring (Parts 9) are installed with retainer pins (Parts 8) which have the function to keep the bullets and spring from falling out;
- the dovetailed slider (Part 5) that has a groove to which the key dowel (Part 6) is glued.

The puzzle box opens very easily:

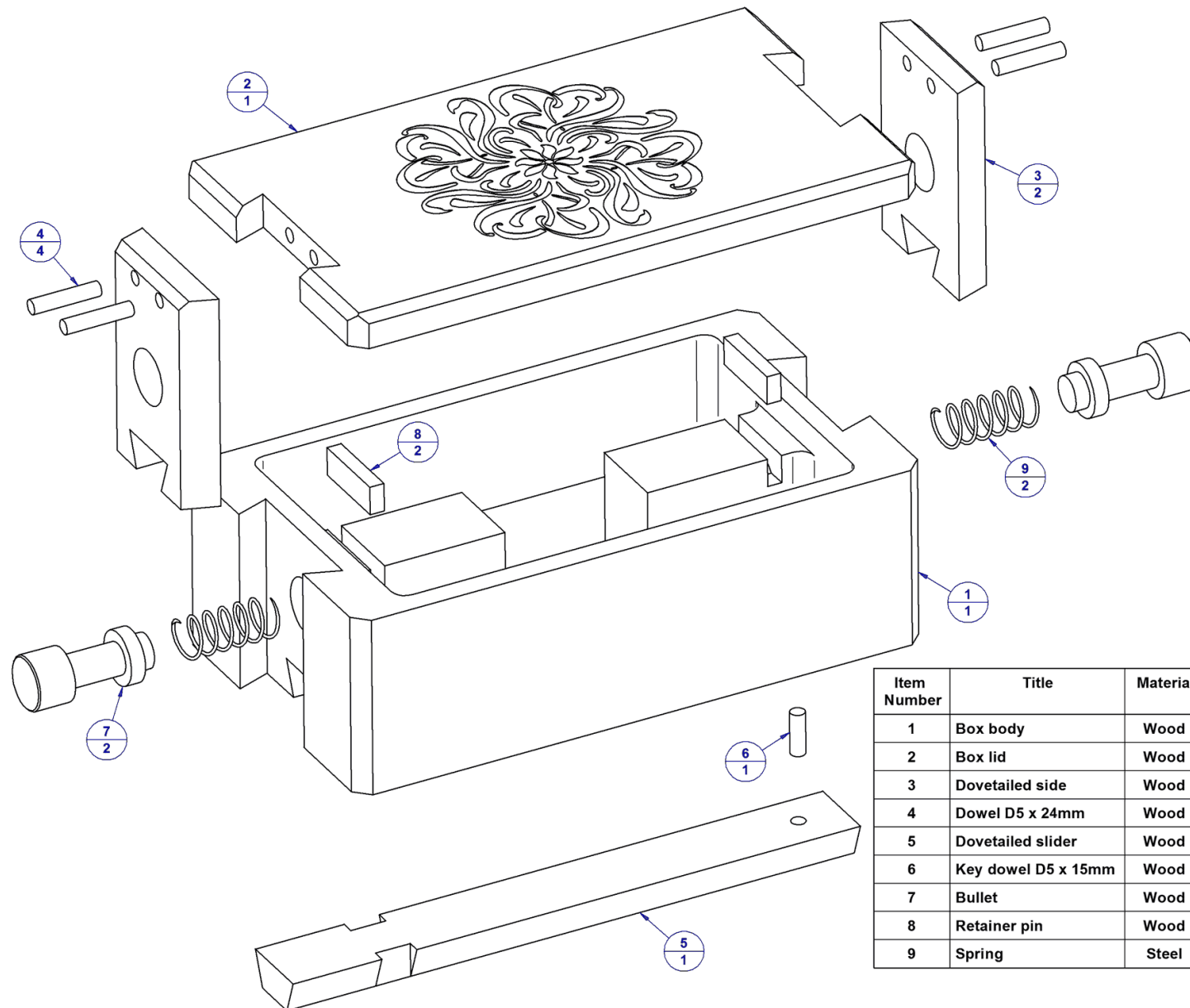
- The part named dovetailed slider blocks the opening of the box because it is in the shape of a swallow tail. On the parts named dovetailed sides there is a groove of the same shape through which the dovetailed slider passes. In order to open the box, the dovetailed slider needs to be moved so that the groove on it allows the passage of one dovetailed side. The other dovetailed side won't be blocked because it will automatically free itself by moving of the dovetailed slider.
- The previous step is just half the job done to open this puzzle box. If you look at the drawings of the box, you can see that the bullets also block the opening of the box. It is necessary to press the bullets simultaneously, which will finally enable the opening of the box.

The disadvantages of this box is that its interior is not very elegant and that the box body is not easy to make. We recommend you make the box body part using either carving technique (from one piece of wood) or lamination technique (cutting horizontal segments and their gluing), or to craft it on a milling machine which serves for the production of metal parts. As you can see, the puzzle box is decorated with an ornament to show you that it looks much nicer that way.

The making of this puzzle box is not among the simple projects designed for amateurs because:

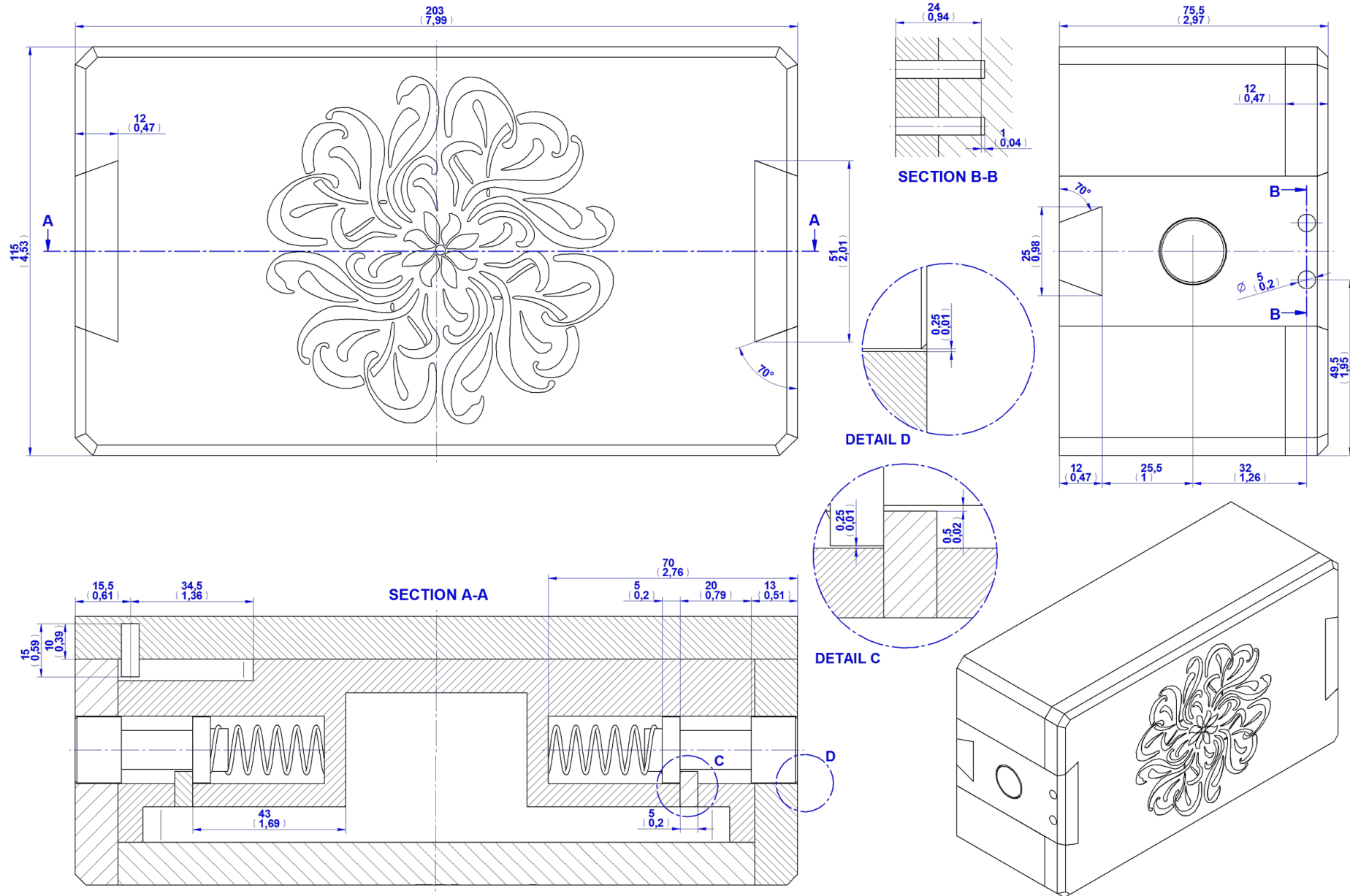
- You must pay attention to precision so that the locking mechanisms of the box will function smoothly. Precision also enhances the beauty of the box itself.
- To make the box and leave it undecorated is just half the job. Decorate it using some wood decoration technique (pyrography, marquetry, painting ...) and choose a quality finish. In order to last for a long time and function properly, for this puzzle box some type of hardwood is recommended.

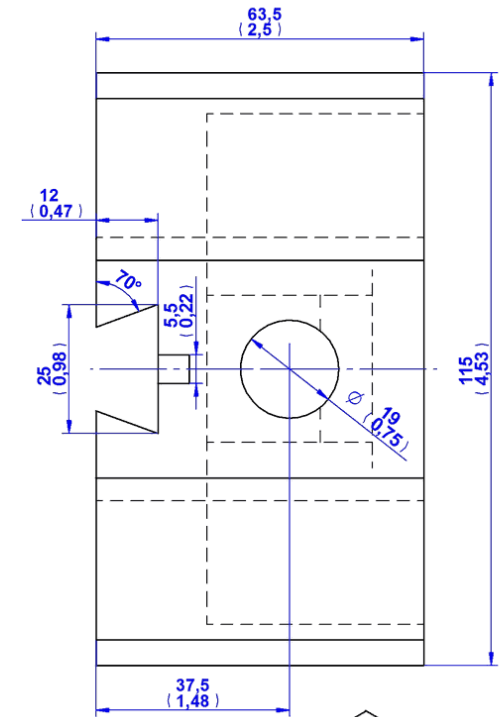
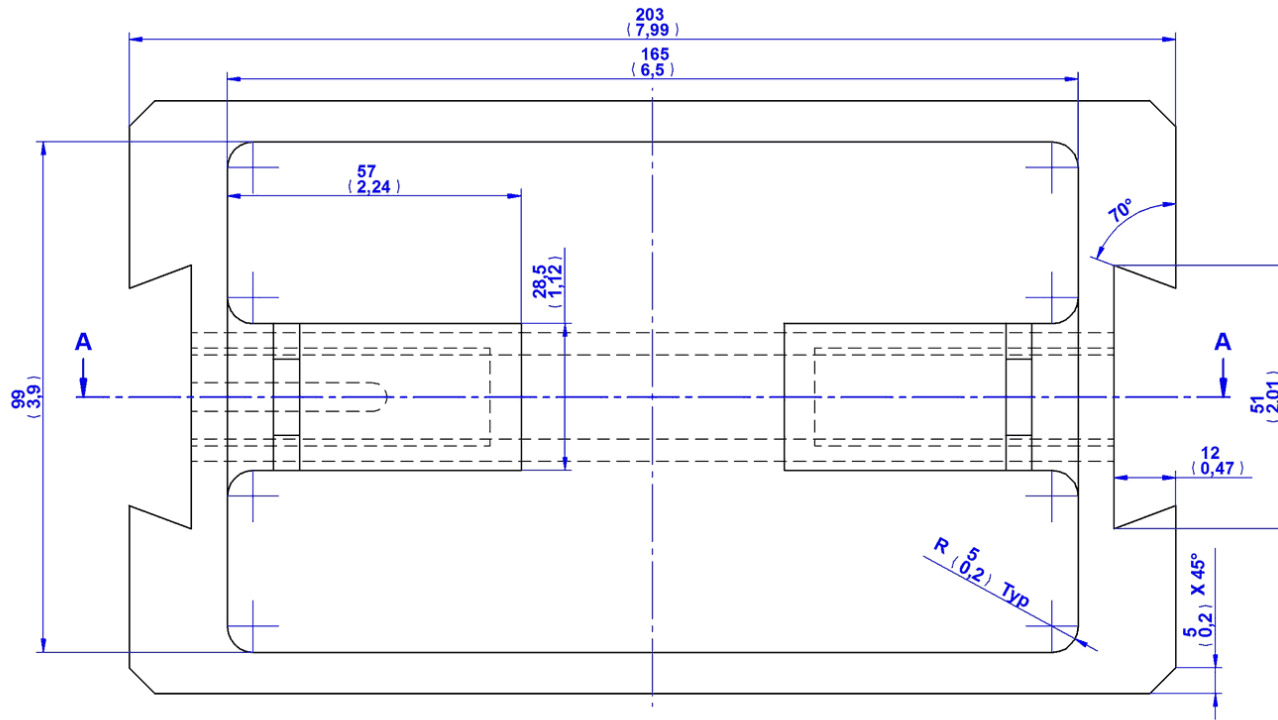
Wooden puzzle box – Parts list



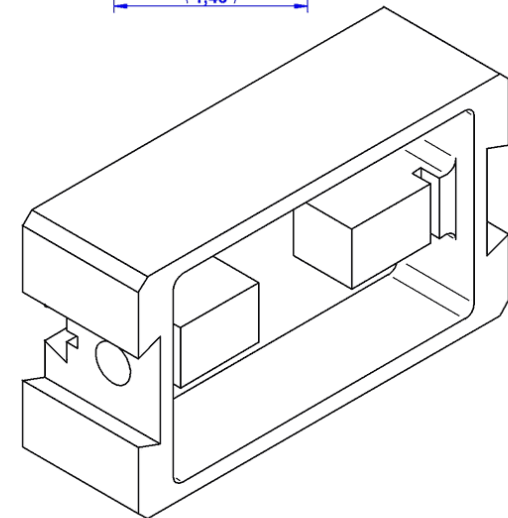
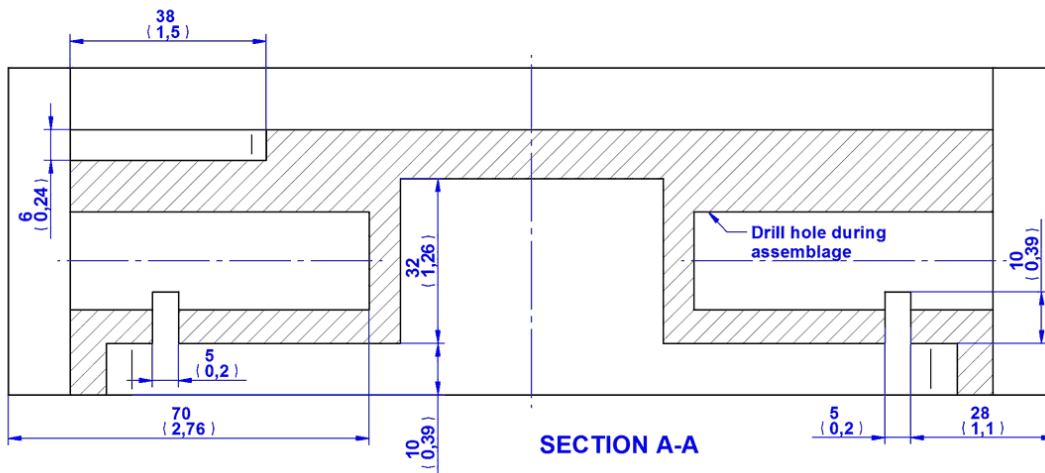
Item Number	Title	Material	Quantity
1	Box body	Wood	1
2	Box lid	Wood	1
3	Dovetailed side	Wood	2
4	Dowel D5 x 24mm	Wood	4
5	Dovetailed slider	Wood	1
6	Key dowel D5 x 15mm	Wood	1
7	Bullet	Wood	2
8	Retainer pin	Wood	2
9	Spring	Steel	2

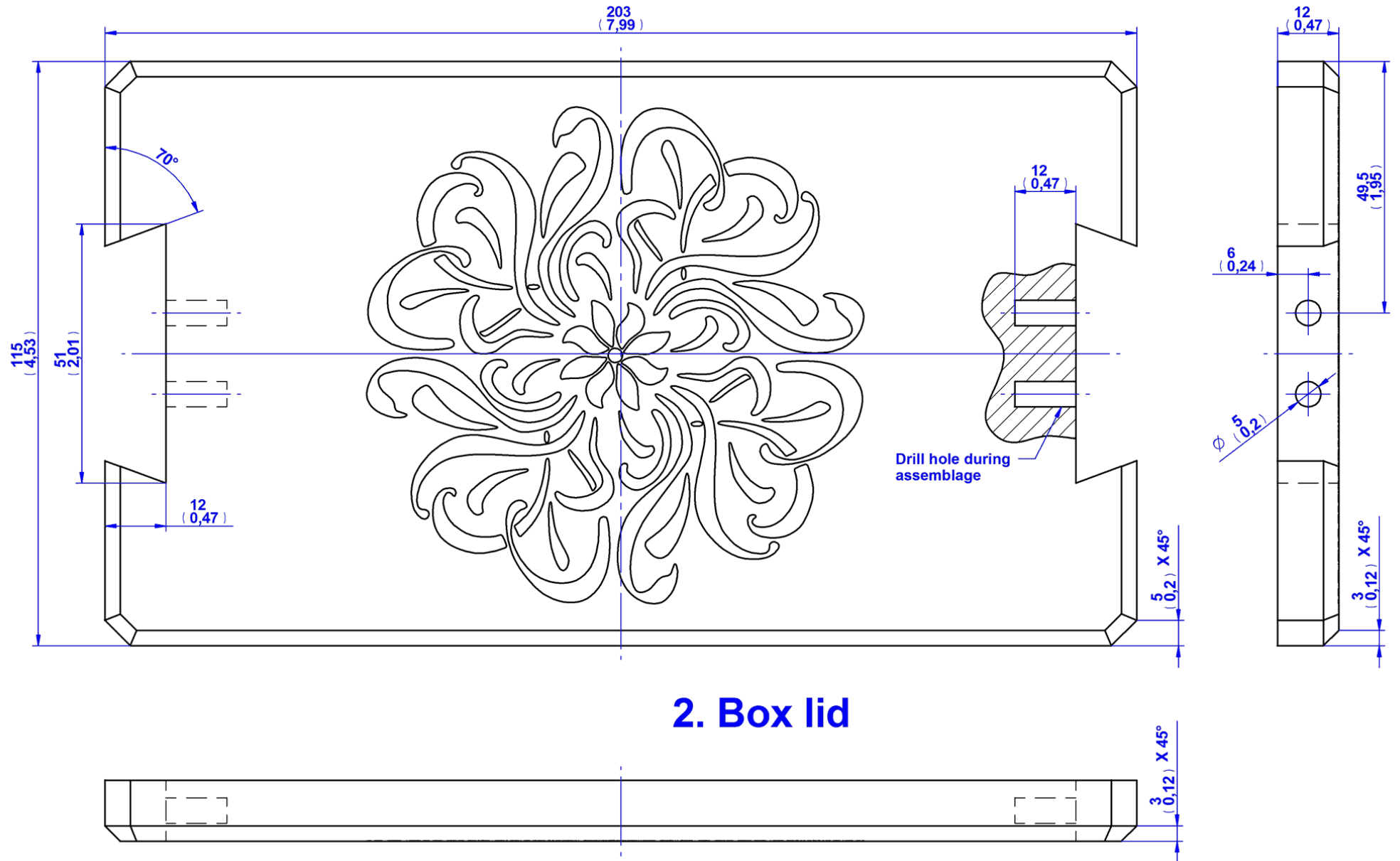
Wooden puzzle box – Assembly 2D drawing

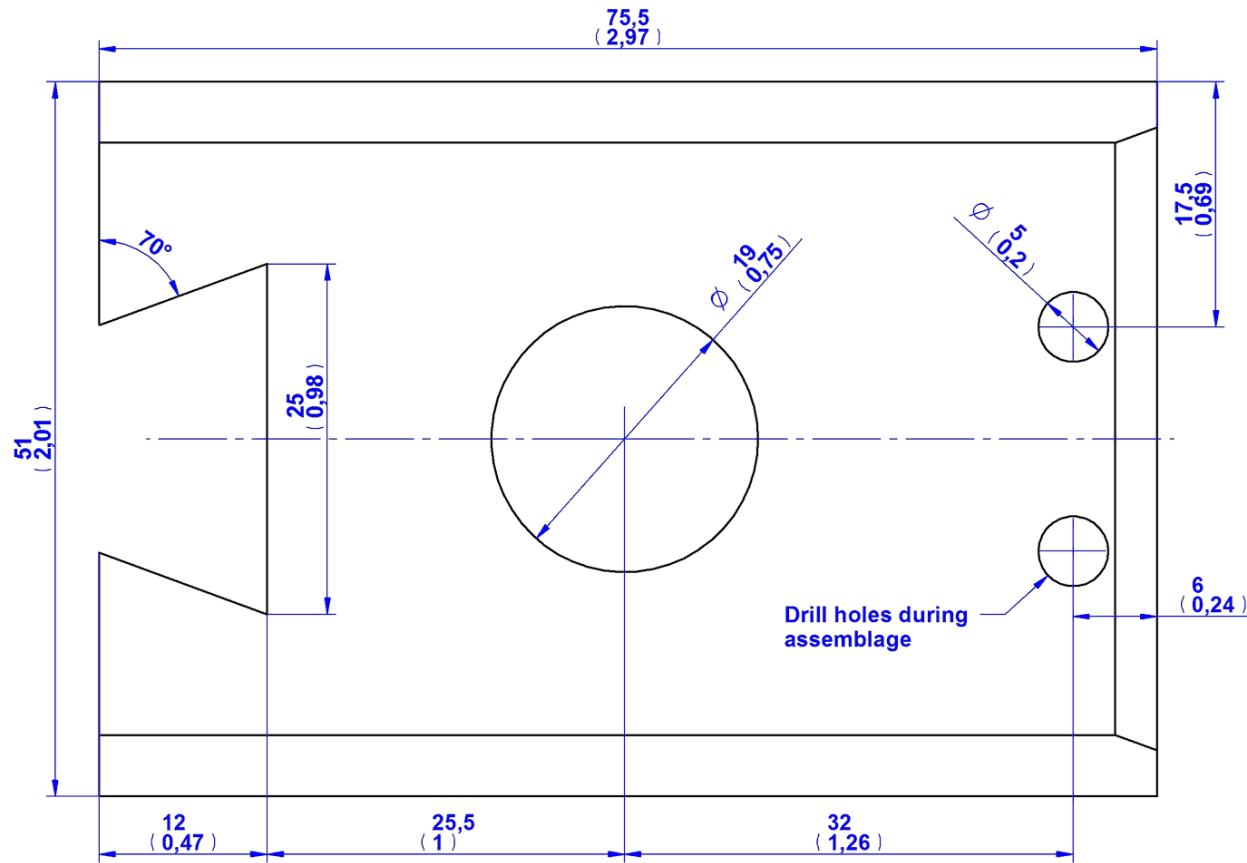




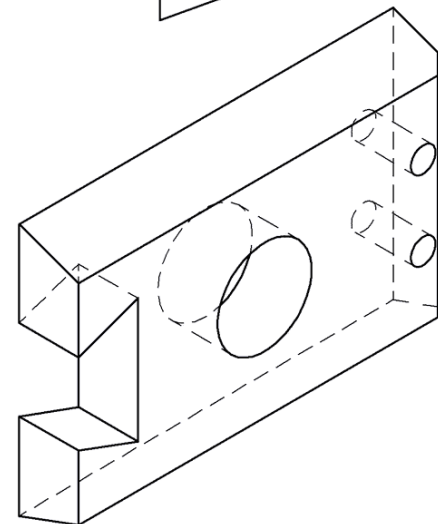
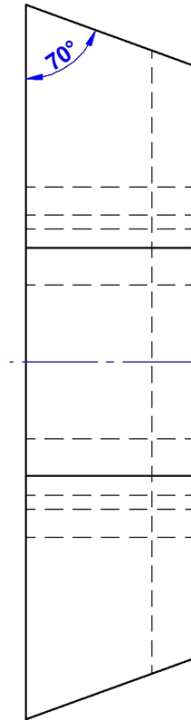
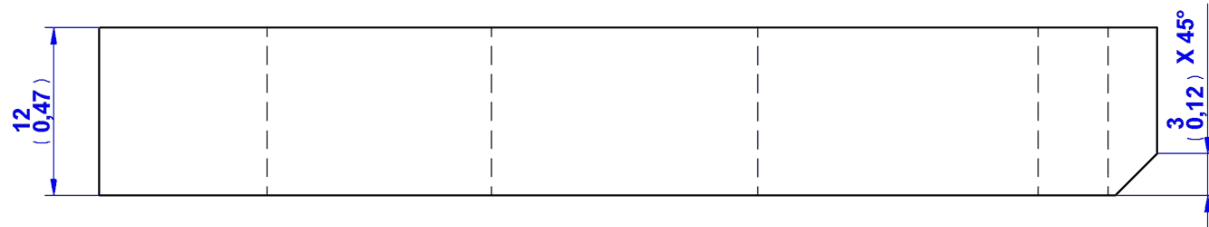
1. Box body

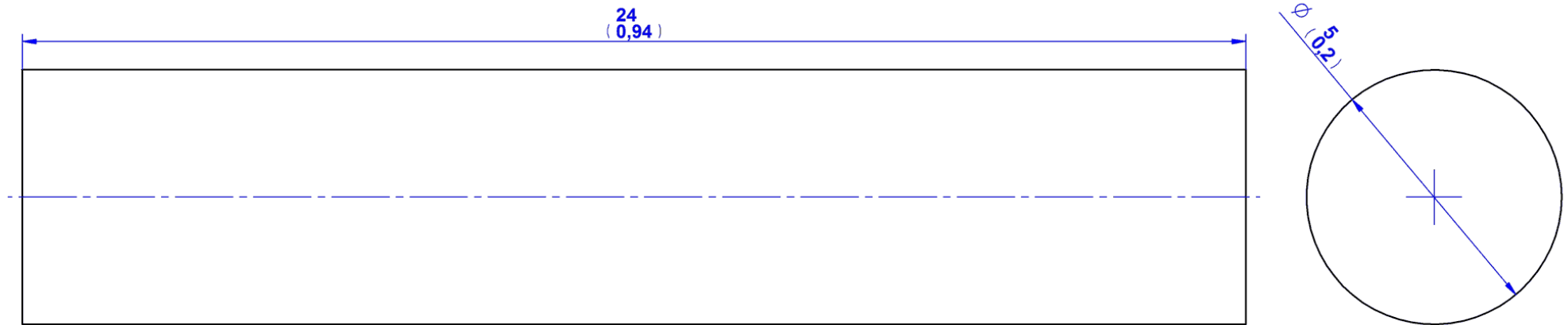




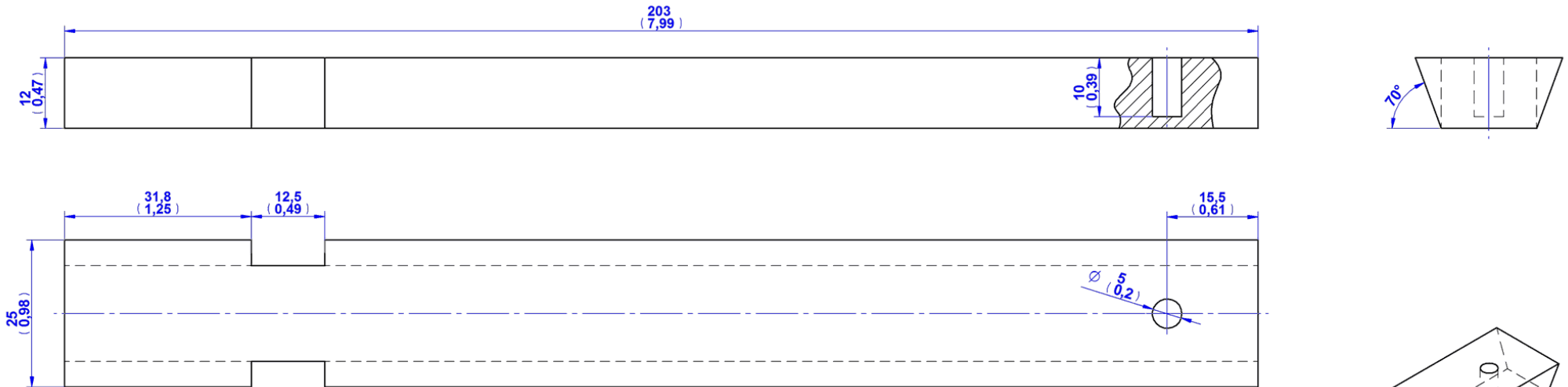


3. Dovetailed side

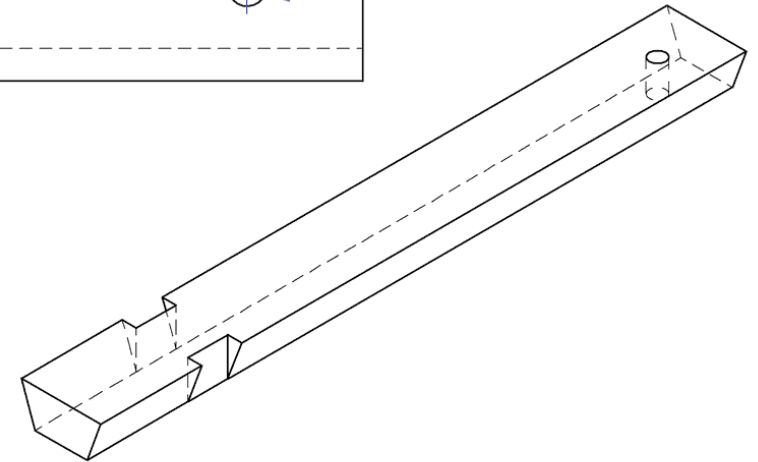


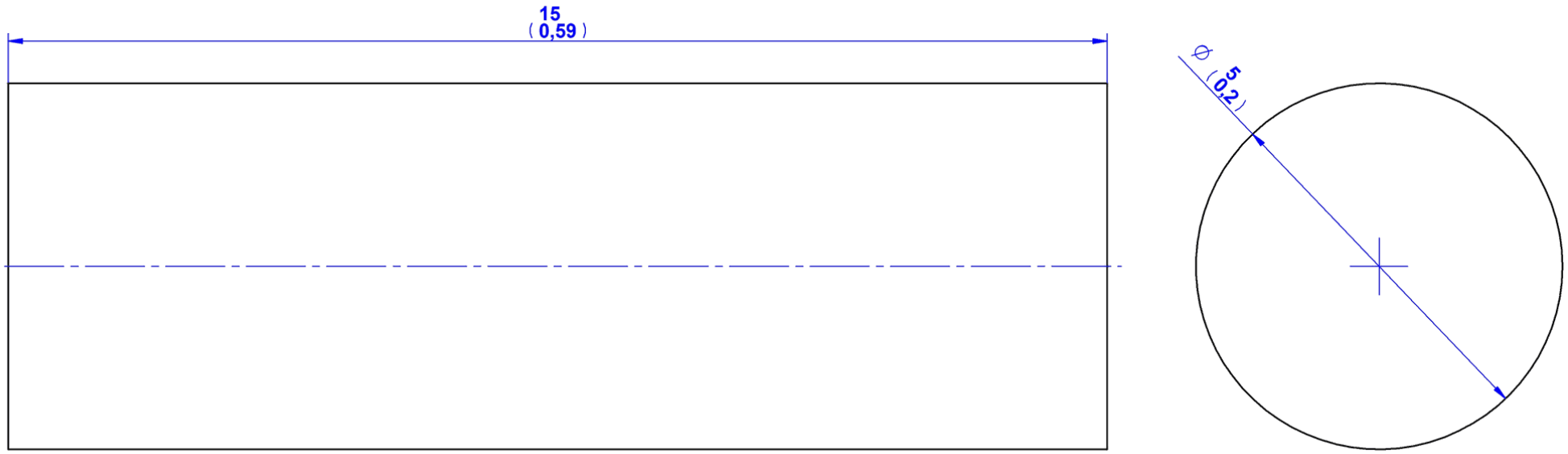


4. Dowel D5 x 24mm

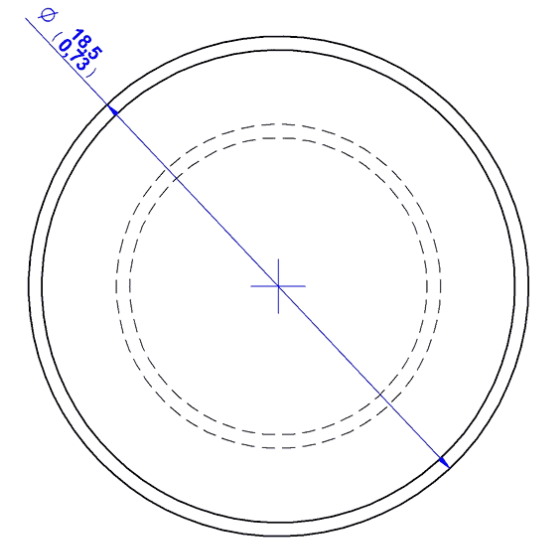
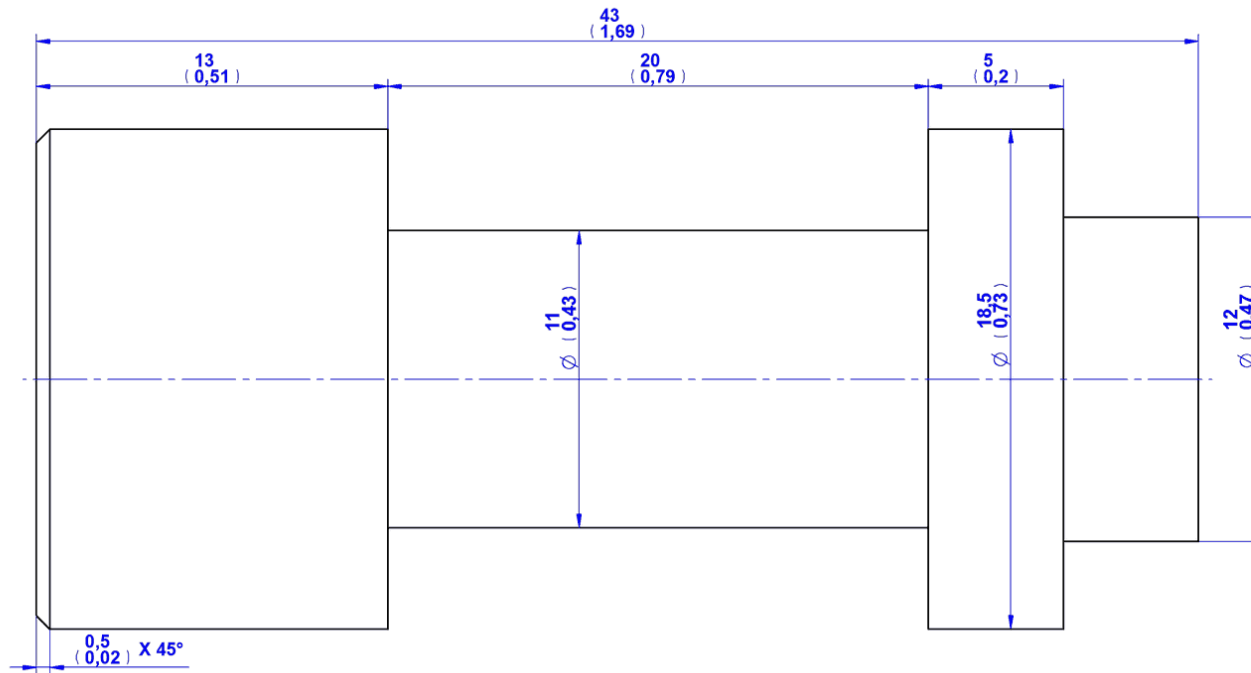


5. Dovetailed slider

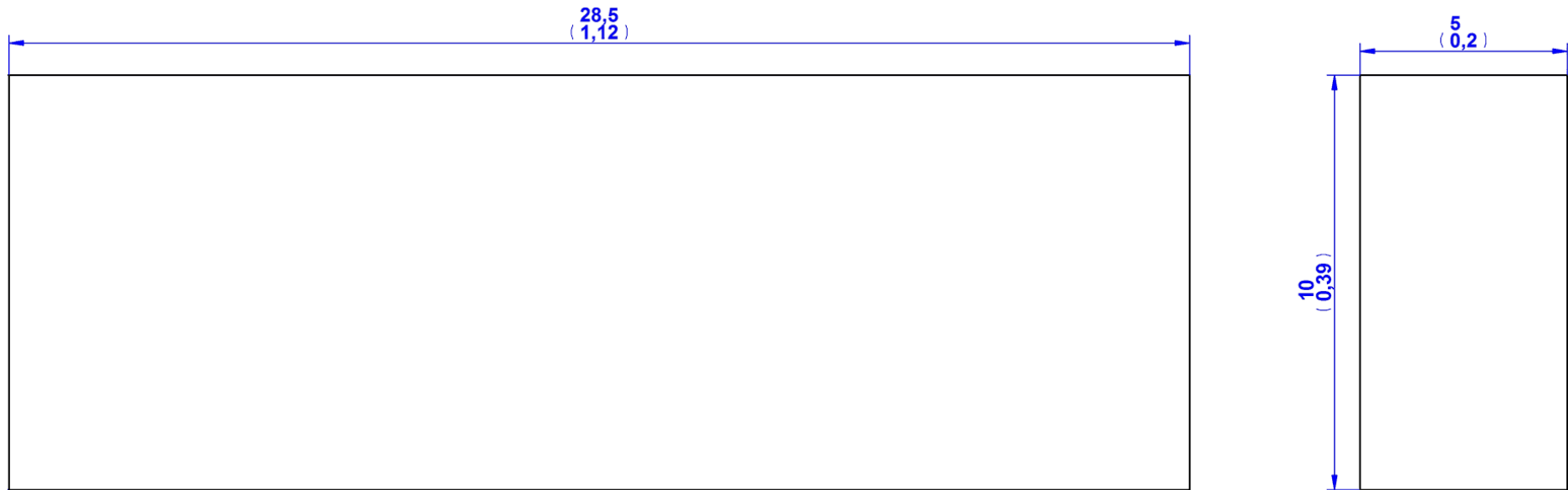




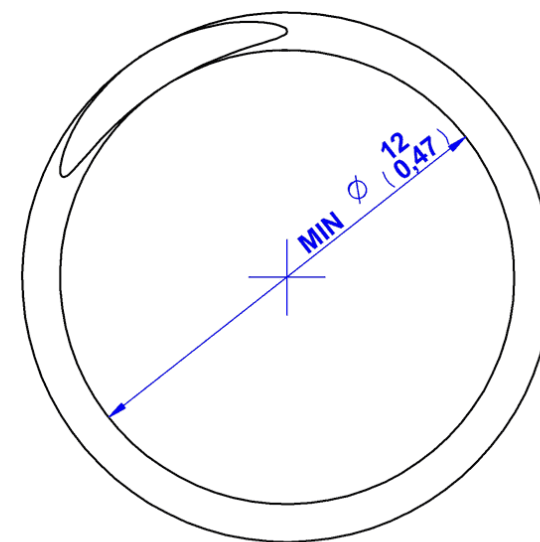
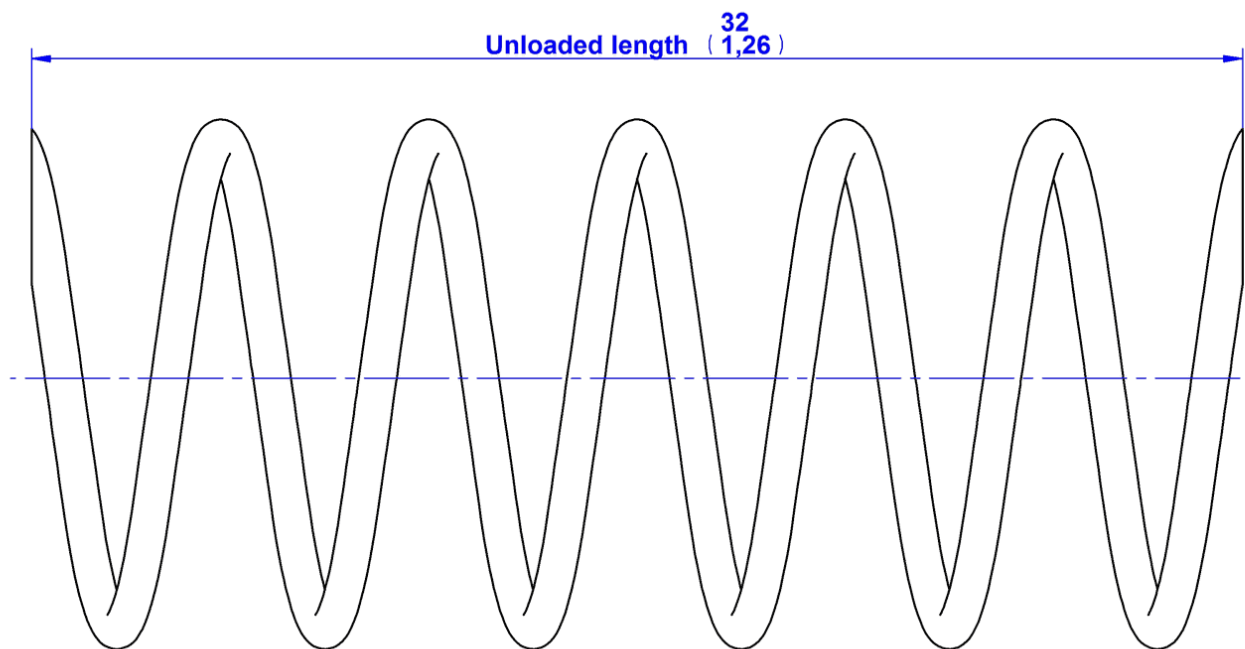
6. Key dowel D5 x 15mm



7. Bullet



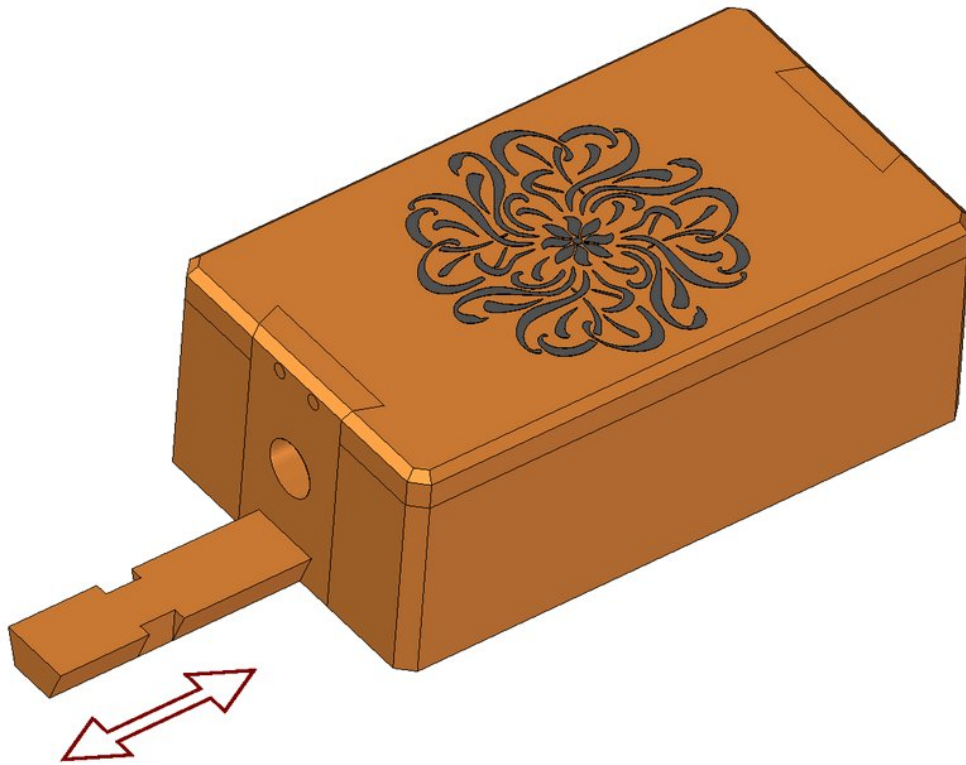
8. Retainer pin



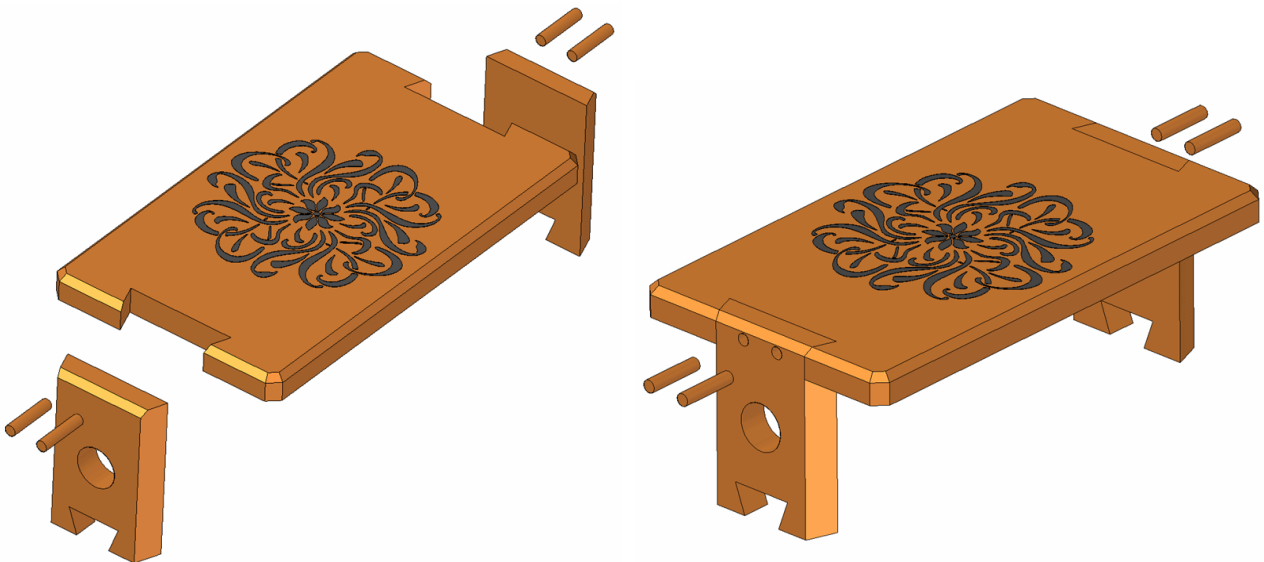
9. Spring

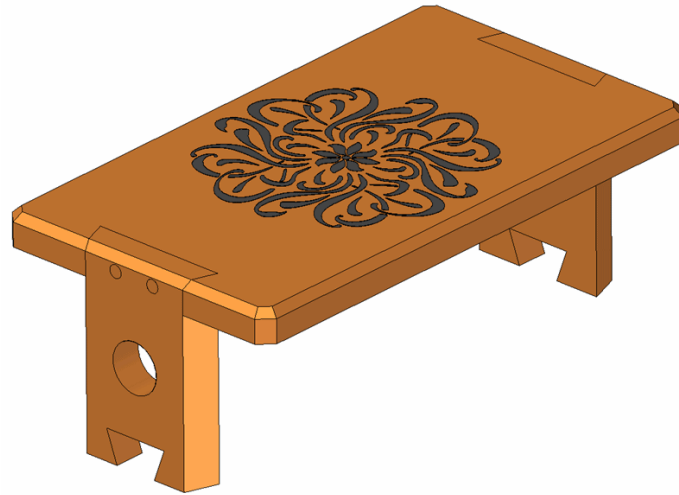
Assemblage images

1.

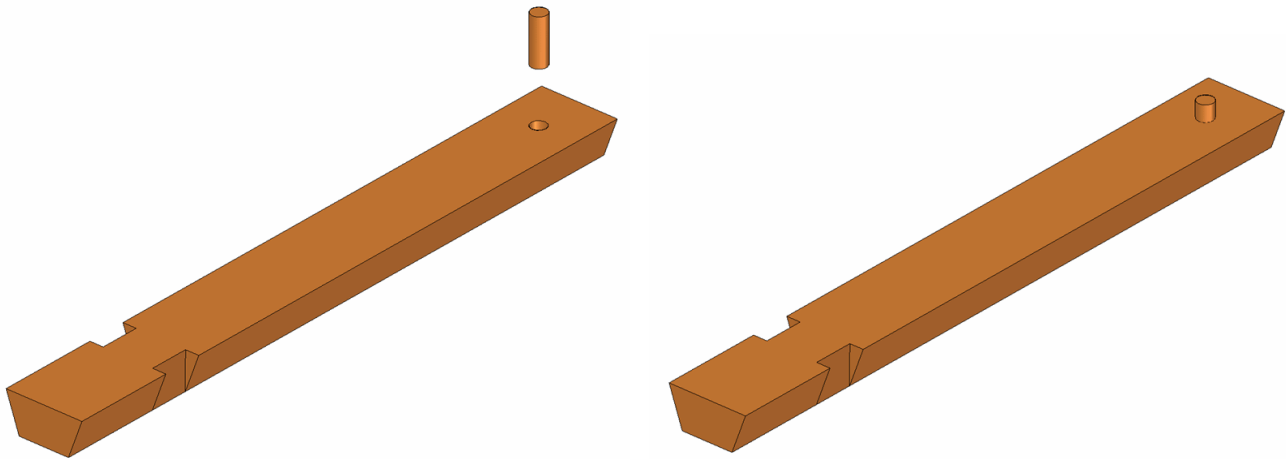


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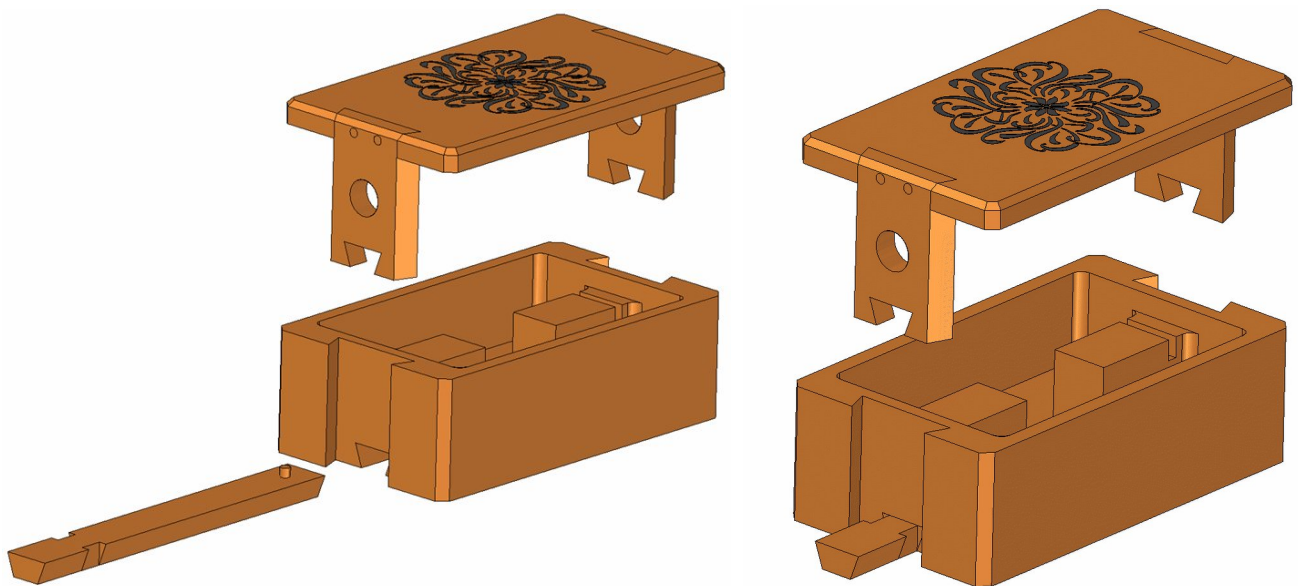


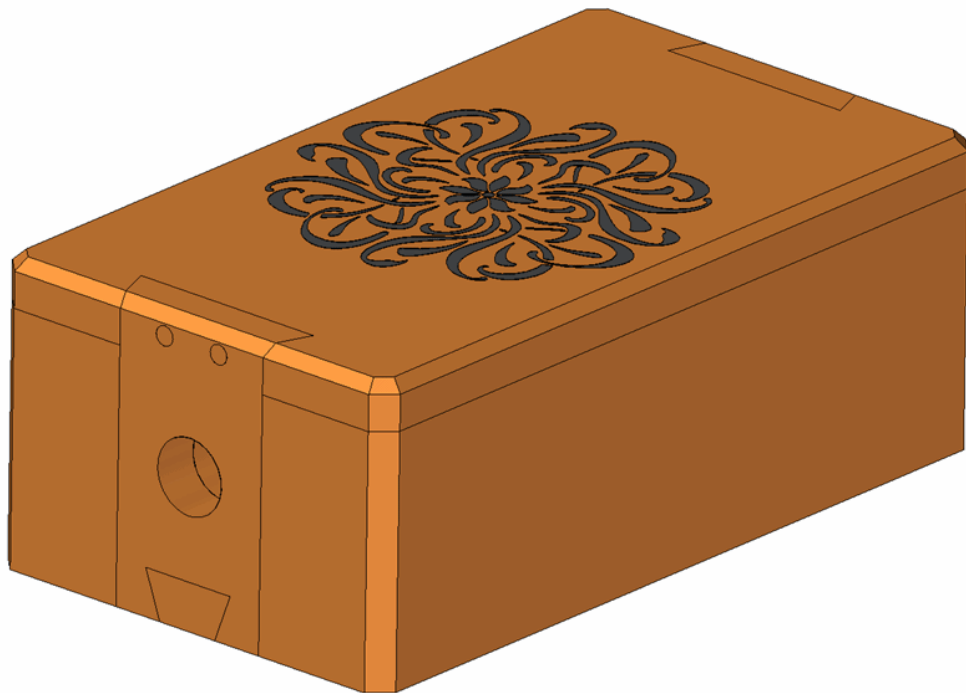
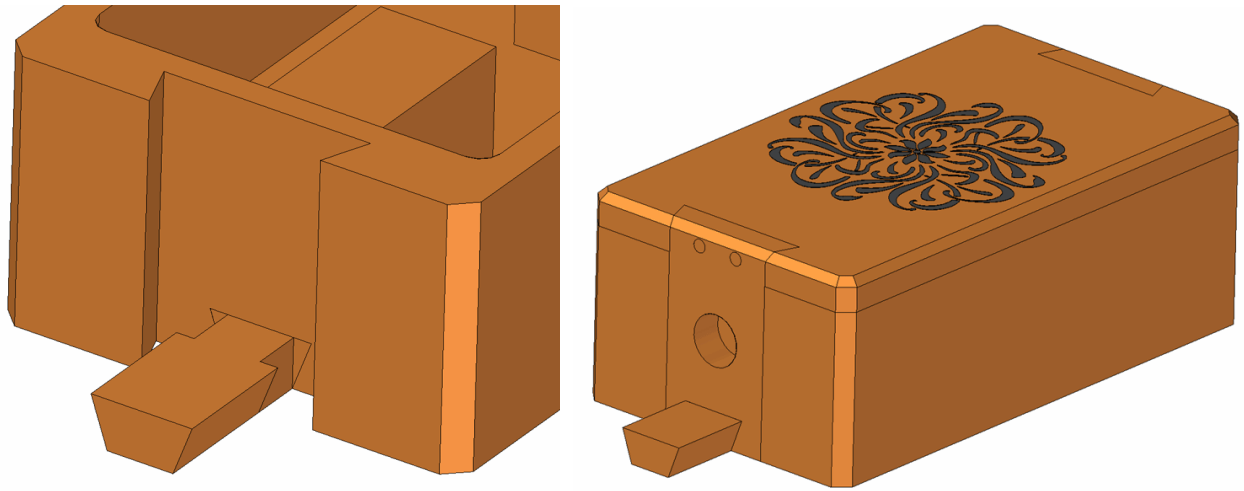


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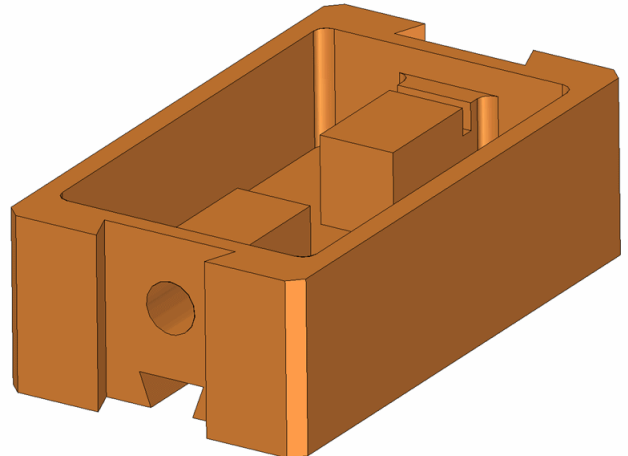
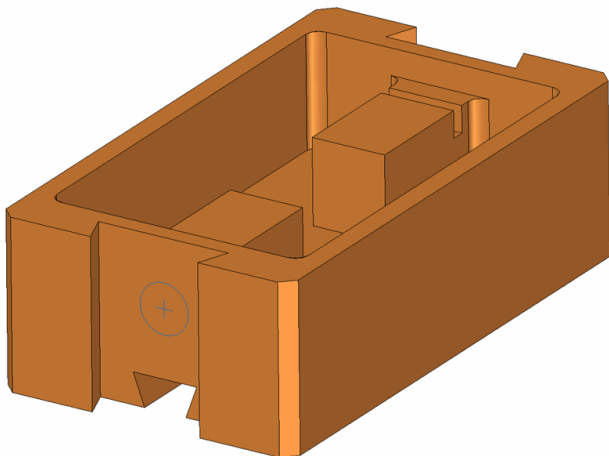
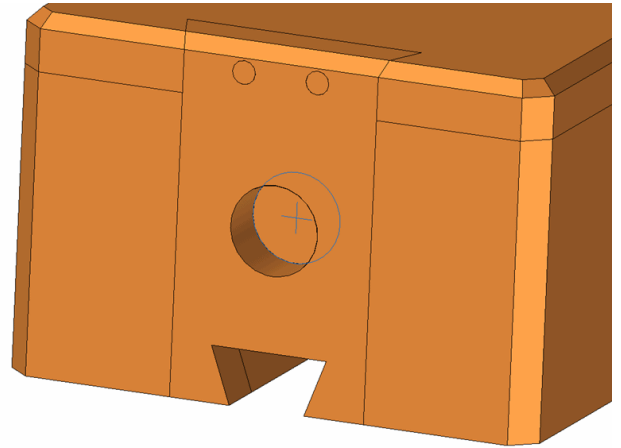
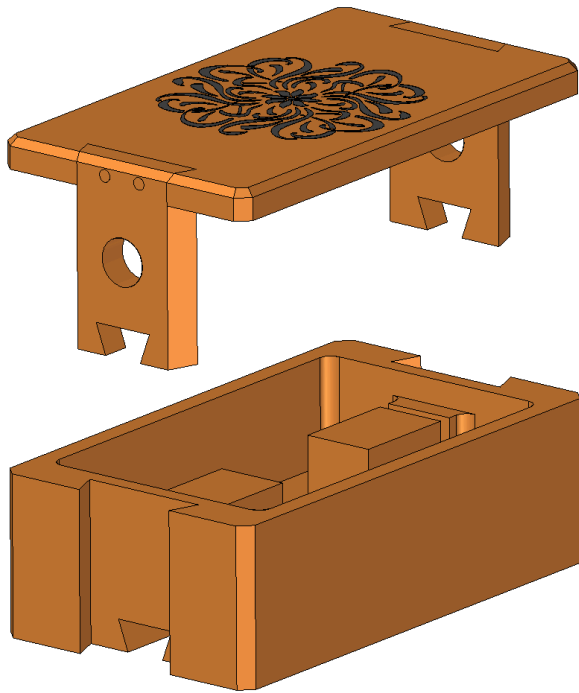


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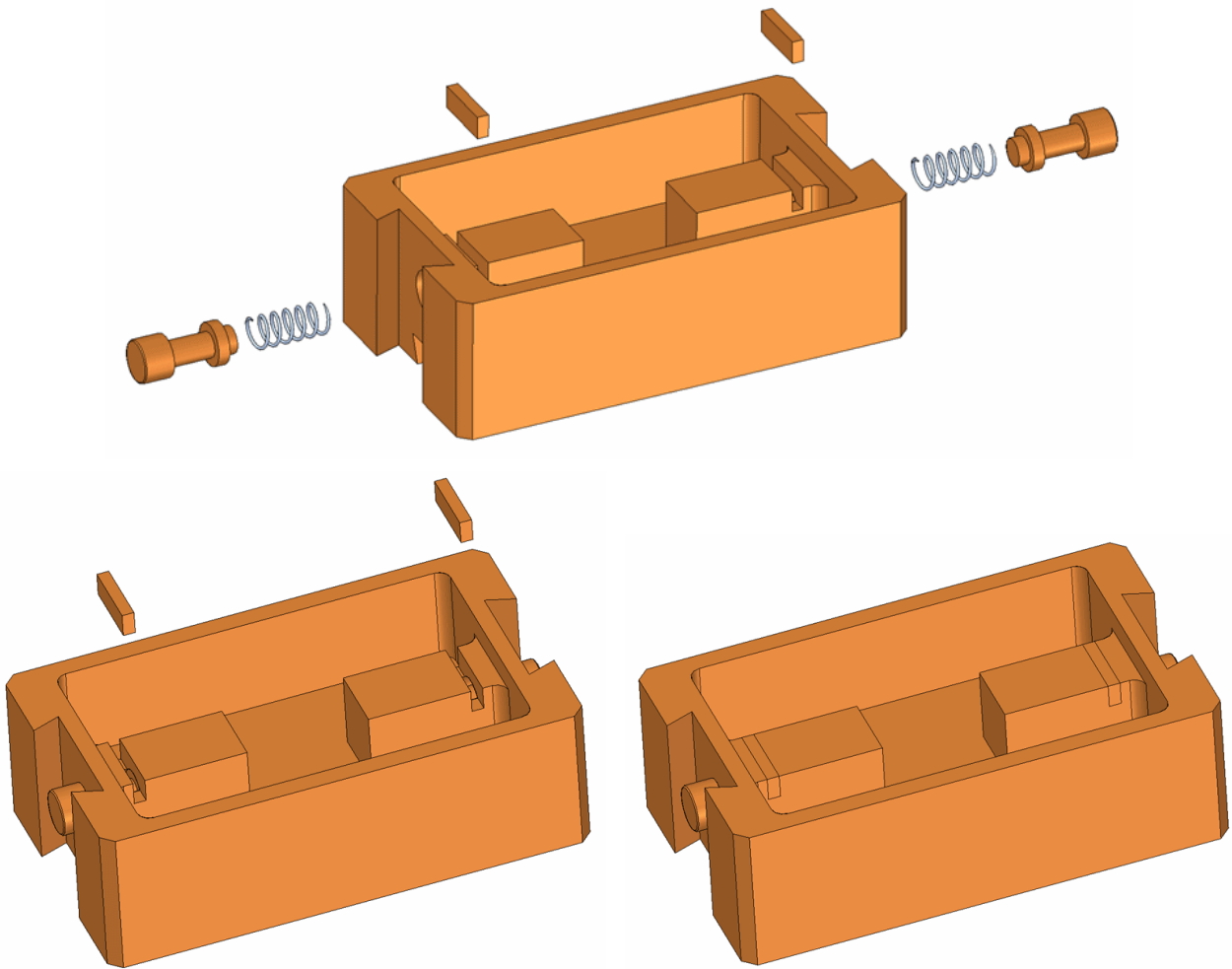




5.



6.



7.

