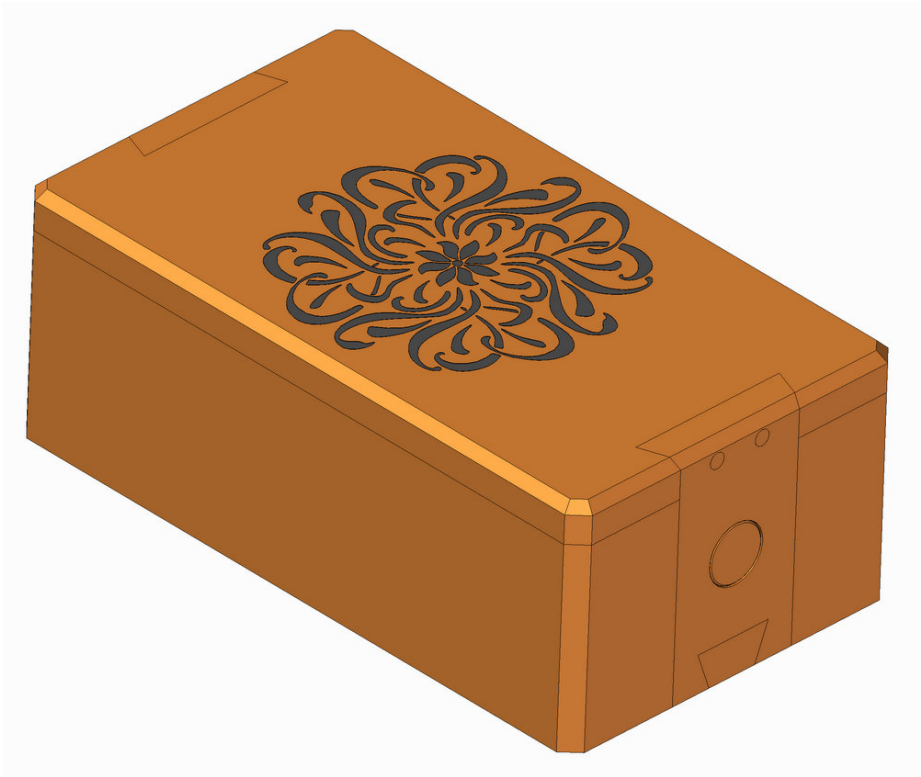
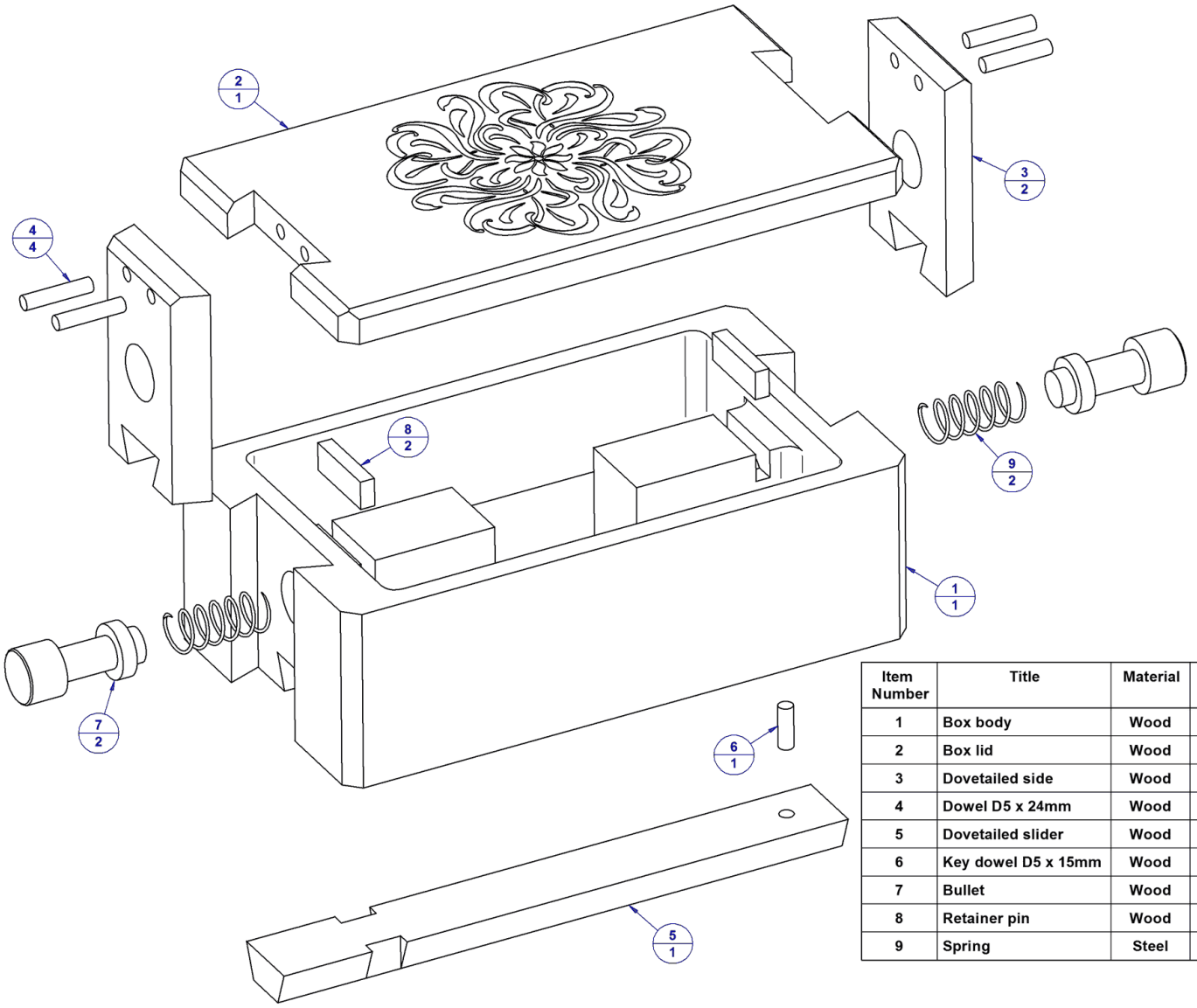
Wooden puzzle box



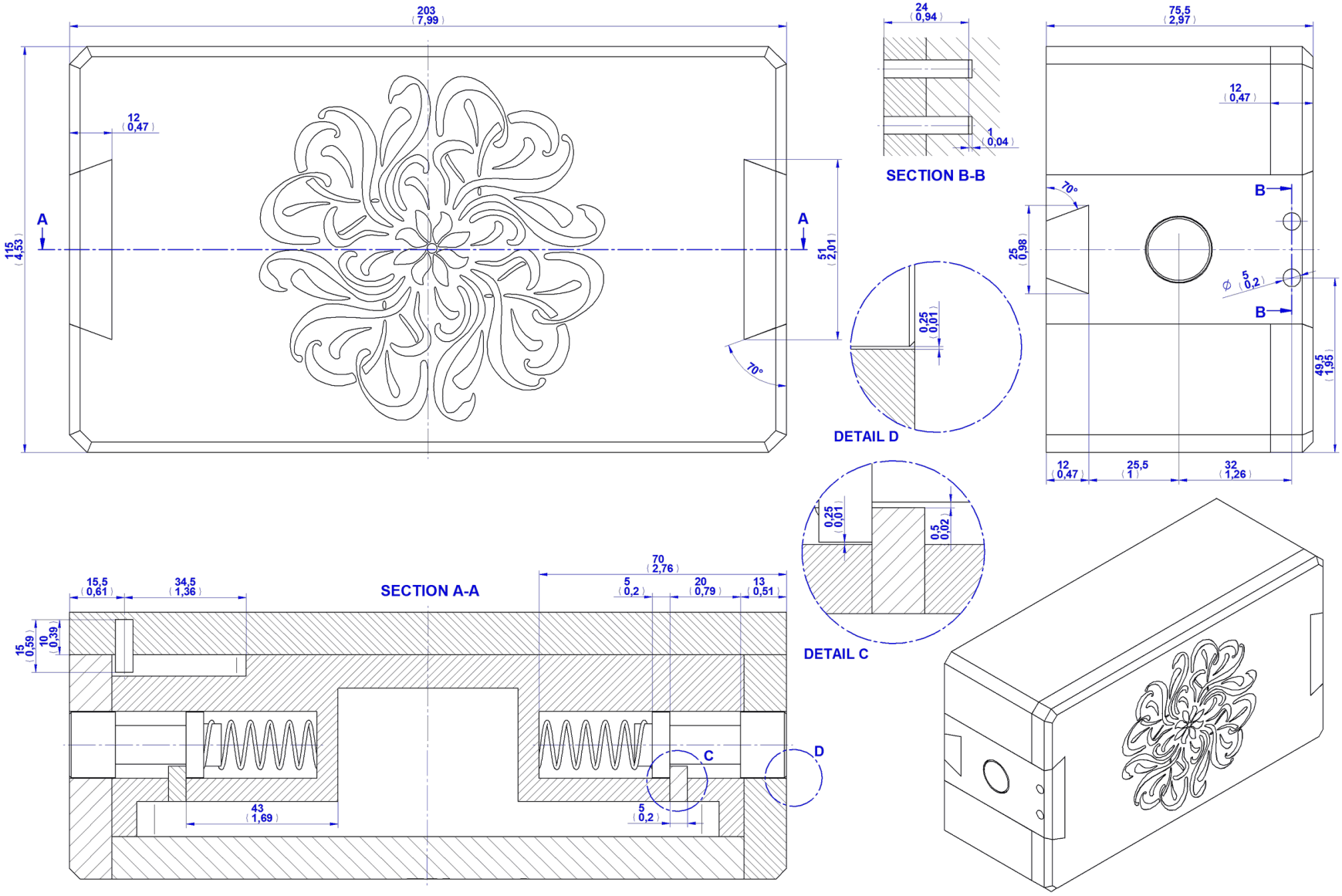
The puzzle box (also called the secret lock box or a trick box) is a box with the secret. These boxes can only be opened with a subtle movement or pushes of right box parts. Japanese artisans made the most beautiful and complicated wooden puzzle boxes long time ago. Then the rest of the world craftsman 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 trick box will have the honorary place in your home. You can keep valuable papers in it or jewellery 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.

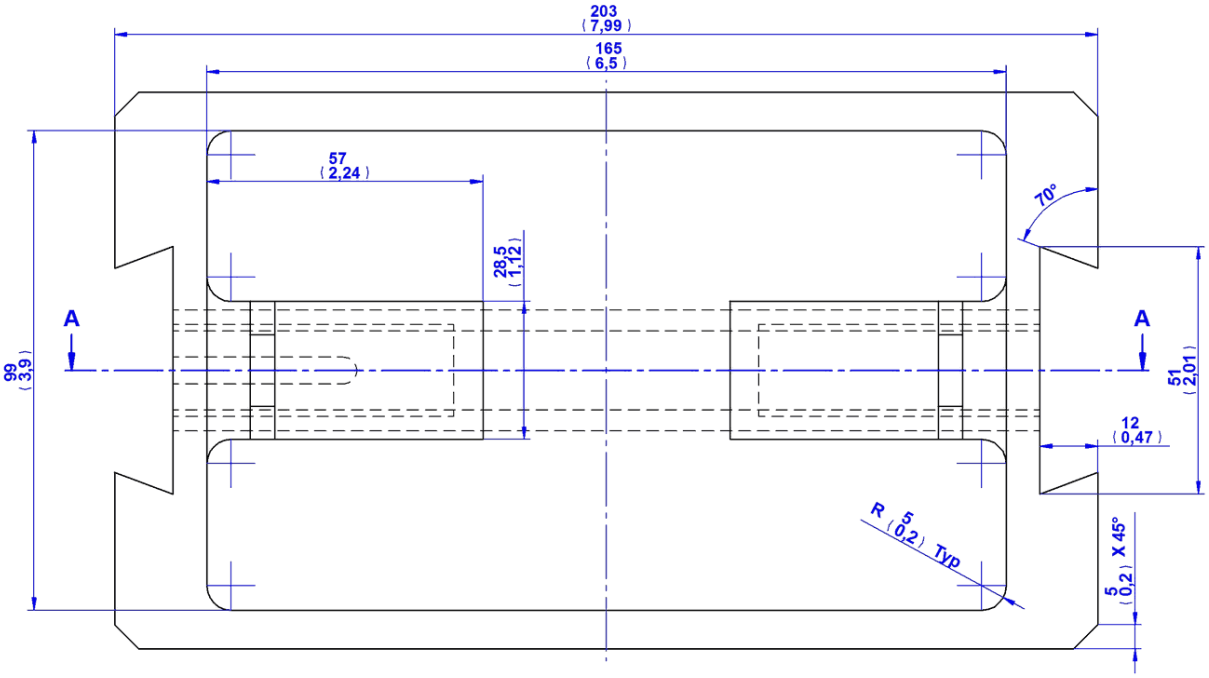
Wooden puzzle box – Parts list

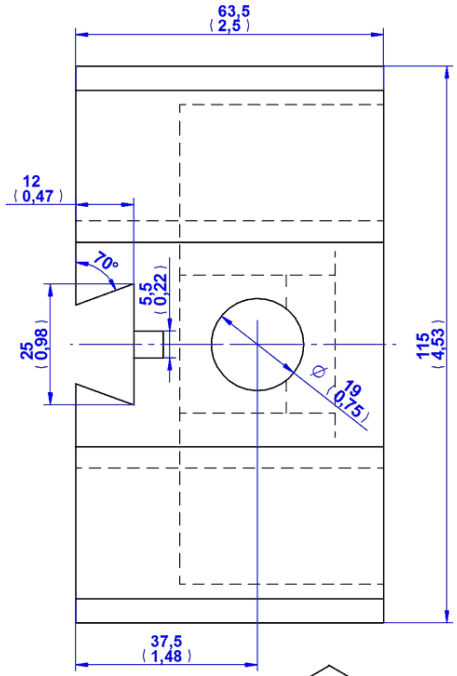


Item Number	Title	Material	Quantity
1	Box body	Wood	1
2	Box lid	Wood	1
3	Dovetailed side	Wood	2
4	Dowel D5 x 24mm	Wood	4
5	Dovetailed slider	Wood	1
6	Key dowel D5 x 15mm	Wood	1
7	Bullet	Wood	2
8	Retainer pin	Wood	2
9	Spring	Steel	2

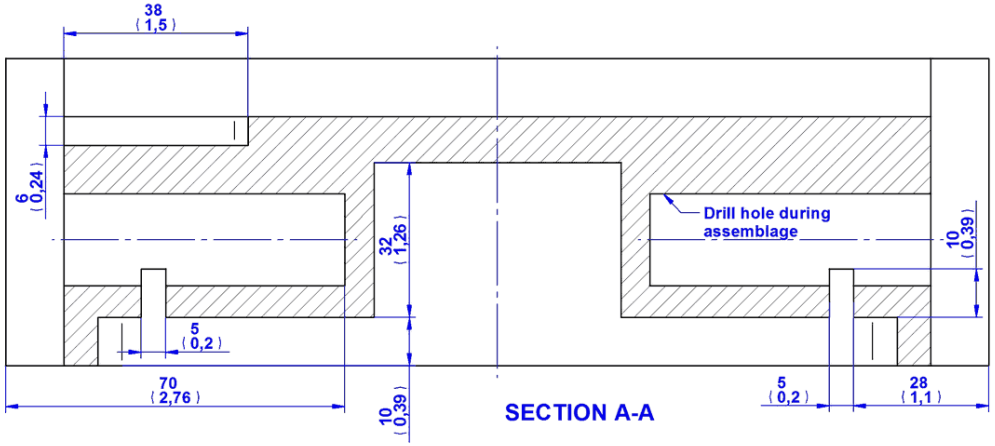
Wooden puzzle box – Assembly 2D drawing



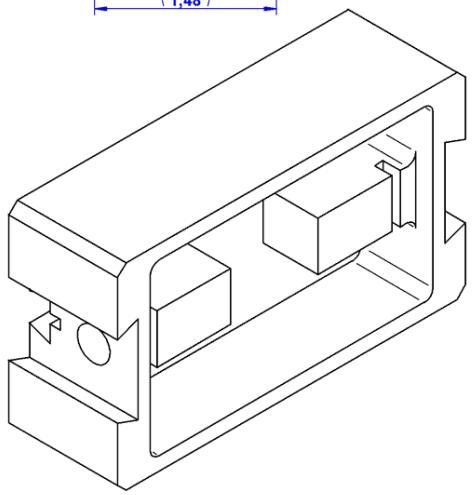


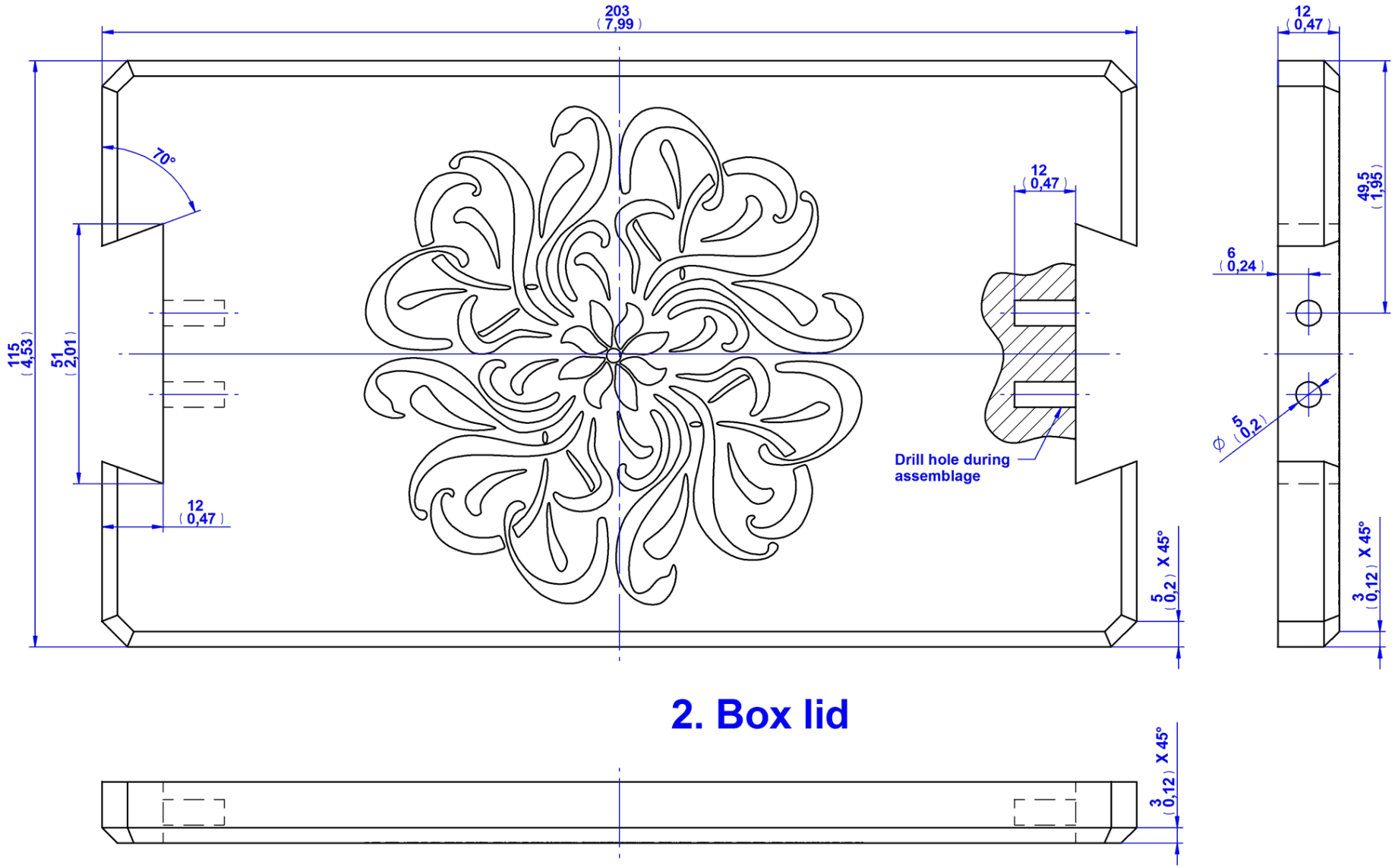


1. Box body

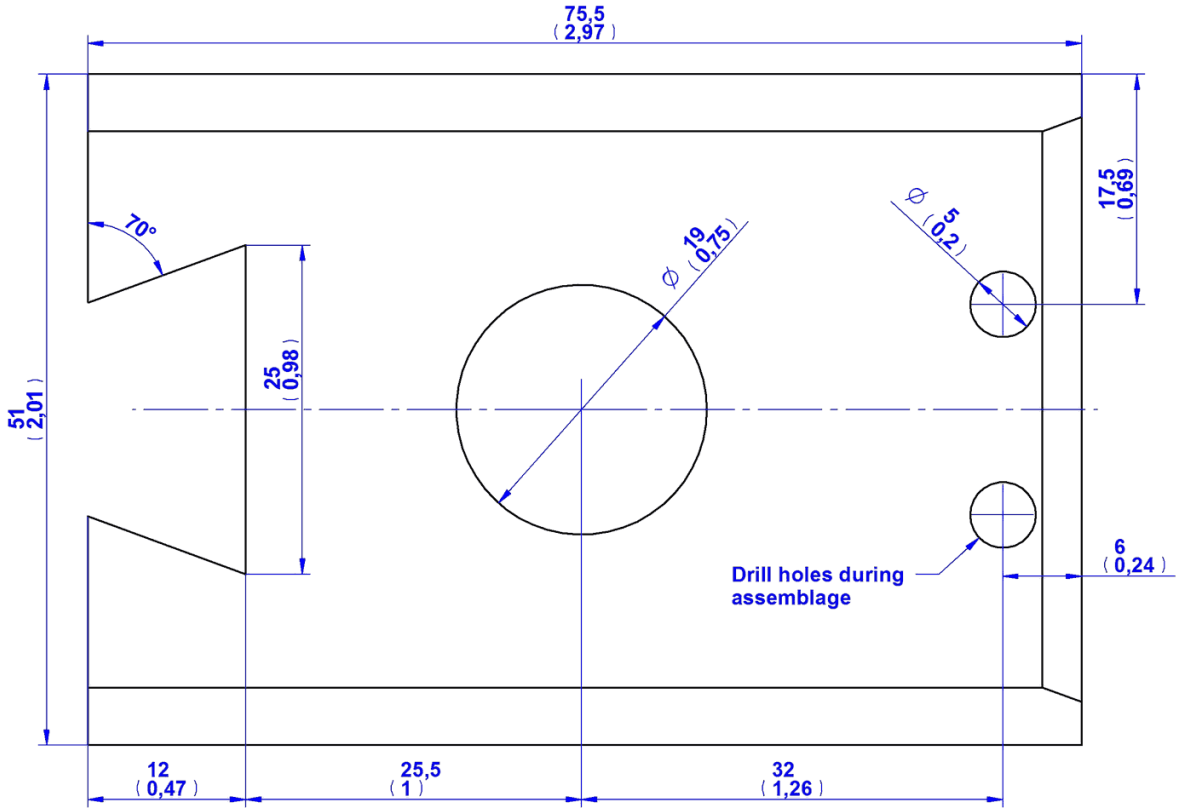


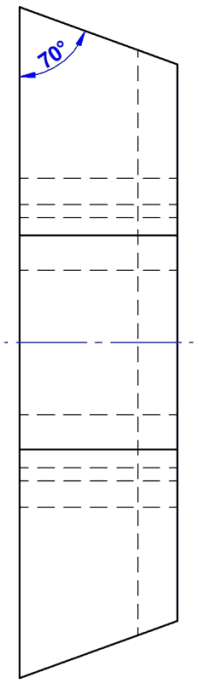
SECTION A-A



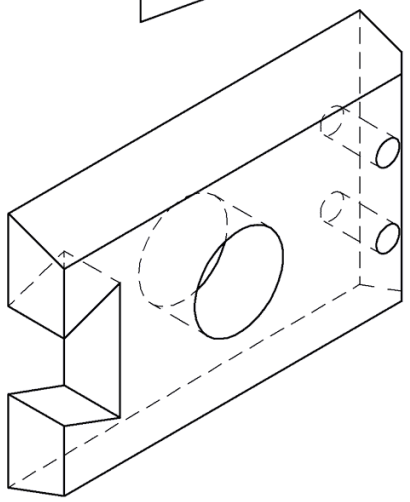

203
(7,99)
12
(0,47)
70°
115
(4,53)
51
(2,01)
12
(0,47)
12
(0,47)
Drill hole during
assemblage
5
(0,2) X 45°
6
(0,24)
49,5
(1,95)
5
(0,2)
3
(0,12) X 45°
3
(0,12) X 45°

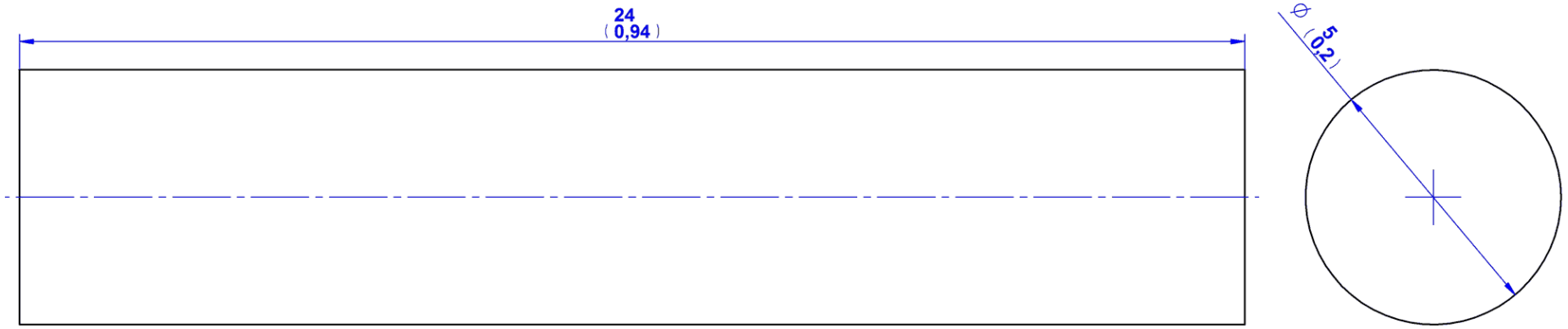
2. Box lid



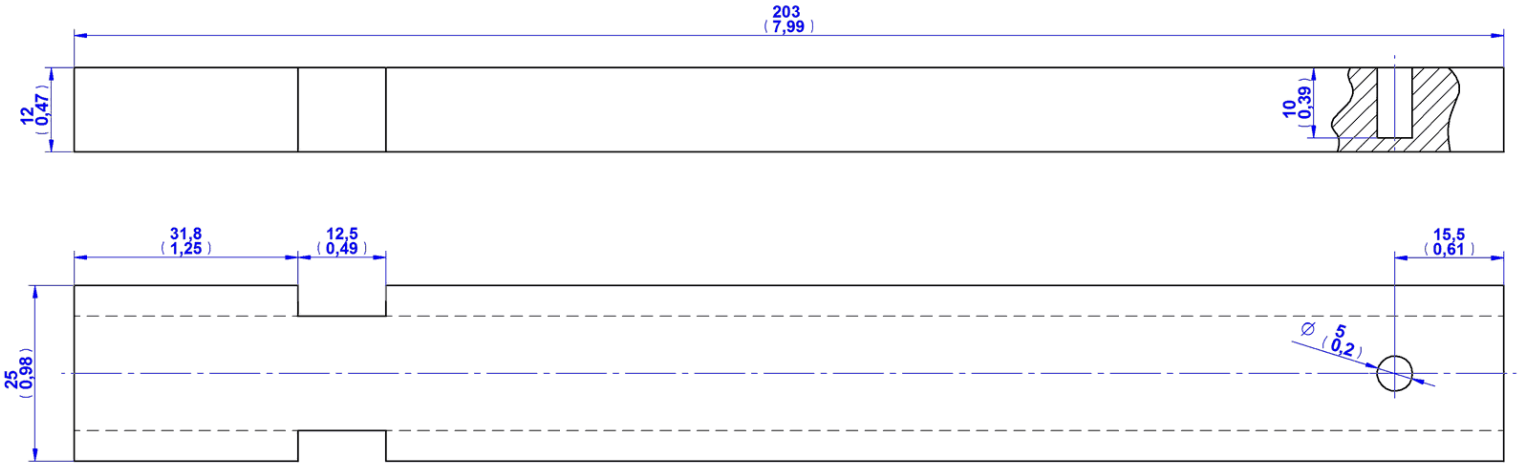


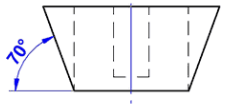
3. Dovetailed side



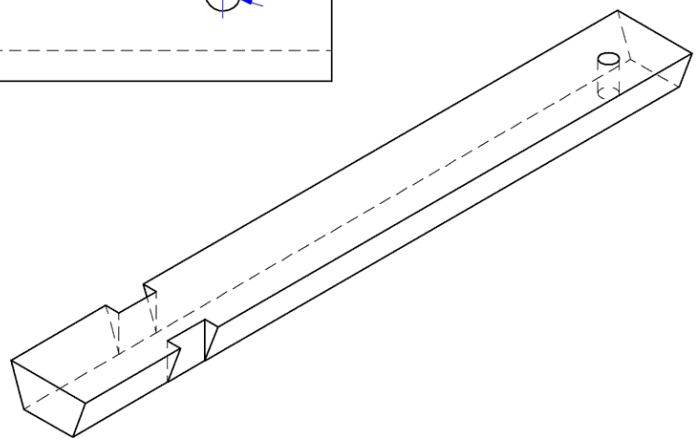


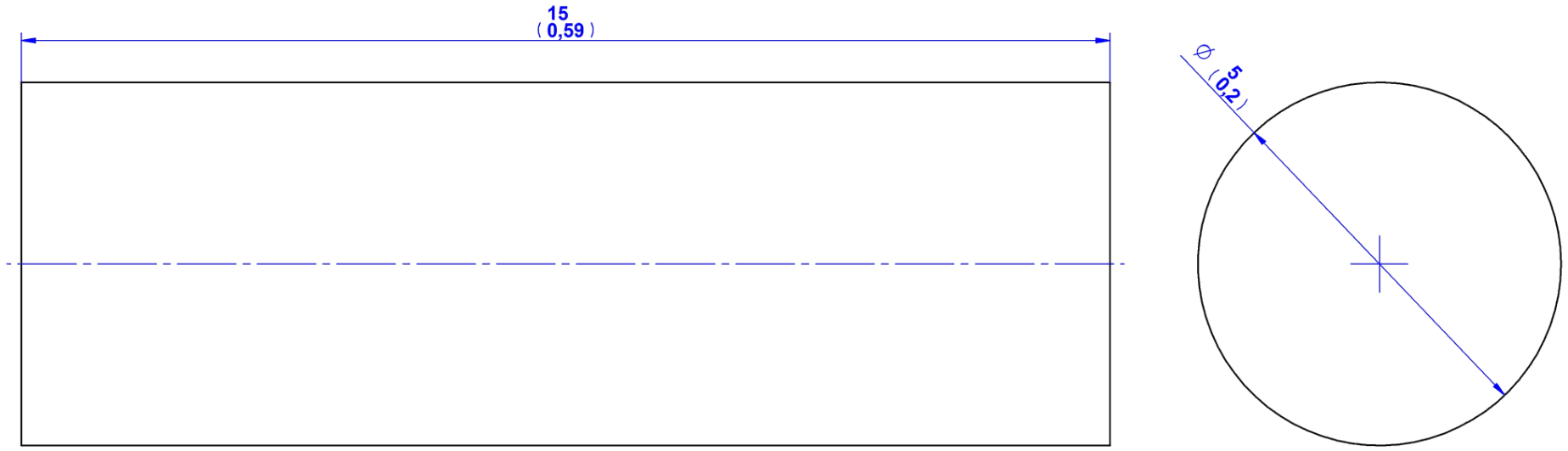
4. Dowel D5 x 24mm



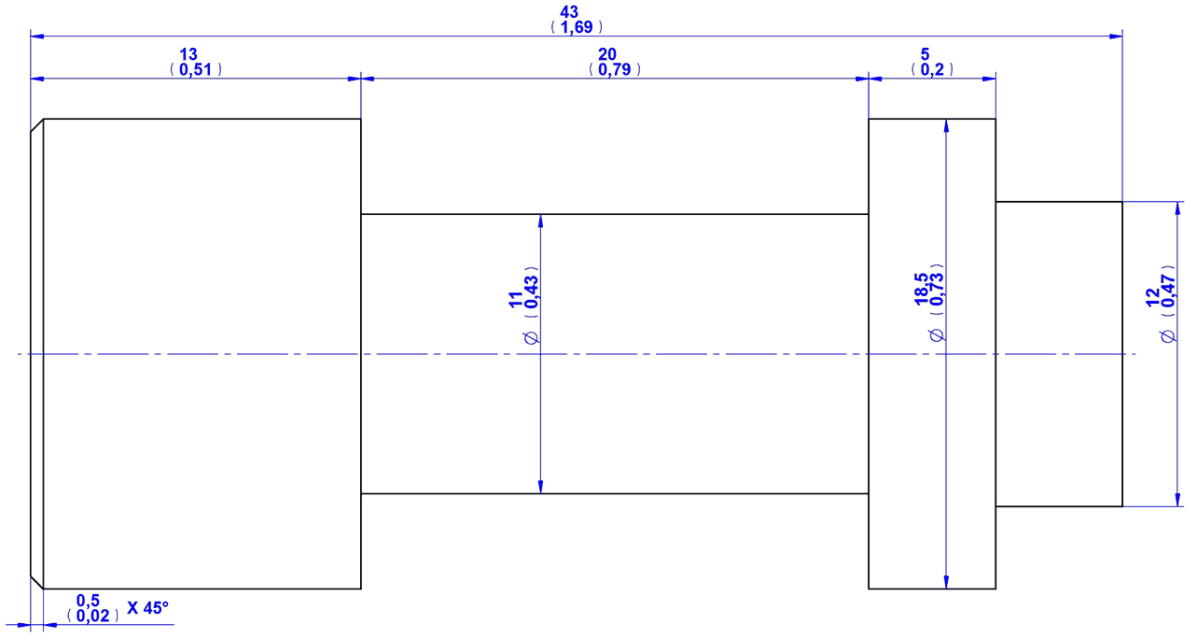


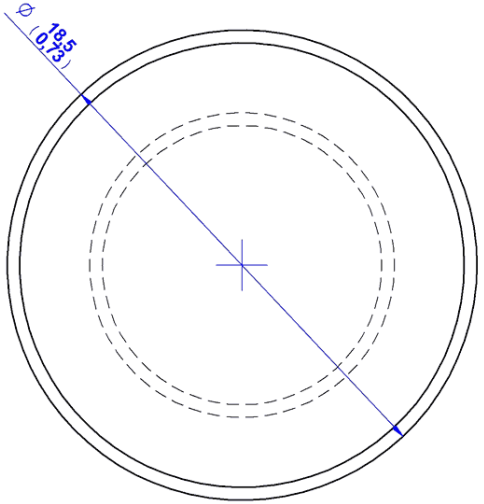
5. Dovetailed slider



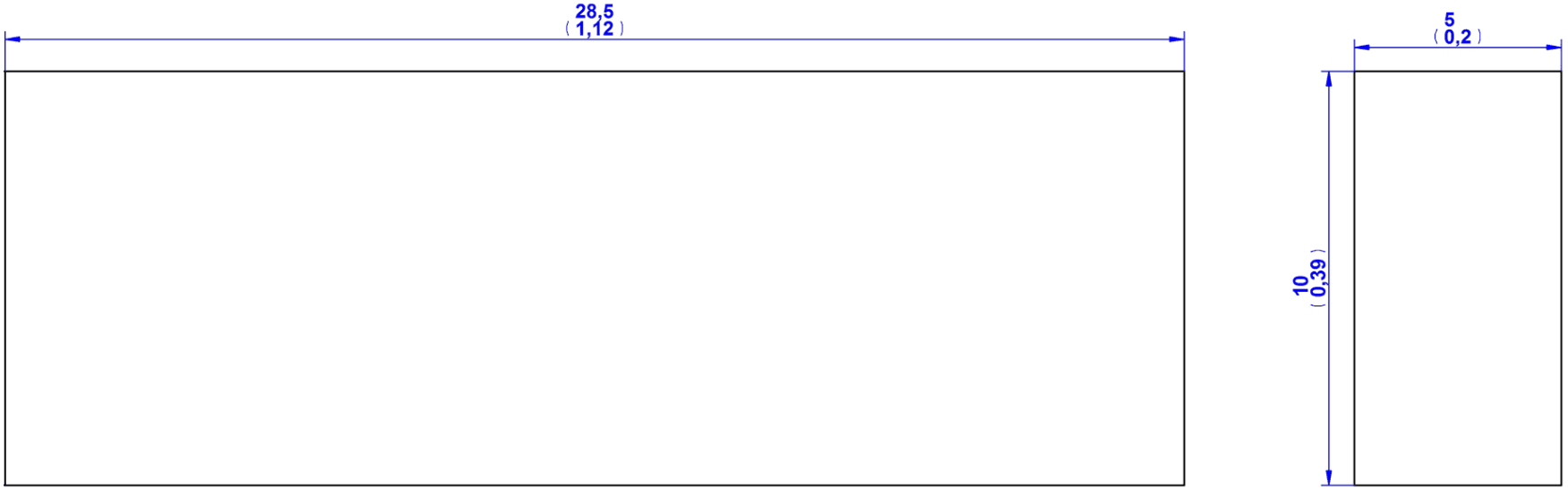


6. Key dowel D5 x 15mm

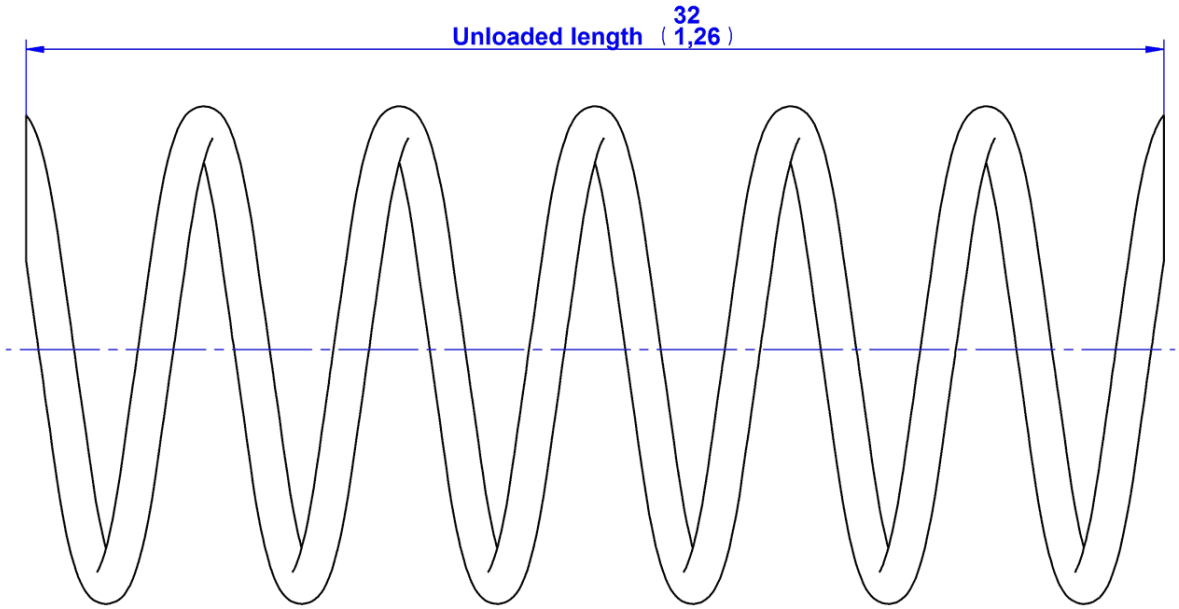


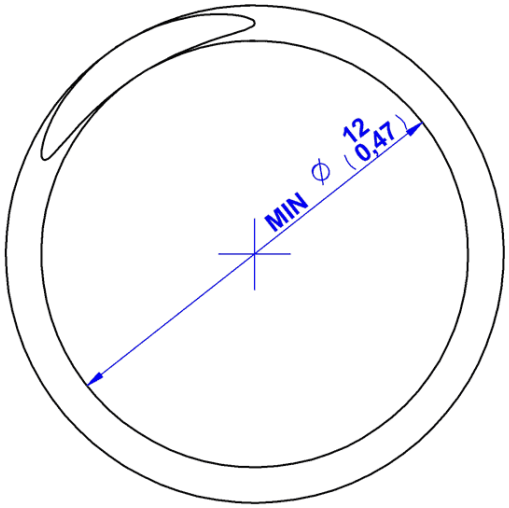


7. Bullet



8. Retainer pin

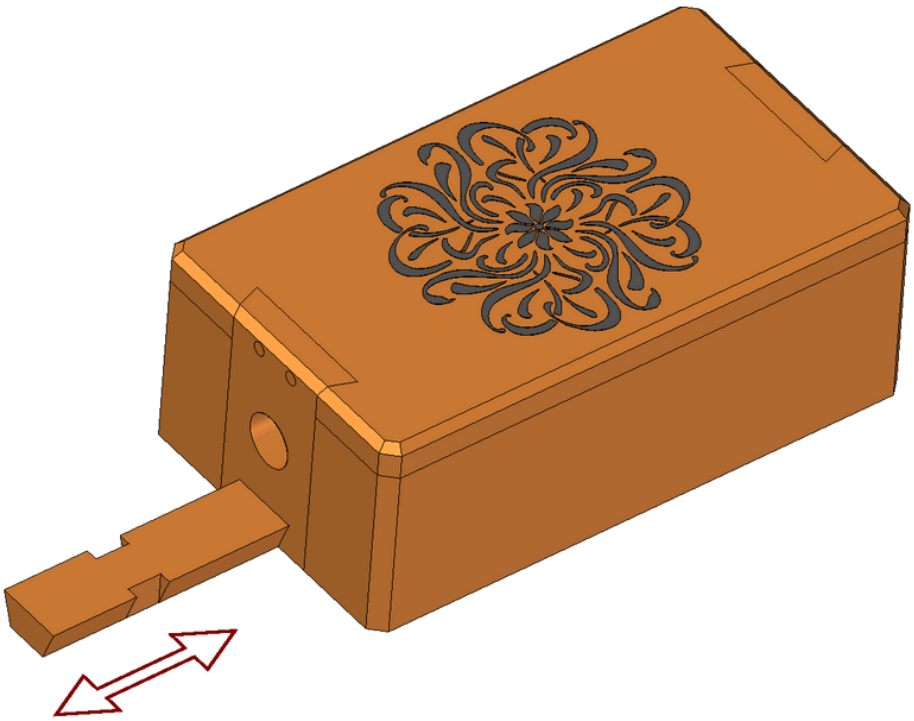




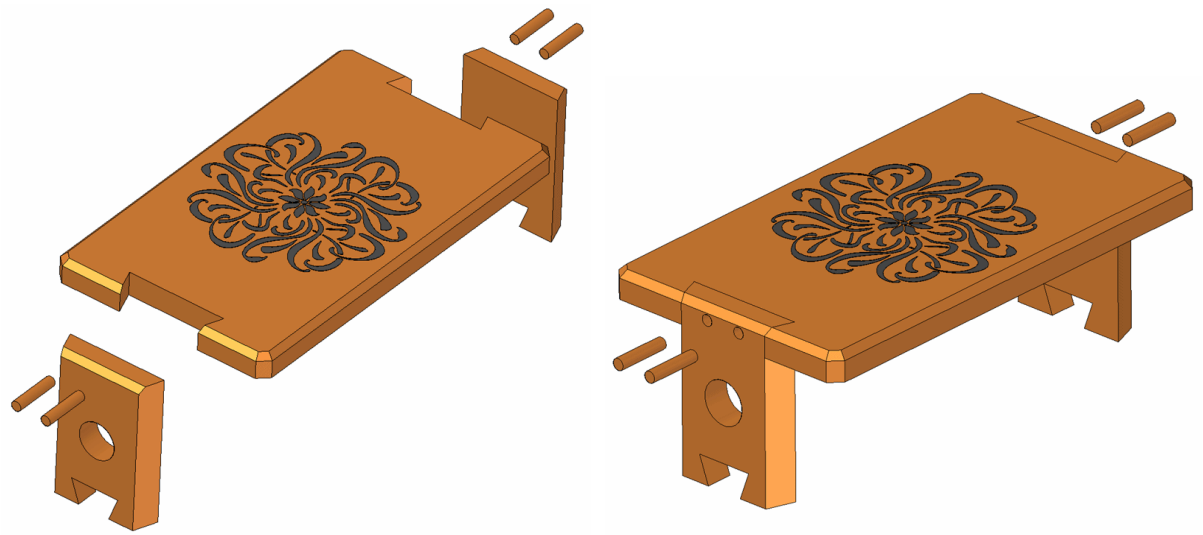
9. Spring

Assemblage instructions

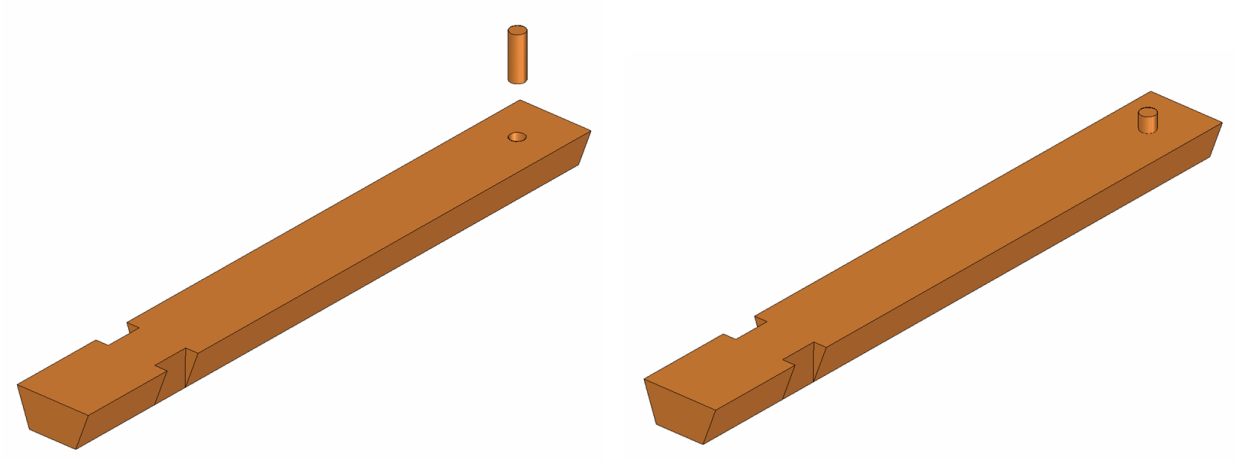
1. Before you attach Dovetail sides (Part 3) and the Box lid (Part 2) using Dowels D5 x 24mm (Part 4) and glue, you should assemblage it following the 2D documentation, put it on the Box body (Part 1) and check does the Dovetailed slider (Part 5) can actually slide. If not, just simply sand that part with the 150-180 grit sandpaper, until the Dovetailed slider (Part 5) can smoothly slide.



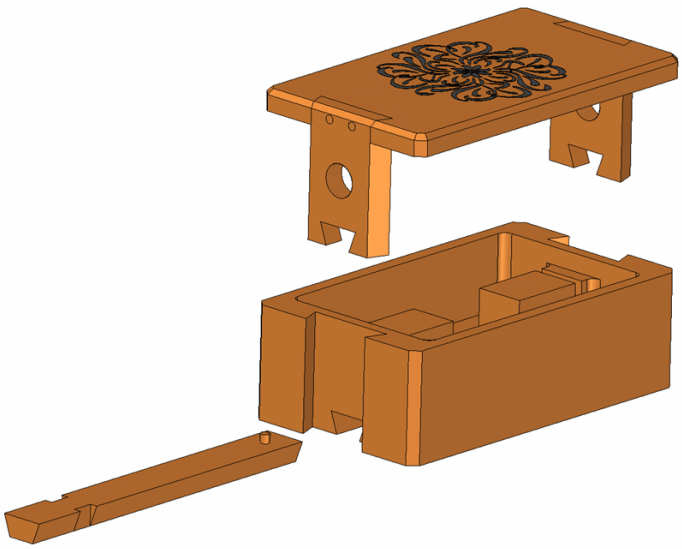
2. Attach the Dovetail sides (Part 3) to the Box lid (Part 2) using Dowels D5 x 24mm (Part 4). Put also some glue on Dowels.

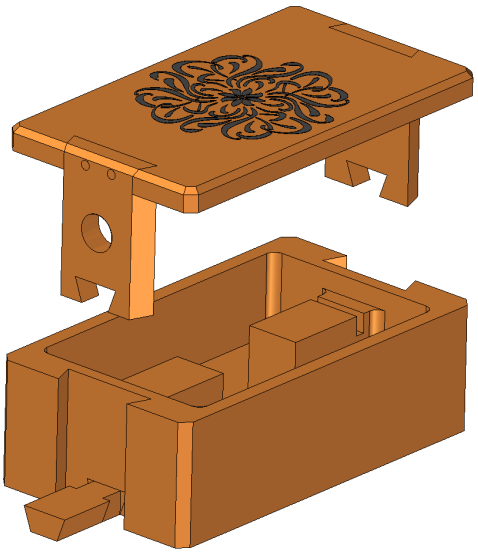


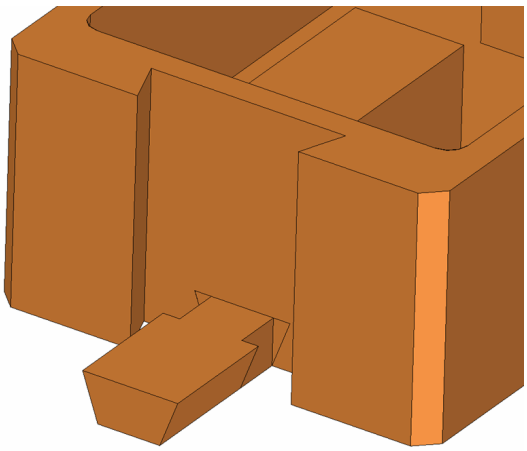
3. Attach the Key Dowel D5 x 15mm (Part 6) to the Dovetailed slider (Part 5) with glue.

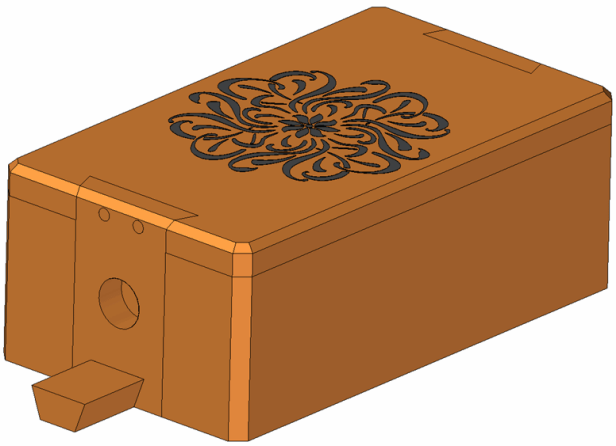


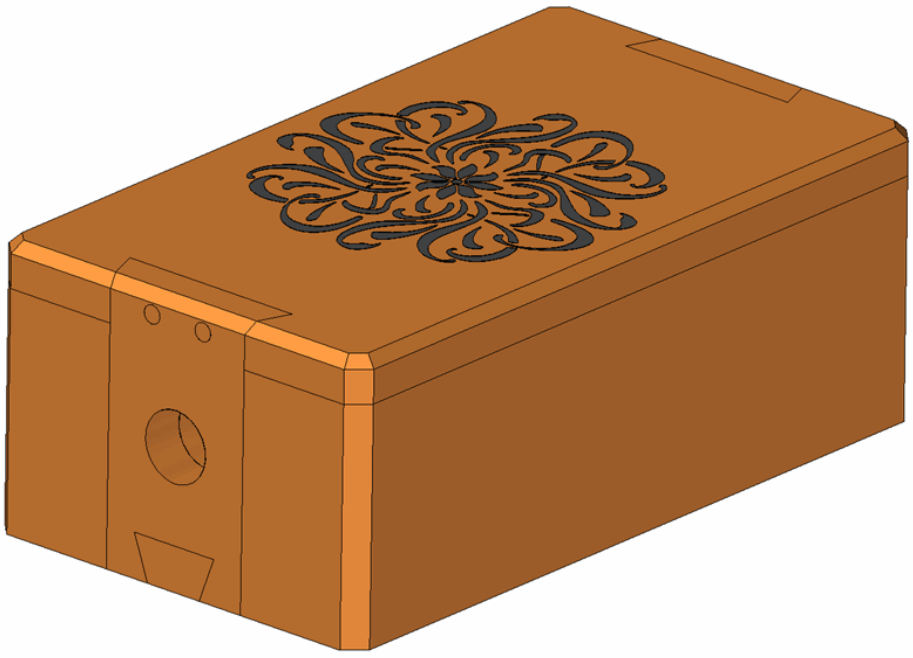
4. Push the subassembly made in the previous step into the Box body (Part 1) until the Dowel D5 x 15mm (Part 6) stops against the end of the slot, then put the subassembly made in step 1 on it place, and return the subassembly made in the previous step, until it (it – Key Dowel?!) entirely slides into the slot. This way, you are checking out, does the first locking mechanism works smoothly.



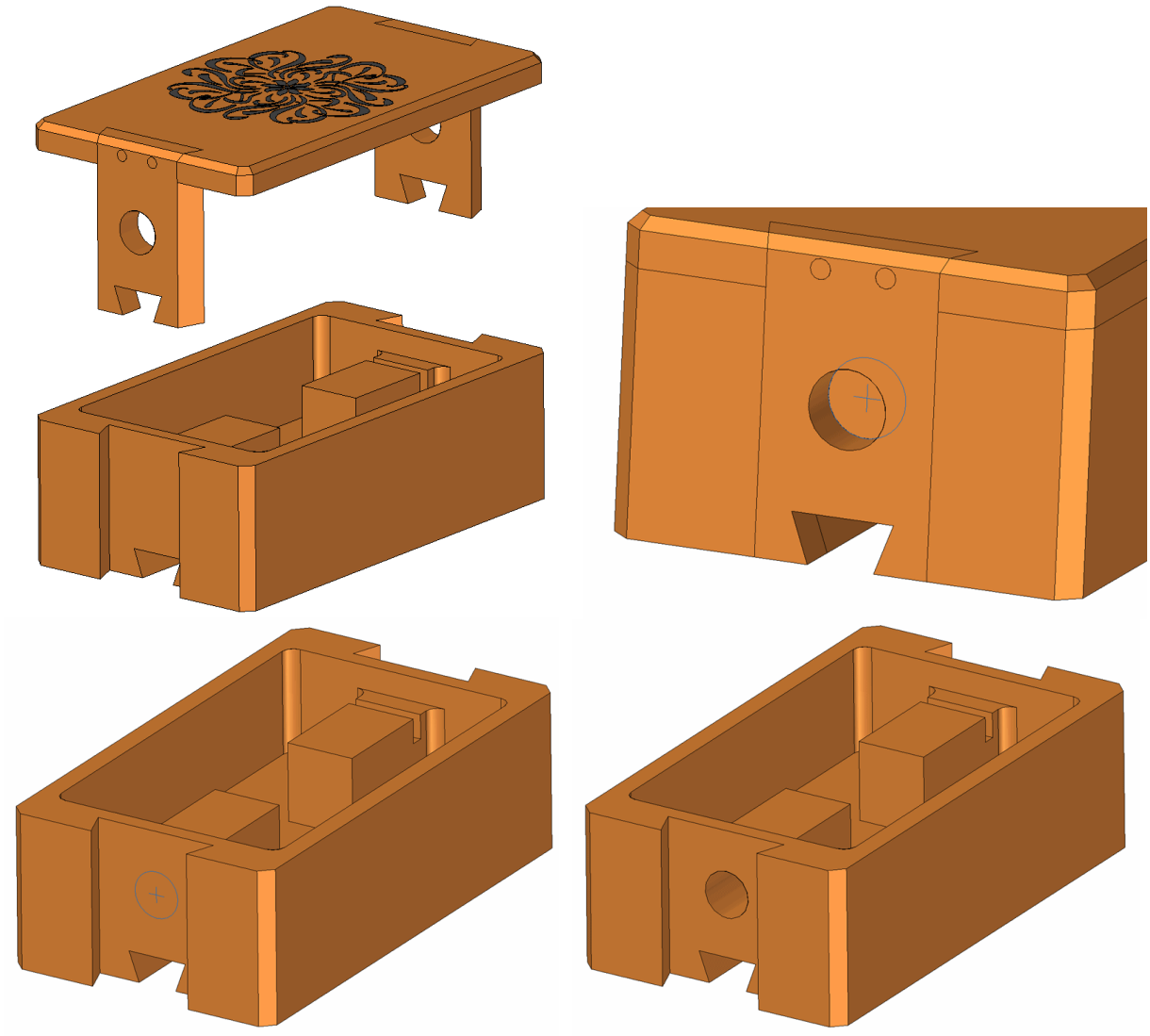




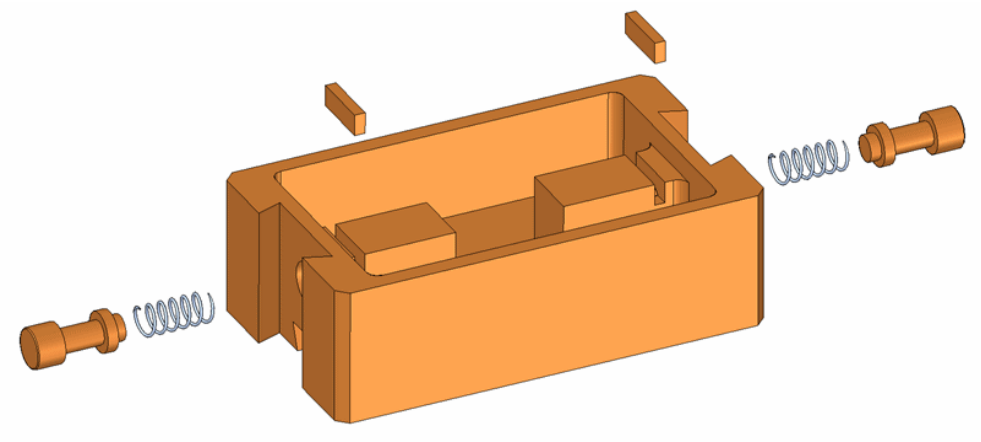


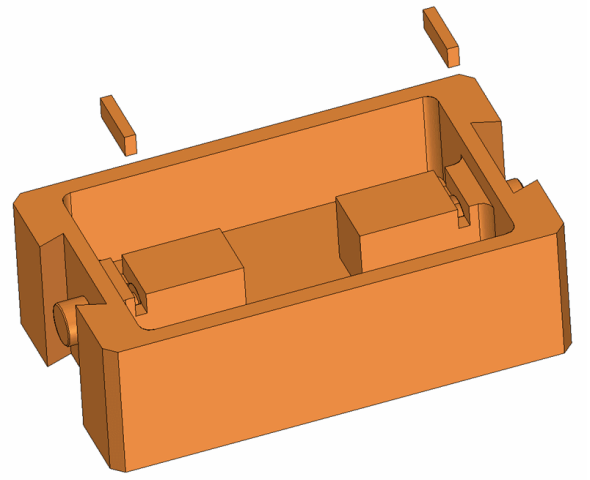


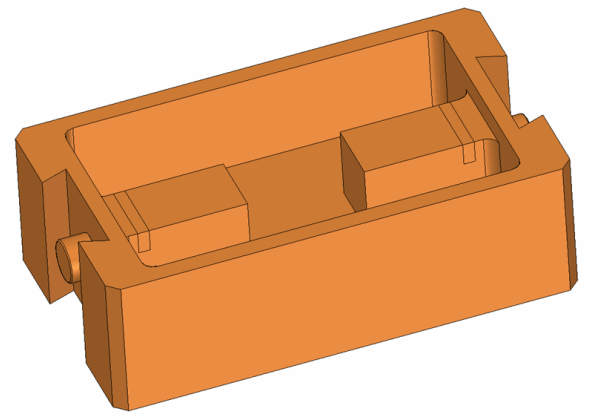
5. Put the subassembly made in step 1 on the Box body (Part 1) and mark from the both sides positions for the holes, where the Bullets (Par 7) will go. Then drill these holes.



6. Put the Bullets (Part 7) and Springs (Part 9) into holes and check out, does each bullet slides smoothly inside the hole. If this is not the case, simply sand the extra material, until both Bullets slides satisfactory. Push the Bullets (Part 7) as far as they can go, to compress the spring, and then glue the Retainer pins on its positions. This way, the Retainer pins will block the Bullets and Springs to pop out. Now you have finished the second locking mechanism.







7. The box has two locking mechanisms and to lock it you need to:

- put the subassembly from step 2 into the groove and move it until the Key Dowel D5 x 15mm (Part 6) touch the end of the slot,

- push both Bullets to completely go inside holes,

- put the subassembly from step 1 on its place,

- pull in the subassembly from step 2 into the slot.