



3d printed tripod



Lytographum

[VIEW IN BROWSER](#)

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Summary

Tripod with head for video and photography, 3d printable with Petg and TPU.

[Gadgets](#) > [Photo & Video](#)

Tags: [video](#) [photo](#) [tripodmount](#) [accessory](#) [tripod](#)
[photography](#) [cameratripod](#) [cameratripodmount](#)

PRINTABLE TRIPOD

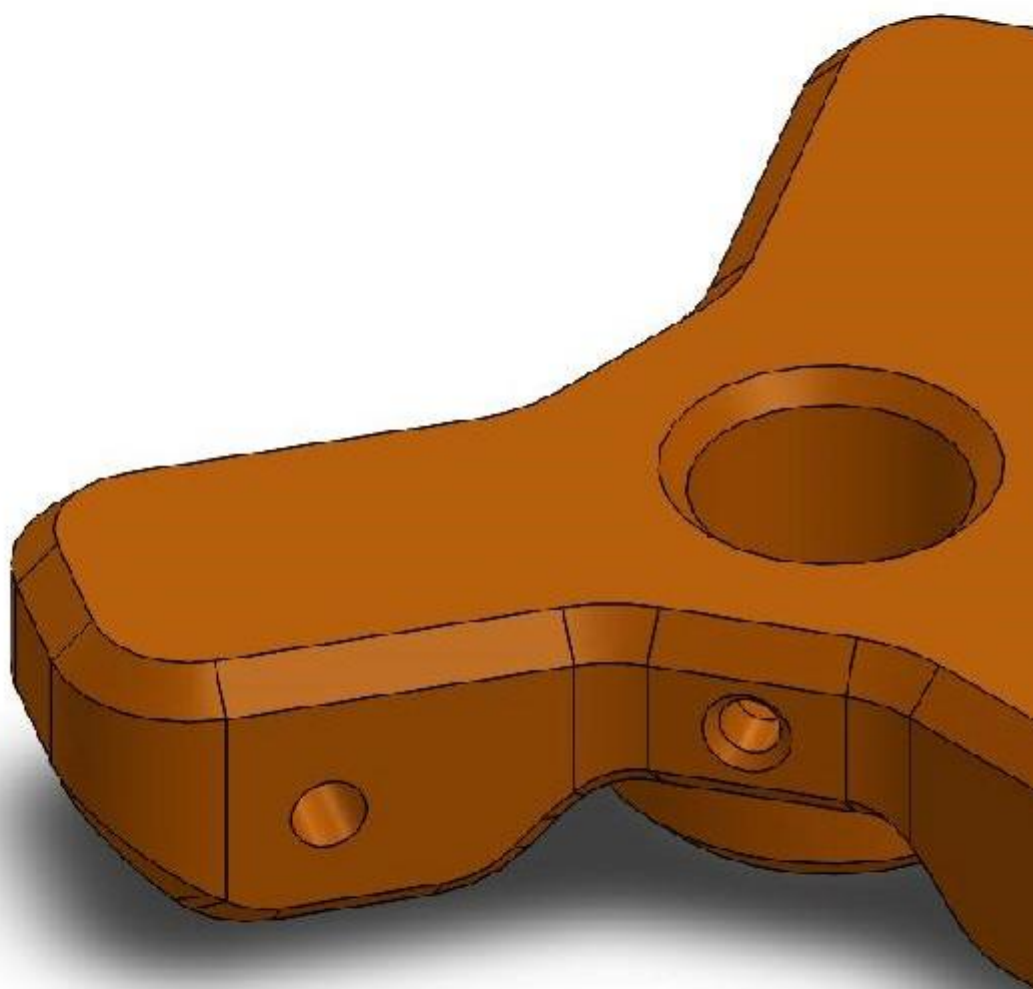
Simple but functional tripod with a maximum extension of about 1,30 meters, design also includes a 3-axis head.

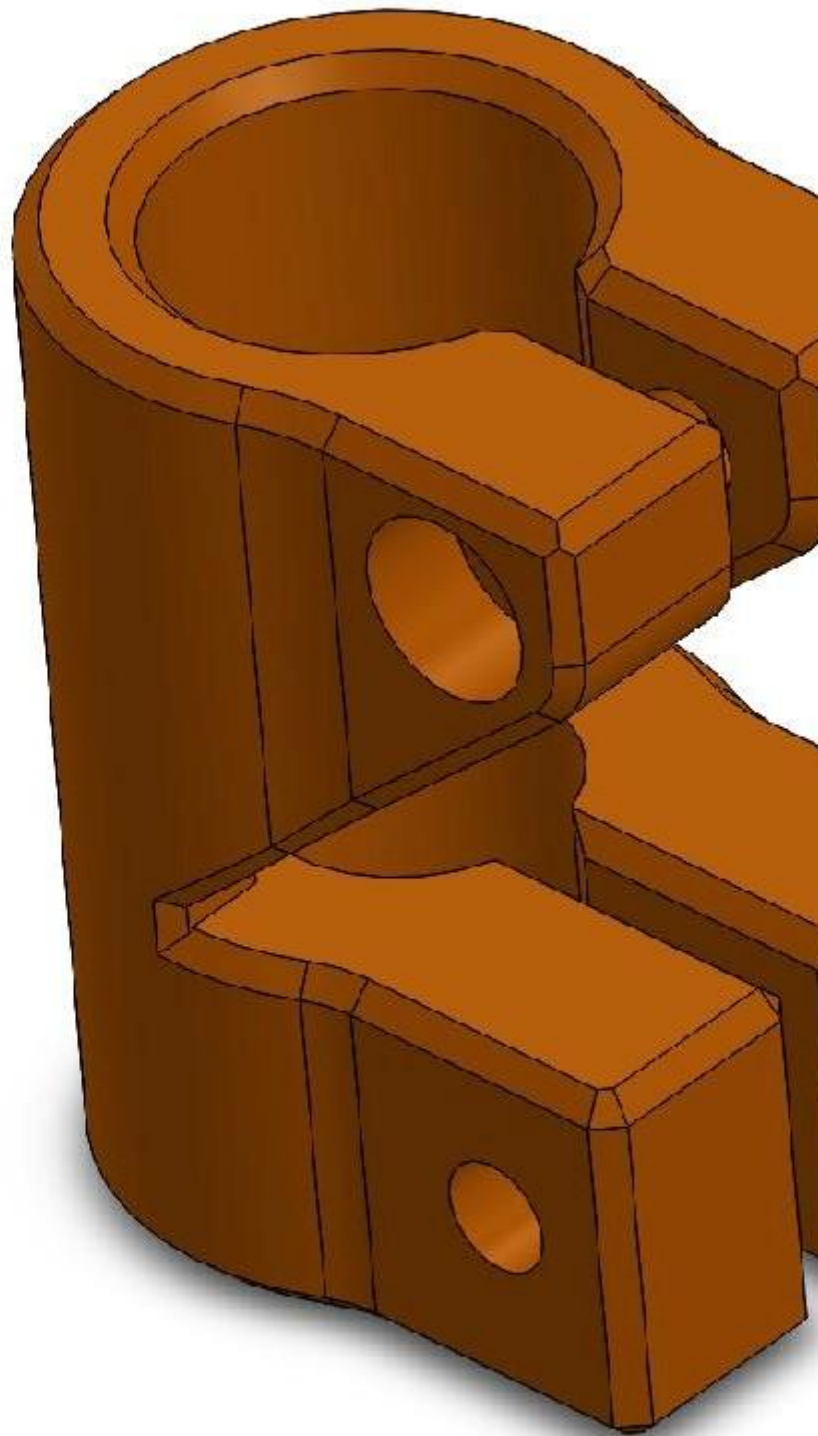
BILL OF MATERIALS

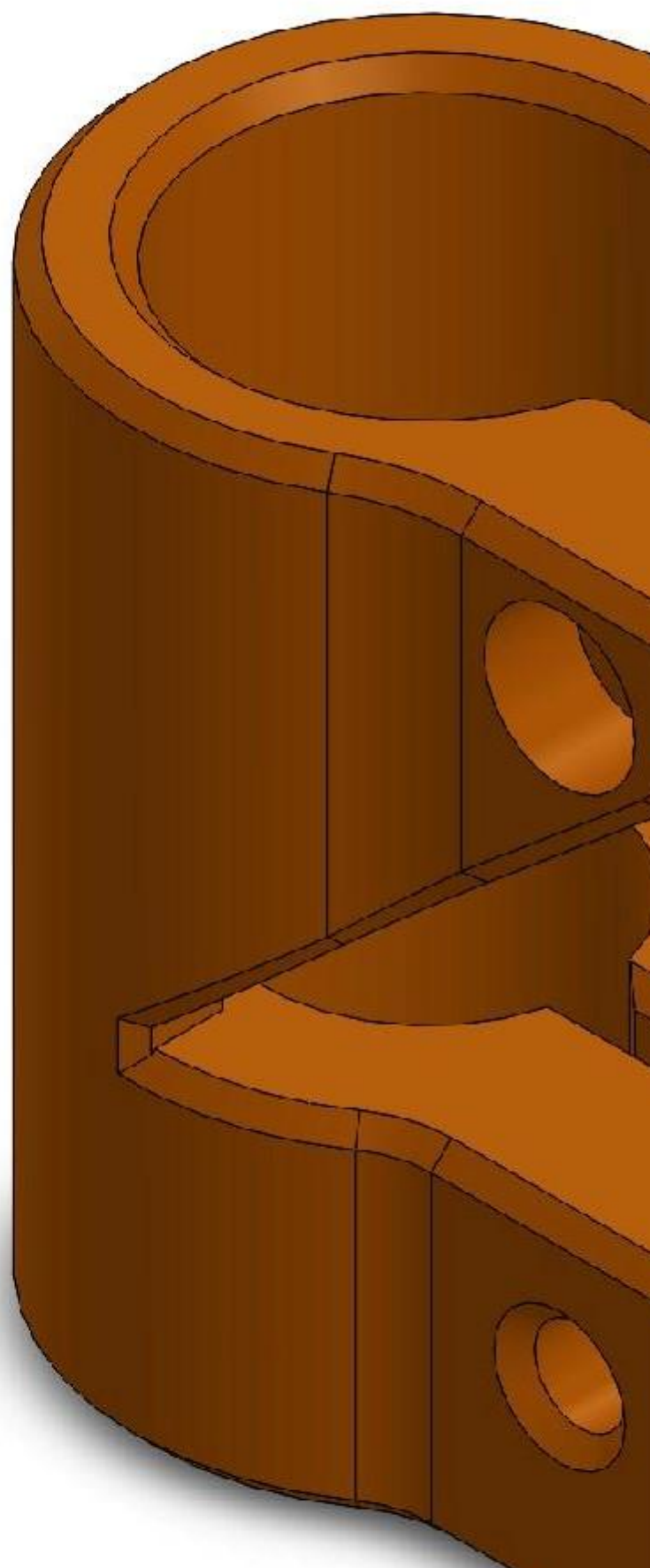
PRINTED PARTS

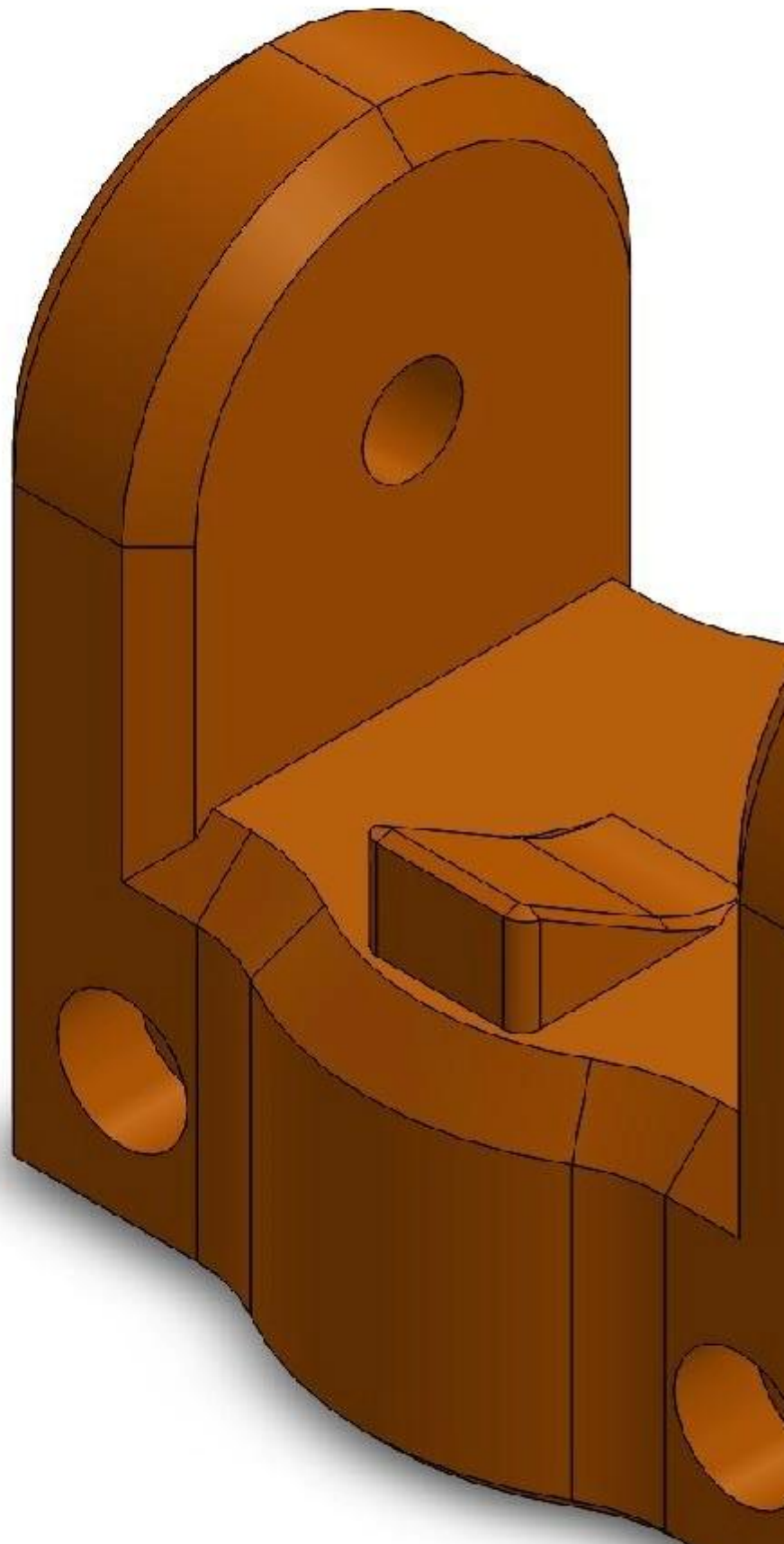
All parts doesn't require supports, also STLs are already oriented for printing.

N.	PHOTO
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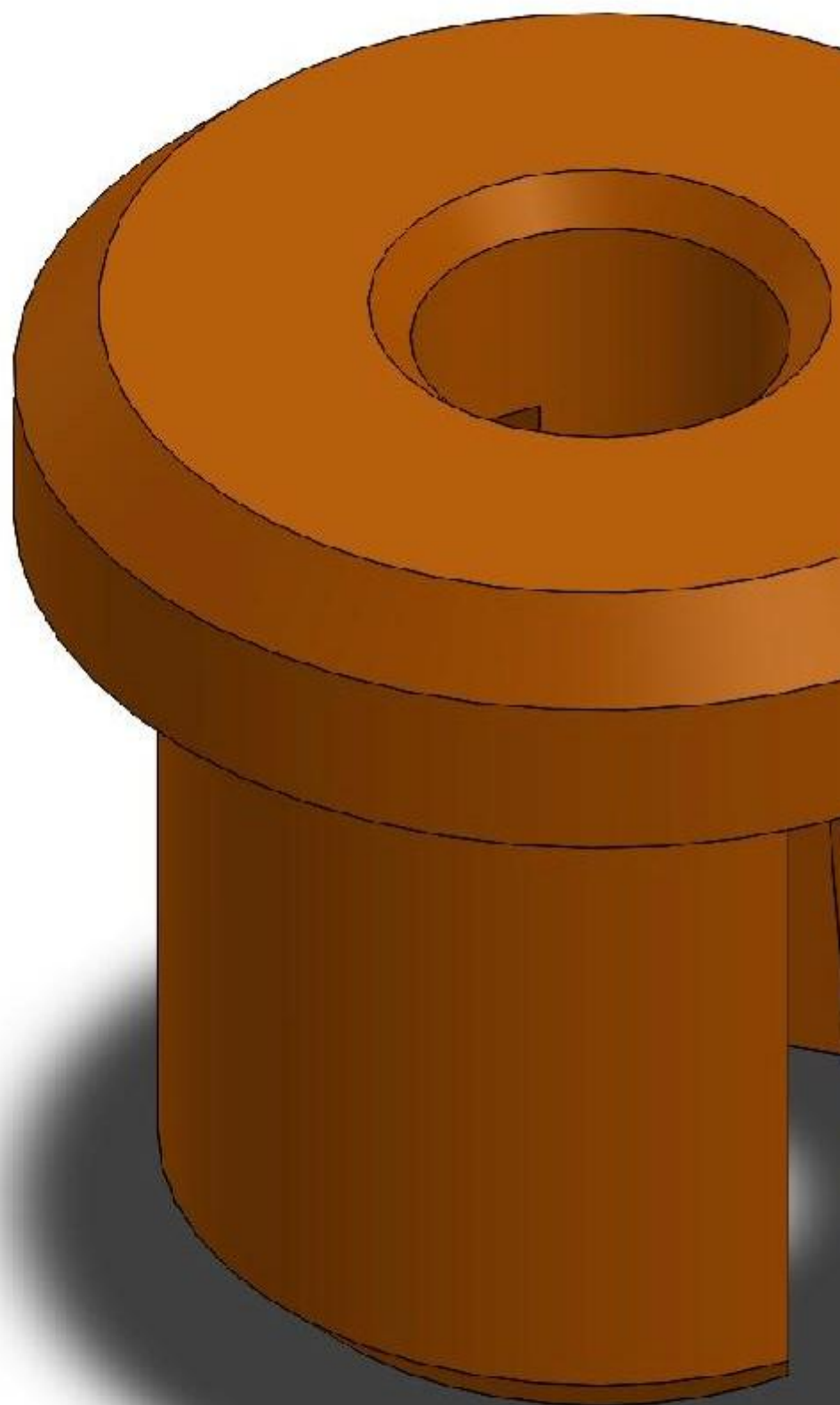


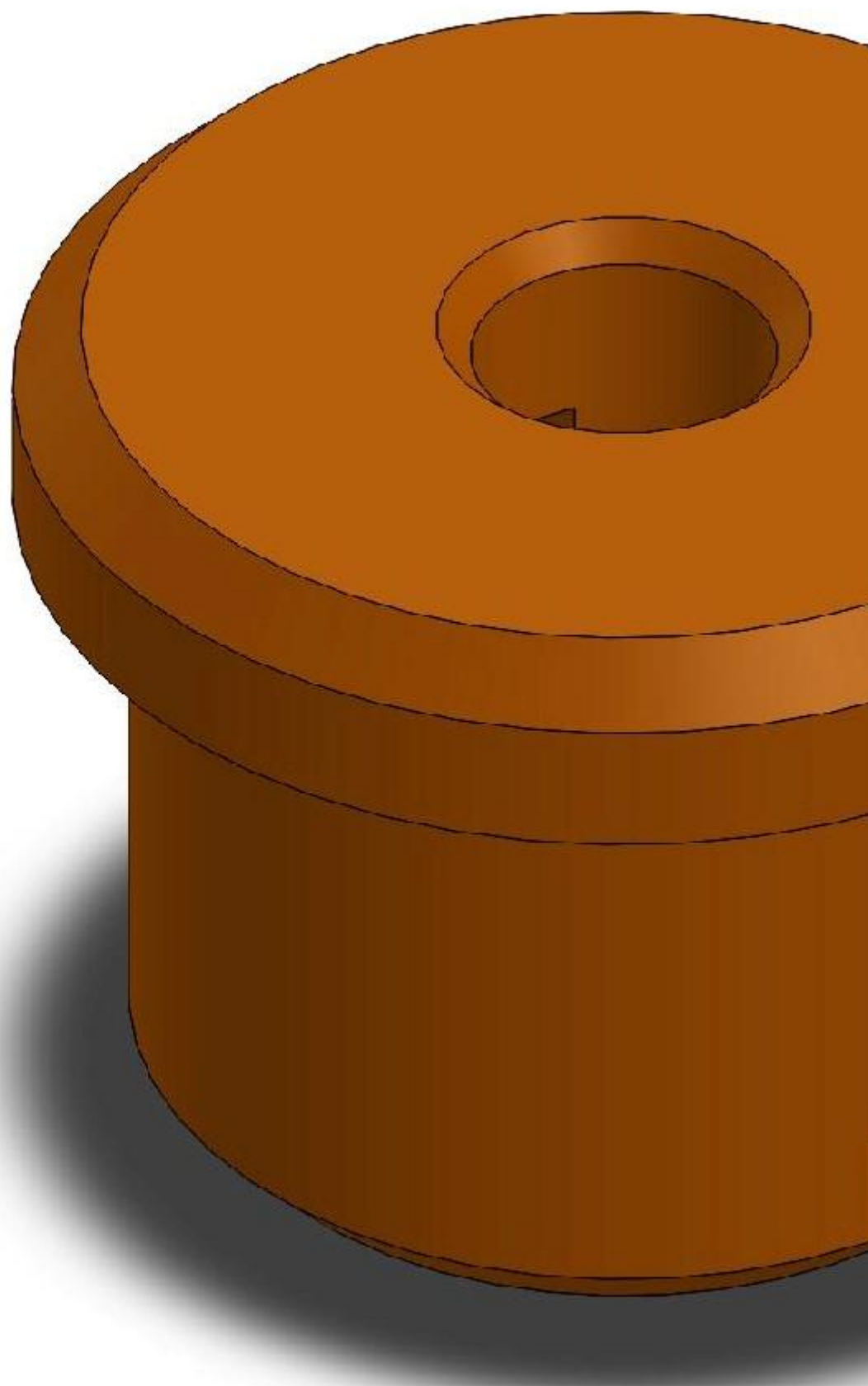


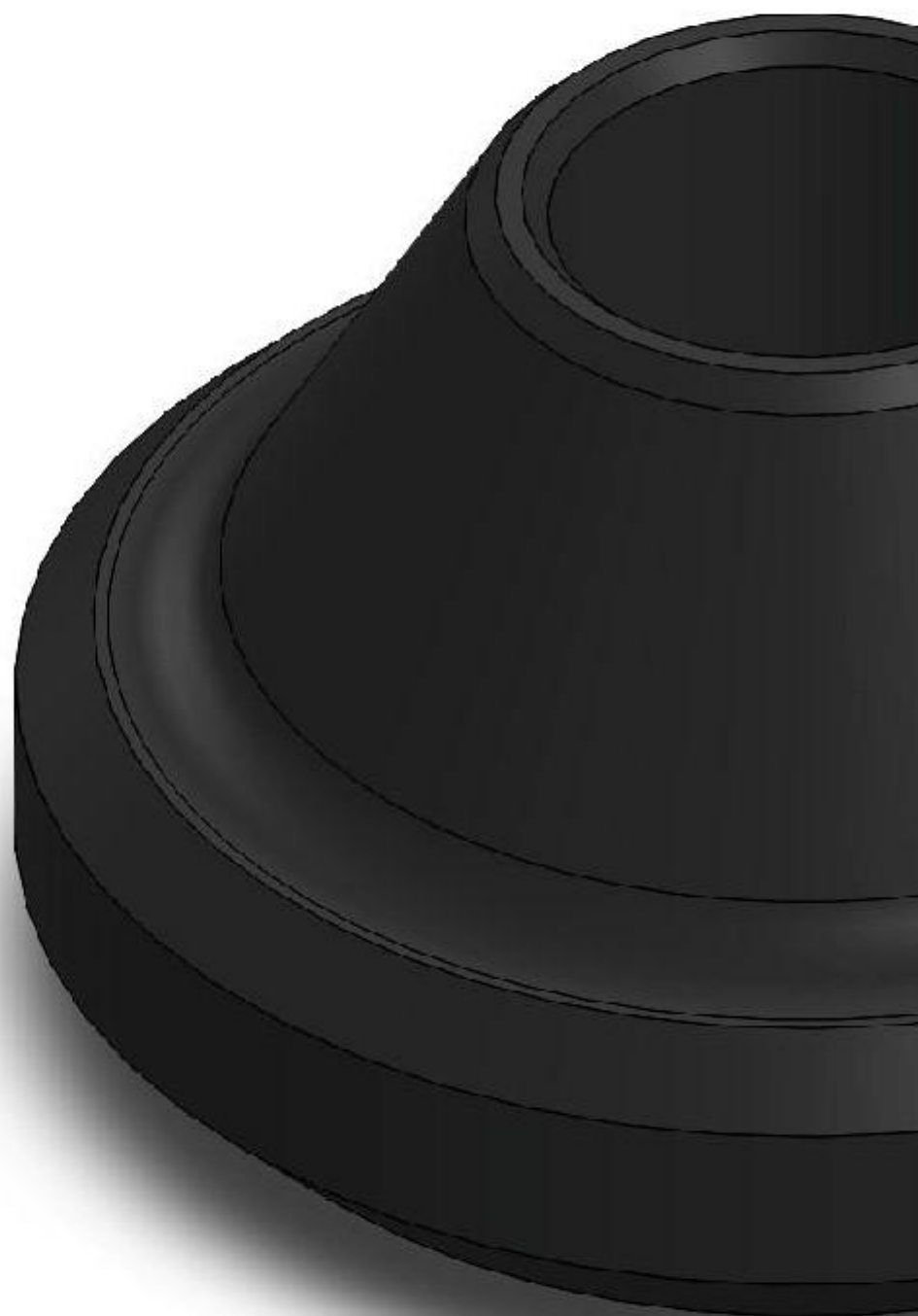




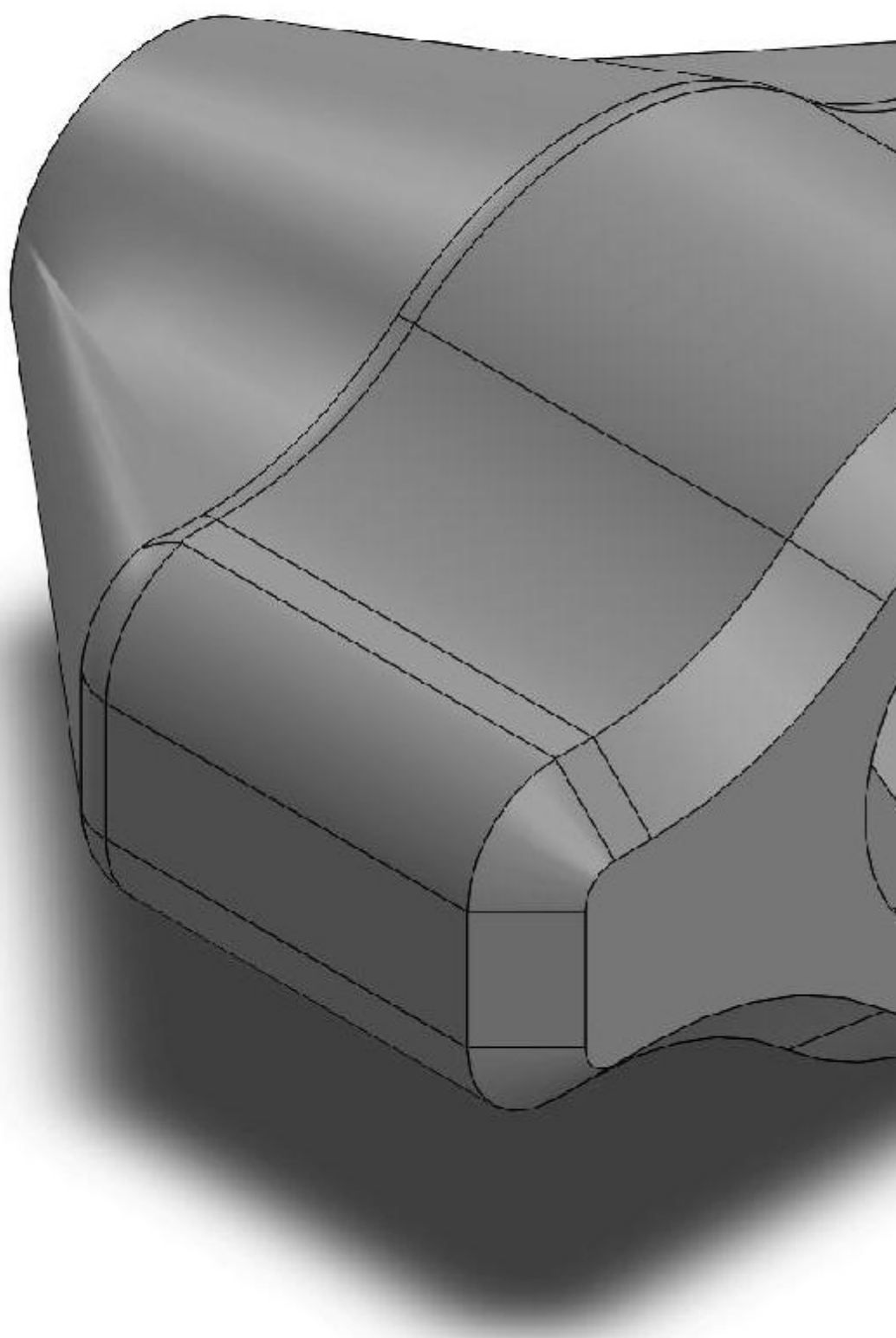


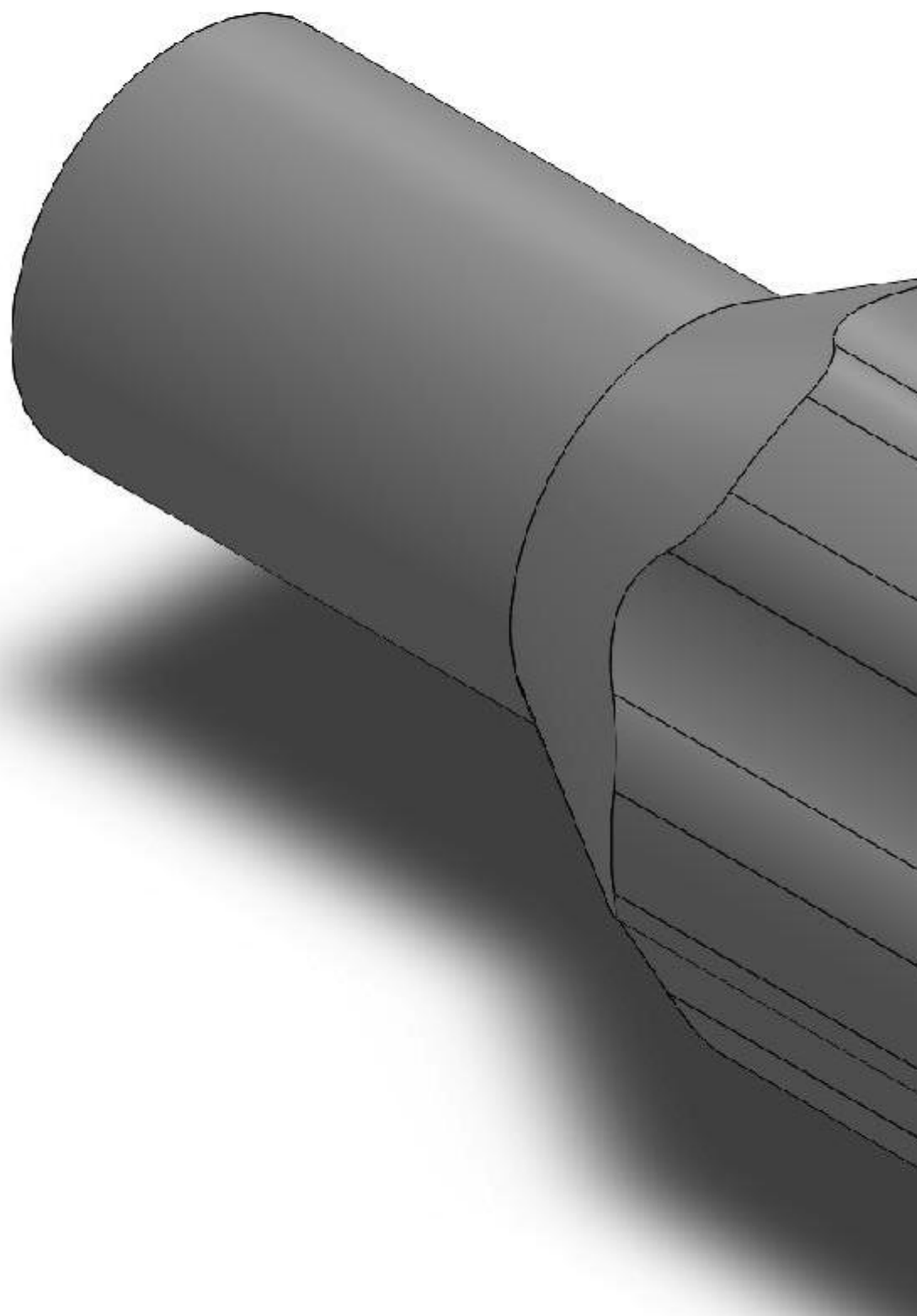


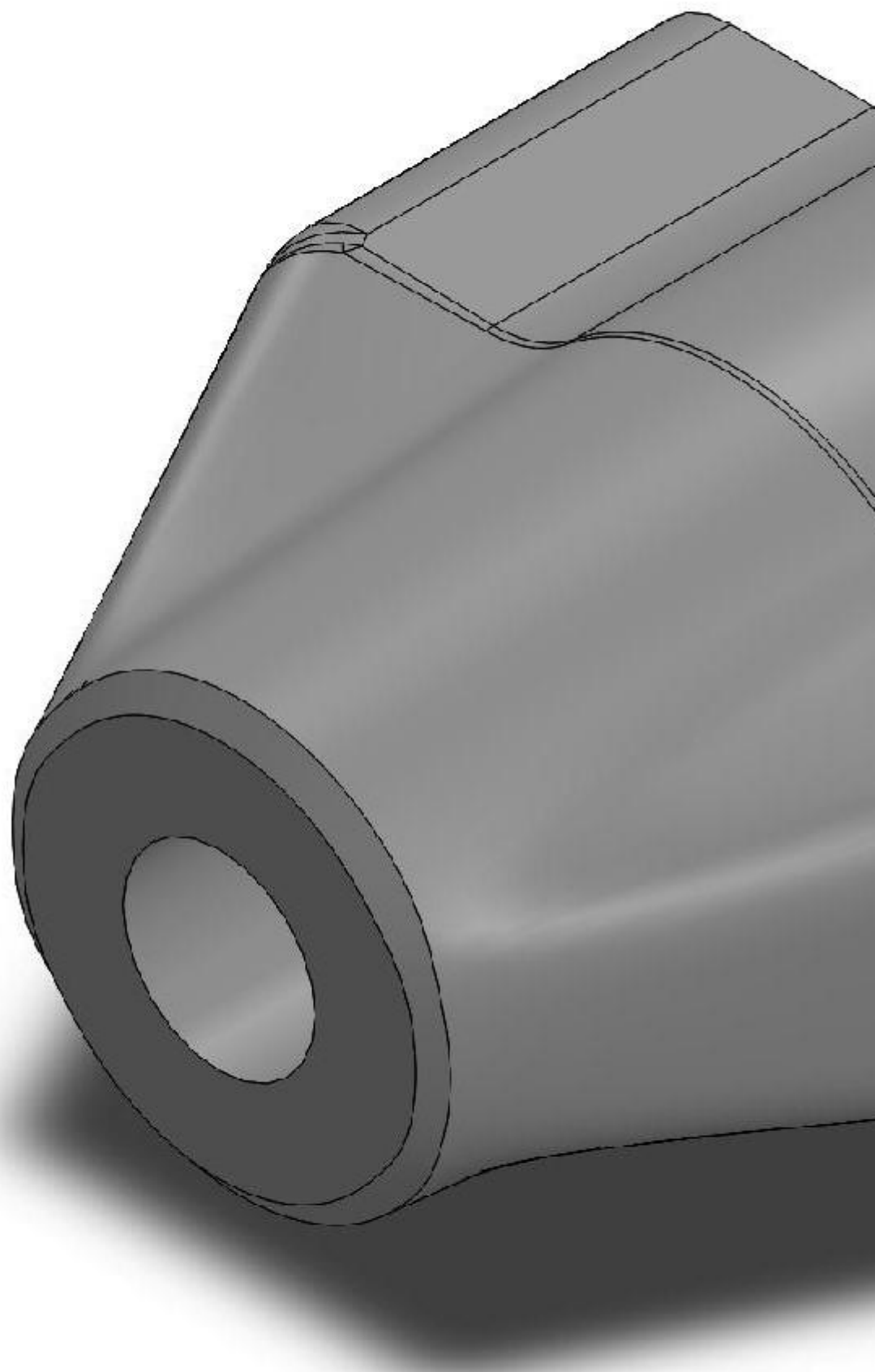


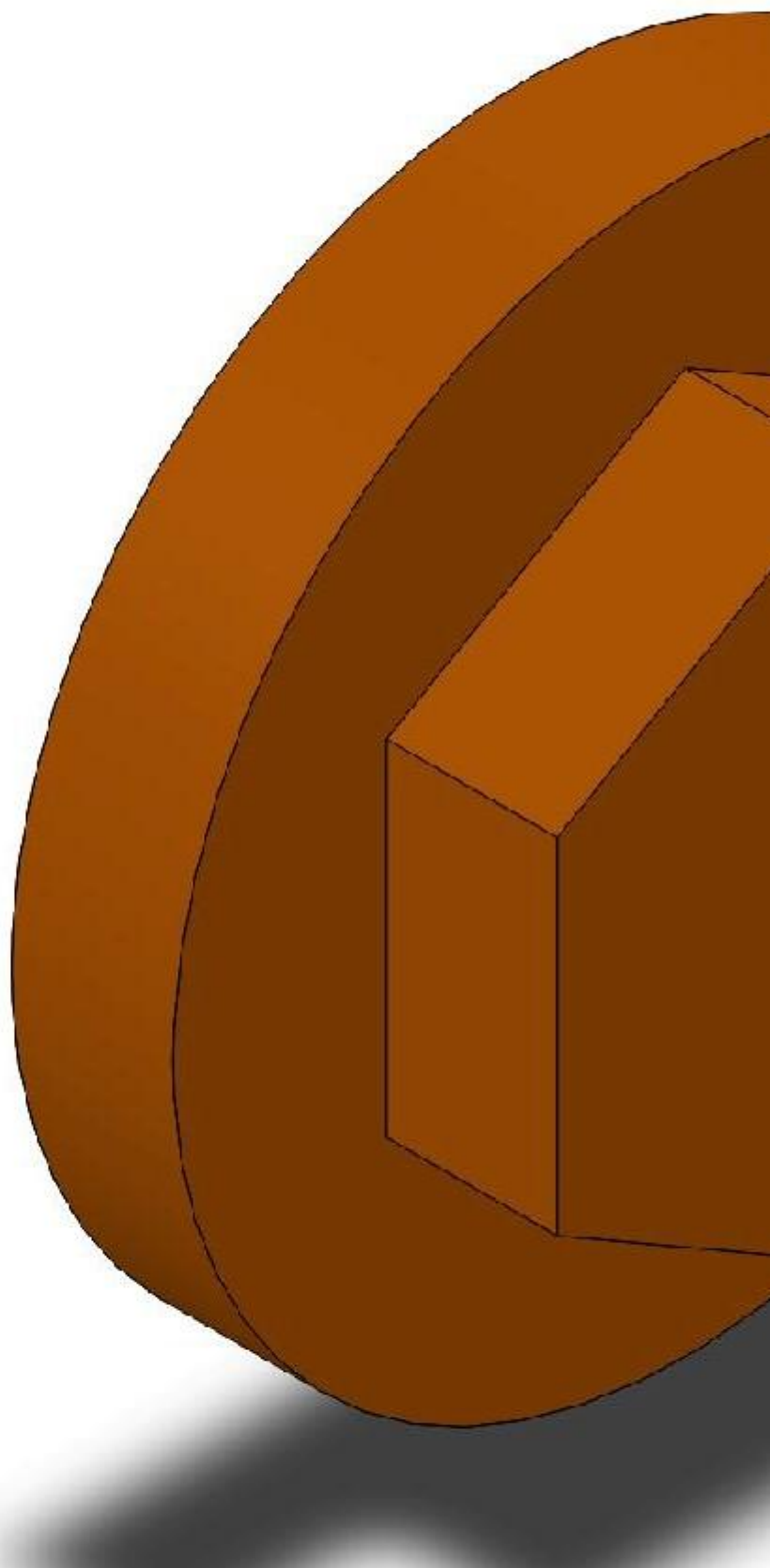


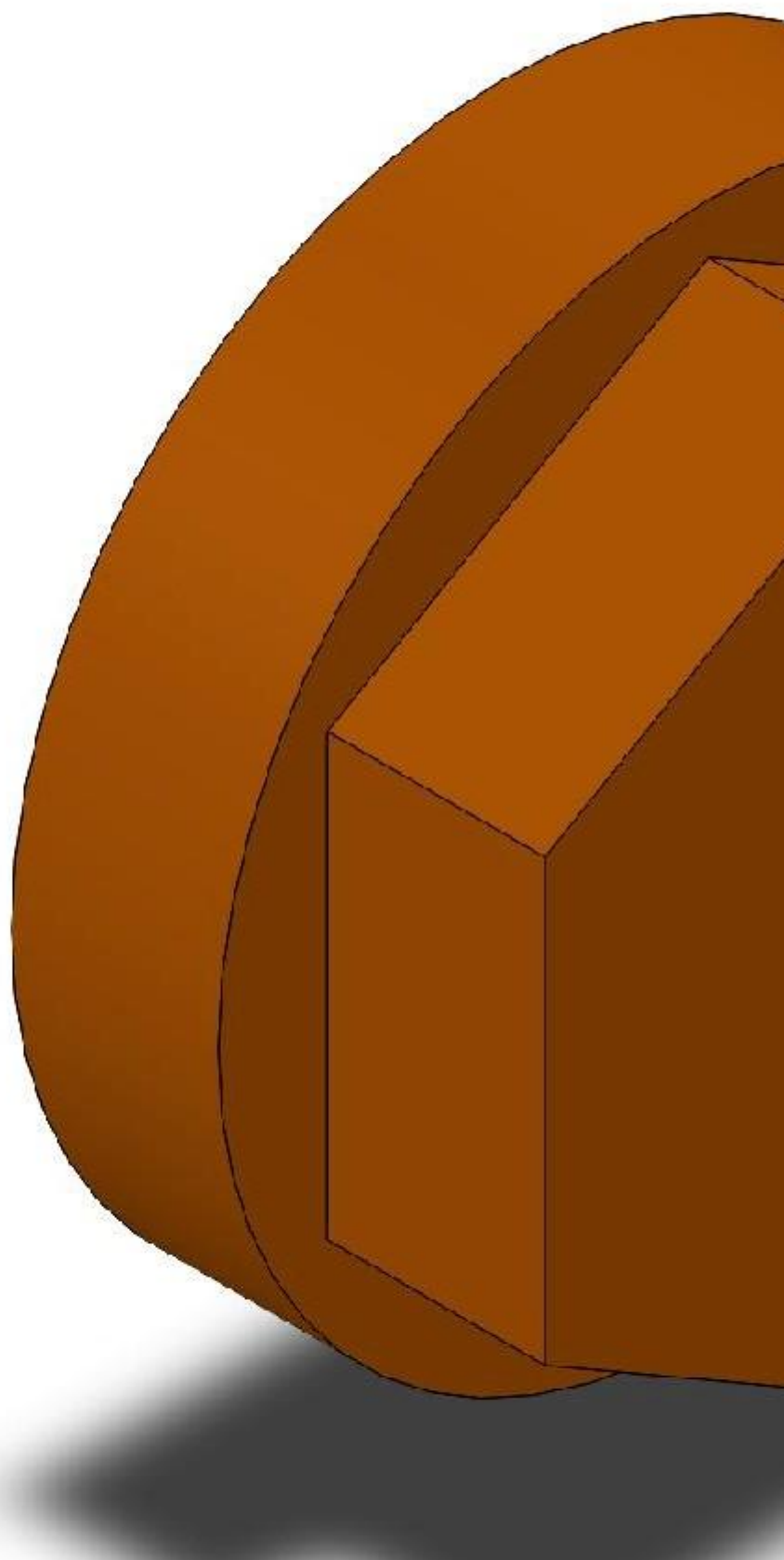


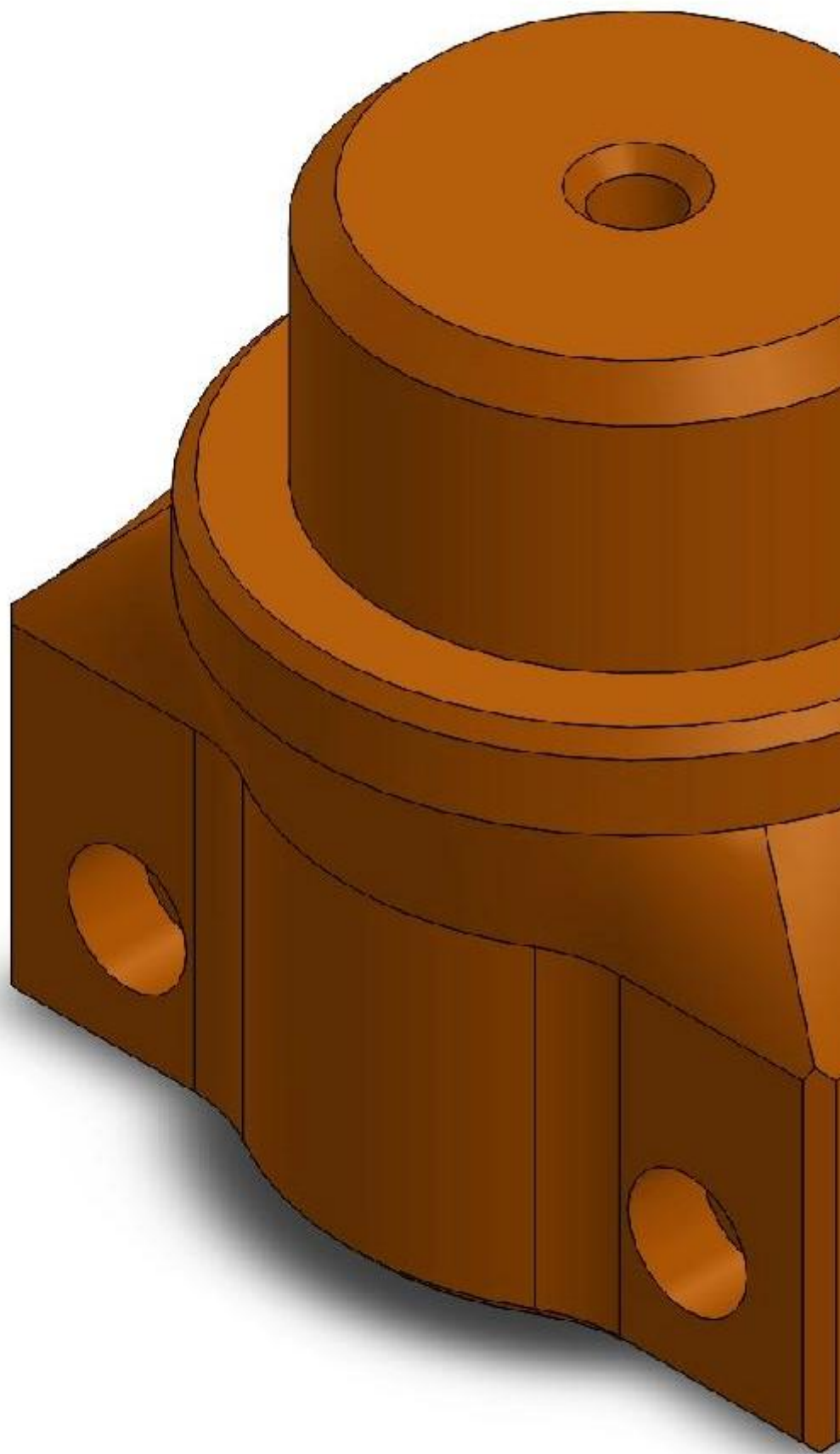


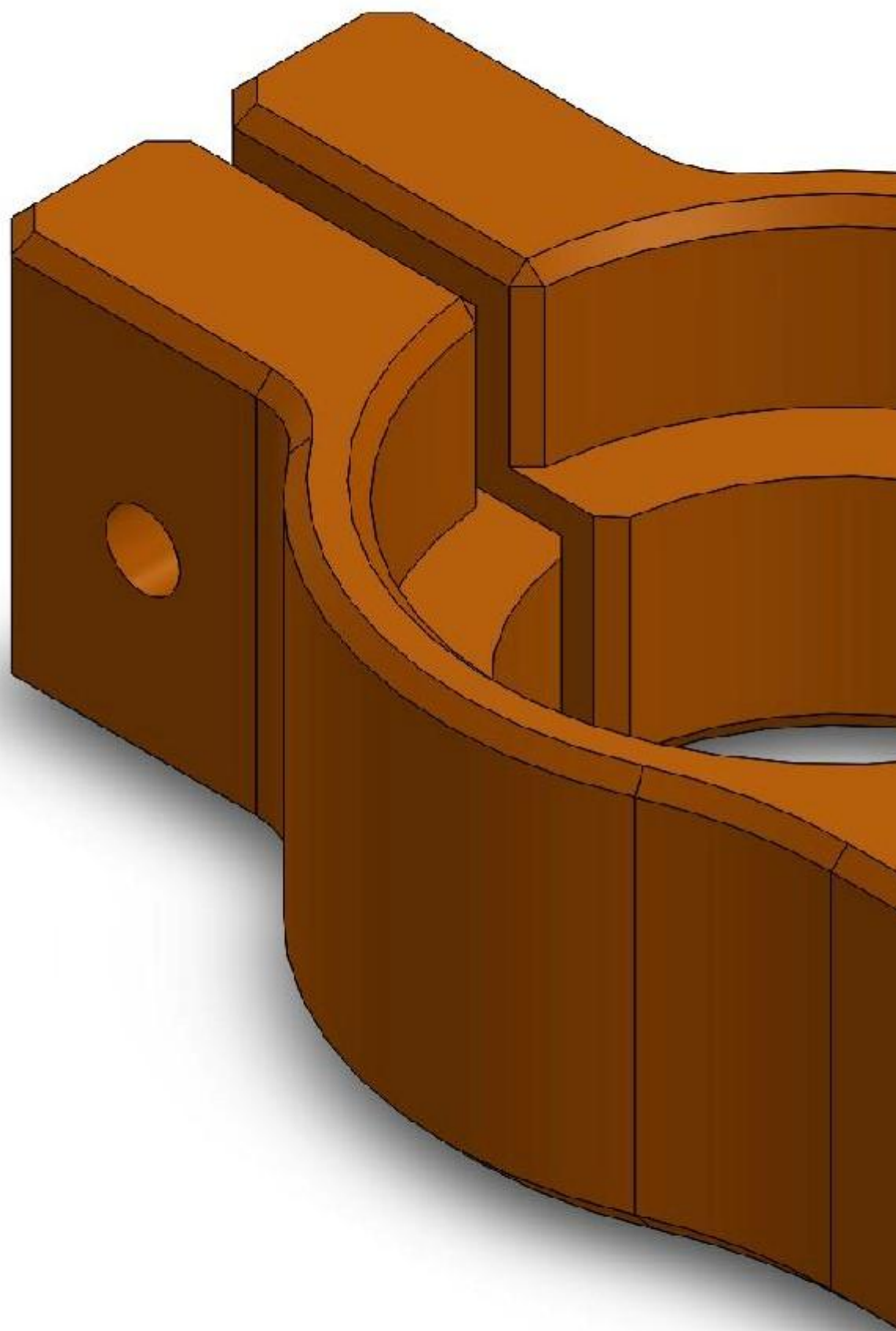


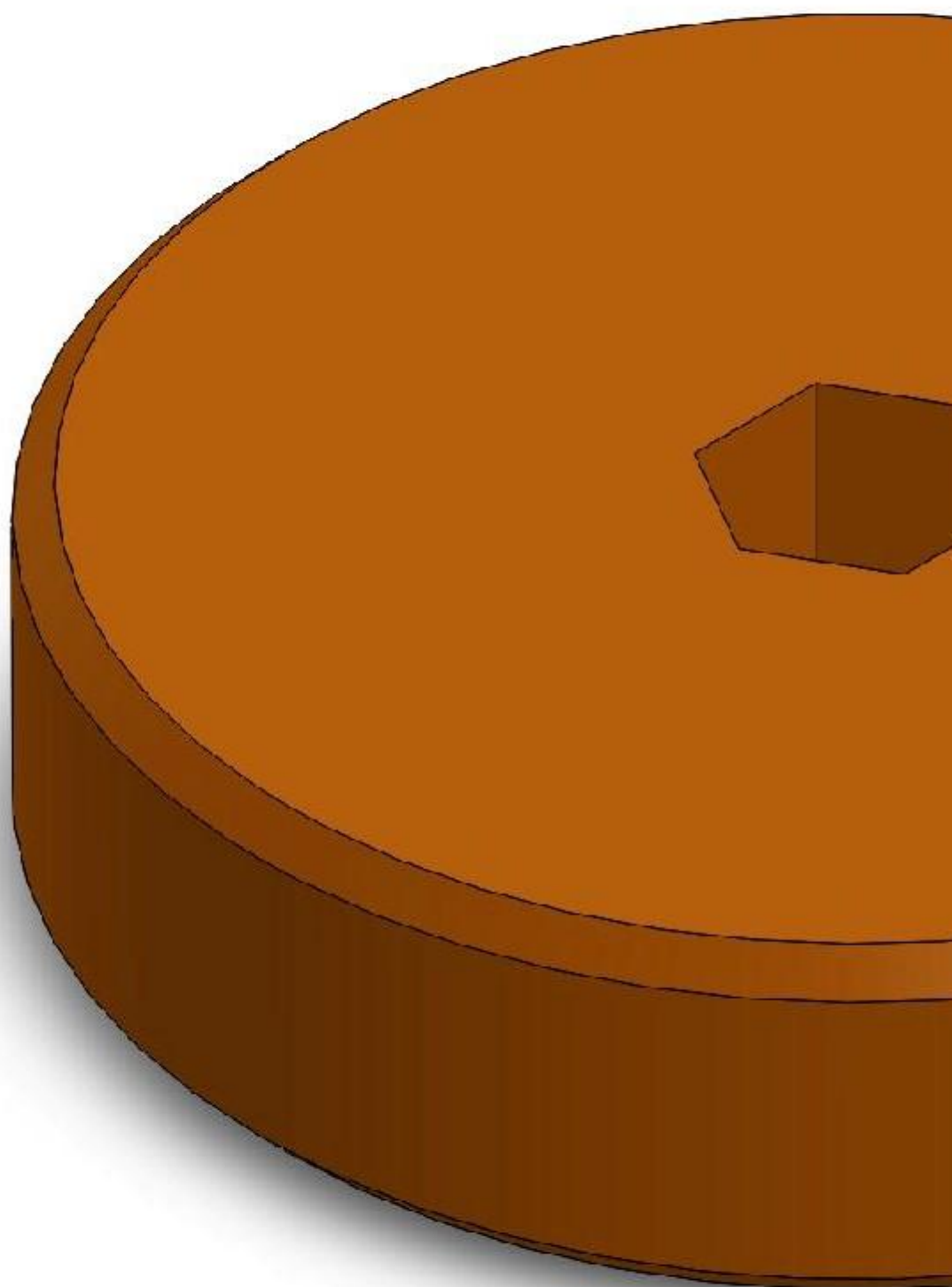


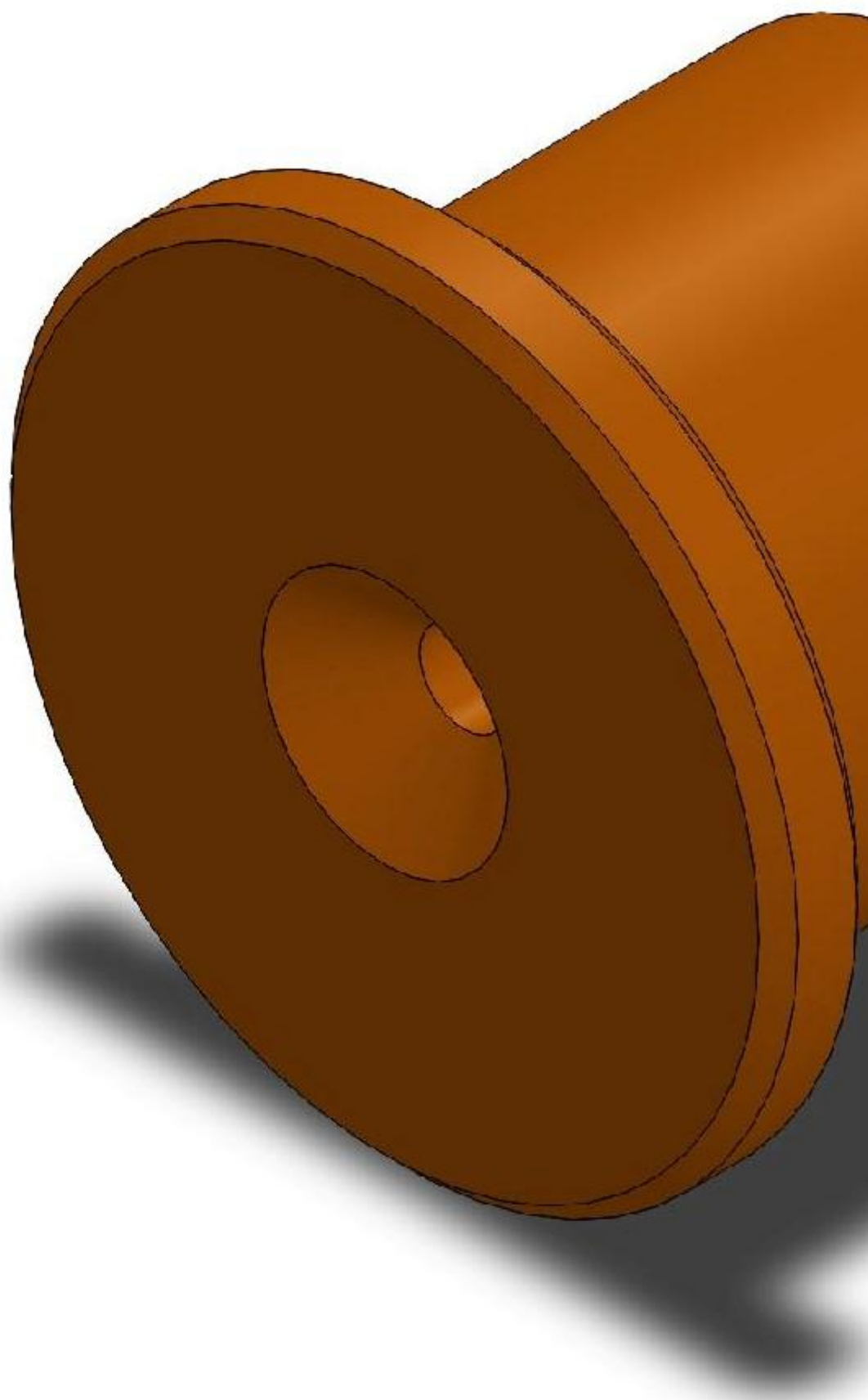


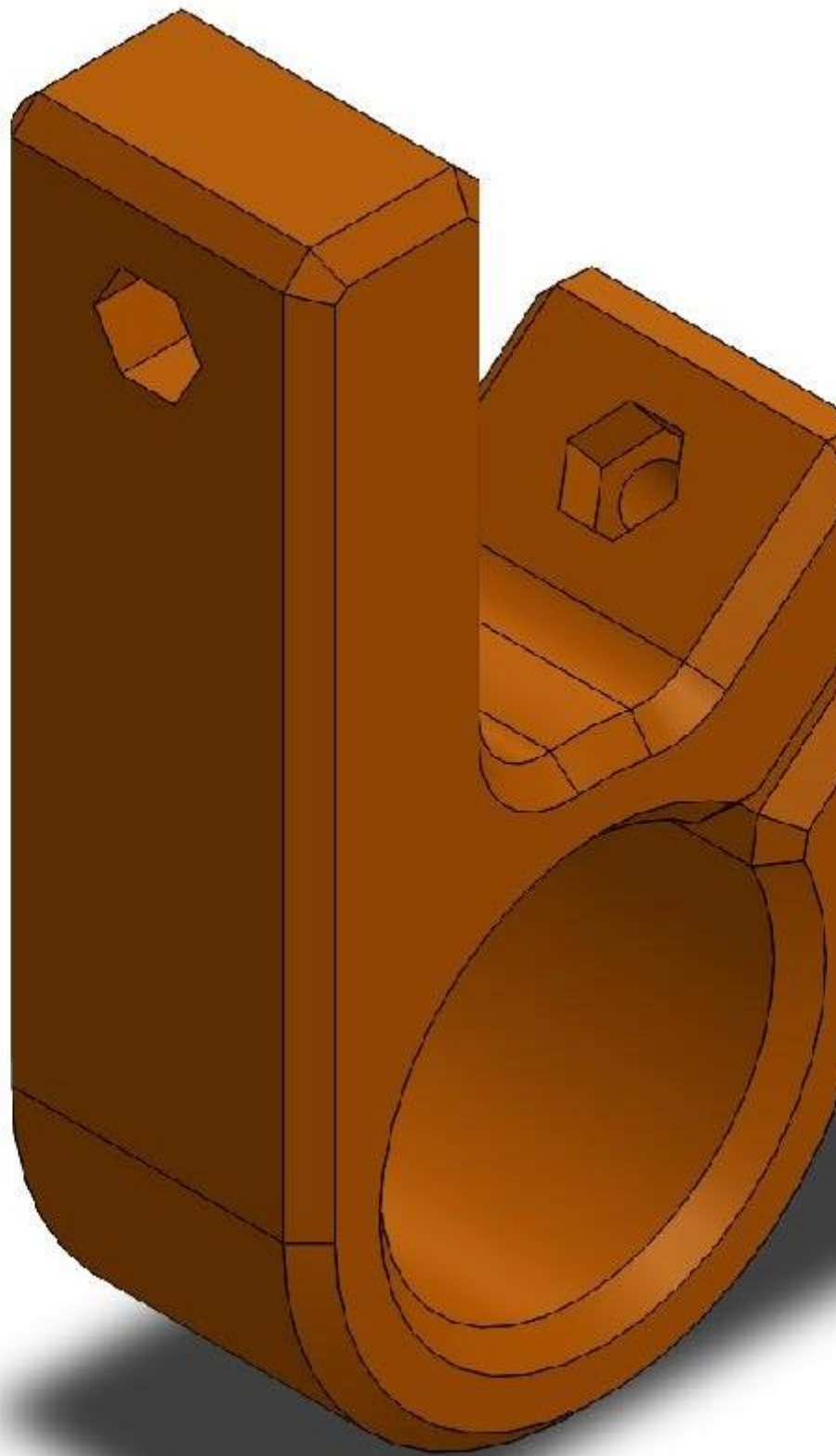


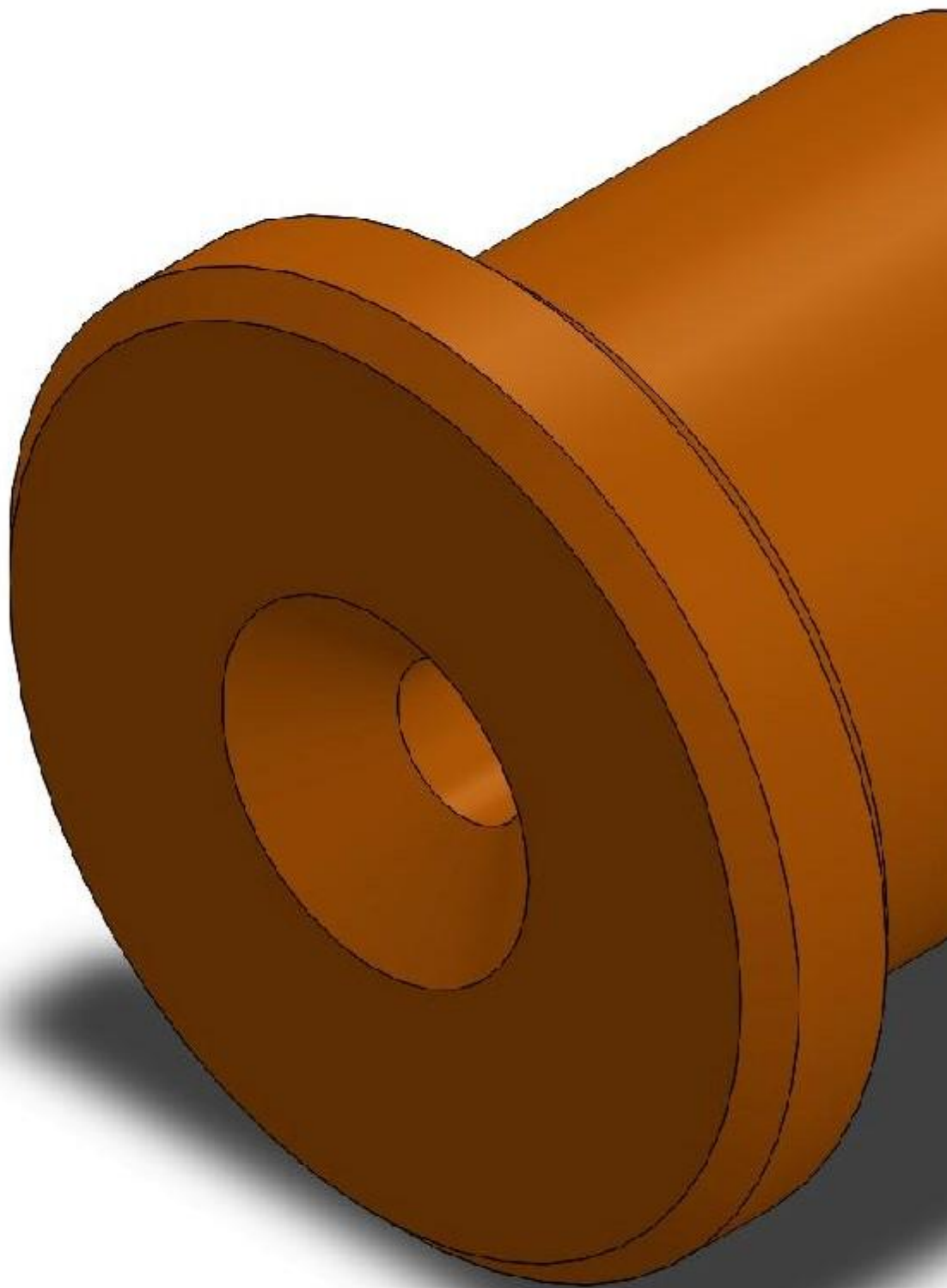


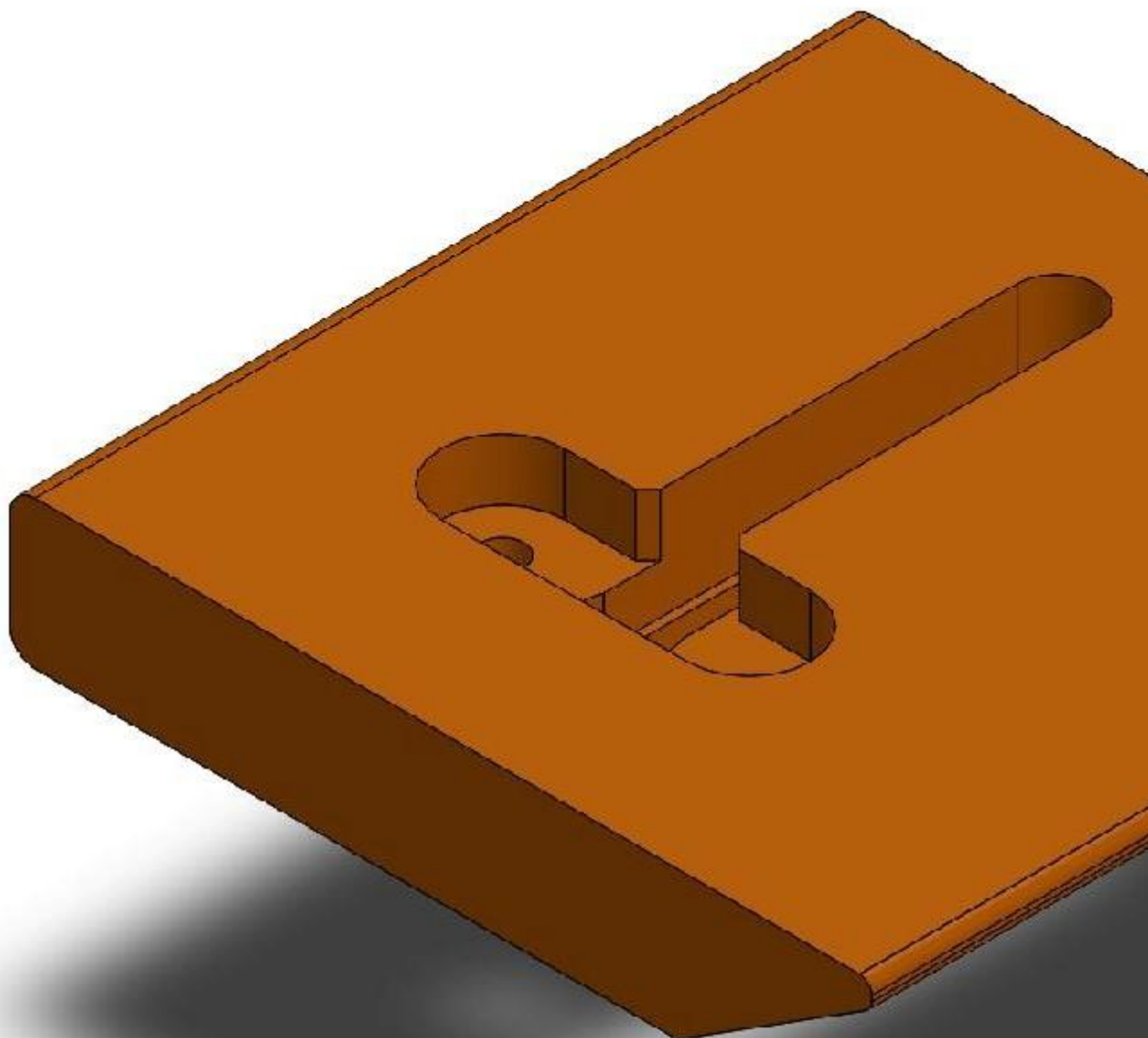


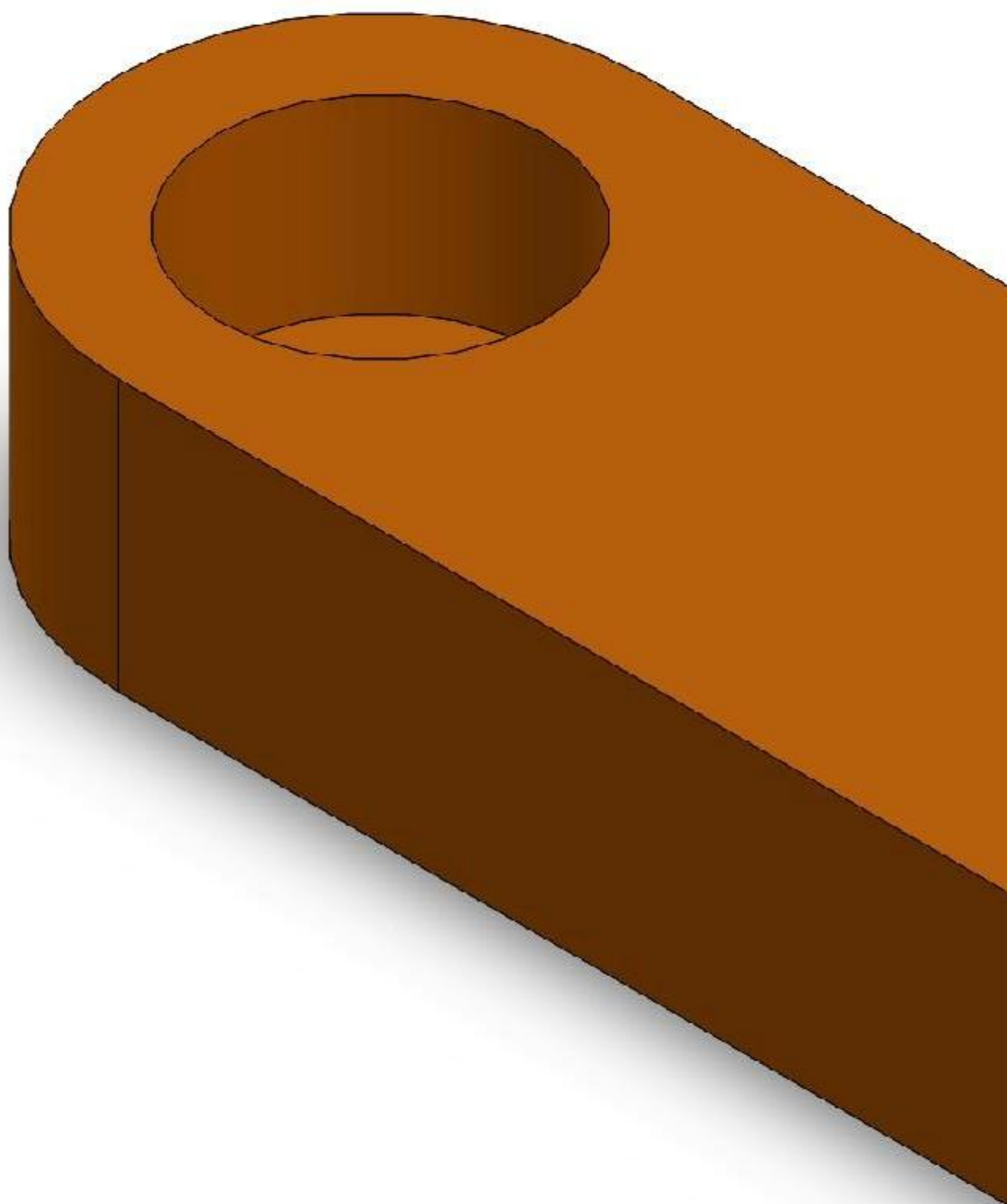










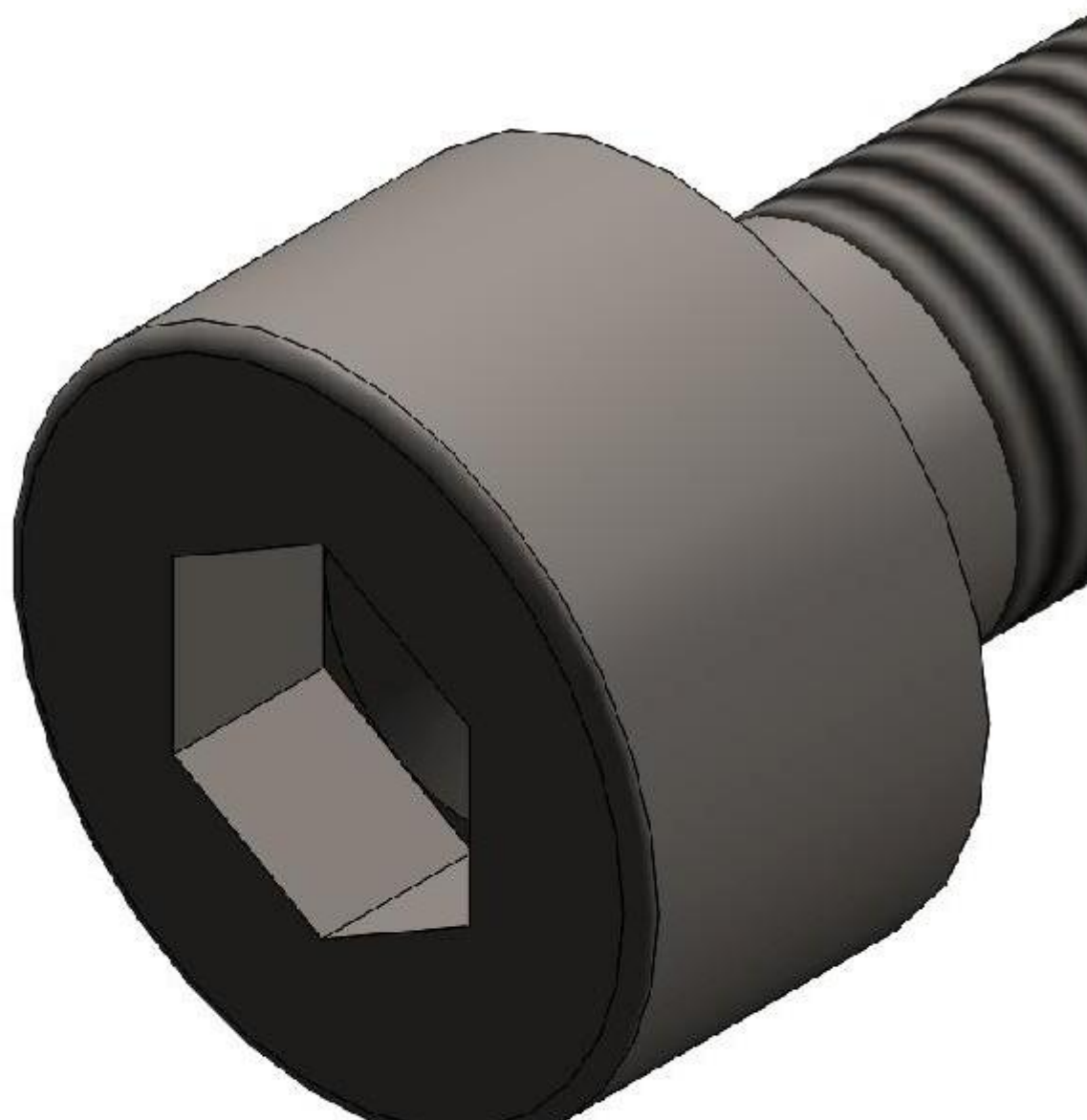


TUBES

N°	NAME	EXT Ø	INT Ø	LENGTH	MATERIAL	Q.TY
23	20 - 320 Tube	20	18	320	Anodized aluminum	4
24	16 - 300 Tube	16	14	300	Anodized aluminum	3
25	12 - 280 Tube	12	10	280	Anodized aluminum	3

SCREW AND BOLTS

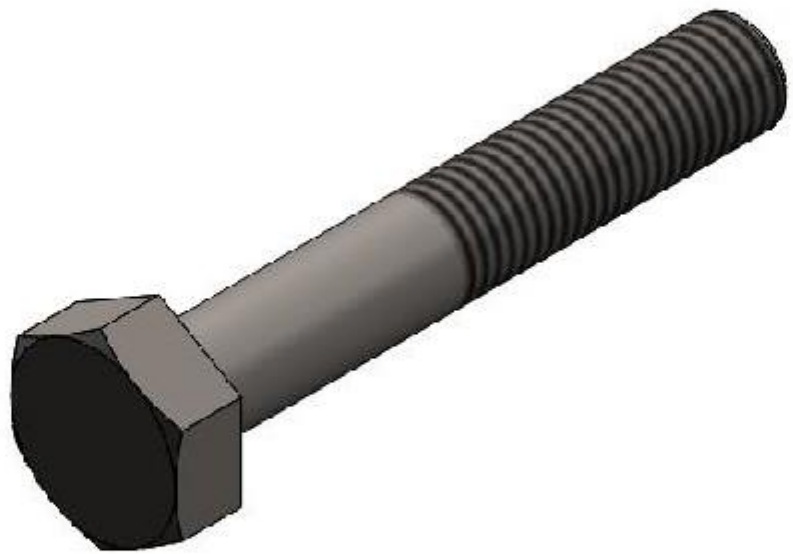
N	PHOTO
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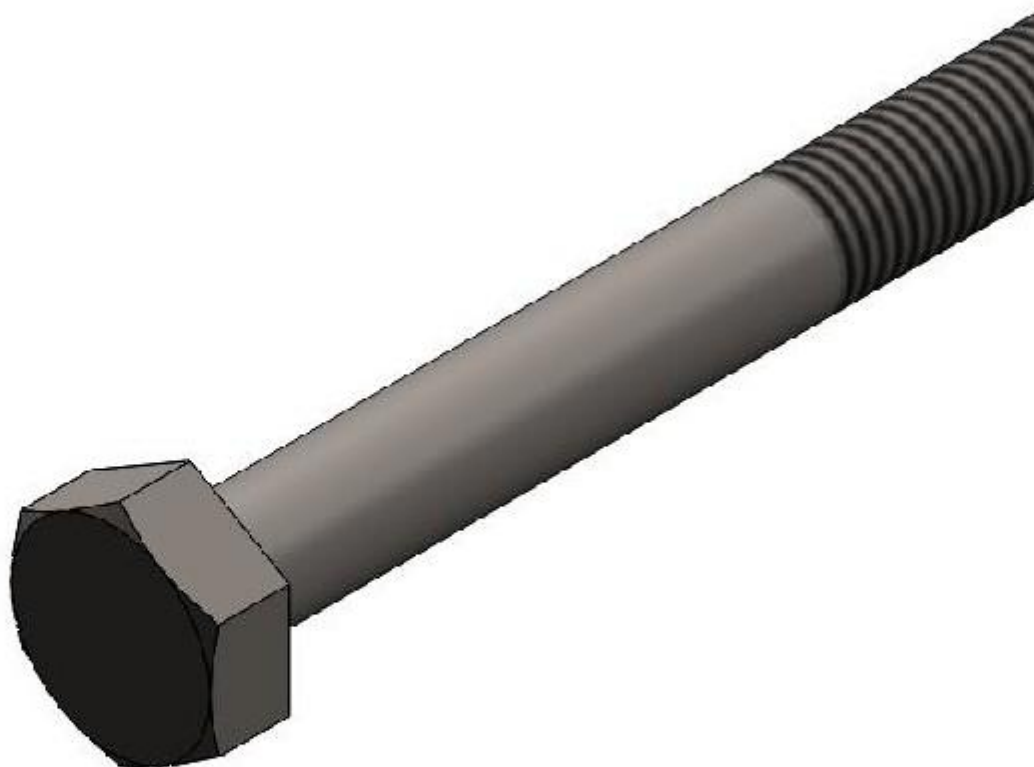




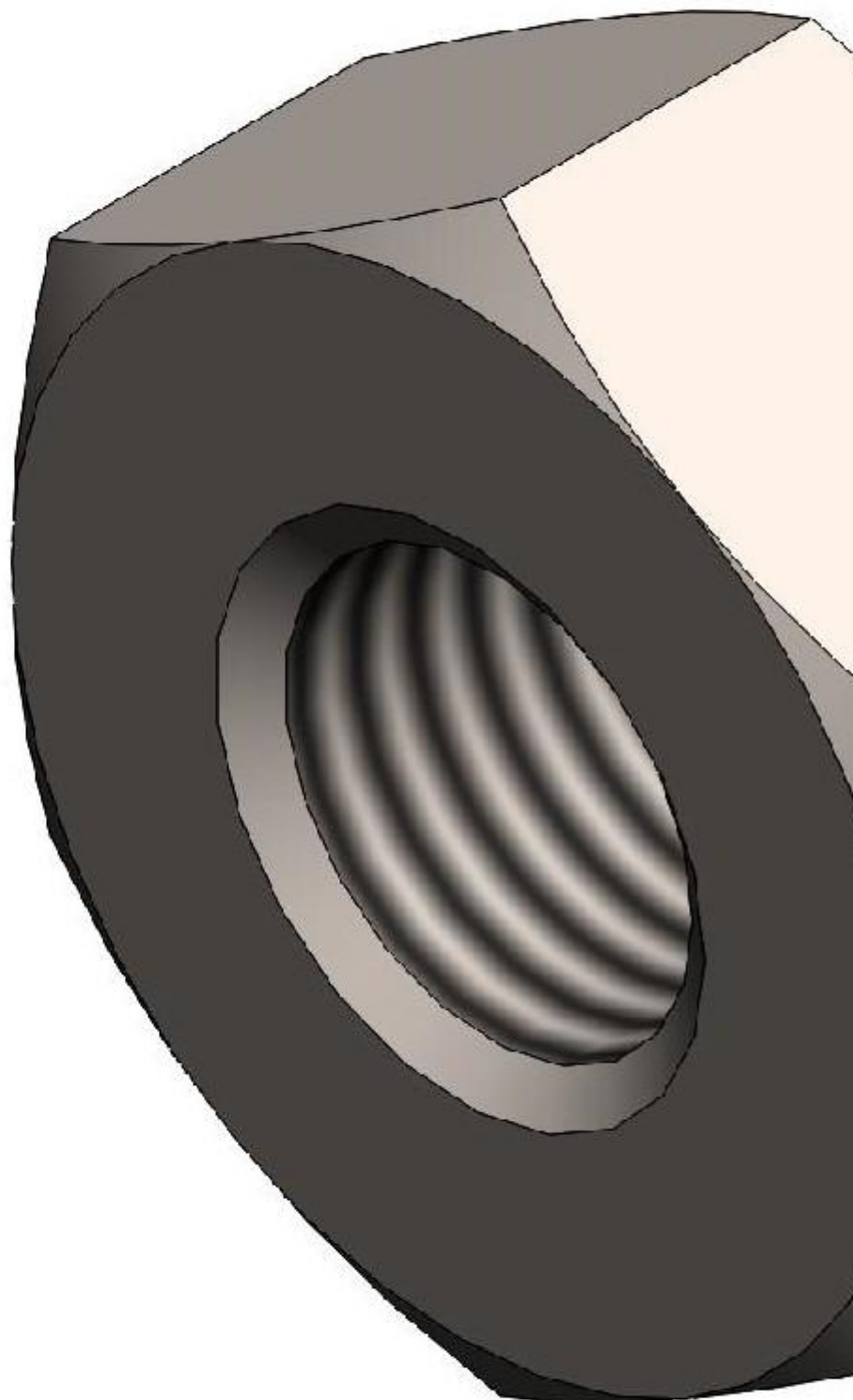


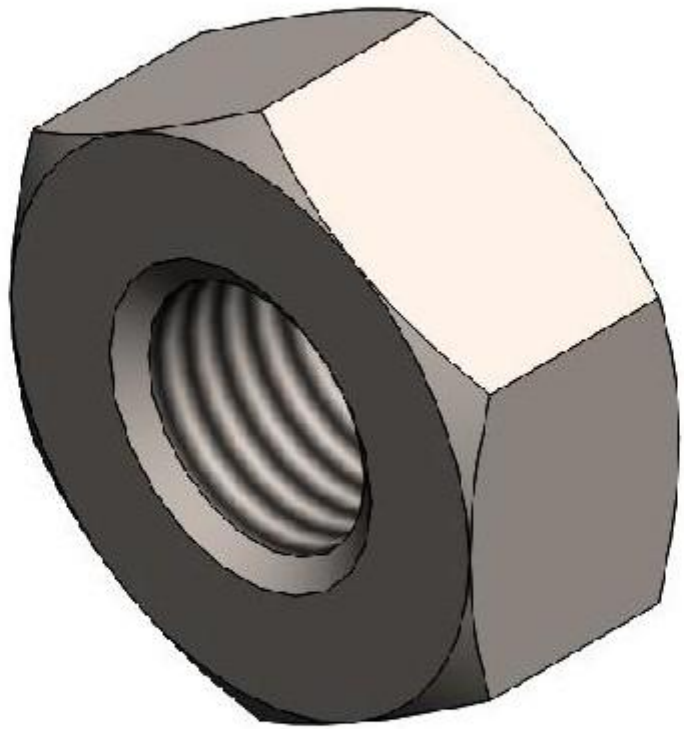


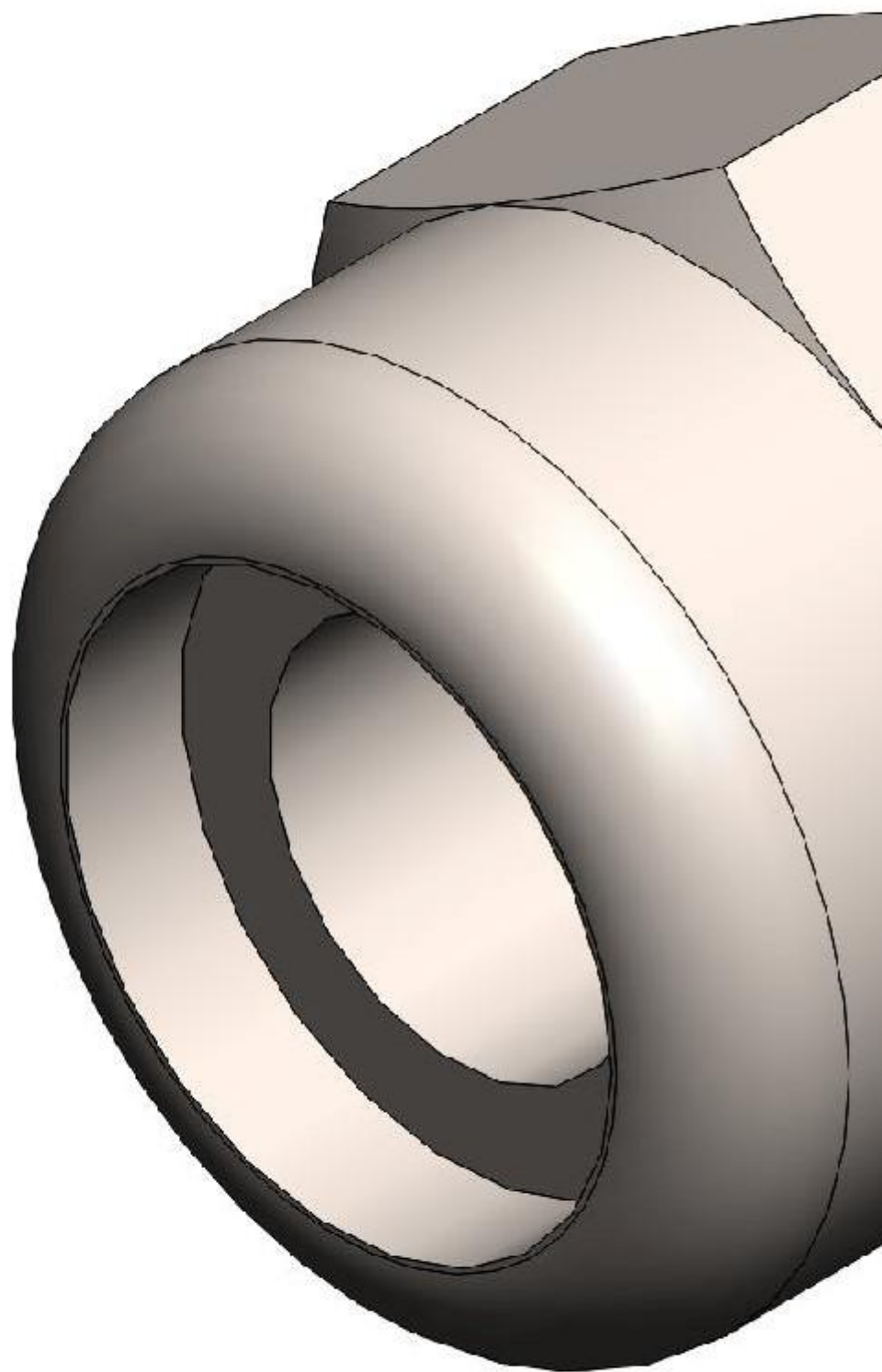


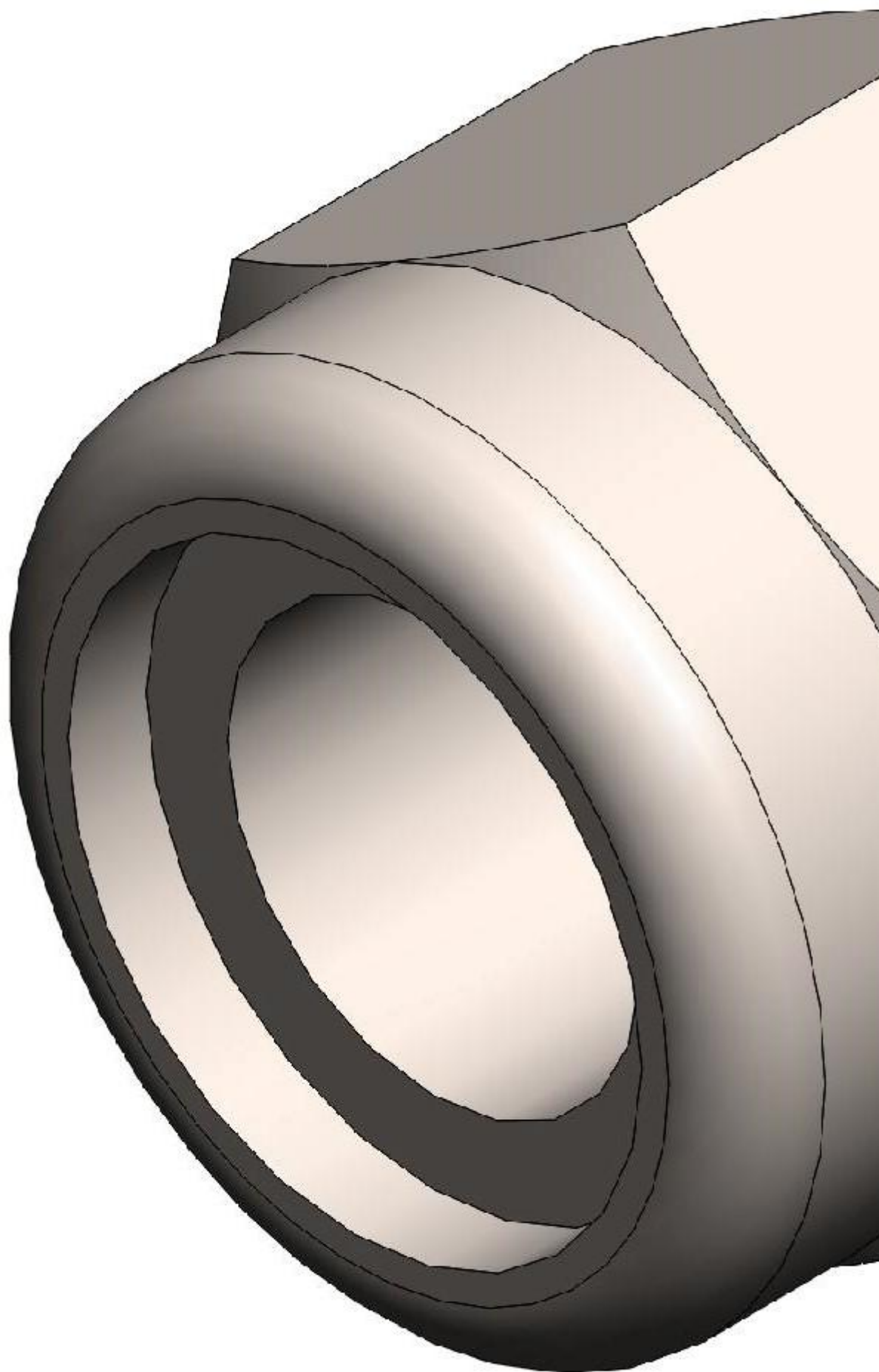












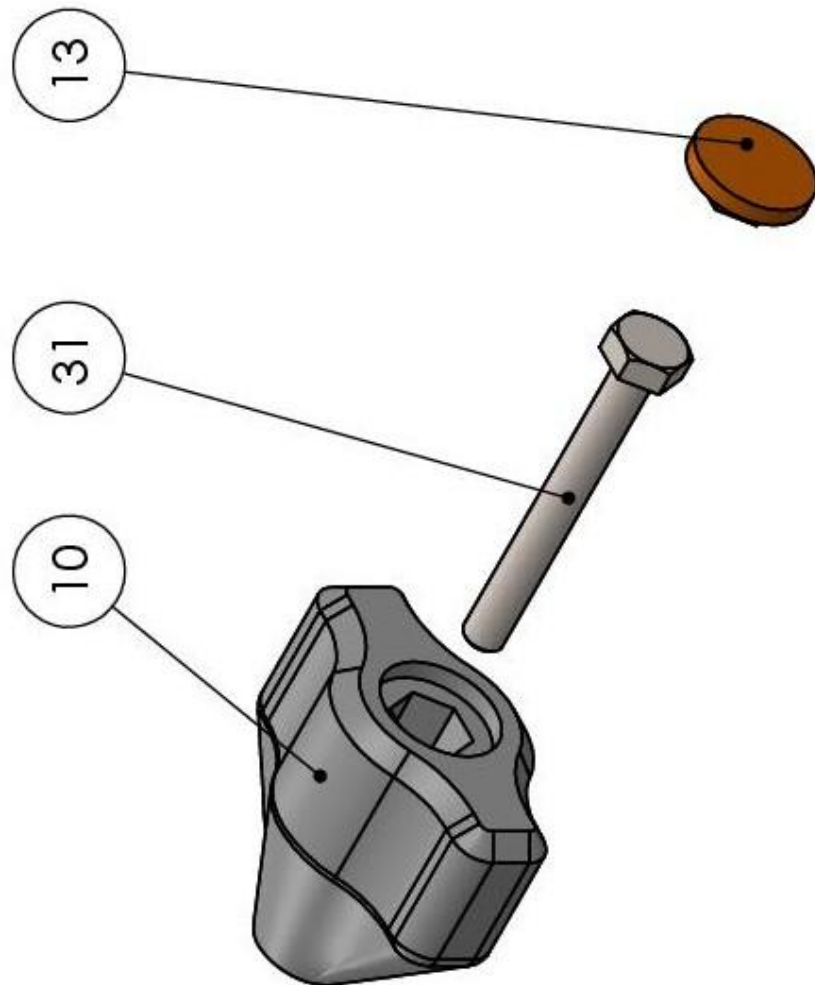
37



*For the camera screw I use this (<https://amzn.eu/d/7YtbWqY>) from Amazon (NOT AFFILIATE LINK)

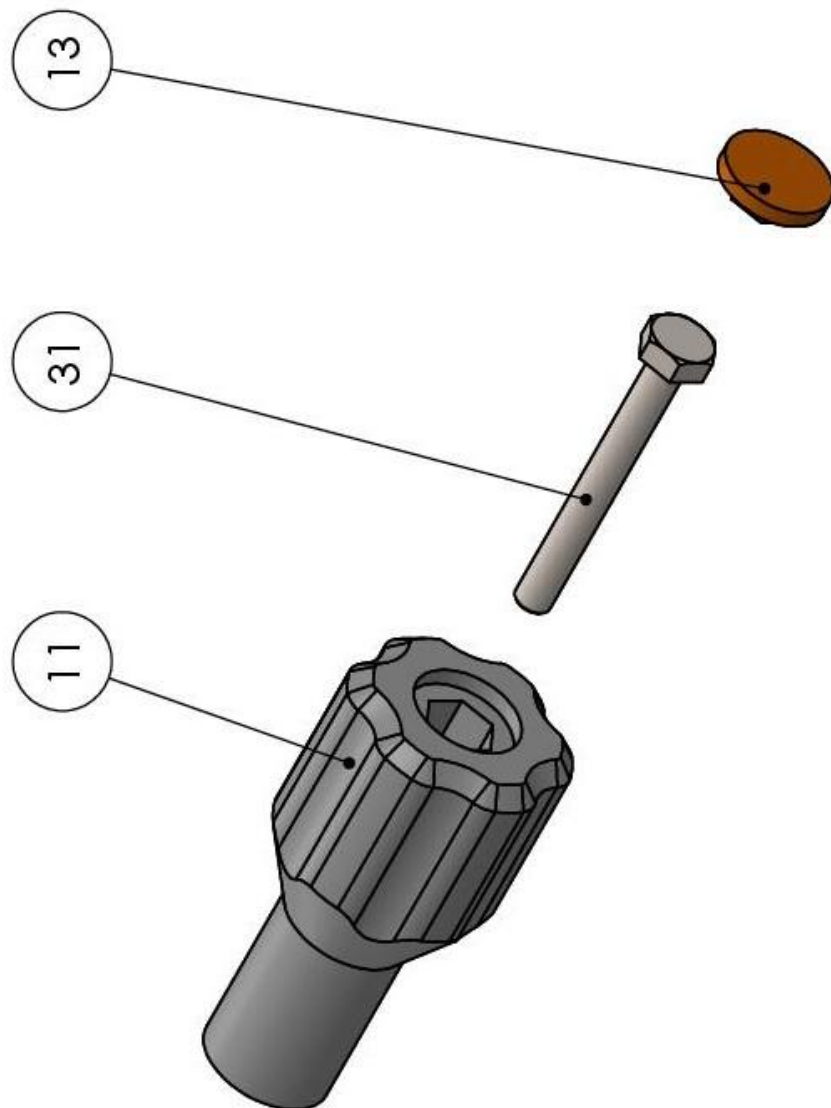
ASSEMBLY Knobs assembly

A knob



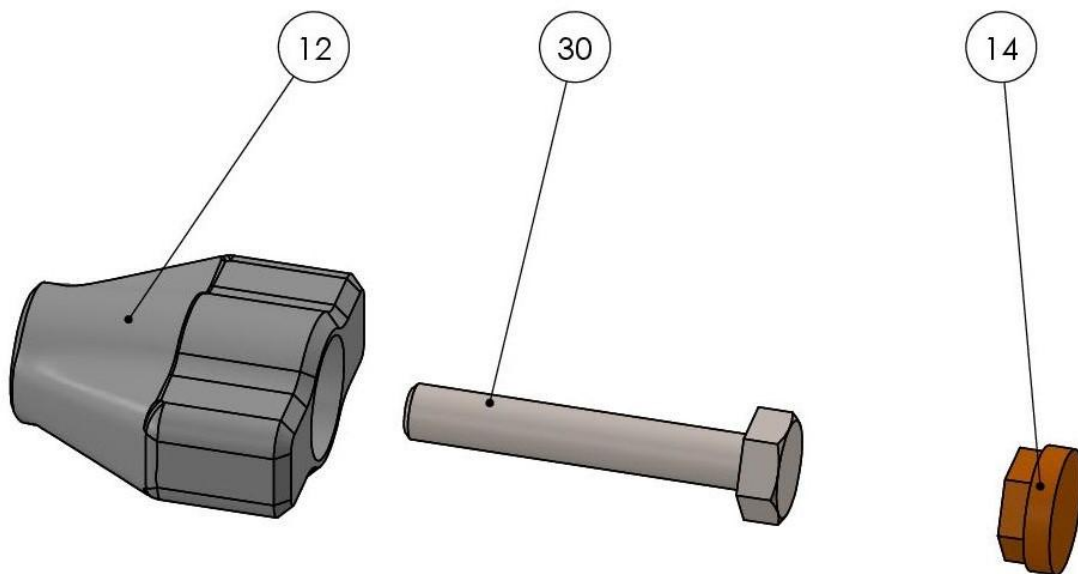
- Insert an M4 x 35 hex head screw (31) inside leg knob (10);
- Push the knob cap (13) inside knob to disguise the screw.

B knob



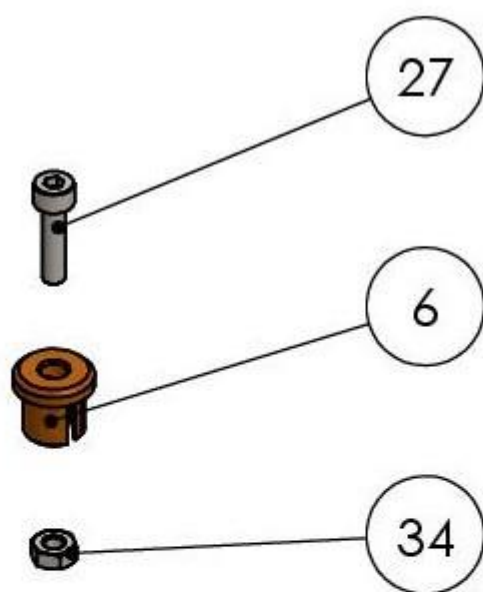
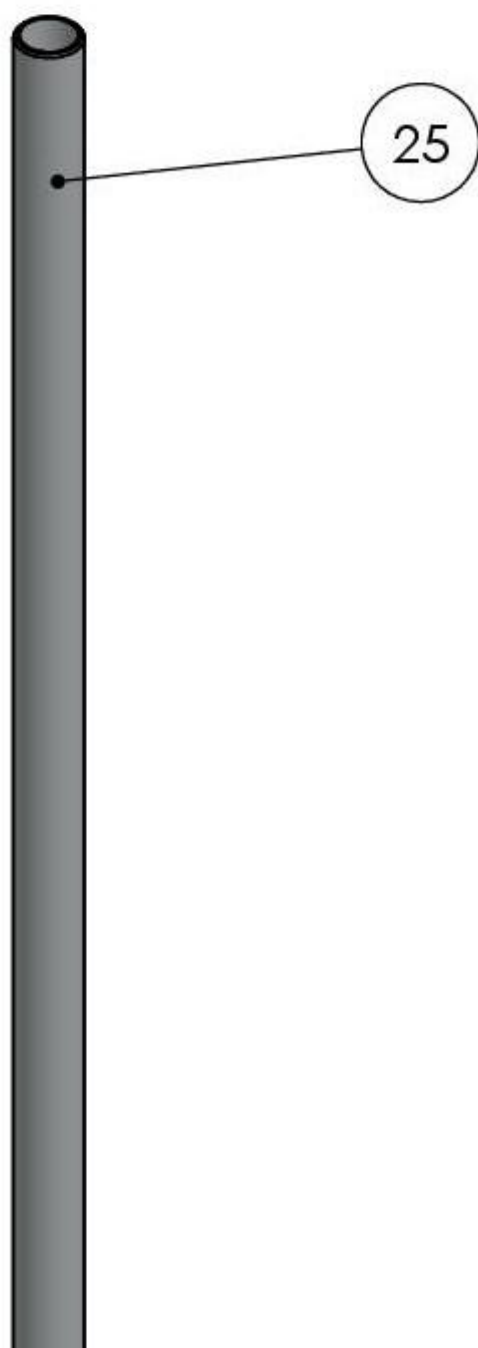
- Insert an M4 x 35 hex head screw (31) inside head knob (11);
- Push the knob cap (13) inside knob to disguise the screw.

C knob



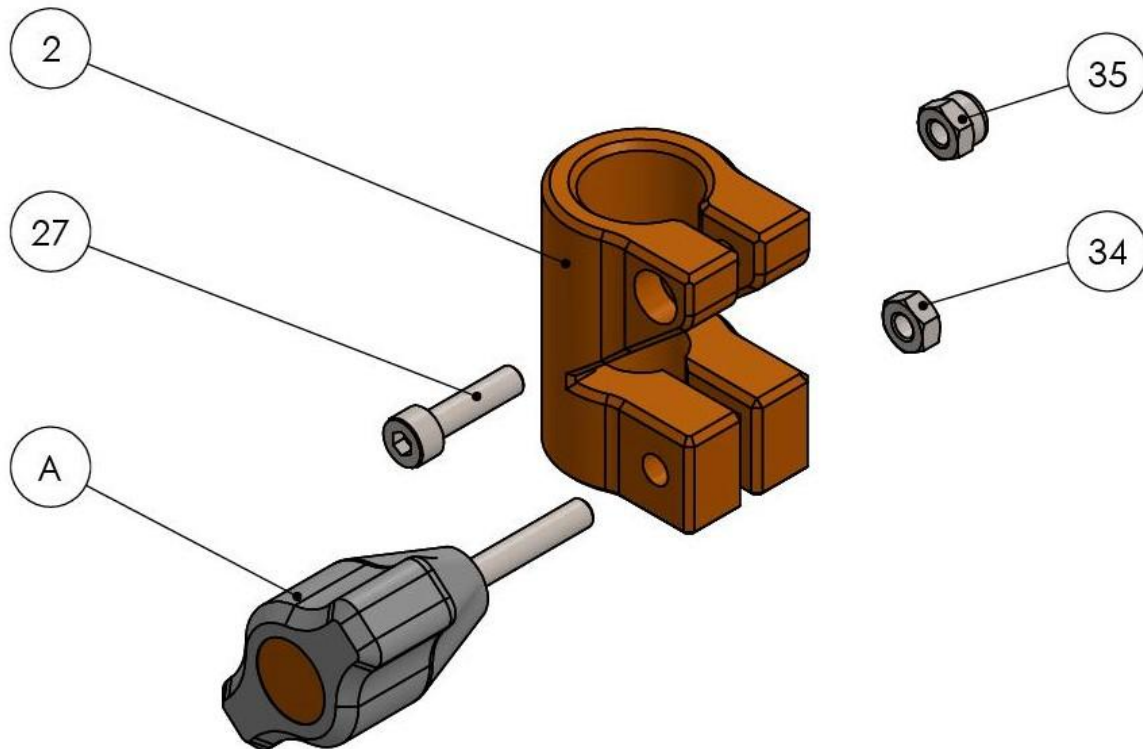
- Insert an M4 x 25 hex head screw (30) inside column knob (12);
- Push the knob cap small (14) inside knob to disguise the screw.

STEP 1: 12mm leg assembly



- Insert M4 nut (34) inside endstop 12 (6), then slightly screw M4 x 16 socket head screw(27);
- Push the endstop inside 12 - 280 tube (25). You will have to use a lot of force;
- Now tighten the screw with wrench. With this operation the endstop made more grip with leg beacouse the hexagonal hole is conic and nut push in outside direction.

STEP 2: 12 - 16 joint assembly



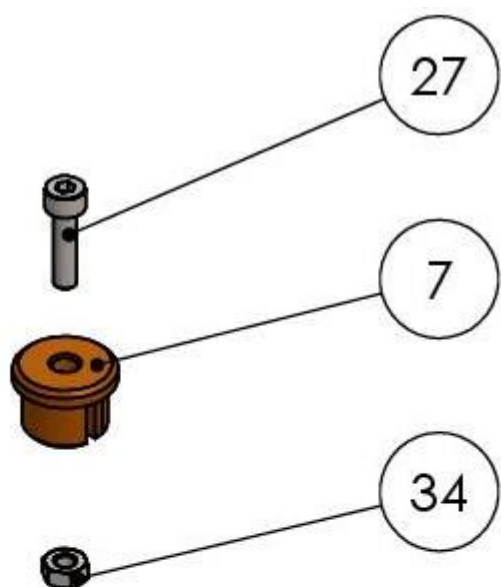
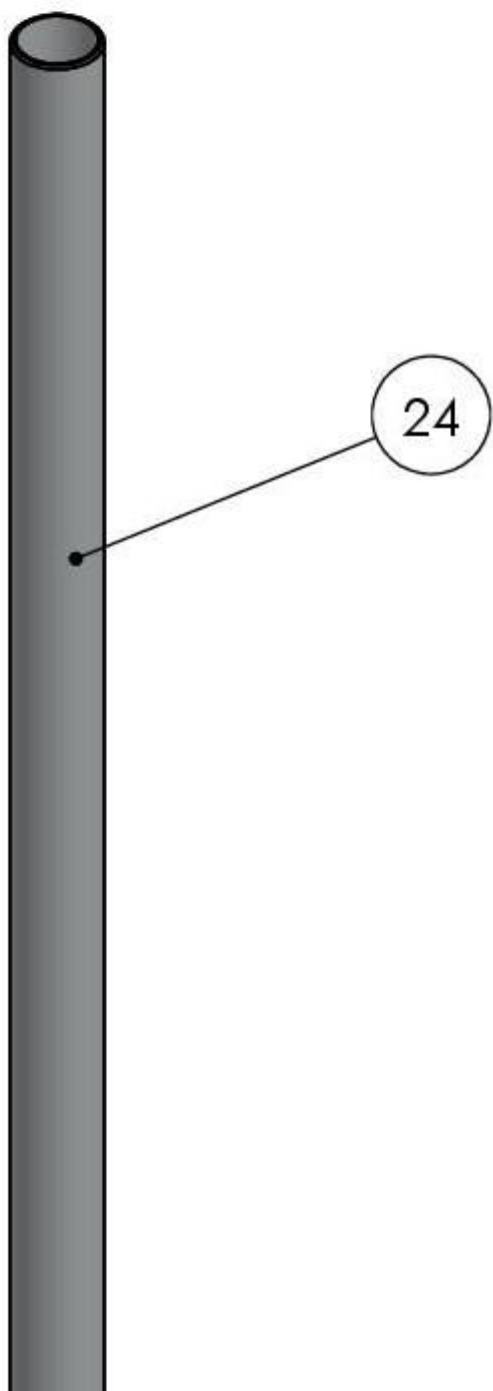
- Insert M4 nut (34) and M4 selflock nut (35) inside 12 - 16 joint (2). Pay attention to directions;
- Slightly screw M4 x 16 socket head screw(27) and Leg knob (A).

STEP 3: Joint - leg - feet assembly



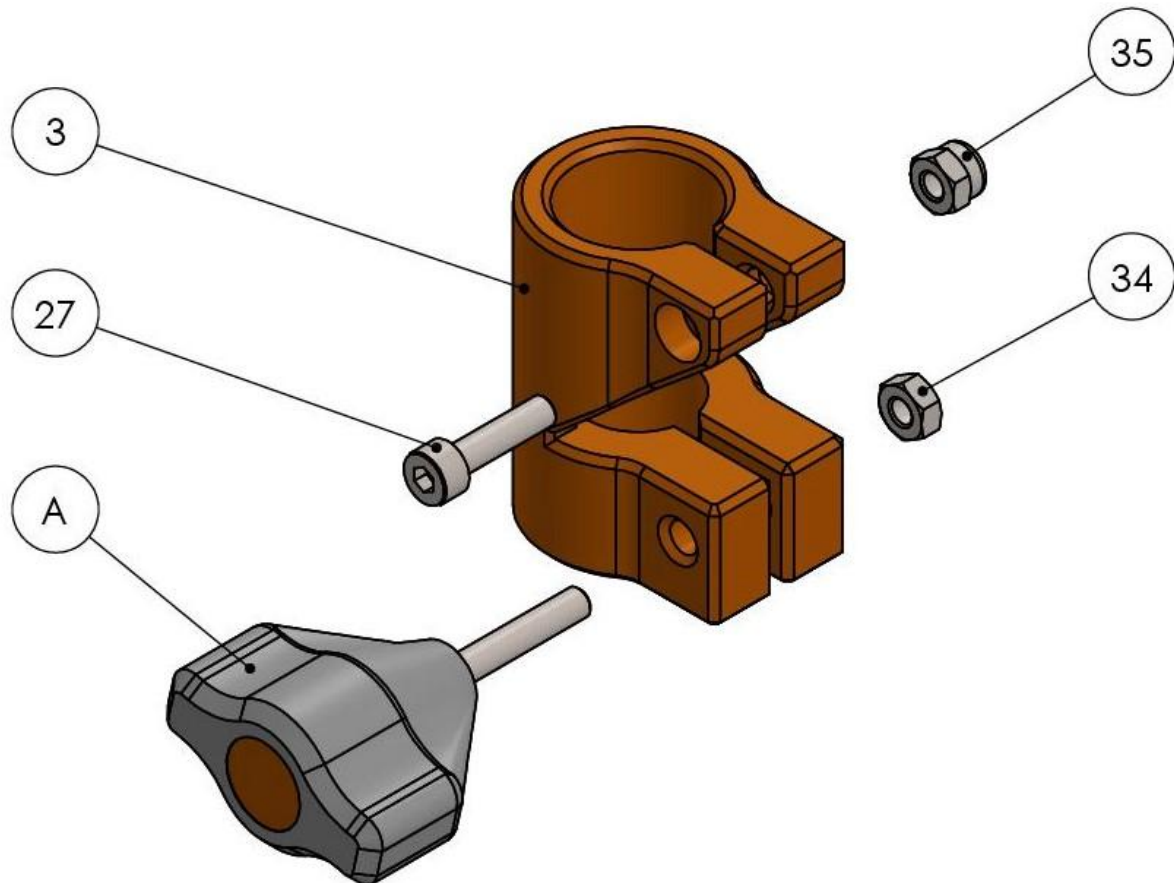
- Put the leg inside joint from the top;
- Press leg into the foot (5).

STEP 4: 16mm leg assembly



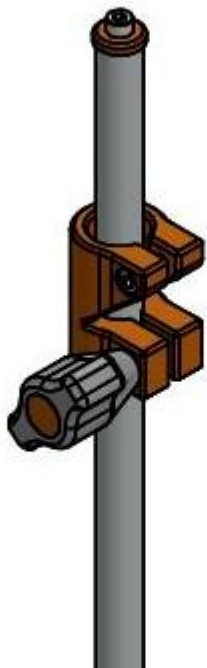
- Insert M4 nut (34) inside endstop 16 (7), then slightly screw M4 x 16 socket head screw(27);
- Push the endstop inside 16 - 300 tube (24). You will have to use a lot of force;
- Now tighten the screw with wrench. With this operation the endstop made more grip with leg beacouse the hexagonal hole is conic and nut push in outside direction.

STEP 5: 16 - 20 joint assembly



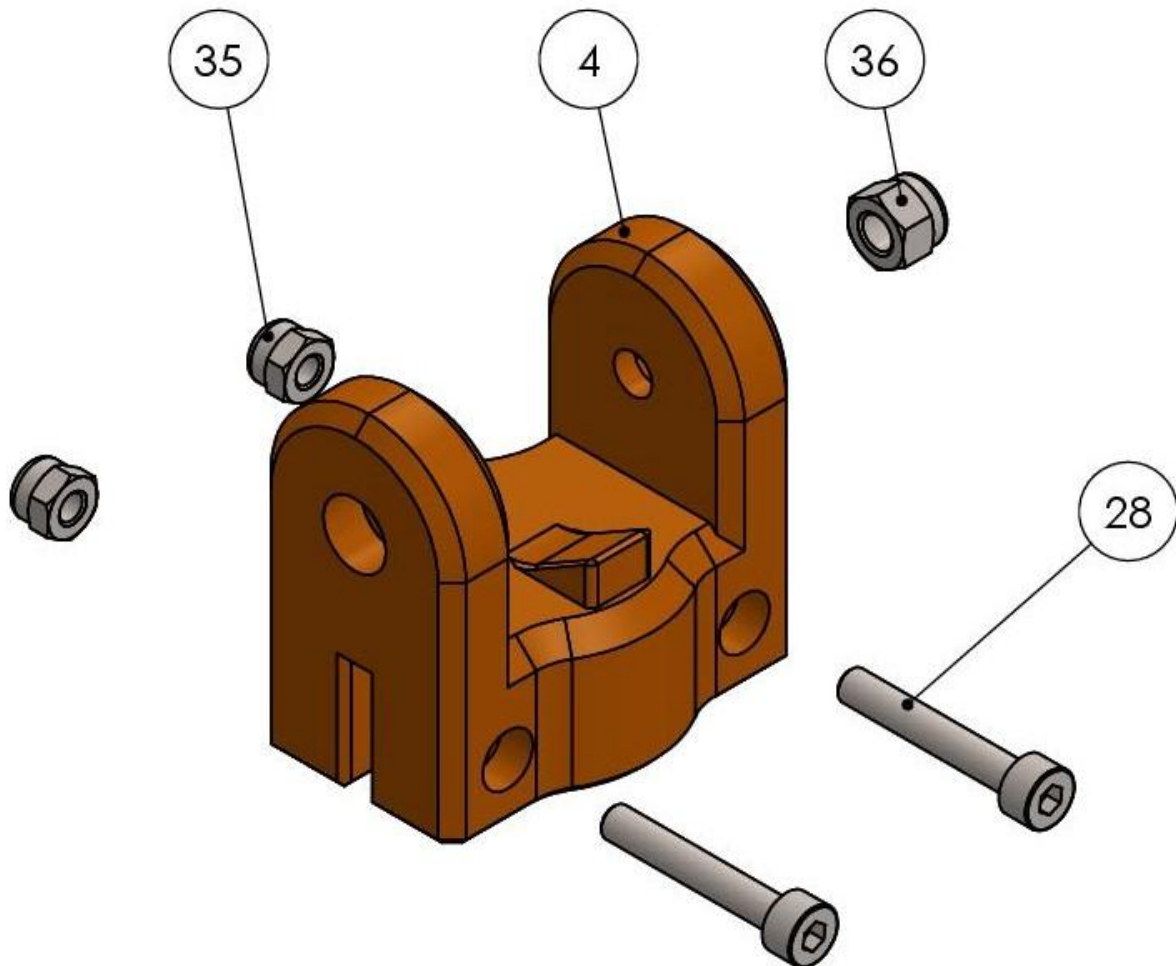
- Insert M4 nut (34) and M4 selflock nut (35) inside 16 - 20 joint (3). Pay attention to directions;
- Slightly screw M4 x 16 socket head screw(27) and Leg knob (A).

STEP 6: Mounting 16mm leg on 12mm leg



- Insert 16mm leg inside 16 - 20 joint assembly from the top;
- Use the knobs on the joints to block it on the leg;
- Push 16mm leg inside 16mm hole in 12 - 16 joint then tight M4 x 16 screw for blocking the leg inside joint.

STEP 7: Leg joint assembly



- Insert M5 selflock nut (36) inside Leg joint (4);
- Insert M4 selflock nuts (35) inside Leg joint (4) and also insert two M4 x 25 screws (28) but don't tighten.

STEP 8: Complete leg

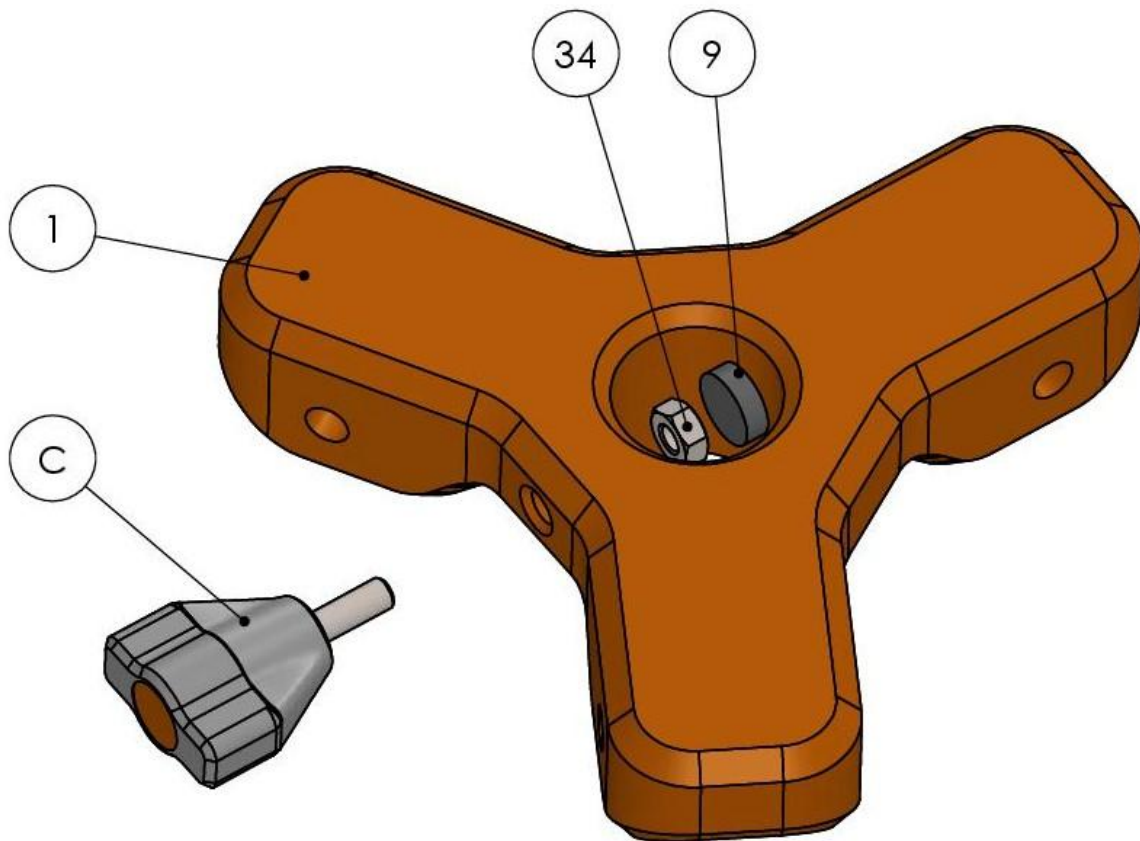


23



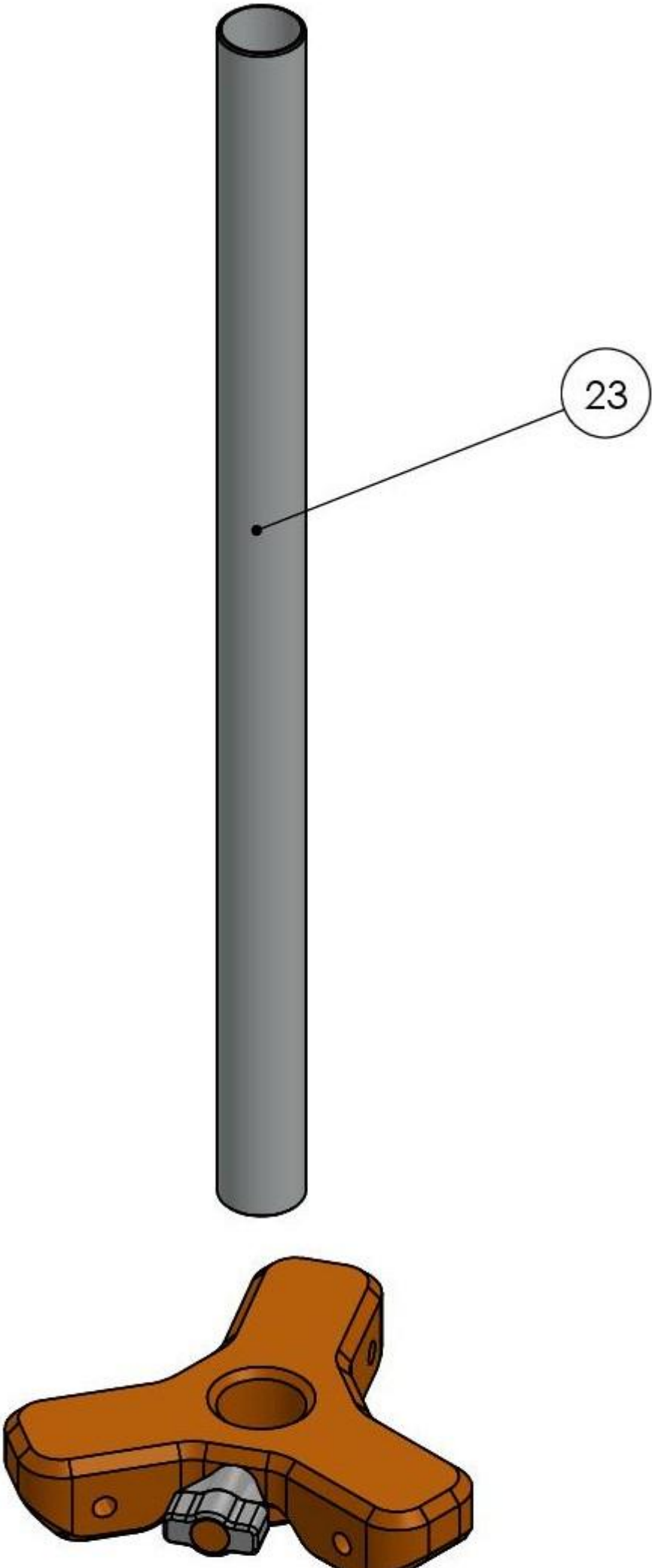
- Insert 20 - 320 tube (23) inside 16 - 20 joint from the top
- Tighten the M4 x 16 screw;
- Insert Leg joint on the top of the leg, then tight M4 x 25 screws.

Repete steps 1 to 8 for the other 2 legs STEP 9: Center body assembly



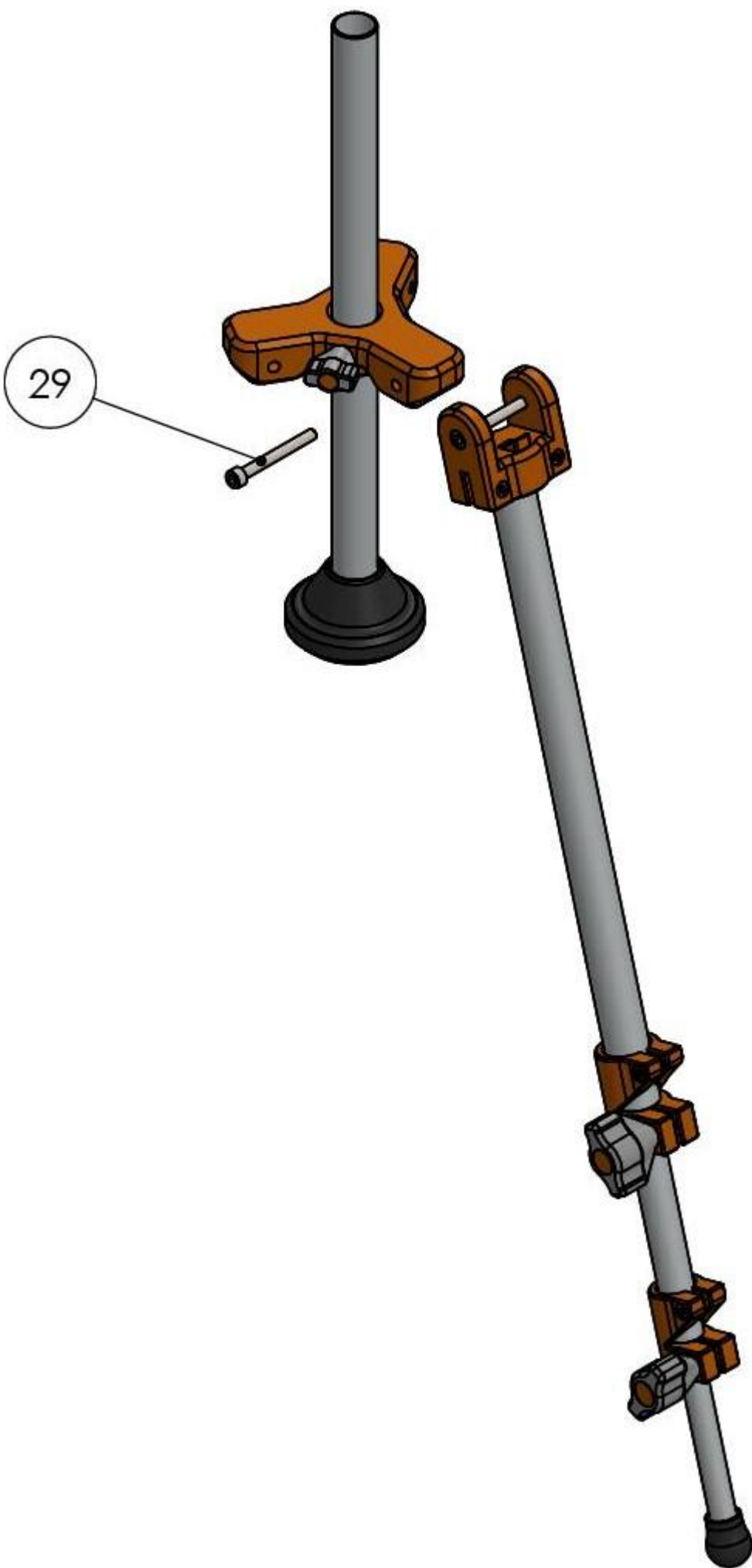
- Insert the M4 nut (34) inside Body (1), for this operation you may need a screw to pull the nut;
- Insert TPU cap (9) on the back of the nut;
- Insert Knob (C) but not tight.

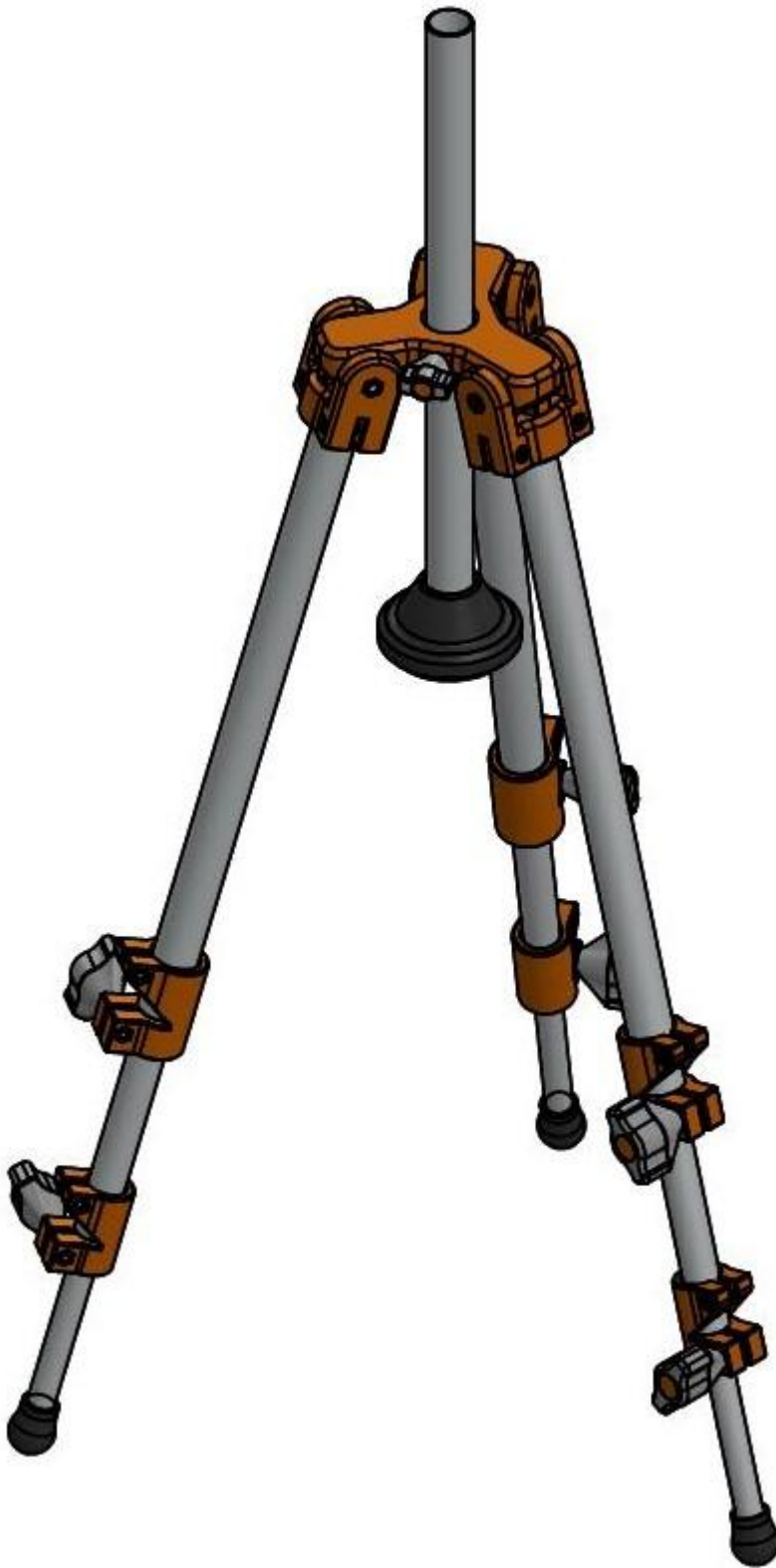
STEP 10: Column assembly



- Insert 20 - 320 tube (23) inside the Body;
- Push Column cap on the bottom of tube.

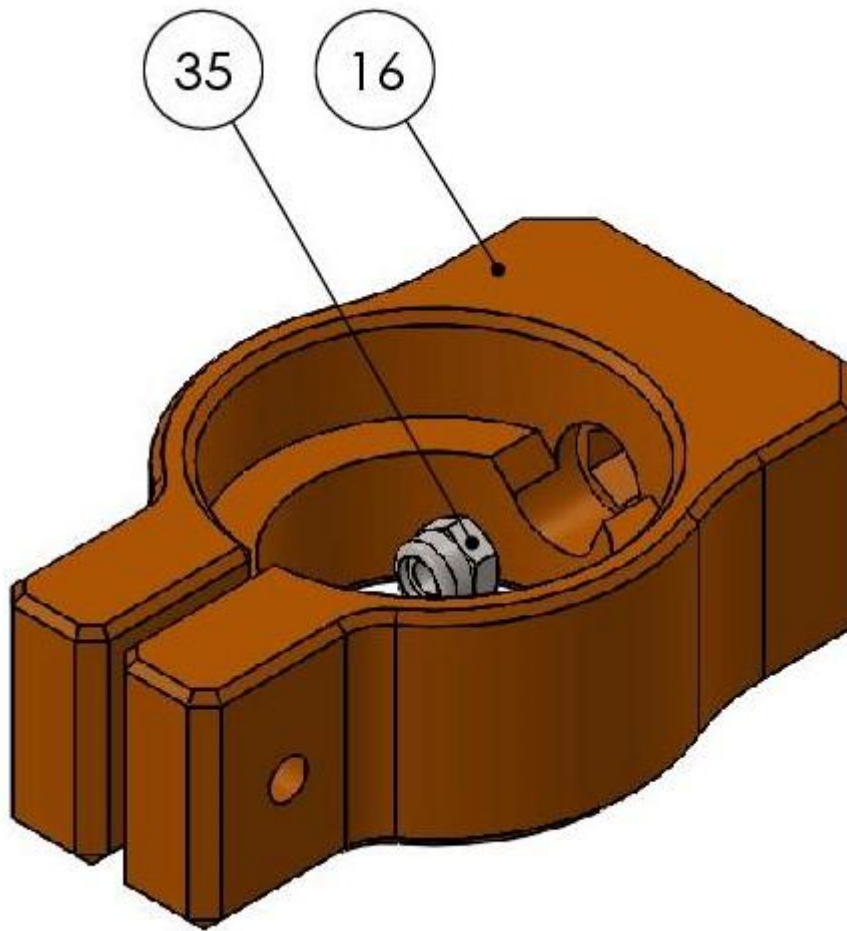
STEP 11: Assembly legs and base





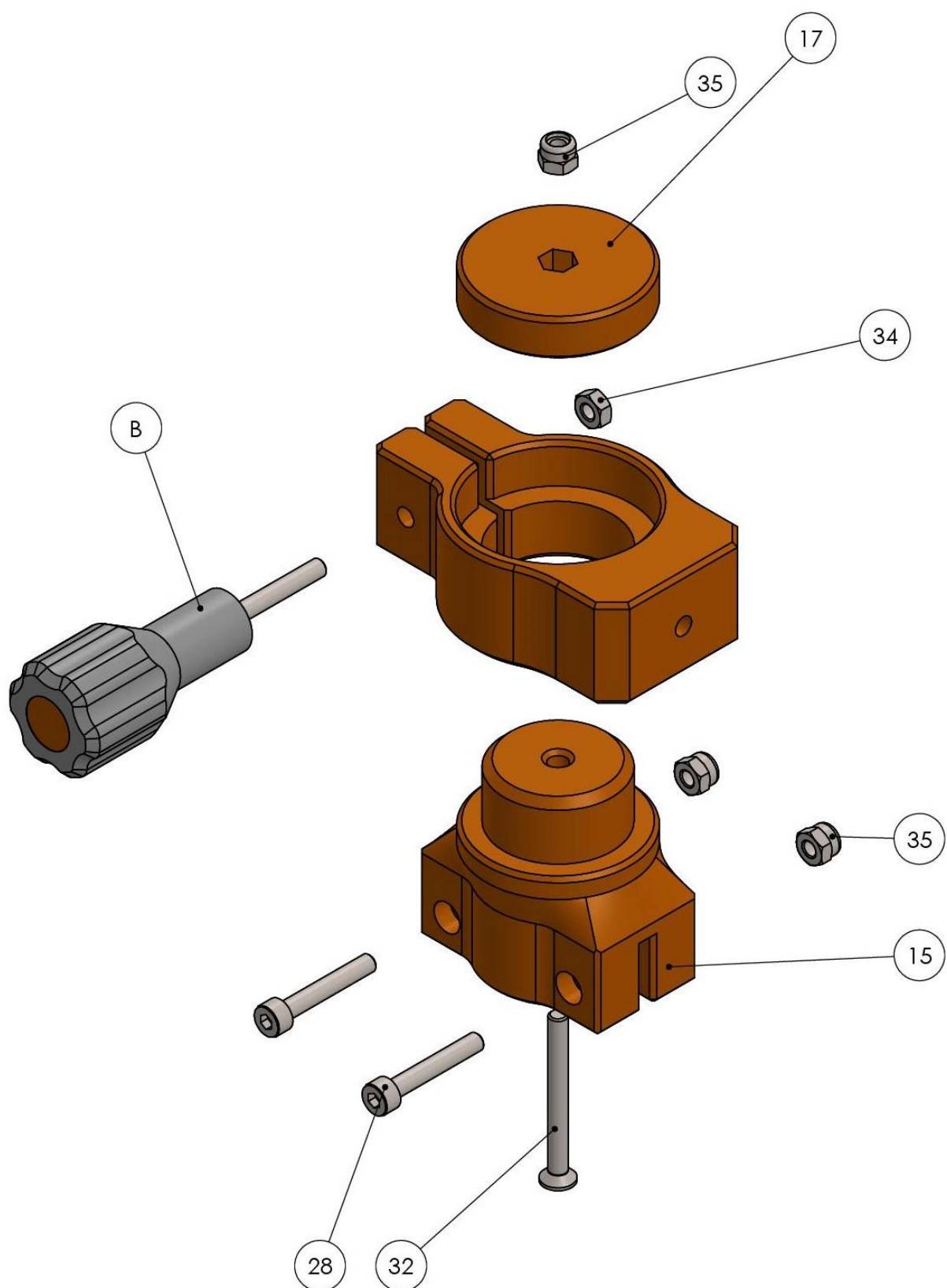
- Join legs and base with M5 x 45 socket head screw (29), thigh the screw enough to make leg stable;
- Leg joint component need to be orientated with the ramp and the head of the screw outside.

STEP 12: Prepare rotating base



- Push the M4 selflock nut (35) inside Rotating base (16).

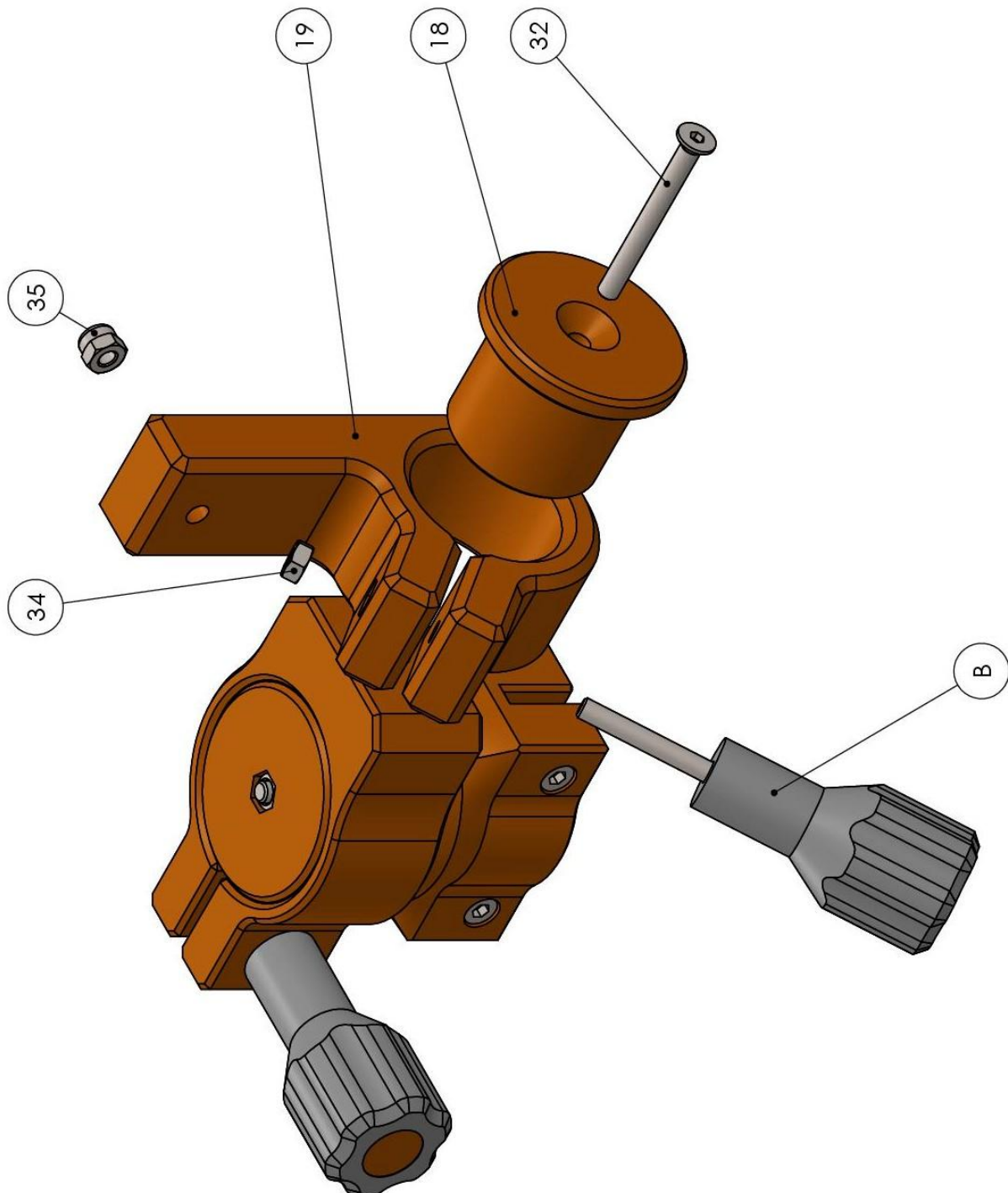
STEP 13: Head base assembly



- Push the M4 selflock nuts (35) inside Head joint (15);
- Insert two M4 x 25 socket head screws (28) but don't tight
- Push the M4 selflock nut (35) inside Rotating base cap (17) and an M4 nut (34) inside Rotating base;

- Insert Rotating base on Head joint;
- Insert Rotating base cap in Rotating base and screw it with M4 x 40 hex drive flat head screw (32), make sure that you tighten enough the screw;
- Screw the Head knob (B);
- Make sure everything runs smoothly and the rotating base cap doesn't rotate.

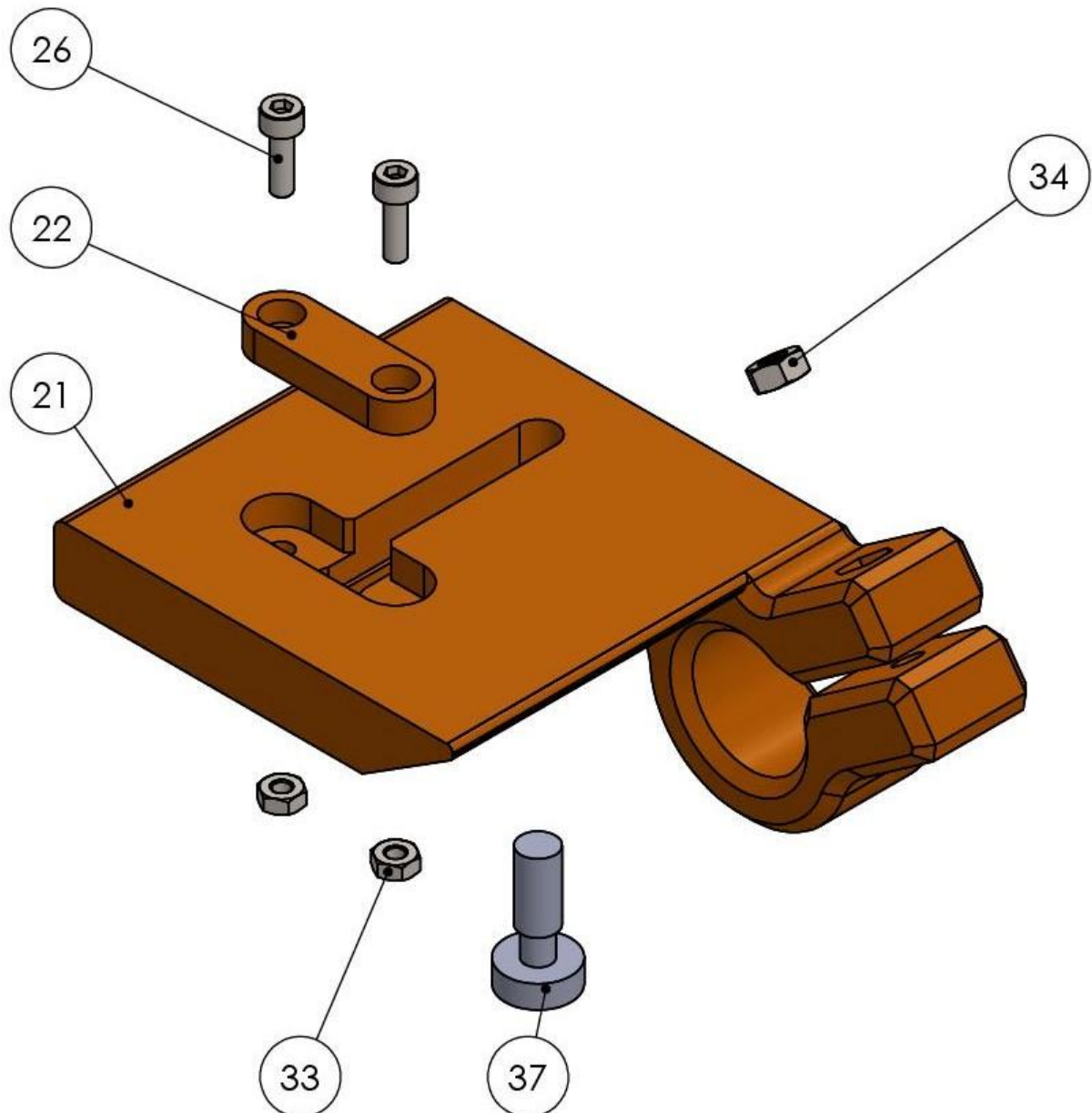
STEP 14: Tilting axis assembly



- Push M4 selflock nut (35) inside Tilting head (19);

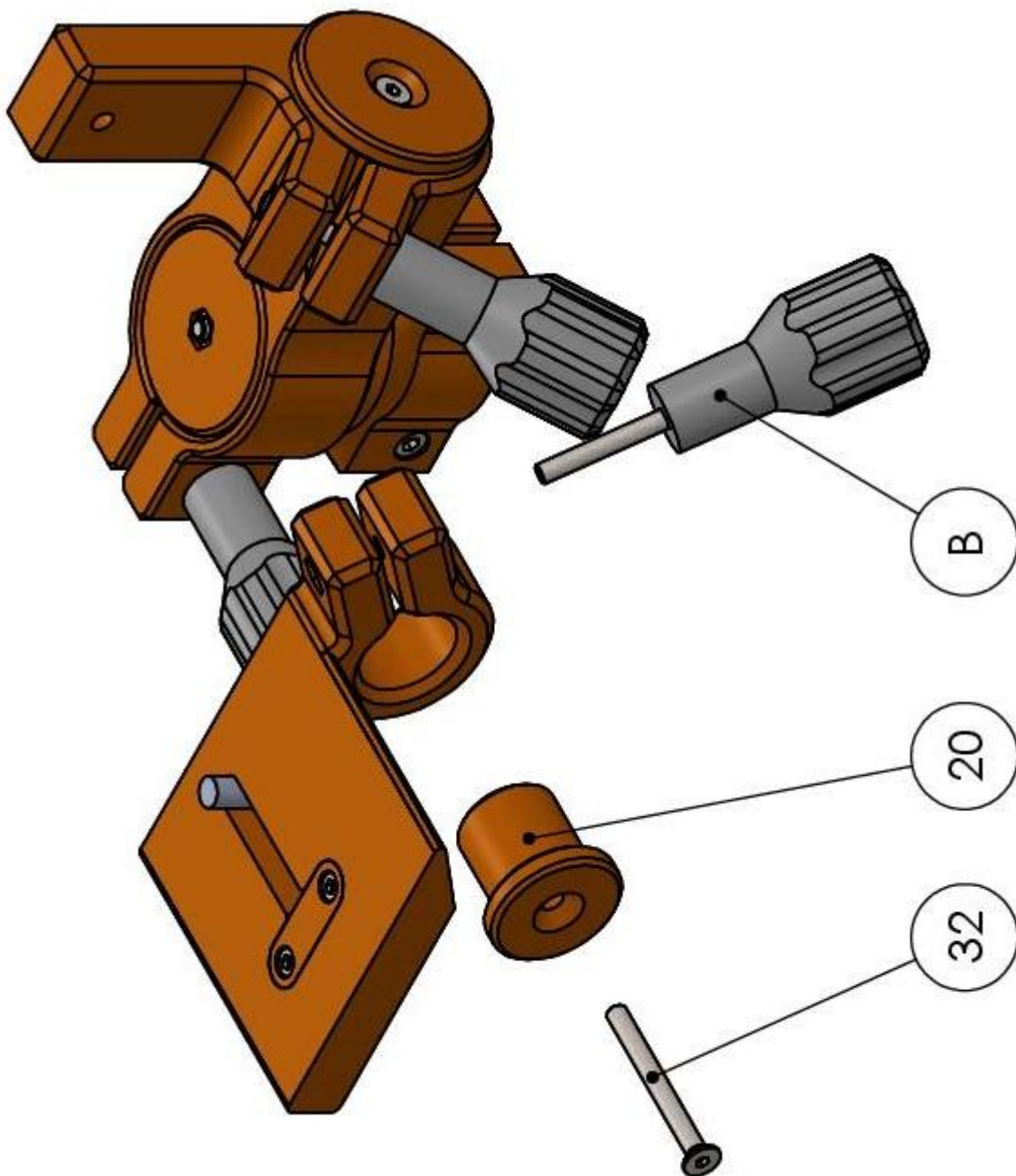
- Push M4 nut (34) inside Tilting head;
- Mount Tilting cylinder (18) inside Tilting head, after that mount tilting axis on Rotating base with M4 x 40 hex drive flat head screw (32), make sure that you tightly enough the screw;
- Screw the Head knob (B);
- Make sure everything runs smoothly and the Tilting cylinder doesn't rotate.

STEP 15: Camera base assembly



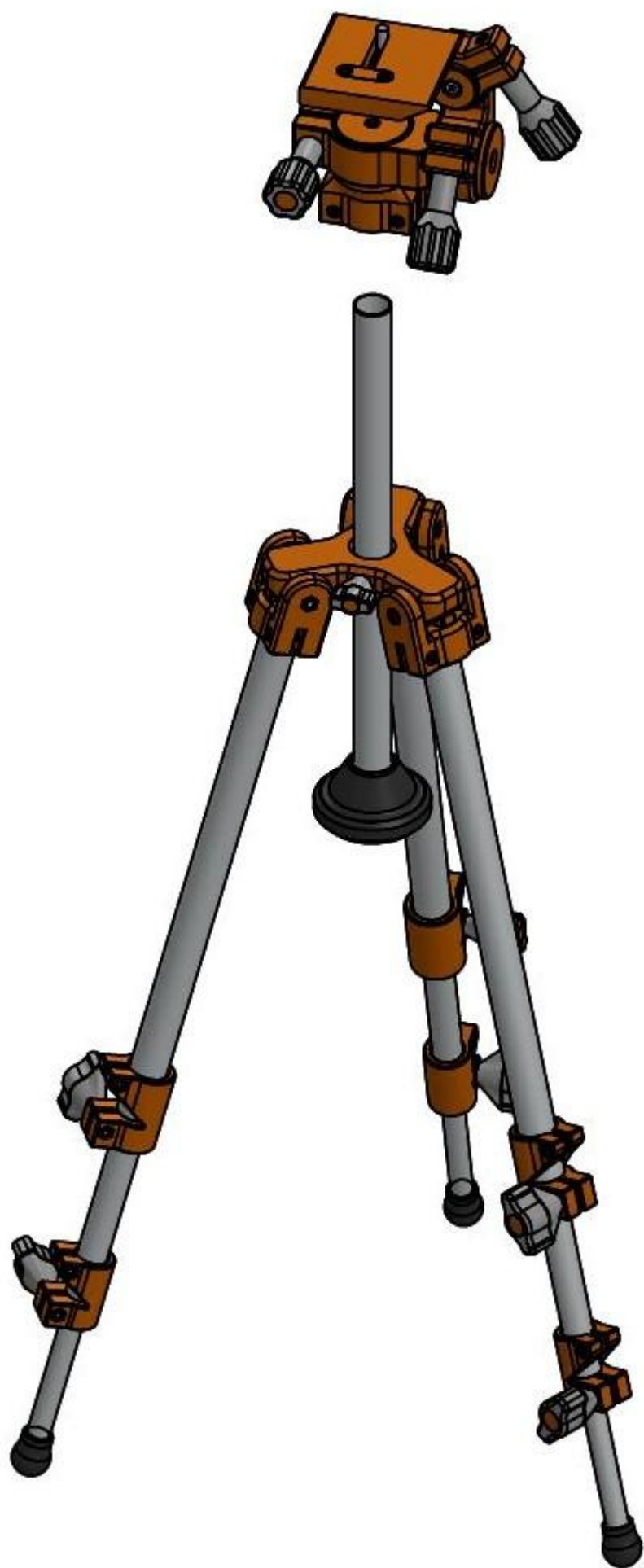
- Insert M4 nut (34) and M3 nuts (33) inside Camera base (21);
- Insert Camera screw inside Camera base from the back of cut and after push the screw towards the front;
- Insert Camera base cap (22) and fix it with two M3 x 10 socket head screws (26).

STEP 16: Complete the head



- Mount Camera base cylinder (20) inside Camera base and insert M4 x 40 hex drive flat head screw (32), make sure that you tightly enough the screw;
- Screw the Head knob (B);
- Make sure everything runs smoothly and the Tilting cylinder doesn't rotate.

STEP 17: Mount head on tripod



- Insert head on column and thigh M4 x 25 socket head screws of the head.

GOOD JOB, YOUR TRIPOD IS NOW COMPLETE

Model files

	Tripod	9 files
	endstop-12.stl	
	endstop-16.stl	
	column-cap.stl	
	16-20-joint.stl	
	12-16-joint.stl	
	tpu-cap.stl	
	foot.stl	



body.stl



leg-joint.stl



Head

8 files



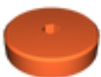
head-joint.stl



camera-base-cylinder.stl



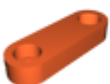
tilting-cylinder.stl



rotating-base-cap.stl



rotating-base.stl



camera-base-cap.stl



camera-base.stl



tilting-head.stl



Knobs

5 files



knob-cap-small.stl



knob-cap.stl



head-knob.stl



column-knob.stl



leg-knob.stl

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