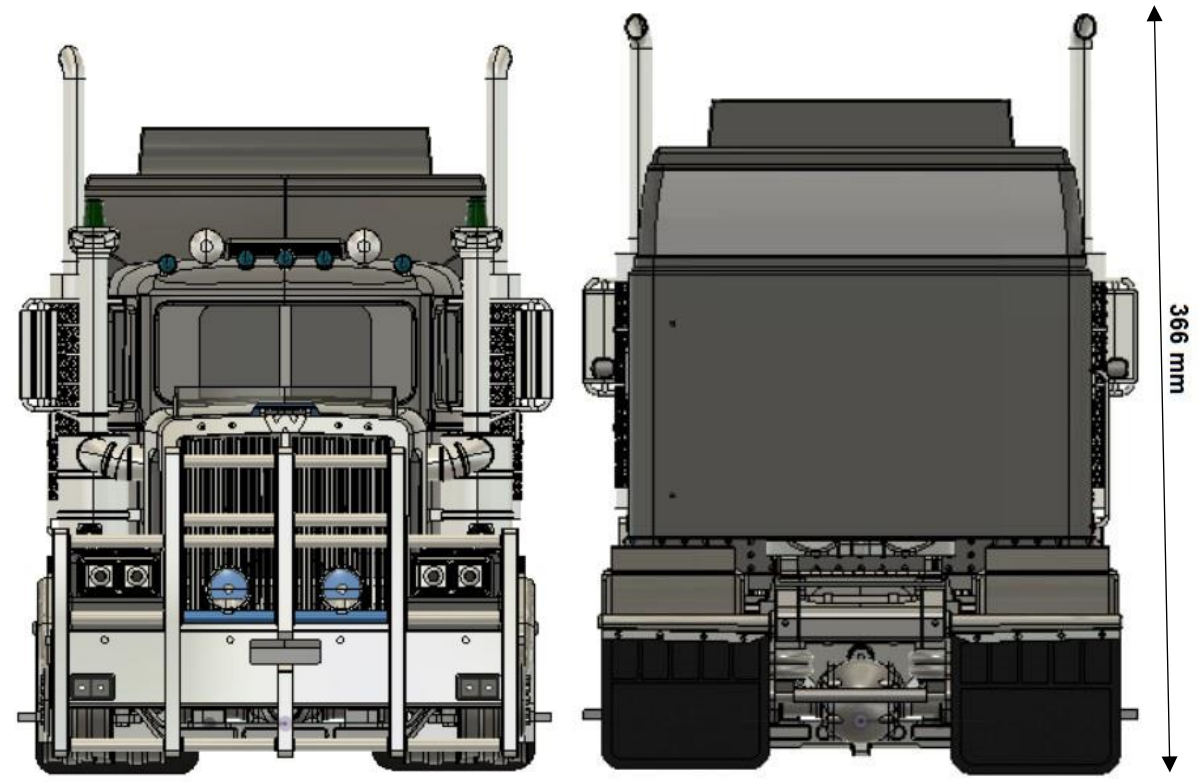
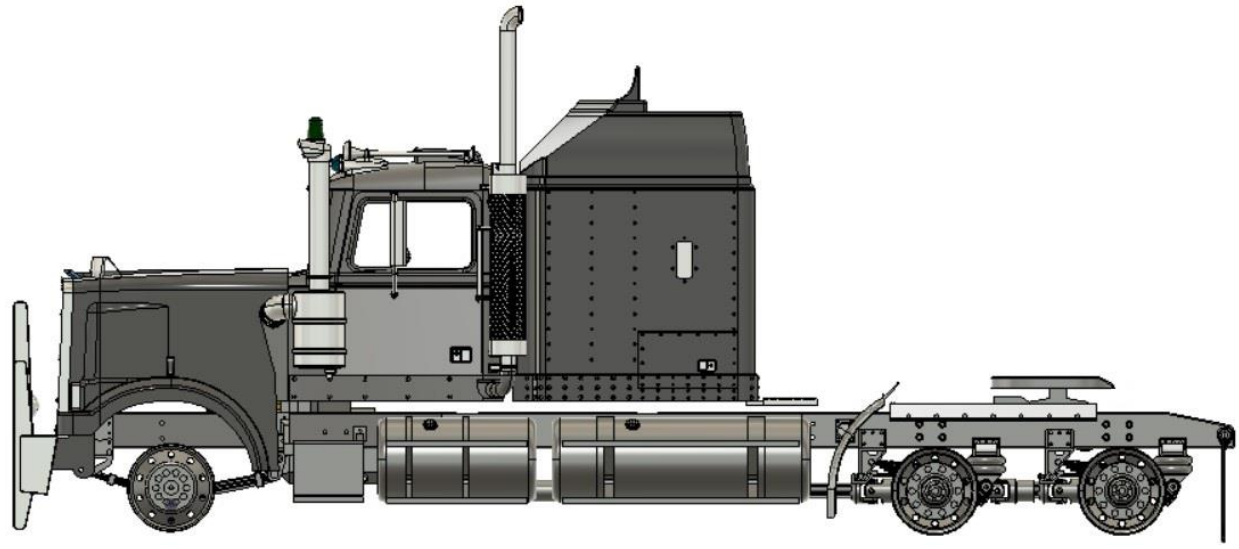
Construction instructions

Miroslav Liesner

Construction instructions Australian truck 1/10





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E-mail: ssiforum@seznam.cz **v.1**

Thank you for buying the STL files of the truck model.

I tried to prepare the parts

as closely as possible with regard to simplicity and possible repairability.

Some parts may not exactly be the same as the pictures in this walkthrough.

These are later modified or improved parts.

Please follow the updates:

http://www.mlmodel.webnode.cz

For construction you will need:

3D printer with 25x20 cm

4 kg quality PLA

Transparent PLA Crystal Clear from Fillamentum – parts are marked in the instructions „Clear“

Flex filament (not a condition) - parts are marked "Flex" in the instructions

Ball bearings 10x15x4 – 23ks

Tires 100 mm – 10 ks

With three cyanoacrylate glue + activator

DUROFOL 0,2 mm

M2 screws

M3 screws

M3 nuts

M3 headless screws

Neodymium circular magnets 8x3mm - 12pcs

Motor size 540 + controller

Standard servo - minimum 30 kg

grease PTFE, and a few other things (paints, varnish, etc.)

2S1P Li-Po Battery 7.4 V

Transmitter + receiver

Recommended print settings:

Spurts: 0.4mm

Extrusion width: 0.48 mm

Layer height: 0.15 mm – 0.2 mm

Fill: 25%, gears and shafts 100%

Perimetry: 2-3

Parts to be printed differently are listed in the title.

Print speed: 70 mm/s, outdoor perimeters 30 mm/s

Temperature: 220°C HE, 50°C HB

Parts printed with support have in the title "support".

This is my recommended printer settings,

however, you can also use your proven one.

Before gluing the parts, test their settling.

To compare the contact surfaces, use the file,

sharp knife or sandpaper.

The most common problem is the "elephant's foot" - the extension of the press

on the pad. This needs to be sharpened.

Also carefully plan the location of the seams,

in particular for transfers.

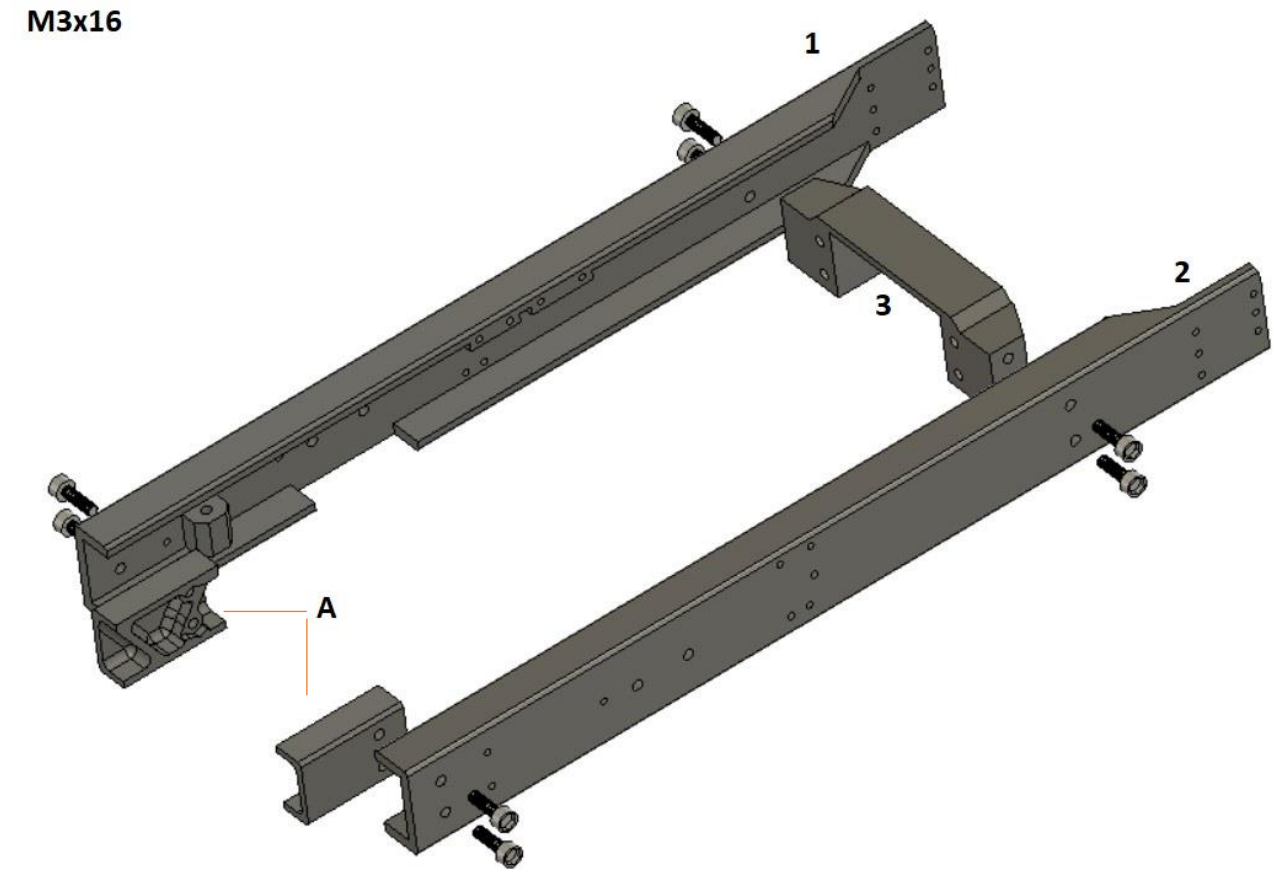
Gallery:

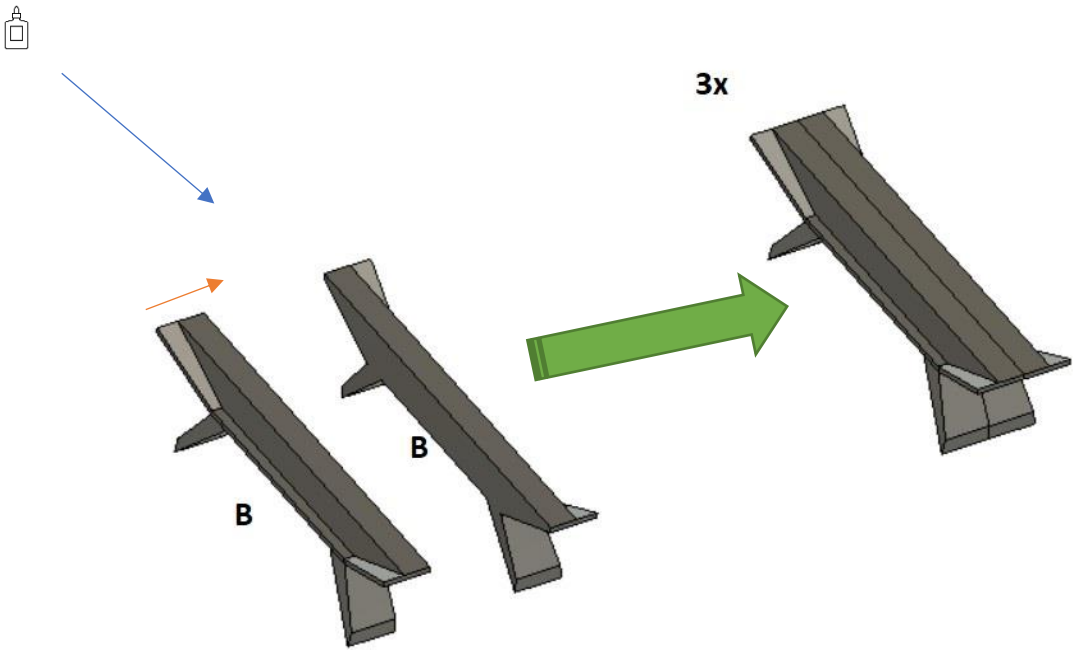
https://ssiforum.rajce.idnes.cz/3D_Print_1_10_RC_Australian_Truck_6x4/

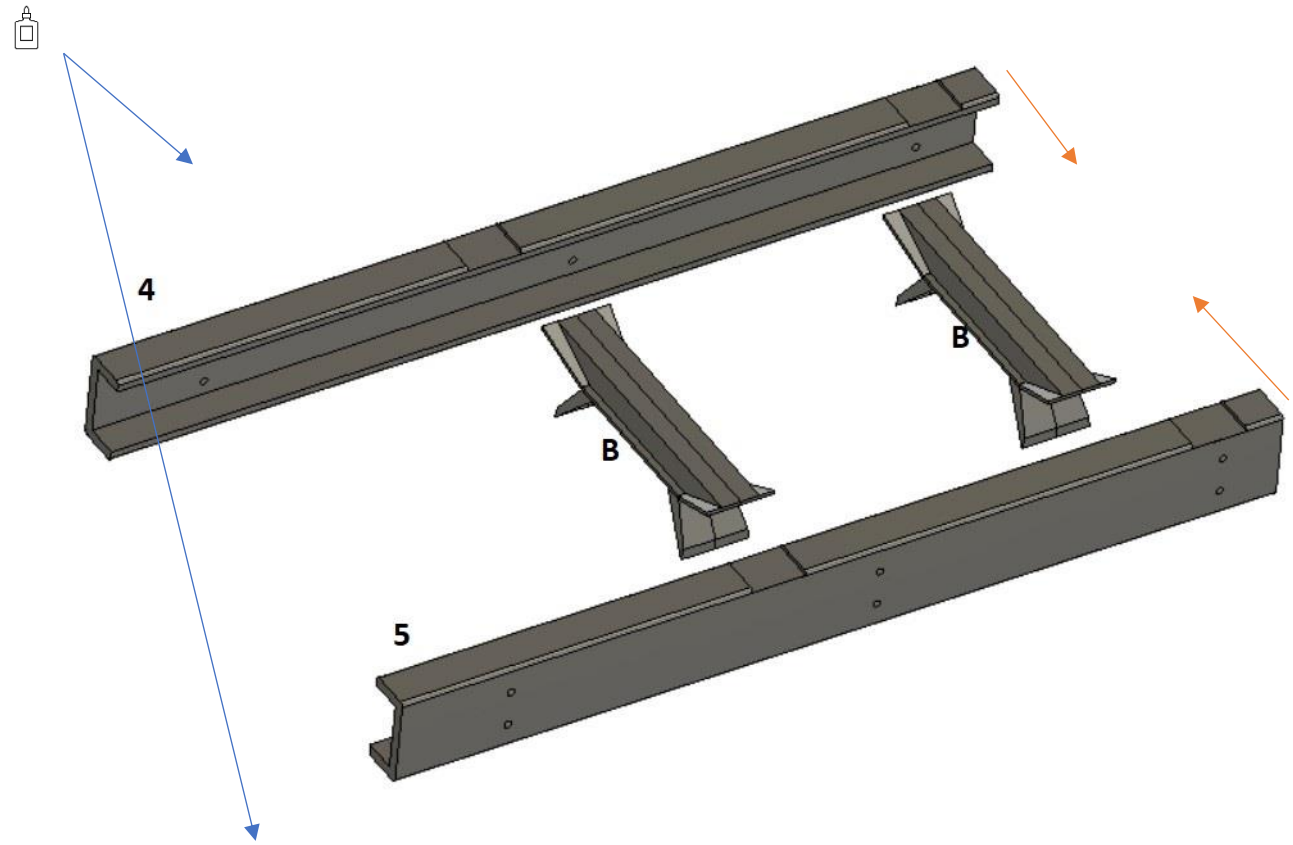
Videos:

https://www.youtube.com/user/ssiforum/videos

Chassis



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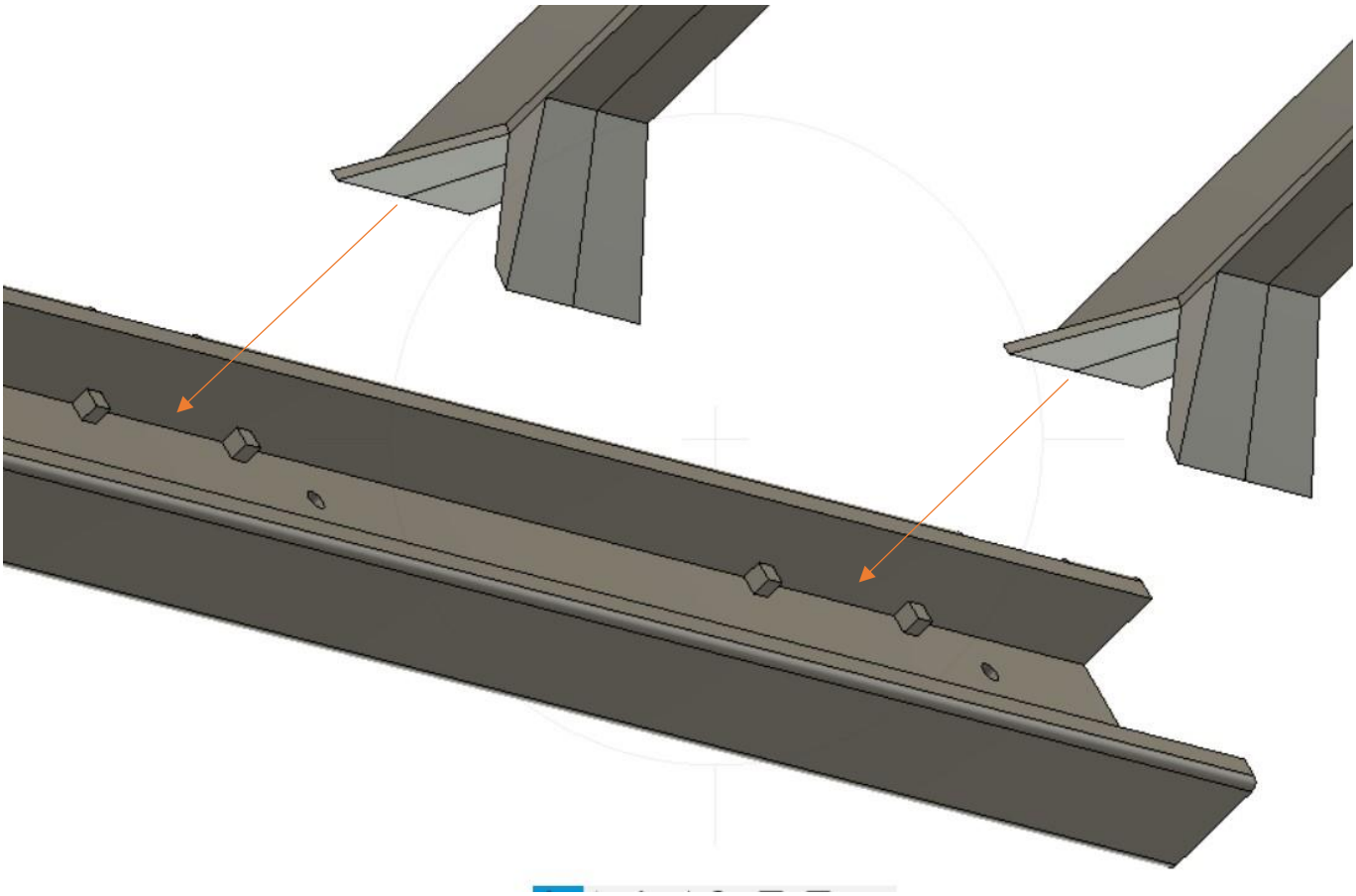
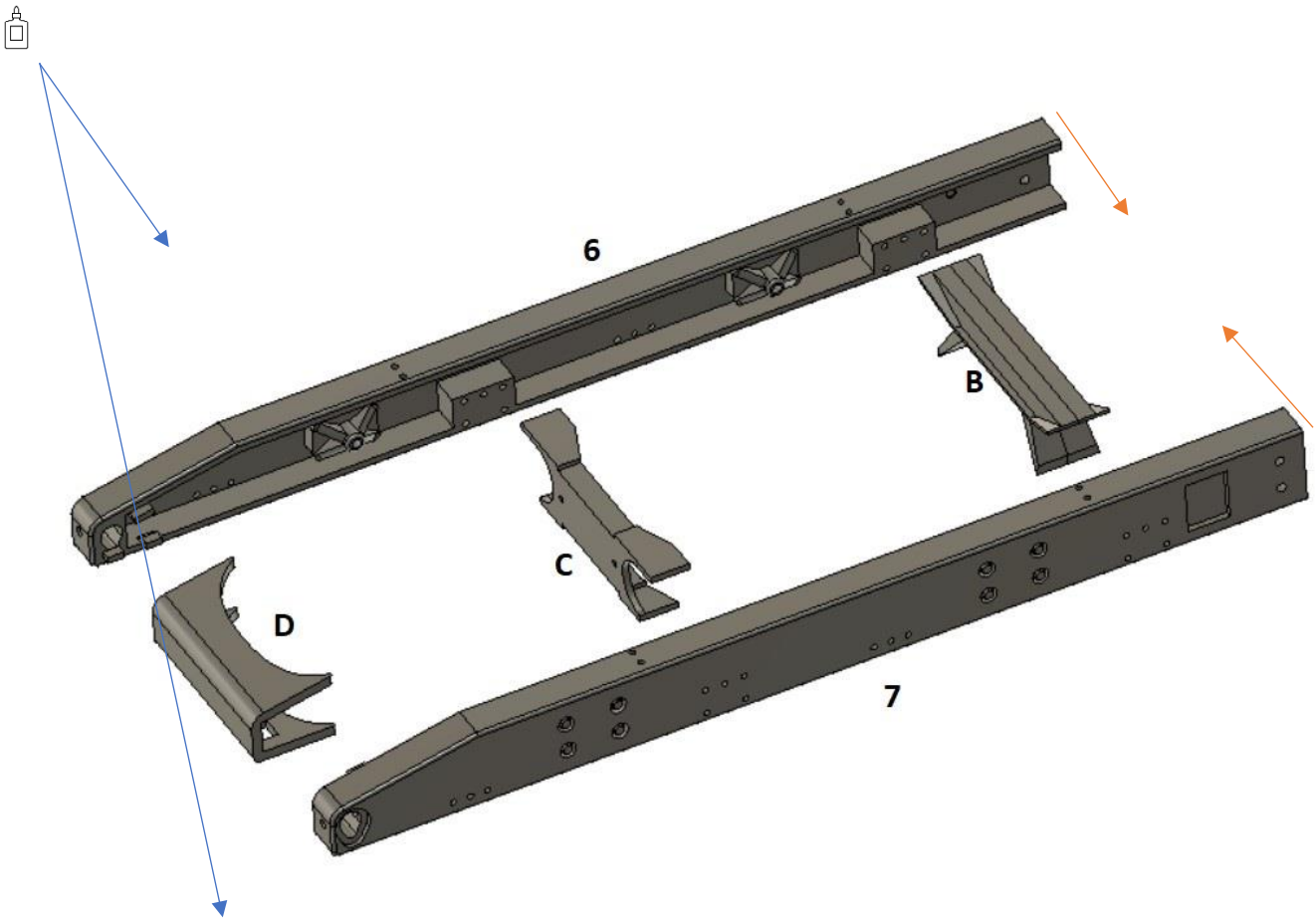
B
B
5

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B
C
D
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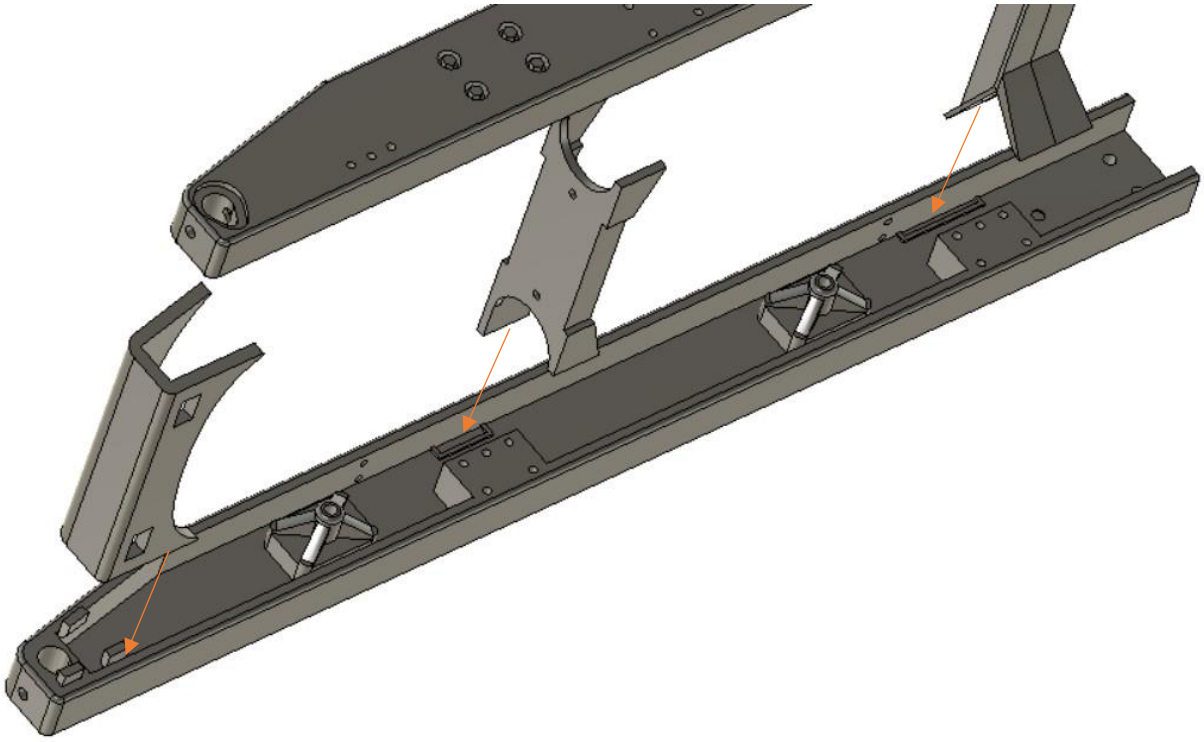

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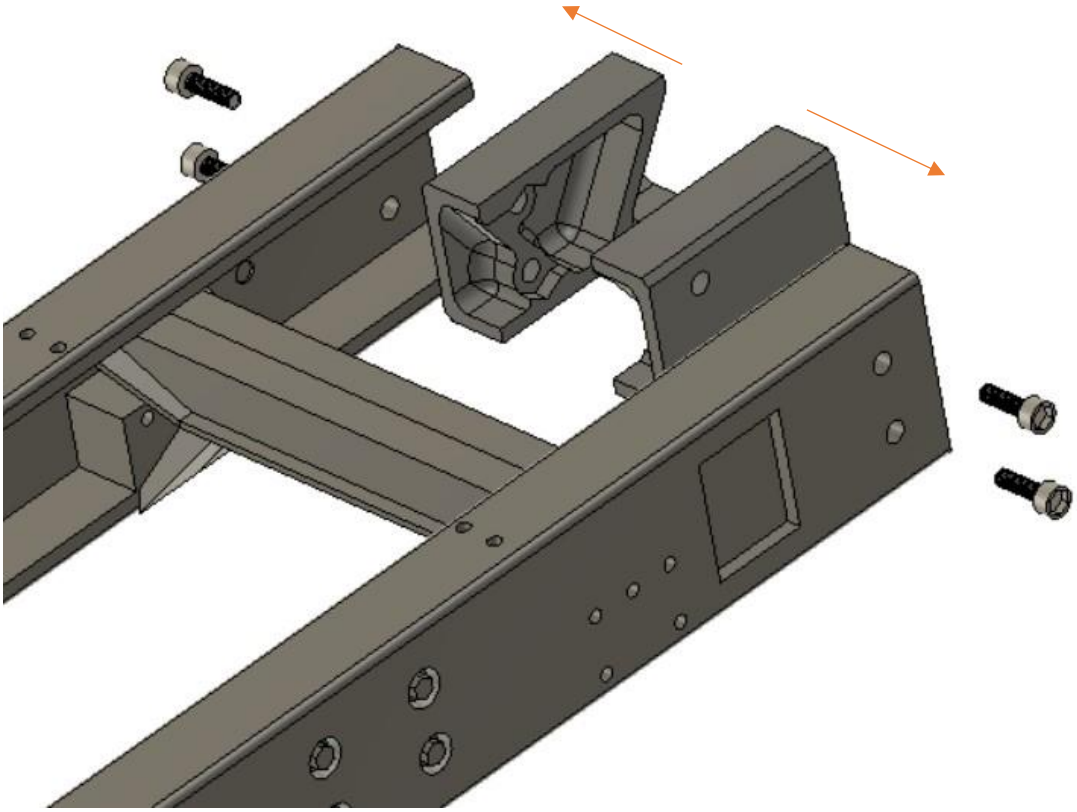
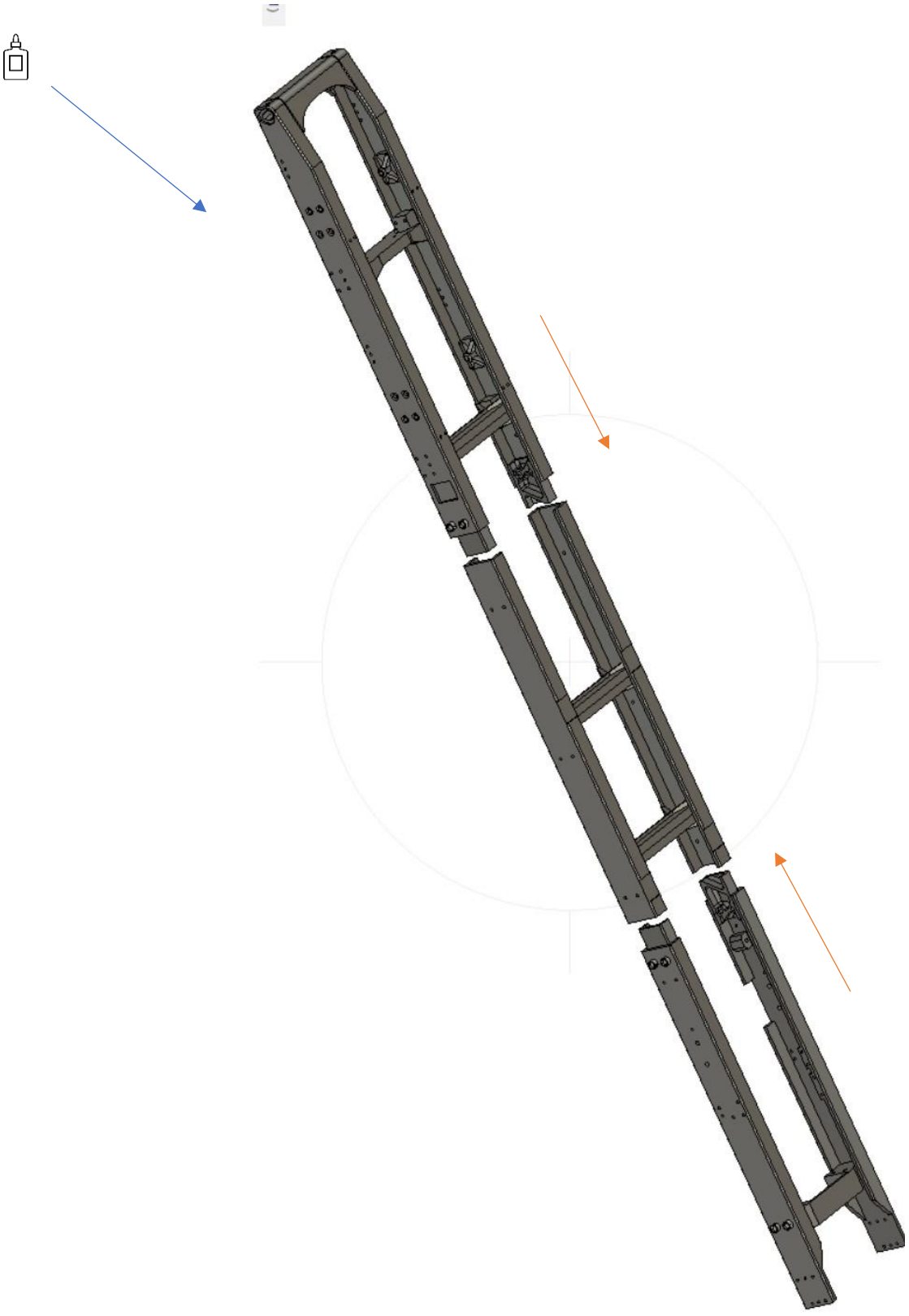
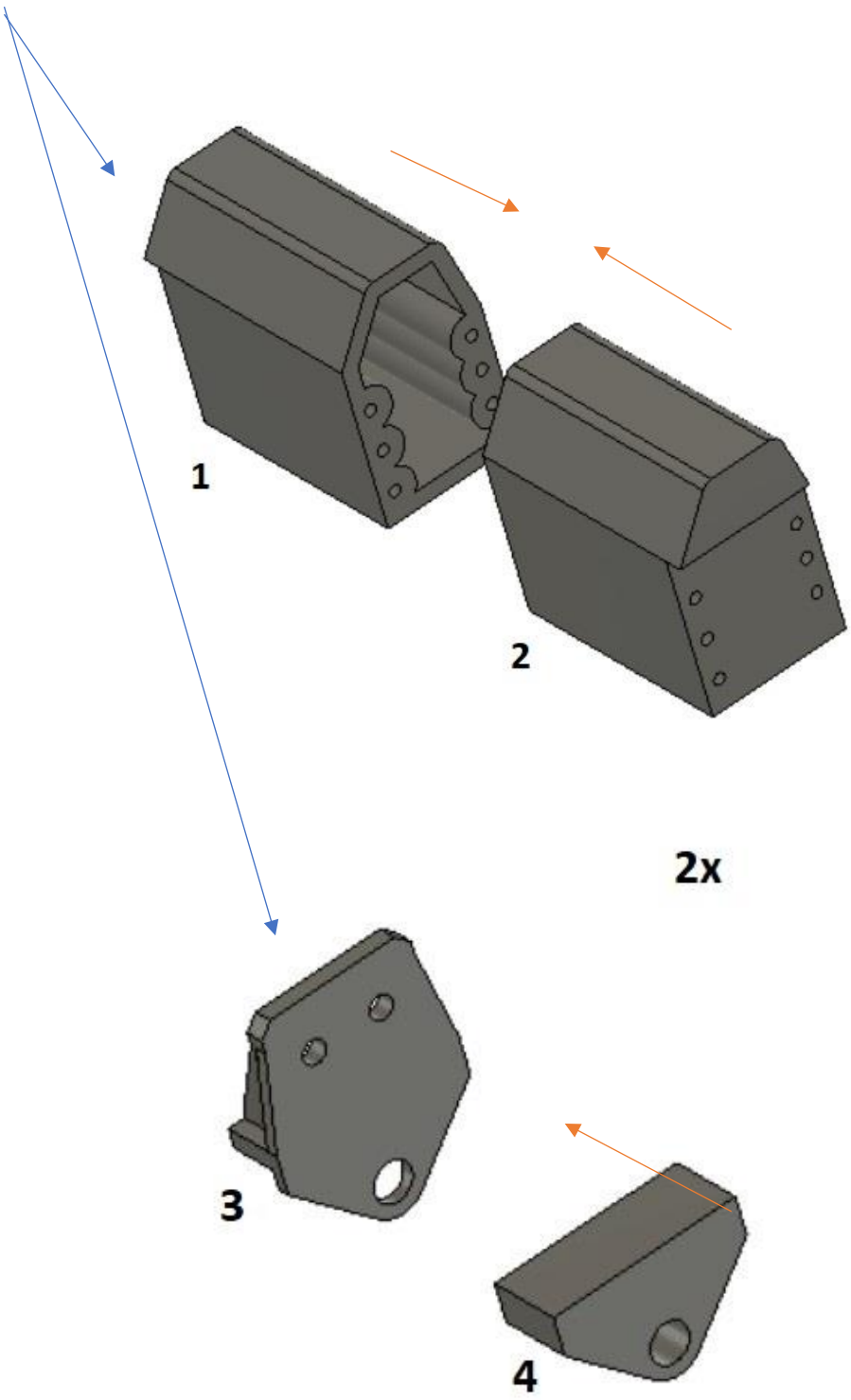
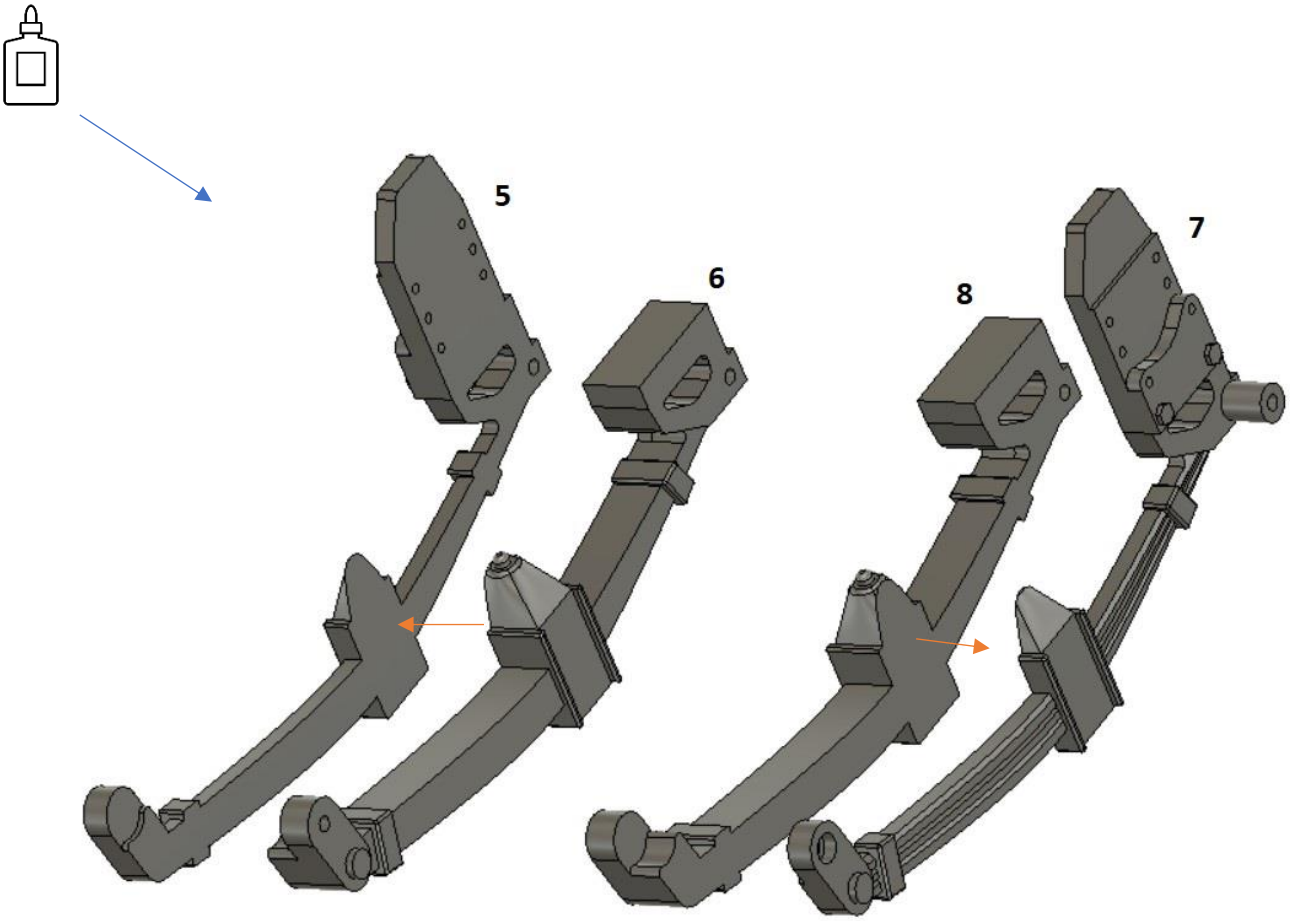




Front suspension





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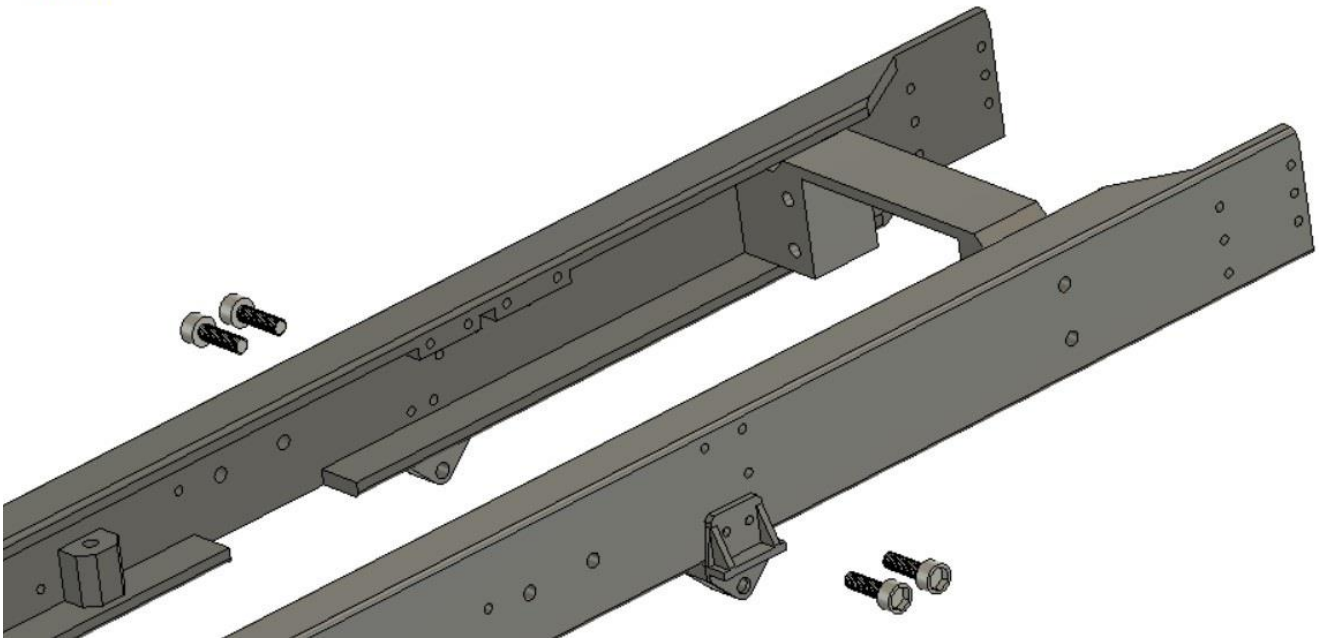

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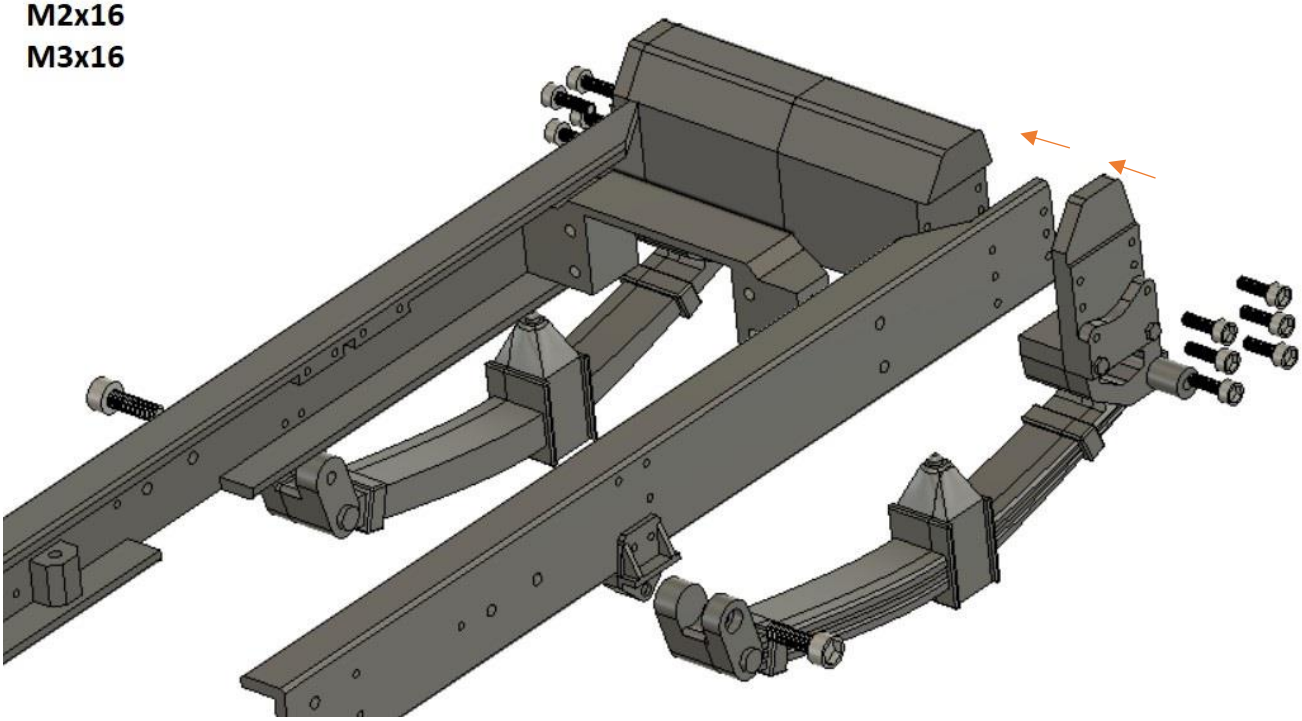
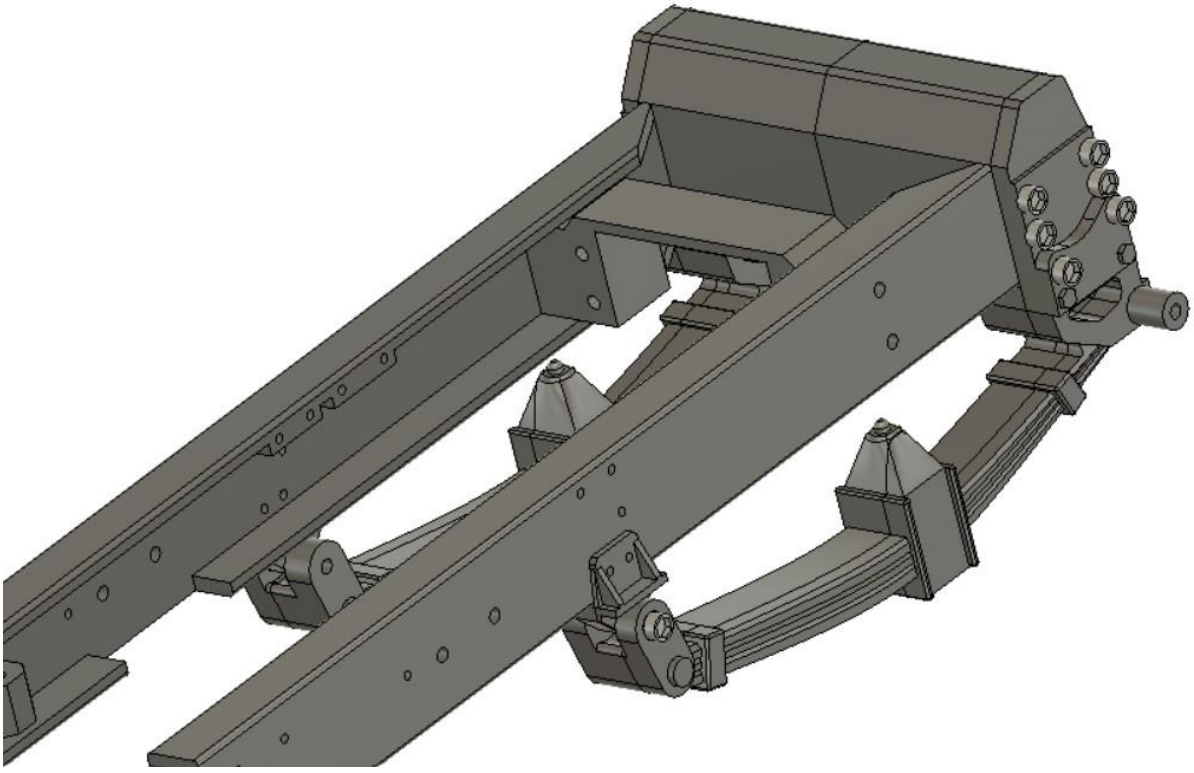
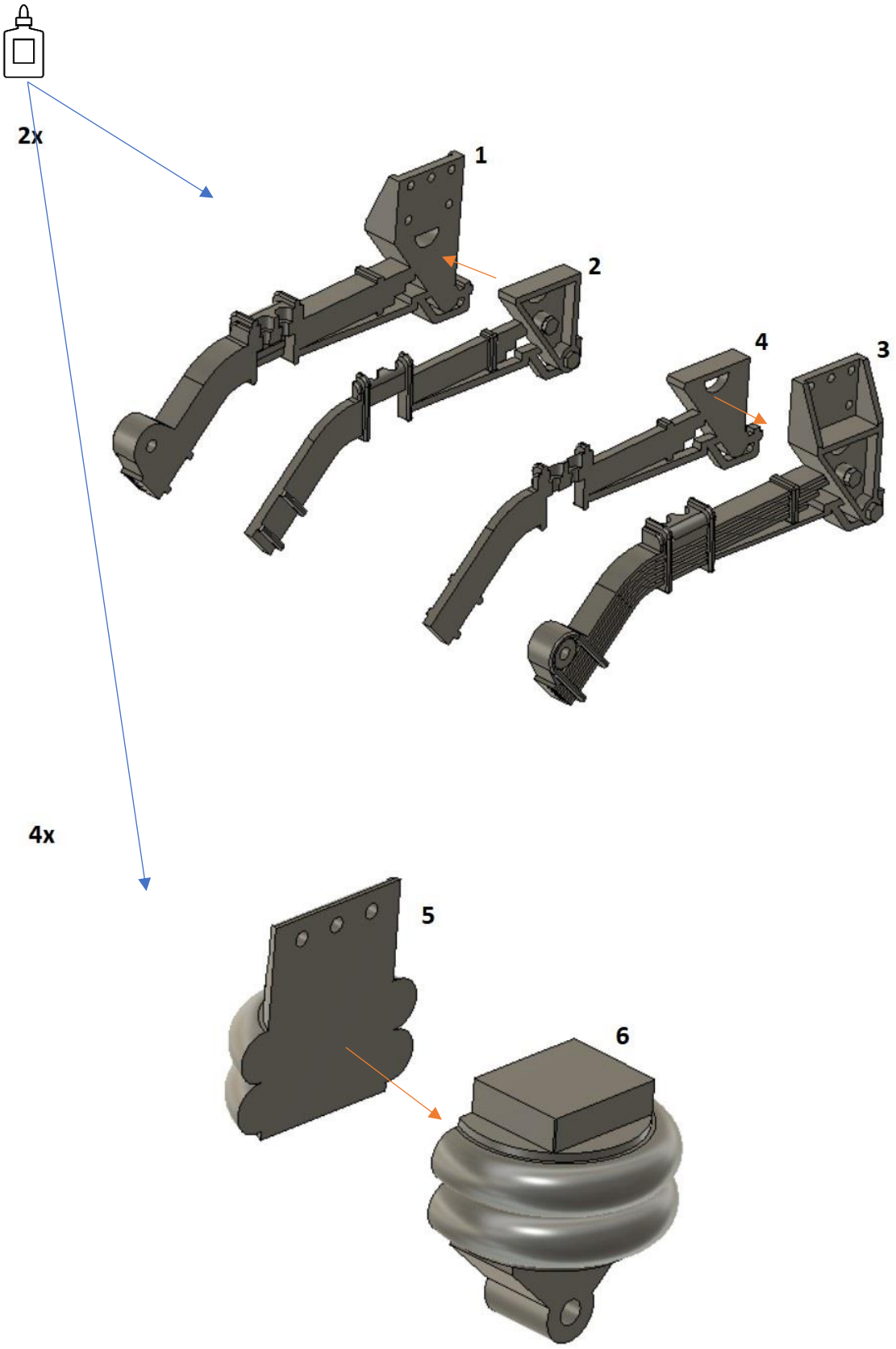




Rear suspension



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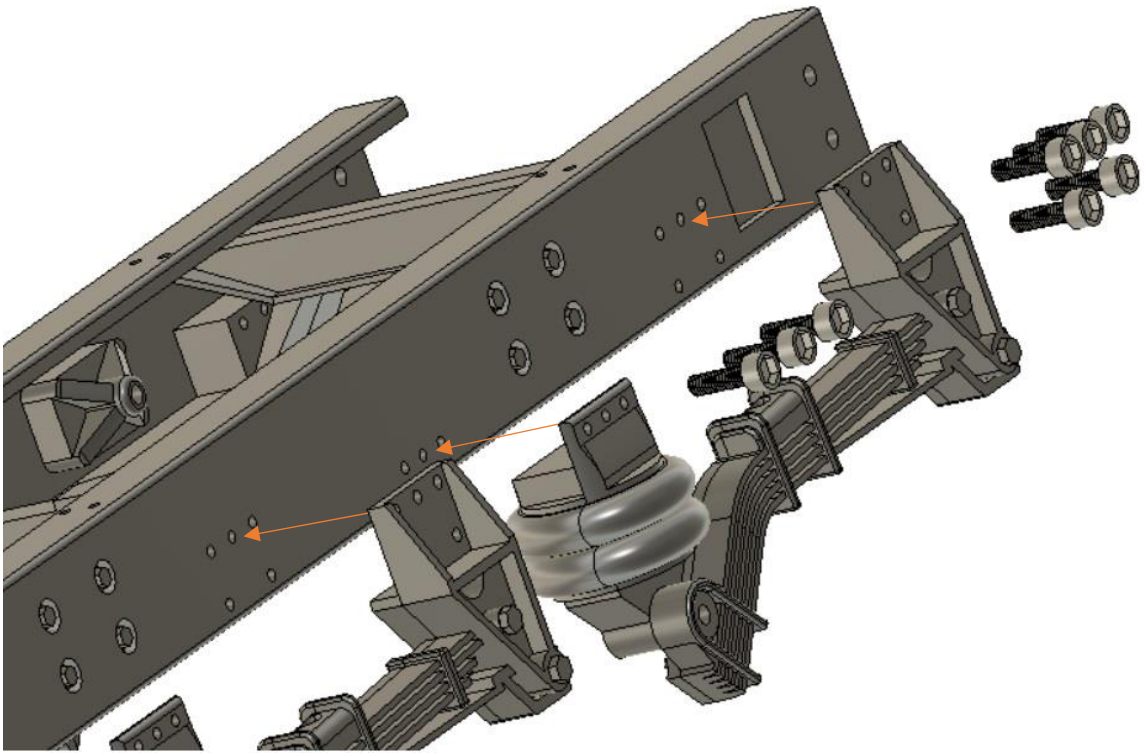

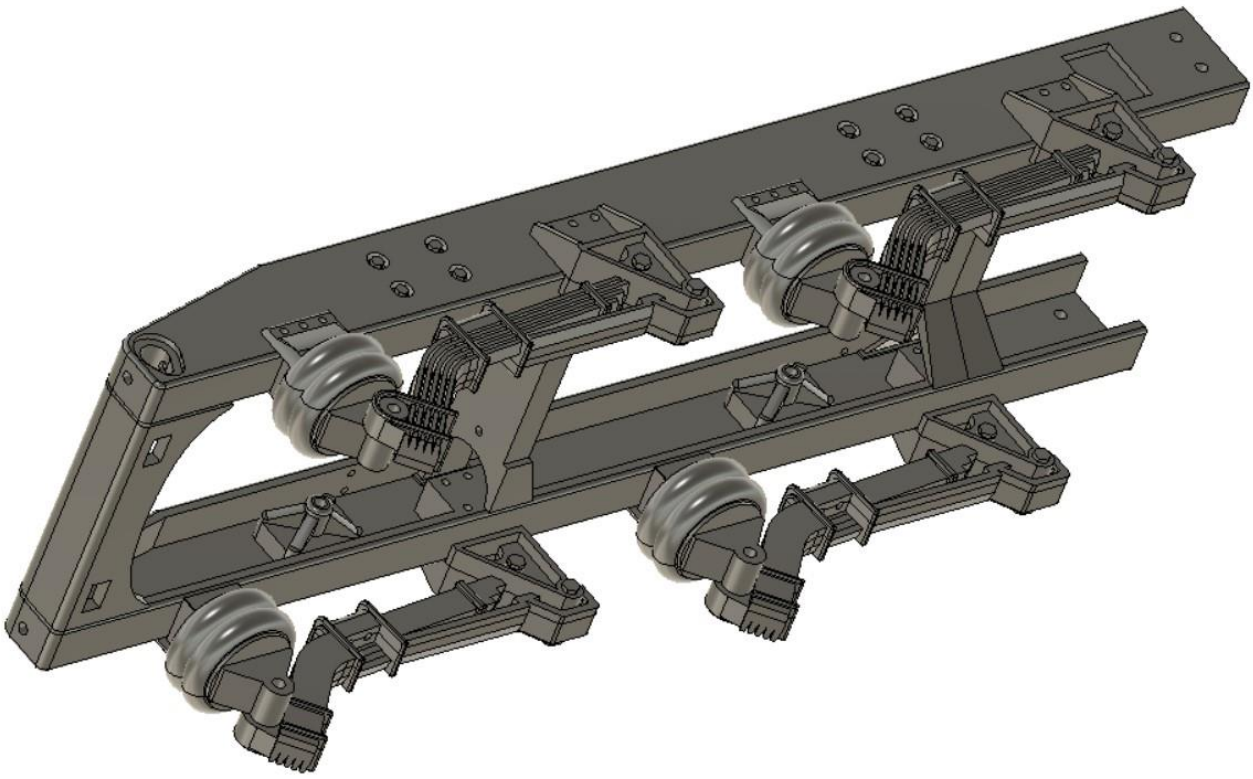

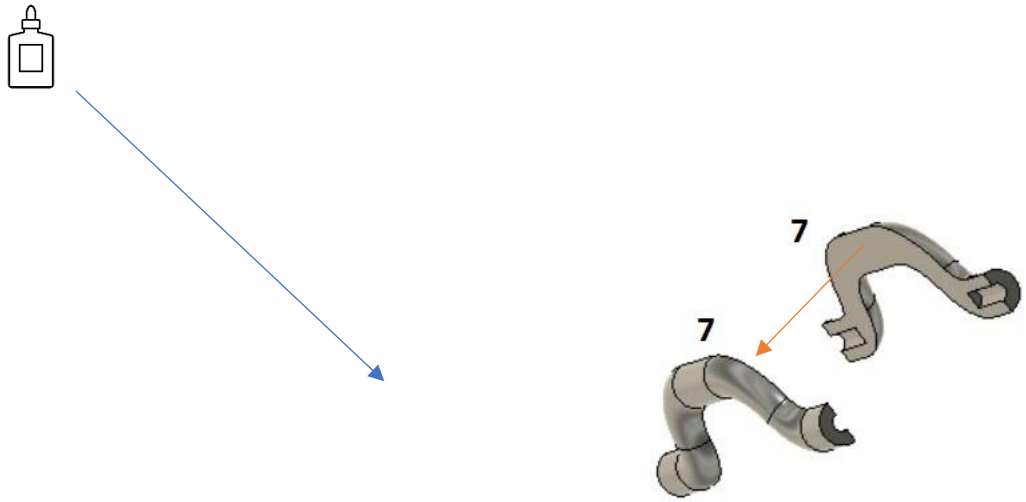

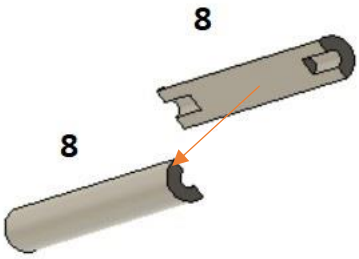

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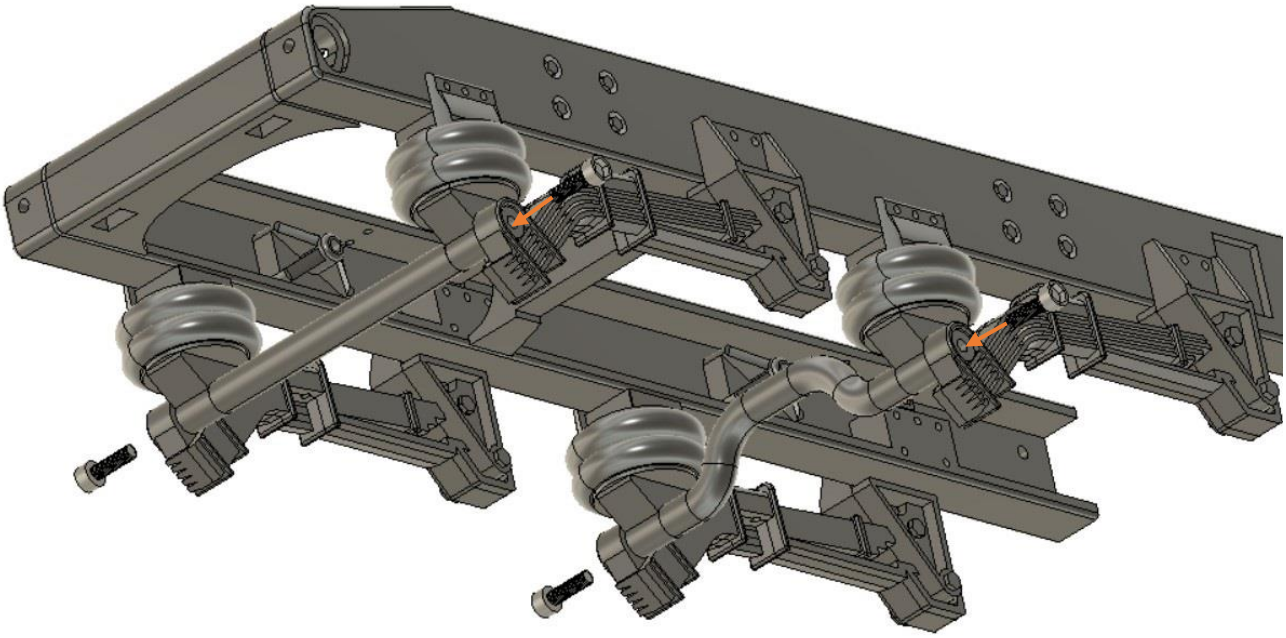
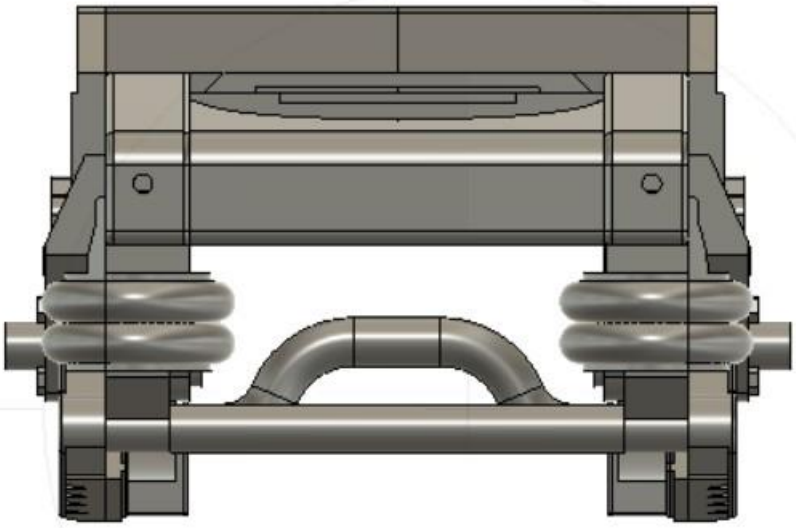
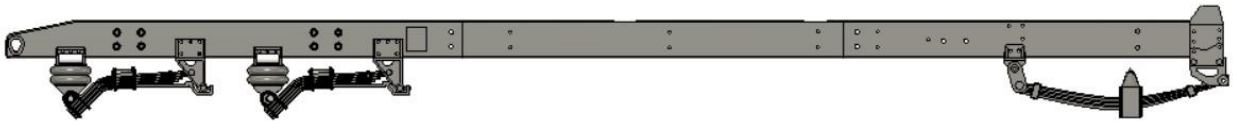
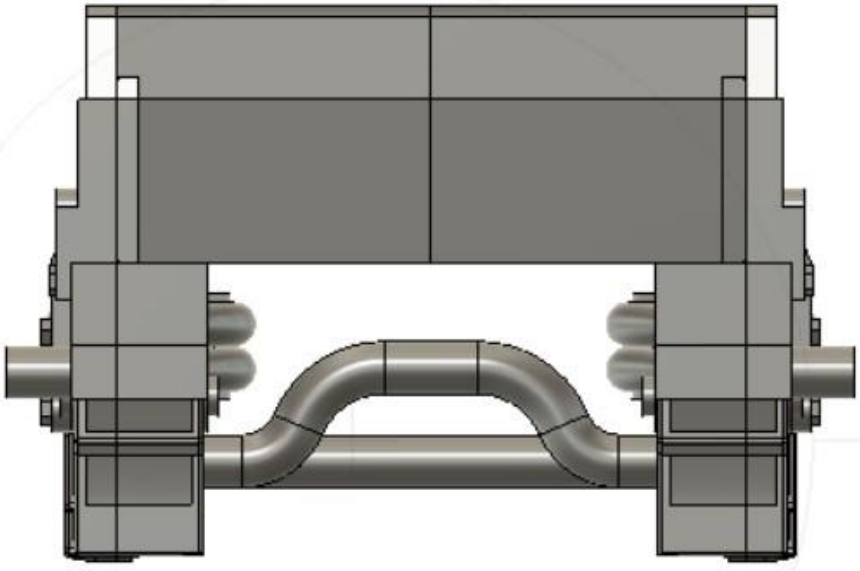


Views

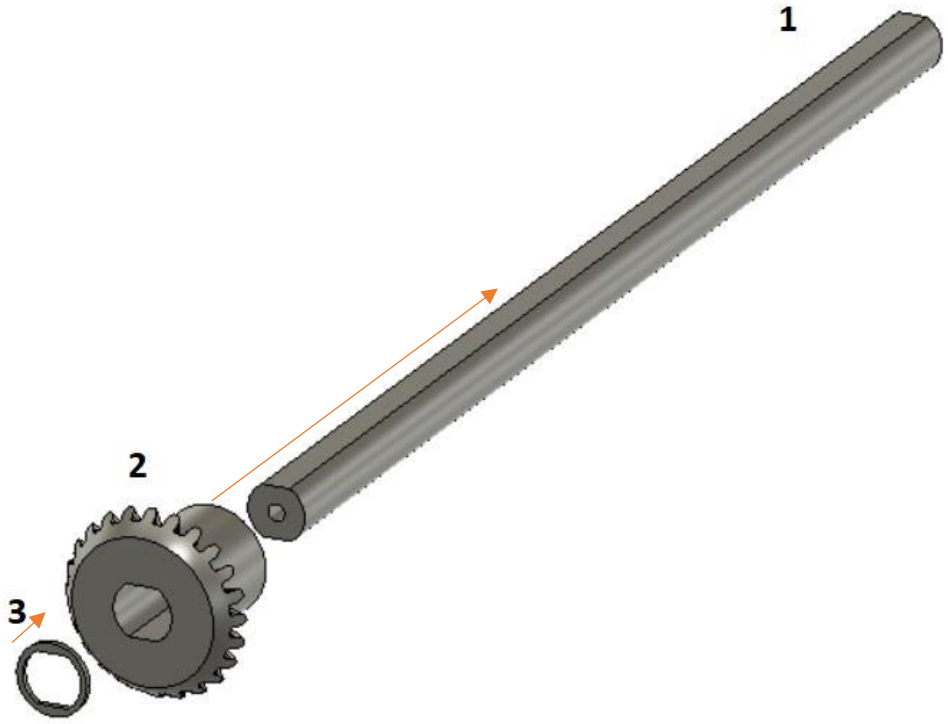
1- from the back 2- from the side 3- from the front



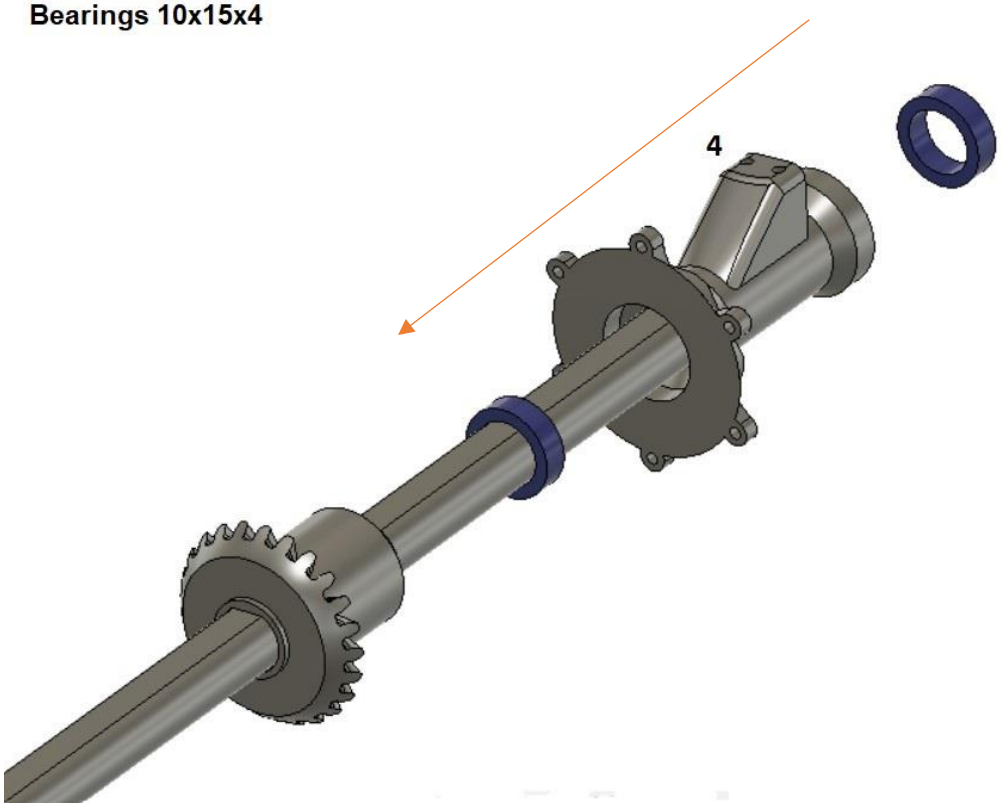


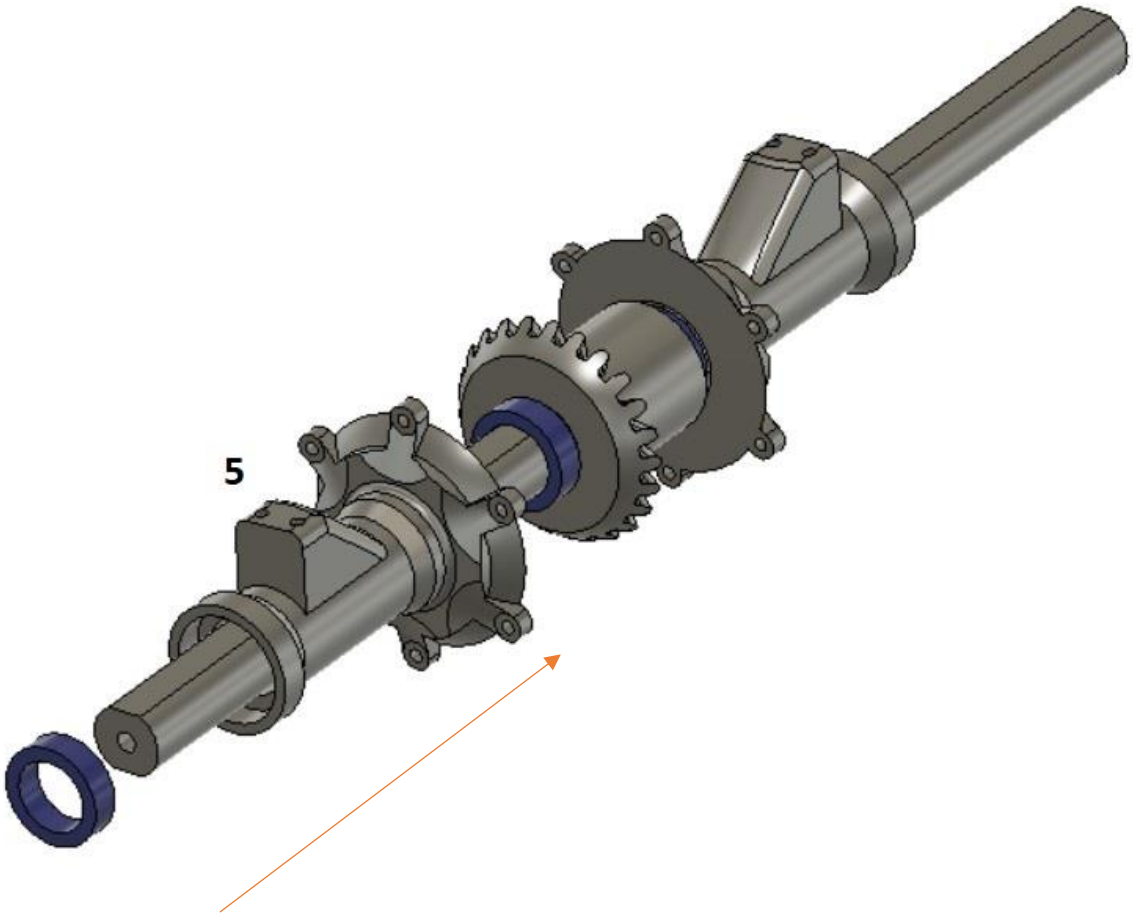


Transfers



Bearings 10x15x4

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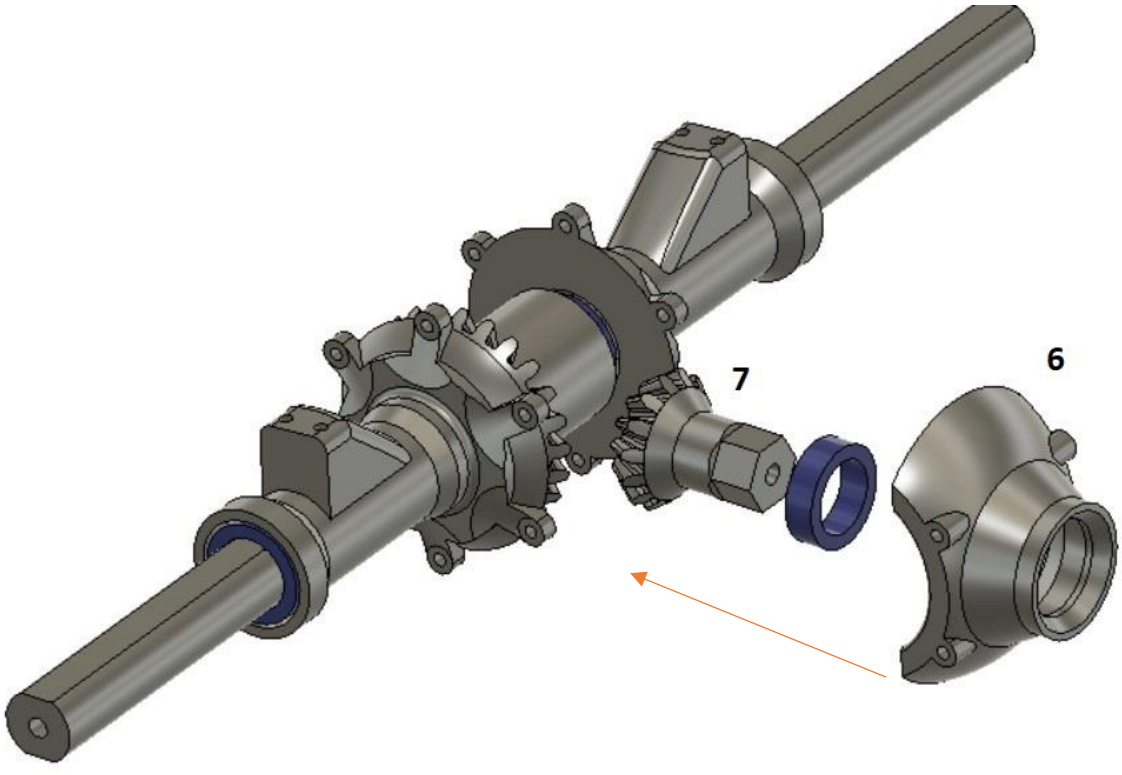
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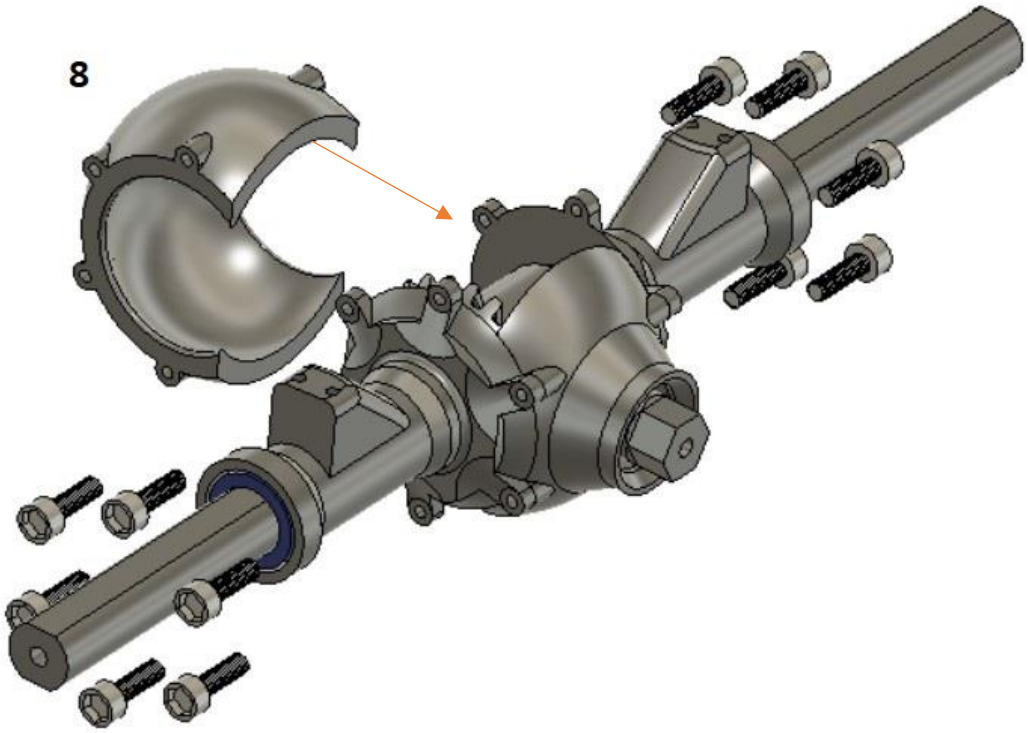

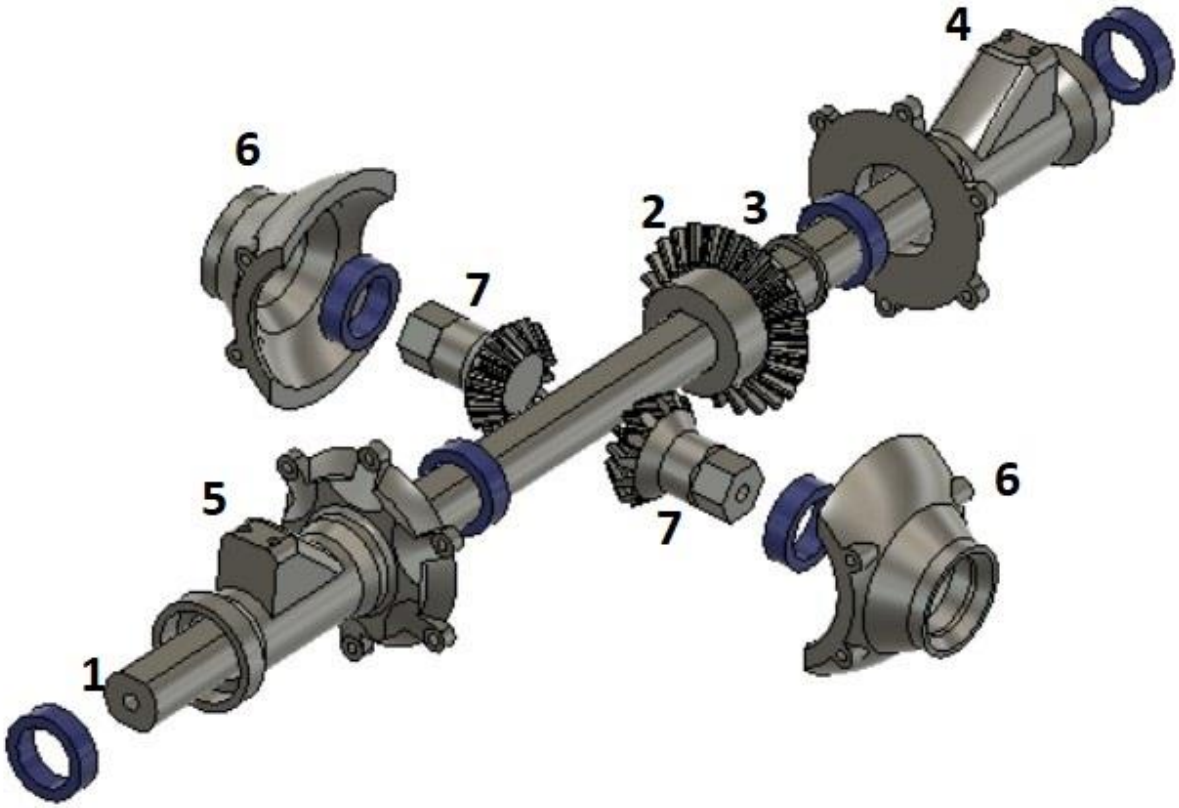

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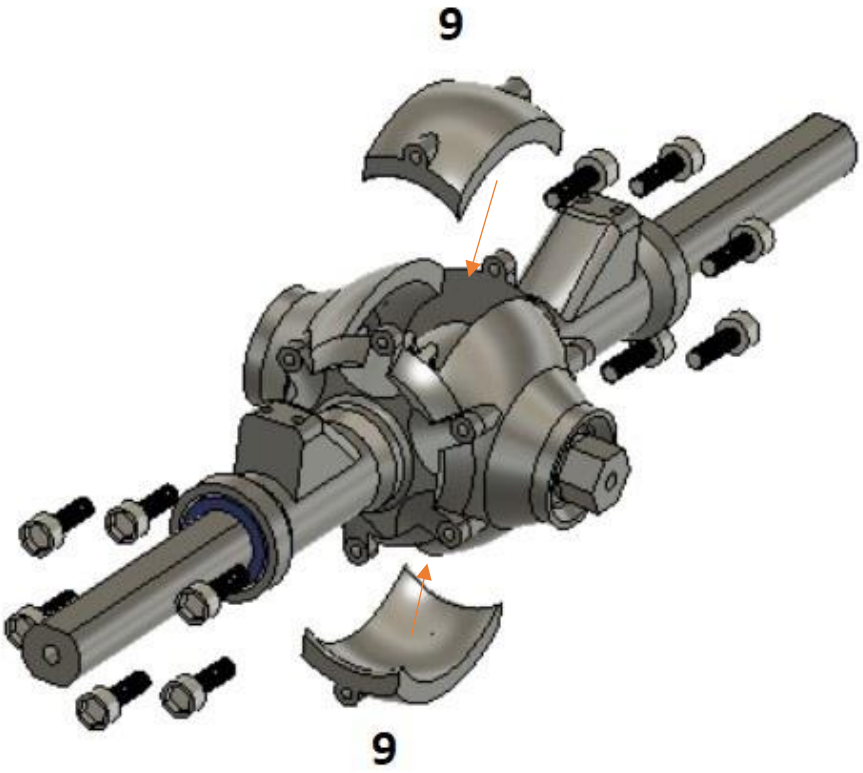

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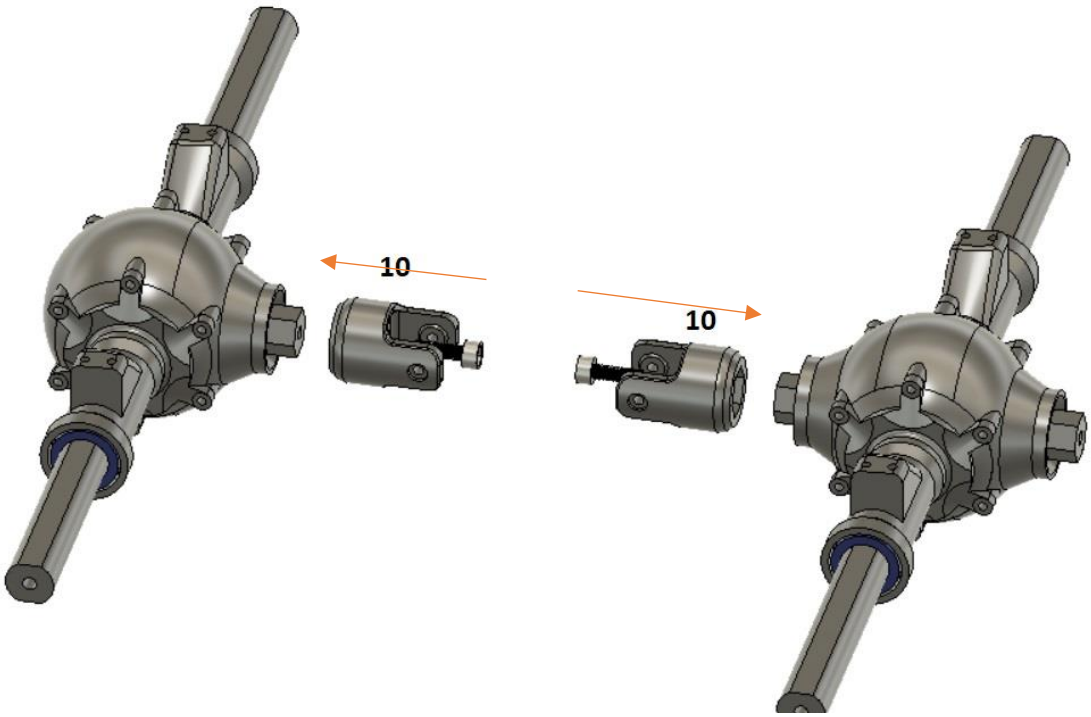

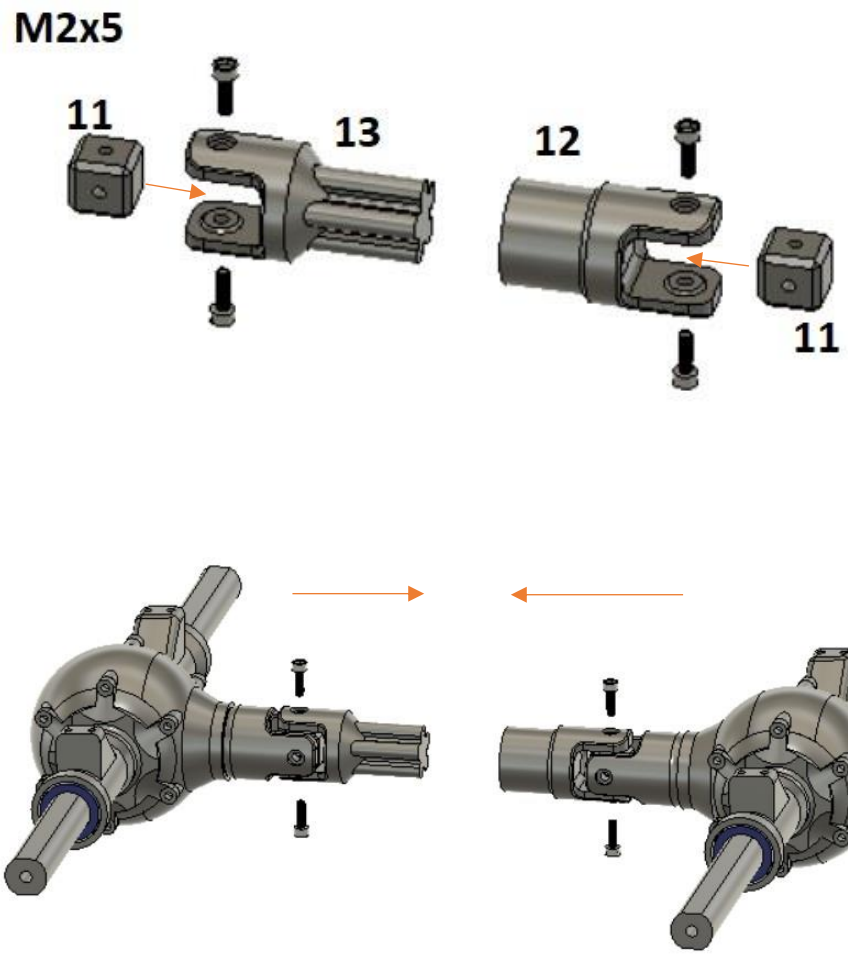

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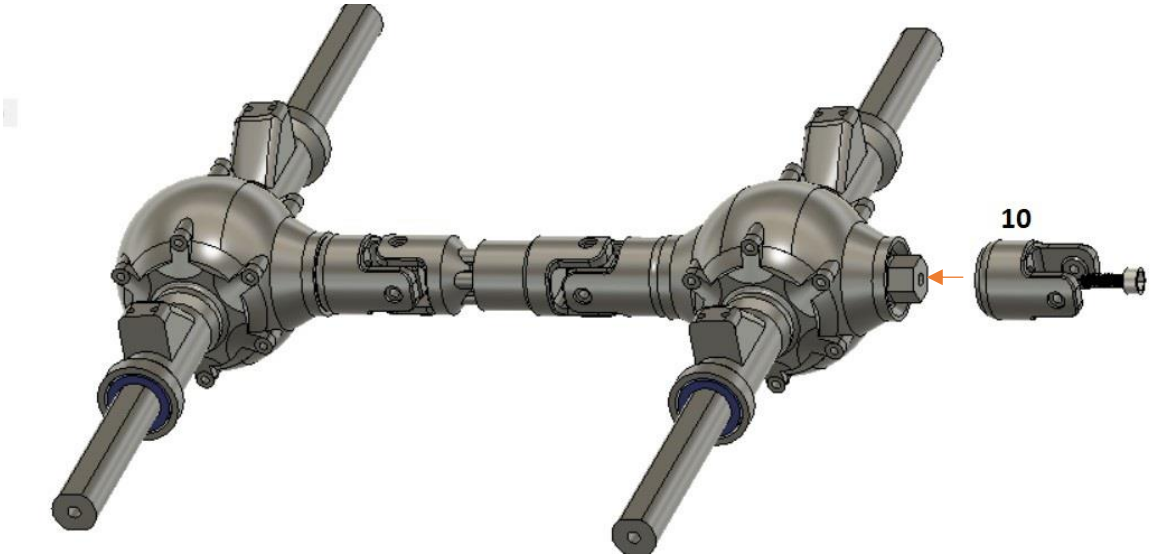

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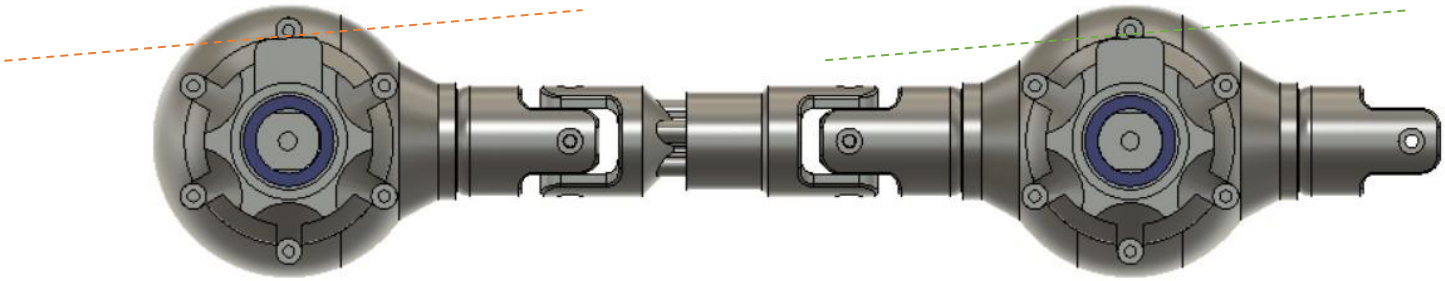

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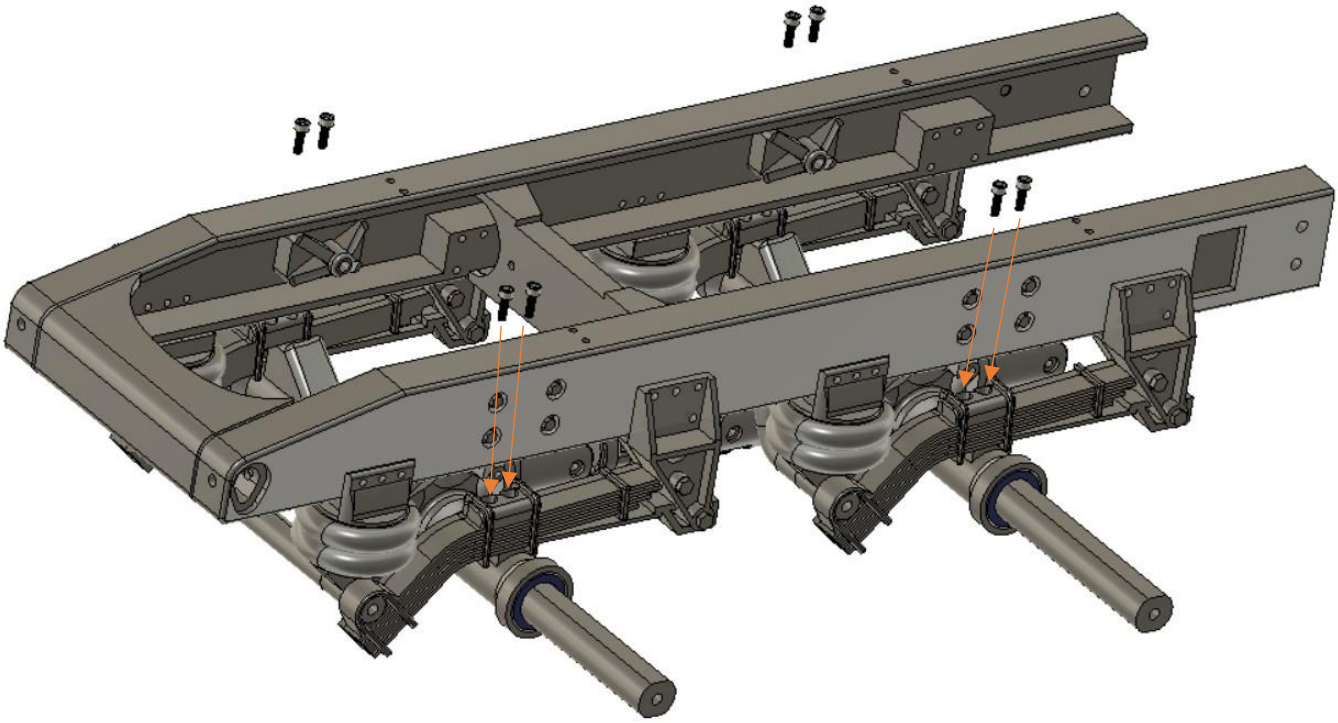
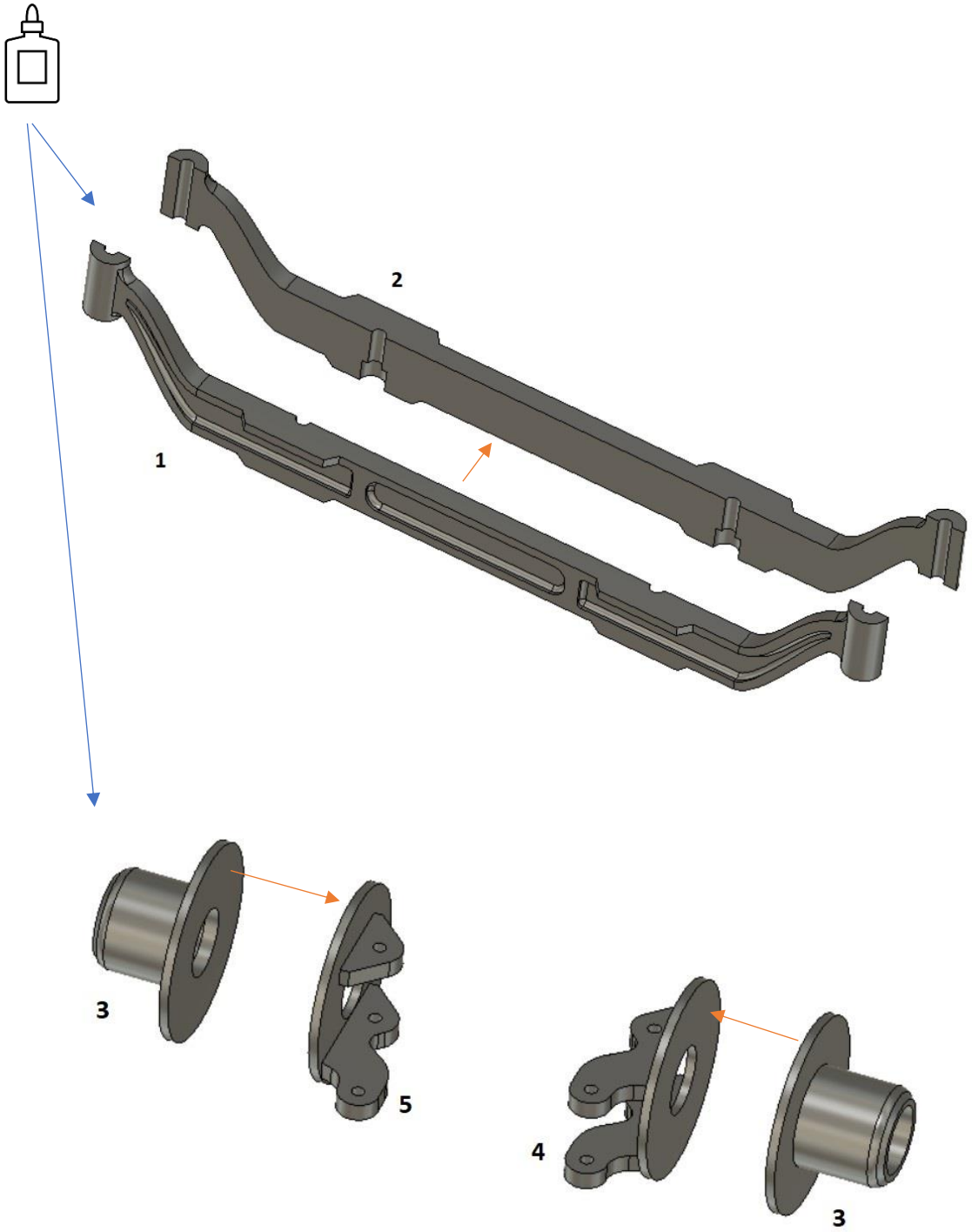
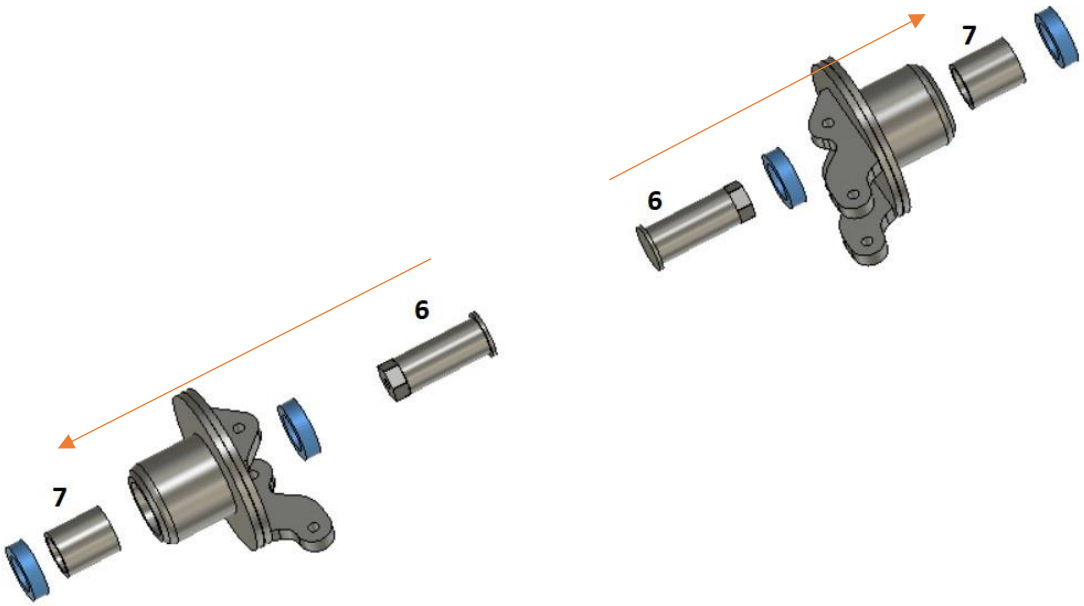


Steering

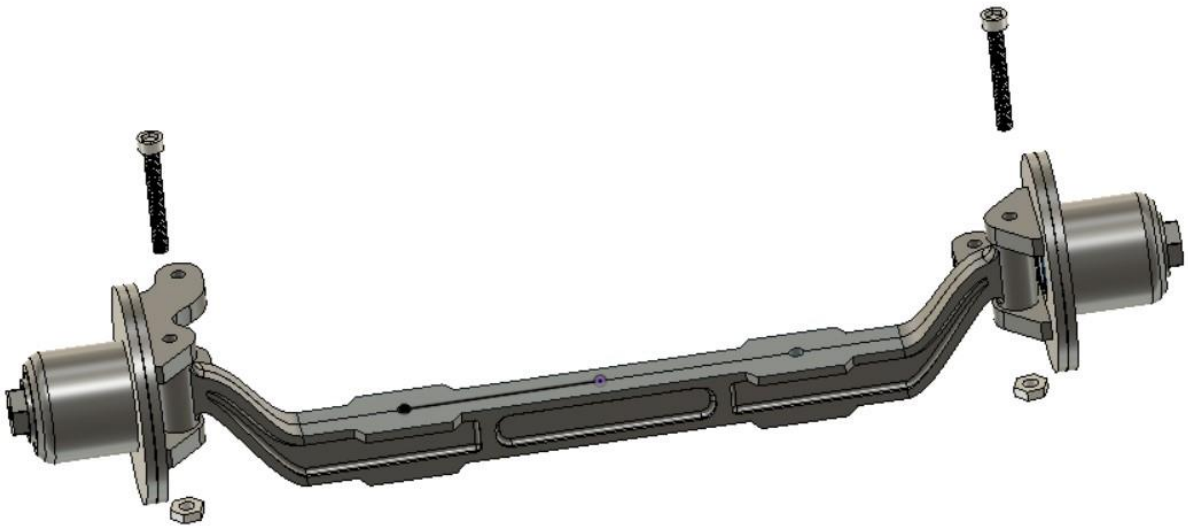


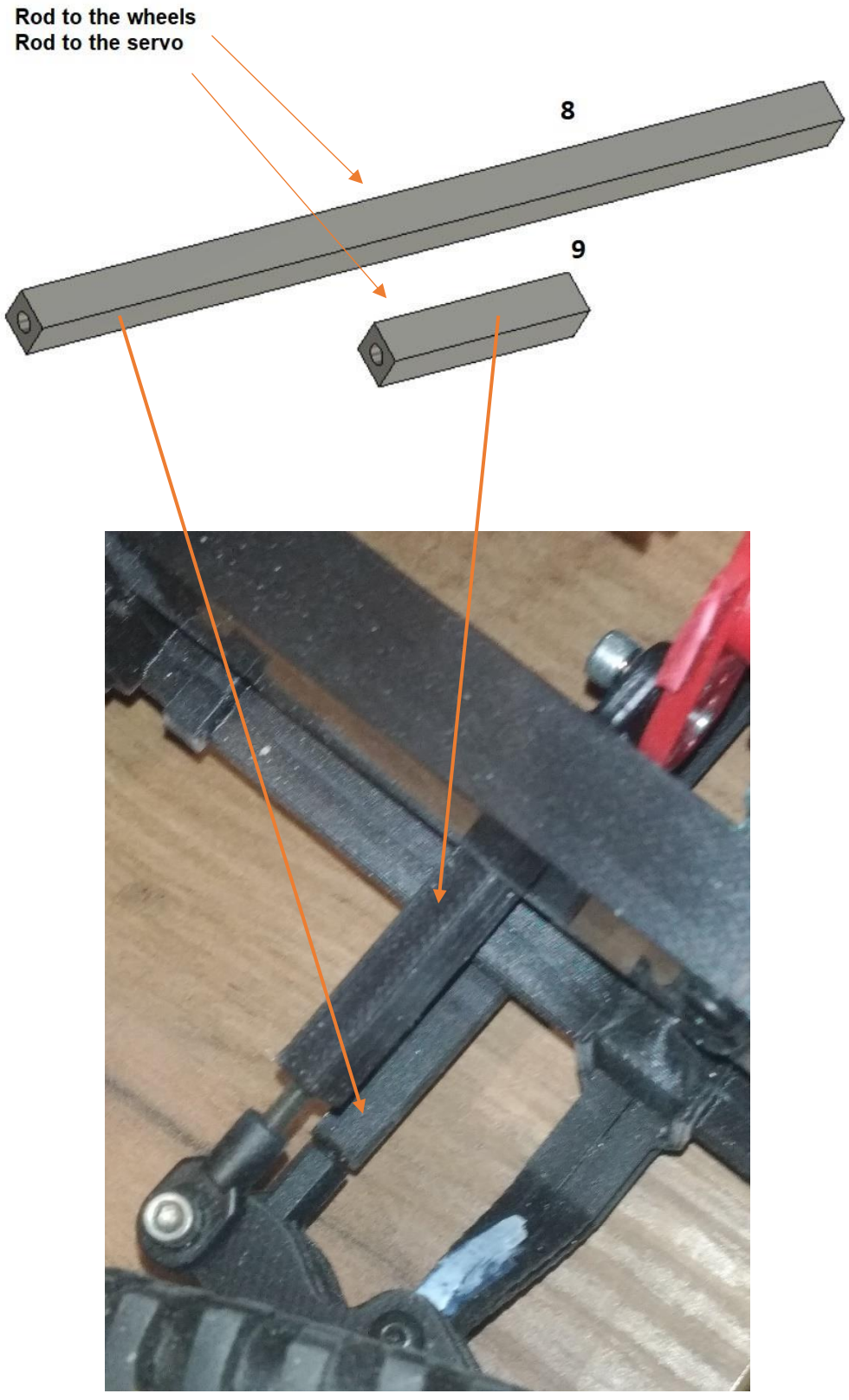
Bearings 10x15x4



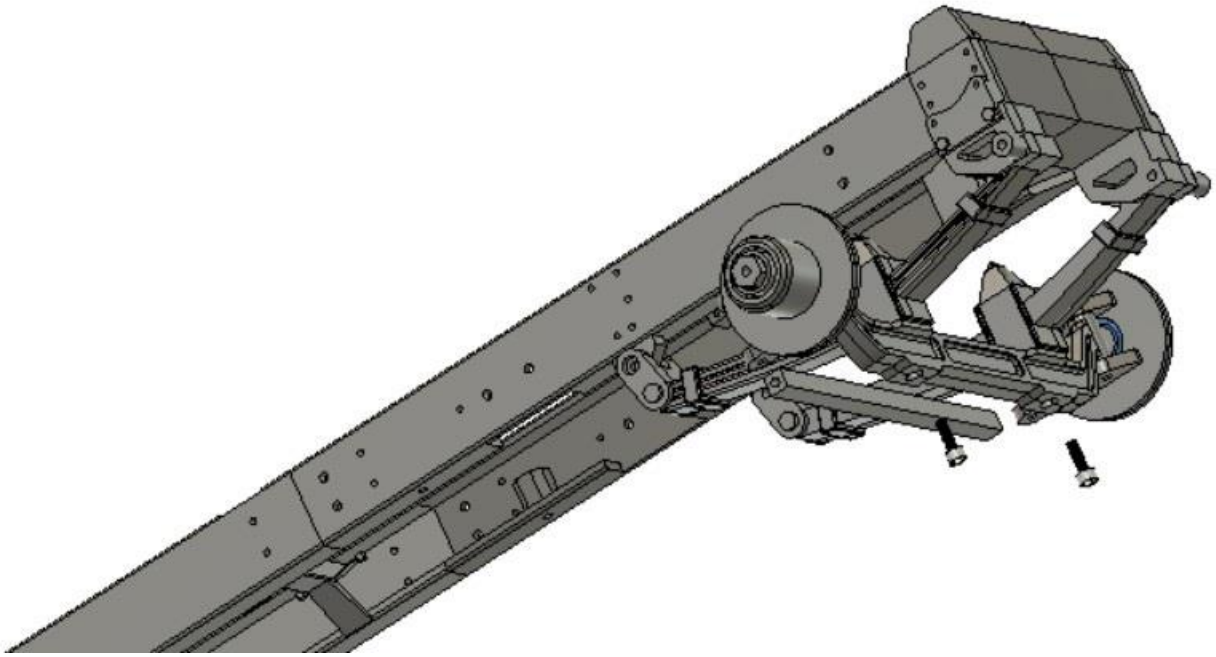
M3x30

Nuts M3




Rod to the wheels
Rod to the servo
8
9

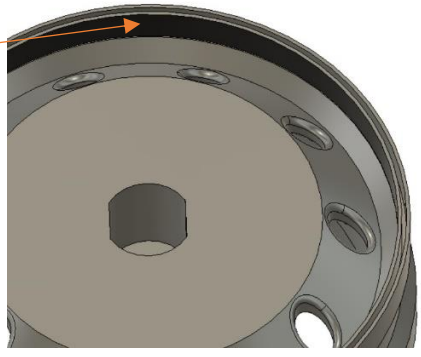
M3x16

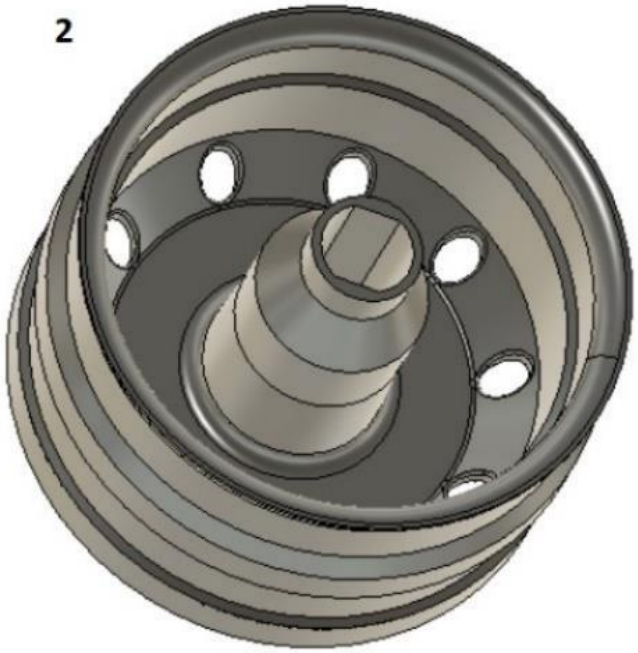


Wheels

Support

To be removed

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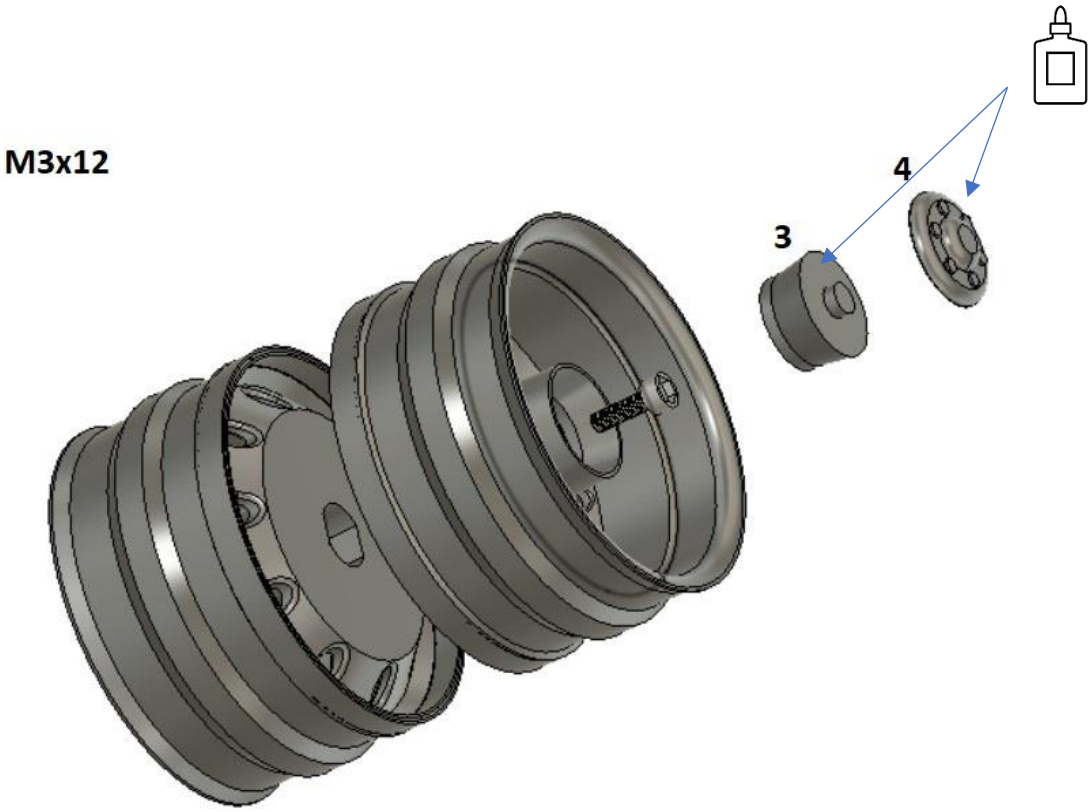
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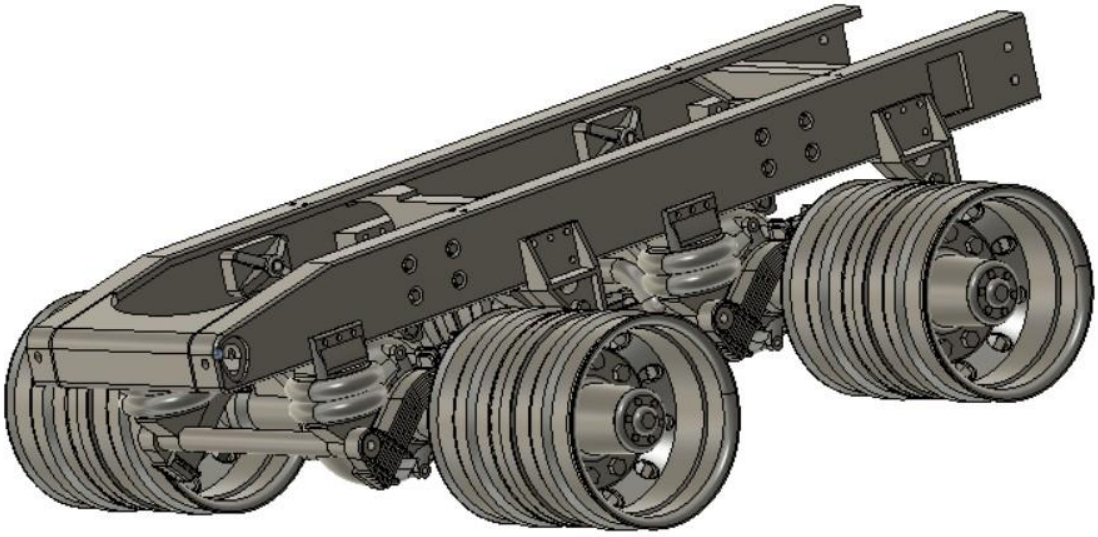

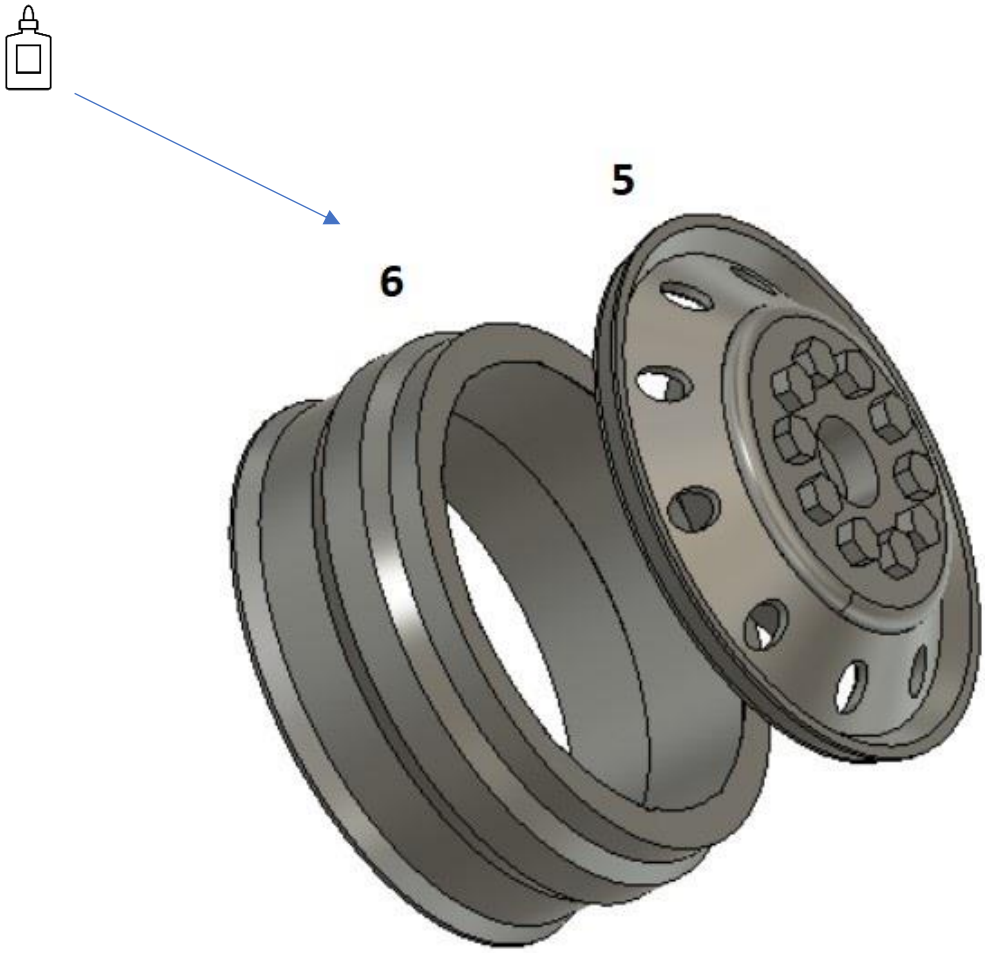
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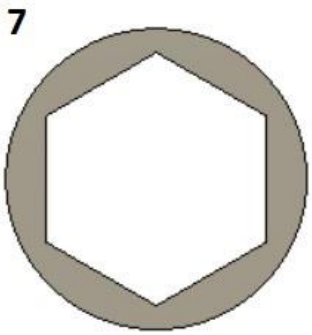
6

Washer under the front wheels



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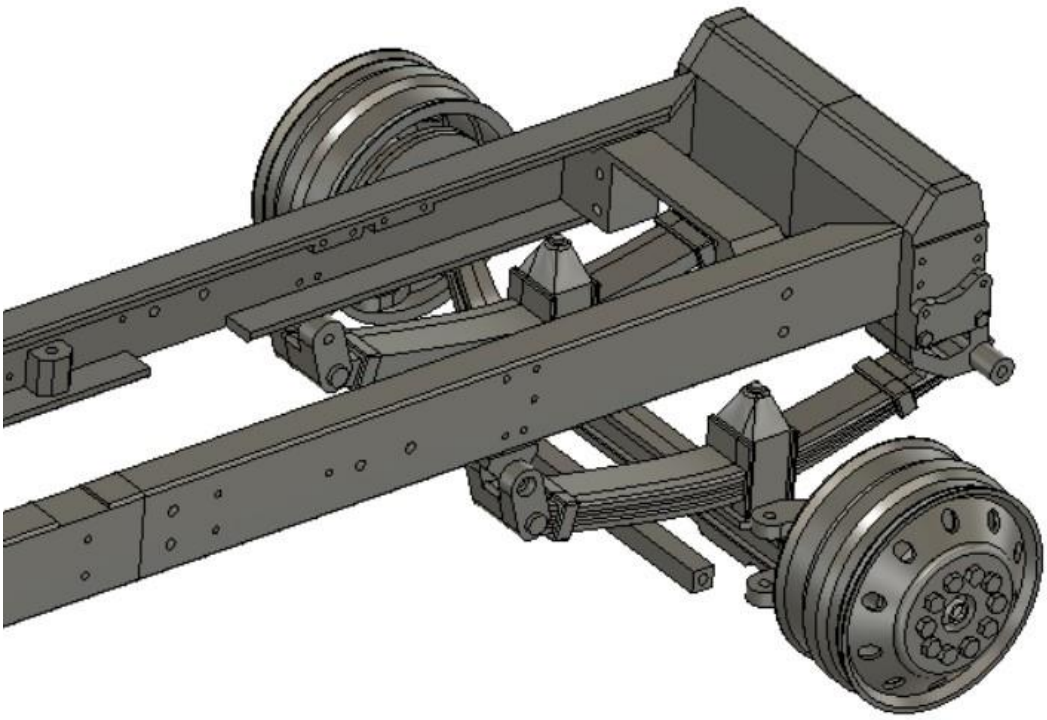
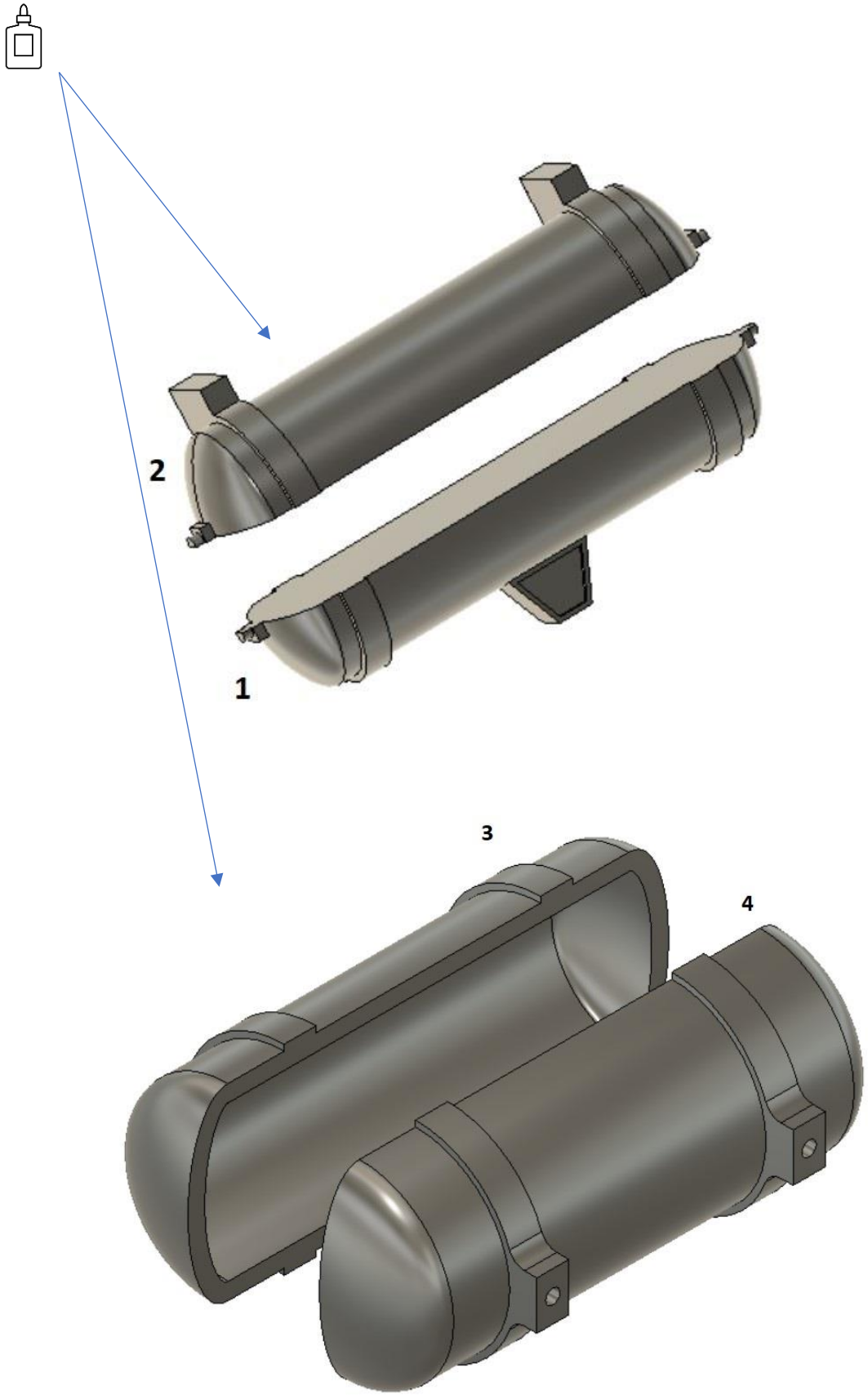
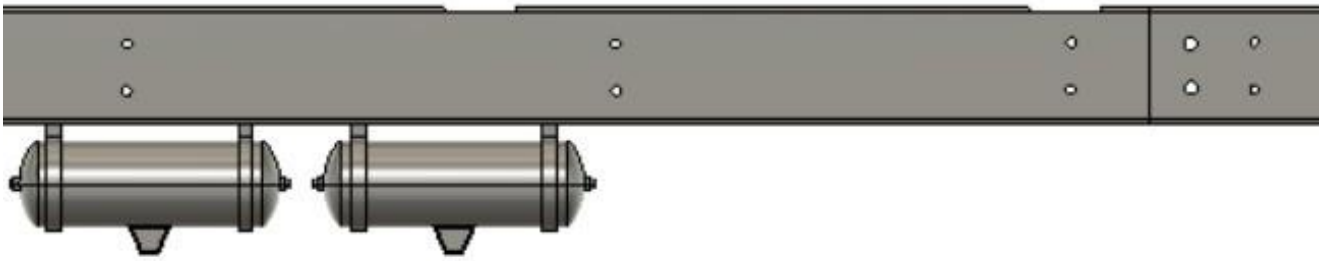
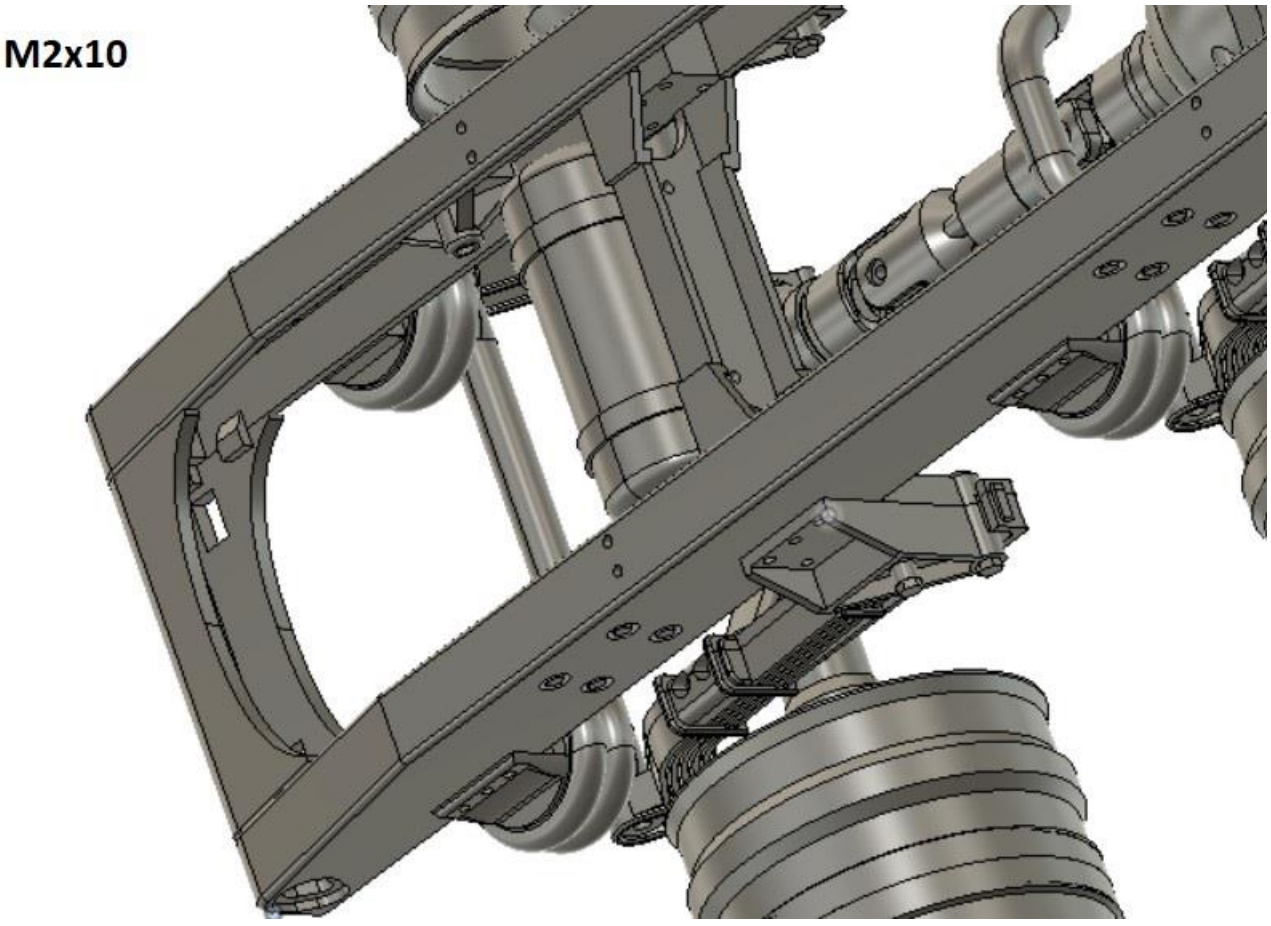


Accessories

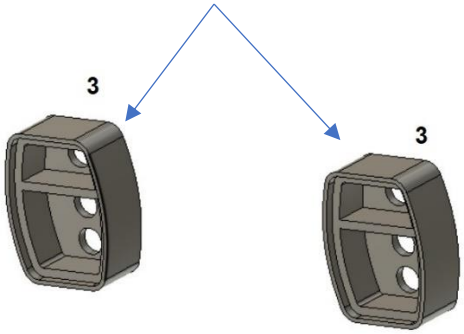


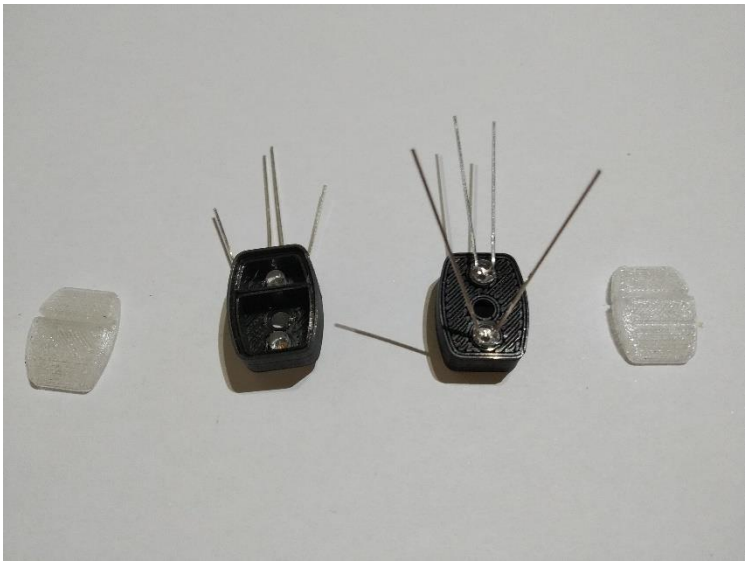


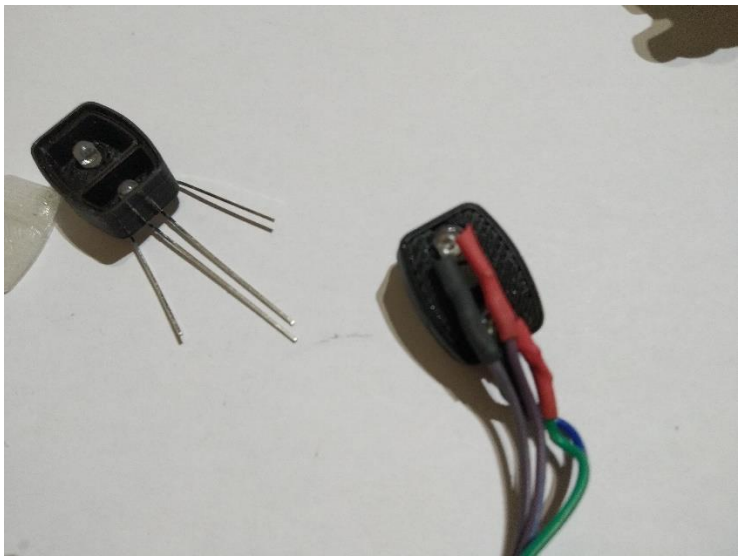

M2x10

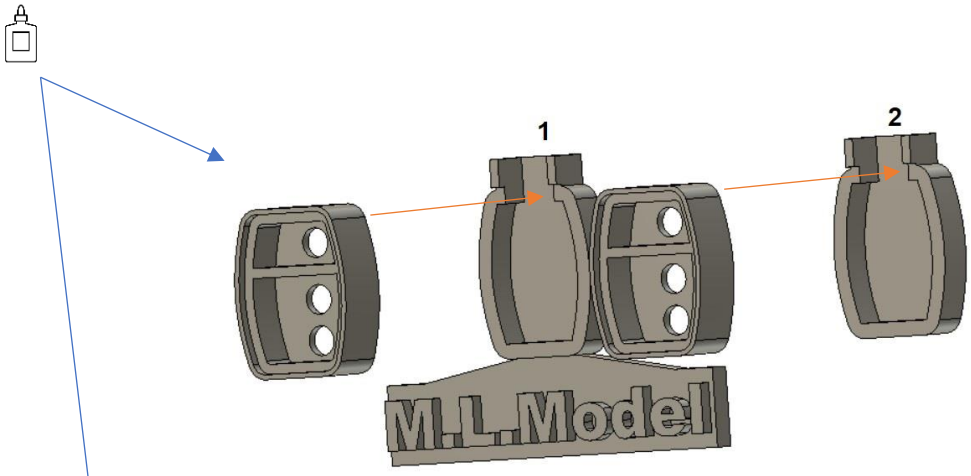
Rear lights

Insert the LED 3mm into parts 3 at your discretion.

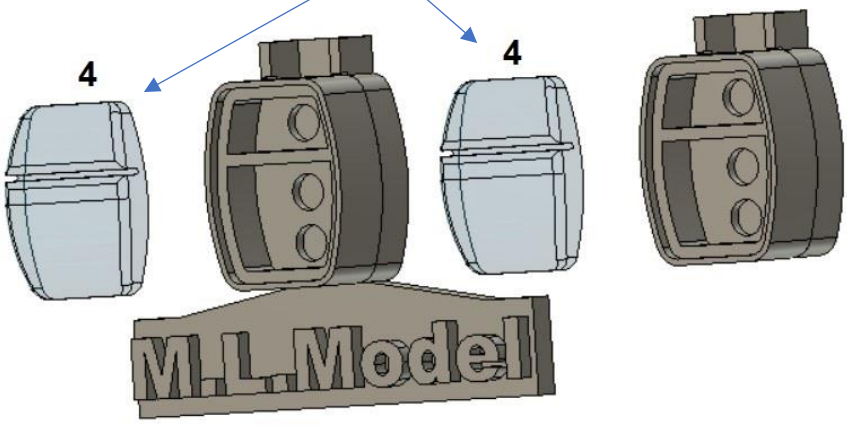


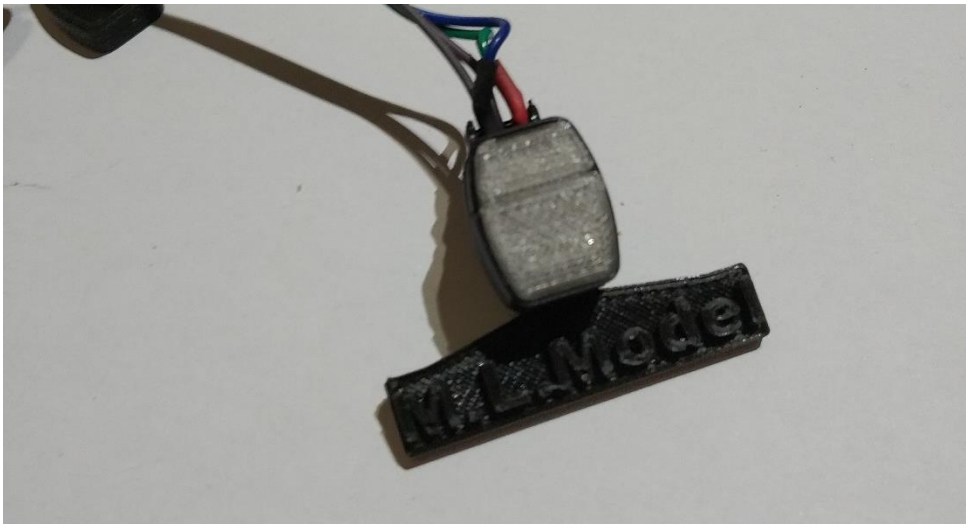


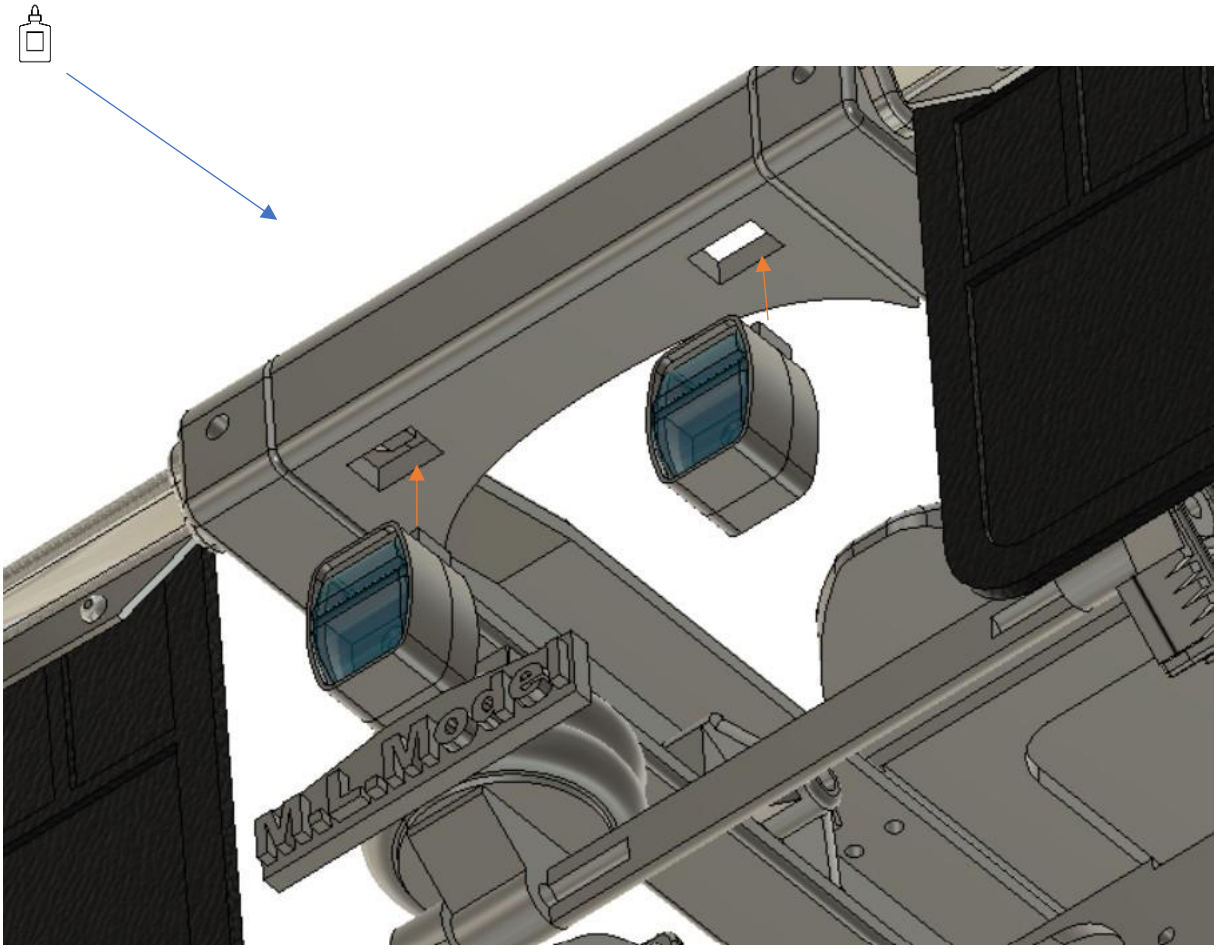




Clear

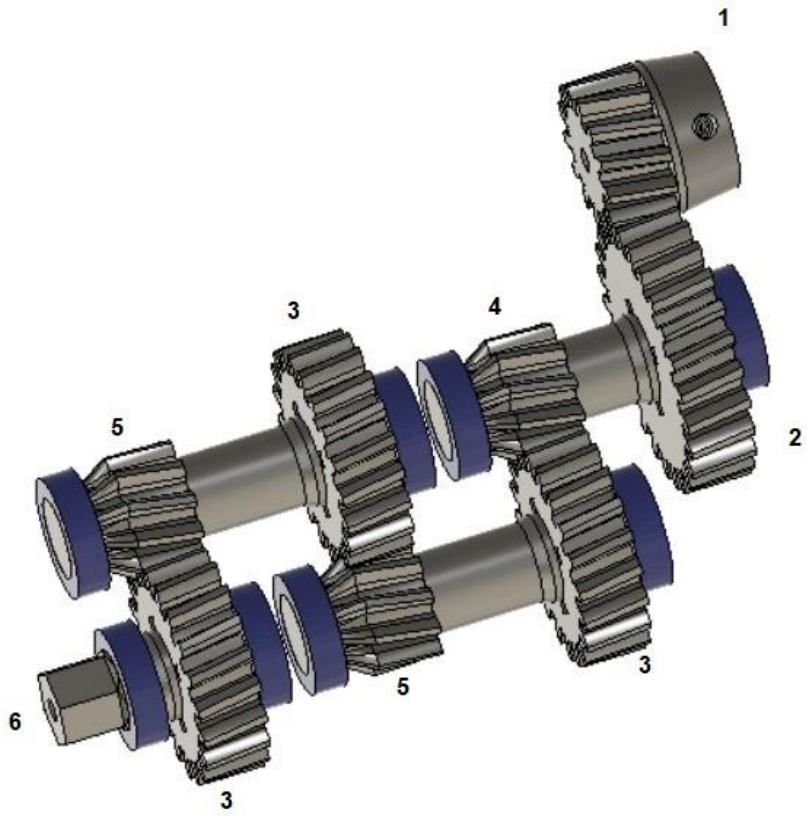


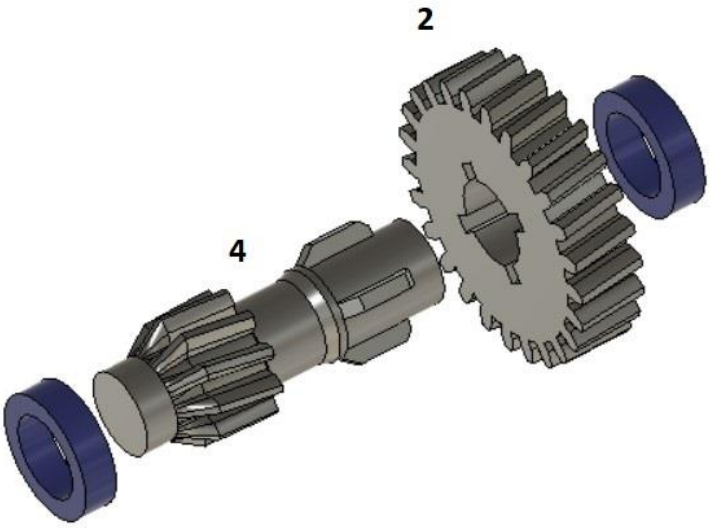

M.L.Model


M.L.Model

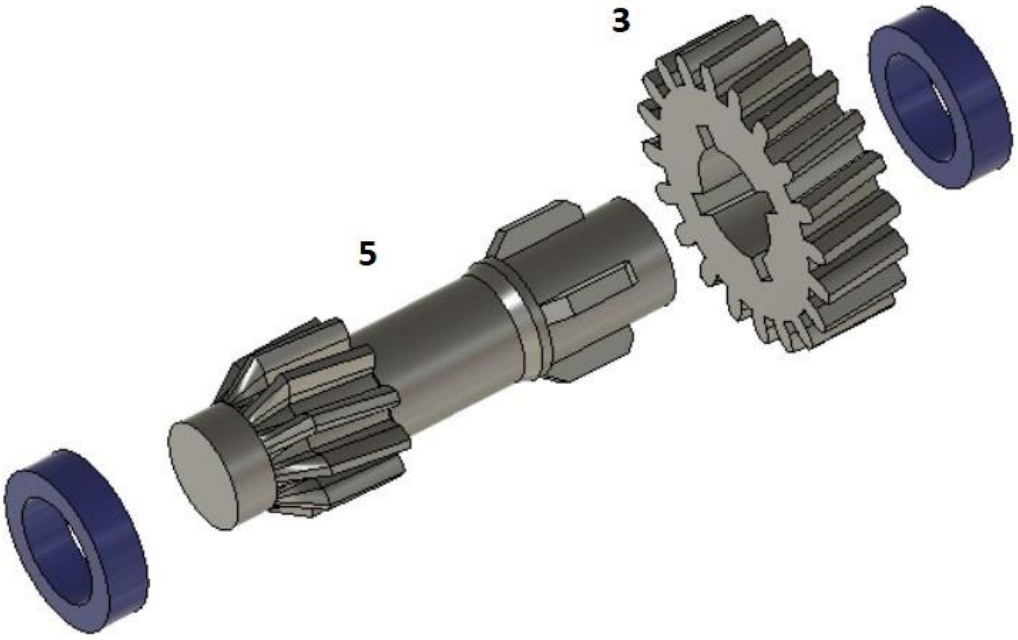
Transmission

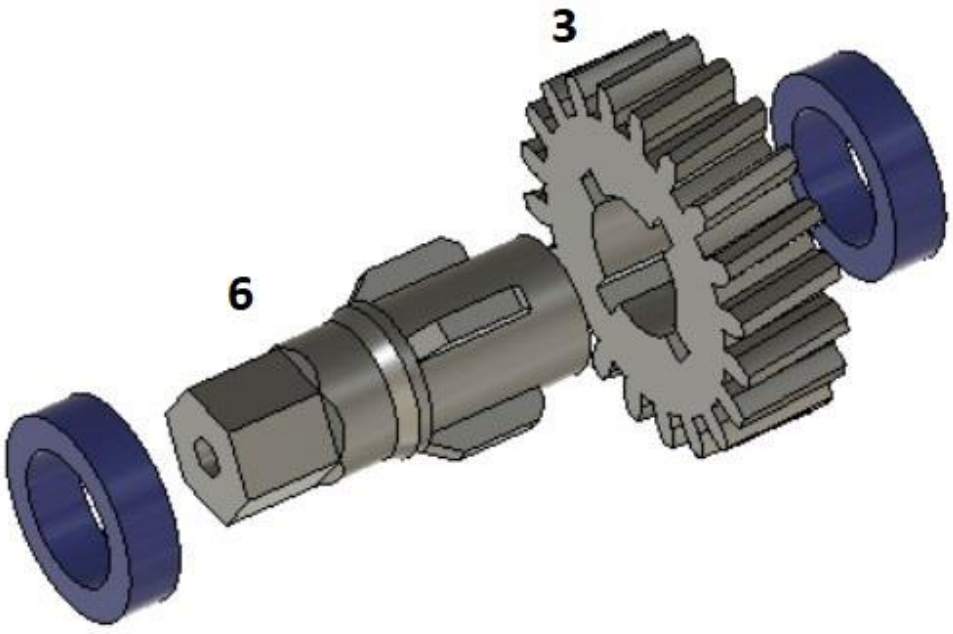
Bearings 10x15x4

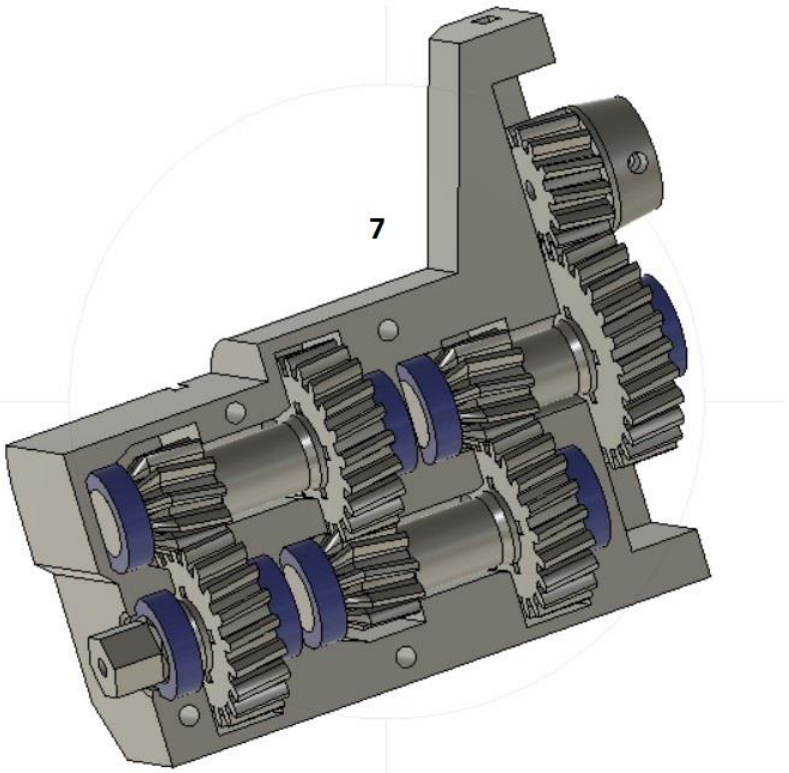




2x

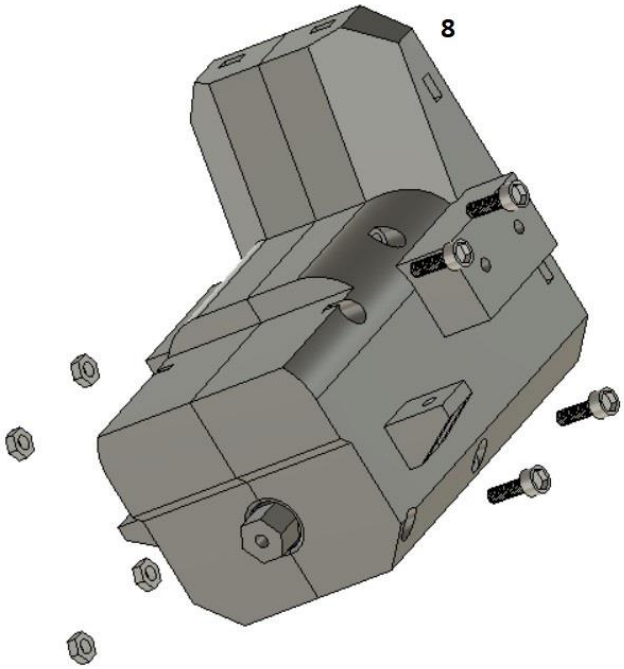






M3x45

Nuts M3

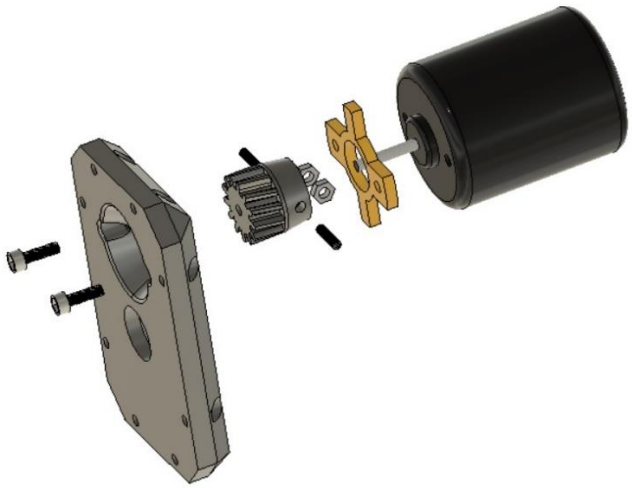


I recommend printing part 10 from temperature-resistant material such as ABS, CPE HG100 and the like.

M3x10

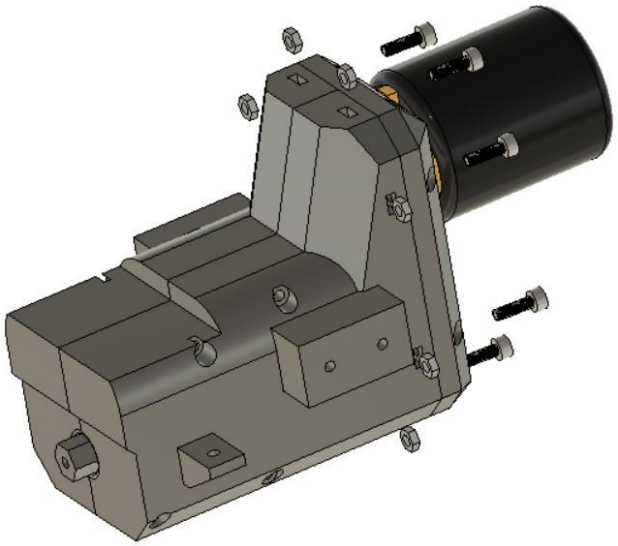
Headless srrews M3x6

Nuts M3

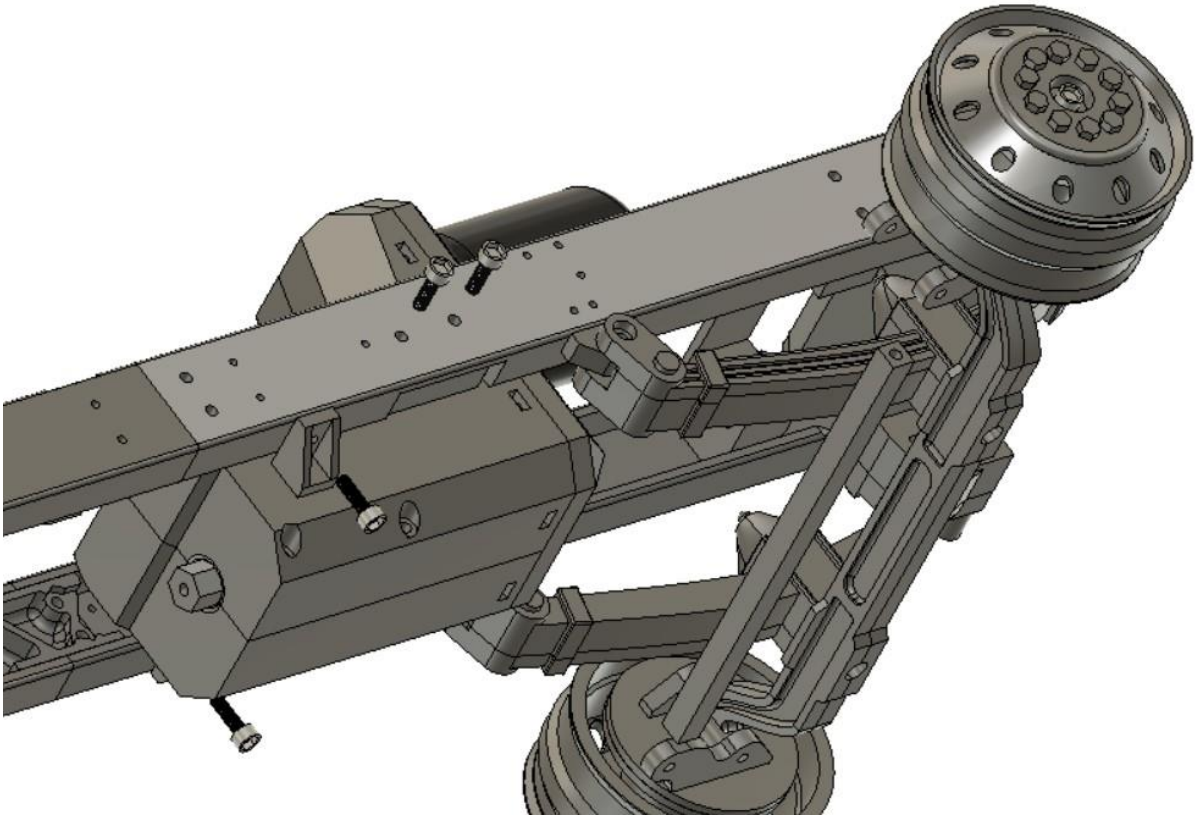


M3x14

Nuts M3

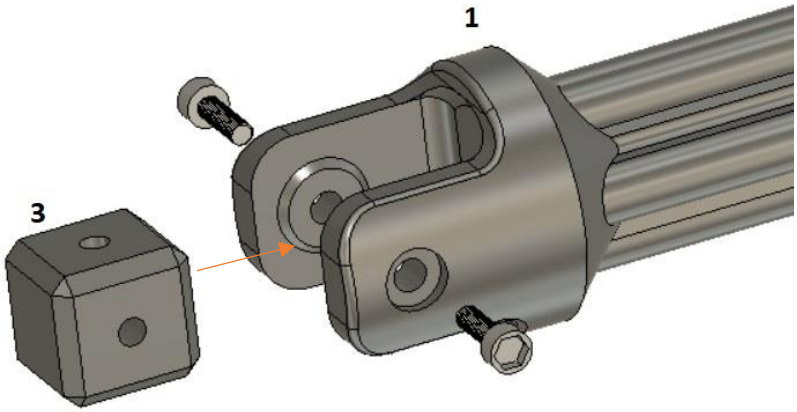


M3x10

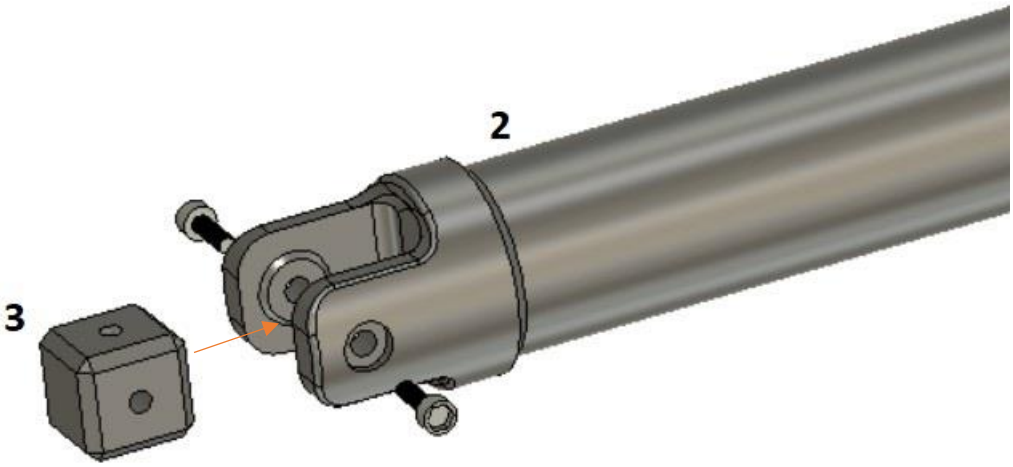


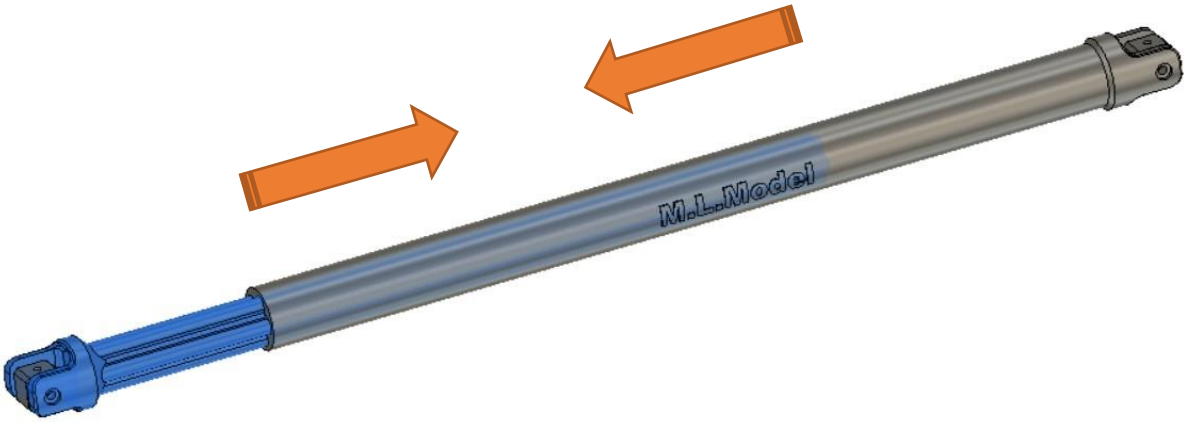
Cardan

M2x5

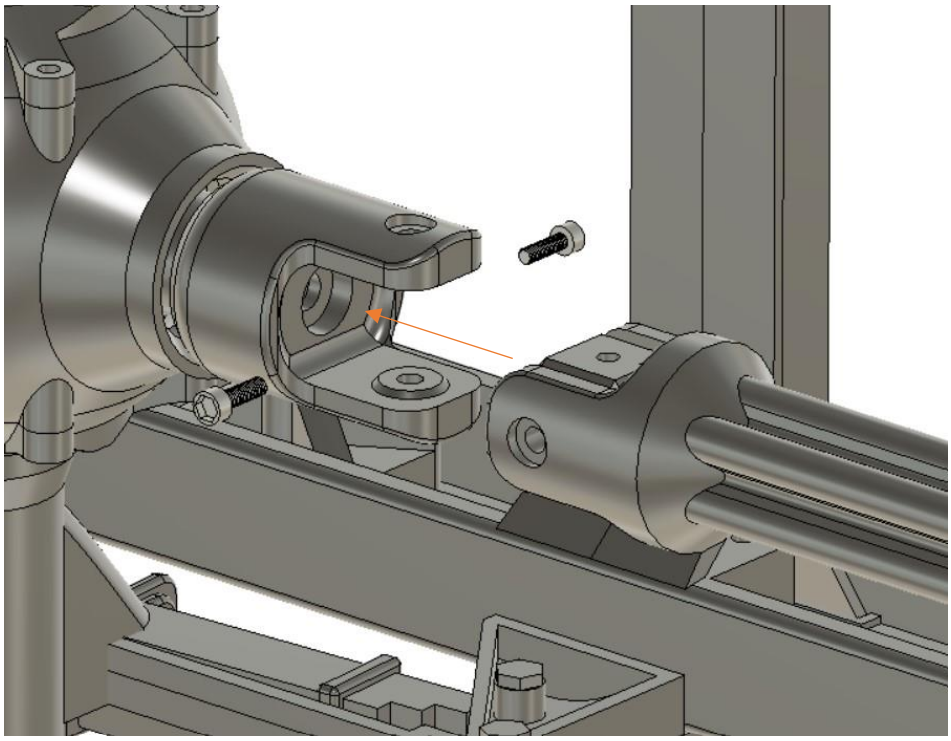


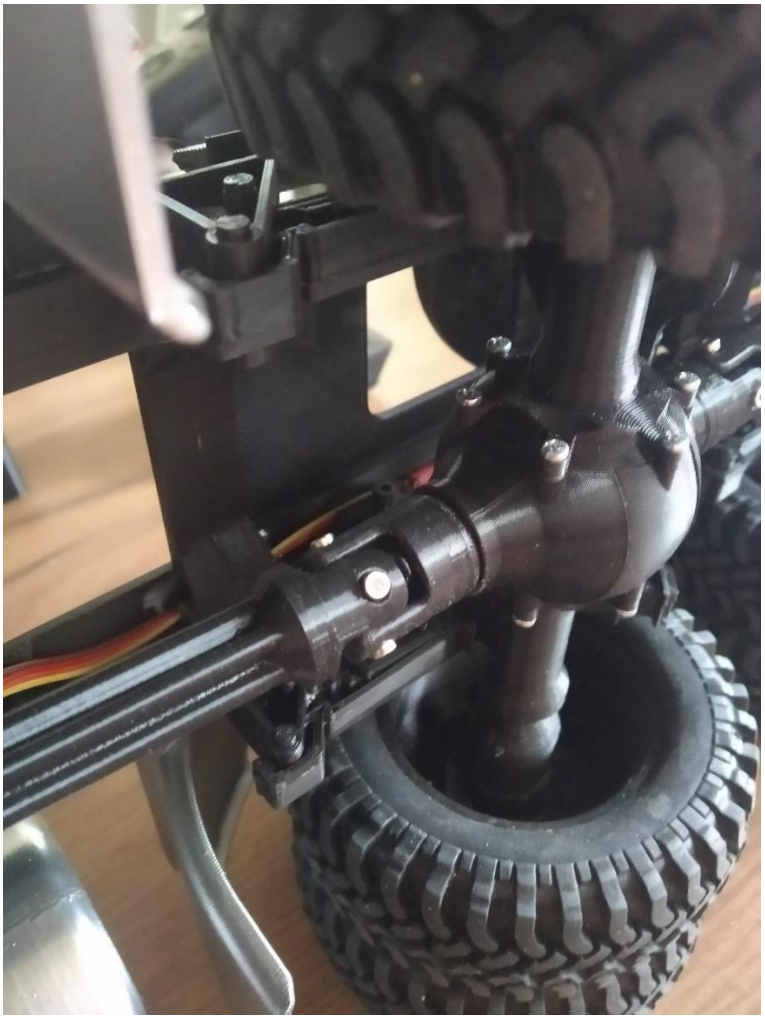
M2x5



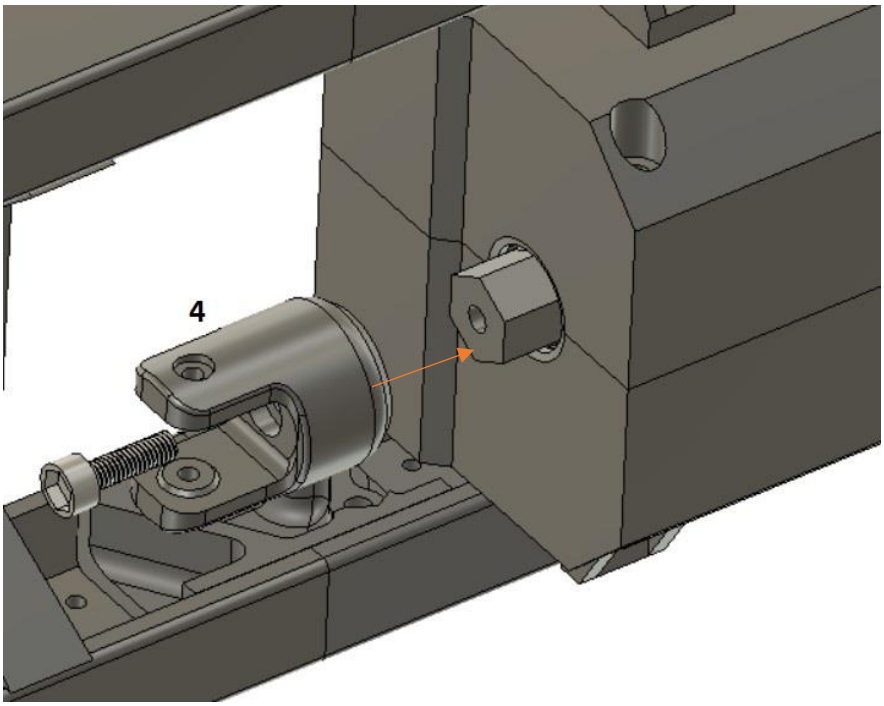


M2x5

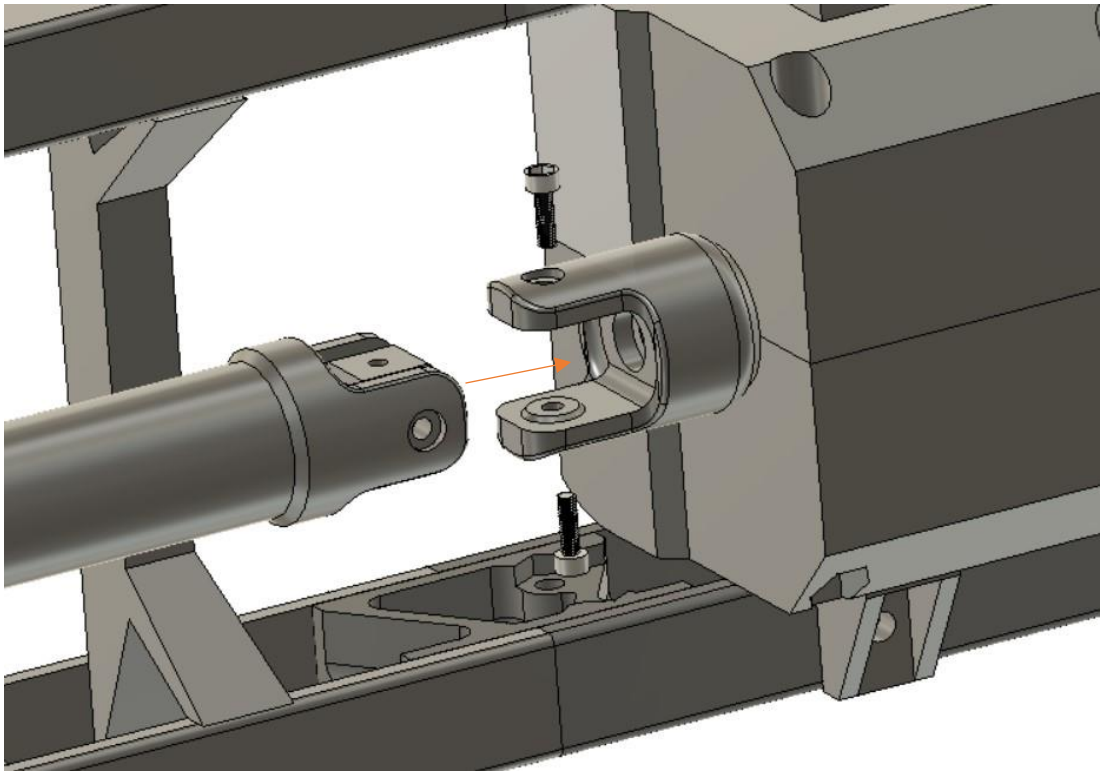


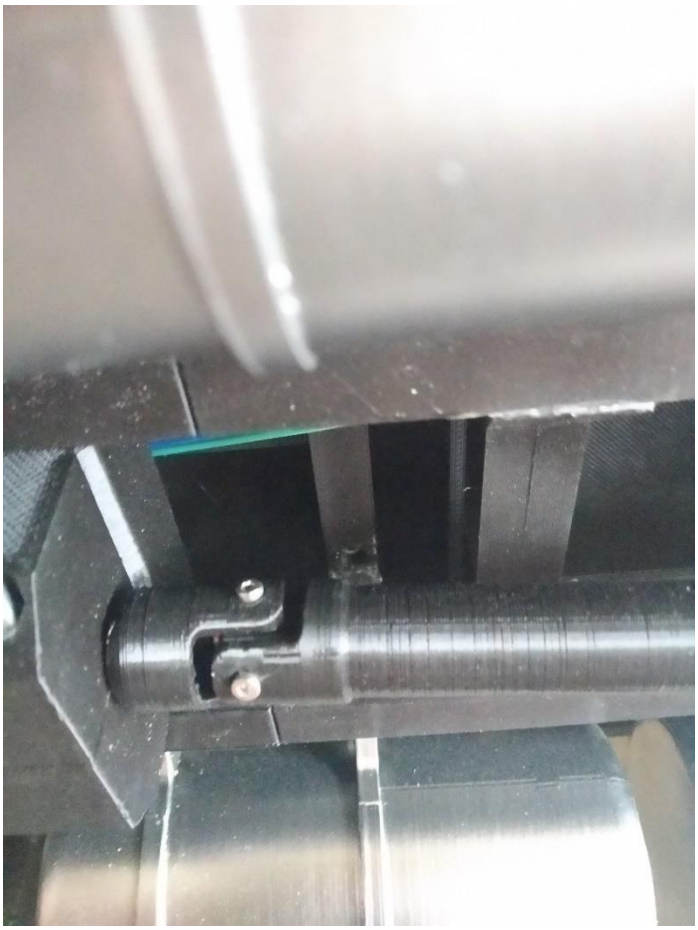


M3x8

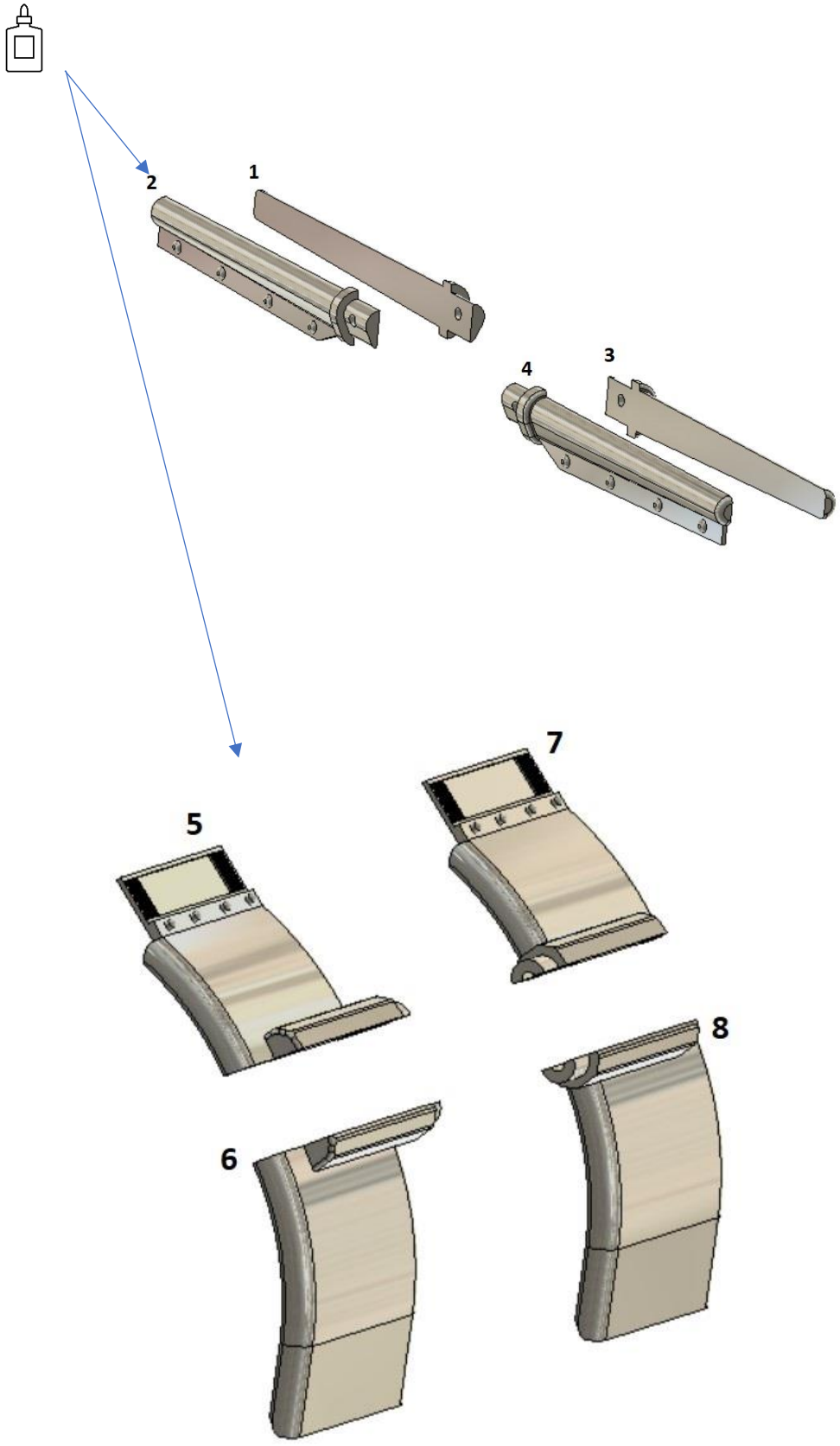


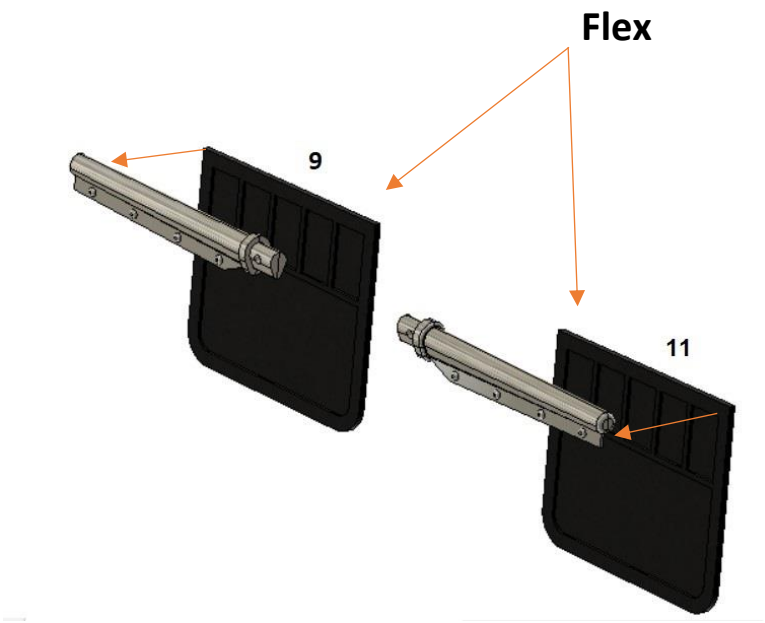
M2x5



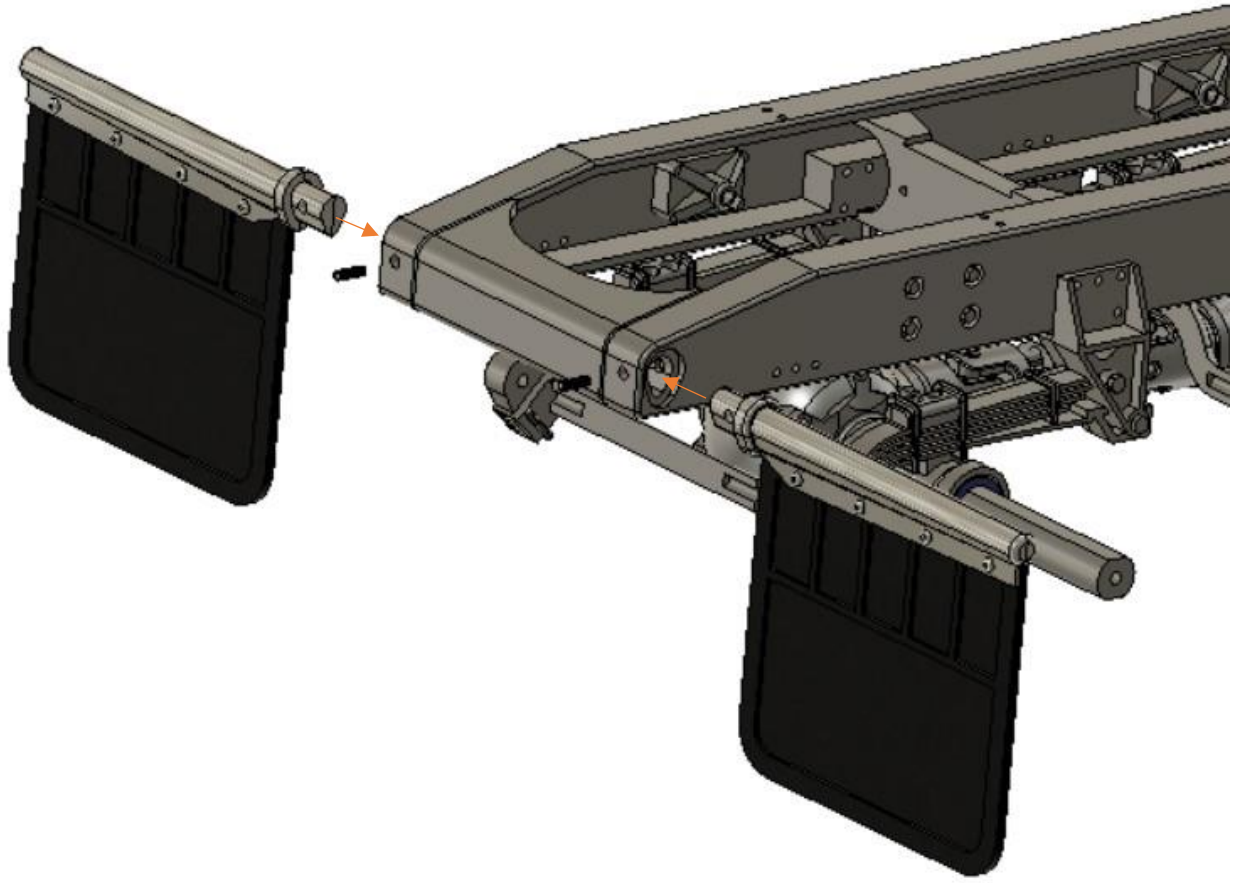


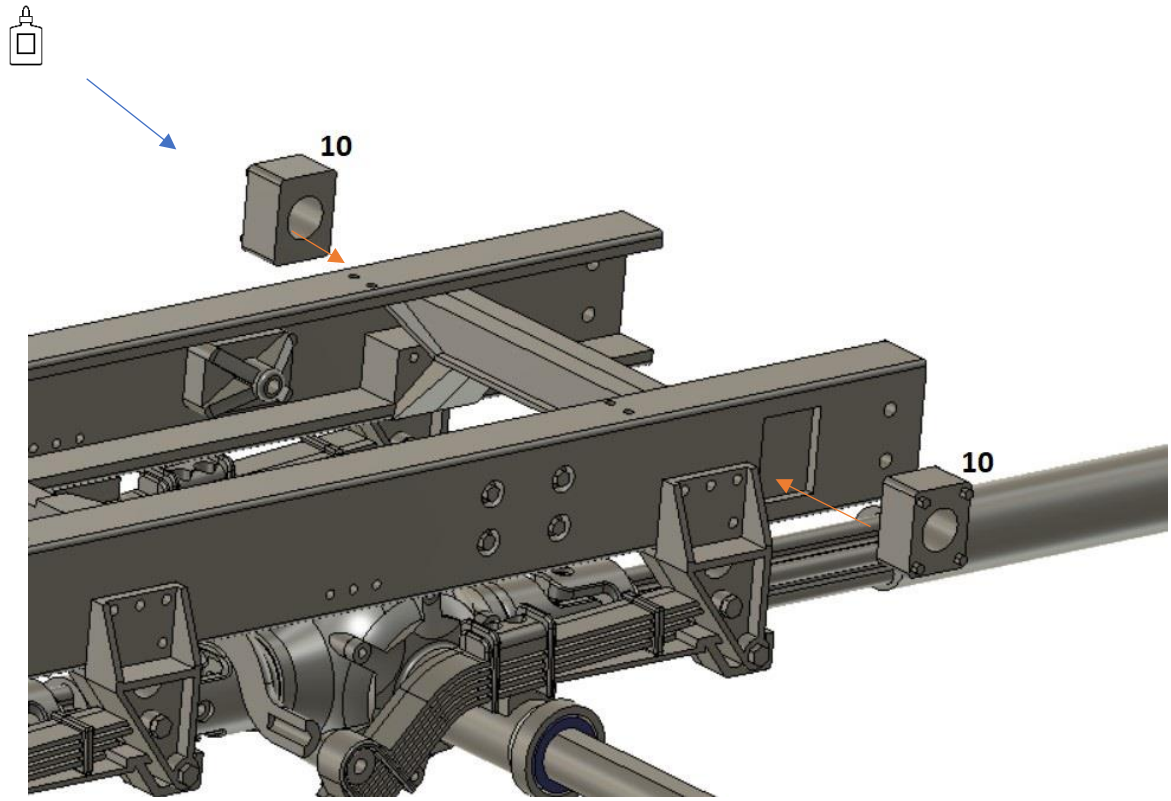
Fenders





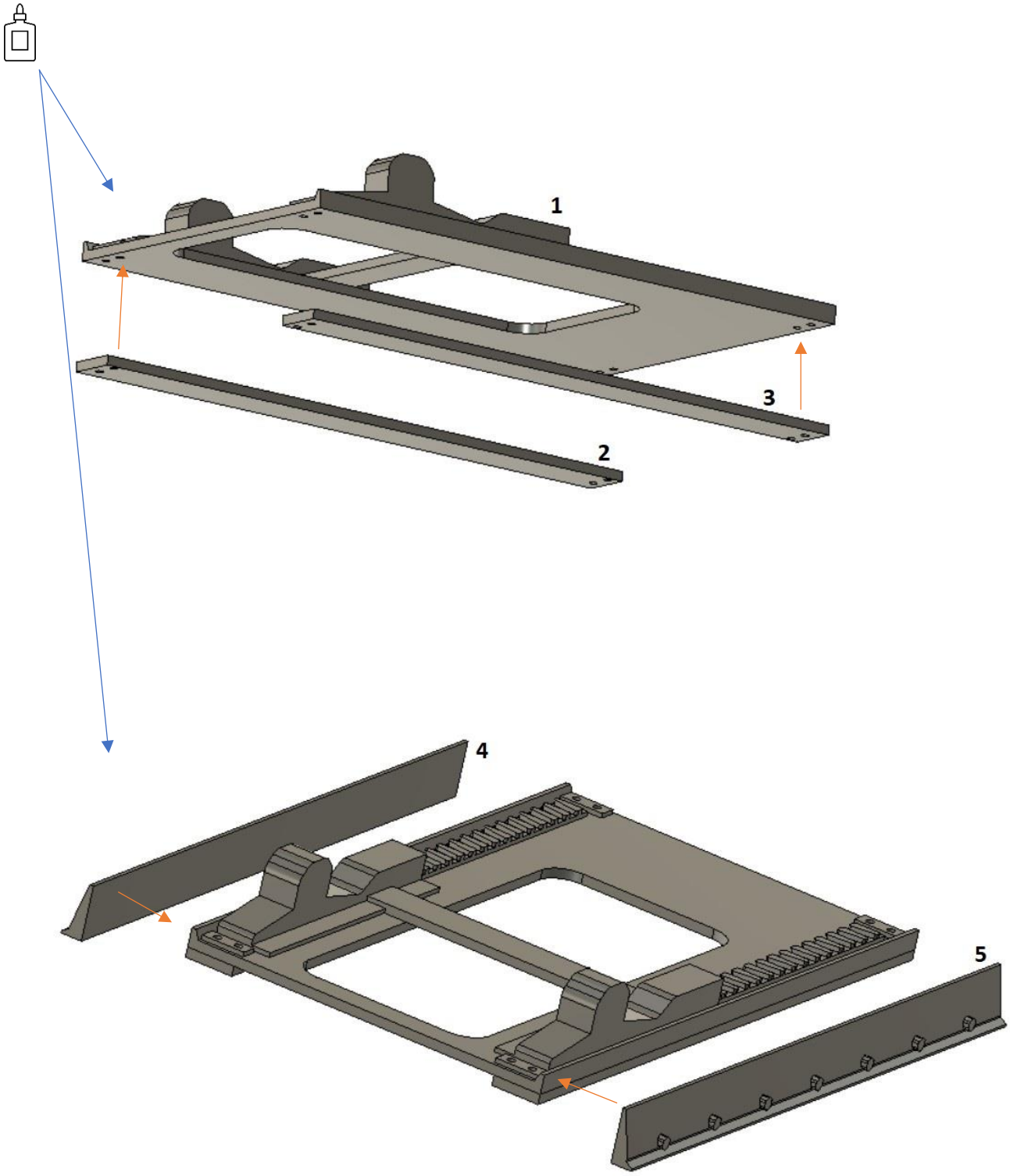
Headless srrews M3x10

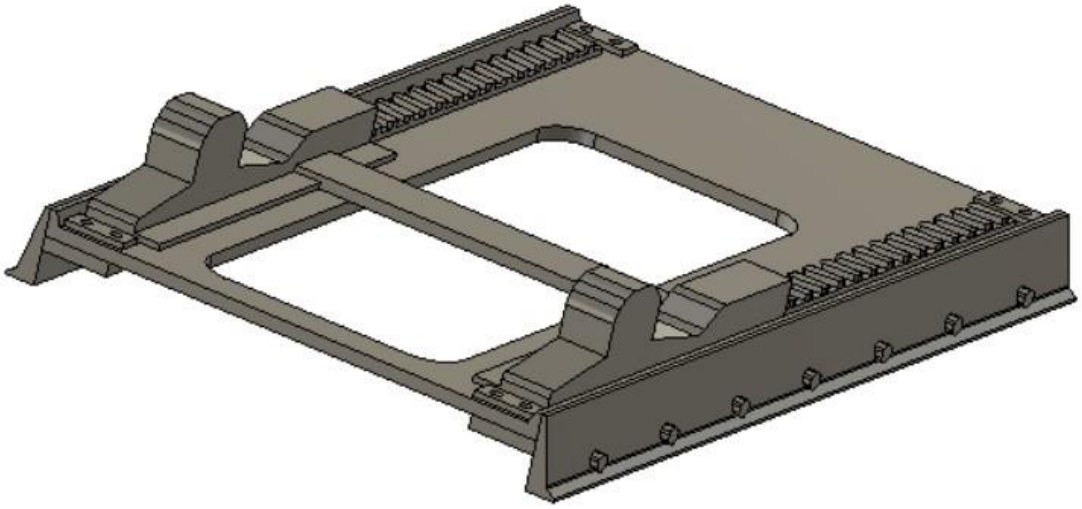


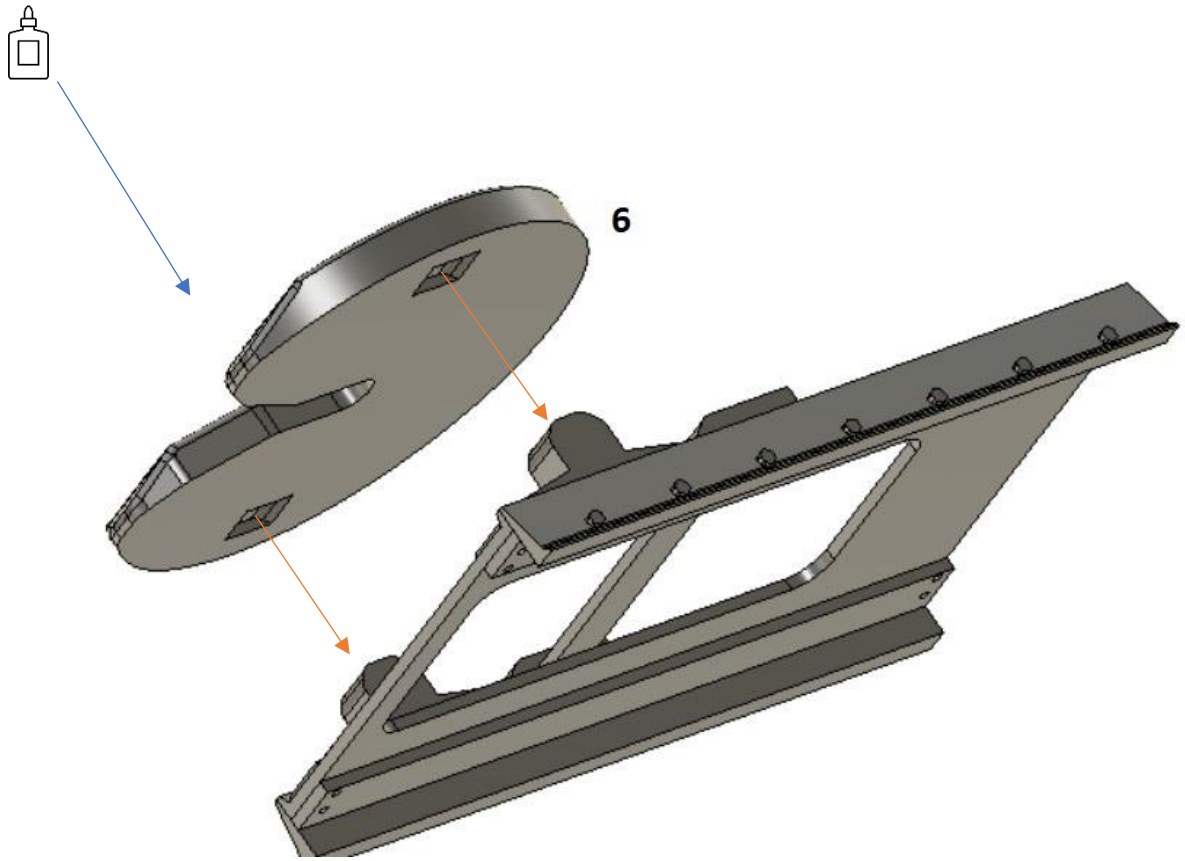


M3x10

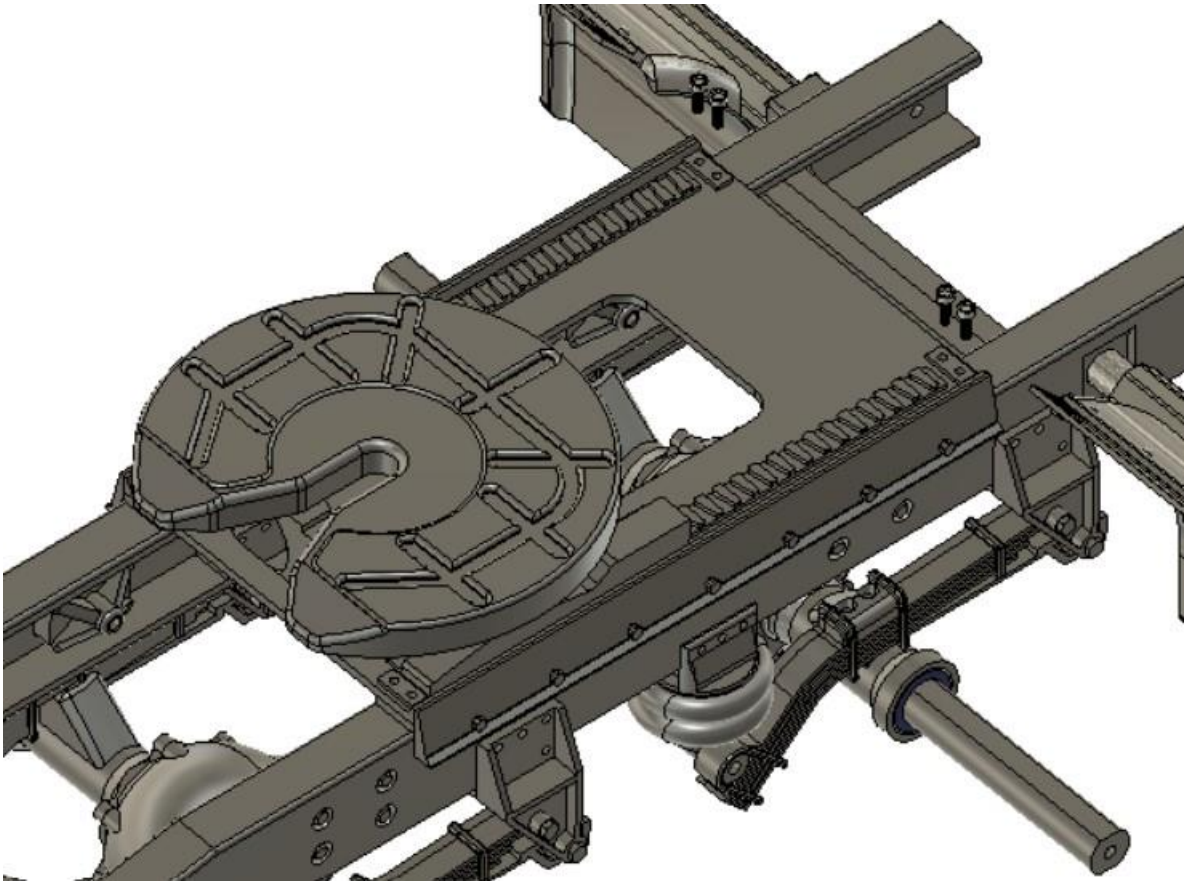
Turntable



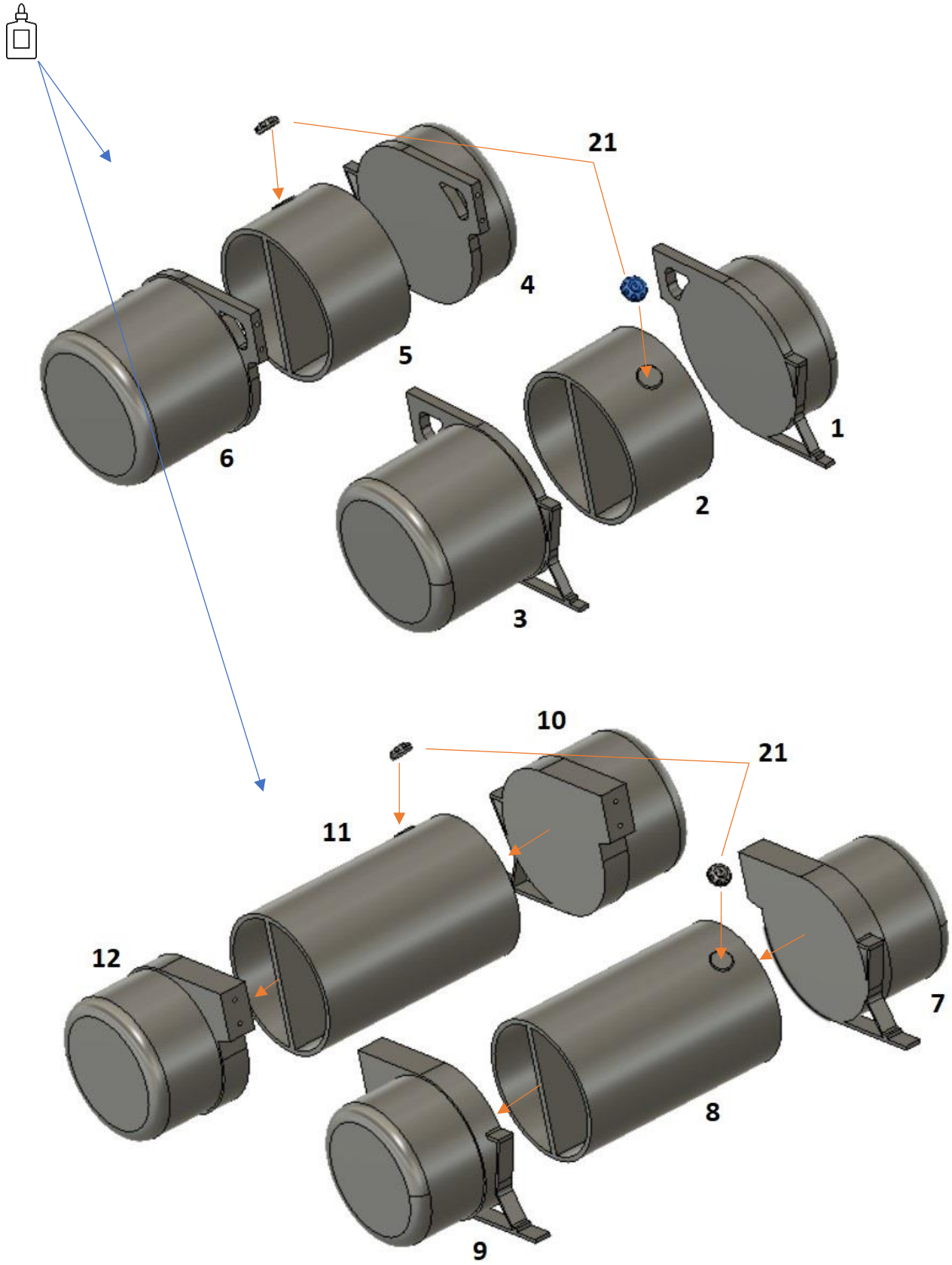


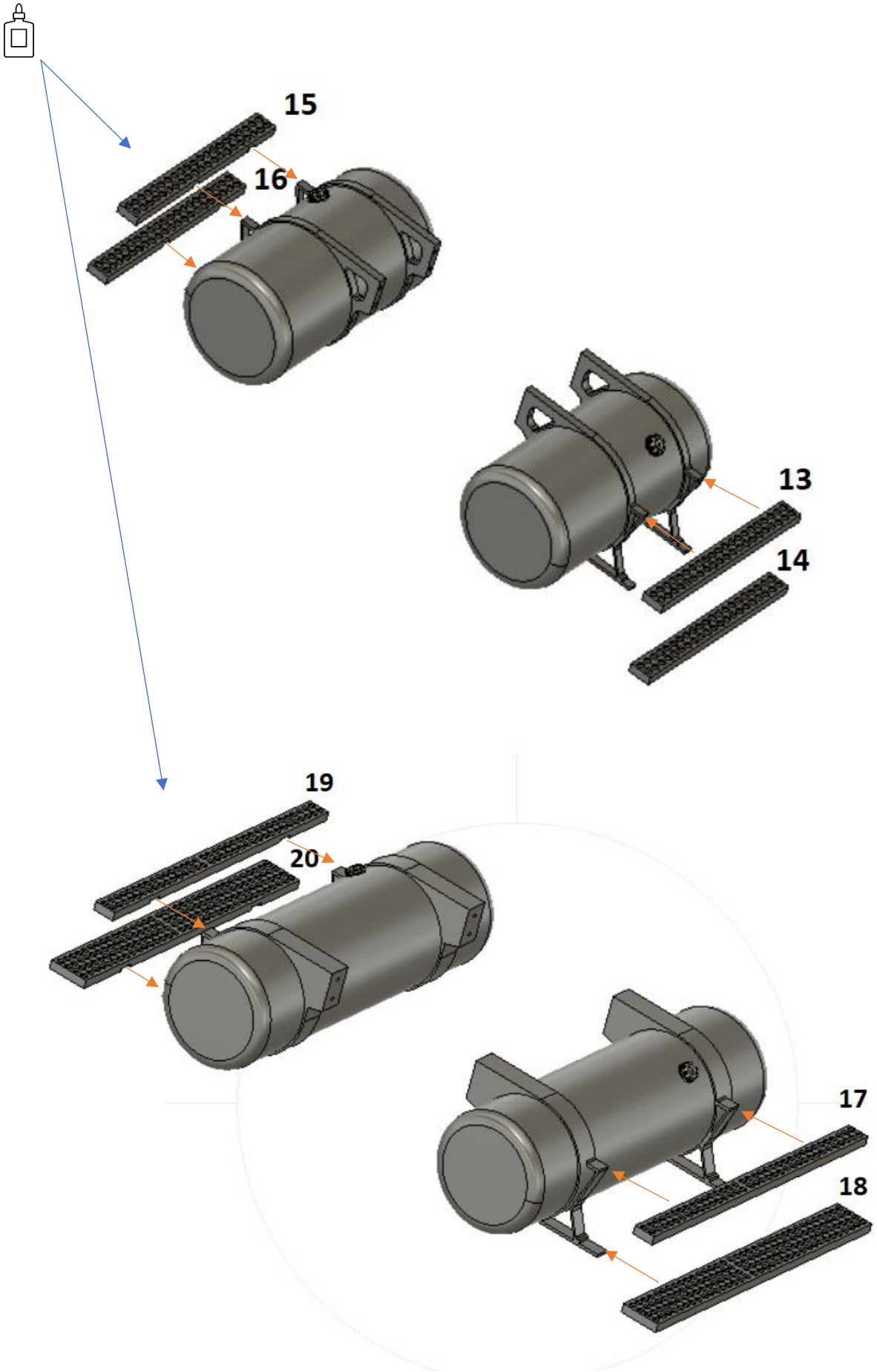

6

M2x10



Tanks




15
16
13
14
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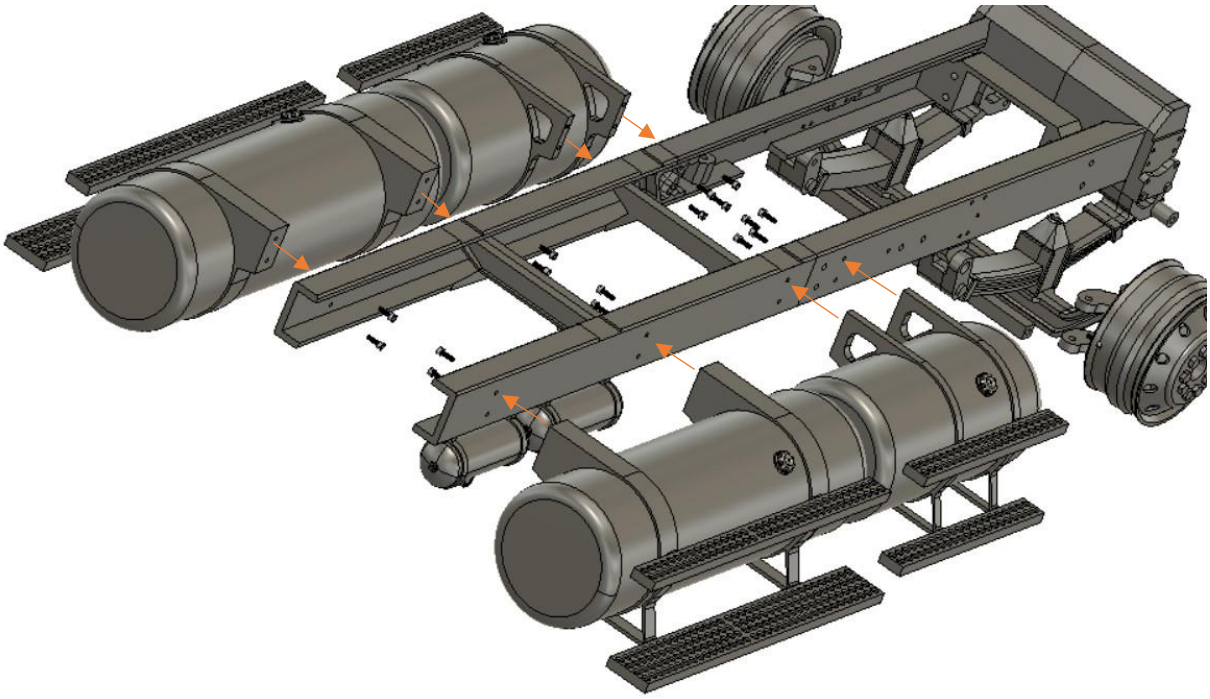
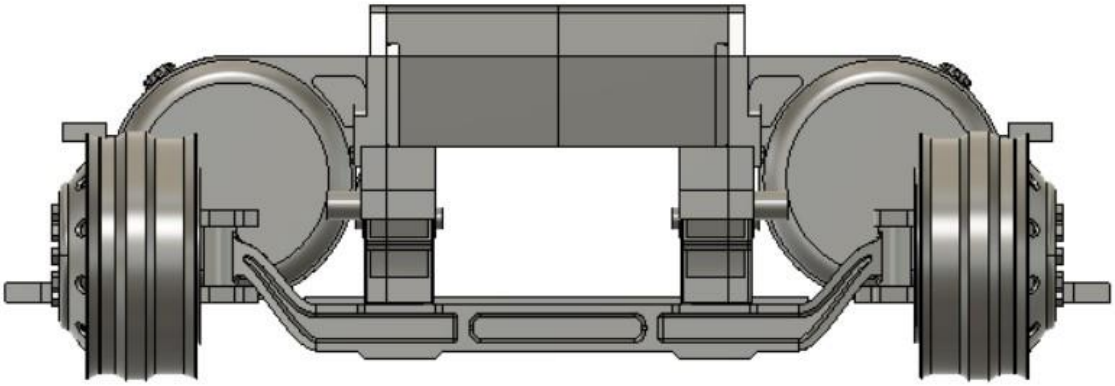
17
18

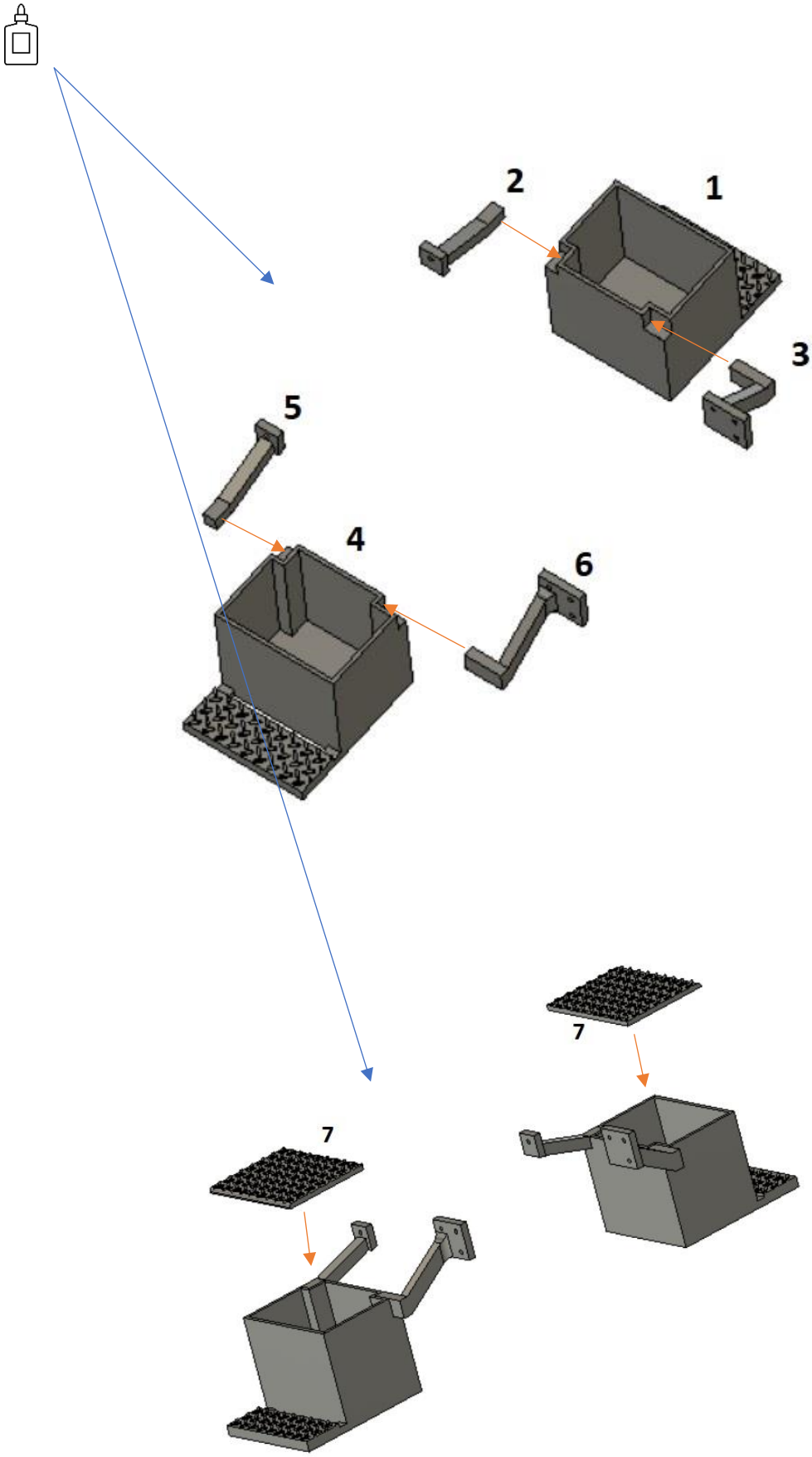
Before mounting, remove the gearbox with the gimbal for better access to the screws.

M2x8

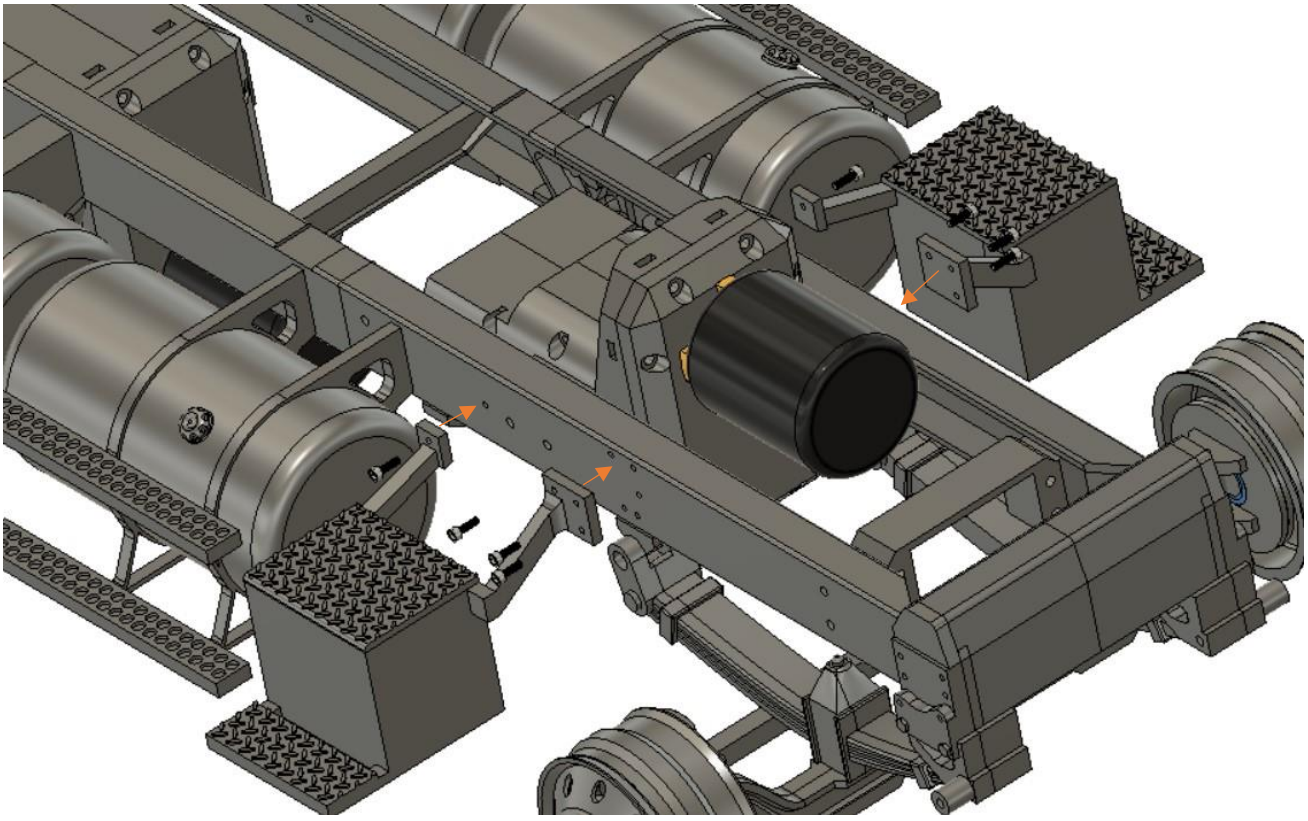


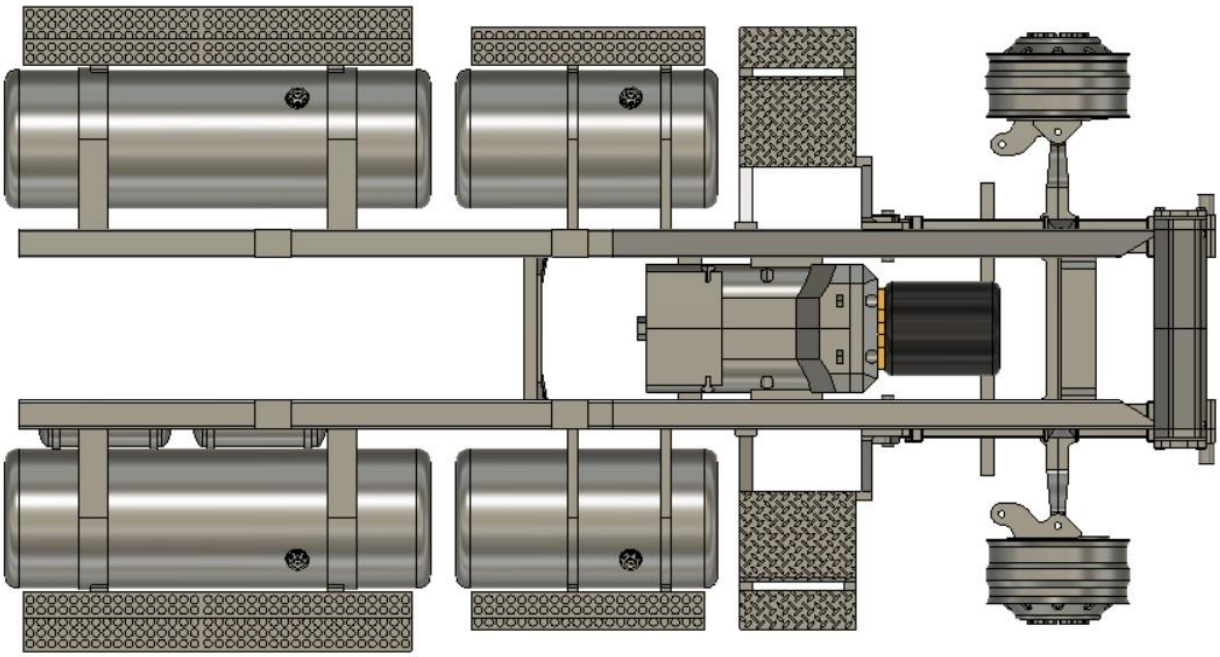


Stairs

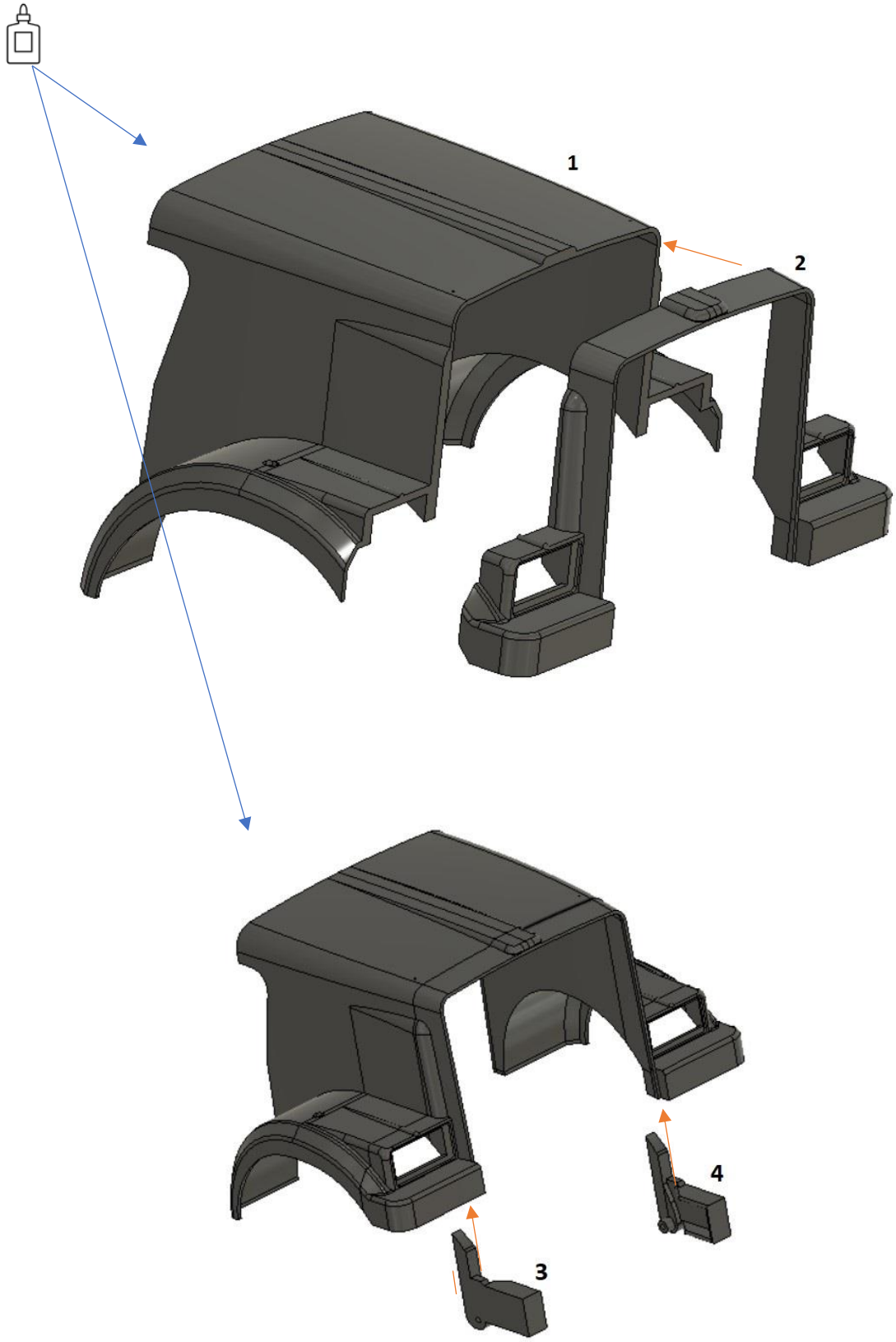


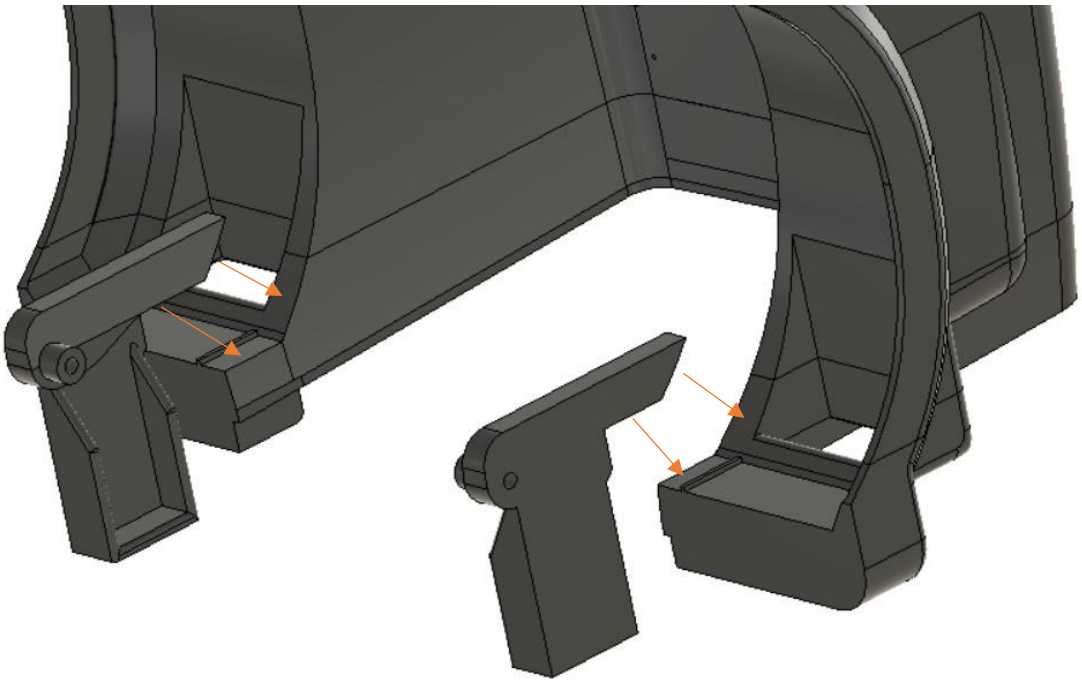
M2x6

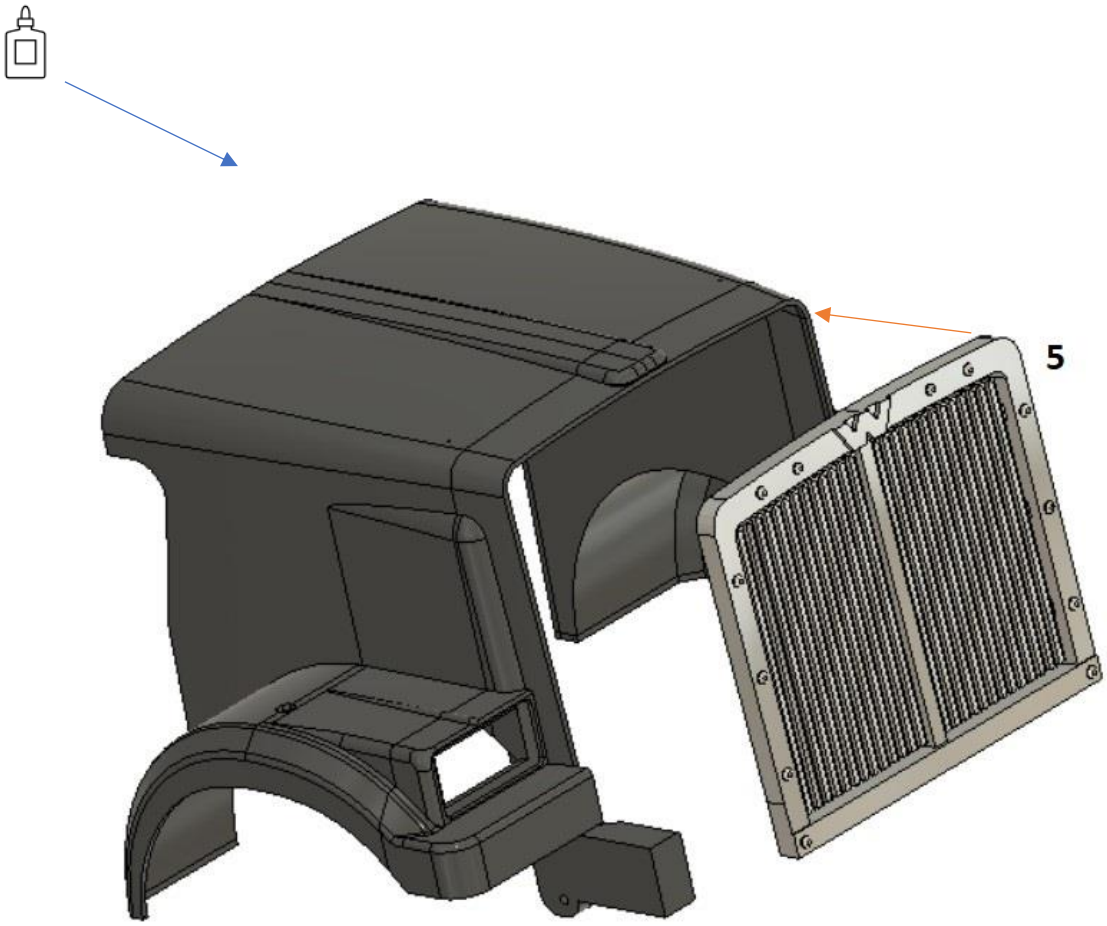




Capote



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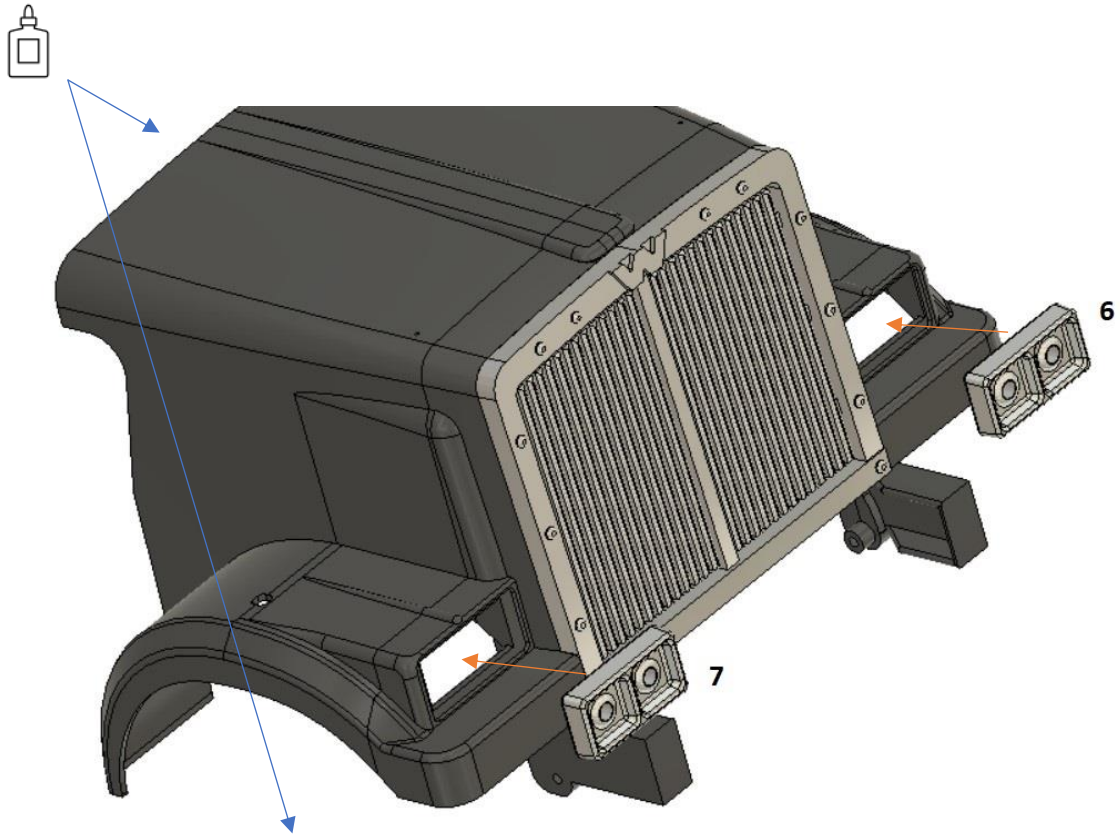
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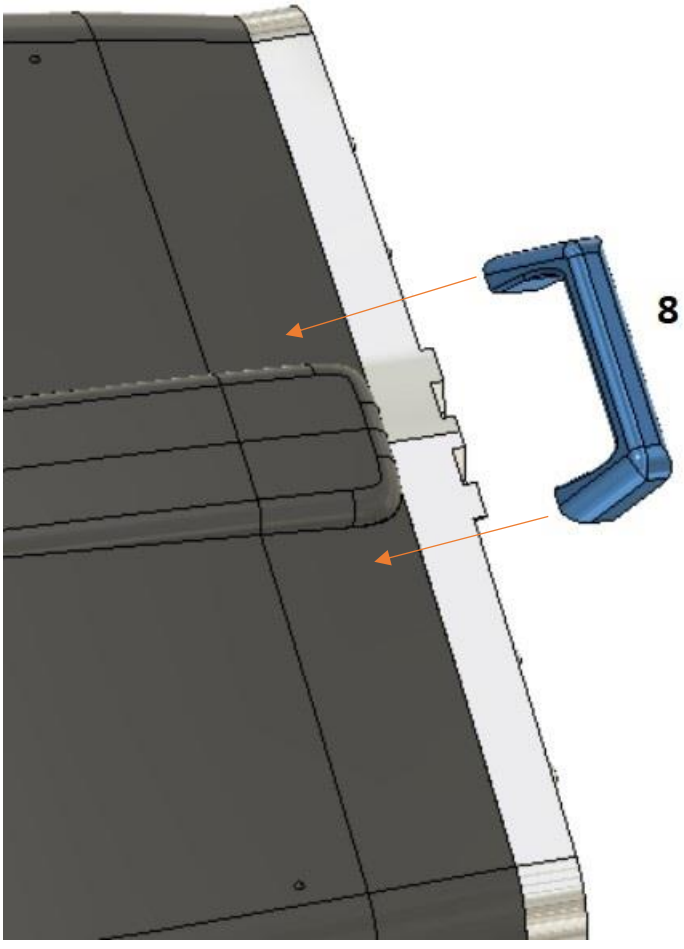
7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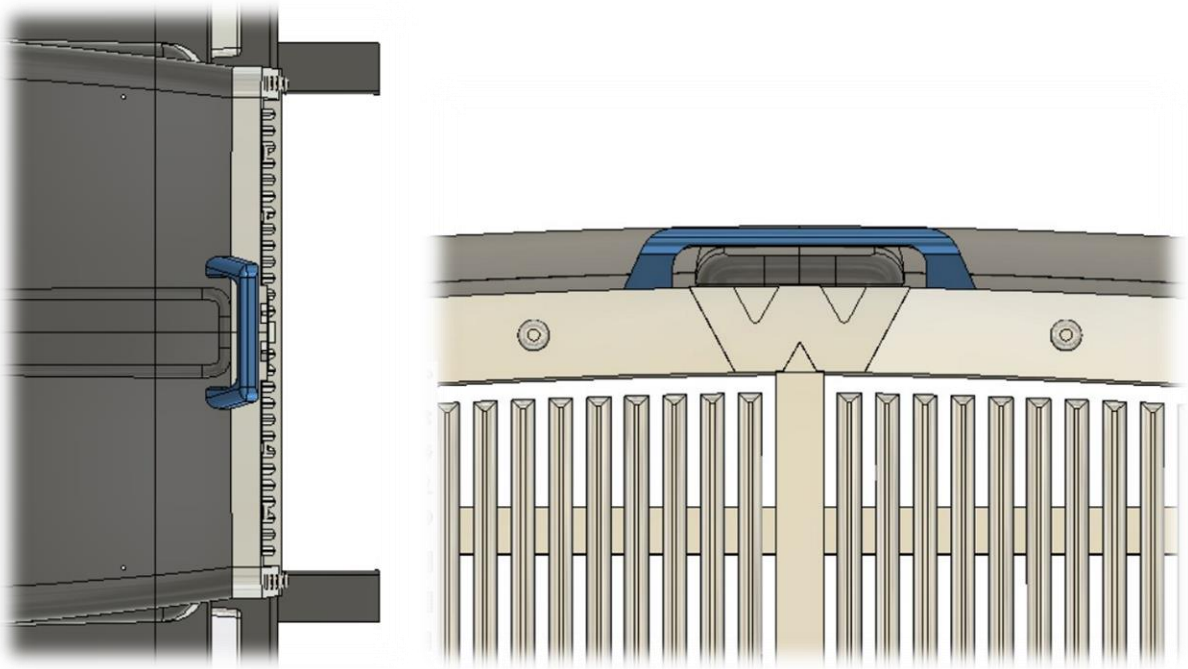
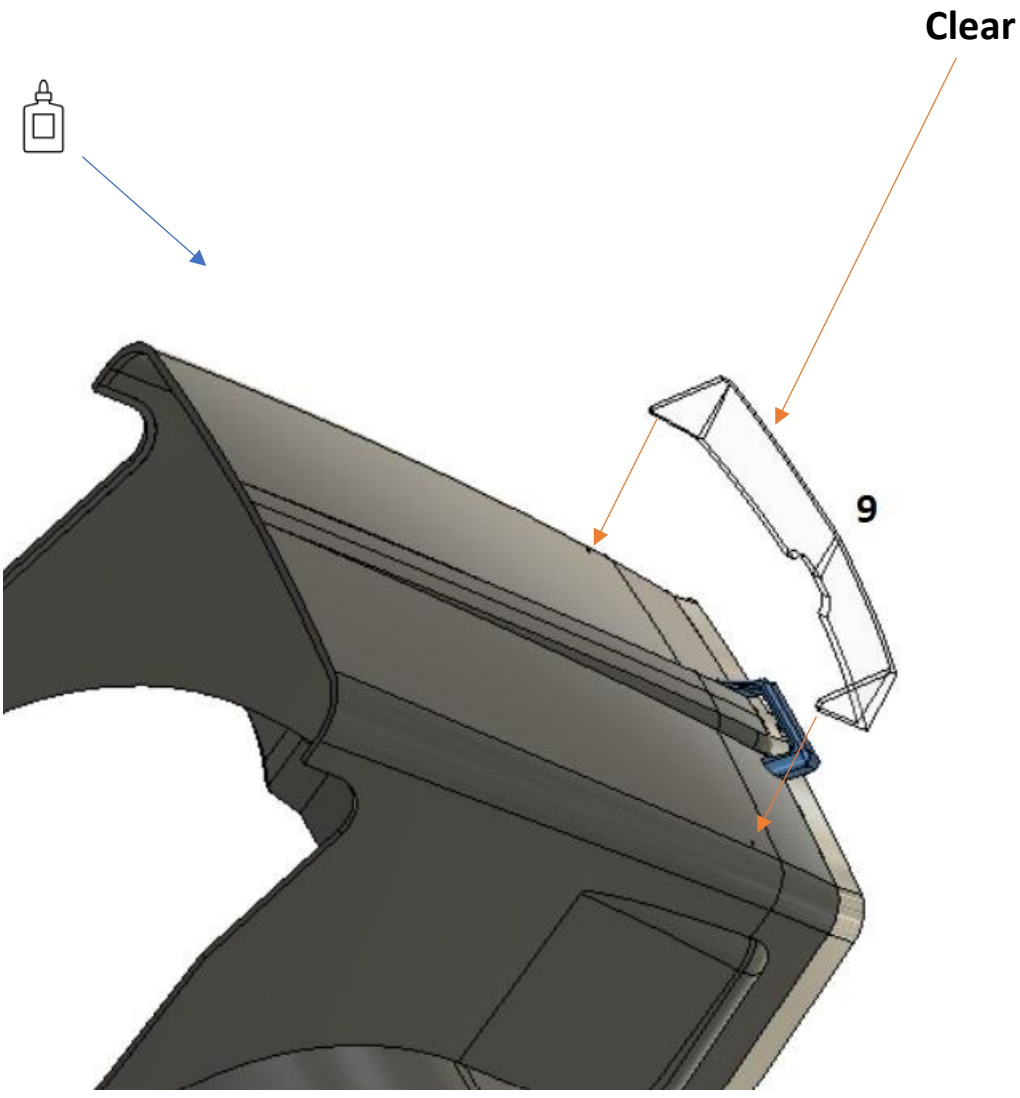
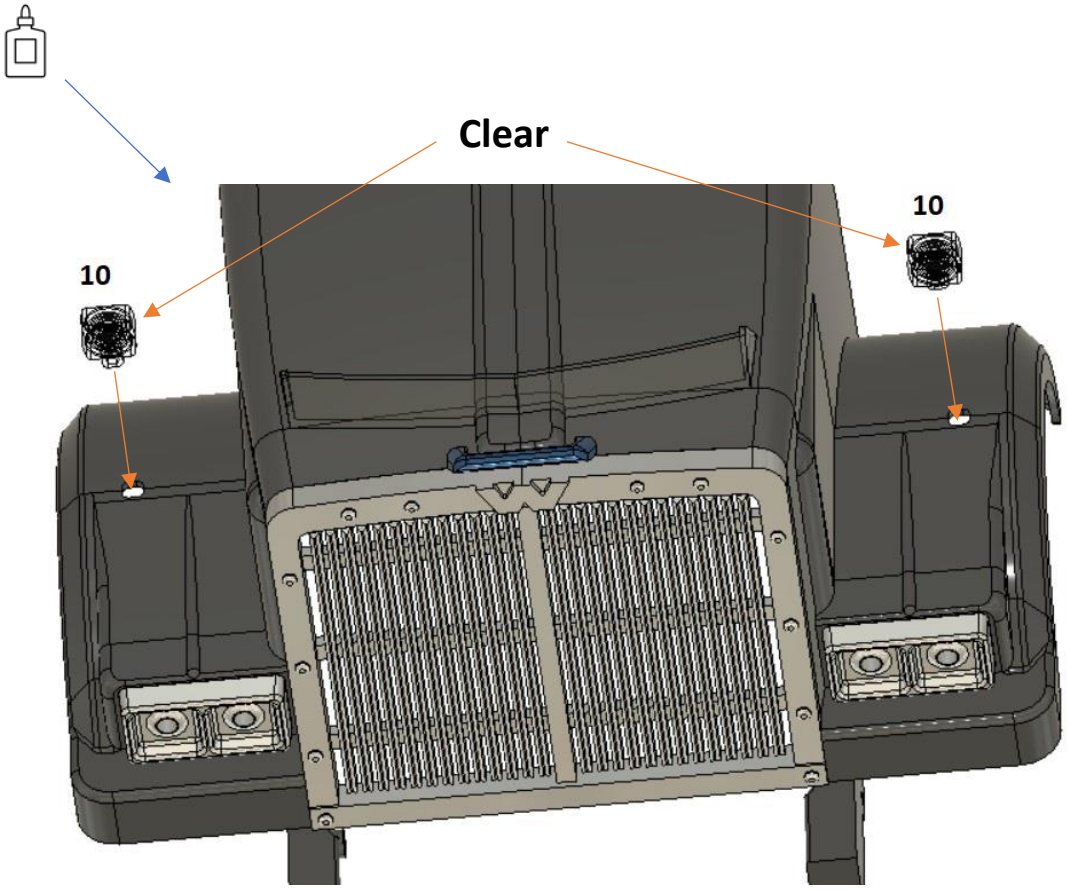
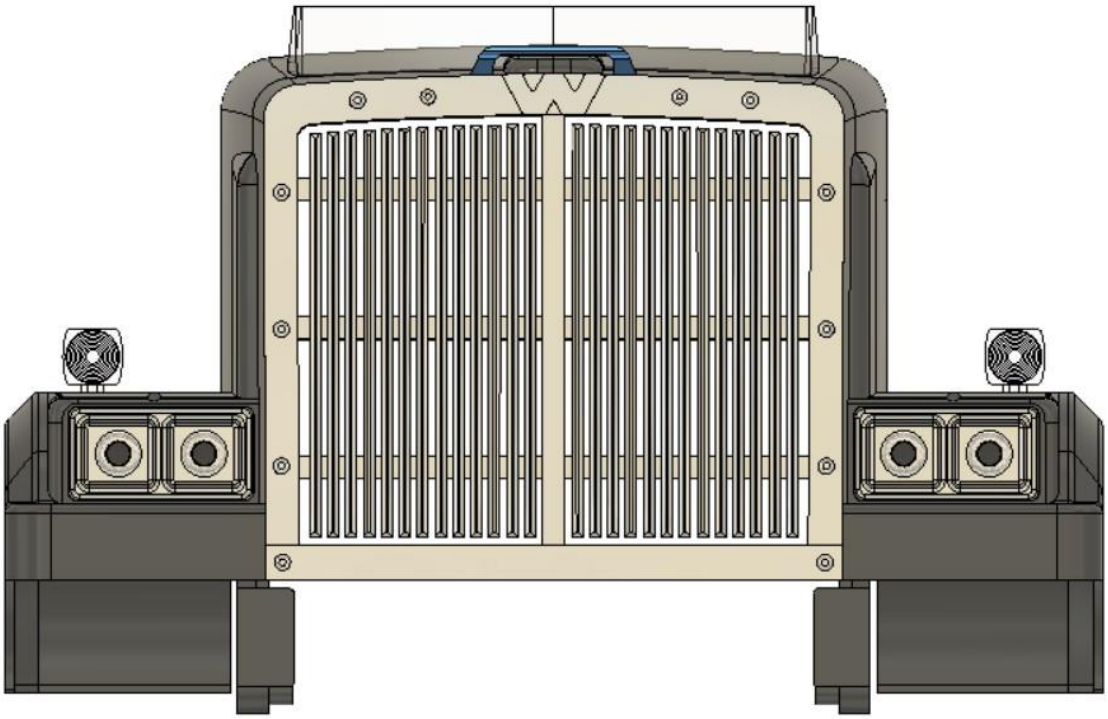
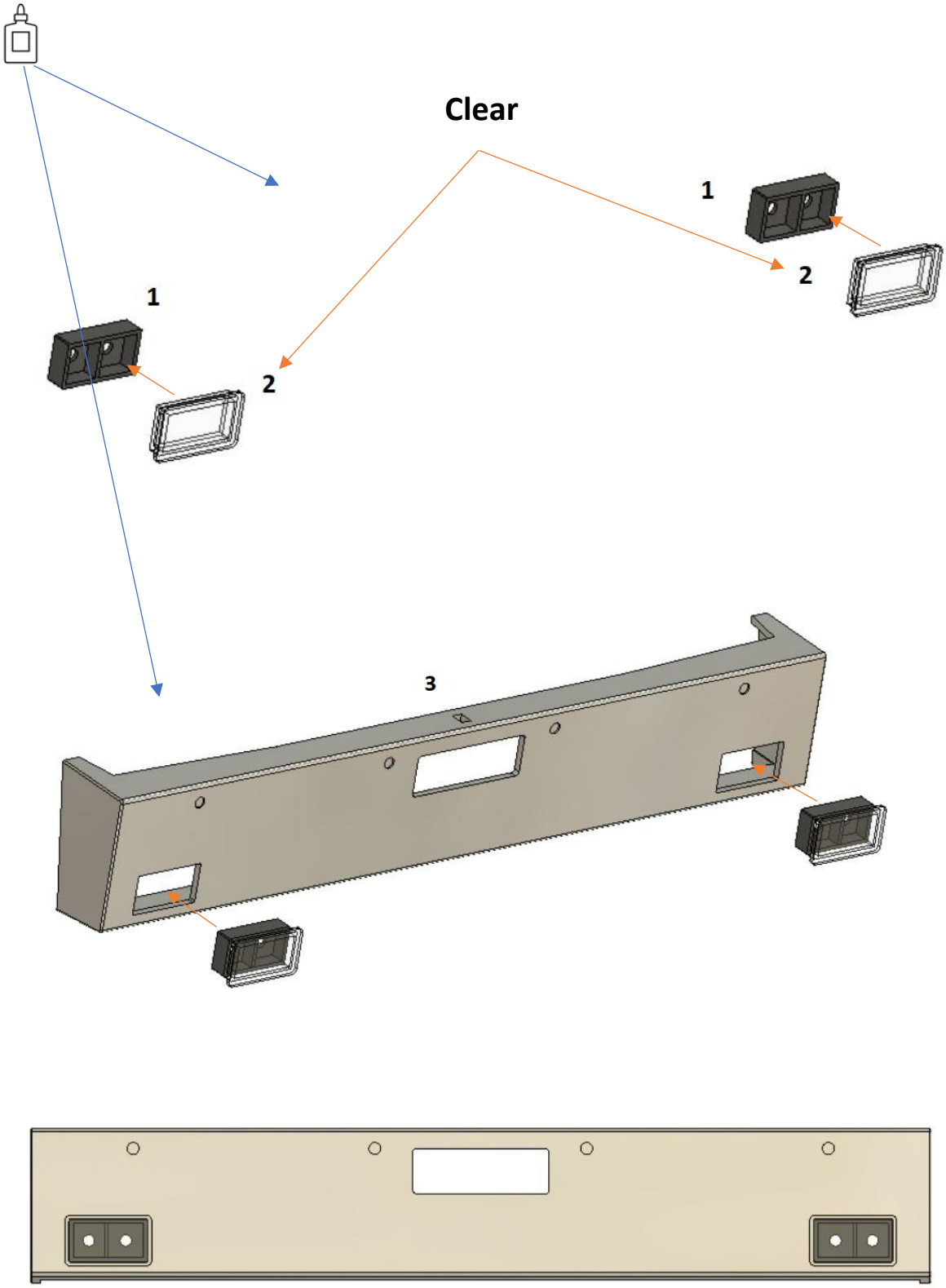



Clear
9

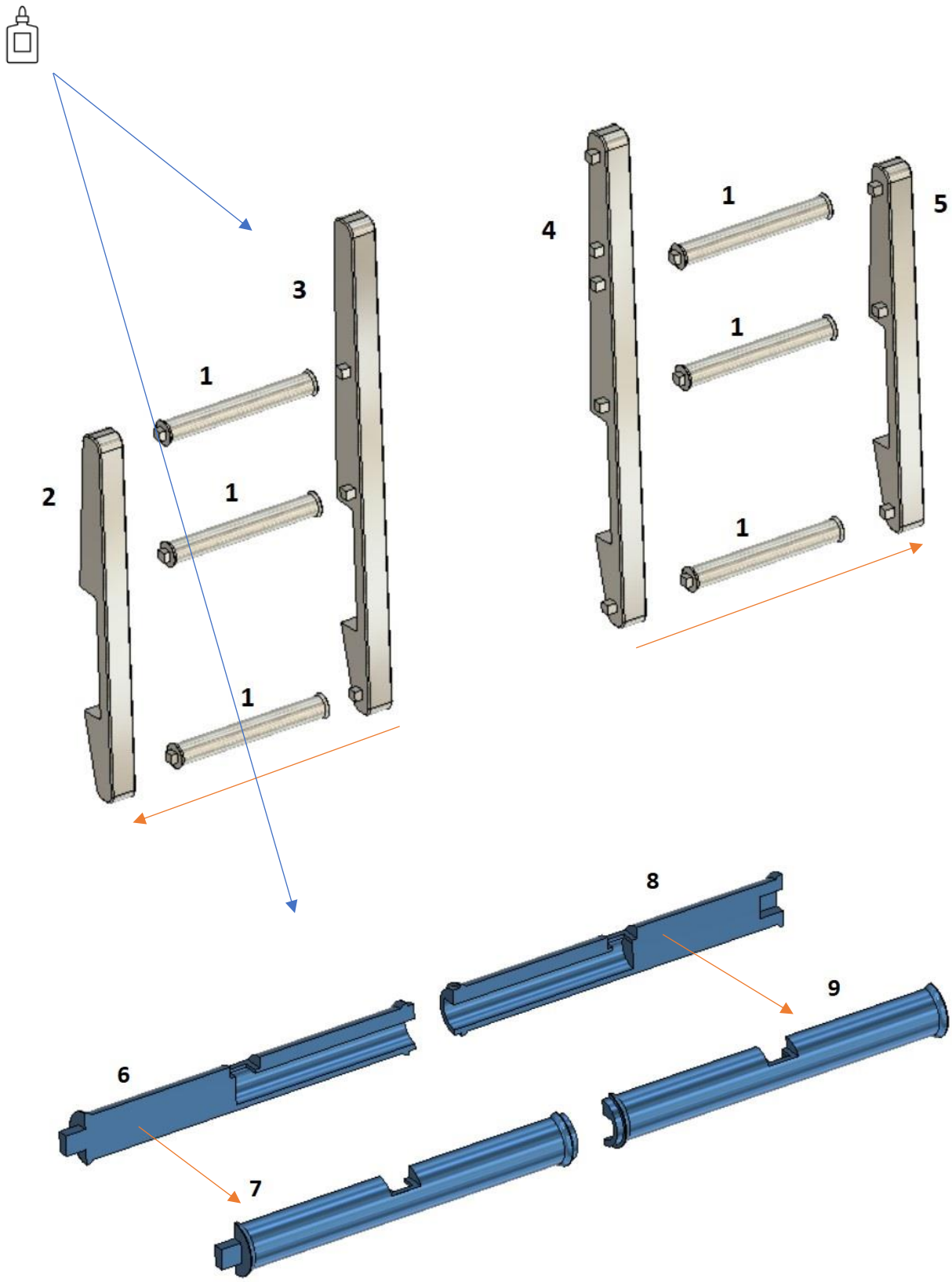

Clear
10
10



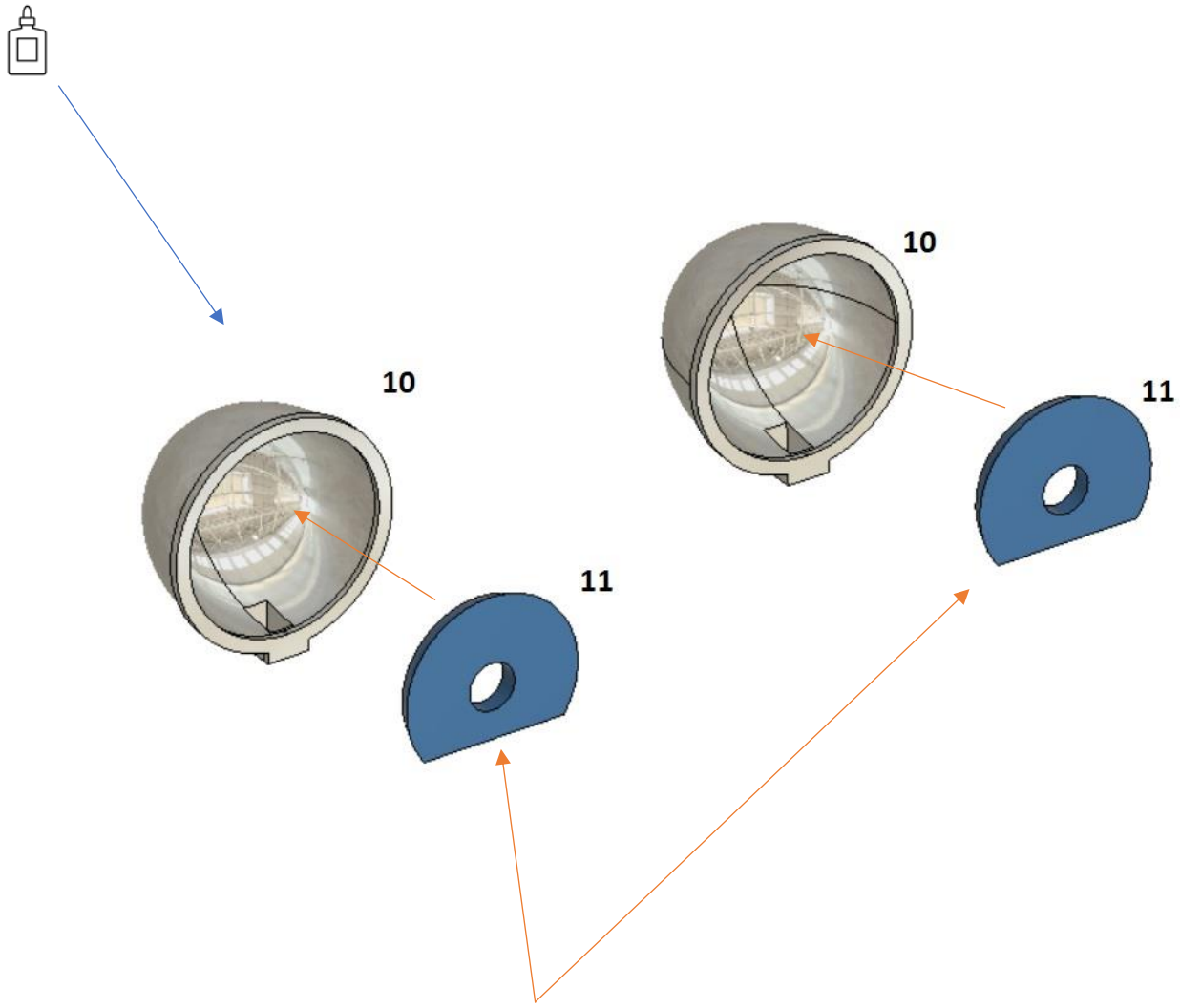
Bumper



Frame



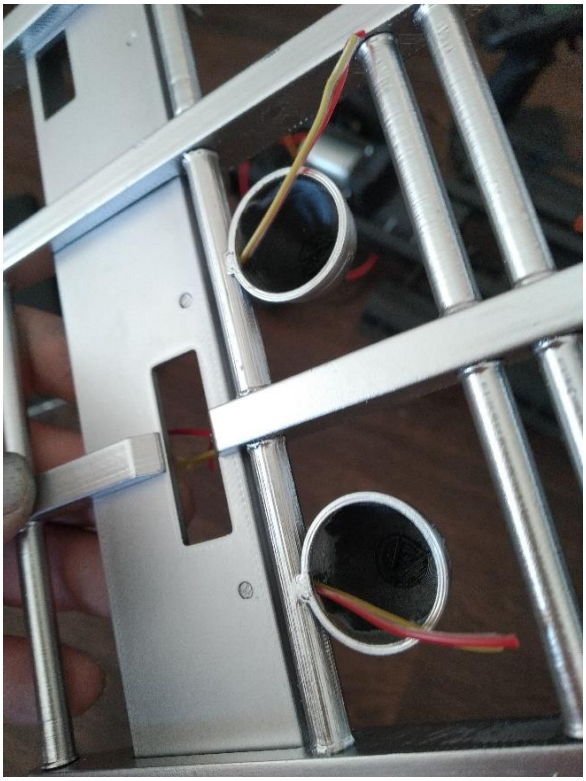
Before the next step, prepare 2 5mm white LEDs. We solder the wires, which must be so thin, to go through the holes in the parts (preferably: https://www.gme.cz/kabel-plochy-awg28-fbk64h-1-2mm).

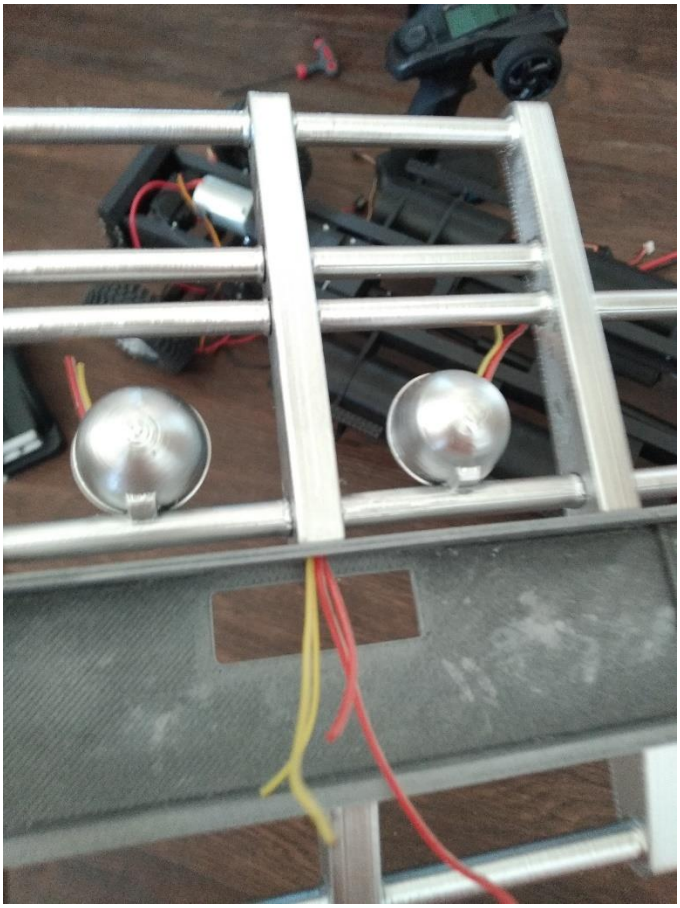


In part 11 we insert LEDs and wires through the holes in part 10.

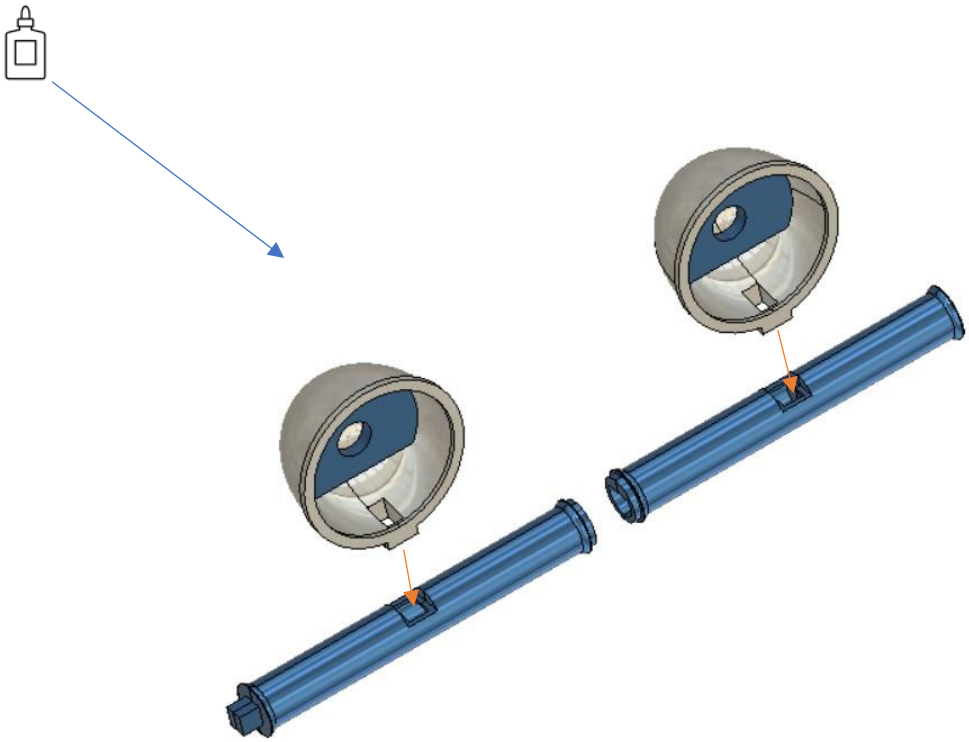
Insert the parts 11 with LEDs as far as they will go into the parts 10 and then glue them.

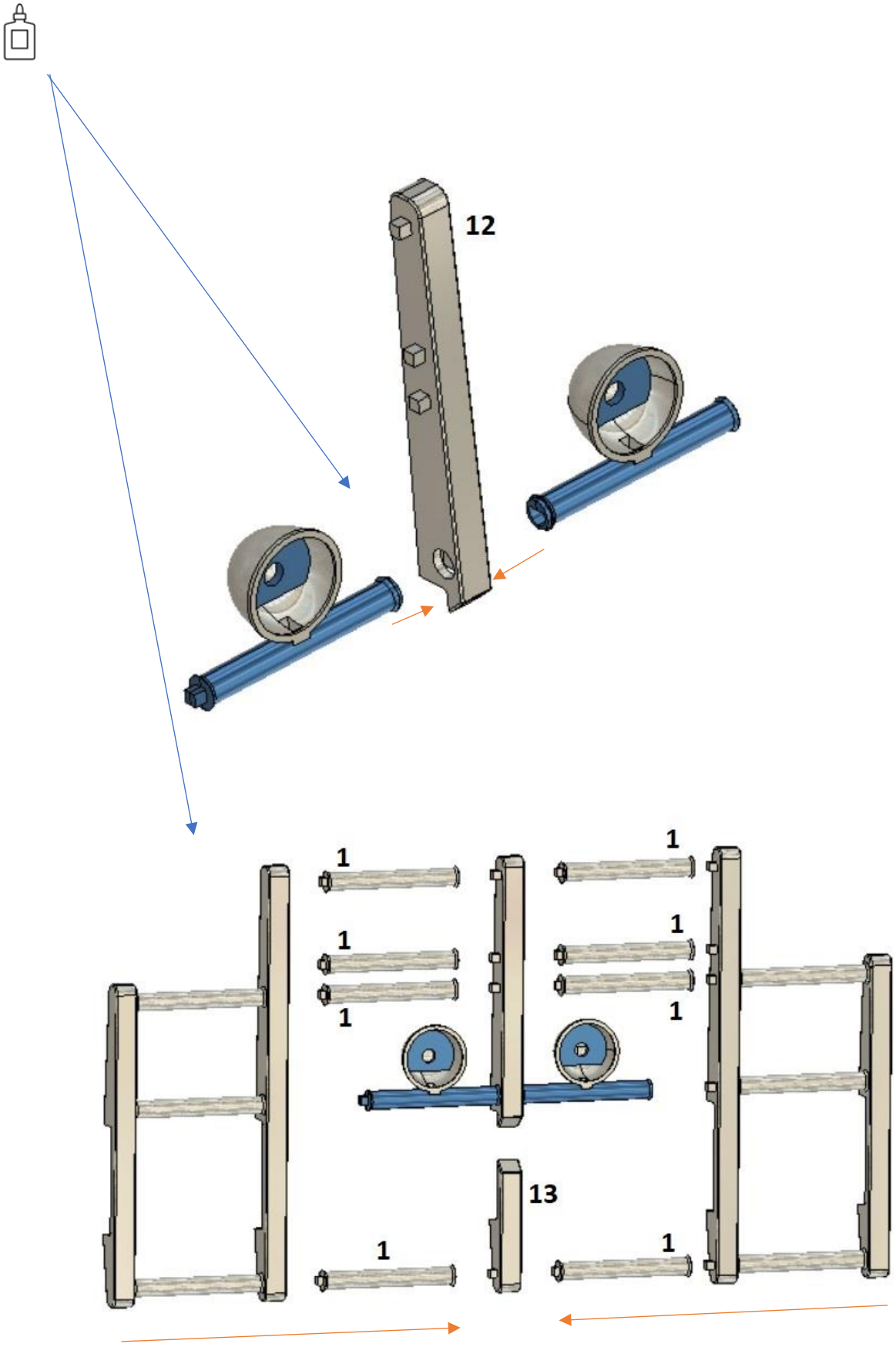
See the following photos in detail.

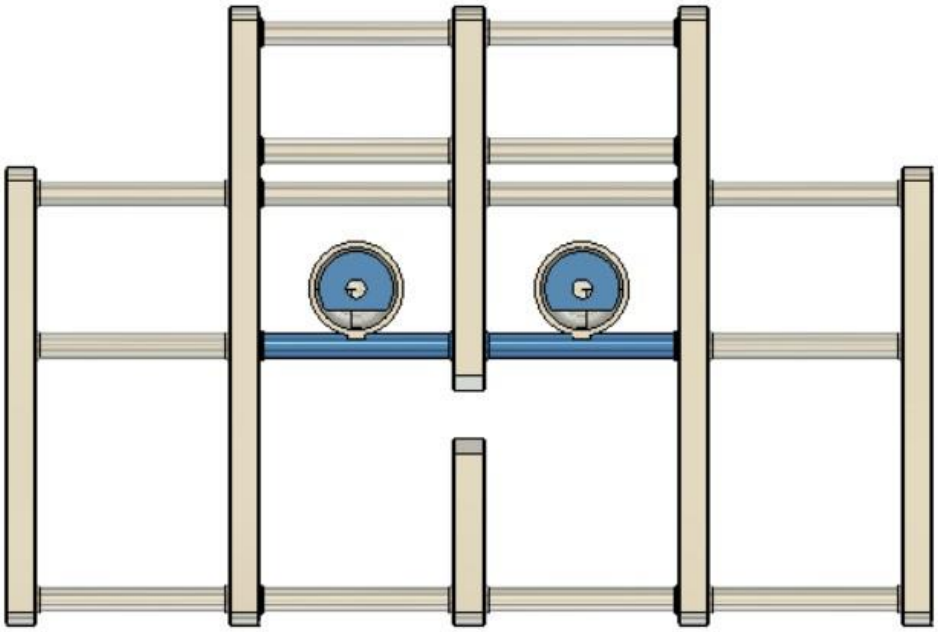


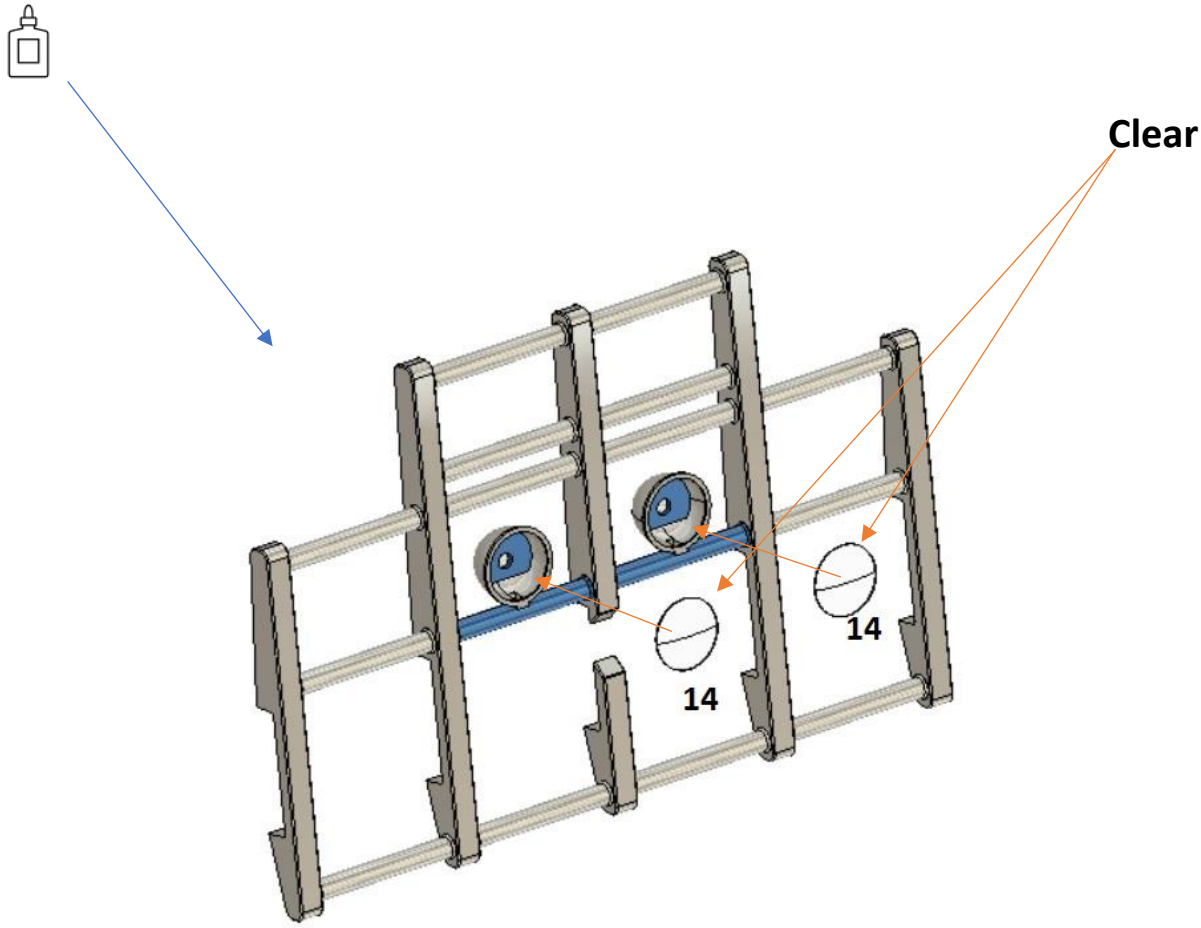


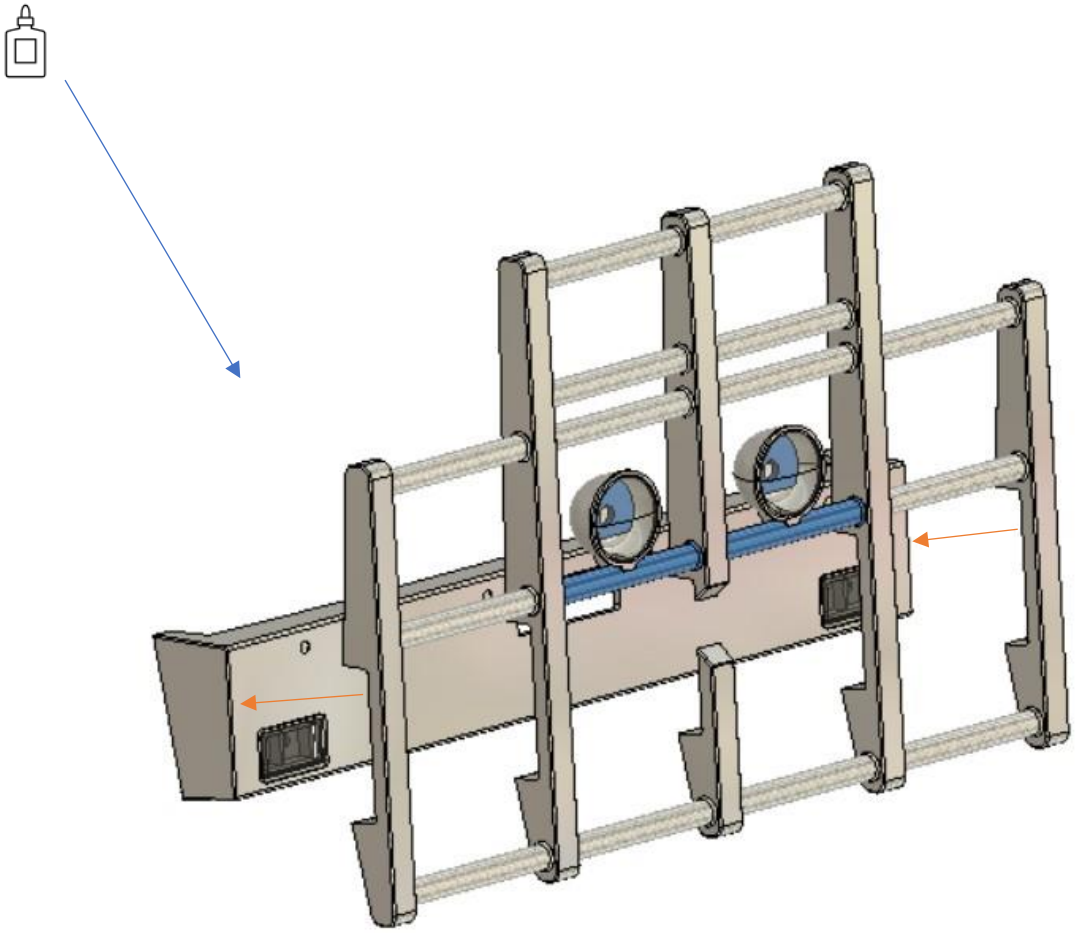
Later installation of the LEDs would be very complicated.

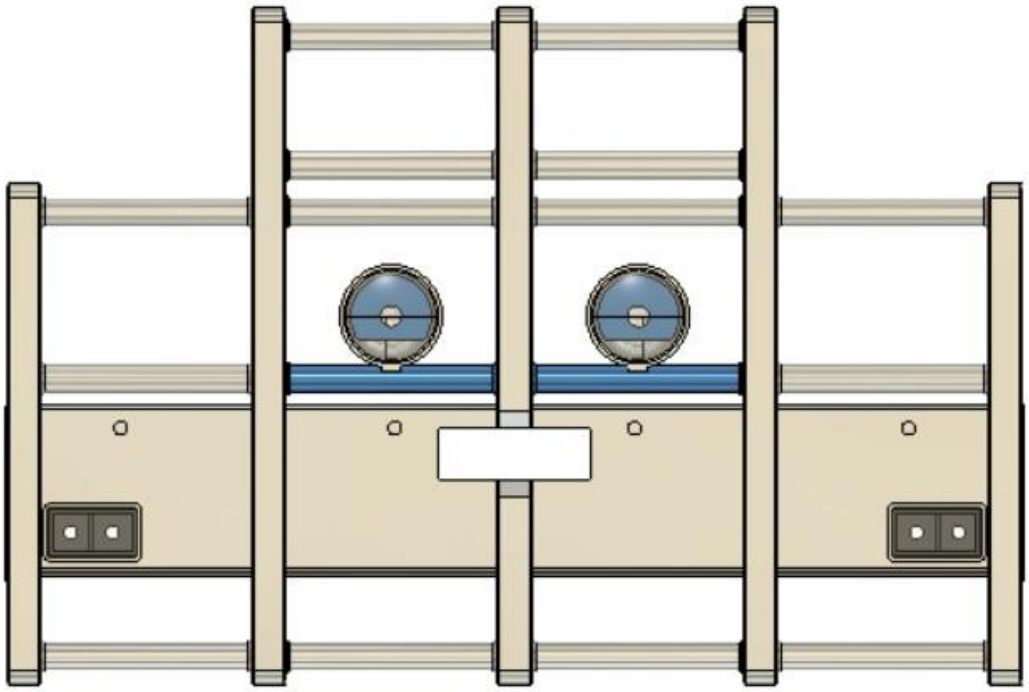


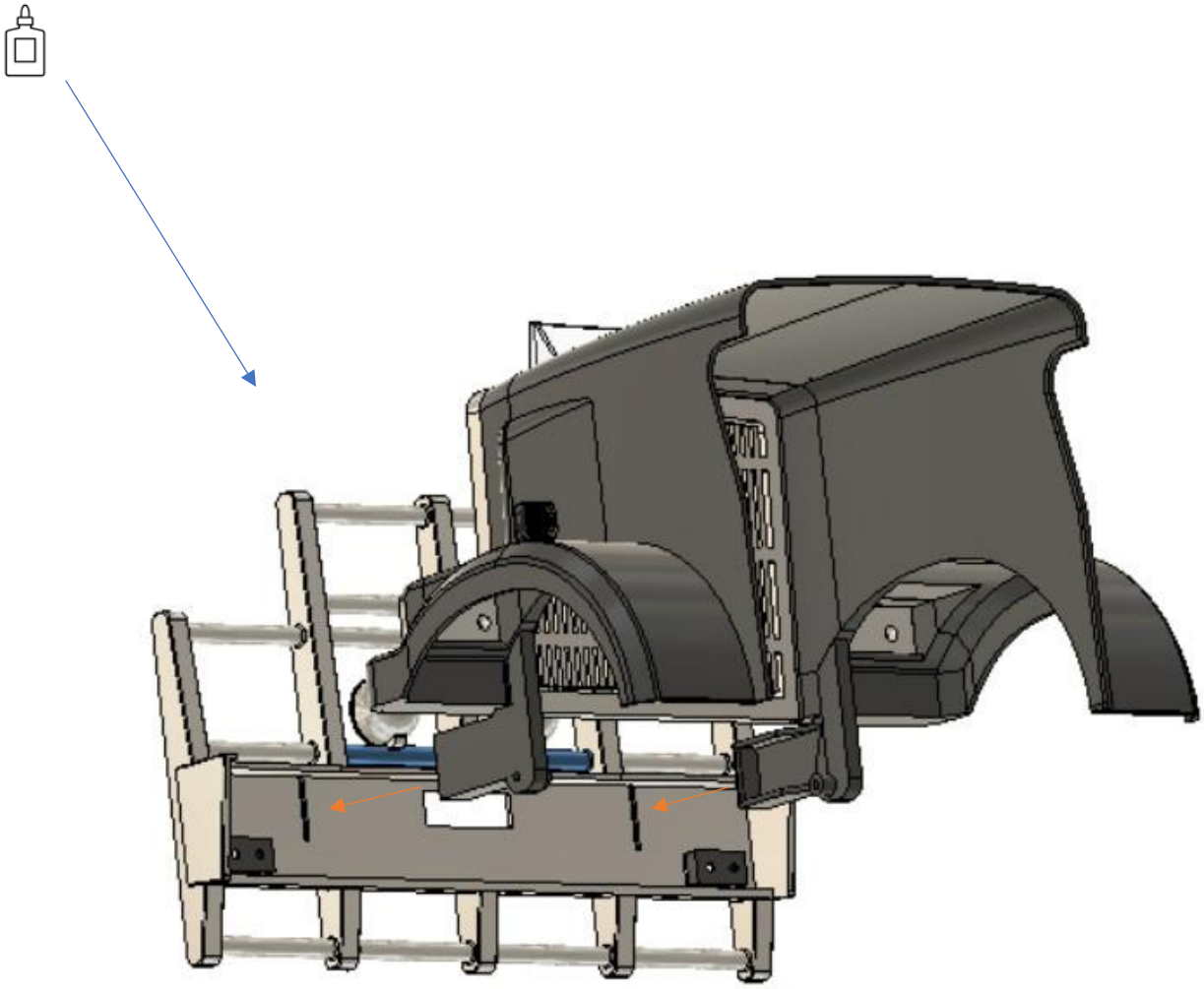

12
1
1
1
1
1
1
13
1
1

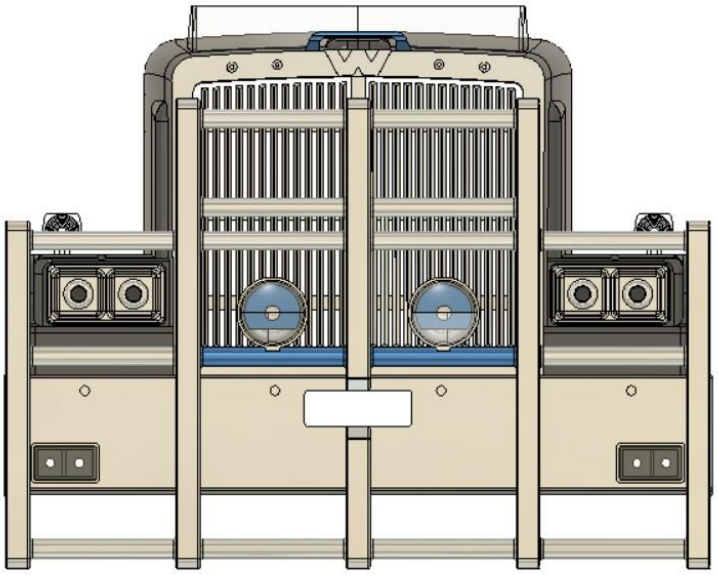



Clear
14
14

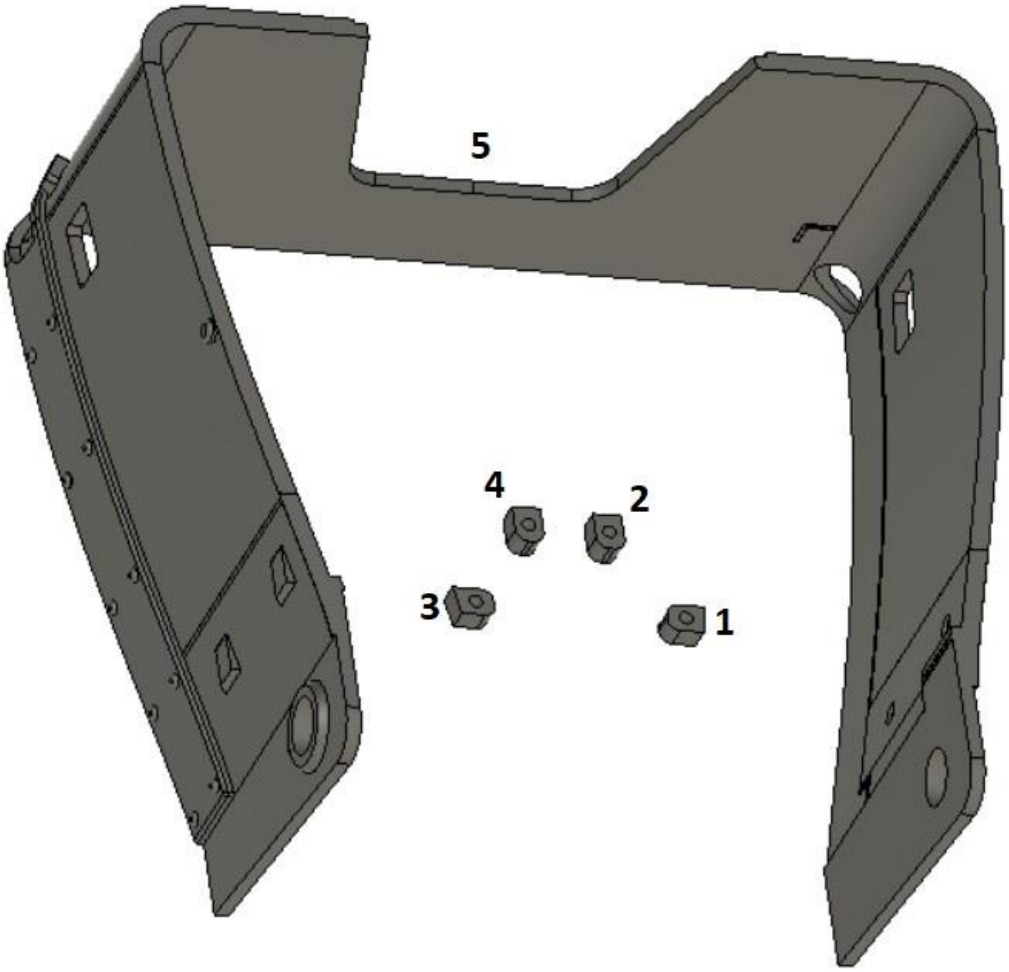


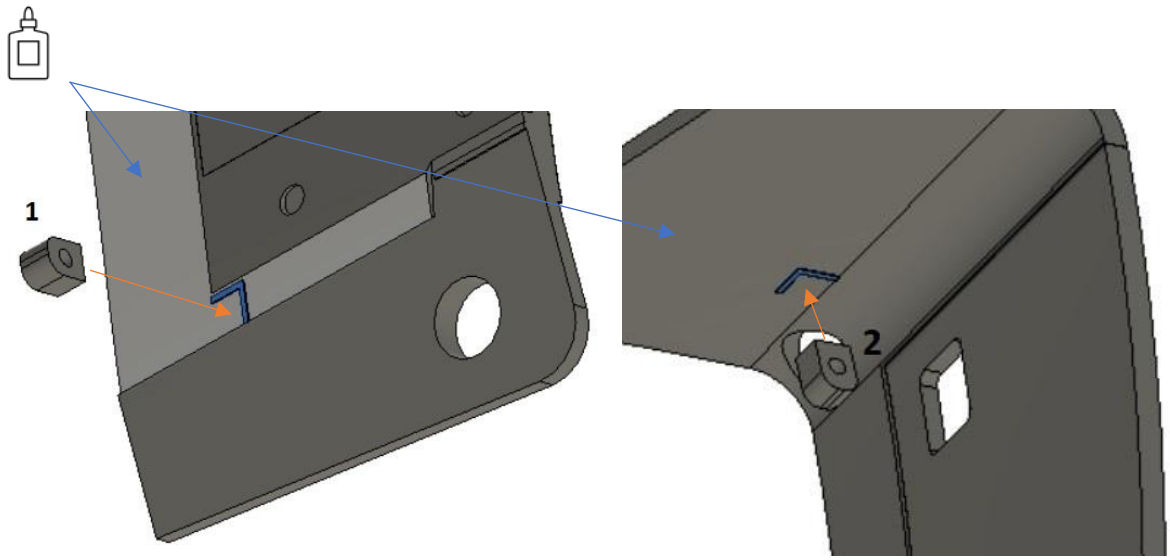


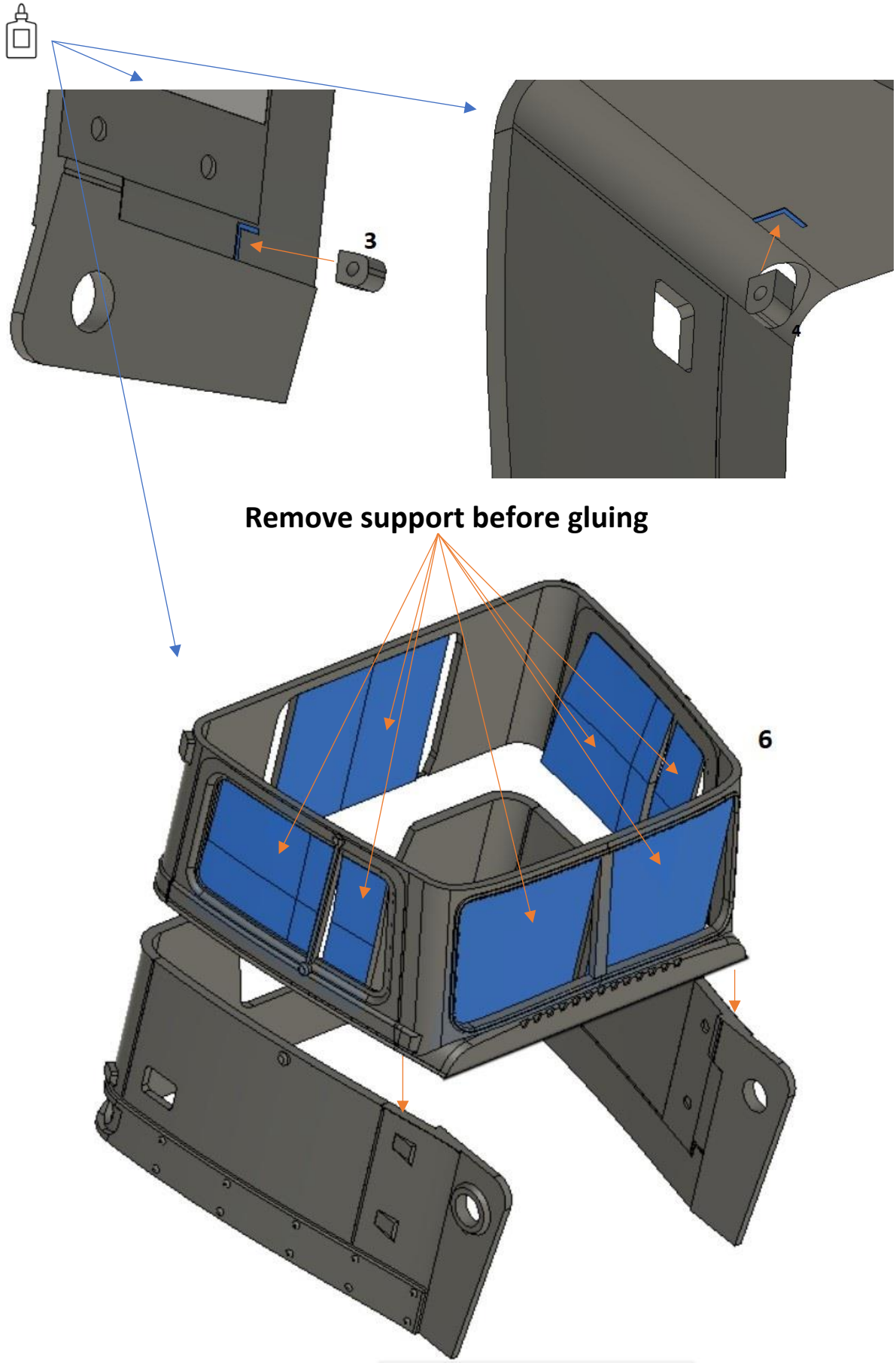


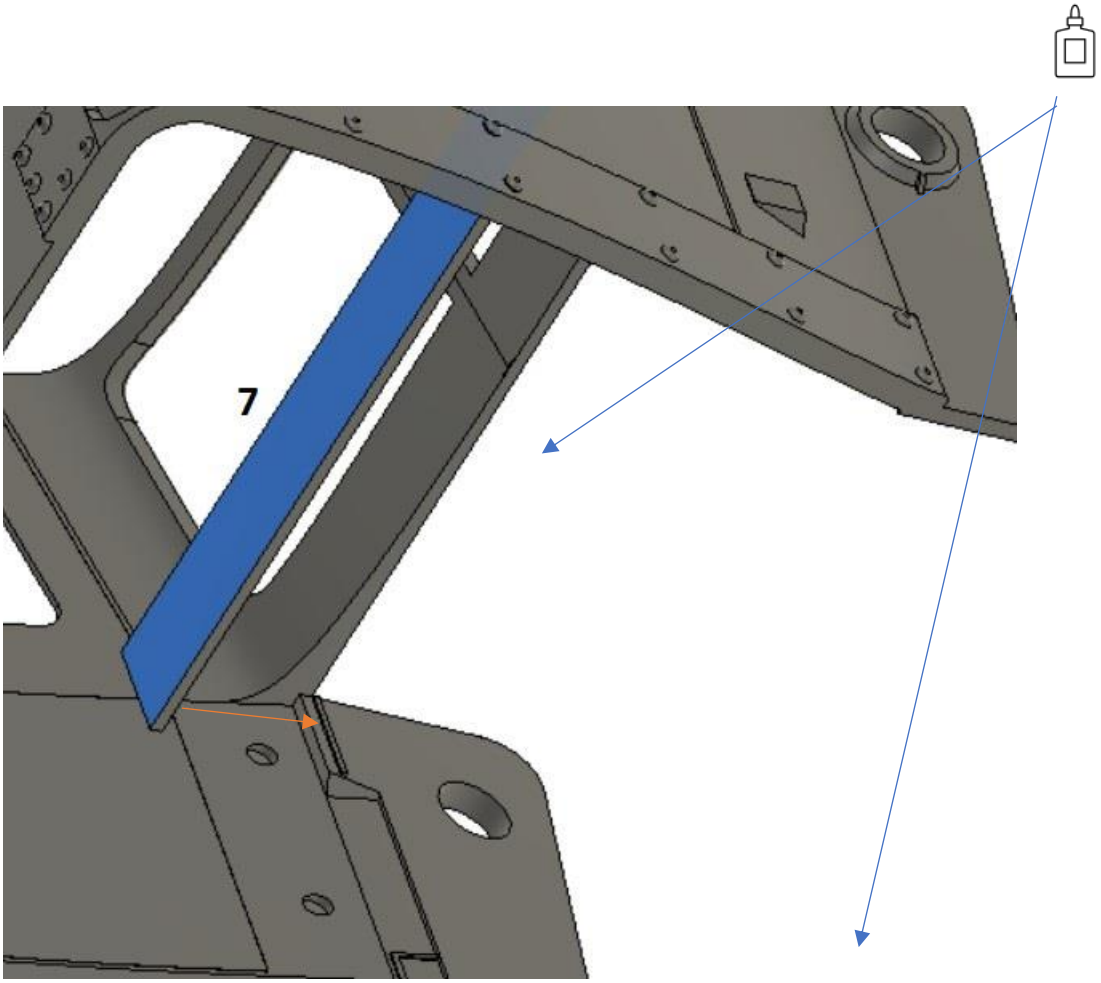


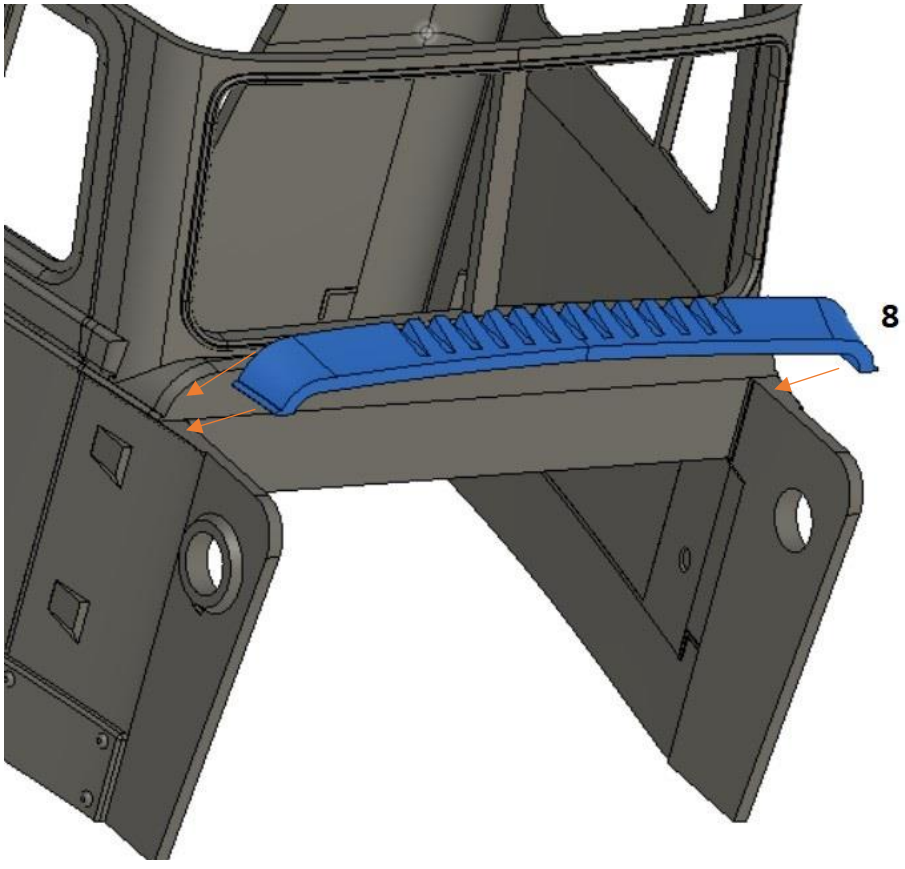
Cabin -1






3
4
Remove support before gluing
6


7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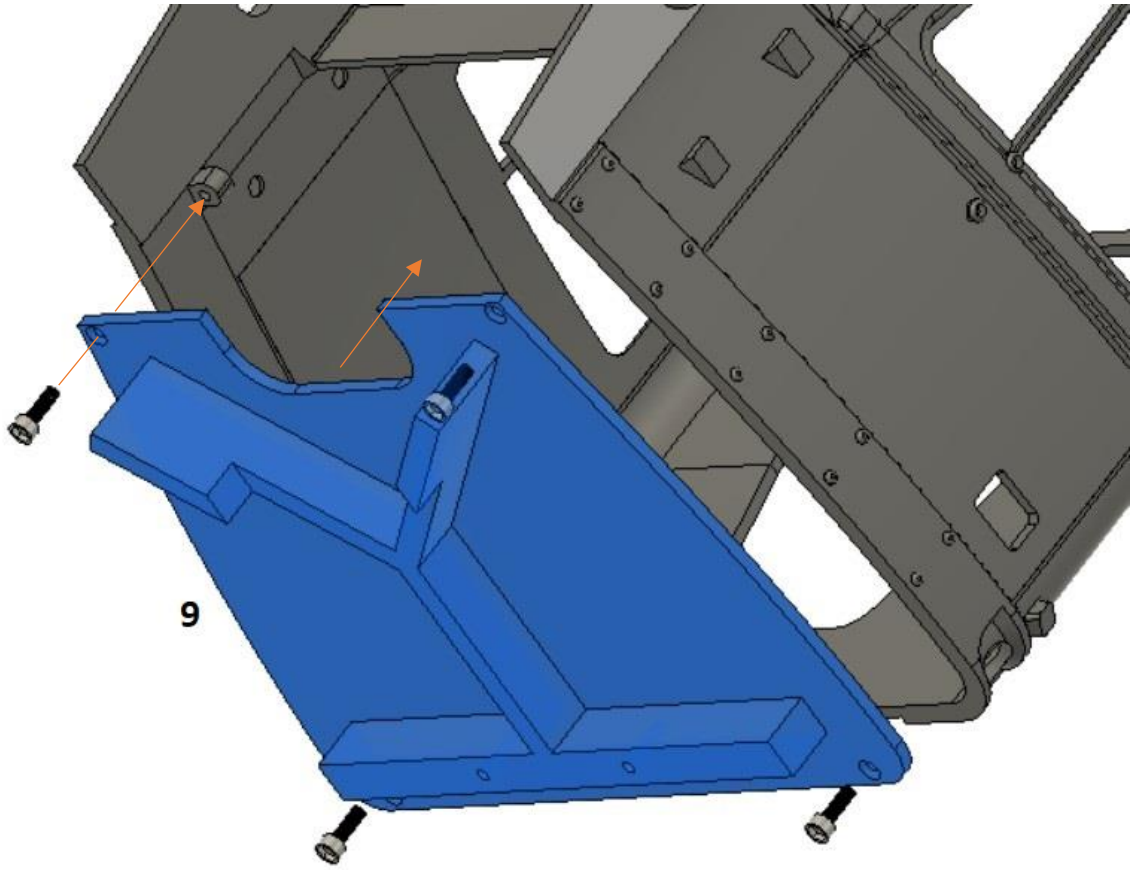
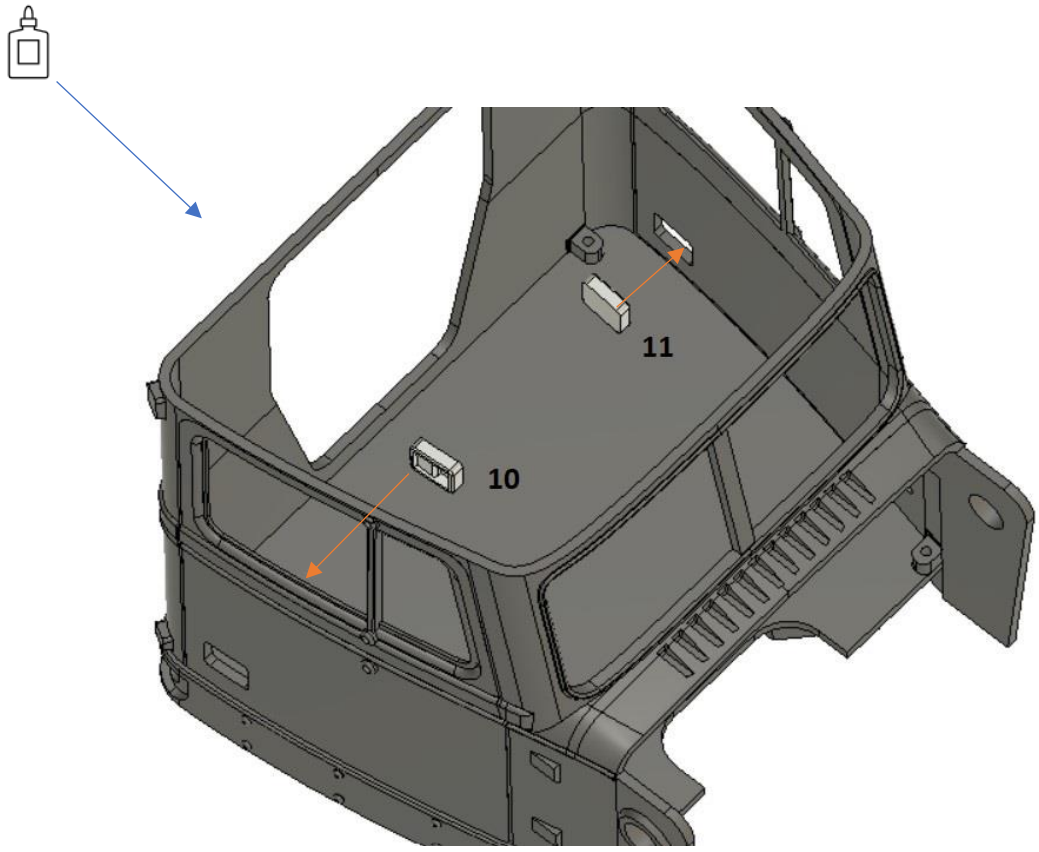
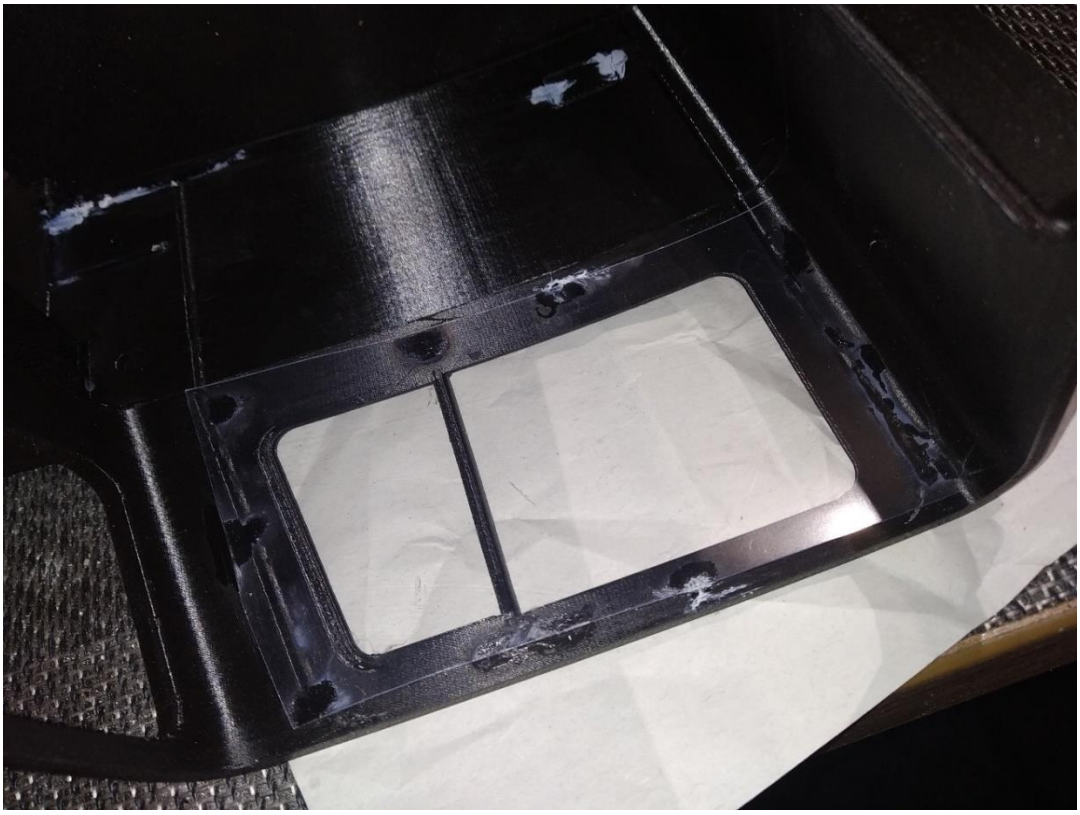
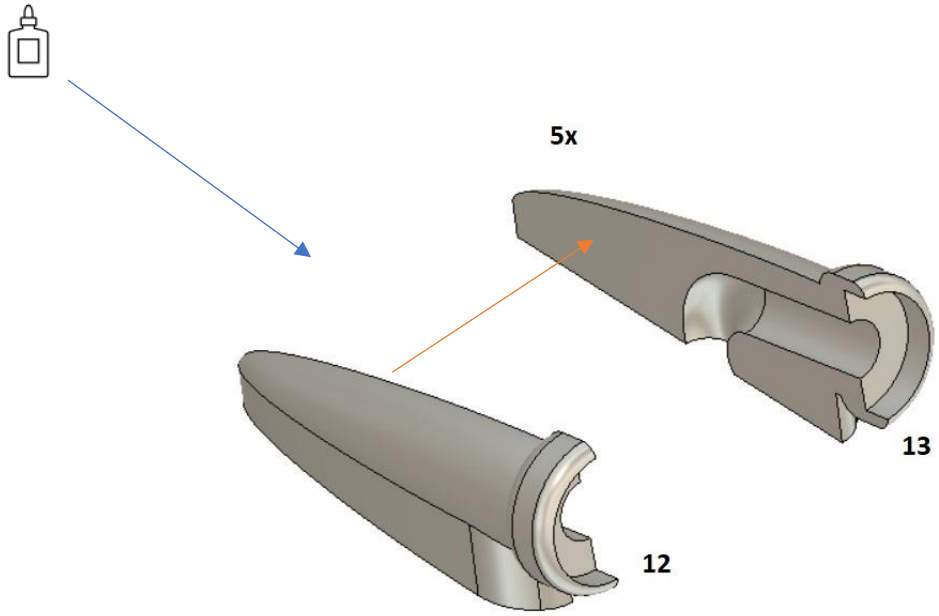
M3x10



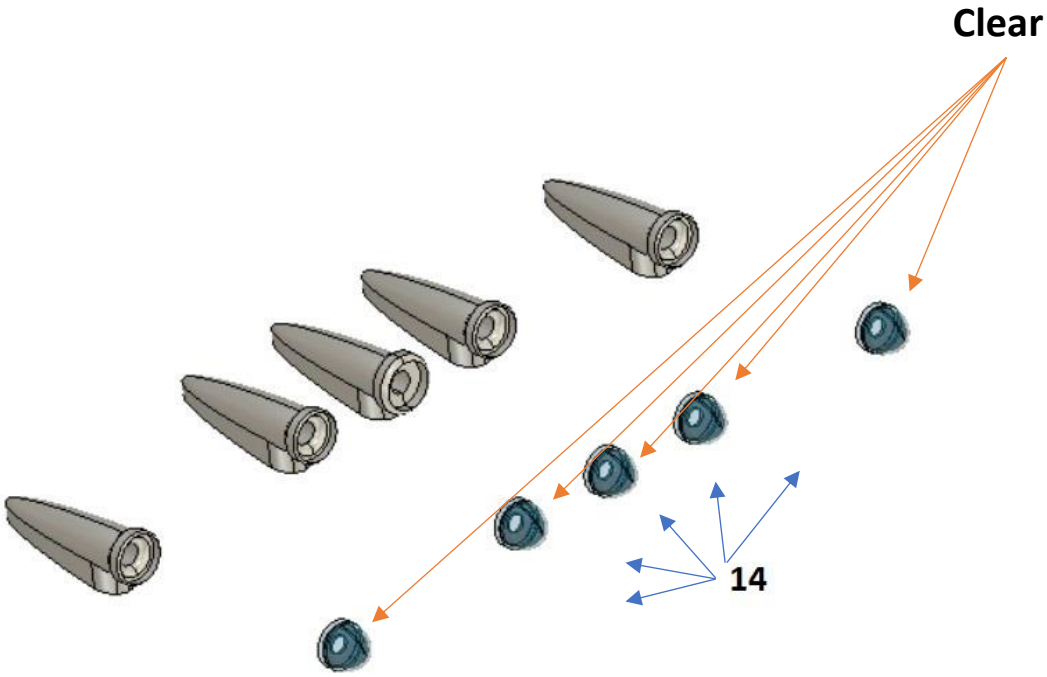


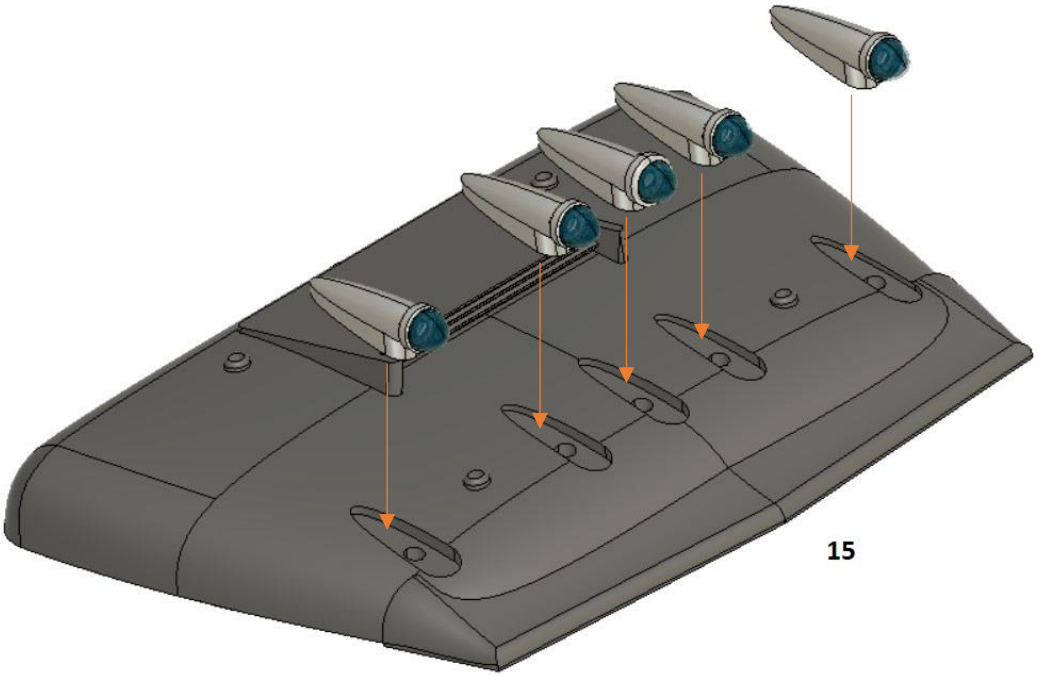
Now glue the windows (DUROFOL). Apply the adhesive carefully to the edges so that it does not stick to the part through which it is to be visible.





Insert 3 mm orange LEDs with soldered wires into parts 14, which you insert through the holes in parts 12-13. Insert parts 14 with LEDs into parts 12-13, they should hold tight even without sticking. If not, use a really small drop of glue to replace the LED if necessary. If the wire cannot be pushed through the hole, insulate only the positive pole or enlarge the hole with a drill.

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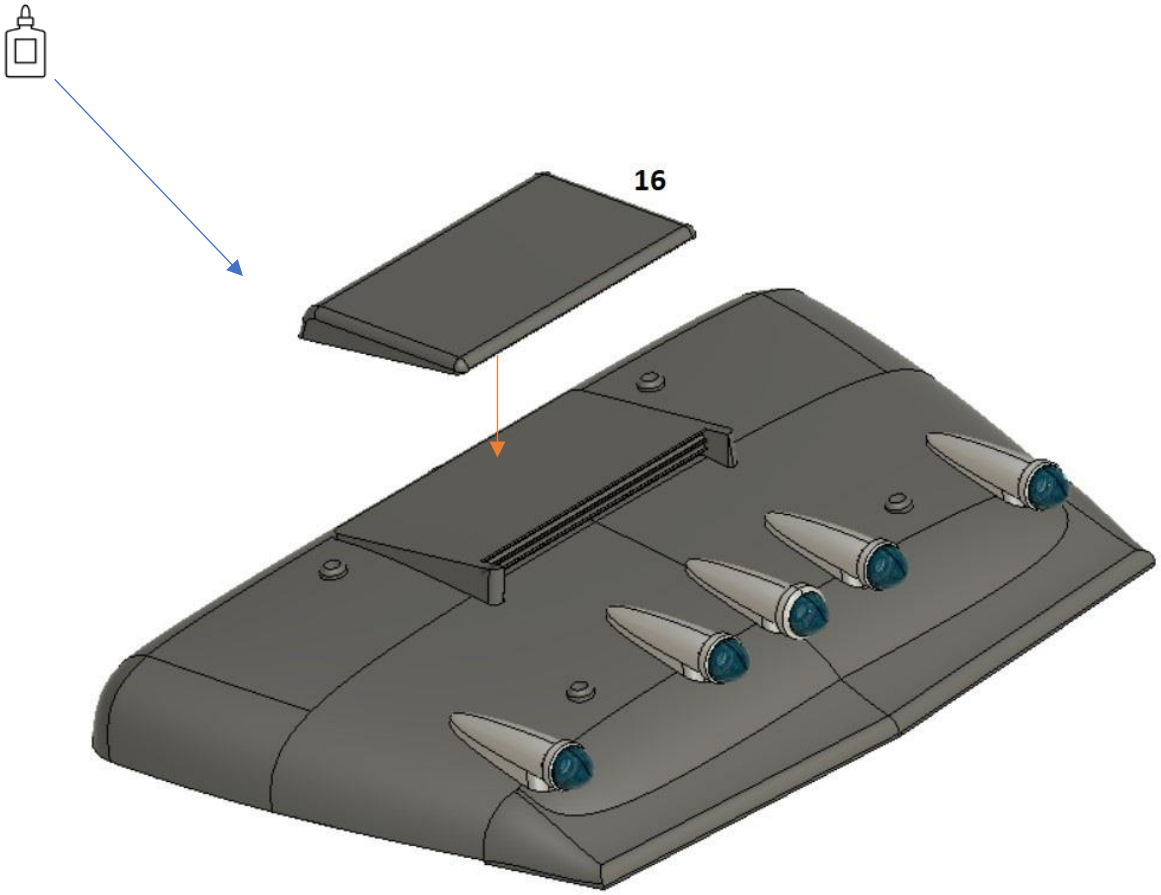
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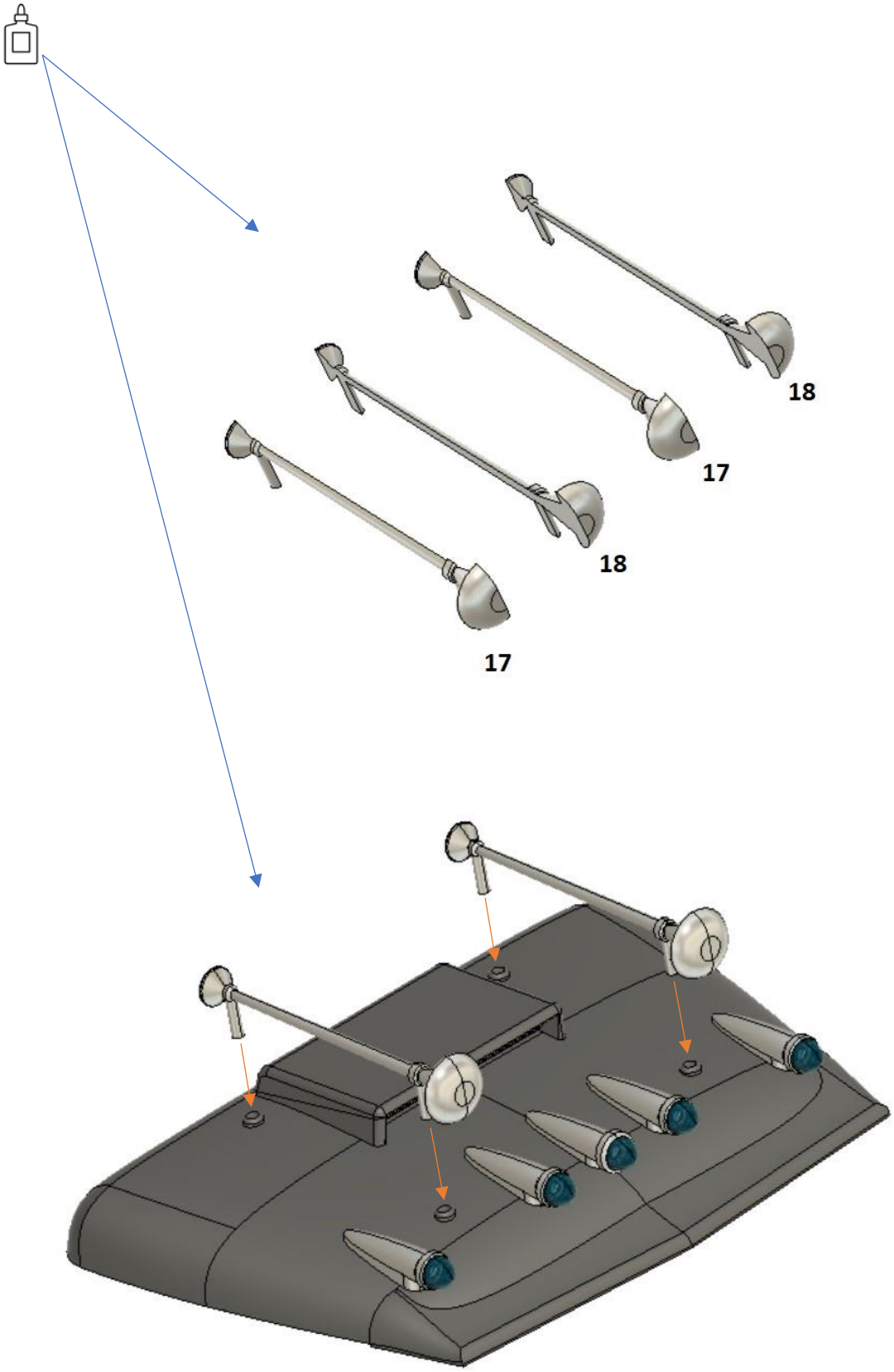
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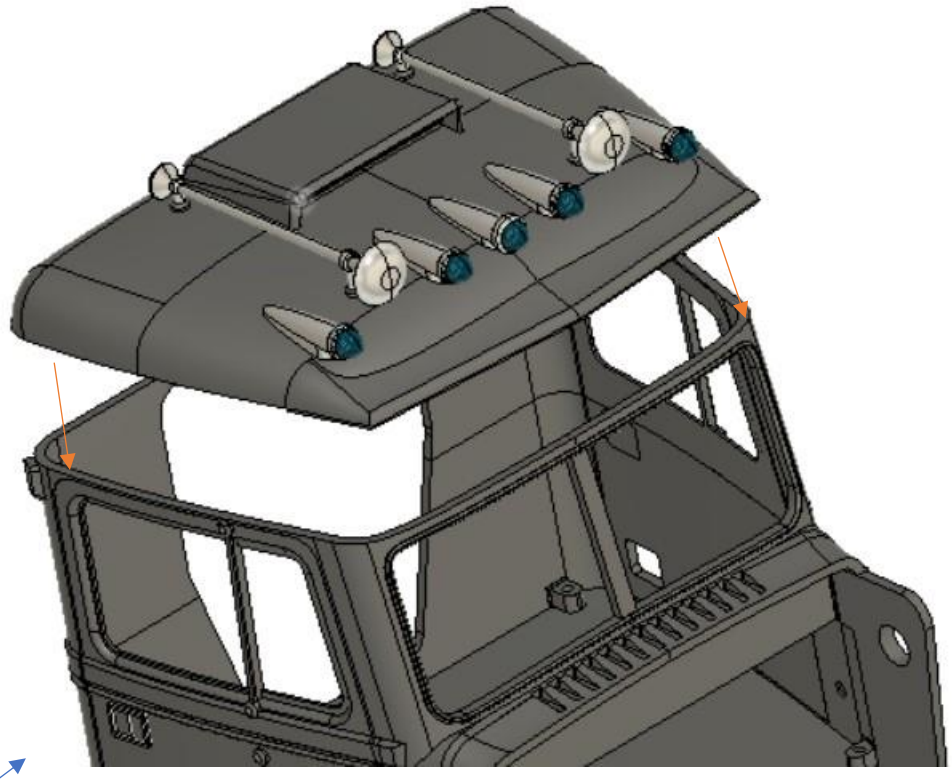

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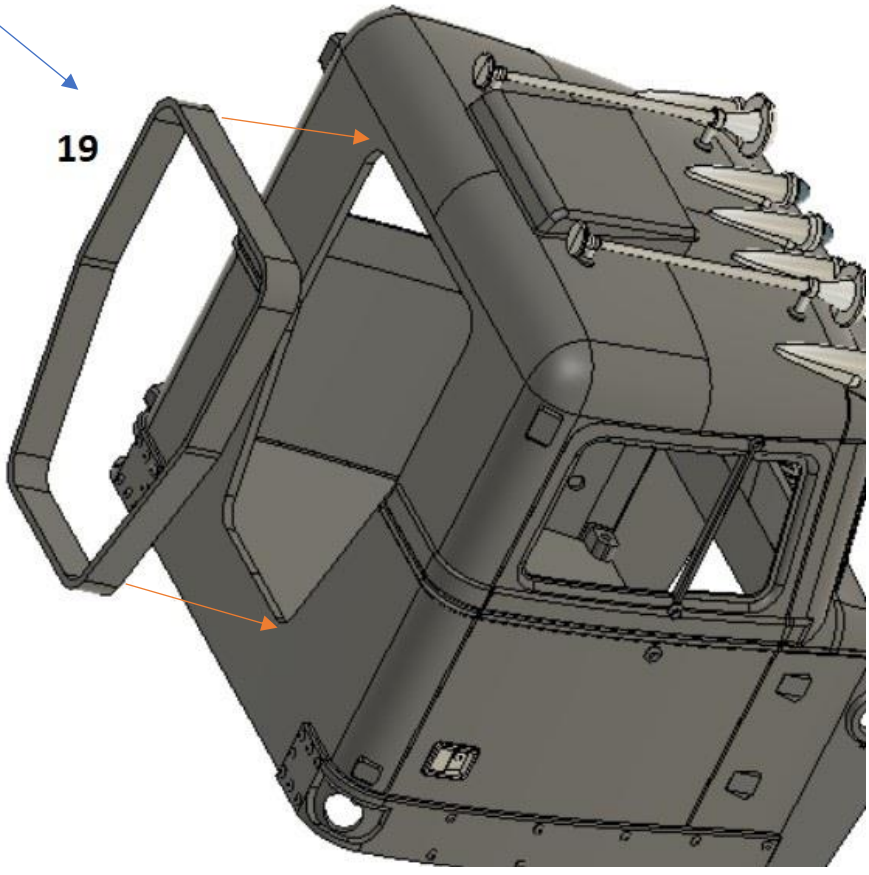

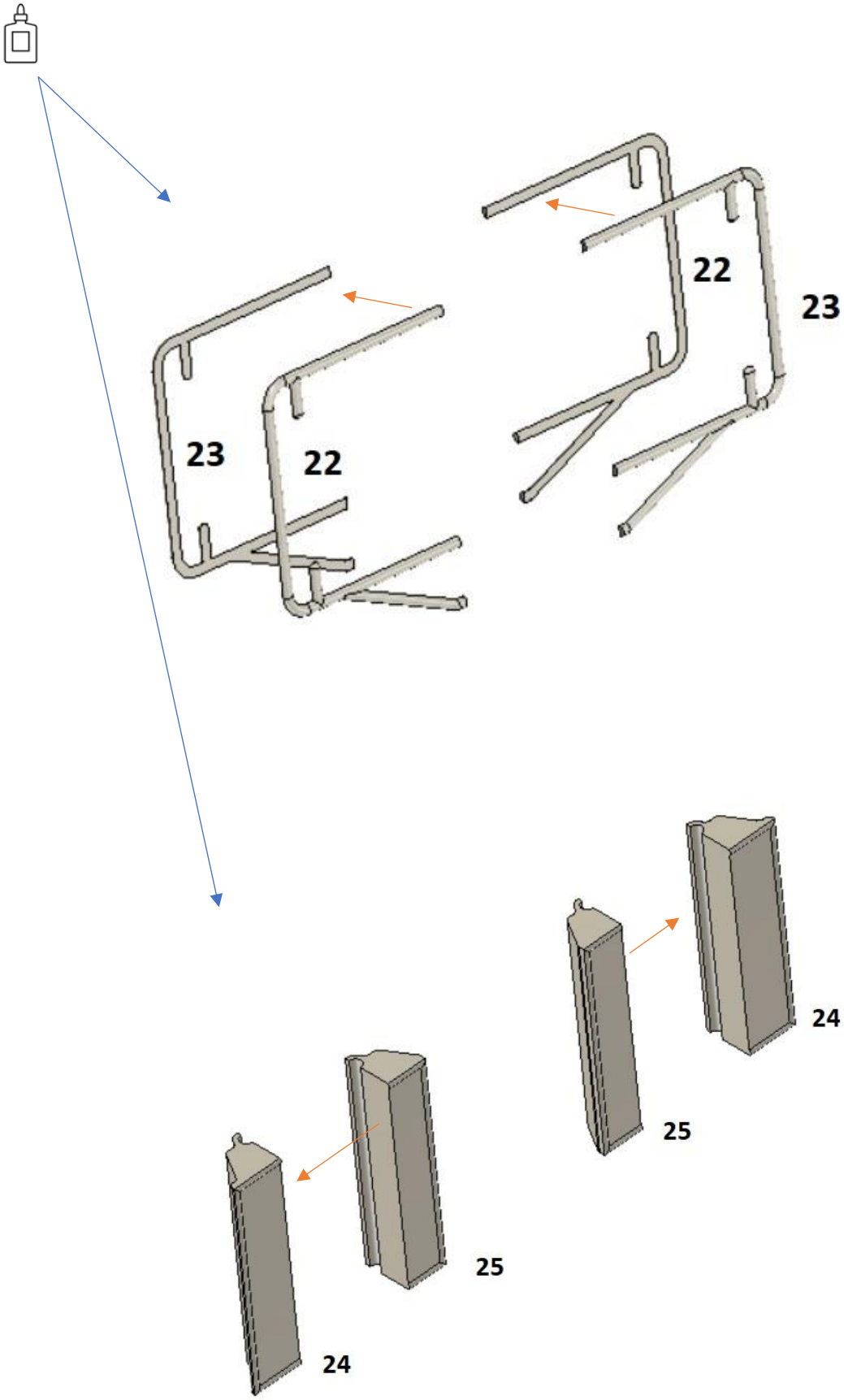
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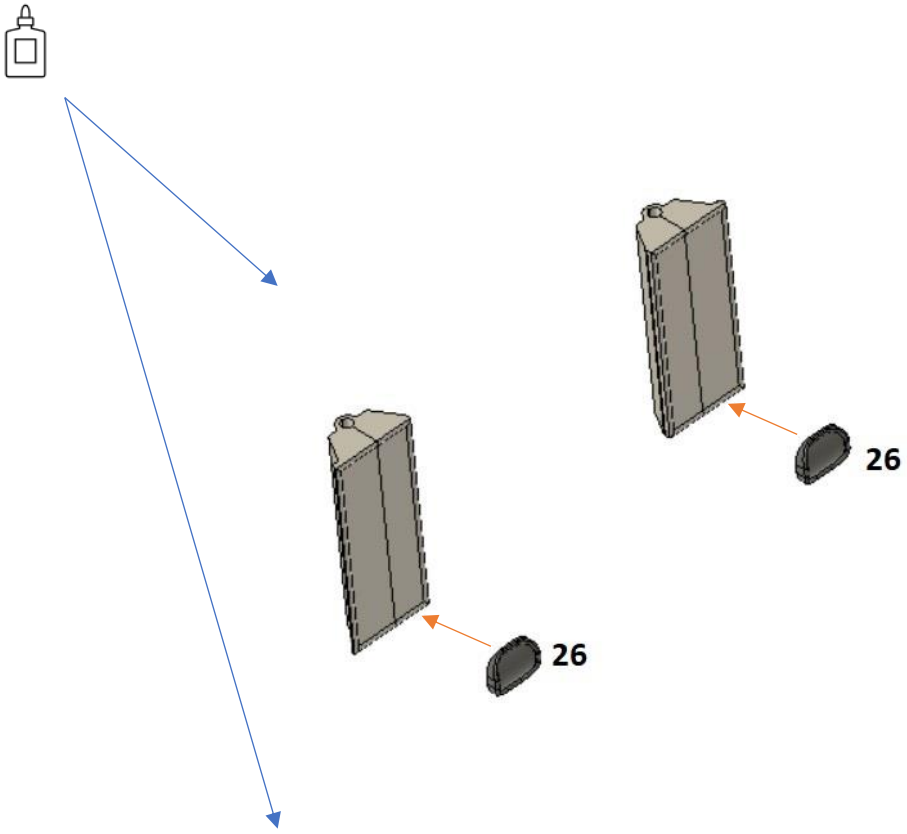
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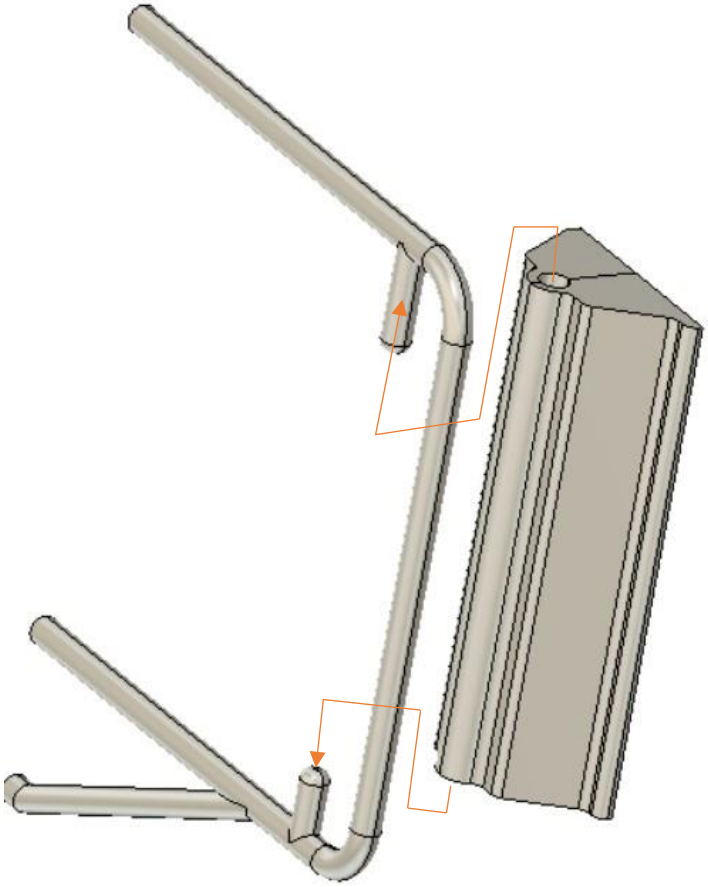
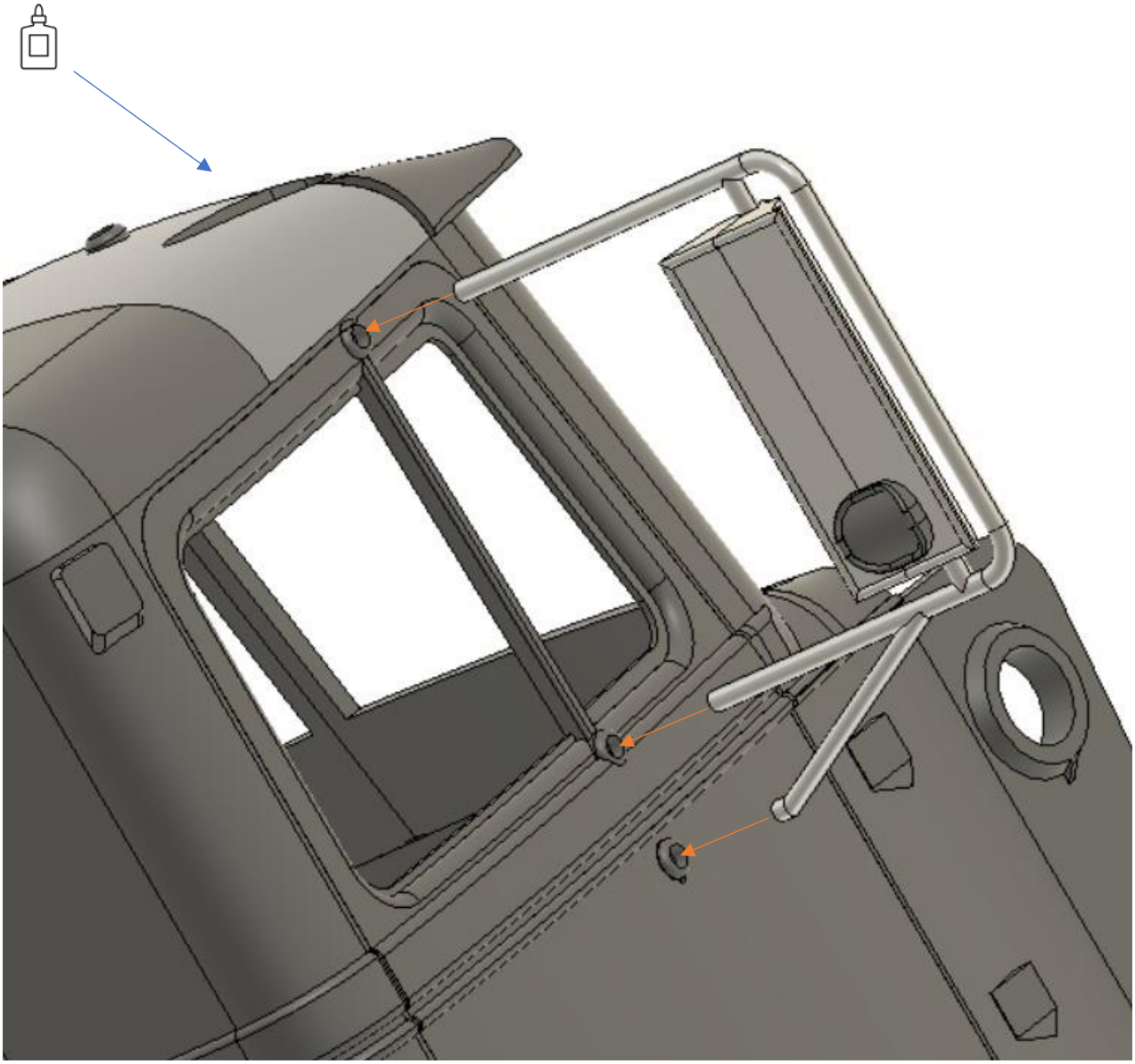
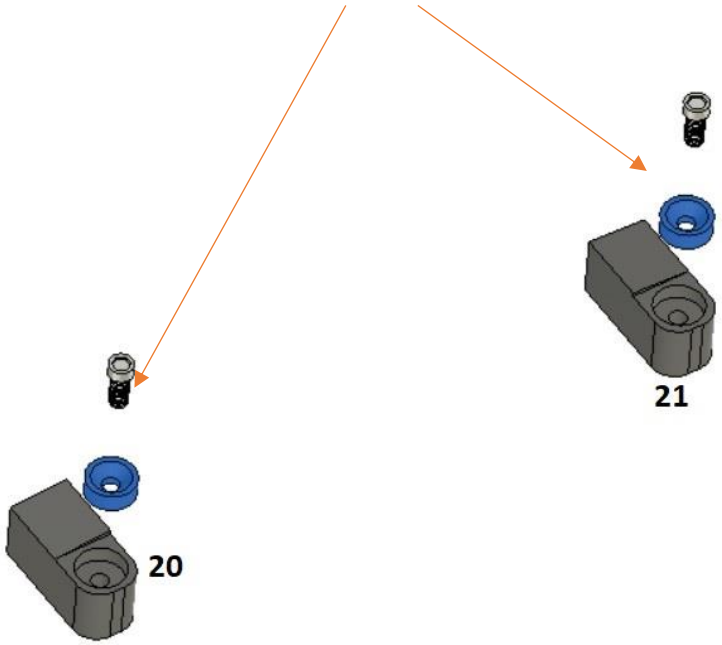
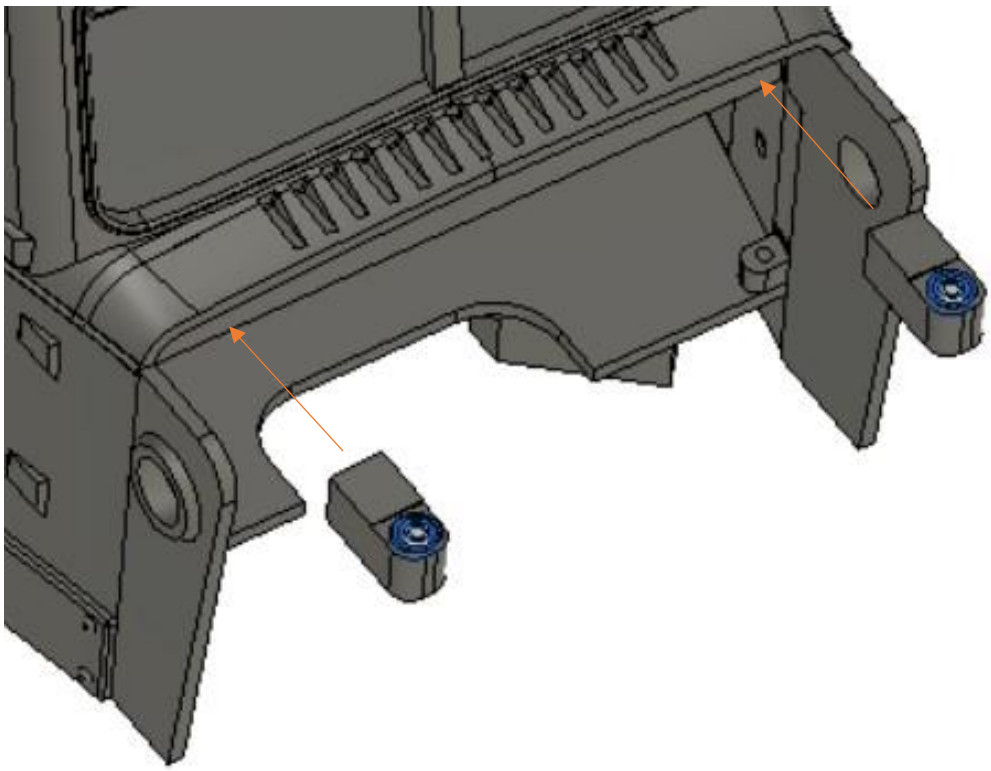


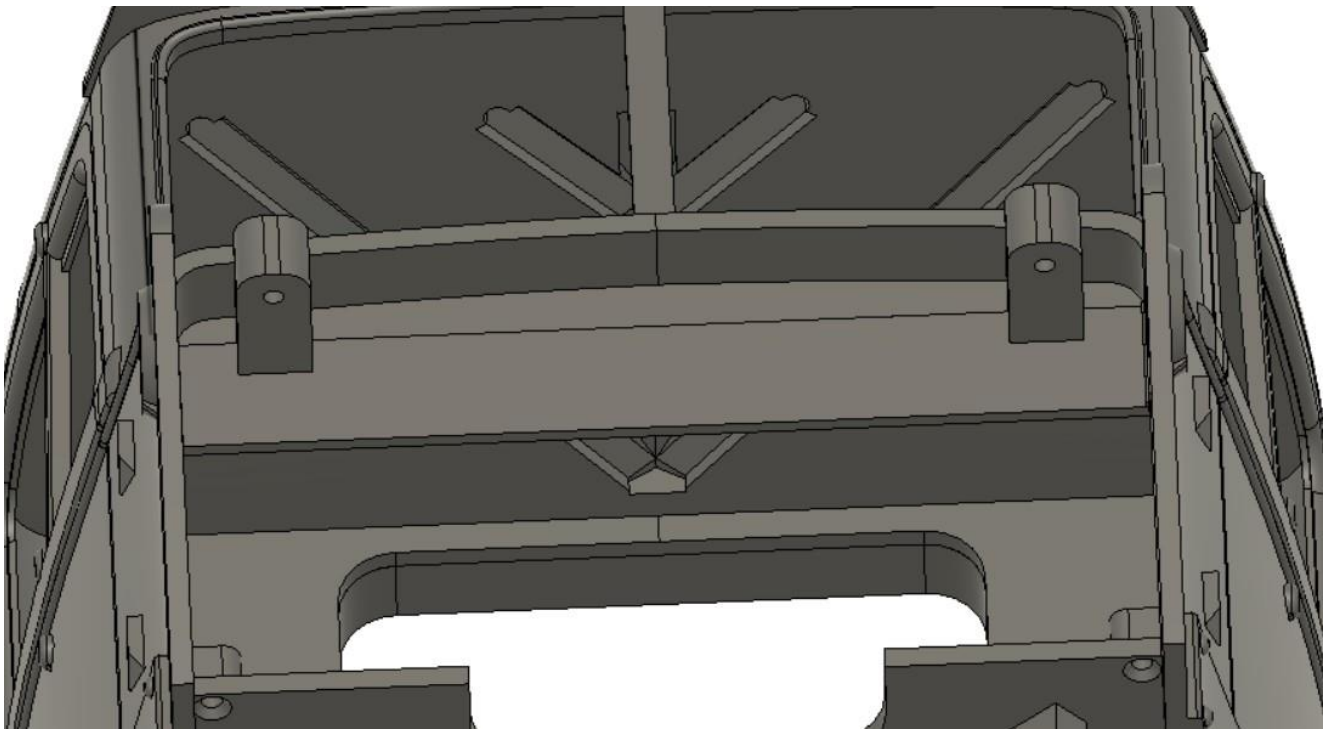


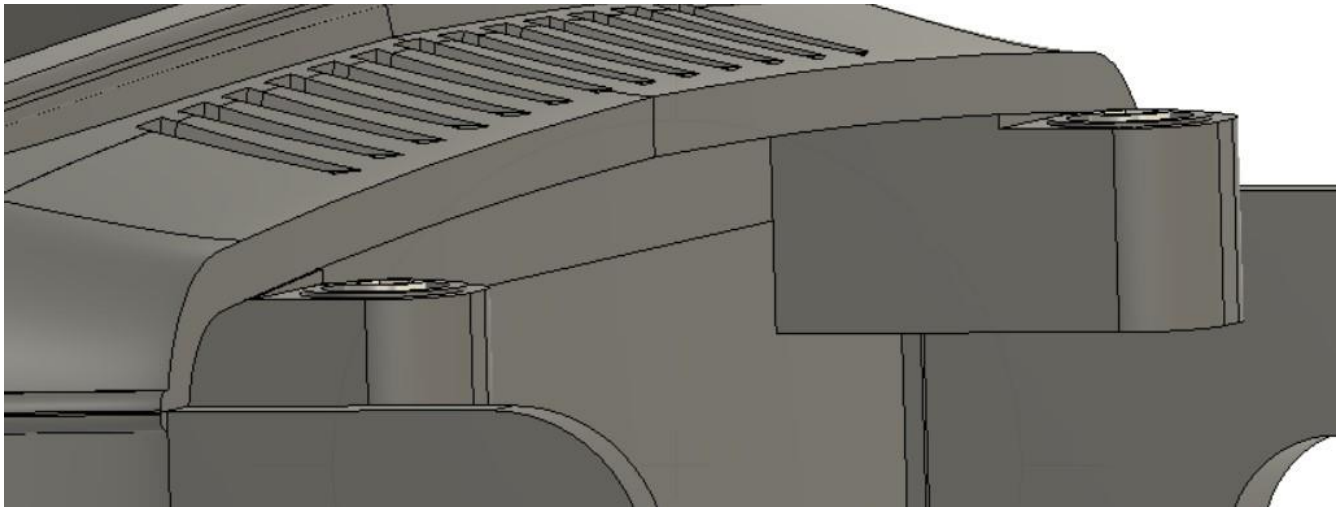
Insert magnets into parts 20 and 21 and secure countersunk screws.

M3x10

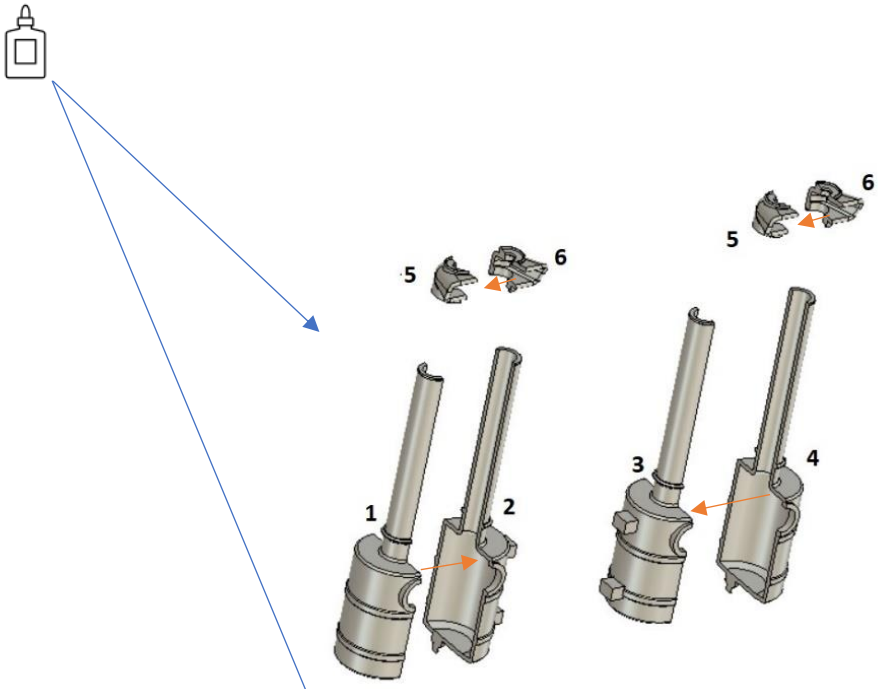




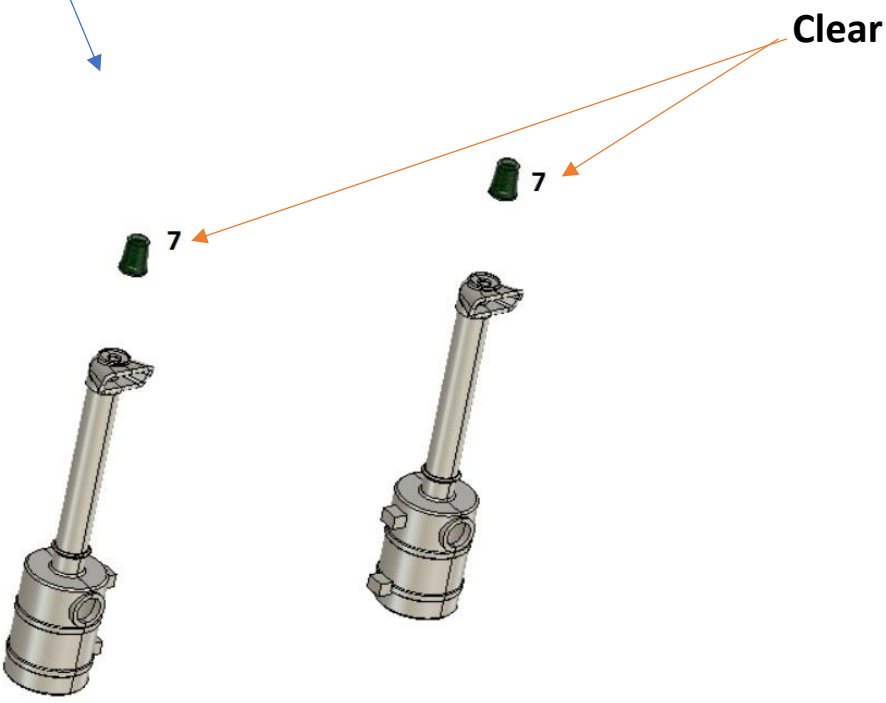


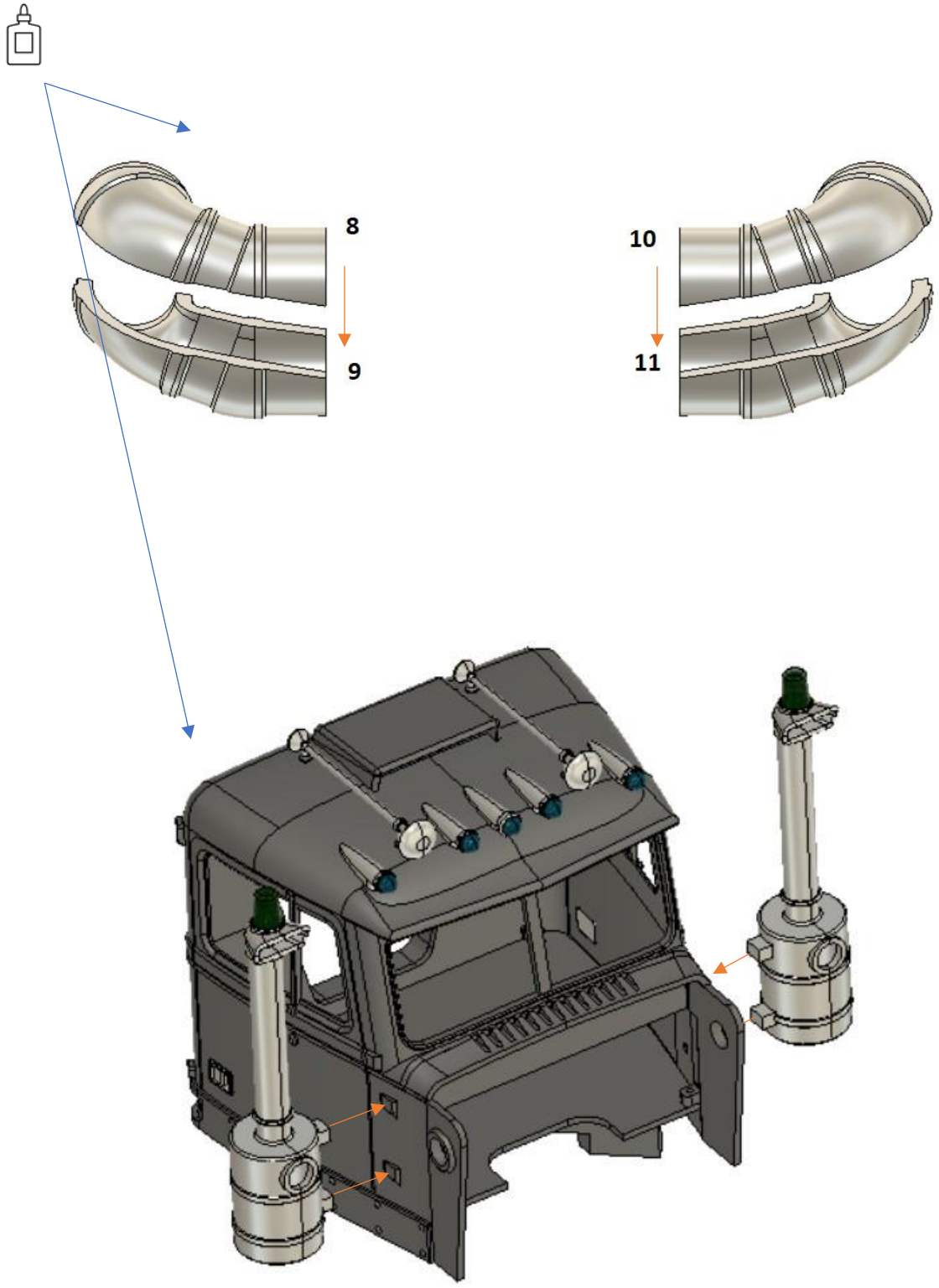


Sucking



Insert a 5 mm orange LEDs into parts 17 and pass the wires through the hole in parts 1-2 and 3-4

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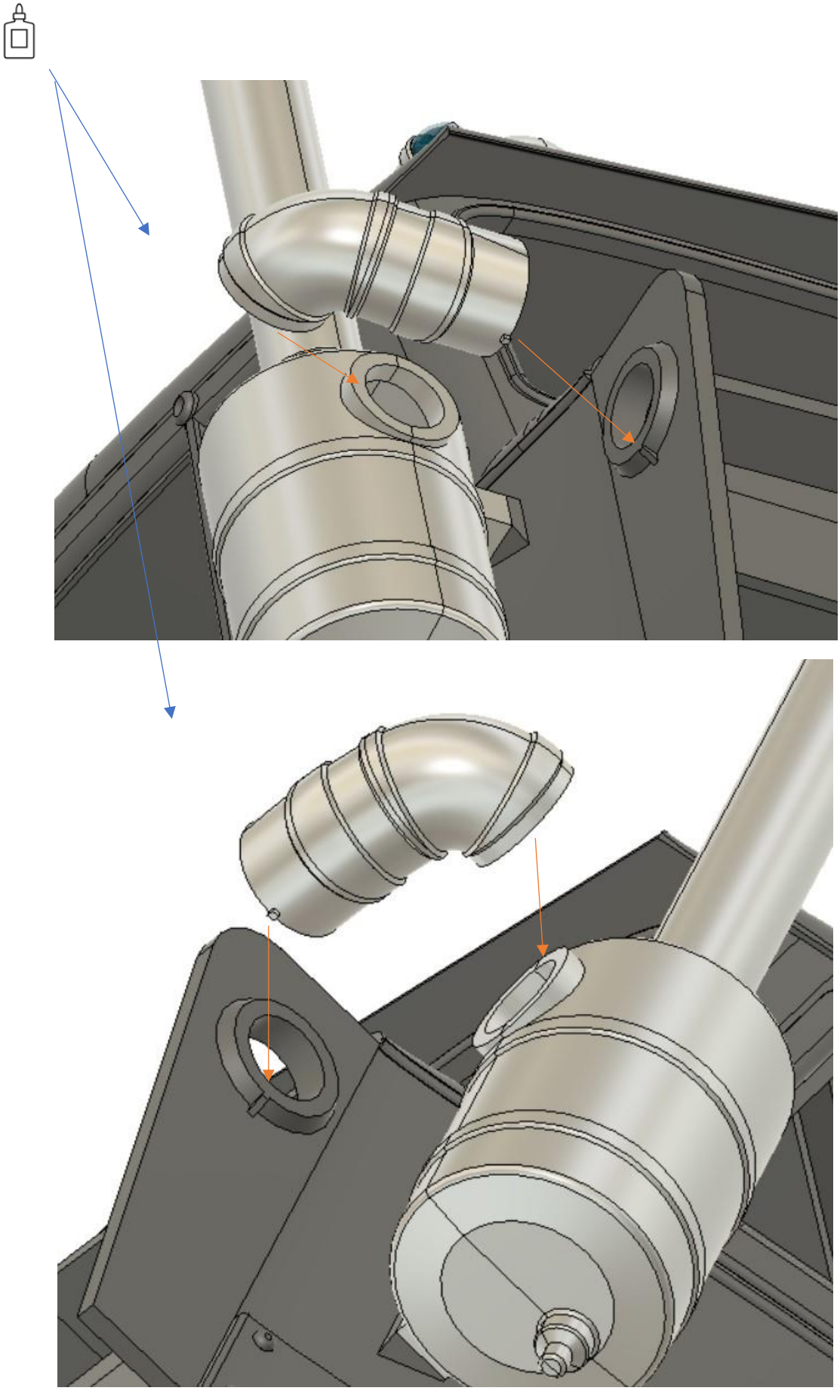
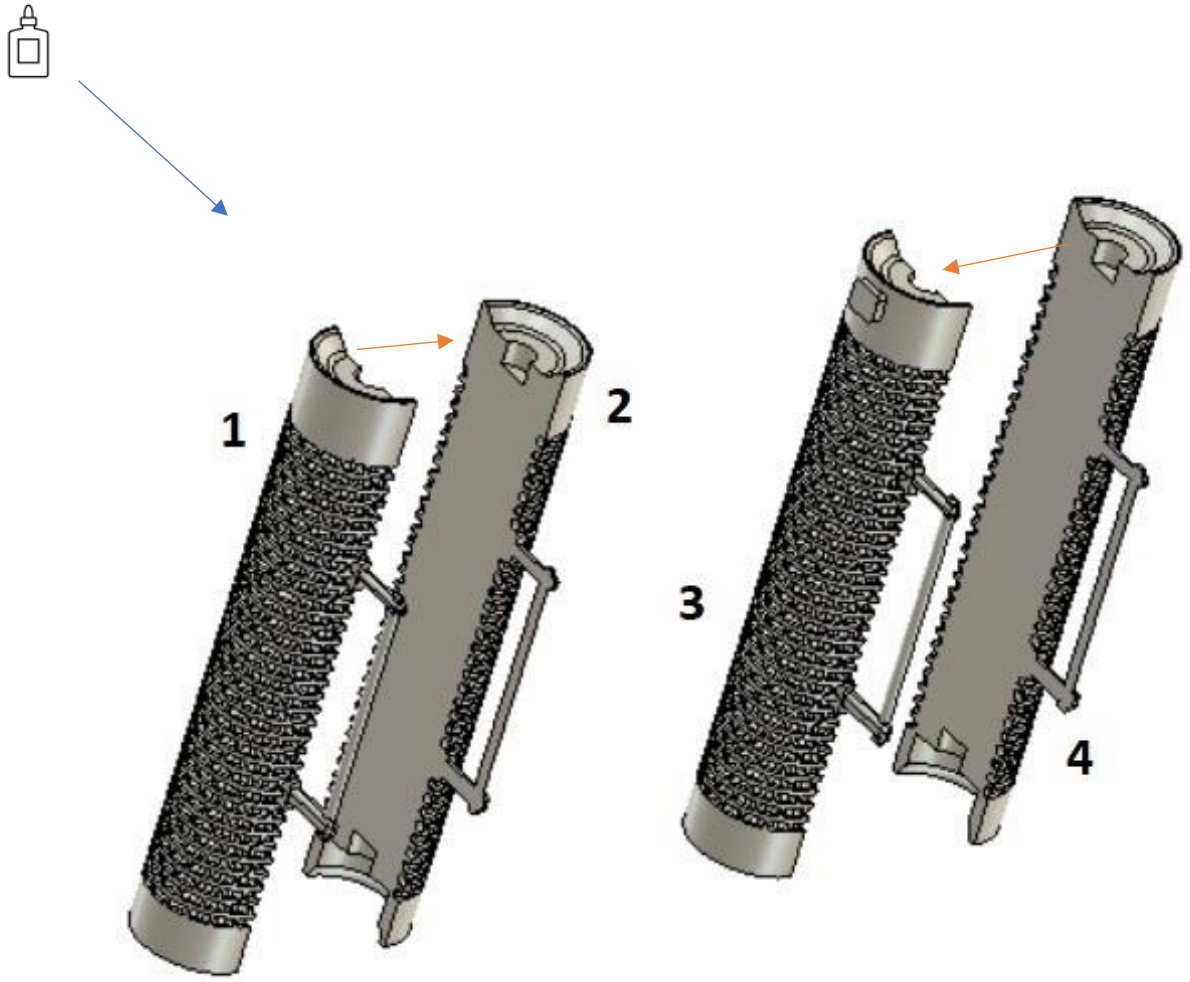
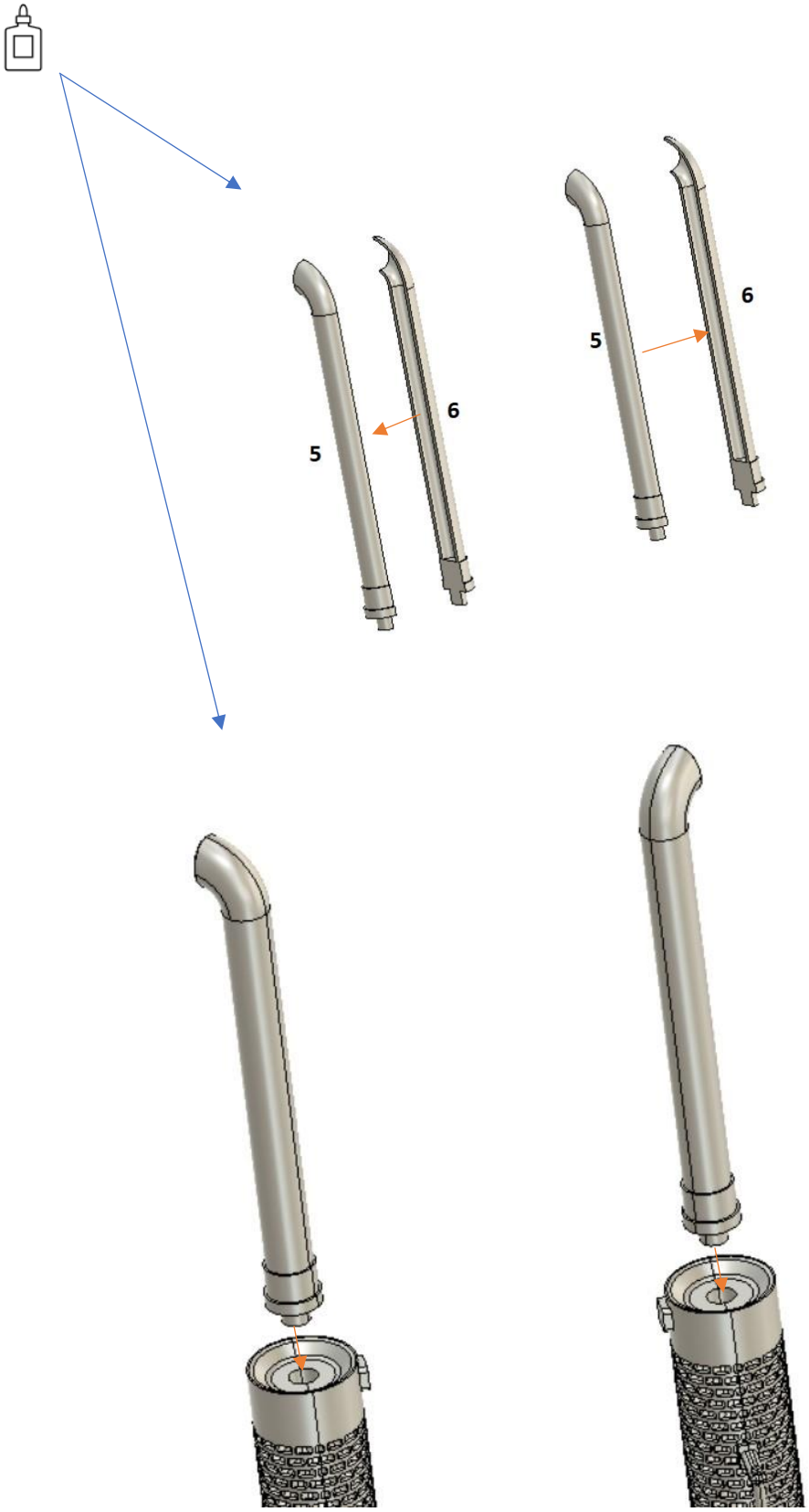


Exhaust

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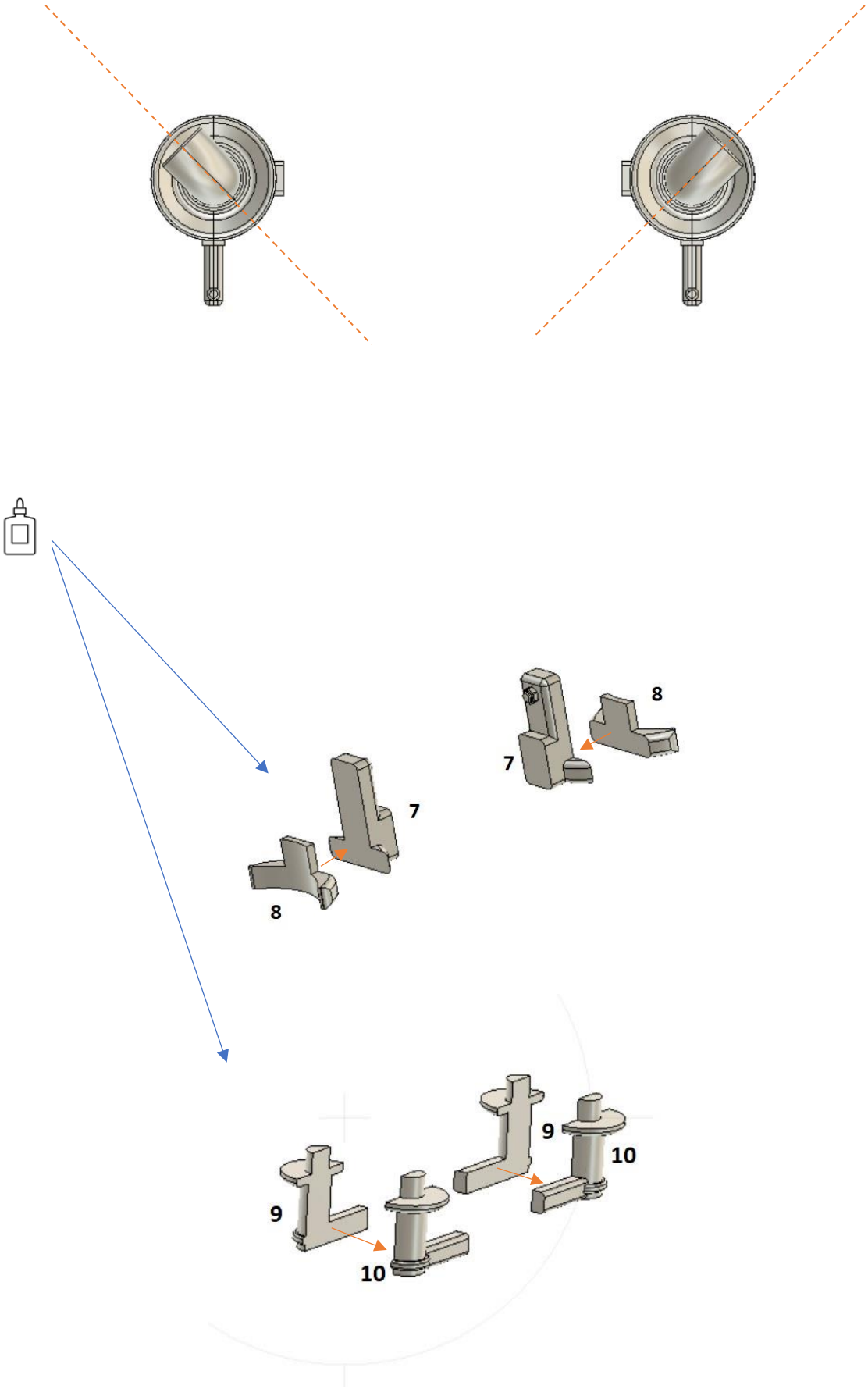
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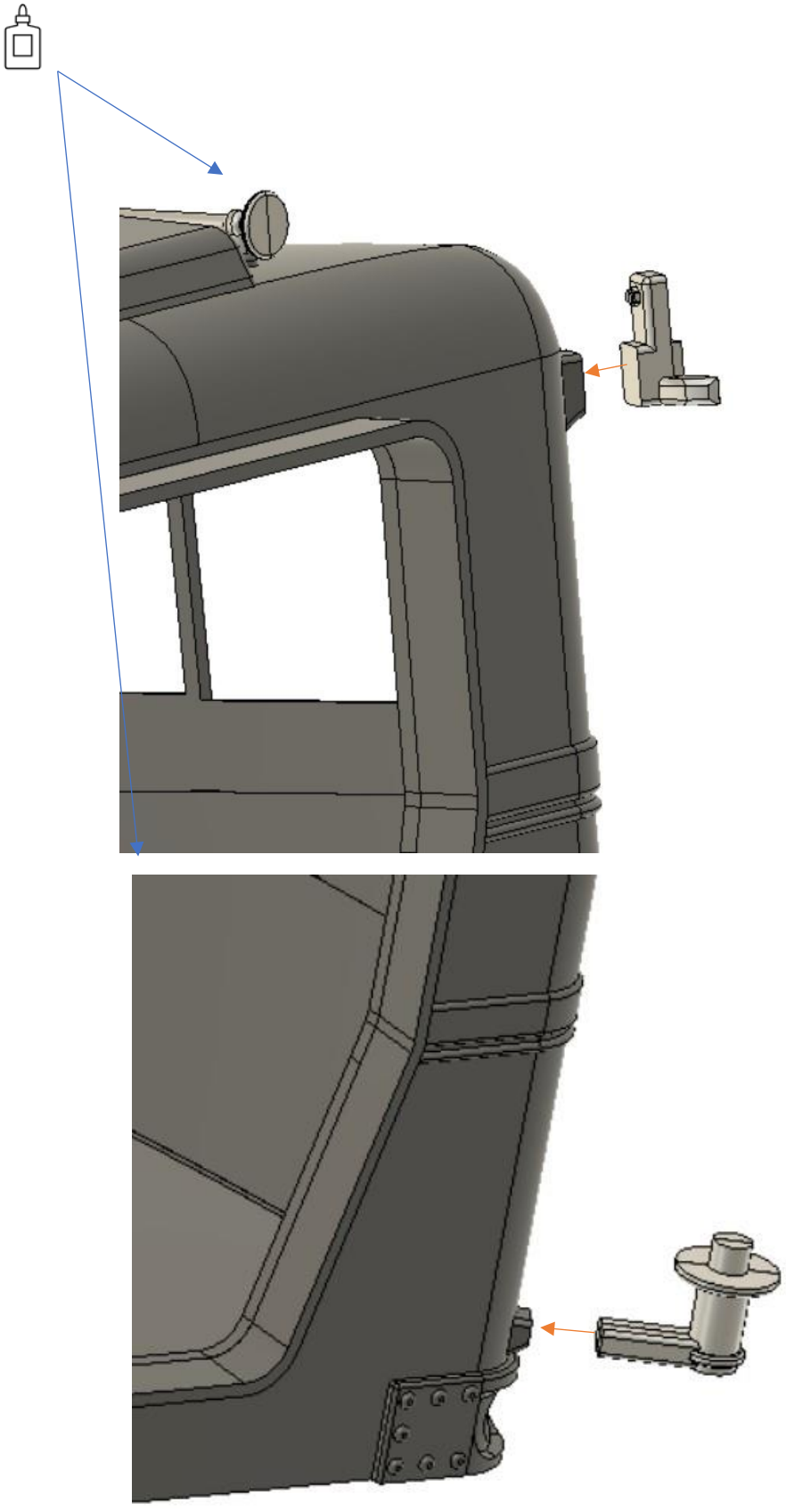

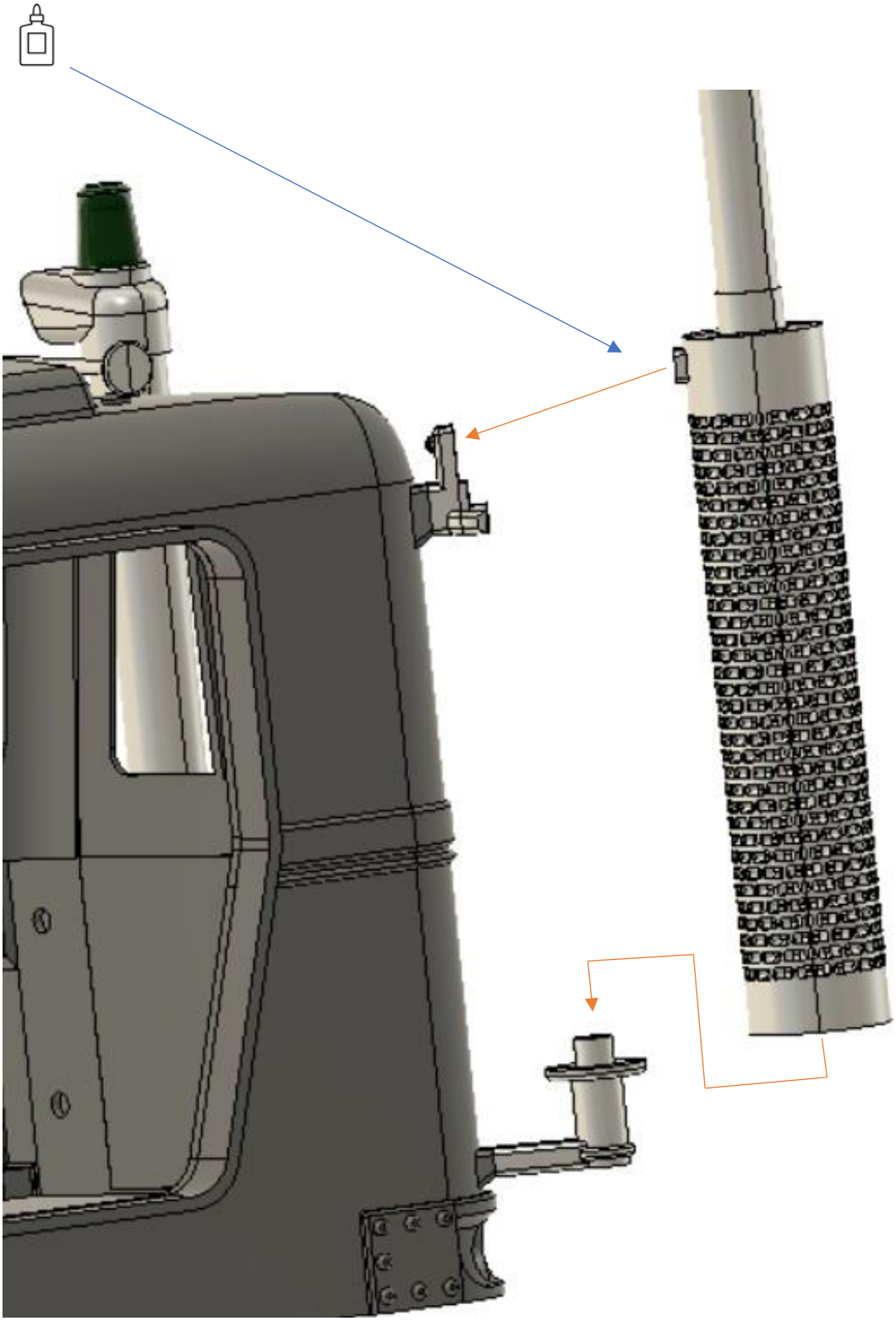

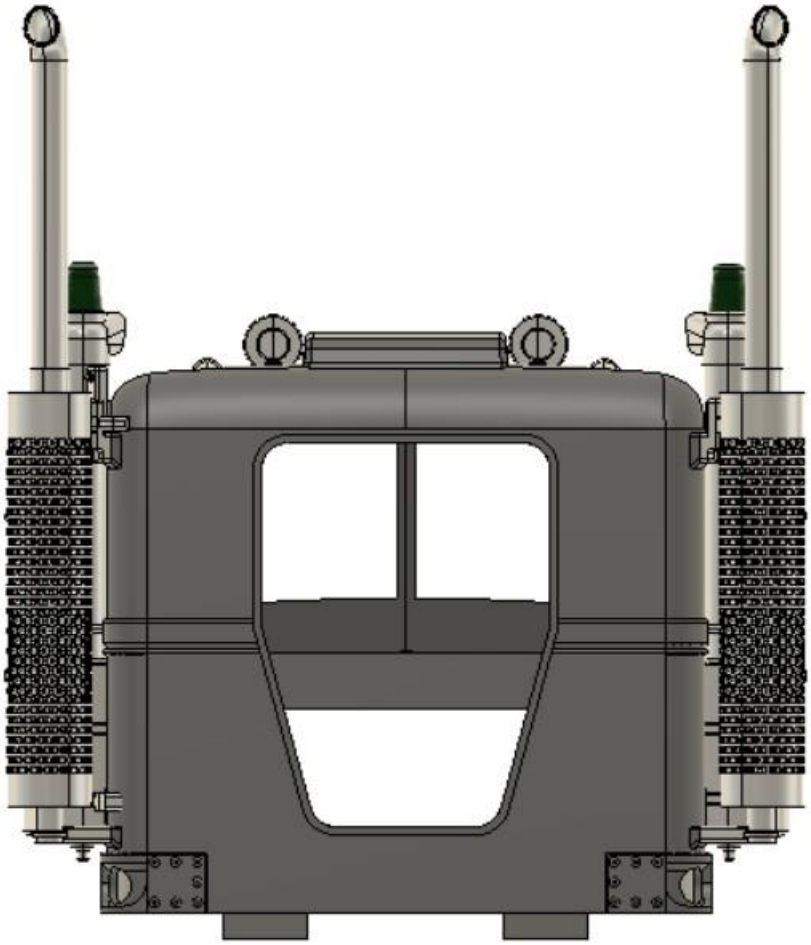

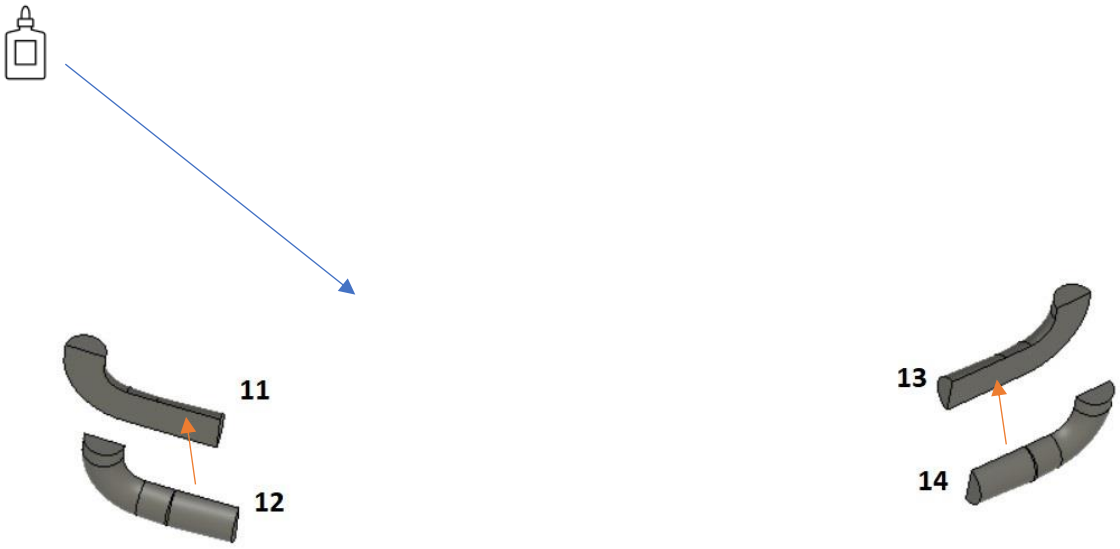
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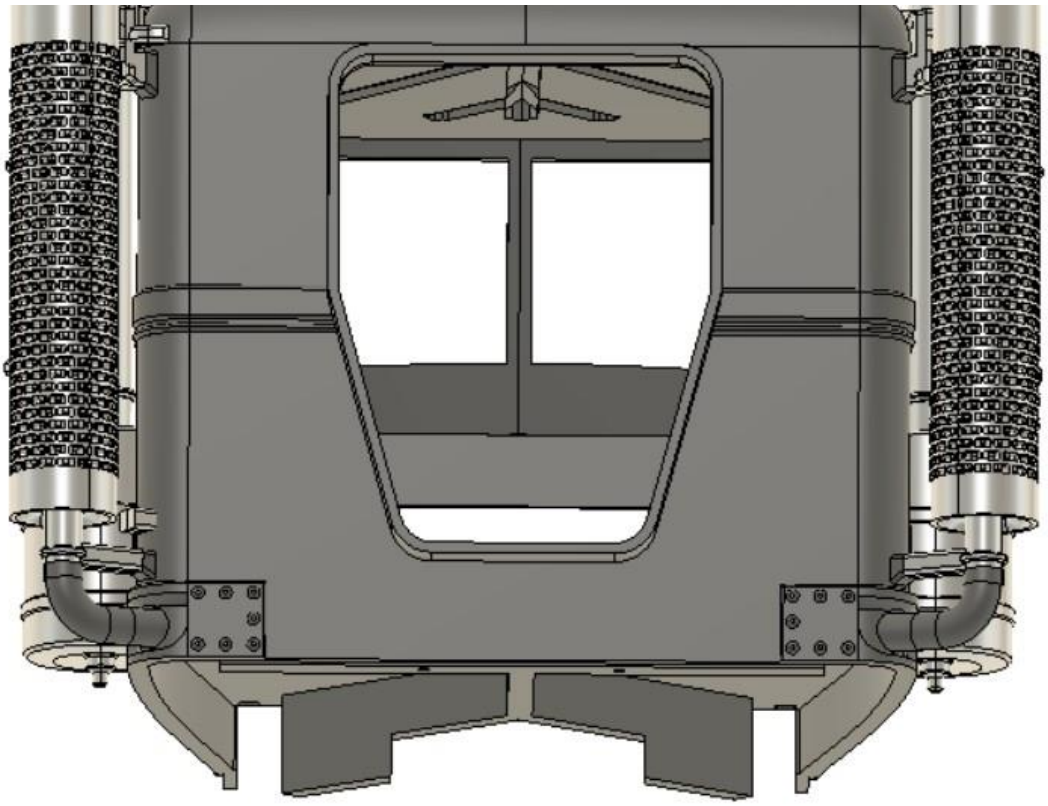
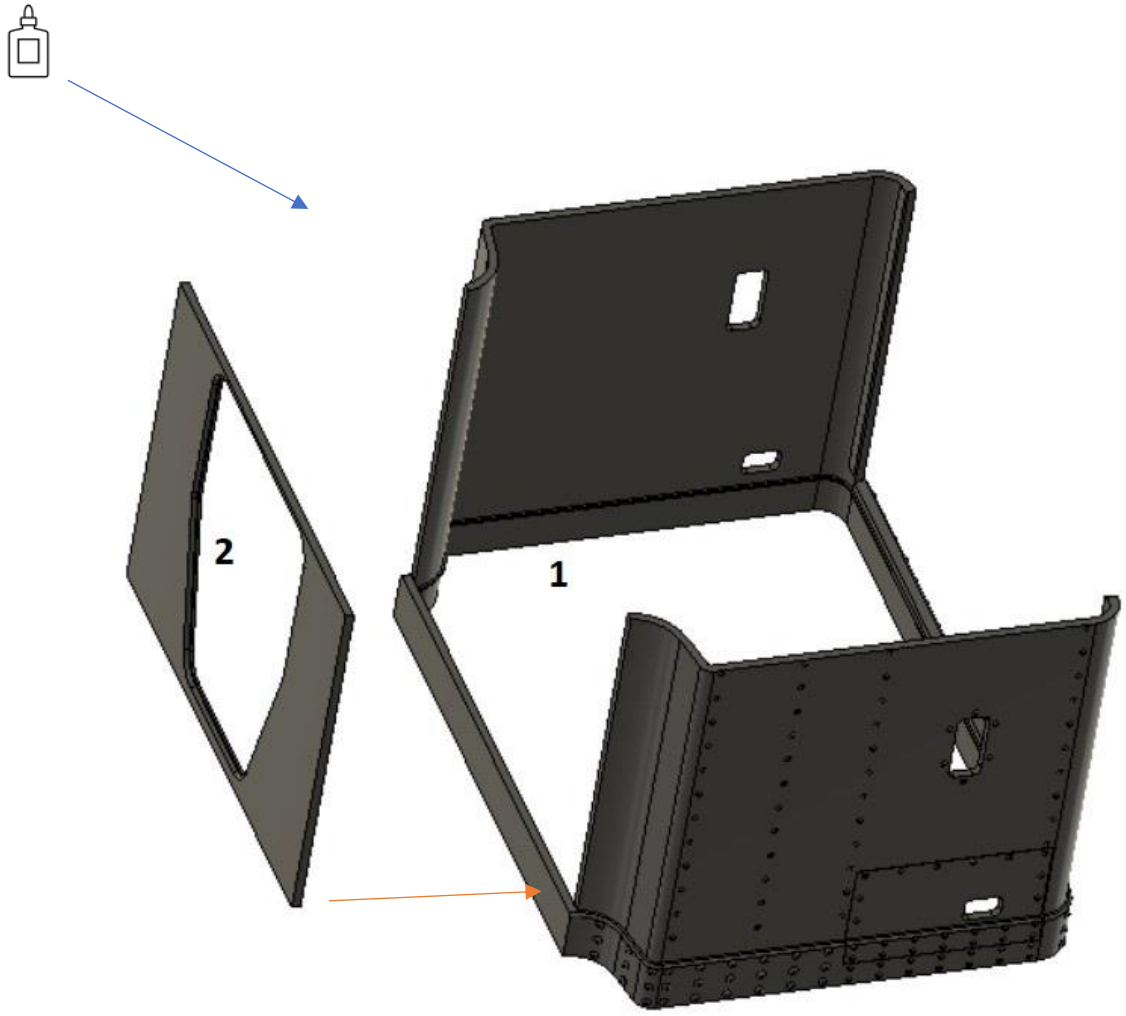
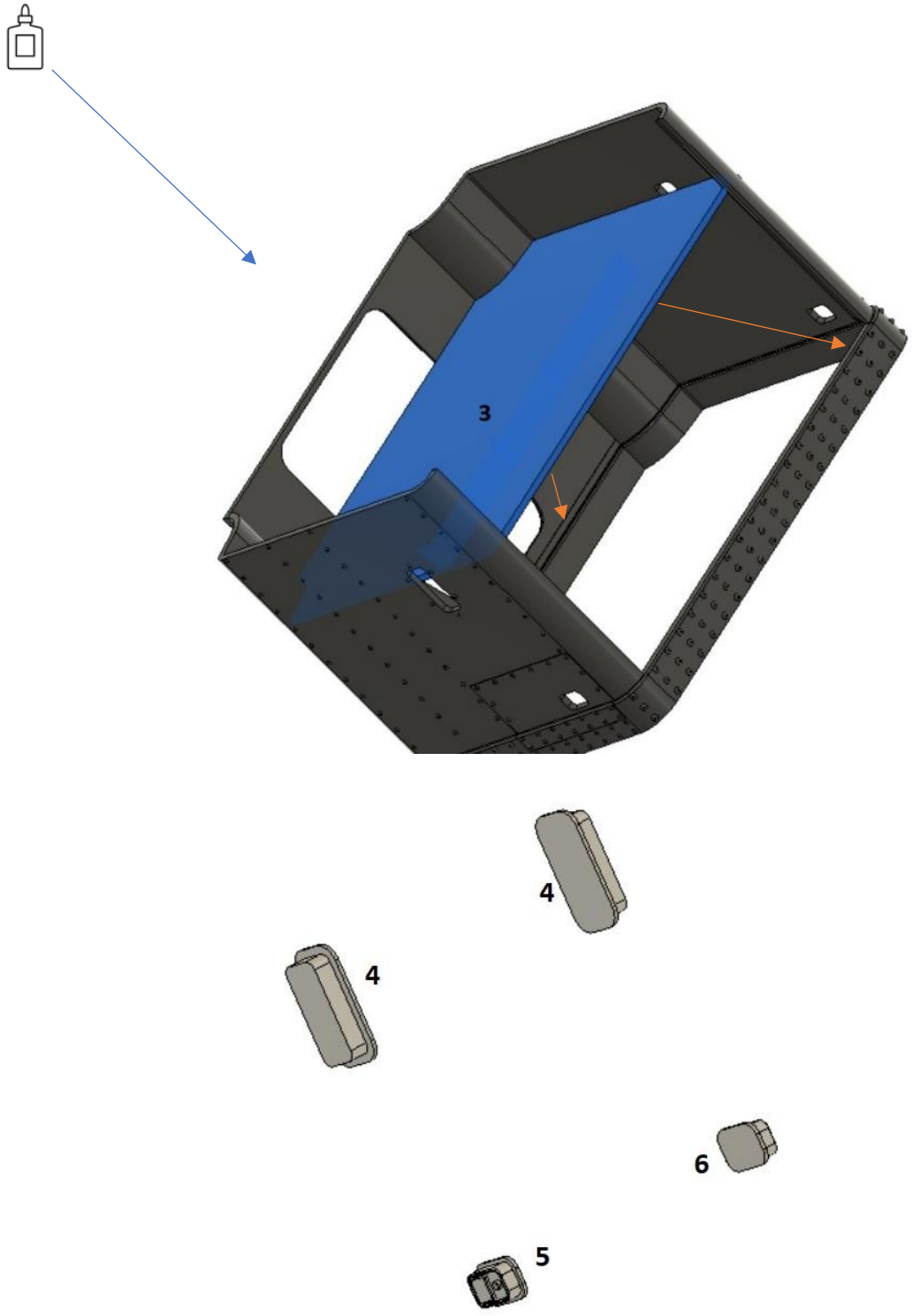


Cabine -2

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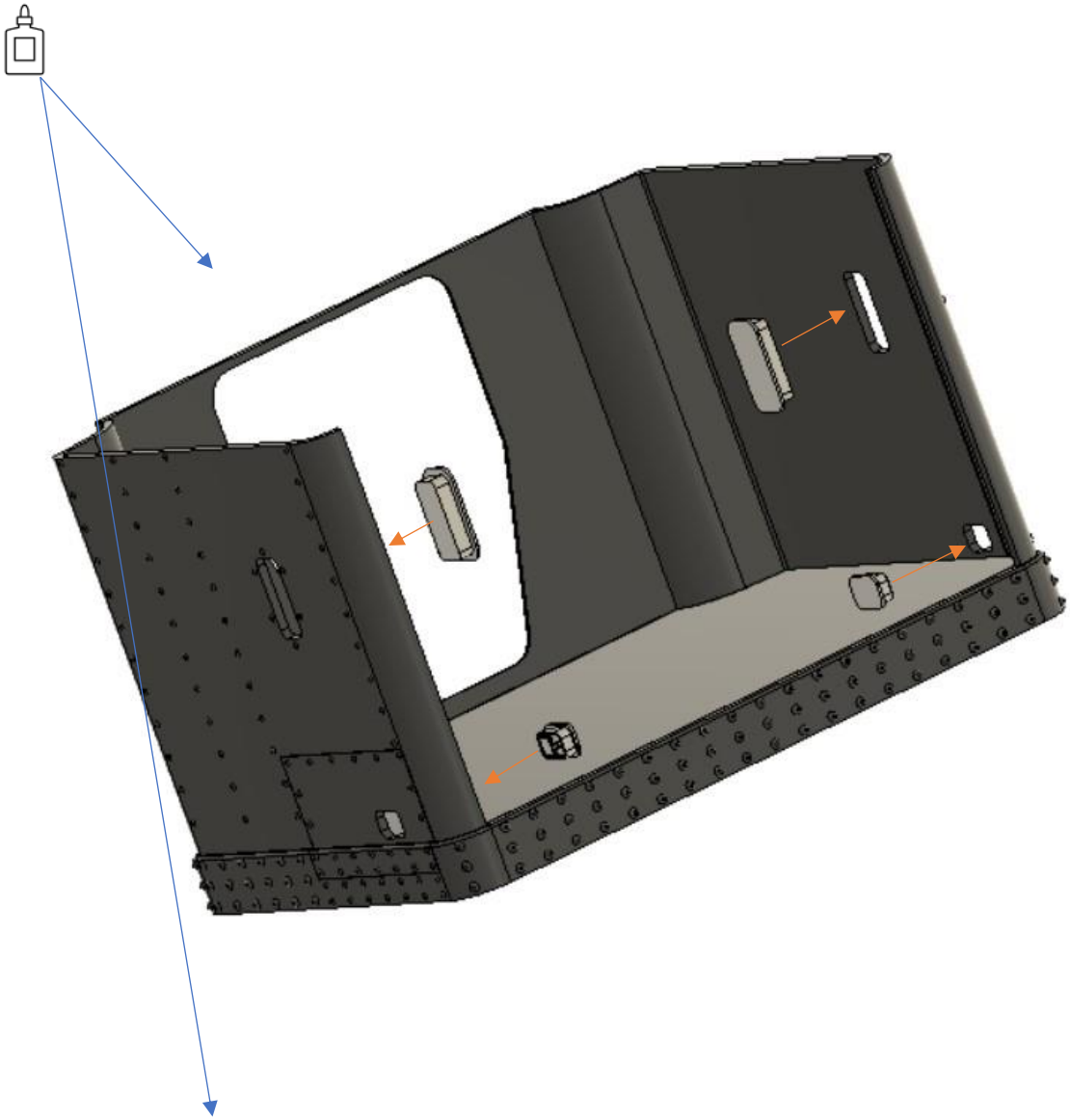


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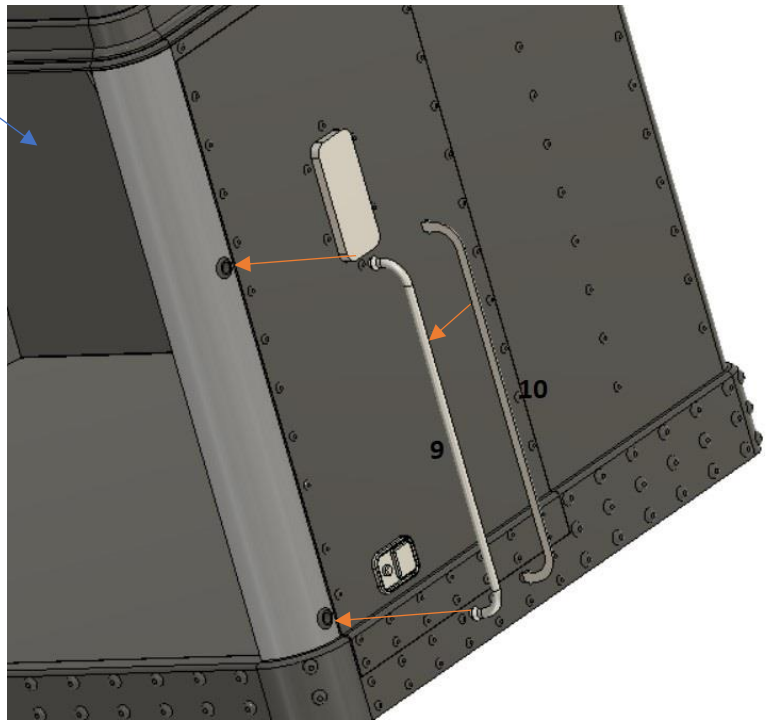
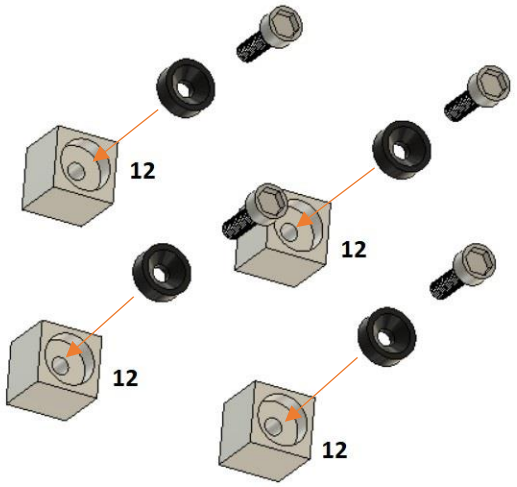
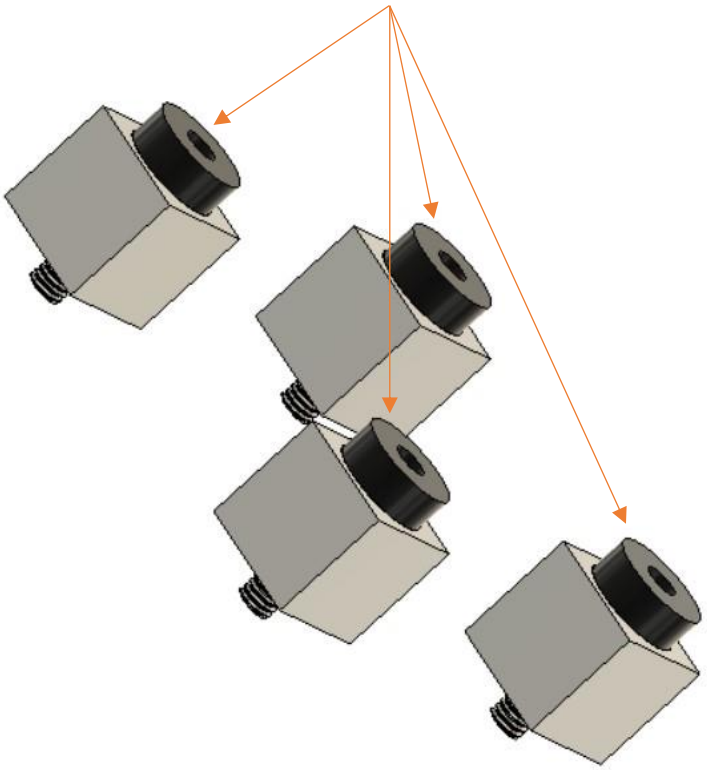


Use 2 mm wire, preferably brass, on the handle of part 11 and glue it into the holes.

Insert magnets into parts 12 and secure countersunk screws.



Put their counterparts on the magnets.



Now apply glue to the parts prepared in this way and place them in the cabin (2 bottom first) in the places shown in the following figure with part 11.

Insert your hand through the hole in the cab and define parts with magnet

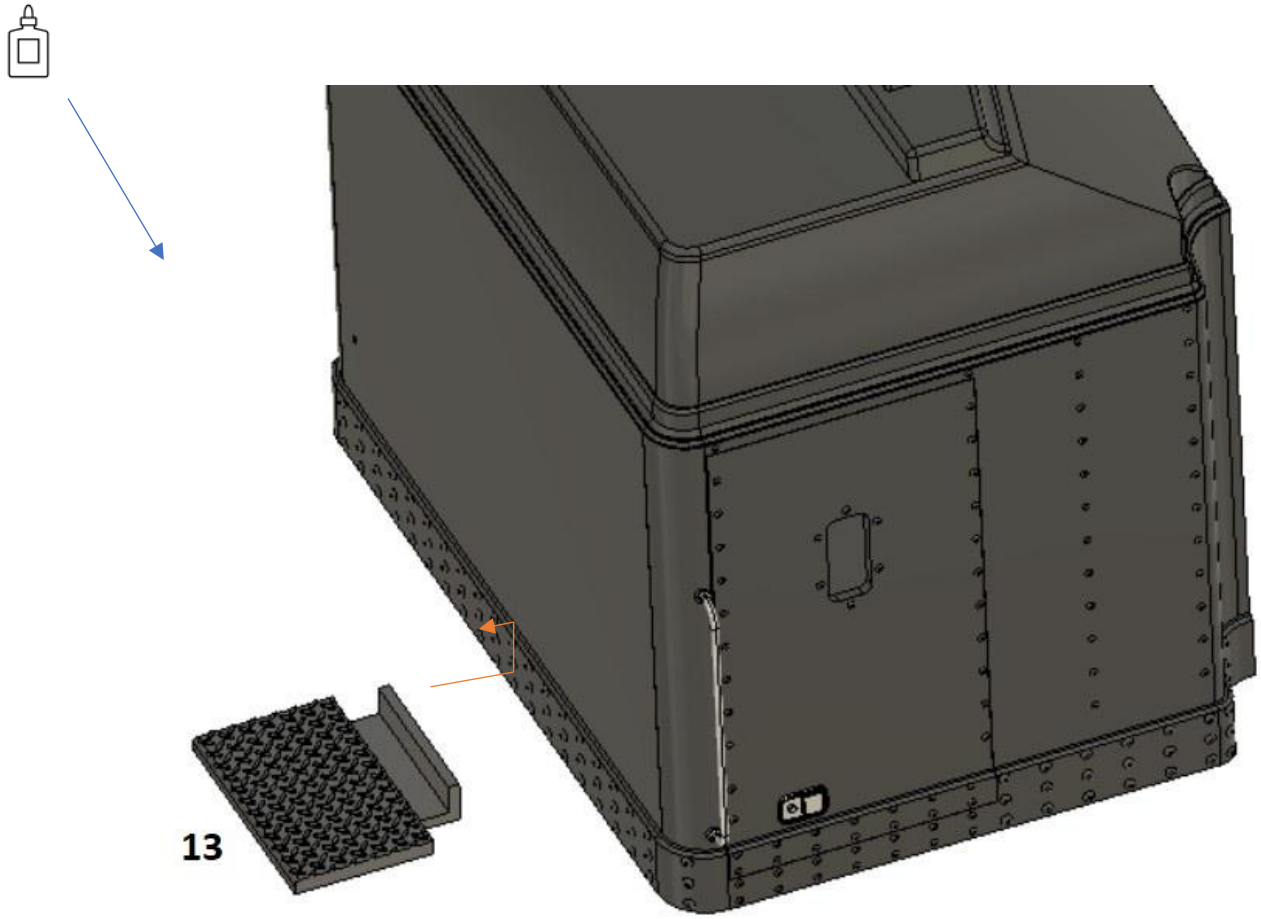
Part 11 must fit exactly with the edge.

Repeat the same procedure for the tops.

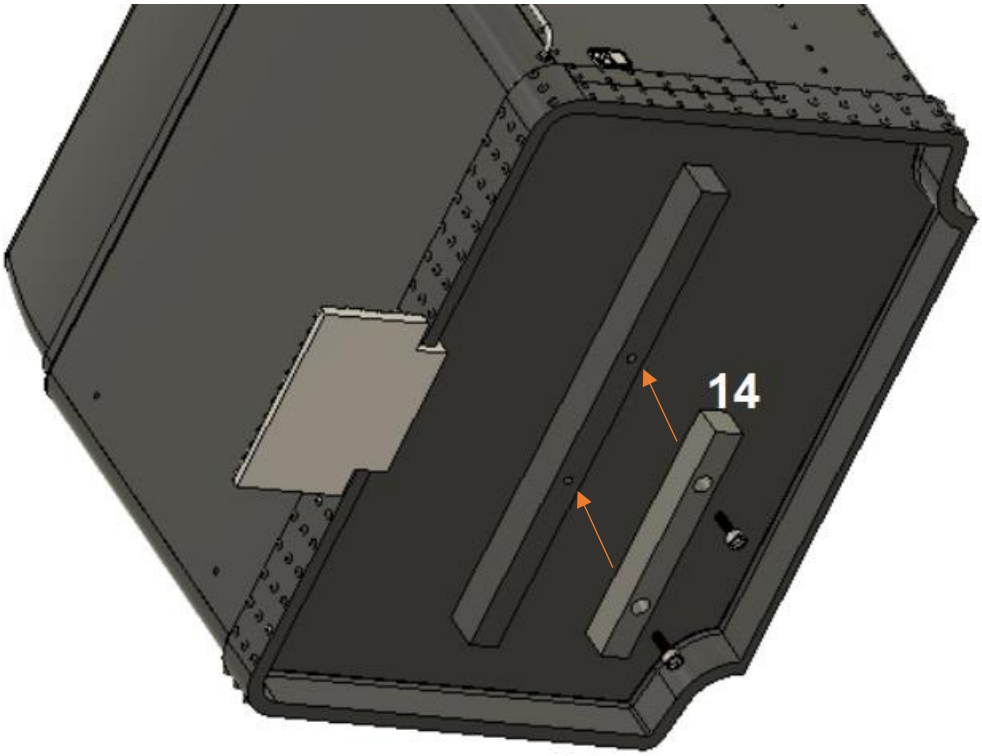
Then apply a sufficient amount of glue to the magnet counter-tips and fold in part 11.

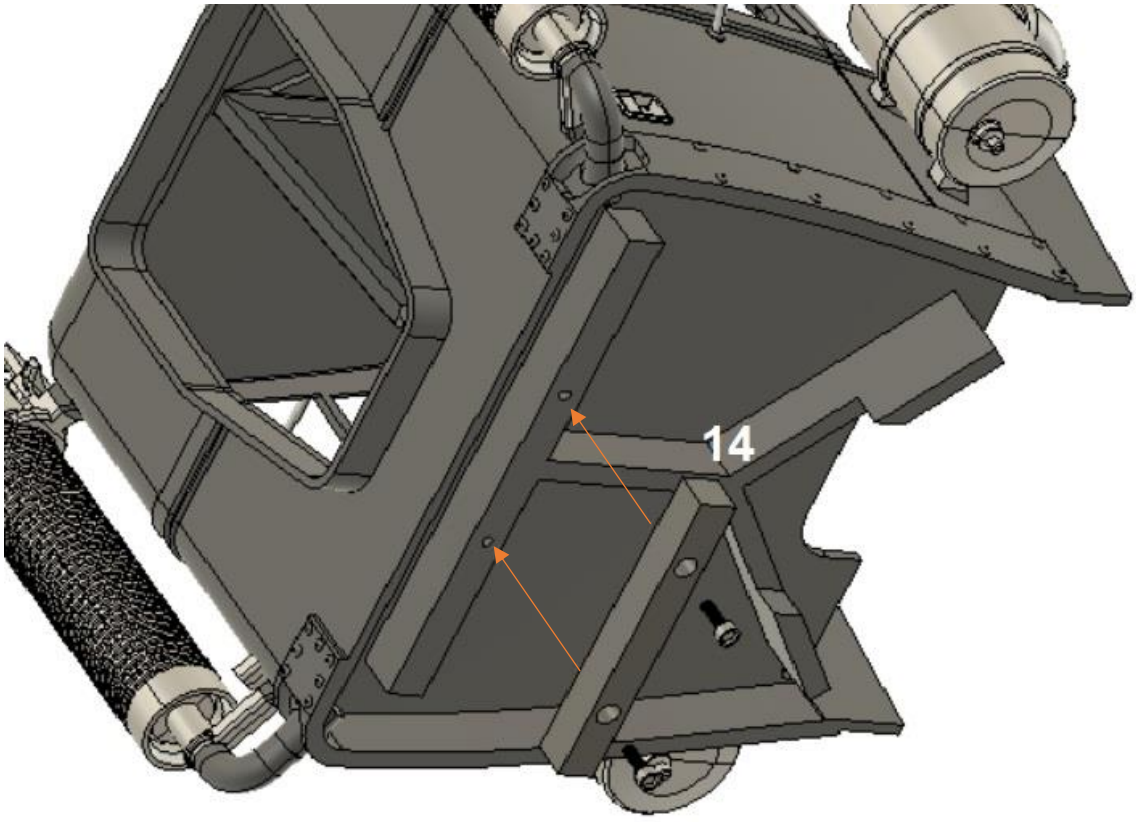
Be sure to use the activator. After the adhesive has withered, remove part 11 and check the strength of the glued joint.

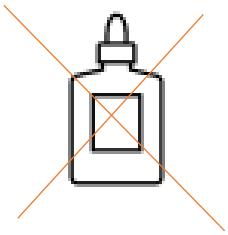

POWER

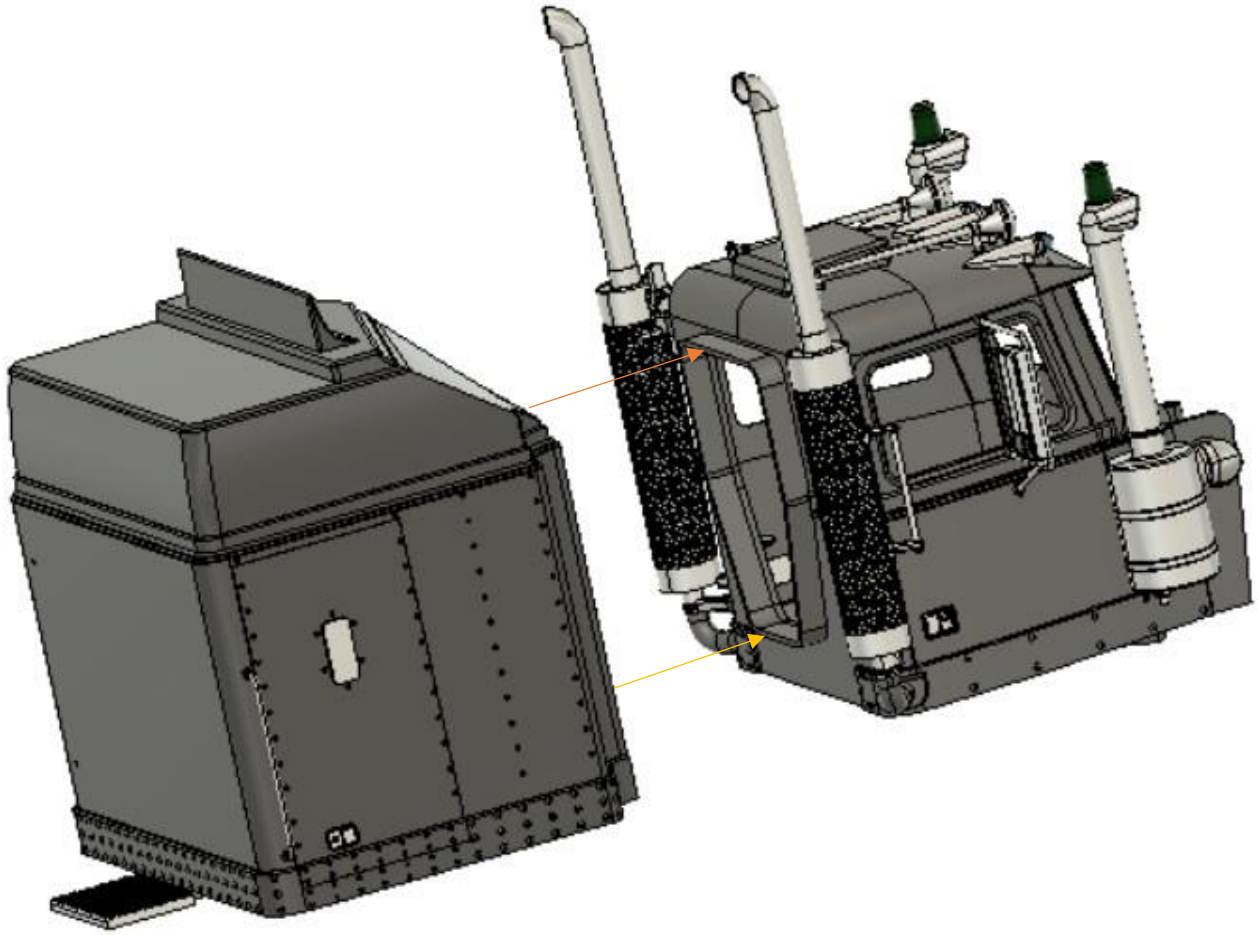

13

M3x10





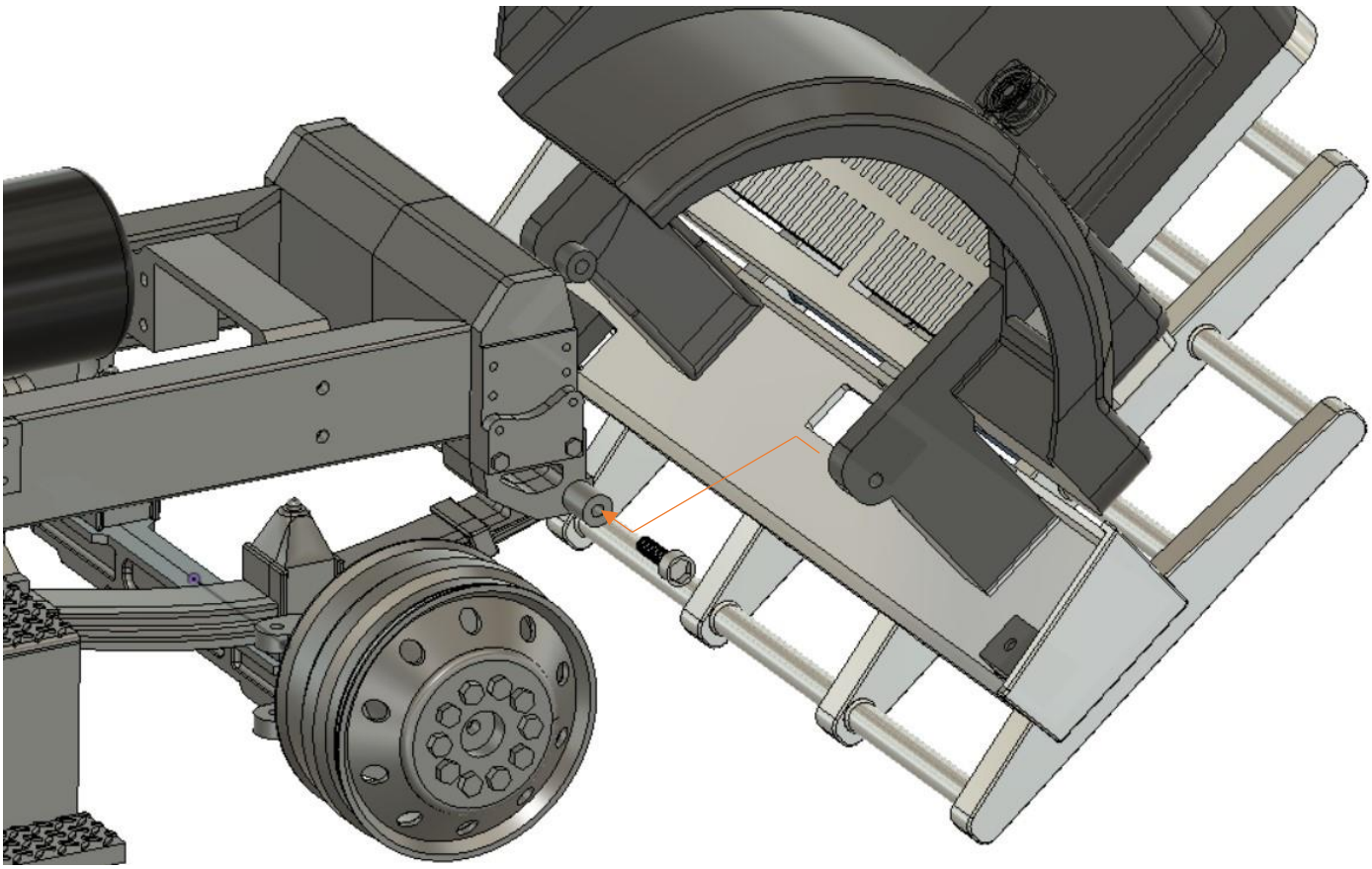




Do not glue!!!

Just put it in.

M3x20

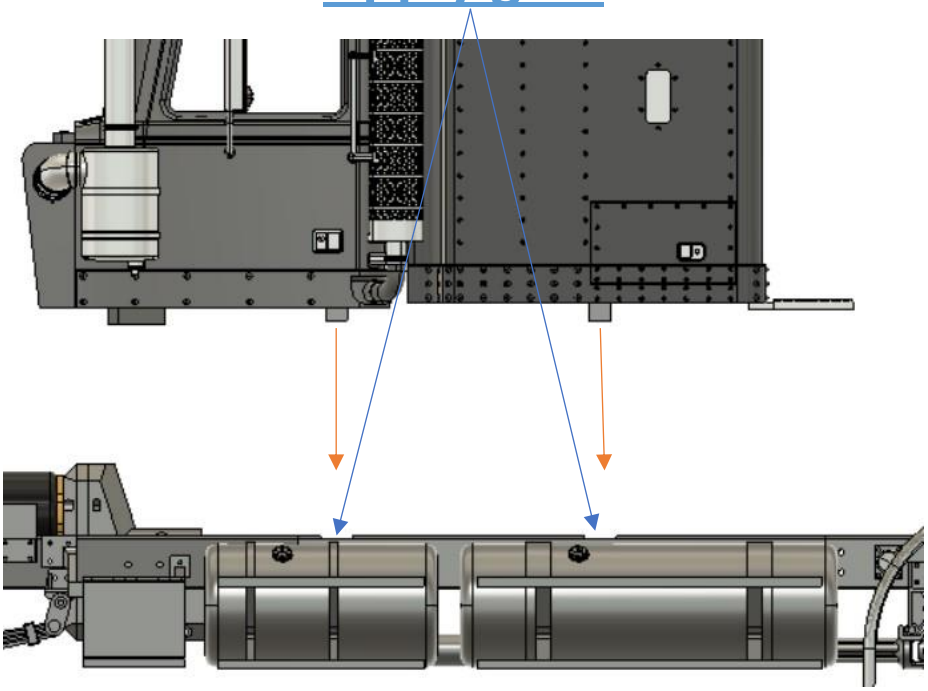


<u>Tighten the screws so that the capote can tilt freely.</u>

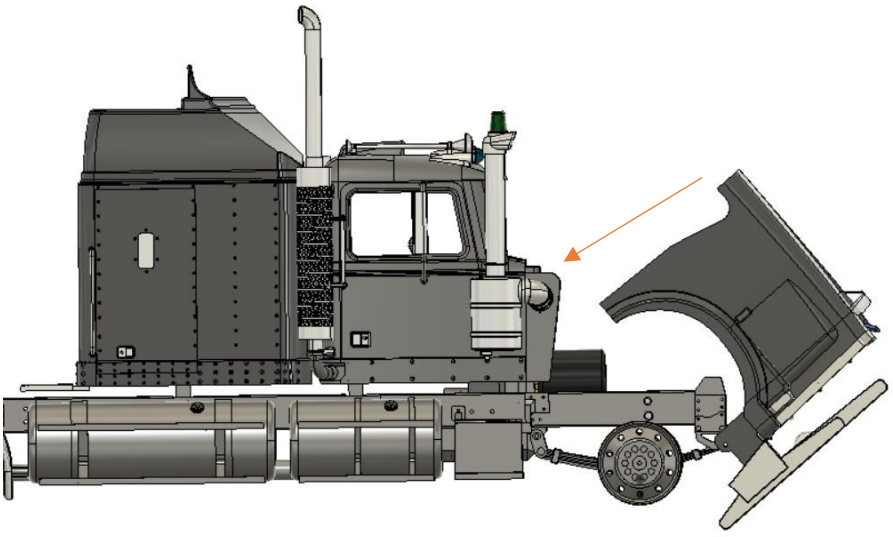
Follow these steps quickly but carefully.

It is good to apply a larger amount of glue to the marked places for slower drying.

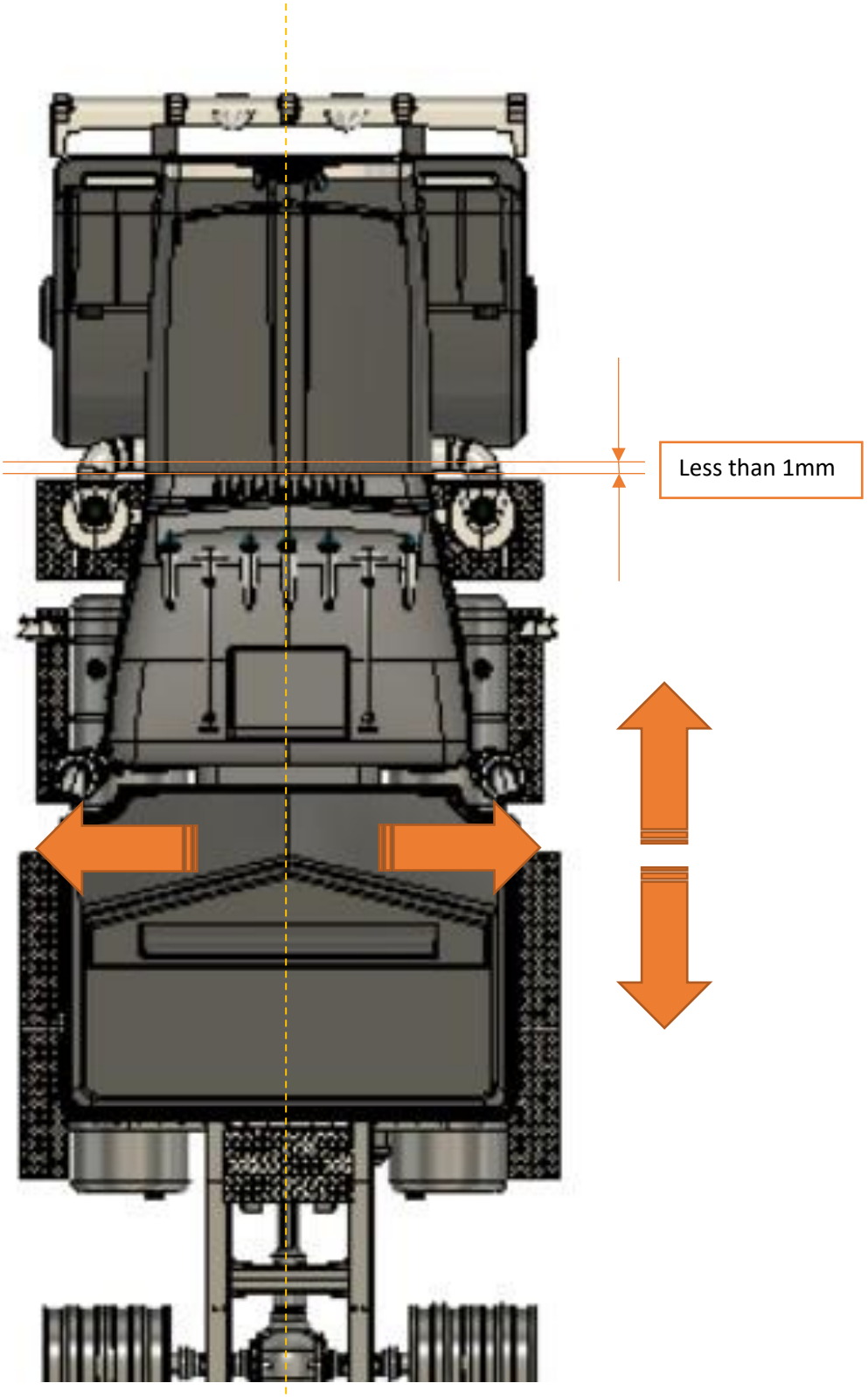
Apply glue

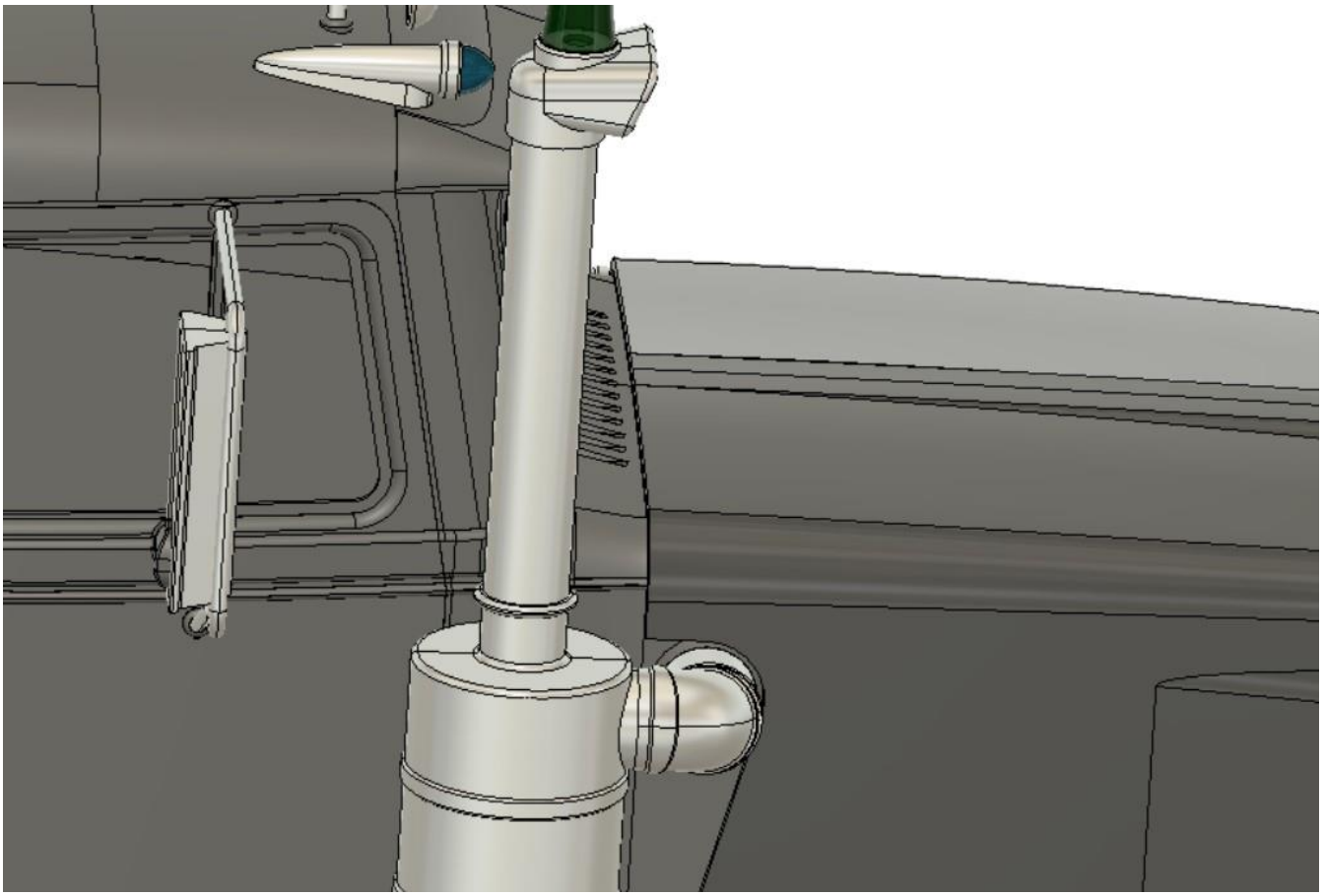


Tilt the capote



Move the Cab until the parts are in the axis and at the same time the gap between the hood and the cabin is less than 1mm.



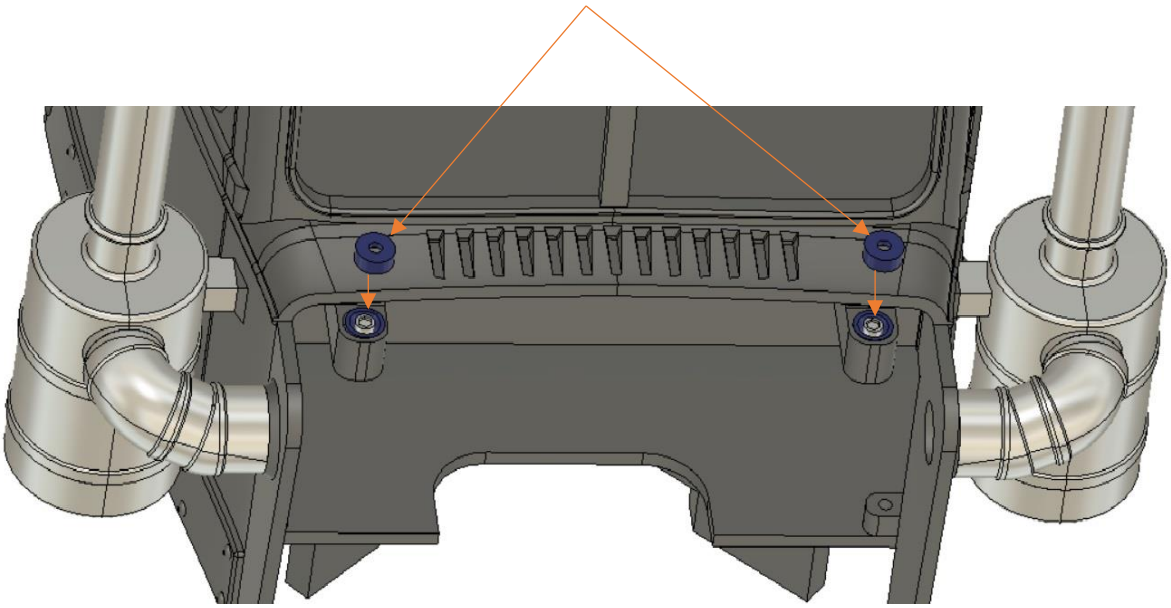


The hood should fit beautifully on both sides.

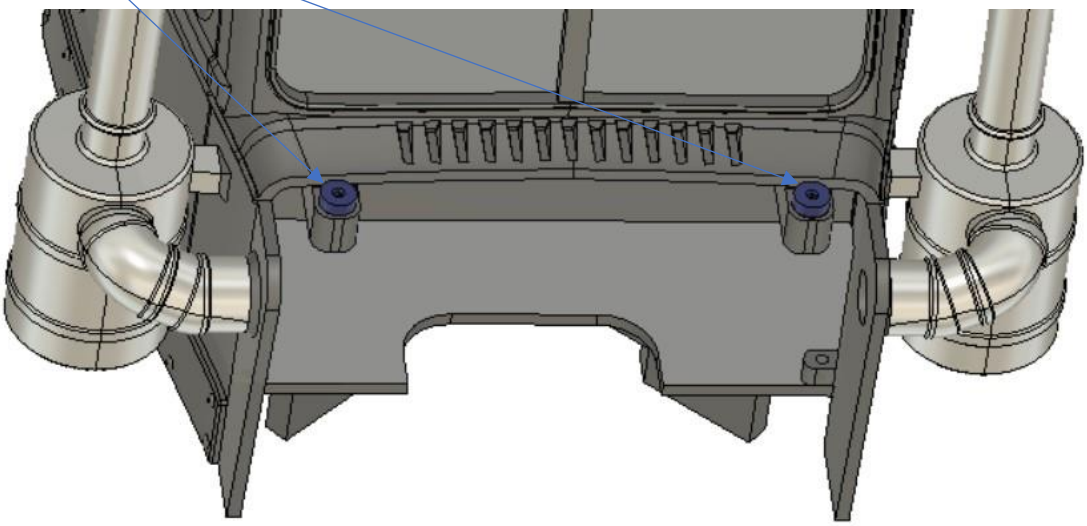
In this way, we eliminated almost all inaccuracies in the previous assembly or in inaccurate gluing.

After unscrewing the screws from the underside, we can remove the cabin if necessary.

All that's left is to plant magnets to keep the hood closed.



Apply glue and tip the capote



After the adhesive has dried, open the hood and check the strength of the glued joint

And it's done!

<u>Finish the lighting</u>

(if you decide to use the light module I designed, you can find the instructions on http://www.mlmodel.webnode.cz)

Set the controller to mode – without brake

<u>If your radio has the possibility of slowing down the channel, mix the deceleration to the gas channel.</u>

Enjoy the model 😊