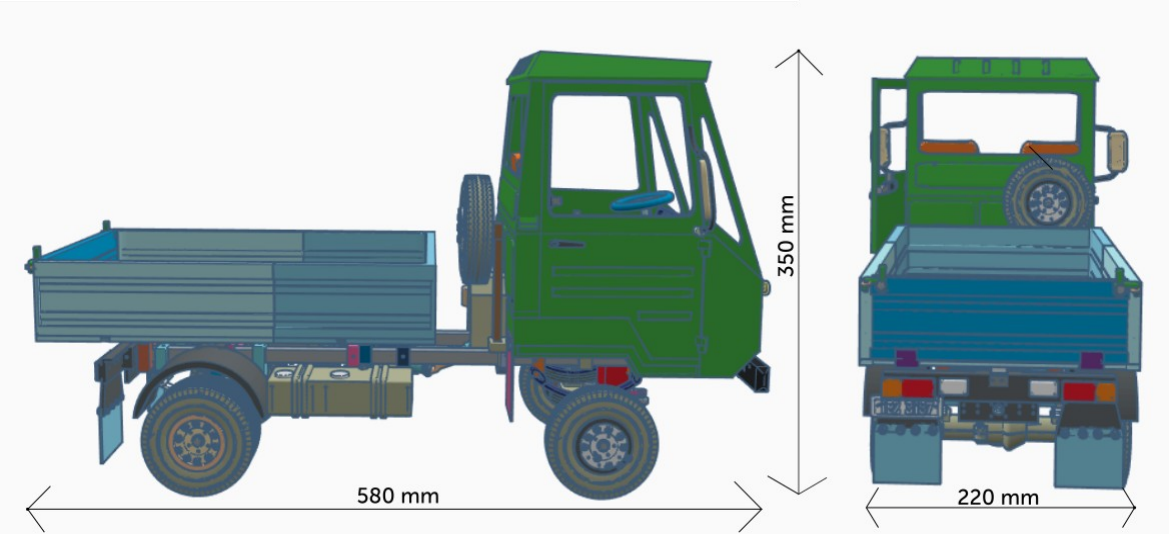
IFA Multicar M25

by Tamimi Team

The project is inspired by a Germany made vehicle IFA MULTICAR M25. Many prototypes has been made and the final M25 was produced in more then 100,000 units. The vehice used a 33 kW (45 PS) diesel engine. Simple, yet a versatile small utility vehicle. made in various variants, such as flatbed, snow plow, tiny excavator, 4x4 etc.

We love cars and RC models so we decided to make a model of this car. Its mostly 3d printed, you need to buy just a few things such as motor, esc, battery, reciever, some M3 and M2 screws, few bearings, tires and aluminum profile 10x10mm. Shopping list is included within download bundle. Multicar is made with a flatbed, lifting mechanism is optional and its included in files. **NOTICE – recommended and tested motor N20 for lifting mechanism is not very strong, works well without heavy payload, i! Lifting heavy payload is not tested and its at your own risk!**



Parameters

Lenght: 580 mm
Width: 220 mm
Height: 350 mm
Weight: 2200g PLA (depents on print settings)

Requirements

Printing is very simple, requires FDM 3d printer with min. build volume of. 210X210xZ-200mm, default 0,4mm noozle, slicer software such as Simplify3D(recommended) CURA or any favourite software. You will need basic PLA, optional is transparent pla for lights. You'll also need screwdrivers, superglue and for final assembly M3 drill (basic lithium battery screwdriver with M3 drill bit work well).

Print settings

There are two folders, first named SIMLIFY3D with simplify3d factory file containing all the setting you need. Layouts on heatbed, processes etc. **Always adjust print setting according to your printer!**

The second folder named BASIC STL contains stl file for any other slicer. For almost everything use 2 or 3 walls, 20% infill. For transmition gears, drivetrain and gears generally, use denser infill. **Always adjust print setting by your printer!**

NOTE – every stl file is named with recommended print colour and if support is required (for example B1-black PLA with support). Feel free to use whatever color you like, but we chose colors based on the original vehicle.

Shopping list

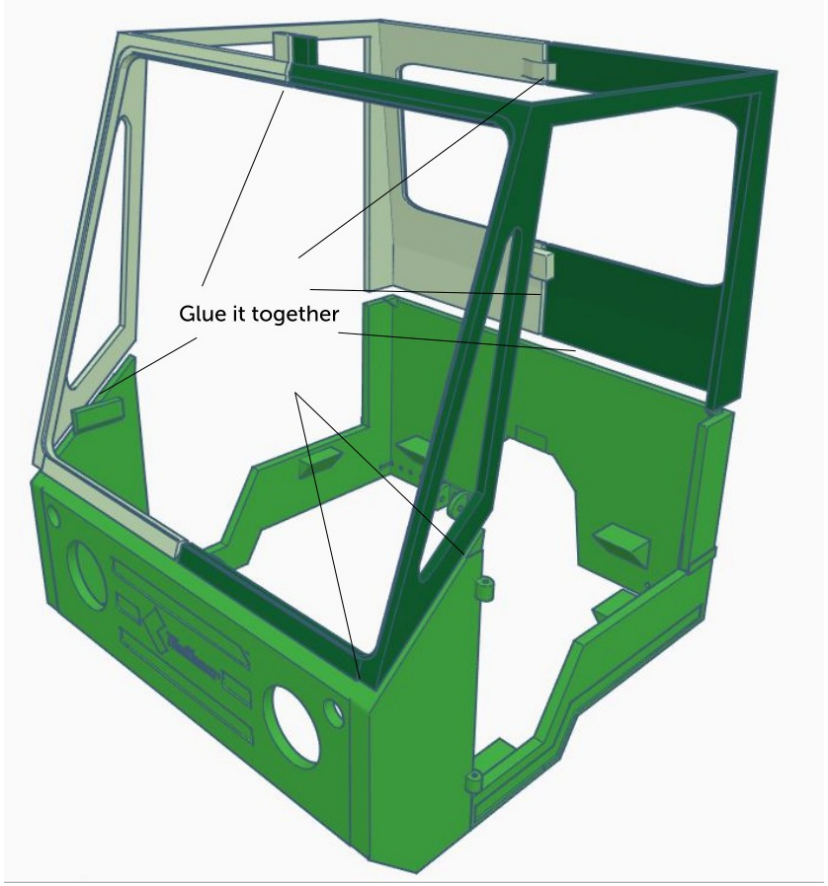
Shopping list is located in main folder, its separated file, not included inside this manual. Please check shopping list before you will start print, make sure you have everything to finish assembly. Lift mechanism is optional, so its on your choice. Recommended motor and esc work together, if you wanna use differend motor or with differend RPM, you will need to rework complete motor holder and transfer case gears.

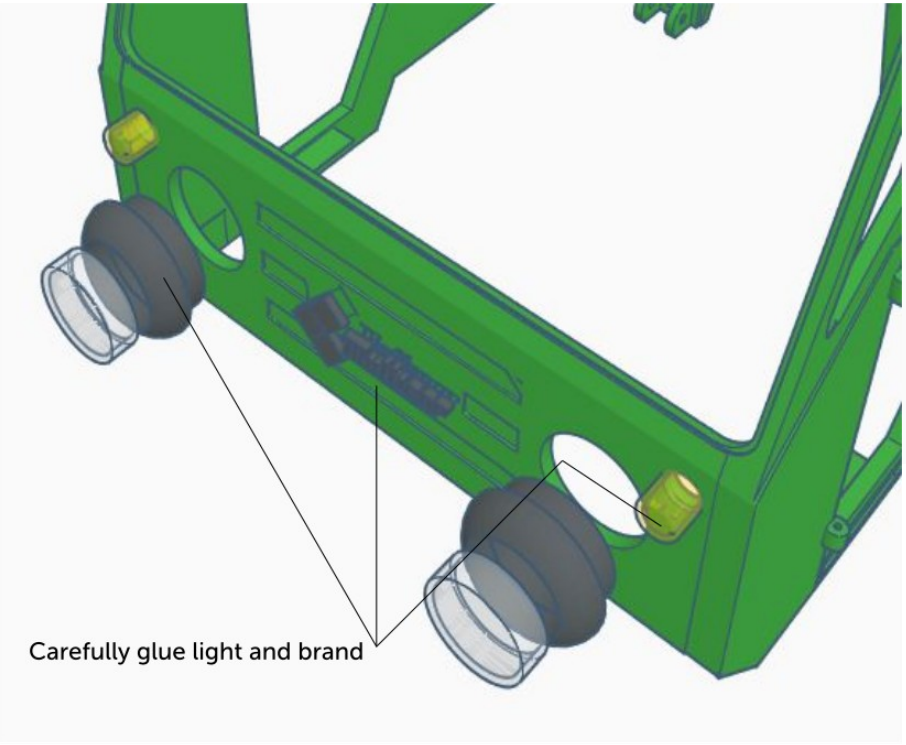
So lets get printing and don"t forget to order stuff on shopping list!

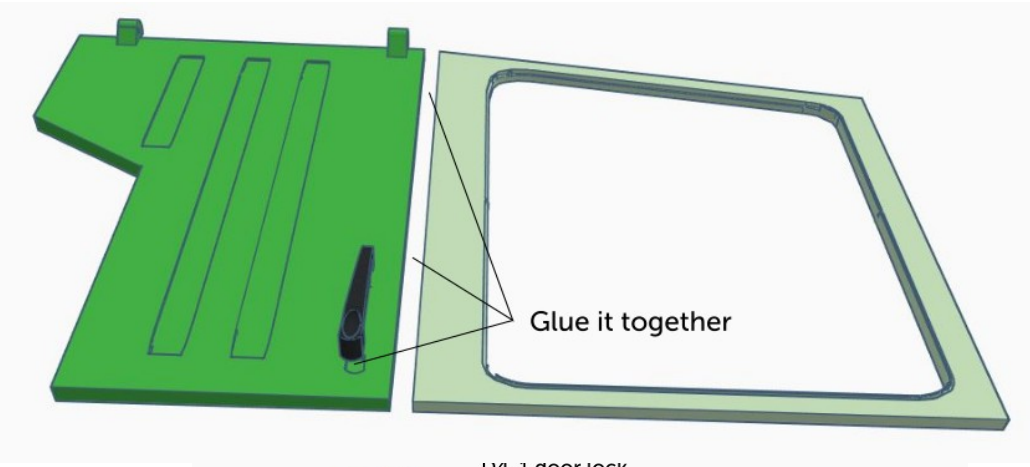
Assembly instructions

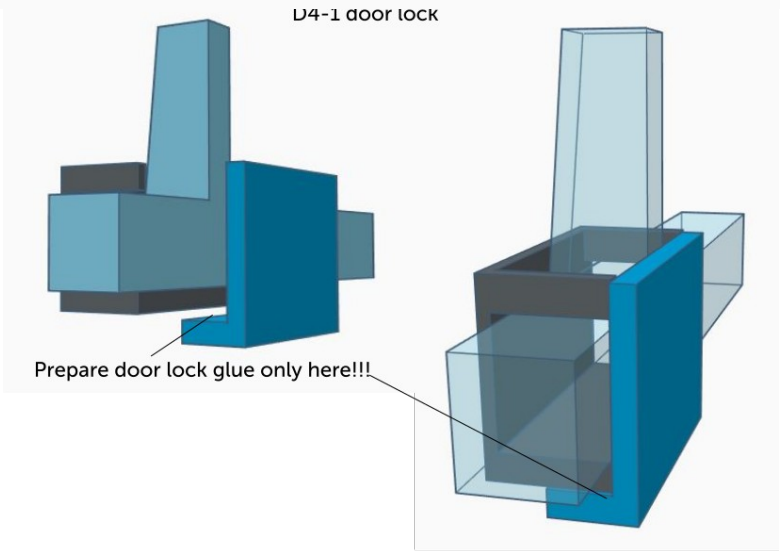
Step by step instructions, how to assemble the model. Please include the pictures as well. Use the Heading level 2 style for sections here.

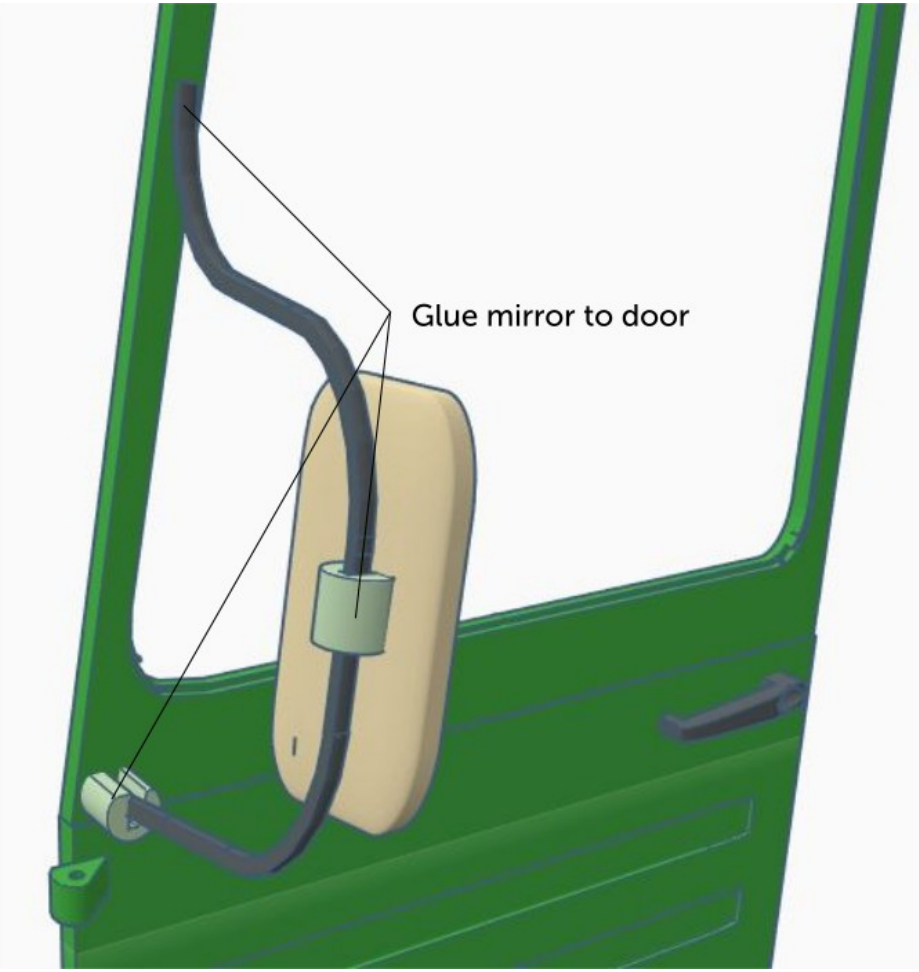
1. Cabin assembly

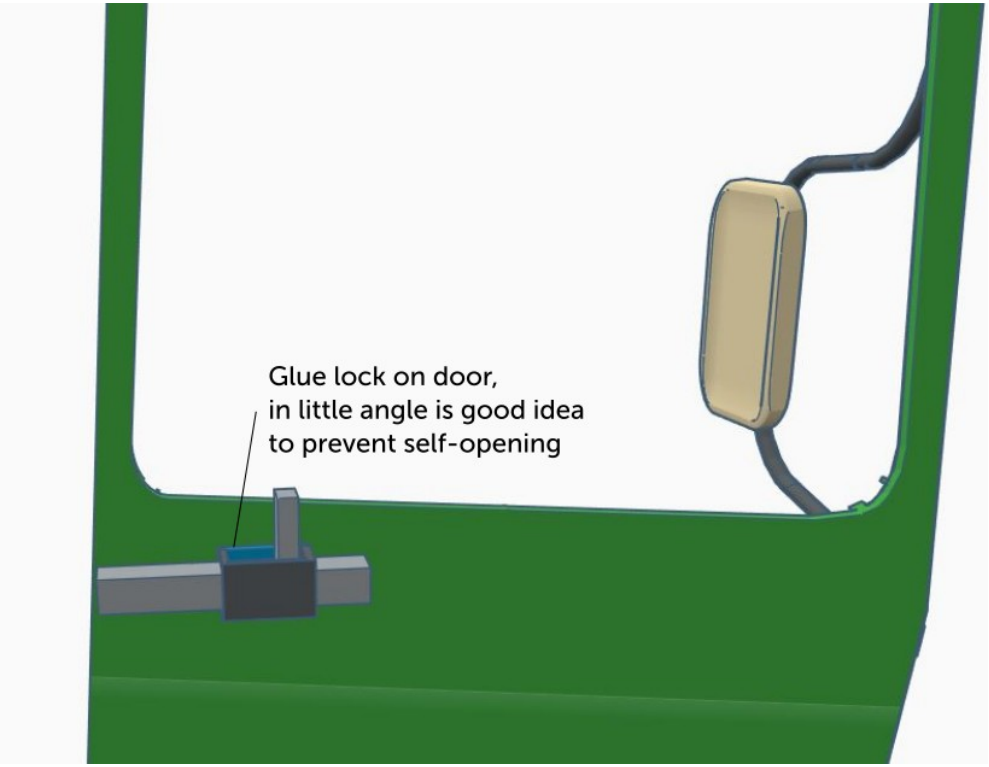


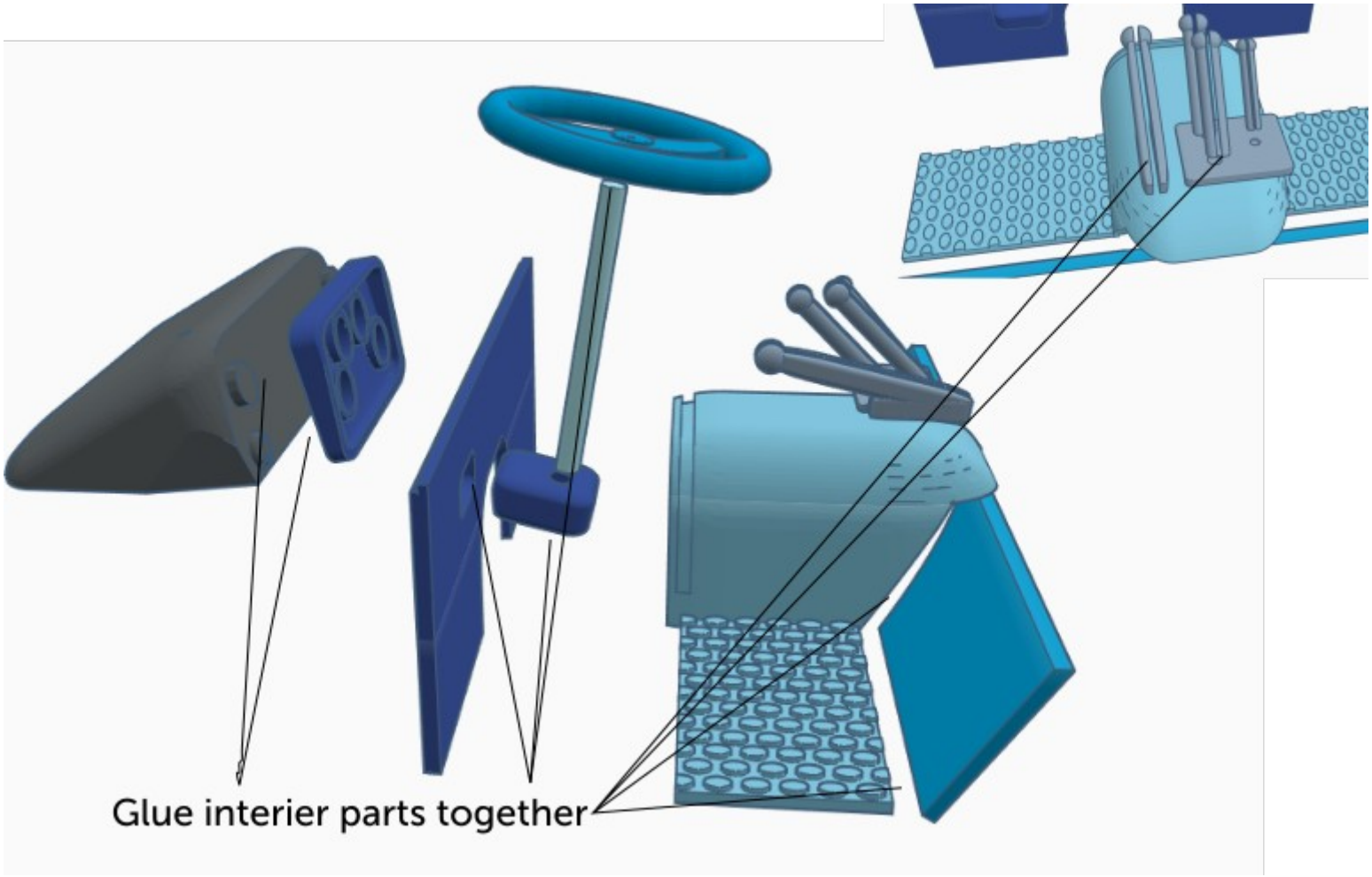

Carefully glue light and brand

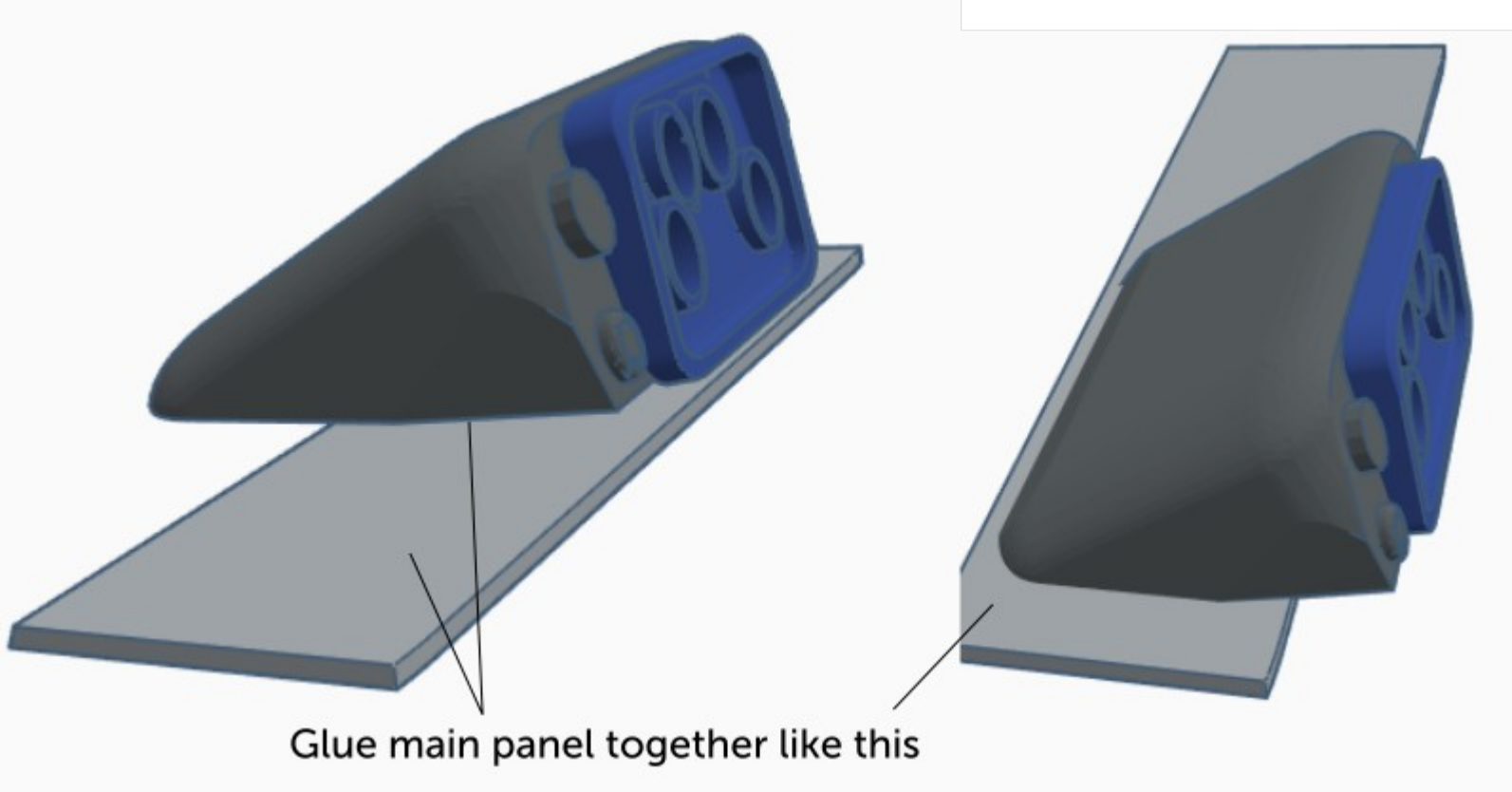

Glue it together

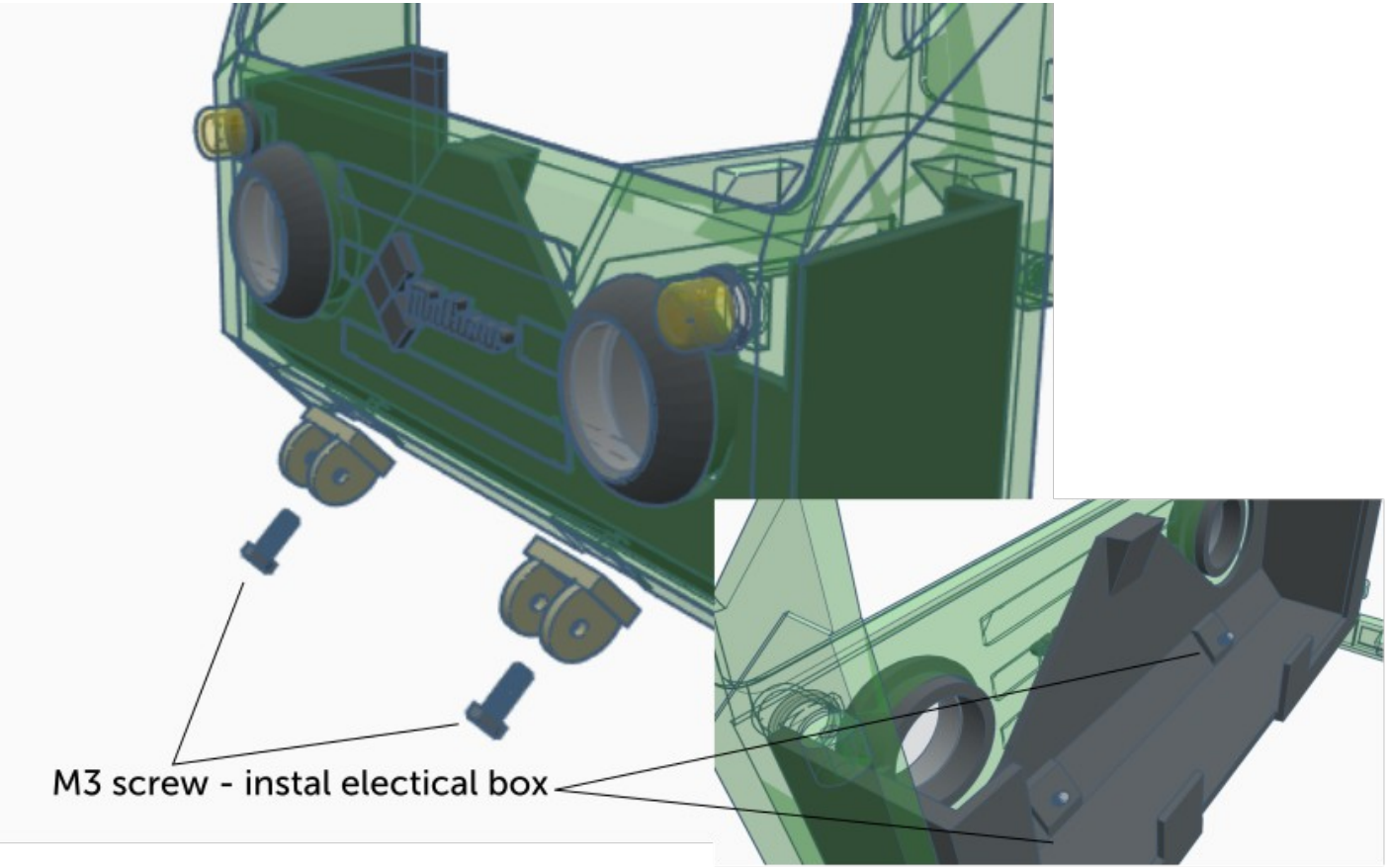

D4-1 door lock
Prepare door lock glue only here!!!

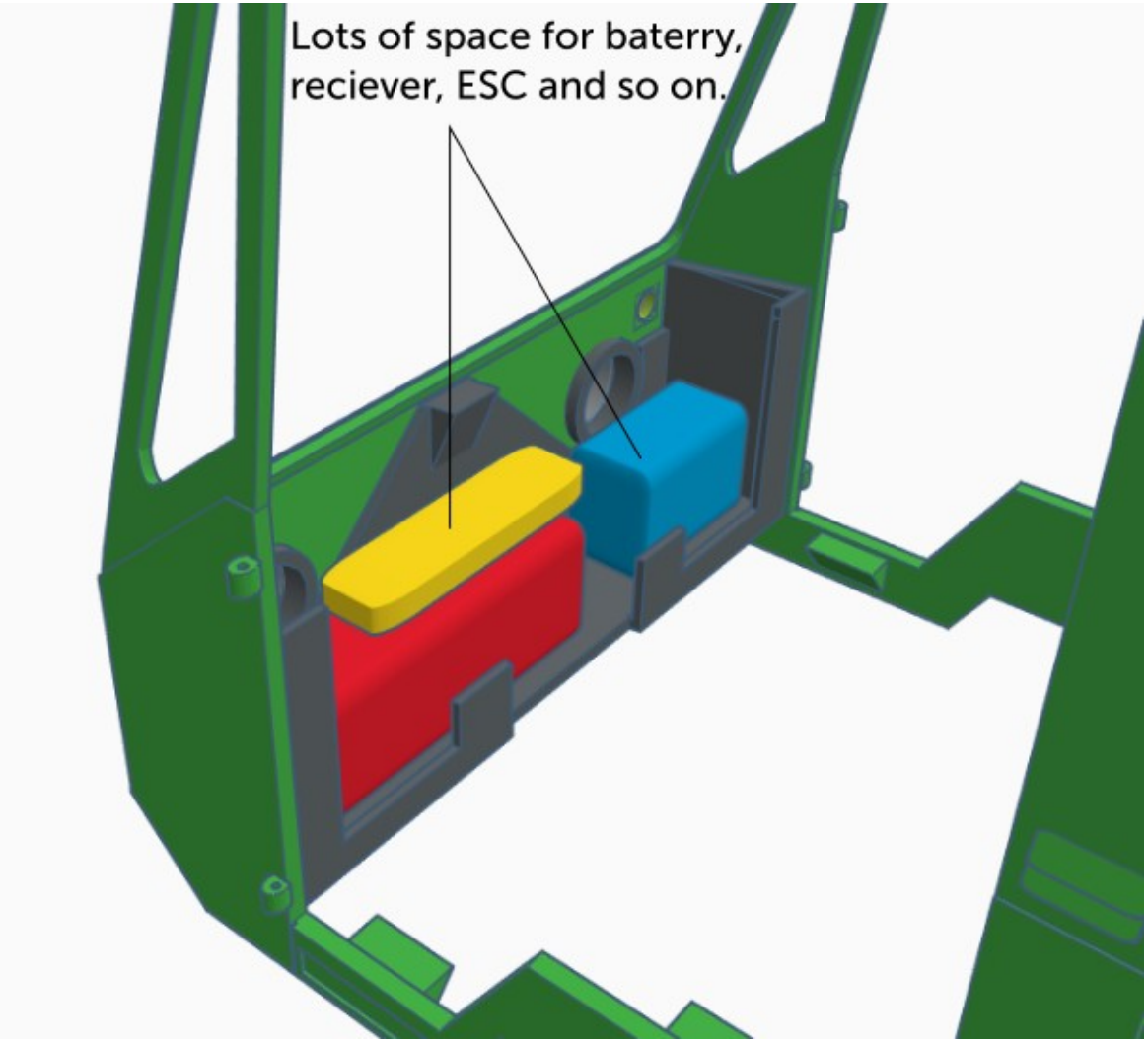

Glue mirror to door

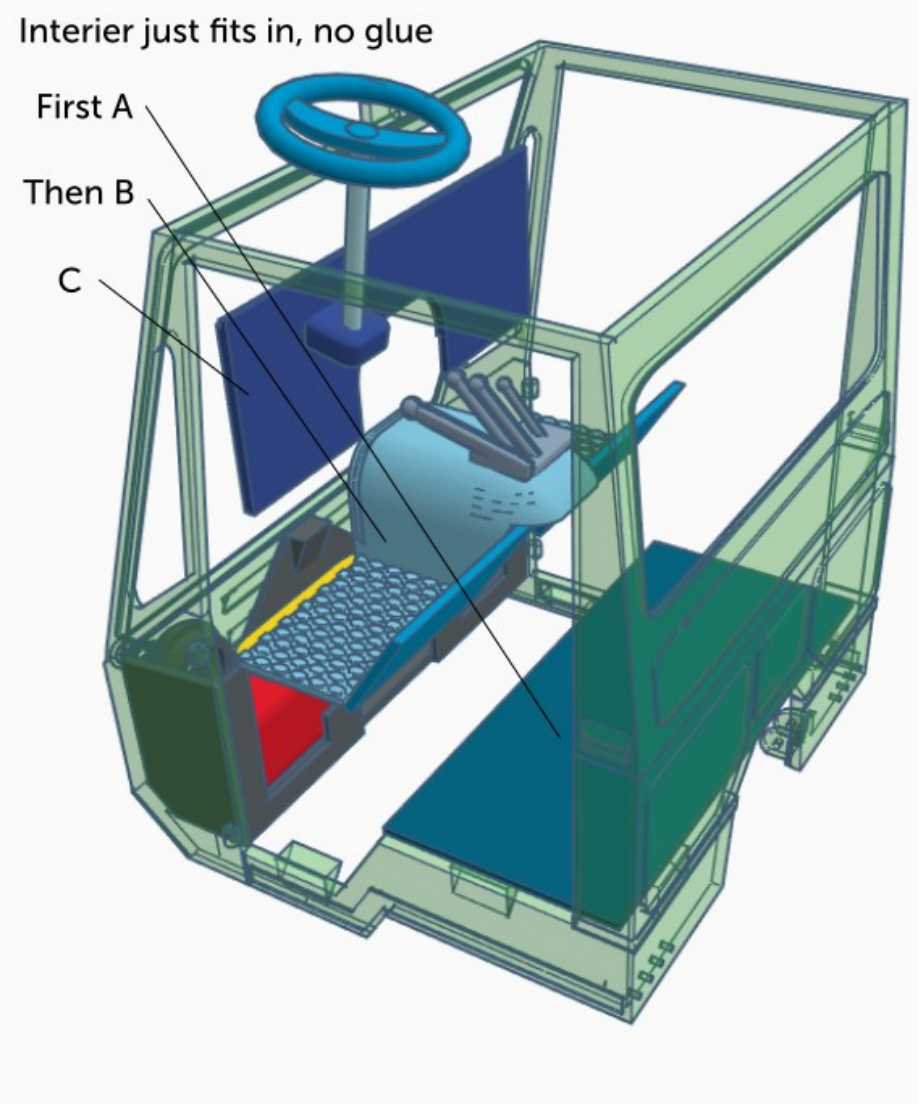

Glue lock on door,
in little angle is good idea
to prevent self-opening

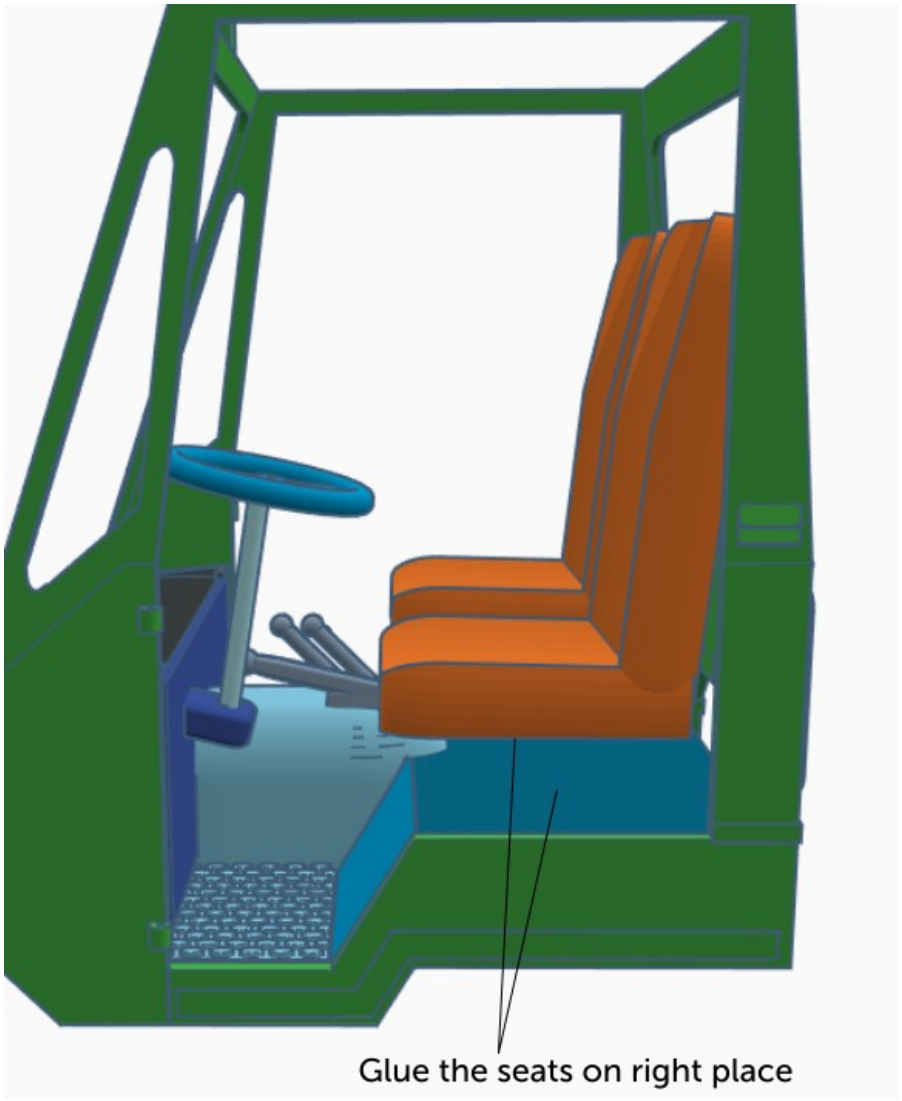

Glue interier parts together

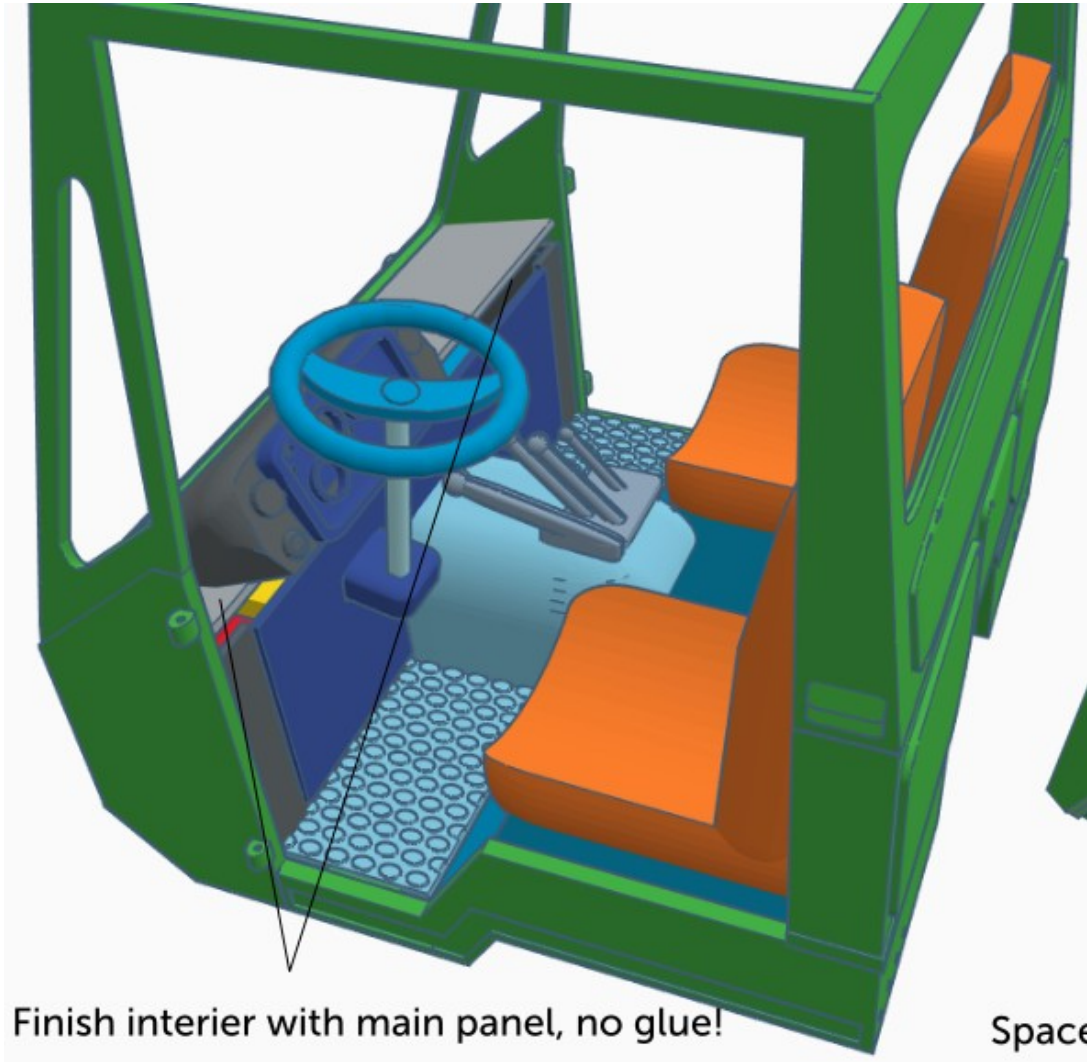

Glue main panel together like this

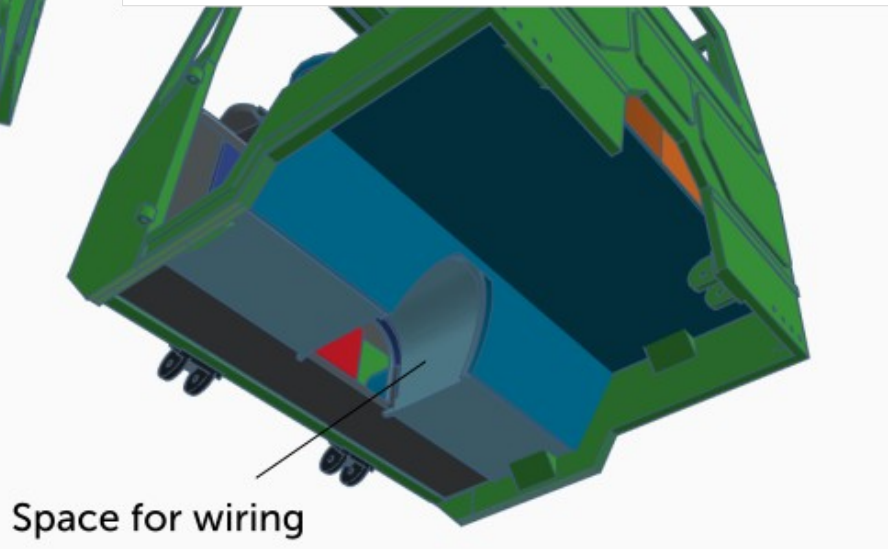

M3 screw - instal electical box

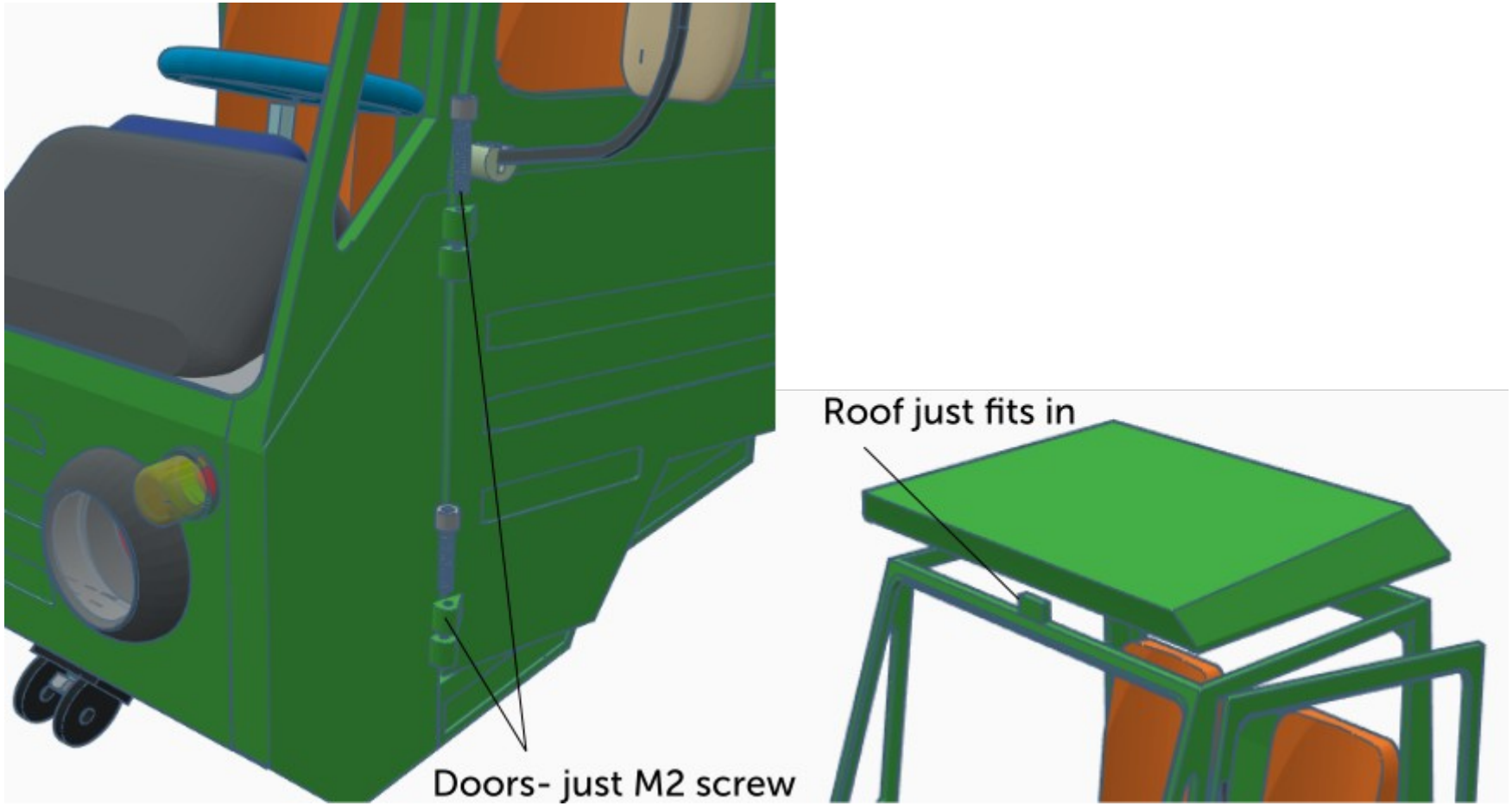

Lots of space for baterry,
reciever, ESC and so on.


Interier just fits in, no glue
First A
Then B
C

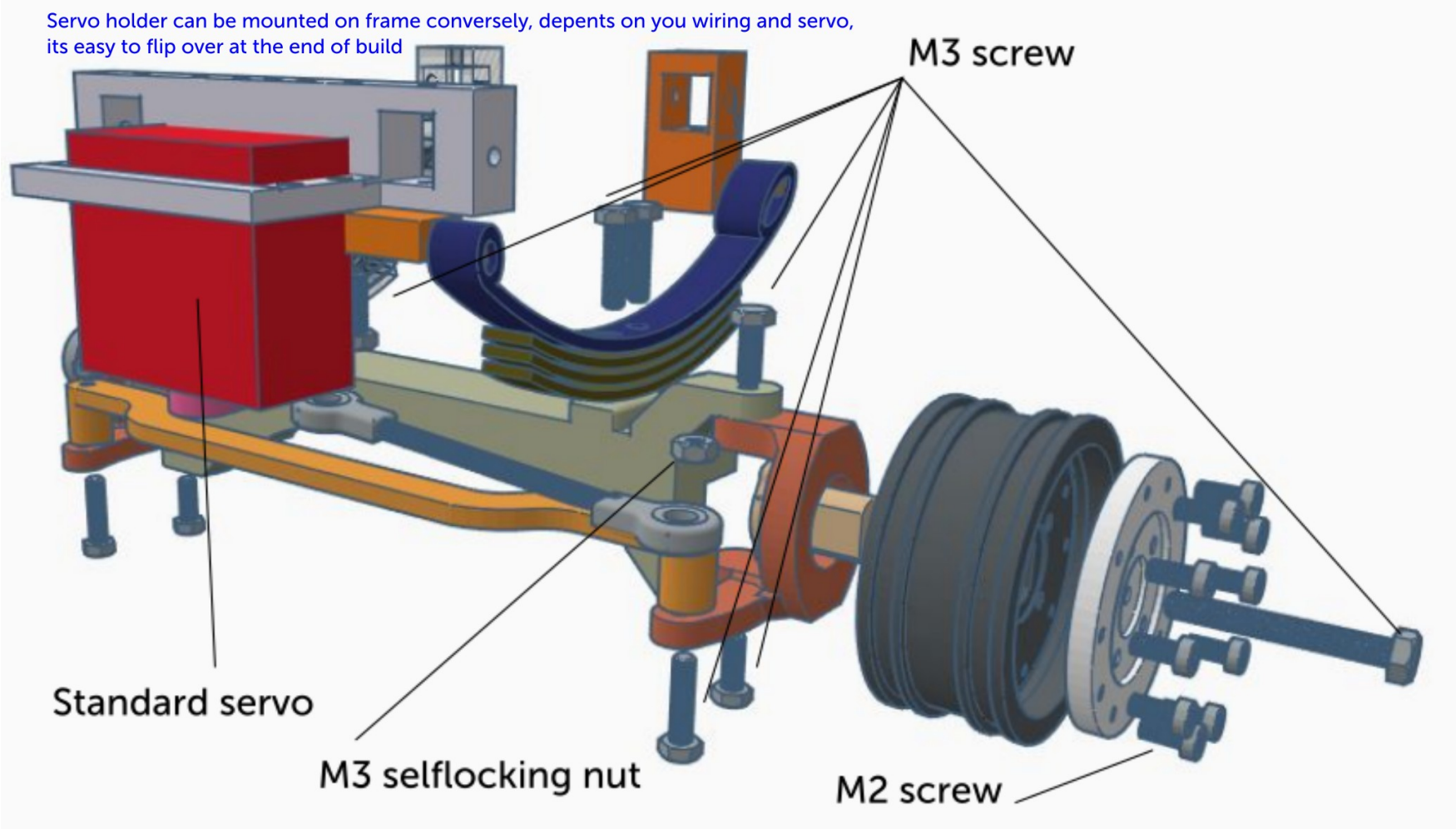

Glue the seats on right place

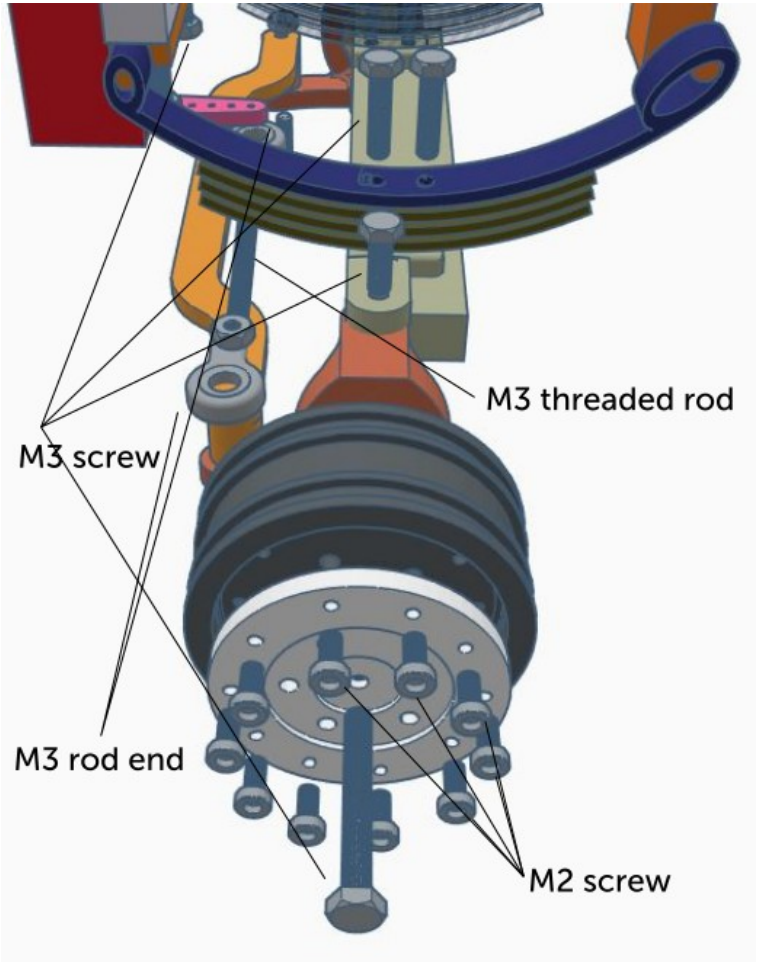

Finish interier with main panel, no glue!

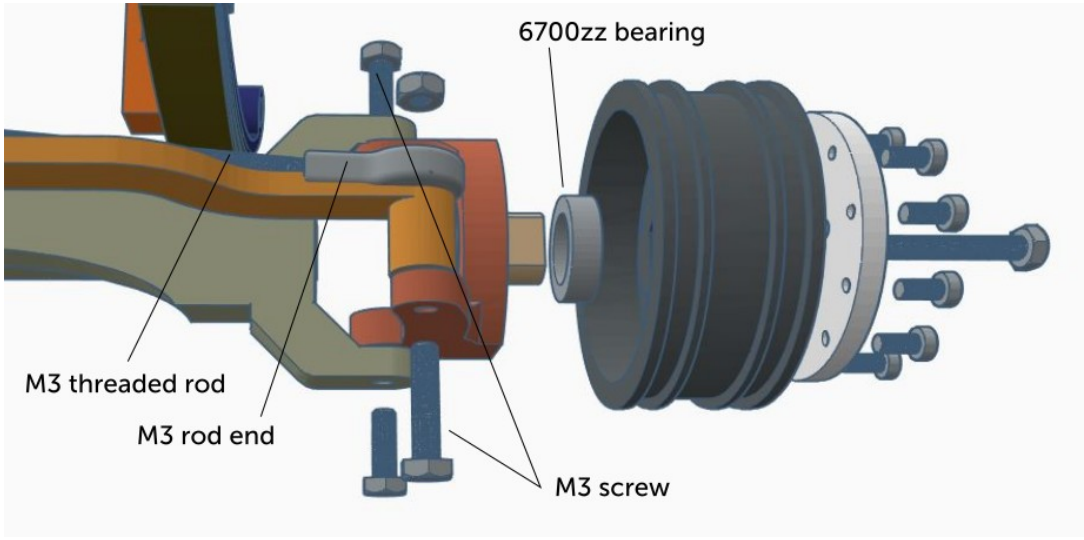

Space for wiring

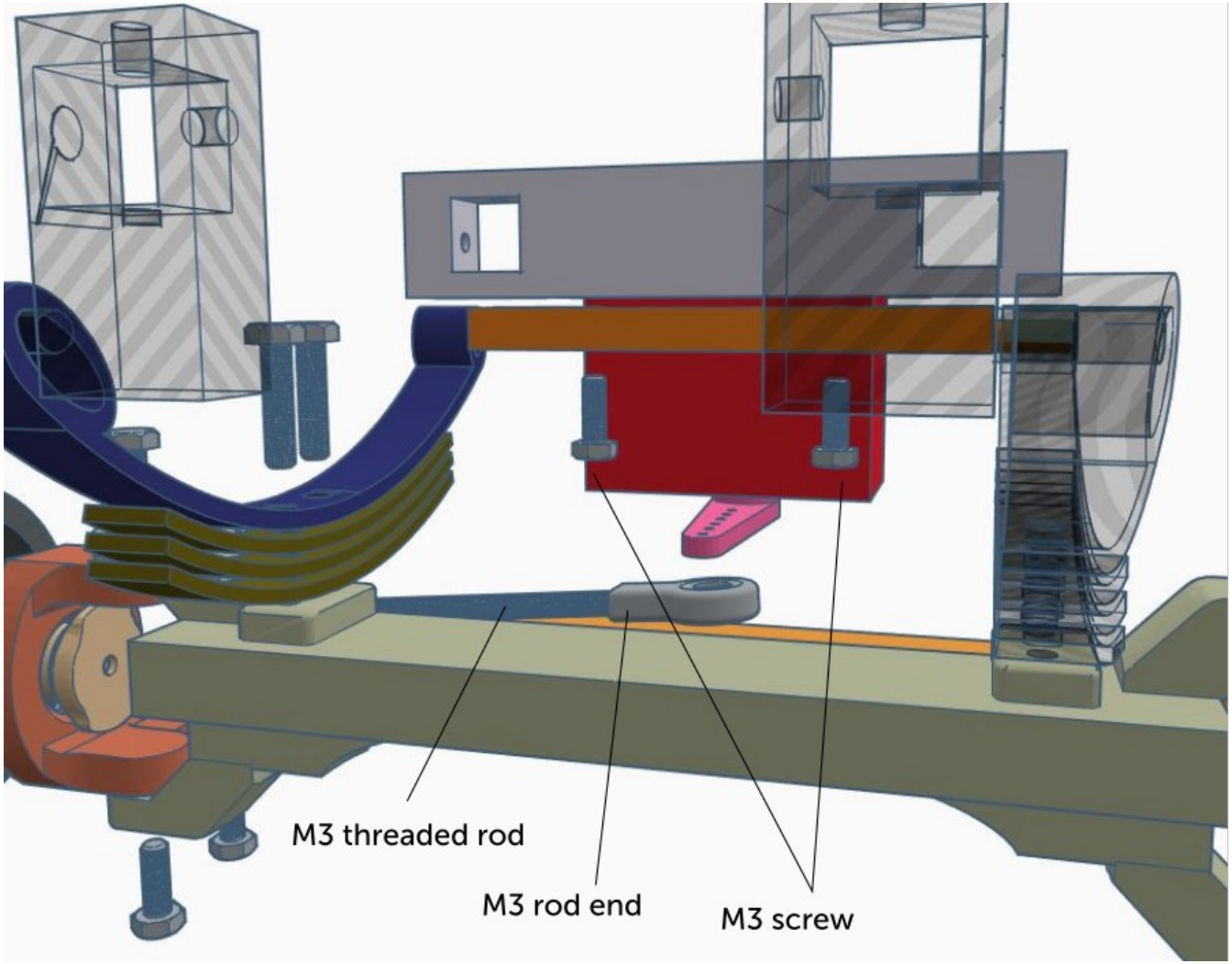

Roof just fits in
Doors- just M2 screw

2. Front axle

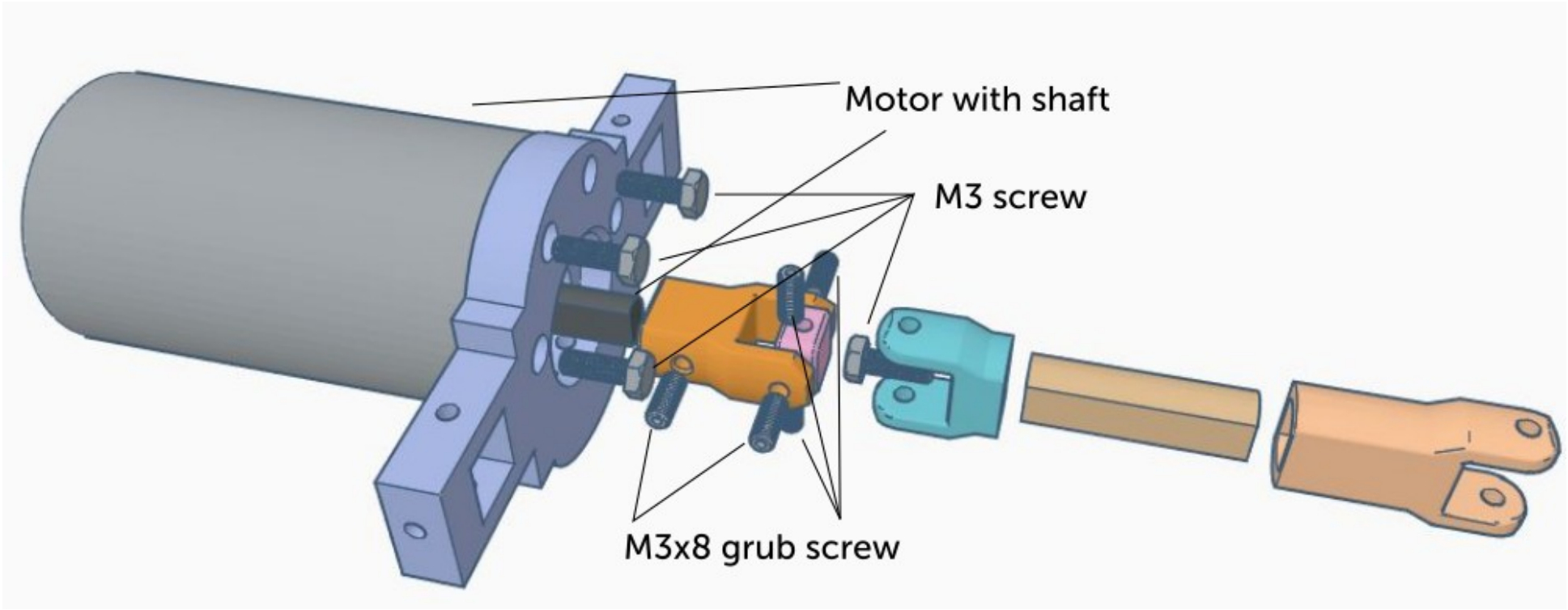

Servo holder can be mounted on frame conversely, depents on you wiring and servo, its easy to flip over at the end of build
M3 screw
Standard servo
M3 selflocking nut
M2 screw

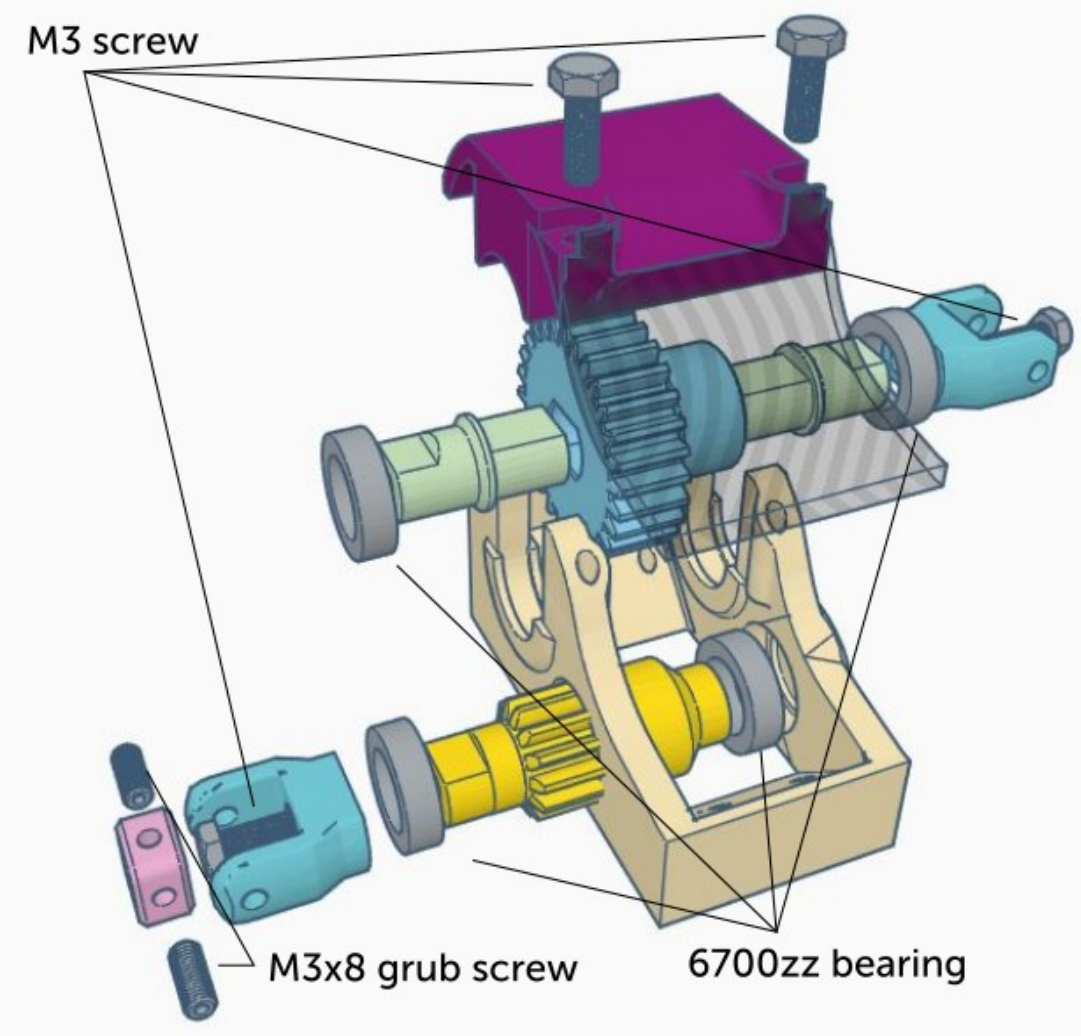

M3 threaded rod
M3 screw
M3 rod end
M2 screw

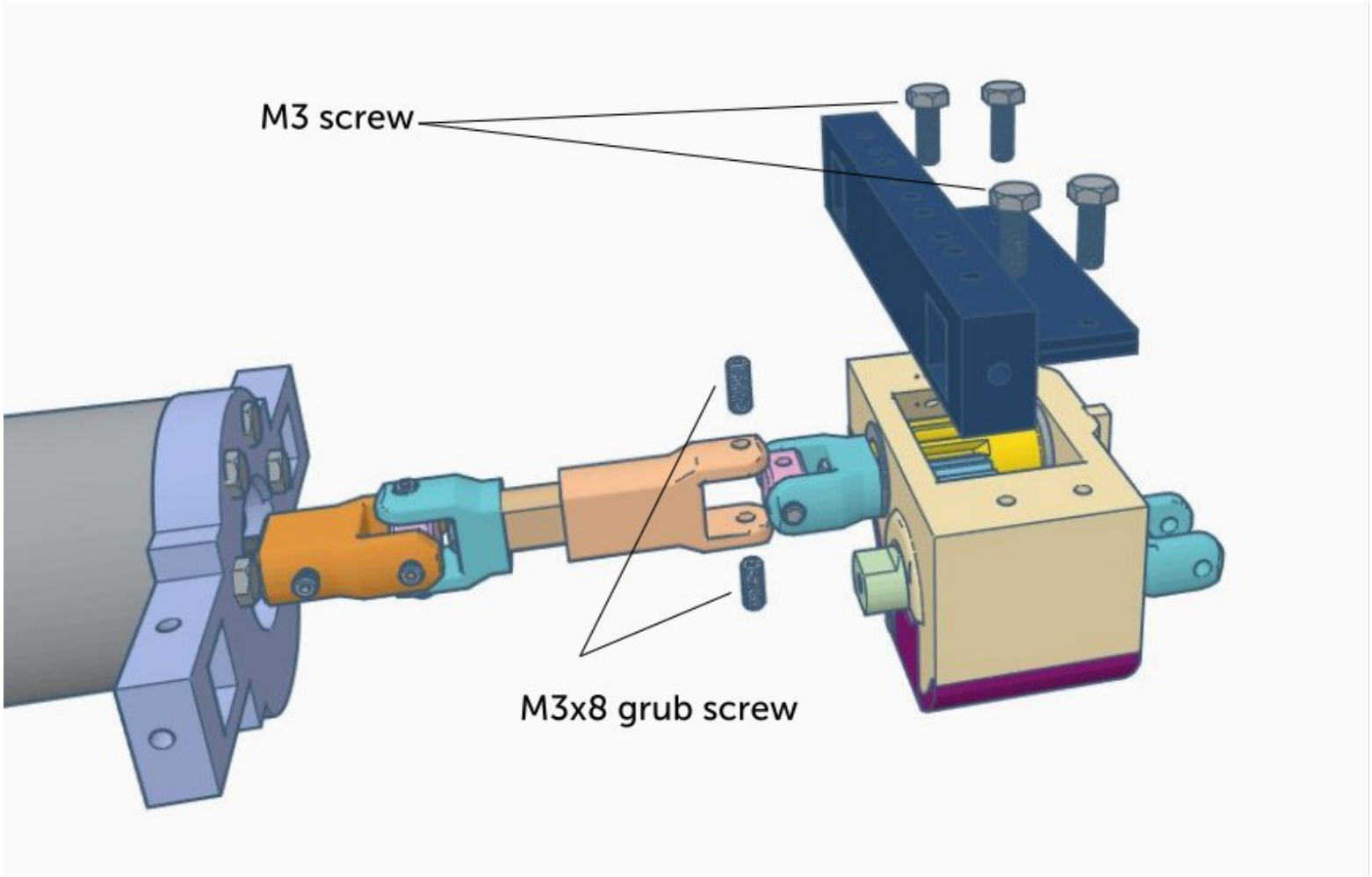

6700zz bearing
M3 threaded rod
M3 rod end
M3 screw


M3 threaded rod
M3 rod end
M3 screw

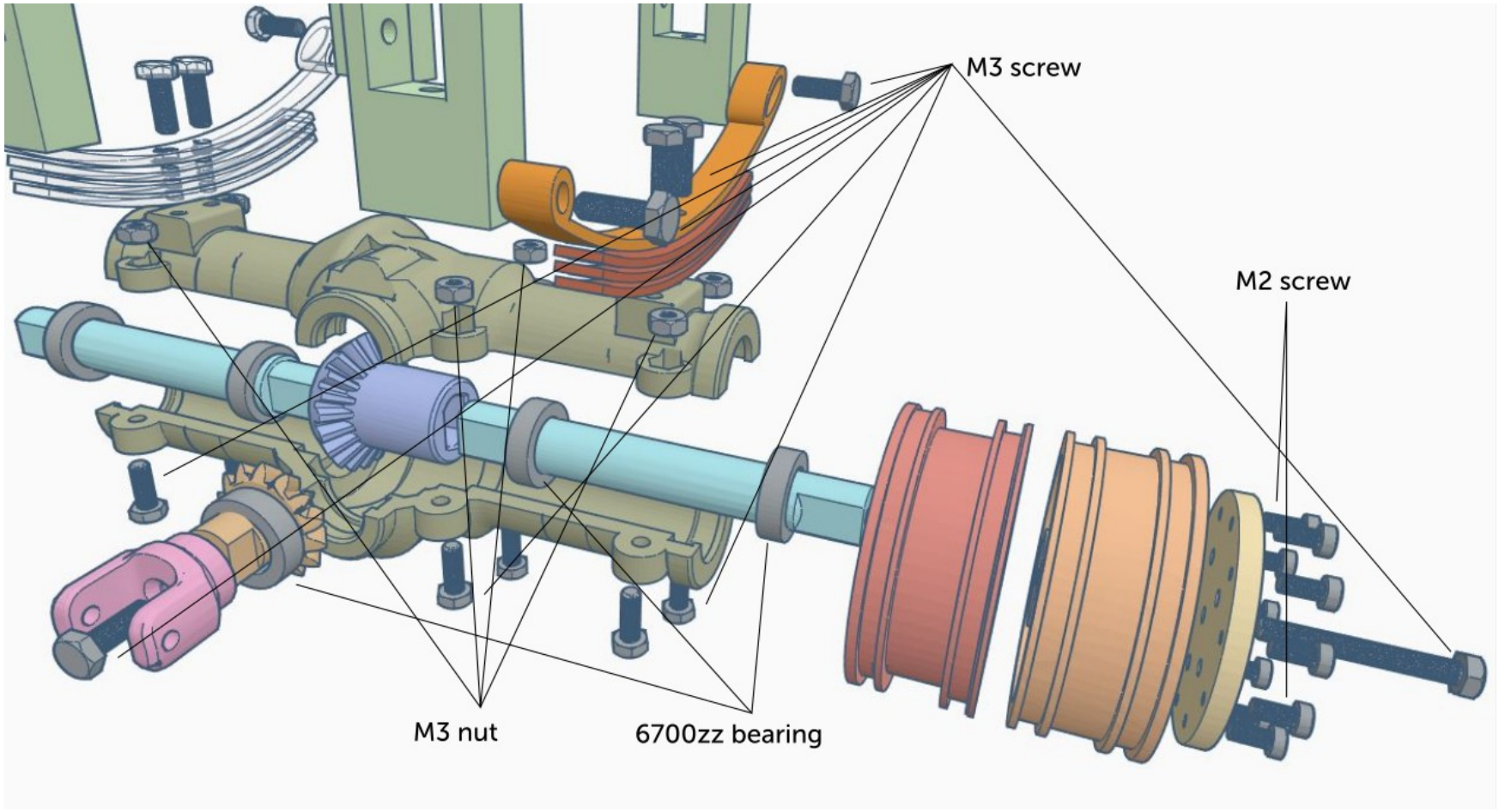
3. Motor and transmission

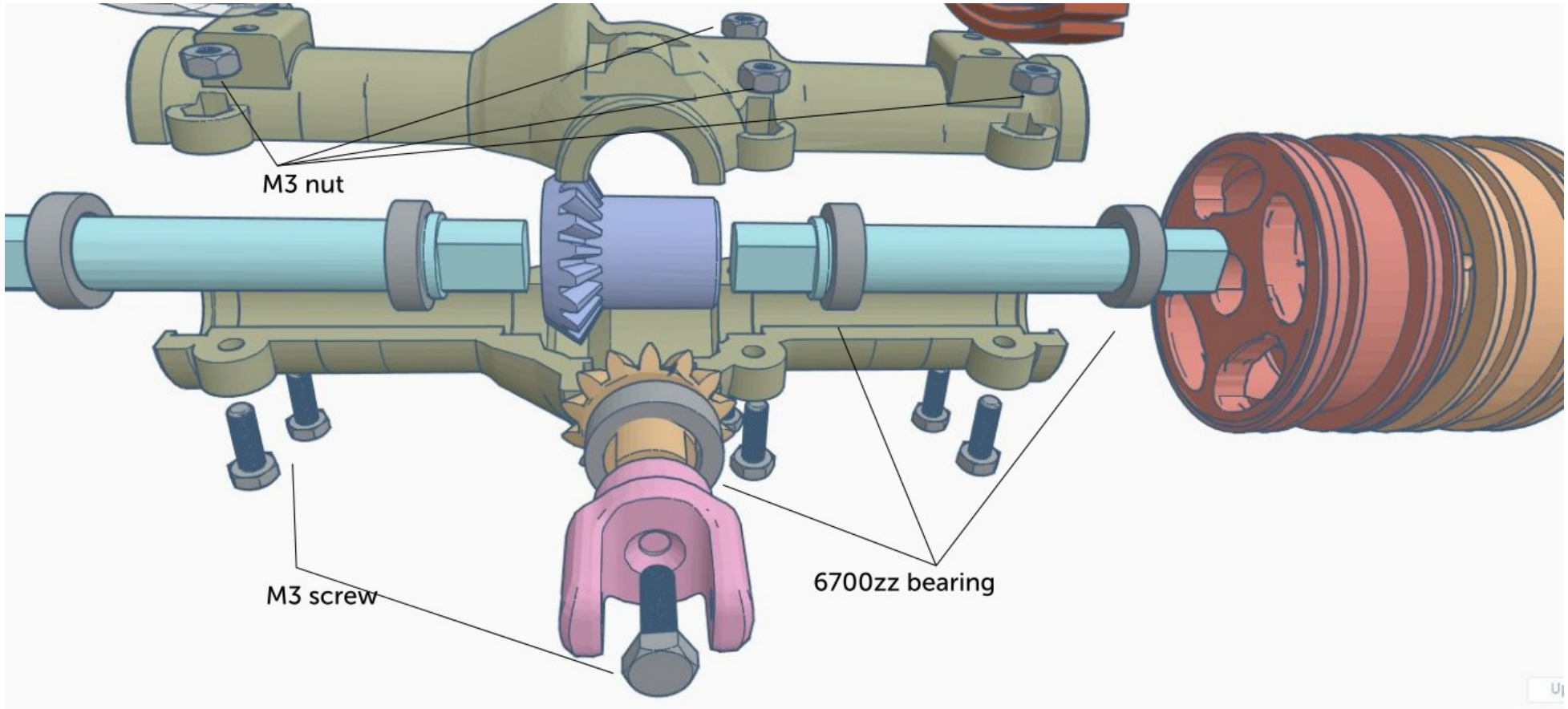


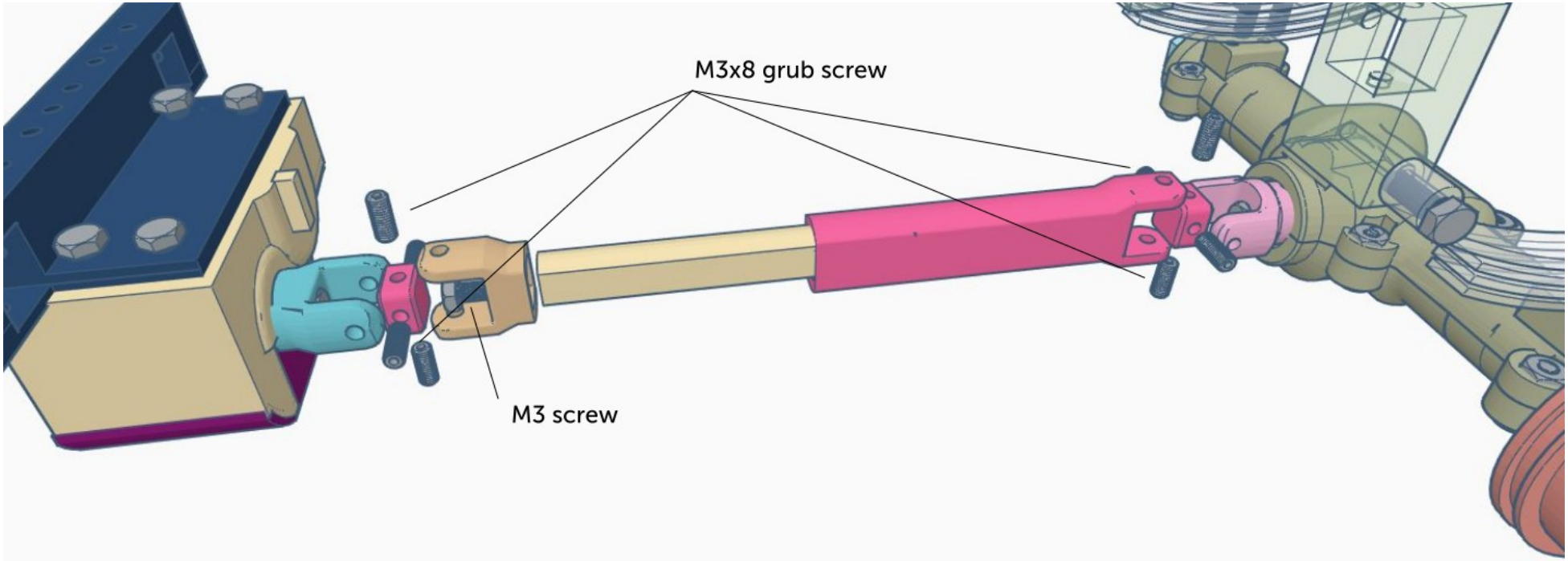

M3 screw
M3x8 grub screw
6700zz bearing


M3 screw
M3x8 grub screw

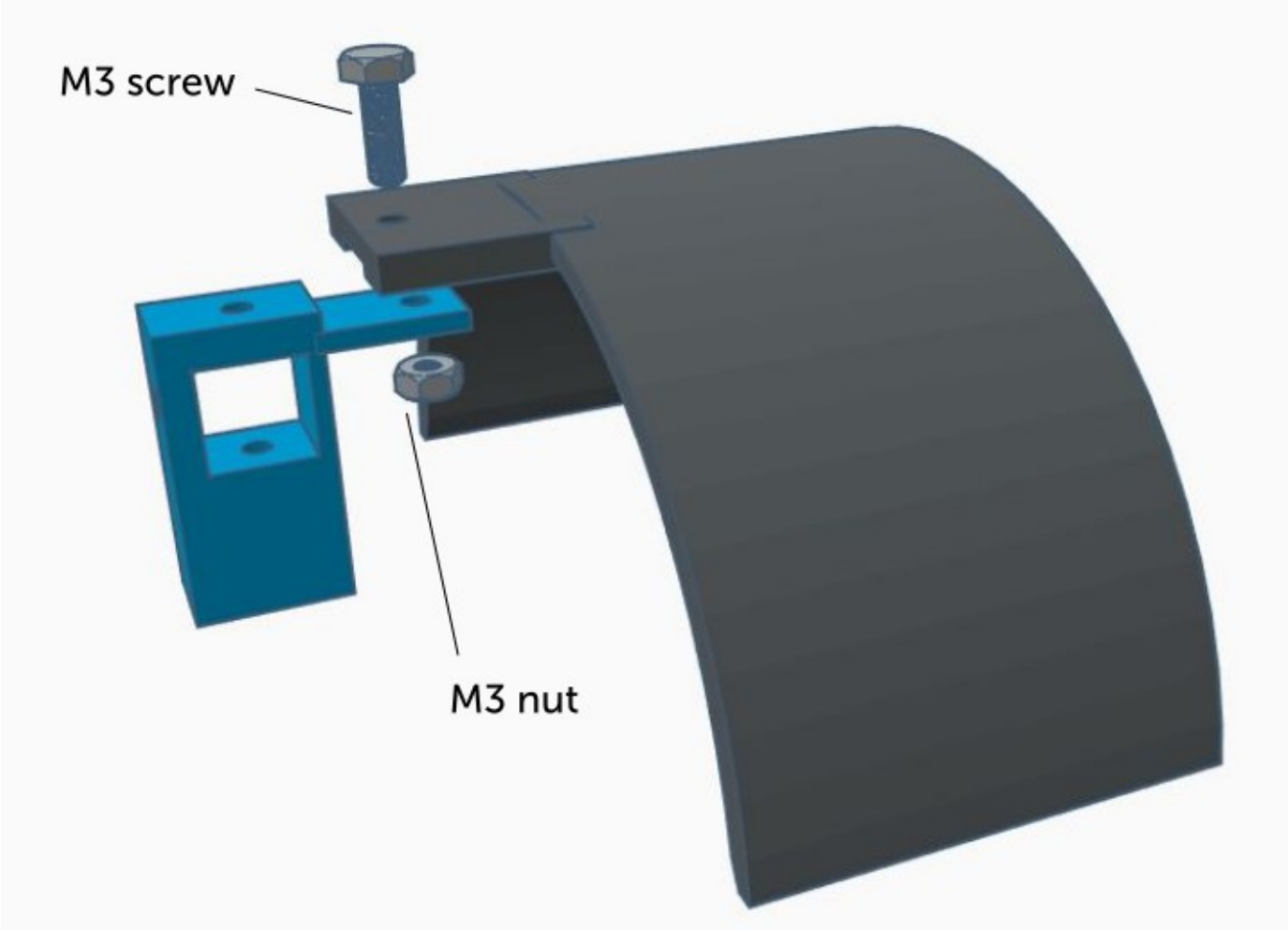
4. Rear axle



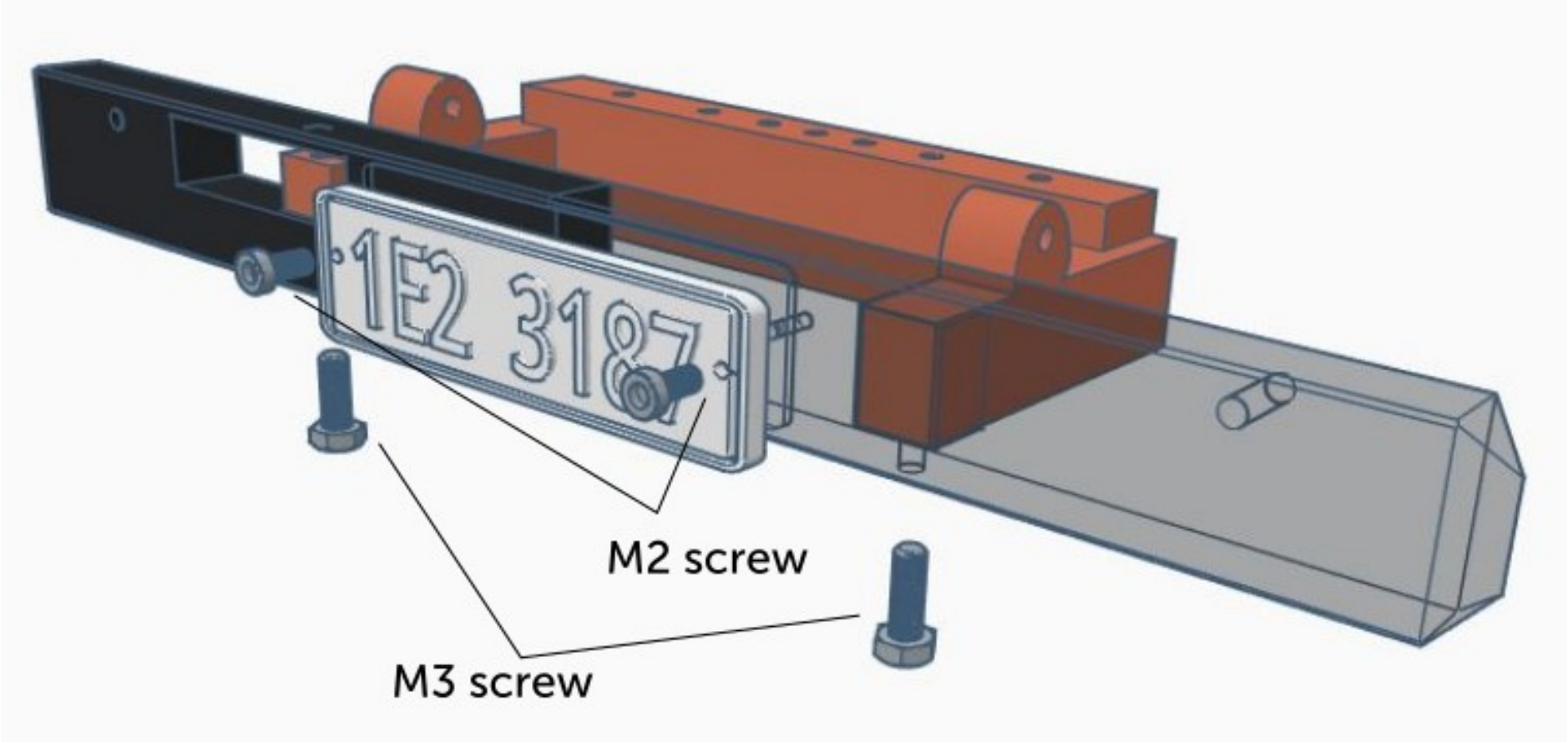

M3 nut
M3 screw
6700zz bearing


M3x8 grub screw
M3 screw

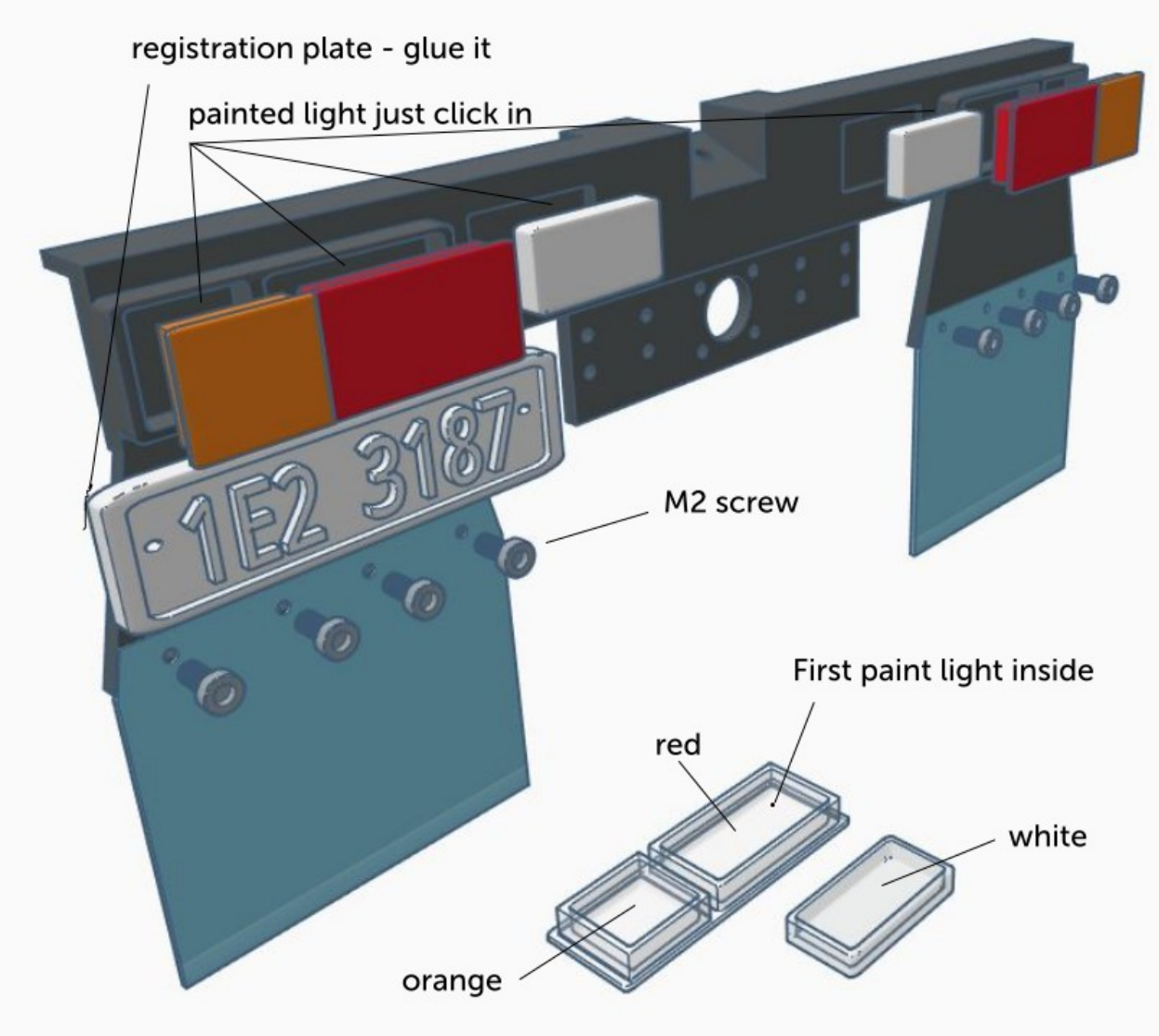
5. Fenders



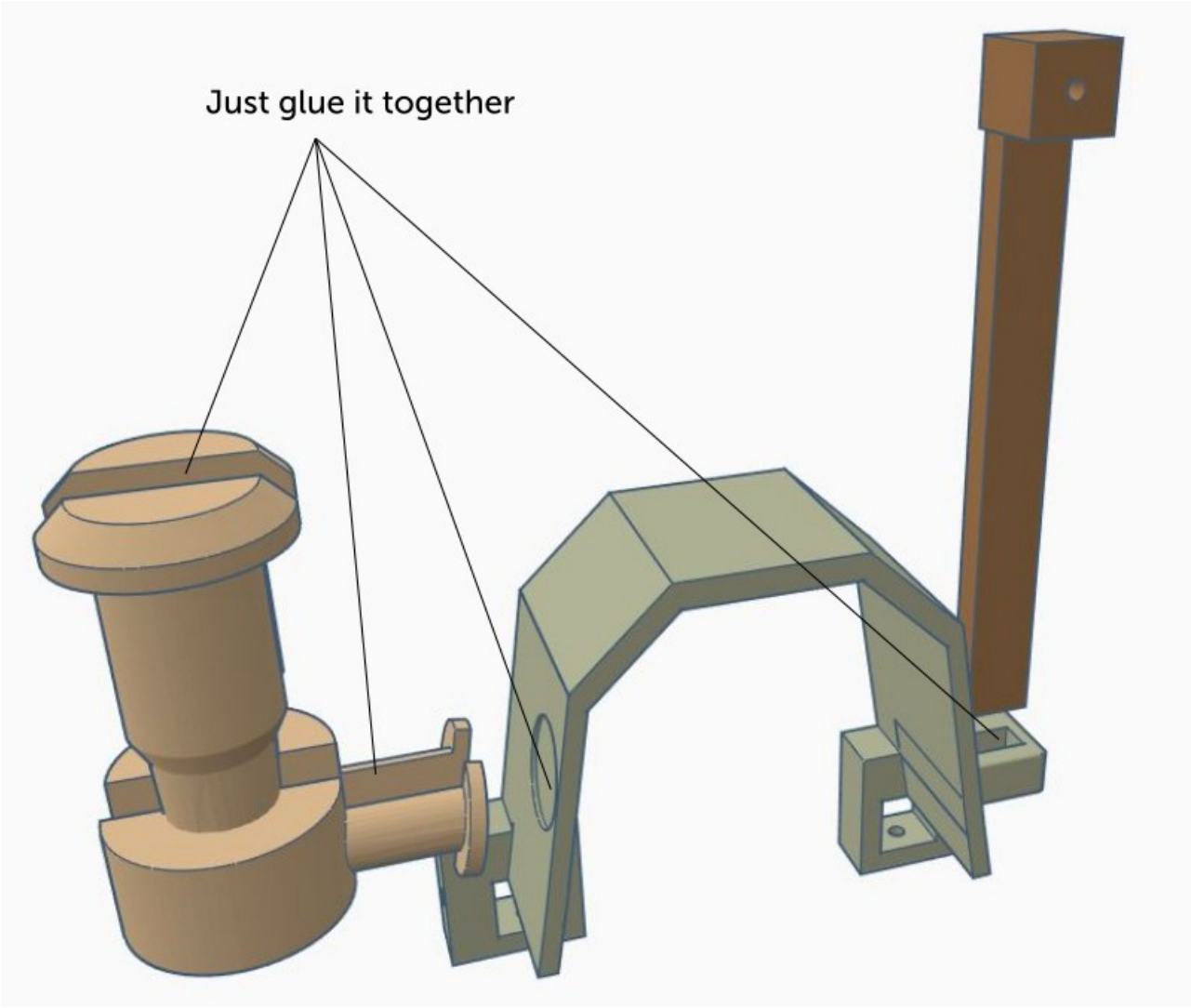
6. Front bumper



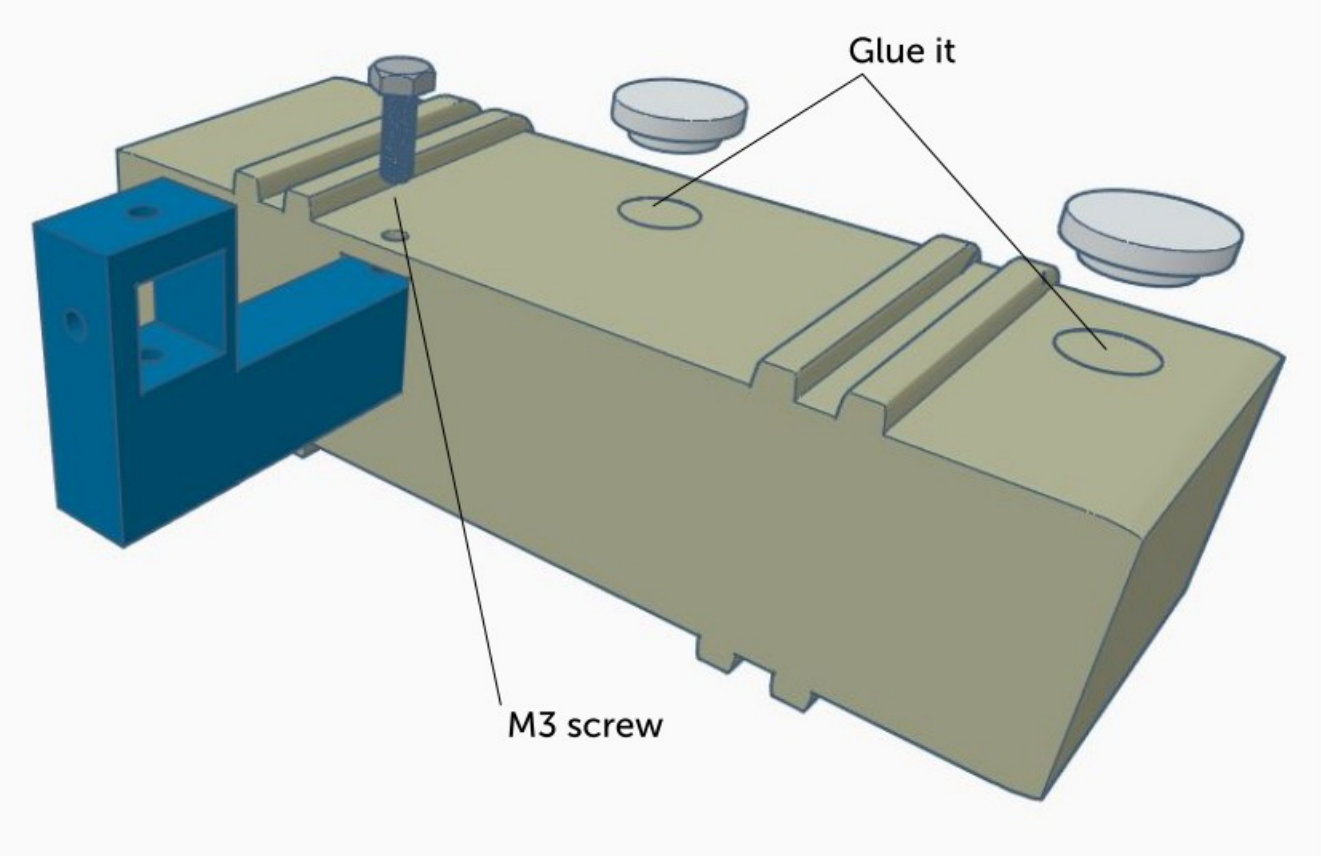
7. Rear bumper



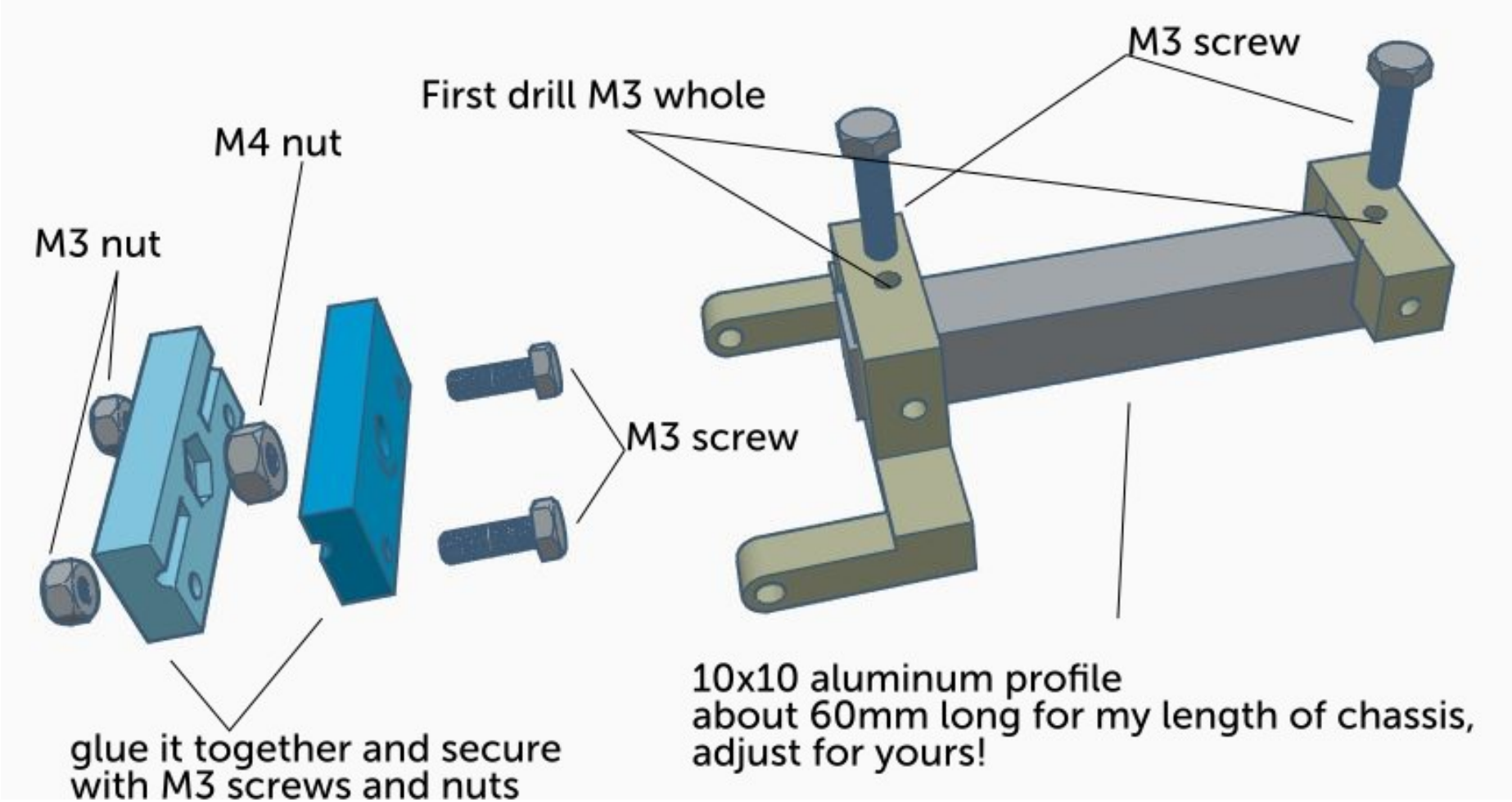
8. Motor cover

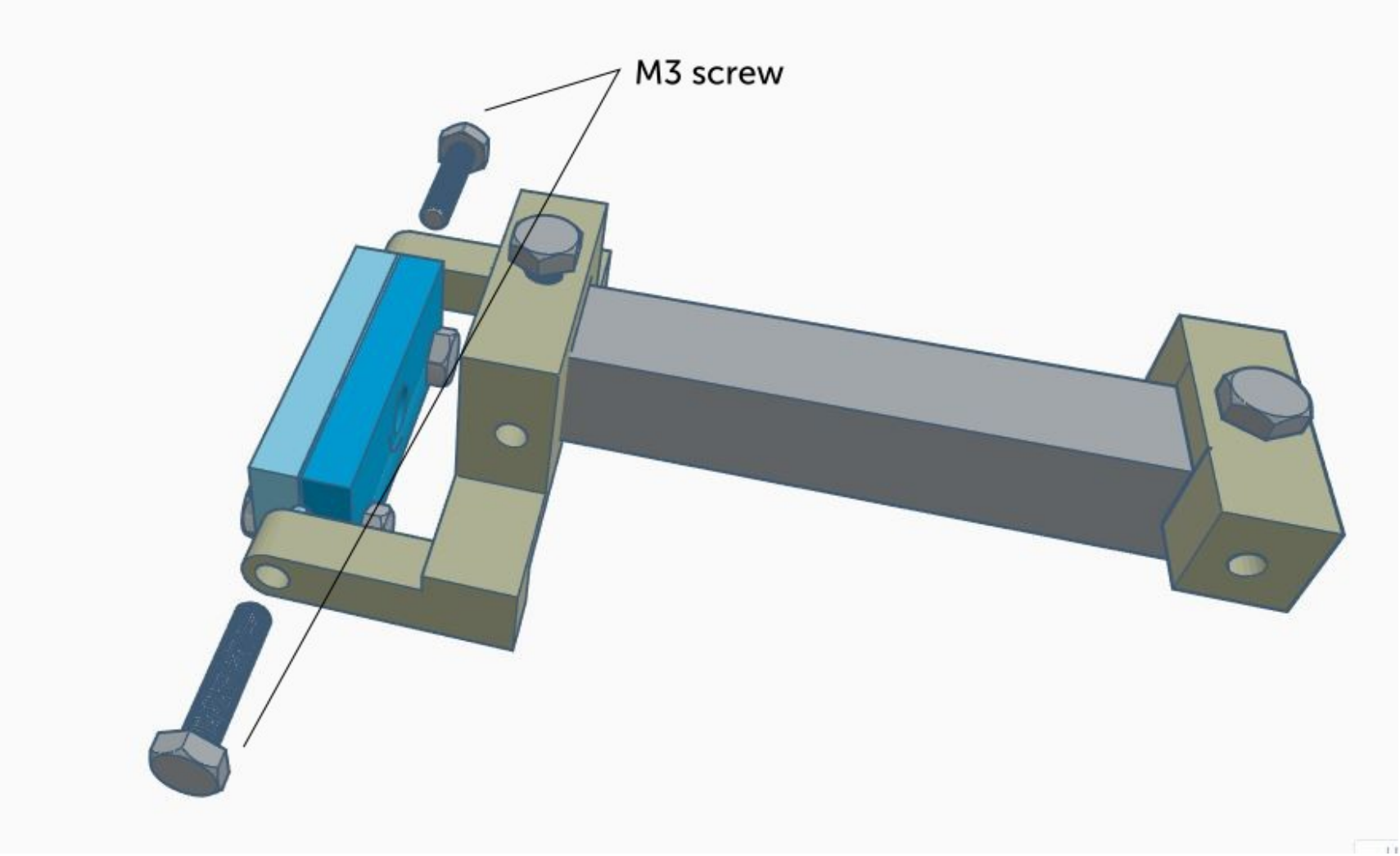


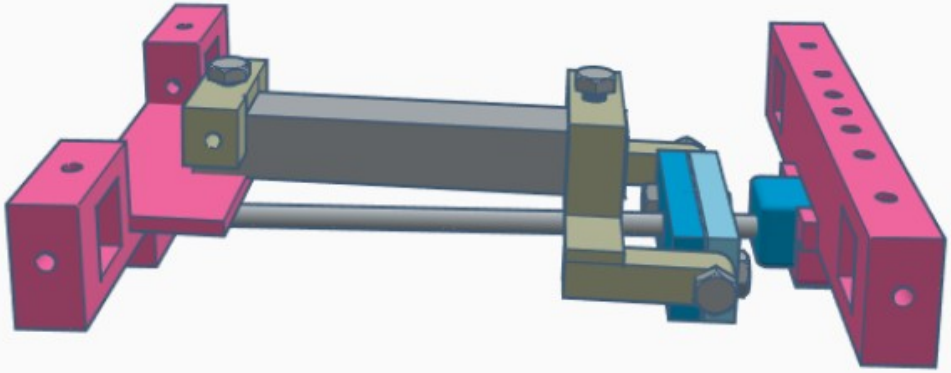
9. Fuel tanks



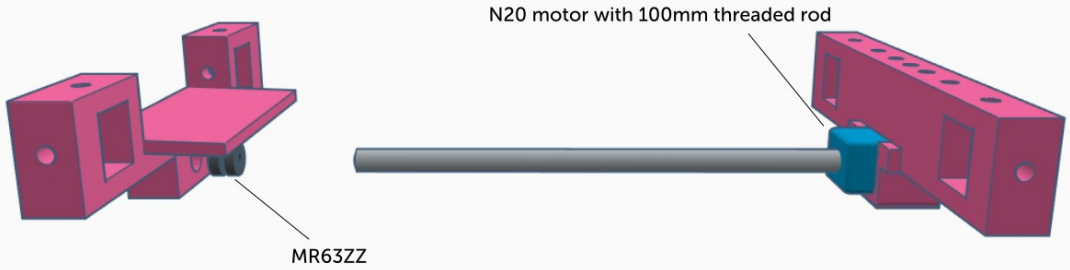
10. Lifting mechanism - optional

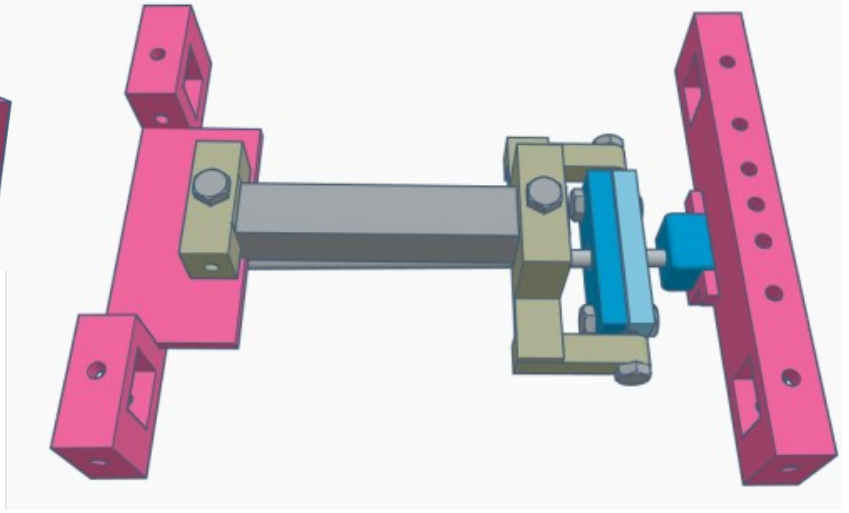



M3 screw

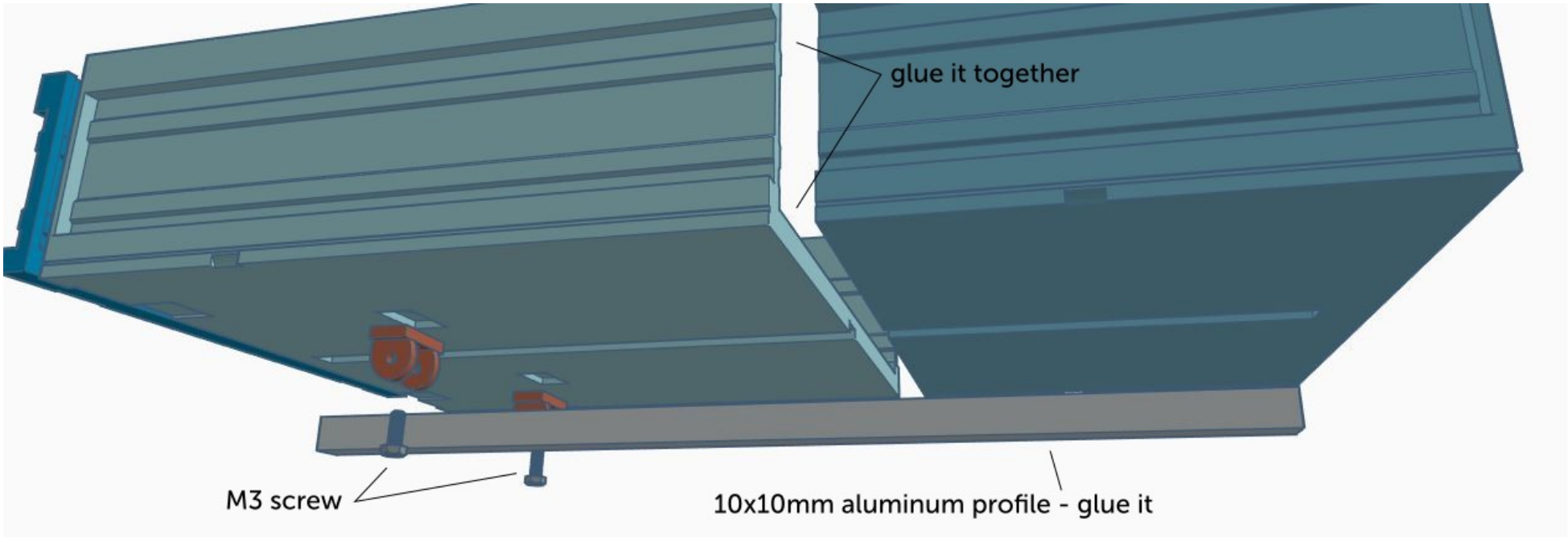


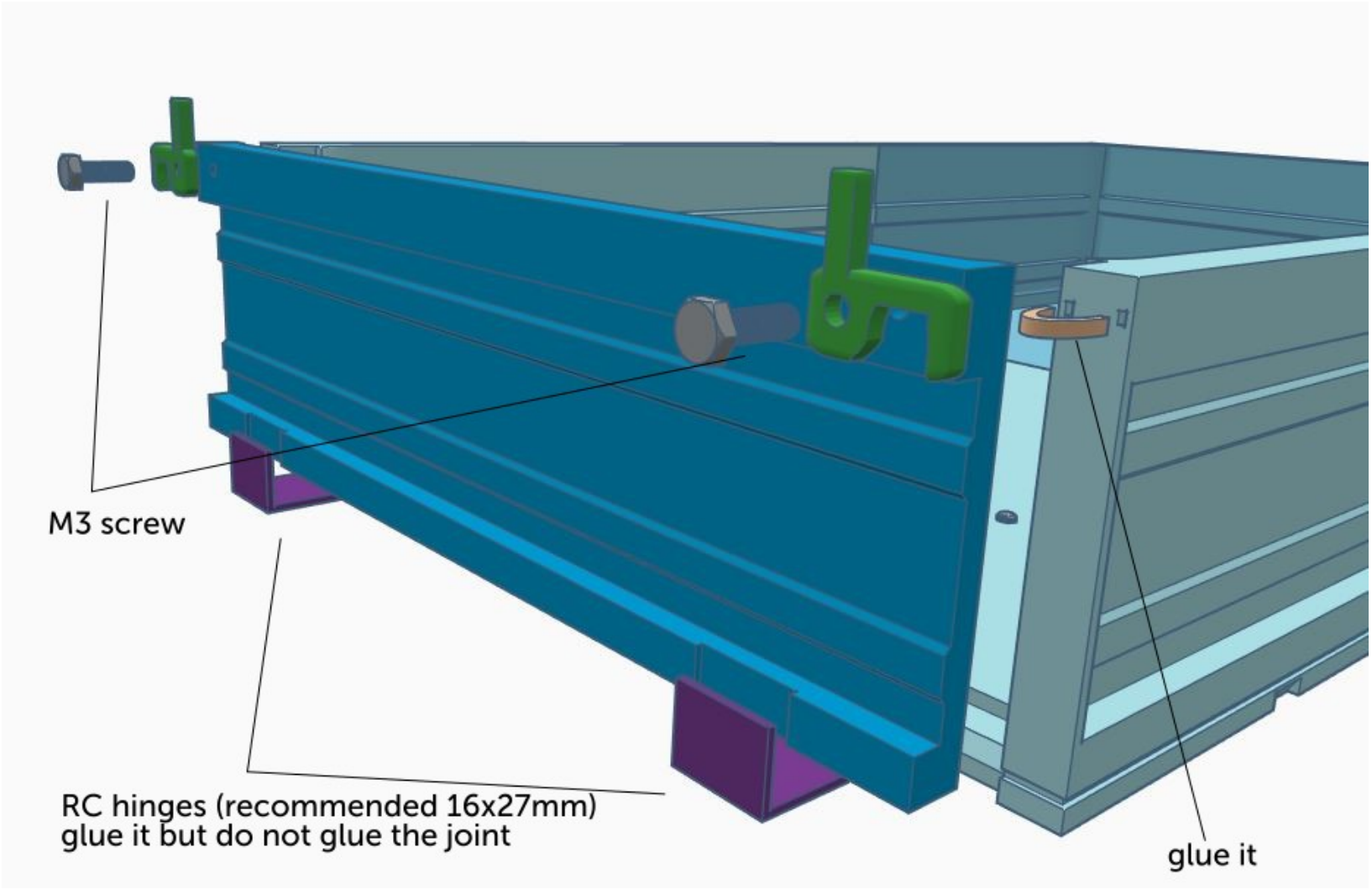
Almost completed lift mechanism



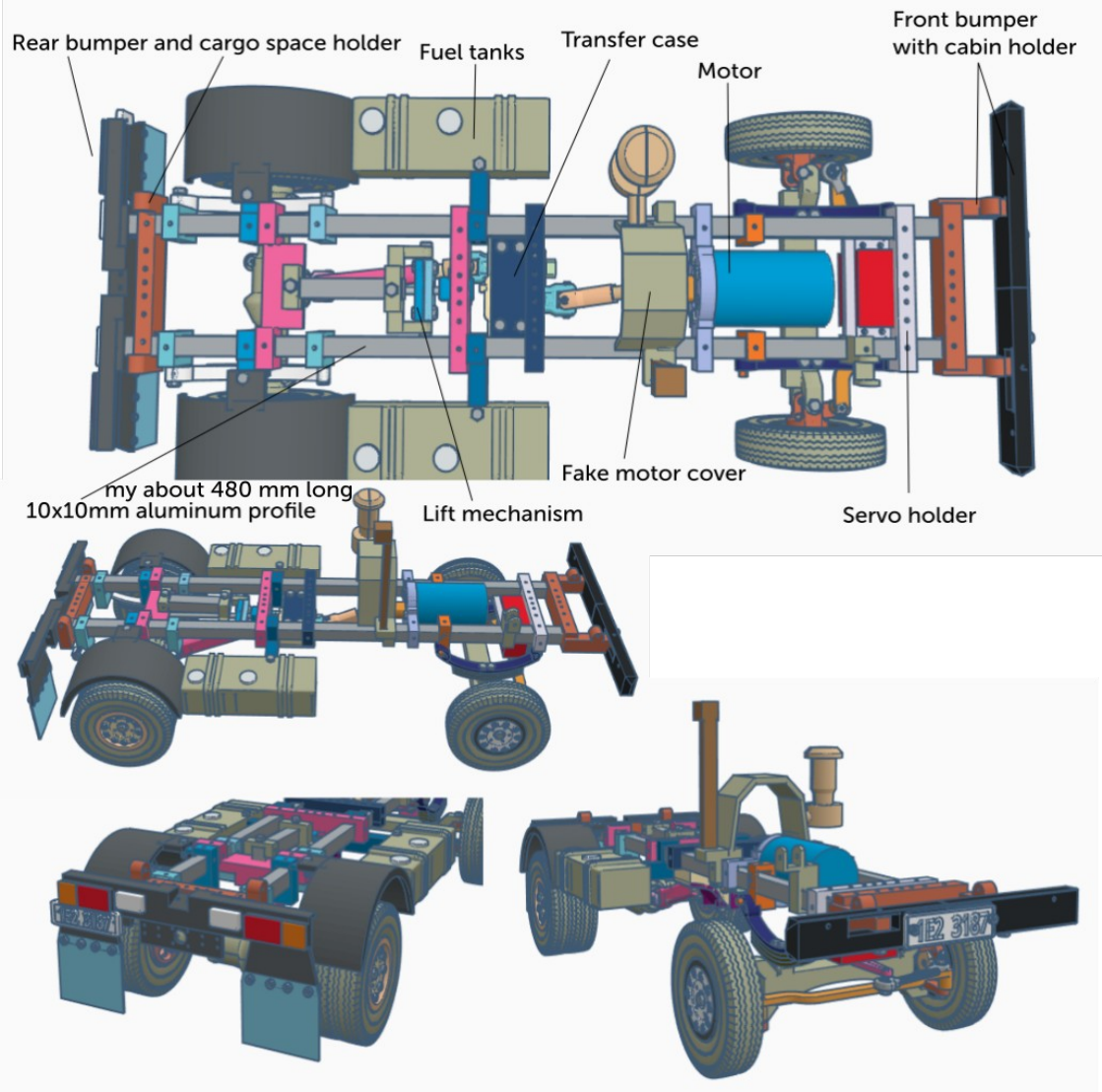


11. Flatbed assembly

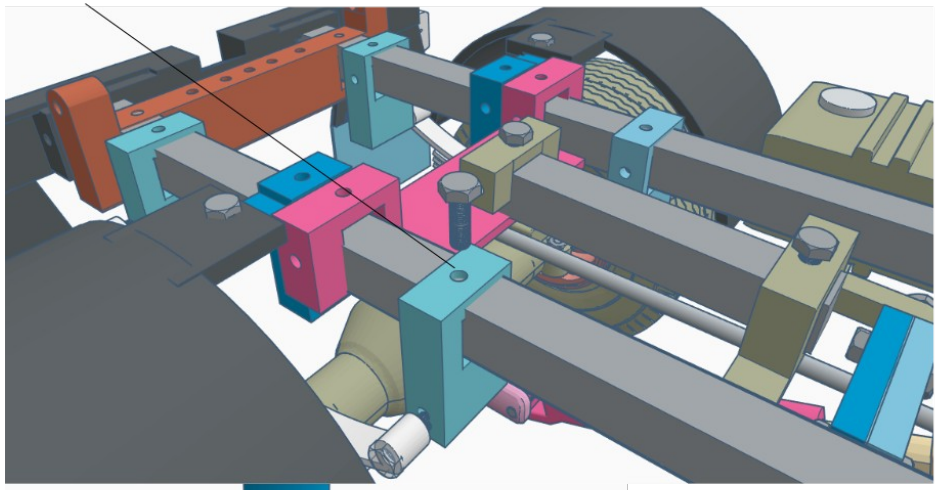


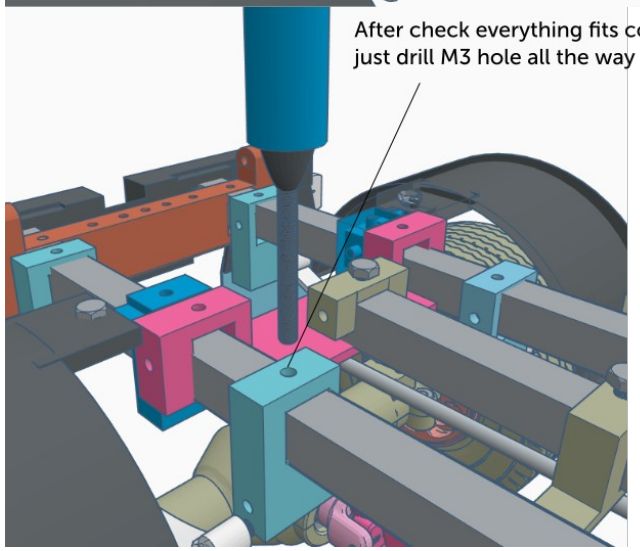

M3 screw
RC hinges (recommended 16x27mm)
glue it but do not glue the joint
glue it

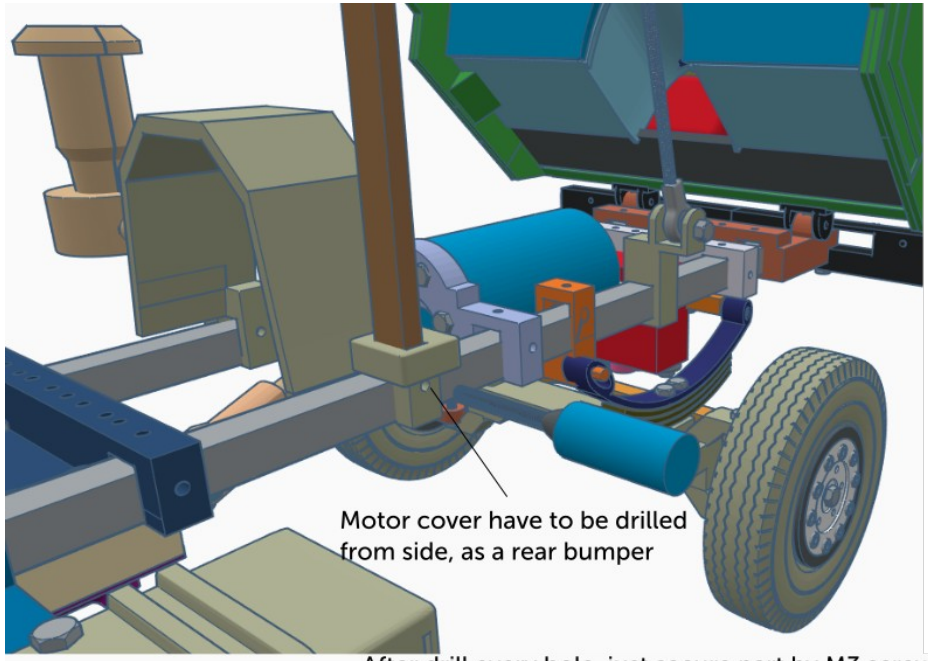
12. Chassis

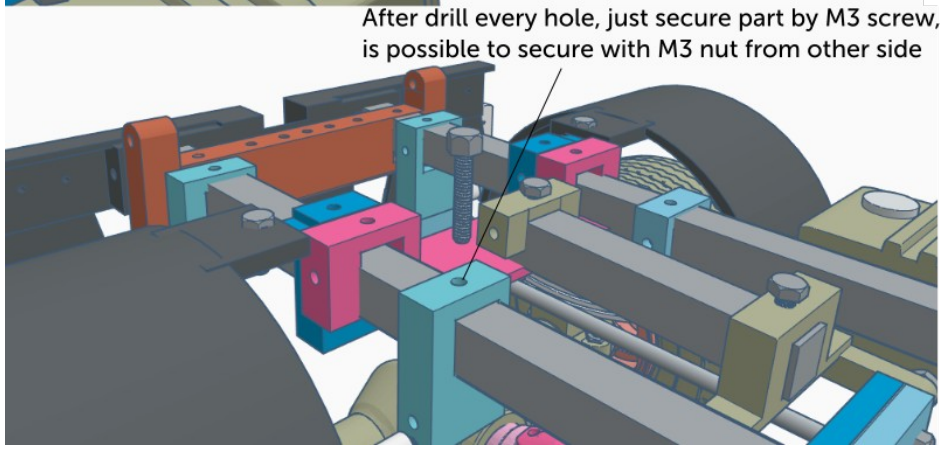

Rear bumper and cargo space holder
Fuel tanks
Transfer case
Motor
Front bumper
with cabin holder
my about 480 mm long
10x10mm aluminum profile
Lift mechanism
Fake motor cover
Servo holder

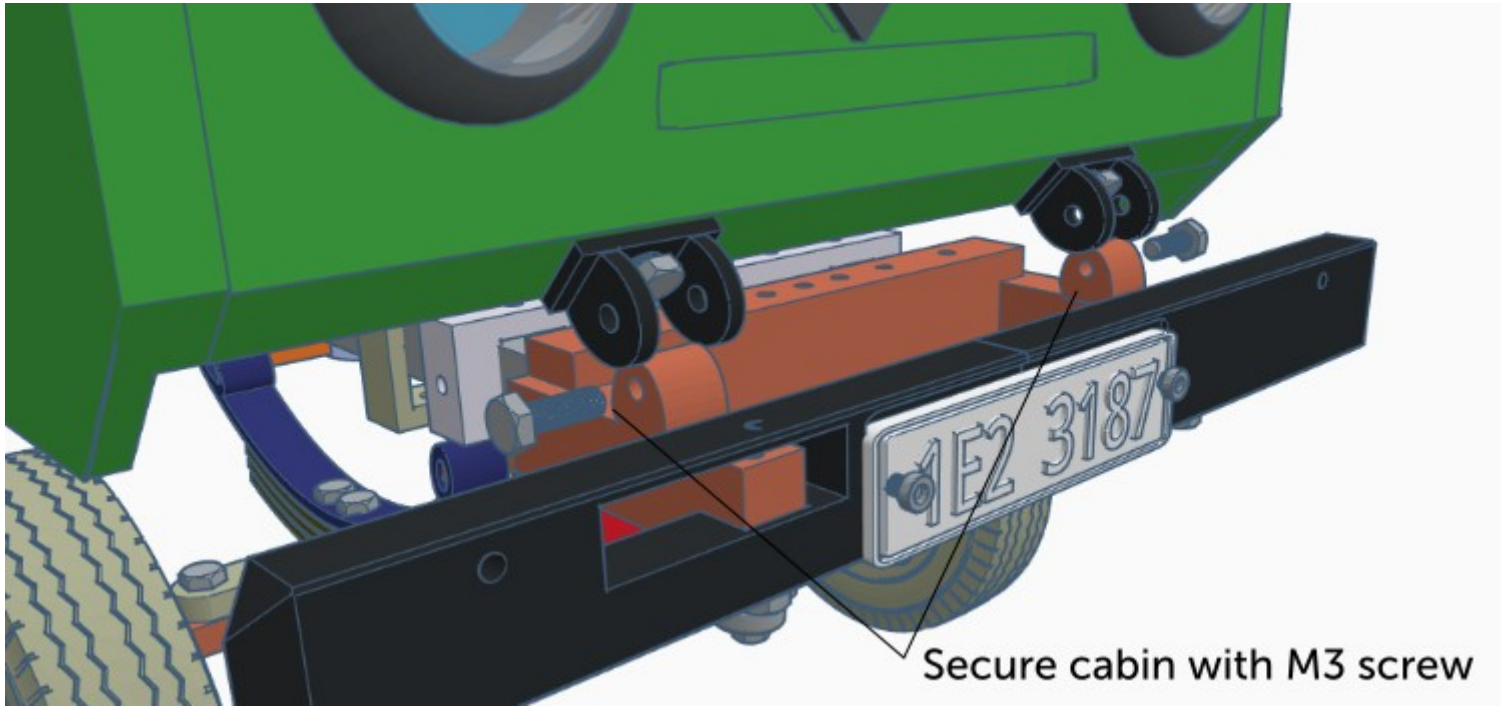
Part of car are mounted on 10x10mm aluminum profile, First try every part of car, then tight by M3 screw, that makes mark on aluminum profile. Is possible to use hot glue instend of screw.

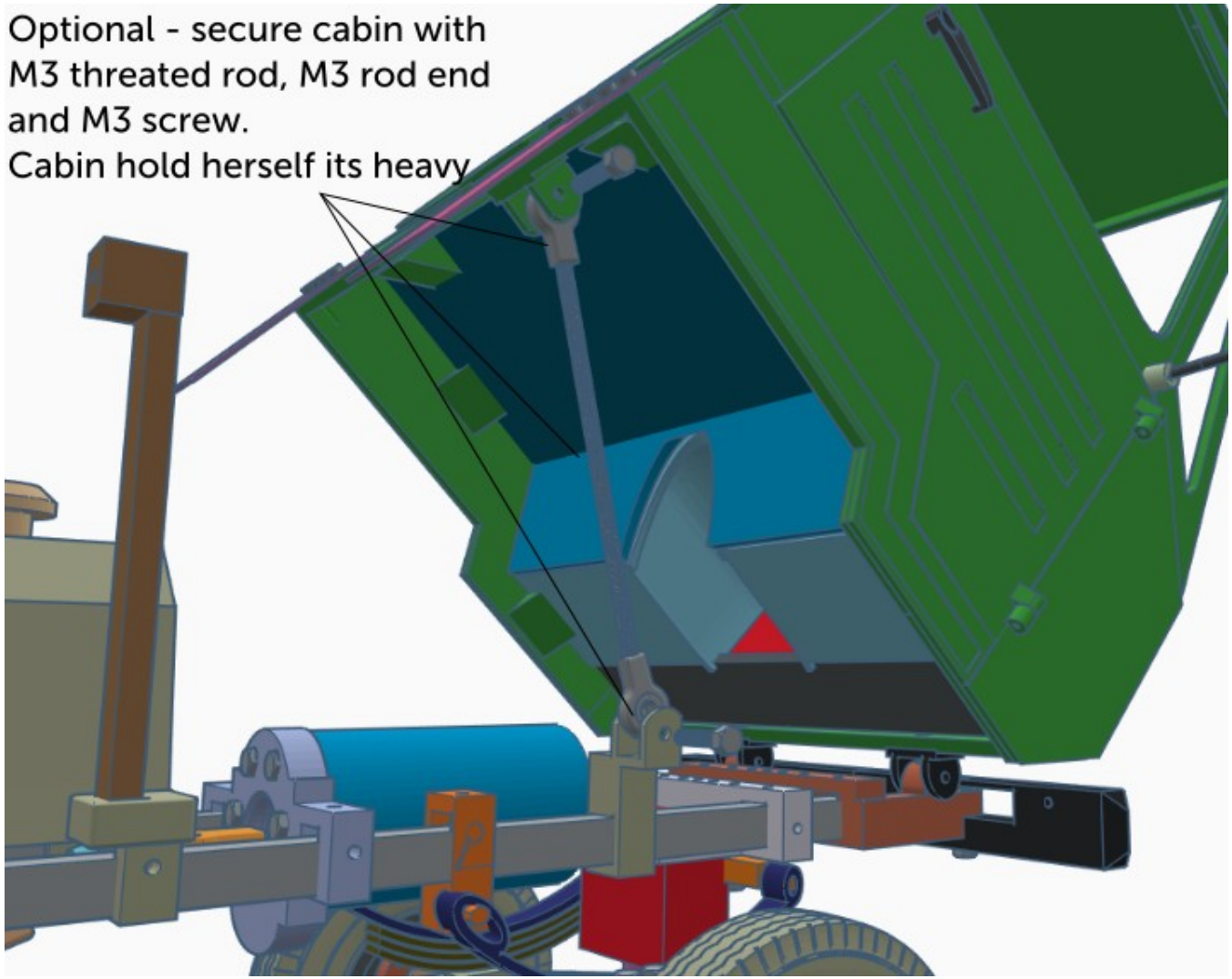


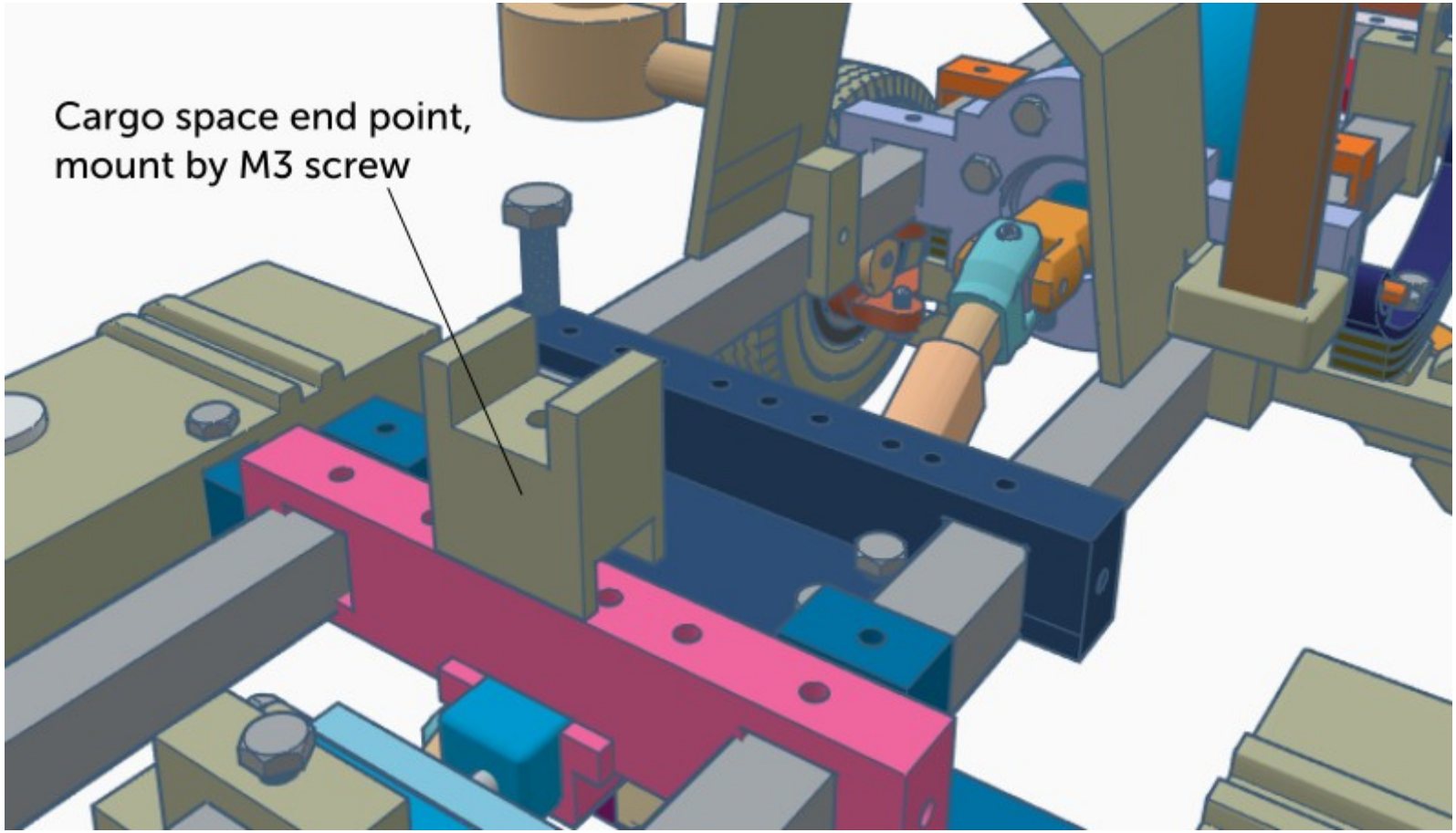


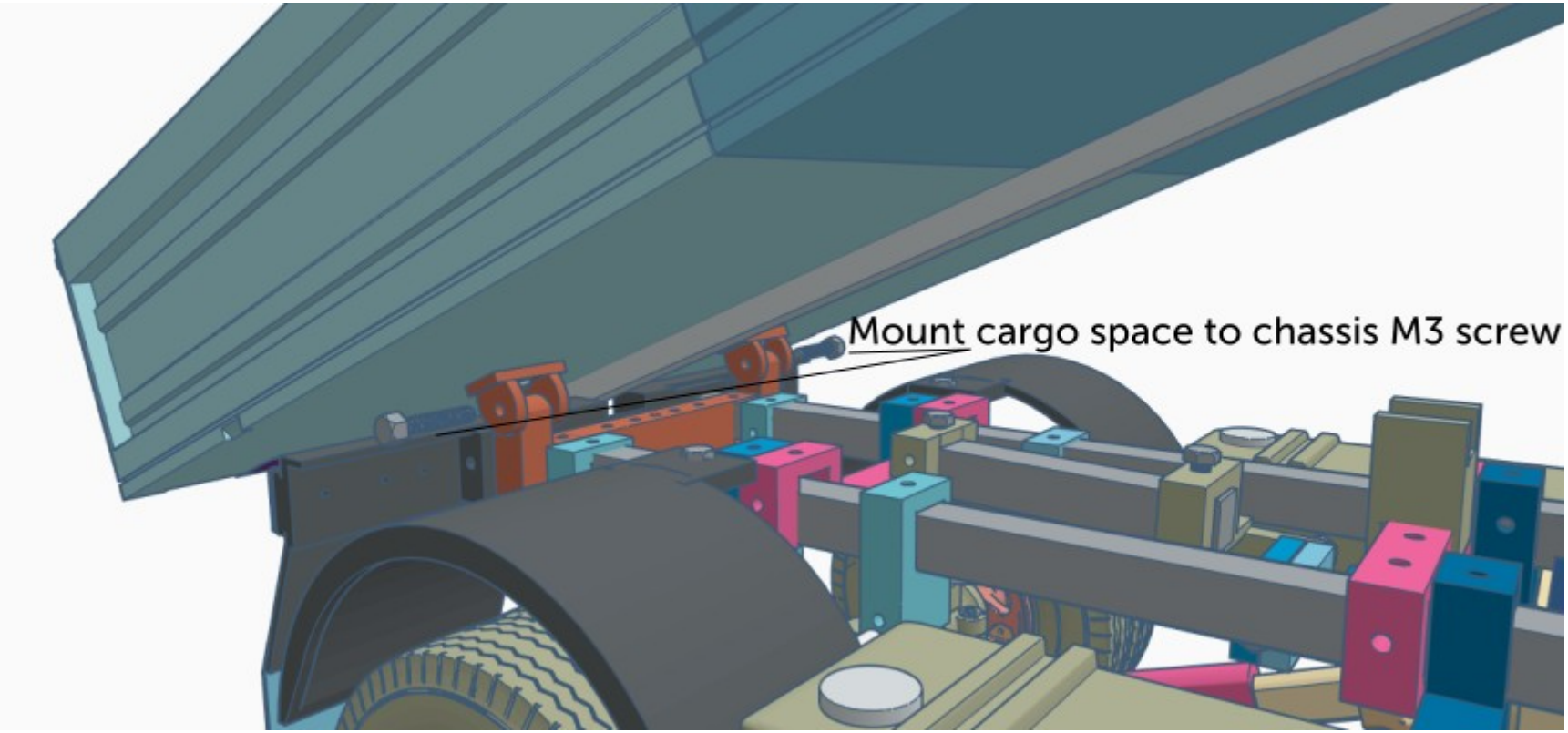


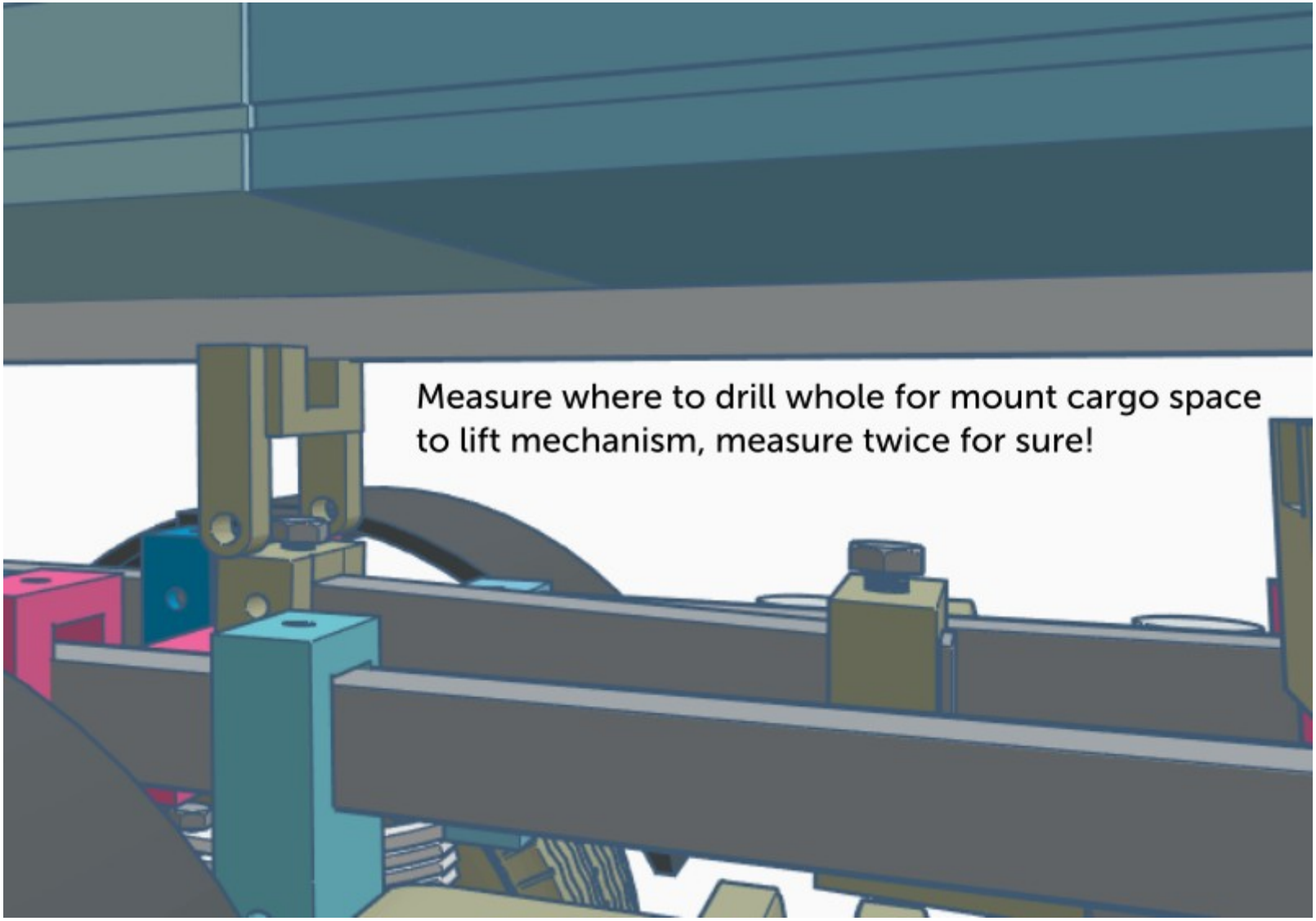


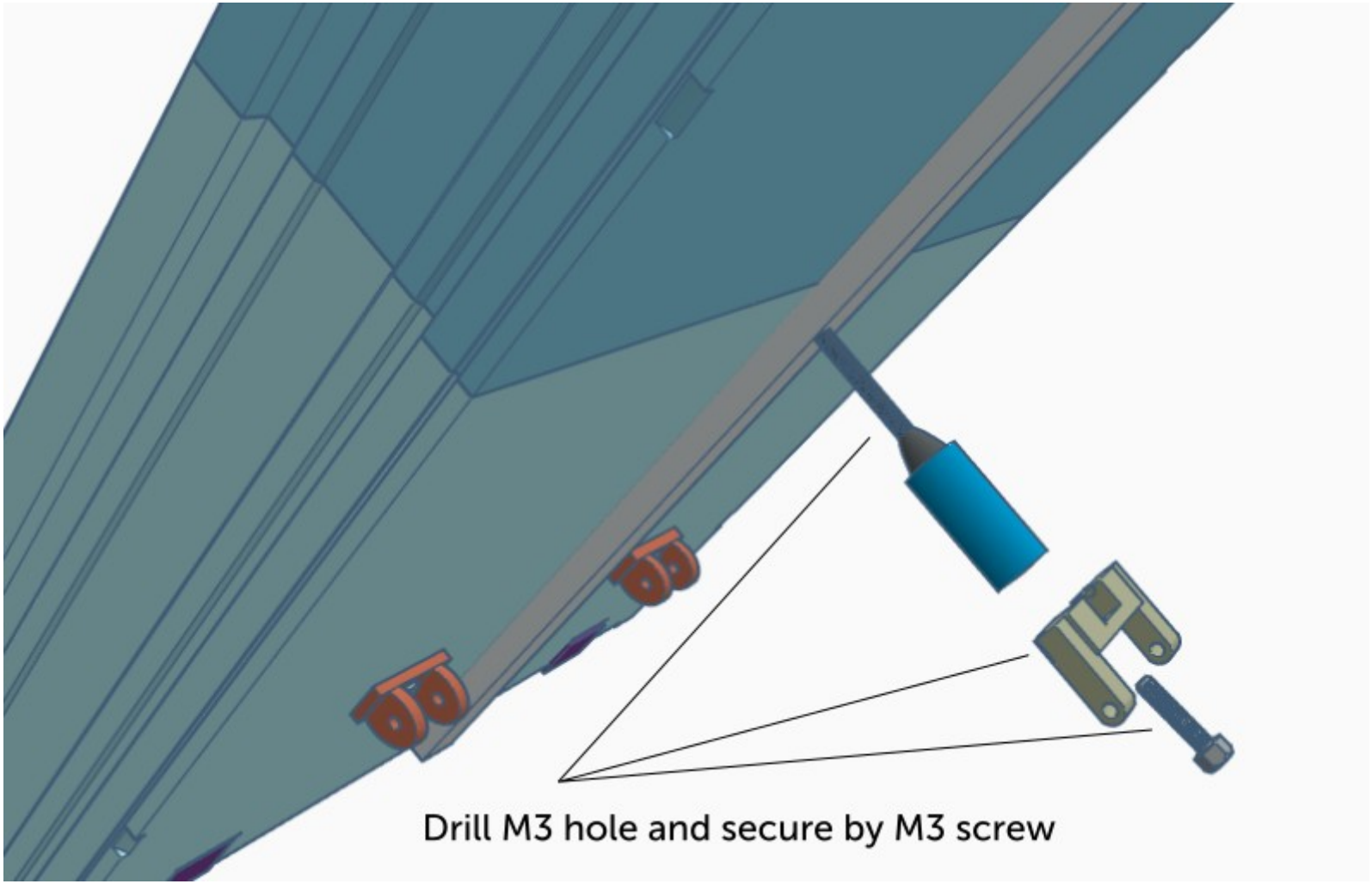

Secure cabin with M3 screw

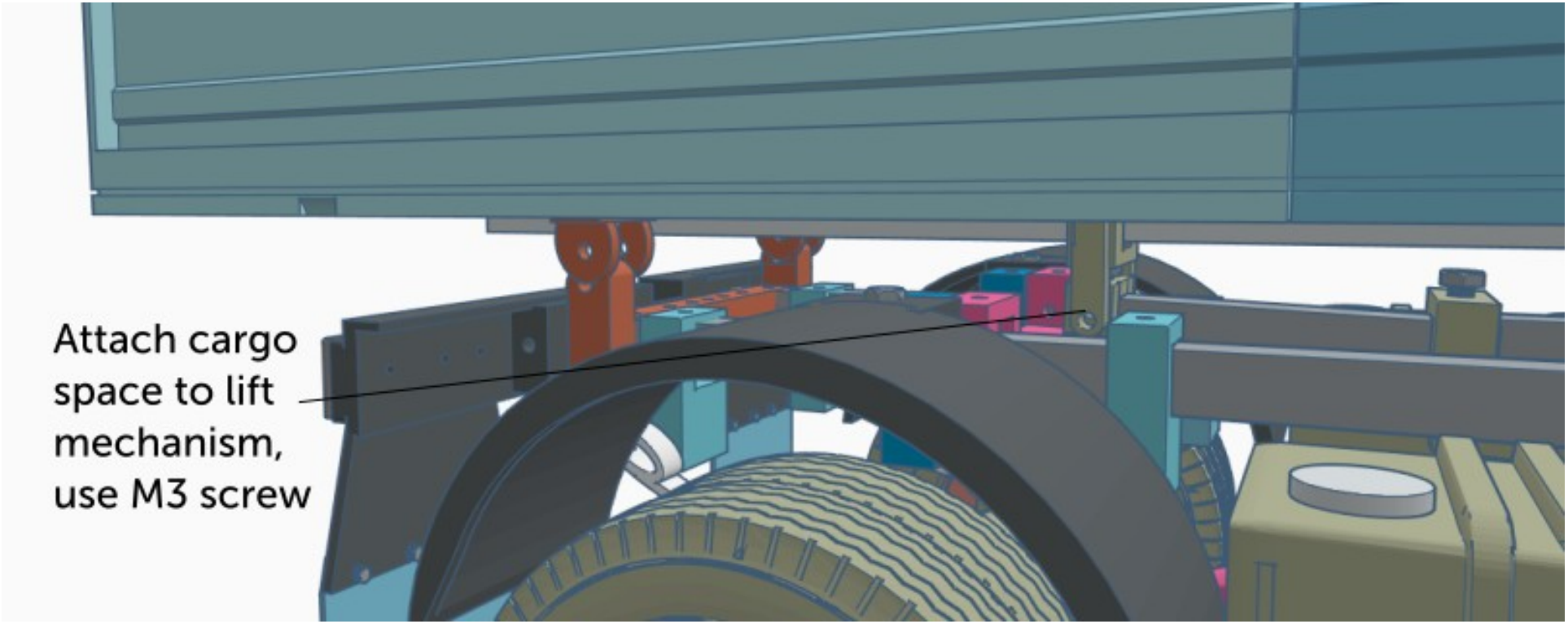

Optional - secure cabin with
M3 threated rod, M3 rod end
and M3 screw.
Cabin hold herself its heavy

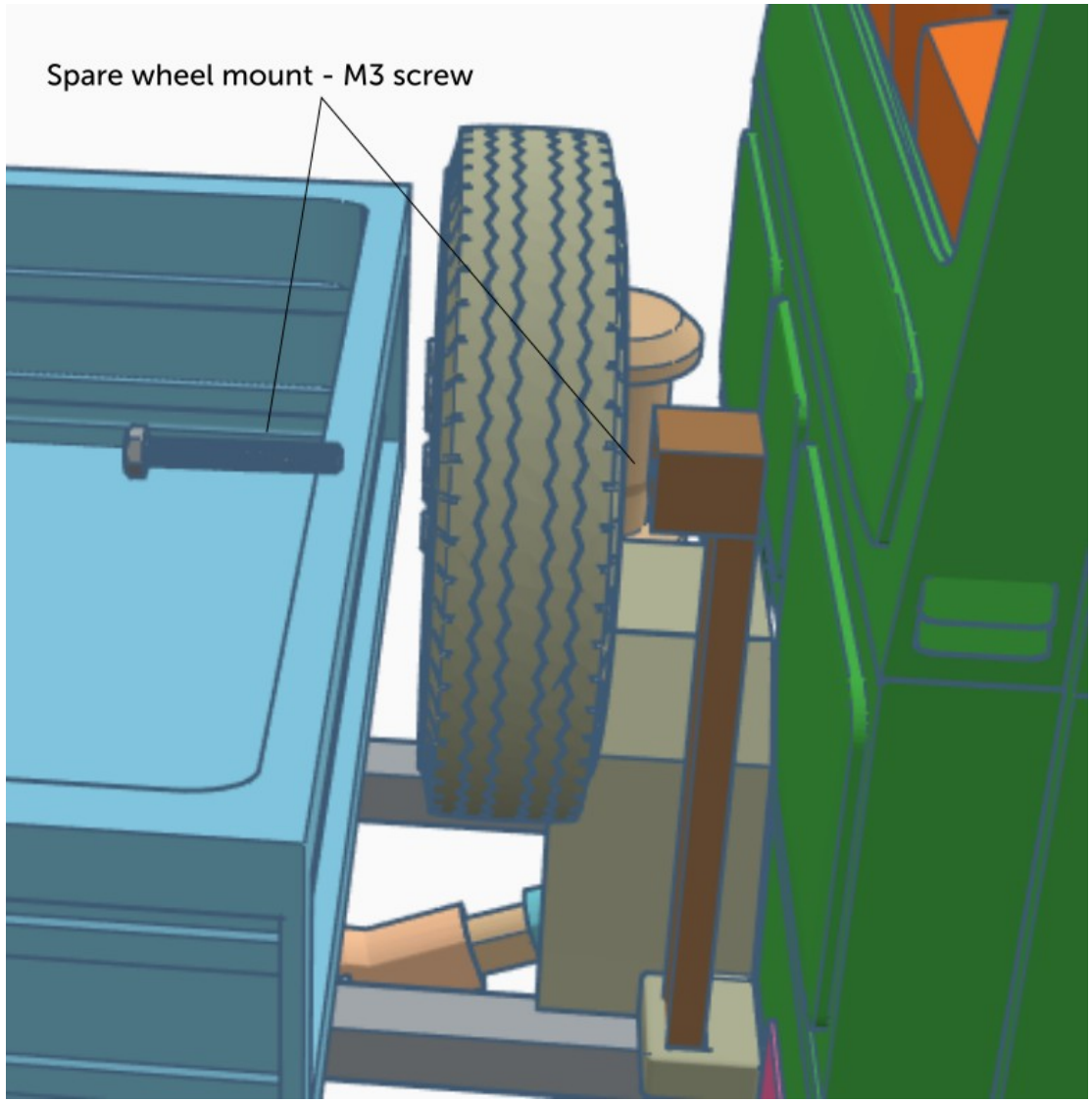

Cargo space end point,
mount by M3 screw


Mount cargo space to chassis M3 screw


Measure where to drill whole for mount cargo space
to lift mechanism, measure twice for sure!


Drill M3 hole and secure by M3 screw


Attach cargo space to lift mechanism, use M3 screw


Spare wheel mount - M3 screw