

How-To Print and Set Up Top Mount



How-To Print Top Mount

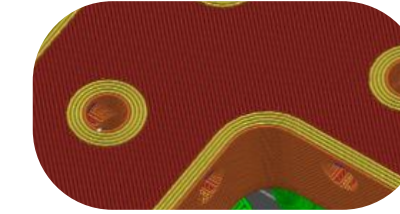
Printer settings to be mindful of

1. Import file into your preferred slicer program.
2. Settings to be mindful of:
 - a. Filament.** Recommended to use **PETG** or **PETG-CF**. These work well in saltwater.
 - b. 100% infill vs. open model and gyroid infill**
To prevent implosion in deeper waters, the parts should either be **100% infill** or **open** to let water run through. Which setting you should use when depends on the desired durability, and which one we recommend for which part is specified in the guides on the next slides.

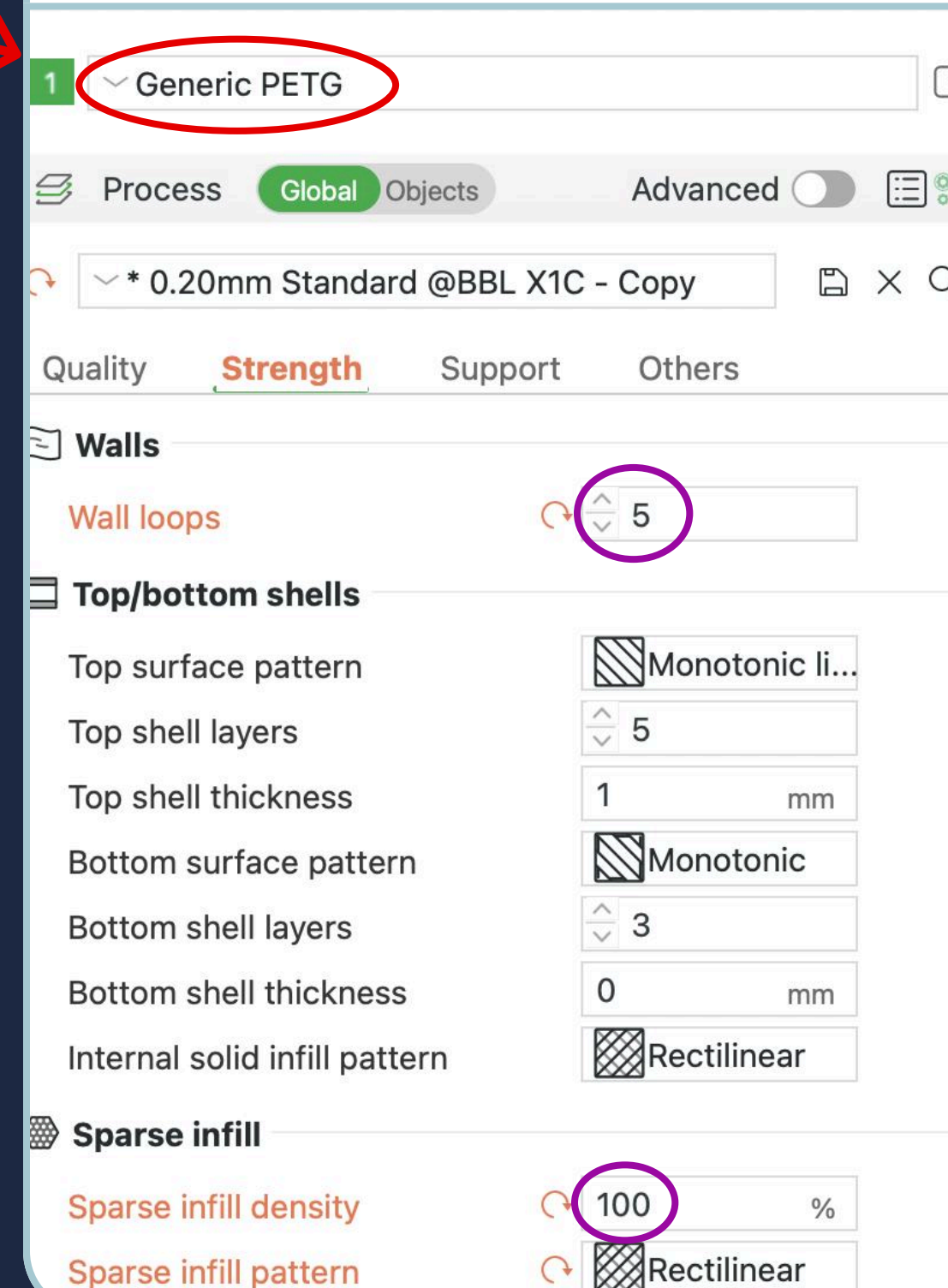
Note:

The examples are from the bamboo slicer but equivalent settings will exist on every slicer program. You only need to change the specified settings, the rest is fine as-is.

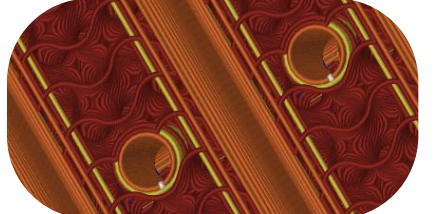
Airtight and 100% infill



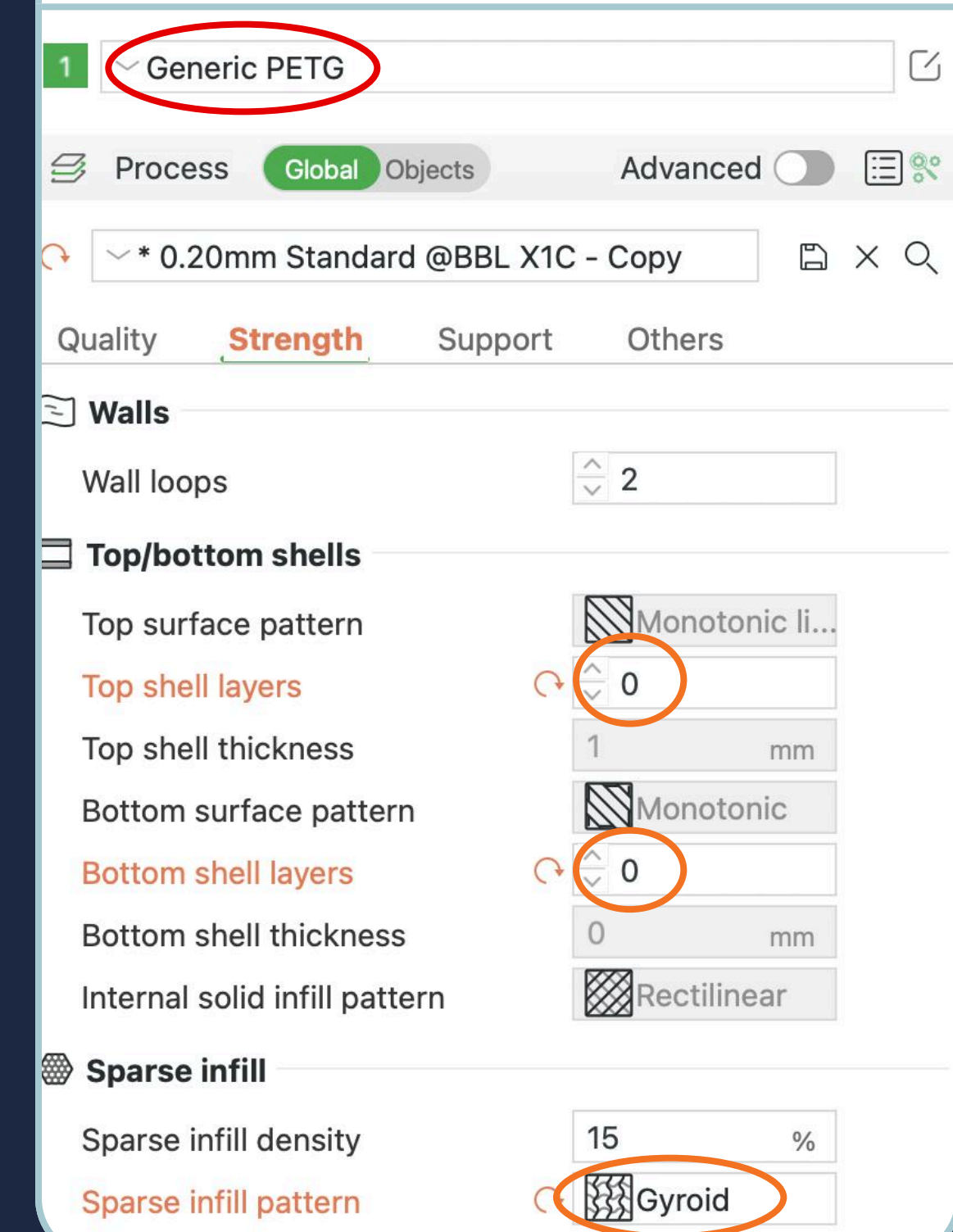
To make the parts airtight increase **infill density** to **100%**. It is also recommended to set **wall loops/thickness** to **5** for increased durability.



Open model and gyroid infill

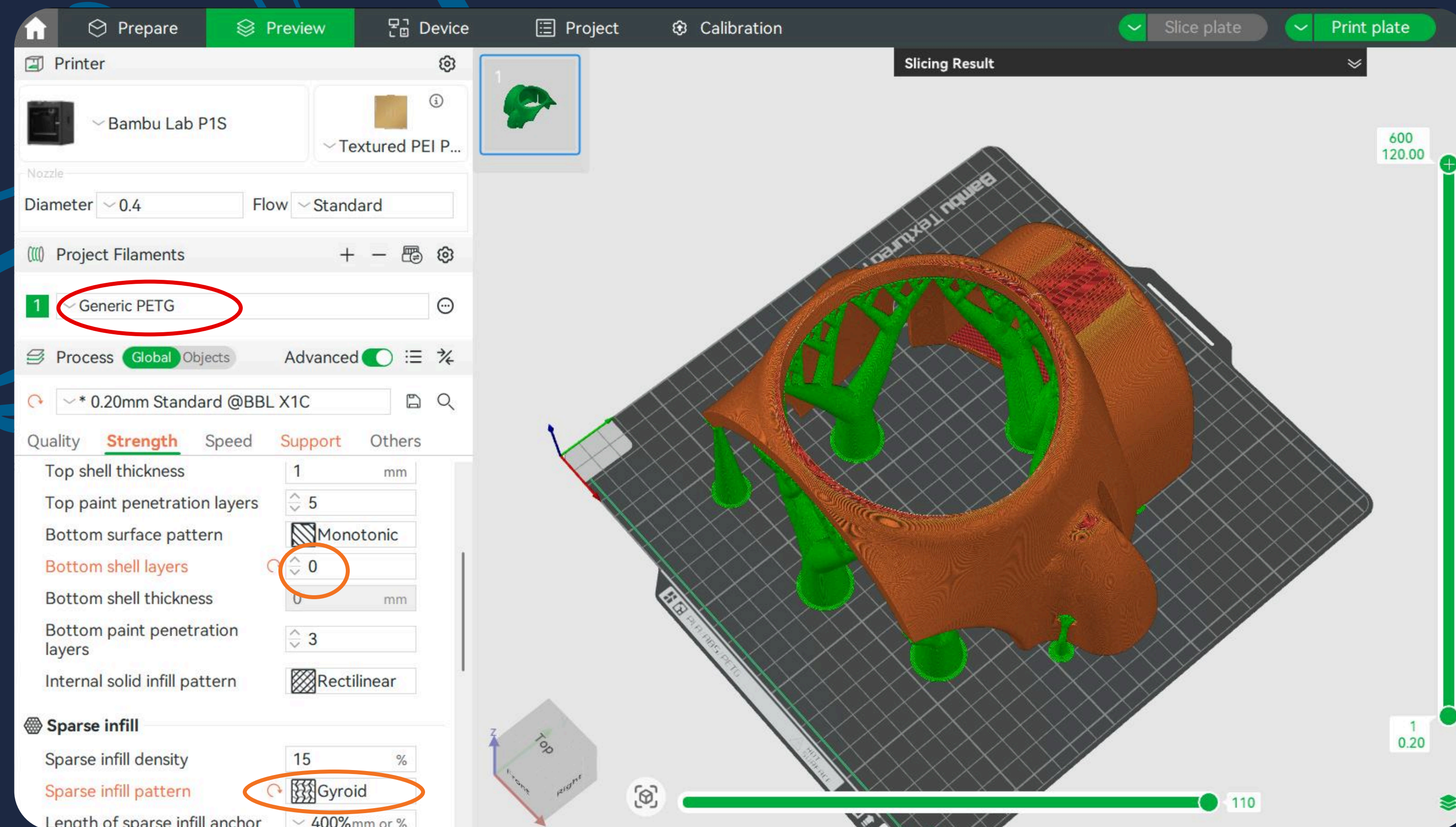


To make an open solution, set **top** and/or **bottom shell layer** to **0** and change **sparse infill** pattern to "Gyroid".



How-To Print Top Mount

Top Mount – Front piece



Amount: 1

Time: 8 hours 20 minutes

Edited printer settings

Recommended to use the **Open model** settings

Bottom shell layers: 0

Infill pattern: gyroid

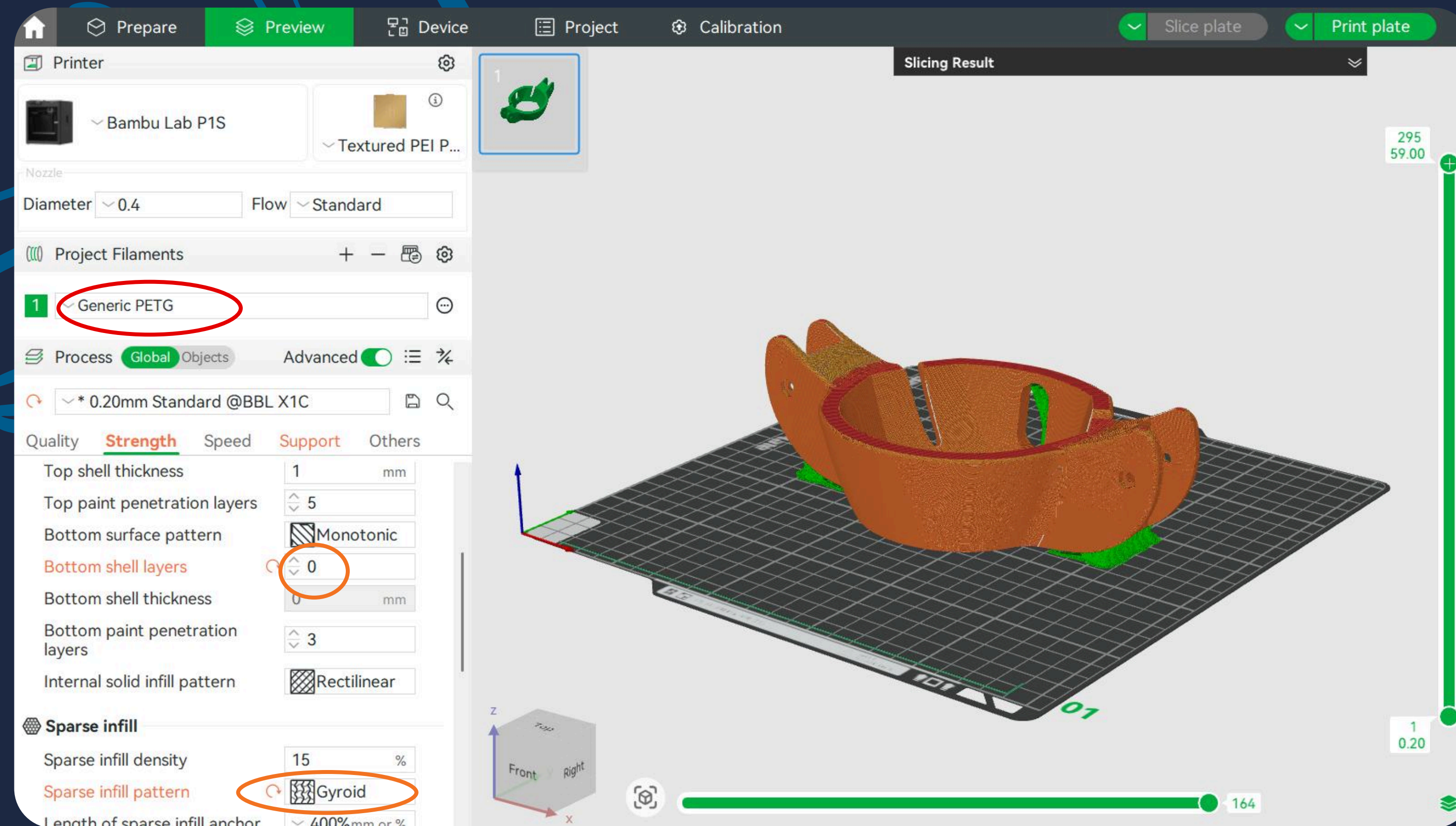
support enabled

support type: tree/organic

(the rest is fine as is)

How-To Print Top Mount

Top Mount – Rear piece



Amount: 1

Time: 2 hours 57 minutes

Edited printer settings

Recommended to use the **Open model** settings

Bottom shell layers: 0

Infill pattern: gyroid

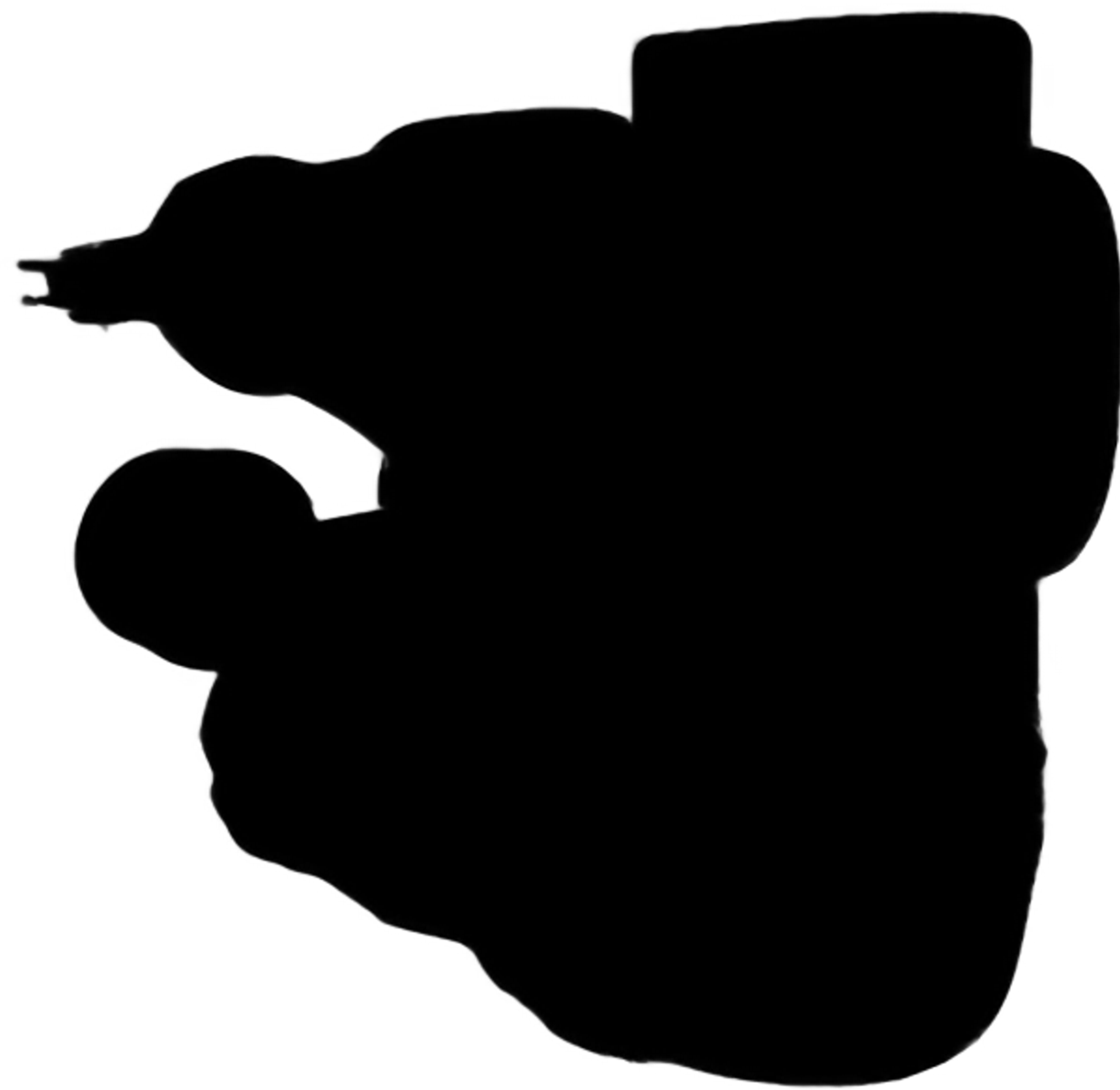
support enabled

support type: tree/organic

(the rest is fine as is)

How-To Set Up Top Mount

Prepare

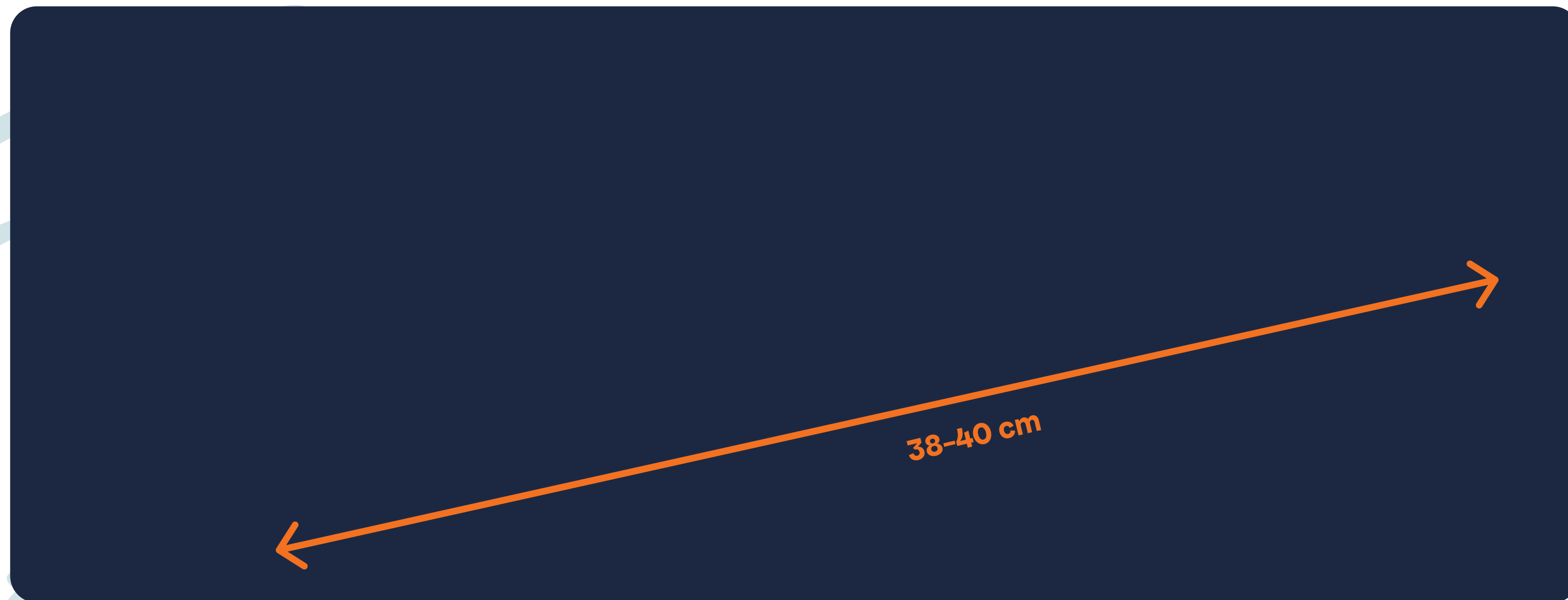


What you need:

- Top mount – Front piece x1
- Top mount – Rear piece x1
- Aluminum rails x2
- M4 screws of 35mm x4
- M4 nuts x4
- Drill
- Glue for plastic and metal

How-To Set Up Top Mount

Prepare aluminium rails



Step 1: Cut the rails to a length of approximately 38–40 cm

How-To Set Up Top Mount

Prepare aluminium rails



Insert pencil here to mark

Step 2: Attach the rails to the 3D-printed parts to help position the screw holes accurately.

Step 3: Mark the hole locations by inserting a pencil through the holes in the 3D-printed parts.

How-To Set Up Top Mount

Prepare aluminium rails



Step 4: Drill vertical holes through the aluminum rails at the marked points—two at the front and two at the back (4 holes in total).

Step 5: Use a 4.5 mm drill bit to allow for proper screw tolerance and easy assembly.

How-To Set Up Top Mount

Prepare front and rear pieces.

Like this!

Easier to do it with a screw!

Step 1: Glue down nut on the underside of the top mount where you can see a hexagonal indent.

Step 2: Important to use glue suitable for plastic and metal.

How-To Set Up Top Mount

Assembly (with inductive charger)



Screws should be
inserted from the
underside.

Optional step: If using an inductive charger, make sure to attach it to the top mount before assembly.

Step 1: Attach the aluminum rails to the 3D-printed top mount.

Step 2: Secure the rails by screwing them in place from the top.

