Repkord

RepBoxTT v2.0 & v2.1 Build Guide

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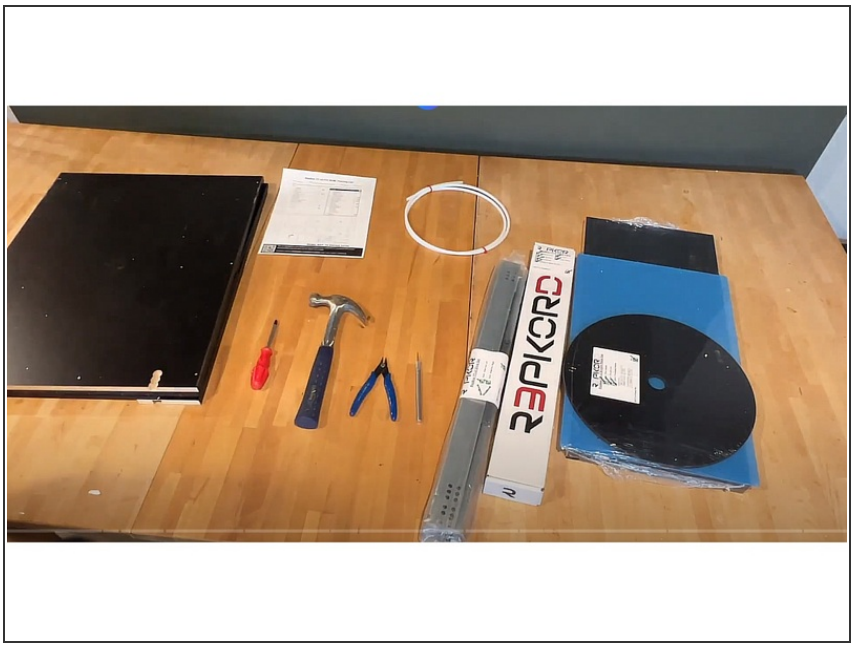
INTRODUCTION

PLEASE NOTE: THIS GUIDE IS IN PROGRESS. Please check back often for updates.

TOOLS:

- Phillips Head Screwdriver (1)
- Flush Cutters (1)
- Needle Nose Pliers (1)
- Clean & Flat Surface (1)
- Printed Bill of Materials (1)
- Hammer/Mallet (1)

Step 1 — The Unboxing.



⚠ Please watch the build video for in depth instructions - https://youtu.be/BDDXVMv4M0A .

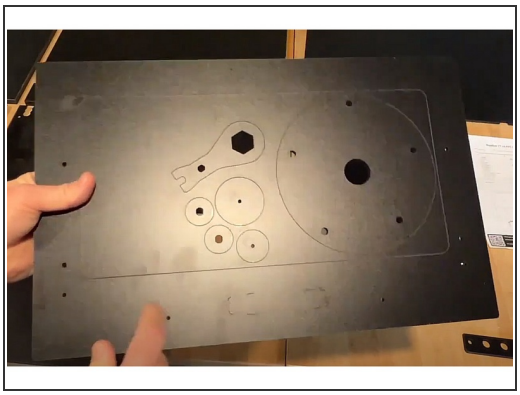
⚠ An interactive CAD model is available and is also very helpful - https://repkord.com/RBTTv2-3D .

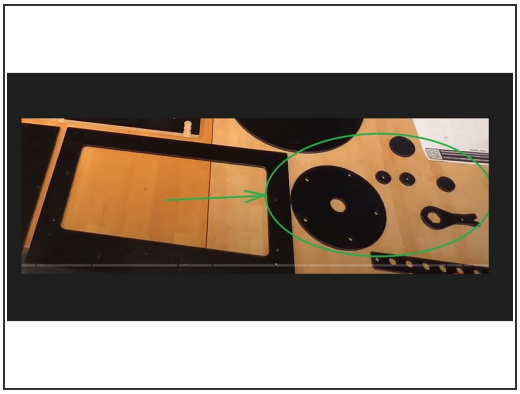
- **IMG 1** - Unpack all the parts and confirm all parts are available.

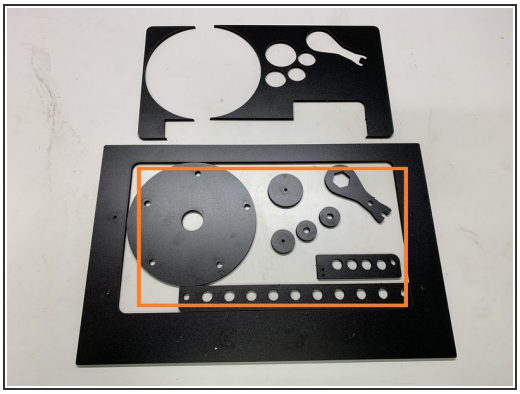
ⓘ Locate the Printed Bill of Material and refer to it for part/location information.

- Locate a clean/flat surface with plenty of room to work.

Step 2 — Small parts located in Panel 8

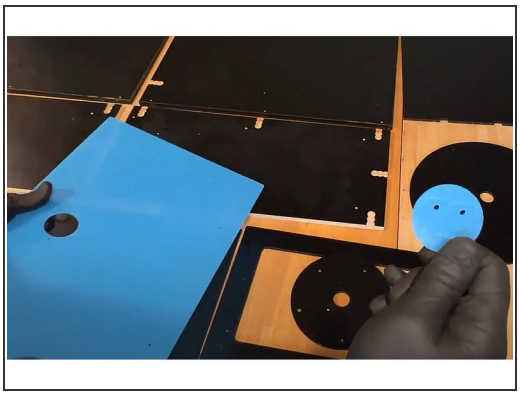
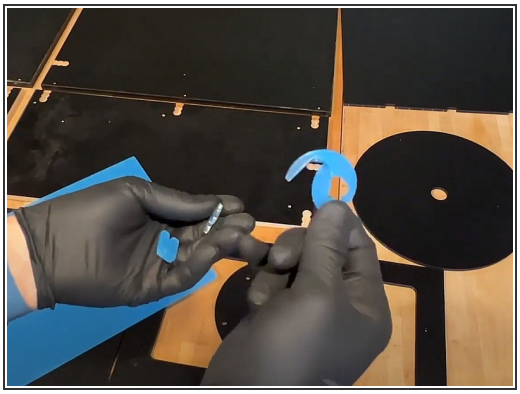
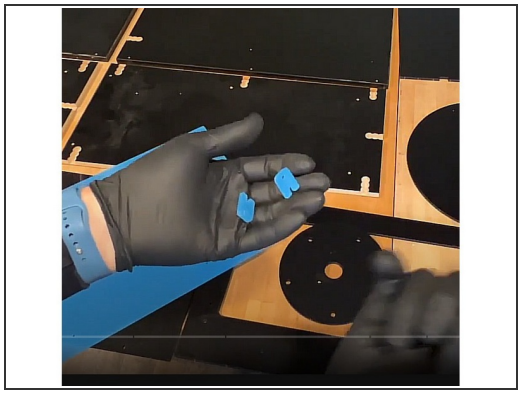






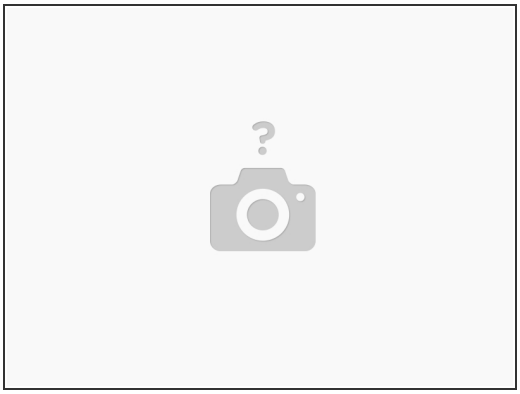
- IMG 1 - Locate Panel 8.
- **IMG 2** - Pop-out the internal pieces from the center of Panel 8. For **v2.0**, there are six pieces (highlighted in Green) that should be saved. The scrap material should also be saved for a later Step.
- **IMG 3** - Pop-out the internal pieces from the center of Panel 8. For **v2.1**, there are eight pieces (highlighted in Orange) that should be saved. The scrap material should also be saved for a later Step.

Step 3 — v2.0 only; Acrylic preparation.

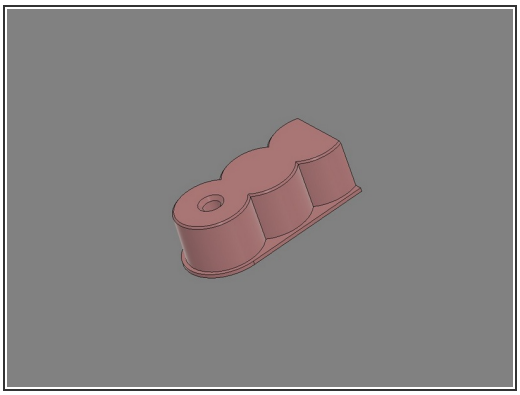
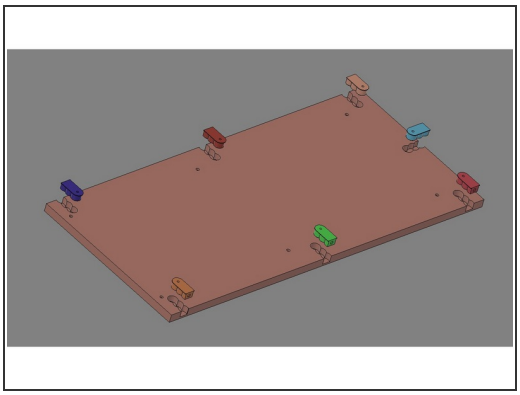
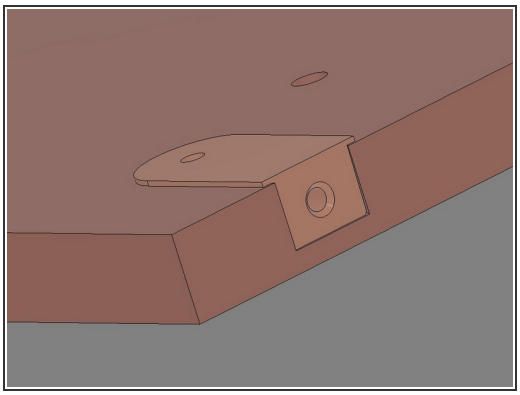
- **IMG 1** - Locate the *Acrylic Lid* and remove the circle knock-out.
- **IMG 2** - Remove the two *Tray Clips* from within that circle.
- **IMG 3** - These are the *Tray Clips*.
- Carefully remove the protective film from all of the acrylic parts.

Step 4 — v2.1 only; Acrylic preparation.



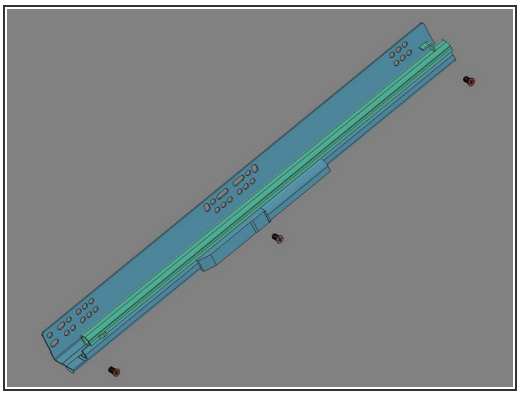
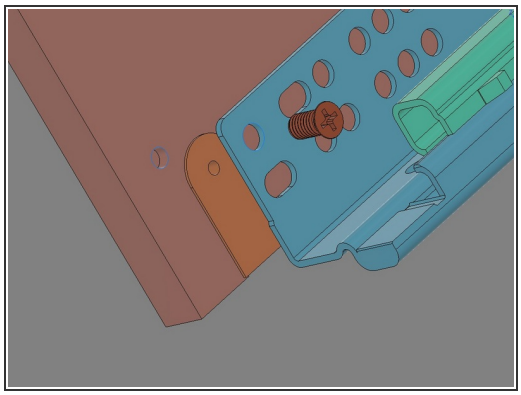
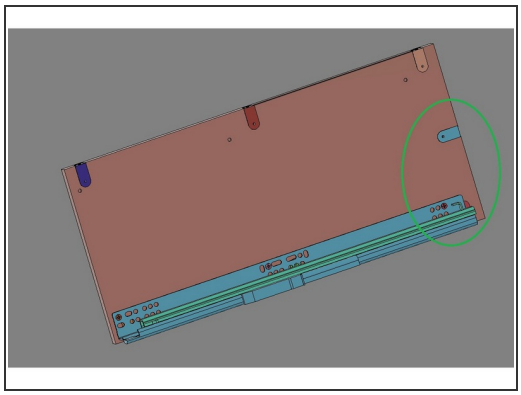
ⓘ Remove the protective film from both sides of the *Acrylic lid*.

Step 5 — Butt Anchors and Main Body Panels.

- **IMG 1** - Locate the *Butt Anchors* from within the *Plastic Parts Pack*.
- **IMG 2** - Align the *Butt Anchors* with the notches in a body panel. There are four panels total; *Top*, *Bottom* and two *Side Panels*.
- **IMG 3** - Initially, install the anchors by hand. These *Butt Anchors* must sit flush with the surface of the panels; If needed, use the scrap piece from Step 1 to cover the anchor and gently tap them in place with a hammer/mallet.
- Repeat this process for the remaining panels.

Step 6 — Tray Glide installation.

⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate the *Glide Pack* and take one of the two (Left Side shown). Locate x3 of the *Glide Screws*.
- **IMG 2** - Align the *Left Glide* with a *Side Panel* with the finished face forward. The first hole in the *Left Glide* will align with the first hole in the *Side Panel*.

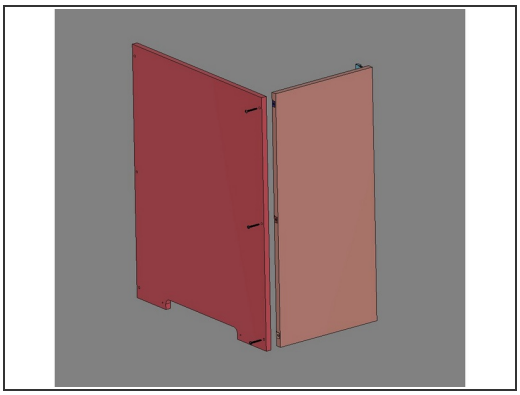
⚠ Do not over tighten any of the *Glide Screws*. Bring them down slowly and seat them against the glide.

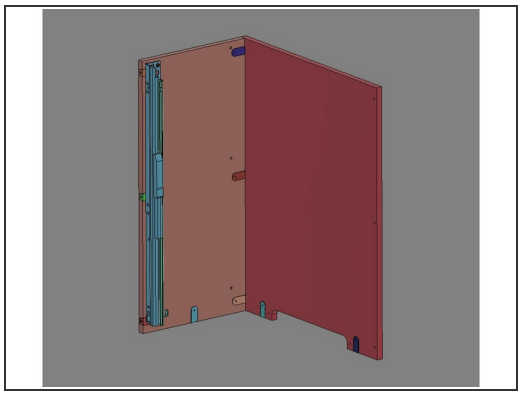
- **IMG 3** - Install x2 *Glide Screws* into the two remaining holes in the *Side Panel*; one in the middle and one at the rear.

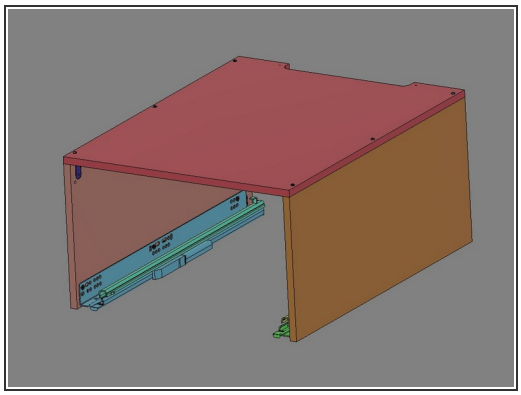
ⓘ Confirm the orientation of the *Glide*. There is a small hook-feature that should be at the back (unfinished edge) of the *Side Panel* (highlighted in Green).

- Mirror the process with the *Right Glide* into the other *Side Panel*.

Step 7 — Combine Sides with the Top Panel.







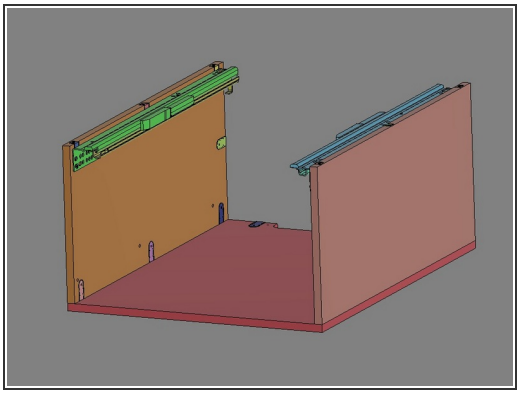
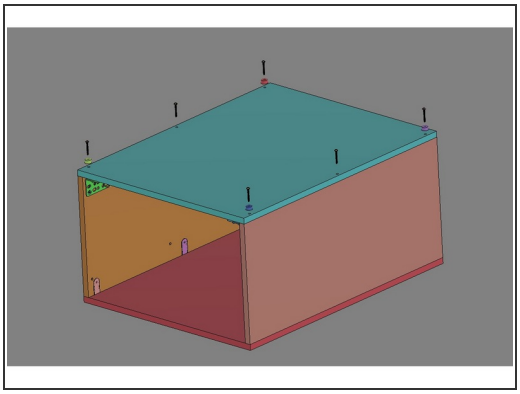
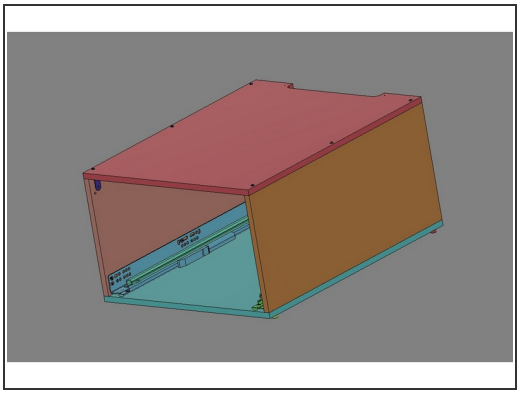
⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate the *25mm TF Screws*. Align the Left Side Assembly with the *Top Panel* and secure them together with x3 *25mm TF Screws*. The screws should pass through the *Top Panel* an into the *Butt Anchors*.

ⓘ Top simplify this process stand the parts up. The rear edges (unfinished) of these panels should be facing down towards the work surface.

- **IMG 2** - Confirm the correct orientations.
- **IMG 3** - Mirror these steps for the Right Side Assembly.

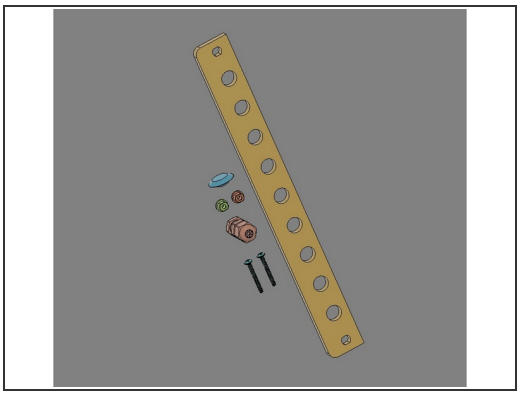
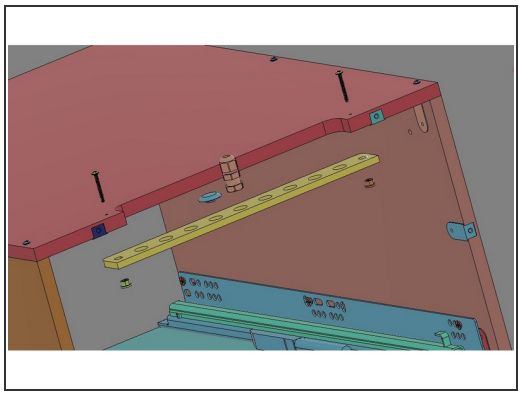
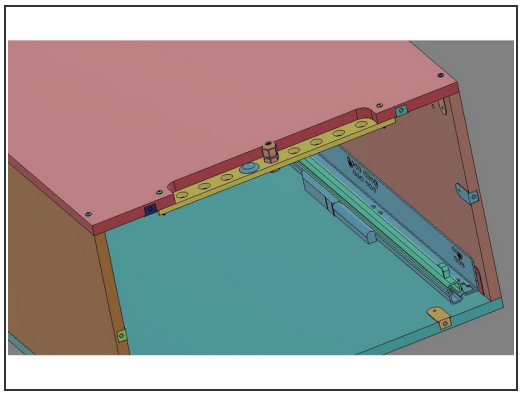
Step 8 — Add the Bottom Panel.

⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Flip the Main Assembly up-side-down.
- **IMG 2** - Locale the x4 *Rubber Feet* and x6 *25mm TF Screws*. Align the *Bottom Panel* with the Main Assembly and secure it with x2 *25mm TF Screws* in the middle holes, but do not tighten.
- Place a *Rubber Foot* at each corner hole and secure them to the Main Assembly using the remaining screws. Now, tighten the two middle *25mm TF Screws*.
- **IMG 3** - Flip the Main Assembly over to be top-side-up and confirm the orientations.

Step 9 — Install the Rear Exit Panel.

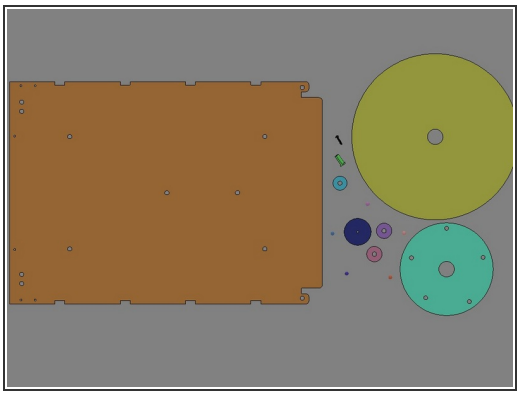
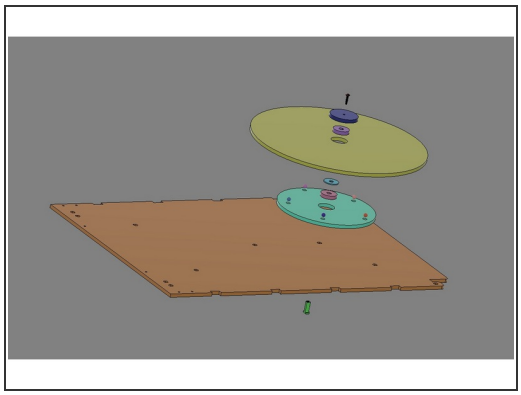
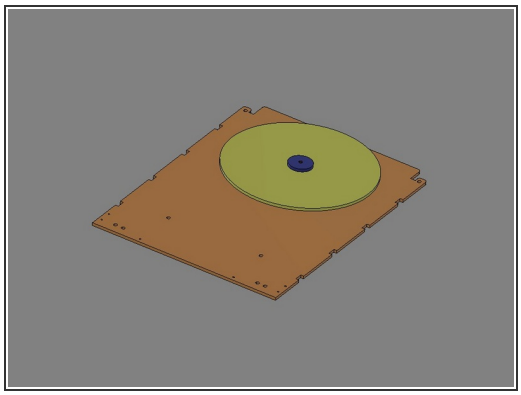
⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate the *Exit Panel*, x2 *25mm TF Screws*, x2 *Flange Nuts* and the *Exit Pack* which contains the *Exit Fittings* and *Exit Plugs*.

ⓘ It is suggested that any *Exit Plugs* needed should be installed prior to the next step. Alternatively, they can **all** be installed now then removed later as needed.

- **IMG 2** - Align the *Exit Panel* with the flat side facing the rear of the Main Assembly. The x2 *Flange Nuts* will fit up into the *Exit Panel* from the bottom.
- **IMG 3** - Secure the *Exit Panel* using x2 *25mm TF Screws* though the *Top Panel* into the *Flange Nuts*.

Step 10 — Tray and Turntable Assembly

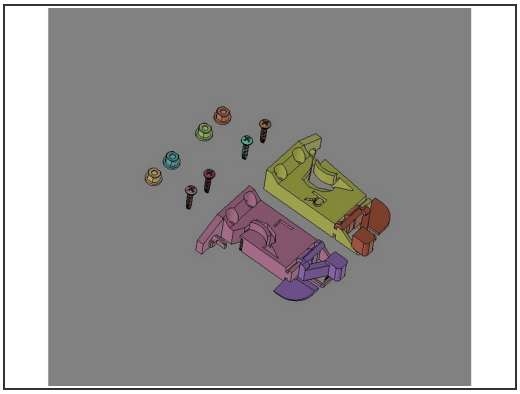
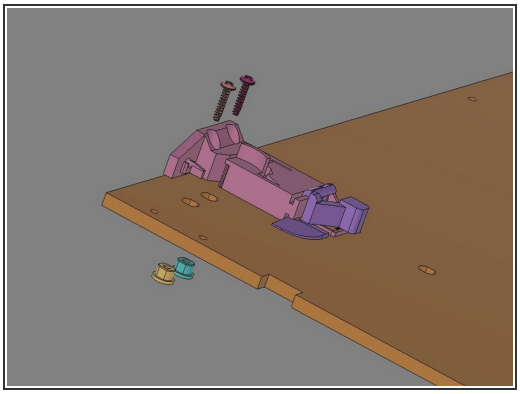
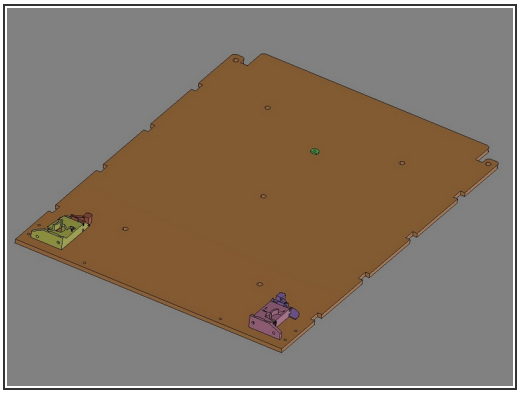




⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate the following: *Tray*, x1 *16mm TF Screw*, *Hub Flange Nut*, *Turntable Hub Spacer*, x5 *Ball Bearings*, *Hub Topper* (either the 32mm or 50mm), x2 *6mm Turntable Hub Spacers*, *Turntable* and *Bearing Race*.
- **IMG 2** - The parts will stack/align as shown. Note that the *Hub Flange Nut* will come up through the bottom of the *Tray* utilizing the rear most hole.
- Insert the *Hub Flange Nut* into the tray and set the tray down on a flat surface with the protruding *Hub Flange Nut* facing **UP**.
- Stack x1 *6mm Turntable Hub Spacer* onto the protruding *Hub Flange Nut*, followed by the *Turntable Hub Spacer* and then the remaining *6mm Turntable Hub Spacer*.
- Place the *Bearing Race* onto the Stack. Insert the x5 *Ball Bearings* into the five holes of the *Bearing Race*. Place the Turntable onto the Stack.
- Place the *Hub Topper* (either the 32mm or 50mm) on top of the Stack and fasten it using the *16mm TF Screw*.

The *Turntable* should now rotate freely, but be captured by the *Hub Topper*.

Step 11 — Glide Latches

⚠ **Do Not Use Power Tools for assembly.**

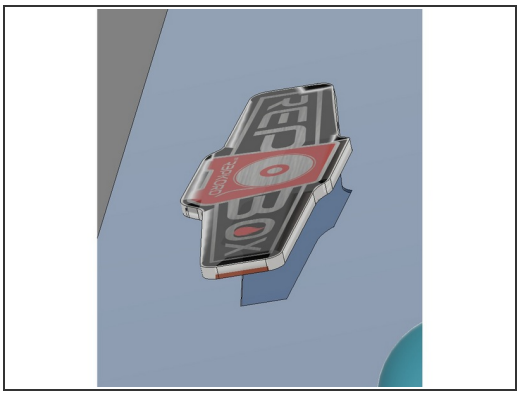
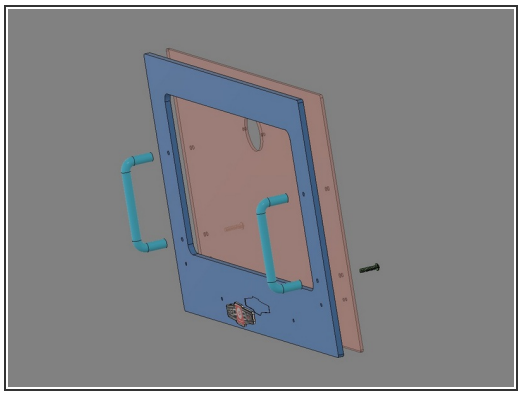
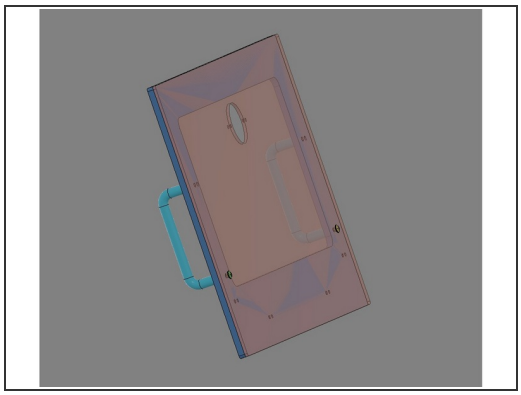
- **IMG 1** - Locate the Right and Left *Glide Latchs*, x4 *Flange Nuts* and x4 *16mm TF Screws*.

ⓘ Flip the Tray Assembly over with the *Turntable* facing **DOWN**.

- **IMG 2** - Align a *Glide Latch* as shown. The x2 *Flange Nuts* will be inserted into the *Tray* from the bottom. The x2 *16mm TF Screws* will insert through the two hole in the *Glide Latch*, though the *Tray* and into the *Flange Nuts*.
- **IMG 3** - Repeat the process for the other *Glide Latch*.

Verify the *Glide Latches* are oriented correctly.

Step 12 — Drawer Front, Part 1

⚠ **Do Not Use Power Tools for assembly.**

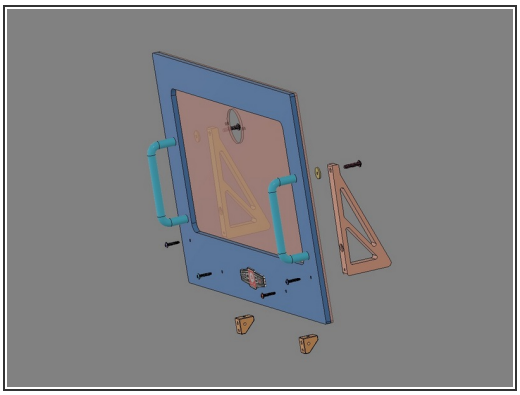
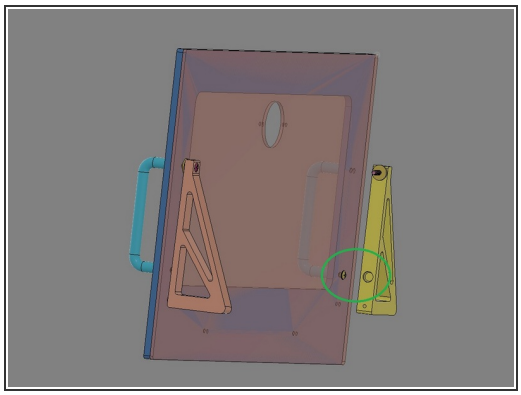
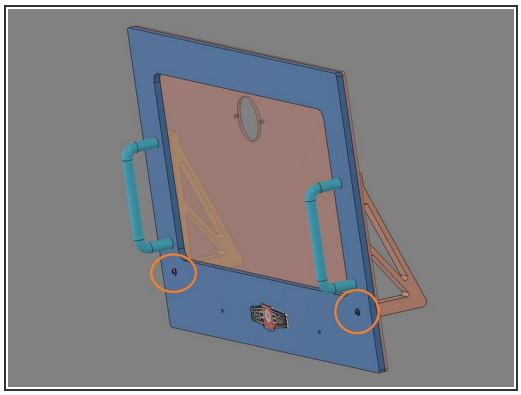
- **IMG 1** - Locate the *Drawer Front Trim*, *Clear Drawer Front*, x2 *Handles (with their included screws)* and the *Dome Label*.
- **IMG 2** - Lay the *Drawer Front Trim* on a flat surface (with the engraved lines facing upward). Peel the protective backing from the *Dome Label*. Align the label with the engraved marks on the *Drawer Front Trim* (the label will cover all of these lines). Press the label firmly onto the surface.

⚠ The *Handel Screws* are specific to the *Handles*. Only use their provided screws for the *Handles*.

- **IMG 3** - Align the *Clear Drawer Front* with the **BACK** of the *Drawer Front Trim*. Align one of the *Handles* (as shown) and install **ONE** of the *Handle Screws* in the **LOWER** hole.
- Repeat the process for the other *Handle*.

ⓘ Do **NOT** install the remaining two *Handle Screws* in the upper holes yet.

Step 13 — Drawer Front, Part 2 (Alignment Brackets)

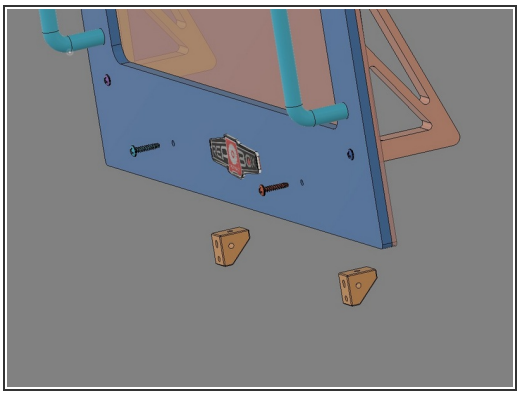
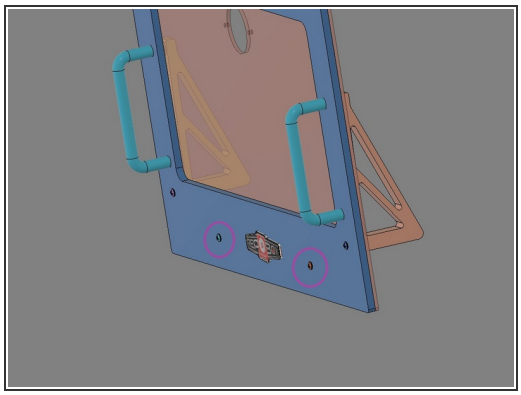
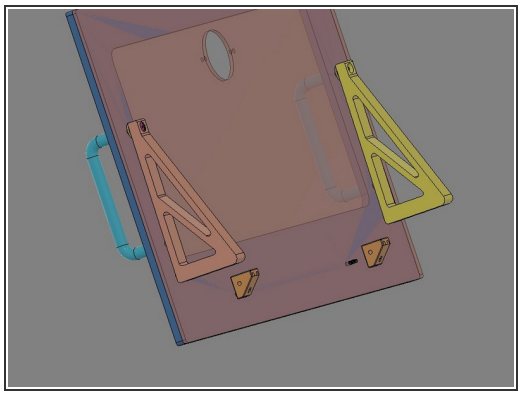
⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate x2 *Alignment Brackets*, x2 *Brackets*, x2 *Bracket Spacer*, x4 *16mm TF Screws* and the two remaining *Handle Screws*.
- **IMG 2** - Align the recess in the *Alignment Bracket* with the *Handle Screw* installed in the previous Step (highlighted in Green).
- Insert a remaining *Handle Screw* into the top hole of the *Alignment Bracket* and through a *Bracket Spacer*. This screw will continue through the Drawer Front Assembly and into the *Handle*.

ⓘ Do not fully tighten the top *Handle Screws* at this time. they will be used to adjust the Draw Front Assembly in a later Step.

- Repeat the process for the other *Handle*.
- **IMG 3** - Insert x2 *16mm TF Screws* into the Drawer Front Assembly and into the *Alignment Bracke* (highlighted in Orange).

Step 14 — Drawer Front, Part 3 (Lower Brackets)

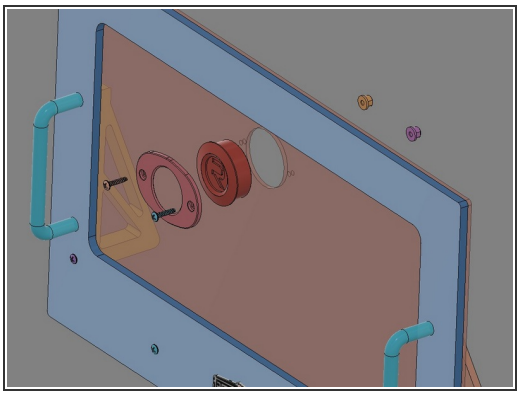
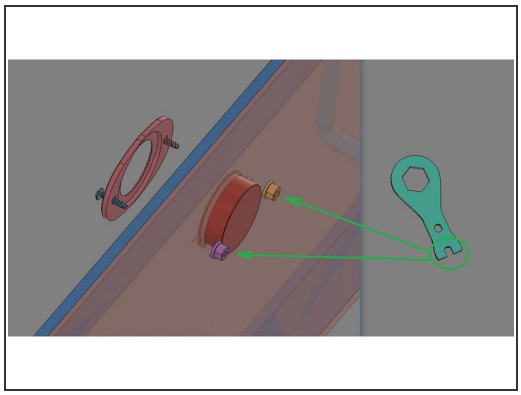
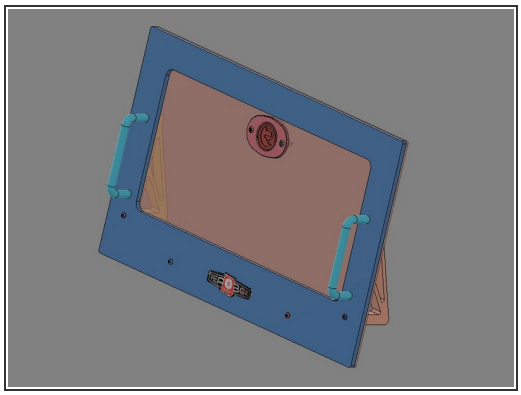




⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate x2 *16mm TF Screws* and x2 *Brackets*.
- **IMG 2** - Insert these screws though the remaining holes in the Lid Assembly (highlighted in Purple)
- **IMG 3** - The x2 *16mm TF Screws* should be tightened into the **LOWER** hole of the brackets x2.

ⓘ Do not fully tighten these two screws.

Step 15 — Drawer Front, Part 4 (Install the Hygrometer)

⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate x2 *16mm TF Screws*, the *Lid Trim Clamp*, *Hygrometer* and x2 *Flange Nuts*.
- For **v2.0**, install the *Hygrometer* into the Drawer Front Assembly from the front. **v2.1** does not come with a *Hygrometer*, but install the *Lid Trim Clamp* in the same way over top of the engraved Repkord Logo.

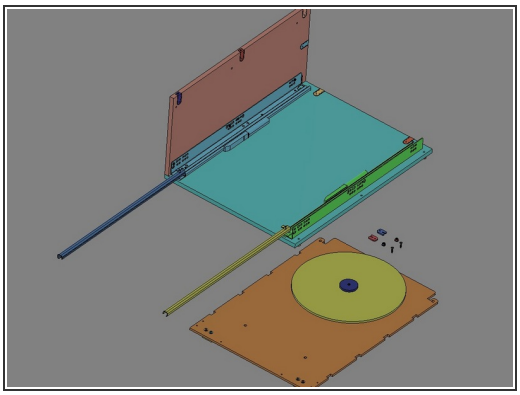
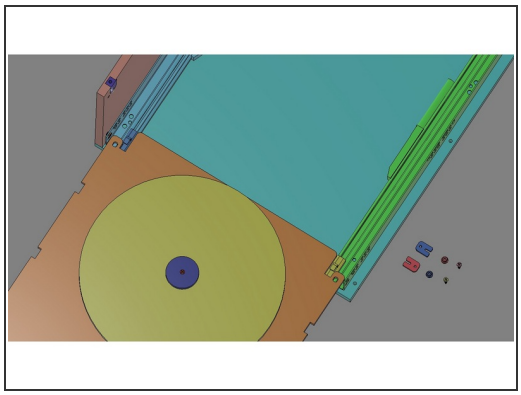
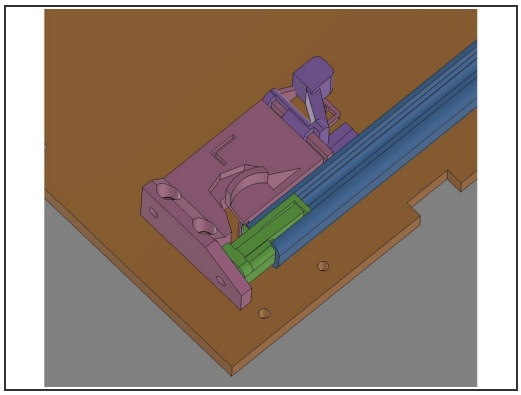
ⓘ Note that the *Lid Trim Clamp* has a recess on one side. This recess will fit around the *Hygrometer* once installed.

- **IMG 2** - Align the x2 *16mm TF Screws* with the *Lid Trim Clamp*. Place the *Lid Trim Clamp* over the *Hygrometer*. The x2 *16mm TF Screws* will pass through the *Lid Trim Clamp* through the holes in the *Acrylic Lid* and into the x2 *Flange Nuts*. Hold the flange nuts in place with **PART 14 Drumstick Tool**.
- Be sure to rotate the *Hygrometer* for best view as the x2 "16mm TF Screws" are slowly tightened.

⚠ Be sure not to over tighten these screws. They should be just tight enough to secure the *Hygrometer* and prevent it from rotating out of view.

- **IMG 3** - The Drawer Front Assembly is now complete.

Step 16 — Attach the Tray Assembly Part 1

ⓘ The *Top* and *Right Side* have been removed from view to provide better visibility. They **DO NOT** need to be remove to complete the assembly.

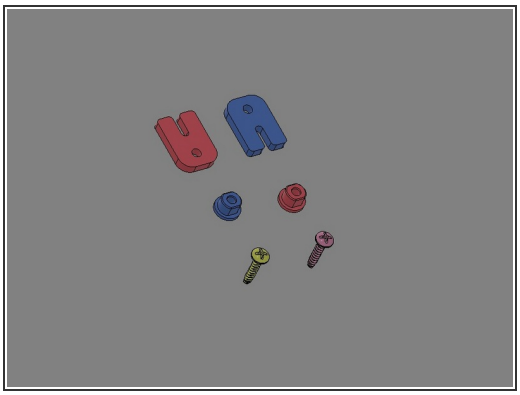
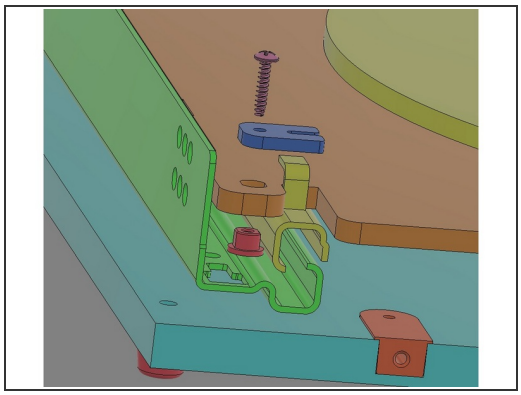
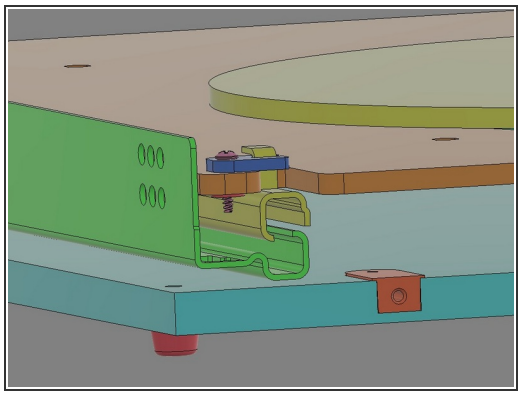
- **IMG 1** - Extend the *Glide* top rails to their full extension. Have the Tray Assembly ready (Turntable side up).
- **IMG 2** - Set the Tray Assembly onto the *Glide* top rails and align the Tray Assembly with the *Glide* top rail hooks.
- **IMG 3** - Reach under the Tray Assembly and pull the *Glide* top rail forward and insert it into the *Glide Latch*. There should be an audible clinking-in once the *Glide* top rail is fully inserted.

ⓘ The plastic tip (shown in Green) is pre-installed into the *Glide* top rail.

- Repeat the process for the other *Glide* top rail.

⚠ The Tray Assembly is **NOT** fully secure at this point.

Step 17 — Attach the Tray Assembly Part 2

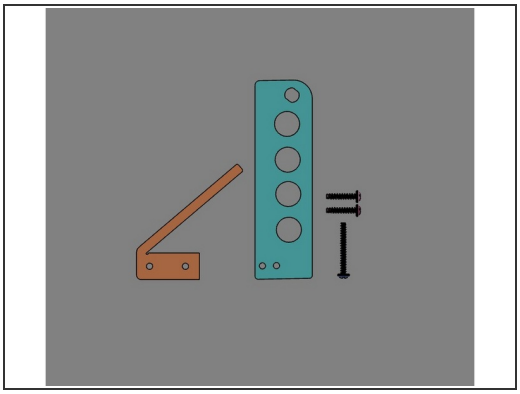
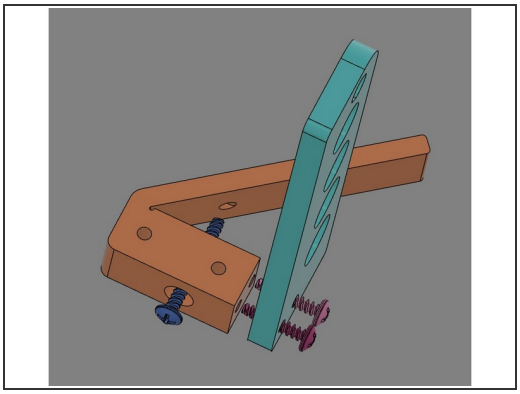
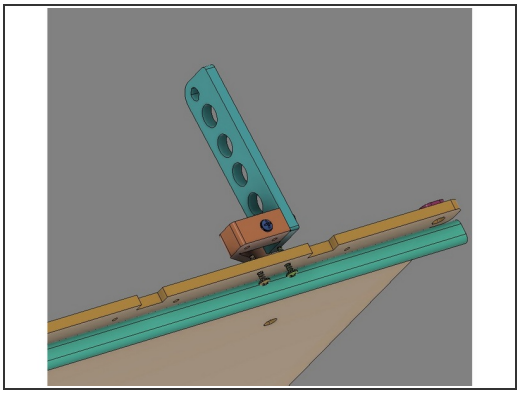
⚠ **Do Not Use Power Tools for assembly.**

- Slowly push the Tray Assembly & *Glide* top rails back into the box.
- **IMG 1** - Locate x2 *Tray Clips*, x2 *Flange Nuts* and x2 *16mm TF Screws*.
- **IMG 2** - Align one *Flange Nut* with the hole in the back corner of the Tray Assembly.
- **IMG 3** - Fit the *Tray Clip* around the *Glide* top rail hook. Insert the *16mm TF Screw* into the *Tray Clip*, through the *Tray* and into the *Flange Nut*.

⚠ **Do Not** over tighten this screw. It should be just tight enough to keep the *Tray Clip* secure.

- Repeat the process for the other side of the Tray Assembly.
- The Tray Assembly should now be secure to the Main Assembly.

Step 18 — v2.0 only; Spool Brake & Tower installation.

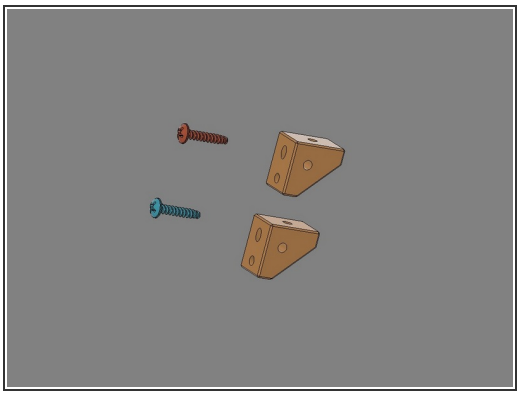
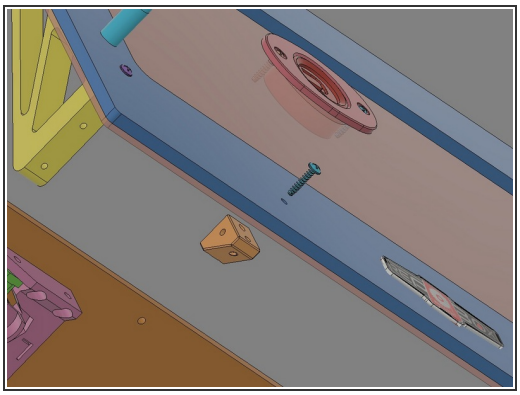
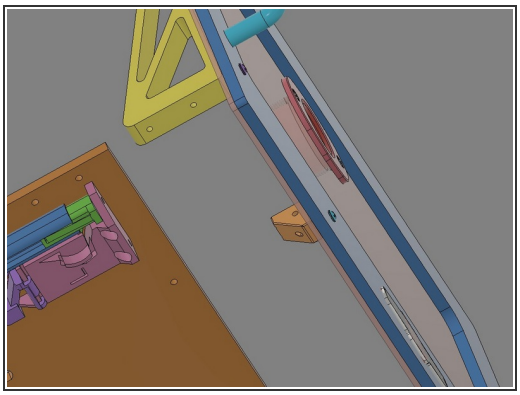




⚠ Do Not Use Power Tools for assembly.

- **IMG 1** - Locate the *Brake*, *Tower*, x1 *25mm TF Screw* and x4 *16mm TF Screws*.
- These images are for installing the finished Brake/Tower assembly on the Right side of the TT. These parts can be reversed if the Brake/Tower is to be installed on the Left side of the TT.
- **IMG 2** - Insert the x1 *25mm TF Screw* into the single side-hole as shown. When tightening, leave a small gap between the screw tip and brake arm (as shown).
- **IMG 2 cont.** - Insert the x2 *16mm TF Screw* through holes in the *Tower* and secure the *Tower* to the *Brake*.
- **IMG 3** - To attach the Brake/Tower Assembly to the Tray Assembly, insert the x2 *16mm TF Screws* up through the Tray Assembly (using the rear-most pair of holes) then up into the Brake/Tower Assembly.

⚠ The x1 *25mm TF Screw* can be slowly tightened so the brake arm gently drags against the side of the *Turn Table*. This drag should be adjust just enough to keep a spool of filament from "free wheeling" as the filament is pulled through and up to the printer.

Step 19 — Attach the Lower Brackets.

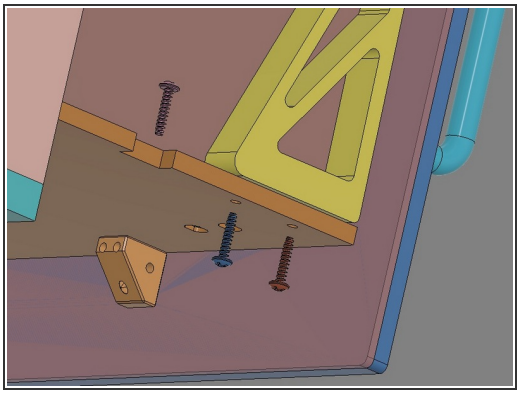
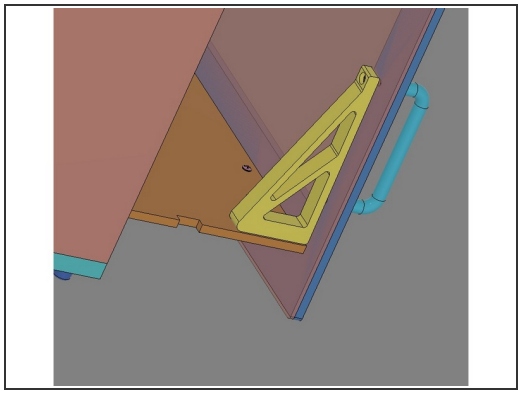
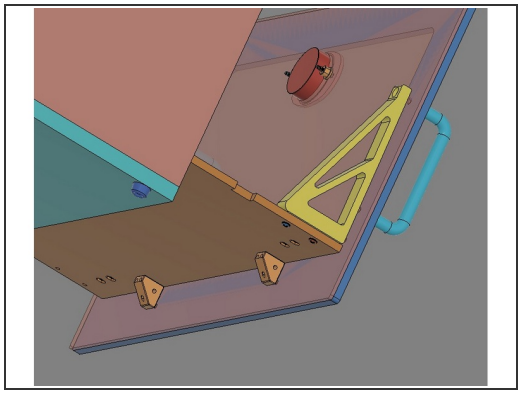




⚠ **Do Not Use Power Tools for assembly.**

- **IMG 1** - Locate the x2 *Brackets* and x2 '16mm TF Screws".
- **IMG 2** - Align one *16mm TF Screw* with the Drawer Front Assembly. Orient one *Bracket* as shown.
- **IMG 3** - Insert the *16mm TF Screw* through the Drawer Front Assembly and into the **LOWER** hole in the *Bracket* to secure it.
- Repeat this process for the other side of the Drawer Front Assembly.

ⓘ Confirm the *Bracket* orientations before moving to the next step.

Step 20 — Attach the Draw Front Assembly.

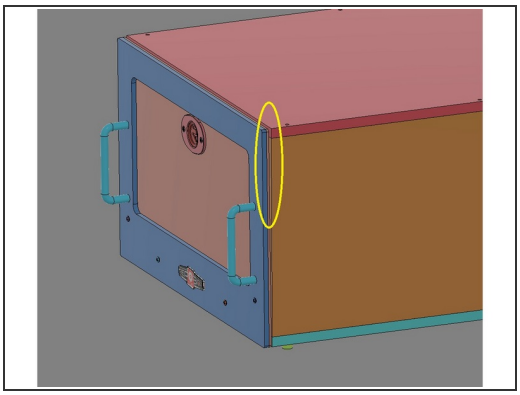
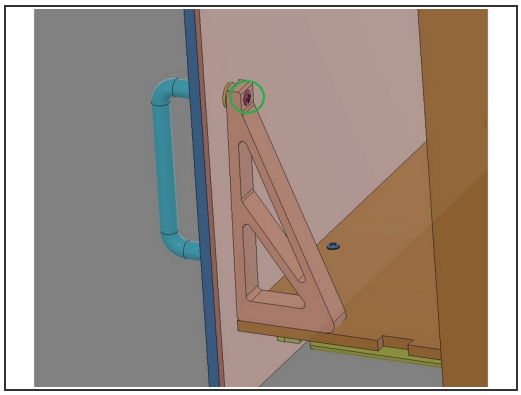
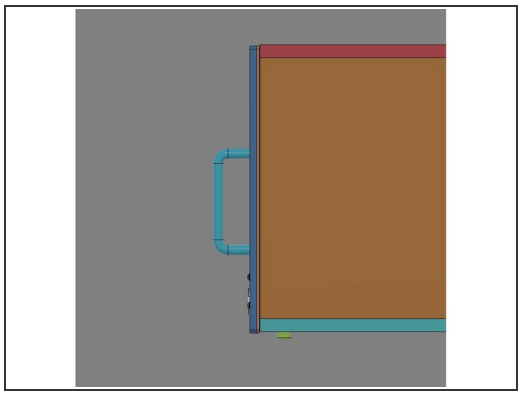
⚠ Do Not Use Power Tools for assembly.

- **IMG 1** - Locate x6 *16mm TF Screws*. They will be aligned as shown on both sides of the Drawer Front Assembly.

ⓘ Some parts have been removed from these images to provide better visibility for the next instructions. They **DO NOT** need to be remove to complete the assembly.

- **IMG 2** - Slide the Drawer Front Assembly onto the Tray Assembly and align the *Alignment Brackets* with the holes in the *Tray* (as shown). This will also align the lower *Brackets* with the two holes at the front of the *Tray*.
- **IMG 2** - Insert two of the *16mm TF screws* into the two front holes of the *Tray* and into the *Brackets*. Tighten these screws slowly making any adjustment necessary for alignment. **DO NOT** fully tighten these screws yet.
- **IMG 2** - Insert two of the *16mm TF screws* into the two side holes of the *Tray* and one of the *Alignment Brackets*. Tighten these screws slowly making any adjustment necessary for alignment. **DO NOT** fully tighten these screws yet.
- Repeat this for the other *Alignment Bracket*.
- Once all six screws have been installed, slowly tighten them all to fully secure the Drawer Front Assembly to the Tray Assembly.

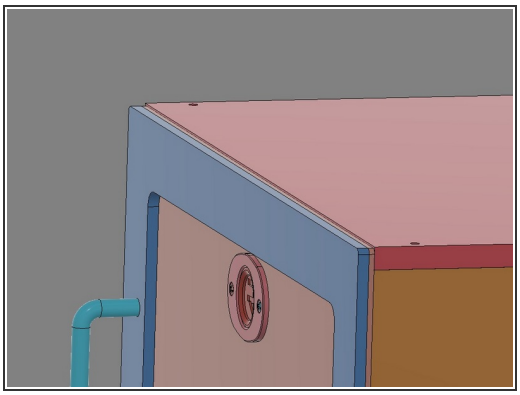
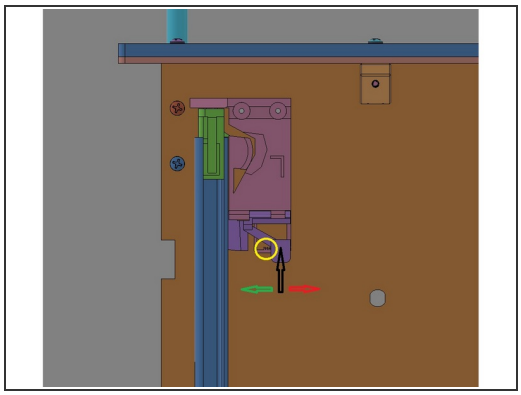
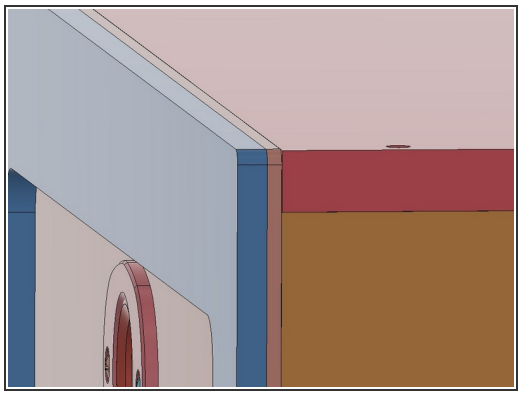
Step 21 — Adjusting the Drawer Front 'Tilt'.

⚠ Do Not Use Power Tools for assembly.

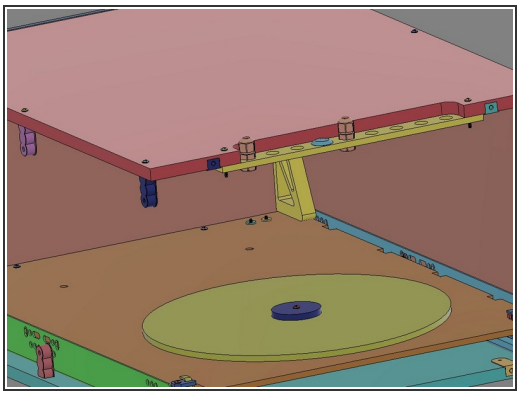
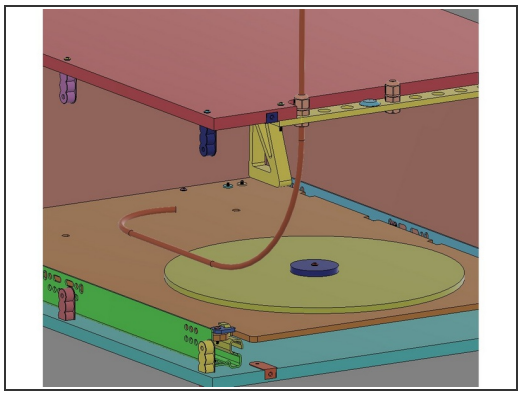
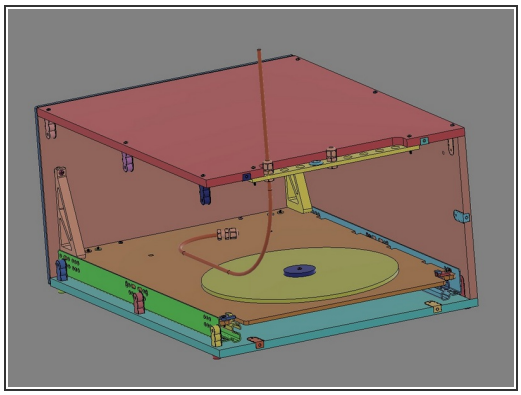
- **IMG 1** - If there is a 'tilt' in the Drawer Front Assembly, it can be adjusted to close the gap.
- **IMG 2** - Pull open the drawer and slowly tighten the screw at the top of the *Alignment Bracket* (highlighted in Green).
- **IMG 3** - Both sides might need adjustment, so alternate sides making small adjustments until the Drawer Front Assembly lays flush.

Step 22 — Adjusting the Drawer Front 'Height'.

- **IMG 1** - If the Drawer Front Assembly isn't aligned with the *Top*, it can be adjusted.
- **IMG 2** - The *Glide Latches* have an adjustment feature that slides back/forth to lift/lower the Drawer Front Assembly. To slide this feature, gently press the slide's adjustment arm inward (highlighted with the Black Arrow) and slide the feature towards the *Glide Rail* to lift it (Green Arrow) and away to lower it (Red Arrow).
- **IMG 3** - Make small adjustments to both sides to best level the Drawer Front Assembly.

Step 23 — v2.0 only; Adding the PTFE tubing.

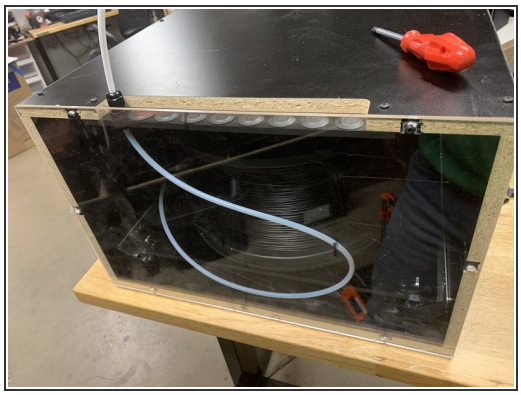
⚠ Do Not Use Power Tools for assembly.

- Some parts have been removed from these images to provide better visibility for these instructions. They **DO NOT** need to be remove to complete the assembly.
- **IMG 1** - Install the rear *Exit Fitting* into the *Exit Panel*.
- **IMG 2** - Insert the *PTFE Tube* through the rear *Exit Fitting* approximately 20"(~500mm). **DO NOT** tighten this fitting yet.
- **IMG 3** - Install and secure another *Exit Fitting* on the end of the *PTFE Tube*. This prevents snags and makes it easier to hold the *PTFE* when threading filament.

ⓘ Once a spool of filament is loaded, the PTFE tubing length can be adjusted through the rear *Exit Fitting*.

Step 24 — v2.1 only; Adding the PTFE tubing.





⚠ Do Not Use Power Tools for assembly.

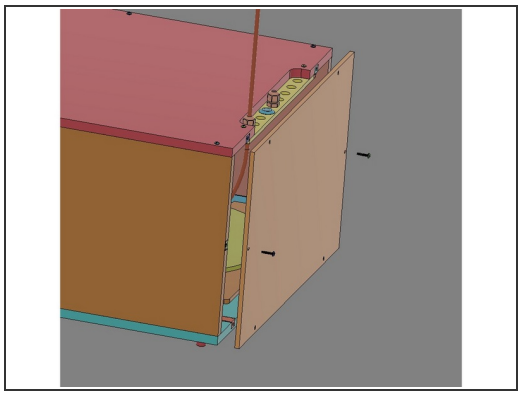
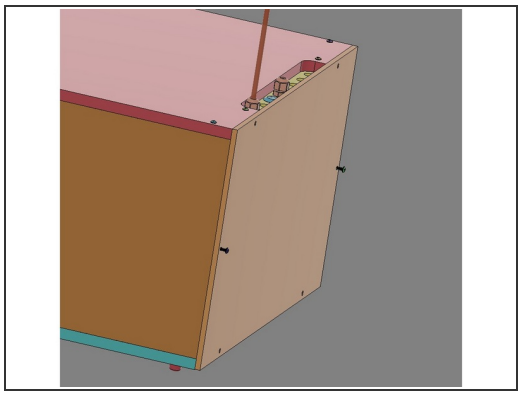
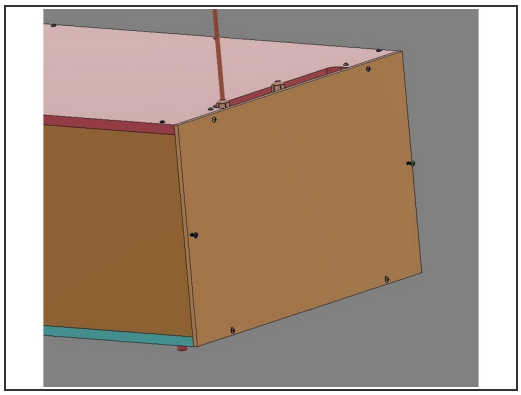
ⓘ For these three images, the *Rear Panel* has been removed and replaced with an **Acrylic Panel** to help visualize how the PTFE tubing should be installed and how it will articulate when the tray is opened/closed.

- **IMG 1** - Install x1 *Exit Fitting* into the Brake/Tower Assembly. Feed the *PTFE Tube* through the *Exit Fitting* leaving approx. 2-3 inches (50-75mm) sticking through towards the front. Tighten the *Exit Fitting* Cap to secure the tube.
- **IMG 1 cont.** - Pull the *Tray* forward as far as it can travel . Tuck the remaining tube out the back of the cabinet.
- **IMG 2** - Install x1 *Exit Fitting* into the *Rear Exit Panel* in the position shown. Feed the remaining *PTFE Tube* up through the Fitting leaving slack on the inside of the cabinet to provide free movement of the *Tray* and without any strain against the two *Exit Fittings*. Tighten the second *Exit Fitting* to secure the tubing.

ⓘ The *PTFE Tubing* should have a natural curve from being coiled during shipping. Utilizes this natural curve when installing the tubing... curving "inward" towards the spool when passing though the front *Exit Fitting* (***IMG 1) and then "up & out" when passing though the rear *Exit Fitting*.

- **IMG 3** - Side the tray back into the cabinet to confirm smooth operation and that there is no strain is being applied to the two *Exit Fittings*.
- The *PTFE Tubing* should dress/form-fit as shown.

Step 25 — Adding the Rear Panel.

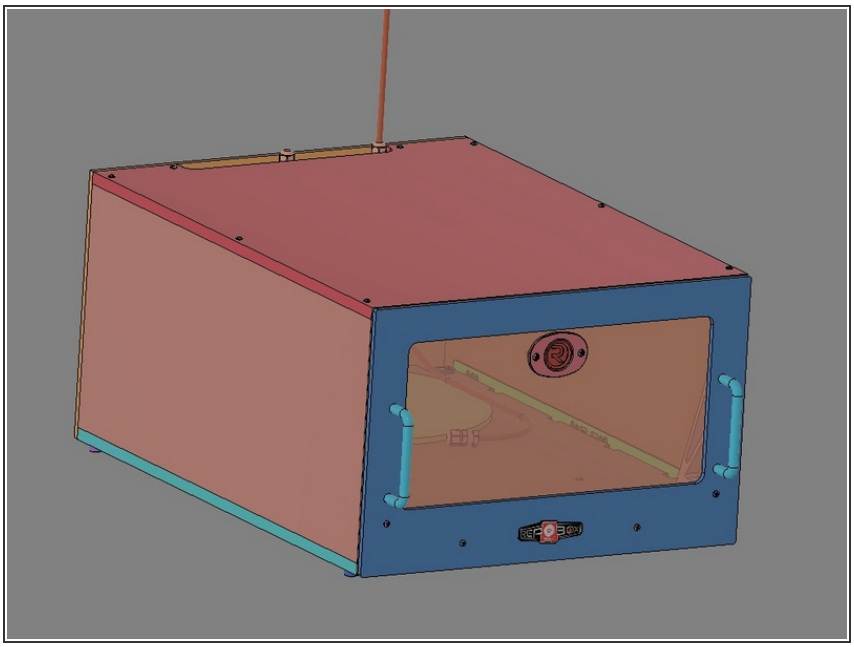




⚠ Do Not Use Power Tools for assembly.

ⓘ On v2.1, the *Rear Panel* installation is easier if the Tray Assembly is pulled forward.

- **IMG 1** - Locate x6 *16mm TF Screws* and the *Rear Panel*. Align the *Back Panel* with the rear of the Main Assembly and insert two screws through the side holes and into the *Butt Anchors* (already installed in the *Side Panels*).
- **IMG 2** - **DO NOT** fully tighten these two screws yet.
- **IMG 3** - Align the remaining four *16mm TF Screws* into the remaining four holes in the *Rear Panel*. **DO NOT** fully tighten any of these screws until they are **ALL** fully engaged.
- Slowly tighten each of the six screws.

Step 26 — Assembly Complete.



- The assembly is now complete.

