Reactor assembly guide

Move the original metal chassis, disc drive, cooling fan and front controls into the printed CustomXConsoles Reactor enclosure.



Choose your donor

Original black 1 TB disc model

This guide follows the original 1 TB Series X with a disc slot. Keep the metal chassis and the optical drive from the same console together.

Galaxy Black 2 TB disc model

Compatibility with this revision is unconfirmed. The fastener table and frame drawings in this guide follow the original 1 TB model.

At the workbench

02 Choose what to print
03 Sort screws and tools
04 Remove the donor shell
05 Recover the front controls
06 Mount the lower chassis frame
07 Attach the intake foot
08 Fit the power and eject buttons
09 Mount USB, sync and disc drive
10 Reconnect cables and fan
11 Align front and rear panels
12 Secure the side walls
13 Test the assembled console

Already have your printed parts?

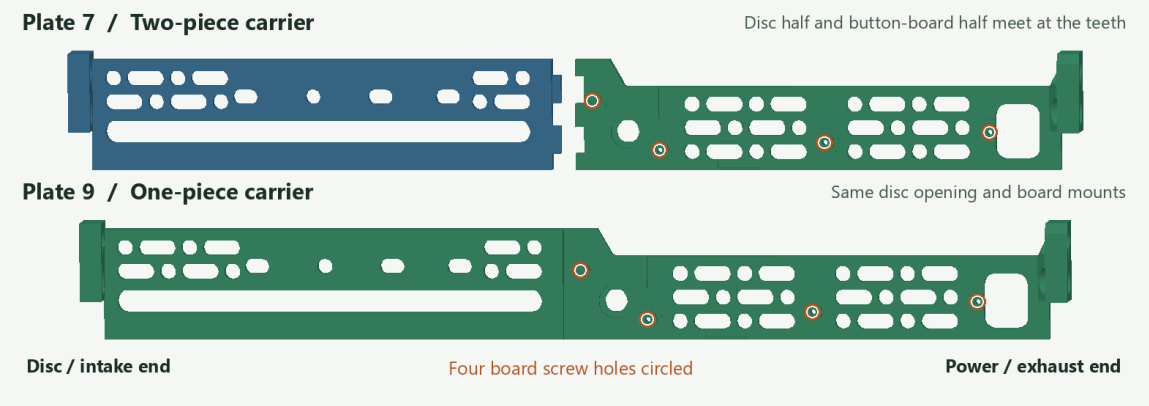
Print the new top on plate 5. Reuse your front carrier, base and finished walls. Print a missing right wall from plate 2 or a missing left wall from plate 3.

Choose what to print

Open the Series X Reactor 3MF in Bambu Studio at 100% scale. Choose one front carrier. Both versions fit the same upper and lower frames.

Plate	Printed parts	What to look for
1-4	**Front, right wall, left wall, rear**	One finished panel per plate.
5	**One-piece biohazard fan cover**	Grille and upper frame print face down together.
6	**Honeycomb foot and lower locator**	Earlier round-vent versions also fit.
7	**Front controls and carriers**	Green power, eject and sync buttons.
8	**White power-button center**	Seats inside the green Xbox power button.
9	**Optional one-piece front carrier**	Replaces both front carrier halves.
10	**Fan supports, choose one**	Original 9.4 mm, centered T 25.4 mm, offset 50.8 mm.
11	**Intake alignment tools, choose one**	Round pins or honeycomb key. See page 7.

Pick one front carrier



Two-piece carrier / plate 7

Print plates 1 through 7. The disc-slot half and the button-board half meet at the teeth. Print the white power-button center on plate 8.

One-piece carrier / plate 9

Print plates 1–6, the plate 8 center and the plate 9 rail. On plate 7, select the front USB carrier and the three green buttons.

Print one fan support

On plate 10, turn off Printable for the other two supports. Fit-check the selected part in PLA with the console unplugged. Print the installed support in ABS.

Prepare the bench

Gather the Reactor screws before opening the Xbox. Keep the original 1 TB disc console screws in labeled trays as you remove them.

Disassembly tools

T8/TR8 Torx hand driver, plastic opening pick, nylon spudger and blunt ESD-safe tweezers. Work on a clean ESD mat with a wrist strap.

Assembly tools and tape

Match each driver to its screw head. Have thin electronics-grade double-sided tape ready to secure a loose ribbon along its original route.

New Reactor hardware

Fastener	Qty	Where it goes
M3 × 6 mm machine screw	19	3 lower frame to chassis + 16 wall screws
M3 × 10 mm screw	4	Outer intake foot to lower frame
M3 × 8 mm self-tapping screw	1	Front USB/sync mounting tab to bracket

Original Xbox hardware

Original location	Quantity and length	Identification
Rear cover	2 × 7.4 mm	Under rear labels
Fan and bracket	1 × 10.5 mm + 2 × 8.8 mm	Keep wide-head screw separate
Drive vibration isolator	2 × 8.8 mm	Upper and lower mounts
Stock shell to chassis	3 × 7.4 mm	Store with the removed stock shell
Power / eject board	4 × 5.5 mm	All four go back through this board
Front USB enclosure	2 × 8.9 mm	Keep the original USB hardware
Fan lip support	1 × original green screw	Reuse from upper heatsink plate

> **Keep the USB fasteners with the module**
>
> The original Xbox screw joins the case base to the USB/sync module plate. The new M3 × 8 mm self-tapper goes through the front tab into the printed bracket.

Original Xbox screw photos

Galaxy Black screw photos

Open the donor console

Use the photo sequence for the model on your bench. Photograph cable paths, fan orientation and each screw location as you go.

1 **Shut down and disconnect**

Eject any disc, fully shut down the console and unplug power at both ends. Remove all cables and the expansion card. Wait at least 30 seconds after disconnecting power. Set the unit on its front on a clean ESD mat, with the base toward you.

2 **Release the rear cover**

Lift the rear labels enough to uncover both screws and remove them. Use a plastic spudger to release the two clips near the base, then the long edges. Tilt the loose bottom edge up and disengage the top tabs.

3 **Remove the fan and round foot**

Record which hole takes the wide-head fan screw. Remove the three fasteners. Grip the fan plug at its body, unplug it and slide out the fan with its bracket. Lift the foot’s latch and turn the round foot counterclockwise as viewed from underneath.

4 **Lift out the optical drive**

Remove the two isolator screws. Ease the isolator off both sides, keeping its pads with it. Unplug the drive’s data and power connectors by their housings. Lift the drive out along its locating pins. Keep this console’s drive with its original electronics.

> **The metal chassis transfers as a unit**
>
> Keep the power supply closed and the motherboard shields and heatsink together. Opening the PSU or disturbing the thermal interface is unnecessary for this shell transfer.

Original 1 TB teardown photos

2 TB Galaxy Black photos

Microsoft service and safety guide (14-digit model 1882)

Free the front controls

The two front cables have different latches. Open each retainer before pulling its tab. Keep both ribbon cables full length.

USB connector



Then lift the pull tab.

Power connector



Hold it in while lifting the pull tab.

5 **Disconnect both front cables**

Flip up the USB ribbon’s metal locking bar and lift the black pull tab. At the power cable, press its side latch and lift by its pull tab. Support any tape as you peel the USB cable off the chassis.

6 **Slide the chassis free**

Remove its three screws. Support the metal frame with both hands, slide it toward the top exhaust to free its guide pegs, then lift. Set the module on the mat and protect the exposed sockets and fins.

7 **Recover the power/eject and USB boards**

Free the ribbons from the old housing with a plastic pick. Keep all four short black screws with the power/eject board. Save the original USB enclosure screws as you remove them, then slide the enclosure free of its metal spring clip.

8 **Record the pair-button position**

Photograph how the factory pair/sync button and its optical window sit above the USB socket. Keep the donor button and window together. The green printed sync button goes in this position during assembly.

Original board and latch close-ups

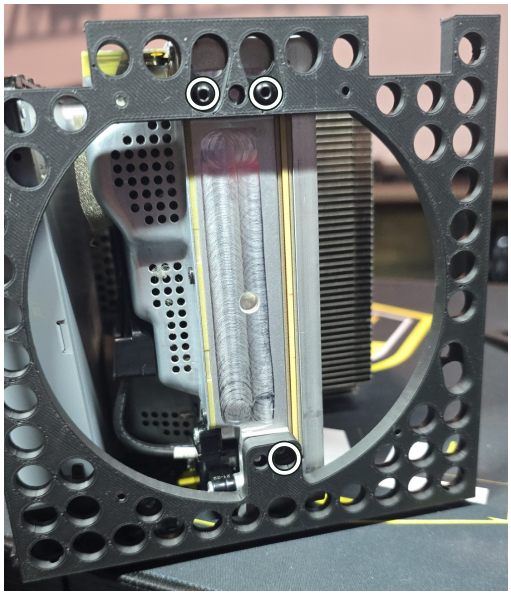
Galaxy Black board and latch close-ups

Mount the lower frame first

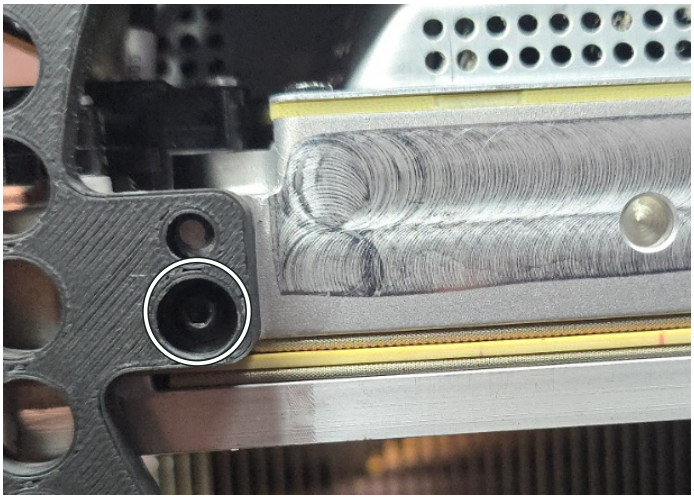
Start with the plate 6 lower chassis locator, the frame with the large center opening. The round-vent frame in the photos and the honeycomb frame in the drawing share the same three mounts.

9 Align the open frame with the metal chassis

Lay the unplugged chassis on its side and support its weight. At the intake end, align the two recessed screw seats near the disc-slot front and the single seat toward the rear ports.



Three seats around the center opening

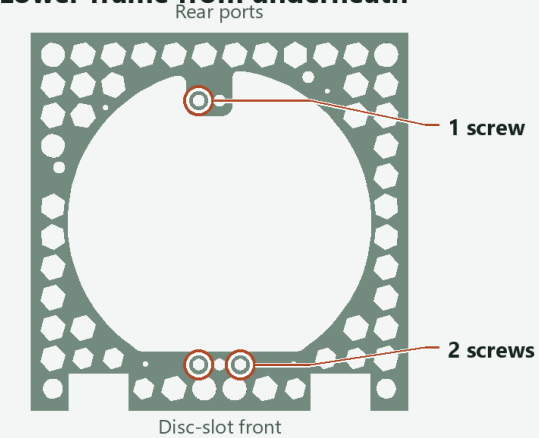


Single screw on the short inner tab

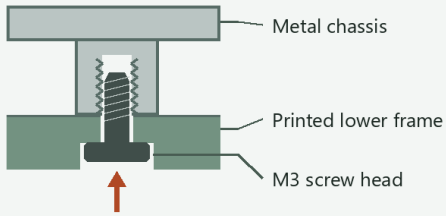
10 Fit three M3 × 6 mm machine screws

Insert them from underneath the printed frame into the metal chassis. Start all three by hand, then snug them with the frame flat against the chassis. The outer intake foot goes on next.

Lower frame from underneath



How each screw seats



3 × M3 × 6 mm machine screws

Insert from the intake end, through the frame and into the original metal chassis bosses.

Align and fasten the foot

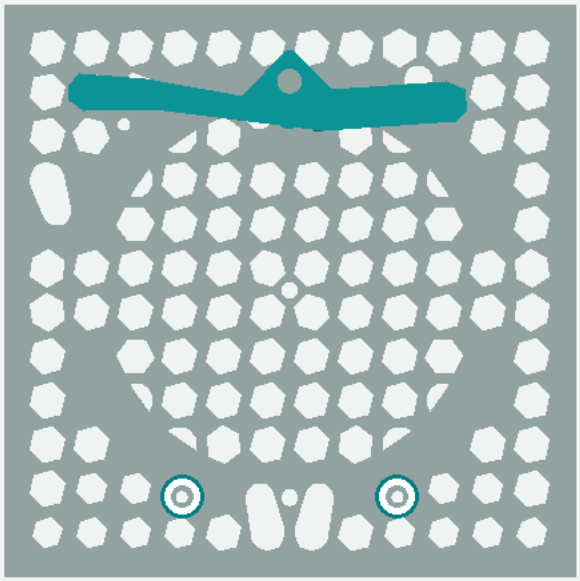
Support the unplugged chassis on its side with the lower locator already attached. Hold the outer foot against the locator with its four curved feet facing out.

11

Insert the alignment tool from underneath

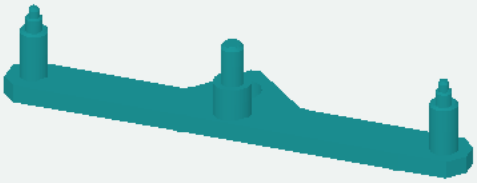
Print one tool from plate 11 in PLA, pins up. Use the hex peg for honeycomb plates or the round pins for circular vents. Point the triangular pull tab toward the rear ports. Press until the center shoulder rests against the foot.

UNDERSIDE / REAR PORTS AT TOP



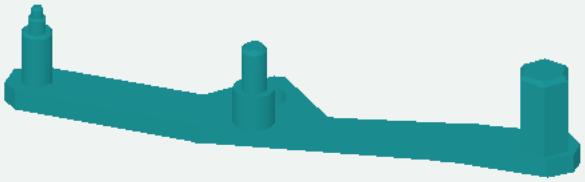
Start the two circled screws at the disc-slot end.

ROUND-HOLE TOOL



Three round pins, including two stepped ends.

HONEYCOMB TOOL



One large hex peg seats in both honeycomb plates.

12

Start the front pair, then remove the tool

With the tool seated, start the two M3 × 10 mm screws nearest the front disc slot. Leave them loose. Pull the tool straight out by its tab, then start the two rear M3 × 10 mm screws. Snug all four by hand.



Check the seating

Each screw head sits in its small recess beside a curved foot. The four feet support the console when upright.

Fit the power and eject buttons

Work on the loose front carrier. The eject button goes in before the board covers its opening. Use this order with either front carrier shown on page 2.



Green eject button in the loose carrier

13 **Seat the eject button first**

Drop the green eject button into the round hole, press face forward. Fit the white 10 × 3 mm center insert into the back of the green Xbox power button, then seat the power button.

14 **Fasten the original power/eject board**

Lower the long Xbox board onto the carrier over both buttons. Line up the four mounting points. Start all four original 5.5 mm T8 screws through the board into the printed carrier, then snug them by hand.



Four board screw positions. The third ring shows the open pilot.

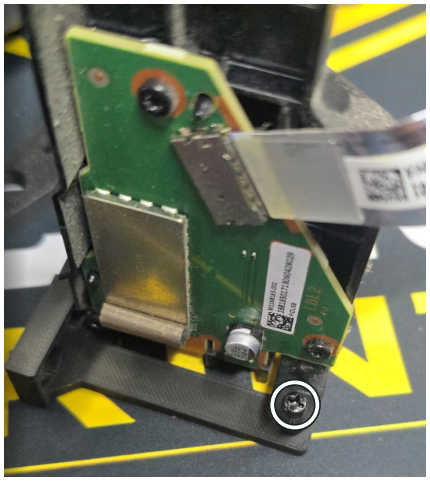
15 **Check both buttons and seat the carrier**

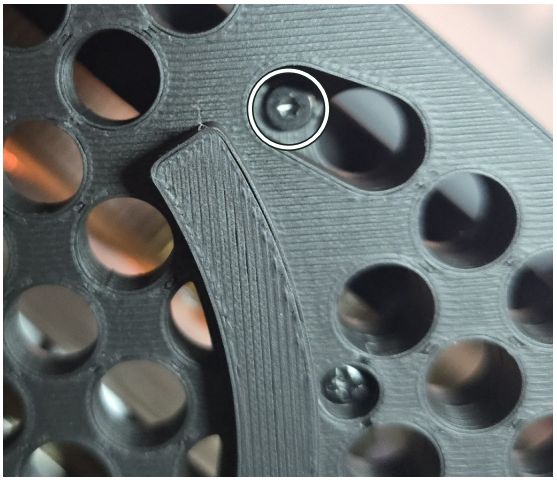
Press and release each button. Both should return freely. Seat the disc-slot end of the carrier against the lower frame, with the board end toward the fan. On the split carrier, mate the teeth of the two halves.

Factory power/eject board screws

Mount the USB and sync module

Fit the green Sync button from plate 7 above the vertical USB port. Its round tip faces the front opening. Align the flat spring base with the module and check that the tip returns when released.



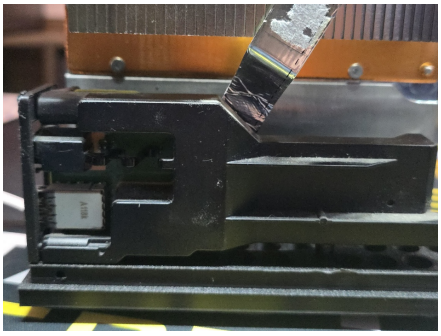


16 **Fasten the front tab**

Use one M3 × 8 mm self-tapping screw through the module's black front mounting tab into the printed bracket.

17 **Attach the module plate**

Hold the carrier plate flat against the case base. Insert the original Xbox screw from underneath to secure the base to the USB/sync module plate.



Ribbon clears the base



Plate 7 sync button



Sync sits above USB

18 **Seat the optical drive**

Check that the sync button returns freely and a USB plug seats. Lower the drive pegs into their guides and align its mouth with the disc slot. Fit the padded isolator around both drive edges and reuse its two original 8.8 mm T8 screws.

Factory drive and isolator

Fit your chosen fan support

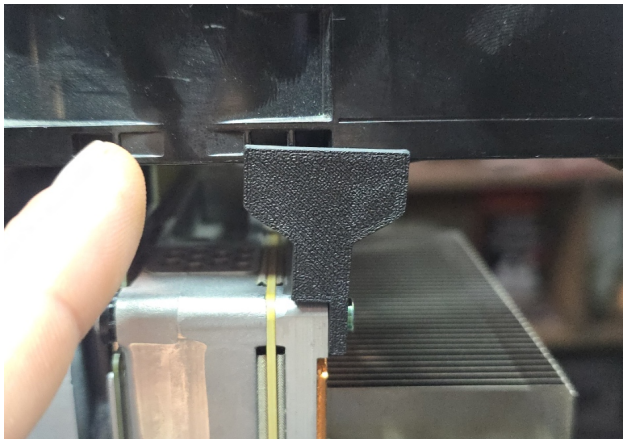
The original post, centered T and left-offset support use the same screw. Fit one in PLA with the console unplugged, then print the installed part in ABS.

19 **Connect the drive and front ribbons**

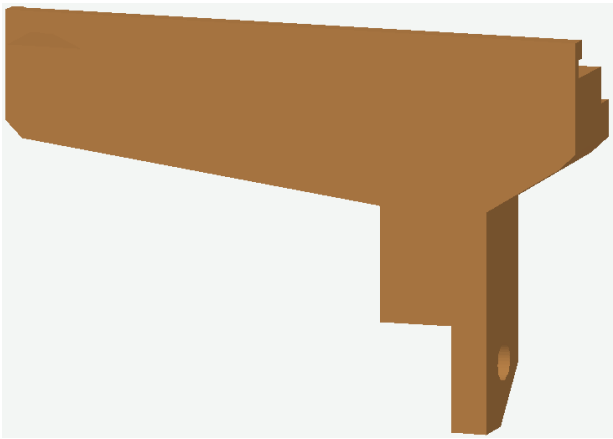
Seat the drive's data and power plugs. Reconnect the front USB and power/eject ribbons, close both latches and secure loose sections along their original routes.

20 **Locate the original green screw**

Find it beside the silver flange on the copper-colored heatsink plate. With the support's eye down and its stepped head up, pass the green screw sideways through the eye and back into its original chassis hole.



Centered T on the chassis. Finger marks the extension.



Offset option. The left arm gains 25.4 mm.

21 **Check the support under the fan housing**

Face the high tooth toward the silver flange. For the offset version, the screw lug sits at lower right and the long arm reaches left. The housing should sit flat with the ribs clear and the blades turning freely by hand.

22 **Install the ABS support and reconnect the fan**

Repeat the seating and clearance checks with the ABS part. Refit the fan's original 10.5 mm wide-head screw and two 8.8 mm screws in their original holes. Reconnect the fan and tuck its wire into its guide.

Watch the support installation at 2:17

Factory fan fasteners

Align the front and rear panels

Lower the plate 5 cover over the fan, biohazard symbol up. Its underside pocket slips over the top end of the front button-board carrier. Leave the sides open while fitting the front and rear.



Behind the front panel

- **Front fascia**
  Shown pulled forward.
- **Drive and button carrier**
  Disc slot at bottom, power at top.
- **Power, eject and sync buttons**
  Press faces point toward the fascia.
- **USB and sync-button carrier**
  Sync sits above the front USB port.
- **End frames**
  Exhaust above, intake below.

23 Fit the front fascia

Bring the fascia toward the buttons and the drive mouth. Guide the power, eject and sync buttons into their openings. Start two M3 × 6 mm screws into the side of the one-piece top and two into the lower frame. Leave them slightly loose.

24 Fit the rear port panel

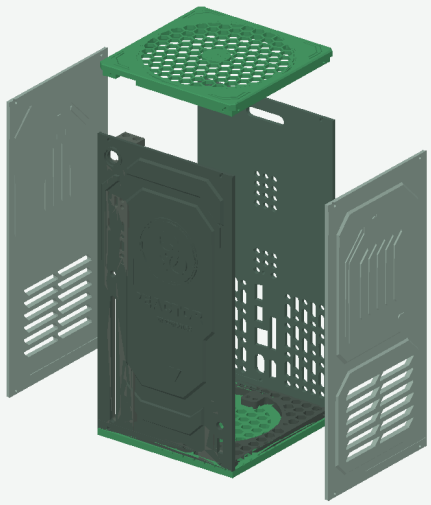
Match the panel cutouts to the sockets. Start its four M3 × 6 mm screws, two at each end. Sight along both panels to make sure their edges rest flat against the frames.

25 Check the openings, then snug the eight screws

Press and release each front button. Check that the full drive mouth clears the slot. With power disconnected, try your front USB and rear plugs and check that their housings clear the panels. Snug each screw by hand, just until the panels sit flush.

Secure the side walls

With the front and rear panels seated, fit the two vented walls. The drawing lifts the cover to show where it meets the carrier.



Side walls and one-piece top



Finished front and right side

26 **Close the two side walls**

Check that wiring clears the panel edges and screw holes. Match the right and left vented panels to their sides. Start two M3 × 6 mm screws at the top of each panel and two at the bottom. Snug all eight by hand.

27 **Check the top and fan**

The cover should sit flush along all four walls. Confirm that its eight side screws are snug. With power disconnected, turn the fan by hand and check that the blades and wiring clear the cover.

Test the assembled console

Start with the console upright, the intake and exhaust uncovered, and the exterior fully assembled. Carry out the unpowered checks first.

Before power	Account for 19 M3 × 6 mm, four M3 × 10 mm and one M3 × 8 mm self-tapper, plus the original hardware. Confirm the installed T-support is ABS. Check the feet, seams, fan, plugs and button return. Clear both vents.
Power and cooling	Connect the display and power. Press the front power button. Check the picture, audio, fan operation and airflow from the upper grille. A translucent lens should show the power light. If the fan rubs, stops or a thermal warning appears, shut down and unplug.
Disc drive	With the console running, load a known-good disc. Confirm the console recognizes it, then press eject. The disc should travel freely through the fascia in both directions.
Controls and ports	Pair a controller with the front pair button. Try the front USB port, both rear USB ports, Ethernet and the expansion card if used. Check that each plug seats fully through the panel.
If a test fails	Shut down and disconnect all cables before reopening. For a dead control, check the moving button and the board ribbon. For a blocked disc or plug, inspect the opening and seating. For fan noise, check the wire route, fan lip support and grille clearance.

For serviced model 1882 units covered by Microsoft's 14-digit guide, have a qualified technician perform the specified post-repair AC leakage test before customer return.

Microsoft post-repair checks **Original frame and parts**