

# **Post-Processing a Print**

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## Introduction

This guide will explain all the steps necessary to properly remove a print, cure a model, and remove supports from a print using the Nexa3D XiP.

#### Step 1 — Inspect Build Plate



- Inspect the model for any visible failures. It may be helpful to pull up the stl file on a computer to compare.
- Look for floating debris in the tank.
- If there was no floating debris and the part looks successful, select "YES" on the touch screen.
- If the part was unsuccessful, select "NO" to begin tank cleaning procedures. Refer to a separate guide.

### Step 2 — PPE Requirements



- ▲ Gloves must be worn at all times when handling uncured resin or the build plate.
- ▲ Safety goggles must be worn for removing cured supports from the model, but gloves are not required

#### Step 3 — Prepare IPA Tank



- Find the correct IPA tank and place it on the table.
- ③ There is a "light" tank and a "dark" tank. The light tank is for white and clear, and the dark tank is for black resins. This prevents light parts from getting stained black during washing.
- Open the lid and inspect the metal holder. There should be a basket at the bottom and a rectangular frame on top.

#### Step 4 — Remove Build Plate



- Push down on the latch holding the build plate in place.
- Pull the build plate out of the XiP.

#### Step 5 — Rinse Model



- Rinse the part with IPA over a trash can to remove liquid resin.
- Wipe the top surface of the build plate with a paper towel.

#### Step 6 — Prepare Wash



- Gently place the build plate and the model in the IPA tank.
- The build plate should rest on the rectangular metal frame.
- Ensure that the IPA level is above the base of the build plate and the model is fully submerged.
- Secure the lid in place.

#### Step 7 — Start Wash



- If the reflective film and rotating base are still in the Nexa3D Wash+Cure, remove them.
- Place the IPA tank (with the build plate inserted) on the Wash+Cure.
- Ensure the Wash+Cure is set to "Wash" mode and start the timer for 10 minutes.
- Multiple washes may need to be done if the resin is not completely washed off. 10 minutes is a
   good duration for every wash

#### Step 8 — Inspect Model







- Remove the IPA tank from the Wash+Cure and take out the build plate.
- Rinse the model with more IPA and wipe the build plate with a paper towel.
- Inspect the model for any liquid resin. If you see any liquid resin, or if the model feels sticky, run another wash cycle.

#### Step 9 — Separate Build Plate



• Use a razor blade to carefully separate a corner of the model raft from the build plate.

△ Use a very shallow angle when using the razor blade! Be careful not to scratch the build plate!

- Once a corner is separated, use a metal scraper to slowly lift up more of the raft.
- Gently work your way around the model until the model pops off the build plate.

#### Step 10 — Dry Model



- Retrieve the magnetic dry-erase tag with the order number of the model. It should be located below the printer that the model was printed on.
- Place the model on the drying shelf with the tag nearby.
- Ensure the fans are turned on using the switch.
- Leave the part to dry for 5-10 minutes. you may need to reorient the model to completely dry all surfaces.

## Step 11 — Wash Build Plate



- Wash all surfaces of the build plate with IPA and a paper towel. Ensure the build plate is completely dry, and all resin/debris is removed.
- Slide the build plate back into the printer.
- Engage the latch on the top of the rail to secure the build plate in the XiP.



#### Step 12 — Dry Model II

- Check the model for any sticky surfaces or liquid resin.
- If the model is sticky, place it in the IPA tank and wash it again.
- If the model is still wet from IPA, let it dry longer.
- ⚠ The model must be completely dry before moving on to curing!

## Step 13 — Prepare Cure



- Place the reflective sheet and the rotating base on the Wash+Cure platform.
- Ensure the rotating base seats into the exposed gear at the center.
- Place the model (with supports intact) on the rotating base.

#### Step 14 — Start Cure



- Place the UV cover on top of the Wash+Cure.
- Ensure the Wash+Cure is set to "Cure" and set the timer. Push the dial inwards to start the curing process.
- Information about curing times can be found <u>here</u>
- △ Curing can cause thin parts to warp. Check on the model every 3-5 minutes. If discoloration or warping occurs, you can stop the curing process and move on.

## Step 15 — Remove Supports



- Take the part out of the Nexa3D Cure+Wash and place it on the silicone post-processing mat.
- Using flush cutters, start cutting away at the support structures. Cut close to the model surface, but be careful not to damage the model.
- Once all accessible support structures are severed from the model, begin cutting away larger chunks of support.

#### Step 16 — Remove Supports II



- After all of the support structure is removed, inspect the model for any leftover bits of support.
- Use the flush cutters to clean up the surface of the model.
- ③ The support will leave an uneven finish on the model. It is best to avoid digging at the small bumps left from the support because you could damage the model.

#### Step 17 — Clean Area



- Wipe off the dry-erase tag and return it beneath the XiP.
- Clean up all resin and support structures from the post-processing area.
- Return the IPA tank next to the post-processing area.

## Step 18 — Bag Model



- Print out the label for the order on the Papercut page.
- Place the model in a bag and apply the label to the bag.
- Looking at the order number, place the model in the correct bin.
- The order number sequence is marked on the bins.



#### Step 19 — Update Papercut

- Mark the order as "Ready for Pick-Up."
- In the notes section of the order, indicate the letter of the bin the model was placed in.
- Post-processing is complete.