

# Fulbore Models Guide to Painting 3D Printed Resin Models



Anyone who's built 3D printed models knows that **paint hides no flaws**. Without treatment, small step-marks or support marks will show through on the final surface.

## Step by Step:

### Surface Prep

Using hand files and 320 grit wet & dry, gently remove support marks and any “stepping” or other defects in the print.

Prior to priming, the surface should be smooth. Apply an initial



“sacrificial” coat of primer and a thin coat of paint of a contrasting colour to the resin (blocking coat). This allows the low points to be seen more easily when sanding.

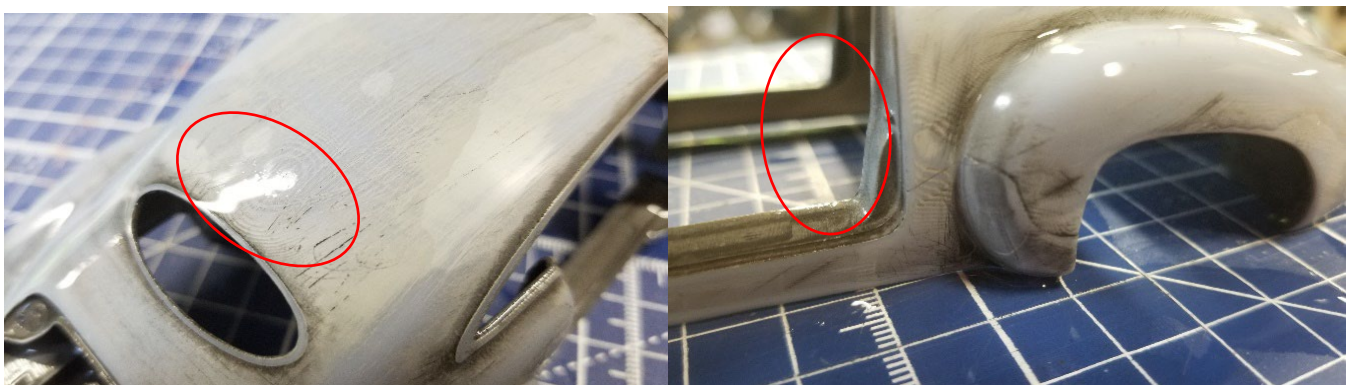
1 Initial sacrificial coat of primer



*Primer and contrasting colour "blocking" coat applied*

Note: Heavy "filling" primers can be used as an alternative to sanding, **but this is not recommended** as it will obscure any intricate details in your part, and some of the printing flaws will still show through anyway.

Wet sand the part using 320grit wet & dry to remove the bulk of the print flaws and work your way up to 600 or 800 grit. A finishing wet sand of 1500-2000 grit is usually good enough depending on the filling capabilities of your primer. You can usually gauge this visually.



*some fine sanding scratches and print stepping still visible after 600 grit*



*Surfaces ready for final prime.*

## **Glue parts of the same colour**

It's important to avoid trying to glue surfaces together that have been painted. Fulbore Models are separated out into components that are generally likely to be painted different colours, but if there are parts that can be glued together and painted as one, this can be a good way to avoid having to glue painted surfaces together. For best results, remove paint and/or primer from the surfaces to be glued, and **dry fit each part before gluing**, filing or sanding as necessary.

When painting components that need to be glued (almost all), take care to minimise getting paint on the surfaces to be glued, by appropriately masking them. Often blue-tac comes in handy as a means of holding the part on alligator clips, as well as masking the surface to be glued.

## **Priming**

**On the smaller components of our models, it's often not necessary to prime at all. This yields the best results on small detailed parts as it can preserve all the juicy details!** Ensure the parts have been cleaned well to remove any dust etc. Acrylic Lacquer paints such as Outlaw Paints are recommended if you are going to paint straight onto the resin with no primer.

The goal of priming is to create a pristine surface before painting. The neutral grey or white of a primer highlights imperfections in a model and preps them to be sanded or filled with modelling putty. It makes the painting process much cleaner and the outcome more professional (especially with glossy surfaces).

Apply a final thin coat of primer and after the manufacturer specified drying time, and a quick final wet sand with 1500-3000 grit wet & dry, the part is ready for painting

Always wash all dust off the model and leave to dry prior to applying more coats.

## Colour Coats

After priming, spray painting 3D printed models is a surprisingly quick process (with the right technique). For a glossy finish, you must build up thin layers. Thin coats allow under painted layers to show through, creating a rich, deep colour.

Between paint coats, remember to buff and polish the paint surface or a very light sand with min 2000-3000 grit wet & dry. This can help remove any dust or other imperfections in the paint and maintain a smooth surface that will look glossy under the final clearcoat.

To get the richest colour, add an undercoat or base layer. An undercoat is a coloured paint that blocks the neutral colour of the primer. Generally, it takes 2 to 3 thin layers to fully cover a surface. Black is a popular undercoat for



darker tones or metallics, while white is ideal for light colours.

*This colour requires an undercoat of gunmetal grey*

Between layers, masking preserves details in a particular colour. Don't leave general purpose masking tape on for more than a few days. Paint manufacturer Tamiya recommends you complete spray painting in a single session.

After masking the topcoats, add the final colour. Imagine these layers as a light glaze over the undercoat. The thinner the topcoat, the more the undercoat shows through. Between applications, let the paint sit for a few minutes to see if the colour is saturated enough.

Final colour coat. Ready for clear



It's a good idea to cover the model with a plastic container while allowing the paint to fully dry, to keep any dust from settling into the paint.

## **Clear Coats**

When you're satisfied with the colour, it's time to move on to clear coating. Apply any decals at this point.

The colour coat should be wet sanded with min 3000, preferably 5000 grit or finer wet & dry, to remove any "orange peel", dust or other imperfections. Wash and cover the model whilst drying to eliminate dust.

Once entirely dry, apply the clearcoat in 2-4 thin, even layers. With a polished surface, you want just enough to let all the microdrops of clearcoat run together, forming a glossy shell over the part. While not necessary, you can polish the surface with an ultrafine grit polishing cloth or wax with polish to add an extra layer of protection.

After painting, give the model time to dry under cover away from any dust. There's no hard and fast rule, but letting the model rest for at least a week will allow the paint and clear coat to thoroughly harden. If you need to move the model before then, wear gloves and use a delicate touch to avoid damage.

*Clear coats complete.*



## **Polishing**

This section will be covered soon, but in the meantime, check out YouTube. There's some great videos on polishing scale model cars.

[https://www.youtube.com/watch?v=EsT2\\_o5An5g&ab\\_channel=JH-Hobby](https://www.youtube.com/watch?v=EsT2_o5An5g&ab_channel=JH-Hobby)

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