



# A COWPOKE'S GUIDE TO RESIN MINIATURES

Some Warcradle Studios miniatures are made from resin, a material that can make for fantastic looking models by using a few easy to understand techniques. We will run through those techniques to get the most out of preparing, cleaning up and assembling any of Warcradle Studio's resin kits.

If you need extra help with your Wild West Exodus products, or have any issues such as missing parts or damaged components, email our support team at [support@warcradle.com](mailto:support@warcradle.com) and they will be happy to help.

## TOOLS

Most of the following tools are available from any good modelling store. Tools can be dangerous if improperly handled so please make sure to follow the manufacturer's guidelines and use them with care.

**Craft Knife:** The most useful of all the tools, it is necessary for cleaning up castings prior to assembly. Make sure you cut away from yourself and use a proper cutting mat or board to avoid damaging the surface of your table or yourself.

**Clippers:** Clippers are useful for removing pieces of resin that are too large to safely remove with a knife, and for snipping components off their sprues.

**Dust Mask:** The resin that we use has no inherent health risks, but we do recommend a dust mask if you are doing a lot of filing as resin dust can be an irritant.

**Files:** A set of files is the another extremely useful part of your tool kit, and are used for cleaning and smoothing pieces 'to fit' where necessary.

**Super Glue:** We recommend a good quality super glue to assemble Warcradle Studios kits.

**Modelling Putty:** These are used for filling small gaps and usually come in two parts that have to be thoroughly mixed.

## STEP ONE: PREPARATION

There are several stages to consider when prepping your kit before you begin the actual construction. After opening the blister or box and unpacking your models, the first thing you do should be to lay out the components and check that they're all there. It sounds obvious but it is very easy to get carried away and start assembling the model without checking. A missing piece will, of course, stop you from finishing the model which is far more annoying than finding that a piece is missing before you start.

### A) WASHING

You may find that the components of your kit have a slight glossy sheen to them. This is caused by the release agent that our team use to remove the parts from the molds. That release agent can prevent glue and paint from properly adhering to the model when it's complete.

You will need some lukewarm water and washing-up liquid. Simply place the parts into the soapy water and leave them to soak for five minutes, then gently scrub each part with an old toothbrush. This will ensure that any traces of release agent are removed then you can rinse them thoroughly and allow them to dry.

### B) CHECK FOR EXCESS RESIN

Just like metal and plastic models there will be excess material that needs removing from the model before assembly. The parts that need to be removed from a resin component can sometimes be larger, and of course must be removed with more care. These are an unavoidable part of the casting process, but can be easily dealt with.

### C) CLEAN OFF MOLD LINES AND FLASH

Just like with plastic miniatures, resin components will often be a slight line on the model that shows where the mold joins together during manufacture. Flash, on the other hand, is formed usually by a gap in the mold (deliberately or not) which allow resin to flow through. Both are usually very fine, but nevertheless they will need removing so that they don't show up after painting.



Mold lines and Flash membranes can be removed with a modelling knife or file by carefully scraping or filing away the line. A smooth surface can be restored with some fine edged files. This shouldn't take too long and makes a big difference to the finished model.

#### **D) REMOVE GATES AND VENTS**

The gates and vents are created when the resin is poured into the mold. This is where you will find most of any excess resin that needs to be removed. The most common are large rectangular shapes at the bottom of the piece (usually with Warcradle Studios stamped on it).

These will need removing with a pair of clippers and a file. Remove the gate at a point above where it joins the component using your clippers. Don't snip it off right next to the actual component though - clippers are a powerful but imprecise tool so often damage the areas on either side of where you cut. After clipping most of it away use a file to remove the last of the gates and vents and to ensure a smooth finish.

#### **E) FILL SURFACE AIR BUBBLES**

Rarely in the casting process small surface air bubbles form. These can easily be filled with a liquid putty or a carefully applied drip of superglue.



### **STEP TWO: ASSEMBLY**

Once the components have been washed and all excess resin has been removed the model is ready for assembly.

#### **A) DRY FIT**

Before gluing the components together it is a good idea to dry fit them. A dry fit means test-fitting the components together without any glue, and this is a useful way to point out any potential problems such as uneven joins and slight gaps between the various components. If there is an uneven join just quickly take a file to it before gluing.

#### **B) WARPING**

Warping can easily occur with thin components due to the casting process. To get a warped piece back into its correct shape, or position, or even to just reshape a piece like a staff, tentacle or arm, immerse the component in hot water. Do not heat resin with any kind of flame.

You should leave the part in hot water for roughly thirty to sixty seconds, then carefully remove it and gently bend it – you'll probably see the part straighten itself as the heat works through it. It is useful to have a cup of cold water to hand to rapidly cool parts once they are the correct shape.

#### **C) FILLING GAPS**

If after correcting any warping of components there is a gap this will need filling. Glue the components together straight but don't worry if it leaves a gap. Once the glue has set, use a small amount of modelling putty to fill the gap. To save both time and putty it is best to glue all your components that will need filling at the same time. Once the putty has set it can be filled flat to create a smooth surface that matches the components on either side.

### **STEP FOUR: PRIMING & PAINTING**

We recommend priming your model as you would the rest of your miniatures, with a high quality fine miniatures undercoat or primer.

Once you are satisfied that your undercoat has adhered to your assembled resin miniature, treat it like the others in your collection and get painting!