

MODELING TIPS

Applying Waterslide Decals

By ScaleModelGuide.com

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Waterslide decals are by far the most popular way of applying markings and other graphics to scale models. This is partly because most model kits are supplied with appropriate waterslide decals, but also because they generally work very well in most situations and it is relatively easy to get a good result.

Waterslide decals can vary considerably in quality. Sometimes they are too thick and will stick out on the surface of the model and will not lie flat over surface details. At other times, they may be too thin and might disintegrate during the application process. If the printing is not sufficiently opaque the underlying color of the model will show through. Occasionally, they may be printed out of register where the different colors are not printed over each other in the right place. However, standards have been continually increased over the years and the vast majority of decals are now very good quality.

Decals that are applied well will greatly enhance a model, but when they are applied badly they will ruin a model that otherwise would have been excellent. Providing a few basic rules are followed, it is quite easy to get good results.

Description of Water Slide Decals

Water slide decals or transfers consist of several layers. There is always a sheet of backing paper to which everything else is attached. On top of the paper is a layer of water soluble glue. The actual markings are printed on the glue film and on top of that is a carrier film.

When placed in water for a few seconds the glue will become slippery and allow the decal to literally slide off the backing paper and on to the model. A single spot of dishwashing liquid dissolved in the water will help the decals to slide off the backing paper and on to the model. Hopefully there will still be sufficient adhesive on the back of the decal to stick to the model.

Surface Preparation

It is vitally important to have a gloss or semi-gloss surface to apply the decals. If the model is painted with matt/flat paints, then the surface needs to have a couple of thin coats of gloss clear coat, or an acrylic floor wax such as Pledge Floor Care to give it some shine. Matt/flat paints leave a surface that is microscopically rough. If a decal is applied to such a surface then it will only make contact with the high points on the surface of the paint. When dry there will be thousands of microscopic air pockets under the decal which will appear as 'silvering' and will look terrible.



Photo from Circus City Decals

Some modelers will only clear coat those parts of the model where decals are to be placed, but there is a danger of producing a ridge at the edge of the varnish. Most modelers will varnish the entire model because this is not only needed for decal application, but also makes it easier to apply filters and washes to the model.

The model can always be returned to a matt or semi-gloss finish after decal application with another coat of appropriate clear coat.

Decal Solutions

Although waterslide decals are intended to stick well to the model, in practice they only do this in ideal circumstances, such as when there is a perfectly flat surface. If the surface undulates or has texture, or if the decals need to fit over or around surface projections, then they need a little help. Many companies produce two part decal solutions to help with the application of waterslide decals. The first part is painted on to the surface of the model. This makes it easier to slide the decal into the correct position and improves the adhesion of the decal. The second part is painted on top of the decal. This softens the decal and helps to make it conform to any irregularities in the surface. This second solution can be reapplied if the decal has not fitted well around any surface projections.

Once the second solution has been applied, the decal may appear to wrinkle and may look dreadful. However, **do not touch it** at this stage because it will be extremely elastic and fragile. As it dries the wrinkles should disappear and the decal will shrink back on to the surface and cling fast to any surface details.

These decal solutions vary in strength between different manufacturers. It is advisable to experiment a little when you use these solutions for the first time, or change brands.

Circus decal source: **Circus City Decals & Graphics**

www.circusdecals.com

Or write to

Matt Welke

1441 Tillberry Dr

Baraboo, WI 53913

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Water Slide Decals

If your decal is thin and the paint underneath shows through (often the case with white decals) then try painting over the decal with thinned paint using the decal as a template.

If your decal has to fit around surface projections, then cut it into small pieces and apply the pieces separately.

If there are air bubble under your decal when it has dried then prick it with a pin a few times, paint decal solution on it and press down on it with a damp paper towel.

Send your tips to: CircusZopfi@gmail.com or mail them to: Bob Zopfi, 1650 Kreidler Valley Rd, Forest Hill, Md 21050

When To Apply Decals

This will vary from model to model and it may be advisable to apply some decals at a different time to others. Normally, the best time to apply them is just before weathering, so that they look like they have been weathered with the rest of the vehicle.

Step By Step Guide

The first stage is to prepare your work area and make sure you have everything at hand:

- Model
- Decal sheet
- Saucer of water + a drop of dishwashing liquid
- Tweezers
- Decal solutions
- Small brushes (one for each decal solution)
- Small scissors
- Paper towel

Cut out the decal to be applied. It is best to leave the carrier film intact if possible, but where this will make the decal too big for the area where it is applied, or where there is an irregular surface it may be best to cut right up to the printed decal area.



Image credit: ScaleModelGuide.com

Place the decal on the surface of the water and leave it for 20 or 30 seconds. The decal may float or sink and it may curl up, none of this matters.

Remove the decal from the water and place it on paper towel to remove any excess water. Paint a layer of decal solution 1 on the model where the decal is to be placed.



Image credit: ScaleModelGuide.com

Slide the decal off the backing paper on to the model. Using a paint brush is a good way to do this without damaging the decal. Try to move the decal as little as possible pulling the backing sheet away from it.

Use the brush to position the decal. When you are satisfied with the position press paper towel on top of the decal to absorb excess water. It is normally possible to reposition the decal by dampening it with more solution and sliding the brush underneath it. If necessary, brush a layer of setting solution 2 on to the decal then **leave it alone** to dry thoroughly.

When the decal is completely dry it is normal to seal it with a coat of clear. When applied correctly, the decals should look like they have been painted on.



Hint: Save costs by using an acrylic floor polish to prepare the surface before placing your decal. The shine can be dulled later with flat clear coat spray.

A note from Dick Schillhahn, CMB #956: The DVD "Ring of Fear" starring Clyde Beatty is available from Amazon.com for \$12.95.

Mort Gable: "The movie has some good scenes of the Clyde Beatty rail show in that era, unloading and setting up, too, as I recall."