

## Ted Holochuk's Painting and Finishing Models – Part 3

This time we will look at ways to get paint onto our models. Basically, there are three ways to do this. Actually, there are four ways.

### 1. **Dipping:**

Dip the model in a bucket of paint. This method covers fine detail, needs large quantities of paint (*try dipping a 1/48th B-17*) and can be messy when drip-drying. Dipping is not a recommended technique.

### 2. **Paint Brush:**

I suppose we have all used this method at some time in our early years. I still use good quality red sable brushes for detail painting and touch up. However, I would not use a brush to paint a model today. Think about painting your car, boat or fine furniture with a paint brush. It is tough to do a credible job, and the results are not usually acceptable. Same with our models. Again, I do not recommend this method.

### 3. **Aerosol:**

Aerosol cans are a great product when used in the right situation. Painting models is not usually the right situation. They have a limited selection of colors and are expensive. They can also be temperamental. They also spray out too much material in too large a pattern. They cannot be easily controlled. I use a lot of aerosol paint products in my job, so I am very familiar with their characteristics. I could tell you some stories about using spray cans. There was the time.....Oh! That could be another article. Well, back to the task. Even though some modellers use

aerosol cans, I personally do not care for, nor do I recommend them for painting models.

#### 4. **Air Brushing:**

My prejudice comes to the front again. I think that using an airbrush is the only way to paint.

There are many different makes and types of airbrushes on the market. They are priced from reasonable to expensive. In this case the more expensive may not be the best for our needs.

There are basically two types of air brushes:

##### A. **Single action airbrush:**

These are usually an external mix unit, with paint and air mixed outside the body of the airbrush. Single action brushes are fairly simple to use. They are also easy to take apart, and clean. When put back together (*if no parts are left out*) they will still work properly. Examples of a single action airbrushes are; Binks Wren, Badger 350, and Paasche model H.

##### B. **Double action airbrushes:**

These are internal mix airbrushes. The air and paint are mixed inside the body of the airbrush. Paint is routed around the needle inside the body of the airbrush. This leads to clogging with our type of paint. (*More on this later*). Cleaning means taking the airbrush apart, cleaning the parts and reassembling. The parts are delicate and prone to damage, especially the needle. These types are more difficult to use, more temperamental and more expensive. Examples are; Binks Raven II, Badger 150, and Paasche VL.

My personal preference is the single action Paasche model H. No, this is not a commercial. I do not sell them or own stock in the company. It is because I have used this model of airbrush for a long time. I am familiar with it, get good results and find it easy to use. It is a simple unit, easy to take apart and clean. Am I repeating myself?? It is also reliable and durable, and parts are readily available. Read - when you drop it on a concrete floor!!

The Paasche model H is available with three air/fluid assemblies. They are; H-1 Fine, H-3 Medium (*I use this one most of the time*), and the H-5 Heavy Duty. I use the H-5 on my "Clear Finish" airbrush. What? Yes, I use two H model airbrushes.

The first, with an H-3 tip I use exclusively for color painting. I will change to an H-1 tip for fine line painting when needed.

The second airbrush is for clear finish only. Clear gloss, semi gloss, or flat finish is the only material sprayed through this airbrush. The H-5 tip on this unit puts on a medium to heavy coat which I like. Also the "clear only" airbrush eliminates any chance of paint specks in my clear finish.

The objective of this two-brush system is sort of fueled by my laziness. I do not take apart and clean these airbrushes after every paint session. Horrors!! Sacrilege!! I probably take my "color" gun apart every 2-3 months, after fairly heavy use, or when needed. Normally, I hook up the paint jar and spray away. When done, I will run 1/4 to 1/2 ounces of lacquer thinner through the airbrush, put a cloth over the nozzle and "back flush" into the thinner bottle (*another thing you're not supposed to do*)!! I then run a little more thinner, remove the thinner bottle, run air through it, wipe off the air cap and hang it up,

ready for next time. I repeat, I only take things apart and clean them when "The darn thing don't work right no more!" The clear airbrush doesn't need cleaning as often, but since I'm doing one, I usually do them both at the same time.

## **Cleaning the airbrush**

So, when the airbrush has to be cleaned, you must take it apart. There will be an air cap/nozzle on the front end with a rubber washer between the air cap and the body of the airbrush. The fluid/paint nozzle is the cone shaped piece that fits through the air cap. The paint tip/needle fits into the fluid /paint nozzle. Remove the fluid nozzle and paint tip, then last, take off the air cap. Inside the fluid/paint nozzle there is a small compression washer held on place by a retaining nut. Back out the nut and remove the washer. Put the three parts into a small container of lacquer thinner. Do not soak the washers, as lacquer thinner will ruin them.

Clean the parts using Q-Tips, pipe cleaners and toothpicks. Do not force any instrument, including toothpicks, into the fluid paint nozzle, because you could distort or break the tip. Also, treat the needle with care as it can be bent or damaged.. With heavy use, parts will eventually wear out and new parts can be purchased as needed. It is wise to replace the whole "front unit" when required. That is the air cap, fluid nozzle and the paint tip. The washers can be purchased and replaced as required. Both washers are needed for proper operation.

When reassembling, make sure the compression washer is a snug fit around the paint tip. There should be a little resistance when adjusting the fluid nozzle. If it spins freely, the retaining nut should be tightened a bit.

Lets see, what else? Oh yeah, I sort of lied. I also have a Paasche VL double action airbrush that I got as a present a long time ago. As some of you know, I have trouble walking and chewing gum at the same time and this airbrush gave me fits. At the time I was not doing much model building, and the "two way" control drove me to put this thing on the shelf and mumble about another "expensive piece of junk".

Well, after getting back into this hobby in a more serious manner, (??) I decided one day to "give 'er another go!" I tried it with a little more patience and found it does work well, if you understand its temperamental nature. To explain, the Paasche VL is a good airbrush for painting thin, fine lines and small controlled areas – for camouflage and that sort of thing. I wouldn't use it to squirt olive drab on a 1/48th B-17. For that job I would use a Binks Model 2001 commercial spray gun! That is just a joke!!

Part of the problem is the type of paint we use. We normally spray pigmented paint. That means the paint is composed of a clear vehicle, normally lacquer, enamel or acrylic, color pigment, and a reducer to thin out the paint. Pigment is the finely ground solid particles which are what clogs up the tip of the airbrush. Common problems are not thinning out the paint enough, or using the wrong air pressure. However, these heavy pigmented paints are what give us the ability to get good coverage with minimal coats of paint. It is a good news/bad news scenario.

These airbrushes were not designed for pigmented paints. Read any airbrush catalog. They recommend inks and dye colors. There is very little if any pigment in these products, but they don't cover well. We are using these airbrushes to do a job they were not designed for, and

that can cause problems. Even large commercial spray guns can have problems when spraying heavy pigmented paints. Thinning your paint and using proper air pressure can help. Thin enough to get good flow into and through the airbrush, and use enough pressure to atomize the paint completely. Thinning is a delicate balance between good coverage and not running all over the surface. Proper pressure will put paint on the surface in a smooth, non grainy coating.. No lumps, spitting, or unevenness. Unfortunately, there is no perfect number such as "thin XX percent and spray at YY pressure". Each brand of paint, and even each color within the brand, will have different characteristics and require more thinner and/or pressure adjustments.

Like many things in our hobby, experience and experimentation will soon get you to the point where it becomes comfortable. A good general guide is that if the paint does not flow through the brush well, it is probably not thin enough, if it does not provide a good surface, it could be a thinning problem, but is probably not atomizing, and that is a pressure deficiency. The other end of the scale is too much pressure. This causes excessive over spray, and can also dry the paint before it hits the surface and results in a grainy, sandy like surface. 35 PSI is probably the maximum pressure to ever use.

I believe I have covered "getting paint onto the model" and it time to move on.

Any questions or rebuttals will be "cheerfully" received. Please submit in written form and in triplicate. (*another joke!*). I would urge anyone who uses other makes and models of airbrushes to put pencil to paper and write an article. I am sure the group would appreciate it.

Next time we will talk about materials-paint.

## Sources:

Check out local hobby shops or mail order shops. I found good prices on Paasche H and VL sets at a ceramic mail order shop:

Lou Davis Wholesale  
N3211 County Road H  
P.O. Box 21  
Lake Geneva, WI 53147-0021  
1-800-748-7991

Paasche H set single action kit - 0099, with gun, hose and all 3 tips and color bottles \$34.99

Paasche VL Double action kit - 0487, with gun, hose and 2 tips \$52.95

They also carry parts. Ask for a catalog.

The local Paasche distributor is;

Rossmann Industrial Supply Co  
2500 Western  
Seattle, WA  
(206) 728-0260

## References:

### Fine Scale Models

Airbrushing Tips	March 1992	page 50
Airbrush	Spring 1982	page 53
Rating 8 Airbrushes	December 1986	page 46
Airbrush basics and Cleaning Airbrushes	December 1993	Page 44
Basic Airbrush - Compressors	January 1996	page 32
Airbrush Techniques	February, 1996	page 30
Advanced Airbrush (Double Action)	March 1996	page 82

### Scale Auto Enthusiast

Test of Model Master Airbrush	June 1992	page 34
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