

The Basics of Airbrush Painting

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Part I – The Air Brush

Painting model horses can be a challenging aspect of the hobby (Figure 1). It is always fun to try your hand at new techniques, especially if they are interesting to look at. One tried and true method of painting and shading models effectively and efficiently is to use an airbrush. We will go over the basics of how to use this tool, and then move on to a step-by-step tutorial for painting an actual model horse.

There are many brands of airbrushes, but my favorite is the Badger #150 double action. It is light-weight and easy to hold. The parts are interchangeable with the Badger #200 single action so I use this model as well. An airbrush uses compressed air forced through a fine tip, siphoning paint from the jar along the way, and blowing it in a fine mist across the needle. You control the amount of air by pushing down on the trigger.

You control the amount of paint released by drawing back the trigger. This double action (Badger #150) helps to control fine and heavy paint flow with one action. A single action airbrush (Badger #200 shown on Figure 2) requires that you control the amount of paint flow with a set screw, and only control the amount of air flow with the trigger. This can be very frustrating for detail work, as you will be constantly adjusting the set screw, while your paint is drying on the needle. I use a Model #200 for base coating and primer coats because I want a steady, even coat of paint across the entire model. Then I switch to a #150 with a fine head and tip for body shading and detail work.



Figure 1- The Breyer Paso Fino illustrates the levels of shading and depth of color



Figure 2 Model 200 bottom feed, single action, internal mix

There are several sources of compressed air for your air brush. You can purchase a bottle of compressed air, but it can be very frustrating to run out of air when you are in the middle of a horse. There are also small hobby-size compressors that you can buy. My only complaint with them is that they don't have as much pressure and they can be noisy and vibrate. If you can get a long compressor hose and have the compressor in a closet or outside, this may help. Because I airbrush on a regular basis for many hours at a time, I have a standard compressor, which has a large tank to store the compressed air in. It is noisy, but it can store a lot of air in the tank, so it is not running constantly. I also have a long hose with a water trap on it, so my compressor sits in the next room, and the water trap keeps condensation from gathering in the hose and coming through my air brush. The recommended pressure is 35 p.s.i. (pounds/square inch). If the pressure is too low, a weak flow of air and lots of spatters come out. If the pressure is too high, it will be a strong force, and lots of air can blow projects over.

Be sure when you are attaching your hose to the compressor and to your airbrush that you use thread tape in the recommended areas. Any air leaks from the source of the air to the tip of the airbrush will cause differences in the way the paint and air come out. Use a quick release nozzle on the compressor so you can remove the airbrush when you're done painting. Most hoses that come with the airbrush have a pipe thread fitting part with it which can be attached to a quick release. I also recommend that you purchase the smaller flex hose for use with the airbrush. The standard hose is stiff and thick, and horses can get knocked over with it easier than with the little one. The smaller hose doesn't come with an airbrush set, but only costs a few dollars more. Just don't put more than 35 p.s.i. through it or it can split and scare you to death while it wiggles all over shooting air out the hole. Trust me on this one!

Paint mixing can be a science that is mastered with practice. I use acrylic well recommended paints, specifically and good Liquitex brand. I mix them to the color I desire and thin them with water. Usually using 2/3 paint to 1/3 water will work, but some pigments are thicker than others, especially earth tones and titanium white. These will require patience because if the paint is too thin it will make spiders on your work, and if it is too thick it won't come out at all. I use the glass jars with siphon lids to mix and thin my paints. They come with a solid lid, so after I'm done I can put on the lid and squeeze the paint for later. It is best to invest in some small two ounce jars with air tight lids for storing your mixed colors over time. You can rinse out the empty two ounce plastic containers that the Liquitex paints come in and use them for custom mixed colors. Do not use the glass jars for long periods of time because the paint can dry on the threads and you can dent the lid or break the jar trying to open it. Any lid that is dented will not be air tight and your paints will dry out in the jar making it nightmare to clean.

Now, let's look at the way the airbrush works. You have your choice of an XL; (extra large), M; (medium) or F; (fine). For regular painting, use the M, and F, head assemblies. If you want to use a lot of paint for base coating, try the XL head and needle. These head assemblies have different sized openings for the corresponding sized needles. The needles are marked with slashes at the blunt end, one slash for fine, two for medium and three for extra large. Be sure to use the correct needle with the correct head assembly or the paint will not flow correctly! The assemblies and needles are the most fragile parts of your airbrushes, so always be careful when changing and cleaning them! To get started, put the medium-sized head assembly and needle in your airbrush.

Okay, you've read through all the instructions that came with your airbrush and your compressor. You're hooked up; your paint is thinned, in the jar and attached to your airbrush. Let's go! Practice the steps on flat paper as directed in the manual trying straight lines, dots, gradations and varying shaped lines. Then move on to an old model horse that you can practice on. You will need to play with it to get the feel for how the paint comes out and how to control the flow. The instruction manual will also show you how to troubleshoot and clean the equipment. When cleaning, use great care not to bend the needle or split the brass tip. These are essential to smooth, spatter proof painting and must be replaced if damaged. Clean your air brush after each use! Acrylic paint can be stubborn to remove if allowed to cake on, and must be cleaned with nail polish or lacquer thinner. Don't let it sit in a bucket of water until your next painting day because the seals are delicate and will wear out faster if they become waterlogged. Take care of your equipment and you will have fewer problems when creating your next masterpiece!

PART II Step by Step Painting a Solid-Colored Model

Start with a clean model in primer. This model is meant to stand on a base but it wasn't available, so it has been attached to a cardboard base for stability. This is not normally recommended as it makes it hard to paint the underside of the horse.

Gather the following masking materials: masking tape, Miskit, an old paint brush and paper towels torn in strips (Table 1).

Softly indicate the face markings on the model with the pencil, don't carve them in. Mark the stockings onto the model with the pencil as well.



Figure 3 This Huckleberry Bay is base

Use the old brush to paint the well-stirred Miskit or rubber cement on the areas that you wish to remain white; stockings, face markings, etc. The Miskit is tinted bright orange so you will be able to see it when it is dry. It is thin, so don't apply too much and don't let it run down the face. It will rub off cleanly later and the orange color will not stain the model. Wash the brush in warm soapy water as soon as you're through.

Table 2. Colors

Burnt Sienna
 Burnt Umber
 Raw Sienna
 Raw Umber
 Taupe
 Soft White
 Titanium White
 Mars Black

Table 1. Supplies

Clean model in primer (use a primer that can be applied on plastic or fiberglass and have water based paints applied over it.)
 Double-action airbrush with compressor set at 35 p.s.i.
 Bowl of clean water
 Pencil
 Paper towels
 Miskit or rubber cement
 Masking tape or drafting tape
 Thinned acrylic paints (Table 2)
 #1 paint brush and an old #1 paint brush
 Clear coat spray
 Clear gloss fingernail polish or sealer
 Lazy Susan big enough for your model to stand on (optional)



Figure 4 For larger stockings, paint only the top 1/2" edge of the stocking with Miskit.

#1 For larger stockings, paint only the top 1/2" edge of the stocking with Miskit, wrap the paper towel strips completely around the legs, and secure them with pieces of masking tape. (Figure 4) Make sure the towel covers the bottom portion of the areas painted with Miskit so there isn't a gap between the two. Also be sure not to place the tape on the horse's body, but around areas covered with paper towel. If the mane and tail are going to be white, mask them with Miskit and paper towels too so they don't get the body color on them. It can be difficult to paint white over a dark color, so it is better to take the time to mask them if you can. It can also be difficult to remove the Miskit from grooves in the

mane and tail, so use paper towels whenever you can.

2 The first coat of body color is a golden tan mixed from Raw Sienna, Soft White and Yellow Ochre (Figure 4). Paint from the rear of the horse forward to allow areas behind muscles to get more paint, and the top of the muscle to be lighter, creating depth. This model will have a black mane and tail, so do not waste paint by covering them or the lower legs.



Figure 5 The first coat of body color is a golden tan mixed from Raw Sienna, Soft White and Yellow



Figure 6 The second coat is a darker shade of golden tan.

#3 The second coat is a darker shade of golden tan (Figure 6). Adding layers of progressively darker colors will create a more realistic finished piece.



Figure 7 As seen in the photo of the real horse, there is a red tint to his

#4 As seen in the photo of the real horse (Figure 7), there is a red tint to his coat where it is hit by the sun. This next color is a light red chestnut made with a combination of Burnt Sienna, Raw Sienna and Burnt Umber. Remember to shoot at a sheer angle from the rear of the horse forward to achieve a shaded look.

5 This shows the next color, chocolate, which is mixed from Burnt Umber, Burnt Sienna, Raw Umber and Black (Figure 8). I've covered the mane, tail, ears, eye areas, muzzle, groin and legs as well to add depth.



Figure 8 This shows the next color, chocolate, which is mixed from Burnt



Figure 9 Now add the Black.

#6 Now add the Black. Be careful to cover all 4 of the areas of the mane and tail (Figure 9). In a sculpture. Like this it is easy to miss a spot. Paint the insides of the ears, the muzzle, the eye area and the groin too. Notice, I did apply paint to the masked portions of the legs, but only painted down to the toweling. Don't take a chance, because if the masking isn't complete, you could paint a black section in the middle of the stocking!

7 The masking should be removed with care (Figure 10). First, take off the toweling. Moisten it if it has stuck to the leg in any areas. ..Then gently rub off the Miskit, starting from the bottom up. If some pieces are stubborn, try a little window cleaner on a cotton swab to clean up the edge. Don't rub too hard or you'll remove the paint too!



Figure 10 The masking should be removed with care.

Part III Details: Eyes, Hooves, and More!

Painting details can make all the difference and give an extra spark to your model. We'll take them step by -step starting with the eyes. If you use several colors in a pattern of increasingly smaller round shapes, you will achieve a realistic tri-eyed look.

Painting Eyes (Figures 11 & 12)

#1 Using your good #1 brush, paint the whole eyeball including the corners with Titanium White or Soft White. Let it dry.

#2 Paint a dark brown Burnt Umber/Black mixture in a round shape that touches the top and the bottom of the lids and leaves a white corner in the back and front. Let it dry.

#3 Paint a red-brown Burnt Sienna/Burnt Umber mixture in a smaller round shape over the dark brown shape, leaving a rim of dark brown around it and touching at the top lid. Let it dry.

#4 Paint a black pupil in the center, slightly toward the top, letting a rim of the red/brown area show all around the sides and bottom. You may want to look at some photos of a horse's pupil to get the shape because it is not generally perfectly round.

#5 Using Titanium White or Soft White, add a tiny highlight dot. Think of the pupil as a clock face. On the horse's right eye, the highlight is generally at about 10:00 on the pupil. On its left eye, it is at about 2:00. Keep the dot tiny so it doesn't look like a cartoon.

#6 Figure 12 shows an added detail of flesh color in the nostril. If the sculpture is detailed enough, you may use a Maroon/Burnt Sienna/Burnt Umber mixture to place a small comma-shaped mark up the nostril.

You may choose to use a clear nail polish instead of, or in addition to the highlight dot and over the flesh color in the nostril. Wait until you have sprayed the clear protective coating over the horse before applying nail polish.



#1



#2



#3



#4



#5

Figure 11 Painting Tri-Eyes



#6

Figure 12 Details of the nostril

Painting Hooves (Figures 12 & 13)

Horses' hooves are like your fingernails, and can range in color according to the color of the leg and whether there is a sock or stocking present. This horse has a solid leg with a grey/black hoof and three legs with stockings and tan/ pink hooves. He also has ermine spots which cause a dark strip to run from the coronet band to the bottom of the hoof. Some show horses have the hooves painted shiny black; others place a gloss coat over the natural color. You will need to decide which you would like to do.

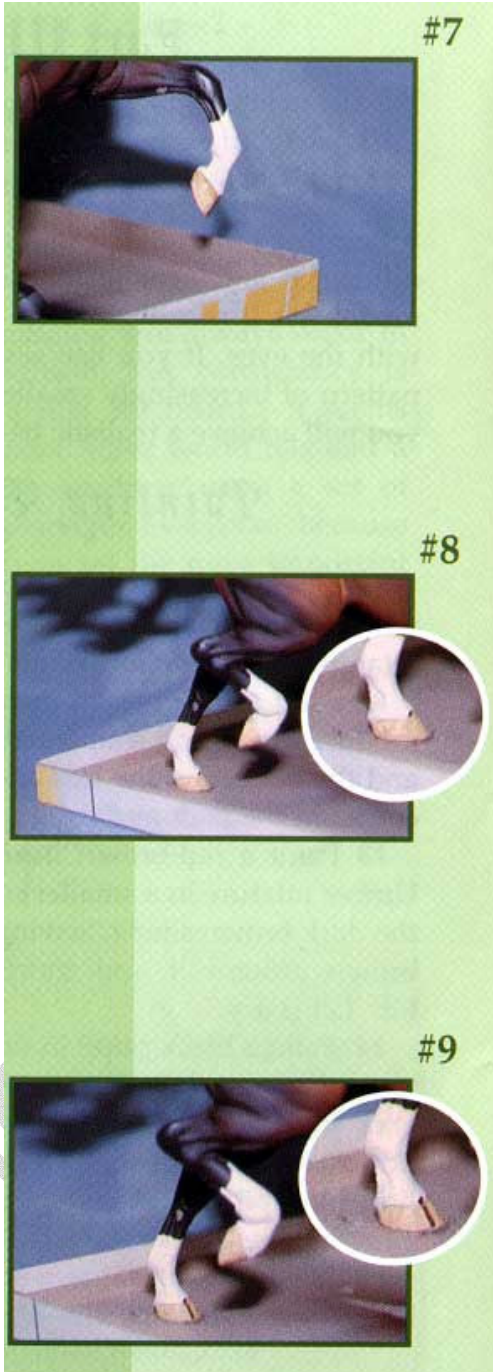


Figure 12 Painting the hooves

#7 The hooves on the legs with stockings are tan. Begin by brush painting them with a beige color mixed from Soft White, Taupe and Raw Sienna.

#8 This hoof has an ermine spot. The spot on the skin is painted with a small black dot. Also, notice that the chestnut is painted a muted tan/ grey color. The chestnuts should be painted on each leg, above the knee in the front and below the hocks in the rear.

#9 Using Brown/Black, paint a straight line down from the ermine spot to the bottom of the hoof. Using a dark tan mixed from Taupe and Raw Umber and thinned with water, paint a thin band across the top of the hoof.

Quickly paint plain water starting at the bottom of the hoof and connecting to the band of paint.

#10 This is a watercolor effect which allows the paint to run down the hoof, staying heavier at the top and fading out towards the bottom. Keep a paper towel handy to control runs, and do only one hoof at a time. Do not allow the dark band to dry or you will need to repaint from tan and start over.

Use this technique over the striped hoof as well.

#11 The dark hoof on the solid leg is brush painted dark grey.

Use the airbrush to shade black over the hoof, beginning at the bottom edge and working up.

Now that the model is done and the details have been added, he is compared to the reference photo one last time (Figure 14). I recommend Testor's Clear Lacquer over coat in satin/semi-gloss finish. Also, you will need a large soft paint brush to brush off any dust from the model.

The model is carefully clear coated. Be sure to have adequate ventilation and use a face mask. This stuff is strong! I usually carefully hold the model upside down and spray a light coat on the underside of the head, belly and tail, as well as all sides of all four legs. Then I place it on a lazy susan (a small plate-sized platform which sits on ball bearings and allows the platform to spin around) and spray a light coat over the sides and top of the horse, paying close attention to the tops of the ears and the nose - two areas that are easily rubbed. Let it dry in a safe place, then repeat the process. Follow the manufacturer's label, and don't coat too heavy. Several light coats is always better. Now is the time to apply the clear gloss coat to the eyes, nostrils and hooves if you wish to do so.



#10



#11

Figure 13 Finishing the hooves



Figure 14 The final check.