

How To **Custom Paint Your Car**



- *Shop Setup*
- *Choosing Basecoats, Colors & Clearcoats*
- *Mastering Candies, Metallics, Mattes & Pearls*
- *Designing & Applying Custom Artwork*
- *Advanced Airbrush Techniques*

JoAnn Bortles of Crazy Horse Painting



Dedication

To Alyre Surette—Artist, craftsman, father, husband, friend, extraordinary card player. Mr. Surette was a great inspiration to me growing up. His workshop was always neat and organized. I never heard him raise his voice. The incredible sheetmetal fabrications he created ran from huge installations in the World Trade Center to pristine art deco lamps. His creations were inspired and original. Always a gentleman.

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On the cover: Realistic flame painting requires careful attention to detail. Notice the small licks of flame trailing off the wheel well.

Inset: Pinup girls are classic custom paint subjects dating back to the classic days of hot rodding.

On the back cover: Skulls can give your car a wicked attitude. In this technique, stencils are used for the shape of the bones and colors are carefully matched.

About the author

JoAnn Bortles owns Crazy Horse Painting in Waxhaw, North Carolina, a top custom paint shop used by many of today's best builders. Her paint work has graced cover bikes on all of the major chopper magazines, including *Easyriders* and *American Iron*. An accomplished writer and photographer, JoAnn's articles have appeared in *The Horse* magazine.

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CHAPTER 5

AIRBRUSHES AND OTHER FORMS OF TORTURE

THE ESSENTIAL EQUIPMENT

Years ago I knew the location, quality of copies, and hours of every copy machine within a 30-minute drive from my home. I'd break the speed of sound trying to get to one with great enlargement and reduction capabilities before they closed. There were times when it felt like my life depended on it. Copy machines saved me hours of resizing drawings by hand. They took all guesswork out of it. Then someone invented personal computers with scanners and printers, and suddenly instead of stressing at the wheel I could stay at home and get a whole lot more work done. If you don't have a computer, most drug stores and many other places have copiers that will reduce and enlarge drawings or photos.

I keep the drawing board close by for tracing the reverse side of drawings or to draw out stuff. I also tape a piece of thin cardboard on one side of the drawing board and cut out all my stencils on that. They seem to cut better against a soft surface. Plus, after the cardboard surface gets all marred by the cuts, I just tape on a new one. It saves the wooden cutting board and makes for quick and easy stencil cutting. I also use a cutting plotter sometimes. But I find for most of my applications, it's just quicker and easier to cut out my stencils by hand.



Cars, trucks, and boats are large surfaces to work on. One piece of essential time-saving equipment is a projector. The top panel flips up to reveal a glass surface. Simply place the drawing or photo you are working from face down on the glass plate. Then place the projector the necessary distance from the surface being worked on. The farther away the projector is, the larger the image will appear. The lens tube slides back and forth to focus the image. Once the image is displayed on the desired surface, just draw it on the prepped surface with a lead pencil or Stabilo pencil. Then you're ready to airbrush. But one factor to consider is that the brighter the light in the shop, the less visible the image projected will be. Just like any other tool, the more a projector is used, the more effective the artist will become with it. I use an Artograph Super Prism projector. They run about \$200.



Taking a break from flaming two hot rods.

Here the image of a grim reaper is projected onto a hood. The room is nearly dark and the hood is white, while the reaper is a black outline. Yet, it is not as visible as you would think. Projectors are great, but they do have their limitations.



A light box is also an essential piece of my equipment. You can buy them online for as little as \$55. Don't have a light box? You can make one using a plastic crate, a sheet of clear Plexiglas and a light bulb fixture. Or just tape whatever you're tracing to a window (during the day, of course) and trace away.





Other airbrushing tools I cannot live without (clockwise from upper left): drawing board, magnets, pink erasers, mechanical pencil, fineline permanent marker, high-quality scissors, Stabilo pencils, Iwata airbrushes, X-Acto Number 11 knife, Uncle Bill's Sliver Gripper tweezers (available online for \$6.85 at www.magellans.com), X-Acto Number 4 stencil knives, 3M green fineline tape. Also, my television.

Magnets hold paper stencils in place on metal surfaces. Pink erasers, like the pointed ones that go on the end of a pencil, come in very handy. They're not just for erasing pencil lines and rubbing off frisket adhesive from painted surfaces; they also can be used to erase overspray that creeps in between pieces of tape. I just finished touching up a logo on a tank and some overspray had sneaked between bits of masking tape. Under the rework, there was plenty of clear, so the overspray rubbed right off without affecting the original artwork. Mechanical pencils are great for getting the very fine lines needed on stencils and such. Fineline permanent markers are often used in artwork to get superfine detail. I use a selection of scissors to cut out paper stencils. Stabilo pencils are great when working on fine details, like faces, and you can clear coat over them. I know artists who have done entire murals using

only Stabilos. I use the tweezers to grab frisket when removing it and to handle tiny tape ends. It's easier than trying to maneuver and place them with my fingers. I prefer the small Number 4 knives to any others when cutting frisket paper, and they are small enough to maneuver around curves, but Number 11 knives work better for cutting paper stencils. I use a smooth white cutting stone to keep the blades sharp. Some painters will only use blue fineline tape as they feel it hugs the curves better than the green, but I like the green fineline. I feel it lays down a straighter line than the blue because it is stiffer. It comes in many different widths, and the 1/16-inch tape holds a sharp curve if firmly pressed down and then taped around the unpainted side of the curve, especially if masking tape is run alongside the sharp curves. You may need to go back and burnish down the curves just before you spray paint.

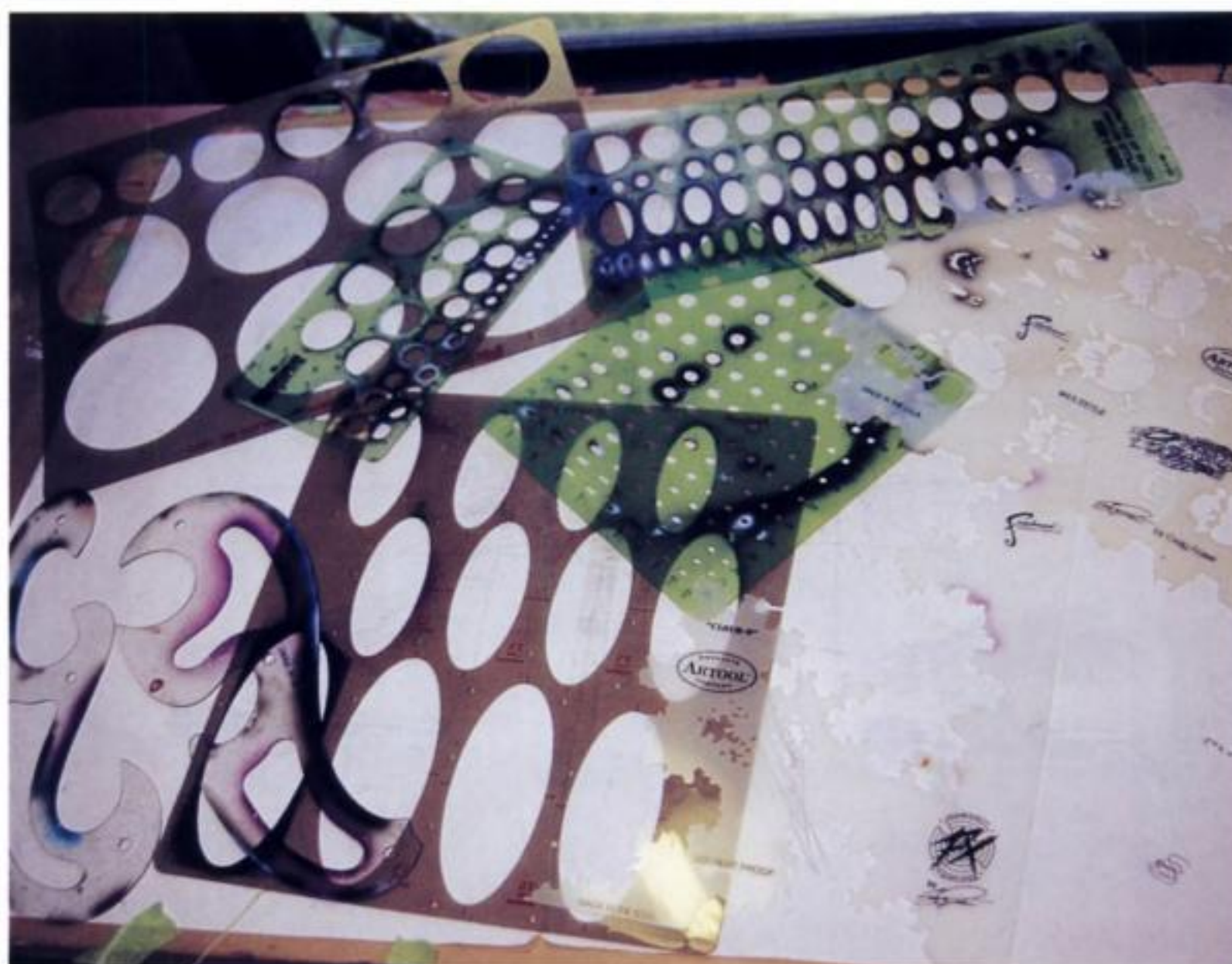
HANDY HINT

Airbrushing can be stressful and tedious. I find having a TV or music on gives background noise and takes the edge off the atmosphere. Also, it can add to the mood. If I'm working on a medieval themed mural, I'll put a barbarian movie on and find it helps my frame of mind. Some people prefer music. The point is to make your painting atmosphere as pleasant and relaxing as possible. It can be very distracting doing artwork in a body shop. Everyone wants to stop and watch. And this is always when things go wrong. Some artists thrive on being watched, but it took me some getting used to. Yet there are times when it is very handy to have opinions. It's easy to focus so hard on a project that essential flawed elements are missed. For example, a design could be slightly slanted, or maybe the design is off balanced, or the symmetry is off. And the only way to really see it is to stand back for while and just look at it with fresh eyes. I take regular breaks from working and stand back to study the car, checking out the progress of the artwork.

For stencils, I prefer Grafix brand frisket paper, GerberMask (a low-tack vinyl stencil film), and MetalFlake Corporation Spray Mask (1-800-227-2683). Many airbrush artists successfully use transfer tape as stencil material. Sticky Mickey transfer tape (1-800-423-3071) was developed by artist Mickey Harris, especially for use as stencil material. But there are times when I need to see the background artwork through the mask, and most transfer tape is opaque. TransferRite Ultra Transfer Tape is clear, and I find I'm using it more and more. I also keep a soft measuring tape handy for referencing around fenders and trunk lids. And I keep 6-inch, 15-inch, and 36-inch steel rulers around, as well as a steel measuring tape.

Flexible drafting templates, like circles, ellipses, and ovals, and specialized airbrushing stencils, like Craig Fraser's line of skull stencils are things I also use quite a bit. Arttool makes all kinds of great freehand shields, with shapes that can be used for almost anything. You can find these stencils at most online art stores.

STENCIL AND MASK MATERIALS



FINDING MATERIALS AND EQUIPMENT

Most paint, sandpaper, and taping materials can be found at automotive paint supply stores. Transfer tape and Gerber paint masks are found at sign supply stores. Different stores carry different lines of paint, like PPG, DuPont, etc. But most stores carry House of Kolor, which can also be found at online paint stores. Call the store first to find out if they carry the line or brand of paint you want. Artist tools and materials can be found at art supply stores. I buy most of my stuff online. Sites like bear-air.com, coastairbrush.com, dixieart.com, dickblick.com, and misterart.com are some of the places I find everything from airbrushes to Stabilo pencils. If you have difficulty finding a product, just go online and use a search website.

HIGH TECH

These days, computer equipment is a bargain. A desktop computer paired with a scanner and printer can be found for \$500 or less.

SETTING UP YOUR WORKSPACE

Try to have the car in a place where it can stay until the artwork is completed. You'll be spending many hours airbrushing, so make it as comfortable as possible. I find that rolling mechanic's stools work great. Plus most have a handy storage space to keep tools in easy reach. For working down low on vehicles, I lay a large beach towel, sheet,

HANDY HINT

For items like hoods, trunk lids, or other removable parts, I use an artist's easel to hold the part. In some cases, when the parts are very heavy, panel holders can be used or you can even make a super heavy duty easel out of wood.



A rolling mechanic's stool with a storage tray below. I've never done artwork on a car without one of these.

or big piece of cardboard down next to the car. You'll want to sit up as straight as possible. Don't let your back hunch or slump, because you'll be in serious pain the next day, or even in a few hours.

Keep everything handy and within easy reach. Paint bottles can get out of control. Try not to have more colors mixed than being used on any particular job. But always have white, black, and other commonly used colors mixed up and ready to spray. After a job is finished, try to go through the work area and put all paperwork related to that job in a file. Then clean up the area. Hours can be wasted trying to find stuff. Take the time to have a system. It's great to be working on an eagle and be able to quickly pull up a drawing or photograph to reference, or leftover feather stencils to help with a new eagle mural. Each paint job I do gets a file.

Try to have the car or truck near an overhead door. There will be times when it's very helpful to roll the car outside to check artwork or colors in the sunlight. Plus, it makes for easier wet sanding as the water doesn't get all over the shop floor.

LIGHTING

Depending on the shop or space you are doing the artwork in, chances are additional lighting will be needed. Ideally, you would think a professional paint booth, with its great

lighting, would work best for artwork. But I find that the close quarters of a spray booth make it difficult to step back and plan out my artwork, gauge how effective it is, or if I even like the way it is turning out. I like to work where I can stand back and spend time contemplating the overall design or how effective it is. Cars need to be viewed from farther away than the 3 or 4 feet of extra space a spray booth provides. I usually keep the vehicle close to an overhead door with plenty of space on both sides. But ventilation can be a problem. The shop I paint in has an area with overhead doors and two connecting walls. If I'm doing a lot of artwork spraying, I'll open both doors halfway even if it is cold. You have to get that overspray out.

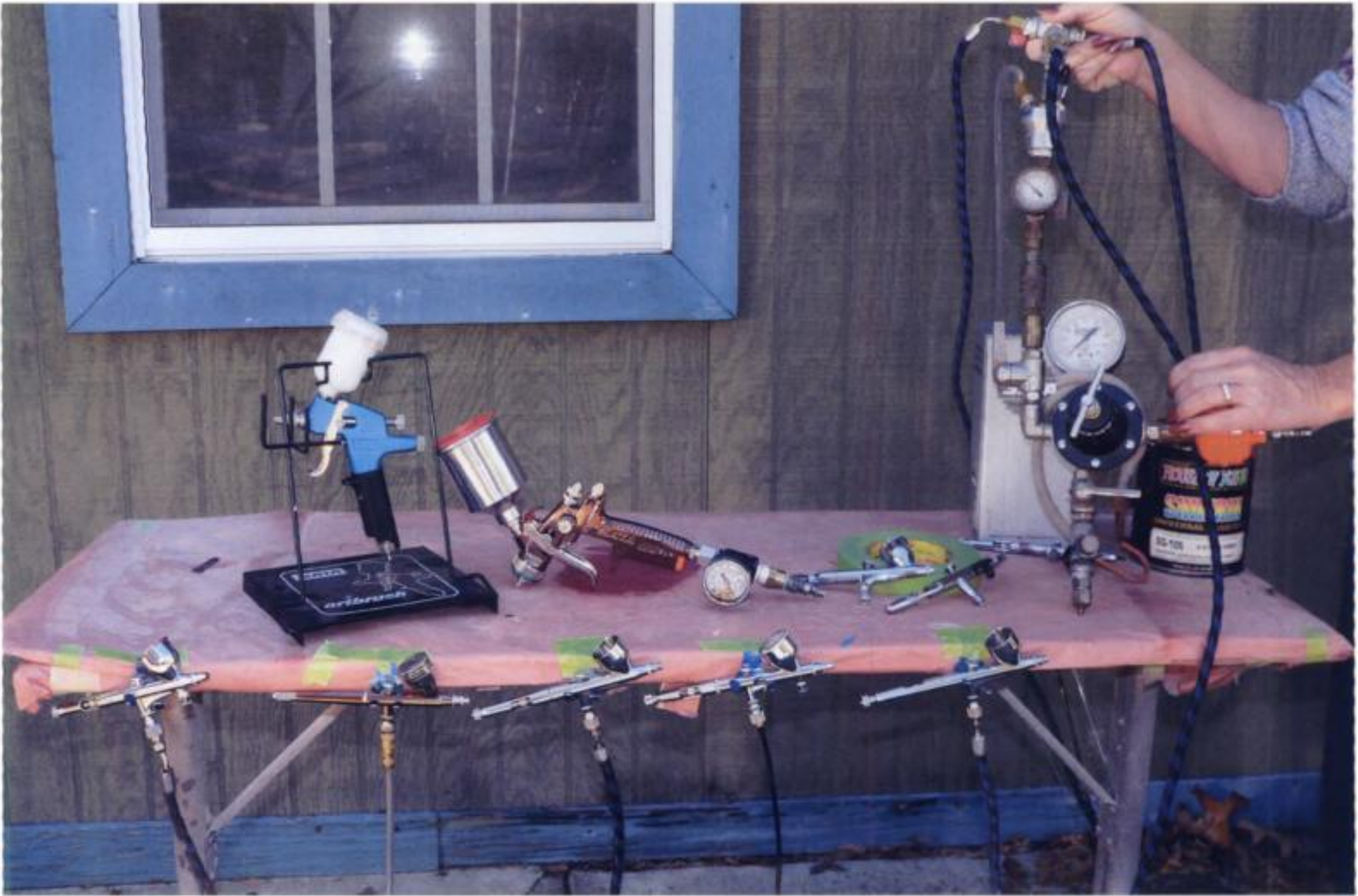
If I will be doing a lot of heavy spraying, I'll lay out the artwork or apply masks out in the shop just beyond the spray booth, then roll the car into the booth for the actual paint application.

An open garage door can let in all kinds of natural light, but with weather extremes that is not always possible. I'll use small halogen shop lights to throw more light where I need it. I always try to position the car where it can get as much natural light as possible. Many times, I'll even roll the car outside the shop to check the artwork in the sun.



I've used portable lights outdoors, indoors, anywhere I'm doing artwork. I love working outdoors because the light is great. But that seldom is possible. Check out Chapters 6 and 7. I painted those cars in my favorite place to work on car. There are overhead doors with windows on two sides and plenty of room to stand back. The spray booth is located just forward of this area. I can roll the car into it if necessary. Plus, there are even two skylights in the roof to let in natural light. But many times I still find I need more light. That's where portable lights come in. I usually use two lights shining on the artwork area. One light on one side, another light on the other. This way they cancel out the shadows each one is throwing.

AIRBRUSHES



AIRBRUSHES AND OTHER FORMS OF TORTURE

I like using a full-size spray regulator as it keeps the air pressure nice and constant. This was a jury-rigged setup that somehow I've never taken the time to update. I just keep adding more fittings and hoses. I can quickly break it down from my shop set up, load it into a bag, and set it up on location anywhere. I use a homemade air manifold made out of pipefittings. There are commercial manifolds on the market, but these tend to be pricey. A little common sense goes a long way. At some discount stores you can find aluminum blocks with quick-disconnect fittings already installed. Go to most quality auto parts or hardware stores, and go through their air hose or pipes fitting trays. Take along the fittings for your airbrush hoses and design your own set up. I mount the regulator on the side of a table or rollaround tool cart and tape airbrush holders on the edge of the table or cart. There's plenty of space for my airbrush bottles.



I have six airbrushes in my shop. Most artists have a favorite kind of airbrush. I used Badger 150 siphon-feed or bottle-feed airbrushes for years and got great results with them. The range of needles and tips allowed me to go from fine hairlines to wide spray. And the price was right. Then in the mid 1990s I switched over to gravity- or top-feed airbrushes for greater control of fine detail. I use a SATAglyph 3 and 1 top-feed for most of my detail work. I also use Iwata HP-Cs and Micron C airbrushes. With gravity-feed brushes, I like the way I can remove the crown cap/spray regulator and get a very fine line for details, then put it back on for shading and fades. For larger spray needs, I use a SATA dekor 2000 artbrush and a SATAmijet 4. The SATA artbrush has a wide range of nozzle sizes from 0.2 to 1.0 millimeter. For beginner airbrushers, the top feed Iwata Eclipse is a good choice. I use them a lot.

HANDY HINT

One thing I love about the SATA artwork system is the quick disconnect hoses. You can quickly switch from the Dekor artbrush to the SATAglyph airbrush.



AIRBRUSH MAINTENANCE

All kinds of things can go wrong with airbrushes, but dried paint clogging the nozzle is the biggest problem. Know your airbrush. Learn how to take it apart and thoroughly clean it with lacquer thinner. I remove the needle and use good quality cotton swabs to clean out the color cup on my gravity-feed airbrushes. Little round bristle brushes can also be used to clean out passages. See Chapter 15 for more info.

The brand of paint I use is House of Kolor. I have had very good results, and it has proved to be very, very, durable, dependable, and easy to work with—if used properly. I keep my airbrush paint mixtures in plastic bottles with caps on them, and I agitate them often while working. I find these at coastairbrush.com.



PAINT FOR AIRBRUSHING

Lacquer atomizes down finer than any other kind of automotive paint. Some airbrushers refuse to use any other paint. I switched over to uncatalyzed base coat enamels 10 years ago, and it took some getting used to. I currently use House of Kolor for much of my art.

Many painters believe the future of paint is water-based paint. Water-base has come a long, long way. Many airbrush artists are enjoying the new Auto Air line of water-based paint. I don't have enough experience to talk much about it, but like any paint, the more you use it the better you'll be. Like it or not, it is the future and the sooner a painter starts using it, the more experience is gained, the better that product will work for the painter.

More and more painters are using Auto Air, and their range of colors is quite extensive and getting more extreme every day. Some of their colors are very exciting, but like any paint, I like getting used to it before I use it on customers' jobs. Other companies are also developing water-based paint, so these products will only keep improving.

Every type and brand of paint has its own qualities that the airbrusher has to become familiar with. Some painters like Brand X and some swear by Brand Y. The best thing to do is try out a type and brand of paint by buying a pint of black, a pint of white, and some reducer. Then play around with it. Get used to it. Is it too grainy, or does it make the airbrush spit no matter how much it is reduced down? Try another brand. I have seen all kinds of awesome mural work, and when I ask what brand of paint the artist used I get a different answer each time.



Back in the days before gravity feed guns, most painters simply mixed their paint right in the cup. Not a good idea, but we still did it. These disposable mixing cups from E-Z Mix are great. They're economical, they come in different sizes, and they have a variety of various measurements on them that make it easy to mix up paint, whether it's 3-2-1 or 4-1-1 or 1-1. Remember to always strain your paint.

As for design colors, like pearls and specialty colors for graphics and flames, I truly recommend House of Kolor. There are some artwork results that would only be possible by using HOK. Their Shimrin pearls dry quickly, cover great with minimal coats, and work very well with other brands of paint. I keep an inventory of these pearls and find I keep using them. Some painters have their own mixing systems and can mix up pearls of the specific paint brand they use, but many of them still use HOK Designer Pearls. And for the painter who doesn't have a mixing system, keeping a small inventory of HOK will come in extremely handy.

Other paint companies are also coming out with more specialty paints, and I look forward to having some fun with those. Having more paint companies with custom paint lines means more choices for the custom painter.

SAFETY

One thing that is very essential while airbrushing is proper ventilation. If I'm not in a spray booth, I have a small fan off to the side behind me pushing fresh air past my face, and I wear a respirator. As I've said previously, I like working as close to an outside door as possible, and I like getting the paint fumes out of my work space as quickly as possible. During the day I love the natural light that comes in the windows in the door, but you don't want to work with the sun hitting you in the face. I've had work areas that were in shops with no windows, surrounded by concrete and equipment. It definitely had a negative effect on my work. I find that I do my best work near an open door.

Folks ask me how I can do such tedious work for hours on end. Over the years I've learned what works for me, what gets me the best results in my artwork. Calm, quiet, peaceful surroundings with no distractions work for me. Other artists thrive in shops that put them in contact with people. Find what works for you and what kind of atmosphere you feel happy and relaxed in.

Other safety considerations with airbrushing are paint storage, ventilation, and cleanup. I keep very little paint on my work cart, only the colors for the artwork I am doing that day. All other paint is stored in a climate-controlled shed that is not attached to my home or shop. More paint cans sitting around mean more fumes.

When I clean my guns or airbrushes I always wear vinyl gloves. If I can possibly help it, lacquer thinner never touches my hands. Solvents absorb through the skin very quickly and can have the same effect as if you had breathed them in. Always use common sense. But if you're breathing fumes, your thinking will get fuzzy and common sense will go out the window.

REFERENCE LIBRARY AND IDEAS

I've talked about this in other chapters, but it's worth mentioning here. Build a good photo reference library. If you plan on painting realistic murals of wolves or eagles, a \$25 investment in a book on wildlife is money well spent, as that book will give you ideas and great photos to work from for years. I have 25 years of books and reference materials in my library. I can find a photo of nearly anything I need



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