

Airbrush

The Inner Workings of the Airbrush

When you use specific equipment or tools on a daily basis (such as a computer or an airbrush), you sometimes take basic information or knowledge for granted and forget that a novice may be full of questions. As an example, while examining an airbrush in an art supply store recently, a consumer inquired: "Which end does the paint come out of?" This is certainly a valid question for someone who has never before seen an airbrush up close, so here's a basic explanation of how this tool works.

The airbrush is similar to a pen--the blunt end is the handle and the pointed end is the tip. The paint comes out of the tip, and you hold onto the handle. At the very tip of the airbrush is the air cap, which covers and protects the paint tip. The back of the airbrush is covered with a handle, which--when removed--exposes the airbrush needle. The needle runs through the airbrush all the way to the front paint tip. It controls the flow of paint and is activated by the trigger, which is the button or lever located on top of the airbrush. When depressed, the trigger also turns on the air, which enters the airbrush through an air valve located at the bottom.

All airbrushes--whether single- or dual-action--operate on the same basic principle. Inside the body are two channels, one for paint and the other for air. The air channel is tapered and when compressed air rushes through, it speeds up and draws paint up through the paint channel and into the air stream, where it becomes spray. A tapered needle controls the volume of paint sprayed. In a single-action airbrush, the needle is preset to determine the volume and the trigger is simply depressed for paint. In the more sophisticated dual-action airbrush, the trigger is depressed for air and then drawn back to varying degrees to produce smaller or larger volumes of paint.

Paint enters the airbrush through one of two methods: gravity or siphon. The resultant spray of both is of the same quality. In the siphon-feed airbrush, the paint is contained in a cup or bottle that is attached to either the side or bottom of the airbrush. Air rushing through the brush draws the paint up and into the tip where it is mixed with the air or atomized. In gravity-feed models, the paint is contained in a cup or slot that is situated on top of the airbrush. The paint then drips into a reservoir at the tip of the airbrush where it mixes with air to become spray.

The airbrush is held and pointed like a pen. The difference, though, is you don't touch the paper with an airbrush and you are able to control the amount of ink that's applied.