Airbrush Maintenance—The Needle

There is but one part of an airbrush that must be removed on a regular basis for cleaning—the needle. All internal mix airbrushes have a needle, whereas external mix airbrushes do not (fluid tip). And it is this needle and its condition that determine the quality of spray. If the needle contains dried paint or if the tip has been inadvertently bent (fish hook), the spray will be negatively affected. Rather than having that round pattern for which the airbrush is known, it will be misshapen.

To properly clean the needle, first remove the handle at the back of the brush, which unscrews. What appears underneath is the back end of the needle protruding from what we will call the “needle chuck screw.” (Airbrush manufacturers usually have different names for the same parts.) This screw holds the needle in place, so when you pull the trigger back the needle is simultaneously drawn back. To loosen the needle chuck screw, unscrew it counter-clockwise ½ turn, as there is no need to remove it completely.

Then remove the needle from the brush, set the airbrush down, and use a paper towel and cleaning agent to wipe the needle clean. (The needle is sharp, so use care handling it.) Then replace the needle in the airbrush. Check to make sure the trigger has not come out of line. The needle slides through the trigger, so replace it slowly. If it butts against something, it is hitting the stem of the trigger, which indicates the trigger is misaligned. When everything is perfectly aligned the needle will slide in all the way to the tip of the airbrush. It should be snug to the tip, but never be forced. Once back in place, re-set the needle chuck screw by turning it clockwise until tight. To insure that the needle is properly seated before replacing the handle, pull back on the trigger to see if the needle is moving back simultaneously. If so, then everything is in place and properly set. Now replace the brush handle and you are good to go.

Airbrush manufacturers make needles from various materials. Obviously the harder the material, the more difficult it is to bend the tip. If you do “fish hook” the tip, you can attempt to straighten it yourself, but harder needles make this more difficult to accomplish. So it’s recommended that you have a spare needle on hand.

Some airbrush models are adaptable to several different sized needle/head assembly combinations, and each manufacturer uses different terminology in describing the size of these combos. But no matter what they’re called, make sure that the needle and the head assembly match for maximum airbrush performance.

As you can see, the needle is of major importance to the optimal performance of an airbrush. So use care in handling, cleaning and replacement of the needle to insure continued reliability.