

First, you need to know a little about how spray cans are designed and how the paint inside is mixed. A spray can is technically known as an "aerosol" device. It consists of a vessel that can withstand significant internal pressure (the can); a spray nozzle that depresses a sealing device that won't let the pressure out of the can until called for, a tube inside the can that brings the fluid (paint) to the nozzle, and the two critical elements: pressurized gas (usually carbon dioxide) and the paint.

Today's spray nozzles are really quite good. They are precision-engineered to provide a high-quality spray, with consistent droplet sizes. The spray pattern they provide isn't adjustable like air-powered spray guns are, but that isn't why many people have a hard time getting smooth, shiny results. Those very people would encounter the same problems if they used a spray gun. The reason good finishes are difficult is often the user isn't painting properly

Spray paints are heavily thinned (more solvent-to-paint content) in order for them to be pushed out of the can and turned into an aerosol spray. Thicker paint would require greater gas pressure and a more sophisticated nozzle, hence leading to an air-powered paint gun. The "trick" to getting good results with thinned paint is simply to remember that it is, in fact, thinner and prone to runs. That means more thin coats.

Common user errors is why we are providing this article. There are many, many wrong ways to apply spray paint, all of which end in poor finishes. People hold the can too close, too far away, too long in one spot, move too fast, move to slow, etc. There are so many wrong ways to do it that we'll just concentrate on techniques to do it right. Let's paint!

But first we must make sure our work piece is ready for painting. It has been sanded, smoothed and primed, then sanded again with fine (600 grit or higher) paper. Just before painting we've wiped it again with solvent on a paper towel. Now it's placed on a table or some other surface that allows it to be high enough to see clearly during spraying (we prefer to hang items from the ceiling joists with string and bent pieces of wire). Make sure there is plenty of light around the work piece.

Now we can start spraying. The proper technique will be achievable issuing the following tips:

**Tip # 1**- Shaking the can long enough! Now it's time to shake the paint can, and we often do so until the little ball inside rattles, thinking that's long enough. Unfortunately, it usually isn't long enough. The paint pigments have most likely separated during storage, so they need quite a bit of agitation to properly mix again. The can you are using probably says to shake for some number of minutes after the ball starts rattling. Do so. In fact, shake the can for at least three minutes unless you've just used it that day. Test the spray on a piece of cardboard or paper.

**Tip # 2** - Holding the can the proper distance! Spray can directions tell you how far away from the work piece to hold the nozzle. That distance is to provide the best spray pattern and most equal distribution of the paint. Test that effect on your cardboard and prove it to yourself. What the manufacturer tells you is true.

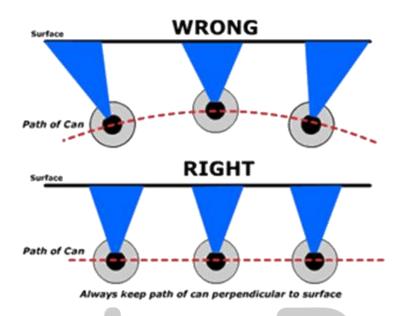
Spraying too far from the surface puts less of the paint on the surface and the paint can actually start to dry out before it reaches the surface, leaving a rough texture or dull finish to the paint.

**Tip # 3** – No holding the can directly in front of your face! It becomes very difficult to see how the paint is "wetting" the surface if the can is spraying directly in front of your eyes. If you are right-handed, hold the can at chest-height about one foot to the right of your head (the reverse if left-handed). As you spray you will be looking at your work piece at a "grazing incidence" angle and will easily see how the spray is falling onto the surface.

Spraying at the distance suggested on the can's label gives you control over the paint and helps prevent excess paint buildup which can lead to runs.

**Tip # 4** - Moving at the right speed! Once you can see the "wetting" effect; that is, the paint falls onto the surface and just starts to become shiny, it's time to move the can along the surface. Keep it moving at all times and the correct speed is that in which the volume of paint coming out wets the surface. Moving too fast applies a "dusting" of paint that is too little for the components to "float out" to become a smooth surface. Too slow applies the paint too thick and because it is a thin fluid can cause paint to start to run and drip.

**Tip # 5** - Staying parallel to the work surface! You must move the can parallel to the work surface at all times. Not doing so alters the distance from the nozzle to the surface, creating the mistake in Tip # 2 again. Practice with the can before actually spraying so you know you can move easily over a large area.



**Tip # 6** - There's no such thing as "one coat." Good paint finishes are always built up from multiple layers of paint, each one applied on a "still tacky" surface. The idea is that the paint you sprayed 10 minutes ago is still uncured and soft, so the new coat will not only stick well but its solvents will tend to "re-melt" the last coat and allow the finish to create a smoother, flatter surface.

**Tip # 7** - There will be incidences when, no matter how well you've applied the paint, it just looks lousy. Dust got in the finish, runs appeared, "orange peel" appeared, or something else affected the outcome. Big deal! When that happens, just stop and let the paint dry. Next day, sand everything smooth with 600grit or higher sandpaper and put on a couple more coats. If the project really looks terrible, spread on the paint stripper and get the work piece back down to bare surface. Fresh paint comes off very easily and you can re-do the whole thing in short order.

## **Points To Remember**

- A little practice goes a long way, so if you're not experienced at spray
  painting take some time to practice painting a "test" piece. Use a piece
  of cardboard covered with aluminum foil if you don't have a sheet of
  metal or plastic to practice on. Plan to waste the better part of a can of
  paint in the process.
- Shake the can periodically while you paint to keep the materials in proper suspension.
- Don't forget to invert the can when finished, spraying until all color disappears.
- Mount your work piece on a stand or hanger if possible that makes it easy to rotate or otherwise change its position, so that you can get a more even finish overall.
- Keep the nozzles on your paint cans clean. If they are clogged, pull them off and soak for a few hours in lacquer thinner.
- Custom colour paint cans only designate colour formula on a label stuck to the can. Write this down somewhere or take a photo of the label for later reference.

## Safety

Paints are often made from toxic substances, and their solvents can be equally as dangerous. Ventilation and breathing protection are very important. When painting indoors you must make sure you have good ventilation. Wear a proper filtration mask that removes organic vapors. If you feel dizzy, nauseated or disoriented while painting, stop and get some fresh air.

