Gun Setup

Once you have a good, clean, and moisture free air supply, then we can work on gun setup. Whether it is a new gun off the shelf or an old gun that has been taken apart and rebuilt, most need some kind of adjustment. Understanding how it works will make you a better painter.

First, you should always have a pressure regulator at the gun.

Coming in the bottom of the gun, see if there is a knob right next to the air inlet. If there is, this valve must be opened all the way. This is a restrictor valve. If not, then this will restrict the airflow coming in and will reduce your pattern and atomization. So keep it wide open.

Second, there are 2 knobs at the top of the handle of the gun.

One for fluid control and the other for fan pattern.

The fluid control knob leads directly back from the paint nozzle where the paint comes out.

To adjust this knob, back it almost all the way out. If you go too far, the knob will come off in your hand, be careful not to lose any springs, just screw it back in. Pull back and hold the trigger handle of the gun. Slowly screw the knob in until it starts to push the trigger forward. This is full
fluid flow. We want this 90% of the time. The only time where we might not need this is when we are trying to shrink the pattern to paint smaller pieces. Full fluid flow will give us the best control, pattern & atomization.

**The second knob is for the fan control.**

Depending on the manufacture of the gun, this knob could be above the fluid control knob or on the side of the handle. Turning this knob will cause the pattern to either become circular or to flatten out. We want a full size (9”-12”) oval pattern when sprayed from 6-9 inches away from the panel. Next, let's test the uniformity of the pattern.

First, turn the nozzle or air horn 90 degrees. This is the part where the paint comes out. This will make your paint pattern lay on it's side rather than up and down. Then, spraying against a metal panel or masking paper, spray until the color starts to run. Looking at the paper the runs should be uniform across the pattern. This will tell us that paint will be consistent throughout the pattern. We will then have even coats when we overlap without having any zebra stripes.

Then turn the air horn back so the pattern is vertical. Hold the gun about 6-8 inches from our metal panel or masking paper. Set your pressure gauge at the gun to 30 psi and pull the trigger fully back and release. This must be inlet pressure to the gun, not air cap pressure.

Repeat in 5 psi increments until two identical patterns have been produced. You will then use lower of the two pressure of the two identical patterns.