

What Every Beginner Should Know

The question often gets asked, “What do I need to paint my own car?” The answer is not nearly as easy to state as the question is to ask so I will attempt to put some of the basics down in this article.

Prior to listing the things needed let me start off by saying that producing a quality paintjob is assumed to be the intended goal. Rattle cans, brush and roller paint jobs are not what we are discussing or what we recommend. It’s your car so you can do what you want with it. I am not going to debate anyone on the subject however this article is for those wanting to do a quality, long lasting paint job using products made for automotive painting.

The first consideration must be a place to work. It takes adequate space in which to dismantle, label and store parts. There is also the matter of supplies and tools that need to be put somewhere in a protected area. The fact that a car or truck can take up the majority of space in a single car garage leaving you with little or no room to work makes having an adequate place to prep and paint your car a must.

Next we must consider the heart of your shop – the air compressor. Many of the higher end guns require large amounts of compressed air. One common misconception of beginners is that if the pressure is high enough the amount of air being supplied must be enough as well.

Compressed air is measured in two capacities, pressure and volume. Pressure is measured as **Pressure per Square Inch** or **PSI**. Volume is measured in **Cubic Feet per Minute** or **CFM** (sometimes referred to as **SCFM**). These are two different things and should not be confused one with another.

Air tools, including spray guns, will have the required amount of air (CFM) given at a specific operating pressure (PSI) for them to run properly. This means that your compressor must be capable of producing that much or preferably more than this amount. For example here are the Specifications for the DeVilbiss Tekna Copper:

Key Specs

Air Cap	7E7 High Efficiency Air Cap (as efficient as HVLP!)
Fluid Tips	1.3mm needle/nozzle set as well as a 1.4mm needle/nozzle set
Materials	All basecoats (inc. waterborne), all clearcoats, all single-stage
Air Pressure	Input pressure: 16 to 30 PSI
Spray Pattern	12 ½ inch
Air consumption	9CFM to 13CFM

Notice that two different specs are listed, Air Pressure and Air Consumption. To be safe in calculating air supply I suggest you take the high numbers so for this gun to operate properly your air compressor must produce 13 CFM at 30 PSI.

Another concern is the run time of the compressor so sizing your compressor to handle more than 13 CFM at 30 PSI is recommended. This is especially true if you plan to use an air sander or sandblaster as they required large volumes of air as well.

Once you have the proper size compressor you will need a filtration system and drier or at least a good water separator. The good ones are not cheap by any means and the Chinese stuff usually leaks air badly if they work at all. You will also need a quality air hose with Hi-flow fittings, a regulator and place to put your gun when not in use.

Next is safety equipment. Today's paints have many different chemicals in them that are hazardous to your health and some are extremely flammable. Isocyanates (ISOs) used in making polyurethanes are really bad news and must be filtered out of your breathing air. These things can hurt or even kill you so this is not something to take lightly. Respirators can be used in a paint booth that has good air flow but you must make sure the cartridges are rated to remove Isocyanates. Wearing a paint suit, sock, and quality gloves will not only protect your skin from contamination but also provide you with a much cleaner paint job.

So now you have your air supply, filtration system and safety equipment purchased and installed in your nice big garage so what's next? The answer: tools.

Removing car trim, door handles, bumpers, windshield moldings, door locks, etc. all require the proper tools or you will destroy the parts rather than remove them. A good set of hand tools in both standard and metric sizes is a must, screw drivers, allen wrenches, nut drivers, Torx drivers and the list goes on.

Add to the list a quality Dual Action Sander, a 4 ½" electric grinder, a 7" rotary buffer and the rubber backing plates needed for each. A decent inline sander really helps to get panels nice and straight as well. If you are working on newer cars a quality heat gun is recommended as well. Then there are the spray guns for Primer, Paint and Clear. Yes you can get one gun with interchangeable tips however you will find stopping, cleaning and changing out the tips to be tedious if you plan to paint often. With the price of good quality paint being very high it doesn't make sense to try and cheap out on the tool that applies the paint.

You will need sanding blocks of assorted sizes and shapes, body working tools, and some filler application tools (spreaders and mixing sheets/boards).

Next are the supplies. Good sandpaper is not cheap and cheap sandpaper is not good. The better quality paper will cost you and you will need a supply of multiple grits in PSA rolls, discs for DA and sheets. Not to mention wet/dry sandpaper for final sanding and cut and buff.

Automotive Masking tape in a variety of widths, masking paper in assorted sizes and a roll of plastic sheeting that is for automotive painting.

You will need some filler for repairs and some 2k glazing putty for any little issues.

You will need primers such as Epoxy for sealing bare metal, Polyester primer like SlickSand for cars that need a little extra build, and regular 2k Primer/Surface to get your car prepped and ready for base.

Once the prep work is done you will need your base coat, clear coat, activators and reducers. Also mixing cups, stir sticks, screened filters, tack cloths, wax and grease remover, and lacquer thinner for clean up.

If you plan to cut and buff, then you will need pads and compounds.

I am sure I have forgotten something but this is a pretty good idea of the expense that goes into producing a paint job. The rest will be knowledge gained by reading or watching videos and experience gained by practice.