

TRUCKS!

Technical Information
**PAINTING
FUNDAMENTALS**

HERE IS A LIST OF SOME OF THE TERMS THAT ARE USED IN THE REPAIR/REFINISH INDUSTRY:

Substrate - The surface requiring repair. (metal, fiberglass, etc)

HVLP - High volume low pressure, usually used in describing spray gun Technology or style.

Primer - metal coating

Primer surfacer - High-build coating used for leveling and blocking minor Imperfections in substrate.

Primer sealer - A primer that is applied in a wet-on-wet application of Topcoats.

VOC's - Volatile Organic Compound Solvents that are released during the painting process and go into the atmosphere, reacting with various pollutants causing "Photochemical Smog"

Corrosion - any process where a material disintegrates as a result of contact with its environment.

Bondo - Brand name for plastic based body filler. probably the first major marketing campaign that everyone remembers. Now a nick-name for all plastic fillers.

Basecoat - Color coat only, no UV screeners or strength. Must be used under a clearcoat

Clearcoat - Shiny, outer layer of a two part system containing all the UV screeners and weather resistance.

Thermoset - Catalyzed coating that can't be re-flowed by solvents

Thermoplastic - non-catalyzed coating that CAN be re-flowed by solvents (lacquer)

SSU - Single stage urethane coating. Single component paint system that has pigment, UV screeners, and strength in one application.

Tri-coat - Three stage paintsystem consisting of a base color, a transparent mid-coating, and a clearcoat for gloss and strength.

OEM - Original equipment manufacturer

NOS - New old stock usually referring to vintage parts that have never been used.

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Colorsanding - The procedure of defect correction in a topcoat system through sanding with ultrafine paper, followed by compounding and polishing the scratches out to a high gloss.

DOI - Distinctness of image, referring to the quality of reflection in a painted or polished surface.

Acid rain - Industrial fallout mixed with rain to create an acidic residue that can be corrosive to a vehicles finish.

Overspray - Paint materials from another unit falling on adjacent surfaces.

Orange peel - film that has the surface appearance of an orange peel.

Dry spray - A rough textured surface often confined to a small area.

Sags - curtains of excessive paint that appear on a vertical or inclined area.

Fisheyes - small rounded indentations in the paint caused by contamination of substrate.

Trash - small pieces of debris trapped in new paint film.

Delamination - Layers of paint separating from the substrate they were sprayed onto.

Die-back - Loss of gloss after application.

Solvent trapping - a "volcano" that appears in fresh paint film, usually caused by premature "flashing" of painted surfaces.

Mottling - blotchy appearance in metallic paints.

Scratch swelling - Sanding scratches made in undercoats that "swell" when covered by topcoats and solvents.

FIND A PAINT BOOTH!

Your safety is the most important thing, so set the bar high and find a professional facility before you even start your project.

MAKE SURE YOUR AIR SUPPLY IS CLEAN AND DRY!

The basic rule is that you'll need at least 11 CFM and 60 gallons of storage (air tank size) to be able to keep up with the air demands of a complete paint job.

USE NO LONGER THAN A 40 FOOT AIR HOSE...

Even with only 40 feet you stand to lose 10 LBS and 4 CFM of pressure and volume with the air traveling that length, and it gets worse as your hose gets longer.

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USE 3/8 ID HOSE AND FITTINGS...

They're easy to get and cost no more than conventional 5/16 units, and with the thick modern paint systems CFM is what gives you atomization, so make sure you're not restricting air flow.

MATCH YOUR PAINT GUN TO YOUR COMPRESSOR...

If all you've got is 2 CFM delivery, stick with airbrush work or small motorcycle parts and use a detail gun.... Step up your air supply if you're stepping up the size of your projects.

A GOOD GUN DOESN'T MEAN AN EXPENSIVE GUN...

There are many different brands to choose from, my favorite is Iwata, but there are less expensive guns that are not name brand that do the job, but don't break the bank. Just make sure they have CFM requirements and pressure ratings in the manual.

WEAR APPROPRIATE SAFETY GEAR!

Again, nothing's more important than your health! Live to paint another day!

PRACTICE YOUR TECHNIQUE WITH ALCOHOL & WATER MIX...

This gives you a good idea of what to expect with paint coming out of the gun and it's reasonably safe to use. Buy takeoff parts to practice with real paint. Get a feel for what makes things mess up.... Make mistakes on purpose to see how they happen. There's a fine line between not enough and too much paint and there's no way you can know if without making mistakes, and this way it's guilt free mistakes with no consequences!

When your painting, stagger your panels and work your way up the car starting at the roof, then the left quarter, right quarter, left door, right door, left fender across the hood and down to the opposite fender. This makes sure your edges stay WET and you don't end up with dry patches on your finished paint job.

Use a 50% overlap on your gun technique and build your coat of paint gradually. Don't stress out if it looks like you're not getting complete coverage in one coat, this is a process that takes several coats, just make sure your technique is good and you're applying medium-wet coats for base-coats and wet coats for clear coats.

PAINTING IS LIKE HAMMERING A NAIL...

If you watch the hammer you'll hit your finger, you need to watch the nail as you hit it! Watch the panel while you paint, and keep an eye out for your gun and gun distance out of your peripheral vision, or out of the side of your eye to gauge distance. This may take a little practice but you'll get a feel for it soon.

REMEMBER THIS...

There's nothing you can mess up that can't be fixed!

Experience is the ultimate teacher.

Paint safe and paint the world!



Kevin Tetz.