Southern Polyurethanes, Inc.™

2014-2015 Technical Manual

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Products


SOUTHERN POLYURETHANES, INC.
EPOXY PRIMER
EPOXY PRIMER
6700-1
PART B ACTIVATOR


SOUTHERN POLYURETHANES, INC.
PART #6501-4
2K
SOUTHERN POLYURETHANES, INC.
PART #6520-1
2K PRIMER
STANDARD
GRAY
ACTIVATOR


SOUTHERN POLYURETHANES, INC.
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2K PRIMER
HIGH BUILD
ACTIVATOR
SOUTHERN POLYURETHANES, INC.
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2K PRIMER
HIGH BUILD
GREY


SOUTHERN POLYURETHANES, INC.
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TURBO 2K PRIMER
ACTIVATOR
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GRAY


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UNIVERSAL CLEARCOAT ACTIVATOR
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UNIVERSAL CLEARCOAT ACTIVATOR
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NORMAL
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ULTRA GLOSS FINISH
CLEARCOAT


SOUTHERN POLYURETHANES, INC.
PART #5102-4
EURO 2.1 VOC
ULTRA GLOSS FINISH
NORMAL ACTIVATOR
SOUTHERN POLYURETHANES, INC.
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EURO 2.1 VOC
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MID TEMP
MEDIUM ACTIVATOR
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PART #2100-1
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SOUTHERN POLYURETHANES, INC.
PART #2200-1
MATTE CLEAR
PRODUCTION
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SOUTHERN POLYURETHANES, INC.
WAX & GREASE REMOVER
Part #710


SOUTHERN POLYURETHANES, INC.
URETHANE REDUCER


SOUTHERN POLYURETHANES, INC.
PART #600-4
PLASTIC ADHESION PROMOTER
For all TPO, TEO, PP, PU type plastics


SOUTHERN POLYURETHANES, INC.
PART #925-4
POLYURETHANE RETARDER


SOUTHERN POLYURETHANES, INC.
PART #900-4
POLAR ACCELERATOR
UNIVERSAL
URETHANE ACCELERATOR


SOUTHERN POLYURETHANES, INC.
PART #950-4
FLATTENING AGENT
LIQUID FORMULA

Why Southern Polyurethanes?

At Southern Polyurethanes our goal as a premium coatings manufacture is to provide you with the finest clears, primers, solvents and additives available today using only the best raw materials and latest technologies. While we don't manufacture a lot of redundant re-labeled products we can assure you what products we do make are comparable if not superior to anything else in their class in the automotive aftermarket at any price.

Now compare our $130 and less gallon kits of clears against the competitors $600 kits of clear and you will see the difference every time. Everything we make is intended to be the best in its class or we simply won't make it. With our clears you turn the booth fan off as soon as the overspray is evacuated and none of our clears require baking, though if you choose to bake they are all low time low temp baking clears. How much money will this save you in electricity and filters per year?

Looking for a show car quality clear with unmatched gloss and clarity? Look no further than our Universal Clear. Thousands of rods, bikes and restorations have been finished with these clears. Both of these clears have excellent chemical resistance and buff easy even months after application.

Need to save a few dollars but want an excellent collision shop quality clear? Try our Euro Clear or Production Clear. Both are two coat products even if buffed.

We are known on enthusiast message forums worldwide for our Epoxy Primer. All four colors have outstanding adhesion to metals and aluminum, excellent chemical resistance, outstanding corrosion protection and can be easily sanded by wet sanding, dry sanding or DA sanding. You can also apply body filler and 2K primer over our Epoxy Primer for up to 7 days without sanding.

All of our 2K Primers have exceptional filling properties, sand in 30-60 minutes and don't require the use of a paint sealer. Our Turbo Primer is even 100% sand scratch / shrink free after only 3 hours of air drying due to the state of the art resin system we use.

Contact Barry, the President of SPI @ 404-307-9740 7 days a week even after normal business hours for your technical questions. I bet you don't even have the cell phone number of your current factory paint rep and if you, do does he or she immediately return your calls? What about in the evening? On Sunday? While you might get my voicemail due to call volume I will return your call ASAP!

Some suppliers copy the descriptions of our services and the descriptions of our products; however no supplier duplicates the quality of our services or the quality of our products. **© Southern Polyurethanes, Inc 2006-2013**

Urethane Grade Reducers

06/2013

Product Numbers:
860-1 Fast
870-1 Medium
885-1 Slow
895-1 Very Slow
925-4 Polyurethane Retarder

Uses:
These reducers are top of the line and have no moisture content so they may be used in any paint system which calls for a polyurethane or acrylic urethane reducer. The 895-1 Very Slow Reducer will dramatically help in the 95°+ weather for many clears. **Save 20% by purchasing in 5 gallon pails! Also available in 0.0 VOC.**

Wax & Grease Removers

710-1 and 710-5

710 is a solvent-based wax and grease remover available in gallons and 5-gallon pails. This is a very high-quality product with only the best solvent used. 710 was not made to replace the cheap cleaners out there but to do an exceptional job which a high quality shop needs. 710 is a medium-dry wax and grease remover designed to give the painter time to clean the panel without fear of the product drying too fast.

Polar Accelerator

900-4

SPI'S Polar Accelerator may be used in **any** urethane or polyurethane clear to speed up the dry time. Used at the rate of 1-4 oz per mixed quart of clear this accelerator will not cause dieback or cause the clear to buff hard. SPI'S 900-4 may also be used in **any** 2K type urethane primer at the same rate. Keep in mind that accelerator will decrease pot life in any product. 2K Primer pot life should be watched closely.

Waterborne
Wax and Grease Remover

06/2013

Product Number:

700-1 Gallon

General Information:

A very high-grade alcohol, waterborne and solvent mixture formulated to clean the toughest jobs before painting. This product is formulated as a medium-slow dry wax and grease remover. It is fast enough for small panels and slow enough for washing a semi fender. **It does not leave a film when dry and will not attack fresh paint!**

The first time you use this product you will notice a big difference in how the surface feels compared to a regular solvent based wax and grease remover!

Uses: TPO Plastics

Alcohol based waterborne wax and grease removers are recommended for all new Toyota bumpers by Toyota to eliminate future potential of peeling of paint. These products are a must for new plastic bumpers as there are no mineral spirits in this product.

This product will also work great for fleet shops. This is a great pre-cleaning product for interior parts and leather. Check a small hidden spot for any reaction first! Toyota has finally admitted that there is a problem with paint sticking to new bumpers long term.

Their answer basically is this: Wash bumper with soap and water or a "scuffing paste" type product with gray scuff pad, rinse and dry then wash bumper only with an Alcohol Based Waterborne cleaner. At this point spray your adhesion promoter like SPI 600-4 on and according to Toyota your paint will never come off!

Yes, SPI's Waterborne Wax & Grease Remover is an alcohol-based product. We suggest you clean the bumper with our waterborne wax & grease remover 700-1, then scuff with "Scuff Stuff" and clean again with the 700-1. Now spray your 600-4 Adhesion promoter.

Poor Performance?

This product will not remove glue or adhesive! Decal and pin strip adhesive will come off easier with our 710-1 solvent based Wax and Grease Remover.

We don't recommend this cleaner over fresh basecoat.

After the Waterborne WGR has been wiped dry the car must set 30 minutes or be blown off with dry compressed air to make sure the vehicle is completely dry before you tack it off!

Plastic Adhesion Promoter

06/2013

Part Number:

600-4 Quart

VOC:

2:1 VOC Ready to Spray at gun and meets California 2009 new VOC Rules

Shelf life:

12 months stored at a stable temperature with the top sealed after each use

Mixing:

Ready to Spray
Do not add any other product or reducer to this product.

EXCEPTION: You can activate this product with 6501 activator 5:1, (5 parts 600 to 1 part 6501) primer activator. This is an option but it will totally change this product and would be very suitable for the most difficult to paint bumpers.

Uses:
Use for all plastic unprimed parts interior or exterior such as TPO, TEO, PE, PP, UR, etc.

Prepping:
For sanding and cleaning use a gray scuff pad in conjunction with a sanding paste product like Presta "Scuff Stuff" or other equivalent brands. Sand the entire bumper, rinse with water and allow to dry. Once dry wash with 700-1 Waterborne Wax and Grease Remover and dry the bumper. Then let the bumper set for 30 minutes. **Do not use a solventborne/mineral spirits Wax and Grease Remover such as 710.**

Using a clean air line blow dry the bumper then tack cloth the bumper. Apply **one medium wet coat** of 600 Plastic Adhesion Promoters to the bumper or plastic substrate.
.
After allowing to dry for 10-20 minutes apply the coating product of your choice such as epoxy, 2K primer or a 2K sealer. For best long term results always use an epoxy.

You must coat this product within 1 hour of the last coat or scuff the adhesion promoter and spray one more coat before painting.

Notes:
This product will work with any high grade paint system **but will not work with acid etch primers, lacquer type coatings or non-isocyanate cured primers.**

EPOXY PRIMER

06/2013

Gun Tip: 1.4 or 1.5

As a reduced sealer use a 1.3 or 1.4

Product Numbers:

6600- White
6610- Gray
6620- Black
6630- Red Oxide
6700- Activator

V.O.C.

2:1 VOC Ready to Spray

Mix:

1:1 or 1 part SPI Epoxy to 1 part SPI Epoxy Activator

30 minutes of induction is recommended

When you first open part A of the epoxy, it is VERY important to make sure that all settling on the bottom of the can is mixed up very well with your paint stick. If not mixed properly, you can destroy the epoxy and as a side note, paint shakers **DO NOT** perform well with settled epoxy so always use a paint stick.

We strongly recommend you activate the epoxy by first stirring very well and then allowing it to set/ induce for 30 minutes. Stir once again before spraying and the longer you wait between spraying your coats of epoxy the better.

Pot Life:

72-120 hours depending on humidity and temperature (store in a sealed container).

Uses for SPI Epoxy:

SPI Epoxy is one of the finest available and it's great for use on any type of metal or aluminum if properly sanded and cleaned. **This epoxy eliminates the need for an acid-etch primer.** Use this epoxy on bare fiberglass or SMC before applying body fillers or 2K primers for best long-term results.

Prepping the Surface:

Metal or aluminum must be clean of all rust, oils, and any films. **Never** clean metal with lacquer thinner, acetone, or reducers of any kind. When prepping aluminum and metals for epoxy always sand aluminum or metals with 80 grit DA paper. **Clean bare metals or aluminum with SPI 700 Waterborne WGR, clean with 710 WGR then let it sit 30-60 minutes before applying SPI Epoxy!**

If you have any questions on how to prep any type of substrate please call our tech line before beginning.

Body Fillers:

On any restoration it's **always best to apply the body filler over the epoxy** rather than applying filler over bare metal for best adhesion and corrosion protection. After applying two coats of epoxy, wait overnight before applying the body filler. The epoxy does not need to be sanded before applying the body filler (for up to 7 days).

If time allows, it's always best to apply filler over the epoxy after it has set for 24-48 hours.

If you choose to do the filler work over bare metal, the epoxy can be sprayed over the sanded body filler.

Spraying:

Spray two wet coats for normal applications. For special projects such as restorations spray one coat and let it flash 30 minutes or longer at 70° degrees or higher. Then spray a second coat for maximum corrosion protection. For frames we recommend three coats for maximum protection and to make sure you don't have any thin spots as frames tend to be very hard to spray. **You do not need to top coat our epoxy on frames, wheel wells, firewalls or suspension components.**

For older corvettes such as early 70's and older, 3 wet coats of epoxy will perform best. Any cleaning of the raw glass should be allowed to sit 24 hours or longer before applying the epoxy. Apply one wet coat of epoxy, let it sit 1-4 hours then spray a second coat. If a third coat is desired again wait 1-4 hours before applying the next coat.

This epoxy does not need to be sanded if it's primed over within 7 days. Always prime over the epoxy within 7 days. After 7 days the epoxy should be sanded with 180 and re-coated with epoxy for best adhesion.

Polyester primers:

When using a polyester type primer always let the epoxy sit for at least 24 hours, while 48 hours would even be a better bet.

Wet and Dry Sanding:

If you need to sand a large area of epoxy, the epoxy will dry sand best after 12-16 hours. Wet sanding with moderate pressure can be done after about 4 hours, depending on the amount of epoxy applied, air temperature and substrate temperatures.

To use as a Paint Sealer:

To use the epoxy as a paint sealer, reduce it 5-50% with the proper temperature range urethane reducer (this is very important) and spray with your base/clear gun. Spray one wet coat ONLY, let it sit 2 hours then apply paint. For sealing of a potential problem paint job, apply two coats of epoxy with proper flash times between coats and let it sit over night before painting.

Remember, reducing epoxy speeds up the cure time, so when mixed as a sealer the best application of base is within 2-18 hours (no sanding is needed within this time frame).

Cold Weather:

In cold shop conditions this primer can and will go dormant. Keep heat on the car for 24 hours after spraying with an absolute minimum metal temperature of 65° F. Also, when it's cold it will help to mix primer and let it induce 60 minutes before spraying. Application of any epoxy in cold weather can destroy a paint job.

Bottom line is if the car metal cannot be kept at 65° or higher as well as the shop temp for the next 24 hours, DO NOT spray our epoxy, as you may end up redoing all your hard work.

Also, the temperature of the epoxy in the can is just as important so store the epoxy in a warm place at least 24 hours before spraying.

For $20 you can buy a laser temperature gun to take readings of the can and the car panels and this will save you from guessing.

Once again, if you have any questions regarding the application of SPI Epoxy in cold weather please call us first. Metal temperature when you spray epoxy primer is critical and must be at least 65° as well as the contents of the epoxy primer and activator cans!

Precautions:

NEVER use SPI Epoxy over a Soda Blasted vehicle unless you call us first for proper neutralizing instructions.

NEVER use SPI Epoxy over Acid Etch/Wash Primers or Rust Converters. It will not work and we strongly suggest if you want to use a rust converter that you use the rust converters paint system instead of SPI.

Acid treatments should not be used unless you know the proper way to neutralize them, again call us first to be safe. Acid films can cause an adhesion loss.

We only recommend using Ospho's acid treatment if you even need one.

If not handled properly the aforementioned issues can destroy a paint job and will result in an expensive mistake.

For bare metal or aluminum do NOT use any other cleaner except 700-1 for cleaning step number one and then 710-1 for cleaning step number two.

2K Regular Build Primer
4:1
06/2013

Product Numbers:
Gun Tip: 1.7 – 2.5

6500-1B Buff / Yellow - Gallon
6520-1G Gray - Gallon
6530-1 Black - Gallon
6501-4 Activator - Quart

Mix:
4:1
4 parts primer to 1 part activator. Mix / stir activator in very well for at least one minute. This primer can be reduced with SPI urethane reducers 870, 885 and 895. Do not reduce more than 25%.

Pot Life:
45-60 minutes at 75°

Spraying:
Always coat bare metal with epoxy first!
Mix only what you immediately need and clean the gun when you are finished. Spray a full wet coat and let it flash. Spray a total of two or three coats being sure to let each coat flash before spraying the next coat. Flash times will vary from 3-5 minutes depending on temperature.

Filling:
This primer is the same as our High Build Primer except it will spray a little thinner at about 1.8 to 2.0 mills per coat depending on the primer / paint gun used. This is an excellent primer for the high quality shop that does not need a very high filling primer. This primer is made to fill like the major paint manufacturers best 2K primers. A sealer is not required for this primer prior to painting.

Sanding:
Depending on how you applied it and current temperature this primer should be ready to sand in 30 minutes. If sanded primer has set more than 24 hrs, you must scuff first with a red scuff pad or equivalent before applying another product.

Winter:
Add 2oz of SPI 900-4 Polar Accelerator in shops with inadequate heat.

Summer Heat:
Add 2oz of SPI 925 Retarder per sprayable quart if pinholes are a problem.

2K High Build Primer

4:1

Product Numbers:

8000-1 Grey - Gallon
7001-4 Activator - Quart

Gun Tip: 1.7 – 2.5

Mixing:

4:1
4 parts High Build Primer to 1 part High Build Primer Activator.

High Build Primer can be reduced with our 870, 885 or 895 reducers if less millage is desired. This product should be reduced no more than 25% for best results.

CAUTION! Due to the thickness of this primer it is very important that you completely mix the activator in with the primer. MIX ONE FULL MINUTE!

Pot Life:

Short! Pot life will vary from 30 to 45 minutes depending on air and metal temperature, humidity and the amount of product in the cup. The more product, the shorter the pot life!

Spraying:

Always coat bare metal with epoxy first.
Mix only what you need! See *pot life* first! Spray one wet coat and let it flash 5 minutes then apply a second coat. You can apply as many coats as you like but it is very important that **each coat** flashes before applying additional coats.

Filling:

This primer depending on the spray gun, will spray at 2-2.5 mills per coat.

Sanding:

Depending on how High Build Primer is applied you should be able to sand this product in 30-60 minutes. Keep in mind this time changes with temperature. 2K High Build Primer sands good but to make it easier shoot your coats to be blocked non-reduced and reduce your final coat 10-15% for less build and less final blocking. If sanded primer has set more than 24 hrs, you must scuff first with a red scuff pad or equivalent before applying another product.

Summer Heat:

In the summer heat it will not hurt to add 2oz of 925 Retarder per mixed quart of primer to avoid potential pinholes or dry spraying.

Winter: Add 2 –4 oz per quart of 900-4 for cold shop conditions.

TURBO 2K High Build Primer

100% cured in 3 hours at 75 degrees!

4:1:1

06/2013

Product Numbers:

6300-1 Grey – Gallon
6310-1 Black - Gallon
6320-1 White - Gallon
6350-4 Activator - Quart

Gun Tip: 1.5 – 2.0

Mixing:

4:1:1 - Ready to spray
Use either SPI 870, 885 or 895 Urethane Reducers to reduce this primer. The amount of reducer you choose to add controls the amount of film build you will receive.

Pot Life:

60 minutes @ 70° and pot life is decreased if you do not use reducer!

Spraying:

Spray one wet coat and let it flash then apply the next coat. It's **very important** that each coat flashes properly!

Sanding:

With the **metal temperature** @ 75° this primer can be wet sanded or dry sanded in 30-45 minutes. If sanded primer has set more than 24 hrs, you must scuff first with a red scuff pad or equivalent before applying another product.

Summer Heat:

With higher temperatures pay close attention to the grade/temperature of reducer that you use! Use a slower grade; a good rule of thumb is use the grade/temperature that you would use in basecoat for the same size area with the current air temperature.

This primer sands in 30-60 minutes like our other 2K primers, but it also incorporates the newer hyper cure resins.

2K Urethane Sealer

4:1:1

2.1 VOC when mixed 4:1

06/2013

Part Numbers:

6401-1 Grey 1 Gallon

6402-1 White 1 Gallon

6403-1 Black 1 Gallon

Products Needed:

6501-4 Primer Activator

870, 885 or 895 Urethane Reducer

0-VOC Reducers may be used in 2.1 VOC compliant areas.

Mixing:

4:1:1 - 4:1:2 Depending on your paint gun setup with a 60 minute pot life

Prepping:

One wet coat of this sealer mixed 4:1:1 will fill 320 dry sand scratches, however we recommend first preparing the area with 400-600 grit before spraying sealer.

Spraying:

Spray one wet coat of sealer over the properly prepped area and let it set for 10 minutes up to 4 hours before applying color. After 4 hours the sealer must be sanded. To fix imperfections after spraying sealer it may be sanded in 15-30 minutes depending on temperature and grade of reducer used. It's very important to use the proper grade/speed urethane reducer. On large areas we recommend using the slowest speed reducer possible.

As a Primer: This product can be used as a 2K Primer by mixing it 4:1 and without reducer.

Intercoat / Color Blender Clear

1:1 to 1:3

06/2013

Part Numbers:

2020-1 Gallon

Application:

- Works with all **high quality** base systems, lower grade systems should be spot tested before using.
- May be used as a jamming clear to match OEM under hoods and deck lids with a semi-gloss appearance.
- May be sprayed over a properly prepped panel before applying metallic base for ease of blending.
- May be mixed with the base for leveling metallic for blending.
- In between coat of colors when doing multiple colors of stripes or graphics.

Mixing:

For normal applications this clear can be reduced 1:1 up to 1:3. Most applications are going to work well with the 1:1 mix though you can adjust the mixture to suit your needs.

The resin system in this blending clear is top of the line. Because of this the selection of reducer is critical as far as quality and temperature grade. Do not use a low grade urethane reducer in this product and for safety sake we recommend the SPI 870, 885 or 895 Reducers depending on the temperature at which you're spraying. The reducer used should be the same speed as your color reducer.

Activator:

Using an activator with this clear is an option open to you. **We feel it's always advisable to use an activator in a base coat or intercoat clear.** If you decide to activate this product, you can use any SPI "clear" activator for the activation. Just 1oz of clear activator per sprayable quart will make big difference in cure time, tape time and repair time.

Spraying:

To use as a cut in clear apply 2-3 coats over the base.
To use as a lock down clear apply 1-2 medium coats.
To use as a taping clear between multi colors apply 1-2 medium wet coats.
Depending on grade of reducer used the flash times should be 3-10 minutes between coats. This clear must be top coated within 24 hours and for best results use a 1.3 or a 1.4 only.
Each coat MUST flash...Do NOT double coat this product!

Liquid Flattening Agent

06/2013

Product Number:

950-4 Quart

SPI Liquid Flattening Agent Qualities:

SPI Flattening Agent is a high strength semi-gel type product that utilizes the finest raw flattening agent available. This product is very high strength and stays in suspension well, though always pre-mix or pre-shake before adding to a coating

Reducer Selection:

If you are using this Liquid Flattening Agent in a coating that requires reduction always use the proper speed activator and/or urethane reducer in that coating.

Mixing:

Mix or shake this product thoroughly before each use! Then gradually add 950 Liquid Flattening Agent until the desired flatness is achieved and verified on a test spray-out panel.

Normally 20-40% of activated material is what is commonly used and for a low sheen 20-30% will be a very good starting point.

Spray a Test Panel First:

As with any flattener always spray a test panel first and allow to totally dry for full flattening effect as no two products are alike and everyone's idea of semi-gloss or flat is different! Different coatings will require different amounts of flattener. True flattening will always take about 24 hours after spraying which is why you always do a test panel first.

Common Mistakes:

1. Not allowing the first coat to properly flash (30 min) before applying the second coat
2. Spraying back to back wet coats
3. Using wrong speed reducers and activators will also counteract effect
4. Not allowing enough dry time to check for proper flatness before adjusting
5. Seeing 'snowflakes' means too much air pressure

All of these common mistakes will override the properties of the flattening agent!

General guidelines:

Customer feedback on Universal Clear for a **totally flat application:**
Mix one quart of clear with one quart of activator and one quart of flattening agent. Lower your normal clear spraying air pressure by 5-10 lbs or just high enough to spray clear the way you want.

2000 Series Basecoat

06/2013

Products Needed:

Gallon of SPI Basecoat
Gallon of SPI Urethane Reducer
SPI Clear Coat Activator

Mixing:

1:1
Must be activated with any SPI Clear Coat Activator
Add 1 oz of SPI Clear Coat Activator per mixed quart of basecoat
Use SPI 870, 885 or 895 Urethane Reducers

Paint Gun Tip:

1.3 or 1.4

Description:

Premium basecoats that are very user friendly, easy to spray and wet sand very well (only if necessary).

SPI basecoat should be reduced only with SPI 870, 885 or 895 Urethane Reducers for proper adhesion and color control.

SPI basecoat must be activated with any SPI Clear Coat Activator at the rate of 1 ounce per mixed/sprayable quart of basecoat.

Preparation:

If typical prepping techniques are used, this basecoat will cover 400 grit sand scratches.
SPI basecoat is compatible with any 2K sealer or epoxy primer used as a sealer.

Application:

With proper gun adjustment this base should be sprayed using wet coats.

Insurance type work: Let each coat flash 10-20 minutes before applying the next coat.

Restoration or custom work: Let each coat flash 30-60 minutes between coats.

If sprayed properly two coats should cover and a third coat is sprayed for peace of mind but this will depend on color of substrate/sealer used and basecoat application by the painter.

For insurance work we recommend the last coat of base flash 30 minutes before applying clear.

For restoration and custom work we recommend the basecoat sit overnight, then the next morning tack off the base and apply the clear. Allow the clear to flash 30 minutes per coat.

Single Stage Polyurethane Color

06/2013

Product:

4200-1 - All colors

Mixing:

4:1 with any of the following activators:
2102-4 Medium
2103-4 Slow
2104-4 Very Slow

Paint gun tip:

1.4

Description:

A premium single stage paint that is easy to spray and will wet sand and buff very well the next day after spraying (only if needed).

This single stage has very good chemical resistance and stone chip resistance.

Preparation:

Use normal preparations for paint and when ready to spray clean the vehicle with wax and grease remover 700 or 710, then let the vehicle sit for 45 minutes before applying the single stage paint.

Application:

With properly adjusted gun spray one wet coat. When finished check time and wait exactly 30 minutes before spraying second coat, same with the third coat if needed.

The last coat of color can be integrated with any SPI pre-activated clear mixed with pre-activated single stage at any ratio, although the most common is 50/50.

This single stage can also be clear coated after sitting overnight with any SPI clear; if done within 24 hours simply tack it and shoot it.

Buffing:

Next day wet sand, put the vehicle in sun/daylight for about 4 hours, pull it inside and when the vehicle cools buff as usual.

Matte Clear

06/2013

Product: **Paint gun tip: 1.4**

2200-1 Matte Clear

Mixing:

4:1 only with any of the following activators:
2102-4 Medium
2103-4 Slow
2104-4 Very Slow

Precaution: the flattener will settle in the bottom of the can so make sure you spend the proper amount of time with the paint stick to mix the product very well or you will ruin the gallon. Do not use fast activator or urethane reducer.

Description:

SPI Matte Clear is a premium grade polyurethane clear which out of the can is about 95% flat and will match most new car matte claddings.

Advanced: Only if needed the flatness may be adjusted by mixing other SPI clears that are pre-activated then combined with pre-activated SPI Matte Clear to produce the gloss you desire.

If Matte Clear is not flat enough for your needs, you can add additional SPI Flattener #950-4 to make it more flat. TEST FIRST and let dry for proper flatness. Actual flatness may not start showing up for an hour or two after you spray the Matte Clear and total flattening results will occur in 6-12 hours so it's always very important to do a sample spray out and view the results the next morning.

Preparation:

When spraying Matte Clear over a basecoat, the base should sit at least an hour so the base solvents do not interfere with the Matte Clear.

When using Matte Clear over a single stage paint, the paint must sit 4 hours to overnight before spraying the Matte Clear.

Application:

Spray one medium-wet or wet coat with 50% overlap with the proper gun adjustment and application and the Matte Clear should be lay orange peel free. When spraying this product simply pretend you are spraying clear.

Very important: Once the first coat has been sprayed, note the time and **wait exactly 30 minutes** before applying the second coat. **Don't spray a third coat.**

Depending on temperature and humidity, you may see the gloss starting to fade in about 60 minutes but here again actual gloss/flatness will be best measured the next day.

This product cannot be buffed or waxed without affecting the gloss level and possibly destroying the paint finish.

Matte Black Single Stage

06/2013

Product: **Paint gun tip: 1.4**

2201-1 Matte Black

Mixing:

4:1 - 6:1 or 8:1 with any of the following activators:
2102-4 Medium
2103-4 Slow
2104-4 Very Slow

Precaution: the flattener will settle in the bottom of the can so make sure you spend the proper amount time with the paint stick to mix the product very well or you will ruin the gallon. Do not use fast activator or urethane reducer in this black. With a 4:1 mix you will end up with an egg shell finish with 3-5% gloss. With a 6:1 mix you will have a nice flat black with about 1% gloss (this is the most popular choice). With 8:1 mix you will have black with zero shine leaning to a slight gray scale but its only noticeable if painted on a panel next to the other mix ratios of Matte Black. SPRAY TEST PANELS FIRST so you choose the right mixing ratio for your application.

Actual flatness may not start showing up for an hour or two after you spray the Matte Black and total flattening results will occur in 6-12 hours so it's always very important to do a sample spray out and view the results the next morning.

Description:

SPI Matte Black is a premium grade **2-coat** polyurethane single stage.

Advanced: Only if needed the flatness may be adjusted by mixing other SPI clears that are pre-activated then combined with pre-activated SPI Matte Black to produce the gloss you desire.

Preparation:

Sand the surface with 320-800 grit wet paper or dry paper.

Application:

Spray one medium-wet or wet coat with a 50% overlap with the proper gun adjustment and application and the Matte Black should be lay orange peel free. When spraying this product simply pretend you are spraying a clearcoat. The product cannot streak unless you add reducers, fast activator or rush the recommend paint process.

Very important: Once the first coat has been sprayed, note the time and **wait exactly 30 minutes** before applying the second coat. **Don't spray a third coat.**

Depending on temperature and humidity, you may see the gloss starting to fade in about 60 minutes but here again actual gloss/flatness will be best measured the next day.

This product cannot be buffed or waxed without affecting the gloss level and possibly destroying the paint finish.

Universal Clear
1:1
06/2013

Product Numbers: Gun Tip: 1.4

4000-1 Universal Clear – Gallon
4000-4 Universal Clear - Quart
4001-4 Multi-Panel Activator – Quart
4002-4 Fast Activator – Quart
4003-4 Slow Activator – Quart
4004-4 Very Slow Activator - Quart
Order one quart of activator per quart of clear

Mixing:

1:1

Mix one part of 4000-1 to one part of 4001-4, 4002-4, 4003-4 or 4004-1
Activators may be **mixed** to create your own dry times.

Polar Accelerator 900-4 may also be used at 1-2oz per mixed quart of UV Clear.

VOC's:

4.0

Uses:

This clear may be used on any job whether all-over or a spot repair.

UV clear has been used over the years on many Barrett Jackson cars and Pebble Beach cars as this clear was designed for restoration and street rod refinishing.

UV clear is very user friendly and works very good in all types of production shops as this is truly one clear that will do it all. UV clear may also be sprayed over any base coat and over any activated single stage paint, to spray over an activated single stage paint let the single stage set overnight.

Spraying:

Adjust the gun so you can lay the clear slick and you then have two choices:

Option #1: Spray the first coat wet then apply a second wet coat within 10-30 minutes for a two coat production type job.

For custom painting (3 coats or more) it's best to **wait exactly 30 minutes** between coats. (Refer to The Perfect Paint Job)

Dry Times:

Depending on conditions the first coat **Multi-Panel Activator** will flash in 3-8 minutes. The second coat will be a little slower.

The first coat of **Fast Activator** will flash in 2-5 minutes.

The first coat of **Slow Activator** will flash in 5-10 minutes depending on the temperature.

For large areas consider the Fast Activator mixed with Normal Activator when the booth temperature is below 60°. This truly unique clear will fill 100 percent of a body shops needs year around without the need for a second clear.

Baking: Low temperature baking clear

No purge! Bake for 10-15 minutes at 110°-120°. This obviously depends on air temperature and activator used. This clear is water spot free after one-hour when air dried at 75°.

NEVER BAKE THIS POLYURETHANE CLEAR OVER 120° F AND LONGER THAN 20 MINUTES!

Repairing:

After one hour of air drying you should be able to make minor repairs without any problems. Keep in mind the type of base you use plays a big part in the curing of the clear and to be safe you should wait at least 4 hours to repair.

Buffing:

UV clear buffs great. Always let it set overnight before buffing but small spots like a door can be buffed in **2 hours @ 75°** with **Normal Activator** if needed. Adjust buffing times according to your air temperature and the activator you used.

Spraying in Non-baking Paint Booths:

The booth fan MUST be shut off as soon as the overspray is gone!

Do not let the fan run longer than a minute after the last coat of clear is applied. We designed UV Clear this way and this is one of the reasons this clear works so well in shops that don't have perfect painting conditions.

Universal Clear
2:1 VOC
06/2013

Product Numbers: Gun Tip: 1.4

4100-1 Universal Clear – Gallon
4101-4 Fast
4102-4 Multi-Panel Activator – Quart
4103-4 Slow Activator – Quart
4104-4 Very Slow
Order one quart of activator per quart of clear

Mixing:

1:1

Mix one part of 4100-1 to one part of 4101, 4102, 4103 or 4104.

Activators can be **mixed** to create your own dry times.

Polar Accelerator 900-4 can also be used at 1-2oz per mixed quart.

VOC's:

2:1

Uses:

This clear can be used on any job whether all-over or a spot repair.

This clear has been used over the years on many Barrett Jackson cars and Pebble Beach cars as this clear was designed for restoration and street rod refinishing.

Universal Clear is very user friendly and works very good in all types of production shops as this is one clear that can really do it all. UV clear can also be sprayed over any base coat and over any activated single stage paint. To spray over an activated single stage paint let the single stage set overnight first before applying UV Clear.

Spraying:

Adjust the gun so you can lay the clear slick and you then have two choices:
Option #1: Spray the first coat wet and then a second wet coat within 10-30 minutes for a two coat production type job.

For custom painting (3 coats or more) it is best to **wait exactly 30 minutes** between coats. (Refer to the Perfect Paint Job)

Dry Times:

Depending on conditions the first coat of Multiple Panel Activator will flash in 3-8 minutes. The second coat will be a little slower.

The **Slow Activator** will flash in 5-10 minutes depending on the temperature.

For large areas consider using Polar Accelerator 900 with Normal Activator when the booth temperature is below 60°. This truly unique clear can fill 100 percent of a body shops needs year around without the need for a second clear.

Baking: Low temperature baking clear

No purge! Bake for 10-15 minutes at 110°-120°. This obviously depends on bake temperature and the activator used. This clear is water spot free after one-hour air dried at 75°.

NEVER BAKE THIS POLYURETHANE CLEAR OVER 120° F AND LONGER THAN 20 MINUTES!

Repairing:

After one hour of air drying you should be able to make minor repairs without any issues. Keep in mind the type of base you use plays a big part in the curing of the clear and to be safe you should wait at least 4 hours to repair.

Buffing:

UV clear buffs great. Always let it set overnight before buffing but small spots like a door can be buffed in **2 hours @ 75°** with **Normal Activator** if needed. Adjust buffing times according to temperature and the activator used.

Spraying in Non-baking Paint Booths:

The booth fan MUST be shut off as soon as the overspray is gone!

Do not let the fan run longer than a minute after the last coat of clear is applied. We designed Universal Clear this way and it's one of the reasons this clear works so well in shops that don't have perfect painting conditions.

Euro Clear 2020
4:1:1
06/2013

Gun Tip: 1.4 ONLY

Product Numbers:
5000-1 Clear gallon
5001-4 Fast Activator quart
5002-4 Medium Activator quart
5003-4 Slow Activator quart

Mixing:
4:1:1 – 4:1:3
Through the ratio in which urethane reducer is added to this clear *the painter has complete control* to create his own personalized clear based on what he wants the solids content to be, how he wants Euro Clear to spray and the speed in which he wants the clear to dry.

Painters doing low end or used car work have the option to take a clear used for everyday production and reduce it up to 4:1:3 in order to significantly cut his costs for that job without buying a lower grade clear.

VOC's:
3.5-3.7 VOC Ready to Spray when mixed 4:1:1 with the 870 Medium Urethane Reducer.

Uses:
This very high grade clear can be made to do about anything the painter desires with a little creativity in choosing mixing ratios and proper grade reducers and with a little experimenting this clear can suit the needs of any collision shop doing anything from used car work to insurance work on a new Mercedes.

Spraying:
Use a gun with a 1.4 tip to spray the first coat wet, let it dry until you can lightly touch the clear then spray the second coat wet.

Buffing:

Depending on the mix ratio and speed of reducer buffing can be done in 2 hours to overnight. This clear should be buffed within 10 days when 70° or greater for best results.

Reducing:

Most high grade urethane reducers will work fine in this clear and of course the SPI Reducers would be your best choice. We strongly advise you to **avoid** using lower grade reducers in this clear.

DO NOT spray this clear until all precautions have been read!

- **Never** add any fisheye eliminators to this clear.
- Clear can be accelerated but **only** with **SPI 900-4**.
- **Never** use a paint gun with a 1.3 tip. **Use a 1.4 only**.
- Bake at temperature and cycles not **higher** than 120° for 10 minutes or 110° for 15 minutes. **No purge time is needed** before bake cycle.
- If allowing to air dry the **fan must be shut off** within one minute after the overspray has been evacuated from the last coat of clear.
- The mixed **pot life** will be about 2-3 hours depending on temperature in shop.
- **First coat must be sprayed** how you want the clear to look the next day therefore **never** spray a tack/dust/drop coat.
- Reduce the clear however it works best for you but if you choose to add excess reducer to the mixed product it's very important there is **at least 2-mils of clear** left after buffing is complete (assuming buffing is needed) for maximum UV protection. Test is recommended.
- **Do not wax** this clear for a minimum of 60 days.

Euro Clear 5100
2.1 VOC
06/2013

Gun Tip: 1.4 ONLY

Product Numbers:
5100-1 Euro Clear gallon
5101-4 Activator Fast quart
5102-4 Activator Medium quart
5103-4 Activator Slow quart
5104-4 Activator Very Slow quart

Mixing:
4:1:

VOC's:
2.1
Less than 2.1 Ready to Spray

Uses:
This very high grade clear can do about anything the painter desires by choosing the proper activator and adding 900-4 polar accelerator (1-2 oz per mixed quart) **if** needed.

This clear can suit the needs of any collision shop doing anything from used car work to insurance work on a new Mercedes.

Spraying:
Use a gun with a 1.4 tip to spray the first coat wet, let it dry until you can lightly touch the clear then spray the second coat wet. Flash time is 10-30 minutes with 2 coats but if doing more than 2 coats, allow 30 minutes flash per coat.

Buffing:
Depending on the activator used buffing can be done in 2 hours to overnight. This clear should be buffed within 10 days when the temperature is 70° or greater for best results.

Reducing:

In 2.1 VOC areas clear can only be reduced with low VOC Reducers such as SPI 0860, 0870 or 0885.

In non-VOC areas most high grade reducers will work fine in this clear and of course the SPI Reducers would be your best choice. We strongly advise you to **avoid** using lower grade reducers in this clear.

DO NOT spray this clear until all precautions have been read!

- **Never** add any fisheye eliminators to this clear.
- Clear can be accelerated but **only** with **SPI 900-4**.
- **Never** use a paint gun with a 1.3 tip. **Use a 1.4 only**.
- Bake at temperature and cycles not **higher** than 120° for 10 minutes or 110° for 15 minutes. **No purge time is needed** before bake cycle.
- If allowing to air dry the **fan must be shut off** within one minute after the overspray has been evacuated from the last coat of clear.
- The mixed **pot life** will be about 2-5 hours depending on temperature in shop.
- **First coat must be sprayed** how you want the clear to look the next day therefore **never** spray a tack/dust/drop coat.
- Reduce the clear however it works best for you but if you chooses to add excess reducer to the mixed product it is very important there is **at least 2-mils of clear** left after buffing is complete (assuming buffing is needed) for maximum UV protection. Test is recommended.
- **Do not wax** this clear for a minimum of 60 days.

2.1 VOC Production Clear
4:1
06/2013

Product Numbers: **Gun Tip: 1.4**

2100-1 Production Clear gallon
2101-4 Fast Activator quart
2102-4 Medium Activator quart
2103-4 Slow Activator quart
2104-4 Very Slow Activator quart

Mixing:
4:1
Mix 4 Parts of #2100 Clear to 1 Part 2101, 2102, 2103 or 2104 Activator.
These four activators may be cocktailed / mixed to create your own dry times.

Uses:
SPI's 2.1 Production Clear is water-like in color so it will not affect white blend jobs and may be used for spot repairs and all-overs alike. Our 2.1 Production Clear has excellent long term UV holdout with high gloss and its new resin system requires only low temperature / low time baking cycles which lowers your energy costs. 2.1 Production Clear may be used over any basecoat after proper flash time.

2.1 Production Clear may be used over catalyzed enamels or polyurethane coatings after a minimum of 8 hours but preferably over night to be safe.

Drying Times:
2.1 Production Clear is two clears in one can. With the Slow Activator the first coat will flash in 10-30 minutes depending on air and substrate temperature. The Medium Activator makes this 2.1 clear dry like an MS clear for those smaller jobs. Regardless of activator it maintains its 2.1 VOC properties and solids so you have the best of both worlds. Fast Activator is perfect when the temperature drops below 75°.

Spraying:
The best way to spray this clear is to adjust your gun so you lay the clear the way you want it to look. **Spray one wet coat.** If you're doing an all-over and it's hot you may spray two wet coats back to back if you desire. If you're spraying only a couple of panels spray your first coat then wait 10-30 minutes before applying your 2nd coat.

Baking: Low Temperature Baking Clear

Purge the booth for 5 minutes then bake for 110°-120° (never higher) for 10-20 minutes depending on activator used.

Never bake higher than 120°!

Paint Booths Without Heat:

In the summer after the last coat of clear is applied, shut the booth fan off as soon as the overspray has been evacuated.

Repairing:

After 4 hours @ 70° or better you should be able to make repairs without any problems. If the clear was baked repairs should be made 60 minutes after the vehicle has cooled to room temperature.

Buffing:

Always let it set overnight. 2.1 Production Clear will buff best in the first 3 days but will still buff good for the next 7 days.

Spray-in Bedliner

06/2013

A 1050 Bedliner Kit Includes:

1-¾ gallon bed liner

1-Quart of Part B activator

1-Tube black tint

Only Use a GEO Bed Liner Gun!

Use only Geo gun part number **W4535** to spray this product with a regulator. The use of other guns that look alike do not have a big enough bore or pick up tube and will cause loss of strength and adhesion and you will lose a lot of the gallon to airborne over spray. In other words don't even consider using a different type of gun or *you* will have major problems! **If you don't use the GEO gun we already know the result so there is no need to call us because there is nothing we can do for you!**

Making Colors

We only supply black tint with each kit, however you can make your own color. **USE ONLY** pure mixing color tints from a **quality** paint line! Do not use *mixed* base or single stage colors in the bed liner. Use a minimum of 4 ounces up to 8 ounces (for transparent colors) of tint per gallon kit of bed liner. Single stage color systems tend to produce glossier colors. Blacks and grays will be the most UV stable. As with other bed liner companies some white tints have an adverse reaction with this bed liner as they can turn the white bed liner slightly yellow or green and this can happen as soon as you mix it or up to a month after you spray it. **We don't know why so don't tint this bed liner white!**

<u>*Anti-Skid Option</u>

In order to create a durable anti-skid coating with this bed liner you may add 2-6 ounces of *clean* and *dry* silica (sand blasting) sand to one gallon of sprayable bed liner.

Mixing the Product

This step is very critical as this is not automotive paint, so follow directions very closely!

1) Pour the desired tint into part A can and mix well.

2) Combine part A and B at a ratio of 3:1 and mix by hand with mixing stick for three minutes **very aggressively**.

You will notice the product if mixed for only 30 seconds will start to jell / thicken in the can. At this point just keep mixing and the product will thin down. Pot life is 45-60 minutes if mixed for about 3 minutes, but pot life will be only 5 minutes if mixed for 30 seconds. This is the opposite of paint so don't cheat here or it will be very costly to ***you***. In the first quart or two you may add up to 10% SPI 870 Urethane Grade Reducer (never 860) as this will allow the bed liner to lay down level and act like a sealer which will allow fast uniform coverage. Once the entire bed has been coated uniformly one time spray the left over bed liner un-reduced, which will give you the texture you desire. This is also very helpful on transparent colors. **We recommend spraying one coat of SPI Black Epoxy first when spraying black bed liner over a white bed for faster coverage.**

Prepping the Truck

The paint should be cleaned with SPI wax and grease remover 700 or 710. The bed should be sanded with 180 by hand, 180 grit with a DA, **or** a red scuff pad and then cleaned again with wax and grease remover. Although the bed liner will stick to clean bare metal we do recommend that in these areas you coat the bare metal first with SPI epoxy primer and let it set at least one hour and preferably over night before applying the bed liner. **Never use an Acid Etch primer under the bed liner.**

Also if the bed looks like it has been repainted before especially with what we refer to as a used car special (low quality paint and poor prep) it would be advisable that you coat the bed with two coats of SPI Epoxy Primer and let it set over night before spraying the bed liner.

Masking the Truck

The whole truck should be covered and we recommend that you use 18" or 36" paper to outline the area and then spray the rest of truck with Air Filtration's liquid spray mask. Areas where the bed liner will overlap the tape such as the top of the bed rails, the following procedure works best. Outline with ¾ inch tape and masking paper, then lay another piece of tape over the first piece with 2 inches extra at the end curled up. As soon as you are done spraying the bed liner you can pull the curl and the top layer of tape will be removed leaving the first layer until bed liner is dry. This will leave a very nice looking edge with out the cost of buying wire tape.

Spraying the Truck

Adjust the **GEO** gun. The tip screwed in will cut back on the material and the further out the tip is the more material the gun will shoot. For the first time users we recommend you adjust the tip of the gun in about 75% of the way and air pressure at about 40-50 pounds. What we are trying to accomplish here is getting the gun to spray a fine spray just wet enough that we will hide and cover the paint with the first coat of bed liner. On our first coat when we're in the bed, all we care about is covering so no bleeding of paint can be seen. Then spray a coat on the bed as you walk out of the truck.

Now that we're out of the truck for the next coats you will need to adjust the fluid tip out so more material comes out and you may need a little more air pressure. Now we want to lean over side of bed and spray across the bed as this will even out the texture and then walk to the other side and do the same thing, follow this procedure until the gallon kit is gone.

Delivery

The bed liner will be dry to the touch within 2 hours depending on air temperature and at this point untape the truck and carefully rinse off the liquid mask if used. *Light* water will not hurt the bed liner at this point. The truck can be driven but it is best not to use the bed for 48-72 hours depending on air temperature. Just like automotive clear coats or single stages this bed liner will cure very, very slow below 60 degrees and it is possible for this product to go nearly dormant. You may bake this bed liner around 110-120 degrees to speed up the curing in low temperatures.

Restorations and Street Rods

When spraying inside the doors, trunk and floor pans if the car has been dipped, wash with SPI 700-1 or 710-1 and spray one or two coats of SPI epoxy let it set overnight then shoot the bed liner. If the vehicle is not stripped and it is a factory finish just clean as above and scuff with a red scuff pad and spray. On frames that have been sand blasted, our first choice would be epoxy as above but the bed liner will stick and seal the frame very well with out it. On raw fiberglass it is best to spray a coat of epoxy for safety sake, but the bed liner will stick very well to most fiberglass on its own.

Safety

Always wear complete body and lung protective gear, see MSDS sheets and product label for complete information.

Caution

We have referred to the use of epoxy quite a few times above. Please be aware all epoxy primers are not created equal! You should know the epoxy very well and how it reacts if you are considering using another epoxy under the SPI spray in bed liner. Some epoxies out there would need to set 3-4 days before our bed liner could be sprayed over them. This is not an area you want to gamble with!

Paint Gun Adjusting

06/2013

This may sound trivial to an experienced painter but the fact is very few painters know how to adjust their paint gun. This one item separates a sprayer from a painter more than anything else. The fact is a painter that knows how to fine tune his paint gun will turn a lot more hours and have a lot less problems because he is controlling the paint and is not letting the paint control him. This is why 80-90% of the painters today hate to spray High Solids clears. They vision runs or orange peel and if you don't adjust the gun properly this is what you will get make no doubt about it.

First of all the number one question I get is what tip should I use? My personal feeling is for basecoat a 1.3 or 1.4 and for clear 1.4. The exception on the 1.4 for spraying clear would be certain HVLP guns where a 1.5 is made for spraying clear. And of course a true painter is only going to use gravity feed gun. Leave the old siphon feed guns for the enamel sprayers that they are made for, as these guns have no place in today's body shops that are using Urethanes and Polyurethane's.

What happens with an improperly adjusted paint gun?

If you're applying basecoat chances are you're applying it way too heavy and your blends are showing, your metallic are not lying down or standing out like they should so your color marches are a problem and the base is drying slower between coats than it should. The number one clue the basecoat is going on too heavy is if you're having a dieback problem with the clear after setting overnight (trapped solvents). If you're applying clear the clear is controlling you instead of you controlling the clear. With a High Solids clear you try to spray it wet enough that the orange peel will flow out but hope that it doesn't flow so much that it runs on you. The next day you tend to have a clear that looks cloudy or milky because of the trapped solvents and it requires a lot of wet sanding. The benefits of adjusting the paint gun properly will be faster application of paint and you will know what the final job will look like when you spray it and not have to guess.

How do I properly adjust my gun?

Place a piece of masking paper on the wall, then set the fan how you like it. Adjust the air pressure to the rate that you plan to spray with. Screw in the fluid adjustment all the way. Hold the gun from the paper the distance that you would normally spray (usually 6-8 inches) and give the trigger a quick squeeze and release. If anything comes out of the gun it should be very little and dry. Turn the fluid out one full turn and repeat this procedure half a turn at a time until you are getting an even pattern and the paint is even in build. If it is metallic the metallic should spray even as well. At this point go to a rocker or bottom of a fender on the car and make a 12-inch pass. You will most likely have to back the fluid out one-half to one full turn to spray at the speed you want then fine tune your air pressure.

Now the gun is very close in adjustment, you should be able to lay the clear orange peel free with out running it, and metallic should spray even and wet with out much effort. Keep in mind this is not your last adjustment; every base color will spray a little different and may require a half a turn in or out for the new color. If you're going from a high solids clear for an all-over to a spot repair clear you will need to make a minor adjustment again.

A simple formula to remember is orange peel is fluid adjustment and run control is an air pressure adjustment. If you're getting a few runs try upping the air pressure 5-10 pounds more.

One final note spend the money for a good set of paint guns! This is your career and the paint gun makes or breaks you as far as labor hours turned. NASCAR drivers don't buy their race engines at a parts store to save money, so why would a painter want a $200 gun? Spend the $400-800 for a good base gun and again for a good clear gun the payback will be faster than you think. You will always get what you pay for with a paint gun!

The Perfect Paint Job

06/2013

Our goal is to accomplish a paint job that has a strong foundation, maximum gloss and will last for many years. This type of painting is **not practical for the everyday production body shop** but it will serve you when you do your next restoration or a street rod job. We are going with the assumption that the metal or fiberglass has been stripped of all paint.

All bare metals and aluminum should have 80 grit DA scratches.

Spraying primers:

Bare metal is always best cleaned with 700-1 Waterborne Wax and Grease Remover and 710 Wax and Grease Remover, then let it sit 30-60 minutes before applying the epoxy!

After first reading our Epoxy Tech Sheet mix enough SPI Epoxy Primer to spray 2-3 wet coats over the entire car. Spray one wet coat and let flash about 30 minutes then apply a second wet coat. Let the epoxy sit overnight then apply body filler or glazing putty over the epoxy. **Let the epoxy sit 24-48 hours before applying polyester primer.**

It's **not necessary to sand the epoxy before applying the fillers** (within the first 7 days of spraying epoxy) as they will bite into the epoxy and feather great. When you have finished sanding all of the bodywork you are likely to have some bare metal spots from sanding. Spray one wet coat of epoxy over all filler spots and over any bare metal spots. Now let the vehicle set overnight.

The next day you can start spraying the 2K primer over the epoxy. Once again, it is **not necessary to scuff or sand the epoxy before applying primer**. The most important thing to remember at this point is spray one wet coat of 2K primer and let it sit for 10 minutes before applying the second coat. Follow this procedure between all coats of 2K Primer. This step when abused messes up more paint finishes than anything else!

When all of the primer blocking and any necessary primer repairs are finished it's always best to use the epoxy as a sealer. Mix up enough epoxy to go around the car with one wet coat and adding a double shot glass of SPI 885 Urethane Reducer per quart. Let the epoxy sit for 30 minutes. Stir one more time and strain. Spray one full wet coat of epoxy over the entire car. The epoxy should sit for 6 hours before spraying basecoat or the next option is let it sit over night and wet sand the epoxy with 400-800 then spray the base.

Spraying the basecoat:

Next to rushing the 2K primer, rushing the basecoat is the second cause for the final gloss and depth of a paint job to look bad. It's very important to use the slowest urethane reducer in your basecoat that you can get away with regardless of outside temperature. Just allow enough extra time for the basecoat to flash off and dry. The difference between a very slow grade and medium grade reducer will show up in the final gloss.

The slower grade reducer also has better solvency and will give you far better adhesion. Spray the first coat and let it totally dry before spraying the second coat. It's best to wait 30-45 minutes between coats of base. Always wait 45 minutes between base colors that contain a lot of black pigment.

If your basecoat isn't perfect:

After two coats of base the vehicle should sit overnight, and then do any minor wet sanding with 800-1500 grit sandpaper to remove any orange peel or trash. Apply the next two coats with 45 minutes of flash time in between coats. Some colors will require additional coats. If this is the case always wait 45 minutes between coats.

Let the basecoat sit overnight.

A word of caution: There are 2-4 basecoats types that cannot be sanded or you will lose adhesion so avoid those basecoats. Check with your basecoat manufacturer.

Clear Option 1: Applying the clear in a single day

The following day tack off the vehicle, then apply a wet coat of SPI Universal Clear and let the first coat of clear sit 30 minutes.

Spray the second wet coat of clear and let it sit 30 minutes. Let the clear sit for 30 minutes before applying each additional coat as well.

Normally 4-5 coats of clear are applied during this process.

Then proceed with normal wet sanding and buffing when you are ready.

Clear Option 2: Layering multiple coats of clear over multiple days:

Spray 3-4 coats of clear waiting exactly 30 minutes between coats. Do not bake! You can set the booth at 80°-90° and leave it on if you wish. The next day, if possible, let the car sit in the daylight/sun all day regardless of air temperature as all we want is UV light.

The following day or anytime after, wet sand the car with any grit between 400-800 and put it back in the sun for at least a half a day; a full day would be better. Clean the car with 700 waterborne wax and grease remover, then clean it with 710 wax and grease remover. Do it carefully as anything left behind will destroy the paint job. Let it sit 45-60 minutes then apply 3-4 more coats of clear waiting 30 minutes in between coats.

DO NOT BAKE! The booth heat can be set at 80°-90° if you wish.

Anytime after the day of last spraying the car give the car one full day in sun. Wet sand the next day with the grits of your choice, pull the car out for at least a half day in sun then buff it at your leisure.

It's advisable for black, dark blue and dark green paint jobs to have an extra day in the sun with any of the above steps, as blacks dry/release solvents slower and this step will prevent the black from showing fine scratches and it will help you get rid of swirl marks when buffing.

Wait a long time before waxing:

NEVER wax one of these multiple coat jobs for at least six months or you will run the risk of delamination down the road. You can use detail spray to make the bugs wash off easier and to make drying easier as these products are designed to breathe.

Notes: