Dangerous Curves Ahead

Due to this Forum I have been fortunate enough to share the joy of building a Factory Five 33 over the last year and a half and due to that exposure I have had the opportunity to create a business of sorts working on these Great Cars. I receive daily pm's and phone calls and I do my best to help anyone whom asks. Having years of experience in the field still makes building these kits a challenge. I am currently hanging the body and painting Jeff Maxwell's pride and Joy and when his car is complete I will be starting a radical FF33 for another builder.
I thought I would start this thread to share my thoughts on attacking the Challenges of the Build!
Sit back and enjoy Mad Max's "THUNDERROD"

Dr. Ruth
IRS

Self-Centered

I received Thunder Rod in the Go Kart stage with the body attached with the zip screws placed at the factory. After spending sometime trimming the body and chassis it became apparent that the body would require relocating to get everything to align properly. The chassis is for the most part square with the exception of a few brackets that are welded on with little attention to detail which I will address later. It is very important to create a center-line down the middle and also a datum line down the sides so as to get all the body parts to line up and fit within tolerance. When you start measuring the panels you will find that the measurements are fit for a ruff frame carpenter when finish carpenter specs would have been more appropriate. I have found that with a little patience you can fudge most of the panels to work without excessive modification. That being said, there are panels that are undercut and required compromise. I found this particular body to be diamond a bit and I was forced to move it forward on the pass side so as to get the body to run square with the chassis. If you get the body squared the hood and deck lid will fit with ease and take less time to install, so spending a little time there will pay off in the end.
Isn’t strange how one word could have different meanings!

Assuming the body was attached inline at the factory would be a poor assumption, they simply screw the body to the chassis for shipping purposes which makes things a little confusing from the start. As discussed in earlier posts the body is by no means perfect and therefore compromise is the key word in fitting the body and its parts, ie, hood and grill etc.

I recommend using a wax pencil and going around the body at key points and measuring and marking for reference points to be used to achieve a true center. I suggest scribing a line on the top of the cowl, the package tray and rear valance. I also recommend that you do the same on the chassis at the rear, the center x by the transmission tailshaft and the front steering bulkhead and the very front of the chassis. You will find that these points will be used frequently through the build and will be used to center your engine and trans, your gauges, your fuel tank and even the rear end and last but not least your cup holders!

At this point it is important to level the car “side to side” with your coil over spring adjusters and or air pressure and make sure and have the car on its wheels or at least supported from the suspension pick up points, DO NOT USE JACKSTANDS ON THE CHASSIS. Place a long straight length of 1 ½” square tubing or suitable material down the center of the car and clamp it in place and hang Plumb Bobs at points you wish to reference like the front and rear bulkheads. Now it’s time to adjust the body to get all the points inline, a ¼” forward or backward on one side or the other will move the centerline at the ends easily 1”. Time spent doing this simple task will pay off many times during your build! Depending on your particular body and chassis you may need to shim or grind some of the firewall to chassis to body mating surfaces to get everything square. Take your time and do it RIGHT!
Laser Levels

I remembered I had a simple laser that I could possibly use to create the centerline so I dug it out and turned it on! It works great and can be tweaked to use for all the continuous lines. As far as trying to match the body heights from side to side it is all about compromise. You can also use the laser to scan the belt line to keep it all in plain. Remember that the right side of the body is by no means a match to the left side! Also remember that the grill bars will not be insink with the shell squared.
Shimming

I don't recommend shimming the body at the sills because the chassis would then hang below the bottom of the body. That being said shimming the body forward on one side or the other to get the front/grill on center is highly recommended! Just my 2 cents worth!

Breaks

Many people complain about the supplied brake combination, some say it is the master cylinder size, some say the bleeding procedure but IMHO it most likely is a poor quality pad at fault. Most people don't realize that bedding the brakes is so very important and most can't believe that with proper bedding you are transferring material to the discs. So what I am saying is Read the Instructions!

I bought a vented cross drilled rotor and pad kit off EBAY for peanuts and they came with dust free, squeak free carbon metallic pads that I have been very happy with in all respects, of course I bedded them!
I have been so busy working 10-12 hour days on Thunder Rod that I have failed to keep you all posted on the progress. I last reported on the grill mods and fitting and now it's time for the hood and side panel fitting.

I have found that contrary to the assembly manual it is by far easier to do all the front body fitting with the radiator and if possible the engine absent.

The first items you should fit are the side panels as they should line up well at the suspension cut outs and the cowl. The mold lines should not be considered on the sides as they are way off! I found that many of the panels were undercut and again required compromise. Remember to set your centerline for the grill and set the hood "no hinges" in its spot and see if you’re close. On this car I found the triangular frame bracket on the passenger side to be welded on improperly and I had to cut it and relocate. At this point I don’t recommend securing the front of the body rockers with anything but clamps. Move everything around and trim and grind a little as you go until you get the fit you require, take your Time!
Those of you whom followed Hot Rod Lincoln know a hood Brace of some design is needed to keep your hood from warping due to the latch and strut design. The gas struts are always trying to push the sides up "30 lbs. per side" and the latch is holding the center down so the hood develops bat wings as the sides spread out as much as 1/2" depending on the weather.

The cure is Braces!
The prototype on HRL although effective was Ugly like my braces some 45 years ago, the new design is virtually invisible and can be installed in 1/2 hour and you and your 33 will have a Smile to last a Lifetime.
Sidetracked

Finished the hood side panels and the final hood fitting and here is the skinny.
As usual Factory Fives fancy computer panel cutter has cut the panels short in one spot or
the other and compromise is in order. When fitting the sides it is my opinion that they be
the first panels installed as they have reference points at the suspension cut outs and the
lower sill and so you should line those points up and clamp the panels in place. You will not
use the rear mold lines for anything and you most likely will need to grind the rear radius a
bit to get the right side panel back enough. I have had to add fiberglass at the left rear
upper flange as it was trimmed to short and I also rework the front upper flanges for fitting.
Fit them up and grind carefully a little at a time. My next post will be the Chin mounting and
then the hood. I strongly recommend that all the fitting be done with the radiator not installed and ideally the engine not installed either.
Hold your Chin High

After fitting the side panels it was time for the Chin. I found once again that the part had been trimmed too much at FF and in this case fiber glassing was in order. At this point one must consider if you are willing to accept the original design of the panel extending out from the grill mating area, inconsistent with the side panels or modify it to fit. I looked at the total combined issues and choose to fix the whole dam thing. The style lines that extend forward from the lower body are inconsistent from side to side and need extensive work and the complete panel needs to be cut in half and narrowed to achieve the proper fit. As stated earlier, fitting all the front body parts is much easier with the radiator out!

You ask yourself is it really worth the extra effort since it's down so low and no one will ever see it. I found that narrowing the chin and tapering the style lines has increased fuel mileage and top speed by 20% and I also found that when driving through large puddles it was much easier to steer. So go for it! If you don't you will wish you had, Oh yeah! Don't forget to install a keel.
Believe me after completing two FF33 body installs the doors still drive me to dink!
I watched Erik's videos the other day and once again asked myself why oh why does it take so long when Erik go do it in less than 10 minutes!
Erik! Great job on the Videos!

Over the last two years I have been working on Factory Five Hot Rods and have worked with most of the FF staff and I have the up most respect for all of them. That being said, I can't wait to get my hands on a car built after #250 so I can prove to myself things are getter better. Enough said about the shortfalls.

When I first sat down and read the chapter on the door install in the manual and read Mike Everson's thread in the summer of 09 I still was scared to death to tackle the doors but knew it had to be done so I just dove in Head first!
I made some mistakes but in reality the biggest mistake was starting with the driver's door. Think about it, when it is all said and done, you are the one whom will be using the driver's door so that door needs to be perfect and not just remind you every time you open it about the problems you had assembling it.
So start with the passenger side door!

Start by removing any fiberglass imperfections inside the door shell and checking the steel door frame for welding issues and issues with the stampings. I have found that the stampings that have designed bends in them all need grinding to remove distortion caused by the bending. After completing those preparations its then time to install the hinge stanchions. I recommend you install them loosely with the short 1/2" carriage bolts after modifying the one bolt that will not clear the lower hinge. You should make sure the carriage bolts slide easily in their respective slots and lower the stanchion to the bottom and then raise it all the way up and then split the difference and tighten it up. Once you have done that take your supplied door cut out patterns and trace and cut out the jam openings being sure to verify their locations before cutting. Adjust as needed and go for it! When complete, install the hinges with the shoulder bolts pointing towards each other so you can gain some body clearance on the bottom bolt as it is way to close. Lubricate the bushings on the hinges and verify movement.
Now take your door shell cut out pattern and trace and cut out the slots for the hinges. Now it's time to take a deep breath and move back to the door and frame you had previously prepped. It may vary from kit to kit but most likely you will need to change the angle of the bend in the latch plate on the frame to get it to match the angle of the door shell and you will need to enlarge the rear door shell mounting plate holes to allow the frame to fit inside the door with the carriage bolts with ease, if you have to force anything fix it NOW! Before proceeding! Make sure that the frame can be secured in the shell in a relaxed state and then sit back and relax yourself before tackling the door alignment.
Latch & Striker

I have found that the thickest fiberglass on the whole body is the area around the striker pin location. Unfortunately it is also the area of the most variance in thickness. Most likely you should prep this area a little before installing the body as it does effect the ability of the striker plate to mount squarely against the surface. After verifying the fitment and prepping as needed I suggest that you install the 5/16" carriage bolts with flat washers and the supplied Nylock nuts loosely and clamp the bracket to the body then tighten. This is another of those areas of the build where a right angle drill is a big advantage but it is not impossible if you don't have one. If you don't have one I would suggest you measure 3 times and then use a 1/8" drill bit so there is room for error. Since the bracket has a slotted hole and the strikers always have a large thick washer I suggest you slot your hole to match the plate and allow for adjustment.

OK don't install the striker just yet!

With the door installed loosely in its brackets align it perfectly front to rear top to bottom making sure the style line is lined up perfectly at both ends. As has been the case with the cars I have done the doors have been undercut and needed addition of material to get the gaps good but that will be addressed latter. Now take a scribe and plunge through the striker hole to the door shell and scribe the panel. Install the supplied bear claw template and drill just the top hole. Verify that the front mounting plate for the door A frame aligns well and I suggest you verify that the actuating lever will clear the inside of the fiberglass before drilling the remaining holes and adjust as needed. I suggest all three latch holes be slotted side to side to allow the ability to tweak the door shell to align with the cowl. Now do your best to push the rear hinge plate against the inside of the door shell with the door aligned perfectly and drill the two holes in the center of their slots. Install the two supplied 1/4" bolts loosely and proceed with the rest of the alignment.

Now gradually start tightening all the bolts in the door assembly and verifying fit along the way, once you have everything tight and the door perfect you can now install the striker and align it to perfection, all the while remembering that the bear claws are double catch.

Note: The supplied strikers are complete JUNK and should be replaced with something you can actually hold to tighten.
Well today is Bash FF day! I can't hold back in longer!
While continuing on with the Thunder Rod build thread it’s only natural that during the build you will have those days when you could kill someone but you put your nine back in your holster and continue on.
I had the pleasure to visit the Factory five facility back in 09 and was very impressed with the Hi Tech nature of the manufacturing. They have well-built fixtures with laser cut brackets and many computer driven machines that are designed to duplicate procedures to exacting standards. They have Robotic this and Robotic that but these Robots only do what they are told to do!
What I have found is, that quality control is affected by the failure of someone to inspect the finished part on a regular basis and therefor parts end up slipping through that Should Not! Factory Five has a Hugh Robotic panel cutter housed in a large contained room much like a spray booth that trims all the fiberglass parts from there molds to eliminate the Human error factor. That being said, what tends to happen is the Human that sets up the Robot makes a mistake and the robot does a Great job of continuing on with that mistake. I have found that virtually every fiberglass part in this kit is undercut at some point and those undercuts create undue hardship throughout the build.
Since we’re talking about fiberglass parts and quality control I have found that every panel that is made up of two panels "inner/outer" is misaligned and once again creates problems in the build. This is a failure to care about the finished product and nothing else!
Stepping off my soapbox I will get back to the door fitting!
Here are some pics of adding material the Robot left in Mass.
Finished the doors last week and finished reshaping the door jams and dash intersection points. As most of you will find out the top of the jams above the style-line vary a considerable amount from the left to the right side and the opening creates a very poor look. The repair of this area is time consuming as most if not all of it must be hand sanded and you must use a fiberglass reinforced filler and those fillers sand like Concrete. I like to use the Fiberglas Evercoat MetalWorks system as all of their fillers can be intermixed during the repair process creating a filler properly suited for the job. After you have reconstructed the jam areas with the Everglas you can cross mix it with Rage Filler to fill pinholes and make it much easier to sand.
Bobbed

Jeff wanted his rear fenders bobbed and he had purchased the FF full fender versions with the FF trailer style fronts so the answer was to Cut them up and make them fit. The biggest issue with the rear fenders is that they are all out of whack and once again FF has undercut the outside edge. For those of you mounting these fenders make sure you locate the curve on the inner flange and align it with the body and make sure you jack the fender up into the body in some manner to get it to mate well. Having done two sets now I have found that three bolts on the flange and one bolt at twelve o clock about four inches out from the flange is sufficient. Because the fenders were so whacked out it was not just a matter of cutting the rear section off, it had to be sectioned and straightened and fiberglassed to make them usable. So both the fronts and rears would match we decided to remove the raised lip and give them the flush look and because they were undercut we had to fiberglass the lip to get it right and also to straighten the edge. It took over 20 hours to get them right but the end result is a fender that fits the car.
Door Slammer

Finished over 2 weeks of alterations to the doors innards today and I feel good about the result. With the change in the upper belt molding and the addition of the Balls window assembly and the addition of a rear window track the window works quite well. I also installed a much better inner door handle and made my own cables with adjusters to keep the handles working to perfection which I found was very difficult with the supplied Junk. The panel I fabricated mounts the door handle, door pull/armrest and the electric solenoid for remote operation. I truly believe that Jespar and crew will get it right in due Time.
The VW armrests supplied with the kit are ok but there is no provision for a door pull and with suicide doors it is a must. I have been using these very nice fiberglass armrests for some time and they are very well finished and are available in a dozen styles. The aluminum plate I use to install the handle, door solenoid and window switches also serves as a very solid attachment point for the door pull/armrest. As many have found the aluminum door panels are too thin to mount anything to yet alone attach vinyl. Let me know if you guys like the thumbnails or the big pics on my posts and I will oblige.
Mirror Image

What you see is what you get!
These mirrors are quite nice and easy to work with and require very little cleanup to get them to work on the Hot Rod. They have LED turn signals and they are made of easily sandable and paintable plastic. I choose to mount them with two 1/4 x 20 studs and inserted threadserts in the plastic. The angle of the dangle is very good to start with and vision is very good. I will have to do a little mud work to get them ready for paint but nothing compared to others I have worked on in the past.
Turning your Headlights On

I the headlight mounting system on the FF kit is so bad and Jeff as allowed me a tremendous amount of freedom with Thunder Rod so when I proposed headlights that turned with the wheels he said Go for it! Just so happens his daily driver is one of those new Imports that do just that. Jeff had purchased one of Factory Fives front fender kits that like with most everything on the kit are quite well designed but lack detail and fail to be just a simple bolt on. In my opinion the fender kit could without any additional cost be a simple bolt on, supplied with various spacers and such that would allow easy adjustment for various wheel offsets and tire sizes. That was not the case and the sturdy Stainless Steel mounting brackets that were Water jetted by someone I would have fired needed modification just to clear the lower ball joint nut! I fabricated a simple 1/8” thick Stainless Steel bracket and made a special bolt to attach the headlamp and because these new fang-tangle light bulbs are not sensitive to shaking, mounting to the spindle should not be a problem.
Electric Door opener

I had already shown you all the aluminum panel I make to mount the inner door handle and I have also decided that the panel is the mount for the door pull, window switch and door opening actuator. It will be removed as an assembly for painting of the car and will be reinstalled with self-taping screws and will also be attached to the front window channel so as to give it more badly needed support. I use the compact 11 lb. actuators from Hoffman as they are quite and small yet very strong. I like to use cables rather than rods as they do not rattle.
Pimp my Ride Height

Before doing any of your front or rear alignment you should set your ride heights. The manual is very vague as to where to measure the ride heights, but in a nutshell offering a set number is foolish as your tire size is a very big variable and in reality what FF should be giving you as a baseline is the preferred lower control arm angles! The preferred angles are very easy to determine as FF would have started with those figures first when doing the front and rear suspension layouts on their SolidWorks program. The front angle would have a huge effect on the preferred camber gain and the rear would have a huge effect on the anti-squat and both affect the overall handling more than anything else! If you are just wanting a car that drives good and you like a certain stance "Look" than set your ride heights to achieve the "Look" you desire and work everything else around that. Some may find you like the raked look, some may like the Lowrider Look, and some may set the height based on their driveway or local streets but to each his own! That being said you should try and set your side to side heights the same and that should take into consideration a standard fuel load and if you feel you will drive the car by yourself most of the time than set your heights with that in mind. Because the standard shocks have no thrust washers on the springs it is best to jack the car up at the chassis and get the springs relaxed to adjust the spanner nuts and then set the car back down and bounce on it and roll the car back and forth a few feet to take the bind out of the front end. You should take into consideration the chin of the car and the tire clearance in the rear wheel wells as the rear end was not located in the true center and the tires will rub the body at 11:00. The cars are sprung so stiff that getting more than a 1-1/2" of travel is highly unlikely so that number can be considered. The easiest places to use for reference are the rear of the frame side rails where it starts to kick up and the front of the frame side rails where it starts to pinch in. Based on your preference those numbers will vary between 7" and 4". One thing to keep in mind is that you should try and keep the spanner nuts within a 1/8" of each other "side to side" so as to keep from Jacking cross weight into the car which would cause ill handling. Do not use the set screws on the spanner nuts as they will make further adjustment very difficult. Once you have achieved the "Look" you want, then and only then should you move onto the alignment of the suspension.
Do it Yourself

Finished another alignment on a FF33 this week and thought I would share my thoughts with all of you. Before tackling the project I combed through all the threads on alignment in this forum to see if anything made sense and I could use any of the data to speed up the process. As those of you that follow my posts know, I have many years of alignment experience and in fact I was the first kid on the block to have a 4 wheel alignment system way back in the 70’s. It was a John Beam Visualiner which would later become FMC and it had a projector that attached to each wheel that projected an image forward to a grid in a cabinet. It was bulky but did a great job in the hands of a Good tech. Today all the shops use laser systems to do what we did with light but they still need a Good Tech to do the job right. So here is the Do It Yourself method that is as good as it gets and if followed there will be no need to waste your time and money at an alignment shop that will most likely scratch your car.

Here is what you will need to complete your alignment.
1 – 12’ tape measure
1 – Digital or bubble type inclinometer
3 – 2′ - 2 x 4s
4 – jack stands
25’ – string “kite string or thicker is better” Not Rope!
4 – 12” flooring tiles
1 – General duty bearing grease.
1 – Ratchet Tie down strap

Believe it or not you must start at the rear end!

Those of you with the standard 4 Link should verify that the diff is in squarely but since you have no panhard bar there is not much you can do. Because the upper and lower trailing arms are both nonadjustable you are at the mercy of Factory Five. Those of you with the 3 link option have the ability to adjust the pinion angle with the upper link and the ability to locate the diff from side to side with the panhard bar. Start with either system by trimming cross wise to common points on the rear of the frame and the diff and adjust as needed to get the diff on center. Once you have got that complete you can now move forward. Because Factory Five has indeed altered the supplied front suspension parts through the production run you should not assume that cutting of anything is required. The first hundred indeed needed some cutting but they did listen and made corrections. I can tell you that the 33377 and 78 lower control arms should be 13-1/2” from the zerk fitting to the end. Some guy’s that have big front tires and or want to run the car real low might want to cut the arms to 13-3/8” so you can get the camber to spec. The 33467 adjustable tube should be 11” from end to end. Make sure you have installed the 12257 pivot sleeves in the correct orientation as if you install them in the method that makes since they will be wrong! Look at the pictures, they basically both point outward.
Don’t cut the tie rods yet! I would suggest you adjust the front links to 15-1/4” from bolt to bolt to start with and the rear lower control arm to 18-1/2” from the zerk to the ½” attachment bolt. Your tie rod end should measure 4-3/4” from the zerk to end if not you may need to cut it latter if you have excessive toe in. What I have found is that the tie rods (male threaded part) need to be trimmed by ½” to keep the threads from bottoming out in the tie rod ends. Wow this is getting a little LONG!

OK you have set your suspension to the above specs and you have set your desired ride height we did on the previous post, now you’re ready to get down to business! Let’s assume you have a relatively flat garage floor to work on and room to move the car
back and forth about two feet. Take the floor tiles and apply an ample amount of grease between a pair of them and put the two greased sets in front of the front tires and roll the car on to them. You now have a set of Polish Turn tables! The grease goes between the tiles! No Mess! Now set the e-brake and now it’s time to center the steering rack. The supplied rack is about 3 ¼ turns if I remember but that makes no difference, just turn your car to the left all the way and then to the right all the way and count as you turn. Return the steering to the halfway point and mark the steering wheel top with some masking tape. Don’t worry about the steering wheel alignment at this time, we will get to that latter. Now take the tie down strap and secure the steering wheel down to the brake pedal so the steering cannot move. It is very important to get the rack on center as it is designed with a slight amount of crown on center giving the car some feel or drag at that point. Now take the jack stands and place one in each corner of the car about three foot back of the rear axle and three foot forward of the front spindles. Tie the string to the stands at 10-12” off the ground and stretch it across the stands down the sides of the car and then take the rear stand and move it towards the centerline of the car until the string touches the rear sidewall of the rear tire. Now take the front stand, with the tight string attached and move it inward till the string touches the front sidewall of the rear tire, be very careful and precise and only get the string to barely touch! Repeat that on the other side and you’re now ready to align the front suspension!

Take your tape measure and measure inward from the string to the front tire sidewall at the front and the rear and adjust the tie rod until that number is the same at both points. Repeat that on the other side and your toe is now set at ZERO. Now take your 2x4 and lay it on the ground crossways in front of your Hot Rod and lay your inclinometer on it and verify the status of your floor and remember if it is not perfect you will need to make that correction to the next procedure. Now take your 2x4 and run it up against the sidewall of the tire on center towards the moon and take a reading with your inclinometer. Taking into consideration some sidewall bulge at the bottom the inclinometer it should read ½ degree or .05. Adjust the rear lower control arm to achieve that number and leave the front tubes set at your original number as they for the most part only set your Caster. You will need to reset your toe as you make adjustments to the camber and keep it square until you have the camber where you want it. Once you have the camber set and the caster set based on the front control arm length you’re ready to set the toe. You will have 3-6 degrees of caster with this setting, so just make sure and set both at the same length to insure the car goes straight down the road. Now lengthen each tie rod about a 1/6 of a turn and check the toe numbers on each side. The front number should be 1/32” larger per side than the rear off the string. Now remove the steering wheel and center as needed with the splines or if not perfect compensate with the tie rods making sure to keep the toe at spec.

For those of you whom are concerned about Caster measurement we can get into that later. Believe Me, if you follow these guidelines a local alignment shop will not do a better job! Now Get Er Done!
Coloring

I started painting Thunder Rod finally and everything is perfect! The weather is in the 70's with not a cloud insight and the many hours of preparation is paying off! As those of you that have followed this thread know I use the Fiberglass Evercoat Metalworks system followed by their G2 Featherfil. I longboard the Featherfil with 180 grt. dry and then follow that with GenStar Select High Build acrylic urethane surfacer which I final sand with 400 grt. wet. At that point the substrate is ready for a thin coat of GenStar Select sealer followed directly by the GenStar Premium Basecoat. The GenStar product line is second to none and every product in the line is simple to use with easy mixing ratios and one reducer for everything. It was developed in Europe and has all the benefits of the Best European products without the Euro price tag. The base covers in 2 coats and lays down as smooth as a babies butt and after just 30 minutes I applied 3 medium wet coats of GenStar Premium Euro clear coat with a SataJet 1.3 mm tip. The clear coat levels out very good and shines like a mirror. Next week I will let ya know how it Buffs! I have sprayed everything on this planet and I am impressed with this product!
More painting! In reality the actual painting takes about 10 hours of in the booth time but of course that is 40 hours at the shop. I am very lucky to have an old friend that owns a shop with a Downdraft booth that I can use when it is available so I don't need a booth in my shop. Due to the fact there are so many parts to paint and everything should be painted separately off the car it requires special mounting of parts and lots of booth time. Here are some pics of the deck, hood and top all of which must be sprayed twice because of the inside & outside! Time taken here pays off in the End! When a guy says he can paint your Hot Rod for 10 grand, Run Away as fast as you can! Hell the materials cost $1500!
D.o.i.

If you have followed my posts over the years you would have read that I have been in the auto paint business since the sixties and owned collision repair shops and auto paint stores and spent some time as a paint Rep for a large domestic paint manufacture. During that time I have had the opportunity to paint everything from 737’s to bathtubs and I have witnessed a great deal of progress in the industry. The only negative I have scene is the rising Cost of the Goods!

That being said, unlike say, 10 years ago we now have many options to choose from, some good, some not so good! In 1990 I was introduced to Spies Hecker, a very good German paint line that was not easily available in the US but none the less worth the effort to locate. I was so impressed with its performance I became the Arizona distributor for the complete product line. I sold SH to High end shops and I sold a little unknown domestic industrial paint to industrial/manufacturing facilities. That line would later be known as Valspar and they would take on the giants of the industry with a product line that performed well and was priced within reason. After 10 years of success with those paint lines I Sold my paint business and went another direction. The point of this story is to give you a little History of sorts about how the business works in America.

Spies Hecker distribution in America would later be controlled by DuPont and you can only guess what they did with it and Valspar would become a Big player and even would buy House of Color and believe it or not, improve that already Great product line.

Last year while rounding up paint for a car I was working on a came across an old friend from the industry that had left Valspar and joined a team importing a product from over the pond that was developed by former SH technicians that was priced within reason and performed to the standards I was accustomed to. I could not wait to get my hands on it and anxiously awaited the opportunity to put it through its paces. ThunderRod was ready to paint and I was ready to Shoot GenStar for the first time.

I just finished the week of spraying and can tell you I am 100% Sold on the complete line! The price was Great, the mixing was simple, the application was user friendly and the results were Fantastic!

In the industry there is a term known as D.O.I. "Distinction of Image", it is a method of quantifying by percentage, the quality of the reflection viewed, 100% being perfect which is not achievable due to distortion and anything in the high nineties is incredible! The
unpolished next day shine and D.O.I. of the GenStar blew me away and I can't wait to polish it to Perfection. The camera flash does not do it justice.
Propped Up

The FF supplied trunk lid & hood prop rods and hardware are lacking in quality and design but many of us just figure out a way to use them just because they are bought and paid for! Having spent my fair share of time under the hood of HRL where I basically mounted the prop rods as per the manual I can tell you that mounting the rod to the backside of the hood is not a great spot! Heat rises and being right above the engine means it is always HOT! If not careful it can fall out of its catch and rattle on your air cleaner or intake, it’s just a Bad Location!

On this car I attached it to the firewall just above the frame downtube and installed the retaining clip on the top of the downtube making sure that the rod is parallel to the tube. I drilled a receiving hole in the hood just below one of the three rivnuts that hold the hood alignment pin bracket so the rod bottoms on the rivnut, it works well and looks good! Here are some pics!