

Intro

Concept 57

Chassis

Body

Fitting

Trim

Paint

Assembly

Links

Contact

When we set out to complete P-57, there was always one goal, written in permanent ink on the bottom line - we wanted the car to be in our booth for Corvette Carlisle in August.

We succeeded in having P-57 at the booth, along with throngs of readers and attendees stopping by to check out the car. They were not disappointed. The car is simply gorgeous, and the fact that it affords the comforts of a modern Corvette while staying true to its classic roots makes it that much more appealing. While we accomplished our goal of having P-57 at the booth, the real story is what it took to get it there, even after the wrenches stopped flying.





The early morning of August 22 found the team of Walden & Young busily wrenching on P-57. They were working out a myriad of nagging gremlins that took most of the night, and by early Monday morning, nearly all of the problems had been corrected or guarantined.

THE ENTIRE YEAR WRAPS UP WITH P-57 GETTING ALL THE ATTENTION

As mentioned before, P-57 was built from scratch. There was no chassis to restore, no body to disassemble and refurbish and, most of all, nearly every part had to be introduced to every other part, or at least finished and fitted to look good. That's the difference between building a car and rebuilding a car. On this day early in the morning, the car had been built, it was drivable and it was 3:00 a.m. The team of Walden & Young was headed for some well-deserved sleep before they loaded P-57 on the trailer for the Corvette Carlisle show. We originally thought of driving P-57, but because we didn't have a satisfactory shake-down period, decided not to risk it. It was better to have the car at the booth in Carlisle than to be halfway to Carlisle with a problem that we hadn't identified earlier.



One of the improvements over the original 1957 Corvette is the smaller-diameter steering wheel. It has all the feel of the original but it allows you more room between the seat and the wheel. With the power steering, turing the car is a dream, even with the smaller wheel.





1. The goal of P-57 was to have modern amenities while still holding true to the essence of a '57 Corvette. The interior has a nice touch of both old and new. Along with the power brakes and

ON THE MOVE: Once loaded onto the trailer, P-57 was on its way to Bowling Green, Kentucky, for a scheduled appearance and a Museum Xperience delivery on Tuesday morning. Henry Younger is a strong supporter of the NCM and he wanted to do a Museum Xperience, the used Corvette's equivalent of a Museum Delivery, to make completing the car official. P-57 showed up at the Museum Monday afternoon and P-57 was escorted into the Museum in preparation for Tuesday's delivery.

power steering, P-57 has power widows. Because the doors never had anything mounted in them, proper placement of the window assemblies took some time to ensure it was right, but it was worth it.

- 2. The American Racing five Spoke wheel gives P-57 a vintage feel, and the gray complements the gray coves beautifully. Going with a slightly higher tire than the Kumho Ecsta 215/50-17 would have given us a little more clearance at the bellhousing.
- 3. The indicator on the shifter boot plate may read that there's a four-speed, but P-57 has an RPM-saving, fuel-mileage-stretching overdrive under the floor, making the drive much easier on man and machine. A classic-style gauge set keeps tabs on the car's condition.
- 4. Henry and Dave Hill return from their trip in P-57. All smiles!

The Delivery Team took P-57 and gave him a cleaning, and then they positioned him in the number one spot in the Corvette Nursery where they do all the deliveries. These spots can be viewed on the NCM's Web site through several Web cams. It was great to see P-57 amid a long string of C6s that were prepared for delivery. The Museum has put a lot of thought into making this day special for owners of Corvettes, for either the R8C delivery or the Museum Xperience. When we arrived, we were greeted by Gray Cockriel and Bruce Robel. Bruce officiated the Xperience for P-57 and started off by emphasizing that this was Henry'sday at the Museum. That thought was backed up by the screen in the lobby. The Museum Xperience and the R8C Museum Delivery allow the owners to have their Corvettes presented to them inside the NCM, and they get a special, guided plant tour of the nearby Corvette Assembly Plant and the National Corvette Museum and a oneyear membership to the NCM. Most of all, they get to keep all the memories. We were working on a tight schedule, so we pulled P-57 out of the Museum for a few more photos, and then it was on the road again. We planned on making this a trip to Carlisle but, thanks to our friends at CM, we were invited to Virginia International Raceway to test drive the new 2006 Z06. While we were at the event, Dave Hill and the rest of the CM employees in attendance asked Henry to bring P-57 out for a little show and tell of our own, so just before the dinner at VIR's Plantation House, we pulled P-57 out of the trailer. Everyone fell in love with the car, especially Dave Hill. After studying the car for over an hour, Corvette's chief engineer was given an offer he couldn't refuse: Would he like to go for a ride? Who wouldn't? The smile he had on his face as they drove down the road was exceeded only by the one he had when they returned with him behind the wheel. Before Dave and P-57 parted ways, Henry asked Dave if he would sign one of the engine covers on P-57, and Dave graciously did.

The next day found us on the road again, this time headed directly for Carlisle. We arrived on Thursday and began to unload P-57. Almost immediately, we were asked, "Is that P-57?" Henry was all smiles, and rightly so. He and the entire Walden & Younger team had set a less-than-easy goal of building a car from the ground up in less than a year and bringing it to Carlisle. They succeeded, but we would be remiss if we didn't mention those who also helped so much to make this project a success. While the actual work of assembly was done at Walden & Younger's shop, many items were fabricated elsewhere.



CONTRIBUTORS TO P-57'S SUCCESS: Corvette Central's Concept '57 body facilitated the build, in that everything was new and no body panels needed replacing, as would have been the case with a used body. Also, the optional equipment like the gas shocks on the trunk lid and heavier hood hinges make the car more modern without taking away from the essence of Corvette. The body itself varies from a 1957 body in ways such that the floorboards are much thicker than the originals, helping to deaden road noise, but it can make shimming the car a little tricky when you have to move the body shims around. Also, being entirely new, there will be some adjusting of holes and drilling of new holes since nothing had ever been mounted on this body, or the body onto any chassis. There is no other way to do it since all the parts are meeting for the first time as the car is assembled.

The Street Shop chassis laid the rock-solid foundation for the rest of the car. Everything from the driveline, engine and brake/fuel lines came as part of the kit offered by Street Shop. We went with the LS6 in our car, but they can just as easily accommodate earlier small-blocks or whatever the customer wants. The major benefit of using this chassis for our car was how it expedited the build because Street Shop has done all the R&D work and knows what works and what doesn't. We didn't have the luxury of time to find out for ourselves. The fact that the frames are made out of square tubing and run very similar to where the original would be under the car makes the installation look factory and unobtrusive. Also, when we received the chassis, the entire C4 suspension had been rebuilt and was ready to go, a definite time saver.

Henry wanted P-57 to still look like a 1957 Corvette, right down to the interior. That's where Al Knoch came in and supplied the correct interior for the project, right down to the correct waffle pattern. The red stands out in a sea of black and looks gorgeous.

Of course, using component parts like the CM Performance Parts LS6 engine saved us some time because we didn't need to modify an original or build an engine. Also, when doing such a build intended to be driven, keep in mind that there's a warranty on that engine should the unexpected happen. That's worth just as much as the time savings.









5 A blend of old and new exists under the hood as well - all NOW THAT IT'S DONE: What is the finished car like to the modern amenities with a feel for yesteryear. That LS6 drive? It's very stable and it takes very little effort to do looks right at home under those Mi-designed, vintage-style valve covers.

Once of the drive of the drive effortless of the drive effortless. But the drive effortless of the drive effortless of the drive effortless.

6 The vacuum can for power brakes is always a problem with straight-axles. This Hydro-tech unit available through Street Shop fixes the problem of space and gives great braking. It also allows a clean installation.

7 After the drive, Dave signed one of P-57's engine covers - "48 years young! August 24,2005.2006 Z06 Premier @ VIR - Dave Hill" Thanks, Dave!

8 Henry in front of the NCM with P-57.

9 Because of the size of the exhaust pipes, Henry had the shop run the pipes under the rear of the car rather than through the original openings. He filled the holes with reflectors to disguise their appearance.

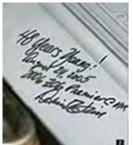
10 One of the benefits of the NCM Xperience or Delivery Program is that you are entitled to purchase special items reserved for members of the program. Henry's new windbreaker will have a black straight-axle and "P-57" embroidered on the front.

NOW THAT IT'S DONE: What is the finished car like to drive? It's very stable and it takes very little effort to do anything. Maybe too little. P-57 has power brakes and power steering, which makes the drive effortless. But you have to keep in mind that you're not in an original straight-axle when you hit the brake pedal in P-57, or you'll be peeling yourself off of the windshield. The brakes, even with the original C4-style calipers and rotors, are fantastic. You would have to install much stickier tires to make use of more braking power. The steering took some getting used to as well. Because of the power steering rack and pinion, there was very

of the power steering rack and pinion, there was very little feel in the steering wheel. Henry plans on adjusting the valving in the system to give a little more feedback in the steering wheel.

The Keisler transmission allows the car to enjoy a leisurely drive down the Interstate while just sipping on the gas. There was a little adjusting to do on the clutch and hydraulic throw-out bearing to get the clutch-pedal travel perfected, but for the time being, a remedy allowed us to get P-57 out and about. Henry intends to replace the original hydraulic clutch master cylinder with another unit from Keisler, which should correct the pedal travel.









11 After all the traveling, P-57 assumed center stage at the Cf booth during the Corvettes Carlisle event.

12 Henry and P-57, flanking a line of new C6s waiting in the Corvette Nursery in the NCM.

THE BOTTOM LINE: Now that the Carlisle trip is over, there are a few items on the list to make P-57 more enjoyable. Since P-57's body is heavier than an original '57 Corvette body, Henry is working with Street Shop on the proper springs/shocks combination to keep the rear of the car from sagging or dipping when hitting bumps, while still giving a satisfactory ride.

Also, a slightly taller tire sidewall would help raise the car up a little. As it stands, the bellhousing provided with the Keisler transmission is a bit too close to the ground to suit Henry's tastes. He'd like to keep the stance and the wheel's position in the wheel openings but raise the car up to give the bellhousing more clearance.

A question that we've been asked ever since we started P-57 was, "How much does it cost?" To be honest, until it was finished, we didn't know. Now we do. Henry reports that to do a car similar to P-57, you can expect to pay about \$130,000. Remember, the only things originally from a 1957 Corvette are the seat frames and the windshield. The more of a '57 Corvette you already have, the less you have to buy, and some of those parts start adding to the bottom line with a lot of zeros from the beginning. Also, we used a crate LS6 engine, but if you wanted to use a carbureted ZZ4 or similar engine, that cost comes right off the top, as much as \$10,000. With that said, we asked Henry the question probably on everyone's mind, "Was it worth it?" Take a look at the smiles on the faces of Henry and everyone else who had a chance to experience P-57 first hand and you'll get your answer. It's a great ride.

Thanks to Corvette Enthusiast - Written by: Andy Bolig

Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact



Intro

Chassis

Body

Fitting

Trim

Paint

Assembly

Links

Contact



Concept 57 - Chassis

OUR NEW PROJECT CAR FOLLOWS THE THINKING THAT WHAT'S NEW IS OLD AGAIN!



Readers will remember last year's project vehicle named Rex, which culminated in one gorgeous Silver Blue 1958 Corvette, feathered on the cover of the October issue of Corvette Enthusiast. This year, we're tackling another project vehicle, and we're going a little further back in chronological order, sort of.

We're combining forces with Walden & Younger Corvette Restorations, Corvette Central and Street Shop to build, in essence, a 1957 Corvette with a modern twist. Titled P-57, it will have the style, feel and appearance of a slightly modified '57 but, under that gorgeously styled skin, it will be as modern as anything on the road. In this, the first segment of a continuing story, we are starting at the frame, the base of the car, and we will be adding to that foundation until we have completed the car. Then, just like Rex, we'll be showing the car to our readers in a complete feature in Corvette Enthusiast. Unlike Rex, which was a numbers-correct project, the goal of P-57 will be to have fun, driveable car that has modern amenities with that classic styling so many Corvette enthusiasts love. Follow along and we'll get started mixing today's technology with yesterday's style.



1. The most basic element of the chassis is the frame. Street Shop starts with .120-inch (approximately 1/8") walled 2X4" square tubing which is then mandrel bent to Street Shop's specifications. One of the problems on these cars is the rear section of the frame interfering with the underside of the body. Street Shop has extensive R&D in creating a frame with a minimum of interference between the body and frame.

IN THE BEGINNING: Unlike Rex, where we had almost nothing to work with, we really did have nothing to work with on P-57. Other than a pile of square and round tubing and some discarded C4 suspension pieces, everything had to be created, and that's where Street Shop comes into the story. We wanted a solid foundation for our Corvette but we didn't even have an original frame to begin with, so Tray at Street Shop custom-built a complete rolling chassis for us that will serve as the foundation for our '57. Upon that foundation, we will be putting a Corvette Central Concept '57 body. Both chassis and body duplicate the original 1957 mounting points and hardware so the marriage should be a good one, but we'll have more on that later.







- 2 The frames are actually assembled in stages. The rear crosspiece is assembled in a specific jig to ensure that its measurements are correct. Also, all the welds inside the tubing are chased (ground out) before mandrel bending to ensure that the bends are always accurate and correct. The two round holes in the rear crosspiece are for the exhaust, which can accommodate a three-inch pipe with adequate clearance.
- 3 The front cross member is also preassembled. This is the basis for the entire front suspension. This needs to be correct or nothing else will matter.
- 4 The next phase of the frame-building process is to completely jig assemble the frame. This is where all the chassis mounting points are installed and checked for accuracy, as well as the frame's overall dimensions.
- 5 The frames are entirely MIG welded on the frame jig to prevent any distortion, and each frame is serial-numbered once it is finished.
- 6 The Street Shop frames are designed to use C4 suspensions, so the customer will need to locate a rebuildable chassis or Street Shop can provide one. All the ball joints and bushings get replaced.
- 7 The rear suspension gets rebuilt because there are some parts that are specifically manufactured for Street Shop to make the chassis operate correctly under their frames.
- 8 The last phase of the frame's construction is the upper brace. This fixture checks the additional points such as the engine mounts and the body mounts to make sure they are placed correctly.
- 9 We wanted modern motivation, so P-57 will receive a 2004 LS6 replacement motor from Conley Smith Chevrolet in Stevenson, Alabama.



- 10 Tray from Street Shop is preparing to mate the LS6 engine to the Keisler Automotive Engineering-supplied Tremec TKQ-500 5-speed transmission via the Lakewood bellhousing designed for this purpose. The 5-speed will give us a lower first gear while still providing overdrive for highway cruising and we still get to row through the gears in a classic Corvette!
- 11 Since we're not doing a restoration, we could take some liberties with the wheel/ tire combination. P-57 will ride on a set of American Racing Torque-Thrust Classic wheels measuring 17X7-inches front and rear. Tray reports that eight-inch wide wheels will fit but it's very tight. Kumho Ecsta 215/50-17 tires keep the ride quiet and comfy.
- 12 While many of the chassis components are factory GM parts, there are several pieces specific to Street Shop that make the suspension work together. Chassis components are available powder-coated or bare. While other colors are



available, black is the standard color for the components.

13 Street Shop can provide either solid-axle or IRS rear ends with their frames, and Dana 36 or 44 differentials are available, but Tray emphasizes that if you are using a standard, opt for the Dana 44 differential. Also note that all the brake and fuel lines are CNC formed to ensure consistency and fit. Street Shop also uses only the 1989-and-up rear suspensions for several reasons, one being the improved and easier-to-accomodate emergency brake assembly.

The bottom line: We're not trying to mislead anyone into thinking that you could build a modern '57 Corvette for less than what you could probably find an original one, but when it's all said and done, you will have a '57 Corvette, in concept, that will include all the cues that you personally find important. In the case of P-57, it will have all the modern amenities that make driving today's cars so enjoyable, along with the design and styling that make driving a classic Corvette such a kick. With that said, let's get started.

Thanks to Corvette Enthusiast - Written by: Andy Bolig

<u>Intro</u> | <u>Chassis</u> | <u>Body</u> | <u>Fitting</u> | <u>Trim</u> | <u>Paint</u> | <u>Assembly</u> | <u>Links</u> | <u>Contact</u>



Intro

Concept 57 - Body

Chassis

A ONE-STEP PROCESS TO GETTING A BODY FOR OUR '57

Body

Fitting

Trim

Paint

Assembly

Links

Contact





The concept behind P-57 was to build a modern '57-style Corvette, and not to rebuild one. What that means is that we are basically building an entire vehicle from mostly new parts. In the last installment, we covered the Street Shop chassis buildup. Now we need a body to drape over P-57's gorgeous chassis. While finding an original body and rebuilding it is an option consideration, we chose to go with Corvette Central's Concept '57 body for P-57.

The availability of the pre-assembled Corvette Central body makes locating a useable donor body unnecessary. The body is constructed from all new parts and would not need reconstruction. This greatly shortens the build timeline for the project and the amount of labor required to properly rebuild a used body. While a Concept '57 body will fit on a stock frame and is designed to utilize factory parts, there have been a few modifications to the body that allow for upgrades. Of course, these are options, and you can still get the Concept 57 body as an original if you desire.

BUILDING A BETTER BODY: Let's face it, there have been improvements made since Chevrolet first started building the straight-axle Corvette. The Concept '57 body uses Owens Corning fiberglass mat and Ashland Chemical Co. resins for increased flexibility, which will help reduce cracking and aging of the body during use. The adhesives used to bond the surfaces together have 50-70 percent elongation properties combined with 3,500lb per square inch shear strength, making the bonds on this new body far more flexible and stronger than the original bodies. All the original hinges can be used on the new body, but Corvette Central also offers gas-operated trunk hinges and an improved hood hinge that can easily replace the original style if the customer so desires. Also, the bodies are factory assembled on a jig to prevent any warping or distortion, and all the primary mounting hardware locations are factory machined or clearly marked on the body so there is no guesswork when fitting the pieces together. One of the major benefits of using a new '57 body is that the inner fender wells can be ordered in original or modified form to allow for modern independent front suspensions. The bodies wear an ivory gel-coat and are ready for preparation and finish painting.

Another benefit to using the Concept '57 body is that it automatically enrolls you in Corvette Central's Start-to-Finish program, which can save you considerable dollars over the life of the project. And, you can purchase the exterior chrome kit (PN 750058) from Corvette Central and save a bundle over purchasing all the parts separately.

- 1. The headlight mounting flanges are bonded into the hody as well as the core support. You can see the X-bracing through the grille opening; which comes premachined to allow fit of the original grille trim.
- 2. This is how the body is shipped. The doors are in the two cardboard boxes sitting on the floorboards. The hinges are already mounted and the entire body is shipped on its own platform, which also serves as a dolly for finishing and painting of the body.
- 4. The body will only be as good as the forms from which it comes. The molds for the Concept '57 one-piece body were designed for precision, long life and repeatability of dimensionally correct pieces.
- 5. For assembly, the body is placed on a jig to ensure that everything fits properly. The door post/hinge supports and latch plates are factory installed on the jig and the major door hardware locations are pre-drilled.
- 3. The floor pan, rear wheel wells and trunk floor, and outer skin of the body are each molded as one piece, eliminating the 6. When we picked up the body for P-57, we simply had to roll

bonding seams of the originals and allowing a more even paint finish (a concern only if originality is an issue). An enlarged transmission tunnel provides clearance for most GM manual or automatic transmissions.

it out and onto the trailer. Having a set of wheels to place the body on made the short trip much easier, and in just a short time, we had an upgraded, pristine '57 body to put on our chassis. Definitely a time-saver over restoring one.

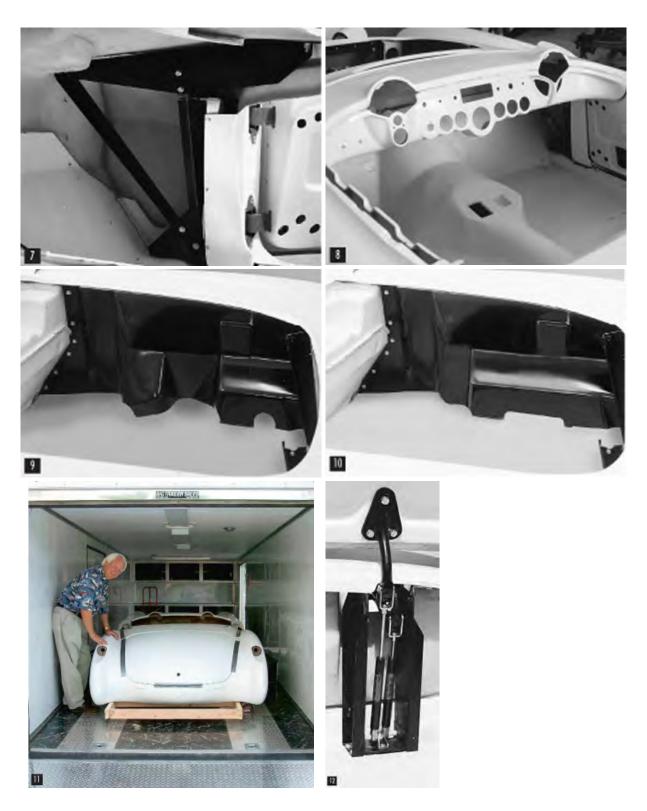


7. The hinges and supports for the doors are already installed, as are the steel rocker panel and underbody reinforcements. They are all factory riveted and bonded just like the original '59-'62 design.

8. When the body is shipped, the dash panel is shipped separately so the customer can access the area behind the dash more easily. The customer can then mount the dash panel when they are ready.

 $9.\ \&\ 10.$ Depending on the style of suspension used, the customer can choose the original style inner fender or the custom style that allows more room for the control arms on a newer style front suspension.

11. Here's Henry Younger of Walden and Younger Corvette
Restorations, proudly admiring the body for P-57. As you
read this, he'll be busy at work fining the new body to the
chassis. We'll have more on that in our next installment on
P-57.



Thanks to Corvette Enthusiast - Written by: Andy Bolig

Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact



Intro

Concept 57 - Fitting

Chassis

Body

Fitting

Trim

Paint

Assembly

Links

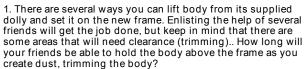
Contact

The process of building a car from literally nothing is quite a daunting task. We've been working together with Street Shop, Inc. and Corvette Central, who've been providing the necessary hard parts as a foundation for P-57.

We covered the chassis and the newly fabricated body in parts one and two (January and March '05 issues of CE), and in this installment, with the help of Walden & Younger Corvette Restorations, we'll cover bringing the two together, giving us a glimpse of what P-57 will finally become.

Street Shop, Inc. .







- 2 We didn't want to move the body around too much, so the $\,$ chassis for P-57 was placed on a set of car dollies and slid sideways under the body. Lowering the body slowly and watching that nothing catches as it is lowered, Adrian Walden and Charles Younger begin placing P-57's body on the frame for the first time.
- 3 The one area that needs trimming for a proper fit is where the upper control arms go through the inner wheel well. Here Adrian and Charles have marked how much



material needs to be removed, and marked the edge with masking tape. A vacuum can help keep the dust down considerably when cutting fiberglass and, as always, wear a mask and long sleeves when cutting fiberglass.

4 A small section needs to be trimmed from the front of the spare tire well to provide clearance for the tie rods. On a stock straight-axle chassis, this is typically not necessary. Street Shop, Inc. has tightened up the chassis to keep the necessary trimming to a minimum. A new flat panel will be inserted in place of the removed material to seal the trunk from the elements.

5 With the trimming complete, the engine nestled nicely up into the engine bay. The LS-style engines look great in the engine bay of straight-axles, and they run great too!

6&7 The body kit comes with mounting hardware to secure the body to the chassis at all the original locations. Proper alignment and shimming of the body is imperative before any final fitting of body panels can be done. One thing that you will immediately notice is the increased thickness of Corvette Central's Concept '57 floor. It's considerably thicker than an original for more strength and sound deadening, both a plus when building a driver.

8 Much like original Corvettes, door alignment and body shims go hand in hand, so the next step before we could proceed was to install the doors onto the body and check the gaps.

9 The doors come pre-drilled and fitted for the hinges. They are bare, with no latches, trim or window tracks. We'll be addressing that in a future issue.

10 Once the body is securely fastened to the frame and the doors are properly aligned and gapped, the operation and fit is as good as (if not better than) the originals. Exact final shimming of the body will be done when we get the windshield frame and door window post trim installed.









11&12 The steering assembly is another consideration when positioning the body on the chassis. P-57 is using a rack and pinion steering in place of the original steering so we have more flexibility than an original-style installation. Either way, a hole needs to be drilled through the firewall to allow for the column to get into the engine compartment. We used the metal column support bracket as a template for drilling the holes.

13 The dash was temporarily installed for installation of the steering column and held in place with clamps. Again, the removable dash will be a huge asset when it comes time to install all its components and the accompanying wiring.

14 Flaming River has all the U-joints and shafts necessary for any application. The shafts are available in various lengths, but before cutting and final fitting, make sure that the column is exactly where you want it. That is best done with the steering wheel and seating arrangements in the vehicle so you will know the best placement of the wheel for driver comfort. We'll be handling that task a little later.

15 This is P-57 so far. Even at this point, the car looks great.



Thanks to Corvette Enthusiast - Written by: Andy Bolig / Photography by: Walden & Young Corvette Restoration

Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact



Intro

Concept 57 - Trim

Chassis

Body

Fitting

Trim

Paint

Assembly

Links

Contact





When we started with the brand new Concept '57 body by Corvette Central, we were several steps ahead simply because we didn't need to restore the body. We only needed to ready it for paint.

Paint is one of those items on a car that, while it's paper-thin when applied on the body, if the surface underneath the paint isn't properly prepared, the paint's appearance can go from stellar to stagnant in a heartbeat. Not only does the surface need to be ready but also the body panels need to fit properly to prevent paint chips and scrapes at the seams. Another aspect that is often overlooked is fitting all the required trim onto the vehicle BEFORE the paint is applied so that any necessary corrections can be made without having to re-do the painting process. It's much cheaper to make a change before the shiny surface is applied.

P-57 is currently at the stage of fitting all the required chrome trim and other necessities onto the body so that any corrections that must be made will be apparent now rather than later. Many of the trim parts are available through Corvette Central as their Exterior Trim Package (PN 750058), which not only supplies you with many of the necessary parts while ordering only one part number but you also save money purchasing them as a package!

The guys at Walden & Younger Corvette Restorations have been hard at work fitting all the body panels, chrome trim and various brightwork so that when P-57 goes to the spray booth, what's under that shimmering Onyx Black paint is as solid and smooth as it appears and will stay that way for years to come.



modifications. The original-style cover provided with the body will make this area look great once it's been painted.

- 2. Quanta supplied the fuel tank for P-57 and then it was modified to allow for the newer fuel injection on our LS6 engine by Rock Valley. They installed the intank pump assembly with a line out and a vent line for the fuel injection.
- 3. After fitting all the body panels like the doors, hood and rear deck lid, it was time to start installing the trim. Since we didn't have a donor car to pick parts from, all our pieces had to be purchased. This can be quite expensive, but if time is on your side, you should be able to find usable examples at the larger Corvette swap meets.

4 One of the styling cues found only on the '56 and '57 Corvettes are these fender scoops. Corvette Central is now offering. scoops. Corvette Central is now offering these for both fenders and appear to be correct replacements. They are also included in the Exterior Trim Package.

421010

421011

2 - 491090

holes need any adjustment after installation. While it takes a little more time to trial fit everything, in the end, it will make for on easier project.

	Actorior from Facility of the Control of Con
2 - <u>441108</u>	1956-1957 Headlight Ring
2 - <u>201101</u>	1956-1957 Front Crescent Bumper
L - <u>281030</u>	1956-1958E LH Door End Cap without Hole
R - <u>281030</u>	1956-1958E RH Door End Cap without Hole
Pair - <u>431036</u>	1957L-1958 Hardtop Receiver Molding
2 - <u>291208</u>	1957-1960 Side Flag Emblem (Show Quality)
2 - <u>491100</u>	1956-1957 Tail Lamp Assembly
<u>201130</u>	1956-1957 Rear Exhaust Chrome with Insulation
<u>491150</u>	1956-1957 License Lamp Assembled with Fasteners
L - <u>201120</u>	1956- 1957 LH Rear Inner Horizontal Bumper
R - <u>201120</u>	1956-1957 RH Rear Inner Horizontal Bumper
<u>331226</u>	1956-1961 Side Molding Mount Kit with Nut & Washer
2 - <u>291101</u>	1956-1 957 Front/Rear Emblem
2 - <u>291102</u>	1 956-1 957 Front/Rear Emblem Bezel
2 - <u>651005</u>	1953-1957 Wiper Arm Chrome Spacer
<u>281010</u>	1956-1962 Door Handle Assembly
2 - <u>441002</u>	1956-1 957 Headlight Bucket
<u>421004</u>	1953-1657 Grille Oval
<u>421008</u>	1953-1957 Grille Oval Mount Retainer Plate
<u>421006</u>	1953-1957 US Mode Grille Teeth with Mounting Hardware

1953-1 957 Grille Bar

1953-1 957 Grille Mounting Bracket 1953-1957 Parking Lamp Housing with Wire and

Exterior Trim Package Includes

6. One of the nice things about Corvette Central's '57 body is that the original pieces will work just like an original '57. While the wiring for the car will be done at a later date, drilling the holes for the courtesy light switches is, like everything else, best done before paint covers everything.

	Brocket
2 - <u>491095</u>	1953-1 957 Parking Lamp Lens Bezel
<u>491096</u>	1953-1957 Parking Lamp Bezel Barrel Nut
2 - <u>491097</u>	1953-1962 Parking Lamp Lens with Gasket
<u>371101</u>	1953-1957 Parking Lamp to Body Gasket
2 - <u>201106</u>	1953-1957 Front License Bumperette
<u>201107</u>	1953-1957 Front License Bar Guide Stamped
<u>201104</u>	1953-1957 Front License Bumperette Bolt
201109	1953-1957 Front License Bumperette Support U Bracket
<u>281019</u>	1956-1962 Window Front Felt Runner with Stitching
<u>281002</u>	1956-1962 Front Window Running Mount
<u>281008</u>	1956-1967 Rear Window Runner Liner
<u>281037</u>	Door Outer Reveal Molding Mount
<u>331120</u>	1956-1957 Wheel Well Molding
L - <u>331125</u>	1956-1957 LH Upper Fender Side Chrome Molding
R - <u>331125</u>	1956-1957 RH Upper Fender Side Chrome Molding
<u>331121</u>	1956-1961 Side Molding Ton Door
L - <u>331231</u>	1956-1961 LH Lower Fender Side Chrome Molding
R - <u>331231</u>	1956-1961 RH Lower Fender Chrome Molding
L - <u>331232</u>	1956-1961 LH Upper Door Side Chrome Molding
R - <u>331232</u>	1956-1961 RH Upper Door Side Chrome Molding
L - <u>331233</u>	1956-1961 LH Lower Door Side Chrome Molding
R - <u>331233</u>	1956-1961 RH Lower Door Side Chrome Molding
	1953-1957 Front License Bumperette Support Tube
	Inner and Outer Deluxe Garnish Molding



- $7\ \mbox{Charles}$ Younger is installing the cove trim included in the trim package from Corvette Central.
- 8 Everything on the rear of P-57 is included in the trim kit. The exhaust chrome, taillights, bumpers and Corvette emblem are oil standard for a '56 or '57 and P-57 will also wear a set of Fuel Injection emblems even though the fuelie unit on our car is only a year or so old.
- 9 Marking out and drilling for the vertical bumpers is much easier (and less nerve wracking) if done before painting.
- $10\,\mbox{The}$ grille is supplied in the kit but must be assembled. The kit also contains the oval that surrounds the opening and the grille mounting kit necessary to install the grille.
- $11\ \text{You}$ will have to cut openings for the door latches and the lock mechanisms on the doors and the trunk. Corvette Central offers correct lock sets that are keyed alike for the trunk, glovebox and doors with the correct keys included.

12 We needed to locate a windshield frame since there is none currently available in the aftermarket. We purchased ours from Grossmueller's Classic Corvettes but if you already have a frame, Corvette Central can repair broken tabs at the mounting points and they also have correct, dated windshields or, you can opt for a tinted unit like we installed in P-57.

13 As more of the trim work was installed, P-57 really started to look more like a car. With the dash and the Stuart Warner gauges installed, the cockpit is starting to look inviting!

14 Part of the body panel alignment process is to adjust all the latches and to ensure that items like the hood and doors will operate properly once the vehicle is painted. Also, you can see the new styled hinges that we opted to use on P-57. They are stronger than the originals, but a hole needs to be made for their installation. The '57's body is manufactured to accept the original style if you prefer.





15 With all the trim fitted, P-57 is standing tall and proud. Now it's time to go back into the shop and take it all back off, but at least we'll know that when it comes time to install it all after painting, it'll fit!

16 We caught P-57 owner Henry Younger sitting behind the wheel making engine noises, anticipating the day he can finally drive P-57. We let him get out and regain his composure before we snapped the photo.





Thanks to Corvette Enthusiast - Written by: Andy Bolig / Photography by: Walden & Young Corvette Restoration

Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact



Intro

Chassis

Body

Fitting

Trim

Paint

Assembly

Links

Contact



Concept 57 - Paint

A PAINTED P-57 - Our Project Car Really Starts To Shine



Progress on P-57 has been steady, but few things give the appearance of progress like putting paint on the body. While there are almost a million reasons to get some paint on the body quickly, there are twice as many reasons not to.

There's an old saying that paint covers a multitude of sins, and there's a good reason they say that. You can't see through paint, at least not until the ink on the check is good and dry and it has cleared the bank. Then those things you couldn't see will become very obvious. That is why the team at Walden & Younger has been so committed to getting everything under the paint right before applying the shiny stuff. In the last installment, we covered the steps to insure that all the bright work will fit P-57 without having to do any touchup after the car is painted. With all the holes in their proper locations, the surface of the body must now be prepared to ensure the paint's longevity.

BEFORE THE BASECOAT: For P-57 we used Dupont's Chroma-system, which we received from C-P Auto Parts in Rainsville, Alabama. We started with DuPont 2K Urethane Primer-filler over P-57's original gel-coat, which was then smoothed out and covered with Dupont's 2K Premier Sealer. This was provided to seal off the body in preparation for the basecoat, and the shaded sealer also helps in the color coverage with the basecoat. Then two coats of DuPont Chroma Premier Base Coat (black for the body and silver for the coves) were applied and covered with DuPont Chroma-Clearcoat. To contrast with the black exterior, we covered the trunk, dash and interior in Venetian Red in single-stage DuPont Chroma Premier paint. We added a flattening agent when the interior was painted to slightly reduce the shine on the dash and surrounding surfaces. They definitely stand out in that sea of black. Once the paint fumes had cleared and the paint had a chance to cure, it was time to pull P-57 out of the spray booth and take its new paint job from shiny to superb by rubbing out that fresh finish.







1 While the body was off, we took the time to clean the chassis prior to additional scheduled work.

2 The GM-supplied engine wiring harness and computer laid out for trial-fitting to engine. Note the tags - each wire was labeled, simplifying hookup.

3 Charles Younger and Kenny Sloan trial-fit the engine harness and determine how best to run the wiring for keeping it neat on top.

BEFORE THE BODY: While the paint work was being completed on P-57, it was the perfect time to do some final wiring of the engine compartment. The GM-supplied ECM and wire harness for the engine was laid in place, since it would be much easier to place the wires without leaning over the freshly painted fender. Since we are building P-57 from scratch and using non-stock components, the wiring harness is generic in nature and must be fitted to the application, as is the case with many of the components that will combine to make the completed car. It's worth the effort, but definitely a consideration if you are the type of person who usually lives within the pages of the original AIM manuals.

While the paint work was being completed on P-57, it was the perfect time to do some trial wiring of the engine compartment.



4 The removable dash panel (a benefit of Corvette Central's Concept '57 body) needed to be molded into position in preparation for painting. Again, you don't want to be doing any fabrication after the paint is applied.

5 Adrian Walden applying the DuPont Urethane primer to the deck lid.





6 Adrian applying the red to the underside of the deck lid. P-57 will have the Venetian Red interior, so the lower dash, convertible top storage area and trunk will be painted red as originally. The red is single-stage paint with a flattening agent used on the dash to give a semi-gloss appearance.

7 Adrian is masking off the door cove to paint the cove silver. Sealer and primer have already been applied.

8 Adrian applying primer to the dash areas of P-57.

9 Adrian getting ready to mask off the fender cove for painting. The fender and cove have already been sealed and primed for paint.











10. Adrian painting the trunk area red. Note the masking to keep any foreign paint spray from settling on the primer.

11. P-57 is now painted. The beautiful black paint really makes the Venetian Red of the trunk and dash stand out. The bubble in the spare tire area is where we cut it for access to the rear suspension parts. The piece was inverted and fiberglass flanges were added to keep the elements out of the trunk area.

THE BOTTOM LINE: At this point, we have a freshly painted body that looks great and a gorgeous frame that's just begging to be covered with it. Taking the time to trial-fit everything before we got to this stage helped ensure that they both stay that way. In our next installment, we'll be looking at the steps necessary to mate the two components together, and we'll be preparing P-57 for its debut in the Corvette Enthusiast booth at Corvettes at Carlisle in August.

Thanks to Corvette Enthusiast - Written by: Andy Bolig / Photography by: Walden & Young Corvette Restoration

<u>Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact</u>



Intro

Concept 57 - Assembly

Chassis

sis

Body

Fitting

Trim

Paint

Assembly

Links

Contact





With only four weeks to go until the formal unveiling of P-57 at this year's Corvette Carlisle in Pennsylvania, the crew at Walden & Younger Corvette Restorations is burning the midnight oil, making sure that everything is in placeand P-57 will be looking its best.

There are so many variables with building a Corvette from the ground up, especially when you consider that P-57 is in all actuality, a new car. The chassis came from Street Shop, Inc. while the body came from Corvette Central. Starting with basically nothing and building a '57 Corvette meant that we needed to find everything else that was to go on, in or under that body and chassis. If we had a donor car, there would have been scores more parts ready at hand but, instead, everything must be sourced; every nut, bolt, trim piece, etc.













1 Because P-57 will have many systems that GM never even dreamed would wind up in a 1957 Corvette, and many of them are electrically powered, we opted to use an aftermarket fuse panel. The new fuse box has more circuits to allow for items like the electric fuel pump. We mounted it behind the driver's side kick panel on the firewall. We allowed enough wire to pull it out for troubleshooting if needed. We started with the rear wiring and ran everything forward to the engine and headlight harnesses, and tested each area as it was completed.

2 The harness came with color-coded and labeled wires cut to a generic length. They will be trimmed to fit and then laced together as a complete harness once routed. Being a custom-fit harness, there may be terminals that will need to be replaced to match the specific application. The instructions are good, but written for experienced wiring people. This harness took longer than if we'd just bought a finished '57 harness, but we wanted to upgrade the wiring capabilities for P-57 and also use the modern fuse plugs rather than the old glass fuses.

3 Charles Younger routed the rear taillight, license plate lamps and gas tank wires through P-57 and covered them with corrugated tubing. Positioning and fastening the wire to prevent chaffing or other damage is as important as what color wire to use.

4 The fuse panel was mounted under the dash, and here Charles is terminating all the wiring that goes to items mounted in the dash. Like routing the wires elsewhere throughout the car, this is much easier if done before the interior is installed.

5 While Charles works on the electrical system, Adrian works on the electric windows from Corvette Central. The doors were not pre-drilled and transferring holes from one door to another didn't provide the correct mounting position. We had to test several places before we got it in the proper place for operation.

6 Before the removable body panels were installed onto the body for the last time, the weather-stripping was installed. Here, Dannie and Adrian Walden are installing the weather-stripping onto the bottom of the convertible top deck lid.

Another factor in such a build is that we are not "restoring" the car to any configuration near original. That means that items like the wiring, hoses, lines and any part that veers from the original configuration must be contemplated and fitted to make it look as close to original as possible, or make it operate with the original parts included in the package. It is much easier to reinstall a bolt into the same hole that it came out of than to locate the part that the bolt holds, mark where the hole needs to be, drill the hole, install the bolt and tighten it. While this illustration of the bolt may seem overly simplistic, just think of how many bolts there are, holding items like door handles, latches, windshields and other parts onto the vehicle. Also, all the lines, wire harnesses, exhaust and such will also need to be thought out. The closer you are to the original, the less variation will be present, but it will still be there, if just to a lesser degree.















The guys at Walden & Younger were busy installing the wiring and finish-fitting the components under the dash of P-57. This month, the body went on the frame for the last time and the bolts holding down the body got Locktite. The car began getting its red interior parts supplied by Al Knoch Interiors. The interior really stands out from the sea of black on the exterior.



7 As all the ancillary components were coming together, the chassis was rolled under the body and the body was installed and bolted down permanently.

8 Charles installing the auxiliary cooling fan for the radiator as well as the air conditioning condenser. We were mounting the fan as a pusher in this photo, but had to change it to behind the radiator with a slim-line fan to ease mounting both the condenser and fan on the radiator. The clearance between the fan and the front sway bar requires a slim-line fan.

9 Charles and Adrian trial-fitting the new aluminum radiator to the core support in P-57.

10 Installation of the dual-line master brake cylinder with the power hydraulic brake booster. This was used in lieu of a vacuum system as it's more compact and functional for the limited space in P-57.

11 Adrian and Dannie installing the newly covered original dash pad to complete the dash area of P-57.

12 Close-up of the Al Knoch Interiors seat bottom springs sitting on the seat spring frame, waiting to be covered.

13 Mervil Lands, Adrian Walden's father-in-law, putting the final clamp on the hog rings for the newly upholstered seats that will go into P-57.

14 The springs and frames were covered with original-style red skins. There were only two color options available for '57 Corvette interiors, Beige and Red. We felt that the red would definitely stand out against the black exterior.

Infusing newer technology into a car while holding true to the original design can be a daunting task. Upgraded components like the power windows, track-driven wipers and air conditioning will make driving P-57 much more enjoyable, but it doesn't make the task of getting everything to work properly under deadline any easier. Focusing on the end result and not the current-day trials is the best way to see any issues through to completion; as the old spiritual goes, "one day at a time."

Thanks to Corvette Enthusiast - Written by: Andy Bolig / Photography by: Walden & Younger Corvette Restoration

Intro | Chassis | Body | Fitting | Trim | Paint | Assembly | Links | Contact