

PETER SAGAN'S
1970 CHARGER R/T
PST/572

BUILD PLAN

In the summer of 2013, two powerhouses from two different worlds collaborated to create one of the most amazing street machines ever built. This is a detailed account of the creation of Peter Sagan's 1970 Dodge Charger R/T dubbed "PST/572".

In May of 2013, World Champion Cyclist, Peter Sagan, approached Scott Tedro, owner of world renowned automotive restoration facility Mascar Classic Resto-Mods, to build him a classic Dodge Charger that was inspired by the Dukes of Hazard's General Lee. The Charger was slated to resemble the General Lee's outer appearance, but to have some moderate performance, comfort, and reliability upgrades over the stock General Lee. Some of the planned upgrades included a modern 5.7L Hemi with EFI, automatic transmission, disc brakes, power steering, and air conditioning.

The planned restoration was very straight forward, and the upgrades that were planned were impactful but modest. Once the general build details and price were agreed upon by Peter and Scott, Scott's team at Mascar began the hunt for a 1970 Charger that was worthy of the restoration that was planned.



A GAME CHANGER

After contemplating the direction of the build, Peter had an inspiration. He saw a Dodge Charger in one of the Fast and the Furious movies. It was absolutely magnificent, captivating, compelling, and aggressive. That is what he wanted. He wanted a unique car that captured the attention of everybody who came in contact with it. He called Scott up and said he'd like to go a different direction on his Charger. Peter sent a picture to Scott and described his new vision of a Fast and Furious inspired Charger. Scott loved it. Scott explained that the car Peter fell in love with was a movie car, and that it would take significant safety and structural upgrades to achieve a safe and drivable version of the inspiration car. These additional upgrades would also double the estimated cost and build time (from 1yr. to 2 yrs.). Once Peter understood and agreed to this dramatic upgrade, Scott immediately commissioned an artist rendering of Peter's concept by world famous concept artist, Steve Stanford. Once the new concept was agreed upon, the team at Mascar was ready to build this one of a kind automotive masterpiece. Along with the existing Mascar team which consisted of Kenny Maisano (Master engine builder and Co-Owner of Mascar) and Adam Stankus (Lead Fabricator and Restoration Specialist), Scott brought in Bret Maxwell, industry expert and master craftsman who has the pedigree to take this Charger from dream to reality.



ORIGINAL 1970 CHARGER BEFORE RESTORATION

- A 1970 Charger was purchased on June 3, 2013 from Simi Valley, CA.
- The car was complete and original.
- The vehicle was a numbers matching car.



VEHICLE DISASSEMBLY

- The entire vehicle is disassembled.
- Every nut, bolt, subassembly, and component must be disassembled.
- Each item is meticulously photographed and cataloged for future reference.
- Disassembly: 120 Hrs.



MEDIA BLAST & ETCH PRIME

- After disassembly, the body shell is mounted on a rotisserie to gain access to all areas for media blasting.
- All body panels are stripped to bare metal by blasting them with compressed air and various types of media.
- All bare metal components are immediately coated with an etching primer to seal out any unwanted moisture or contaminants that may begin to attack the bare metal.
- Rotisserie Mounting and Etch Priming: 24 Hrs.



SHEET METAL REPAIR

- Blasting the panels revealed rust in the roof, passenger quarter panel, rear deck filler, and trunk floor.
- All rusted panels were removed at the factory spot welds and brand new panels were re-welded at the factory locations to maintain structural integrity.
- The vehicle was laser measured and pulled until the body was perfectly straight.
- Sheet Metal Repair: 200 Hrs.



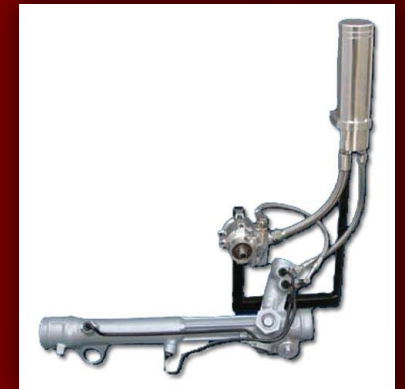
SUSPENSION

- A complete custom air ride suspension was selected to accommodate the desired and necessary safety, handling, and performance characteristics of the PST/572.
- Extensive frame and chassis modifications were required to accommodate the necessary suspension.
- Control Freak tubular front suspension and 4-link rear suspension were used as the foundation for the custom air ride. This is a dramatic performance and safety upgrade over the original suspension.
- Ride Tech Shockwaves with a RidePro Digital Management System with the LevelPro Upgrade keeps the vehicle at the proper ride height while driving and allows the car to drop low for show.
- Dual Viair 380C compressors supply the air for the system.
- Fab 9 rear end with a Detroit TruTrac & 3.00 gears
- Fabrication and Installation: 300 Hrs.



STEERING AND BRAKES

- Because Safety and reliability were the top priorities of this build, modern high performance steering and braking components were selected.
- For steering, a brand new power rack and pinion, connected to an Ididit tilt steering column with Borgeson universal joints was chosen. Hydraulic power is supplied by a GM Type II power steering pump. Gotta Show stainless hydraulic lines were used to connect the system. A Billet Specialties custom black anodized Outlaw steering wheel sits atop the Ididit column.
- Mascar chose a 13" Wilwood brake system w/ drilled and slotted rotors at all 4 wheels . The fronts use a 6 piston caliper, and the rears use a 4 piston Caliper. A custom black powder coated ABS Power Brake Electric High power master cylinder was used to supply hydraulic pressure. All brake lines were custom hand formed out of steel. This set up is estimated to decrease the 60-0 MPH stopping distance by 20%.
- Fabrication and Installation: 100 Hrs.



ENGINE

- To achieve the look and performance that Peter envisioned while still keeping safety, reliability, and drivability as priorities, Master Engine Builder, Kenny Maisano, recommended building a larger displacement (572 cu. in.), blown, EFI engine. This would also allow Peter to have all of the creature comforts he's accustomed to in a vehicle. Some of the many features are listed below.
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| <ul style="list-style-type: none">• Mopar Performance Block• Edelbrock Victor Aluminum Heads• Dart 8:1 Custom Pistons• Billet 4250 Crank• H-Beam Billet Rods• Custom Cam Motion Billet Roller Cam• Custom Aluminum Oil Pan• Custom T&D Rocker Arm Shaft Assemblies• Indy Blower Manifold |   | <ul style="list-style-type: none">• Custom Smith Bros. Push Rods• Dual Accufab Throttle Bodies• 871 BDS Blower• Al's Blower Scoop• Billet Specialties TruTrac Serpentine System• Force Fuel Injection System• Holley HP EFI Management System• Horsepower @ 9 PSI: 1,000 HP• Torque @ 9 PSI: 1,200 lb-ft |
|--|--|--|

TRANSMISSION & DRIVELINE

- Transferring all of that power to the pavement safely and reliably requires a transmission and driveline that are a notch above the rest.
- The crew at Westminster Performance Transmissions built a custom 727 transmission to get the job done.
 - Billet 2500 RPM high stall converter
 - Shift kit
 - 300M input shaft
 - 4140 chromoly billet hub
 - 4 pinion steel front planet & 6 pinion rear planet
 - Billet servos
 - Modified pump for larger gears
 - Black powder coated case
- A B&M Stealth Pro Ratchet Shifter allows the driver to grab gears with ease.
- Drivelines Inc. built a precision balanced custom 3" steel driveline w/ high performance Spicer u-joints.
- Fabrication & Installation: 40 Hrs.



STRUCTURE AND SAFETY

- There are many features that go into building a vehicle for street use that are usually overlooked in cars that are strictly used for show or the movies. Some of those items can include building additional structure and safety into the car to protect the driver and the integrity of the vehicle. For the PST/572, the Mascar team wanted to leave nothing to chance with Peter behind the wheel.
- To increase the structural integrity of the car and protect Peter in the event of a rollover, a custom 1.75" removable chromoly pro-touring style roll cage was built into the vehicle.
- To strengthen the poor original unibody design of the Charger, sub-frame connectors from Global West Suspensions were welded in between the front and rear frame rails.
- In the event of an unlikely driveshaft or universal joint failure, a Metco Driveshaft safety loop was installed under the floor.
- Crow 5 point harnesses with a "Kam Lock" release keep Peter safely strapped into the PST/572.
- Fabrication & Installation: 120 Hrs.



FUEL SYSTEM

- The PST/572's behemoth of an engine guzzles the fuel that is required to quench its thirst. It needs plenty of fuel on demand to propel it down the street and to protect the engine from starvation. Getting fuel to the engine is not the only concern when it comes to the flammable liquid. The vehicle needs easy accessibility to fuel as well as safe storage.
- A custom black powder coated aluminum fuel cell was fabricated from scratch. Inside the aluminum shell is a foam filled bladder. The foam prevents the fuel from sloshing, and the bladder prevents the cell from puncturing.
- Residing inside the fuel cell are two Walbro electric fuel pumps. The vehicle primarily runs on one pump until the engine produces 1 lb. of boost. Then the second pump kicks in to supply the necessary fuel under load.
- After the fuel leaves the tank, it runs through custom -8 Russell Performance fuel lines, through an Holley 10 micron fuel filter, into a Holley bypass regulator, inside the fuel rails, and finally to the injectors. The unused fuel is sent back to the tank at the regulator by a -6 fuel line.
- For convenience and style, a second functional fuel filler was added to the passenger side.
- Fabrication & Installation: 60 Hrs.



PETER'S TOUCH

- Some of the greatest moments during the process were the three times Peter got a chance to visit Mascar during the build. Not only was it an opportunity to check on progress, but it was also a chance for the Mascar crew to personalize his car. Peter was able to sit in the PST/572 very early in the build so that things like the seat, shifter, steering wheel, and throttle pedal position could be moved to his ideal position. He was able to approve and/or change the direction and specific details of the vehicle at any moment, but having the opportunity to see it in person allowed him to put his personal touch on it. The joy that Peter felt once he saw the car at each stage was contagious. When Peter finally got a chance to drive his dream car, he could barely contain the excitement. He was shaking with elation. For the Mascar crew, it was a chance to see Peter's reaction to all of their hard work. Moments like these are what motivate the team at Mascar to continue the pursuit of excellence in automotive restoration.



EXTERIOR MODIFICATIONS

- For a car the caliber of the PST/572, visual impact is nearly as important as safety, reliability, and functionality. This is what immediately draws people to the car. The PST/572 received some extensive and visually stunning exterior modifications to stop bystanders in their tracks.
- A 1969 Charger front sheet metal, grille, and bumper were adapted to the PST/572 to compliment the aggressive style of the rest of the vehicle.
- A fiberglass hood was reshaped and reinforced to reduce weight and fit precisely around the 871 blower.
- The front and rear bumpers were smoothed then reformed to accommodate EU license plates.
- A one of a kind tail panel was fabricated to incorporate the 1963 Impala tail lights that were conceptualized. Amber outer lenses were used inline with EU regulations.
- A powder coated adjustable aluminum spoiler was hand made to perfectly accent the rear body section.
- Quarter panel extensions were permanently grafted to the body for a smooth appearance.



EXTERIOR MODIFICATIONS (CONT.)

- Original front and rear side marker lights were filled in, and 1968 Charger side marker lights were used to compliment the '63 Impala tail lights.
- Custom Kindig-It smooth door handles were grafted into the door to keep the lines smooth on the PST/572.
- Because all visual angles were considered, smooth sheet metal panels were fabricated to bridge the gap between the quarter panels, rear valance, and rear frame rails.
- 1969 Camaro side mirrors were used to compliment the Charger's body lines.
- Fabrication & Installation for All Exterior Mods: 325 Hrs.



WHEELS AND TIRES

- Wheel and tire size and selection are one of the most critical decisions on a car of this caliber. Extensive measuring and research must be done to get the right combination.
- After some initial measurements and a review of the concept, tire sizes are chosen. Once the tires are received, Mascar utilizes the Wheel Fit tool to precisely measure the wheel offset. You only get one chance when you order a custom set of wheels. Also, a set of “rollers” is used during the build so the beauty of the selected wheels stays intact.
- Wheels: Foose Coronet, custom powder coated and pinstriped
 - Front: 18” x 8” Rear: 20” x 12”
- Tires: Michelin Pilot Super Sport
 - Front: 245/45-18 Rear: 315/35/20
- Fabrication & Installation: 6 Hrs.



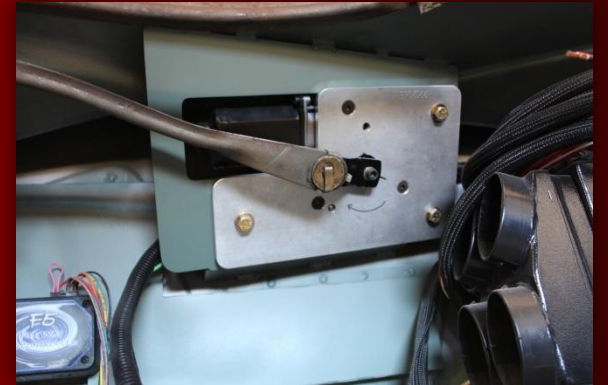
UNDER HOOD

- The areas under the hood got as much attention to detail as the exterior. Some of the many modifications and features are listed below.
 - Custom Mattson's aluminum radiator w/ condenser and dual fans
 - Custom powder coated aluminum crank ventilation catch can system
 - Powder coated aluminum power steering reservoir
 - Billet Ring Brothers hood hinges
 - Custom aluminum/rubber radiator hoses
 - Custom painted MSD 6AL ignition box
 - Powder coated aluminum radiator overflow
 - Custom aluminum heat shields
- Fabrication & Installation: 80 Hrs.



UNDER HOOD SHEET METAL MODIFICATIONS

- The Mascar team did not stop at the exterior for functionally beautiful sheet metal modifications.
- Mascar fabricated a custom hand formed “smoothed” steel firewall to give the engine some extra space and keep the attention focused on the heart of the vehicle.
- To move the wiper out of sight and out of the way, a Detroit Speed “Selecta-Speed” wiper motor was utilized.
- All of the unnecessary holes and stamping were removed from the inner fenders to smooth them out.
- 2.5” mini-tubs were fabricated to accommodate the optimal rear tire size.
- Fabrication & Installation: 200 Hrs.



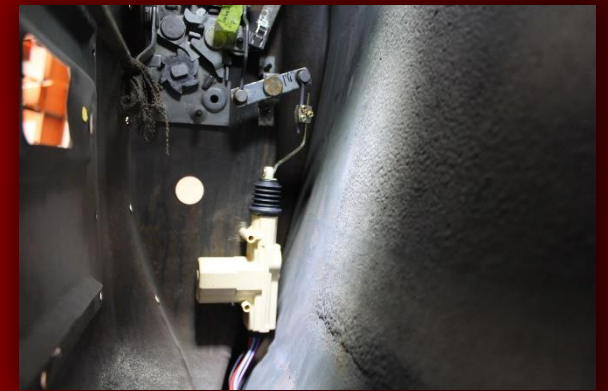
UNDERCARRIAGE

- The meticulous design seen throughout the PST/572 shines just as bright underneath the floor pans.
- Mascar hand fabricated a ceramic coated 3" mandrel bent exhaust w/ Magnaflow mufflers & QTP electric cutouts.
- Ceramic coated Doug's headers were installed to expel the exhaust gasses efficiently.
- Lokar park brake cables were used for a clean & safe install.
- Freight train style air horns shrouded by a custom powder coated aluminum air horn cover let those around know the PST/572 is coming. This is one detail that Peter specified from the beginning.
- The previously mentioned precision run air, brake, and fuel lines also adorn the underside of the body.
- Fabrication & Installation: 100 Hrs.



COMFORT AND CONVENIENCE

- The driving experience isn't all about power, performance, reliability and safety. Sometimes, being comfortable and making some basic functions a little more convenient can make the driver want to get in the car over and over again.
- A Vintage Air A/C & heater unit was custom installed. Almost everything is hidden except the four lines that run from the inner fender to the engine.
- Nu-Relics power windows were installed on all four side windows. Black billet switches located in the center console control them.
- Power door locks from A1 Electric keep the bad guys out and make it easy for Peter to get in.
- For the ultimate in convenience, Mascar used a passive keyless entry and push button start system from Digital Guard Dawg.
- Fabrication & Installation: 80 Hrs.



BODY WORK

- After all the fabrication and mock up is complete, the vehicle is completely disassembled for, body work, paint, and refinishing of all components.
- Every inch of the vehicle's body is touched to make sure nothing is overlooked.
- Body filler is applied to all panels then blocked off to leave filler only in the low spots. Minor imperfections are filled when the panels are primed. After primer, the panels are blocked again to make the body perfectly flat. Then filler and primer are applied again as necessary. This cycle is repeated until the car is deemed perfect for paint.
- Two coats of primer are applied during each phase.
- Every body component and piece of trim is test fit throughout the process to make sure everything will fit perfectly on final assembly.
- Body Work and Prep: 600 Hrs.



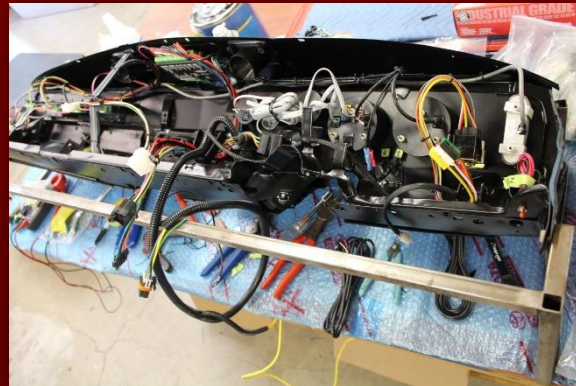
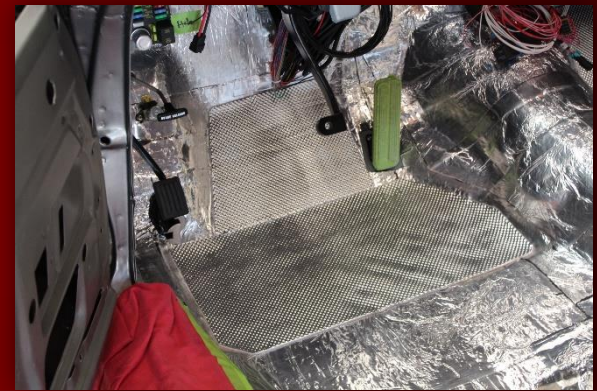
PAINT

- The biggest transition in the build is when final color is applied to the body. This is the moment when everybody involved feels like the end is in sight, and the vision from so long ago comes to life.
- Before the body went into the booth for paint, a layer of black rubberized undercoat was applied to the bottom of the vehicle to seal out any moisture and protect the undercarriage from rock chips.
- After the body was rolled into the booth, it was masked off and wiped down with a tack cloth.
- For the PST/572, four coats of custom mixed titanium colored base was applied, followed by four coats of urethane clear. After the paint cured, it was block sanded with 600 & 800 grit sand paper, and four coats of urethane matte clear were applied for the final finish.
- When the Matte clear was fully cured, Kenny Maisano laid out the tape lines for the black graphics. Two coats of Hot Rod Black were applied, then left to cure.
- The final touch was the red pinstripe on the edges of the black graphics to make the body of the PST/572 scream with aggression.
- Body Paint and Refinishing: 300 Hrs.



INSULATION AND WIRING

- Before any components were installed inside the cabin of the PST/572 every accessible panel was covered in Hushmat sound and thermal barrier. Applying the Hushmat reduces cabin noise by up to 50% and cabin heat by up to 70%.
- When approximately 75% of the final assembly was complete, wiring began. All brand new wiring and terminals were used. All circuits are fuse, breaker or relay protected to prevent damage to the components and the vehicle. Mascar began wiring the electronics already listed and a few more.
 - American Autowire Highway 22 wiring harness
 - Dakota Digital VHX gauges
 - Dakota Digital A/C controller
 - Dakota Digital BIM modules
 - Dakota Digital gear indicator module
 - DC Power high output alternator
 - Digi-Tails LED sequential taillights
 - Charger Specialties electric headlight door conversion
 - Optima Red Top battery
- Fabrication & Installation: 170 Hrs.



STEREO AND CONSOLE

- As Mascar was rounding the final turn in the build of the PST/572 there were only a few more things left on the to-do list. Two of those items were building a custom center console and installing a ground shaking stereo system.
- A custom center console was fabricated from MDF to separate the driver and passenger, and also to house some critical components.
- Like the console, a custom rear subwoofer enclosure and package tray was fabricated from MDF to trim out the rear portion of the interior.
- The state of the art stereo system consists of the following components:
 - Clarion double DIN EU receiver
 - Hertz 4" speakers in the doors
 - JL Audio 5 channel amplifier
 - Hertz 5" x 7" speakers in the package tray
 - (2) JL Audio 10" Subwoofers
- Fabrication & Installation: 60 Hrs.



INTERIOR

- With the end in sight, the crew at Mascar set their sights on the interior of the PST/572. Using Steve Stanford's rendering as a guide, Mascar enlisted Roberto's Auto Trim to create a supple, subtle, and comfortable cabin while trying to maintain the aggressive style of the PST/572.
- The entire dash, rear speaker enclosure, package tray, door panels, seats, console, and steering wheel are wrapped in the highest grade black leather available. Extensive fitting was required to accomplish this beautiful transformation.
- The carpet is a Mercedes Benz fabric, and Black Porsche headliner material was used to cover the inside of the roof.
- Custom aluminum dash and console overlays dipped in carbon fiber hydrographic add a little bit of texture to the interior.
- Procar Rally bucket seats support the driver and passenger while maintaining a high level of comfort.
- For a personal touch, Peter Sagan's logo adorns the rear vertical panel and both headrests.
- Fabrication & Installation: 300 Hrs.



SUMMARY

After 2 years, many late nights, multiple visits from Peter, multiple collaborations, thousands of man hours, thousands of parts, and thousands of dollars spent we are left with a Peter Sagan envisioned and Mascar built masterpiece from top to bottom. Every detail was thought of. Every safety precaution was taken. Every design element aligned. The only thing left to do is drive!!!

PST/572

Presented by: Peter Sagan & Mascar Classic Resto-Mods

