How To



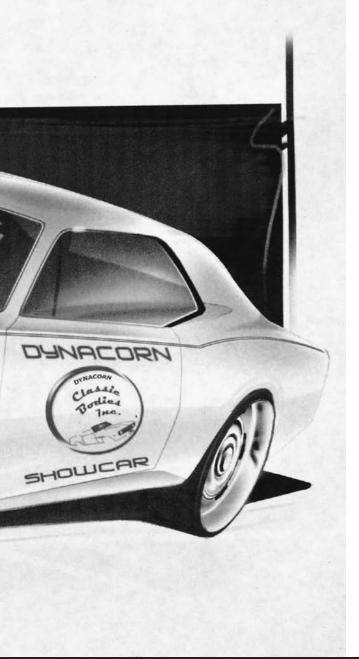
DYNACORN '67 CAMARO BUILDUP, START-TO-FINISH

Part Two

BY BOB MCCLURG

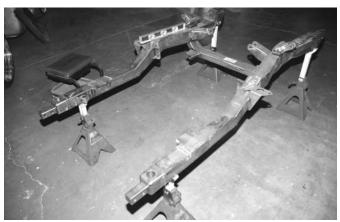
n the last issue of Super Chevy CAMARO PERFORMERS Magazine, we kicked off our series on the buildup of Dynacorn Classic Bodies, Incorperated's 1967 Camaro show car, aka. "The Dynacorn Gem," being built at Sal Perez' San Bernardino, a California-based American Muscle Cars, Incorporated shop. Dynacorn Classic Bodies, Inc, a

Division of Dynacorn International broke new ground with the introduction of the company's GM Restoration Parts licensed, "Replacement Body Shells" for the 1969 Camaro coupe and convertible. Stamped by project partner Golden Trust, and manufactured out of Automotive Grade Universal Steel 1006, which is reputed to be .0002-inch thicker than OE, these Replacement Body Shells feature a total of 350 EDPM-coated sub assembly's or component panels which are jig-welded together to form a single body shell, or to be more specific, a complete coach with doors and deck lid included. These Replacement Body Shells are assembled by a licensed Dynacorn Classic Bodies, Inc. sub-assembler like American Muscle





Shown is Dynacorn Classic Bodies, Inc's pre-production prototype 1967 Camaro coupe body shell (first one ever built) ready and waiting on the lift at Sal Perez' San Bernardino, CA-based American Muscle Cars, Inc. shop. At this point, it looks like a veritable diamond in the rough. Not to worry!



This is our bare Chris Alston Chassisworks 1967 to 1969 front clip, or sub frame (p/n 917701) leveled out on a set of jack stands to insure that all suspension components are correctly aligned upon assembly. These sub frames are manufactured out of CNC die stamped and laser cut boxed steel which is welded together to form a rock-solid foundation. This setup also features a trick mandrel bent 2x4-inch front cross member, and all suspension and engine mount brackets are CNC machined. Alston's front sub frame even comes with its own alignment pins to make installation hassle free.

Cars, Inc. and retail for approximately \$13,500 F.O.B, San Bernardino, CA. Front sheet metal extra charge.

And, with the debut of the Dynacorn Gem at last summer's "Hot August Nights" week long cruise event, (Reno, NV,) comes the official release of Dynacorn Classic Bodies, Inc.'s new 1967 Camaro coupe Replacement Body Shell.

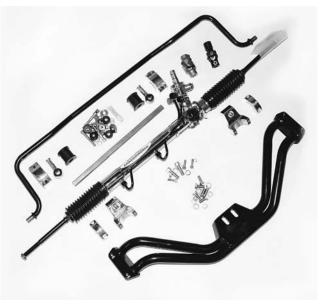
In Part Two of our Dynacorn Classic Bodies 1967 Camaro Show Car Buildup Series, we're going to follow along as American Muscle Cars Project Director Bret Maxwell and Dan Woods begin bolting together our Chris Alston Chassisworks 1967-69 Camaro and Firebird front (sub) frame, and Chassisworks tubular upper and lower aarm coil over front suspension and dropped spindle assemblies, p/n 917701.

With that completed, the next thing on the dynamic duo's work list will be the assembly of the Currie Enterprises 3.89:1 geared Alston Chassisworks-Fab 9, big bearing nine-inch Ford rear axle housing which will feature a set of Currie Enterprises 31-spline steel billet rear axles, and Wilwood Enterprises Dynalite Pro Series four-piston, 12.19-inch vented and slotted rotor rear disc brakes and e-brake assemblies, p/n 140-7140.

In Part Three of our "Dynacorn Gem" start-to-finish buildup series. complete the assembly Chassisworks front frame clip, bolting up a set of 13-inch cross drilled and slotted rotor Wilwood six-piston front disc brakes, and test fit this crucial sub assembly to the Dynacorn Classic Bodies, Inc. preproduction prototype 1967 Camaro coachwork. We'll also be fitting up the Alston-Currie Fab 9 rear axle to the car as well as work a little metal magic on the Camaro's firewall to accommodate that formidable GM Performance Parts 502-cid, Holley carbureted big-block, so stay tuned!



This parts layout photo shows the entire Chassisworks un-equal length, upper and lower a-arm suspension system including A-arms, ball joints, a ball joint wrench, set of Chassisworks dropped front spindles, bushings, mounting hardware, a pair of shock simulators, Alston VariShock, double adjustable coil-over shocks, and Chassisworks front hubs.



And there's more. In this second parts photo, we see the remainder of the Chassisworks frame assembly (there's a lot of stuff here, folks,) which includes the front anti-sway bar, a polished Chassisworks power steering rack, and Chassisworks tubular front transmission cross member setup for a Tremec TKO 500 five-speed transmission.

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Actual suspension component assembly begins with Maxwell chasing threads on the control arms, while Dan Woods follows up with a little anti-sieze to the control arm adjusters for ease in installation. This procedure is followed with the installation of the actual ball joints themselves using the provided ball joint installation tool.



Next, Maxwell repeats the thread chasing process on the control arm mounts because any time in manufacturing, a small burr can get inside, and potentially damage potentially expensive fastener hardware. Just call it a safety precaution, folks!



With all the threads cleaned and chased actual lower control arm assembly begins using the special ?-inch Allen head pivot studs provided.



The lower A-arm ride height is set using the provided shock simulator brackets provided in the Chassisworks kit. Note that the top hole represents full extension while the bottom hole represents full compression The center hole, represents the ideal ride height (@ 12-inches) that you're shooting for.



Bret installs the upper control a-arms using ?-inch Allen head pivot studs which are tapped in with a mallet to insure that they seat properly. These studs are then tightened following the torque specifications provided in the Chassisworks catalogue.



This procedure is followed with the installation of the Chassisworks dropped front spindles (which are marked "L and R,") using the provided 9/16 Grade 18 castle nuts. With both right and left side control arm and spindle installations complete, this is what you end up with. Looks pretty good, eh?



The next order of business is the installation of the polished Chassisworks steering rack installing it into the provided rack mounting bosses for trial setup.



The steering rack is subsequently secured in place using the two billet-aluminum steering rack clamps, and ?-13 x 2-inch Allen bolts and accompanying ?-inch lock washers.



Prior to achieving dead center on the rack, Woods and Maxwell check out Alston's highly detailed installation instruction book. Virtually every step is covered using highly detailed photos along with listing nut and bolt sizes, torque specifications, etc;

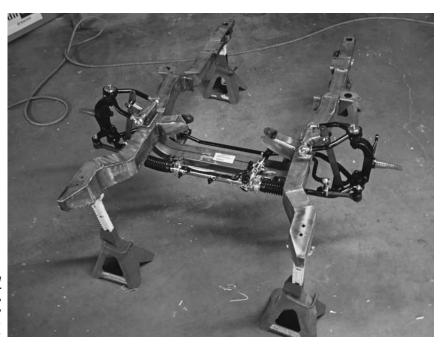


The first step in aligning the Chassisworks A-arm front suspension is to center the rack assembly in order to be able to set toe in. After turning the rack to the full "lock" position on the passenger side, it is then reversed to the full "lock" position on the driver side. The driver's side should read 15-1/8-inces, while the passenger side should read, 9-7/8-inches. After adding the two, you should come up with a measurement of 25-inches, divided by two (2) equals 12-1/2-inches side-to-side.



Next the tie rod end is installed on the steering arm, while being aligned with the steering arm. The jam nut should be set at 8-5/8-inches, which is the distance from the frame to the inside of the tie rod end. This procedure should be repeated on the driver's side.

Both tie rod ends are secured in place using the provided 9/16-18 castle nuts and cotter pins included in the kit. At this juncture, we have a 90 percent complete front sub frame minus front brakes, ready for test fitting, which will take place in our next installment.



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After completing our Chassisworks front frame clip, our installation team tackled the Chassisworks-Fab 9 sheet metal nine-inch Ford big bearing rear axle housing.



Shown are some of the rear end components being used on this build including a set of Currie Enterprises 31-spline steel billet axles, and a set of 12.19-inch, slotted and cross drilled Chassisworks-Wilwood Disc Brakes four-piston rear disc brakes.



Of course, the other key player our Chassisworks Fab-9 axle housing buildup is one of Currie Enterprises 9+ 3.89:1 geared nodular iron gear cases.



Rear axle mockup begins with the installation of a series of four, 3/8-24 axle studs to set up the rear end.



Next, in goes the Currie **Enterprises** "chunk," or completed 3.89:1 geared third member. The wooden sticks are used to cushion the third member from slamming down on the mounting surface, and possibly stripping the studs.



With the carrier in place, it gets snugged in place via a series of 3/8-inch Nylok nuts.



Next comes the installation of the Wilwood-Ford emergency brake assemblies which are mounted up to the Fab-9 axle bearing flanges using four, (4) 3/8-inch retaining nuts and bolts.





This is followed with the installation of the actual Wilwood four-piston disc brake calipers using the provided mounting brackets using 3/8-24 nuts and bolts. And that's all for now, gang!





With that done, in go the Currie Enterprises 31spline billet axles.



Then Bret and Dan tighten down the axle bearing retainers side-toside.



On go the Wilwood Brakes 12.19-inch slotted and cross drilled rotor's or rear "hats."