The Ponies Run Again

Musclecars Past, Present and Future Part II

By Steve Campbell

Chevrolet Camaro

Spurred by the success of Ford's Mustang, Chevrolet began planning a competitive model in 1964. The engineers based the new car on a redesign of the Nova that had been set for '68, and it was quite different from the '67 Nova. The Camaro, which is French slang meaning "companion," was introduced on September 29, 1966, in coupe and convertible body styles.

The underpinnings of the first-generation Camaro included a double A-arm front independent suspension, and the rear used a solid axle with semi-elliptical leaf springs. Drum brakes resided at all four corners, and the trim levels included the Rally Sport (RS) and Super Sport (SS) as well as a combined package (RS/SS).

The concept Camaro was designed with '69 in mind, but it also follows some of the C6 Corvette and even YF-22 fighter aircraft cues. The suspension is a four-wheel independent setup with a MacPherson-strut front and a multilink rear.

Photos courtesy of General Motors

The Super Sport option group included a 295hp, 350ci small-block, accent stripes, SS badging and red-stripe wide-oval tires. The 396ci Mark IV big-block engine was introduced as an option in November of '66 to compete with the Mustang's big-block GT. The Z/28 trim level was also introduced in November to homologate the Camaro for SCCA Trans Am racing. In order to meet the SCCA's 305ci engine limit for that series, Ford created a 302 by combining a 283 crank with a 327 block.

The Camaro retained its basic body configuration throughout the first generation, but there were several minor body mods and new engine offerings for '68, including the L89 aluminum-head 396 that produced 375 horsepower. For 1969, the body revisions included a new grille, fenders, doors and rear quarters for a wider and lower look, and many Camaro connoisseurs regard the '69 as the best body ever. Some of the best-performing cars, however, came via the Central Office Production Order (COPO) system.

COPO was used by GM to produce nonstandard versions of production vehicles such as special fleet orders. The system was used to produce Indianapolis 500 pace cars, for instance, but engineers also called on COPO for special high-performance versions of several Chevrolet musclecars. For instance, the ZL1 427ci engine with aluminum block and heads was installed through COPO in the Camaro and other Chevrolets of the period. The ZL1 was conservatively rated at 430 horsepower, but it actually pounded out better than 500 hp. COPO was also employed to specially build Camaros for some Chevy dealers such as Don Yenko in Canonsburg, Penn., who then further modified them to make extreme musclecars from his Yenko Supercars Inc.

Camaro's second generation debuted in 1970 but was officially tabbed a 19701/2 model. The car had undergone a complete redesign with outboard-placed headlights framing a centered grille. The new model was larger and heavier than the first generation had been, and the Z/28 designation lost its slash and became the Z28 for no discernable reason. In addition, the convertible had been dropped from the lineup and would not return until the third generation was released years later. Engine offerings now included the LT-1 350 with 360 horsepower, and the SS Camaro received a nominally 396ci (actually a 402ci) big-block. The biggest power option, however, was the L78 big-block with 375 horsepower.

In the years immediately following the redesign, those previously mentioned muscle-destructive market forces started to crop up. Horsepower figures began to drop dramatically in '71 and '72, and the SS was discontinued in 1972. The Z28 also disappeared in '75 and '76, but it was back for 1977.

By 1982, the third generation Camaro, which was slightly smaller than the previous car, was on the road and power was rising once more. The increase was a relative thing, however, as the 350 V8 that year offered only 190 horsepower. The new Camaro suspension included a modified MacPherson-strut and coil-spring front end with a long torque arm on the rear. The third generation marked the first use of fuel injection on the Camaro but also the first use of the 90hp 2.6-liter four-cylinder as the standard engine in the Chevy pony car.

The V8 in the concept car is a 6.0-liter LS2 with aluminum block and heads and is rated at 400 horsepower. It features an Active Fuel Management system that shuts down four cylinders under light loads in order to achieve fuel efficiencies of 30 mpg or better.

In 1985, the IROC-Z was added as an option to the Z28 platform, commemorating Camaro's use in the International Race of Champions series. The IROC option remained in the line until 1990, when Dodge took over sponsorship of the series. In fact, the Z28 designation was dropped entirely in 1988, when the IROC-Z took that slot, but at least the convertible had been reintroduced to the Camaro line in 1987. In 1991, the Z28 returned with a vengeance, sporting the 1LE option package. The 1LE package had been introduced to the basic Camaro line in 1988, and by 1992, it offered a 245hp 350. In '93, a detuned Corvette LT1 engine with 275 hp (down from 300 hp) was offered as an optional engine.

The fourth generation was introduced in 1993. Some components were carried over, including the floor stamping, but the front suspension was changed to a short-arm/long-arm setup, and rack-and-pinion steering was added. The new model glowed with

sleek new sheetmetal, but the convertible was once again deleted until the following year. The base engine for '93 was a 160hp 3.4-liter V6, and the topline Z28 came with the 275 hp 350.

The 1998 model saw a new fascia but also the optional inclusion of the C5 Corvette LS-1 engine. The all-aluminum powerplant was rated at 305 hp, and the SS Camaro received an improved induction system to boost the output to 320 hp. By the turn of the century, however, the Camaro had lost popularity and seemed doomed. While cosmetic changes were made to subsequent versions, 2002 was the final year of production…until now.

The fifth generation Camaro will go on sale in the first quarter of 2009. GM has said that it will be almost identical to the rear-wheel-drive 2006 concept car—which has enthusiasts excited. The concept was designed with the '69 Camaro in mind, but it also follows some of the C6 Corvette and even YF-22 fighter aircraft cues. The long, bulging hood covers either the standard V6 or the optional V8 engine. The V8 in the concept car is a 6.0-liter LS2 with aluminum block and heads and is rated at 400 horsepower. It features an Active Fuel Management system that shuts down four cylinders under light loads in order to achieve fuel efficiencies of 30 mpg or better. The suspension is a four-wheel independent setup with a MacPherson-strut front and a multilink rear. The five-spoke cast-alloy front wheels measure 21 inches and are clad in 275/30 tires, and the rear 22s carry 305/30 rubber. Each corner is fitted with vented 14-inch disc brakes and gas-pressurized shocks. The concept has six-speed manual trans, but GM said that an automatic will also be available.

Dodge Challenger

Chrysler Corporation was heavily into the musclecar wars with its Plymouth and Dodge divisions starting early on, but the company had a misstep with the introduction of its first pony car. Though the Plymouth Barracuda beat Ford's Mustang to market by two weeks, it didn't have enough power to be truly competitive. Based on the Valiant with a fastback body, the Barracuda improved over the next few years until, at last, a 425hp Hemi appeared in the 1968 Super Stock version. The Barracuda was also offered with a 400ci big-block that put out 375 hp that year, but it had no power steering or power brakes, making it a handful to drive.

The new Challenger's updated styling includes monochromatic bumpers that are flush with the body, as is all of the glass. There is no B-pillar and no moldings, and the cabin has been designed to allow full four-place seating.

Photos courtesy of DaimlerChrysler

To compete with the Mustang and Camaro pony cars, Dodge ultimately developed the Challenger in 1970. The new car was based on the redesigned E-body Barracuda, and while it was late to the game, it proved to be a true stalwart. The Challenger was two inches longer than the Barracuda and came in three models: hardtop, convertible and formal hardtop (which had a vinyl roof and a smaller rear window than the regular hardtop). Engine offerings ranged from a 190hp six-cylinder to a sweet-running 340ci small-block and the massive 426 Hemi. The 340 Challengers were good road cars that scooted and handled well, and the 440 big-block and Hemi cars were monsters at the drags.

Dodge built the 1970 Challenger R/T (Road and Track) to provide outstanding performance in both venues. It was equipped with a 383ci Magnum big-block rated at 335 hp, and there were two optional 440ci engines. The four-barrel version was rated at 375 horsepower, and the 440 with triple two-barrel carbs pulled a 390hp rating. The 440s and the Hemi were backed by either a TorqueFlite automatic transmission or an optional four-speed stick. Even with all those horses under the hood, power steering and disc brakes were still only options.

As with the other manufacturers that had entries in the pony class, Dodge wanted to go SCCA racing. Thus the company created the 1970 T/A Challenger to qualify for the Trans Am series and built 2,500 to exceed the production requirement. The T/A offered a 340 Six-Pack engine setup, which mounted three Holley two-barrel carbs on an Edelbrock aluminum intake. The street version of the engine was rated at 290hp (but actually made more like 350 horses, according to authorities), and the street T/A Challenger could turn mid-14-second quarter mile times. Even more impressive, however, was the destroked version used to make the 305ci SCCA limit. It made 440 horsepower!

The T/A was also fitted with a heavy-duty suspension and a four-speed transmission with a Hurst shifter. It was among the first production cars to carry different tire sizes front and rear (along with Plymouth's AAR Barracuda, also built for the SCCA Trans Am series), with Goodyear E60s in front and G60s in the rear. The T/A Challenger was produced for only one year. It was advertised but not offered for 1971, and the R/T convertible was also deleted for '71.

While most musclecars were campaigned at the drags, like this Dick Landy entry, the pony cars were also homologated for SCCA Trans Am racing. They would be lightning-quick accelerators or set up to handle the corners.

Photos courtesy National Dragster

Following the trend throughout the industry, the 383 V8 used for the R/T decreased from 335 to 300 horsepower in 1971 when the emissions mandates were already wearing on the musclecar phenomenon. In fact, 1971 would be the last year for the Hemi engine in the era.

The Hemi Challenger was equipped with the 426 motor that carried dual four-barrel Carter AFB carburetors. The Hemi car offered a Shaker hood in which the air scoop was mounted directly to carburetors and protruded through a hole in the hood. The Shaker name came from the movement of the scoop as the engine vibrated and leaned over when torque was applied. The base 440 engine was discontinued in '71, but the 440 Six-Pack was still available as an option.

The Challenger world changed after 1971. All of the ragtop versions were gone, and so were the Hemi and big-block engines. The best available powerplant was the 340, which had been emasculated to only 240 horsepower. Minimal styling changes included an egg-crate grille, and while sales were up in '72, performance continued to decline. At midyear, emissions mandates brought about a change from the 340 to a 360ci engine to try to recoup some muscle, but the result was only a 5hp increase.

The same market forces that killed the other musclecars took their toll on the Challenger, and its last year was 1974. Now, however, a new Challenger will debut as a 2008 model. It will be based on the recent Challenger concept car and built using Chrysler's LX platform, which is shared by the Chrysler 300 and the Dodge Charger.

The Challenger Concept is powered by the 6.1-liter 425 horsepower SRT8 Hemi V8 engine backed by a six-speed manual transmission. That pairing allows the car make a 0 to 60 pass in 4.5 seconds and build a top speed of 174 mph. The concept's 116-inch wheelbase makes it six inches longer than the original, but it is also two inches wider, with a front track of 64 inches and a rear track of 65, which Dodge touts as giving the car a more aggressive stance. The five-spoke chrome wheels measure 20 inches in the front and 21 inches in the rear.

The updated styling includes monochromatic bumpers that are flush with the body, as is all of the glass. There is no B-pillar and no moldings, and the cabin has been designed to allow full four-place seating. The flat seats of the original have been modernized with fully bolstered buckets in the front to support aggressive cornering. The instrument panel houses three inline analog gauge openings, and the floor console with a piston-grip shifter is canted toward the driver. The gauge cluster also includes a larger outboard opening that mounts a computer, which allows the driver to view top speed, quarter-mile time and speed, and top speed in each gear.

The new Challenger, like the Shelby GT500 Mustang and the new Chevrolet Camaro, compares well with its predecessors both in styling and performance. But when the technological advances of the past 40 years are layered on, these cars usher in a whole new standard for muscle in the modern age.

Dodge Charger: The Other Modern Musclecar

Originally introduced in 1966, the Dodge Charger was basically a fastback version of an intermediate Coronet, and it was every inch a musclecar. Power options included a 318 small-block as well as 361ci and 383ci engines, but the top of the line was the 426ci Hemi. Over the years, several sought-after versions were built, perhaps most starting being the outrageous-looking '69 Charger Daytona with its extended nose cone and a four-foot-tall exaggerated rear spoiler.

Photo courtesy of DaimlerChrysler

Today's version is available with a 250 hp 3.5-liter V6 or the 340hp 5.7-liter Hemi V8. The Hemi features Multi-Displacement System to deactivate four cylinders almost instantaneously when power demand is down to provide up to 20 perccent greater fuel economy.

Courtesy of Specialty Equipment Market Association (SEMA).