

BIG BERTHA'S BAD COUSIN

Pete Stout finds

the true meaning of torque

by the truckload

in a Callaway SuperNatural 435 Firebird.

Scott Dahlquist

steadies his Nikon for the

smoky burnouts.

Scalpels are nice, but sometimes it's just plain fun to use brute force. A scalpel might be fine for the short shots or the greens—but when it's time to smack that ball into the distance so far you need binoculars to keep it in sight—well, that kind of shot calls for Big Bertha. And if you're a golfer, you certainly know all about Big Bertha by Callaway Golf, a company run by Callaway family patriarch Ely Callaway.

The good folks at Callaway Cars (run by Ely's son, Reeves) are no strangers to brute force. The company has a long legacy of producing powerful automobiles that sizzle

like bacon grease on a hot griddle—four-wheeled versions of Big Bertha. In the late 1980s the Callaway name became almost synonymous with turbocharging when Chevrolet authorized the company to build twin-turbo Corvettes under factory option code B2K. Legendary machines were the end result, spawning a one-off 254.76 mph "Sledgehammer," sexy Callaway Aerobodies, and in 1991, a run of 10 roofless Callaway "Speedsters," the company's last production cars fitted with turbochargers.

When Chevrolet announced its new LT1 5.7-liter V8 in 1992, Callaway prudently decided to move away from the

complexity and expense of twin-turbochargers and produced a "SuperNatural" version of the new engine. It's a path they have remained on since—installing the powerful engines in both Corvettes and Camaros—and now Firebirds.

The Callaway SuperNatural 435 Firebird is Big Bertha's bad cousin. Have a nice family get-together and what happens? He shows up...with squealing tires and a big roar, proceeding to do the usual tire-frying burnouts. Neighbors are always aghast, especially the guy with the 308 down at the end of the block. Funny how the Ferrari guy never brings his car out when ol' cousin is around....

Yes, we're dealing with a different sort of animal here. Where other cars costing this kind of bread offer package performance that satisfies down to the turn signal stalk, this one is more singularly focused. As a high-speed implement, the Callaway-produced Firebird is a fun tool that begs to be put to work on that favorite stretch of asphalt, straightening out those twisties and making short order of long straights. Just don't expect the cruise control switch to have the tactile sensations of a more refined German-bred machine.

For the money you'd buy an SLK, you say? Well check out what you might be missing. This is a car that not only entices,

but nearly causes you to be the rowdy hooligan of Main Street. For a guy who normally likes his cars quiet and understated, I found myself giddy with each blip of the throttle as I passed other muscle cars, and ecstatic when a Porsche 928's passenger flipped me the bird. I don't think she liked my tickling of the go pedal while burbling down to a stop sign.

This car begs to be driven away from empty intersections sideways. It emits a growl that's unlike the pimply guy's 5.0 'Stang with Flowmasters. It's more like the serious sound an SCCA V8 makes, only quiet enough that you can cruise by the donut stand without shifting into neutral and

uttering a quick prayer. But when you're on it, and when the wall of a canyon reverberates with the V8's battle cry, the sounds alone justify that second trip of the morning to the fuel pumps.

This car is all about motor. Those Callaway guys tried to tell me that they're into package engineering, evidenced by the excellent Brembo binders and tuned suspension, and though I was prepared to believe otherwise, it's really true. But think of these secondary accoutrements as mere support groups. They only exist for one reason, to help showcase one of the best V8s money can buy, without exception.

Point in fact, most of the car is sort of





Callaway gained its "tuner" fame through the Corvette market.

For five years they constructed twin-turbo versions of Chevy's sports car. From there the company has continued with SuperNatural versions of the LT1 V8. Their racing record includes a ninth overall in the Le Mans 24-hour classic. Any wonder that this Firebird runs like the wind?

outclassed by the heart that inhabits the space under the hood. The engine's sweetness overwhelms the Pontiac's merely average fit and finish. Complaints about the quality of the coachwork should be limited, however. GM has done a lot to keep the F-bodies from squeaking and rattling as they leave the dealer lots, and this example with over 16,000 miles attests to the progress the General has made. The company builds all Camaros and Firebirds in St. Therese, Canada.

While an SLK or a Boxster might just be a more satisfying package, they have trouble shining as bright in a single area. If your priority is powerful, endless, gut-wrenching torque with handling and braking that's up to the task, this is a bright star indeed.

The punch this motor packs is impressive, rated at 435 hp at 5750 rpm and 425 lbs/ft of torque at 4750 rpm. The linearity of the power curve begins its trajectory at the 200 hp mark on the dyno sheets while

spinning at just 2500 rpm—pointed so straight and skyward it looks as though an engineer took a ruler to a graph and simply penciled in the line he wanted. While peak horsepower here was certainly a goal, there are three other objectives in Callaway's mission—emissions compliance, reliability, and driveability.

What makes this engine reliable, clean-burning, and wonderfully powerful is that scalpel mentioned earlier. Callaway's approach to engine building is not unlike that of a surgeon as he heads for the O.R. It is a finite, exacting process as the LT1 block is stripped bare, prepping it for major surgery. Callaway begins with details overlooked on most street motors.

The first thing to go are the casting flanges, because engine builders don't like the feeling of rough edges when they handle a cylinder block so much and so often. While this sort of zeal is expected on an engine that lives from race to race, it demonstrates real passion in the builder who knows he may never see his work again. The original cylinder block is bored out 0.030 inches over stock and the stroke

is increased to 3.750 inches in order to yield 383 cubic inches of displacement. A forged 5140 steel crankshaft takes the place of the factory piece, while forged connecting rods and forged high-silicon aluminum alloy pistons are substituted for the stock components as well. Cylinder heads are CNC machined to improve flow, and irregularities from the casting process are corrected. Every combustion chamber is matched, as is the intake plenum. Compression ratio is a performance-oriented 10.5:1.

General Motors supplies the custom camshafts, machined to Callaway's specs while enlarged stainless steel valves rest in three-angle seats. The engine breathes through Callaway's "Honker," a snorkel-like air filter assembly that flows far better than the stock arrangement, feeding air to an enlarged throttle body. Exquisite, hand-welded headers and a true equal-length exhaust system make sure the spent gases have an easy and efficient exit. Engine management is modified as well, but retains the use of the factory Delco electronics.

Having this much fun in the engine room and the resultant power increase requires an upgrade in handling and braking. Callaway relies on the proven Brembo system for converting over the stock front brakes (a \$3455 option, installed), where about 80 percent of the braking force is generated during hard stops. The equipment includes four-piston calipers and a pair of 13.1-inch cross-drilled rotors for the front wheels, while stock discs and calipers suffice at the rear. The factory ABS is retained, and overall stopping power is enough to strain the eye sockets. Repeated slow-downs from speed cause no fade or pull—simply straight, progressive stops every time.

It's interesting to note that Callaway tunes its suspension to fit each individual application. In the case of the Firebird, the live rear axle is located by new, stronger lower trailing arms. A strut brace in the engine compartment stiffens the front structure and suspension towers. More compliant bushings, Eibach springs and stiffer antiroll bars fill out Callaway's standard Touring package. Stock de Carbon shocks were fitted to our test car, but normal Koni or double adjustable units are available. This package retails for \$1632, while the optional Konis will add another \$1253. Both prices include installation in Old Lyme, Connecticut and the upgrade is well worth the money.

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There are only an infinite number of individuals who will appreciate and pay the high price of an aftermarket-enhanced vehicle that appears little different from a stock Firebird, yet offers performance on par with many pure-bred exotics.

Stock bodywork gives away only a hint of what's under the hood, and without the rather garish Trans Am plastic body cladding, the 'Bird is cleaner, though still a bit heavy-handed and weighty in appearance. I found this one good-looking from most angles thanks to the massive wheels installed on our test machine. Eighteen-inches fill out the wheel wells in a way that the standard 16s can't, and the optional factory 17s don't. Whether one loves or hates the Firebird's shape, it is obvious that the team that designed the car had passion for what they were doing. But from the inside looking out, the only way to tell you're driving something special is to tap the "go" pedal a few times.

Of course, when one is talking speed one is talking money. How fast do you want to go? How much do you want to spend? And here we have a fast car, so we also have an expensive car.

It all begins with the stock Firebird, optioned out from the factory in whatever manner the buyer sees fit. Then the Callaway crew goes to work on it. The engine alone will cost you 15 large, and then add another five-thousand in brakes and suspension. Total the wheels and tires up—18-inch Fittipaldi Tubolares wrapped

in Pirelli P Zero rubber—add it to the subtotal and we're talking about a \$40,000-plus Firebird.

In looking at the quality of the leather or the fit of the bodywork one may question the price. But for some there's much more to be said about a car that produces this level of performance, is 50-state emissions legal, can be driven daily and carries a 3-year/36,000 mile warranty. Callaway claims an entirely realistic and consistent sub 13-second quarter mile performance and a top speed of more than 170 mph.

Along a favorite Southern California mountain road I enjoy frequenting, the scenery is breathtaking. However, in a car like the Callaway I don't really pay attention. I'm watching up the road ahead instead, because I'm using the car to the hilt. Though precision in the sense of an NSX is an unfair comparison, the chassis will yield to a smooth hand and allow the driver to take turns at very high speed without the tail once stepping out of line, as long as the road remains relatively smooth. But chop the road up a bit, create an undulating surface with lots of off-camber turns, and you'll be very busy with the steering wheel.

While I found myself making full use of the Hurst shifter as corners loomed, the stock pedals were a serious hindrance to heel and toe downshifting, the two pedals being

on different levels. Apparently, the aftermarket has come up with band-aids to fix this annoyance and the money would be well spent. Once you get past the pedals, though, this car excites the senses that process velocity like few other devices with four wheels. The exhaust throb, a promise of old-fashioned rear-wheel steer, brakes and handling to safely explore all the car's potential and even the occasional adolescent smoky burnouts make one blind to all the quirks and compromises that GM engineered in.

Few cars offer this kind of performance, and their prices make Callaway's craftsmanship look like something of a bargain. While most will never know the uniqueness of a Callaway Firebird (though Camaros and Corvettes can be given the full Callaway treatment, too), the few who catch a glimpse of the brakes, appreciate the wheel size, or note the small "Callaway" script across the tail will know the car for what it is. Many buyers won't appreciate the value of such a vehicle, but then Callaway isn't marketing to them, but rather a handful who want this particular kind of performance. And they will find satisfaction indeed. ●



SPECIFICATIONS

1997 CALLAWAY SUPERNATURAL 435 FIREBIRD

General

Vehicle type: front-engine, RWD coupe
Structure: Steel unibody
Market as tested: US
MSRP: US \$43,798

Engine

Type: 90-degree V8 with iron block and aluminum head
Displacement (cc): 6276
Compression ratio: 10.5:1
Power (bhp): 435 @ 5750 rpm
Torque (lbs. ft.): 425 @ 4750 rpm
Intake system: sequential MPFI
Valvetrain: two valves per cylinder, pushrod-actuated

Transmission

Type: six-speed manual
Final Drive: 3.42:1

Dimensions

Curb weight (lbs.): 3373
Length (in.): 195.6
Width (in.): 71.3
Height (in.): 50.8

Suspension, brakes, steering

Suspension, front: upper and lower A-arms with coil springs and antiroll bar
Suspension, rear: live axle with dual lower trailing links, Panhard rod, torque arm, coil springs and antiroll bar
Steering type: power rack and pinion
Wheels, f&r (in.): 8 x 18, 9 x 18
Tires, f&r: 235/40ZR18, 285/35ZR18 Pirelli P Zero
Brakes, f&r: 13.1 and 12.3-inch vented discs (front are cross-drilled)
ABS: std.

Performance

0-60 mph (sec.): 4.5
Top speed (mph): 182

Contact

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