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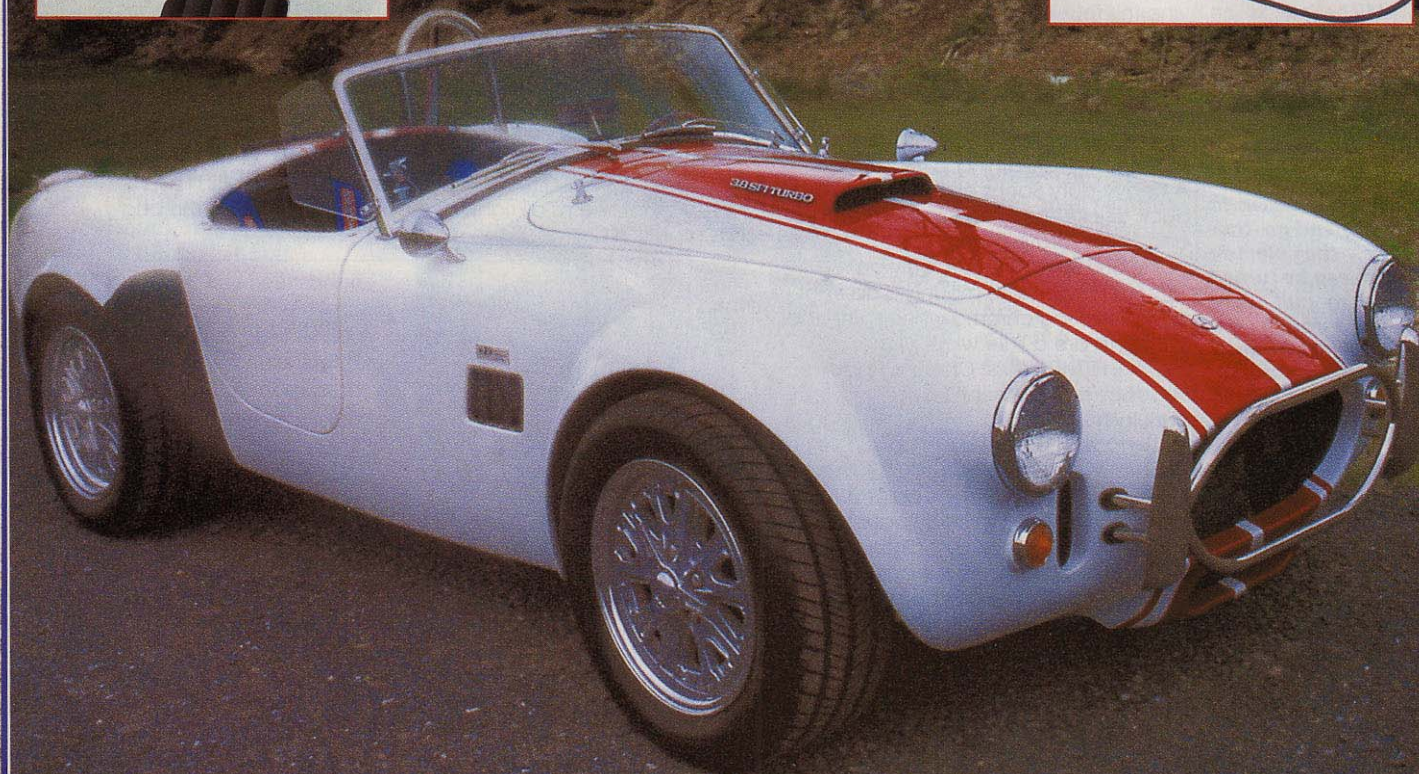
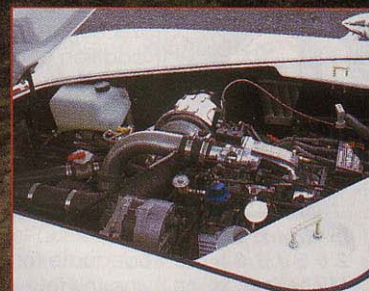
PRO-BUILT SPEEDSTER

A PETERSEN PUBLICATION

Grand National Snake

The Heart of a Potent Buick Lies Beneath the
Skin of This Everett-Morrison

By Harold Pace



PHOTOGRAPHY: HAROLD PACE

Why in the world would anyone want to shove Buick's potent turbocharged Grand National V-6 powerhouse into a perfectly respectable Cobra clone? Aren't Cobras supposed to have Ford engines—well, specifically, 260-, 289-, 427- or 428-inch Ford engines?

Considering that almost all Cobra replicas deviate to some degree from the original spec (i.e. 351-inch Cobras), what's the harm in building whatever motorized concoction you please? How better to personalize ones pride and joy (purists excluded)? Now, if the engine were anemic like the four-cylinder Fords popped into some English Cobra replicas, it would

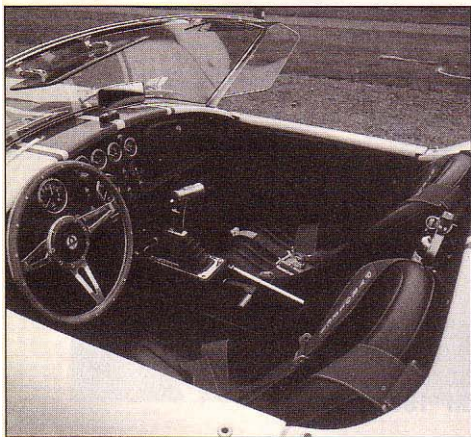
certainly be a sacrilege. But a Cobra that can't defend itself against like-minded muscle machines, is not unlike a kamikaze pilot with a fear of flying.

No such problem exists here. This hybrid rocket packs over 400 horses and turns the quarter-mile in 11.8 seconds, enough to keep pace with the hotter big-blocks and carrying far less weight in the nose.

For builder John Spina, the engine choice was a natural. He owns Casper's Electronics, which manufactures performance PROM chips and electrical components for Buick Grand Nationals. He started with an '87 3.8L engine and automatic transmission, complete with all brackets, pulleys, and intercooler. Street

Performance in Park Ridge, Illinois, did the engine rebuild and assembly. The bottom end was left stock, but the heads were CNC-ported, and big valves were installed by Eastern Performance in Glennmoore, Pennsylvania. A Sig Erson hydraulic cam tickles the lifters, and the turbo is a Garrett TA49 breathing a healthy 800 cfm. Bosch Bluetop fuel injectors pump 36 pounds of fuel per hour and are fed by two MSD high-volume fuel pumps (fuel injection is another Casper's specialty). Computer control is stock GM ECM with an Ultrachip thumbwheel chip. An external Turbonetics wastegate with a manual regulator controls the boost. The intercooler is stock GM.

Since Spina is an electronics designer by trade, he's right at home with all the computerese necessary to get the high-tech driveline to function at peak performance. John uses a Turbolink software/hardware package (for use with a laptop PC) to monitor engine functions. He also uses a Scanmaster, which is a stand-alone high-speed monitor with diagnostic and recording features, and an EPROM emulator. The custom harness consists of an amazing 195 terminals, 45 connectors, and 35 wire colors in three sizes.



The transmission is a GM 200-4R four-speed automatic (relax, some real Cobras had automatics) with a 3000-rpm stall speed converter and an aluminum cooler. It was performance-prepped by Dennis Bernardy. Making John's drag-strip record even more impressive, his Everett-Morrison rearend has a '90 Corvette diff spinning tall 3:08 gears. John has already made plans to switch to a 3:43:1 gear set for even more quarter-mile potential.

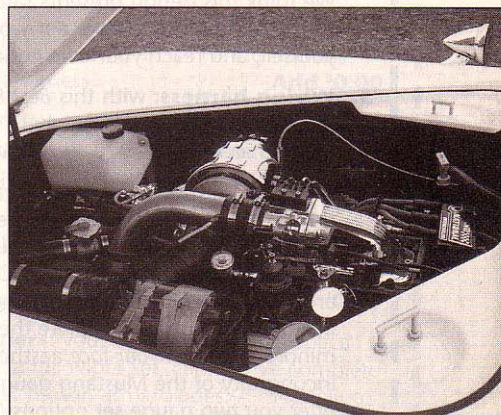
Of course, this entire super drive-

train could be in a Buick Regal, but then it wouldn't be in this magazine. John made the *Kit Car* connection by neatly slipping his sophisticated GN motor into an Everett-Morrison Cobra replica. It was ordered as a rolling chassis with a late-model Corvette suspension installed. To prepare it for the GN mill, Everett-Morrison made several modifications to the frame to fit in special fuel pumps and the vent and return lines from a custom 22-gallon aluminum gas tank.

Surprisingly, the Buick engine fit as if it had always been there. John was able to move the engine to way back in the engine compartment and low in the chassis. The turbo and intercoolers fit in the stock Buick locations. Exhaust was a custom fabrication that runs under the car, along the passenger side; there are no sidepipes. The combination of a lightweight engine with a rearward location resulted in a 44/56 weight distribution which eliminated the understeer present in many big-block-powered replicas.

The chassis is a standard 4-inch mandrel-bent round-tube Everett-Morrison design, with '90 Vette suspension and steering. The rear steel leaf spring was replaced with a single fiberglass unit but is otherwise all stock Chevy. Wheels are Compomotive three-piece Cobra-style units (16X8 front; 16X9.5 rear) with Michelin XGTZ rubber (255-50 ZR16 front; 315-40 ZR rear). For drag racing, 255-50R16 BFG Drag Radials are bolted to the back. The brakes are 13-inch Vette discs with a GM Powermaster electric power system.

John Spina chose the standard Everett-Morrison 427 SC-style body because he was impressed with the strength and rigidity of the fiberglass work. It was delivered in white gelcoat and was painted by Pat Sweeney using Sikkens Ultra White with Ultra Red stripes and a clearcoat. The seats are black vinyl with black carpeting throughout the cockpit. The VDO gauges include tach, speedo, fuel, oil, water temp, clock, and two extras you don't see in many Cobra replicas: a boost gauge and a Casper's knock gauge. The steering wheel is a wood Cobra-style



unit from Everett-Morrison and since there isn't a stereo onboard, John considers the unique exhaust note to be music to his ears.

Spina built his hybrid kit for daily summer use at around \$40,000, and he has put some serious miles on it.

Although 11.80 is the quickest quarter-mile time so far, to improve performance John has several tricks up his sleeve, like going to lower rearend gearing and improving the intercooler ducting.

Don't be surprised if you're passed by something that looks like a Cobra but sounds like a Hoover! **KC**

SOURCE

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