

2003 SVT Mustang Cobra Overview

'03 Cobra Sets A New Standard of Performance

"We're committed to the number-one thing our customers want:
enhanced performance."

— *John Coletti, chief engineer for Ford SVT*

Beginning with the original in 1993, every generation of the SVT Mustang Cobra has elevated its standard of performance. Now, the 2003 SVT Mustang Cobra raises the bar yet again, this time increasing power output to a level never before achieved in a production Mustang. The addition of a Roots-type supercharger and water-to-air intercooler to the Cobra's 4.6-liter, DOHC 4-valve V-8 engine bumps output to 390 horsepower and 390 foot-pounds of torque.

The new SVT Cobra also joins the 2002 SVT Focus in providing a six-speed gearbox as standard equipment. Additional enhancements for 2003 include exterior design alterations to the front and rear fascia, hood, rocker moldings and side scoops, as well as several changes to the interior appointments, including new multi-adjustable front seats trimmed in Nudo leather and Preferred suede.

"Every once in a while, a car comes along that really shakes up the status quo," said Tom Scarpello, marketing and sales manager for Ford's Special Vehicle Team. "Since the '64^{1/2} Mustang was launched, there have been a number of Mustangs that set the standard for performance when they were introduced. The 2003 SVT Cobra is the new benchmark, and proudly carries on the tradition of Mustang performance leadership."

"We've had some pretty successful Mustangs, and specifically SVT Mustang Cobras," said John Coletti, chief engineer for Ford SVT, "but the whole idea is to improve. That's what we're committed to, and the number-one thing our customers want is enhanced performance. The supercharged engine allowed us to go where we needed to go — to give our customers a whole lot more car than ever before."

Powertrain

The 2003 SVT Mustang Cobra's 4.6-liter, DOHC V-8 is equipped with an Eaton™ supercharger and new aluminum alloy cylinder heads that provide increased flow capabilities. The engine produces 390 horsepower at 6,000 rpm and 390 foot-pounds of torque at 3,500 rpm, compared with the 2001 model's 320 hp at 6,000 rpm and 317 foot-pounds of torque at 4,750 rpm.

To provide strength necessary for the substantially increased torque output, the new Cobra engine is built on a cast-iron block. This unit contains the carryover forged-steel crankshaft, which is fitted with new Manley forged "H-beam" connecting rods, forged pistons similar to those in the SVT F-150 Lightning, and an aluminum flywheel similar to the 2000 SVT Mustang Cobra R's.

The engine is mated to a TTC T-56 6-speed manual transmission. Behind that, an aluminum drive shaft with upgraded universal joints connects to the rear axle, which now has a 3.55:1 gear ratio.

Suspension and Brakes

The SVT Mustang Cobra's independent rear suspension system receives upgraded bushings and an additional tubular cross-brace for 2003, necessary for increased loading due to the higher power output and larger tires. The Cobra coupe's springs have higher rates compared with 2001, increased from 500 lb./in. to 600 lb./in. at the front, and from 470 lb./in. to 600 lb./in. on the rear springs. In a departure from past practice, the Cobra convertible receives its own individual suspension tuning to suit the unique characteristics of its convertible body. The convertible's front spring rates are 500 lb./in., and the rear springs are 470 lb./in.

The 2003 SVT Cobra is equipped with gas-charged monotube Bilstein dampers at all four corners, and the pad material on the rear brakes has been upgraded for enhanced durability and brake performance.

Design and Equipment



Flow-through hood scoops help vent hot air from the engine compartment.

Exterior design changes distinguish the SVT Mustang Cobra from the regular production Mustang GT. While it retains the SVT-signature round fog lamps, the front fascia is more aggressive looking, and also helps to deliver more air to the engine compartment. The hood also has been redesigned, and now has flow-through scoops that help vent hot air from the engine compartment. Both the hood and rear deck are made of lightweight composite materials. Showing that SVT appreciates even the smallest details, the windshield wipers feature an aerodynamic "wing" to help keep the blades planted at speeds up to 130 mph.

At the sides, the rocker panels have been reshaped with simple, clean vertical surfaces. Color-keyed, foldaway outside mirrors are unique to Cobra, and the side scoops have new, horizontal fins to match those in the hood scoops. The rear deck lid features an integrated spoiler with an LED center high-mounted stop lamp.

The convertible model has a new, high-quality cloth top material, which not only adds to the top's durability, but also helps provide better sound insulation for the interior.



New front face fascia helps deliver more air to the engine for intake and cooling systems.

"Our customers want a more distinctive,

recognizable Cobra," said Scarpello. "It's the top of the Mustang line, and also Ford's flagship performance car. So we put more emphasis on exterior differentiation and on interior touches that set it apart."

Inside, new front bucket seats are designed to provide enhanced support for both comfortable cruising and spirited driving. Seating surfaces have Nudo leather trim and Preferred suede inserts. The driver's seat has standard six-way power, plus new power-adjustable thigh and side bolsters, and power lumbar support. Switches for these new controls are in an easy-to-reach location on the right-front corner of the seat.

The instrument cluster, with titanium-color gauge faces, has been redesigned to include a boost gauge, and features electroluminescent lighting.



Pedals for drivers; metal-trimmed in the 2003 Cobra.

The gear shift knob is leather-wrapped, with a brushed-aluminum insert on the top, inscribed with the six-speed pattern.

New metal-trimmed pedals and dead pedal complete the interior transformation.



New front bucket seats provide enhanced support. Seating surfaces are Nudo leather with Preferred suede inserts.

Additional SVT Mustang Cobra standard features include a leather-wrapped steering wheel; leather boots for the shift and parking brake levers; tilt steering wheel; power windows, mirrors, door locks and trunk release; the SecuriLockTM passive anti-theft system; remote keyless entry; speed control; and a MACH 460 audio system with AM/FM stereo and an in-dash, six-disc CD player.

Exterior color choices for 2003 are Oxford White Clearcoat, Ebony Clearcoat, Torch Red Clearcoat, Sonic Blue Clearcoat, Satin Silver Clearcoat Metallic, Mineral Grey Clearcoat Metallic, and Zinc Yellow Clearcoat.

The interior is available in two color schemes; both feature a Dark Charcoal environment, with a

choice of either Medium Parchment or Medium Graphite accents.

Safety

The 2003 SVT Mustang Cobra is equipped with second-generation driver and passenger airbags, as well as three-point safety belts in all seating positions.

Additional safety features that are standard on the 2003 Cobra include an emergency release for the rear deck lid, located inside the trunk. It has a phosphorescent handle that's easy to find in the dark, and allows anyone locked in the trunk to open it from the inside.

Ford's BeltMinder™ safety belt use reminder system senses whether or not the driver is wearing the safety belt. If the driver is not buckled up when the vehicle is in motion, a warning chime sounds intermittently, and a red light illuminates on the instrument panel.

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