

# Tested: 2013 Ford Mustang Shelby GT500

No trust fund required for this blue-collar, 662-hp monster.



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Voltaire once wrote, “The superfluous, a very necessary thing.” What, then, should we make of a warranty-equipped **Ford Mustang** with 662 hp and a claimed 200-plus-mph top speed? Is there a deeper philosophical argument to be made about the necessity of a live-axle production car with more power than an overclocked supercollider? Does the vehicle in question—the 2013 Ford Shelby GT500—teach us about the nature of right and wrong, indulgence and restraint?

Perhaps. But mostly, it just hauls mind-bending ass. Be a good, excess-loving American, and don’t overthink it.

With a car like this, you inevitably focus on the numbers. The \$54,995 GT500 coupe turns in a 0-to-60 sprint of 3.5 seconds. Ferociously tall gearing means third gear is good for 140 mph and first gear is long enough to reach highway speeds. Even so, the quarter-mile passes in 11.8 seconds. Slam a redline shift from second to third, and you'll hear the rear tires chirp. We also saw an even 1.00 g on the skidpad.

A college professor of mine once used the words "big juice" to describe America's above-ground nuclear tests in the 1940s, the ones that vaporized entire Pacific atolls. I will now borrow the phrase: This car is big juice.

### **Heart of the Matter**



MORGAN SEGAL

The GT500 was developed by Ford's SVT division, the same loon lab responsible for the **Ford GT** and **F-150 SVT Raptor**. Like a lot of SVT products, it seems dominated by its engine. The 5.8-liter, supercharged V-8 with 631 lb-ft underhood is a punched-out version of the aluminum-block 5.4 used in the **2011-12 GT500**, which was itself essentially a wet-sump evolution of the V-8 used in the GT. The previous engine's massive 105.8-mm stroke remains, but the cylinder bore balloons from 90.2 mm to 93.5 mm. (Ford claims the block is now at its limit and can be stretched no larger.) The compression ratio rises from 8.4:1 to 9.0. Like its predecessor, the 5.8 uses plasma-transferred wire-arc bore coatings and billet main-bearing caps, but it also gets a larger oil pump, an aluminum sump, piston oil squirters, and additional coolant passages. The Eaton supercharger in the engine's valley displaces 2.3 liters, spins faster than the last GT500's blower, cranks out 14.0 psi at maximum boost (up from 9.0), and takes more horsepower to operate than is produced by the current Ford Fiesta. It looks big enough to inhale a small dog.

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SVT chief engineer Jamal Hameedi says the 2013 program “started with an engine and then bled over to touch every part of the car.” Staring at the new car’s gaping front air intake—there is no real radiator grille, just a maw the size of Kansas that lets you reach in and molest a couple of heat exchangers—we find it hard to doubt him. (Question for future ’13 GT500 owners: How expensive is a bird strike on this thing? The intake looks capable of hoovering 100 pigeons.)

According to Hameedi, the GT500’s development team focused on three bogies: 650 hp, 600 lb-ft, and 200 mph. The production car bests the engine targets, but the added grunt required a host of driveline upgrades, and the 200-mph figure necessitated a heap of added cooling capacity. Twin fuel pumps (a Mustang GT’s single supply pump, twice over), larger fuel injectors, a grippier and larger-diameter clutch, a larger fan, a three-row intercooler (the previous car used a double-row unit), a beefed-up Tremec 6060 six-speed with an internal oil pump, and a single-piece carbon-fiber driveshaft come along for the ride. The carbon shaft is lighter and stronger than its two-piece steel forebear, but chiefly, it doesn’t use a center support bearing, cutting frictional losses. It also doesn’t go into resonance between 150 and 200 mph like the old unit. Larger Brembo front disc brakes with six-piston calipers, reinforced axle tubes, and countless tiny aero tweaks round things out for the base GT500.



There is, unsurprisingly, more. The optional Performance package adds adjustable dampers and a Torsen limited-slip rear differential. Ordering the Performance package allows a buyer to select the Track package, which is aimed at road-course work and brings a transmission cooler, a nose-mounted differential cooler for the Torsen limited-slip unit, and an air-to-oil engine-oil cooler (the previous car used a water-to-oil unit). If you ask nicely, Ford will send out a technician to sit in the passenger seat, compliment your girlish figure, and mist lavender water on your face every time you try for Vmax.

Fine, I made that last one up. But the point is that if you want to make a blown Mustang pound out 662 ponies and hit two bills while carrying a warranty, the answer is apparently to build a heat exchanger on wheels with bigger everything. Then you throw more radiator at it. Possibly more after that.

The rest of the car is essentially a much-massaged 2012 GT500. The base cars get a larger front anti-roll bar and retuned springs. An rpm-adjustable **electronic launch-control function is standard**, as is four-mode electronic stability control.

