## Shelby GT500 2014

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**Revised February 2013** 

Shelby GT500

## 2014 Shelby GT500 What's Important

## **Key Messages**

NOTE: This section is dedicated to Shelby GT500-specific information. See the Mustang section for features shared by Shelby GT500 and Mustang.

- Standard on Shelby GT500 is an aluminum 5.8L supercharged V8 engine that produces 662 horsepower<sup>(1)</sup> and 631 lb.-ft. of torque,<sup>(1)</sup> making it the most powerful production V8 engine in the world<sup>(2)</sup>
- Nearly every vehicle system optimized including the powertrain, brakes, gearing and suspension for outstanding performance
- SVT Performance Package features Bilstein<sup>™</sup> electronically selectable dampers and a TORSEN<sup>®</sup> limited-slip differential
- Track Apps give drivers instant performance information, such as measuring g-forces, acceleration times and braking distance and more, on a 4.2" LCD screen located in the instrument cluster
- Performance-driven exterior design features downforce-generating front grilles, aggressive lower splitter, dual exhaust system with quad-tips and two wheel designs

## **Key Features Overview**

5.8L supercharged DOHC V8 engine with 662 horsepower<sup>(1)</sup> and 631 lb.-ft. of torque<sup>(1)</sup> (pp. 60-63) 6-piston Brembo™ front brake calipers (p. 68) SVT Performance Package and SVT Track Package (p. 70)

Interactive launch control (p. 65)

One-piece carbon-fiber

driveshaft

(p. 64)

Bilstein<sup>™</sup> electronically selectable dampers (ESD) (p. 67)

TREMEC<sup>®</sup> 6-speed manual transmission (p. 64)

(1) *Figures* achieved using 93-octane premium unleaded gasoline.

(2) Based on current production models and manufacturer horsepower data.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

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## Shelby GT500 What's Important 2014

## **New for 2014**

## Model Lineup

• No changes to the model lineup for 2014

## Performance/Handling

No new features for 2014

## Safety/Security

No new features for 2014

## **Comfort/Convenience**

· Standard heated front seats (not available with RECARO<sup>®</sup> seats)

## Quality/Reliability/Durability

No new features for 2014

## Design/Styling

- Exterior colors added
  - Oxford White (YZ)
  - Ruby Red Metallic Tinted Clearcoat (RR)
- Exterior colors deleted
  - Performance White
  - Red Candy Metallic Tinted Clearcoat





2014 Shelby GT500 Major Product Summary

The following pages indicate Shelby GT500 standard and available equipment. Shelby GT500 is available as a Coupe or Convertible.

| PERFORMANCE/HANDLING  | Shelby GT500 Coupe<br>and Convertible |
|---|---------------------------------------|
| AdvanceTrac Sport Mode  | S                                     |
| Axle, rear — limited-slip differential  |                                       |
| Differential cooler with electric pump  | А                                     |
| Modified 8.8" with 3.31:1 ratio   | S                                     |
| TORSEN® 3.31:1  | A                                     |
| Bilstein™ electronically selectable dampers (ESD)   | A                                     |
| Brakes — vented 4-wheel disc with Brembo™ front 6-piston calipers and 15" rotors  | S                                     |
| Driveshaft — one-piece carbon fiber   | S                                     |
| Drivetrain — rear-wheel-drive   | S                                     |
| Engine  |                                       |
| 5.8L supercharged 4-valve V8 with aluminum engine block and 3-row<br>air-to-water intercooler   | S                                     |
| External engine oil-to-air cooler   | Α                                     |
| Interactive launch control  | S                                     |
| Oil cooling system  |                                       |
| Oil-to-air (incl. in SVT TrackPackage)  | A                                     |
| Oil-to-water  | S                                     |
| Steering — driver-selectable effort electric power-assisted (EPAS) with pull-drift compensation and active nibble control   | S                                     |
| Suspension  |                                       |
| 3-link rear with panhard rod with 23 mm rear stabilizer bar   | S                                     |
| Bilstein™ electronically selectable dampers (ESD)   | Α                                     |
| Independent MacPherson strut front with 33.2 mm front stabilizer bar  | S                                     |
| SVT-tuned 3-link rear with panhard rod and 25 mm front stabilizer bar   | Α                                     |
| SVT-tuned independent MacPherson strut front with 34.6 mm front stabilizer bar  | Α                                     |
| Tire Mobility Kit (takes the place of spare tire)   | S                                     |
| Tires — high-performance Goodyear® Eagle F1 Supercar G:2 with P265/40R19 front and P285/35/R20 rear   | S                                     |
| Track Apps  | S                                     |
| Transmission  |                                       |
| Transmission cooler with integrated mechanical pump   | Α                                     |
| TREMEC® 6-speed manual with performance shift indicator   | S                                     |
| SAFETY/SECURITY   |                                       |
| Active Anti-Theft System  | S                                     |
| AdvanceTrac electronic stability control with Anti-Lock Braking System (ABS) and traction control   | S                                     |
| Airbags — dual-stage front and integrated front-seat side   | S                                     |
| Belt-Minder — driver/front-passenger  | S                                     |
| Emergency tire inflation kit  | S                                     |
| Illuminated entry   | S                                     |
| LATCH (Lower Anchors and Tethers for CHildren) System   | S                                     |
| MyKey   | S                                     |
| Personal Safety System  | S                                     |
| Safety belts — manual 3-point shoulder and lap safety belt system for all seating positions; front pretensioners  | S                                     |
|   |                                       |
| SecuriLock Passive Anti-Theft System  | S                                     |
| SOS Post-Crash Alert System   | S                                     |
| Tire Pressure Monitoring System (TPMS) (excludes spare)<br>S = Standard A = Available as a stand-alone option, part of a package or part of an Equipment Group $- = NA$ | S                                     |

A = Available as a stand-alone option, part of a package or part of an Equipment Group S = Standard - = NA

NOTE: The above information is an excerpt to be used with the 11/1/12 Shelby GT500 Dealer Ordering Guide. For more information and the latest Dealer Ordering Guide, go to fmcdealer.com.

## Shelby GT500 Major Product Summary

Shelby GT500

| COMFORT/CONVENIENCE   | Shelby GT500 Coupe<br>and Convertible |
|---|---------------------------------------|
| 12-volt powerpoints (2)   | S                                     |
| Audio/Entertainment   |                                       |
| HD Radio™   | А                                     |
| Shaker™ audio system  | S                                     |
| Shaker Pro audio system   | A                                     |
| SiriusXM Satellite Radio  | S                                     |
| Climate control   | <u>_</u>                              |
| Dual-zone electronic automatic temperature control  | Α                                     |
| Single-zone   | S                                     |
| Console — center locking with full armrest and storage  | S                                     |
|   | S                                     |
| Cruise control – steering wheel-mounted   |                                       |
| Cupholders (2) – covered  | S                                     |
| Decklid release — remote  | S                                     |
| Defroster — rear window   | S                                     |
| Door locks — power  | S                                     |
| Easy Fuel capless fuel filler   | S                                     |
| Floor mats — black front carpeted with embroidered "GT500" logo and silver perimeter stitching            | S                                     |
| Footrest – driver left  | S                                     |
| Headlamps   |                                       |
| Automatic   | S                                     |
| High-intensity discharge (HID)  | S                                     |
| Instrumentation   | <u>_</u>                              |
| 4.2" LCD message center with overrev indicator and Track Apps   | S                                     |
| 6-gauge instrument cluster with tachometer, speedometer, water temperature, fuel and SVT graphics         | S                                     |
|   | S S                                   |
| Integrated blind spot mirrors   | 5                                     |
|   |                                       |
| Header-mounted dome (Coupe)   | S                                     |
| Lighted bezel (Convertible)   | S                                     |
| Mirrors, exterior — dual power with integrated blind spot mirrors   | S                                     |
| Navigation System — voice-activated with SiriusXM Traffic and SiriusXM Travel Link Services               | A                                     |
| Remote Keyless Entry System with two integrated keyhead transmitters                                      | S                                     |
| Seating   |                                       |
| Coiled Cobra logo, racing strips and Alcantara® suede accents   | S                                     |
| Driver 6-way power with power lumbar  | S                                     |
| Front 4-way adjustable head restraints  | S                                     |
| Front-passenger 2-way manual  | S                                     |
| Heated front seats (not available with RECARO® seats)   | S                                     |
| Leather-trimmed   | S                                     |
| Rear 50/50 split-fold seat backs (Coupe)  | S                                     |
| Rear fixed seat backs (Convertible)   | S                                     |
| Rear seat head restraints   | S                                     |
| RECARO sport leather-trimmed seats (driver 4-way manual adjust; front-passenger 2-way manual adjust)      | A 5                                   |
|   |                                       |
| Steering wheel – tilt   | S                                     |
| 4.2" LCD message center controls  | S                                     |
| Cruise and audio controls   | S                                     |
| Storage – map pockets in front doors and at driver/front-passenger seat backs (NA with RECARO seats)      | S                                     |
| Sun visors — driver and front-passenger with illuminated vanity mirrors and storage                       | S                                     |
| SYNC with SYNC Services   | S                                     |
| Turn signals — sequential light-emitting diode (LED)  | S                                     |
| Universal garage door opener  | S                                     |
| Windows — power with one-touch-up/-down and global open controls  | S                                     |
| Wipers — variable interval  | S                                     |
| S = Standard A = Available as a stand-alone option, part of a package or part of an Equipment Group — = N | Δ                                     |

NOTE: The above information is an excerpt to be used with the 11/1/12 Shelby GT500 Dealer Ordering Guide. For more information and the latest Dealer Ordering Guide, go to fmcdealer.com.

# 2014 Shelby GT500 Major Product Summary

| QUALITY/RELIABILITY/DURABILITY   | Shelby GT500 Coupe<br>and Convertible |
|--|---------------------------------------|
| Exhaust — stainless steel dual   | S                                     |
| DESIGN/STYLING   |                                       |
| Air registers — aluminum accent  | S                                     |
| Ambient lighting   | S                                     |
| Antenna – rear-mounted   | S                                     |
| Badging  |                                       |
| "SHELBY" on the rear decklid   | S                                     |
| "SHELBY GT500" on the rear badge gas cap   | S                                     |
| Convertible top — cloth, power with glass rear window and black soft boot  | S (Convertible)                       |
| Exhaust — stainless steel dual with H-pipe design and quad tips  | S                                     |
| Exterior colors – premium  |                                       |
| Ruby Red Metallic Tinted Clearcoat (RR)  | A                                     |
| Fascia, front – GT500-specific with larger air intake and lower air splitter   | S                                     |
| Fascia, rear — GT500-specific with underbody air diffuser  | S                                     |
| Fog lamps — integrated into the front fascia   | S                                     |
| Glass roof   | <u>A</u>                              |
| Grille — upper with coiled Cobra badge   | s                                     |
| Hood, aluminum – GT500-specific with functional heat extractor   | S                                     |
| Instrument panel finish — aluminum with armor pattern  | S                                     |
| Mirrors, exterior — body-color caps  | S                                     |
| MyColor  | S                                     |
| Pedals — bright accelerator, brake and clutch  | S                                     |
| Shift knob — white "cue ball" style  | S                                     |
| Spoiler, rear – GT500-specific, decklid-mounted with Gurney Flap   | S                                     |
| Steering wheel – GT500-specific leather-wrapped with thumb pads  | S                                     |
| Tape stripes   | S                                     |
| "GT500" side stripes and Over-the-Top racing stripes (Coupe)   | S                                     |
| Tape Stripe Delete (requires black accent interiors 6X or QX)  | <u>A</u>                              |
| Wheels   |                                       |
| 19" x 9.5" front and 20" x 9.5" rear premium painted forged aluminum   | S                                     |
| 19" x 9.5" front and 20" x 9.5" rear "Tarnish" painted forged aluminum   | <u>A</u>                              |
| EQUIPMENT GROUPS   |                                       |
|  |                                       |
| Equipment Group 820A<br>All Shelby GT500 standard equipment  | S                                     |
| Equipment Group 821A, all 820A equipment, plus:  | A                                     |
| SVT Performance Package  |                                       |
| <ul> <li>19" x 9.5" front and 20" x 9.5" rear "Tarnish" painted forged aluminum wheels</li> </ul>                                |                                       |
| <ul> <li>Bilstein<sup>™</sup> electronically selectable dampers (ESD)</li> <li>CVT two of front and more series</li> </ul>       |                                       |
| <ul> <li>SVT-tuned front and rear suspension         <ul> <li>Larger front and rear stabilizer bars</li> </ul> </li> </ul>       |                                       |
| <ul> <li>Unique front and rear springs</li> </ul>  |                                       |
| <ul> <li>TORSEN® 3.31:1 limited-slip rear axle differential</li> </ul>   |                                       |
| Unique gear shift knob   |                                       |
| PACKAGES   |                                       |
| Electronics Package (58N)  | A                                     |
| Dual-zone electronic automatic temperature control   |                                       |
| <ul> <li>HD Radio™</li> <li>Voice-activated Navigation System with SiriusXM Traffic and SiriusXM Travel Link Services</li> </ul> |                                       |
| SVT Track Package (55S) (Coupe with 821A only)   | Α                                     |
| Differential cooler with electric pump   |                                       |
| • External engine oil-to-air cooler  |                                       |
| Transmission cooler with integrated mechanical pump  |                                       |
| S = Standard A = Available as a stand-alone option, part of a package or part of an Equipment Group                              | - = NA                                |

S = Standard A = Available as a stand-alone option, part of a package or part of an Equipment Group - = NA

NOTE: The above information is an excerpt to be used with the 11/1/12 Shelby GT500 Dealer Ordering Guide. For more information and the latest Dealer Ordering Guide, go to fmcdealer.com.

## **Key Messages**

NOTE: The content covered in this area is specific to Shelby GT500. For more information on the Performance/Handling features common to Shelby GT500 and Mustang, see the Mustang section.

- 5.8L supercharged V8 produces 662 horsepower<sup>(1)</sup> and 631 lb.-ft. of torque,<sup>(1)</sup> making it the most powerful production V8 engine in the world<sup>(2)</sup>
- Eaton TVS Series 2300 supercharger features a large, more efficient design
- · Cooling system includes large cooling fan, fan shroud with high-speed pressure-relief doors, an efficient charge air cooler, a high-flow intercooler pump and an intercooler heat exchanger
- Computer-engineered carbon-fiber driveshaft designed to handle the specific horsepower, torque and rpm requirements of Shelby GT500

## **Powertrain Availability**

| Engine                     | 5.8L V8                 |
|----------------------------|-------------------------|
| Horsepower (@ rpm)         | 662 @ 6500″"            |
| Torque (lbft. @ rpm)       | 631 @ 4000″"            |
| Technology                 | Roots-type supercharger |
| Transmission               | 6-speed manual          |
| Drivetrain                 | RWD                     |
| Max. Trailer Towing (lbs.) | Not recommended         |
| Model                      |                         |
| Shelby GT500               | S                       |

(1) Figures achieved using 93-octane premium unleaded gasoline.

(2) Based on current production models and manufacturer horsepower data.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

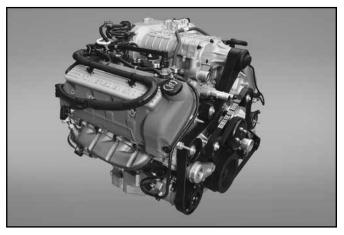
RE&T: 2014 Source Book

## 5.8L Supercharged V8 Engine

## **Key Features**

- 5.8L aluminum block with plasma transferred wire arc (PTWA) cylinder liner technology
- 662 horsepower @ 6500 rpm<sup>(1)</sup>
- 631 lb.-ft. of torque @ 4000 rpm<sup>(1)</sup>
- 9.0:1 compression ratio
- "Powered by Ford SVT" is cast into the coil covers
- 60 mm dual-bore electronic throttle body
- Roots-type Eaton TVS Series 2300 supercharger creates 2.3L of displacement and features a design unique to the 5.8L engine
- High-efficiency supercharger
  - Channels the supercharged air/fuel mixture to the cylinders
  - Allows the entire induction system to be effectively packaged under the special aluminum air-extractor hood
- Aluminum cylinder heads and specially calibrated dual overhead camshafts with 4 valves per cylinder deliver enhanced engine breathing, good fuel efficiency and emissions
  - Cross-drilled coolant passages to help improve cooling
  - Nimonic<sup>®</sup> super steel alloy exhaust valve material and thicker valve heads help withstand increased cylinder pressure
  - Stellite exhaust valve seats offer increased surface hardness
  - Valve lift supports the airflow of the 5.8L engine's large displacement supercharger
- Large diameter and strong pistons feature thick bulkheads to better support the piston dome
- Angled geometry of the bulkhead helps improve connecting rod strength

- Piston cooling jets help improve oil warm-up and cooling and help maintain cooler piston temperatures
- 8.5-quart oil capacity with an oil change interval of 6 months or 7500 miles<sup>(2)</sup>
  - Oil change interval of every 5000 miles under severe duty or track conditions
- Forged steel crankshaft, forged connecting rods and forged pistons handle the extra strain on the lower end of the block
  - Forged crankshaft offers precise balance with heavy tungsten slugs pressed into the crankshaft counterweights to help support overrev capability of 7000 rpm, up from 6250, for track-oriented driving



(1) **Figures** achieved using 93-octane premium unleaded gasoline.

(2) Under normal driving conditions.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

# Shelby GT500

## 5.8L Supercharged V8 Engine cont'd

## **Engine Overrev Indicator**

- Helps increase the performance range of Shelby GT500
- Overrev is indicated on the tachometer by raising the redline from 6250 to 7000 rpm
  - When conditions permit, overrev is indicated by a 7000 rpm redline
  - If conditions limit overrev accessibility, the tachometer redline is illuminated at 6250 rpm
- Engine torque and maximum rpm are limited until coolant temperature reaches 170 degrees F
- Warm-up is indicated when the illuminated tachometer redline changes from 6250 rpm to 7000 rpm
- Once the engine is warm, the overrev feature allows 8 seconds above 6250 rpm up to 7000 rpm
- If the 8-second time limit is exceeded, maximum engine rpm is reduced to 6250 until both of the following occur:
  - Engine is operated for at least 15 seconds below 6000 rpm
  - Engine rpm falls below 5000

## Aluminum Engine Block

- Lighter than typical cast iron with steel sleeves
- Plasma transferred wire arc (PTWA) cylinder liner technology
  - Coating is 0.006 inches thick and eliminates the need for a cast-iron cylinder liner for reduced weight
- Reinforced with structural webbing
- Unique bulkhead chilled process helps maintain strength
- Billet main bearing caps feature 6-bolt design for high-performance reliability
- 93.5 mm bore diameter allowed engineers to reach
   5.8L with the stock 5.4L stroke
- Coolant passages in the cylinder heads and engine block deck help improve engine cooling
- Cast aluminum oil pan instead of stamped sheet metal to achieve the complex shape it requires
- Combination oil pan gasket/windage tray keeps windage below 5%, even at high rpm
- Tray is molded from glass-filled nylon into the complex shape
- Tight fit and nylon construction mean the tray acts like a scraper to shave oil off the rotating assembly

## ENGINEERING INSIGHT

## "Cross-drilled" Engine Block

Just below the edge of the between-cylinder water hole is a drilled passage that leads to that cylinder's matching water hole. This small passage provides the needed inter-cylinder deck cooling required by the 5.8L engine.

## ENGINEERING INSIGHT

## PTWA Cylinder Liner Technology

## What PTWA Is

- A Ford-patented cylinder liner coating process that applies a 150-micron composite coating containing nanoparticles on the internal surfaces of the engine cylinder bores
- Replaces the cast-iron cylinder liners typically used in aluminum engine blocks

## How It Works

- The PTWA process uses air and electricity to create a 35,000-degree F plasma jet, which melts a steel wire that's fed into a rotating spray gun
- Using atomized air, the melted steel is applied to the cylinder bore surfaces
- The cylinder bore surfaces have been specially machined to receive the coating
- During the process of melting and being applied to the cylinder bore surface, the steel oxidizes, creating a composite consisting of iron and iron oxide

## Why PTWA Is Important

- Offers improved performance and durability compared to more typical iron cylinder liners
- Helps reduce friction between the cylinder wall
   and the piston rings
- Helps lower heat transfer
- Provides an approximate 8.5-lb. weight savings over typical iron-sleeved aluminum block

## What PTWA Means to the Customer

 Overall lighter weight of the engine helps improve fuel economy and performance without a trade-off in reliability and durability

## 5.8L Supercharged V8 Engine cont'd

## **Engine Cooling**

- Use of computational fluid dynamics (CFD) modeling allowed engineers to enhance engine cooling for the 5.8L engine
- Both the head and block castings are carryovers from the 5.4L engine
- Additional paths in the cylinder heads route coolant between the exhaust seats at the correct flow velocities and volumes
  - Drilled coolant passages on the cylinder heads direct water to go between the exhaust valve seats, improving engine durability to run at maximum torque with no significant wear to the engine
  - Once the coolant has flowed between the valve seats, it rejoins the general water flow in the larger cooling jacket above the combustion chamber
- Small passages drilled in the block and heads of the 5.8L engine provide the needed extra coolant flow, eliminating the need to make a casting change to the 5.4L engine block or heads
- Piston squirters are positioned in the newly drilled passages in the main bearing bulkhead
  - Shooting path is through a carefully placed diagonal hole drilled into the side of the main bearing bulkhead
    - Path is aimed at the underside of the dome and pin boss, not the skirts or connecting rod beam, to ensure oil stream meets an on-target average of 60% of piston stroke
    - Path ensures complete coolant flow around the cylinders just below the block, as well as between the exhaust valve seats in the cylinder heads
  - Squirter valves are tensioned to open at 50 psi to ensure adequate oil flow at the critical main bearing-to-crank journal clearance and provide maximum flow at higher loads and crankshaft speeds when the piston needs extra cooling
    - Having the squirters continuously flow at full volume could cause excessive windage, which drags on the crankshaft, reducing horsepower and fuel economy
  - Due to the oil use of the piston oil squirters, the 5.8L engine requires two more quarts of oil compared to the 5.4L engine

## **Two Oil Cooling Systems**

- · Oil-to-water is standard
- Oil-to-air included in SVT Track Package
- Both systems use full synthetic 5W-50, which can survive up to 300 degrees F
  - Typical oil temperatures are 200 degrees F with oil-to-water cooling
  - Extended track driving will raise oil temperatures closer to 300 degrees F

## **Oil-to-Water Cooling System**

- Transfers oil heat to the water in the engine's regular cooling system for rapid warm-up and stable oil temperatures
- Provides total engine cooling to meet street driving needs and some track driving
- Will not overheat when used for track driving
  - Powertrain control module (PCM) will start closing the throttle and limiting engine speed when coolant temperature reaches 251 degrees F
  - If the driver continues to push the engine, or if there is a mechanical concern such as a punctured radiator, the powertrain control module will deactivate the cylinders into a "limp home" mode
- Standard on Shelby GT500

## Oil-to-Air Cooling System

- Offers greater cooling capacity than the oil-to-water cooling system
- Offers 20% more cooling capacity than with the 5.4L supercharged V8 engine
- "Larger" radiator no longer has to shed oil heat just engine heat
- Oil is cooled through its own cooler, so the total heat exchanger area to the atmosphere is increased

## ENGINEERING INSIGHT

## Two Oil Cooling Systems

How the Special Vehicle Team (SVT) got Shelby GT500 to offer two oil cooling systems is rather clever: bolted to the left side of the engine block is a convoluted aluminum casting full of passages and the oil filter mount, which looks similar to an aluminum brick. With standard cooling, this snake-like casting also mounts an oil-to-water heat exchanger. The casting features hose nipples for piping the coolant between the radiator and the oil-to-water brick. For the SVT Track Package, the oil-to-water brick is replaced by a thermostatic housing. The hose nipples are exchanged for threaded plumbing fittings to connect with an airto-oil heat exchanger mounted in the front of the vehicle behind the grille. This way, the casting's passages are converted from water to oil galleys, so another adaptor isn't needed.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

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## 5.8L Supercharged V8 Engine cont'd

## **Roots-type Eaton Supercharger**

- TVS Series 2300 creates 2.3 liters of displacement per revolution
- Design unique to the Shelby GT500 5.8L V8 engine
  - Features four-lobe rotors and high-flow inlet and outlet ports that greatly enhance thermal efficiency, deliver high volumetric capacity and enable higher operating speeds
  - Features a smaller, pressed-on blower pulley that's 69 mm in diameter
- Efficient design flows more air through the engine, helping produce increased horsepower
  - Higher helix angle of the rotors, coupled with redesigned inlet and outlet ports, improves airhandling characteristics without increasing the overall size of the unit
- Operates at up to 15 pounds per square inch (psi) to force-feed a higher-density air/fuel mixture into each cylinder

## Air-to-water Intercooler

- · Efficient air charge cooler and high-flow intercooler pump help keep air intake temperatures lower, which helps produce more power
- Large intercooler heat exchanger helps make the power production more consistent in hotter ambient conditions

## **Dual Exhaust System**

- Unique exhaust manifolds help to move spent gases out of the cylinders and into the custom-tuned mufflers and dual exhaust system with quad tips
- More than 40 different muffler tunings were tested, measured and evaluated for the right sound to get a custom-tuned, aggressive exhaust note
- The H-pipe stamping creates the desired sound and helps increase power output

## **MAKE THE POINT: 5.8L Dipstick**

The Shelby GT500 enthusiast may notice that the 5.8L dipstick has extra marks in it. These are for "overfill" use by the plants. Explain to the customer that the engine, depending on the oil cooling system the standard oil-to-water or the oil-to-air included with the SVT Track Package - has two different oil fill levels. The engine is filled with oil at the engine plant and is then topped off at the vehicle assembly plant. If the SVT Track Package is ordered, cooler lines are added, so when the engine is filled with oil, the level drops. The extra marks are simply used as a visual check by the plants to ensure the engine has the proper amount of oil – an attention to detail your Shelby GT500 customer will appreciate.

## MAKE THE POINT: Gas-Guzzler Tax

With EPA-estimated fuel economy ratings of 15 mpg city and 24 highway, the Shelby GT500 is **NOT** subject to the gas-guzzler tax. The tax can range from \$1,000 to \$7,700 depending on the combined fuel economy rating of the vehicle. See www.epa.gov/fueleconomy/guzzler to learn more.

| EPA-estimated <b>Rati</b> | ngs         |                |
|---------------------------|-------------|----------------|
| Engine/Transmission       | City<br>mpg | Highway<br>mpg |
| 5.8L V8/6-speed Manual    | 15          | 24             |

| ENGINEERING INSIGHT: Developing Reliable Horsepower   |   |  |  |
|---|---|--|--|
| Supercharging   | Intercooling  |  |  |
| A supercharger uses engine power to spin an impeller. | Because air heats up as it is compressed, a supercharger    |  |  |
| The impeller compresses the air charge and "blows" it | is often coupled with an intercooler to remove heat from    |  |  |
| into an engine's intake.                              | the compressed air before it enters the engine's intake     |  |  |
| Boost is created when the supercharger pushes         | system to provide a cooler, denser intake charge.           |  |  |
| enough air into the engine to overcome the vacuum     | An intercooler works just like a radiator — it cools air as |  |  |
| naturally created by the engine's air intake. The     | the air flows over fins and plates inside the intercooler.  |  |  |
| supercharger on the Shelby GT500 produces boost       | This generates a denser intake charge and increases the     |  |  |
| of up to 15 psi.                                      | engine's ability to produce horsepower and torque.          |  |  |

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## **TREMEC® 6-speed Manual Transmission**

## **Key Features**

- Pedal box design helps clutch pedal feel
- Short-throw performance 6-speed transmission
- Proven heavy-duty performance to handle the high torque output of the supercharged engine
- Less shifting is needed to find the "sweet spot" in keeping the revs "on cam" for power to pass
- Makes the most of the engine's broad, flat torque curve
- Twin disc clutch
- Clutch slave cylinder is designed for released travel and rpm support
- Clutch master cylinder and over-center spring in pedal box

## Programmable Performance Shift Indicator

- When activated, provides a visual (SHIFT LAMP) and/or audible (SHIFT TONE) cue to upshift the transmission to the next gear at a preset engine rpm
- SHIFT LAMP and SHIFT TONE can be programmed to be used separately, or together, via the message center controls
- SHIFT LAMP feature illuminates the SVT logo in the tachometer in a bright orange when the programmed engine rpm shift point is reached. SVT logo is backlit in red under normal driving
- SHIFT TONE feature sounds an audible tone when the programmed engine rpm shift point is reached
- Engine rpm shift points can be set in 100 rpm increments between 1500-7000 rpm

**NOTE:** The performance shift indicator and fuel economy upshift indicator operate independently.

## **One-piece Carbon-Fiber Driveshaft**

## **Key Features**

- Computer-engineered for the specific horsepower, torque and rpm requirements of Shelby GT500
- Made of continuous filament wound carbon fiber
  - Actual forming done on a mandrel, which has been treated with release agents
  - Forming is accomplished using a filament winding process
  - The winding profile is engineered to handle both the torque and speed to which the driveshaft may be subjected
  - After two full axial wraps of carbon fiber, a circumferential winding of E-glass (continuous filament fiberglass) is applied, serving two purposes:
    - Provides structural integrity in the hoop or circumference direction
    - Pulls down and consolidates the composite layup

## Benefits

Compared to the steel two-piece unit used on previous Shelby GT500 models, the one-piece carbon-fiber driveshaft is designed to offer these benefits:

- Weight reduction of approximately 13 pounds
- Less rotational mass
- Less noise and vibration
- Increased durability
- 200 mph+ capability



## Traction

## AdvanceTrac Sport Mode

- Includes Anti-Lock Braking System (ABS) and traction control as well as yaw stability control
- A unique calibration of the AdvanceTrac system that allows more spirited driving while AdvanceTrac is enabled
- See the Mustang Safety/Security purchase motivator section or the Safety section of the Source Book Appendices on eSourceBook for a complete description of AdvanceTrac

## **TORSEN®** Differential

- · A full-time torque-sensing system designed to improve power delivery to the rear wheels
- Differential continuously manages power delivery between the rear axles, helping maximize traction over a variety of road conditions
- A better balance of power delivery helps improve overall vehicle handling and acceleration capability
- TORSEN<sup>®</sup> differential uses a parallel helical gear system
  - Helical gearset is more robust than a limited-slip differential with a clutch pack design

## **Rear Axle**

- Modified 8.8" live axle
- 3.31:1 gear ratio helps balance overall performance and fuel efficiency
- TORSEN differential with 3.31:1 gear ratio included in the SVT Performance Package
- · Limited-slip differential helps improve traction and off-the-line acceleration
- Filled with new 75W-85 premium synthetic hypoid gear lubricant that is more thermally stable

## **Interactive Launch Control**

- Lets drivers set and hold the desired launch rpm depending on tire temperature, surface conditions or weather
  - Not intended for cold, wet or slippery conditions
  - Intended for use only where consistent acceleration is desired
- Integrated with AdvanceTrac and the engine control system to maximize traction from a standing start while accelerating in a straight line
- Provides a unique "drag start" traction calibration specifically designed for high-grip surfaces
- Can be turned on and off via the launch control button in the instrument panel or the 5-way control button on the left side of the steering wheel
  - Rpm setpoint can only be changed in the Track Apps menu using the 5-way control button
  - Launch control setting does not turn on/off with key cycle
  - Launch control engine rpm setpoint range is available in 1000 rpm increments
- Refer to the *Launch Control* driving modes table in this section for a description of operating modes

NOTE: Launch Control is engineered to be used with the original equipment provided on Shelby GT500. Any modifications to the vehicle may affect feature function or performance.

## Traction cont'd

## Launch Control Driving Modes

| Mode | Driving Mode                 | AdvanceTrac Setting  | Benefit  |
|------|------------------------------|--|--|
| 1    | Street driving               | NORMAL with all-weather calibration  | <ul> <li>No action required by the driver</li> <li>Enhanced calibration for standard and high-<br/>performance driving</li> </ul>                                  |
| 2    | Street driving               | <ul> <li>NORMAL with all-weather calibration</li> <li>Traction control off</li> </ul>  | Allows the driver to spin the tires in a straight line without electronic intervention   |
| 3    | Racetrack driving            | SPORT calibration  | <ul> <li>Provides enhanced control by increasing<br/>AdvanceTrac thresholds for high-speed road<br/>course driving</li> </ul>                                      |
| 4    | Expert racetrack<br>driving  | <ul> <li>AdvanceTrac off</li> <li>Traction control off</li> <li>ABS on</li> </ul>  | <ul> <li>No electronic intervention by AdvanceTrac or<br/>traction control systems for enhanced driving</li> </ul>   |
| 5    | Drag strip driving           | <ul> <li>NORMAL with all-weather calibration</li> <li>Launch Control on</li> </ul>   | <ul> <li>Enables Launch Control to maximize straight-<br/>line acceleration</li> <li>Provides NORMAL AdvanceTrac dynamic control</li> </ul>                        |
| 6    | Expert drag strip<br>driving | <ul> <li>NORMAL with all-weather calibration</li> <li>Two-stage rpm control with traction control off</li> <li>Launch Control on</li> </ul>  | <ul> <li>Enables the engine rev limiter, if the vehicle<br/>is stationary, with no traction assist</li> <li>Provides NORMAL AdvanceTrac dynamic control</li> </ul> |
| 7    | Expert drag strip<br>driving | <ul> <li>SPORT calibration</li> <li>Launch Control on</li> </ul>   | <ul> <li>Enables Launch Control to maximize straight-<br/>line acceleration</li> <li>Provides SPORT AdvanceTrac dynamic control</li> </ul>                         |
| 8    | Expert drag strip<br>driving | <ul> <li>AdvanceTrac off</li> <li>Two-stage rpm control<br/>with traction control off</li> <li>ABS on</li> <li>Launch Control off</li> </ul> | <ul> <li>No electronic intervention for AdvanceTrac or traction control systems</li> <li>Launch Control off</li> </ul>   |

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## Chassis

## **Balanced Weight Distribution**

- 57% of the weight is in the front and 43% is in the rear of the Shelby GT500 Coupe
- 56% front and 44% rear for the Shelby GT500 Convertible

## MacPherson Strut Front Suspension

- Delivers precise handling. incredible responsiveness and a smooth. comfortable ride
- High spring rates handle the weight of the car and help reduce roll
- Reverse L-shaped lower control arms have a number of advantages over classic A-arm or wishbone design
  - Firm bushing controls side-to-side motion for excellent steering response
  - Softer bushing controls fore-and-aft motion and helps dampen road shocks
- 33.2 mm front stabilizer bar helps reduce body roll
- 34.6 mm front stabilizer bar on Shelby GT500 models equipped with the SVT Performance Package

## 3-link Rear Suspension with Panhard Rod

- Gives precise control of the rear axle
- Panhard rod bushings are tuned to handle more torque and firmly control the rear axle during hard cornering
- 23 mm rear stabilizer bar helps reduce body roll
- 25 mm rear stabilizer bar on Shelby GT500 models equipped with the SVT Performance Package

## Bilstein<sup>™</sup> Electronically Selectable Dampers (ESD)

- Allows drivers to select suspension damping modes on all four shocks/struts with the simple push of a button to deliver the handling characteristics they desire
  - Damper button is located in the instrument panel
  - Damper setting is indicated in the Track Apps display
- Can be set in NORMAL or SPORT Mode

**Revised March 2013** 

- NORMAL is enhanced for most street and daily driving
- SPORT is racetrack-tuned and should be selected for enhanced performance when ride comfort is of less concern

## **Key Benefits of Suspension Design**

- Constant-rate coil springs and outboard shock absorbers are specially tuned for controlled and precise handling
- Shock absorbers are on the outside of the rear structural rails, near the wheels, to reduce the lever effect of the axle and let the shock valves be tuned more precisely and slightly softer

## **ENGINEERING INSIGHT**

## Electronically Selectable Dampers (ESD)

## What It Is

A technology that helps control the vertical movement of the wheels with an onboard system rather than the movement being determined entirely by the road surface, allowing for a greater degree of ride quality and vehicle handling and improved traction and control at higher speeds

## How It Works

- Uses a main adjusting valve and two secondary valves: one for NORMAL and one for SPORT
- A solenoid allows the NORMAL valve to be connected hydraulically in parallel with the SPORT valve
  - When the solenoid is energized, magnetic force pulls up the slider below it to open the flow channel through NORMAL Mode
    - The main flow passes this valve and NORMAL is generated
  - When the solenoid is not energized, a return spring presses the slider onto the valve seat to interrupt oil flow
    - The NORMAL valve is switched off, and the complete oil flow goes through the SPORT valve, generating the sportier handling characteristic
- The NORMAL valve can be tuned in a similar way to conventional shock absorber valves: the hydraulic resistances on the rebound and compression sides of the valve are adjusted using preload elements and bypass channels

## **Key Benefits**

- Virtually eliminates body roll and pitch variation in many driving situations including cornering, accelerating and braking
- Provides the performance-inspired handling characteristics Shelby GT500 drivers want from their vehicle

RE&T: 2014 Source Book



## Chassis cont'd

## Four-wheel Disc Brakes

- Front Brembo<sup>™</sup> 6-piston aluminum calipers and large 15" vented rotors
- Rear 13.8" vented rotors with single-piston calipers
- Vented discs provide better cooling and help resist brake fade better than drum brakes
- High-performance friction brake pad material helps provide outstanding stopping power for confident braking performance
- Includes Anti-Lock Braking System (ABS)

## Wheels and Tires

- Premium painted forged aluminum wheels with SVT center caps are standard
  - 19" x 9.5" (front)
  - 20" x 9.5" (rear)
- Goodyear<sup>®</sup> F1 Supercar G:2 high-performance tires were developed specifically for the Shelby GT500, offering superb dry traction and precise handling characteristics
  - Front: P265/40R19
  - Rear: P285/35R20
- Wider rear tires help deliver the engine's power to the ground better when accelerating off the line
- Help improve handling balance when powering out of a turn

## Aerodynamics

- Aerodynamic features of Shelby GT500 provide enhanced performance at all speeds, improving the cooling system, maximizing downforce and minimizing drag
  - Front splitter and upper and lower grille inserts expose the radiator to help funnel air and cool the internal components of the vehicle
  - Large splitter helps create downforce when the vehicle is hitting top speeds
  - Front upper and lower grilles include an integrated air dam to help minimize drag
- The result is a vehicle that tracks more securely and feels more "planted" to the road surface while providing racetrack performance, improved cooling and fuel economy

## ENGINEERING INSIGHT

## **Emergency Tire Mobility Kit**

To help save weight, the Shelby GT500 does not have a spare tire. Instead, there is a standard tire mobility kit. The kit includes a compressor and a can of tire sealer used to inflate and seal small punctures in the tire caused by road hazards. By eliminating the extra weight of the spare tire, engineers were able to improve the power-to-weight ratio and give the Shelby GT500 improved performance.



NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## **Track Apps**

A 4.2" LCD screen message center allows the driver to select various performance options in the Track Apps menu.

## Accelerometer

- The red dot in the center of the gauge is a real-time indication of the vehicle's longitudinal and latitudinal acceleration and updates continuously
- The numbers on the outside of the ring represent the maximum accelerations since the customer last reset the values
- The gauge updates only when it's being displayed

## **Acceleration Timer**

- Brings up a selection of tests that the driver can run
- Once the test has been selected, the driver can select from two different starting methods:
  - Countdown Start
    - Provides a racing "Pro Tree" (the red, yellow and green staging lights found at drag strips) style of starting
    - Driver will be prompted to pull up to the starting line and then be prompted to start the countdown
    - · Colors will flash a half-second apart, and if the start is successful, it will end in green
    - If the driver accelerates early, the color will be red and no data will be recorded
  - Automatic Start
    - Useful if there is an external starting mechanism
    - Once the driver presses "OK," the timer will wait until the vehicle starts moving and then the time will begin
- Once the timer start is successful, the screen will change to show an elapsed time and a progress bar to show how close to the end of the test the customer is
- When the data collection finishes, the screen will display the results
- Timer will attempt to fill in as many of the times and speeds as it can. For example, if the customer picks a 1/4-mile test, all the results should be filled in provided the vehicle exceeded 100 mph
- The recorded times and speeds are similar to the results that a drag strip would provide at the end of a run

## **Boost Gauge**

 In gauge mode, the boost gauge numerical and digital display can be selected

## **Brake Performance**

- Brings up a selection of tests that the driver can run
- · Driver is instructed to accelerate above the speed requested in the previous screen
- Once the proper speed is attained, the driver is instructed to apply the brakes
- The screens will then change to the data acquisition screen
- Data acquisition screen shows the elapsed time and a progress bar showing how close to the end of the test the vehicle is
- · When the data is acquired, the results will be displayed

## **View/Clear Results**

- Brings up a menu of data management actions the driver can take
- Track Apps will store three sets of data: Last Run, Saved and All-time Best
- Driver can clear All-time Best data separately from the Last Run and Saved data (only when vehicle is stopped)
- Selecting View Acceleration Timer will display the results from the last acceleration run and the saved data
- · Driver can select any result and save it. Saving a result will override the previously saved result
- Results with more than one data parameter can only save all the parameters together
  - Selecting View Brake Results will display the results from the last brake performance run and the saved data
    - Driver can select any result and save it. Saving a result will override the previously saved result
  - Selecting View All-time Best will display the All-time Best results
    - Track Apps automatically saves All-time Best data any time it sees a result that is better than a stored result
  - All-time Best data is from the Acceleration Timers and the Brake Performance Runs

## Performance State

- Screen divided into four areas
- Shows status for each Performance Mode selection
  - Steering
  - Interactive launch control
  - Driver-selectable dampers
  - AdvanceTrac

## NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## Packages

## SVT Performance Package

## Performance/Handling Features

- Bilstein<sup>™</sup> electronically selectable dampers (ESD)
- SVT-tuned front and rear suspension
  - Unique front and rear springs
  - Larger front and rear stabilizer bar diameters
- TORSEN® 3.31:1 limited-slip rear axle differential

## **Design/Styling Features**

- 19" x 9.5" (front) and 20" x 9.5" (rear) "Tarnish" painted forged aluminum wheels
- Unique gear shift knob

## SVT Track Package

- Differential cooler with electric pump
- External engine oil-to-air cooler
- Transmission cooler with integrated mechanical pump





## Shelby GT500 2 Comfort/Convenience

## 2014

## **Key Messages**

NOTE: The content covered in this area is specific to Shelby GT500. For more information on the Comfort/ Convenience features common to Shelby GT500 and Mustang, see the Mustang section.

- Instrument cluster with 4.2" message center includes MyColor backlighting and Track Apps
- Electronics Package available with Shaker^{\rm TM} Pro audio system
- SYNC with SYNC Services includes Traffic, Directions and Information, 911 Assist, Vehicle Health Report, AppLink and Operator Assist

Interior

Available heated front seats

## **Seating Features**

- Driver 6-way power with power lumbar
- Front-passenger 2-way manual
- Front-seat 4-way adjustable head restraints
- Available RECARO<sup>®</sup> leather-trimmed sport bucket front seats with accent stripe
  - Designed by SVT in cooperation with RECARO for high-performance Mustang models like Shelby GT500
  - Thick side bolstering provides lateral support to keep the driver firmly placed in the seat during aggressive cornering maneuvers
  - Driver 4-way manual, front-passenger 2-way manual
- Available heated front seats provide added comfort in cold weather
  - Not available with RECARO seats



## Instrument Panel

- 4.2" LCD message center with Track Apps
  - Track Apps display includes AdvanceTrac, steering feel, damper control and launch control states
- 4-gauge instrument cluster with tachometer, speedometer, water temperature and fuel
  - Programmable Shelby performance shift indicator light included with the tachometer
  - The tachometer has an overrev feature which is indicated by an illuminated redline at 7000 rpm. If conditions limit overrev accessibility, the illuminated redline will change to indicate 6250 rpm
  - Boost gauge is located in 4.2" LCD message center
- One-touch buttons for launch control (LC), electronically selectable dampers (ESD) (if equipped) and electric power-assisted steering (EPAS)

## **Electronics Package**

- Dual-zone electronic automatic temperature control
- HD Radio<sup>™</sup>
- Voice-activated Navigation System

## 2014 Shelby GT500 Quality/Reliability/Durability

## **Key Messages**

NOTE: The content covered in this area is specific to Shelby GT500. For more information on the Quality/ Reliability/Durability features common to Shelby GT500 and Mustang, see the Mustang section.

- · NVH (noise, vibration and harshness) features designed to help lower road and wind noise
- One-piece instrument panel helps reduce interior squeaks and rattles
- Testing in multiple countries ensures high levels of quality, reliability and durability
- Easy maintenance with 7500-mile oil change intervals<sup>(1)</sup>
- Powertrain limited warranty protection for 5 years/60,000 miles

## **NVH Features**

## Shelby GT500 Models

- Engine-side dash absorber
- Sealing between the doors and the lower rockers
- Rear-wheel arch liner helps reduce road noise
   on gravel roads and in the rain

## Shelby GT500 Convertible

- · Stiff "V-brace" with gussets
- Stiff #2 crossmember
- Front "Z-brace" connecting to the #1 and #2 crossmembers
- · A-pillar stiffening foam

## Quality

## **One-piece Instrument Panel**

- · Designed to help reduce squeaks and rattles and has a tight fit and finish
- · Provides an overall sense of build quality and attention to detail



(1) Under normal driving conditions. See vehicle owner guide.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

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## **Key Messages**

NOTE: The content covered in this area is specific to Shelby GT500. For more information on the Design/ Styling features common to Shelby GT500 and Mustang, see the Mustang section.

- Performance-driven exterior design features downforce-generating front grilles, aggressive lower front air splitter and quad-tipped exhaust
- Shelby GT500-specific wheel designs accentuate the exterior
- Interior includes a soft-touch instrument panel with unique armor pattern aluminum inserts and Smoke Satin accents, exhaust-influenced air registers and instrument cluster with overrev indicator offset by 360-degree chrome rings and conical lenses
- · Seats include Le Mans racing stripes matched to the exterior stripe color

## Exterior

## **Glass Roof**

- Adds the panoramic feel of a convertible while maintaining the legendary aggressive style and athletic stance of the Shelby GT500 Coupe
- Coupe styling is complemented while maintaining interior versatility and head room, at about half the price of the Convertible
- Constructed of laminated safety glass, which includes a thin layer of vinyl sandwiched between two pieces of glass to maintain excellent interior acoustics and quietness
- Tinted privacy glass helps maintain a climatecontrolled environment and protect interior fabrics from the sun's ultraviolet (UV) rays
  - The UV protection is equivalent to an SPF 50 sunscreen rating
- Interior temperatures of a GT500 Coupe equipped with a glass roof vary by no more than 2 degrees F compared to a Coupe without the glass roof
- Manual roller blind sunshade offers a choice of additional protection from the sun or increased privacy



## Shelby GT500 Convertible Features

- The same 662-horsepower<sup>(1)</sup> 5.8L supercharged V8 engine and TREMEC<sup>®</sup> 6-speed manual transmission as the Shelby GT500 Coupe
  - Top speed limited to 155 mph on Convertible
- Coupe-like ride and handling is a result of good torsional rigidity that allowed the engineers to add fewer reinforcements to the chassis
  - Less added weight meant few suspension modifications were needed to achieve excellent handling characteristics
- Cloth convertible top uses premium material found on luxury cars and is designed to be more durable
  - "Floating" 5-bow design creates a tauter top, resulting in a very quiet interior while driving with the top up
  - Glass rear window will not discolor, scratch or stain like plastic
  - Includes black soft boot

## **Up Front**

- Functional lower air splitter at the bottom of the unique front fascia limits airflow under the car, helping improve high-speed aerodynamics
- Aluminum hood with heat extractor vent is specific to Shelby GT500
  - The functional air extractor helps improve underhood temperatures by increasing airflow
- Large upper and lower grille openings help improve airflow to the radiator and intercooler and give a strong visual connection to vintage Shelby 427 Cobras
- HID headlamps provide a distinctive look and excellent nighttime visibility
- Distinctive coiled Cobra badging offset in the grille

(1) *Figures* achieved using 93-octane premium unleaded gasoline.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## 2014 Shelby GT500 Design/Styling

## Exterior cont'd

## Along the Side

- Distinctive coiled Cobra badging on the front fenders
- Premium painted forged aluminum wheels with SVT center caps
  - 19" x 9.5" (front)
  - 20" x 9.5" (rear)



## At the Rear

- Rear fascia features a roll pan with airflow diffuser to help improve aerodynamic efficiency
- Rear spoiler is a modern application of the classic Shelby GT500 design and helps provide aerodynamic downforce at higher speeds
- Includes Gurney Flap
- "SHELBY" lettering is boldly shown on the trunk lid, under the spoiler
- SHELBY GT500 and coiled Cobra logos are seen on the "gas cap" badge



## Stripes

- Le Mans-style "Over-the-Top" racing stripes are true to Shelby Mustang heritage and are available in four colors, depending on the exterior color
  - Two distinctive 9"-wide Le Mans-style "Over-the-Top" racing stripes
  - Stripes cover the fascias, hood and decklid of Coupe models, include stripes over the roof (excludes glass roof top)
- "GT 500" side stripes just above the rocker panels of Coupe and Convertible, are available in five colors, depending on the exterior color
- Four stripe colors are available, depending on exterior color:
- Black
- Blue
- White
- Red
- Stripe delete option available



**Revised March 2013** 

## **Exterior Colors**

- Black
- Grabber Blue
- Ingot Silver Metallic
- Deep Impact Blue Metallic
- Oxford White
- Race Red
- Ruby Red Metallic Tinted Clearcoat
- Sterling Gray Metallic

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

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## Shelby GT500 Design/Styling 2014

## Interior

## Instrument Panel and Trim

- Smoke Satin finish trim replaces the traditional chrome finish trim around the instrument cluster rings, air conditioning registers and speaker rings
- Brushed aluminum inserts feature an armor pattern
- Integrated center stack sweeps down from the double-brow instrument panel and into the flowthrough center console and places audio and climate controls within easy reach of the driver or front passenger
- Instrument cluster with overrev indicator offset by 360-degree chrome rings and conical lenses
- Gauges with white lettering are a unique SVT performance cue pioneered on the original Mustang Cobra
- Programmable Shelby performance shift indicator light is included with the tachometer

## **Steering Wheel**

- Leather-wrapped steering wheel has a thicker wrap than Mustang
- Features Alcantara<sup>®</sup> suede-trimmed thumb pads positioned for enthusiast driving
- "GT500" script and coiled Cobra logo on the steering wheel center pad

## **Flow-through Center Console**

- · Forms the backbone of the interior
- Includes cupholders with cover and lockable storage bin with "SHELBY" embossed on the release button

## **Ambient Lighting**

- Programmable via the message center, the driver can program up to 125 ambient interior lighting colors from the MyColor palette in addition to the seven factory preset colors
- · Aluminum "SVT" door sill plates illuminate only in red

## Seating

## Front Bucket Seats

- Charcoal Black leather-trimmed front bucket seats feature rolled-and-pleated perforated inserts with exterior color-matched Le Mans-style racing stripes
- Seat side bolsters include Alcantara suede inserts while the bolsters and head restraints offer contrast color thread stitching
- · Coiled Cobra logo is embossed on the front seat backs

## **Rear Seats**

 Feature exterior color-matched Le Mans-style racing stripe inserts



## **SVT Performance Package**

## **Design/Styling Features**

• 19" x 9.5" (front) and 20" x 9.5" (rear) "Tarnish" painted forged aluminum wheels

## Unique gear shift knob

## Performance/Handling Features

- Bilstein<sup>™</sup> electronically selectable dampers (ESD)
- SVT-tuned front and rear suspension
- Unique front and rear springs
- Larger front and rear stabilizer bar diameters
- TORSEN<sup>®</sup> 3.31:1 limited-slip rear axle differential

2014 Shelby GT500 Wheels/Color and Trim

## Wheels

| Wheel  | Coupe                                  | Convertible                            |
|--|--|--|
| 19" Front/20" Rear<br>Premium Painted<br>Forged Aluminum   | Standard                               | Standard                               |
| 19" Front/20" Rear<br>"Tarnish" Painted<br>Forged Aluminum | Included in<br>SVT Performance Package | Included in<br>SVT Performance Package |

## **Color and Trim Availability**

|  |               |                           | Shelby GT500 Co          | oupe/Convertible         |                          |
|--|---------------|---------------------------|--------------------------|--------------------------|--------------------------|
| Color Charcoal Black E                                   |               |                           | k Environment            |                          |                          |
|  | Material      | Leather-trimr             | ned Seats with Co        | ordinated Racing         | Stripe Inserts           |
|  | Stripe        |                           |                          |                          |                          |
|  | Accent        | Black                     | White                    | Blue                     | Red                      |
| Paint Name   | Order<br>Code | 6X (Std.)<br>QX (RECARO®) | 62 (Std.)<br>Q2 (RECARO) | 6B (Std.)<br>QB (RECARO) | 6D (Std.)<br>QD (RECARO) |
| New Oxford White   | ΥZ            |                           |                          |                          |                          |
| New Ruby Red Metallic<br>Tinted Clearcoat <sup>(1)</sup> | RR            |                           |                          |                          |                          |
| Black  | UA            |                           |                          |                          |                          |
| Deep Impact Blue Metallic                                | J4            |                           |                          |                          |                          |
| Grabber Blue   | CI            |                           |                          |                          |                          |
| Ingot Silver Metallic                                    | UX            |                           |                          |                          |                          |
| Race Red   | PQ            |                           |                          |                          |                          |
| Sterling Gray Metallic                                   | IJ            |                           |                          |                          |                          |

NOTE: See the Shelby Dealer Ordering Guide for seating availability. Tape stripe delete (46D) requires interior 6X or QX . (1) Extra-cost option.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.

## Shelby GT500 2014 Color and Trim/Stripe Choices

## **Interior Trim**

| Model             | Style/Material | Description   |
|-------------------|----------------|---|
| Coupe/Convertible | Leather        | Leather-trimmed sport front bucket seats with rolled-and-<br>pleated perforated inserts, side bolsters with Alcantara® suede<br>inserts and contrast color thread stitching and vinyl-trimmed<br>50/50 split-bucket rear seats (folding in Coupe) |
| Coupe/Convertible | Cloth          | RECARO <sup>®</sup> sport front cloth bucket seats trimmed with Miko <sup>®</sup><br>suede and rear vinyl-trimmed 50/50 split-bucket rear seats<br>(folding in Coupe)   |

NOTE: See the Shelby Dealer Ordering Guide for available seating choices.

## **Stripe Choices**

| Exterior Color                         | Exterior Tape Stripe Color(s) | Interior Environment |  |
|--|-------------------------------|----------------------|--|
| New Oxford White                       | Black, Blue, Red              | Charcoal Black       |  |
| New Ruby Red Metallic Tinted Clearcoat | Black, White                  | Charcoal Black       |  |
| Black                                  | Black, White, Red             | Charcoal Black       |  |
| Deep Impact Blue Metallic              | Black, White, Red             | Charcoal Black       |  |
| Grabber Blue                           | Black, White                  | Charcoal Black       |  |
| Ingot Silver Metallic                  | Black, Blue, Red              | Charcoal Black       |  |
| Race Red                               | Black, White, Blue            | Charcoal Black       |  |
| Sterling Gray Metallic                 | Black, White, Blue, Red       | Charcoal Black       |  |

## **Instrument Cluster**

Please refer to the owner guide for instrument cluster information.

## 2014 Shelby GT500 Key Product Specifications<sup>(1)</sup>

| Model  |   | Coupe   | Convertible   |  |  |  |
|--|---|---|---------------|--|--|--|
| Wheelbase  |   | 107.1   | 107.1         |  |  |  |
| Length   |   | 188.2   | 188.2         |  |  |  |
| Height   |   | 55.4  | 55.9          |  |  |  |
| Width (with/without min                                    | rrors)                                    | 80.1/73.9                                     | 80.1/73.9     |  |  |  |
| Track (front/rear)   |   | 61.9/62.5                                     | 61.9/62.5     |  |  |  |
| <b>Base</b> Curb Weight (appr<br>Weight Distribution (from |   | 3845<br>) 57/43                               | 3982<br>56/44 |  |  |  |
|  |   | ) 5//45                                       | 50/44         |  |  |  |
| Front/Rear Seatin  | g   |   |               |  |  |  |
| Seating Capacity   |   | 4   | 4             |  |  |  |
| Head Room (front/rear)                                     |   | 38.5/34.7                                     | 38.8/36.5     |  |  |  |
| Shoulder Room (front/re                                    | ear)                                      | 55.3/51.6                                     | 55.3/45.0     |  |  |  |
| Hip Room (front/rear)                                      |   | 53.4/46.8                                     | 53.4/45.2     |  |  |  |
| Leg Room (front/rear)                                      |   | 42.4/29.8                                     | 42.4/29.8     |  |  |  |
| Passenger/Luggag   |   |   |               |  |  |  |
| Passenger Volume (cu. f                                    |   | 83.3  | 81.0          |  |  |  |
| Luggage Capacity (cu. ft.)                                 |   | 13.4  | 9.6           |  |  |  |
| EPA Interior Volume (cu.                                   |   | 96.7  | 90.6          |  |  |  |
| Fuel Tank Capacity (gal.                                   | )   | 16.0  | 16.0          |  |  |  |
| Engine   |   |   |               |  |  |  |
| Driveline Layout   | Front engine, rear drive                  |   |               |  |  |  |
| Engine Type  |   | HC supercharge                                | ed V8         |  |  |  |
| Displacement   | 5.8/355                                   |   |               |  |  |  |
| (liters/cu. in.)   | <b>662</b> @ 6                            | E00(2)  |               |  |  |  |
| Horsepower @ rpm<br>Torque (lbft.) @ rpm                   | 0   |   |               |  |  |  |
| Compression Ratio  | <b>631</b> @ 4000 <sup>(2)</sup><br>9.0:1 |   |               |  |  |  |
| Bore and Stroke  | 3.68 x 4.16                               |   |               |  |  |  |
| Construction   | Aluminum block with aluminum heads        |   |               |  |  |  |
| Intake Manifold  | Cast aluminum                             |   |               |  |  |  |
| Supercharger   | Roots-type with air-to-water intercooler  |   |               |  |  |  |
| Boost  | 15 psi                                    |   |               |  |  |  |
| Exhaust Manifold   | Cast iron                                 |   |               |  |  |  |
| Crankshaft   | Forged steel                              |   |               |  |  |  |
| Throttle Body  | Dual bor                                  | e 60 mm, elect                                | ronic         |  |  |  |
| Valvetrain   | DOHC, 4 valves per cylinder               |   |               |  |  |  |
| Valve Diameter   | Intake: 37.0 mm                           |   |               |  |  |  |
| <b>D</b> 's taken  |   | 32.0 mm                                       |               |  |  |  |
| Pistons  | -   | luminum                                       |               |  |  |  |
| Connecting Rods  |   | teel I-beams                                  |               |  |  |  |
| Ignition   | Coil-on-                                  |   | wathstic      |  |  |  |
| Oil Capacity   |   | ts, 5W-50 full-                               | synthetic     |  |  |  |
| Coolant Capacity   |   | 5, engine <sup>(3)</sup><br>ial multi port fi | ul injection  |  |  |  |
| Fuel System  |   | ial multi-port f                              | Jet injection |  |  |  |
| Fuel Requirement<br>(octane)                               | 91 <b>+</b> (mir                          | iirrioffi)                                    |               |  |  |  |
| Exhaust System   | Dual sta                                  | <b>inless steel</b> wi                        | th catalytic  |  |  |  |
| Exhluost System  |   | rs and "H" cros                               |               |  |  |  |
|  |   |   | - 1- 1        |  |  |  |

| EPA-estimated                     |   |   |            |            |          |  |
|-----------------------------------|---|---|------------|------------|----------|--|
| City/hwy. mpg                     | 15/24   |   |            |            |          |  |
| Transmission                      |   | _   |            |            |          |  |
| Туре                              | TREMEC <sup>®</sup> 6-speed manual  |   |            |            |          |  |
| Final Drive Ratio                 | 3.31:1  |   |            |            |          |  |
| Gear Ratios                       |   |   |            |            |          |  |
| c                                 | lst   | 2nd   | 3rd        | 4th        | 5th      |  |
| 6-speed Manual                    | 2.66:1  | 1.82:1                                      | 1.30:1     | 1.00:1     | 0.77:1   |  |
|                                   | 6th   | Rev.  |            |            |          |  |
|                                   | 0.50:1  | 2.90:1                                      |            |            |          |  |
| Front Suspension                  |   |   |            |            |          |  |
| Туре                              | Independent MacPherson struts   |   |            |            |          |  |
| Springs                           |   | Coil<br>Gas-pressurized hydraulic           |            |            |          |  |
| Shock Absorbers<br>Stabilizer Bar |   |   | nyuraulio  | -          |          |  |
| Diameter                          |   | 33.2 mm<br>34.6 mm with Performance Package |            |            |          |  |
|                                   |   |   |            |            |          |  |
| Rear Suspensio                    |   | استا د ما                                   | with       | bardrad    |          |  |
| Type<br>Springs                   | Solid-ax<br>Coil  | kie o-link                                  | with par   | indru rođ  |          |  |
| Shock Absorbers                   |   | ssurized                                    | Ihvdraulio | -          |          |  |
| Stabilizer Bar (dia.)             | Gas-pressurized hydraulic<br>23 mm<br>25 mm with SVT Performance Package          |   |            |            |          |  |
|                                   |   |   |            |            |          |  |
| Steering                          |   |   |            |            |          |  |
| Туре                              | Rack-and-pinion   |   |            |            |          |  |
| Assist                            | – Electric power-assisted (EPAS)  |   |            |            |          |  |
|                                   | <ul> <li>Driver selectable effort (Comfort, Normal<br/>and Sport)</li> </ul>      |   |            |            |          |  |
|                                   |   |   | pensation  |            |          |  |
|                                   |   | nibble c                                    |            |            |          |  |
| Overall Ratio                     | 15.7:1  |   |            |            |          |  |
| Turning Diameter,                 | 37.0  |   |            |            |          |  |
| Curb-to-Curb (ft.)                |   |   |            |            |          |  |
| Brakes                            |   |   |            |            |          |  |
| Standard                          | 4-wheel disc with Anti-Lock Braking System  |   |            |            |          |  |
|                                   | (ABS), brake assist and electronic brakeforce<br>distribution (EBD)               |   |            |            |          |  |
| Frent                             |   | •   | •          |            |          |  |
| Front                             | Brembo™ 6-piston aluminum calipers and<br>15-inch vented rotors                   |   |            |            |          |  |
| Rear                              | Single piston calipers with 13.8-inch vented                                      |   |            |            |          |  |
|                                   | rotors  |   |            |            |          |  |
| Trailer Towing <sup>(4)</sup>     | )   |   |            |            |          |  |
| Not recommended                   |   |   |            |            |          |  |
|                                   |   |   |            |            |          |  |
| Flat/Neutral To                   |   |   |            |            |          |  |
| Emergency Towing                  |   |   |            | helby GT5  |          |  |
|                                   | be towed with a wheel lift or with flatbed<br>equipment. However, if towing in an |   |            |            |          |  |
|                                   |   |   |            | 6T500 ma   |          |  |
|                                   | neutral-  | towed b                                     | ehind and  | other vehi | cle, but |  |
|                                   | only at a maximum speed of 35 mph and for a distance of no greater than 50 miles. |   |            |            |          |  |
|                                   | a distan  | ice of no                                   | greater t  | han 50 mi  | les.     |  |
| Recreational Towing               | When to<br>vehicle s  |   |            | 00 behind  |          |  |
|                                   |   |   |            |            |          |  |

trailer must be used.

(1) All dimensions in inches unless otherwise noted.

- (2) Figures achieved using 93-octane premium unleaded gasoline. (3) Engine-fill only. Does not include four extra quarts of coolant for
- supercharger intercooler. (4) See the RV & Trailer Towing Guide, available on eSourceBook

as a printable PDF or the vehicle owner guide for more towing information.

NOTE: For product features, please see the Major Product Summary pages and/or the Dealer Ordering Guide for availability.