

2007 Shelby GT500 Safety

SHELBY GT500: SAFETY

- Shelby GT500 has increased torsional rigidity, which can aid driver vehicle control and provide protection in an accident.
- Features Ford's Personal Safety System® and standard driver and front passenger seat-mounted side-impact air bags. BeltMinder™, SecuriLock™, all-speed traction control, anti-lock brakes and a host of other innovative features are included.
- An active anti-theft package aimed at combating high performance-car insurance premiums on Shelby GT500 includes a separate alarm sounder, anti-tow sensor, an ultrasonic interior-motion sensor and perimeter anti-theft sensors.



The Ford Shelby GT500 convertible builds on four decades of open-air heritage; the first Mustang was a drop top. More than 1 million convertibles have been sold since 1964.

DETROIT, Jan. 8, 2006 – With a body structure providing considerably more torsional rigidity than the previous generation Mustang hard top, the chassis of the 2007 GT500 coupe is better able to respond to driver inputs to help control the vehicle in emergency maneuvers.

The body structure is 31 percent stiffer in torsion, meaning that a twisting force of 15,500 foot-pounds can deform the body by only one degree. Such dramatic leaps in body stiffness contribute to the GT500's driving performance, with parallel benefits in accident protection.

Engineering a body with such high stiffness creates a passenger "safety cage" that helps protect the cabin from deformation and intrusion.

The front structure is designed to absorb energy in a controlled manner and dissipate it before it can reach the passenger compartment. The GT500 front rails have an octagonal shape to spread forces evenly at the firewall and progressively deform for increased protection in demanding offset frontal crashes.

Other safety features include all-speed traction control, anti-lock brakes (ABS) and Ford's Personal Safety System®. When you add in the standard driver and front passenger side-impact air bags and side intrusion door beams, the GT500 provides a comprehensive safety package.

GT500 Confidence: Ford Personal Safety System®

Topping the list of GT500's safety equipment is Ford's Personal Safety System®, one of the industry's most comprehensive safety technology suites. The system is designed to provide enhanced protection in many types of frontal crashes by analyzing impact factors and determining proper air bag response in milliseconds.

It uses dual-stage driver and front-passenger air bags capable of deploying at full or partial power. In less severe frontal crashes, air bags inflate with less force.

Ford's Personal Safety System® employs pretensioners to tighten front seat belts in the first milliseconds of a crash. Energy management retractors gradually slacken the belt, if necessary, to reduce forces across the occupant's chest during the impact.

Standard Front Passenger Classification Sensing

Standard front passenger classification sensing builds on the strength of the Personal Safety System™ to tailor deployment of the front-passenger air bag. If the passenger-seat sensor detects no weight or very little weight, like a newspaper or a jacket, the passenger air bag is automatically switched off.

If more weight is on the seat, like a small child, the air bag remains deactivated and an instrument panel light alerts the driver with the message "PASSENGER AIR BAG OFF." Of course, the safest place for children remains the rear seat, properly restrained. If an adult is seated properly in the passenger seat, the air bag automatically is switched on, ready to inflate within milliseconds, if needed.

Among the dozens of standard safety and security features the GT500 offers are:

- **BeltMinder™**

The most effective way to help save lives on roadways is one of the simplest safety technologies on the market – the safety belt. Ford's BeltMinder™ system gives occupants a gentle chiming reminder to fasten their safety belts. A Ford innovation introduced in 1999, BeltMinder™ already is proving to increase safety-belt use.

- **SecuriLock™ Passive Anti-Theft System**

Passive anti-theft systems like SecuriLock™ help protect against drive-away theft through the use of an electronically coded ignition key. The system is designed to help prevent the engine from being started unless a coded key programmed to the vehicle is used. A miniature transponder with an integrated circuit and antenna is imbedded in the ignition key. A wireless radio-frequency transmission transfers an electronic code between the transponder in the key and the vehicle. If the codes match, a signal passes through the wiring system to the electronic engine control, allowing the vehicle to start.

- **Battery Saver**

Battery Saver helps prevent accidental battery drainage from Mustang's interior lights. The

battery saver feature automatically turns off interior lights in a parked vehicle after a few minutes, like when a door is left ajar. If interior lights are left on while the ignition is in the Off position, a relay is deactivated in 10 to 40 minutes cutting power to the interior lights.

- **Fail-Safe Cooling**

A fail-safe cooling system lets GT500 be driven under limited power for short distances if engine coolant is lost, eliminating the cost and inconvenience of towing. If the coolant level sensor reads below a critical level, the engine computer module switches the engine to an emergency limp-home mode, in which only half the cylinders get fuel. With only half the cylinders firing, the engine operates at lower power and generates much less heat. The cylinders alternate between even- and odd-firing pistons in this mode. The engine can move the vehicle at moderate speeds (up to about 50 mph).

Keeping the Shelby Where It Belongs

The GT500 also features an active anti-theft package aimed at combating high performance-car insurance premiums. The package includes:

- **Separate Alarm Sounder**

The GT500 employs a separate, remotely located alarm sounder in conjunction with the traffic horn, making it harder for thieves to disable the system and make off with the car or its contents.

- **Anti-Tow Sensor**

The vehicle is guarded against tow-away thefts. An inclination-sensing module records the vehicle's angle when the anti-theft system is armed. If the sensor detects a change in vehicle incline, it sends a signal to the alarm system, which triggers a separate alarm, traffic horn and flashes the car's lights.

- **Ultrasonic Interior Motion Sensor**

To detect "smash-and-grab" break-ins, an ultrasonic interior-motion sensor is designed to detect motion inside the vehicle cabin. If an intrusion is detected, the alarm sounder and traffic horn are activated and the exterior lights flash to frighten would-be thieves.

- **Perimeter Anti-Theft Protection**

Perimeter anti-theft sensors also detect the opening of the hood, doors or trunk when the anti-theft system is armed. If the vehicle is parked and the window rolled down, for example, the alarm is sounded if a would-be-thief tries to open the door to gain access to the car.

- **High-Capacity Battery**

A 60-ampere-hour battery is capable of sounding the alarm longer. This powerful battery lends an extra measure of authority to the active anti-theft system and helps prevent battery run-down from use of GT500's powerful audio system while the engine is off.