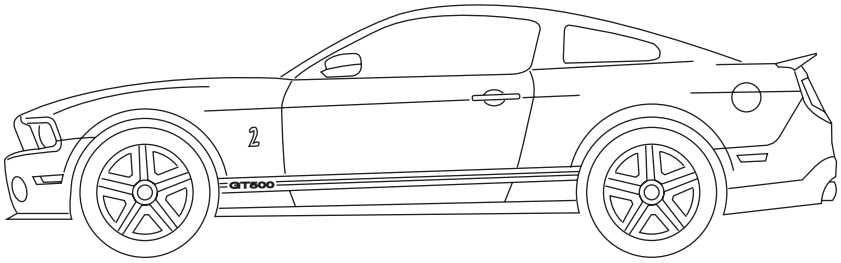
Table of Contents

Introduction

WELCOME

Congratulations on your decision to purchase or lease the latest from Ford SVT — the Shelby GT500. If you've owned or leased an SVT product in the past, we're glad you're back. If this is your first SVT vehicle, welcome to the SVT family! We are confident that our dedication to performance, quality, craftsmanship and customer service will ensure many miles of exhilarating, safe and comfortable driving in your new Shelby GT500.



Your choice of an SVT product is an intelligent and informed one. SVT strives to build engaging vehicles that involve the driver in every aspect of the driving experience. Although performance is at the heart of every SVT vehicle, we go much further. Our goal is to deliver a comprehensive, complete vehicle, sweating the details such as the sound of the exhaust, the quality of the interior materials, and the functionality and the comfort of the seats, to ensure that the driver enjoys not only exceptional performance but an outstanding *driving environment* as well. In the Shelby GT500, that philosophy is expressed by a sophisticated powertrain, outstanding chassis dynamics and significant interior and exterior enhancements.

This supplement complements your *Mustang Owner's Guide* and provides information specific to SVT and the GT500. By referring to the pages listed in this supplement, you can identify those features, recommendations and specifications unique to your new SVT vehicle. If there are any discrepancies between this supplement and the Mustang Owner Guide, this supplement shall supersede the information found in the Mustang Owner Guide.

If you have any questions or concerns regarding your Shelby GT500, please call the Ford Performance Info Center at 1-800-FORD-SVT (367-3788).

Introduction

SVT HISTORY

The Ford Special Vehicle Team (SVT) was established in 1991 to "Polish the Ford Oval" by creating low-volume, factory-produced vehicles designed for those select few whose idea of driving is a high-powered, passionate experience — not just a means of getting from point A to point B.

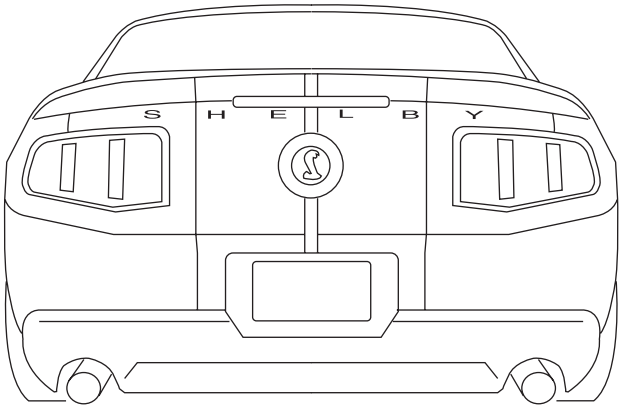
In a move to support this spirited enthusiasm, Ford Motor Company carefully integrated the wide array of talent in the company into a small, cross-functional group of engineers and product planners, housed together under one roof with a common mission: to create vehicles specifically designed to meet the unique needs and desires of the knowledgeable driving enthusiast.

Each of nearly 150,000 SVT vehicles produced since the 1993 model year has been designed and developed with the four SVT Hallmarks in mind: Performance, Substance, Exclusivity and Value. These hallmarks have driven the SVT Mustang Cobra and the Cobra R, the SVT F-150 Lightning, the SVT Contour, the SVT Focus, Ford GT, Shelby GT500 and GT500KR.

We are proud and passionate about what we do, and we're glad you have made us your choice.

Shelby GT500 unique features

UNIQUE FEATURES

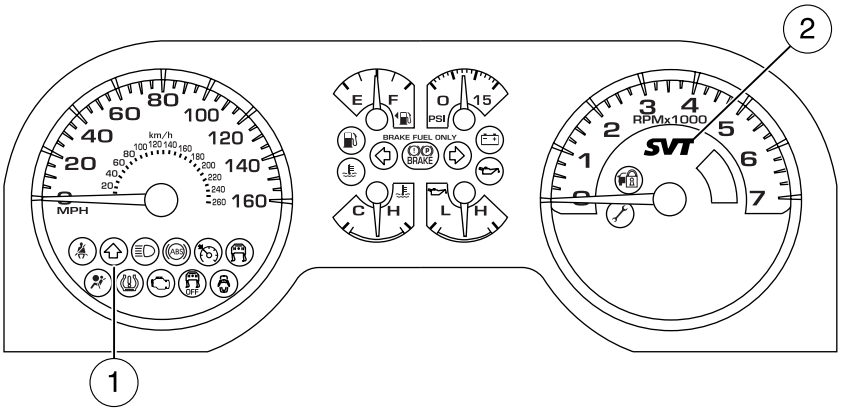


- 5.4L DOHC 32V Supercharged V-8 engine with intercooler — 540 horsepower @ 6,200 rpm, 510 lb-ft torque @ 4,500 rpm SAE certified
- Low-restriction, cold air intake system
- SVT tuned exhaust system with X pipe and 4 inch tips
- Engine oil cooler
- TR-6060 6 speed manual transmission
- Twin disc clutch
- Anti-lock brake system
- High performance brake pads
- Front Brakes: Brembo 14 inch vented disc with four piston aluminum calipers
- Rear brakes include unique friction material
- SVT tuned front and rear suspension
- 18 in x 9.5 in cast aluminum wheels (convertible only)
- 19 in x 9.5 in forged aluminum wheels (coupe only)
- P255/45ZR-18 front, P285/40ZR-18 rear (convertible only) Goodyear F1 tires
- P255/40ZR-19 front, P285/35ZR-19 rear (coupe only) Goodyear F1 tires
- Unique front fascia, rear fascia, aerodynamically tuned front splitter, fog lamps, hood with functional air extractors, rear decklid spoiler

Shelby GT500 unique features

- Limited slip rear differential w/ 3.55 rear axle ratio
- Short throw shifter
- Flat blade wiper system
- AdvanceTrac Stability Enhancement System with sport mode specifically calibrated and race track tuned. To engage, refer to the *Driving* section in your owner's guide.
- Unique cluster with boost gauge and programmable performance shift indicator
- Unique Shelby GT500 seats
- Leather-wrapped sport steering wheel, shift boot and parking brake handle
- I/P appliques, door panels, and scuff plates

SHELBY GT500 INSTRUMENT CLUSTER



Upshift

Illuminates when it is best to shift to the next highest manual transmission gear to maximize fuel economy.

Multi-shift indicators:

1. (Upshift): Set for maximum fuel economy

2. *SVT*: Performance shift indicator

Shelby GT500 unique features

Performance shift indicator

Your vehicle is equipped with a programmable performance shift indicator. When activated, this feature provides a visual (SHIFTLAMP) and/or audible (SHIFTTONE) cue to shift to the next highest gear at an engine rpm specified by the driver.

The SHIFTLAMP feature uses the SVT logo on the tachometer to notify you when the desired shiftpoint is reached. The SVT symbol is backlit in red under normal driving conditions (SHIFTLAMP OFF). When the SHIFTLAMP is set to ON, the red backlighting is turned off and the SVT logo will turn bright orange when the desired shift point is reached.

The SHIFTTONE feature uses an audible tone to notify you when the desired shiftpoint is reached.

SHIFTLAMP and SHIFTTONE can be used separately, together, or turned off completely.

To use the performance shift indicator feature, **first bring the vehicle to a complete stop** then use the message center controls as follows:

Note: The vehicle's headlamps or park lamps must be on to perform/check light functions.

1. Press SETUP repeatedly until PRESS RESET TO SET SHIFTPOINT appears in the display.

2. Press RESET to choose between SHIFTLAMP ON/OFF. Press SETUP when finished.

3. Press RESET to choose between SHIFTTONE ON/OFF. Press SETUP when finished.

4. Press and hold INFO to lower the desired SHIFTPOINT in increments of 100 rpm.

5. Press and hold RESET to raise the desired SHIFTPOINT in increments of 100 rpm.

Note: The SHIFTPOINT can be adjusted from 1,500-6,500 rpm.

The performance shift indicator feature functions independently of the fuel economy upshift indicator ( ). The upshift indicator will still illuminate when it is best to shift to the next highest gear to maximize fuel economy regardless of the performance shift indicator settings.

Unique instrument cluster lighting

Your vehicle is equipped with a unique instrument cluster color display. In place of orange, you can select R-W-B which will illuminate the speedometer in red, the Fuel/Boost/Temp/Oil pressure gauges in white and the tachometer in blue. Pointer colors are not adjustable.

The instrument cluster will momentarily display the R-W-B coloring when the ignition is turned to on or start and will then return to the previously chosen color.

For instructions on how to set the instrument cluster display color or MyColor™, refer to *Message center — Display color* in the *Driver Controls* chapter of the *Owner's Guide*.

ALTERNATE CALIBRATION

Your Shelby GT500 power train control module (PCM) strategy contains a feature to limit supercharger boost pressure and engine speed to 4000 rpm for the first five consecutive miles of vehicle operation or 50 engine start/warm up cycles. This feature is enabled prior to shipment. If neither of these conditions have been satisfied prior to customer delivery, full power will not be available.

MANUAL 6 SPEED TRANSMISSION OPERATION

Using the clutch

The manual transmission has a starter interlock that prevents cranking the engine unless the clutch pedal is fully depressed.

To start the vehicle:

1. Make sure the parking brake is fully set.

2. Press the clutch pedal to the floor, then put the gearshift lever in the neutral position.

3. Start the engine, then press the brake pedal and release the parking brake.

4. Move the gearshift lever to 1st gear, then slowly release the clutch pedal while slowly pressing on the accelerator.

During each shift, the clutch pedal must be fully depressed to the floor. Failure to fully depress the clutch pedal to the floor may cause increased shift efforts, prematurely wear transmission components, or cause gear clash or damage to the transmission. Make sure the floor mat is properly positioned so it doesn't interfere with the full extension of the clutch pedal.

Do not drive with your foot resting on the clutch pedal or use the clutch pedal to hold your vehicle at a standstill while waiting on a hill. These actions will reduce the life of the clutch.

Your vehicle is equipped with a twin disc clutch. Due to the high performance of the powertrain, a certain amount of noise from the transmission is normal.

ADVANCETRAC® STABILITY ENHANCEMENT SYSTEM

AdvanceTrac® Sport Mode

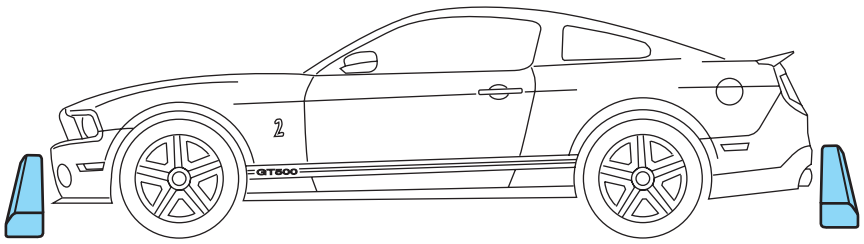
The AdvanceTrac® system provides an available Sport Mode specially calibrated for the GT500's unique performance characteristics. This can be selected utilizing the AdvanceTrac off control switch. See the *Driving* section of the owner's guide for more information.

Sport mode is not intended for use on public roadways as this mode provides less AdvanceTrac® system intervention than when the default ESC and Traction Control systems are on. Sport mode will allow more spirited driving while the AdvanceTrac® system is still enabled.

DRIVING YOUR SHELBY GT500 THROUGH WATER

The Ford Shelby GT500 has aerodynamic devices attached to the underbody designed to help control airflow for superior performance. Therefore, the driver must be especially careful to avoid driving through deep or standing water. If driving through deep or standing water is unavoidable, proceed very slowly. Never drive through water that is higher than the bottom of the wheel rims. Water may enter through the air intake due to the vacuum generated in the engine. Damage caused by the intake of water in the engine is not covered by the warranty.

GROUND CLEARANCE



Note: Because of low vehicle ground clearance, use caution when approaching curbs/curb stops from the front and rear as vehicle damage could occur. Additionally, when crossing speed bumps or driveway curbs, SVT recommends approaching at a 45 degree angle to reduce the risk of vehicle damage.

WASHING YOUR SHELBY GT500

Do not drive your vehicle through an automated, commercial car wash due to the vehicle's low ground clearance, tire width and track. Wash your vehicle by hand, or by using a touchless commercial wash with no mechanical tracks on the floor. Do not use a commercial or high pressure wand on the striped surfaces or stripe edges.

SUSPENSION

- MacPherson strut with L-arm front suspension
- 8.8 inch solid rear axle with limited slip differential (3.55:1 ratio)

Coupe stabilizer bars:

- 34 x 5.1 mm tubular front stabilizer bar
- 24 mm solid rear bar
- Tokico twin tube shocks and struts

Convertible stabilizer bars:

- 34 x 5.1 mm tubular front stabilizer bar
- 20 mm solid rear bar
- Tokico twin tube shocks and struts

Spring rates:

- 39.0 N/mm front and 31.5 N/mm rear (Coupe)
- 30.9 N/mm front and 23.0 N/mm rear (Convertible)

WHEELS

Your SVT vehicle is equipped with unique wheels matched to the tires. These wheels are more susceptible to damage due to their diameter, width and low profile tires. To avoid damage to your wheels:

- Maintain proper tire pressure (see *Tires* in this supplement).
- Do not drive your vehicle through an automated, commercial car wash due to the vehicle's low ground clearance, tire width and track. Wash your vehicle by hand, or by using a touchless commercial wash with no mechanical tracks on the floor. Do not use a commercial or high pressure wand on the striped surfaces.
- When installing wheels, always torque lug nuts to specification with a torque wrench.
- Inspect your wheels for damage on a regular basis. If a wheel is damaged, replace it immediately.
- In the event that you encounter an abnormally harsh impact, inspect the outer diameter of your wheels, both inside and out, for damage.

Operating at high speeds

Your SVT vehicle is capable of high speeds and is equipped with tires rated for the vehicle's maximum speed, electronically limited to 155 mph (250 km/h). Remember to drive safely, obey all traffic laws and only operate your SVT vehicle at high speeds at locations equipped and designed to do so safely. Before operating your vehicle at high speeds:

- Ensure correct tire pressures (see *Tires* in this supplement).
- Inspect wheels and tires for wear and damage. Replace any damaged wheels or tires.
- Do not operate your vehicle at high speeds with more than two passengers or while carrying cargo.

Wheel lug nut torque specifications

Retighten the lug nuts to the specified torque at 500 miles (800 km) after any wheel disturbance (tire rotation, changing a flat tire, wheel removal, etc.).

Bolt size	Wheel lug nut torque*	
	lb.ft.	N•m
½ x 20	100	135
* Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.		

WARNING: When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Ensure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while the vehicle is in motion, resulting in loss of control.

IMPORTANT TIRE INFORMATION

Your SVT vehicle is equipped with unique wheels and tires designed to enhance performance. To continue providing this performance, extra care must be taken when operating and maintaining your vehicle.

Wheels and Tires

Tires	P255/45ZR-18 front, P285/40ZR-18 rear (convertible only) P255/40ZR-19 front, P285/35ZR-19 rear (coupe only)
Wheels	18 x 9.5 in. cast aluminum (convertible only) 19 x 9.5 in. forged aluminum (coupe only)

Tires

Your SVT vehicle is equipped with low profile, high performance tires that are designed to optimize the driving dynamics you expect in a SVT vehicle. These tires are not optimized for off-road or winter (snow or cold weather) performance, and their ride, noise and wear characteristics are different than non-performance tires. Also, because of their lower profile, the tires are more susceptible to damage due to potholes and rough roads. To ensure that your tires perform as intended, it is important that you maintain your tires properly:

- The Shelby GT500 original equipment tires are optimized for performance in both wet and dry conditions. Ford does not recommend using the original equipment tires when temperatures are below 40°F (5°C) or in snow/ice conditions.
- **Do not use tire chains** on the original wheels and tires of your vehicle. The use of any type of tire chain on these tires may damage your vehicle.
- For tire pressures, see the placard located on the B-pillar inside the driver's door.
- Always maintain your tire pressures according to the tire information placard on the driver's door jamb, using an accurate gauge.
- Tire pressures are specified "cold" and should be checked after the vehicle has been parked for at least 3 hours. Do not reduce pressure of warm tires.
- Check your tire pressure often to maintain it properly. Tire pressure can diminish over time and fluctuate with temperature.

- Do not overload your vehicle. Maximum vehicle and axle weights are listed on the tire information placard.
- Extra caution should be taken when operating the vehicle near its maximum load, including assuring proper tire pressure and reducing speeds.
- Extra caution should be taken when operating on rough roads to avoid impacts that could cause tire damage.
- In the event that you encounter an abnormally harsh impact, inspect your tires for damage.
- Inspect your tires for damage on a regular basis. If a tire is damaged, replace it immediately.
- Proper suspension alignment is critical for maximum performance and optimal tire wear. If you notice uneven tire wear, have your alignment checked.
- Rotate tires as recommended in the following section *Tire rotation.*
- When replacing tires, the only way to ensure original performance is to use the original equipment tire. If a different tire is used, it should be the same size, speed rating and load rating and be replaced as a set of four. Never mix tire brands.

Winter driving

The original equipment tires on your SVT vehicle are designed for maximum performance in dry and wet summer conditions. They are not designed for winter use on ice or snow and cannot be used with snow chains. If you will be operating your vehicle in these conditions, winter or all-season tires must be used.

- Use winter tires on all four wheels and use P255/45R-18 (convertible) or P255/40R-19 (coupe) tires with a “V” speed rating and a 93 load index or higher.
- Winter tires must be of the proper speed and load ratings.
- Be aware that winter or all-season tires will not perform as well as the original equipment tire in dry and wet conditions. Expect handling, steering and braking to be degraded.
- Do not use a winter tire with less than a “V” speed rating, and even with clear, dry driving conditions do not operate your vehicle above posted speed limits while using winter tires. Never perform high speed driving with winter tires.

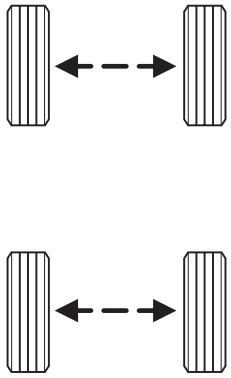
Please call the Ford Performance Info Center at 1-800-FORD-SVT (367-3788) for specific winter tire recommendations.

Tire rotation

Because your vehicle is equipped with unique larger tires on the rear wheels, you can only rotate the tires side to side. You must not rotate tires in a crisscross pattern or front to rear. If you notice that the tires wear unevenly, have them checked.

The tires on your Shelby GT500 should be rotated every 5,000 miles (8,000 km). This will help your tires wear more evenly, providing better tire performance and longer tire life.

- Tire rotation (front tires at the top of the diagram)

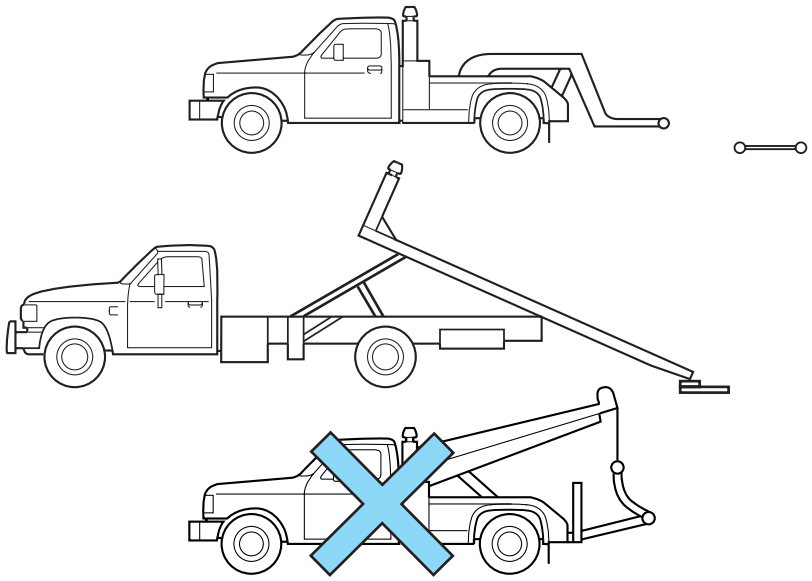


Sometimes irregular tire wear can be corrected by rotating the tires.

Note: If your tires show uneven wear, ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

Note: After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

WRECKER TOWING

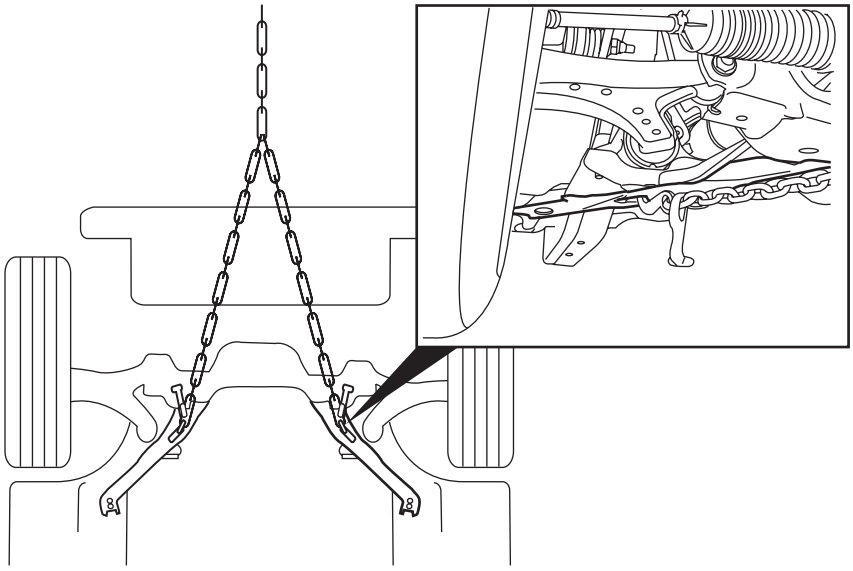


If you need to have your vehicle towed, contact your roadside assistance center or a professional towing service.

It is recommended that your vehicle be towed with a wheel lift and dollies or with flatbed equipment. When towing with a flatbed, 4x4 blocks must be used when loading/unloading your vehicle. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

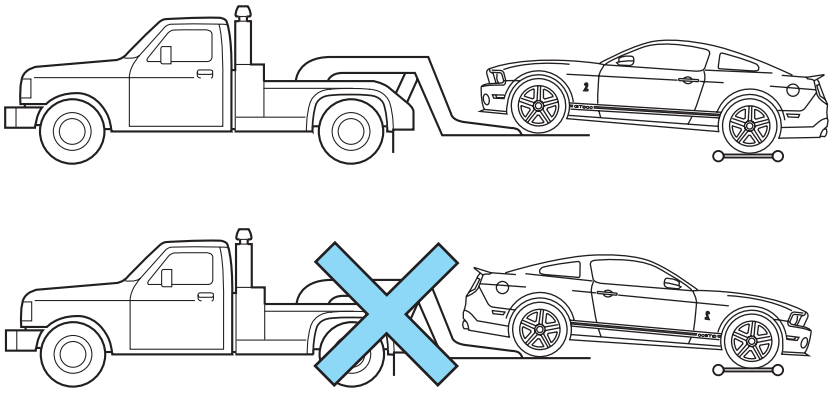
If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

Transportation instructions



When towing the vehicle, ensure that you use two mini J hooks and attach them to the crossmember oblong holes as shown. Other methods may damage the vehicle.

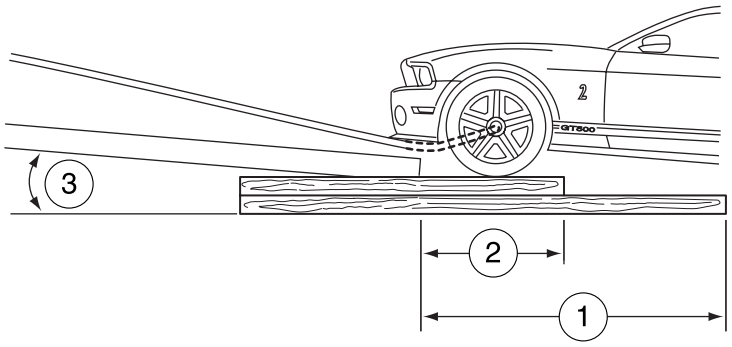
Wheel lift



When towing the Shelby GT500, for front loading, the front tires must be 16 in. (41 cm) higher than the rear.

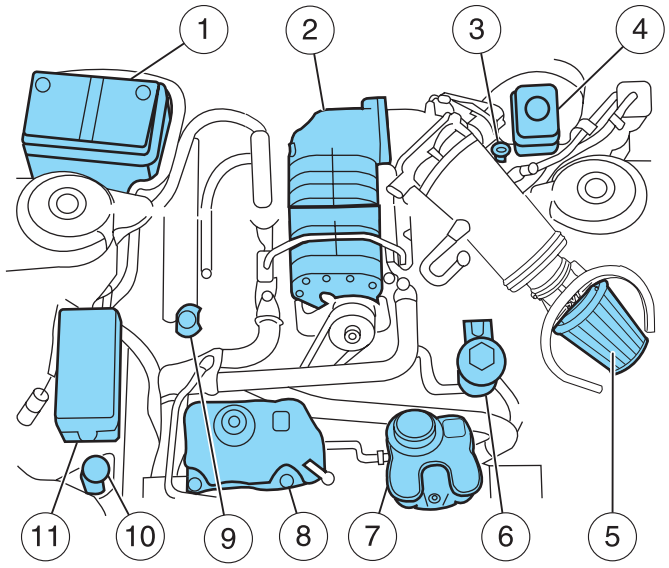
Rear lift towing is not recommended, as vehicle damage may occur.

Flatbed



1. 36 in. (91 cm) 4x4 loading block
2. 18 in. (45.72 cm) 4x4 loading block
3. 11.5° maximum

5.4L DOHC SUPERCHARGED V–8 ENGINE



1. Battery
2. Supercharger
3. Engine oil dipstick
4. Brake fluid reservoir
5. Air filter assembly
6. Power steering fluid reservoir
7. Intercooler coolant reservoir
8. Engine coolant reservoir
9. Engine oil filler cap
10. Windshield washer reservoir
11. Power distribution box

ENGINE OIL RECOMMENDATION

Use Motorcraft SAE 5W-50 full synthetic or an equivalent SAE 5W-50 full synthetic oil meeting Ford specification WSS-M2C931-B.

Do not use supplemental engine oil additives, cleaners or other engine treatments. They are unnecessary and could lead to engine damage that is not covered by Ford warranty.

Change your engine oil and filter according to the appropriate schedule listed in the *scheduled maintenance information.*

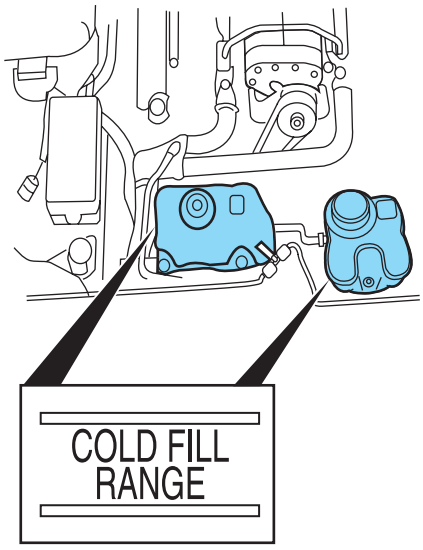
ENGINE AND INTERCOOLER COOLANT

The concentration and level of coolant should be checked at the mileage intervals listed in the *scheduled maintenance information.* The coolant concentration should be maintained at 50/50 coolant and water, which equates to a freeze point of -36°C (-34°F). Coolant concentration testing is possible with a hydrometer or antifreeze tester (such as the Rotunda Battery and Antifreeze Tester, 0014–R1060). The level of coolant should be maintained at the "cold fill range" level in the coolant reservoir. If the level falls below, add coolant per the instructions in the *Adding coolant* section.

Your vehicle was factory-filled with a 50/50 coolant and water concentration. If the concentration of coolant falls below 40% or above 60%, the engine parts could become damaged or not work properly. **A 50/50 mixture of coolant and water provides the following:**

- **freeze protection down to -36°C (-34°F).**
- **boiling protection up to 129°C (265°F).**
- **protection against rust and other forms of corrosion.**
- **an accurate temperature readout from the engine coolant gauge.**

When the engine is cold, check the level of the engine coolant in the reservoir.



- The coolant should be at the “cold fill range” as listed on the engine coolant reservoir and intercooler coolant reservoir.
- Refer to the *scheduled maintenance information* for service interval schedules.
- Be sure to read and understand *Precautions when servicing your vehicle* in your *Owner’s Guide*.

If the coolant has not been checked at the recommended interval, the engine or intercooler coolant reservoir may become low or empty. If the reservoir is low or empty, add coolant to the reservoir. Refer to *Adding coolant* in this chapter.

Note: Automotive fluids are not interchangeable; do not use engine coolant, antifreeze or windshield washer fluid outside of its specified function and vehicle location.

Adding coolant

When adding coolant, make sure it is a 50/50 mixture of coolant and distilled water. Add the mixture to the coolant reservoir, **when the engine is cool**, until the appropriate fill level is obtained.

WARNING: Do not add coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

WARNING: Do not put coolant in the windshield washer fluid container. If sprayed on the windshield, coolant could make it difficult to see through the windshield.

The cooling system in your vehicle is filled with either green-colored Motorcraft Premium Engine Coolant meeting Ford specification ESE-M97B44-A or yellow-colored Motorcraft Premium Gold Engine Coolant meeting Ford Specification WSS-M97B51-A1. To determine your vehicle's coolant type (color), check your coolant reservoir.

- **Add Motorcraft Premium Engine Coolant (green-colored), VC-5-A (U.S., Mexico) or CXC-10 (Canada) or Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7-B, depending on the type of coolant originally equipped in your vehicle.** If you are unsure which type of coolant your vehicle requires, check your coolant reservoir or contact your local dealer.
- **Do not add/mix an orange-colored, extended life coolant such as Motorcraft Specialty Orange Engine Coolant, VC-3 (U.S., Mexico) or CXC-209 (Canada), meeting Ford specification WSS-M97B44-D with the factory-filled coolant.** Mixing Motorcraft Specialty Orange Engine Coolant or any orange-colored extended life product with your factory filled coolant can result in degraded corrosion protection.
- A large amount of water without coolant may be added, in case of emergency, to reach a vehicle service location. In this instance, the cooling system must be drained and refilled with a 50/50 mixture of coolant and distilled water as soon as possible. Water alone (without coolant) can cause engine damage from corrosion, overheating or freezing.
- **Do not use alcohol, methanol or brine or any engine coolants mixed with alcohol or methanol antifreeze (coolant).** Alcohol and other liquids can cause engine damage from overheating or freezing.
- **Do not add extra inhibitors or additives to the coolant.** These can be harmful and compromise the corrosion protection of the engine coolant.

- **Do not mix with recycled coolant unless from a Ford-approved recycling process (see** *Use of recycled engine coolant* **section).**

WARNING: To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.

If you must remove the pressure relief cap or radiator cap (depending upon engine application), follow these steps to avoid personal injury:

1. Before you remove the cap, turn the engine off and let it cool.
2. When the engine is cool, wrap a thick cloth around the cap. Slowly turn cap counterclockwise until pressure begins to release.
3. Step back while the pressure releases.
4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.

Coolant and intercooler refill procedure

The following procedure should be used when refilling the cooling system after it has been drained or become extremely low.

1. Remove the pressure relief cap from the coolant reservoir as previously outlined.
2. Slowly add a **50/50 mixture** of coolant and distilled water to the coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.
3. Reinstall the pressure relief cap.
4. Start and idle the engine until the upper radiator hose is warm (this indicates the thermostat is open and coolant is flowing through the entire system).
5. Shut the engine off and let it cool.
6. Remove the pressure relief cap from the coolant reservoir as previously outlined.
7. Add a **50/50 mixture** of coolant and distilled water to the coolant reservoir until the coolant level is at the “cold fill range” as listed on the reservoir.
8. Reinstall the pressure relief cap.
9. Check the coolant level in the reservoir before you drive your vehicle the next few times (with the engine cool).

10. If necessary, add a **50/50 mixture** of coolant and distilled water to the coolant reservoir until the coolant level is at the "cold fill range" as listed on the reservoir.

After any coolant has been added, check the coolant concentration (refer to *Checking coolant* in the *Owner's Guide).* If the concentration is not 50/50 (protection to –34°F/–36°C), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

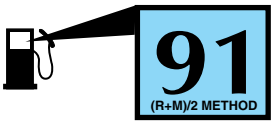
Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough 50/50 concentration of coolant and distilled water to bring the liquid level to the proper level.

If you have to add more than 1.0 quart (1.0 liter) of coolant per month, have your dealer check the cooling system. Your cooling system may have a leak. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

ENGINE SPARK PLUG INTERVAL

To keep your high performance engine operating at peak performance, the spark plug service interval is every 45,000 miles (72,000 km). Reference the Motorcraft Part Numbers chart for the specific spark plug application.

OCTANE RECOMMENDATIONS



Your vehicle is designed to use "Premium" unleaded gasoline only, with an (R+M)/2 octane rating of 91 or higher. SVT recommends using unleaded gasoline with octane rating of 93 or higher for optimal performance of this vehicle. Recommended fuel is an important part of the proper maintenance and optimal performance of this vehicle. The use of gasoline with octane ratings of 91 or lower can lead to severe mechanical damage to your vehicle, may degrade vehicle performance and may affect your warranty coverage. Please see the Warranty Guide for complete information.

SVT does not recommend the use of gasoline labeled as ″Premium″ with octane ratings of less than 91.

AIR FILTER

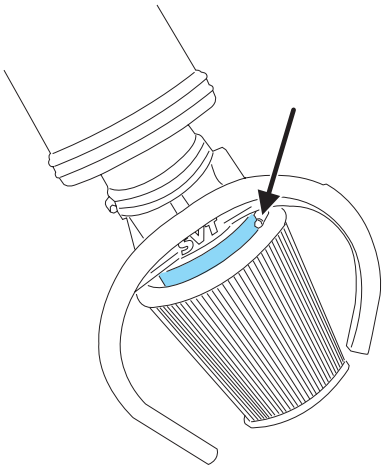
Refer to *scheduled maintenance information* for the appropriate intervals for changing the air filter element.

When changing the air filter element, use only the Motorcraft air filter element listed. Refer to *Motorcraft part numbers* in this chapter.

WARNING: To reduce the risk of vehicle damage and/or personal burn injuries do not start your engine with the air cleaner removed and do not remove it while the engine is running.

Changing the air filter element

1. Loosen the air filter clamp bolt enough to allow the air filter to slip off the air filter housing easily.
2. Slip the air filter off from the air filter housing.
3. Wipe the air filter housing clean to remove any dirt or debris.
4. Install the new air filter taking care not to damage the air filter element. Align tab on closed end of filter with notch in air filter housing.
5. Tighten the air filter clamp bolt.



MOTORCRAFT PART NUMBERS

Component	5.4L DOHC Supercharged V8 engine
Air filter element	FA-1896
Fuel filter	FG-1083
Battery	BXT-40-R
Oil filter	FL-820S
Spark plugs*	AGSF-22FM1

* Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

MAINTENANCE PRODUCT SPECIFICATIONS AND CAPACITIES

Item	Capacity	Ford part name or equivalent	Ford part number / Ford Specification
Brake fluid	Between MIN and MAX lines on reservoir	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	PM-1-C / WSS-M6C62-A or WSS-M6C65-A1
Engine oil (includes filter change)	6.5 quarts (6.1L)	Motorcraft 5W-50 Full Synthetic Motor Oil	X0-5W50-QGT / WSS-M2C931-B
Engine coolant[1]	21.1 quarts (20.0L)	Motorcraft Premium Gold Engine Coolant with bittering agent (yellow-colored)	VC-7-B / WSS-M97B51-A1
Intercooler coolant[1]	3.96 quarts (3.75L) (See your authorized dealer for service)	Motorcraft Premium Gold Engine Coolant with bittering agent (yellow-colored)	VC-7-B / WSS-M97B51-A1
Power steering fluid	Between MIN and MAX lines on reservoir	Motorcraft MERCON® V ATF	XT-5-QM / MERCON® V
Rear axle lubricant[2]	4.25 pints (2.0L)	Motorcraft SAE 75W-140 High Performance Synthetic Rear Axle Lubricant	XY-75W140-QL / WSL-M2C192–A

Item	Capacity	Ford part name or equivalent	Ford part number / Ford Specification
Fuel tank	16.0 gallons (60.5L)	—	—
Transmission fluid[3]	6.35 pints (3.5L)[4]	Motorcraft MERCON® V ATF	XT-5-QM / MERCON® V
Windshield washer fluid	4.0 quarts (3.8L)	Motorcraft Premium Windshield Washer Concentrate	ZC-32-A / WSB-M8B16–A2

[1]Add the coolant type originally equipped in your vehicle.

[2]Rear axle lubricants do not need to be checked or changed unless a leak is suspected, service is required or the axle assembly has been submerged in water. The axle lubricant should be changed any time the rear axle has been submerged in water, using SAE 75W-140 High Performance rear axle lube, meeting Ford specification WSL-M2C192–A.

Fill 1/4-9/16 in. (6-14 mm) below bottom of fill hold. Add 4 oz. (118 ml) of Additive Friction Modifier C3AZ-19B546-A or equivalent meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

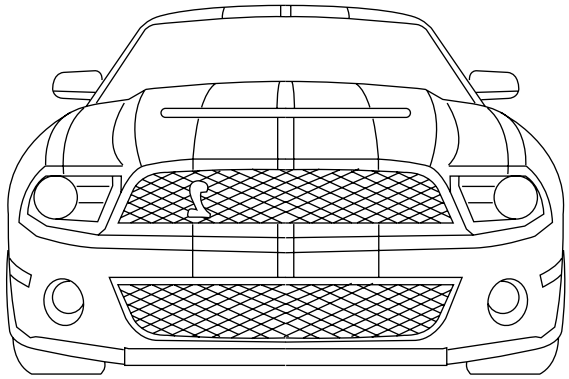
[3]The Tremec TR-6060 6–Speed manual transmission on your Shelby GT500 uses MERCON® V automatic transmission fluid. Ensure that the correct MERCON® V ATF automatic transmission fluid is used as indicated on the label on your transmission.

[4]Service refill capacity is determined by filling the transmission to the bottom of the filler hole with the vehicle on a level surface.

USING THE RIGHT BULBS

Function	Trade Number
Park lamp, turn lamp, side marker (front)	3156K
Luggage compartment lamp	S211
Fog lamp	PS24N

DRIVETRAIN



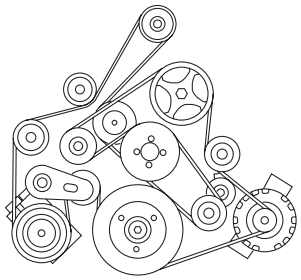
Item	Description	
Rear axle	8.8 in. solid rear axle with limited-slip differential 3.55:1 ratio	
Driveshaft	2-piece aluminum	
Transmission	Tremec TR–6060 6-speed manual with integral clutch housing	
Gear ratios	*Gear*	*Ratio*
	1st	2.97
	2nd	1.78
	3rd	1.30
	4th	1.00
	5th	0.74
	6th	0.50
	Reverse	2.90

ENGINE INFORMATION

Item	Description
Configuration	Longitudinally mounted, 90-degree V8, cast-iron cylinder block and cast aluminum cylinder heads
Bore x Stroke	90.2 x 105.8 mm (3.55 x 4.165 in)
Displacement	5410 cc/330 cid
Compression ratio	8.4:1
Horsepower	540 Horsepower @ 6200 rpm
Torque	510 lb-ft torque @ 4500 rpm
Redline	6250 rpm fuel shut-off
Specific output	100 HP per liter
Valvetrain	Dual overhead chain-driven cams, roller finger followers with hydraulic lash adjustment, ovate-wire valve springs, four valves per cylinder
Fuel system	Sequential electronic fuel injection
Mass air sensor	105 mm (4.13 in) circle
Throttle body	Twin 60 mm (2.36 in) diameter bore-simultaneously open
Pistons	Forged aluminum
Crankshaft	Forged steel
Connecting rods	Forged steel I-beam
Supercharger	Eaton model 122, Roots-type
Exhaust manifolds	Cast high-silicon, molybdenum iron
Exhaust system	Dual stainless steel

Engine drivebelt routing

5.4L DOHC 32V Supercharged V-8



WARRANTY COVERAGE

The Shelby GT500 carries the same warranty as other Ford Mustang models. This information is covered in its entirety in the Ford Motor Company Warranty Guide.

Warranty service for the Shelby GT500 or any SVT vehicle can be obtained at any Ford dealer nationwide.

SVT does not recommend modifying or racing SVT vehicles, as they are designed and built to be driven as delivered from the factory. The Ford Motor Company Warranty Guide discusses vehicle usage and the installation of aftermarket parts and their effect on warranty coverage.

Please see the Warranty Guide for complete information.

In the event the vehicle is intended for track use, and the loss of warranty coverage is not of concern, the following vehicle durability modifications are recommended:

- Install transmission oil cooler. Permanent damage to the transmission will result if the vehicle is subjected to competition conditions without installation of a transmission oil cooler.
- Install rear differential cooler. Permanent damage to the rear differential will result if the vehicle is subjected to competition conditions without installation of a differential cooler.
- Install Ford Racing brake cooling duct kit. Excessive brake wear will occur if the vehicle is subjected to competitive conditions without installation of a brake cooling kit.

Additionally, perform Multi-Point Inspection and the inspections outlined in the 150,000 mile (240,000 km) Normal Maintenance Schedule of the *scheduled maintenance information* before and after track use. Refer to the Vehicle Service Manual for removal and installation procedures. Replace with Genuine Ford and Motorcraft service parts as needed.

These modifications may not necessarily protect your engine from damage in competition conditions. Subjecting your vehicle to competition conditions even with these proposed modifications may render repairs non-reimbursable under the warranty.