



ALL-NEW

2005

MUSTANG

THE ICON OF AMERICAN MUSCLE CARS UNLEASHES A NEW ERA OF PERFORMANCE

Product Information Book

AMERICA'S MUSCLE CAR UNLE



Mustang is the embodiment of American performance. An icon. And the symbol of an entire generation. Straightforward and authentic, Mustang is, without a doubt, the most beloved set of wheels ever to roll off a Detroit assembly line.

And for 2005, Mustang offers a clean, contemporary design rooted in this unmistakable heritage. From its all-new, fully modern body structure and chassis system to its head-turning exterior styling, roomier interior, technologically advanced sound systems, climate control and advanced safety systems, every inch of Mustang is new. Advanced. Leading edge.

And with more features standard than ever before, Mustang is also focused on value. Yet it staunchly remains the genuine article — true to its history. True to its heritage. And true to its responsibility as America's car for 40 years.

The result? A Mustang that combines an all-new fully modern architecture with all the soul that makes Mustang the heart of Ford — and the keeper of America's heart for 40 years straight and counting.



ASHES ITS FUTURE



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MUSTANG 2005 — THE LEGEND LIVES

More standard features than ever before —

Including power windows, power exterior mirrors, power door locks with Remote Keyless Entry System, heated rear window, speed control, interval wipers, and much more

GT Engine — 4.6L 3-valve SOHC V-8 with variable cam timing puts out 300 horsepower @ 5750 rpm and 320 lb.-ft. of torque @ 4500 rpm

V-6 Engine — 4.0L SOHC V-6 with 210 horsepower @ 5300 rpm and 240 lb.-ft. of torque @ 3500 rpm ■

Transmission — A first for Mustang is a 5-speed automatic transmission. Its closely spaced ratios keep the engine in its power band for maximum acceleration under wide-open throttle, yet its wider overall ratio gives it the unique capability to offer exceptional highway fuel economy ■

The classic long hood —

Combines with the short rear deck and pushed-forward front wheels to enhance the rear drive look ■

New front end —

Aggressive, forward-leaning grille and jeweled, round headlamps in trapezoidal housings set off the powerful stance. GT models include fog lamps located in grille ■

Interior offers three distinct design themes —

Base, Interior Upgrade and Interior Color Accent Packages ■

Roomier interior —

Offers more front head and shoulder room, more rear leg and shoulder room ■



Liquid-filled engine mounts — Both the V-6 and V-8 engines use hydromount engine mounts, tuned to intercept specific unwanted vibrations, keeping them from reaching the cabin

True dual exhaust — 2.5-inch stainless steel mandrel-bent exhaust is standard on Mustang GT; helps the engine breathe while politely making its presence heard



Two-piece driveshaft (GT) — It works to keep power delivery smooth while contributing to high-speed capability

Rear-wheel drive with solid rear axle —

Offers better off-line performance and better weight distribution for enhanced handling characteristics

3.55 rear axle — This differential makes excellent use of GT's V-8 engine, offering excellent off-the-line acceleration (standard on GT with manual transmission)

Rear axle design — Provides overall exceptional lateral control and reduces axle hop on hard acceleration and lateral skate on uneven surfaces

MacPherson strut front suspension —

Combines precision handling and a smooth, comfortable ride

3-link rear suspension with Panhard rod —

Provides precise control of the rear axle, while the central upper control arm that's fastened to the top of the differential front end gives

60% more leverage against axle windup for smooth, consistent launches



Short drop door glass — The door glass automatically lowers some when the door is opened, then rises when the door is closed. This allows the glass to clear the weatherstrip during closing, for reduced NVH and positive water and wind sealing

Mustang's exterior — Bold, all-American design with an aggressive stance and powerful look that are uniquely Mustang

Four-wheel disc brakes — With ventilated front rotors for outstanding braking performance, low-effort stopping power, and exceptional fade resistance under all conditions

All-Speed Traction Control — The system helps reduce wheel spin on wet or slippery surfaces, yet is tuned to allow more wheel-slip under hard acceleration on dry pavement (standard on GT, available on V-6)

Wheels — Standard 17-inch wheels on GT for outstanding look, stance and handling characteristics (16-inch wheels standard on V-6) ⁽¹⁾

(1) Optional 17-inch wheel shown.

Available Industry-first MyColor™ — Color-configurable instrument cluster offers almost unlimited personalization

3-spoke steering wheel — Black center hub is marked by the galloping pony and tri-color bars logo

Standard 4-gauge cluster — Cluster includes large, circular speedometer and tachometer



Available 6-gauge cluster — Included in the Interior Upgrade Package, this cluster includes chrome-ringed speedometer and tachometer, barrel-like gauges for fuel level, battery, coolant temperature and oil pressure

Clean center stack design — Offers easy use of audio, climate and other controls

B-pillar window — Looks classic while aiding rear visibility



Tri-bar taillamps — Combined with circular Mustang badge centered in rear of decklid to bring modern flare to a classic Mustang feature



Dual-stage front airbags — Are part of the advanced Personal Safety System™ designed to provide advanced and capable front crash protection

Four-channel ABS — Provides more accurate steering control in hard-braking applications

POWERTRAIN — THE STUFF THAT LEGS

Inevitably, within the first ten words of any Mustang discussion, someone will mention the word "engine," "motor" or "powerplant." Mustang is all about power. Always has been. Mustang owners have always been acutely aware of what's under the hood.

Mustang's engine is the central figure in its reputation and the primary source of bragging rights. In 2005, the GT's 300-horsepower 4.6L SOHC V-8 gives owners plenty to brag about — again.

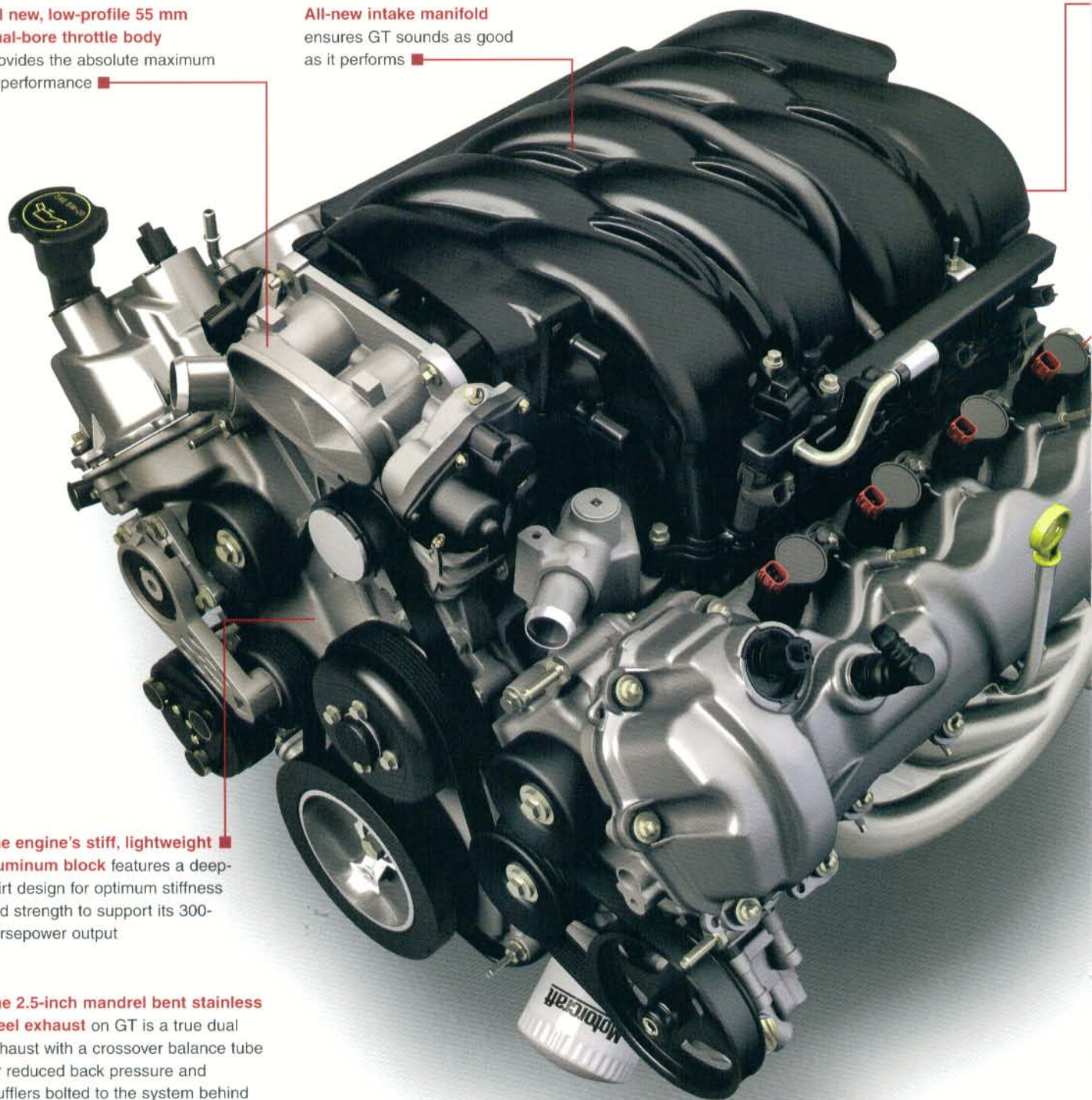
GT

All new, low-profile 55 mm dual-bore throttle body provides the absolute maximum in performance ■

All-new intake manifold ensures GT sounds as good as it performs ■

The engine's stiff, lightweight aluminum block features a deep-skirt design for optimum stiffness and strength to support its 300-horsepower output

The 2.5-inch mandrel bent stainless steel exhaust on GT is a true dual exhaust with a crossover balance tube for reduced back pressure and mufflers bolted to the system behind the rear axle for easy serviceability



ENDS ARE MADE OF...



■ **Charge motion control valves** work with the cylinder head design and variable cam timing to help optimize intake airflow at any given moment

■ **Coil-on-plug ignition** with center-mounted spark plugs produces a symmetrical flame front for improved combustion

■ **All-new single overhead cam (SOHC)**

3-valve cylinder heads are key in producing 300 horsepower from a mere 281 cubic inches



■ **Tuned-length exhaust manifolds** optimize exhaust flow and help capture burned gases

GT Cylinder Heads

The cylinder heads are a story in themselves — providing a key to increasing power by giving the engine a higher compression ratio than previously possible with regular, 87-octane gasoline.

- These heads also pay homage to an internal combustion engine truism: **air equals horsepower**. By designing heads with 3 valves per cylinder — 2 of them intakes — you're moving more air into each cylinder. More air, more power
- And despite having another valve per cylinder, these heads are actually **smaller** than the previous, 2-valve versions, while offering better airflow at peak engine speeds

Finding the Horsepower... the 4.6L 3-valve V-8

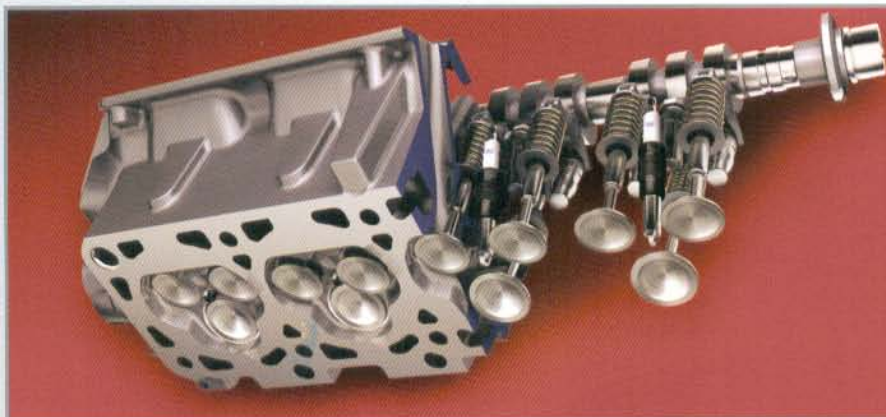
It used to be that only Mach 1s, Cobras and Boss Mustangs traveled in 300-plus-horsepower territory. Obviously, things have changed. The GT's 4.6L 3-valve V-8 engine offers up 40 more horsepower than the 2004 V-8. In fact, the 4.6L's 300-horsepower engine works out to 65 horsepower per liter.

Compare that to the storied good old days. When Ford wedged a 289-cubic-inch, 4-barrel V-8 into the '64 Mustang, it wowed hot rodders with its 42 horsepower per liter.

So how did this happen? How is it that a mainstream Mustang GT can run 300 horsepower — on regular gas, no less? We can thank technology.

- **Deep-skirt, lightweight aluminum engine block** offers exceptional stiffness and strength while shaving 75 lbs. off a comparable cast iron design
- **Five main bearings** use cross-bolted bearing caps to secure the crankshaft and ensure both reduced flex and durability
- **Windage tray** attached at the main bearing caps baffles oil flow to reduce aeration and assure proper crankshaft oil feed during sustained, high lateral force maneuvers often encountered in performance driving

- **Hypereutectic aluminum pistons** with short skirts and an anti-friction coating are lightweight and ensure more power gets to the wheels and less is lost to friction
- **Connecting rods** use Ford's cracked powdered metal manufacturing technique for precise fit
- **High-tension piston rings** seal cylinders better for long-term durability and less oil consumption, while ensuring cylinder pressures produce power, not blow-by
- **Liquid-filled engine mounts** on both the V-6 and V-8 reduce specific vibrations that can prove both aggravating and troublesome at higher rpms
- **Environmentally**, all this technology has helped both Mustang engines meet the Ultra Low Emission Vehicle II (ULEV II) standards, with the 2005 Mustang fleet emitting 57 percent less smog-forming pollution than last year's



Mustang GT 3-valves-per-cylinder design

- Of course, the quicker you get the burned gases out, the quicker you can get the new mixture in. To that end, a new, tuned-length exhaust manifold optimizes exhaust flow by capturing burned gases from the cylinder

POWERTRAIN — THE DETAILS THAT WRIN

The 4.0L SOHC V-6 — A Long Way from Basic Transportation

Consider this: 210 horsepower, 240 lb.-ft. of torque, electronic throttle control, All-Speed Traction Control, an available 5-speed automatic transmission... Sound like a base powerplant to you? We're talking real performance here. Mustang performance. Aside from that power, this new engine provides substantially improved NVH characteristics and a more compact package than the previous pushrod engine, thanks to low-profile heads with single overhead cams driven by a slave shaft mounted in the engine's "V." As if that's not enough, take a moment to review these V-6 features:

New, composite intake manifold developed specifically for this application combines the sound of power with efficient airflow to help ensure maximum performance, making this V-6 feel more like a small displacement, performance V-8

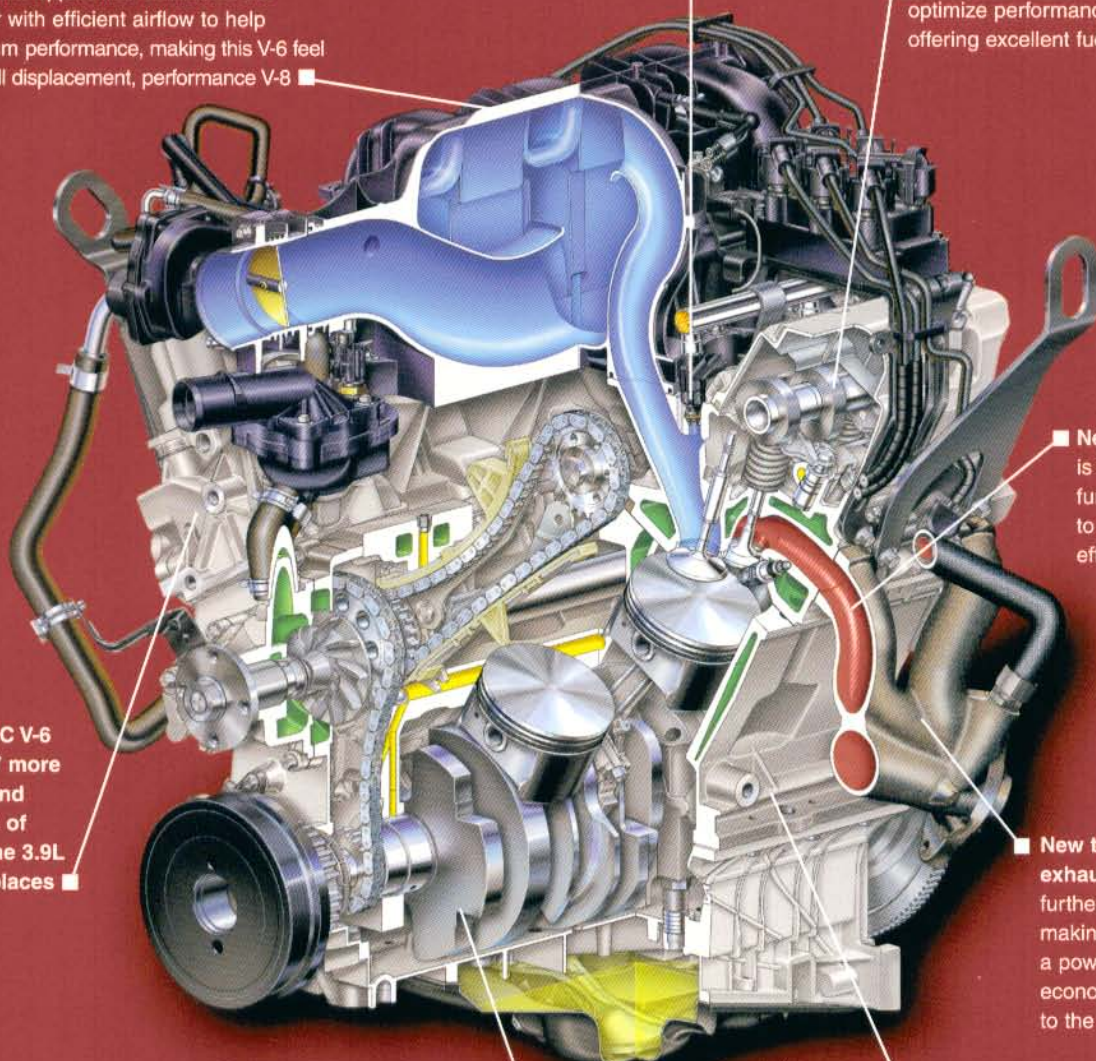
Enhanced fuel injection system reduces the amount of evaporative linkage necessary to help ensure effective evaporative emissions control

Unique camshaft grind helps optimize performance while offering excellent fuel efficiency

New EGR system is designed to further contribute to environmental efficiency

New tuned-length exhaust manifolds further contribute to making this engine a powerful, reliable yet economical alternative to the V-8

The 4.0L SOHC V-6 engine has 17 more horsepower and 15 more lb.-ft. of torque than the 3.9L OHV V-6 it replaces



FEATURE	2005 4.0L SOHC V-6	2004 3.9L OHV V-6
Displacement	245 cubic inches	238 cubic inches
Horsepower	210@5300	193@5500
Torque	240@3500	225@2800
Block Design	60° V	90° V
Valvetrain	SOHC	OHV
Block Material	Cast iron	Cast iron
Cylinder Head Material	Cast aluminum	Cast aluminum
Bore and Stroke	3.95 x 3.32	3.8 x 3.46
Compression Ratio	9.7:1	9.3:1

The 60° V-6 engine is a naturally balanced V design that produces less vibration and smoother operation than traditional 90° engine designs

Key noise-reducing features include a girdled crankcase for increased strength and rigidity, a dual-mode crankshaft damper, coated skirt pistons, optimized bearing clearances and isolated composite cam covers

G OUT THE LAST DROPS OF POWER



Engine Features

Coil-on-plug Ignition System helps pull maximum horsepower from the GT's V-8 engine by allowing extremely precise spark control. The system works with Mustang's center-mounted spark plug configuration to optimize combustion by producing a symmetrical flame front that improves fuel-burn efficiency, allowing the engine to squeeze every last drop of power out of the air/fuel mixture.

Variable Cam Timing (VCT) is another key to power production — VCT simultaneously improves efficiency and reduces emissions by allowing the valves to operate at optimum position throughout the combustion cycle.

- **"Dual-equal" variable cam timing design** uses one cam per cylinder head to vary both the intake and exhaust valves together, providing all the benefits of VCT systems that actuate the intake and exhaust valves separately, with far less weight and complexity
- **Low-profile roller finger followers** help reduce friction while keeping the overall engine height low, which in turn allows keeping the hood low

Magnesium cam covers help reduce engine topside weight, which helps lower the car's center of gravity relative to the roll center axis, improving handling.

Intake manifold and throttle body are primarily responsible for both airflow and sound. Airflow is critical to power production. The cylinders must be able to fill completely during each cycle, and for that to happen the intake manifold must provide enough air. And sound? Just as an opera singer's vocal chords vibrate to make a pitch, Mustang's tuned intakes create a distinctive, powerful, soul-stirring sound.

- **Low-profile throttle body** draws cold air from outside the engine compartment to further maximize power and efficiency. 55 mm on GT and 65 mm on V-6

Tuned intake runners also contribute to developing maximum horsepower from minimum cubic inches and regular 87-octane gasoline because each cylinder is filled via runners that are all equal in length. This means it takes the same amount of time to get precisely the same amount of air to each cylinder.

- **Charge Motion Control Valves (CMCV)** are located at the end of each intake runner. At low engine speeds, the CMCV flaps stay closed. This speeds up the intake charge and induces a tumble effect in the combustion chamber, causing the air/fuel mixture to mix thoroughly and burn faster. At higher engine speeds, the valves open for maximum flow into the combustion chambers at wide-open throttle

Torque-based Electronic Throttle Control delivers substantially improved efficiency and far better acceleration compared to popular electronic systems that merely mimic a mechanical linkage. The powertrain computer monitors a vast array of sensors in conjunction with the sensor at the driver's right foot to electrically operate the throttle body. The result is consistent response over a wide range of operating conditions.

- **Safety Features** include redundant sensors and double-return springs at the accelerator pedal, dual sensors at the throttle valve, a closed-throttle-default actuator, backup microprocessors and self-diagnostic software. The system is fault-tolerant — if a problem is detected, a "limp-home" mode allows the car to move under its own limited power

Transmission Features

Close-Ratio 5R55S Automatic Transmission is new for 2005 and features closely spaced ratios to keep the engine in its power band longer, producing better acceleration with a wide overall ratio that puts up remarkably good highway fuel economy.

- **New powertrain control computer** precisely controls shift duration and timing based on a variety of inputs including throttle position, engine speed, load, environmental factors and a host of other parameters
- **New electronic interface** allows the transmission and computer to communicate 10 times faster than before

5-speed manual transmission is standard — with the GT getting the rugged Tremec 3650 while the V-6 gets the Tremec T-50D. Both offer improved shift quality and efficiency.

- **New flange coupling** replaces the splined transmission to driveshaft connection for better balance and reduced lash
- **All-new remote shift linkage** improves quick gear engagement for a solid feel and none of the "notchiness" apparent in the past
- **Hydraulic clutch** improves clutch engage and reduces clutch effort
- **V-6 clutch** has new plate materials for enhanced durability

Larger V-8 clutch effectively handles 300 horsepower, offering outstanding durability with performance "hook-up" and feel.

Rear End Features

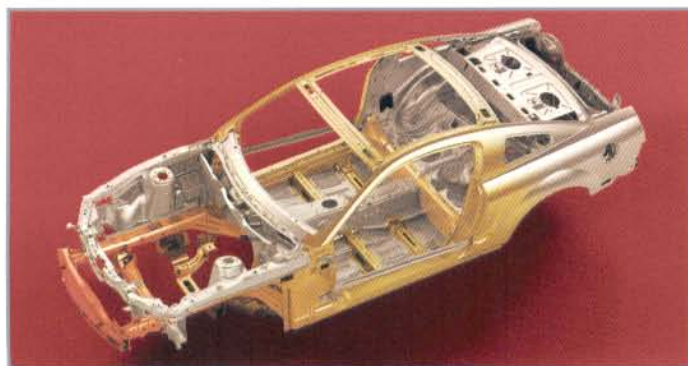
3.55:1 rear axle ratio offers some extra "push" off the line and is standard on GT with manual transmission. A 3.31:1 final drive ratio is used on all other Mustang powertrain configurations.

Traction-Lok 8.8-inch rear differential with heavy-duty 31-spline axles gives smooth launches and better grip on loose or slippery surfaces and is standard on GT, while V-6 Mustang runs 7.5-inch ring and pinion gears.

PERFORMANCE — IT'S MORE THAN QUA

By today's standards a "sports car" or "performance car" or even "muscle car" or "hot rod" is about more than straight-line performance numbers and tire-screaching burnouts. Fact is, chatter around the malt shop drive-in or wireless cappuccino bar is as much about G-forces and cornering speeds as it is about peak horsepower and ET slips. And to that, Mustang says, "Let the games begin."

Mustang is all about driving. The all-new chassis design does everything better — accelerate, turn, stop — while giving a ride that's indicative of what 21st century performance is all about. Noise is isolated out. Control is in. And while MacPherson struts and solid rear axles have been around for a while, here they're refined to their ultimate executions — letting the driver take full advantage of Mustang's power. In short, for those who love to drive, it is a complete driving experience with remarkable dynamics and Mustang's signature straight-line performance.



Platform, Chassis

- **All-new platform with 31% stiffer body structure** provides a solid foundation for responsive, predictable handling characteristics
- **Number two crossmember is 33% lighter**, reducing unsprung weight for better balance and enhanced handling characteristics
- **Large, vented brake rotors** feature 18% more swept area in rear, 14% more in front, for reduced fade and better overall performance



Front Suspension

- **True MacPherson front struts with friction-reducing geometry** allow precise shock valve tuning for exceptional ride and handling characteristics
- **High-strength steel front coil springs** combine with coil-over-shock design for enhanced handling and responsiveness
- **Steel lower control arms** produced using a new technology to form a stiffer, lighter control arm — reducing weight up front to improve front-to-rear weight distribution for enhanced handling, responsiveness and control
- **Hydraulic control arm rear bushing's fluid-filled design** reduces impact harshness and steering sensitivity
- **Front stabilizer bar with outboard mounting** improves roll control and steering response
- **Front stabilizer bar links** use ball joints to help reduce friction and free play
- **Forged front steering knuckle** offers maximum strength and low weight, with a longer steering arm for improved steering response

QUARTER-MILE STATS... A LOT MORE



The Makings of Performance...

They were working with a purpose-built performance car platform. It offered exceptional body stiffness and a remarkable strength-to-weight ratio. It was an outstanding opportunity. They knew this ultra-rigid structure allowed the final tuning of spring damping and bushing rates to a finer degree than ever before possible. Their ultimate goal? The perfect blend of handling and power. Of course, doing that requires miles. Lots and lots of miles.

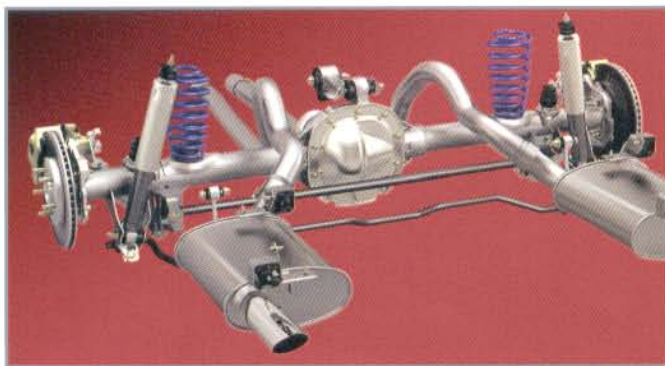
So, they used tons of track time at road courses and drag strips. They pushed prototypes to the limit. Development drives and street time became critical research tools. Potholes and uncertain road conditions became key testing devices. The Mustang, after all, is an everyday driver. Over a million miles show on those prototype odometers — miles garnered over racetracks and streets and highways, not only in the United States, but in Canada, even Sweden — to make sure the Mustang responds in all types of weather.

Road noise and wind noise and other types of noise do nothing to enhance the driving experience. They do nothing to make the car handle better, smoother, more precisely. They are, in essence, a distraction. So, they're out — except, of course, for that nerve-soothing growl of a Mustang engine. A quiet cabin was a top development priority.

They used it all. From computer-aided design and engineering technology to 24-hour track runs and countless days on the straightaways and handling courses of proving grounds around the country, this car has been tested, refined and tested again. The result? An unprecedented combination of road handling and comfort, seamlessly melded with the performance characteristics of a Mustang.

Rear Suspension

- **3-link rear suspension** with Panhard rod accurately controls the rear axle for exceptional handling and cornering even under hard acceleration
- **Rear-axle upper control arm** provides 60% more leverage against axle windup, for smooth, consistent launches
- **Rear lower control arms** are a computer-optimized design offering light weight and high stiffness for improved ride and handling
- **Panhard rod** improves side-to-side axle control for better cornering, steering response and stability
- **Rear coil springs mounting position** allows using lighter springs for better ride control
- **Large piston rear shock absorbers** use outboard mounting location for improved wheel control and durability
- **Rear stabilizer bar** uses a body-mounted swing-link design, reducing unsprung weight for enhanced ride and handling
- **Rear-axle jounce bumpers** allow advanced shock tuning for a better ride



Rear Axle/Differential

- **Robust rear axle** is balanced as a complete assembly for reduced noise and vibration
- **Heavy-duty axle shafts** use 31-spline design for high-torque capacity
- **Axle tubes** are stiffer for more precise wheel control and improved dynamics
- **Stiffer, stronger rear differential with aggressive 3.55:1 gear ratio** (GT with manual transmission) for harder acceleration
- V-6 with a manual or automatic transmission and GT with an automatic transmission have a 3.31:1 gear ratio

PERFORMANCE — LIKE IT'S RUNNIN' ON

Front Suspension

Considered a critical development area, the front suspension delivers a high degree of precision, while giving a smooth ride and offering complete control of the vehicle's power.

After studying a number of designs in conjunction with examining a number of vehicles considered benchmarks in this area, engineers selected the MacPherson strut with reverse "L" lower control arms made of lightweight I-Beam section steel.

■ The **MacPherson strut** is widely accepted as the leader in delivering both comfort and control with reduced weight

■ New, advanced manufacturing technique produces **steel control arms** that weigh less than some comparable cast aluminum designs, reducing unsprung weight and improving front to rear balance

■ A **34 mm stabilizer bar** (28.6 mm on V-6) is attached directly to the strut for optimal roll control

■ **Hydraulic bushings** are tuned to dampen wheel vibrations and smooth out ride

■ The **rack-and-pinion linkage** provides crisp turn-in and excellent response, with a turning circle nearly 3 feet smaller than the 2004 model

■ Up front, Mustang uses **dual-piston aluminum floating front calipers and ventilated discs** for consistent stopping power, shorter stopping distances, better pedal feel, and longer pad and rotor life

Rear brakes on all Mustangs have single-piston calipers clamping on vented rotors

■ **The system enhances braking by helping prevent wheel lockup** and automatically distributing braking power to the wheels where it will be most effective, thanks to Electronic Brake Force Distribution

Brakes

The story behind the all-new Mustang's brakes begins with "bigger means better." But, that is just the beginning. Complementing the standard four-wheel disc brakes with biggest-ever rotors and stiffest-ever calipers is a new, four-channel Anti-lock Braking System (ABS).

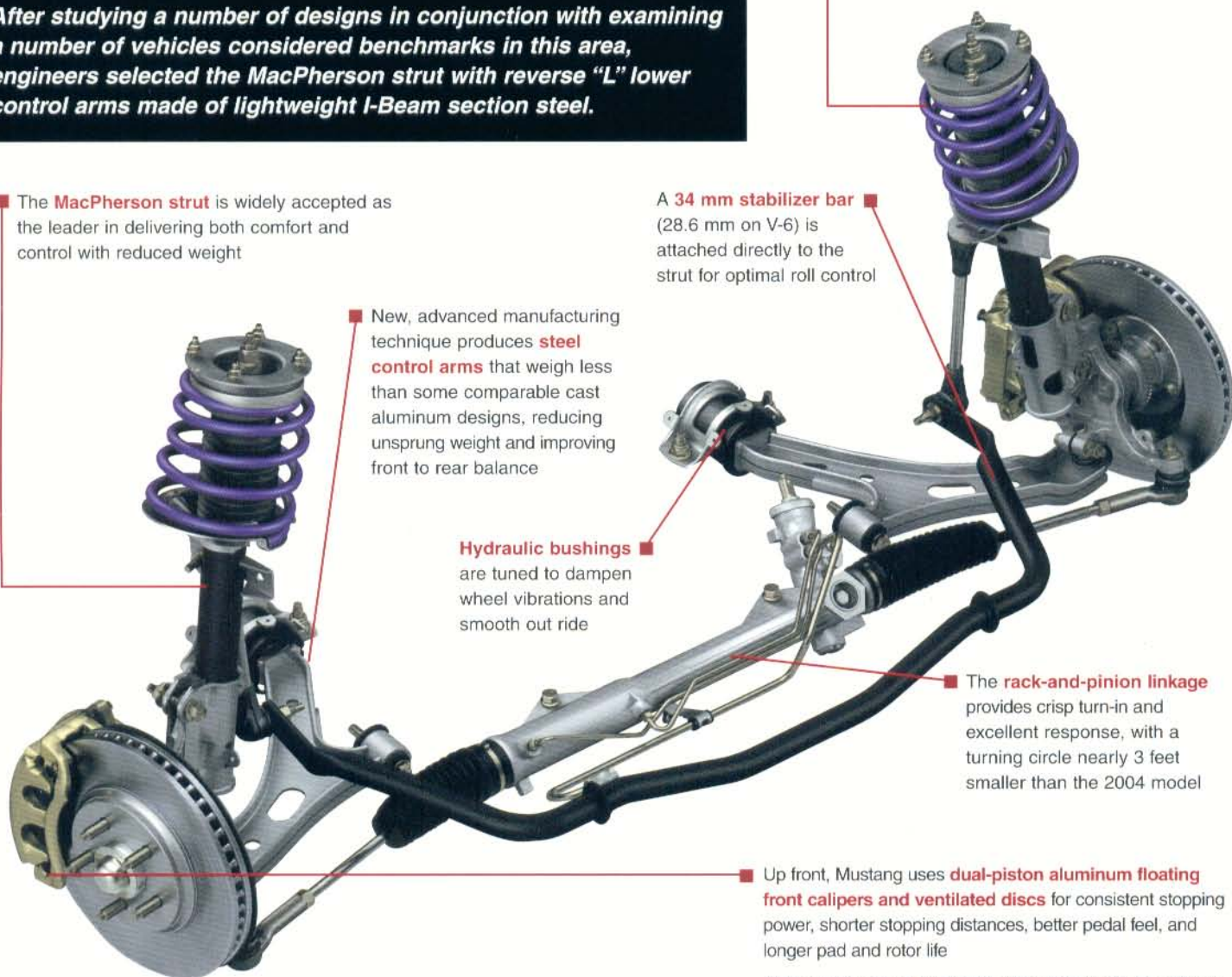
Wheels and Tires

V-6 Mustangs run on 16- by 7-inch painted cast aluminum wheels with BF Goodrich P215/65R16 all-season tires. As with GT, a bright machined cast aluminum wheel with an optional chrome spinner is also available. These tires are designed to offer long wear without compromising performance.

The Mustang GT rolls on standard 17- by 8-inch painted cast aluminum wheels equipped with Pirelli P235/55ZR17 Z-branded performance all-season tires. These tires boast more sidewall than many other sports cars, enhancing the muscle car look and providing a better match for Mustang's

blend of power and handling. These tires and wheels also do a nice job of filling the wheel wells and setting an aggressive, powerful stance.

Available tires and wheels are shown at right.



Rear Suspension

The choice was clear: A solid rear axle is a mainstay of muscle car design, and research clearly indicated that current, past, and even future Mustang owners felt very strongly that the all-new Mustang must have a solid axle.

The **rear axle** is more precisely controlled throughout its range of motion. It is tuned stiff laterally for good handling and steering and tuned soft fore and aft for ride comfort.

The **solid rear axle provides a number of advantages** that neatly complement Mustang's overall performance strengths — it's robust, it maintains constant track, toe-in and camber relative to the road surface, and it keeps body roll well under control.

The **rear-wheel-drive configuration** not only adds to the performance feel, it eliminates **torque steer** while complementing the exceptional handling characteristics offered by Mustang's advanced front and rear suspensions.

wheel or axle hop — A severe vertical oscillation of the tire, or tire "bouncing," where the tire actually loses contact with the ground during acceleration. It's usually caused by axle housing windup within the springs.

torque steer — An unwanted imbalance of driving force between the front wheels of a front-wheel-drive vehicle that causes the car to pull to the left or right under heavy acceleration.

Constant rate **coil springs and outboard shock absorbers** are tuned for a firm, yet compliant ride.

A centrally located **torque control arm** works with trailing arms near each end of the axle to add leverage against axle windup.

Locating the shock absorbers outside the **rear structural rails** reduces the axle's lever effect, allowing for more precise shock valve tuning for a smoother, more comfortable ride with no loss of road "feel" or feedback.

Mustang GT includes a separate **22 mm solid rear stabilizer bar** to help further reduce body lean during aggressive cornering maneuvers.

Mustang's rear suspension uses a **3-link architecture and Panhard rod** that precisely control the rear axle, helping to eliminate **wheel hop** under hard acceleration.

Tubular Panhard rod stabilizes rear axle side-to-side as the wheels move through jounce and rebound, while also controlling the axle during hard cornering.

What's So Important About Unsprung Weight?

You've read a lot about unsprung weight in this Product Information Book. Why have Mustang engineers focused on keeping unsprung weight to a minimum?

First, it's important to understand what unsprung weight is — unsprung weight is the weight of components positioned below the springs and shock absorbers. That means it's weight that's not carried by these suspension components. Keeping this weight to a minimum improves the suspension's response to abrupt changes.

The result is that drivers feel more connected to the road.

In other words, keeping unsprung weight low gives the suspension the quickness to stay firmly planted on the road, improving handling, responsiveness and "feel," especially at competitive driving speeds.



16-inch Painted Aluminum Wheel



16-inch Bright Machined Aluminum Wheel



17-inch Painted Aluminum Wheel



17-inch Bright Machined Aluminum Wheel

STYLING AND DESIGN — JUST LOOK AT

No, seriously. Just take a couple minutes and look at it.

Doesn't it give you goose bumps? Doesn't it send a little tingle down your spine?

More so than any other Mustang in recent memory, this Mustang is the epitome of an American cultural icon. An all-new rolling legend. Its classic fastback profile and timeless exterior design evoke its strong bloodline. It stirs the emotions. It takes aficionados back to the good old days and makes the newcomers ache to create their own memories. In a word, this car is magic.

Everywhere you look, timeless exterior cues ensure the 2005 Mustang is instantly recognizable.

Maybe you've seen that look before.

It's a little like the '67 Mustang — with that forward-leaning grille. But the jeweled-round headlamps in trapezoidal housings make it all different. It's a striking touch that gives it a modern, 21st century flair ■

Front wheels are forward, complementing the low, lean, rear-wheel-drive look created by the classic long hood and short rear deck ■



Mustang GT unique exterior design cues:

- **Aggressive nose with circular fog lamps** located in the grille and in line with the headlamps
- **Upright lower front fascia** offers an "air dam" performance look
- **Body-color lower rocker panel extensions** give a lowered, more planted look
- **Lower rocker panel extension wraparound** to rear fascia
- **Semi-circular cutouts** behind each wheel accommodate large exhaust pipe tips
- **Rear decklid spoiler** and special GT badging



C-pillars incorporate a small window in a modern interpretation of Mustang's traditional louvers or scoops



Tri-bar taillamps highlight the rear end with a circular Mustang badge centered in the decklid's rear face



Accent line runs the body length then culminates in a "C-scoop" design just behind the door cutline

Large tires and aluminum-spoked wheels scream performance and power

Making a Statement

It seems almost contradictory that the 2005 Mustang started out with an all-new platform and a clean-sheet design approach. After all, the intent right from the start was to create a vehicle with the "old school swagger" that personified the cars of the late '60s. But, there was more to it than simply "going retro." This is, after all, a Mustang — and the challenge was in creating a bold, clean, contemporary version of history's most celebrated muscle car.

The success is obvious with one look. The new Mustang's modern design speaks to its technical advancement, without losing the classic Mustang image.

- Like all Mustangs, this one communicates motion even when it's standing still. It features a close-coupled greenhouse, strong shoulders and aggressive flares — all contributing to a strong, powerful stance
- With the front wheels moved significantly forward, the front overhang is reduced 4.6 inches, giving it an unmistakable rear-wheel-drive look. Pushing the wheels to the corners also helped increase the wheelbase by 6 inches and opened up the interior length and width, which allow more room for the driver and front passenger
- Overall, the 2005 Mustang is over 4 inches longer, over an inch taller and almost an inch wider than last year's model

Mustang V-6 unique exterior design cues:

- **Swept-back lower front fascia** incorporates horizontal vents
- **Black lower rocker moldings** accent the side
- **In back, Mustang pony logo** is centered on a black field
- **Semi-circular cutout** behind rear wheel for exhaust pipe tip



STYLING AND DESIGN — JUST SIT IN IT —

And inside? You take a seat and settle in. You feel a little stronger. A little taller. You become aware of your attitude and it feels good. And you can't wait to crank the key and drive. Even a root canal doesn't seem so bad as long as you get to drive yourself to the dentist. That's not magic?



Overall Larger Interior offers the driver and front passenger

- a half inch more head room
- almost 2 inches more shoulder room
- over an inch more leg and shoulder room in the sculpted rear bucket seats
- 3 inches more rear leg room

The base Mustang features highly supportive cloth bucket seats with available leather seating surfaces, 6-way power and tilt steering wheel

Frequently used controls are within easy reach, including speed control buttons mounted on the steering wheel spokes

Consoles overhead and between the seats provide handy storage for small items

Dual cup holders in the center console keep soft drinks secure

Deep pockets in each door offer additional storage

NOW THAT'S NICE



Spring-loaded seatbacks make getting into and out of the rear seat much easier. Pulling a small lever on the back of the top of the seat — at the perfect height for someone standing next to the car — releases the front seatback. This means the person folding the seat forward doesn't have to bend down to release the seatback

Split-folding rear seatbacks offer cargo versatility with a trunk that's 20% larger than last year, providing 13.1 cubic feet of space

Environments to choose from

- Base Interior
- Interior Upgrade Package
- Interior Color Accent Package

Interior Upgrade Package (available on V-6 and GT) includes:

- Satin aluminum instrument panel appliqué — ribbed pattern
- Leather-wrapped steering wheel with satin aluminum spokes
- Satin aluminum-plated gearshift lever (automatic transmission)
- Leather-wrapped steering wheel and sport gearshift knob (manual transmission)
- Satin aluminum-plated door handles
- Special new bright polished 6-gauge cluster with MyColor™ feature and message center
- Satin aluminum doorsill scuff plate with bright Mustang lettering insert
- Dark Charcoal Aberdeen pattern front door panels

Interior Color Accent Package (available on V-6 and GT) includes:

- Dark Charcoal interior environment with Dark Charcoal carpet
- Red sport bucket leather front and rear seating surfaces with red front door trim inserts and red floor mats (requires Interior Upgrade Package, Dark Charcoal interior and leather sport bucket seating surfaces)

STYLING AND DESIGN — IT'S ALL MUSTA

Large, circular chrome-ringed speedometer and tachometer with radial numeric markers dominate the cockpit. The barrel-shaped performance gauges offer information on fuel level, battery, water temperature and oil pressure. And what's really impressive is how this bold instrumentation can be customized at the touch of a button.

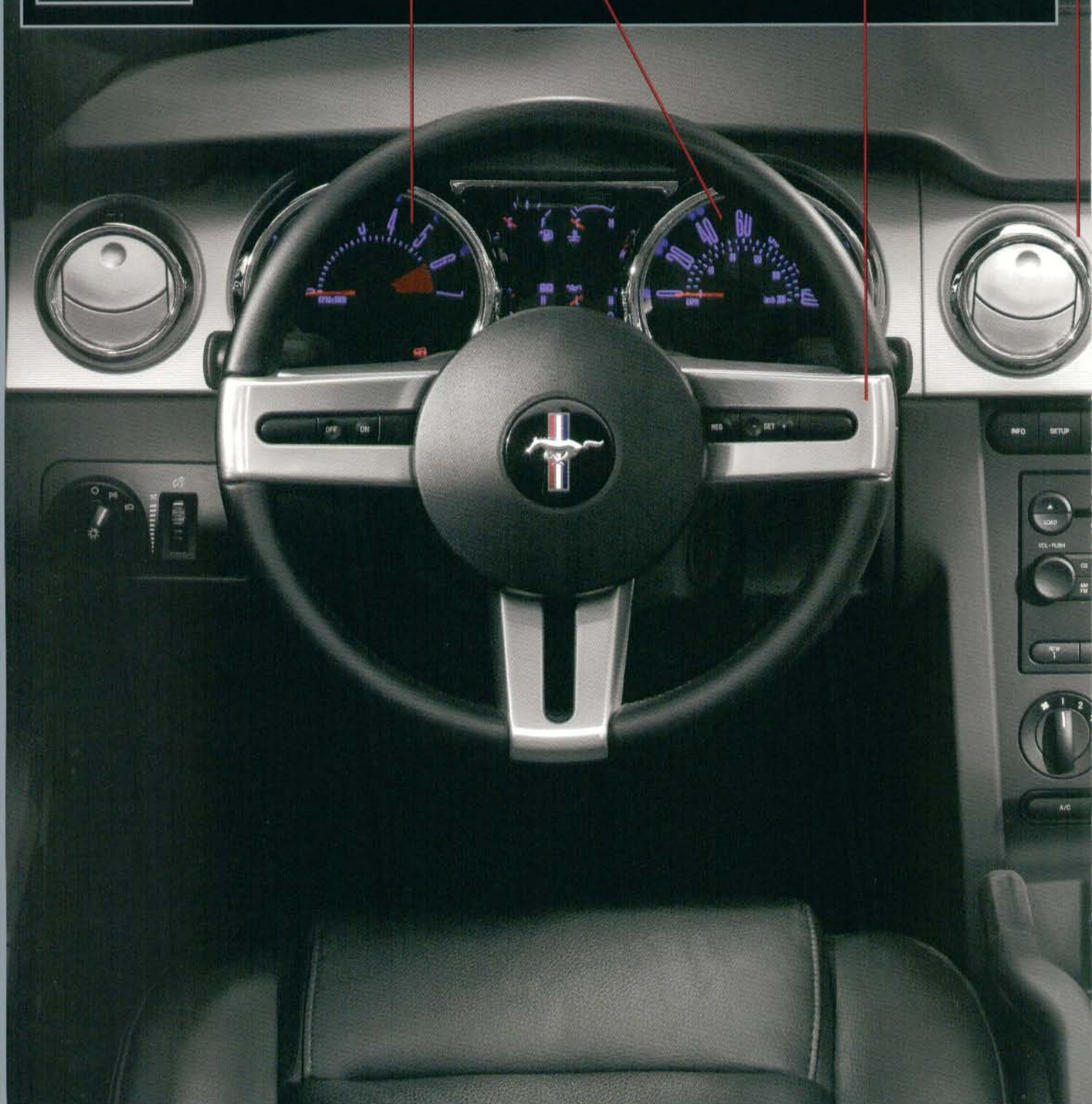
These three features are part of the Interior Upgrade Package:



Available MyColor™ color-configurable instrument cluster lets the driver select six preset color options or create up to 125 different, unique cluster light colors

Standard instrument panel has an available 6-gauge cluster with large, circular speedometer and tachometer

3-spoke steering wheel with black center hub, marked by the galloping pony and tri-color bars logo, gives a nod to the 1967 model



■ **Chrome-ringed air vents** align vertically across the dashboard, precisely in line with the gauges

■ **Ultra-clean center stack** offers easy access to various controls including audio and climate controls

Audio Systems

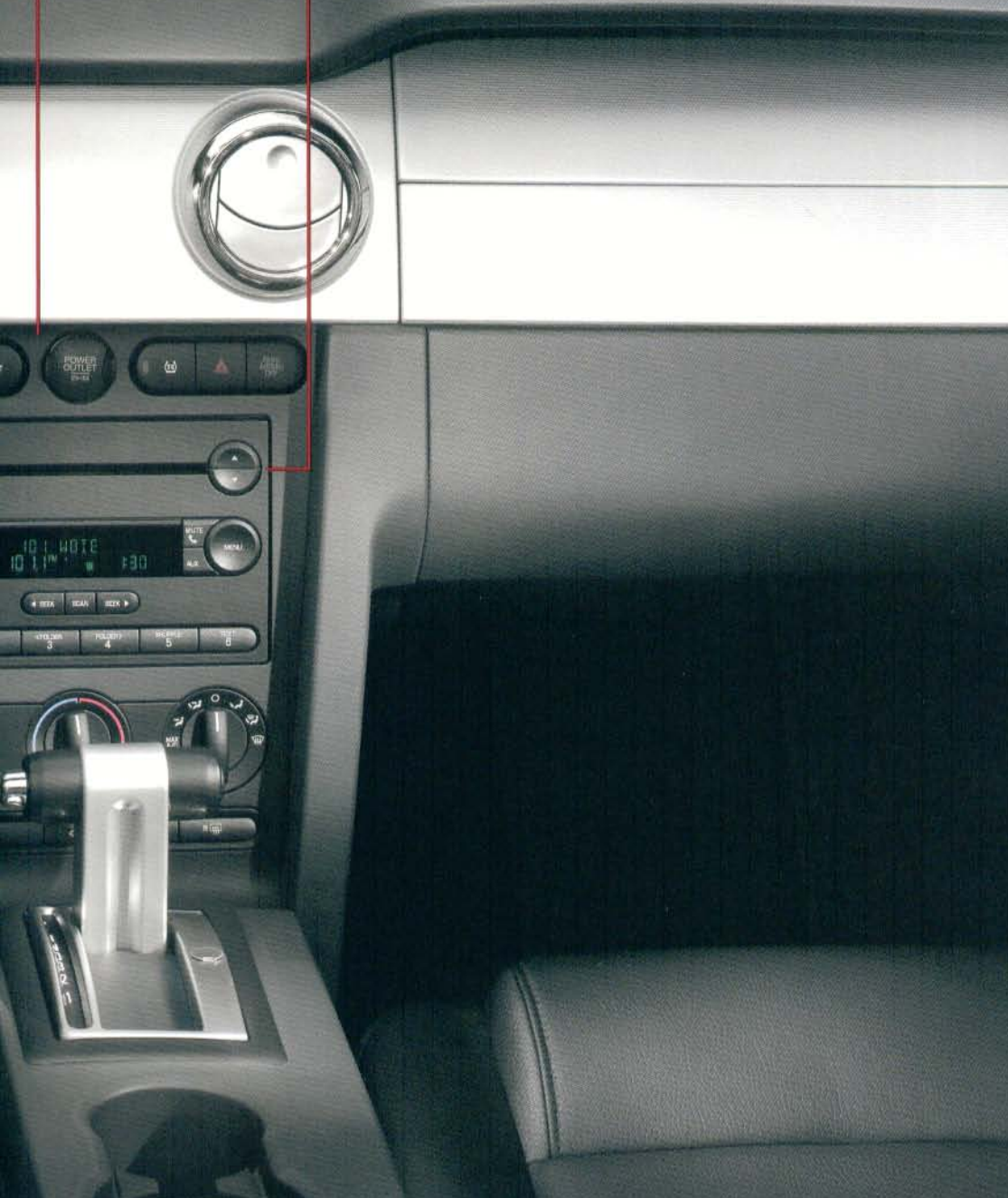
Three audio systems are available in 2005:

- **An 80-watt, single-disc CD player** with four speakers is the base system
- **An optional Shaker 500-watt system** includes two huge subwoofers mounted in the front doors, premium speakers in the rear and a 6-disc, in-dash CD changer with MP3 capability
- **And the real boomer — a 1,000-watt Shaker Audiophile system** adds two 10-inch subwoofers in the trunk. The bass chamber has the same volume as the old unit while leaving more room for luggage. New subwoofers mounted to the trunk's right side use about one-third the previous system's space



How's This for a List of Standard Equipment...

- Power windows with one-touch-up and one-touch-down for driver and passenger
- Power exterior mirrors
- Remote Keyless Entry System, panic alarm and key fob trunk release. (There are two ways to open the trunk. Using the key fob button works from several feet away, or you can simply use the ignition key in the trunk lock)
- Power door locks
- Autolocking on automatic-equipped models
- Short drop side glass
- Heated rear window
- Interval wipers
- Fog lamps (GT)
- Electronic speed control
- Air conditioning
- Floor mats
- Two 12-volt power points
- Tilt steering wheel
- Delayed accessory power
- Battery Saver
- Smart lock, which prevents the driver's door from being locked inadvertently while the keys are in the ignition



SAFETY — WITH PERFORMANCE COMES

Safety and Security begin with strength. And the foundation of the all-new Mustang is a high-strength steel body that is the foundation for a Mustang that's safe, secure and has outstanding driving dynamics. In short, this structure helps Mustang respond to inputs quickly and with exceptional precision.

The Relationship Between Handling and Safety

Combine precise handling and responsiveness with high levels of overall grip and the strongest brakes ever fitted to a production Mustang and the result is not only a vehicle that handles quite well, but a vehicle that assists the driver in the first phase of safety — accident avoidance.

Four-wheel anti-lock brakes and All-Speed Traction Control (standard on GT, available on V-6) provide additional assistance in emergency situations.

Mustang's Personal Safety System™

Mustang's Personal Safety System provides increased protection in many types of frontal crashes by analyzing impact factors and determining proper airbag response in milliseconds.

The dual-stage driver and front passenger airbags then deploy at full or partial power. In less severe frontal crashes, the airbags inflate with less force, or not at all, helping reduce the risk of injury by airbag inflation.

Safety belts are still the best line of defense for vehicle occupants. The Personal Safety System uses pretensioners to tighten the front safety belts in the first milliseconds of a crash. If necessary, energy management retractors then gradually loosen the belt to reduce forces across the occupants' chests during impact.

Passenger Occupant Classification Sensor

As a feature of Mustang's Personal Safety System, the front-seat Passenger Occupant Classification Sensor is designed to sense the weight of the person or object sitting in the front passenger's seat, and then activate or deactivate the front passenger airbag.

By reading the pressure on the bladder, it can determine if the passenger's seat is empty, is holding an object like a briefcase, is occupied by a small person, or is occupied by an average-size adult.

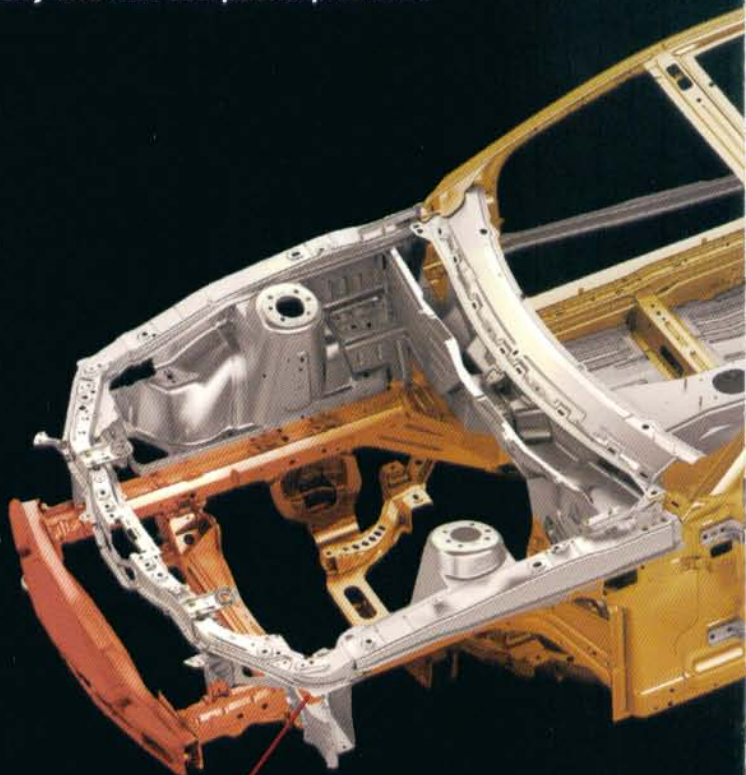
The system also uses a safety belt tension sensor that measures belt load. There will be more load on the belt, for example, if a child safety seat is cinched down in the seat.

This information is sent to a Restraint Control Module (RCM), which deploys the airbag appropriately. This may mean no deployment at all if the seat is occupied by a small person or is empty.

If the seat is not occupied during an accident, the airbag will be deactivated to avoid unnecessary deployment and replacement.

Even with this technology, Ford continues to recommend that children under 12 always ride in the rear seat, properly secured by a safety belt or a child safety seat.

(1) Vehicle speed and distance may vary depending on outside air temperature and vehicle load.



■ A key to crashworthiness is finding a way to dissipate energy in a collision. The front structure of the all-new Mustang absorbs energy in a controlled manner and dissipates it before it can reach the passenger compartment

Belt-Minder System™

The most effective way to save lives on the road is still the safety belt. Mustang's Belt-Minder System provides a gentle chime to help remind the driver and passengers to "buckle up."

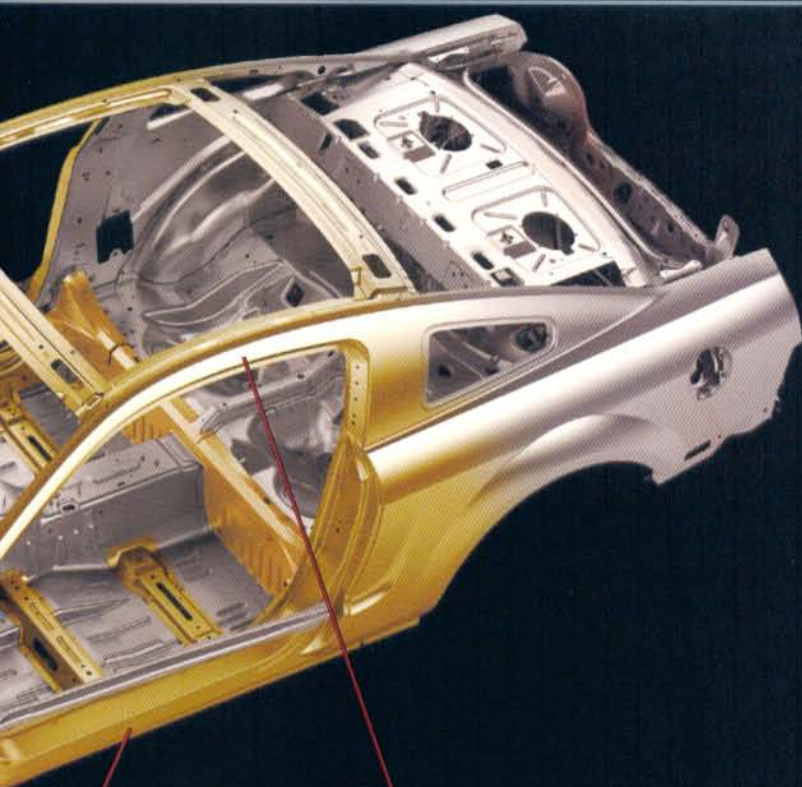
Fail-safe Cooling

If engine coolant is lost for any reason, fail-safe cooling allows the car to be driven under limited power for short distances, 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 this mode, only half the cylinders get fuel. With only half the cylinders firing, the engine operates at lower power, generating much less heat. The cylinders alternate between even and odd firing pistons, allowing the vehicle to operate at speeds up to 50 mph.⁽¹⁾

All-Speed Traction Control

This control uses the electronic throttle and/or the brake system to reduce wheel spin on wet or slippery surfaces while allowing a little extra "tire-squawking slip" on dry pavement, enhancing the feel of rear-wheel drive and offering more effective launches when the going gets particularly spirited.

RESPONSIBILITY



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

■ Dramatic leaps in body stiffness contribute greatly not only to driving performance, but to benefits in accident protection. The all-new Mustang's body structure is 31 percent stiffer in torsion. That translates to a body that will deform by only one degree against a twisting force of 15,500 lb.-ft.

Traction Control Deactivation Button

Located on the center stack — just in case a couple of smoky burnouts are needed to heat up the tires before the next run down the quarter mile.

SecuriLock® Passive Anti-theft System

Passive anti-theft systems like SecuriLock 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 automatically turns off interior lights in a parked vehicle after a few minutes. If a door is ajar, or if interior lights are left on and the ignition is in the OFF position, a relay is deactivated after 10 to 40 minutes, cutting power to the interior lights.

Because performance car insurance premiums are getting steep, Mustang has an optional, active anti-theft package that includes:

Separate Alarm Sounder

The first step for many car thieves is disabling the horn to disarm the alarm system. To make things a little tougher, Mustang 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

A technique gaining favor with many car thieves these days is to simply hook up and tow the car away. To help combat that "clever" approach, Mustang offers an anti-tow system. Here's how it works: An inclination-sensing module records the vehicle's angle of inclination when the anti-theft system is armed. If the sensor detects a change in vehicle inclination, it sends a signal to the alarm system, which triggers the separate alarm sounder and traffic horn, and flashes the car's lights to guard against tow-away thefts.

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

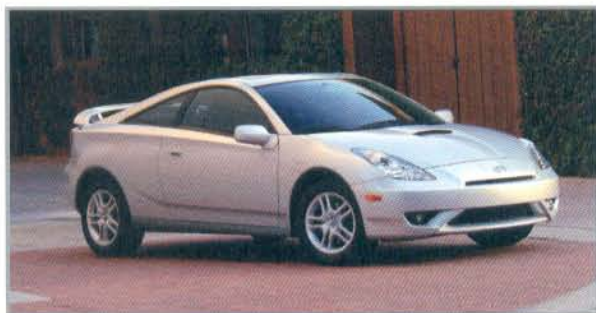
It's a simple idea really — a 60-amp-hour battery is capable of sounding the alarm longer. This more powerful battery lends an extra measure of authority to the active anti-theft system and helps prevent battery rundown from use of Mustang's powerful audio system when the engine is off.

Global Window Open and Close

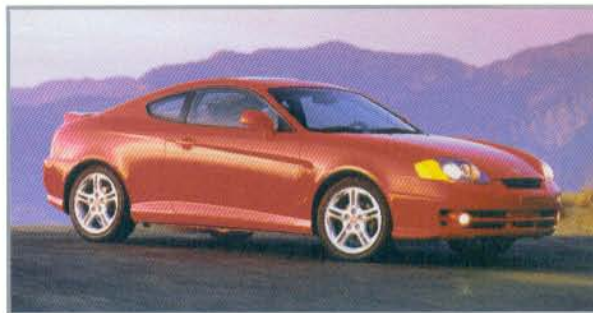
Another feature included with the active anti-theft system allows global opening and closing of the vehicle windows. This feature allows the windows to be opened using the remote transmitter, or opened and closed by turning the key in the driver door key cylinder, making it easier to properly secure the vehicle.

COMPETITIVE COMPARISONS — POWER,

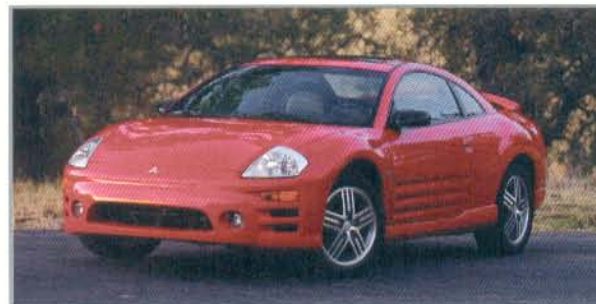
Mustang V-6 Versus Its Competition — At Least, Its Competition on Paper



Toyota Celica



Hyundai Tiburon



Mitsubishi Eclipse



Chrysler Sebring

The fact is, Mustang V-6 has no real competitors. Sure, there are vehicles that are “technically” in its class. But they’re certainly not in Mustang’s league. Need proof? Read the following, it’s brief and to the point. And it does a fine job of explaining why Mustang is in a league of its own.

- All Mustang V-6 competitors have standard 4-cylinder engines. These are basically high-output, small displacement engines that need to rev high rpm to achieve their peak power. Unfortunately, high rpm usually mean high NVH. That’s because high revving contributes to excess engine noise and vibration. Remember, the faster you spin the engine, the more stress you place on its components, which not only makes for noise and vibration, it may lead to excess engine wear
- All Mustang V-6 competitors are front-wheel drive — while Mustang is rear-wheel drive. So what, you say? It’s true, there was a time when front-wheel drive was the darling of the industry. But people are beginning to reconsider its value in a sports-oriented vehicle. You’ll notice, for example, that the majority of high-end sports cars are rear-wheel drive. Why? Consider the following:
 - For starters, torque steer. Torque steer occurs when the car pulls to the right or left on acceleration with front-wheel drive. As you might suspect, this is truly detrimental to handling characteristics. Torque steer doesn’t exist with rear-wheel-drive vehicles because the drive wheels are separate from the steering wheels. But with front-wheel drive, the front wheels are both driving and steering the vehicle
 - Typically, a rear-wheel-drive vehicle offers better handling characteristics because the drive wheels are at the rear, pushing the car, instead of up front, pulling it. This configuration offers improved “feel,” with better feedback and predictability when cornering, accelerating and braking
 - Rear-wheel-drive vehicles also have better weight distribution, with the engine weight up front, and the drive axle weight in the rear. This improved weight distribution offers better balance, which further contributes to better handling characteristics. Front-wheel-drive vehicles have a substantial portion of the vehicle’s weight — the engine and transaxle — at the front of the vehicle, which makes for sluggish steering and slow response in tight turning situations like “S” turns, hairpins and switchbacks



PERFORMANCE AND PRICE

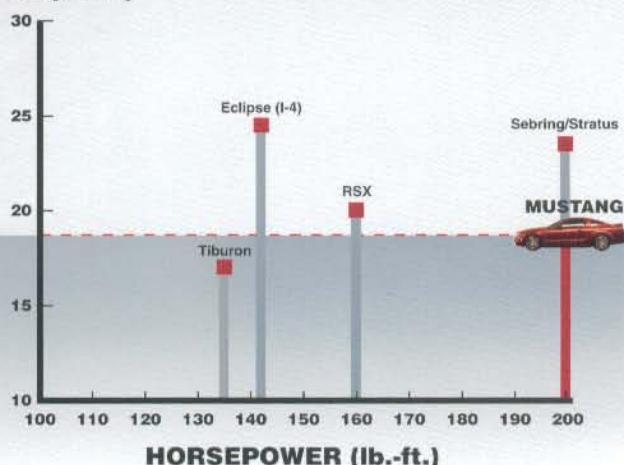
Talk About "Bang for the Buck..."

The all-new 2005 Mustang offers more horsepower per dollar invested than any other car made, period! More than Nissan 350Z. More than Pontiac GTO. More than Corvette, BMW, RX-8 — you name it. That applies to both GT and V-6, in their respective classes.

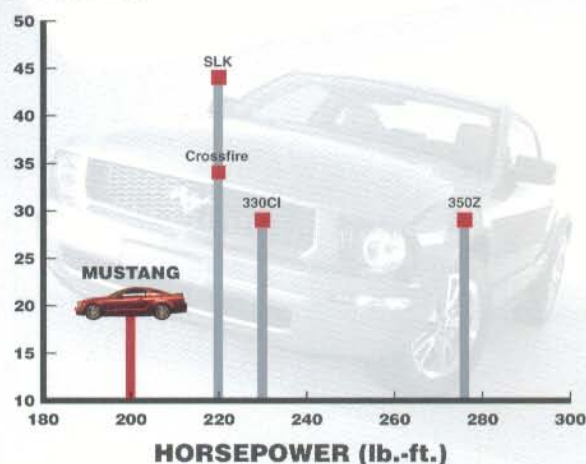
And when it comes to handling, we'll take on all in-class challengers, be it at the drag strip, skidpad, slalom or road course.

MUSTANG V-6

PRICE (000s)



PRICE (000s)

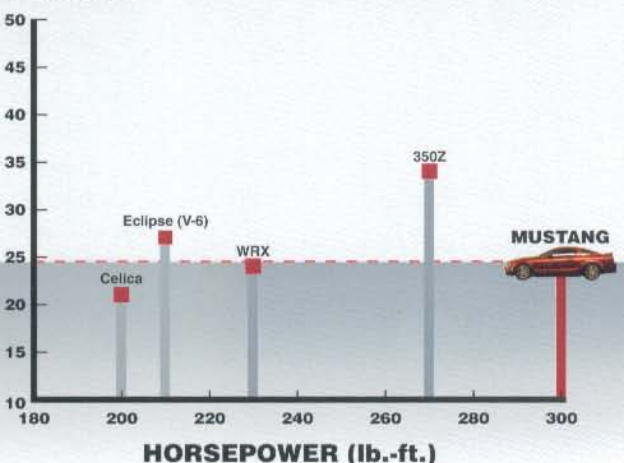


The cost of power keeps going up. Look at what you have to spend to get more horsepower than Mustang V-6.

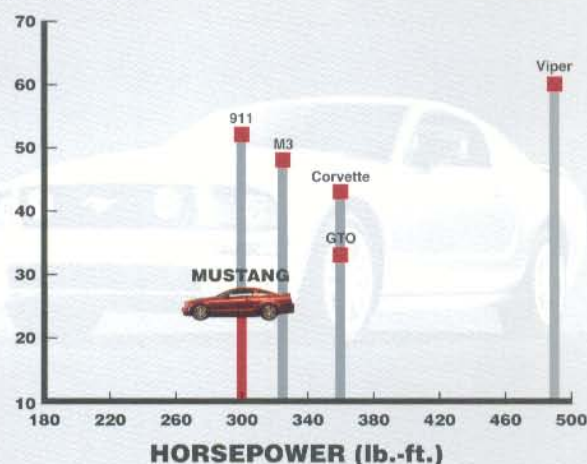
Compared to its typical competitors, only Sebring/Stratus comes close to Mustang's rear-wheel-drive power, at a cost that is thousands more than Mustang.

MUSTANG GT

PRICE (000s)



PRICE (000s)



Can you get more horsepower than Mustang GT? Sure — but at what price? Look at the thousands you have to spend to get more horsepower than is standard with Mustang GT.

Compared to its typical competitors, no one comes close to Mustang GT's 300 rear-wheel-drive horsepower. And it comes at a price that leaves money for gas.

MUSTANG KEY PRODUCT SPECIFICATIONS

Of course, some believe the only real truth about a car is found in its specifications. Well, if you're one of those, check out the data below. Specifications are included for the all-new 2005 Mustang as well as 2004 Mustang.

	2005 V-6	2004 V-6	2005 GT	2004 GT
Body	Unitized welded steel body, aluminum hood	Unitized welded steel body, aluminum hood	Unitized welded steel body, aluminum hood	Unitized welded steel body, aluminum hood

POWERTRAIN AND CHASSIS

ENGINE	2005 V-6	2004 V-6	2005 GT	2004 GT
Type	4.0L 60-degree V-6; cast-iron block and aluminum heads	3.9L 90-degree V-6; cast-iron block and aluminum heads	4.6L 90-degree V-8; aluminum block and heads	4.6L 90-degree V-8; aluminum block and heads
Bore x Stroke	3.95 x 3.32 in.	3.8 x 3.4 in.	3.55 x 3.54 in.	3.6 x 3.6 in.
Displacement	245 cu. in.	238 cu. in.	281 cu. in.	281 cu. in.
Compression Ratio	9.7:1	9.36:1	9.8:1	9.4:1
Horsepower	210 @ 5300 rpm	193 @ 5500 rpm	300 @ 5750 rpm	260 @ 5250 rpm
Torque	240 lb.-ft. @ 3500 rpm	225 lb.-ft. @ 2800 rpm	320 lb.-ft. @ 4500 rpm	302 lb.-ft. @ 4000 rpm
Valvetrain	SOHC, two valves per cylinder	OHV, two valves per cylinder	SOHC, three valves per cylinder, variable camshaft timing	SOHC, two valves per cylinder
Valve Diameter	Intake: 46.0 mm Exhaust: 39.0 mm	Intake: 47.2 mm Exhaust: 39.1 mm	Intake: 33.8 mm Exhaust: 37.5 mm	Intake: 44.5 mm Exhaust: 36.0 mm
Ignition	Distributorless with coil pack	Distributorless with coil pack	Coil-on-plug, high-thread insert spark plugs	Coil-on-plug
Intake	Composite shell-welded with internal runner pack	Composite	Composite shell-welded single runner, charge motion control valves	Aluminum alloy
Recommended Fuel	87 octane	87 octane	87 octane	87 octane
Fuel Injection	Electronic returnless sequential	Electronic returnless sequential	Electronic returnless sequential	Electronic returnless sequential
Oil Capacity	5.0 quarts	5.0 quarts	6.0 quarts	6.0 quarts
Fuel Capacity	16.0 gallons	15.7 gallons	16.0 gallons	15.7 gallons

DRIVETRAIN

	2005 V-6	2004 V-6	2005 GT	2004 GT
Layout	Rear-wheel drive	Rear-wheel drive	Rear-wheel drive	Rear-wheel drive
Driveshaft	Slip-in-tube single-piece	Single tube with internal tuned damper	Two-piece aluminum	Single tube with internal tuned damper
Rear Axle	7.5 inches	7.5 inches	8.8 inches	8.8 inches

TRANSMISSION

	2005 V-6	2004 V-6	2005 GT	2004 GT
Standard	5-speed manual (Tremec T-50D)	5-speed manual (Tremec T-50D)	5-speed manual (Tremec TR 3650)	5-speed manual (Tremec TR 3650)
Optional	5-speed automatic (5R55S)	4-speed automatic (4R70W)	5-speed automatic (5R55S)	4-speed automatic (4R70W)

GEAR RATIOS

	2005 Mustang						
	1st	2nd	3rd	4th	5th	Reverse	Final Drive
V-6 Manual	3.75:1	2.19:1	1.41:1	1.00:1	0.72:1	3.15:1	3.31:1
GT Manual	3.33:1	2.00:1	1.41:1	1.00:1	0.67:1	3.38:1	3.55:1
V-6 & GT Automatic (5R55S)	3.25:1	2.44:1	1.55:1	1.00:1	0.75:1	3.07:1	3.31:1

SUSPENSION	2005 V-6	2004 V-6	2005 GT	2004 GT
Front	Reverse-L independent MacPherson strut, 28.6 mm tubular stabilizer bar	Independent modified MacPherson struts with coil springs and stabilizer bar	Reverse-L independent MacPherson strut, 34 mm tubular stabilizer bar	Independent modified MacPherson struts with coil springs and stabilizer bar
Rear	3-link solid axle with coil springs, Panhard rod	Four-bar link with coil springs on lower arm	3-link solid axle with coil springs, Panhard rod, 22 mm solid stabilizer bar	Four-bar link with coil springs on lower arm, unique horizontal axle damper and stabilizer bar

STEERING

Type	Rack-and-pinion with power assist	Rack-and-pinion with power assist	Rack-and-pinion with power assist	Rack-and-pinion with power assist
Ratio	15.7:1	15.0:1	15.7:1	15.0:1

BRAKES

	2005 V-6	2004 V-6	2005 GT	2004 GT
Front	290 mm vented disc, twin-piston 43 mm floating aluminum calipers	276 mm vented disc, twin-piston 43 mm floating aluminum calipers	316 mm vented disc, twin-piston 43 mm floating aluminum calipers	330 mm vented disc, twin-piston 40.5 mm floating aluminum calipers
Rear	300 mm vented disc, single-piston 43 mm floating iron calipers	266 mm solid disc, single-piston 38 mm floating iron calipers	300 mm vented disc, single-piston 43 mm floating iron calipers	296 mm solid disc, single-piston 38 mm floating iron calipers
Standard Tires and Wheels	P215/65SR16 16 x 7.0-inch aluminum wheels	P225/55R16 16 x 7.0-inch aluminum wheels	P235/55WR17 17 x 8.0-inch aluminum wheels	P245/45ZR17 17 x 8.0-inch aluminum wheels

DIMENSIONS AND CAPACITIES (in inches unless otherwise noted)

EXTERIOR	2005 V-6 & GT	2004 V-6 & GT
Wheelbase	107.1	101.3
Overall Length	187.6	183.2
Overall Width	73.8	73.1
Overall Height	54.4	53.1
Tread Width, Front	62.7 (62.3 GT)	60.2 (59.8 GT)
Tread Width, Rear	63.0 (62.5 GT)	60.6 (59.3 GT)

INTERIOR

	2005 V-6 & GT	2004 V-6 & GT
Head Room (Front/Rear)	38.6/34.7	38.1/35.5
Leg Room (Front/Rear)	42.7/30.3	42.6 (41.8 GT)/29.9
Shoulder Room (Front/Rear)	53.4/53.4	53.6/52.1
Hip Room (Front/Rear)	53.6/46.8	52.8/47.4
EPA Interior Volume (cu. ft.)	97.9	93.9
Trunk Volume (cu. ft.)	13.1	10.9

BASE CURB WEIGHT

	2005 Mustang		2004 Mustang	
	V-6	GT	V-6	GT
Manual Transmission	3300 lbs.	3450 lbs.	3070 lbs.	3317 lbs.
Automatic Transmission	3345 lbs.	3500 lbs.	3355 lbs.	3485 lbs.



Retailer Education and Training

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