Corvette coupe

Corvette convertible

WHAT CORVETTE IS

It's been recognized as the American performance machine. The name alone is legendary among sports car enthusiasts. It's such an American icon, it even has its very own museum. And, in its new, fifth-generation version which debuted in January of 1997, it's been labeled "best Vette yet" by scores of buff books and performance car publications. It's Corvette ... the Chevrolet showcase of performance, power, prestige and technology.

Available as a coupe and now a convertible for 1998, Corvette offers many improvements over its fourth-generation predecessor. The fifth-generation Corvette has a structure more than four times stiffer than its predecessor's, for improved ride and handling characteristics. Other advantages include twice the cargo capacity and better overall performance, across the board.

The new Corvette convertible was designed as a true convertible, not as a coupe with a "chopped top," as is so often the case. Key convertible features include simplified top operation, an integral trunk compartment that can hold two sets of golf clubs and a heated-glass rear window.

Under the hood, Corvette features the power of the 5.7 Liter LS1 V8 engine, the latest in a prestigious line of small block V8s. Cranking out 345 horsepower and 350 lb.-ft. of torque, the LS1 gives Corvette a top speed of over 170 miles per hour and accelerates from 0 to 60 in just 4.7 seconds, with manual transmission.

On the inside, Corvette offers an impressive array of standard features, such as a 6-way power driver seat, air conditioning and power door locks and windows.

Outside, Corvette supports its classic image of THE American sports car with features like an available removable roof panel (coupe), hidden headlamps, four distinctive taillights, side air scoops and long hood/short deck design.

As always, Corvette continues to receive recognition for its leadership in the high sport segment. *AutoWeek* named the 1997 Corvette "Best in Show" at the 1997 North American International Auto Show. *American Women Motorscene* named it Most Likely to be Immortalized at the same show. *MotorWeek* also gave Corvette the 1997 *MotorWeek* Driver's Choice Award as the Best High-Performance Car.

Corvette Models

- coupe
- convertible.

What's New For 1998:

- Convertible model (page 6)
- Medium Purple Pearl Metallic and Light Pewter Metallic are the new exterior colors (page 5)
- Light Oak (leather) is the new interior color (page 5)
- Optional magnesium wheels (page 10)
- Engine air-filter-life monitor (page 7).

Demographics

- Median Age: 45 years.
- Median Household Income: $100,000.
- Percent Male/Female: 74 percent are male.
- Education: 66 percent are college graduates; 36 percent are post graduate.

Additional Facts:

- 60 percent of Corvette owners are married
- Corvette owners are expressive, prestige-conscious and goal oriented.

Corvette Helps Protects Itself From Thieves ...

Corvette comes standard with the highly effective PASS-Key II theft-deterrent system with horn alarm.

PASS-Key II has a sensor in the vehicle's ignition lock that measures the resistor value of a key when it is inserted into the ignition. If the correct key is not used, or if someone attempts to bypass the system, the vehicle will remain inoperable for approximately three minutes, even if the correct key is subsequently used.

Corvette also comes standard with a separate programmable security system that monitors the doors and rear hatch from unauthorized intrusion.

... And, Protects Itself From Forgetful Owners!

Ever experience a moment of absent-mindedness? A moment when the simplest task seems difficult? Well, Corvette knows how to protect itself from two of the most common owner errors.

- Since Corvette is so quiet at idle, drivers might inadvertently attempt to start the vehicle once it is already running. The standard **starter saver** feature prevents this.
- A standard **battery saver** causes the vehicle's on-board computer to monitor electrical loads, and shuts off interior and underhood lamps that are left on after a driver exits the vehicle.
- Remote Function Actuation (RFA) when in active mode can prevent keys from being locked in car.

MODELS AND TRIM LEVELS

Corvette coupe

Corvette coupe offers a long list of standard features that make it a dominant force in the high sport segment:

- 5.7 Liter LSI V8
- Heavy-duty 4-wheel anti-lock disc brake system
- Electronically controlled 4-speed automatic transmission
- Electronic Traction Control
- Remote Function Actuation (RFA) keyless entry system
- Electronic speed control with Resume Speed
- Tilt-Wheel™ Adjustable Steering Column
- Six-way power driver seat adjuster
- PASS-Key II theft-deterrent system with horn alarm
- Daytime Running Lamps
- Goodyear Eagle F-1 GS Extended Mobility Tires (EMT)
- Driver and passenger air bags
- 4-wheel independent Short/Long Arm Double Wishbone Suspension
- Air conditioning
- Removable roof panel
- Electric rear-window defogger
- Remote, heated electric rearview mirrors
- AM/FM Bose stereo with cassette player
- Integrated windshield and rear window radio antennas
- Power door locks and windows
- 17" front and 18" rear 5-spoke cast aluminum wheels
- Scotchgard™ Protector (floor carpeting)
- Tire pressure monitor.

Corvette convertible

Corvette convertible offers the same standard features as Corvette coupe, plus:

- Easy-to-use manual convertible top with heated back glass and an integral trunk
- Power antenna.

SAFETY

With a long history of setting automotive safety milestones, GM is a world leader in automotive safety research, development and testing. The 1998 Corvette exemplifies that dedication, providing an impressive list of safety features. And, with a comprehensive system, emphasizing crash avoidance and occupant protection, Corvette owners not only get sports car performance, but additional peace of mind, as well.

Crash Avoidance Features

- **4-wheel anti-lock disc brake system** (ABS), standard on Corvette, automatically adjusts brake pressure to the front and rear wheels during hard-braking situations, minimizing wheel lockup and helping maintain steering control. All the driver has to do is maintain firm pressure on the brake pedal.
- **Daytime Running Lamps (DRL)** turn on the parking lamps when the ignition is turned to the "on" position increasing Corvette visibility to other drivers.
- **Brake/transmission shift interlock**, standard on Corvette models equipped with the automatic transmission, requires drivers to depress the brake pedal to shift out of Park.
- A **starter safety switch**, on Corvette models equipped with the six-speed manual transmission, requires drivers to depress the clutch pedal to engage the ignition.
- **Electronic Traction Control** automatically activates if wheels should spin on slick surfaces.Traction Control works in conjunction with the ABS and electronic throttle control to optimize traction by reducing tire slip on many surfaces. An On-Off switch is included.

Occupant Protection Features

- Standard **driver and passenger air bags** are designed to supplement safety belts by helping restrain occupants in the event of a frontal impact.

SAFETY (contd.)

- A standard **three-point safety belt system** helps restrain Corvette passengers by distributing forces to help minimize injury.
- **Reinforced safety-cage construction** surrounds occupants with a cocoon-like system of structural components. This structure consists of reinforced roof rails (on Corvette coupe) and door pillars and beams, which absorb the force of a collision and minimize intrusion into the passenger compartment.
- **Front and rear crush zones** are designed to deform in a controlled manner in the event of a collision, helping absorb impact while reducing intrusion into the passenger compartment.
- Tubular **side-door guard beams** help protect occupants in the event of a side-impact collision. Energy-absorbing foam in the doors also enhances side-impact protection.
- A **high-strength perimeter steel frame** helps improve structural rigidity while delivering a smooth ride.
- **Energy-absorbing steering column** and instrument panel are designed to absorb collision impact, helping reduce driver and occupant injury.
- **Laminated windshield safety glass**, urethane-bonded and tempered side and rear safety glass helps prevent shattered glass from entering the passenger compartment.

CORVETTE INTERIOR FEATURES

Corvette offers many standard interior features that are part of the reason why it's earned the reputation of "America's sports car." It boasts up to 25 cubic feet of trunk space — even more room than you'd find in many midsize sedans. And, it has twice the trunk space of the fourth-generation Corvette.

The 1998 Corvette also features a lower door sill height than its predecessor for easier entry and exit, as well as added foot room (3.1" on the driver side, 6.3" on the passenger side).

In the coupe, access to the rear hatch area is improved over the fourth-generation design. The new hatch glass and rear body are molded into a single piece, which opens out to the rear corners of the car.

Other Features Include:

- The standard, ergonomically designed **instrument cluster** is designed in the tradition of simple, easy-to-read analog gauges. This was done in direct response to the voice of the customer, who wanted to start the car and watch the needles "sweep" the gauges. Included are a speedometer, tachometer, fuel gauge, voltmeter, engine water temperature and oil pressure gauge
- Two standard **ultraviolet lights** in the instrument panel illuminate the graphics at night for outstanding definition and "read-at-a-glance" clarity
- A standard **Driver Information Center** displays individual readouts in any of four languages — English, French, German and Spanish. This display can also be used to configure a full range of programmable settings, including entry, alarms, warnings, messages and vehicle function display. Some of the basic warning displays include ABS active, low oil pressure or level, low coolant level, service vehicle soon, low or high and actual tire pressure, flat tire and traction control system on or off. Other driver information center messages include change oil now, change oil soon, cruise set, low fuel, low washer fluid and low brake fluid.
- **Passive/Active Remote Function Actuation (RFA) System**, standard on both Corvette models. The passive mode will automatically lock and unlock the doors and turn on the interior lights when the transmitter is within 30 feet away from the driver side. The buttons on the transmitter may also be used to actively unlock the vehicle or unlock the rear hatch from up to 60–100 feet away. RFA also includes a programmable Secure Return Feature that will illuminate the Interior, backup and turn signal lamps as the driver

Competitors

Corvette coupe and convertible competitors in the high sport market segment are:

- BMW Z3 2.8
- Mitsubishi 3000GT VR4
- Porsche Boxster
- Porsche 911 Carrera
- Toyota Supra Turbo.

In With The Good ... Out With The Bad

Interior noise reduction is an important part of any car's design, especially in the Corvette market. After careful owner studies, however, designers and engineers came upon one universal truth: **Corvette owners love the sound of intake, exhaust and precision machinery.**

Designers and engineers dubbed these as "good" sounds, that should be allowed into the interior, and sought to block the transmission of all other "bad" sounds, which might interfere with overall driving enjoyment.

Through detailed sound-insulation techniques, this noise control was accomplished. Even wiring harnesses within the instrument panel have been wrapped to prevent unwanted sound intrusion.

No Spare Required

Corvette features Goodyear Eagle F-1GS Extended Mobility Tires (EMT) — P245/45ZR-17 up front and P275/40ZR-18 in the rear. These tires keep Corvette rolling, even in the event of a flat, for up to 200 miles at 55 miles per hour.

EMT use self-supporting sidewalls. Should tires lose air pressure, the weight of the vehicle is supported by the reinforced sidewall, and the vehicle continues to roll.

The system works so well, Corvette no longer needs a spare tire or a jack, which also helps reduce vehicle mass and increase usable space.

The real benefit of EMT is security. In the event of a loss of tire pressure, the driver can get to a service station without stopping.

In fact, performance and ride with zero inflation are so similar to normal inflation that drivers need to be warned of lost tire pressure via a standard Low-Tire-Pressure Warning System. This system operates at speeds above 15 mph through battery-powered sensors inside each tire valve stem, which transmit data to the Driver Information Center. These sensors provide accurate readings within 1 psi, with altitude compensation.

Information is transmitted via FM radio frequencies; however, more than two million sensor "identities" virtually eliminate interference between other Corvette models in close proximity.

INTERIOR FEATURES (contd.)

approaches the vehicle. Called the "halo effect", the feature completely surrounds the vehicle with an illuminating glow. The system also includes a driver-activated panic button on the key fob that automatically turns on all the lights (except headlamps) and honks the horn for added security.

- A **single, reversible key** starts the car and operates locking functions on the doors and all other locks. The ignition key inserts directly into an ignition switch on the instrument panel, not the steering column. This means there's no craning of the neck looking around the steering column for the ignition switch.
- The **driver and passenger safety belts** feature buckles mounted on the seats, helping maintain proper positioning when the seat is repositioned
- Standard **Scotchgard™ Protector** helps protect carpeting from stains and makes cleanups easy
- Standard **air conditioning** uses CFC-free refrigerant which does not contribute to ozone depletion. Optional **electric dual-zone** air conditioning provides separate temperature control for the driver and passenger
- A standard, **center console** houses the parking brake, a cup holder (for cups up to 20 ounces), an ash tray and storage space for cassettes, CDs and a portable phone
- A standard, **lockable, lighted glove box** provides the owner with secure, convenient storage space
- A standard **Tilt-Wheel™ Adjustable Steering Column** tailors the wheel to the most comfortable, individualized steering position
- A standard, **PASS-Key II theft-deterrent system** with horn alarm helps prevent theft by disabling the ignition and the fuel delivery system for about three minutes if an incorrect key is used or when an attempt is made to bypass the ignition system
- An optional **memory package** allows drivers to customize up to three different settings for exterior mirrors, radio presets, climate control and driver seat positions
- **Solar-Ray glass** helps filter the effects of heat-producing solar rays, reducing the demands on the air conditioning system
- A standard driver-side **dead pedal** provides a comfortable rest for the left foot
- A standard **turn signal reminder chime** alerts the driver if a turn signal is left on
- **Three storage pockets** in the rear hatch floor provide additional storage space for personal items
- An optional **parcel net and luggage shade** (both available on coupe, parcel net available on convertible) help secure cargo items and camouflage from exterior view
- A standard, **passenger-side grab handle** assists in vehicle entry and exit
- The **removable roof panel** (coupe) fits neatly in the cargo area when not in use for safe storage
- The optional **roof package** includes the standard solid panel and an additional blue translucent panel.

Audio Systems

The Corvette music systems are the result of a collaborative effort between Bose and Delco Electronics. These systems feature the latest Delco Electronics AM/FM receiver and Bose speaker technologies to provide Corvette owners with an outstanding listening experience.

The Delco AM/FM stereo features a "brain" of sorts that remembers the tone control settings for each station and recalls them when the station is selected. Antennas, hidden in the windshield and rear window glass on coupe models provide excellent reception and aren't subject to damage in car washes like traditional mast antennas. The convertible features a power antenna, also offering protection from car wash damage.

INTERIOR FEATURES (contd.)

Available systems on Corvette:

- **Electronically tuned Delco premium AM/FM stereo with cassette player,** seek-scan, digital clock, Theftlock, automatic tone control and Bose speakers is standard on both Corvette models
- **Electronically tuned Delco premium AM/FM stereo with CD player,** seek-scan, digital clock, Theftlock, automatic tone control and Bose speakers is optional on both Corvette models.
- A **cargo-area-mounted Delco CD changer** with a removable 12-disc cartridge is optional.

Seats

Corvette seating provides a standard, power driver six-way seat adjuster for optimum comfort. An optional power six-way passenger-seat adjuster is available on both Corvette models.

Coupe and convertible

- Standard bucket seats with soft leather seating surfaces.

Coupe and convertible

- Optional Sport bucket seats with soft leather seating surfaces and inflatable lumbar support with adjustable wings.

New Interior Colors For '98

- Light Oak.

Other Colors

- Black
- Light Gray
- Firethorn Red.

CORVETTE EXTERIOR FEATURES

The Corvette exterior is a true statement in high style. Designed with an aggressive stance, Corvette features a long hood/short deck design that is the hallmark of this American sports car. And, contributing to overall performance is an outstanding 0.29 coefficient of drag (Coupe only).

- Corvette coupe owners have a choice between a standard body-colored removable roof panel, an optional transparent removable roof panel or an optional combination body-colored and transparent removable roof panel.
- Standard, heated, electric mirrors are both functional and stylish.
- Optional color-keyed body-side moldings add an attractive accent.

Exterior Paint

Standard basecoat/clearcoat paint on Corvette resists fading and provides a high-gloss shine for long-lasting exterior beauty. The clearcoat system is formulated to minimize the effects of acid rain and other environmental damage. Clearcoat finish is used with all colors — solids and metallics.

- The body panels remain unattached until late in the assembly process to help assure a quality paint appearance.
- Painting is preceded by a high-tech cleaning in a "clean-room" atmosphere designed to be dust and contaminant-free.
- A water-borne paint process is used to help minimize environmental emissions and to attain a clear, smooth appearance.

America's Premier Sports Car ... Made Out Of Wood?

When you think of an American performance icon, Corvette is probably the first vehicle to come to mind. And, when you think of Corvette, you think of a sporty, metal and fiberglass performance machine, moving down the road.

Well, all of this is true, except for the floor.

It uses two layers of an aircraft-type composite material that sandwich a balsa wood core. That's right — *balsa wood* — the same stuff used to make model airplanes. However, the balsa used in Corvette is higher in density than a typical model airplane frame. Balsa helps filter out noise and vibration, and contributes to the overall structure of the car. In fact, it actually makes the floor 10 times stiffer than the use of composites alone.

Numerous "high-tech" synthetic fillers were tested, but surprisingly, none matched the stiffness, light weight and damping performance of natural balsa wood.

A Proud, Small Block Lineage

Since its introduction in 1955, the small block V8 has become one of the most important parts of Chevrolet performance history, and the LS1 is the latest in this proud line of engines.

Introduced into 1955 Chevrolet cars and trucks by then Chief Engineer Ed Cole, the small block V8 engine featured a high performance-to-size ratio that changed the way Americans thought about Chevrolet.

Corvette also adopted the 265 cubic-inch small block V8 engine in 1955, gaining a full 30 percent power increase over its original six-cylinder engines. The small block V8 was so well received, it became standard equipment in 1956 Corvette models.

The following year, Cole and legendary engineer Zora Arkus-Duntov ushered in yet another advancement which would change the course of Corvette history: fuel injection.

The small block V8 has since become an inseparable part of Corvette. It also has powered millions of trucks, cars, boats and industrial applications and has set industry standards for performance and durability.

The latest small block, the LS1, produces more horsepower than either of its 1996 predecessors. Incredibly, it does this within the confines of emissions and CAFE regulations. All this, with low noise, low vibration and high durability.

EXTERIOR FEATURES (contd.)

Exterior Colors

New Paint Colors For '98:

- Light Pewter Metallic
- Medium Purple Pearl Metallic.

Other Colors:

- Black
- Nassau Blue Metallic
- Fairway Green Metallic
- Light Carmine Red Metallic
- Torch Red
- Sebring Silver Metallic
- Arctic White.

DESIGN AND MANUFACTURING

Corvette models are manufactured at the Corvette Assembly Plant in Bowling Green, Kentucky. This advanced production facility uses computerized manufacturing techniques to help ensure maximum quality.

- Corvette features **hand-crafted frame structure** technology that employs metal inert gas (MIG) laser welding. This process is performed by skilled craftspeople, instead of the robotic spot welding employed in most plants. This "human touch" increases weld quality.
- Corvette features **modular construction**, where complex sub-assemblies are built as single units away from the assembly line to improve quality and simplify the final build.
- Before leaving the plant, every Corvette is subjected to a **rigorous water test**, which helps ensure a leak-free build.

BODY STRUCTURE

The 1998 Corvette is 4 times stiffer than the fourth-generation version, allowing for a tight, controlled ride and reduced body sway and vibration.

Downward vision is improved over the fourth-generation Corvette to five degrees (from 3.4), allowing the average-sized driver to see an object 18 feet closer to the front bumper than before.

The rear end of the new Corvette is as wide as the previous ZR-1. Last year, a combination of 17-inch front tires and 18-inch rear tires were offered as standard equipment for the first time.

Other Features Include:

- Structural strength, enhanced by a **full-length perimeter frame** with side rails made out of tubular steel. These rails are joined by two bumper beams that are welded on, rather than bolted, for high strength
- **The side rails that are hydroformed,** or pressured into shape by a high-pressure hydraulic press developed by GM. The resulting rail is stiff, strong and lighter than comparable parts formed by conventional means. This process also results in fewer parts over conventional designs for more efficient construction
- An **integral cross member** providing a firm foundation for the instrument panel, resulting in minimized noise and vibration
- A **balsa wood core composite sandwich floor** that is lightweight, yet strong
- **Body panels, constructed of a flexible sheet-molded compound** that resists damage and corrosion. Quarter panels are bolted, not bonded, to the structure to help minimize collision repair
- Both **front and rear fascias**, with 5-mph bumper systems for protection from minor parking lot dings.

Corvette convertible

Having recognized how high customer interest always is in a high sport convertible, designers knew the importance of producing a high-quality, topless version of the new fifth-generation Corvette. Convertible demand has always been high for Corvette, as evidenced by the overwhelming feedback during the since-named "drought years" (1976–1985), when no convertible was available.

BODY STRUCTURE (contd.)

The 1998 Corvette convertible was designed as a true convertible from the beginning, not as a coupe with the top "cut off." This deliberate, integral design gives the convertible a smooth, flowing exterior look, along with seamless top operation, thanks to a "true" convertible design.

Features Include:

- **Heated rear glass window** helps provide clear vision in damp or icy weather conditions. The window is also designed to provide the driver with maximum rearward view due to its full size
- An **integral trunk** has enough room for two complete sets of golf clubs
- The **neat-fitting convertible top** is manually operated from the exterior of the vehicle — a task that can be accomplished in a few moments
- A **5-bow pressurized roof design** eliminates the need for latches at the rear of the top, greatly enhancing operation.
- The convertible top features a **black headliner** with **exterior color choices** of Light Oak, Black and White
- A neat, composite **tonneau cover** is released by the push of a button to put the top up. This action also automatically lowers the windows partially via the Express-Down feature.

ENGINE

5.7 Liter V8 SFI Engine (LS1)

The standard, 5.7 Liter V8 SFI LS1 engine is the latest in a long line of impressive Corvette powerplants. This engine has a number of cutting-edge features that help make Corvette a truly unique performance machine.

- The LS1 produces **345 horsepower @ 5600 rpm and 350 lb.-ft. of torque at 4400 rpm** for outstanding performance.
- The LS1 features an **all-aluminum engine block** that is both strong and lightweight.
- A **"deep skirt"** extends down past the bearing caps. Two bolts tie the main bearing caps directly to the engine block horizontally, and two more secure each cap vertically. This helps give the engine outstanding durability, and reduces noise and vibration.
    - **Replicated cylinder head ports** optimize airflow in the engine, contributing to overall performance.
- The intake manifold is made of **composite materials** that help maximize airflow to the engine for enhanced performance.
- A **dual-wall fabricated exhaust manifold**, made of high-strength stainless steel with an air gap in between, minimizes cold-start emissions, optimizes catalytic converter performance and reduces noise levels.
- **Lightweight pistons and rods** allow engineers to tune the engine to high rpm, achieving maximum power from the 5.7 liter displacement.
- The valvetrain features **in-line valves, rocker arms and pushrods** for reduced stress and friction. This also enhances overall fuel economy and durability.
- **Power metal connecting rods** contribute to fuel economy and emissions.
- A **roller timing chain** with nylon tensioners enhances overall performance.
- **Composite lift restricters** decrease mass and help optimize fuel economy.
- A **dual electronic spark control sensor** is

ENGINE (contd.)

located in the valley of the engine block

Corvette — High Performance With Low Maintenance

Corvette provides owners with a driving experience they won't forget, and a maintenance experience they won't have to remember.

The standard 5.7 Liter LS1 V8 SFI engine offers some extended-maintenance features that make owning Corvette easy.

- Platinum-tip spark plugs give Corvette the ability to travel up to 100,000 miles before the first scheduled tune-up.*
- Extended-life coolant doesn't need to be changed for as many as 5 years or 150,000 miles, whichever comes first.*

Other Corvette "Easy-To-Own" Features Include:

- An aluminized stainless-steel muffler and tailpipe that provide long-lasting durability
- 10,000 mile synthetic oil change interval
- Long-life automatic transmission fluid will not need to be replaced for at least 100,000 miles under normal operating conditions*
- Scotchgard™ Protector that helps resist stains on floor coverings and makes cleanups quick and easy
- Genuine Customer Care — Bumper to Bumper 3-year/36,000-mile limited warranty, 24-hour Roadside Assistance and Courtesy Transportation.

**Maintenance needs vary with different uses and driving conditions. See owners manual for more information.*

GM Mobility Program

Chevrolet recognizes the importance of mobility to everyone's life and, therefore, offers financial assistance to persons with disabilities through the General Motors Mobility Program. This program can provide financial assistance — up to $1,000 — toward the cost of any after-market adaptive equipment for drivers or passengers and/or vehicle "alerting devices" for deaf and hearing-impaired drivers. A special feature of the program is single-transaction GMAC financing for the vehicle and its adaptive aids. Further details are available by calling the GM Mobility Assistance Center at 1-800-323-9935. The hearing impaired can contact the Customer Assistance Center at 1-800-TDD-CHEV.

for precise spark control.

- An **integrated air fuel module** contributes to overall durability.
- A **mass airflow sensor** works with OBD II to help reduce emissions.
- **Sequential Fuel Injection** aids combustion efficiency by optimizing fuel delivery.
- **Electric Throttle Control** (ETC) allows precise tailoring of a specific throttle progression to meet the Corvette particular character. ETC integrates cruise control, brake torque management and traction control into a single controller, for mass reduction and high durability.
- **Direct-mount accessories** eliminate bolts, fasteners and attachment points, which help reduce engine noise and enhance durability.
- A high-efficiency **gerotor oil pump** provides low oil temperature delivery and reliable performance due to low parasitic loss.
- A **lightweight oil pan** features extended sumps that contain additional oil to ensure a good supply to the pickup tube for enhanced performance.
- **One ignition coil per cylinder** provides high-energy ignition for maximized combustion, low emissions and enhanced durability.
- **Platinum-tip spark plugs** (first scheduled maintenance at up to 100,000 miles*) provide dependable service.
- **Extended-life engine coolant** (first scheduled replacement as many as 5 years or 150,000 miles*) helps make maintenance easy.

**Maintenance needs vary with different uses and driving conditions. See owners manual for more information.*

ON-BOARD DIAGNOSTICS SECOND GENERATION (OBD II)

On-board diagnostics for Corvette is highly sophisticated, thanks to OBD II (On-Board Diagnostics Second Generation).

- The system can mean faster, less expensive repairs for consumers. In low-level engine misfire, things like bad fuel, improper maintenance, cracked spark plug insulation or plugged fuel injectors can all lead to a misfire diagnosis that's picked up by OBD II.
- OBD II functions by using a Powertrain Control Module (PCM) to monitor fuel delivery, ignition timing and the emissions controls to detect deterioration or malfunction.
- If a problem is detected, a Diagnostic Trouble Code (DTC) is stored and indicates the type of fault detected.
- The PCM stores and retrieves diagnostic messages to help technicians fix problems quickly and accurately.
- The PCM alerts the driver by illuminating the "Service Engine Soon" light when it detects a deterioration in the performance of any of the monitored components.
- Unlike first-generation systems that signaled only system failures, OBD II alerts the driver to have the vehicle serviced before experiencing a possible breakdown or incurring more expensive repairs.

SEQUENTIAL FUEL INJECTION (SFI)

Sequential Fuel Injection, standard on Corvette, is a far cry from yesterday's fuel control systems such as Electronic Fuel Injection. SFI optimizes fuel economy, power output and the ability to meet today's stringent emissions control requirements.

- SFI's secret is its high-precision fuel control, which uses one injector and nozzle per cylinder for optimum cylinder-to-cylinder fuel distribution.
- Each injector is fired sequentially and timed to the intake cycle for accuracy and metering control. (With non-SFI engines, fuel is injected once per engine revolution through all injectors at the same time. With SFI, the timing is much more precise, thus, there are performance improvements across the board).
- A mass airflow meter constantly measures the engine's air requirements under varying conditions, such as changes in load, altitude and temperature. In an SFI system, the mass airflow meter is essential for accurate fuel delivery.
- The injector nozzle's design and optimum location produce an effective spray pattern that contributes to the engine's smooth idle and fuel efficiency

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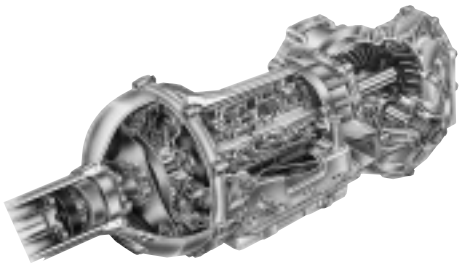
TRANSMISSIONS

Both available Corvette transmissions are rear-mounted to help maximize interior room for the driver and passenger, and to help provide balanced weight distribution.



4L60-E 4-Speed Automatic Transmission w/Overdrive

The standard, Hydra-matic electronically controlled 4-speed automatic Overdrive transmission uses electronic controls to deliver smooth, precise shift points.

- The torque management system helps protect the powertrain by reducing the amount of energy and heat generated by frequent severe shifts that can occur when a vehicle is stuck in a snow bank or similar situation and must be "rocked."
- First-gear ratio (3.06:1) provides maximum low-speed torque for impressive acceleration, while Overdrive gear (0.70:1 ratio) offers impressive fuel economy at highway cruising speeds.
- A two-piece case design with a unique 360-degree bellhousing completely encases the torque converter assembly for maximum stiffness and low noise and vibration.
- An aluminum torque tube houses a metal composite prop shaft for reduced noise and enhanced durability.
- Shift stabilization senses when the vehicle is operating on a grade, and determines the optimal performance gear.
- A standard, brake/transmission shift interlock requires the driver to depress the brake pedal to shift out of Park for added security.

TRANSMISSIONS (contd.)

- A second gear start feature provides an

The Corvette Design — Aerodynamics at its Best

Corvette has always been known as an aerodynamic car, a common characteristic among top performance machines. But, there's nothing common about the aerodynamic design of the fifth-generation Corvette.

With the new body design, Corvette coupe boasts an incredible coefficient of drag (cd) of 0.29 and the new convertible an impressive 0.32. These figures make for a definite boost in overall performance and handling, while helping meet fuel economy goals.

It took nearly 1,500 hours of wind-tunnel testing and many design tweaks, to achieve the Corvette impressive coefficient of drag. Minute design alterations were made within the wind tunnel — as precise as tenths of millimeters.

Several exterior Corvette features contribute to overall aerodynamic performance. A hard edge in the body's rear quarter panel and fascia are perfectly placed to enhance performance. The front air dam does an excellent job of providing much-needed cooling air to the LS1 V8 engine, while minimizing underbody airflow, an important part of aerodynamic performance.

Amazingly, this low coefficient of drag has been achieved with a body that is bigger, both inside and out, than the previous Corvette design.

History (By Model Year)

Introduced in January, 1953 as a GM Motorama show car.

- 1953 — First 300 production Corvette models assembled by hand; 235 cu. in. six-cylinder engine.
- 1955 — First small block V8 introduced.
- 1956 — All-new body style; optional removable hardtop.
- 1957 — Engine improvements; 4-speed manual transmission, and fuel injection are new options.
- 1958 — Four-headlamp design introduced.
- 1961 — Quad taillamps.
- 1963 — All-new Sting Ray introduced with convertible and, for the first time, a coupe model; concealed headlamps debuted.
- 1965 — Big block V8 engine option. Four-wheel disc brakes made standard.
- 1968 — All-new body style; removable T-Tops on coupe models.
- 1970 — Original LT1 small block V8 introduced.
- 1971 — Special-purpose big block V8 produced 425 horsepower.
- 1975 — convertible model discontinued at end of year.
- 1977 — Standard leather seats; 500,000th Corvette produced.
- 1978 — Official Indy Pace Car replica and Silver Anniversary models offered.
- 1983 — No Corvette models made for public sale, 43 pilot models made for testing purposes.

extra measure of security and control in hazardous driving conditions. By moving the gear selector to the D2 position, the driver can reduce torque to the drive wheel, helping limit wheel slip during initial acceleration on slippery roads.

- 4L60-E is filled with extended-life automatic transmission fluid that never needs replacement under normal conditions.*
- The 4L60-E is fully OBD II-compliant. The Powertrain Control Module (PCM) collects information about the operating condition of the 4L60-E and alerts the driver with a "Service Engine Soon" light if there is a deterioration that could cause the vehicle to exceed acceptable emissions levels.

**Maintenance needs vary with different uses and driving conditions. See owners manual for more information.*

6-Speed Manual Transmission (T56)

A 6-speed manual transmission is optional on Corvette. Designed for those drivers who desire more "hands-on" control, the T56 features a self-adjusting hydraulic clutch system that requires little effort to engage and reduces overall wear.

- The 2.68:1 first-gear ratio provides high torque multiplication, for quick initial acceleration.
- Overdrive fifth and sixth gears help produce quiet, economical highway cruising.
- The shift lever is automatically centered in the 3–4 gate's Neutral position to enhance shift feel and help minimize the chance of missed shifting.
- A skip-shift feature requires upshifting from first to fourth gears, skipping second and third, under certain throttle conditions. This feature also helps optimize fuel economy.
- An aluminum torque tube houses a metal composite prop shaft for reduced noise and enhanced durability.
- A limited-slip rear axle features an aluminum case with hydraulic rear mounting for high durability.
- The T56 was designed by Borg Warner, a company well known for its high-quality designs.

SUSPENSION

The 1998 suspension is exclusive to Corvette, and designed with one overall goal in mind: great handling with a smooth ride. In keeping with this goal, the Corvette suspension geometry is designed to allow ride and handling to work independently of one another.

Another key to Corvette ride and handling is the stiff chassis structure. The fifth generation's stiff underbody structure allows engineers to reduce structural variation and movement. The increased stiffness is a bonus to suspension engineers, who in the past compensated for structural movement in their suspension design. The result of this structural stiffening? Engineers are now able to maximize ride and handling characteristics exclusively through suspension tuning.

Notable Suspension Features Include:

- **Standard fully independent four-wheel Short/Long-Arm (SLA) suspension** is similar to suspensions used in many race cars. This suspension is height-adjustable at the factory for consistent ride and handling. Each car is precisely adjusted during production according to its specific option content and vehicle weight. Thus, every Corvette off the assembly line is equal in terms of excellent ride and handling
- **Forged-aluminum** front upper control arms, and cast-aluminum front/rear lower

SUSPENSION (contd.)

and rear upper control arms offer strength

with low mass
- A patented version of the **transverse composite leaf spring** design contributes to an excellent ride. Spring pads are located on the lower, longer arms at each corner. The composite springs run from one side of the car to the other, and are attached to the chassis via rubber-isolated mounts
- **Optional F45 Suspension offers selective Real Time Damping,** a technology that reads the road surface at each wheel and instantaneously adjusts shock damping to achieve a flat, stable ride. F45 provides three settings — Tour, Sport and Performance — for a variety of ride qualities
- **Optional Z51 Suspension** is designed for competition, or for the non-competitive driver who demands the ultimate in handling. Tuned on road courses and autocross tracks, Z51 offers a top level of handling. Z51's highly controlled ride stems from stiffer springs, larger stabilizer bars and larger monotube shocks.

STEERING

Magnasteer II Steering, a variable-effort rack-and-pinion power steering system, is standard on Corvette models. This high-tech system provides lower effort at low speeds for easy parking and maneuvering, and higher efforts at high speeds for positive road feel and stability.
- A **16.1:1 ratio** provides quick steering response.
- The **steering system** was incorporated into the overall chassis design from the onset, which allowed engineers to tune the system for maximum effectiveness.
- Magnasteer II features **smooth transitions** between high effort and low effort for a natural, in-command feel of the road.
- A **lightweight aluminum power steering pump and intermediate shaft** help reduce mass and resist corrosion.

BRAKES

Corvette features a front-and rear-disc, four-channel ABS anti-lock disc braking system. The four-channel design provides the ultimate in stopping power. Some things to keep in mind about anti-lock brakes:
- ABS helps the driver maintain steering control during severe braking situations and minimizes wheel lockup on most slippery surfaces
- ABS can adjust brake pressure by modulating the brakes 15 to 18 times per second, a rate even most skilled professional drivers cannot attain. All the driver needs to do is to maintain pressure on the brake pedal.
- The system modulates the brake-line pressure at each wheel. Drivers should not "pump" the brakes in emergency braking situations. All the driver has to do is hold the brake pedal down.

Other Corvette Brake Features Include:
- **Dual-piston front brakes and single-piston rear brakes** feature aluminum sliding-type calipers that are corrosion-resistant and enhance durability. Front calipers feature the "Corvette" name boldly cast into the aluminum surface
- A **cast-aluminum racing-style brake pedal** provides a sure-footed feel.

WHEELS AND TIRES

History (By Model Year – contd.)
- 1986 — convertible model re-introduced and served as Indy Pace Car; standard 4-wheel ABS; Vehicle Anti-Theft System (VATS).
- 1989 — Standard 17" wheels; Selective Ride Control introduced; 6-speed manual transmission optional.
- 1990 — ZR-1 with LT5 introduced; new cockpit design; driver air bag.
- 1991 — All models feature rear appearance similar to 1990 ZR-1.
- 1992 — Second-generation LT1 introduced; Acceleration Slip Regulation (ASR) introduced; 1 millionth Corvette produced.
- 1993 — ZR-1 LT5 engine enhancements; 40th Anniversary Package; Remote Keyless Entry introduced.
- 1994 — Front-passenger air bag; new cockpit design.
- 1995 — Revised gill panel; last year of ZR-1; Corvette provides Indy Pace Car again.
- 1996 — Grand Sport and Collector Edition; LT4 engine option introduced.
- 1997 — All-new body and chassis; LS1 all-aluminum small block V8 introduced.

Corvette coupe and convertible:

- Corvette standard, cast-aluminum wheel (17" front/18" rear).

Corvette coupe and convertible:

- Corvette optional bronze-tone magnesium wheel (17" front/18" rear)
- Standard P245/45ZR-17 front/ P275/40ZR-18 rear Goodyear Extended Mobility Tires (EMT) standard with both available wheel styles.

GENUINE CUSTOMER CARE

Chevrolet owners are covered by Genuine Customer Care, a comprehensive owner protection plan that includes the following:

Bumper to Bumper Warranty

The GM 3-year/ 36,000-mile (whichever comes first), no-deductible, limited warranty covers repairs for all Chevrolet cars, including labor and parts, to correct any defects in material or workmanship occurring during the warranty period. Warranty features include air conditioning repair, tires, towing, no-cost warranty transfer and 6-year/100,000-mile (whichever comes first) sheet-metal rust-through protection. There also is emissions control system coverage, which varies by geographic location. The only item not covered by the warranty is normal maintenance.

Courtesy Transportation

Customers who purchase or lease a 1998 Chevrolet Corvette are eligible for Courtesy Transportation (at no charge) when their vehicles are left at a participating dealership for repairs covered under the 3-year/ 36,000-mile Bumper to Bumper Limited Warranty. Courtesy Transportation, at participating dealers only, may *include shuttle service, expense reimbursement, or, if the repairs require leaving the vehicle overnight, a vehicle rental.* Owners should see their dealer for details.

24-Hour Roadside Assistance

Lost? We'll help owners find their way. Locked out? We'll get them back in their Corvette. Out of gas? We'll get them gas. Roadside Assistance is provided via a toll-free number 24 hours a day, 365 days a year. Roadside Assistance is offered in two levels of service, Basic Care and Courtesy Care.

Roadside Basic Care covers owners as long as they own their Corvette, and provides:

- Free towing for warranty repairs (to closest dealer)
- Over-the-phone basic technical advice
- Available dealer services at reasonable costs (i.e., wrecker services, locksmith/ key service, glass repair, etc.).

Roadside Courtesy Care is available to owners for a period of three years or 36,000 miles (whichever comes first), and provides:

- Free towing (to closest dealer)
- Free locksmith/key service (when keys are lost on the road or locked inside)
- Free flat tire service, jump start and fuel delivery.

Important — a word about this document: We have tried to make this document as comprehensive and factual as possible. We reserve the right, however, to make changes at any time, without notice, in colors, materials, equipment, specifications, models and availability. Some information may have been updated since the time of printing in June 1997.

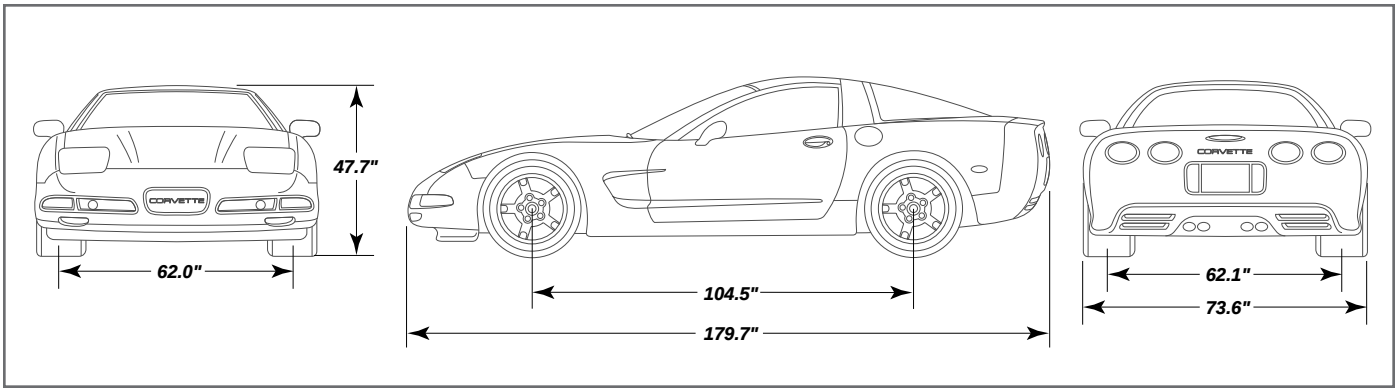
A note about air bags: Always wear safety belts, even with air bags.

1998 Corvette Feature Availability

	Corvette Coupe	Corvette Convertible
INTERIOR		
Air Bag – Driver and Passenger	S	S
Air Conditioning – with CFC-Free Refrigerant	S	S
– Electronic Dual-Zone	O	O
Console – Center with Cup Holder, Ashtray, Coin Tray and Cassette/CD Storage	S	S
Defogger – Electric, Rear-Window	S	S
Door Locks – Power	S	S
Gauges, Analog – Speedometer, Fuel, Tachometer, Oil, Temperature and Volts	S	S
Low Tire Pressure Warning System	S	S
Luggage Shade and Parcel Net – Luggage-Area	O	O[1]
Memory Package – "Remembers" Settings for Outside Mirrors, Radio, Heater/ Defroster/Air Conditioning and Driver Power-Seat[2]	O	O
PASS-Key II Theft-Deterrent System with Horn Alarm	S	S
Remote Function Actuation System (includes Keyless Entry)	S	S
Scotchgard™ Protector (on floor carpeting)	S	S
Seat– 6-Way Power Driver	S	S
– 6-Way Power Passenger	O	O
– Bucket, with Leather Seating Surfaces	S	S
– Sport Bucket, Adjustable with Leather Seating Surfaces (includes inflatable lumbar support and adjustable wings)	O	O
Speed Control – Electronic with Resume Speed	S	S
Steering Column – Tilt-Wheel™ Adjustable	S	S
Stereo – AM/FM with Cassette Player and Bose Speakers	S	S
– AM/FM with CD Player and Bose Speakers	O	O
– 12-Disc Remote CD Changer	O	O
Windows – Power with Driver's and Passenger Express-Down Feature	S	S
Wipers – Intermittent	S	S
EXTERIOR		
Antenna – Integral	S	NA
– Power	NA	S
Convertible Top – Manual with Heated Rear Glass Window	NA	S
Daytime Running Lamps	S	S
Exhaust System – Aluminized Stainless-Steel	S	S
Foglamps – Dual Halogen	O	O
Mirrors – Outside Dual Body-Color Heated Remote Electric	S	S
Moldings – Body-Side	O	O
Paint – Basecoat/Clearcoat	S	S
Tires – Front, Extended Mobility, P245/45ZR-17	S	S
– Rear, Extended Mobility, P275/40ZR-18	S	S
Wheels – Cast Aluminum, 17" Front/18" Rear	S	S
– Magnesium, 17" Front/18" Rear	O	O
FUNCTIONAL		
Brakes – Bosch 4-Wheel Anti-Lock	S	S
– Power, Front and Rear Vented Disc	S	S
Engine – 5.7 Liter LS1 Aluminum Small Block V8 SFI	S	S
Fuel Capacity – 19.1-Gallons	S	S
Suspension – 4-Wheel Independent SLA	S	S
– Z51 Performance Handling Package	O	O
– F45 Real-Time Damping	O	O
Transmission – 4-Speed Electronically Controlled Automatic	S	S
– 6-Speed Manual	O	O

S — Standard. O — Optional (see your order guide for feature availability). NA — Not available.

1 Parcel net only on convertible model. 2 Requires electronic dual-zone air conditioning.



MODEL AVAILABILITY

Models	Corvette coupe, Corvette convertible
EPA vehicle class	High-sport
Assembly	Bowling Green, Kentucky

DIMENSIONS & CAPACITIES (inches, unless otherwise noted)

Exterior Dimensions	Corvette coupe/Corvette convertible
Wheelbase	104.5
Length (overall)	179.7
Width (overall without mirrors)	73.6
Height (overall)	47.7
Tread — front	62.0
Tread — rear	62.1
Interior Front Dimensions	
Headroom	coupe – 37.9/convertible –37.6
Legroom	coupe – 42.7/convertible – 42.8
Shoulder room	55.3
Hip room	54.2
Capacities	
Passenger capacity	2
Passenger index (cu. ft.)	coupe – 51.4/convertible – Not available at time of publication
Cargo capacity (cu. ft.)	coupe –24.8/convertible – with top up – 13.9; with top down – 11:1
Fuel capacity (gal.)	19.1
Curb weight (lbs., est.)	coupe – 3245/convertible – 3246
Engine oil (quarts)	6.0 (with filter)
Engine coolant (quarts)	12.0 (12.4 with manual transmission)

STEERING

Type	Power-Assisted, Speed-Sensitive, Magnetic, Variable Effort Power Rack and Steering
Ratio (overall)	16.1:1
Turns stop-to-stop	2.32
Turning diameter curb-to-curb (ft.)	40.0
Turning diameter wall-to-wall (ft.)	41.3

BRAKES

Type	Power-Assisted, Four-Wheel Vented Disc with 4-wheel ABS
Gross lining, front/rear (sq. in., without grooves)	33.0/18.4
Effective area, front/rear (in.)	32.4/18.4
Disc rotor diameter x thickness, front (in.)	11.9 x .78[1]
Disc rotor diameter x thickness, rear (in.)	11.9 x .78[1]
Total sweep area, front/rear (sq. in.)	102.3[2]/91.3

1 12.8 x 1.1 in. with optional Z51 Performance Handling Package. 2 111.9 sq. in. with optional Z51 Performance Handling Package.

ENGINES

Type	5.7 Liter (LS1) V8 SFI
Block	Cast Aluminum
Cylinder head	Cast Aluminum
Valve configuration	Overhead (OHV)
Hydraulic lifters	Yes/Roller
Bore & Stroke (in.)	3.90 x 3.62
(mm)	99.0 x 92.0
Cam drive	Chain
Redline (rpm)	6000
Displacement (liters/cid)	5.67/346
Compression ratio	10.1:1
Fuel induction	Sequential Fuel Injection (SFI)
Horsepower @ engine rpm	345 @ 5600
Torque (lb.-ft.)	350 @ 4400
Exhaust system	Aluminized Stainless Steel
Tailpipe(s)	4, Rear Center Exit
Ignition system	Coil Near Plug
Alternator	50amps at Idle; 120amps Maximum
Battery (SAE capacity rating)	600cca
Recommended fuel (unleaded)	Premium Unleaded

TRANSMISSIONS

Models	Corvette coupe/ Corvette convertible	Corvette coupe/ Corvette convertible
Transmission	4-Speed Elec. Automatic with Overdrive (std.)	6-Speed Manual (opt.)
Layout	RWD, Mounted Ahead of Rear Axle	RWD, Mounted Ahead of Rear Axle
Gear ratios:		
1st	3.06	2.66
2nd	1.63	1.78
3rd	1.00	1.30
4th	0.70	1.00
5th	–	0.74
6th	–	0.50
Reverse	2.29	2.90
Final drive ratios	2.73[1]	3.42

1 3.15 with optional Performance Ratio.

CHASSIS

Chassis	
Structure/frame	Integral Perimeter Frame with Center Backbone/All-Welded Steel Body Frame Construction
Body material	Fiberglass-Reinforced Plastic
Suspension — front	
Type	Independent SLA Forged Aluminum Upper and Pressure-Cast Lower Control Arms; Forged Aluminum Steering Knuckle, Transverse Monoleaf Spring and Steel Stabilizer Bar, Spindle Offset
Stabilizer bar diameter (mm)	Link/24.0[1]
Suspension — rear	
Type	Independent 5-Link Design with Toe and Camber Adjustment, Cast Aluminum Upper and Lower Control Arms and Knuckle, Transverse Monoleaf Spring, Steel Stabilizer Bar and Tie Rods, Tubular U-Jointed Metal Matrix Composite Driveshafts
Stabilizer bar diameter (mm)	Link/19.1[1]

1 30.0mm front and 21.7mm rear stabilizer bars with optional Z51 Performance Handling Package.

MILEAGE/PERFORMANCE*

Model	Corvette coupe/ Corvette convertible	
Transmission Type	4-Speed Automatic	6-Speed Manual
Mileage:		
City	17	18
Highway	25	28
Combined	20	21
Est. Cruising Range		
City	325	344
Highway	478	535
Combined	382	401

**Based on 1997 EPA figures. 1998 figures not available at time of publication. The 1998 Corvette convertible EPA numbers are projected to be same as coupe model.*

TRAILERING INFORMATION

NOTE: Corvette models are not rated for trailering.

WHEELS & TIRES

Model	Corvette coupe/ Corvette convertible
Wheel type	
— Standard	Cast Aluminum
— Optional	Magnesium (bronze-tone)
Wheel size	
— front	17" x 8.5"
— rear	18" x 9.5"
Tire type	Extended-Mobility (EMT) Eagle F1 High-Performance
Tire size	
— front	P245/45ZR-17
— rear	P275/40ZR-18
Spare size	Not Applicable

All specifications are preliminary and subject to change. Chevrolet Motor Division, June 1997.