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GM Booklets
CHEVROLET

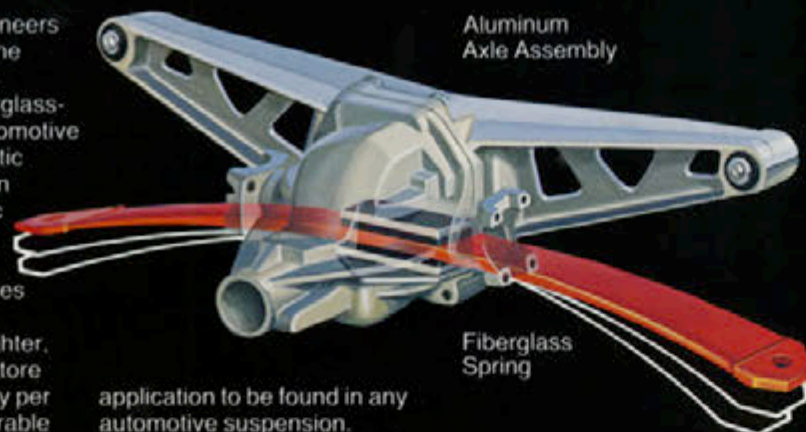
CAMPBELL-EWALD CO.
REFERENCE CENTER #30

1981



Corvette is a rolling showcase of new technology, new materials and new thinking—all part of an evolutionary process that continues year after year. Adherence to the principle of engineering excellence has been applied to all areas, from the front bumpers to the aircraft-style cockpit to the rear suspension system. It is these kinds of developments—detailed here—that make Corvette what it is today: one of the most renowned two-seat sports cars in the world.

For 1981, Corvette engineers trod where none have gone before by developing the world's first and only fiberglass-reinforced composite automotive spring (used with automatic transmission only). It even won the Society of Plastic Engineers Grand Award. This monoleaf rear spring—at 8 lbs.—replaces a 41-lb. steel multileaf spring. And it's not just lighter, it's more efficient. It can store six times the strain-energy per unit weight than a comparable weight of spring steel. This is the lightest possible leaf spring



Aluminum Axle Assembly

Fiberglass Spring

application to be found in any automotive suspension. And steel interleaf friction is eliminated. This fiberglass spring supports the weight of the car that rests on the rear wheels and provides suspension compliance. Wheel position is

controlled by a system of links and pivots.

Attention to detail for 1981 includes other engineering developments such as magnesium valve rocker covers and stainless steel exhaust manifolds. And an

improved anti-theft alarm system with starter-interrupt feature to disable the starting circuit if forced entry is made, even if the ignition switch is bypassed. The whole system is passive—it is easily armed and disarmed automatically when you lock and unlock the doors.

Also new is an auxiliary electric fan that cuts in quietly and automatically if extra cooling is needed. This allows use of a smaller engine fan with fewer, lower-pitched blades for reduced drag and quieter operation.

Computer Command Control. It sounds high tech, and it is. It's an on-board computer that adjusts ignition timing and air/fuel mixture. By continuously monitoring specific functions, it fine-tunes the engine under all normal

operating conditions as you drive. Altitude, barometric pressure and temperature changes are factored in. The whole system is even self-diagnostic. It pinpoints problems for your Chevrolet service technician. And it's even covered by the 5-year/50,000-mile emissions system warranty. Ask your dealer for details.

For automatic transmissions, a computer-controlled torque converter clutch in second and third gears is new. It engages at most road and load driving conditions for efficient rear

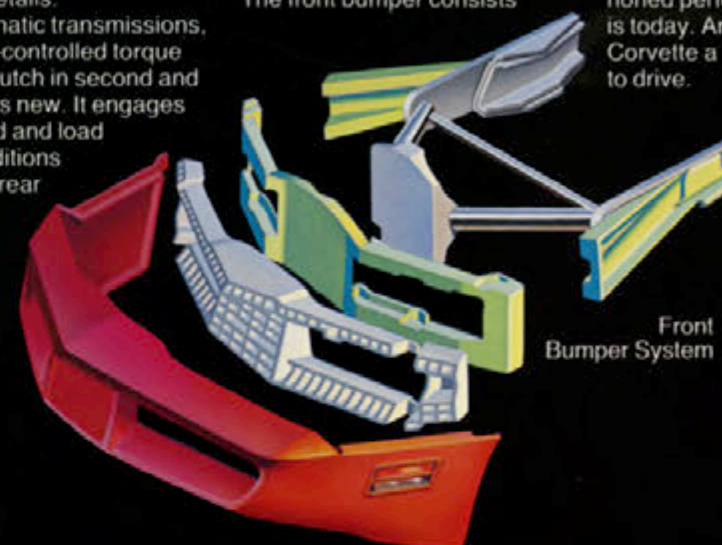
wheel power transfer—unlike the slippage normally found in conventional automatic transmissions.

Look at engineering breakthroughs introduced in 1980. Corvette's front and rear bumper systems were reduced by 84 lbs. Fit and appearance were improved, as well as aerodynamic drag efficiency. The front bumper consists

of a three-piece fiberglass supporting structure to replace the earlier steel parts.

Aluminum intake manifolds eliminated another 24 lbs. And aluminum also found its place in a new rear axle assembly.

A lot has gone into Corvette. The evolutionary process adds, subtracts and improves. It's what makes Corvette the finely honed performance machine it is today. And it's what makes Corvette a unique experience to drive.



Front Bumper System

"We critique Corvette with the same engineering objectivity we'd use to evaluate a military aircraft. What is Corvette's mission? How well does it carry out that mission?"

Dave McLellan,
Chief Engineer, Corvette



A WORD ABOUT THIS CATALOG: We have tried to make this catalog as comprehensive and factual as possible and we hope you find it helpful. However, since the time of printing, some of the information you will find here may have been updated. Also, some of the equipment shown or described throughout this catalog is available at extra cost. Your dealer has details and, before ordering, you should ask him to bring you up to date. The right is reserved to make changes at any time, without notice, in prices, colors, materials, equipment, specifications and models. Check with your Chevrolet dealer for complete information.

In line with the Corvette philosophy of evolutionary development is a brand-new assembly plant in Bowling Green, Kentucky, that will replace during this year the plant at St. Louis, where Corvettes have been built for 28 years. The Bowling Green facility, which will build Corvettes exclusively, is an investment in Corvette's future. It represents the experience and knowledge learned over all those years, which are reflected in the state-of-the-art innovative technology used to build Corvettes.

Just one of these modern technological innovations is a new paint process. In addition to many solid colors, four new optional two-tone treatments celebrate the opening of the new plant. All solid and two-tone metallics employ a base coat/clear coat application for outstanding beauty. This method allows use of glamor metallics with large-flake high-metallic content. And the clear acrylic enamel finish

coat gives a depth of luster not possible with conventional paint finishes. It also provides a measure of protection against the elements.

The four two-tone color combinations are shown on this page. See the back cover for solid color listing.

Beige over
Dark Bronze Metallic

Silver Metallic
over Charcoal Metallic

Claret Metallic
over Dark Claret Metallic

Silver Metallic
over Dark Blue Metallic

"What you see here is a reflection of our constant striving to build a great road machine. The plant and the paint system are two examples of Chevrolet's commitment to quality."

Dave McLellan



STANDARD EQUIPMENT

Engine

5.7 Liter (350 CID) 4-Bbl. 90° V8 engine

Black-accented magnesium rocker covers

Tubular stainless steel exhaust manifolds

Chrome-plated air cleaner cover

Sealed side terminal Delco Freedom II heavy-duty battery

Auxiliary electric cooling fan

Computer Command Control

High Energy Ignition system

Drive train

Fully synchronized 4-speed manual transmission or automatic transmission with converter clutch feature in both second and third gears

Console-mounted shift lever with leather boot

Limited-slip rear axle with aluminum differential housing support

Power windows with console-mounted controls

AM/FM push-button radio with dual front speakers and fixed mast antenna (may be deleted for credit)

Air conditioning, heater and defroster with 3-speed blower

Full instrumentation—speedometer with trip odometer, 7000-RPM tachometer, voltmeter, oil pressure and water temperature gauges

Quartz analog clock

Warning lights for low fuel, brakes, electric choke, seat belts and generator

Washer and dual-speed wipers with time-delay feature

Illuminated visor mirror for passenger

Courtesy and dome lights with time delay

Ashtray and cigarette lighter in center console

Dual-unit retractable headlamps with halogen inner high beams

Automatic cornering lights

Dual horns

Underhood light

Steel-reinforced fiberglass construction

Removable roof panels, with stowage bags and tie-down

Tinted glass for all windows

Magic Mirror lacquer, enamel, or enamel/clear coat on all paint finishes

Dual body color sport mirrors with remote controls

Manual lap/shoulder belts for driver (with reminder light and buzzer) and passenger

Energy-absorbing steering column

Passenger guard door locks

Safety door latches and stamped steel hinges

Energy-absorbing padded instrument panel with anti-reflective upper surface

Laminated windshield/tempered side and rear glass

Safety armrests

Body interior

Molded shell seats with foam pads and high pivot folding backs that fold flat (passenger only)

Padded vinyl and carpeted doors with map pockets

Leather with vinyl bolsters or full cloth seat trim

Molded cut-pile carpeting with carpeted floor mats

Glove box lock and light

Dual padded sunshades (driver's shade extends)

Rear underfloor storage compartment with lock

Interior hood release

Tilt-Telescopic steering wheel with leather-wrap rim

Center console with coin tray

Carpeted luggage area with concealment shade

Day-night rearview mirror

Chassis

Power steering

Power four-wheel disc brakes with dual hydraulic circuits and brake warning light

Steel-belted radial ply blackwall tires (4)

Rally wheels with bright trim rings (4) and center caps

Lightweight bias ply fully inflated spare tire and wheel

Independent front suspension with coil springs and stabilizer bar

Independent rear suspension. Fiberglass-reinforced composite single leaf spring with automatic transmission, steel multi-leaf spring with manual transmission

Integrated energy-absorbing front and rear bumpers

Side lift jack

24-gallon fuel tank with high-density polyethylene liner

Corrosion resistance

Steel-reinforced fiberglass body

Galvanized steel body floor

Hot-melt-wax frame coating

Zincroterne® coating for power steering, fuel and brake lines

SAFETY FEATURES

Occupant protection

Manual lap/shoulder belts for driver (with reminder light and buzzer) and passenger

Energy-absorbing steering column

Passenger guard door locks

Safety door latches and stamped steel hinges

Energy-absorbing padded instrument panel with anti-reflective upper surface

Laminated windshield/tempered side and rear glass

Safety armrests

International identification symbols for controls and displays

Anti-theft

Anti-theft audio alarm system with starter interrupt feature

Anti-theft ignition key reminder buzzer

Anti-theft steering column lock

Accident avoidance

Side marker lights and reflectors

Parking lamps that illuminate with headlamps

Four-way hazard warning flasher

Backup lights

Lane change feature in direction signal control

Windshield defrosters, washer and dual-speed wipers with time delay feature

Vinyl-edged inside mirror

Dual remote outside rearview mirrors, convex right-hand

Dual master cylinder brake system with warning lights

Starter safety switch

OPTIONAL EQUIPMENT

Delco radios. Choose a Delco AM/FM stereo radio.

Or select from available Delco ETR AM/FM stereo radio models:

- with 8-track tape player
- with cassette tape player
- with CB and 8-track tape player
- with CB and cassette tape player

These ETR™

(Electronically Tuned Receiver)

AM/FM stereo models

feature LED

readout, improved power

(40% increase over 1980

models), improved AM noise reduction, electronic

station memory, front/rear balance controls, automatic loudness control and more.

All Citizens Band ETR radios include power

tri-band antenna. Power antenna optional

with other radios. All ETR radios include a

digital clock (standard clock replaced by oil

temperature gage when ETR radio is ordered).

Dual rear speakers, with extended

frequency range, included with all stereo

radios for dynamic sound reproduction.



Electric twin remote control sport mirrors.

Twin sport mirrors are electrically controlled by two switches on the center console.

Automatic speed control with Resume Speed feature.

Designed to operate above speeds of approximately 30 MPH (50 km/h). The speed you preset remains constant up or down hills until braking or turning the system off.



Six-way power driver's seat.

Six-way control provides good seat position for comfort, visibility and operating control access.

Electric rear window defogger.

Aluminum wheels.

Removable glass roof panels

with solar screening to help keep vehicle interior cooler

Goodyear white-lettered, steel-belted radial tires.

P225/70R-15
P255/60R-15—Eagle GT

Roof panel carrier (rear deck).

Gymkhana sports suspension

includes rear stabilizer bar, higher rate rear steel springs and special tuned front and rear shock absorbers (included with trailering equipment package).

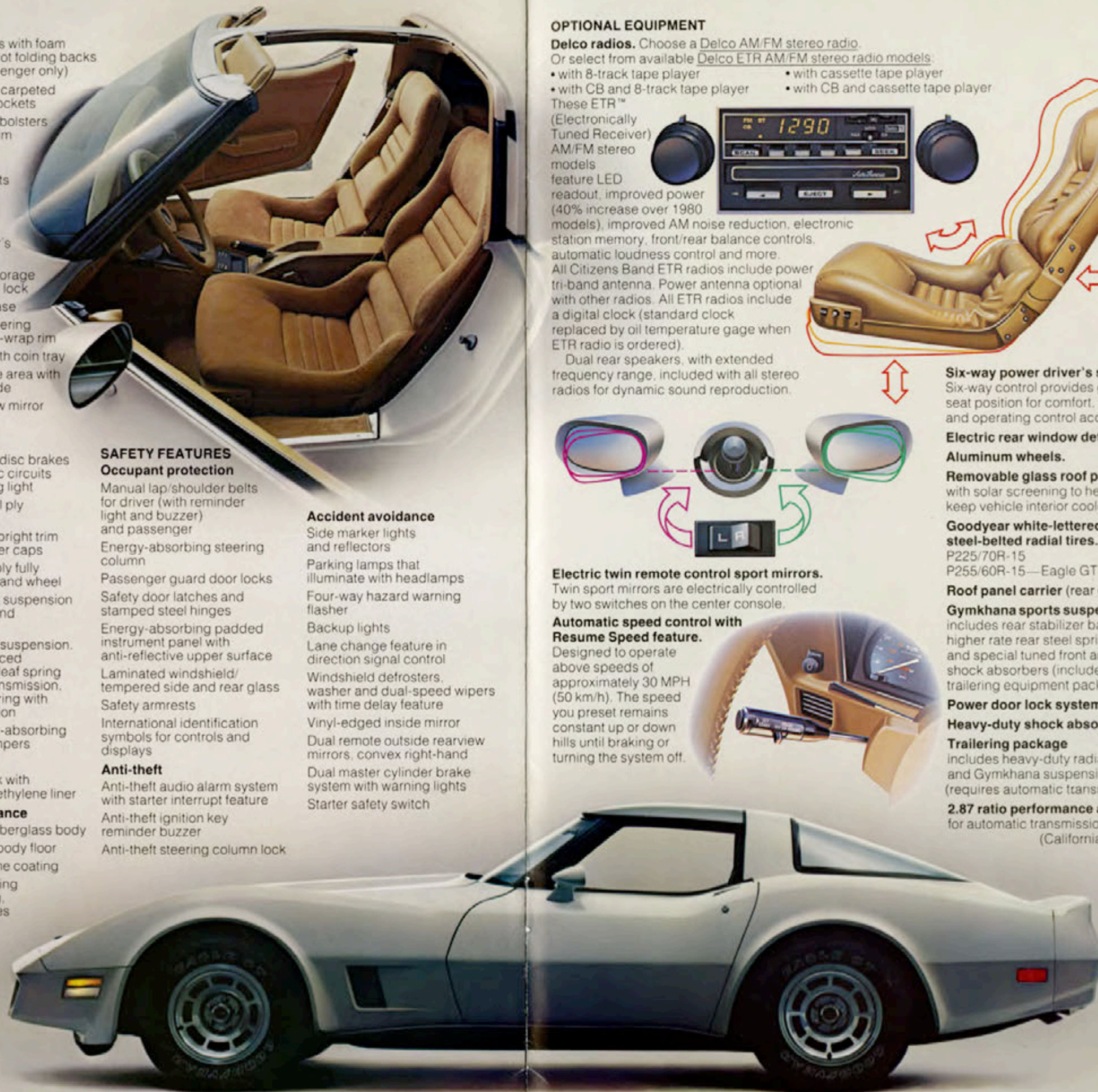
Power door lock system.

Heavy-duty shock absorbers.

Trailering package

includes heavy-duty radiator and Gymkhana suspension (requires automatic transmission).

2.87 ratio performance axle for automatic transmission (California only).



The GM Continuous Protection Plan

It offers service protection in addition to that provided by GM's new vehicle limited warranty. Ask your dealer about it. Coverage is limited to U.S.A. and Canada for 1981 model year.



A word about assembly, components and optional equipment in these Corvettes.

The Chevrolets described in this catalog are assembled at facilities of General Motors Corporation operated by the GM Assembly Division. These vehicles incorporate thousands of different components produced by various divisions of General Motors and by various suppliers to General Motors. From time to time during the manufacturing process, it may be necessary, in order to meet public demand for particular vehicles or equipment, or to meet federally mandated emissions, safety and fuel economy requirements, or for other reasons, to produce Chevrolet products with different components or differently sourced components than initially scheduled. All such components have been approved for use in Chevrolet products and will provide the quality performance associated with the Chevrolet name.

With respect to extra cost optional equipment, make certain you specify the type of equipment you desire on your vehicle when ordering it from your dealer. Some options may be unavailable when your car is built. Your dealer receives advice regarding current availability of options. You may ask the dealer for this information. GM also requests the dealer to advise you if an option you ordered is unavailable. We suggest that you verify that your car includes the optional equipment you ordered or, if there are changes, that they are acceptable to you.

Specifications

CORVETTE POWER TEAMS							
Engine						Transmissions	
Standard all states	Ordering Code	Displacement	Compression Ratio	Net Horsepower	Net Torque	4-Speed Manual	Automatic
5.7 Liter 4-Bbl. V8 ^(A)	L81	350 Cu. In.	8.2:1	190 @ 4200 RPM	280 Lb.-Ft. @ 1600 RPM	Standard	(B)

^(A)Produced by GM: Chevrolet Motor Division.

^(B)Available in place of standard four-speed manual transmission at no extra charge.

A WORD ABOUT ENGINES	Corvettes are equipped with GM-built engines produced by Chevrolet Motor Division. Please refer to power team information on this page, or see your dealer for details.
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GENERAL	Rear-Wheel Drive: Front Engine: Corrosion-resistant, Steel-reinforced Fiberglass Body.				
TRANSMISSION	Standard	4-speed Manual with 2.72 Final Drive Ratio			
	Optional	(No Extra Charge) 3-speed Automatic with 2.87 Final Drive Ratio			
CHASSIS	Front Suspension	Independent, Upper and Lower Control Arms, Coil Springs, Stabilizer Bar			
	Rear Suspension	Independent, Transverse Leaf Spring, Lateral Struts Fiberglass-reinforced Monoleaf Rear Spring (standard with automatic transmission)			
STEERING—TYPE	Power-assisted Recirculating Ball with Tilt and Telescopic Adjustments				
		Steering Wheel Turns, Lock to Lock	2.58		
		Turning Circle, Curb to Curb	40.4 Feet		
BRAKE SYSTEM	Power Four-wheel 11.75-inch Ventilated Disc Brakes with Dual Hydraulic Circuits and Warning Lights				
TIRES—TYPE	Steel-belted, Radial Ply Blackwall—Size P225/70R-15				
DIMENSIONS (Inches)	Exterior		Interior		
	Wheelbase	98.0	Head Room	36.2	
	Length (overall)	185.3	Leg Room	42.1	
	Width (overall)	69.0	Hip Room	49.9	
	Height (loaded)	48.0	Shoulder Room	47.5	
	Tread, Front/Rear	58.7/59.5	Usable Luggage Capacity (cu. ft.)	8.4	
APPROXIMATE CURB WTS. (lbs.)	Manual Transmission				3345
	Automatic Transmission				3345
COLOR CHOICES	Solid Exterior	Two-Tone Exterior (Upper/Lower) (Optional at Extra Cost)	Interior		
	Red	Silver Metallic	Cloth Bucket Seats	Leather/Vinyl Bucket Seats	
	Yellow	Dark Blue Metallic	Camel	Silver Gray	Red
	Black	Mahogany Metallic	Dark Blue	Charcoal	Rust
	White	Claret Metallic	Silver Gray	Dark Red	Silver
	Beige	Maroon Metallic	Dark Red	Camel	
		Charcoal Metallic	Black	Dark Blue	
		Dark Bronze Metallic	Rust	Black	
		Dark Claret Metallic			
LONG RECOMMENDED SERVICE INTERVALS*	Engine Oil	12 months or 7,500 miles			
	Oil Filter	12 months or 7,500 miles; every 15,000 miles thereafter			
	Spark Plugs	30,000 miles			
	Chassis Lubrication	12 months or 7,500 miles			
	Automatic Transmission Fluid Change	Every 100,000 miles			

*See Owner's Manual for conditions requiring more frequent intervals.

