1990 CORVETTE

"The Corvette just gets better and better..."

*Car and Driver**

**Car and Driver's Ten Best List has included Corvette for five years in a row, 1985 through 1989.*

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This is the Corvette story, 1990 edition.

The 1990 Corvette is available as a coupe or a convertible, with 6-speed manual or 4-speed automatic, and a wide selection of optional performance and luxury features.

Whichever configuration you choose, however equipped, you will enjoy a world-class performance machine with a uniquely American personality.

The Racing Corvettes

The advanced technology in every 1990 Corvette is the culmination of over 30 years of highly successful Corvette racing.

Corvette has been blowing the competition into the weeds since Sebring '56. From Turbo-Fire V8s to Tuned-Port Injection, the machine has generated its own mystique—and legions of racing fans.

America's own sports car has come a long way since its introduction in 1953, when—and how wonderfully ironic it seems today—European racing teams didn't give the brash Chevrolet two-seater a second look.

Then along came 1955, and the small-block V8. Corvette chief engineer Zora Arkus-Duntov took the '56 to Daytona Speed Week and set new records for the Flying Mile in a production sports car. That was quickly followed by class wins at Sebring and Pebble Beach.

During its decades-long domination of the road-racing scene, Corvette has won scores of SCCA A-, B- and C-Production class championships. And to be such a steady winner, Corvette had to evolve steadily in response to a highly competitive environment.

Racing technology has clearly influenced the design of the current-generation Corvette, with its aircraft-inspired uniframe, 5-link independent rear suspension, 17" unidirectional tires and Bosch anti-lock braking system.

Today, advanced performance concepts are tested in competition vehicles such as the Corvette GTP (Grand Touring Prototype) and the Corvette GTO (Grand Touring Prototype, over three liters).

In the current Corvette Challenge racing series, 50 of the world's finest drivers compete in 1990 Corvettes (specially prepared with safety equipment) in familiar places—from Elkhart Lake to Sears Point. Why? Because as long as there are checkered flags, Corvettes will chase them. It's the nature of the breed.

1

1956. Corvette comes of age with purposeful new bodywork and a hotter 265-cubic-inch V8. Corvette placed first in class at Nassau, New Smyrna and Pebble Beach.

2

1956. Corvette Chief Engineer Zora Arkus-Duntov unleashes the fiberglass Chevy's potential on the racetrack and personally pilots a modified version to 150 MPH at Daytona Beach.

3

1957. John Fitch takes the experimental Corvette SS to Sebring. Notable engineering advances for '57 included optional fuel injection and a 4-speed manual transmission.

4

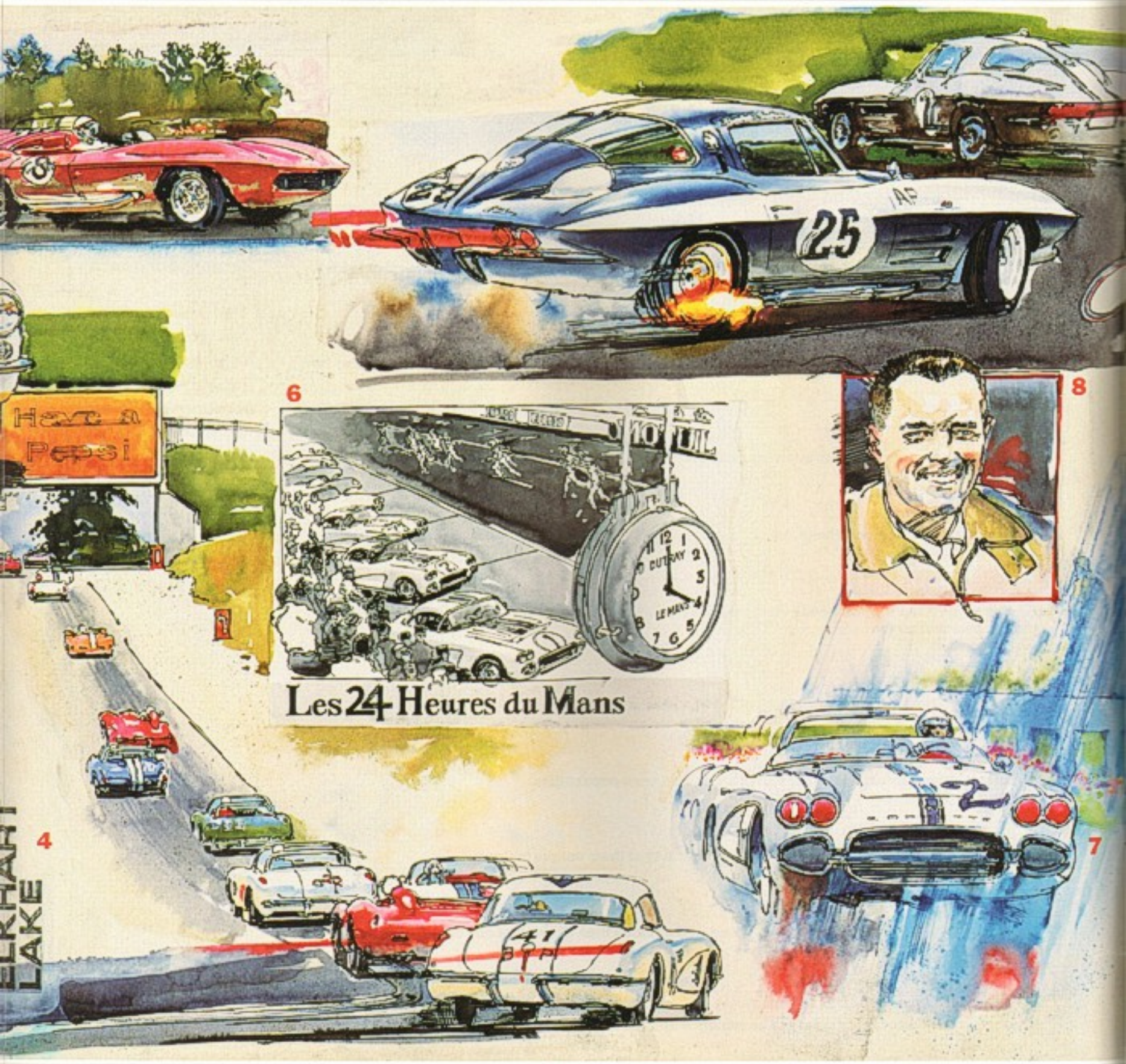
1958. Stock Corvettes were the terrors of the road-racing circuit in the late Fifties. This is Elkhart Lake, Wisconsin, circa 1958.

5

1959. The experimental Sting Ray made its racing debut at Elkhart Lake with John Fitch at the wheel. This car was inspiration for the production 1963 Sting Ray.

6

1960. The mighty Corvettes at the LeMans start. A stock Corvette astounded the Europeans by finishing 8th overall in the 24-hour race.


25
Have a Pepsi
6
8
4
7
ELKHART LAKE
Les 24 Heures du Mans

7

1962. A new 327-cubic-inch version of the mighty small-block kept Corvette in the winner's circle. It was SCCA B-Production champion that year.

8

1963. An all-new Corvette, the Sting Ray, featured exciting styling and a sophisticated four-wheel independent suspension. Dr. Dick Thompson, a k a "The Flying Dentist," took the Sting Ray to victory at Riverside in its first outing.

9

1963. The lightweight Grand Sport, a factory-built racer, was created in '63. Only five were built before Chevrolet officially withdrew from racing that year.

10

1968. Big-block power came to Corvette in the late Sixties. And the victories (Daytona, Sebring, Riverside, Elkhart Lake) kept coming as well.

11

1986. The Corvette GTP introduced exotic new technologies that are fast finding their way into production Corvettes. As always, racing does improve the breed.

12

1987. In SCCA-sanctioned showroom stock competition, the current-generation Corvette exited as undefeated champion. In this racing class, the factory-backed Porsche racing teams were never able to keep up with Corvette.

1990 CORVETTE

Even in the rarified atmosphere of 150-MPH sports cars, Corvette stands alone.

Corvette for 1990 is the exotic American, with world-class technology, incomparable style and V8 performance that has humbled some of Europe's finest.

If the idea of a high-performance sports machine with the highly civilized nature of a luxury automobile intrigues you, compare this car, the 1990 Corvette by Chevrolet, with any other. We think you will be impressed.

5.7 LITER V8 WITH TUNED-PORT INJECTION

At the heart of Corvette performance is the standard 5.7 Liter V8 with Tuned-Port Injection. Other features of this 245-HP V8 include aluminum cylinder heads, high-lift camshaft and roller valve lifters.

STANDARD LUXURY FEATURES

Standard equipment in every Corvette includes air conditioning, AM/FM stereo sound system with cassette tape player, leather-wrapped Comfortilt steering wheel, Electronic Speed Control, power door locks, power windows and intermittent wipers.

PASS-KEY*

Corvette's standard PASS- (Personal Automotive Security System) Key electronic auto-theft system has proven itself the most effective theft deterrent Chevrolet has ever offered. PASS-Key is a special ignition system utilizing a module with a resister decoder and an ignition key with a pellet of specified resistance.

ANTI-LOCK BRAKING SYSTEM

This is one of the most advanced braking systems available in a production automobile, and it is standard on every 1990 Corvette. Bosch ABS II (Anti-Lock Braking System) helps the driver to retain maneuverability under full braking.

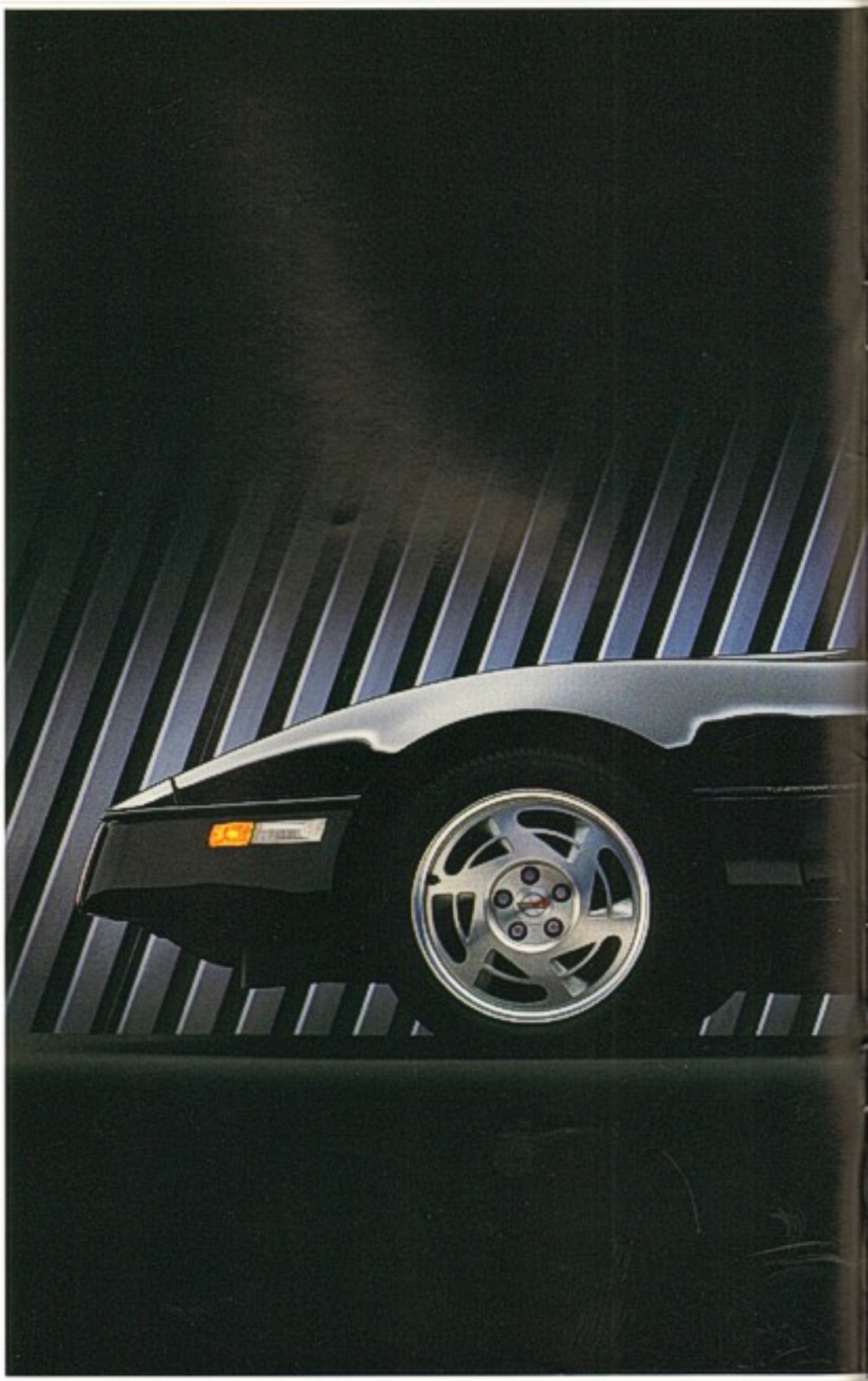
Bosch ABS II is combined with a four-wheel power disc system for up to 1.0 g of stopping power.

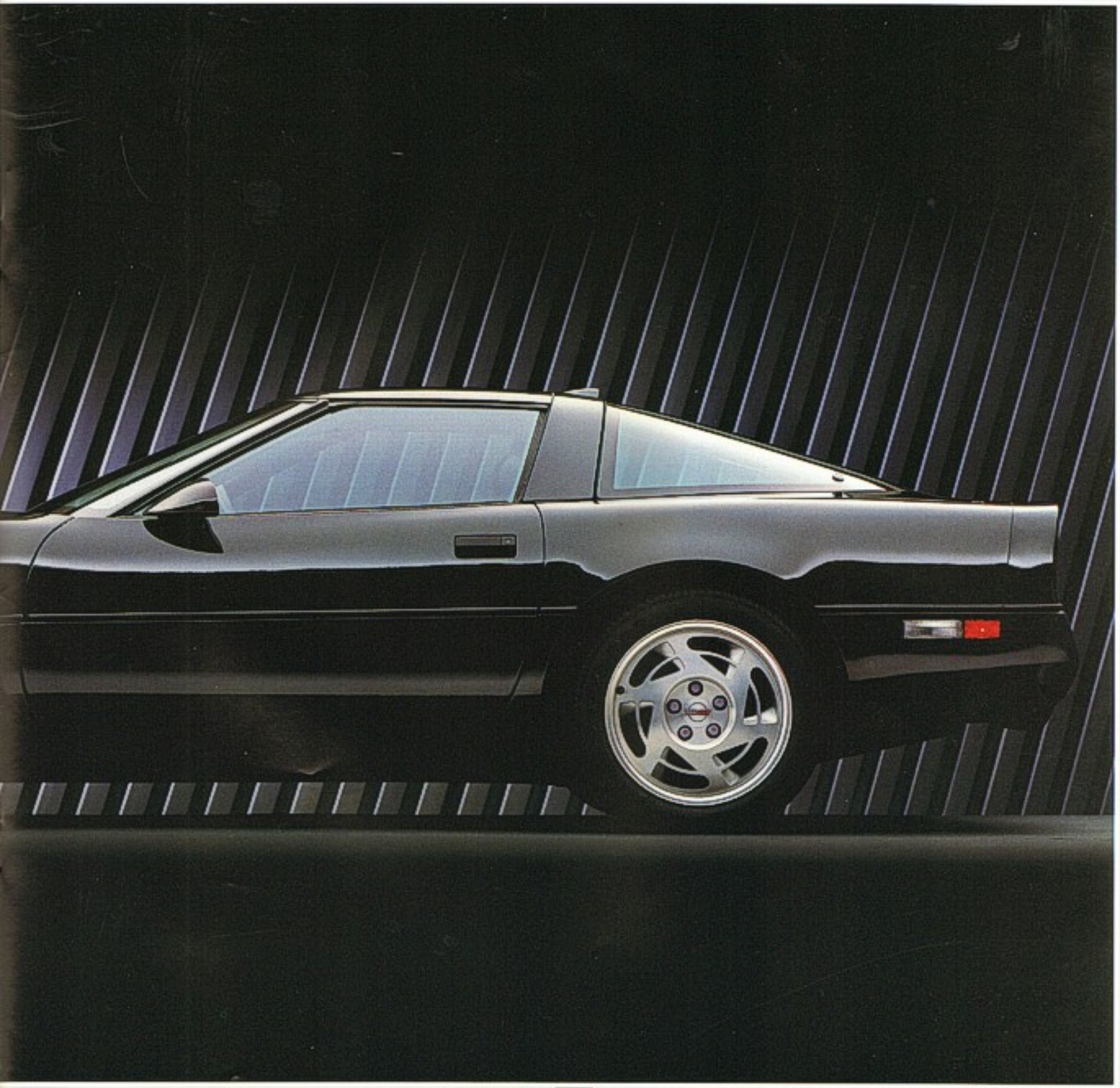
FOUR-WHEEL INDEPENDENT SUSPENSION

The precisely engineered Corvette suspension includes fiberglass-composite front and rear transverse springs with computer-selected spring rates, a rear independent design with 5-link connections and forged-aluminum components.

SELECTIVE RIDE CONTROL

Bilstein Selective Ride Control (FX3) is an innovative suspension option available exclusively on Corvette Coupe with the optional Z51 Performance Handling Package and 6-speed manual transmission. FX3 allows the driver to select from one of three system settings (Touring, Sport or Performance).





CORVETTE COUPE

The coupe version of the 1990 Corvette combines awesome performance and aero style with unexpected luxury.

There can be no mistaking the smooth lines of this car for any other. And these lines promise performance the Corvette Coupe delivers....in generous measure.

In fact, the Coupe's aero profile and lighter weight (compared with Corvette Convertible) make it the body style most often selected by professional racing teams.

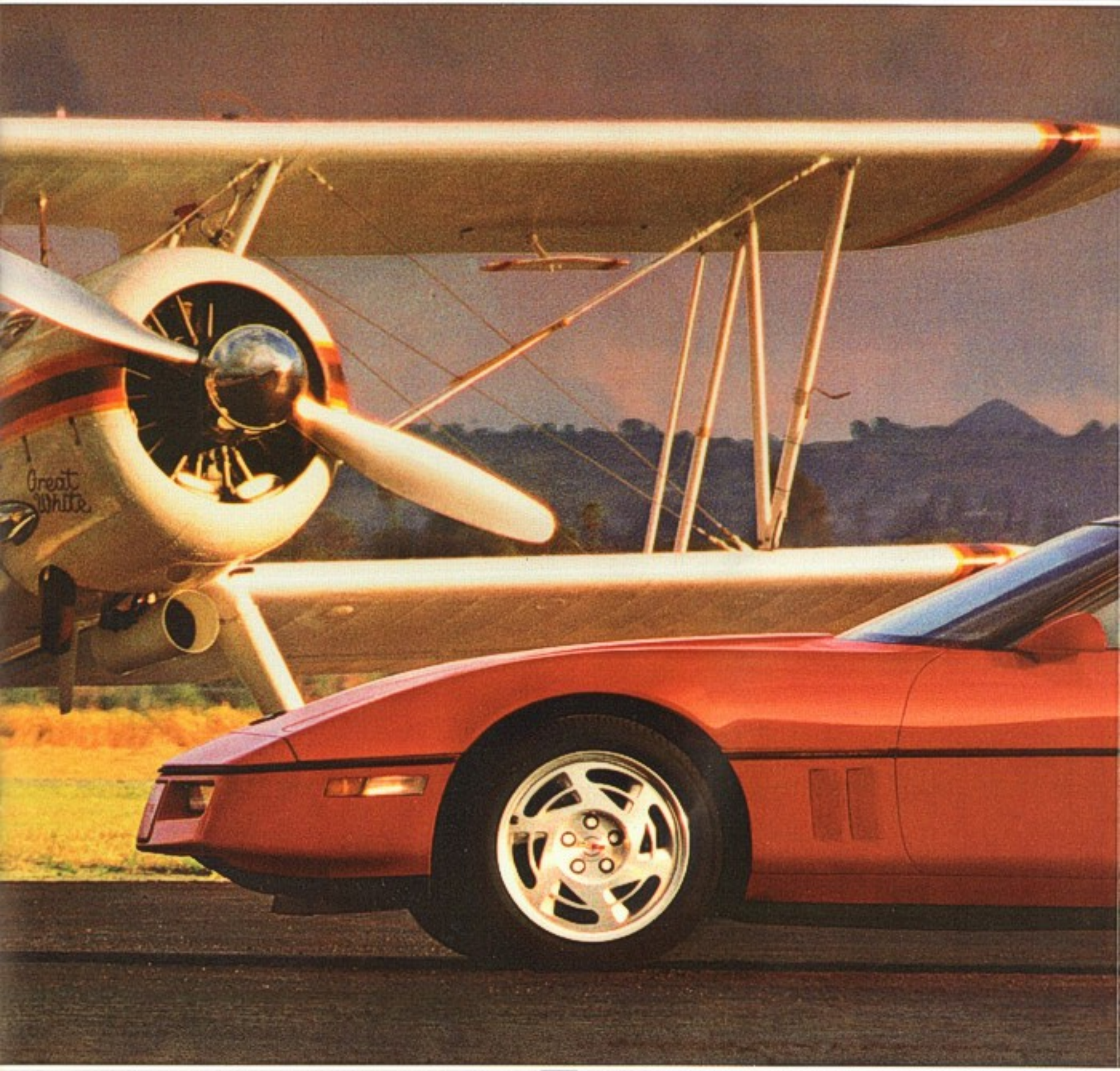
Yet the true beauty of this car is its refined character. Corvette is as composed on the Interstate (or autobahn) as it is aggressive in wheel-to-wheel sanctioned racetrack competition.

There is an alluring dual nature to Corvette Coupe that makes it a popular choice for so many sports car enthusiasts. During the week, it fits your fast-paced lifestyle with a high degree of performance, personal style and a generous roster of luxury appointments. For those weekend escapes, the one-piece removable roof panel may be lifted off for breezy open-sky motoring.

The dramatic appearance of Corvette Coupe is further enhanced with lustrous base-coat/clear-coat paint in a choice of seven colors, new lighter-weight 17" x 9½" cast-aluminum wheels and P275/40ZR-17 unidirectional Goodyear Eagle tires, retractable halogen headlamps and halogen fog lamps.

Performance options available only on Corvette Coupe include:

- ☐ The Z51 Performance Handling Package featuring components proven in the Corvette Challenge racing series.
- ☐ Selective Ride Control, a computerized system allowing the driver to select one of three suspension settings (Touring, Sport or Performance) via a console-mounted switch.


Great White

ABOUT THE AIRPLANE

There's a certain romance about a biplane. It's a carefree attitude perfectly captured in the lines of this restored 1943 Boeing Stearman PT-17.

Originally used as a California crop duster, this Stearman is now a prized collectible, displayed and flown primarily in aerobatic shows. It has been fitted with equipment that allows "stunt" maneuvers, including upside-down flying.

More than 10,000 PT-17's were manufactured from the early 1930s through World War II (by the Stearman Aircraft Company, which was later purchased by Boeing). The highly maneuverable biplane was the U.S. Air Force's primary trainer plane during the war, and remained a popular choice for commercial crop dusting well into the 1960s.

Corvette Convertible

Corvette is the car most Americans have fantasized about owning. And for those lucky enough to experience it, the Convertible adds open-sky motoring to the many pleasures of Corvette ownership.

There is undoubtedly a certain magic about the Corvette Convertible. Vintage models routinely sell for many times their original price. The 1990 edition provides a perfect balance of top-down exhilaration and performance technology.

Selecting the convertible version of the 1990 Corvette will be a most rewarding decision. You get the Bosch ABS II anti-lock braking system, the mighty 5.7 Liter V8 with Tuned-Port Fuel Injection, the choice of 6-speed manual or 4-speed automatic transmission, the all-new interior and the PASS-Key security system. You get Corvette. And then some.

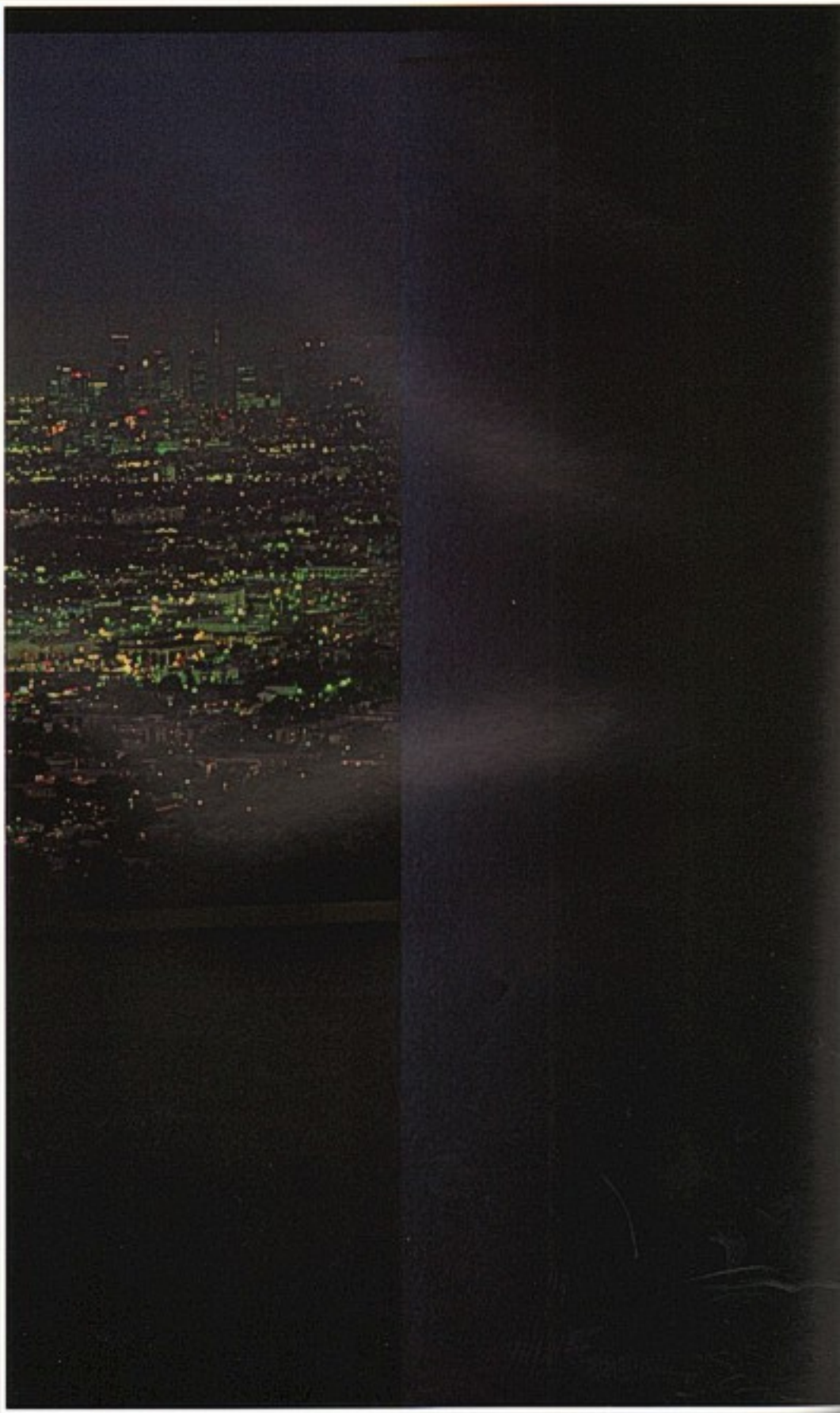
Convertible specifics include:

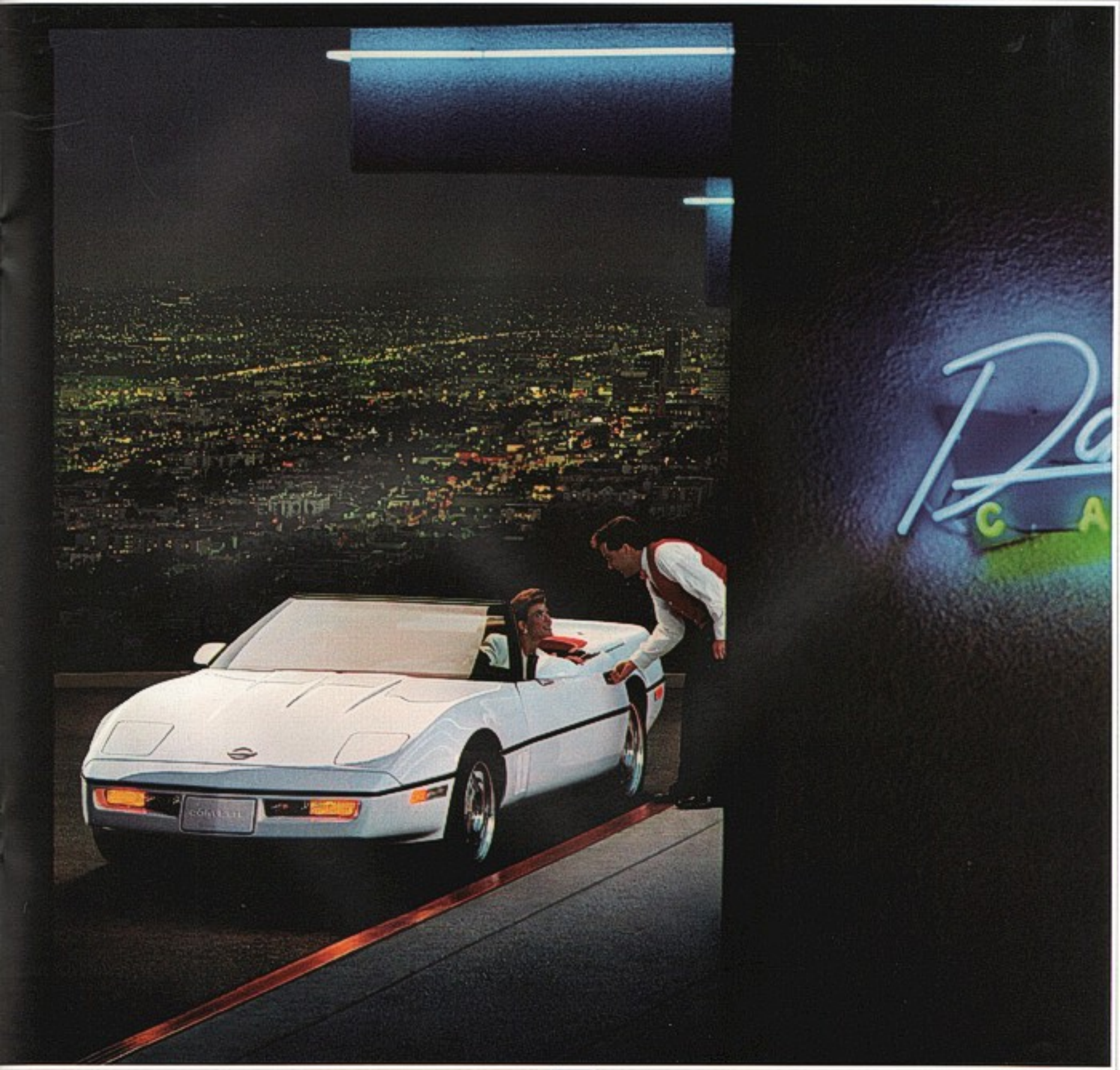
☐ A manually operated convertible top with headliner and vinyl rear window with improved scratch and fade resistance. Choose from three top colors, depending on exterior color selected: Black, White or Saddle.

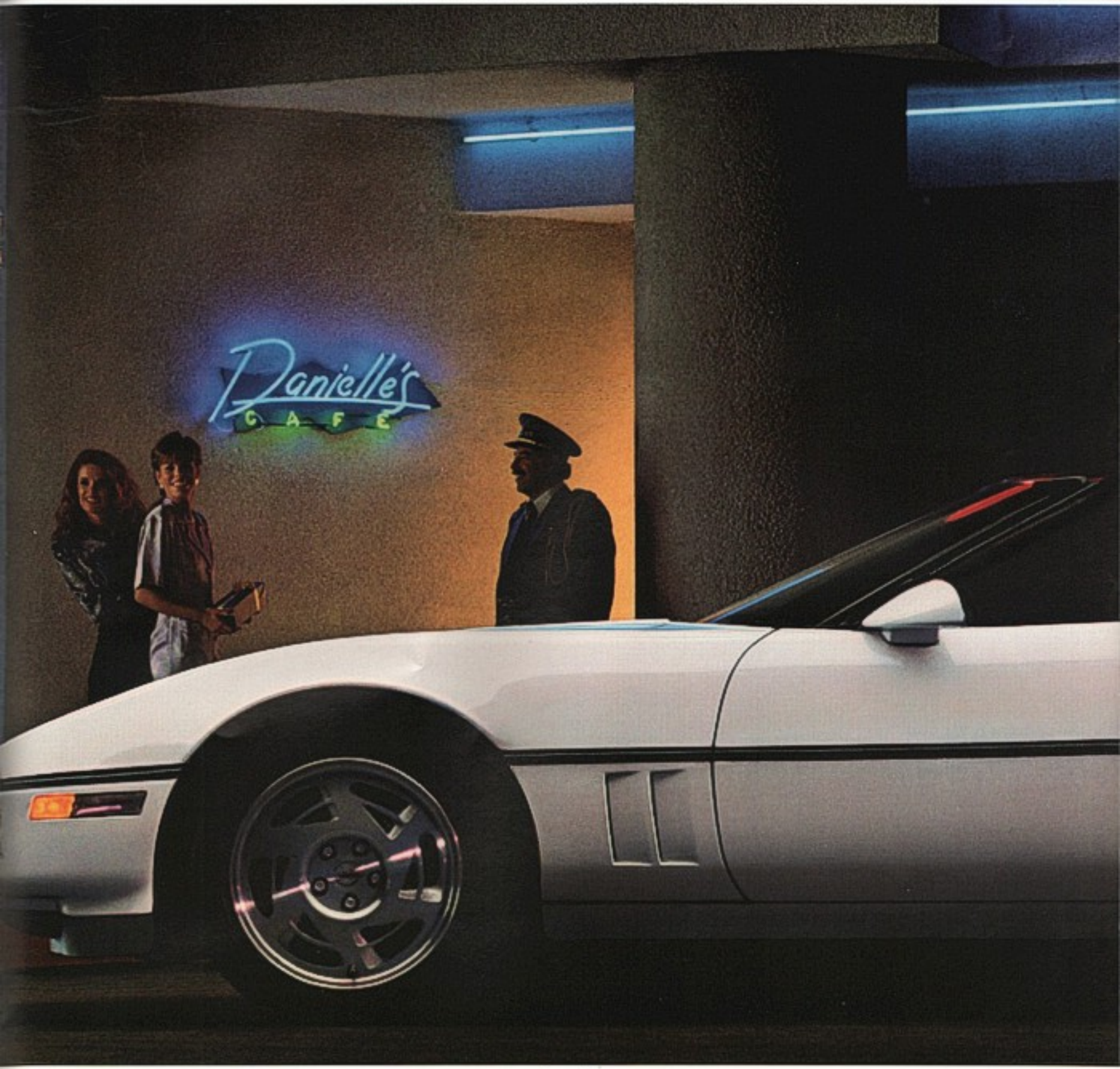
☐ A covered well into which the top completely disappears. There is no unsightly boot to mar the top-down appearance.

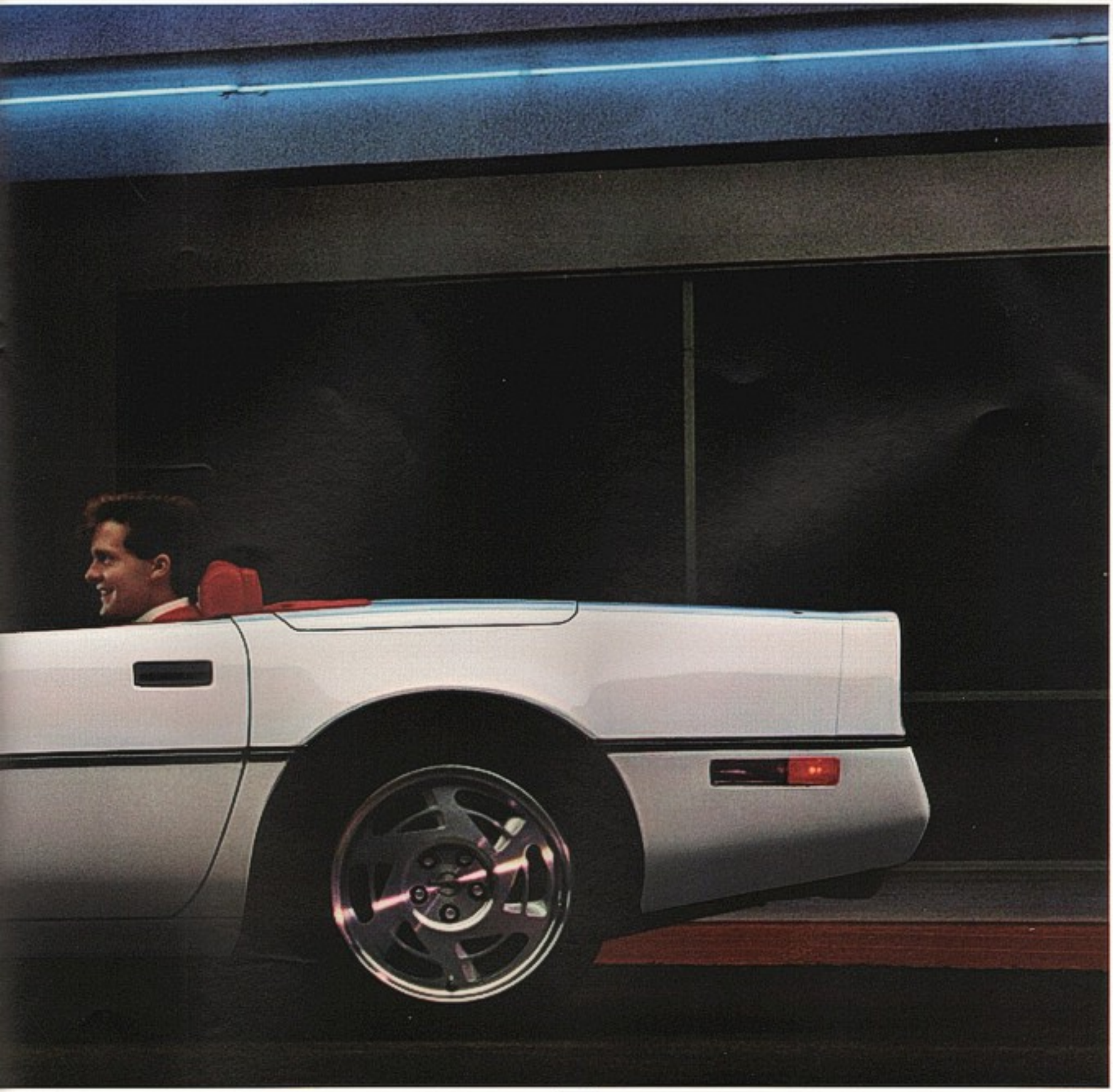
☐ An optional body-color convertible hardtop. This 64-lb. removable hardtop features a cloth headliner and electric rear window defogger.

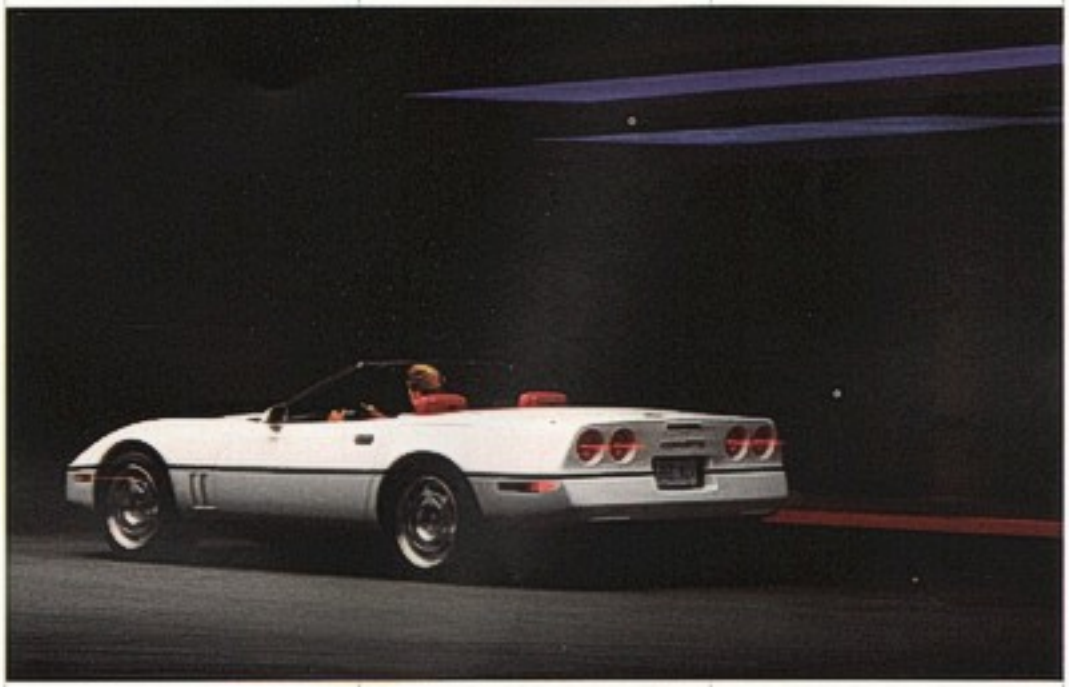
☐ An optional rear deck-lid carrier. This black-finished carrier adds both style and function to the Corvette Convertible.






Danielle's
CAFE





Instrument Panel

An excellent instrument panel is one that communicates instantly and clearly to the driver and positions all operating controls within easy reach. The new Corvette instrument panel is a study in excellence. And it looks like something out of a jet fighter plane.

Jet fighter pilots, and anyone else who appreciates excellence in design, will approve of the new 1990 Corvette instrument panel.

The redesigned interior combines classic Corvette wraparound instrument panel/console flavor with state-of-the-art ergonomics and an advanced electronic information center.

Features include a new steering wheel, new glove box and a larger center console with lock.

Instrumentation includes electronic liquid-crystal displays, large-readout digital speedometer and analog tachometer, plus gages for oil pressure, oil temperature and volts.

A Supplemental Inflatable Restraint system (air bag) is a new safety feature standard on all 1990 Corvettes. The S.I.R. system is designed to provide added protection for the driver in the event that your Corvette is involved in a moderate to severe frontal collision. For maximum protection in frontal and all other collisions, both driver and passenger should be properly restrained with safety belts. The Supplemental Inflatable Restraint system is located in the hub of the steering wheel.

INTERIORS

The Corvette interior is designed to American tastes. With comfortable seating. Powerful air conditioning. Advanced sound systems. And power everything.

It is fair to say the 1990 Corvette is an extremely well-equipped, driver-oriented automobile. In fact, few cars in the world can match Corvette on the single criterion of creature comfort.

The following interior features are standard in every Corvette:

- ☐ Superbly luxurious and ergonomically correct seating for two, with a choice of standard sport cloth or optional leather buckets.
- ☐ Air conditioning, power windows, power door locks, leather-wrapped Comfortilt steering wheel and intermittent wipers.
- ☐ Delco AM/FM stereo radio with Seek and Scan, cassette tape player, digital clock and power antenna.
- ☐ Electronic Speed Control with Resume Speed feature.
- ☐ Dual electrically adjusted and heated mirrors.

TECHNOLOGY

Corvette continues to impress critics with its beautifully balanced palette of world-class performance technology.

Study the engineering details, and you'll know why.

ENGINE

5.7 Liter (350 cu. in.) V8 with Tuned-Port Fuel Injection
Block: Cast iron alloy
Pistons: Cast aluminum
Valve Lifters: Roller hydraulic
Bore: 4.00" Stroke: 3.48"
Horsepower: 250 net @ 4400 RPM*
Torque: 345 lb.-ft. @ 3200 RPM
Recommended Fuel: Unleaded premium
Fuel Pump: Electric (in tank)
Fuel Tank Capacity (in gals.): 20

TRANSMISSIONS

Choice of standard 4-speed automatic with overdrive and high-stall torque converter or no-cost-option 6-speed manual.

TIRES AND WHEELS—STANDARD

TIRES
P275/40ZR-17 B/W High-speed steel-belted radial Eagle ZR40 unidirectional (Goodyear).†
WHEELS 17" x 9½"
Type and Material: Left-right specific aluminum alloy road wheels with special vent design.

SUSPENSION—GENERAL

SHOCK ABSORBERS (front and rear)
TYPE: Standard—Gas pressurized.

SUSPENSION—FRONT

TYPE AND DESCRIPTION
Independent forged aluminum upper and lower control arms and steering knuckle, transverse monoleaf spring and steel stabilizer, spindle offset.
Spring Type and Material Monoleaf, filament-wound glass-epoxy composite.

SUSPENSION—REAR

TYPE AND DESCRIPTION
Independent 5-link design with toe and camber adjustment, forged aluminum control arms, knuckles and struts; transverse monoleaf spring steel tie-rods and stabilizer. Tubular U-jointed drive shafts.
Spring Type and Material: Monoleaf, filament-wound glass-epoxy composite.

BRAKES

DESCRIPTION
Aluminum caliper with nodular iron reaction bracket; pad reaction through bracket. Self-adjusting.
TYPE
Front: Disc with sliding-head low drag calipers.
Rear: Disc with sliding-head low drag calipers.
Special Valving: Proportioning—integral with master cylinder.
Power Brakes: Standard.
Anti-Lock Braking System: Electronic 4-wheel, 3-channel (standard).

ELECTRICAL—SUPPLY SYSTEM

BATTERY
Voltage: 12 volts
Amps at 0°F Cold Crank: 630 cold-cranking amps (CCA)
Minutes, Reserve Capacity: 90
Location: Engine compartment directly behind left wheel opening.
ALTERNATOR
Type and Rating: 105 amps

ELECTRICAL—STARTING SYSTEM

STARTER MOTOR
Current Drain at 0°F: 350 amps.

ELECTRICAL—IGNITION SYSTEM

Type: High Energy Ignition.
Coil: Integral with distributor.
SPARK PLUG
Make: AC
Model: FR5LS
Gap: 89mm (0.035 in.)

BODY

STRUCTURE
Integral perimeter-frame birdcage forms unitized body structure.
ANTI-CORROSION TREATMENT
All-encompassing corrosion protection including extensive use of aluminum; galvanization; use of specially treated fasteners; austenitic stainless steel or specially coated brackets, clamps, clips and braces; use of aluminized steel.

STEERING

Power: Standard
Adjustable Steering Wheel: (Standard) Black-leather-wrapped four-spoke steering wheel; Comfortilt.
Turning Diameter: 40.4 ft.
Steering Type: Alloy rack-and-pinion
Overall Ratio: 13.0:1

FRAME

All-welded steel-body-frame construction, 100% galvanized.

DIMENSIONS AND WEIGHTS

EXTERIOR
Width: 71.0"
Front Tread: 59.6"
Rear Tread: 60.4"
Wheelbase: 96.2"
Overall Length: 176.5"
Height: 46.7"
Minimum Ground Clearance: 4.9"
INTERIOR
Head Room: 36.4" (36.5" Conv.)
Leg Room: 42.6"
Shoulder Room: 54.0"
Hip Room: 49.3"
Cargo Volume: 7.9 cu. ft. (6.6 cu. ft. Conv.)
Curb Weight: 6-speed manual: 3,257 lbs. (3,269 lbs. Conv.)
Automatic: 3,223 lbs. (3,263 lbs. Conv.)

*245 HP at 4000 RPM on Coupe with 2.59 axle and all Convertibles.

†Tire chains should not be used because they may cause damage to your car.

Colors and Trim

Corvette for 1990 rewards sports car enthusiasts with a unique exterior color palette and the choice of cloth or leather seating surfaces.

INTERIOR COLORS

	STANDARD CLOTH SEAT	OPTIONAL LEATHER SEAT	OPTIONAL LEATHER SPORT SEAT
Blue		X	X
Black	X	X	X
Gray		X	X
Red		X	X
Saddle	X	X	X

INTERIOR/EXTERIOR COLORS

EXTERIOR COLORS	INTERIOR COLORS				
	BLUE	BLACK	GRAY	RED	SADDLE
Black	X	X	X	X	X
Steel Blue (Met.)	X				
Charcoal (Met.)		X	X		X
Polo Green (Met.)					X
White	X	X	X	X	X
Bright Red		X	X	X	X
Dark Red (Met.)		X			X

STANDARD CLOTH SEAT
This fully reclining bucket seat is deeply contoured and beautifully trimmed in rich sport cloth. Colors: Black, Saddle.

OPTIONAL LEATHER SEAT
Genuine leather seats are optional at extra cost. Colors: Blue, Black, Gray, Red, Saddle.

OPTIONAL LEATHER SPORT SEAT
Deeply contoured, leather sport seats with full lumbar power adjustments are optional on both Corvette Coupe and Corvette Convertible for 1990.

EXTERIOR COLORS

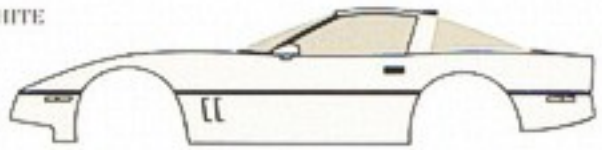
BLACK

STEEL BLUE METALLIC

CHARCOAL METALLIC

POLO GREEN METALLIC

WHITE



BRIGHT RED

DARK RED METALLIC

Standard Features

You expect Corvette to be a well-equipped automobile. It is everything you expect it to be, and more.

AM/FM STEREO RADIO WITH CASSETTE TAPE PLAYER
This electronically tuned Delco AM/FM stereo radio has four stereo speakers, Seek and Scan, stereo cassette tape player, power antenna and digital clock.

ANTI-THEFT FEATURES
PASS-Key (Personal Automotive Security System), the most effective theft deterrent in Chevrolet history, features an ignition key with a special electronic code. A thief using an improper key would cause an immediate four-minute delay before another attempt with a key could be made. And, bypassing the entire system—the predominant attack method—would leave the starter system and fuel delivery system inoperative.

In addition to PASS-Key, an anti-theft horn alarm circuit is standard on every 1990 Corvette.

ELECTRONIC SPEED CONTROL
Electronic Speed Control includes a convenient resume-speed feature and a speed adjustment that allows you to change your speed in precise 1-MPH increments.

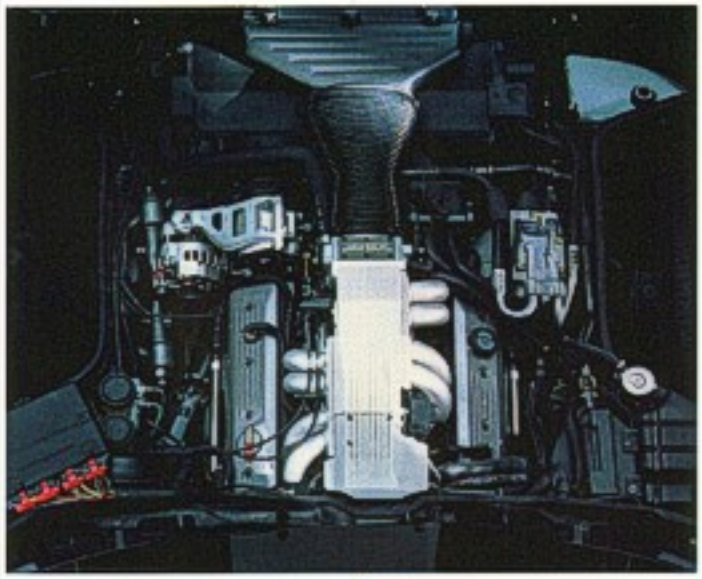
AIR CONDITIONING
Standard on every Corvette. Climate control system also includes heater, defroster, side-window defoggers and heated outside mirrors. An electric rear-window defogger is standard on Corvette Coupe and included with the Convertible's optional removable hardtop.

UNIDIRECTIONAL ZR40 TIRES
These high-performance Goodyear Eagle P275/402R-17 tires feature a unidirectional tread pattern for excellent heat and water dissipation. New lighter-weight wheels are a 17" x 9½" aluminum alloy design.

ADDITIONAL STANDARD FEATURES
Power Team/Chassis/Mechanical
- ☐ Bosch ABS II anti-lock braking system.
- ☐ Choice of 6-speed manual transmission or automatic transmission with overdrive fourth gear.
- ☐ Delco Freedom Plus II Battery with sealed side terminals.
- ☐ Electric engine cooling fan.
- ☐ Electric in-tank fuel pump.
- ☐ Exclusive transverse front and rear springs with monoleaf glass-epoxy construction.
- ☐ 5.7 Liter V8 engine with Tuned-Port Fuel Injection and aluminum cylinder heads.
- ☐ Forged aluminum front and rear suspension arms.
- ☐ Fully independent front and rear suspension.
- ☐ Limited slip differential.
- ☐ Magnesium engine valve covers.
- ☐ Single-belt accessory drive.
- ☐ Power rack-and-pinion steering.
- ☐ Stainless steel exhaust pipes, catalytic converter exhaust manifolds and free-flow mufflers.
- ☐ Uniframe body construction, 100 percent galvanized and dip-painted.

EXTERIOR
- ☐ Concealed wipers with integral washers in wiper arms.
- ☐ Corrosion-proof fiberglass body panels.
- ☐ Designed-in body-side moldings.
- ☐ Dual electric remote-controlled heated sport mirrors.
- ☐ Dual halogen fog lamps.
- ☐ Frameless rear hatch glass with three remote releases (Coupe).
- ☐ Front and rear cornering lamps.
- ☐ Full-tilting clamshell hood.
- ☐ Retractable halogen headlamps.
- ☐ Tinted and flush-mounted glass.

INTERIOR
- ☐ Center console with shifter, coin tray, cigarette lighter and ashtray, plus controls for radio, air conditioning and electric mirrors.
- ☐ Comfortilt steering wheel.
- ☐ Day/night rearview mirror with integral map light.
- ☐ Delco AM/FM stereo radio with Seek and Scan, cassette tape player, four speakers, automatic power antenna and digital clock.
- ☐ Driver information system providing average MPG and cruising range in digital readouts.
- ☐ Electronic liquid-crystal instrumentation with multi-colored analog and digital display. Readouts include: speedometer, 6,000-RPM tachometer, fuel level, oil pressure, voltmeter. Conventional readouts for odometer, turn signals and high-beam headlamps.
- ☐ Headlamps-on reminder.
- ☐ High-intensity interior lamps.
- ☐ Illuminated right-hand visor mirror.
- ☐ Intermittent windshield wipers.
- ☐ Leather-wrapped steering wheel.
- ☐ Power door locks.
- ☐ Power windows.



The 5.7 Liter V8 helps propel Corvette from 0-to-60 in well under six seconds. Performance features include Tuned-Port Fuel Injection, lightweight aluminum cylinder heads, roller valve lifters and an engine oil cooler.*

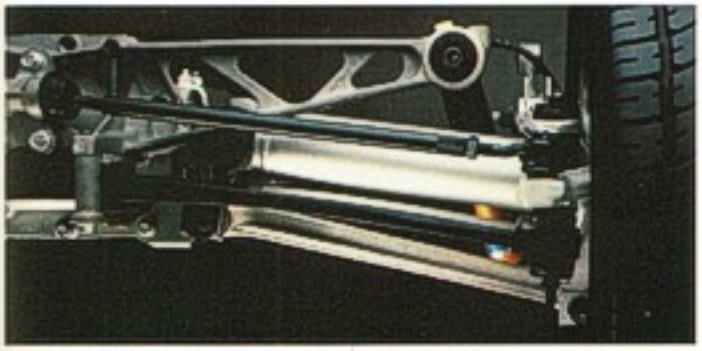
**Results achieved on GM test track by professional drivers.*

The PASS-Key anti-theft system is standard on every 1990 Corvette.

Standard Delco AM/FM stereo music system includes Seek and Scan, stereo cassette tape player, four speakers, automatic power antenna and digital clock.

Standard electronic speed control is an important convenience for long-distance driving. It includes resume-speed and speed adjustment features.

A Bosch ABS II anti-lock braking system, combined with a powerful power disc at each wheel, gives Corvette the stopping power and control to complement its performance potential.



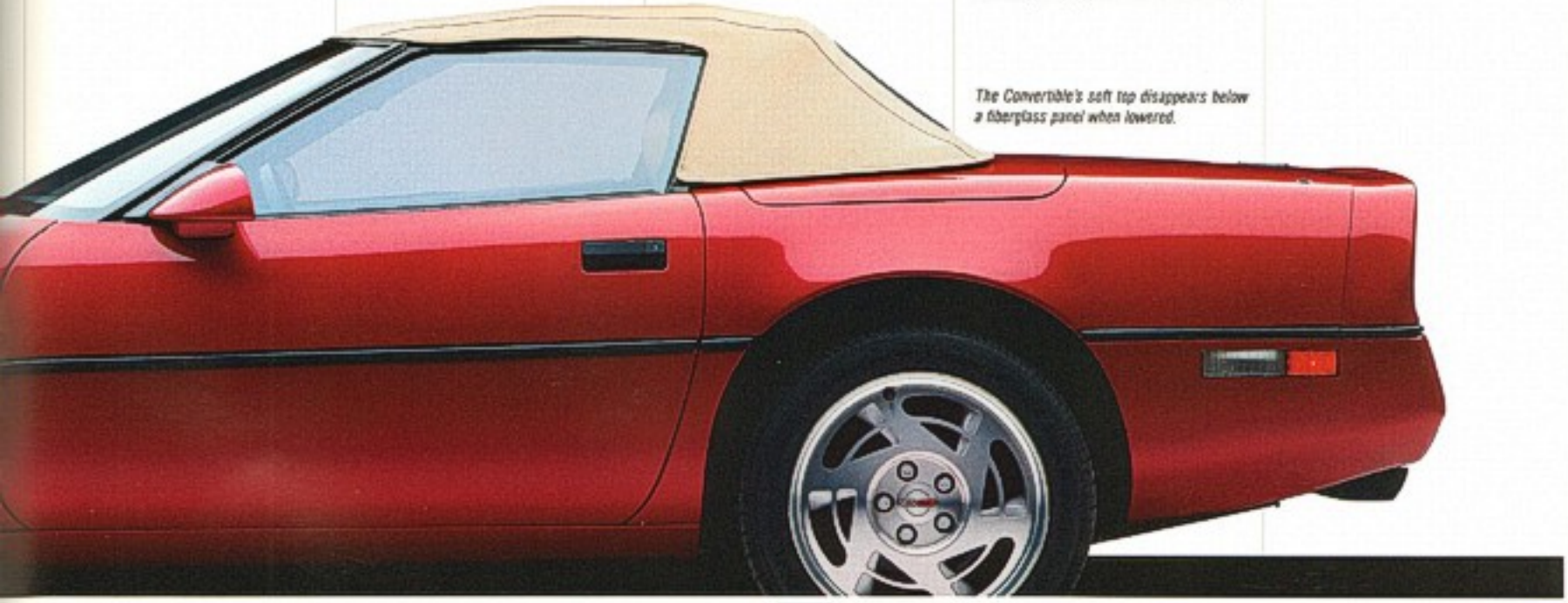
Corvette's sophisticated fully independent suspension is an important reason why this car is so much fun to drive. Components include forged aluminum control arms, transverse springs and stabilizer bars and a 5-link independent rear design that helps maximize tire patch contact with the road surface.

The new-for-1990 Supplemental Inflatable Restraint system (air bag) is located in the hub of the steering wheel. The S.I.R. is designed to provide added protection in the event your Corvette is involved in a moderate to severe frontal collision. For maximum protection in frontal and all other collisions, both driver and passenger should be properly restrained with safety belts.

Comfortilt steering wheel adjusts to your personal driving style.

Standard fully reclining cloth bucket seats are available in Black or Saddle.

Corvette Coupe features a standard removable roof panel (one-piece with no center T-bar).

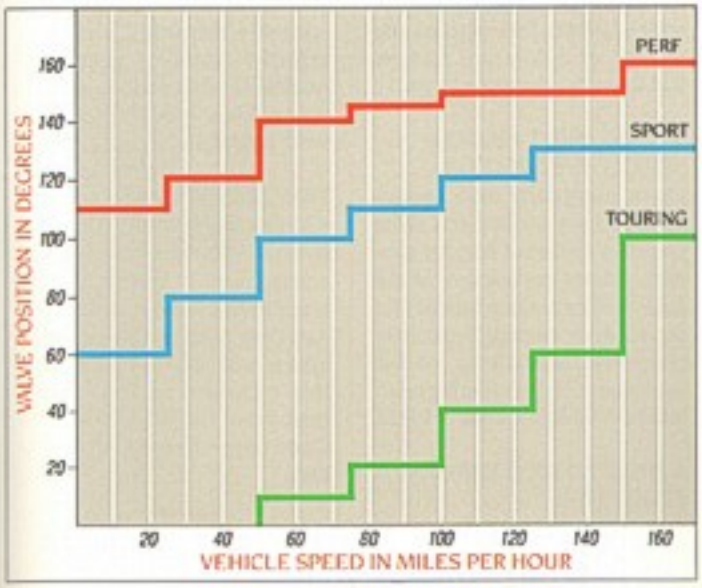


The Convertible's soft top disappears below a fiberglass panel when lowered.

OPTIONAL EQUIPMENT

A wide selection of optional comfort, convenience and performance features helps make Corvette not only a complete sports car, but a very personal one.

Corvette's new optional Delco/Bose system features stereo cassette tape player and digital compact disc player. Also shown: the optional electronic air conditioning, with digital temperature adjuster and automatic thermostat.



Selective Ride Control allows you to adjust ride quality to your personal preference.

Selective Ride Control's console-mounted switch allows you to select the ride firmness you desire (Touring, Sport or Performance).

Delco/Bose AM/FM Stereo Music System with Stereo Cassette Tape Player and Digital Compact Disc Player

☐ Corvette's newest option is a world-class Delco/Bose music system with the following features:
☐ Four bass reflex amplifier speaker enclosures engineered specifically for window placement, angle and density of glass, seating position and cockpit configuration. Each speaker has its own equalizer network.
☐ AM/FM stereo reception with automatic adjustment, electronic tuning with Seek and Scan, Dynamic Noise Reduction (DNR™) and Dolby* Sound Noise Reduction to reduce high-frequency "hiss" on AM, FM and cassette tape.
☐ Speed Compensated Volume (the radio volume automatically gets louder as the speed of the car increases).

The optional rear deck carrier adds a sporty, personal touch to the Convertible.

Corvette Convertible's optional removable hardtop weighs just 64 pounds and is matched to the body color.

☐ Cassette tape player with automatic reverse (radio functions while cassette rewinds) and music search feature.
☐ Integral compact disc player with digital readouts, repeat function and search and scan.

Delco/Bose AM/FM Stereo Music System with Stereo Cassette Tape Player

This Delco/Bose system is similar to the above music system, with the exception that it does not include a compact disc player.

Z51 Performance Handling Package

This is an optional suspension package featuring components proven in SCCA-Sanctioned Showroom Stock Series racing. Equipment includes heavy-duty springs and stabilizer bars, heavy-duty brakes, 3.33:1 rear axle ratio, 8½-inch ring gear and power steering cooler.

The Z51 Performance Handling Package is available on Corvette Coupe with 6-speed manual transmission only. Recommended for specialized uses.

Selective Ride Control

Selective Ride Control is the ultimate Corvette suspension option. This computerized system allows the driver to select one of three suspension settings (Touring, Sport or Performance) via a console-mounted switch. Within each of the three settings, ride firmness automatically increases as speed increases.

Selective Ride Control is available on Corvette Coupe with 6-speed manual transmission only. Requires optional Z51 Performance Handling Package.

Electronic Air Conditioning

This electronic control system features easy-to-use, color-coded push buttons and a digital temperature adjuster. Once set, the temperature is automatically maintained. A display registers outside temperature.

Leather Sport Seats

Aggressively contoured leather sport seats include a six-way power adjustment and full-power lumbar adjustment.

Low Tire Pressure Warning System

A transmitter in each tire is designed to measure tire pressure and activate a warning message if pressure is under 28 psi.

Additional Optional Equipment

☐ Axle, Performance-ratio
☐ Engine Block Heater
☐ Removable hardtop (convertible)
☐ Seats, leather-trimmed
☐ Seats, power six-way adjustment
☐ Transparent roof panel (Coupe only)

Additional Information

IMPORTANT: A WORD ABOUT THIS CATALOG

We have tried to make this catalog as comprehensive and factual as possible. We reserve the right, however, to make changes at any time, without notice, in prices, colors, materials, equipment specifications, models and availability. Since some information may have been updated since the time of printing, please check with your Chevrolet dealer for complete details.

A WORD ABOUT ENGINES

Chevrolets are equipped with engines produced by different operating units of GM, its subsidiaries or suppliers to GM worldwide.

A WORD ABOUT ASSEMBLY

Chevrolets are assembled by different operating units of General Motors, its subsidiaries or suppliers to GM worldwide. Chevrolet incorporates thousands of components produced by different operating units of GM, its subsidiaries or suppliers to GM worldwide. We sometimes find it necessary to produce Chevrolets with different or differently sourced components than originally scheduled. All such components have been approved for use in Chevrolets and will provide the quality performance associated with the Chevrolet name. Since some options may be unavailable when your vehicle is assembled, we suggest that you verify that your vehicle includes the equipment you ordered, or if there are changes, that they are acceptable to you.

A WORD ABOUT UPDATED SERVICE INFORMATION

Chevrolet regularly sends its dealers useful service bulletins about Chevrolet products. Chevrolet monitors product performance in the field. We then prepare bulletins for servicing our products better. Now you can get these bulletins, too. Ask your dealer. To get ordering information, call toll free 1-800-551-4123.

A WORD ABOUT CORROSION PROTECTION

Chevrolets are designed and built to resist corrosion. All body sheet metal components are warranted against rust-through corrosion for 6 years/100,000 miles. Application of additional rust inhibiting materials is not required under the corrosion coverage.

SAFETY FEATURES

OCCUPANT PROTECTION

• Supplemental Inflatable Restraint, driver only, with manual lap/shoulder safety belts for the driver and right front passenger • Energy-absorbing steering column • Energy-absorbing instrument panel • Interlocking door latches • Side-guard door beam • Passenger-guard inside door lock handles • Safety armrests • Head restraints, driver and right front passenger (integral) • Break-away inside rearview mirrors • Security door locks and door retention components

ACCIDENT AVOIDANCE

• Side marker lights and reflectors • Parking lamps that illuminate with headlamps • Four-way hazard warning flasher • Backup lights • Center high-mounted stop lamp • Directional signal control with lane-change feature • Windshield defroster, washer and multi-speed wipers (pulse-type) • Inside rearview mirror • Dual electric remote outside rearview mirrors • Brake system with dual master cylinder and warning light • Starter safety switch • Low-glare finish on inside windshield moldings, wiper arms and blades, metallic steering wheel surfaces • Illuminated heater and defroster controls • Illuminated windshield wiper and washer controls • Tires with built-in tread-wear indicators

THEFT DETERRENCE

• Audible reminder for ignition key removal • Theft-deterrent steering column lock • Visible vehicle identification number • PASS-Key Anti-Theft System • Audio alarm system with starter-interrupt feature • Locking roof panel with theft-deterrent mount (Corvette Coupe only) • Theft-deterrent wheel lugs

GM's 3-year/50,000-mile limited warranty covers repairs for the 1990 Corvette including labor and parts, to correct any defects in material or workmanship occurring during the warranty period. After the first year or 12,000 miles, there is a $100 deductible per repair visit. Warranty features include air conditioning repair, towing, no-cost warranty transfer, 6-year/100,000-mile body sheet rust-through protection and 5-year/50,000-mile emission control system coverage. Items not covered include tires (which are covered by their manufacturer) and normal maintenance. See your Chevrolet dealer for terms of this limited warranty.

At your Chevrolet dealer, financing or leasing your new Corvette can be as easy as saying GMAC.

Let's get it together... buckle up.

Litho in U.S.A. 4930 July 1989

The
Heartbeat
of America.

Today's Chevrolet.

1990 CORVETTE ZR-1

"ZR-1 is Corvette, only more so."

Dave McLellan
Corvette Chief Engineer

CONTENTS

This is the Corvette ZR-1 story, premiere edition.

Few automotive developments have been awaited with such anticipation as the ZR-1 option on the 1990 Chevrolet Corvette.

This catalog will provide you with a closer look at the high-content, highest-performance Corvette that is destined to become a new world standard in production sports cars.

Corvette Conquers Carcassonne

After rousing reviews at the Geneva Motor Show, the ZR-1 captivates the international press in a spirited romp through the south of France.

Ever since the rumors began—at least three years ago—the introduction of the Corvette ZR-1 has been the most eagerly anticipated event in the history of performance cars. The enthusiast press passed along to their readers every scrap of technical detail they could locate, every rumor, every fuzzy spy photo and every evasive "no comment" from the tight-lipped Corvette engineers in charge.

By early 1989, anticipation was turning to frenzy. No automotive writer had even driven a ZR-1, yet more than one cover story suggested that Chevrolet was about to unleash one of the world's best-balanced, fastest, most powerful production sports cars. It made for lively copy, but there was still an aura of mystery surrounding the "Corvette to come."

Chevrolet soon confirmed that the ZR-1 would be introduced at the beginning of the 1990 model year. This intro date provided an unusually comprehensive long-term testing program for the all-new 32-valve V8 engine and also coincided with the restyled interior design making its debut on all 1990 Corvettes.

Traditionally, new models are announced to the press several months in advance of public showing at events called "long lead" previews. The lead time is necessary so the monthly magazines can have driving impressions and photos available to their readers at new-car introduction time. Chevrolet often holds these showings at the General Motors Proving Grounds in Milford, Michigan, and sometimes at U.S. racetracks.

Chevy had never held a new product preview in Europe. Until now.

"Welcome, boys and girls, to a new age in American automotive history. That new age is ushered in by an engine whose technical specifications read as if they were written in Modena, only better..."

Automobile

"Twice, after driving hard all day on French roads that ranged from challenging to hostile, we emerged unscathed and unbrutalized by the ZR-1. This feeling of freshness after a long and difficult drive is the stuff of which great grand-touring cars are made."

Car and Driver

The ZR-1's "coming out party" was held in and around Carcassonne, a medieval city in the south of France. The invitation list included the world's most prominent automotive journalists, including press corps from the United States and several European countries.

After an official unveiling at the Geneva, Switzerland, automobile show, members of the press were able to spend several days and several hundred miles in production-specification ZR-1 Corvettes.

The journalists had the enviable task of driving the ZR-1s from Geneva through the French Alps to the southwest corner of France near the Pyrenees.

The ZR-1 proved beyond doubt its world-class credentials on autoroutes, on twisting mountain roads and in the approving looks of the local citizenry. The Corvettes passed castles and ancient farmhouses, drove down incredibly narrow byways and past awestruck faces of French citizens, many of whom had never seen a Corvette before, let alone thirteen of them.

Even the local *gendarmes* couldn't resist checking things out. One officer pulled a ZR-1 over, signaling with his hands that he wanted to see the engine. At every stop, Corvette was a *cause célèbre*.

The ZR-1, on Europe's own turf, served notice that there was a new order to the world's finest sports cars. But don't take our word for it. Sample the June 1989 issues of *Road and Track*, *Car and Driver*, *Motor Trend* and *Automobile* for the full report from Carcassonne. And significantly, the enthusiast press on *both* sides of the Atlantic has been saying some very nice things:

"To choose anything other than a ZR-1 for a spirited, lengthy romp through France or anywhere else in the world is missing out on one of driving's most pleasurable experiences."

Road and Track

"The heat is on. And it's the European supercar makers that are going to feel it."

Autocar and Motor
(GREAT BRITAIN)

"...the most exciting and responsible high-performance car ever conceived in Detroit, let alone ever built."

Car and Driver

"Der Terminator"

Auto Illustrierte
(SWITZERLAND)

"The ZR-1 stands alone—a statement that deep down, Americans now seem to understand better than Europeans how best to design a muscular sports car for maximum driving pleasure."

Performance Car
(GREAT BRITAIN)

"Lotus Corvette. We test the performance bargain of the decade."

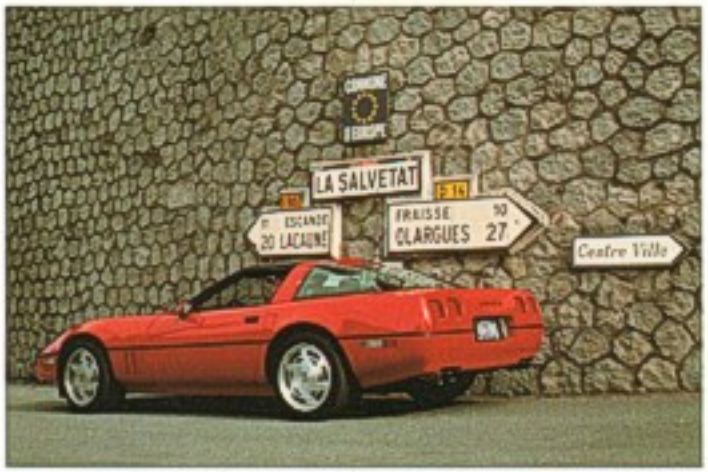
Autocar and Motor
(GREAT BRITAIN)

"Europe's own sports car makers had better watch out: America has just redefined the pleasure machine."

Performance Car
(GREAT BRITAIN)

"...the ZR-1 moves the Corvette out of its position as merely America's best sports car ...and solidly into the world class for performance cars."

Performance Car
(GREAT BRITAIN)

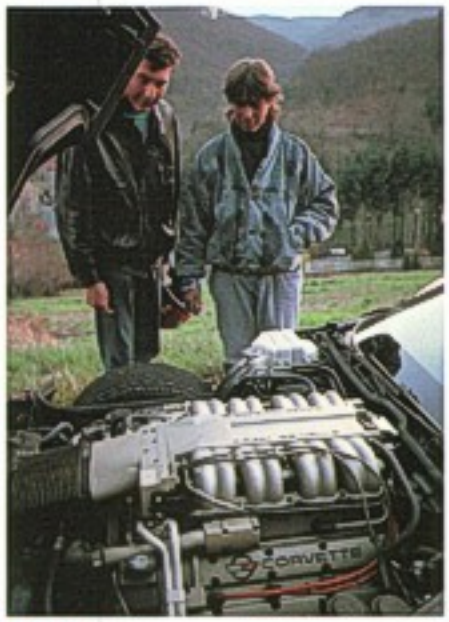


*"This car takes mountain turns—*hard mountain turns*—with a neutrality that would do credit to the Swiss banking industry."*

Car and Driver

"America can play again in the long time European reigned sports car concert of exclusive high performance... the Chevrolet house revitalizes an old legend."

Auto Illustrierte
(SWITZERLAND)



"This car ushers in a new era, in which we are no longer faced with either-or choices... now we can have it all."

Road and Track

Cars shown in this section are pre-production prototypes and do not represent 1990 Corvette ZR-1 appearance exactly.

Technological Tour de Force

In a way, the Corvette ZR-1 is the ultimate expression of the Chevrolet mission statement, which is to "give more than expected."

—Dave McLellan

Dave McLellan, Corvette Chief Engineer since 1975, is a "car guy." A GM engineer since 1959 and a sports car buff for as long as he can remember, McLellan took over "Corvette" from none other than the legendary Zora Arkus-Duntov.

When McLellan assumed command in '75, higher gas prices, lower speed limits and the performance-sapping effects of tightened emission controls had been seriously compromising many sports cars for several years. But even as public interest in performance cars waned, McLellan kept the faith, and he kept Corvette performance very much alive.

During the 1980s the pace of advancing technology quickened considerably for Corvette. The engineering challenges to McLellan had never been greater, but the compromise of performance was never an acceptable option.

While competitors have experimented with turbocharged Fours and Sixes, McLellan has kept Corvette as a V8-powered sports car, because only a V8 provides the level of refined, high-torque performance that Corvette buyers demand. The Corvette V8 engine has never delivered more horsepower on less fuel, with fewer emissions than it does today. Significantly, the boundaries of Corvette technology have expanded in many directions...to include a fully independent suspension with adjustable shocks, Bosch ABS II, a new-in-1989 6-speed manual transmission and much more.

Now McLellan and company advance the sports car art still further. In this interview, Dave McLellan reflects on the mission of and engineering philosophy of Corvette ZR-1:

Q: What is the purpose of a sports car, and specifically Corvette?

A: It is our mission to build an automobile that excites us as engineers and designers of cars. Thus the Corvette is not necessarily a practical statement as an automobile but it, by its nature, maximizes everything that is exciting and fun about automobiles.

We also build Corvette for our customers and need to enthuse them with our vision and also to listen to them and their visions.

Q: Is there a specific mission for ZR-1?

A: With the ZR-1 we have taken all those attributes of the Corvette that we and the customer are looking for and pushed them to their practical limit. For example, horsepower. We've increased it by more than 50 percent. We've increased the capability of the car and its ability to absorb the increased power. The fuel system has to deliver more fuel. There are bigger demands on the cooling system. Everything has to be rescaled to this new level. And if you have a car that is enjoyed for its handling, and Corvette is, we take that to its ultimate limit by putting state-of-the-world tires on it. You can see where we are today with the P275/40ZR-17 tires, and with the new wider rear tire—a P315/35ZR-17—that's all pushing on the boundaries of this car.

ZR-1 is Corvette, only more so.

Q: So pushing technology to the limit is a philosophy that guides the Corvette program?

A: No, I'd say it's the other way around. We and our customers are not looking for technology for its own sake. Example: a "CRT" display panel is technology for its own sake right now and you won't find it in a Corvette. The mission of this car is to allow the customer to fully explore the sport of driving.

Q: Well said. Let's explore the ZR-1 in some detail. What are some of the important technological advances of the LT5 engine?

A: When you look at the standard engine in the Corvette, we've pushed that engine pretty hard. We've upgraded it with fuel injection and spark control. We've gone forward but it really is out there pushing on the boundaries given emission controls, fuel economy considerations, fuel octane requirements, etc. The LT5 has to meet the same boundaries as the current engine in the standard Corvette. But it gets a lot more output from the same size engine. It really pushed the envelope, in that sense of the word, by a lot. Not by 10 percent, but by a huge chunk. We are at roughly 250 HP in the standard 1990 Corvette L98 engine; we've gone to

Dave McLellan, Corvette Chief Engineer, guided development of the aluminum LT5 dual-cam V8.

375 with the LT5. That's about a 50 percent increase.

Q: What was the involvement of Group Lotus? Did they have a clean slate?

A: There were four main objectives for the LT5 program:

- Create a car that is second to none in acceleration—nothing less than one of the fastest production cars in the world.
- Achieve that kind of performance without sacrificing driveability, not only at the high end where you expect fast cars to drive well, but at the low end, too.
- Package all this leading-edge performance and driveability into an engine that could still deliver great fuel economy (EPA estimated 17 MPG City, 26 MPG Highway).
- And design this engine to fit between the rails of the existing Corvette's engine compartment—a brand-new engine, but not one that would require a totally new car.

So it wasn't a clean slate. Those were the parameters. Our guess was that the 32-valve LT5 would end up in the 375 HP range. Obviously, it was more than a guess.

Group Lotus in Hethel, England, which by the way is owned by General Motors, had design and certification responsibility for the engine. Then there's Mercury Marine of Stillwater, Oklahoma, who has manufacturing responsibility for the engine. They don't make all those parts, but they're responsible for the procurement, the assembly, the testing and the delivery of the completed engine to the Corvette Assembly Plant.

Q: Why was Mercury Marine chosen to assemble the LT5 engine?

A: Primarily we were looking at volumes that were much smaller than a typical GM engine plant. Our plan was to build 18 a day and the typical engine plant builds 1,000 a day. That was the first reason to look beyond a conventional process. We also had no intention of tooling the engine up as you tool a high-volume engine. Mercury was judged to be the manufacturing source that had the best process control capabilities, already demonstrated in the other engines they're building. In fact, they've set up a unique manufacturing system for this engine, self-contained in their Stillwater factory. Their quality control is excellent.

Q: Explain the two tiers of LT5 engine performance.

A: It occurred to us somewhere along the way that, since we were regulating the intake system, we could also regulate it at the customer's discretion. That's where the idea of the power key came from. Below 3000 RPM, at any throttle from light to full, you're really operating on the first of the two intake valves and the first of the two fuel injectors. That gives the engine good torque and smooth performance at low RPM. As you go over 3000 RPM at high throttle, you open the secondary system, giving the engine better volumetric efficiency and a new torque peak around 4800 RPM. So there's a dual nature to the engine.

Q: Why a 6-speed manual?

A: This transmission maximizes performance as well as cruising economy. Again, it pushes that envelope, providing a torque capacity upgrade to meet any future requirements. Most important, it represents a world-class shifting transmission. And let's be honest about it: that's something we didn't have before. The way we mechanized this transmission, if you accelerate in first gear at light throttle and then upshift into second gear at between 12 mph and 20 mph, instead of getting second gear, you're getting 4th. That's a reminder that, with the kind of driving you're doing, you really don't need second at that point. It's also part of the strategy for meeting EPA fuel economy requirements. The ratios you want to have for maximum performance acceleration are 1, 2, 3, 4, 5, but for best part-throttle fuel economy—let's call it "lazy driving"—you really are better off using 1, 4, 5, 6. That's how that came about.

Q: Selective Ride Control has been described as a revolutionary suspension development. How does it work?

A: Selective Ride Control represents one of our first major thrusts into dramatically improving the ride quality of the car, while maintaining all of the handling attributes. The objective of the system, basically shock absorber-based technology, was two-fold. To get excellent high-speed control of the car, we've been able to incorporate damping levels that are similar to what we use in showroom stock racing. At the other end, we've reduced the damping below the current fixed damping level by quite a bit at low speed. Really it was that bandwidth—that is, extending the car's acceptability and capability in both directions along the performance spectrum—we were after, and that's what you won't find in any competitive ride control system.

Q: Have you created the world's finest exotic production sports car in the ZR-1?

A: I don't see Corvette ZR-1 as exotic. I see it as much more. Corvette is identifiable and recognized on the road. Exotic is strange scoops and wings, like the Countach. Exotic is making 300 cars a year and selling them for outrageous prices. That's not Corvette. This car certainly delivers the elements of high-performance driving—all those things that exotic cars do for their owners—at a much more affordable level. In a way, the Corvette ZR-1 is the ultimate expression of the Chevrolet mission statement, which is to "give more than expected." But instead of a $10,000 car, you're talking about a $50,000 car that's giving you the attributes of a $75,000 to $300,000 car. The Corvette is a civil automobile; it doesn't remind you every minute that you are driving a race car. But it also has this other dimension that is instantly waiting for you.

Q: What steps are you taking to ensure customer satisfaction with Corvette ZR-1 at the dealer service level?

A: The Corvette ZR-1 will be available at Chevrolet dealerships offering state-of-the-art service facilities with advanced diagnostic and repair equipment. One of the most important ingredients is the GM-CAMS (Computerized Automotive Maintenance System), an advanced vehicle service system which provides dealerships with the latest ZR-1 technical information available. GM-CAMS assists technicians in diagnosing many vehicle powertrain, brake and suspension components and allows retesting of the vehicle once repairs are completed.

Q: Subjectively, how does the ZR-1 feel on the open road? Does it sound like a traditional small-block?

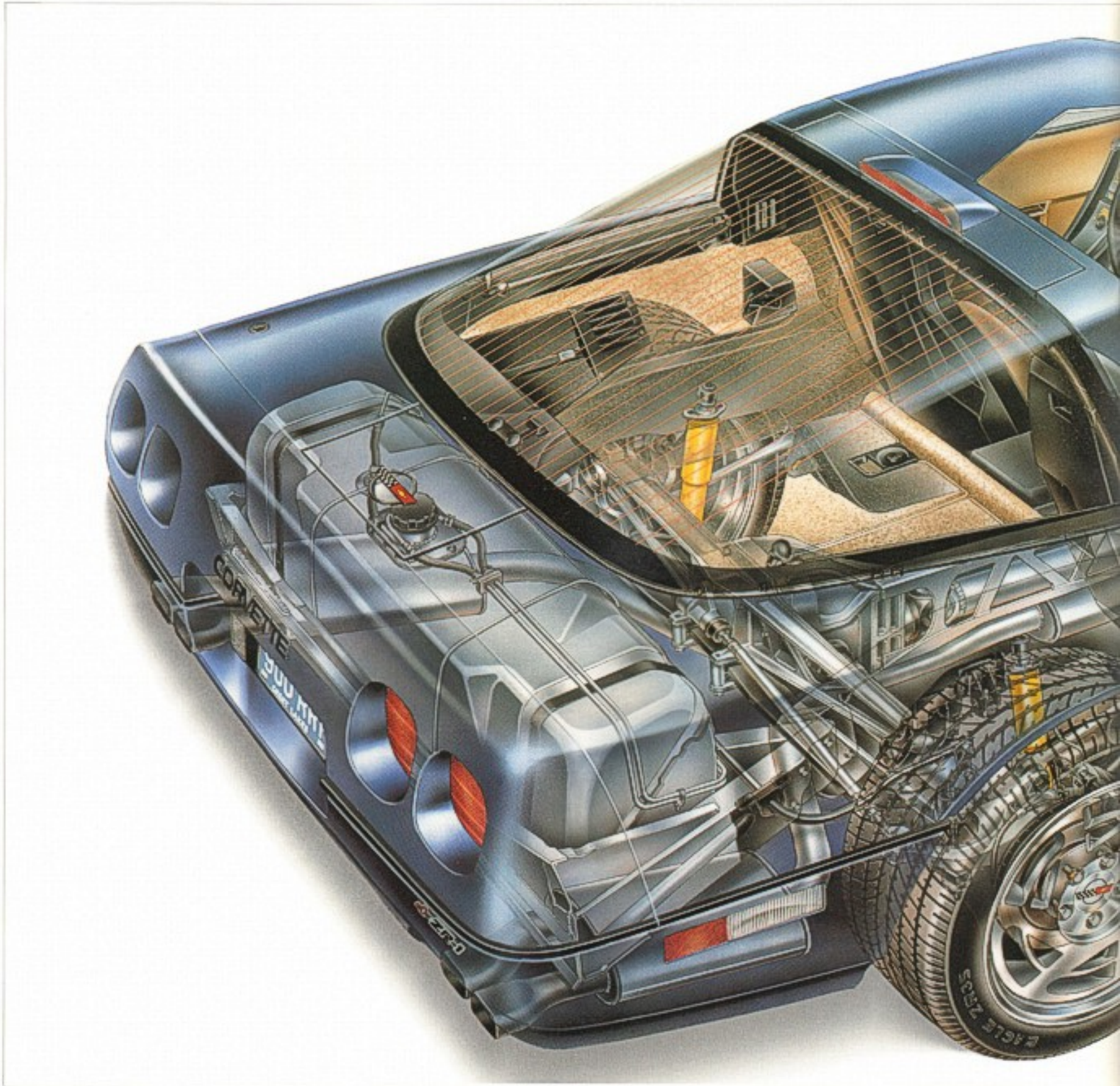
A: It sounds different. It sounds good. We didn't particularly try to achieve one sound or another. We got that sound naturally out of the engine. It's a high-torque chain drive V8 that's quiet and smooth when you're running around at low RPM. And when you run it up to the red line, the car—I will tell you—comes alive.

Q: It's been said that the current Corvette is an engineer's car. True?

A: Of course. But it's also a designer's car. I guess the best way I would describe it is that between Jerry Palmer, John Cafaro, the interior people and the engineering team, we've really invented a car for ourselves. It's a car that's the ultimate expression of what we would like to drive around. That's the only way I know to do the Corvette. You can't do it for somebody else. You've got to do it for yourself. Then you literally say to your customers, "We've got this car that we're excited about, and if you'd like to buy one, we'll make you one."

Every facet of ZR-1 technology, from the LT5 engine to the Selective Ride Control, works in concert to achieve a new level of production-car performance.


CORVETTE
THE
Corvette
CE AMERICA
TODAY'S CHEVROLET


CORVETTE
300 KM/H
C4ZR-0
EAGLE 285

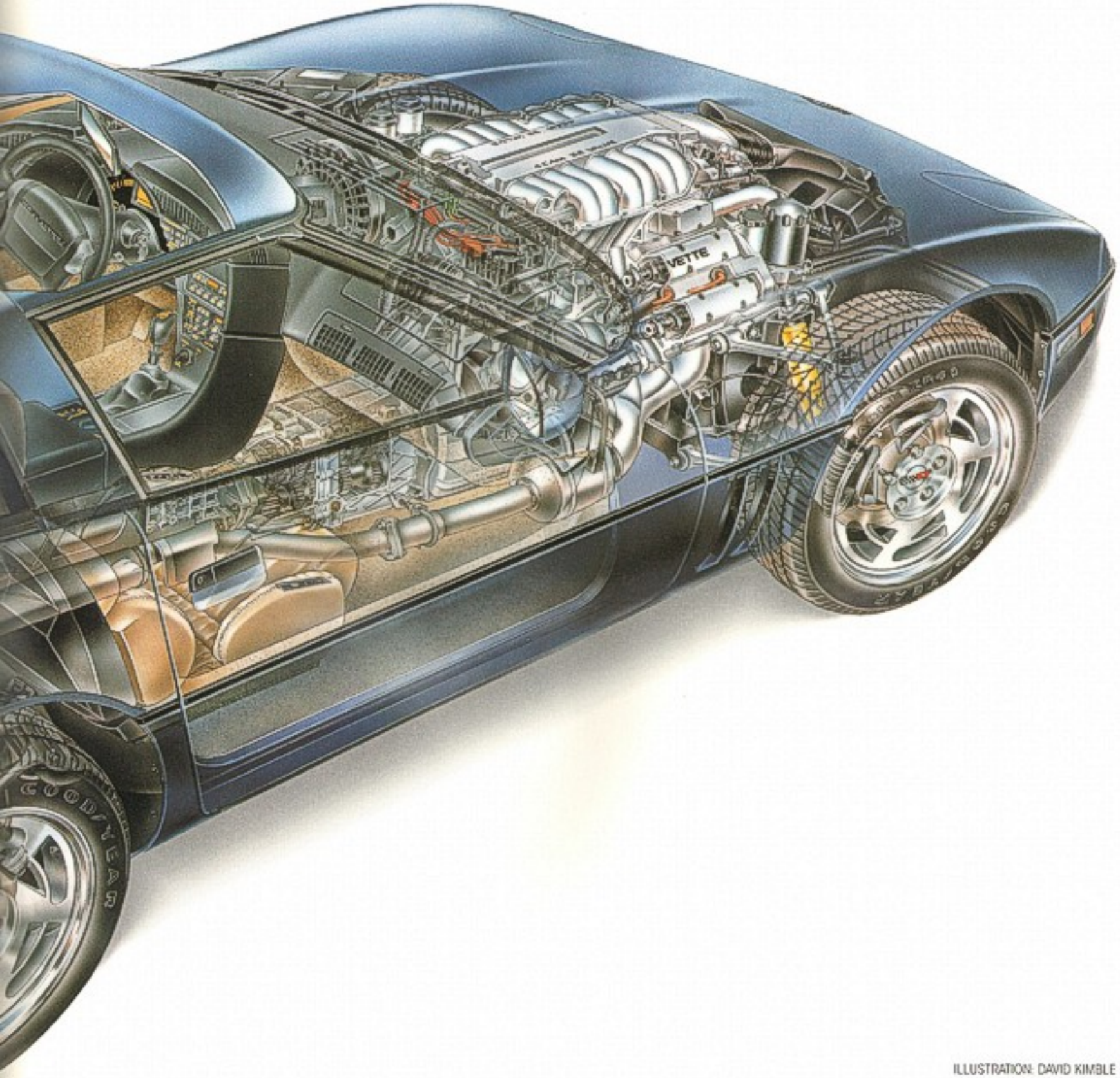


ILLUSTRATION: DAVID KIMBLE

ZR-1 BY THE NUMBERS
(A Performance Story)

The leading-edge technology only begins with a 5.7 Liter 32-valve dual-cam V8...

Test-track data prove that Corvette ZR-1 is one of the fastest production cars available in the world today. Sheer muscle, though, is hardly what ZR-1 is all about. This is a sophisticated grand-touring automobile, serving up the finest combination of performance and luxury ever offered to the American driving enthusiast.

The ZR-1 owner is surrounded by a Delco/Bose stereo sound system, power-adjustable leather sport seats, Comfortilt steering, air conditioning and every other luxury Corvette is known for. But make no mistake, this is a Corvette with a rather exotic heartbeat...

5.7 LITERS OF ALUMINUM 32-VALVE V8 TECHNOLOGY

Beneath the sleek fiberglass hood of Corvette ZR-1 is an art form of breathtaking beauty...the LT5 32-valve 5.7 Liter V8.

There have been masterpieces in engineering before; the great Cadillac V12s and V16s of the 1930s and the 1955 "small-block" Chevy V8 that went on to become the most successful racing engine in history come to mind—but the LT5 is the classic engine of the technology era.

This aluminum V8, exclusive to the Corvette, is a joint engineering effort of Chevrolet Motor Division and GM's Group Lotus engineering center in Hethel, England.

While it is a completely new design, the LT5 pays tribute to traditional Corvette heritage in its displacement (5.7 liters) and cylinder bore spacing (4.40 inches). It shares these dimensions with the Corvette L98 engine, that highly refined development of the classic small-block Chevy V8.

Beyond that, the LT5 is strictly 1990s technology. Features include four valves per cylinder, dual overhead cams (four total) with direct lobe-to-lifter contact, 16 runner inlet manifold, two Multec fuel injectors per cylinder, secondary inlet port throttling, sequential fuel injection and ultra-high 11.0:1 compression ratio.

The earthshaking result is 375 HP at 5800 RPM; 370 lbs. ft. of torque at 4800 RPM. But horsepower alone doesn't tell all (the big-block Sting Rays of the Sixties had plenty of raw power on tap). It's the low-speed-civility, cruising-speed efficiency* and high-RPM ferocity that make the LT5 an engineering blueprint for the future.

MYSTERY OF INDUCTION

A unique multiple-throttle induction system is the secret to LT5 tractability. This three-phase system looks much like Corvette's traditional Tuned-Port Injection but the throttle body has three butterflies instead of two—and there are now 16 runners instead of eight. These runners feed air directly into each of the injector housings, which have an electronically controlled, sequentially fired fuel injector positioned over each of the intake valves.

Within each cylinder, the intake ports, valves and cam lobes are divided into two groups; the primary being the one toward the front of the engine and the secondary to the rear. The secondary ports are slightly larger in diameter and contain a port throttle butterfly which is actuated through a mechanical linkage by a vacuum diaphragm which is signaled by computer.

Below half-throttle, or 3000 RPM, the engine breathes through the primary ports only. So operation, in effect, is on three valves per cylinder. The secondary intake valve is also moving, but admits no fuel-air mixture.

But when you put your foot down, there's a complete change in the ZR-1's personality. The secondary port throttle valves open to permit fuel-air mixture to enter the secondary intake valves.

The secondary port throttles open in a similar manner as "secondaries" on a four-barrel carburetor and the eight secondary injectors come on line. At this point things really begin to happen, with the engine now running on all 16 injectors and all 32 valves.

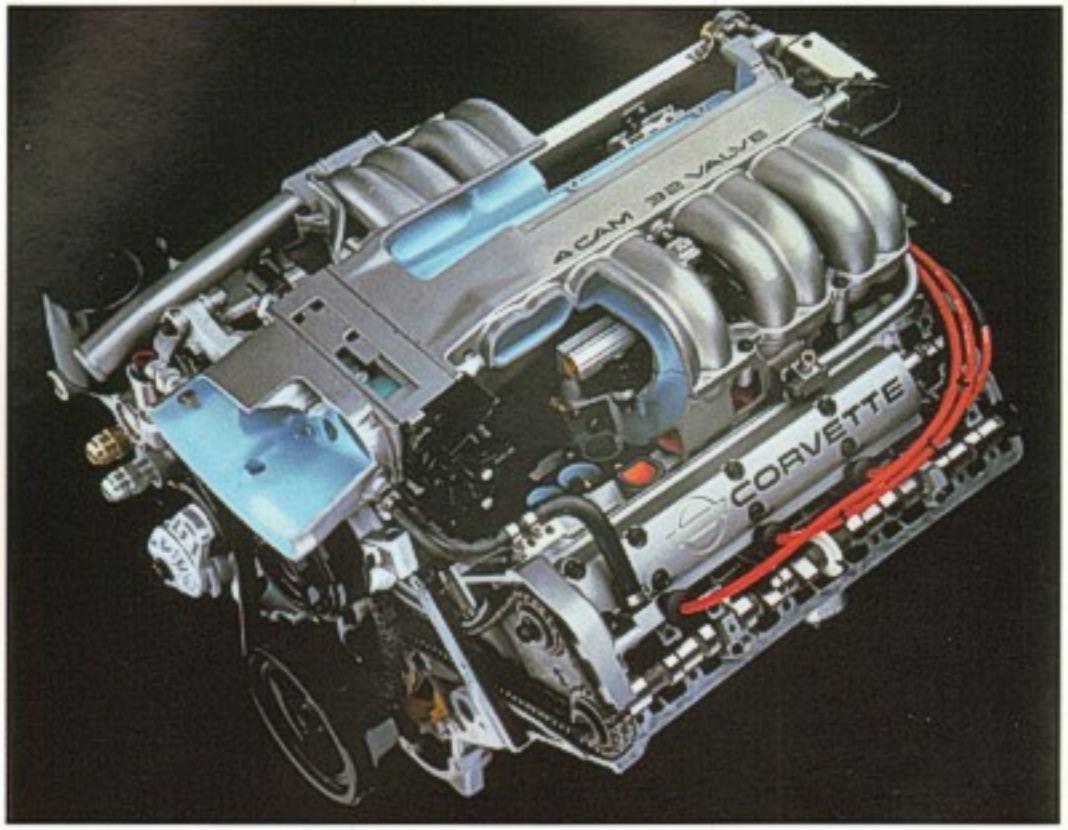
The secondary intake valves, which are now admitting fuel-air mixture to the cylinders, are actuated by cam lobes, which have more duration than the "primaries."

The effect is to provide true variable valve timing, optimizing flow and producing both tractable low speed and impressive high speed characteristics in a single engine.

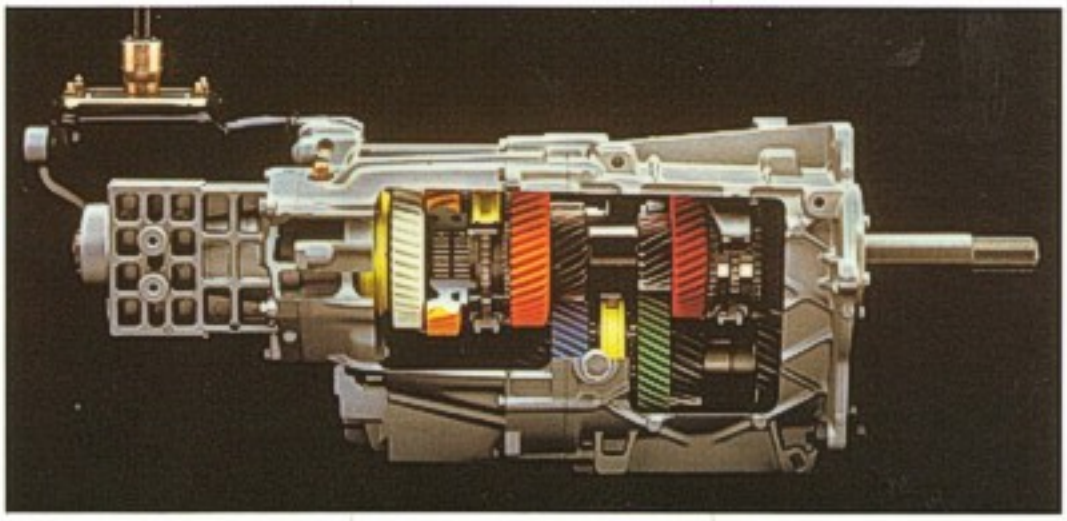
THE "POWER" SWITCH

Everybody's talking about it—the "power" key switch on the console of your new ZR-1—here's what happens when you use it:

*EPA estimated 17 MPG City, 26 MPG Highway



A technological tour de force and the heart of Corvette ZR-1: the LT5 32-valve V8 engine. Displacement is a traditional-to-Chevrolet 5.7 liters. Everything else is new. Features include nearly all-aluminum construction, four overhead camshafts with dual cam contours, sixteen runner inlet manifold, two fuel injectors per cylinder, sequential fuel injection and a computer-controlled coil direct-fire ignition.



ZR-1 rides on the widest tires in Corvette history: huge P315/35ZR-17s in back and P275/40ZR-17s up front. These tires necessitate the gently flared rear bodywork.

The power key is an exclusive feature of Corvette ZR-1. When "Full" mode is selected, the ZR-1's full potential is unleashed. "Normal" mode limits driver to about 200 HP.

The 6-speed manual transmission has been designed specifically for Corvette by Zahnradfabrik Friedshafen (ZF) A.G. of West Germany. ZF is known worldwide for its gearboxes.

The all-new-for-1990 Corvette instrument panel features highly readable analog and digital instrumentation. Driver's side Supplemental Inflatable Restraint system (air bag) is standard.

The keyed switch allows two modes—"normal" and "full" power. When you lock in "normal," the engine is running on primary ports only. This limits output to approximately 200 HP. The "full" mode allows secondary valve operation, in turn allowing maximum 32-valve performance and 375 HP.

As a ZR-1 owner, you (and only you) hold the key to exotic-class performance.

IGNITION AND ELECTRONICS

A computer-controlled coil direct-fire ignition is featured. The direct-coil ignition module is comprised of four coils, each with two separate plug leads.

Timing is constantly optimized by the engine computer. A further enhancement is the electronic spark control which minimizes the occasional spark "knock" drivers may hear under acceleration or with lower octane fuel.

WHY 32 VALVES?

For starters—better breathing, higher output per cubic inch of displacement and tremendously efficient performance.

It's the twin inlet and twin exhaust valve combinations in each of the eight combustion chambers that make the LT5 a 32-valve V8 engine.

Two camshafts above each bank of cylinders are featured. One camshaft operates the intake valves and the other operates the exhaust valves. The inlet valves have distinct primary and second-

ary cam contours on each inlet camshaft to accommodate the LT5's unique induction system. Each pair of camshafts is driven by a highly durable duplex steel roller chain. The overhead design allows for valve train weight savings and simplification.

ZF 6-SPEED MANUAL TRANSMISSION

The Corvette ZR-1 is equipped with the acclaimed ZF 6-speed manual transmission, described by one journalist as bringing Corvette's transmission "back to best."

If a rugged performance transmission ever shifted like the proverbial "hot knife through butter," this is the one. Six speeds forward, fully synchronized.

Not only does this ZF-designed 6-speed help get the most out of the 32-valve V8, it beautifully complements the LT5's two tiers of performance with computer-aided gear selection (guiding you from 1st to 4th during certain light-throttle driving modes) and well-spaced ratios for both maximum performance and low-RPM highway cruising (65 MPH at 1600 RPM).

4-WHEEL INDEPENDENT SUSPENSION

The Corvette ZR-1 wouldn't be one of the world's finest production sports cars without a keenly tuned chassis. These are the components that help deliver up to .91 g of lateral acceleration on the skid pad and over 1.2 g's on the racetrack: fiberglass composite front and rear transverse springs with computer-selected spring rates, rear independent suspension with 5-link connections and forged-aluminum pieces, power rack-and-pinion steering, and an aircraft-inspired "uniframe." The standard Performance Handling Package includes heavy-duty front and rear springs and stabilizer bars, heavy-duty four-wheel disc brakes and power steering cooler.

SELECTIVE RIDE CONTROL

Selective Ride Control, standard on ZR-1, improves on the razor-sharp reflexes of Corvette and offers sedan-like ride quality—when desired.

The driver can select from Touring, Sport or Performance modes via a console-located switch.

Touring mode gives the Corvette driver smoothness and comfort you might not expect to find in a performance coupe.

Sport mode is not unlike Corvette's standard suspension, offering precise handling and well-controlled ride motion.

Performance mode delivers racetrack handling and ride.

Within each mode, there are six different shock absorber damping levels, depending on vehicle speed. Damping levels are automatically adjusted by electric motors. A variable damping feature automatically "firms up" the ride as speed increases.

BOSCH ABS II

This is one of the most sophisticated anti-lock braking systems available in a production automobile. ABS helps the driver to retain maneuverability under full braking.

When called upon to do so, the computer-controlled anti-lock system can adjust brake pressure as many as 15 times per second, a rate even the most skilled driver cannot attain.

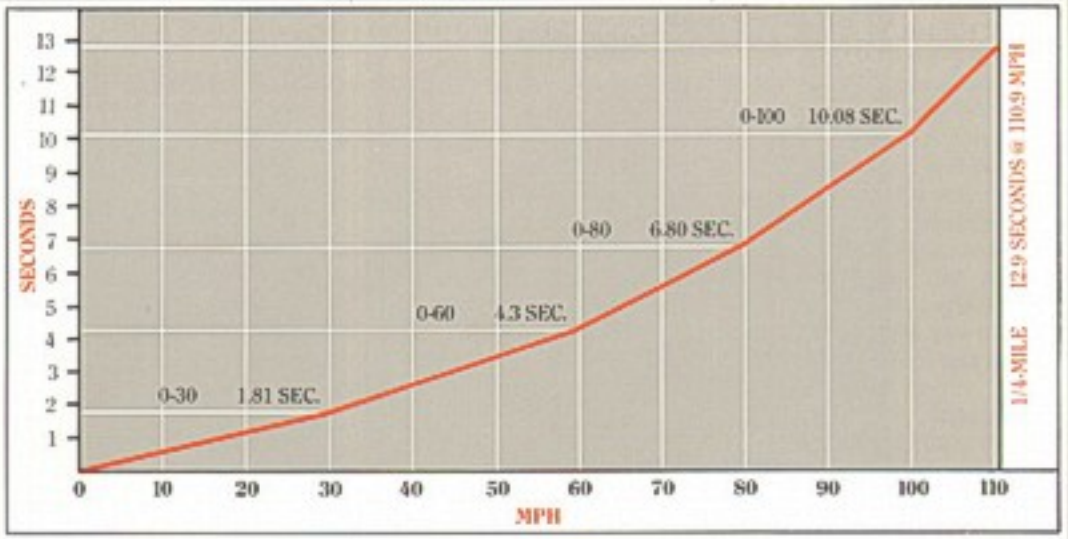
Bosch ABS II is combined with a four-wheel ventilated disc system.

NEW GOODYEAR EAGLE PERFORMANCE TIRES

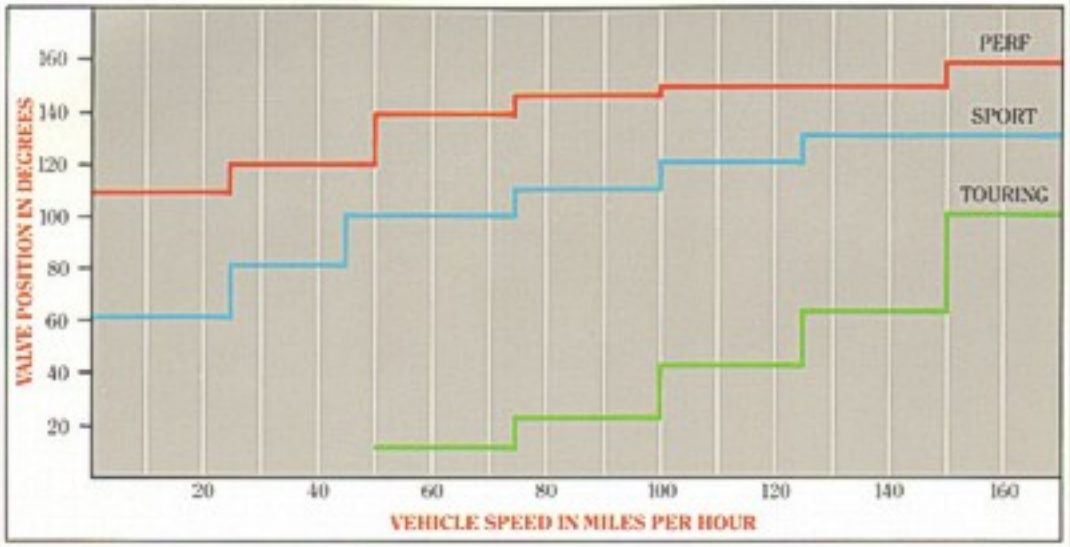
The ZR-1's distinctive appearance results from the use of the widest rear tires ever put on a production sports car. These P315/35ZR-17 Eagle unidirectional (speed rated to 193 MPH) tires were developed specifically by Goodyear for the ZR-1, which required a wider body from the front doors back to accommodate them. The Eagle tires up front are P275/40ZR-17.

A standard low-tire-pressure warning system continuously monitors the air pressure in each tire while the vehicle is being driven.

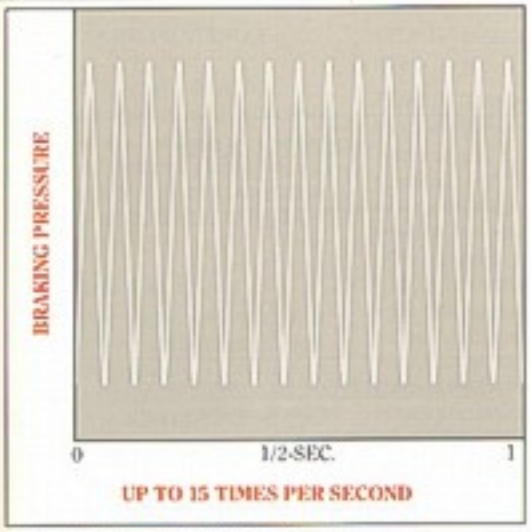
The self-energizing sensors mounted on each wheel detect low pressure conditions and signal a receiver that indicates the condition by turning on a lamp in the driver information center, indicating low tire pressure.



With up to 375 horsepower on tap, the ZR-1 offers astounding acceleration times like these: 0 to 60 in under five seconds and 0 to 100 in 10.08 on the GM test track using a professional driver.



The standard Selective Ride Control allows the driver to select one of three system settings (Touring, Sport or Perf) by rotating a switch on the console panel. Each switch provides six different shock absorber damping levels—depending on vehicle speed.



Corvette's Bosch ABS II anti-lock braking system modulates braking pressure up to 15 times per second, providing a level of braking control even the most skilled driver cannot attain. This graph does not portray actual Bosch ABS II operation exactly.

The ZR-1 is capable of up to 0.91 g's of lateral acceleration on the skid pad. This cornering power is the result of carefully tuned suspension and tires.

TECHNICAL DATA

ENGINE

Block ..... Cast aluminum
Pistons ..... Cast aluminum
Bore x Stroke ... 99.0 x 93.0mm (3.90 x 3.66 in.)
Displacement ..... 5.7 Liters (350 cu. in.)
Compression Ratio 11.0:1
Engine Control System ..... Computer-controlled coil ignition system with enhanced electronic spark control system.
Emission Controls ..... 3-way catalytic converter with feedback fuel-air-ratio control.
Valve Train ..... DOHC (4 total) with direct lobe to lifter contact. A 32-valve engine utilizing camshaft duplex chain drive.
Power (SAE Net): ..... 375 @ 5800 RPM
Torque (SAE Net): ..... 370 ft. lbs. @ 4800 RPM
Valve Diameter
Inlet ..... 39.0 x 2mm (1.54 in.)
Exhaust ..... 35.2 x 2mm (1.38 in.)

CAM Timing (°)	Pri.	Sec.
Inlet–BTC	12	22
ABC	60	70
Duration	252	272
Exhaust–BBC	60	
ATC	12	
Duration	252	

Valve Lift
Inlet ..... 9.9mm (0.39 in.)
Exhaust ..... 9.9mm (0.39 in.)
Bore Centers ..... 111.76mm (440 in.)
Fuel System ..... Tuned-Port Fuel Injection
Throttle Bore
Primary ..... 22.0mm (0.866 in.)
Secondary ..... 2 x 59.0mm (2 x 2.32 in.)
Recommended Fuel ..... Unleaded Premium
Fuel Tank Capacity (in gals.) 20

TRANSMISSION

6-speed manual

Gear ratios:			
1st	2.68	5th	0.75
2nd	1.80	6th	0.50
3rd	1.31		
4th	1.00	Reverse	2.50

Final drive ratio, 3.45:1

TIRES AND WHEELS–STANDARD

TIRES
P275/40ZR-17 (front) and P315/35ZR-17 (rear) B/W High-speed steel-belted radial Eagle unidirectional (Goodyear)*
WHEELS 17" x 9½" front, 17" x 11" rear
Type and Material: Left-right specific aluminum alloy road wheels with special vent design.

SUSPENSION–GENERAL

SHOCK ABSORBERS (front and rear)
TYPE: Standard–Gas pressurized with 18-way Selective Ride Control.

SUSPENSION–FRONT

TYPE AND DESCRIPTION
Independent, forged aluminum upper and lower control arms and steering knuckle, transverse monoleaf spring and steel stabilizer, spindle offset.
Spring Type and Material: Monoleaf, filament-wound glass-epoxy composite.

SUSPENSION–REAR

TYPE AND DESCRIPTION
Independent 5-link design with toe and camber adjustment, forged aluminum control arms, knuckles and struts; transverse monoleaf spring steel tie-rods and stabilizer. Tubular U-jointed drive shafts.
Spring Type and Material: Monoleaf, filament-wound glass-epoxy composite.

BRAKES

DESCRIPTION
Aluminum caliper with nodular iron reaction bracket; pad reaction through bracket. Self-adjusting.
TYPE
Front: Disc with sliding-head low drag calipers.
Rear: Disc with sliding-head low drag calipers.
Power Brakes: Standard.
Anti-Lock Braking System: Electronic 4-wheel, 3-channel.

ELECTRICAL–SUPPLY SYSTEM

BATTERY
Make: Delco Model: 75-630 Voltage: 12 volts
ALTERNATOR
Type and Rating: 120 amps

ELECTRICAL–STARTING SYSTEM

STARTER MOTOR
Current Drain at 0°F: 350 amps.

ELECTRICAL–IGNITION SYSTEM

Type: High Energy Ignition. Coil: Integral.
SPARK PLUGS
Make: AC Model: FRLS1 Gap: .89mm (0.035 in.)

BODY

STRUCTURE
Integral perimeter-frame birdcage forms unitized body structure.
ANTI-CORROSION TREATMENT
All-encompassing corrosion protection including extensive use of aluminum; galvanization.

STEERING

Power: Standard
Adjustable Steering Wheel: (Standard) Black-leather-wrapped four-spoke steering wheel.
Turning Diameter: 40.4 ft.
Steering Type: Hydraulic rack-and-pinion
Overall Ratio: 15.6:1
Turns, lock-to-lock: 2.25

FRAME

All-welded steel-body-frame construction, 100% galvanized.

CAPACITIES/CALCULATED DATA

Engine Oil ..... 12 qts.
Fuel ..... 20 gals.
Engine Coolant ..... 16.7 qts.
Interior Volume ... 48.7 cu. ft.
Trunk/Cargo Volume .... 17.9 cu. ft.
Frontal Area .. 20.4 ft.²

**Tire chains should not be used because they may cause damage to your car.*

Colors, Trim and Features

Corvette ZR-1 offers the same wide selection of interior and exterior colors as other 1990 Corvette models. In addition, ZR-1 features an even more complete level of standard equipment.

EXTERIOR COLORS

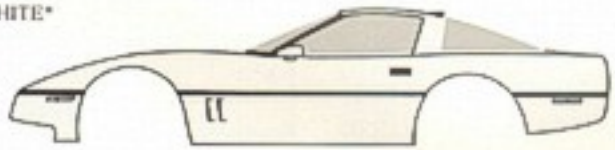
BLACK

STEEL BLUE METALLIC

CHARCOAL METALLIC

POLO GREEN METALLIC

WHITE*



BRIGHT RED

DARK RED METALLIC

*Not available at start of production.

INTERIOR COLORS

	STANDARD LEATHER SPORT SEAT
Blue	X
Black	X
Gray	X
Red	X
Saddle	X

INTERIOR/EXTERIOR COLORS

EXTERIOR COLORS	INTERIOR COLORS				
	BLUE	BLACK	GRAY	RED	SADDLE
Black		X	X	X	X
Steel Blue (Met.)		X			
Charcoal (Met.)		X	X		X
Polo Green (Met.)					X
White	X	X	X	X	X
Bright Red		X	X	X	X
Dark Red (Met.)		X			X

LEATHER SPORT SEAT

Deeply contoured, leather sport seats with full lumbar power adjustment are standard on Corvette ZR-1.

STANDARD FEATURES

LEATHER SPORT SEATS

Aggressively contoured leather sport seats include a six-way power adjustment and full-power lumbar adjustment. Available colors: Blue, Black, Gray, Red, Saddle.

ANTI-THEFT FEATURES

PASS-Key* (Personal Automotive Security System) is a special ignition system utilizing a module with a resistor decoder and an ignition key with a pellet of specified resistance. In addition to PASS-Key, an anti-theft horn alarm circuit and starter interrupt are standard.

ELECTRONIC SPEED CONTROL

Electronic speed control includes a convenient resume-speed feature and a speed adjustment that allows you to change your speed in precise 1-MPH increments.

DELCO/BOSE AM/FM STEREO MUSIC SYSTEM WITH DIGITAL COMPACT DISC PLAYER

The Delco/Bose Music System is comprised of a receiver and four bass reflex amplifier/speaker enclosures engineered by placement and equalization to give both driver and passenger the full stereo effect. Each speaker has its own built-in equalizer network.

Other features of the system include: AM/FM stereo reception with automatic adjustment, adjustable speed-controlled loudness, electronic tuning with Seek and Scan, Dynamic Noise Reduction (DNR™) and Dolby* Sound Noise Reduction to reduce high-frequency "hiss" on AM, FM and cassette tape. Also included: tape player with automatic reverse and music search feature, compact disc player, 100 watts of power, separate treble and bass controls, speed compensated volume and integral compact disc player.

AIR CONDITIONING

Climate control system also includes heater, defroster and side window defoggers. An electric rear window defogger is also standard.

UNIDIRECTIONAL ZR40 TIRES*

The largest standard tire/wheel combination ever offered in a production sports car: P275/40ZR-17 Goodyear Eagle unidirectional tires on 17" x 9½" aluminum alloy wheels (front), P315/35ZR-17 Goodyear Eagle unidirectional tires on 17" x 11" aluminum alloy wheels (rear).

POWER TEAM/CHASSIS/ MECHANICAL

- Bosch ABS II anti-lock braking system.
- 6-speed manual transmission.
- Delco Freedom Plus II Battery with sealed side terminals.
- Electric engine cooling fan(2).
- Electric in-tank fuel pump (2).
- Engine oil cooler.
- Exclusive transverse front and rear springs with monoleaf glass-epoxy construction.
- 5.7 Liter DOHC 32-valve V8 engine with Tuned-Port Fuel Injection and all-aluminum construction.
- Forged aluminum front and rear suspension arms.
- Fully independent front and rear suspension.
- Limited-slip differential.
- Aluminum alloy cam covers.
- Power rack-and-pinion steering.
- Power Steering Cooler.
- Selective Ride Control.
- Serpentine-belt engine accessory drive.
- Stainless steel exhaust pipes, catalytic converter exhaust manifolds and free-flow mufflers.
- Uniframe body construction, 100 percent galvanized and dip-painted.

EXTERIOR

- Concealed wipers with integral washers in wiper arms.
- Corrosion-proof fiberglass panels.
- Designed-in body-side moldings.
- Dual electric remote-controlled heated spot mirrors.
- Dual halogen fog lamps.
- Frameless rear hatch glass with three remote releases.
- Front and rear cornering lamps.
- Full-tilt clamshell hood.
- Retractable halogen headlamps.
- Tinted glass.

INTERIOR

- Center console with shifter, coin tray, cigarette lighter and ashtray, plus controls for power windows, radio, air conditioning and electric mirrors.
- Day/night rearview mirror with integral map light.
- Delco AM/FM stereo radio with Seek and Scan, cassette tape player, compact disc player, four speakers and digital clock.
- Driver information system providing average MPH and cruising range in digital readouts.
- Electronic liquid-crystal instrumentation with analog tachometer and digital speedometer display. Additional readouts include: fuel level, oil pressure, oil temperature, coolant temperature, voltmeter. Conventional readouts for odometer, turn signals and high-beam headlamps.
- Headlamps-on reminder.
- High-intensity interior lamps.
- Illuminated right-hand visor mirror.
- Leather-wrapped steering wheel.
- Power door locks.
- Power windows.
- Supplemental Inflatable Restraint system (air bag).
- Tilt-steering column.

DIMENSIONS

EXTERIOR

Width: 74.0"
Front Tread: 59.6"
Rear Tread: 61.9"
Wheelbase: 96.2"
Overall Length: 177.4"
Height: 46.8"
Minimum Ground Clearance: 4.9"

INTERIOR

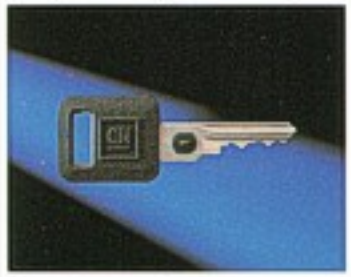
Head Room: 36.4"
Leg Room: 42.6"
Shoulder Room: 54.0"
Hip Room: 49.3"
Cargo Volume: 17.9 cu. ft.

OPTIONAL EQUIPMENT

- Electronic air conditioning.
- Transparent roof panel.

Tire chains should not be used because they may cause damage to your car.

A Bosch ABS II anti-lock braking system, combined with a powerful power disc at each wheel, gives Corvette the stopping power and control to complement its performance potential.



Corvette ZR-1 features PASS-Key; the electronic anti-theft system that has proven itself the most effective theft deterrent Chevrolet has ever offered. PASS-Key is a special ignition system utilizing a module with a resistor decoder and an ignition key with a pellet of specified resistance. Vital systems are deactivated when you lock the ignition and can only be reengaged with your special PASS-Key ignition key. An anti-theft horn alarm is also standard on Corvette ZR-1.

The new-for-1990 Supplemental Inflatable Restraint system (air bag) is located in the hub of the steering wheel. The S.I.R. is designed to provide added protection to the driver in the event that your Corvette is involved in a moderate to severe frontal impact. For maximum protection in frontal and all other collisions, both driver and passenger should be properly restrained with safety belts.

The clean look of a modern classic. Four rectangular rear lamps are a ZR-1 signature.

Additional Information

IMPORTANT: A WORD ABOUT THIS CATALOG

We have tried to make this catalog as comprehensive and factual as possible. We reserve the right, however, to make changes at any time, without notice, in prices, colors, materials, equipment, specifications, models and availability. Since some information may have been updated since the time of printing, please check with your Chevrolet dealer for complete details.

A WORD ABOUT ENGINES

Chevrolets are equipped with engines produced by different operating units of GM, its subsidiaries or suppliers to GM worldwide.

A WORD ABOUT ASSEMBLY

Chevrolets are assembled by different operating units of General Motors, its subsidiaries or suppliers to GM worldwide. Chevrolets incorporate thousands of components produced by different operating units of GM, its subsidiaries or suppliers to GM worldwide. We sometimes find it necessary to produce Chevrolets with different or differently sourced components than originally scheduled. All such components have been approved for use in Chevrolets and will provide the quality performance associated with the Chevrolet name. Since some options may be unavailable when your vehicle is assembled, we suggest that you verify that your vehicle includes the equipment you ordered, or if there are changes, that they are acceptable to you.

A WORD ABOUT UPDATED SERVICE INFORMATION

Chevrolet regularly sends its dealers useful service bulletins about Chevrolet products. Chevrolet monitors product performance in the field. We then prepare bulletins for servicing our products better. Now you can get these bulletins, too. Ask your dealer. To get ordering information, call toll free 1-800-551-4123.

A WORD ABOUT CORROSION PROTECTION

Chevrolets are designed and built to resist corrosion. All body sheet metal components are warranted against rust-through corrosion for 6-years/100,000 miles. Application of additional rust inhibiting materials is not required under the corrosion coverage.

SAFETY FEATURES: OCCUPANT PROTECTION

• Supplemental Inflatable Restraint system, driver only, with manual lap/shoulder safety belts for the driver and right front passenger • Energy-absorbing steering column • Energy-absorbing instrument panel • Interlocking door latches • Side-guard door beam • Passenger-guard inside door lock handles • Safety armrests • Head restraints, driver and right front passenger • Break-away inside rearview mirrors • Security door locks and door retention components

ACCIDENT AVOIDANCE

• Side marker lights and reflectors • Parking lamps that illuminate with headlamps • Four-way hazard warning flasher • Back-up lights • Center high-mounted stop lamp • Directional signal control with lane-change feature • Windshield defroster, washer and multi-speed wipers (pulse-type) • Inside rearview mirror • Dual electric remote outside rearview mirrors • Brake system with dual master cylinder and warning light • Starter safety switch • Low-glare finish on inside windshield moldings, wiper arms and blades, metallic steering wheel surfaces • Illuminated heater and defroster controls • Illuminated windshield wiper and washer controls • Tires with built-in tread-wear indicators

THEFT DETERRENCE

• Audible reminder for ignition key removal • Theft-deterrent steering column lock • Visible vehicle identification number • PASS-Key Anti-Theft System • Audio alarm system with starter-interrupt feature • Locking roof panel with theft-deterrent mount (Corvette Coupe only) • Theft-deterrent wheel lugs

GM

BUMPER TO BUMPER PLUS

3 YEAR/50,000 MILE WARRANTY

GM's 3-year/50,000-mile limited warranty covers repairs for the 1990 Corvette including labor and parts, to correct any defects in material or workmanship occurring during the warranty period. After the first year or 12,000 miles, there is a $100 deductible per repair visit. Warranty features include air conditioning repair, towing, no-cost warranty transfer, 6-year/100,000-mile body sheet rust-through protection and 5-year/50,000-mile emission control system coverage. Items not covered include tires (which are covered by their manufacturer) and normal maintenance. See your Chevrolet dealer for terms of this limited warranty.

At your Chevrolet dealer's, financing or leasing your new Corvette can be as easy as saying GMAC.

Let's get it together... buckle up. GM

Litho in U.S.A. 4975 July 1989

The
Heartbeat
of America.

Today's Chevrolet.