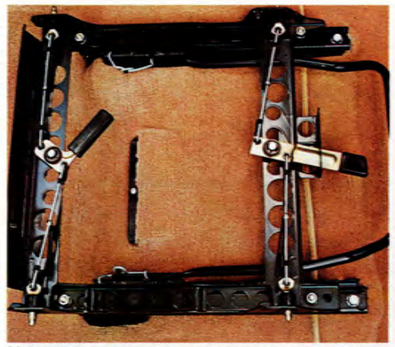
VOLVO

The Driver's Car



Volvo's front seat frame, securely anchored at four points.

Properly positioned, Volvo's fixed head restraints are see-through.

Door latches have built-in drains; water that gets in runs out.

Large exterior mirrors tuned to "daylight" automatically filter headlights at night.

Tinted windshield with dark tint band, three-layer laminated "high-impact" design.

Quad-rectangular headlights and integral turn signals.

Safety and weight distribution—fuel tank located well forward of rear bumper.

For added comfort in the cold of winter, a heated driver's seat on 260 models.

Padded safety steering wheel, variable-intensity illuminated instrumentation.

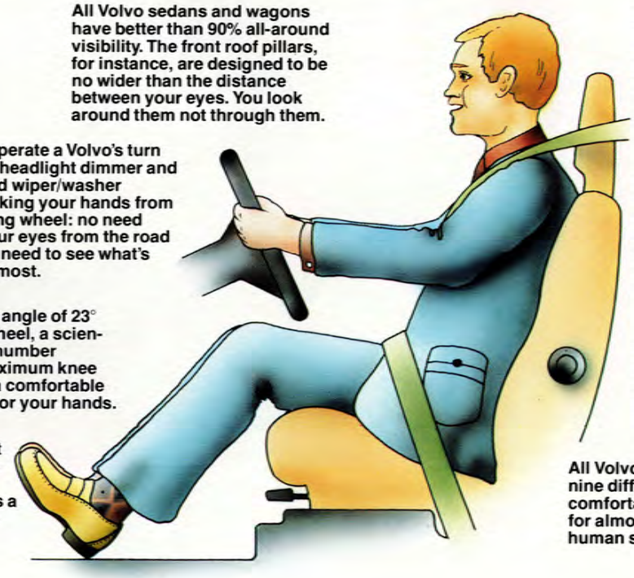
In a Volvo, the driver is more than just another passenger.

Automobiles don't drive themselves. An active, fully alert intelligence has to make them perform each function: Stop, go, accelerate, decelerate, turn. Only the automobile's driver can make those life-and-death decisions which assure that the car and its passengers reach their destination safely. Which is why, despite Volvo's established tradition of giving careful consideration to the safety and comfort of its passengers, Volvo also has an equally well-established tradition of paying special attention to the needs of the driver.

That tradition is carried out by the painstaking application of the science of ergonomics to every feature of every Volvo. Ergonomics, put simply, means making man's use of machinery more efficient and more comfortable (think of it as biotechnology). Volvo concerns itself with ergonomics in every aspect of an automobile's design, because the active intelligence controlling the car—the driver—must be as efficient as possible. And that, of course, means that the driver must be as comfortably alert as possible. No work is more important than that done by the driver, which is why Volvo's engineers give the driver's job extra consideration.

None of which is to say that Volvo's passengers are ignored. Far from it. The same principles used to keep the driver relaxed and in control also apply to keeping the passengers comfortable over long periods of time. And the controls they use—the ventilation, seating, door and window mechanisms, for example—get the same careful attention that goes into the design of the driver's cockpit.

It boils down to this: Volvo designs and builds its cars to fit *you*, rather than expecting you to fit designs selected for sheer styling at the expense of genuine usefulness. That's the essence of biotechnology. And isn't it comforting to know that, in a time when most other manufacturers are interested simply in their economics, Volvo spends *its* time worrying over your ergonomics?



Minimizing Distractions:
maximum pleasure, maximum safety

A distracted driver is a dangerous driver. And, most likely, an uncomfortable one as well. That's why Volvo went to great trouble and expense to minimize the things that can take the driver's mind off the job. We started with the seat, sometimes built as a lounge-chair feature in other cars.

As a "feature" the over-stuffed, improperly dimensioned front seats found in some cars might feel terrific in the showroom, but they can also leave you with an aching back after a six-hour trip. As a "feature" such a seat is of dubious value at best. It's not only a discomfort, it's also distracting, and distractions lessen driving pleasure. Not to mention safety.

So what might seem like an innocuous piece of furniture in a car's interior counts as a major distraction if it *causes* rather than eases strain.

That's why the seats you find in the 1979 Volvos are the most anatomically correct version ever produced by Volvo . . . and that's saying something.

The backrests are dished for excellent lateral support of your upper body, so that you don't have to push against the seat in cornering to stay in place. The lower seat cushions are designed to insure proper thigh support without putting pressure on the wrong places and causing restricted blood flow. And, of course, the adjustable lumbar support in the backrest—another pioneering Volvo design—gives you a way to keep your spine properly cushioned.

The construction of a Volvo seat reflects the intense research into the forces acting on a seated person's back (which, surprisingly, are greater on the spine when sitting than standing), and puts into practice the valuable information gained by that research.

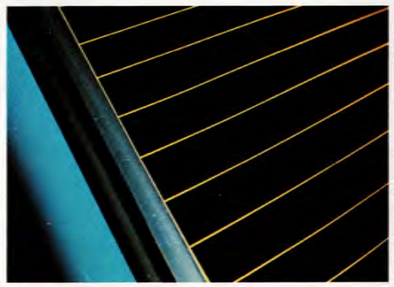
Volvo's approach to building a seat begins at the bottom. Two mounting rails are welded to the floor platform for a firm anchorage. The seat frame is bolted to two glide rails that fit securely into the mounting rails. At the front of the seat cushion, a moveable bar is connected to both glide rails, and by raising the glide bar, you can easily slide the seat back and forth.

But back-and-forth adjustments are only two of the *nine* ways a Volvo seat can be tailored to fit over 95% of the American adult population. Underneath the driver's seat cushion (and passenger seat on the 262C), two levers—one in front and the other one at the rear—allow you to adjust the height or angle of the entire seat. Each lever controls a moveable pin that locks the seat into one of three height levels—a combination of nine different height/angle configurations. (On all other Volvo models, the passenger seat can be similarly adjusted, except that you'll have to reset a few bolts.)

Attached to the steel frame of the seat by helical springs are a set of strong, flexible wires called pullmaflex. The pullmaflex insures that the cold-formed polyurethane foam cushions will retain their shape for many years, and that the seat will respond to your body movements while limiting body bounce. Correct seating is only one of the many ways in which Volvo engineers have sought to minimize distractions.

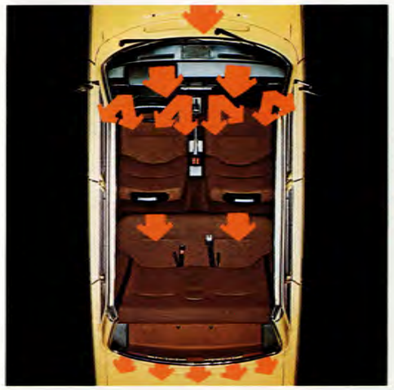
Anything that diverts energy, induces fatigue, or causes a driver to be less than alert can become a dangerous distraction. That's why Volvos are designed with one thought uppermost in mind: to make your driving experience easy, efficient and uncomplicated. And that, of course, should also make it enjoyably safe.

You have freedom of movement under normal circumstances with Volvo's three-point one-piece retractable seat belts, but when the inertia reels experience a sudden motion they lock instantly. Automatic adjustment means minimum interference with maximum safety.



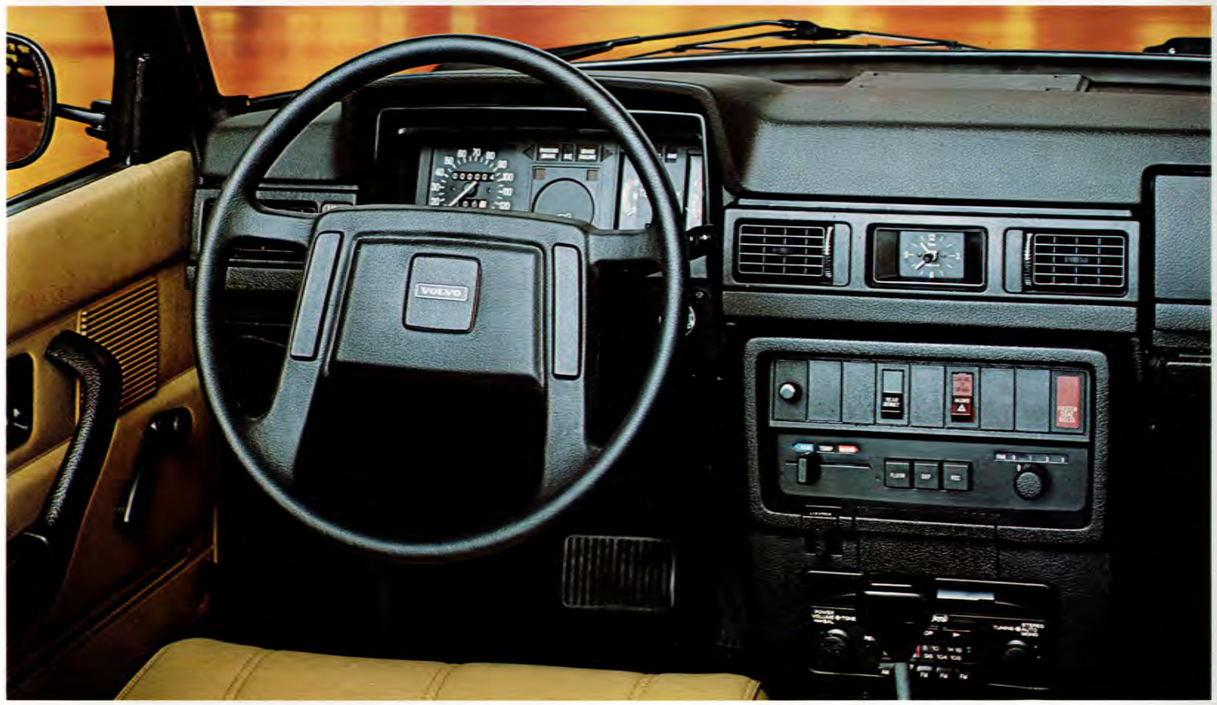
It takes 1292°F to burn the special demisting heating elements into the rear-window glass, and the elements draw 150 watts of power for quick clearing of ice or mist to give the driver an unobstructed view to the rear.

Yet another key to comfortable, alert driving is an effective ventilation system. Stale, stuffy air can make a driver drowsy, but an open window at high speeds can mean buffeting and noise. So Volvo's quiet and effective 12-outlet ventilation system includes demisters for side windows, one-way exhaust vents under the rear window for flow-through ventilation, separate air channels to the rear seat and fresh air inlet on the front left cowl.



Since limited visibility can be the most serious distraction any driver must contend with, all Volvo sedans and wagons offer at least 90% all-around visibility from the driver's seat. That means only ten percent of the 360° around you is blocked by supports, eliminating "blind spots" almost completely. In addition, Volvo's "flexible," laminated glass is lightly tinted to reduce glare and improve air conditioning efficiency. On the windshield there's a dark tint band at the top to further reduce glare.

Another one of the nine ways a Volvo seat can be adjusted is the inclination of the backrest. It's infinitely variable in any angle between 90° to 170°. The most comfortable backrest angle is between 110° to 130° for the average driver. A large knob at the pivot point allows for easy adjustment. When fully reclined, there's no ridge between the backrest and seat cushion. We thought you would be more comfortable.



You shouldn't be distracted with an information display, you should be helped by it. So Volvo's comprehensive instrumentation and warning lights do just that. A light-integrity sensor tells you when a headlight, tail or brake light fails. And, of course, all the controls for the auxiliary controls—the heating/ventilation system, radio, hazard flasher and so on—are well lit and designed to be operated with a minimum of fumbling. Even the cigarette lighter has a unique shape so you can find it in the dark. This attention to ergonomic "details" allows information retrieval by the driver to be quick and easy, since each gauge and light is easily memorized due to its high degree of legibility and differentiation. The highway, after all, offers enough distractions; a car's internal environment shouldn't offer more.

Control:
positive where it counts

Volvo believes that a driver should be in control of the driving situation at all times. When that state of affairs is reached, when the relationship between what the driver does and how the car reacts is uncomplicated, natural and predictable, active safety is at its peak. But the driver has to know what's going on where the action is: on the road. And despite the fact that much of today's automotive discussion centers on the subject of "ride," Volvo thinks you should expect more from a car. You should expect positive control.

Consider things from the road up, not from the seat cushions down. Consider that all control of a vehicle ultimately begins or ends at the road surface. Consider all that, and you can see why Volvo chooses to give its drivers as much information from the road and as much control over the car as necessary for maximum active safety.

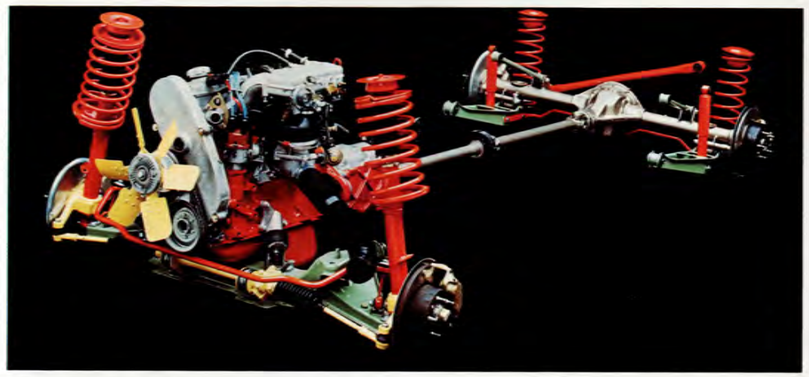
Traction for cornering, braking or straight-line freeway driving begins with tires. Volvo now equips all its models with Michelin steel-belted radial tires. They were selected because tires of this type of construction are engineered for optimum road holding and durability. The 242GT is equipped with high-performance Pirelli CN36 radials. The tires are mounted on wide-based rims to increase their efficiency, and the wheels themselves are centered on lathe-turned hubs to insure true running. (Most manufacturers rely only on tapered nuts or wheel bolts to properly center a wheel, a far less precise method.)

The tires are steered by a rack-and-pinion steering system, recognized by most automotive authorities as the most precise system available. It has fewer moving parts than other systems, fewer joints and much greater accuracy and steering response. A power assist is available which also maintains the advantages of rack-and-pinion with reduced steering-wheel effort. Because of this, should your engine stall in a power-steered Volvo, you can safely steer without tremendously multiplied steering effort. Moreover, a Volvo's turning circle is amazingly tight; it can turn completely around in a 32-foot 2-inch circle.

Volvos ride on a suspension engineered to optimize both ride and handling without sacrificing either. The components are unified to constitute a "ride" that is appreciated by both the driver and the passengers. At the front, each wheel is independently suspended by McPherson struts incorporating coil springs and shock absorbers, which are encased within the strut housing to reduce shock wear from road grit and grime. The McPherson strut is a particularly ingenious design capable of good performance and a wide range of flexibility which results in less transmission of road shock to the body-unit mounting points. It also maintains excellent control of the wheels for more predictable handling and precise steering control. All of which leads to greater longevity. All models are also equipped with a front stabilizer bar scientifically designed to minimize body roll in cornering.

At the rear, Volvo's "live" axle design assures several important benefits: constant wheel-to-wheel track as well as constant toe-in, caster and camber angles. The axle is precisely located by five control arms and rods for exactly delineating wheel travel. Hefty coil springs and independent shock absorbers complement the control arms, and carefully selected rubber bushings — whose properties are chosen to match suspension design criteria — make for a strong, good-riding rear suspension. In addition, all Volvos (except the 265 GL) are also fitted with a rear stabilizer bar to complement the front stabilizer and thereby further promote safe, flat cornering. Heavier stabilizers this year increase roll stiffness by 15%. The 242 GT has 35% higher roll stiffness than the standard models. And the 265 GL has the automatic leveling system in the rear instead of a rear stabilizer bar.

Volvo designed its suspension to be an integral part of the automobile. Thus it functions so well you never have to think about it, but when you need positive control — in adverse weather conditions, at speed on a freeway, or in accident avoidance — the firm, well-controlled Volvo chassis responds without surprises. It goes where you want it to go, when you want it to. It doesn't drive you; *you* drive *it*. And Volvo thinks that's the way it ought to be.

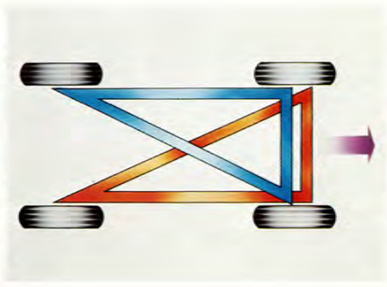


Volvo 240 and 260 Series cars ride on a front suspension with McPherson struts, coil springs, internal shock absorbers, stabilizer bar and rack-and-pinion steering.

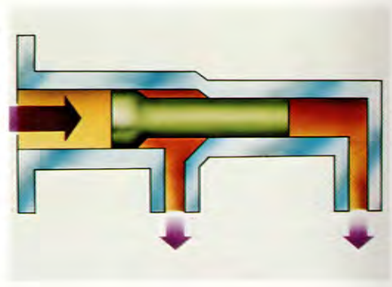
At the rear, the 240/260 Series "live" axle is located precisely by no less than five control links and suspended by coil springs on trailing arms.

Because stopping power and how a car works under braking are also handling features, Volvo puts disc brakes on all *four* wheels, not just the front pair, as most manufacturers do. Disc brakes dissipate heat efficiently, making stopping power reliable and predictable even after long or repeated braking. Ventilated front disc rotors on the 242GT and 260 models have even greater cooling efficiency. A servo unit multiplies pedal effort 4 times for easy stopping, while relief valves maintain proper front-to-rear braking pressure to help avoid rear-wheel lock-up in emergency braking situations.

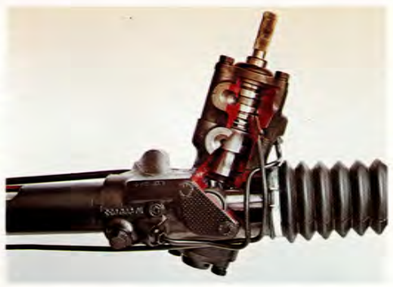
Most emergency braking systems protect only the brakes on two wheels, but Volvo introduced a triangular-split braking system in 1966. With this system, the two front wheels and one rear wheel are served by two independent circuits. Should one circuit fail, braking action would only be lost on one rear wheel, meaning approximately 80% effectiveness would be retained.



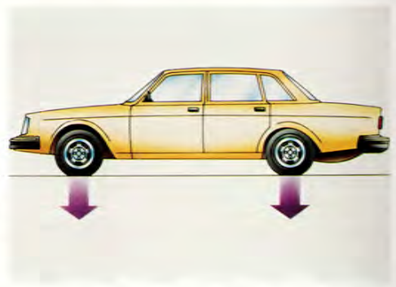
Even though extremely unlikely, a brake circuit failure should not dramatically change pedal response. With Volvo's "stepped-bore" master cylinder design, one chamber (see diagram) could be emptied of fluid, but system pressure would be maintained by the other circuit. This means the driver would feel the brakes respond to near-normal pedal effort and position. Should a brake circuit fail, the driver is alerted by a dashboard warning light.



Because steering predictability and response are effected by more than the tires and steering system, Volvo front and rear suspensions work together to produce uncomplicated, natural and predictable reactions to the driver's commands.



Volvo's rack-and-pinion steering systems—both manual and power-assisted—feel light to the touch without being "disconnected" from the feel of the road. Steering feel and response are geared to help the driver negotiate road hazards—not hinder.



Volvo thinks one of the most vital factors in handling is weight distribution. In a Volvo, we strive for equal distribution between front and rear. The 264GL front/rear distribution is 51% front and 49% rear with driver only, and even when fully loaded is 45/55%. A well-balanced car is easier to control when cornering hard.

People:

the most important things that go into a Volvo

Until recently, safety was a subject most automobile manufacturers just didn't want to talk about. But Volvo has a long history of promoting automotive safety features, sometimes even against the trend of sales techniques. For while other automakers were convinced that "safety doesn't sell," Volvo engineers were constantly researching and improving vehicular safety long before it was required by law or even fashionable. Volvo has always done more than simply meet the going standard: Volvo *sets* standards.

Now, the U.S. Government has recognized that automotive safety is a vital national interest. And the National Highway Traffic Administration has accordingly established safety regulations that are among the toughest for manufacturers to meet in the world. Indeed, they are so strict that some otherwise excellent automotive products cannot even be imported into America because they can't meet NHTSA rules.

Not so with Volvo. NHTSA studies have shown the Volvo 244 sedan provides the best potential for occupant protection of any car in its size and weight class. NHTSA even recognized Volvo's safety engineering to the extent of purchasing more than 60 Volvos for use in studying proposed safety standards for the next decade.

None of this is by accident. Volvo has pioneered many important safety features over the last decades, many of which have yet to appear in many cars. Among these innovations are:

—Volvo's "high-impact" laminated windshield, which because of its flexible construction, minimizes damage from flying stones and other road hazards. Impact tests have been conducted using dummy passengers, that have proved the safety value of the laminated windshield. Volvo introduced laminated glass windshields as standard equipment in 1944.

—Three-point, one-piece safety belts and inertia reels with Volvo's patented "slip-joint" coupling, which distributes force loads evenly between the upper and lower parts of the belt. Volvo was the first manufacturer in the world to introduce three-point belts as standard equipment on one of its products. The date: 1959.

—High survivability of properly restrained occupants at much higher speeds than required by law. The current U.S. standard at which most of these tests are carried out is 30 mph, but U.S. studies show that Volvo's have a high degree of survivability for passengers at 40 mph barrier impacts—and that 10 mph increase in speed means that 79% more energy must be absorbed!

—A special, patented Volvo design for side-door reinforcements. They're tubular steel bars, and are attached by a patented process.

—Seats firmly anchored, which lock onto adjustment rails on not one but *both* sides. They also exceed all applicable safety regulations by a comfortable margin. (A seat belt's ability to restrain can only be as good as the seat's ability to stay put in a collision).

—Volvo's "triangular-split" dual safety braking system, which was introduced in 1966. This unique system maintains control of *three* wheels in case of a brake system failure. No other mass production car has it.

—A "stepped-bore" master cylinder, which maintains near-normal brake pedal pressure in the event of a brake circuit failure. It was introduced in 1974, and is still unique in the industry.

—Four-wheel disc brakes. Long a Volvo standard, they are still rare on most cars.

The safety thinking at Volvo doesn't stop with this list.

Indeed, just as the current safety features grew out of Volvo's ESV (Experimental Safety Vehicle) program of 1972–73, so the future features of Volvo safety are always being developed. And Volvo, unlike many other manufacturers, doesn't simply concentrate on meeting the regulations through passive safety features. Volvo believes that you should have an automobile that gives you every chance to *avoid* an accident in the first place. And then, if necessary, give you the best protection possible. All because our cars are important—but not nearly as important as the *people* who drive them.

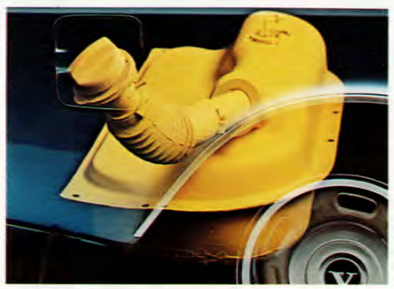
Crash-worthiness is the ability to absorb damage without harm to the passengers. To that end, both the front and rear of the all-steel Volvo unitized body incorporate zones designed to absorb and cushion impact energy instead of transmitting it to the passenger compartment. These "crush zones" are possible because certain parts of the body have been stamped with special patterns to permit progressive compression at a controlled rate.

Volvo's primary foundation for occupant protection is its welded all-unit body. But in addition, a built-in safety "cage" surrounds the passenger compartment, making a "third safety zone" that is so strong it has supported six Volvos on top of one another and resisted deformation even at impact tests with closing speeds up to 90 mph.

Avoiding accidents is every bit as important as surviving them. Systems designed to help in accident avoidance are called "active" safety systems, and include well-balanced suspension, strong chassis, responsive engine, four-wheel disc brakes, and quick and precise rack-and-pinion steering.

Volvo research long ago identified the steering system as a dangerous element in accidents. Volvo steering systems have no fewer than five safety devices built in: 1) retractable, telescoping steering shaft, 2) split-joint mounting, 3) crumple zone, 4) impact-absorbing steering wheel, and 5) angled joint that folds under pressure.

Obviously, not all collisions are frontal, so door reinforcement helps you in the event of a side collision. Each door is reinforced with strong tubular members attached to the door frames by a patented Volvo process.



The fuel tank must be protected to prevent fire. In a Volvo, rear impact members create a safety zone around the fuel tank and combine with the energy-absorbing rear end to afford such protection. The tank is located well forward of the bumper, yet safely separated from the interior.

Keeping the doors closed in a collision aids impact resistance tremendously, so Volvo's door locks are designed to be nearly unburstable in order to maintain structural integrity.

Performance:
in a Volvo, it's standard equipment

The engine is the heart of an automobile. As such, it must have all the qualities associated with an athlete's heart: strength, power, reliability, efficiency. The similarities end there, because an automobile's heart must be specifically designed by man to do its job. For that reason, Volvos have two engines, each designed for different driving conditions.

Many automakers, of course, offer a huge variety of engines for each model they make, and at first that might seem like a good thing. But the closer you look at the problem of powering an automobile, the more you can see that, with a rational car, a rational engine makes the most sense. Hence, Volvo's B21F four-cylinder overhead cam engine and the B27F V-6 represent rational engine choices. No bewildering selection charts with confusing lists of final-drive ratios, transmissions, or carburetion systems. Just two economical, efficient engines providing a broad spread of power and economy. Volvo doesn't think buyers should be expected to design their cars from an option list, nor should they be expected to give up economy for performance or vice-versa. That's why Volvo's power train options remain uncomplicated.

For the 240 Series, the B21F engine. A 2.1-litre overhead camshaft in-line four, the B21F gets its 107 horsepower with Continuous Flow fuel injection and cross-flow intake and exhaust ports that allow good "breathing." In addition, Volvo's exclusive LAMBDA-SOND® exhaust emission control system*, which senses the amount of unburned oxygen in the exhaust flow and regulates the fuel injected accordingly, is standard in selected markets. The engine's ignition system is breakerless and solid state for reliable, safe operation under any conditions.

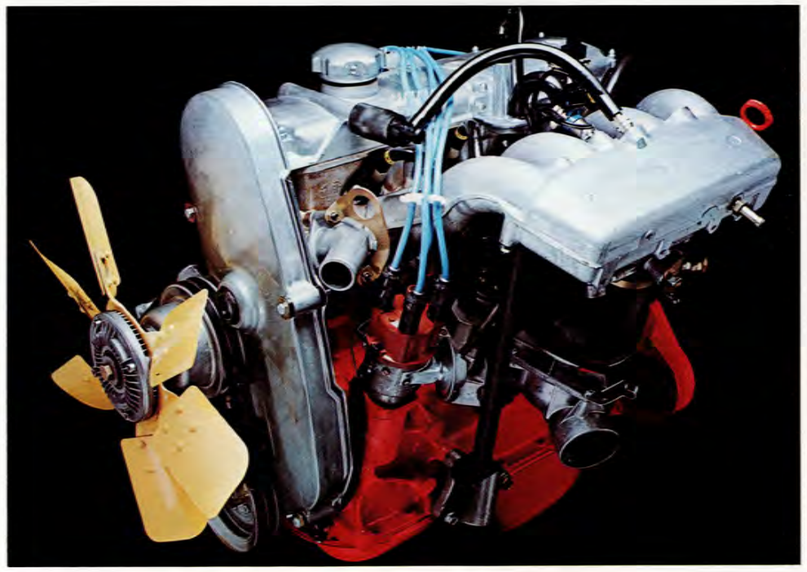
The 260 Series cars are powered by the B27F, Volvo's most powerful engine. It's light-alloy overhead camshaft V-6, pumps out 127 horsepower. Excellent driveability is maintained with LAMBDA-SOND® emission control. And, like the B21F, it is designed for good breathing and excellent low-speed torque, or pulling power. Both engines' designs facilitate good response at any road speed and help eliminate the need for excessive gear changing.

Volvo's engine designs have been subjected to exhaustive road research, with millions of miles of test driving done everywhere from the hot, arid wastes of Asia and Death Valley to the coldest climates of Europe. They are owner-proven and built to last in the best Volvo tradition.

Of course, power and reliability aren't all that Volvo puts into its engines. Each and every one is scrupulously assembled to meet the strictest environmental demands. And Volvo does its work so well that its emission control systems have won widespread acclaim, including an "Award of Excellence in Air Pollution Control" by the National Environmental Industries Council.

Balancing all the diverse requirements made on a Volvo engine was tough. But as you'll see when you test-drive a new Volvo, both the four-cylinder B21F and the V-6 B27F are more than equal to the job.

Performance, reliability, economy and clean emissions. All Volvo traditions. *LAMBDA-SOND® is a trademark of Volvo of America Corporation.

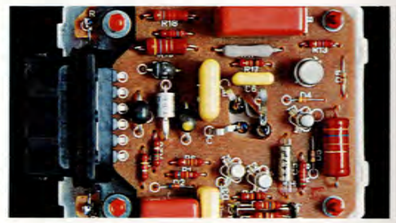


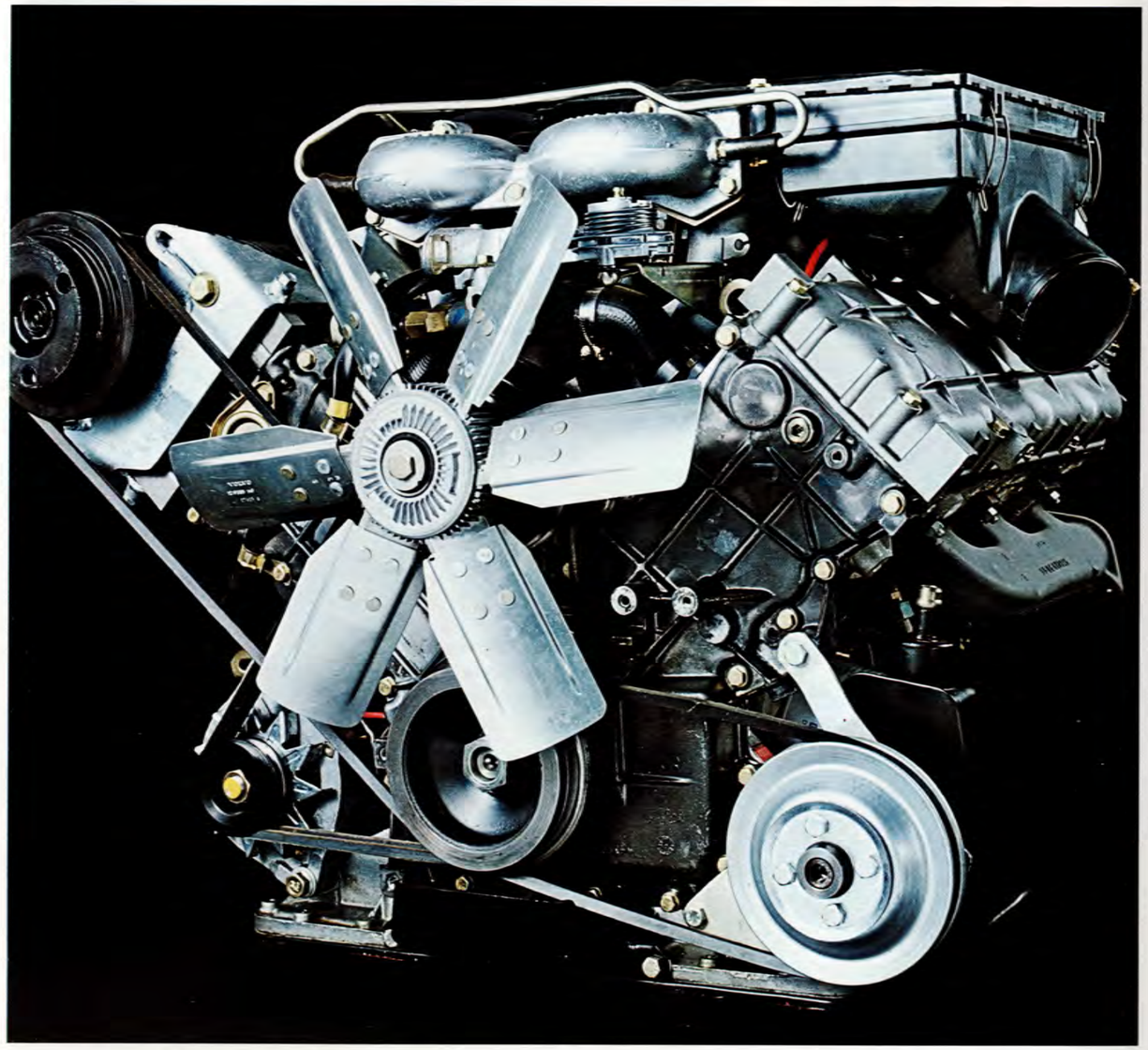
Of advanced design and sporting character, Volvo's 2.1 litre (130 cubic-inch) B21F 240 Series engine uses a "cross flow" cylinder head for free-breathing characteristics. Continuous Flow fuel injection helps the engine produce 107 horsepower. A belt-driven overhead camshaft eliminates pushrods and rocker arms for quieter operation, fewer adjustments and better performance.

A precise, all-synchromesh, four-speed manual transmission is also available with electrically-activated overdrive which reduces fourth-gear engine speeds by 20%. The benefits are improved fuel economy and a quieter drive on the highway.

Floor-mounted, Volvo's three-speed automatic transmission utilizes a hydraulic torque converter to provide smooth starting and variable ratios. Upshifts and downshifts can be made automatically or manually in this versatile transmission—and first gear can be selected for quick acceleration or added engine braking.

For easy starting, good fuel economy and better emission control, Volvo uses a solid-state ignition system. It provides a high-quality ignition pulse and exact timing for controlled, efficient combustion; extends the life of the spark plug and reduces maintenance by eliminating the contact breaker points.





Designed for the 260 Series, the 90° V-6 B27F is a true engineering achievement. The cylinder heads and engine block of the compact, overhead cam powerplant are cast of light-alloy to give it a highly favorable power-to-weight ratio without sacrificing ruggedness.

With its consistently high torque available at low engine speeds, all-around tractability is an important characteristic of the B27F. The result: good acceleration as well as good fuel economy.

For optimum performance under any operating conditions, the Continuous Flow fuel injection system automatically compensates for barometric pressure, temperature and humidity, allowing a peak horsepower rating of 127.

Volvo comfort and convenience: enjoyment with every mile

Many automobile manufacturers spend the bulk of their design time on a car's exterior, seeking to impress buyers with flashy styling and trendy gimmicks. And too often, when the buyers become the driver, they discover shortcomings all through the car's interior.

Volvos are different. From the outside, Volvos are handsome automobiles characterized by tasteful, economic styling and elegant, restrained trim, which is now becoming the vogue. But we believe that it is inside the car, the part of an automobile the owner sees most often — the driver's living room, as it were — that demands the most careful attention. In Volvo, the interior receives the attention it deserves for the comfort you deserve.

Volvo's engineers thoroughly researched their task before setting out to design the interior. They began with the human eye, analyzing its movements while in a car under way. And then they substantially reduced fatigue by locating the key instruments at convenient places in the instrument panel and giving them easily legible faces. Thus a Volvo driver can get all the required information in a single quick glance, without having to peer into confusing or poorly lighted panels.

The designers next turned their attention to the shape and texture of the dashboard. They settled on a resilient, non-glare material that aids safety immensely, as well as resists cracking and discoloring. And of course all the controls are right where the biotechnicians said they should be for optimum use; easy to find, easy to use. This thoughtful design extends even to the door handles, window winders and seat-belt console, which are all made to be unobtrusive but instantly accessible.

Accessibility was also a key factor in making Volvo's doors both wide and tall. Along with the exceptional knee, shoulder and leg room built right into each and every Volvo, the doors help make a Volvo a comfortable, hospitable place.

The front seats incorporate proven Volvo design: Thick padding material — cold-formed polyurethane foam — cushions occupants both in front and in back. This firm material insures even better seating and comfort on long drives and is designed to resist "settling," a common cause of support deterioration in seats.

On top of the foam, there are a host of new seat-covering materials: 240 Series sedans features a comfortable knitted fabric with a corduroy texture — cool in summer, warm in winter, flame retardant and easy to clean. The 245 has supple, vinyl seats that are leather-like in texture. 260 Series cars feature fine-grain leather-faced upholstery (and plush grey velour on the 264GL with Allegheny Black finish only). And the top-of-the-line 262C is fitted with luxurious glove-soft leather throughout. The see-through safety head restraints are color-matched to the interior on all models, and 260 Series cars are equipped with a heated driver's seat. (When the temperature drops below 57°F, thermostatically controlled heating elements automatically warm the seat until it reaches 79°F, at which point it automatically shuts off). The 262C offers this same feature in both front seats.

All Volvos are fully carpeted. 240 Series cars receive fine cut-pile carpeting, while a more dense, plush carpet is standard on 260 Series cars and the 262C. All carpets have been chemically treated with a special flame retardant.

Of course, all this — the comfortable and correct seating, carpeting, safety-designed dashboard surfaces and so on — combines with Volvo's finely engineered chassis and suspension to offer a superb, quiet ride. (To help even further, 95% of the floor surface is covered with a special sound insulating material.) It all goes into every Volvo, making it a car you can enjoy even more from within than from without.

Correct seating means maximum comfort—even in the rear seats. Each seat back wraps around at the edges for lateral support and upholstery, padding and springing are of the same high quality as Volvo's anatomically designed fully adjustable front seats. And all Volvo sedan rear seats incorporate a padded folding armrest.

Conveniences this year include front door operated dome lights added to 240 models and a delayed switch-off for the dome light on the 260 Series. Also, lest you forget your keys or to turn off the lights, there's a special warning buzzer to remind you.

Volvo's efficient styling results in very large and useful trunks. They're shaped like big boxes to use every available cubic inch of cargo area. (There are 13.9 cubic feet of useable luggage space). The spare tire is stowed vertically at the side to facilitate removal without the necessity of unpacking, and both the 242GT and 262C come equipped with a space-saver spare tire and an electric air compressor.

Sound-insulated and color-coordinated door panels now incorporate a two-section utility compartment. The compartment's front section provides ample space for large objects, such as soft drink cans. The rear section is designed to neatly carry items such as maps or books.

Durability:

the longer we make Volvos, the longer they last

Volvos are designed to last a long time, and to age gracefully. This requires quality, and quality isn't an easily acquired characteristic. You cannot simply bolt quality onto a car; it must be built in at every step of the manufacturing process. That's why Volvo goes to extraordinary measures to insure its cars have the highest possible standard of quality. And it's also why Volvo has invested nearly $17 million in a single assembly plant on just those measures. Ways to make better Volvos, not just superficial changes.

A vital part of making an automobile last is the attention paid to the coating of its metal surfaces. Before assembly even begins, all critical body joints in a Volvo are coated with a thick zinc primer to deter corrosion. And after assembly, the body is sprayed with a zinc-phosphate solution. This forms a fine crystalline coating that cleans and etches the metal. Because of this treatment, paint will adhere to the body better.

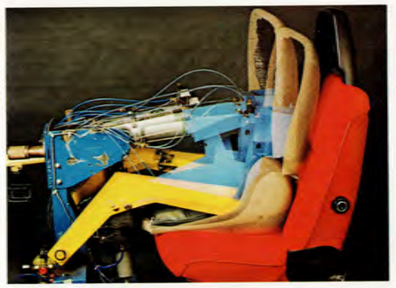
Each Volvo is then dipped in a primer bath that covers the entire body, including the smallest internal cavities — places you never see. Oven baking, sanding and a thorough inspection follow. Insulating materials are applied to the floor, firewall, and other parts while joints are sealed by adhesives and special fillers. Then the sheet metal below the belt line, lower half of the doors and rocker panels are coated with a special stone-chip resistant paint, which consists of wet-on-wet layers of polyester that remain resilient to prevent paint chipping.

Over all this prepared surface goes a final primer layer, which is again baked on by a high-temperature oven. The entire surface of the car is then wet-sanded for greater smoothness, *another sealer* coat is applied and over-baked, and the car is finally ready to be painted, in either thick, wet-on-wet enamel coats or enamel with aluminum flakes for metallic finishes. An additional clear finish coat seals in the metallic paint.

Naturally, primer, sealer and paint cannot insure durability alone. So Volvo goes below the surface, in one instance so far as to install a new, multi-million dollar fully automated welding line. And many parts of the car are made of hot-dipped galvanized steel and special zincrometal to further prevent rust, a goal also aided by the injection of special rust-preventive fluids into nearly fifty body sections.

A Volvo's underside is as well protected. Factory undercoating, a thick asphalt compound — which also serves as a sound deadener — is sprayed thoroughly over the underside. The floor also gets a special abrasive-resistant paint, and rear wheel arches are covered with an "armed" bitumen coating on the wear surfaces.

Many of these measures have found their way into the assembly of a Volvo because Volvos are made in Sweden, which has a climate with particularly adverse conditions much of the year. And in those conditions, Volvo's extra care in durability measures — using many galvanized parts, zincrometal, multi-coat protection and full undercoating — has paid off, year after year. The Swedish Motor Vehicle Inspection Company has proven that Volvos last longer than any other car on the road in Sweden. Since 1966, Volvo has had a steadily higher life expectancy there, reaching an average longevity of over 16 years in 1974, well ahead of Mercedes-Benz, BMW, Volkswagen, Peugeot and Audi (in that order).



Volvo's reputation for toughness isn't just because of thick paint. Volvo also invests heavily in sophisticated testing and quality-control equipment and procedures. This machine, for instance, can put years of stress and wear on a seat in a matter of days. It represents Volvo's dedication to quality.

Volvo long ago recognized the value of steel-belted radial-ply tires. They can not only offer lower rolling resistances than conventional bias-ply types (lower rolling resistances means better fuel economy), they are also the most durable of popular designs.

Rubber-faced aluminum safety bumpers are designed to take normal parking lot bumps without damage to themselves or the car body. Backed with special impact absorbing cylinders, the aluminum alloy bumpers can take a 5-mph barrier test crash with no damage to the body or safety related components.

Exhaust components are particularly susceptible to rust, so Volvo aluminizes the "cool" pieces of the exhaust system—such as the mufflers—to minimize rust penetration. In addition, the underbody receives thorough rust-proofing treatments, while a rust-inhibiting agent is injected into 50 body cavities.

Each individual spot-weld in a Volvo is strong enough to support the weight of the entire car. And there are over 4000 welds. That's strength.

Fighting rust demands more than just paint. That's why Volvo uses a "slipstream" ventilation system to keep moisture from collecting in rust-prone spots like door sills. Preventing rust from the inside is more effective than covering it up.

Every part of the body most susceptible to rust receives a thick layer of zinc. Zinc galvanizing protects against corrosion by an electrolytic principle which makes corrosion attack the zinc—which will *not* rust—instead of the steel, which will.

The 1979 Volvos at a glance

Engine: 262C, 264GL, 265GL
Model B27F, V-6 configuration light-alloy cylinder heads and block with wet steel cylinder liners. Valves actuated by overhead camshafts (one per cylinder bank) operating rocker arms. Displacement: 163 cubic inches (2673 cc). Horsepower: 127 @ 5500 rpm (SAE-net). Torque: 146 ft. lbs. @ 2750 rpm (SAE-net).

Engine: 242, 244, 245, 242GT
Model B21F, in-line four cylinder, cast iron block with five main bearings, light-alloy "cross-flow" cylinder head. Valves actuated by a belt-driven, single overhead camshaft operating on bucket-type tappets. Displacement: 130 cubic inches (2127 cc). Horsepower: 107 @ 5250 rpm (SAE-net) for all models. Torque: 117 ft. lbs. @ 2500 rpm (SAE-net); 114 ft. lbs. @ 2500 rpm (SAE-net) with LAMBDA-SOND®* emission control.

Exhaust Emission Control
Lambda-sond®* three-way catalyst on all models except 242, 244, 245 models in selected market areas.

Fuel System
15.8 gallon tank, electric fuel pump. Unleaded regular fuel with at least 91 RON octane.

Cooling System
Sealed "tropic" system with permanent anti-freeze coolant. Translucent expansion tank for convenient checking.

Electrical System
12-volt system features solid-state, breakerless ignition for fast, reliable starting. 55 Amp-rated alternator and 70 amp hour battery (60 amp on 240 Series). Starter motor output 1.1 hp.

General Data:	Inches	cm
Wheelbase (All Models)	104.0	265
Overall Length (All models)	192.5	489
Overall Width (All models)	67.3	171
Overall Height (242/244/264GL)	56.3	143
(245 & 265GL)	57.5	146
(262C)	53.9	137
Legroom, Front (All except 262C)	40.7	103.5
(262C)	40.2	102.2
Legroom, Rear (All sedans)	36.6	93
(Station Wagons)	36.4	92
(262C)	33.5	85
Seating Capacity (All except 262C)	5 people	
(262C)	2 + 2 Tourer	
Trunk Capacity, Sedans (SAE)	13.9 cu.ft.	
(262C)	13.7 cu.ft.	
Cargo Capacity, Station Wagons (SAE)		
Rear Seat up	41.1 cu.ft.	
Rear Seat down	76.0 cu.ft.	

Drivetrain: 260 Series
Manual: Four-speed, fully-synchronized transmission with floor-operated shift lever with leather cover. Electrically operated overdrive with a shift lever switch operates in fourth gear. Gear ratios: 1st 3.71:1, 2nd 2.16:1, 3rd 1.37:1, 4th 1.00:1, Overdrive 0.80:1. Final drive ratio 3.73:1.

Automatic: Three-speed with a floor-mounted shift lever and an illuminated quadrant with a PRND21 pattern. Final drive ratio 3.54:1.

Drivetrain: 240 Series
Manual: Four-speed, fully-synchronized transmission with floor-operated shift lever. Optional electrically-operated overdrive with a shift lever switch operates in fourth gear (standard on the 242GT). Gear ratios: 1st 3.71:1, 2nd 2.16:1, 3rd 1.37:1, 4th 1.00:1. Overdrive 0.80:1. Final drive ratio 3.91:1.

Automatic: Optional three-speed automatic with a floor-mounted shift lever and an illuminated quadrant with a PRND21 pattern. Final drive ratio 3.73:1.

Steering System
Rack-and-pinion gear with five-stage safety column. Variable ratio power-assist is standard on all models except the 242 and 244 with manual transmission. Turns lock to lock: 3.5 (4.3 without power-assist). Turning circle 32'2" (9.8 meters).

Suspension
Front: McPherson strut design incorporating coil springs and telescopic shock absorbers. Firmer shock absorbers are standard and a heavier stabilizer bar further increases roll stiffness.

Rear: Rigid "live" axle is located by longitudinal control arms and torque rods. Lateral location by track rod. Coil springs and telescopic shock absorbers, gas-filled on the 264GL and 262C for better ride control. Heavier rear stabilizer bar further improves cornering on all sedans and the 245 station wagon. The 265GL has a fully automatic load-leveler.

Note: The 242GT is equipped with heavier stabilizer bars front and rear plus fast response shock absorbers on the rear.

Wheels and Tires
Michelin steel-belted radial tires are standard. They are fitted on wide-offset 5.5" Jx14" pressed steel wheels. The 264GL and 262C have 25 spoke light-alloy wheels and the 242GT has light-alloy GT wheels. A "Space Saver" spare tire with electric air compressor is standard on the 242GT and 262C.

Tire Size:

264GL & 262C	185/70-SR14
265GL & 245	185-SR14
242 & 244	175-SR14
242GT: Pirelli CN36	185/70-HR14

Brake System
Self-adjusting disc brakes on all four wheels. Tandem type 4:1 power assist. Pressure relief valves on rear brakes. Dual "triangle-split" hydraulic brake circuits with stepped-bore master cylinder to maintain near-normal pedal effort even if one circuit fails, connects both front wheels and one rear wheel on each circuit. Special ventilated front discs are standard on all 260 Series models and the 242GT. Center handbrake operates mechanically on separate rear wheel drums.

Body
Unitized construction with energy absorbing front and rear ends with central "safety cage." Hot-dipped galvanized steel in rust susceptible areas. Zincrometal is also used. A special anti-corrosive coating is sprayed inside the doors, rocker panels, etc. Factory undercoating and special stone chip resistant paint. Exhaust system is partially aluminized.

Additional Standard Equipment: 240 Series
Fuel injection, solid state ignition, fully adjustable front bucket seats, adjustable lumbar support, tinted glass all around, 12-outlet heating and ventilation system, fresh air inlet, intermittent windshield wipers, full interior carpeting, front door operated dome light, key and light warning buzzer, storage compartment on front doors, vanity mirror, and lockable, illuminated glove compartment, quartz crystal clock, day/night rear view mirror, dual outside mirrors, child-proof rear door locks, electric rear window defroster, stereo door speakers and radio antenna, trip meter, light integrity sensor, passenger assist handles, rear seat center armrest (sedans), four three-point, self-adjusting safety belts, and one rear lap safety belt, luggage compartment light, cloth upholstery with vinyl trim (all vinyl in station wagon), electric rear window wiper and washer on the 245, bright anodized bumpers with rubber facing, body side molding, twin tailgate gas cylinders on the 245. 242GT: Custom interior upholstery and trim, tachometer, GT steering wheel, grille-mounted fog lights, GT suspension/handling package, sliding steel sunroof on selected models, air spoiler, and special exterior trim and Mystic Silver metallic paint.

Additional Standard Equipment: 260 Series
240 Series equipment plus: sliding steel sunroof, metallic paint (and selected non-metallic colors), leather-faced upholstery with matching vinyl trim and color-coordinated interior, tachometer, heated driver's seat, map pockets on front seat backs, delayed switch-off of dome light, grey velour upholstery with Allegheny Black finish on 264GL, power windows, power remote-controlled rear view mirrors, air conditioning, plush carpeting including trunk or cargo area, 25-spoke light-alloy wheels on 264GL and 262C, engine light, intermittent rear window wiper and washer on 265GL, automatic load-leveler on 265GL, wide rubber body side molding. 262C: Custom leather interior by Bertone, cruise control, heated passenger seat, deluxe interior map lights, black vinyl roof with Mystic Silver metallic finish, power antenna. 264GL radio antenna is an accessory.

Accessories
Volvo has a wide variety of accessories, including stereo radios, CB radio and tape players, designed to tailor-make a Volvo to your individual specifications.

Warranty and Maintenance
Volvo offers a 12 month limited warranty without mileage restriction. To help you fully understand your warranties, servicing needs and maintenance schedules, Volvo has prepared a descriptive booklet.

Leasing
Your dealer can advise you of the possible advantages of leasing. Consider a variety of plans, including full-service leasing with maintenance and insurance coverage, available from 12 to 48 month periods.

Overseas Delivery
Volvo's comprehensive overseas delivery plan is designed so you can get the most out of your European vacation or business trip. All the details, even complete financing, can be arranged in advance. See your Volvo dealer to develop a plan that accommodates your itinerary and schedule.

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