

# Where your money goes when you buy a Volvo.

#### Every Volvo is an investment in longevity.

According to the Swedish Motor Vehicle Inspection Bureau, the life-expectancy of a Volvo in Sweden now averages 18.7 years. That's longer than any other car on the road in Sweden...longer than Mercedes-Benz, BMW, Volkswagen, Peugeot, or Audi.\*

# The engine in your Volvo has been carefully selected for your Volvo.

During the 1950s and 60s, when the name of the game with most auto makers was horsepower, Volvo maintained that horsepower alone didn't produce high performance, and it certainly didn't promote fuel economy. As usual, time has borne us out.

The engines in Volvo models deliver more torque, not just unbridled horsepower,

over a wide range of speed—so that you can enjoy better performance and efficiency, from initial acceleration on through highspeed passing situations.

Since many technical variables are involved in Volvo's performance equation, our engineers assume the responsibility for matching engines with models. Consequently, every Volvo delivers optimum performance.

You may, of course, choose between manual and automatic transmissions.

\*Of course, driving conditions in America may differ, so your Volvo may not last as long. Then again, it may last longer.

DL

 Two-door
 Four-cylinder

 Four-door sedan
 Four-cylinder

 Six-cylinder Diesel

When you get down to sticker price, the DL sedan -the basic Volvo-is positively luxurious.



By design, Volvos are eminently controllable cars.

Many cars that are relatively easy to control under ideal weather and road conditions become difficult to control in a moment of panic. Volvos, on the other hand, are designed to respond to your reactions in a crisis just as they respond to your actions under normal driving conditions.

A number of components and interrelated systems combine to give the Volvo its distinctive handling characteristics.

Power-assisted rack and pinion steering is standard on all Volvos. Volvo engineers believe it is the most responsive and reliable steering system that can be built into a car.

Fewer moving parts account for its reliability. Its responsiveness to your hands on the wheel gives you a consistent feel for the road. All Volvos come as close as possible to the ideal 50-50 front-to-rear weight distribution, so they're easier to control when cornering or braking hard.

The weight of a well-balanced car is distributed as evenly as possible between the front and rear wheels.

Volvo's 51% front/49% rear weight distribution without passengers or luggage changes to approximately 45% front/55% rear when the car is fully loaded.

The fact that the weight distribution changes only moderately, even when you're carrying luggage or extra passengers, means that the car maintains its balance and therefore its handling predictability.

DL

Four-cylinder Six-cylinder Diesel

"If you think of an imported station wagon as embodying Old World quality and limitless practicality, then Volvo is the standard bearer." MOTOR TREND's Import Car Buying Guide.

Wagon



# All Volvos have power-assisted disc brakes on all four wheels.

Disc brakes tend to resist brake fade better than conventional drum brakes. Better still, Volvo's disc brakes, unlike any others sold in America, have Volvo's pioneering dual triangular split brake circuit system. Each brake circuit simultaneously and independently serves both front wheels (the ones that do most of the braking), and one opposite rear wheel. Should one system fail, the other provides about 80 percent of the braking power of the whole system.

Volvo's stepped-bore master brake cylinder lends additional integrity to the dual brake circuit system. If one circuit fails and the brake fluid chamber drains, the master brake cylinder will sustain the pressure in the remaining brake circuit, enabling you to stop the car with a near normal amount of pressure on the brake pedal.

# The Volvo suspension gives the driver precise steering control, but doesn't sacrifice comfort.

Each front wheel is independently suspended by a McPherson strut, an ingenious device that incorporates a coil spring and a shock absorber into one unit. In other words, your Volvo is designed to respond immediately to your steering commands, and doesn't sway its way between lanes or around corners.

In back, Volvo engineers have selected a "live" rear axle to do the job of keeping the rear wheels on the road at the same angle. As a result, Volvo's road-holding ability remains as consistent as possible in all driving situations.

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Four-door sedanFour-cylinder<br/>Six-cylinder DieselWagonFour-cylinder<br/>Six-cylinder Diesel

Although the Volvo GL delivers fuel economy, it can satisfy even an oil shiek's penchant for opulence.



For better traction, all Volvos have steel-belted radial tires mounted on wide-base rims and centered on lathe-turned hubs.

It's through the tires that you know what's going on — on the road. Volvo engineers select the type and brand of radial to match the specifications of each model and to complement the characteristics of the other Volvo components.

Volvo engineers were committed to researching and improving automobile safety long before it was required by law—let alone fashionable.

By the time legislators and manufacturers woke up to the importance of auto safety, Volvo had become the model to emulate.

Certain Volvo features—the steering, braking, and suspension systems—are designed to help you maneuver your way out of trouble. A variety of other features are designed to help protect you when you can't avoid an accident.

An all-steel, spot-welded unitized body creates a kind of cage that surrounds Volvo passengers on all sides, and provides the foundation for Volvo's passenger safety. Front and rear crumple zones—areas designed to give themselves up in the event of a crash help absorb the force of an impact rather than transmitting it all to the passenger compartment. Each door is reinforced with a tubular steel bar, which is attached to the door frame by a patented Volvo process. Three-point seat belts, with inertia reels and Volvo's patented slip-joint anchors, help protect the two front-seat passengers *and* the two outside rear passengers. (A lap belt is provided for the middle rear-seat passenger.) Comforting information.



Two-door sedan Four-cylinder Four-cylinder Turbo

"The GLT...especially the Turbo...shows that Volvos can do more than get out of their own way."

-Csaba Csere, CAR AND DRIVER



In every Volvo form follows function; they're designed and built to fit you, rather than requiring you to fit them.

Every Volvo is a study in ergonomics—the science of making machinery more comfortable and more efficient for people to use.

The doors open wide, to an angle of nearly 80 degrees. High seats and a properly positioned steering wheel make it unusually easy to get in and out of your Volvo.

The front seats themselves are famous: they're comfortable because they're orthopedically designed and adjust nine different ways to accommodate almost every conceivable human shape and size in an anatomically correct position. The unique, adjustable lumbar support eases pressure on the spine, the cause of back tension and driver fatigue. Be sure to climb into the back seat. You'll find another welcome surprise: leg room.

Your Volvo and its instrumentation are designed not to get in your way. Accordingly, all Volvo sedans and wagons have better than 90-percent *all-around* visibility from the driver's seat. The front door pillars, for instance, are no wider than the distance between your eyes, so you look through, not around, them. You can operate the Volvo turn indicator, headlight dimmer, and windshield wiper/washer without taking your

GLT Wagon

Four-cylinder Four-cylinder Turbo

"Stunned! is the only way to describe my reaction to the first high-speed corners and bends I took with Volvo's GLT wagon..." —Bill Hartford, POPULAR MECHANICS.



hands off the steering wheel. All the dials, gauges, and switches are easy to see, day or night, and are easy to reach. To reduce muscle tension and provide a more stable driving position, Volvos have a *left* foot rest, so both the driver's feet can be comfortably positioned on a similar plane.

A twelve-outlet ventilation and heating system rapidly, evenly, and quietly distributes air throughout the Volvo.

Ergonomics even extends to the luggage compartments of Volvo sedans. They're

deep, with flat floors, so you can set luggage up vertically.

In the Volvo, virtually nothing has been overlooked. Perhaps that's why Volvos are cars people swear by, not at.

In an industry-wide survey\* of new-car buyers, one of the questions asked was, "how do you rate your new car on Value for the Money."

In response to that question, fully 96.2% of new Volvo owners rated their cars in the three top categories: "Excellent" (54.5%), "Very good," and "Good."

When you know how the Volvo is made, the reason for its high rating is hardly a surprise.

\*Beta Research Corporation, 1980 New Car Buyers Survey.

GLE Sedan

Six-cylinder

The gratification, the comfort, the interior quiet, the ride—for less than a Mercedes.



# THE 1982 VOLVOS AT A GLANCE:

# DIMENSIONS AND WEIGHTS

Wheelbase		104.3 in.
Overall length		192.4 in.
Overall height,	Sedans	56.2 in.
	Wagons	57.5 in.
Legroom,		
Front	(all models	) 39.8 in.
Rear	Sedans	36.6 in.
	Wagons	36.4 in.
Trunk capacity,	Sedans	13.9 cu. ft.
Cargo capacity, Wagons		41.1 cu. ft.
Rear seat down	1	76.0 cu. ft.
Approximate c	urb weights	5

DL, GLT, GL sedans 2891-3065 lbs. Diesel, GLE sedans 3120-3149 lbs. DL, GLT wagons 3129-3262 lbs. Diesel wagons 3230-3263 lbs.

#### BODY

Unitized. Central passenger safety cage with energy absorbing front and rear ends. Rustproofing includes use of galvanized steel in susceptible areas; anticorrosive coating inside doors, rocker panels, etc.; extensive undercoating and special stone chip resistant paint. Aluminum tailpipe and muffler.

**B21F ENGINE: DL, GL GLT\* MODELS** Fuel injected in-line four, cast iron block with light alloy "cross-flow" cylinder head. Overhead camshaft. Lambda Sond® emission control. 

Displacement:	130 cu. in.
Compression	
Ratio:	9.3:1
Horsepower:	98 @ 5000 (S.A.E.)
Torque:	112 @ 3000 (S.A.E.)
Sealed cooling	
system:	9.8 qts. auto./
	10.0 qts. manual
Fuel tank:	15.8 gallons, unleaded
	91RON

#### **D24 ENGINE: DIESEL MODELS**

In-line overhead cam, six-cylinder diesel with indirect fuel injection into swirl chambers. Displacement: 145 cu. in. Compression Ratio: 23.0:1 Horsepower: 78 @ 4800 (S.A.E.) 98 @ 2800 (S.A.E.) Torque: Sealed cooling system: 9.7 gts. auto./ 9.9 gts. manual 15.8 gallons Fuel tank:

\*California non-turbo GLT has B21F LH Lambda engine: HP 105 @ 5400, torque 119 @ 3000.

## **B21F-T: GLT TURBO MODELS**

Fuel injected, in-line four, cast iron block with light-alloy "cross-flow" cylinder head. Overhead camshaft. Lambda Sond<sup>®</sup> emission control. Exhaust-driven turbo-compressor. Displacement: 130 cu. in. Compression Ratio: 7.5:1 Horsepower: 127 @ 5400 (S.A.E.) 150 @ 3750 (S.A.E.) Torque: Sealed cooling system: 9.8 qts. auto./ 10.0 qts. manual Fuel tank: 15.8 gallons, unleaded 91RON

#### **B28F ENGINE: GLE MODEL**

Fuel injected V-6 with light-alloy cylinder heads and block; wet steel cylinder liners. Overhead camshafts. Lambda Sond<sup>®</sup> emission control. Displacement: 163 cu. in. Compression Ratio: 8.8:1 Horsepower: 130 @ 5500 (S.A.E.) 153 @ 2750 (S.A.E.) Torque: Sealed cooling system: 11.5 qts. Fuel tank: 15.8 gallons, unleaded 91RON

## ELECTRICAL SYSTEM

12V, solid-state ignition. 55 amp alternator, all Diesel models. 70 amp alternator on all other models. 60 amp hour battery on four-cylinders; 90 amp on diesels; 70 amp on sixcylinders.

### DRIVETRAIN

Manual: Four-speed fully synchronized transmission. Electrically operated overdrive which automatically releases when you shift from 4th to 3rd gear. Gear ratios: 1st 4.03:1; 2nd 2.16:1; 3rd 1.37:1; 4th 1.00:1; overdrive 0.80:1. Final drive ratio: B21F 3.54:1; B21F-T 3.73:1; D24 3.54:1.

Automatic: DL, GL, and GLT models: four-speed with overdrive fourth gear; floor-mounted shift lever, with an illuminated PRND21 pattern. Final drive ratio: B21F 3.91:1; B21F-T 3.73:1. Diesel and GLE models: three-speed with a floor-mounted shift lever, with an illuminated PRND21 pattern. Final drive ratio: D24 3.31:1; B28F 3.54:1.

# STEERING SYSTEM

Rack-and-pinion gear. Servo-assist is standard on all models. Turning circle: 32'2". Turns lock-to-lock: 3.5.

### SUSPENSION SYSTEM

Front: McPherson strut incorporating coil springs and telescopic shock absorbers. Stabilizer bar. GLT's have larger diameter stabilizers and gasfilled shocks. GLE has gas-filled shocks. Rear: Rigid "live" axle located by longitudinal control arms and torque rods. Lateral location by track rod. Coil springs and telescopic shock absorbers. Stabilizer bar. The GLT sedan has a larger diameter stabilizer and gas-filled shocks.

Tires: Steel belted radials. Size: DL gas sedan 175SR14; GLE sedan, GL gas sedan and all diesel sedans 185/ 70SR14; All wagons 185SR14; GLT sedan and wagon 185/60-HR15-P6.

#### **BRAKE SYSTEM**

Self-adjusting disc brakes on all four wheels. Tandem type power-assist. Ventilated front discs are standard on the Diesel, GL, GLT, and GLE models. Each circuit of the dual triangularsplit hydraulic brake system connects both front wheels and one rear wheel. Stepped-bore master cylinder maintains near-normal pedal effort should one circuit fail. Handbrake operates mechanically on separate rear wheel drums.

## VOLVO

The factory reserves the right to make changes at any time, without prior notice, in prices, colors, materials, standard equipment, specifications, and models; also, to discontinue models. Roof racks are accessories.

