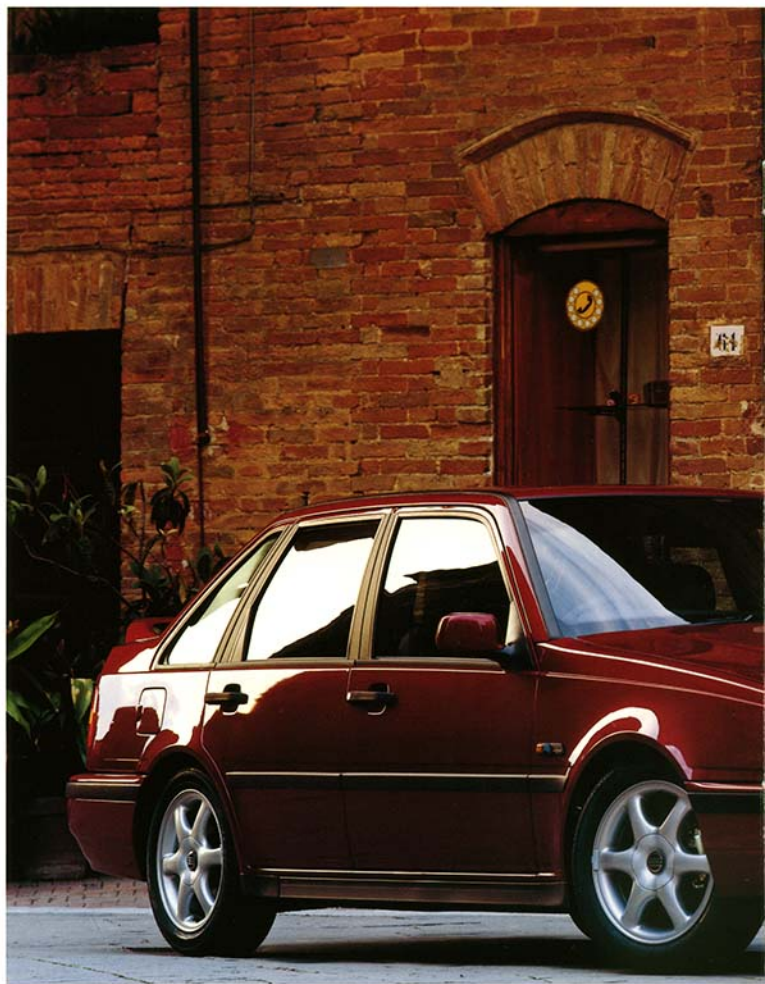


VOLVO
440









Volvo 440 GLT



Full of surprises



440 GLT



Take a look at a Volvo 440 and you will be surprised at how much more it has to offer than safety and reliability.

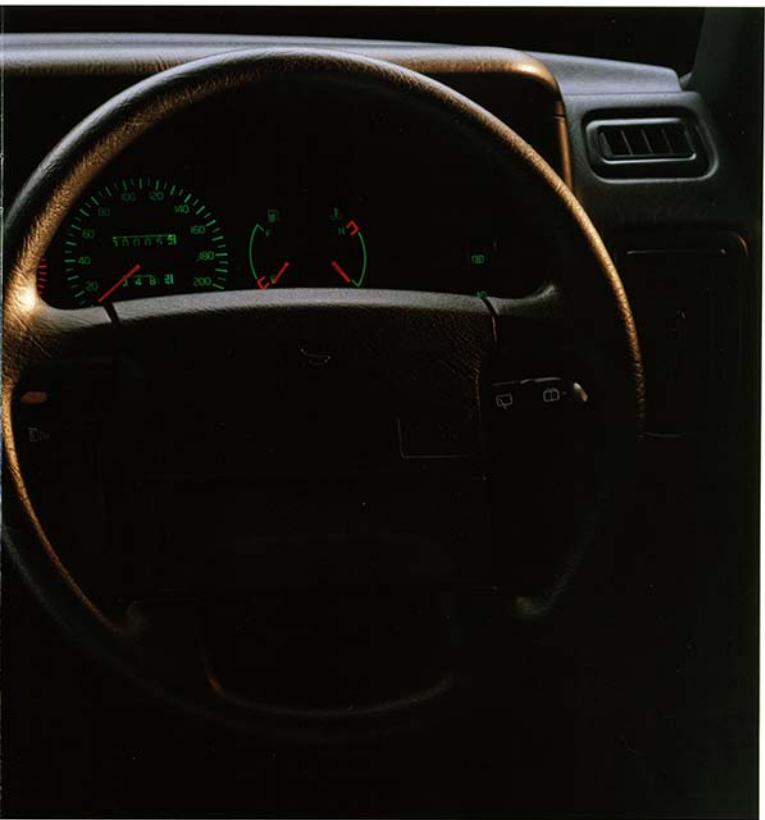
You will discover that it has character and performance to surpass most other cars in its price range. It outshines the competition - even cars known for their good driving capabilities - proving that a really safe car can also be fun to drive.

Whether you prefer the 440 GL or the more sporty 440 GLT pleasant surprises are in store.

So go ahead, satisfy the driver's urge in you. Take the wheel of a 440 and give it a try!



Volvo 440 GLT



Behind the wheel
— that beautiful feeling of having
everything under your control





1 The air conditioning system means added comfort and safety on hot muggy days. It allows you to recirculate ninety per cent of the air to cool the cabin quickly if the car has been standing in the sun. It also allows you to shut out dust and exhaust fumes and make the interior a cool, relaxing place in which to travel.

2 Electrically-operated windows at the front and electrically operated and heated outside rear view mirrors are standard on 440 GLT.



3 The steering wheel is vertically adjustable to ensure a comfortable and restful arm position for the driver.

4 With cruise control (accessory) you can relax and drive in even greater comfort. Engage it when you reached the speed you want, then release the accelerator – the car will maintain the set speed until you touch the brake, clutch or accelerator. Then you can determine the speed yourself or order the cruise control to resume the set speed. Using the button at the end of the lever, the set speed can be adjusted upwards or downwards.

5 The illuminated ignition lock is easy to find, even when it is dark outside.



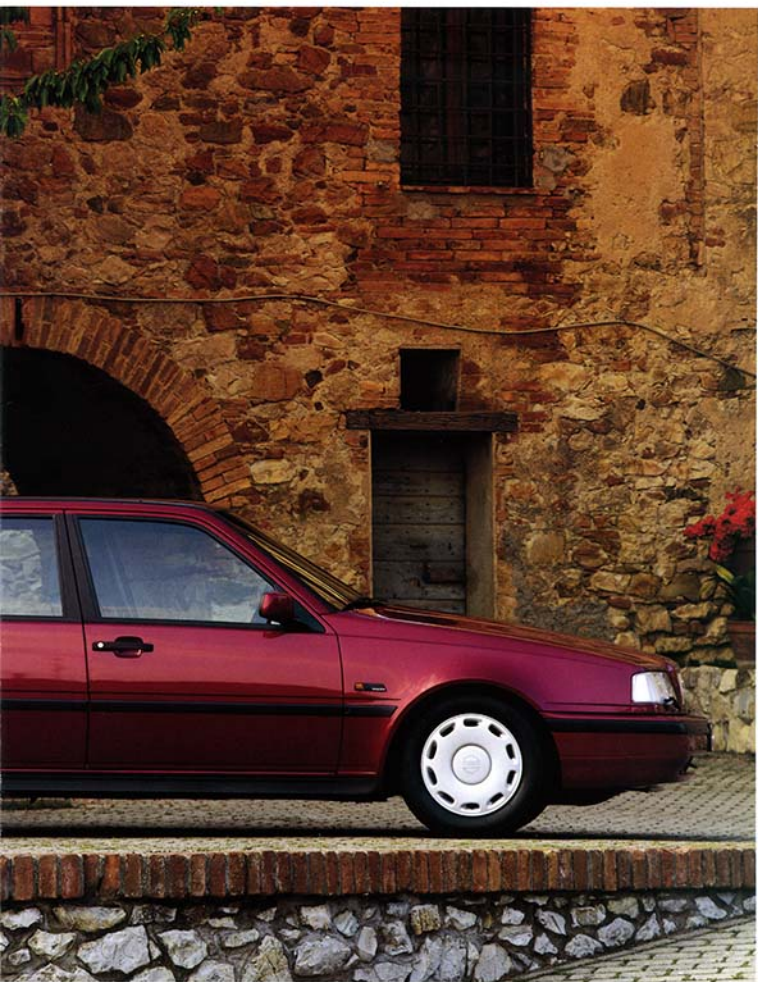




Practicality in
the service of comfort



Volvo 440 GL







1 In the Volvo 440 the rear seat backrest can easily be folded forwards to provide space for luggage instead of passengers. It can be divided so that one third, two thirds or the entire backrest can be folded down.

With the whole backrest folded down, the Volvo 440 holds 874 litres. The tailgate extends from the roof right down to the bumper making it very easy to load bulky or heavy items into the load space.

Central locking is standard.

2 The 440 GLT has reading lamps front and rear. In addition to this the ignition lock lighting and the interior lighting remain on for 15 seconds after the doors have been closed in the GLT. You do not need to turn on the light to find the seatbelt catches when it is dark outside. The lights go off immediately as soon as you turn the ignition key.



3 To ensure the comfort of all occupants, even on long journeys, orthopaedic specialists have been involved in the design of the seats.

Both front seats allow smooth adjustment of backrest inclination and lumbar support on the driver's side. The height of the seat cushion can be adjusted at both the front and rear edges.

The rear of each front-seat backrest has a recess to allow increased legroom for rear-seat passengers. The almost vertical side windows add to the sense of interior space and help keep out the heat of the sun.



440 GLT with accessory six-spoke alloy wheels



The secrets of a
great driving experience

High torque for fast overtaking

A transverse engine with front-wheel drive is the conventional way of optimizing space in a car. A transverse in-line engine also provides better protection in a head-on collision by absorbing and dissipating the impact more efficiently.

The Volvo 440 features a powerful 2-litre engine which provides exceptional pulling power with at least 90% of the torque available at the low end of the engine speed range - so response is always there when you need it, without resorting to frequent gear changing.

The 2-litre engine combines high performance for fast overtaking and highway cruising speeds with remarkably low average fuel consumption.

Sophisticated technology

Good basic engine design is backed up by sophisticated electronics to minimise fuel consumption and exhaust emissions and ensure that the engine runs efficiently and reliably. Every Volvo has a three way catalytic converter with Lambda Sond as standard. This system purifies over 90% of the exhaust gases - more than legislation requires in most countries including Australia - and is one of Volvo's many environmental innovations. An environmental warning lamp on the instrument panel indicates any fault which might affect the emission control system.

The breakerless electronic ignition system, valves, and camshafts require no adjustment during the first 90,000km - cutting edge technology that results in lower service requirements and low running costs.

A diagnostics system constantly monitors the ABS brakes (optional), airbag system (optional) and other electronically controlled components. If the diagnostics unit registers any fault - even a transient one - it is stored in the memory as a code. These codes can be read by any Volvo service workshop ensuring fast, reliable and economical repairs.

Transmissions for comfort and control

The 440 GL and GLT are available with a choice of manual or automatic transmission - both with the top gear as an energy saving and easy running overdrive.

The four speed manual gearbox is easily handled with distinct gear lever positions. The automatic makes optimum use of the engine's power and torque to give lively response and quiet cruising.



The sophisticated modern technology in the powerful, clean 2-litre engine means plenty of pulling power over a wide engine-speed range.



The extremely reliable and powerful new 2-litre engine offers excellent performance and includes a microprocessor-based engine management system to control ignition timing and fuel injection.



The Cd value of the Volvo 440 GLT is only 0.34. The combination of fine-tuned front and rear suspension, precise and light steering and powerful braking system adds up to a very light and stable car which is great fun to drive.



The secret behind the pleasure of driving a Volvo 440 lies in the perfect compatibility between chassis and driveline.

Safety and driving pleasure hand-in-hand

In a Volvo, dynamic safety is a blend of constraint and predictable handling, stability and a functional driving environment. The steering gives an excellent feel for the road, an almost total absence of roll in cornering and outstanding roadholding, made all the more enjoyable by the effortless performance of a smooth and responsive engine.

Much of the pleasure in driving a Volvo 440 comes from the stable and well balanced chassis which holds no surprises for the driver, no matter what the conditions.

The Macpherson strut front suspension features special anchorage points and a direct-acting anti-sway bar. The system ensures direct and rapid steering response with excellent directional stability, even in cross winds.

The rear-wheel suspension consists of a live rear axle with Watt links and Panhard rod, for consistent wheel angles and constant wheelbase and track, with no undesirable steering effects. This is fundamental to really good roadholding, particularly in poor road conditions. The double-acting hydraulic shock absorbers are fine-tuned for each model. The low unsprung weight and long spring travel add to the outstanding sense of comfort.

The Volvo 440 is fitted with progressive power assisted rack-and-pinion steering. The direct ratio around the centre position ensures stability and good feedback from the road at cruising speeds without sacrificing manoeuvrability in parking or city driving. The turning circle of only 10.35 metres is an added advantage.

The diagonal-split dual-circuit four-wheel disc brake system gives the Volvo 440 models extremely safe and well-balanced stopping characteristics. One illustration of the powerful progressive braking capability is that a fully laden Volvo 440 driving at 100 km/h can be brought to a standstill in 3.9 seconds. Thanks to the design of the sliding brake callipers and the materials used in the system, overheating is avoided so that the brakes always function impeccably without any suggestion of fading.

Like all Volvos the 440 models have asbestos-

free brake linings and a high-capacity servo for powerful, controlled braking.



ABS brakes are optional on 440 GL and GLT models. When braking sharply, particularly in treacherous road conditions, the system keeps the wheel just on the brink of locking in order to prevent the car from skidding. This is rather like pumping the brake pedal, but it is far more effective, and it does not impair steering capability since the wheels never lose their grip.

The safety of built-in protection

There are different ways of determining how safe a car is. The laboratory can measure the safety of individual components but the ultimate test is what happens in real life.

Through Volvo's own insurance company, Volvia, we receive information on all serious accidents in Sweden if a Volvo car is involved. We also maintain contact with medical experts in order to obtain information on injuries, since the early 1970s we have been researching and analysing over 2,000 accidents every year – the more serious or exceptional the accident, the greater the detail of the study. This has provided us with comprehensive data and a unique body of statistical material.

When we compare the statistics with our laboratory experiments, we can predict how new designs will affect the safety of our cars. We perform computer simulations on the more common types of collision in order to reduce the need for full-scale crash tests.

All this information is enabling us to develop safety features faster than ever.

The protective safety module

For optimum safety in a collision, the front and rear of the car have been designed as crumple zones all the way from the energy-absorbing bumpers to the passenger compartment, which consists of a robust safety module of steel – around you and all your passengers.

The energy-absorbing steering column is made up of several sections that collapse under the force of an impact so as not to intrude into the passenger compartment.

Superior side-impact protection

Side impacts are the second most common type of collision – and the one in which the occupants are most vulnerable. In addition to a protective steel member in each door, there are similar transverse reinforcements beneath the dashboard and under the front and rear seats. In a side impact, they interact with the roof, door pillars and front and rear roof cross-members in order to dissipate the impact throughout the car body and away from the occupants, reducing any intrusion into the passenger compartment.

The doors also contain effective new energy-

absorbent panels for improved protection in a side collision.

Safety belts and airbag – a complete system

The heart of the safety system in the Volvo 400 Series – as in all Volvo cars – is the three-point inertia-reel seatbelt. For the driver, this can be supplemented with an airbag fitted in the centre of the steering wheel. In a sufficiently severe impact, it inflates in a fraction of a second to protect the driver's head. The airbag combines effectively with the seatbelt to further reduce the risk of injury to the chest, neck and face.

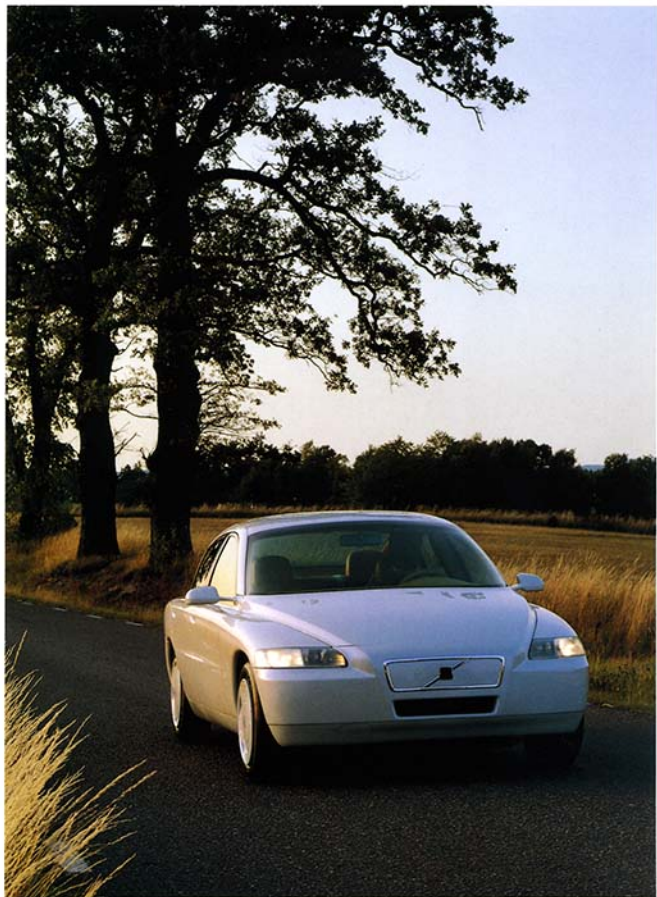
The correct belt height and an effective tensioner

In order for the three-point seatbelt to be really effective, it is important for the shoulder strap to be at the right height in relation to the height of the occupant and the position of the seat. In the Volvo 440 the front-seat reels are placed in the door pillars on each side and designed so that the belt automatically adjusts to the shoulder height of the occupant. This is done by simply pulling out the belt and releasing it again over the shoulder.

Volvo's belt tensioners for the front seats make the seatbelt even more effective. In a collision, it reacts in 25 milliseconds and tightens the belt the extra centimetres required to ensure that it restrains the body as securely as possible.

All five seats are designed to prevent the occupants from sliding under the seatbelts in a collision.





The Volvo ECC is a hybrid-electrical environmental concept car. It has an electric motor powered by batteries which are in turn charged by a gas turbine-driven generator. When the car is at a standstill the batteries can also be charged from the mains. In city traffic it can be driven on electricity alone, and on longer journeys the gas turbine can be engaged to charge the batteries and provide extra power. In normal driving, and with the types of mains power generation used in Europe today, the total environmental load is only about half that of a conventional car.

Cars and the environment.

What is Volvo doing?

Like so much else in life, cars present us with a dilemma.

We all want to breathe clean air, see healthy trees, have clean water in the lakes and the sea and enjoy the sunshine without having to worry about it.

However, we want our cars. They give us freedom. They give us opportunities that were once reserved for a privileged few.

We need our cars. They are one of the foundation stones of the society we have built.

The dilemma is that cars pose a threat to the air, the trees, the water and the solar filter which our atmosphere provides – not just when they are manufactured, but also when they are driven and when they are scrapped.

There is no reasonable short cut to take us past this dilemma. We can, however, do all possible to minimise it.

You can, and we can – and that is exactly what we are doing.

A holistic approach to design

Volvo manufactures only a small percentage of the cars in the world. Still, we have assumed a leading role in making cars safer – and we are doing the same when it comes to cars and the environment.

When we design a Volvo we have a method of taking its environmental load into account so that we can choose solutions for the lowest possible total impact, from “cradle to grave”, from manufacture to scrapping.

We were perhaps the first car manufacturer to eliminate ozone-depleting compounds in manufacture. Today's Volvos contain no asbestos, no mercury, no cadmium – and we are systematically hunting down other hazardous chemicals. We have made a sharp cut in our

emissions of solvents and our main painting facilities use the cleanest technology available. These are just a few examples.

So when you buy a Volvo you have the security of knowing that few cars, if any, involve less environmental impact when they are built.

Tackling the main problem

Most of the environmental impact – around 90 per cent – arises when the car is driven, the main problem being exhaust emissions.

Volvo has done more than any other manufacturer to tackle this problem. As far back as the mid-seventies, we introduced the three-way catalytic converter and Lambda Sond, reducing harmful emissions by more than 90 per cent. Since then, we developed the technology further to ensure that every Volvo is equipped with extremely effective and reliable emission control.

So the best thing you can do for the environment if you drive an older car which has no form of emission control is to get a new Volvo instead.

The car of the future

Today's solutions are not enough, however. At Volvo we are already well ahead with the solutions of tomorrow.

Some of them are currently being tested in the Volvo ECC – the first realistic “environmental” family car. It has room for five occupants, a top speed of 175 km/h and the same range as a conventional car. And it is just as safe as other Volvo cars.

This is important. In the fight to reduce car emissions, it can be tempting to cut down on weight so much that safety is jeopardised. This is not Volvo's solution, however. We do not believe in short cuts. We have come so far without them.



The Volvo 440 GL illustrated is equipped with the following accessories: - Vesa alloys wheels, rear spoiler, fog lamps and safety net. (Headlamp washer/wipers not included in Australian specification).



Quality accessories
for that purely personal touch





Your Volvo 440 should suit your own practical requirements and personal style. This is why there is a wide range of extra equipment to choose from, all designed and manufactured to fit your own Volvo.

You will find some examples on these pages. You can often save by ordering this equipment at the same time as you order your car.

1 Tow bar. For towing loads up to 1,200 kg.

2 Steel safety net. Prevents luggage from being thrown forward onto the driver or passenger when braking hard. Can be folded out of the way when not in use.

3 Luggage compartment mat. Protects the standard carpeting from dirt and moisture. Plastic and textile mats also available for the passenger compartment.

4 Pollen and dust filter. Keeps the interior of the car free from harmful particles.

5. Volvo Alarm System. Remote-controlled alarm. The remote controller activates the alarm at the same time as the central locking. Also available: The Volvo Security Immobiliser with complete engine disable and remote central locking

6 Fog lamps. Fit perfectly in pre-shaped areas in the spoiler. Ventilated housings for long bulb life.

7 Volvo offers an attractive range of alloy sports wheels. Left to right: Vesa (6"x15"), Taurus (6"x15"), and Cetus (5.5"x15").

8 Armrest with cupholder. Raised armrest with two cupholders can be pulled out for two cups or bottles each - one in front, one behind.

The range of Volvo accessories is presented in the Genuine Volvo Accessories Brochure, which you will find at your Volvo dealer.

Standard & extra equipment

	440 GL	440 GLT
COMFORT		
Air conditioning	●	●
Asymmetrical split, seat backrest	●	●
Central door/boot lock	●	●
Clock	●	●
Driver's door lock illumination	–	●
Driver's seat, height adjustable	●	●
Electrically operated heated door mirrors	□	●
Electrically operated windows/front	□	●
Plush upholstery	●	–
Migrano/leather upholstery	–	●
Power steering	●	●
Reading lamp/front	–	●
Reading lamp/rear	–	●
Rev counter	●	●
Steering wheel height adjustable	●	●
Interior light and ignition illumination/with delay	–	●
Voltmeter	●	●
Warning lamp doors open	–	●
Windscreen wiper intermittent	●	●
AUDIO		
Electrical Aerial	●	●
Four loudspeakers	●	●
AM/FM stereo radio/cassette player	●	●
BODY		
Sport suspension with rear anti-sway bar	–	●
Alloy wheels	□	●
Colour co-ordinated bumpers	●	●
Front spoiler	●	●
Metallic paint	○	○
Rear spoiler	□	●
Tinted glass	●	●
SAFETY		
ABS	○	○
Airbag, driver's side	○	○
Child proof latches, rear doors	●	●
Disc brakes, front and rear	●	●
Front fog lights	□	●
Head restraints, front and rear	●	●
Lockable fuel cap	●	●
Front seatbelt pre-tensioners	●	●
Auto height adjustment, front belts	●	●
Rear fog light	●	●

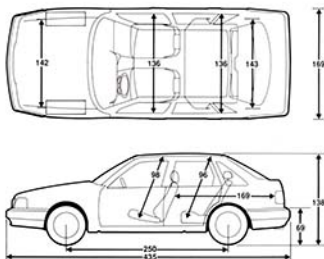
CODE ● standard equipment ○ factory fitted option □ dealer installed accessory – not available

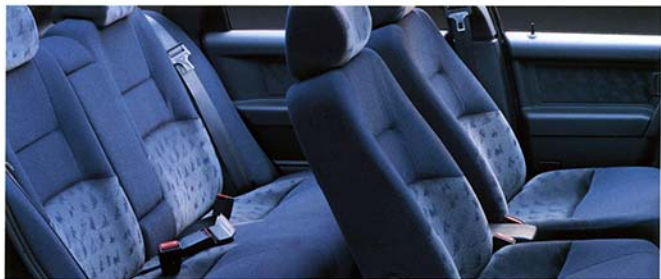
Technical Information

		440 GL and GLT
ENGINE		B 20 F
Configuration		Transverse 4 cyl
Fuel system		intermittent injection
Displacement		1998
Bore/stroke mm		82.7/93
Max output ECE kW/hp/rpm		80/108/5200
Max torque ECE Nm/kgpm/rpm		165/16.8/3500
Compression ratio ¹		9.5:1
Min octane		92 unleaded
Emission control		Catalytic converter and Lambda Sond
TRANSMISSION		
Manual		5-speed
Automatic		4-speed
ELECTRICAL SYSTEM		
Battery capacity (V/Ah)		12/55
Alternator rating (V/A)		14/70
Ignition system		Microprocessor controlled (with diagnostic unit)
FUEL TANK		
Volume (l)		60.0
STEERING GEAR		
Rack and pinion ratio		17.2:1 3.1 turns lock to lock
Turning circle (m)		10.35
WHEELS		
Steel braced radial ply tyres	175/65 TR	185/65 HR
Rims	5.5"x14" (Steel)	5.5"x14" (Alloy)

WARRANTY: - Two year warranty with no limitation on kilometres. The factory reserves the right to make changes to design and equipment without prior notification. Extended warranties for up to 12 or 24 months over standard warranty are also available. Ask your Volvo dealer for details.

NB: - Volvo cars are exported all over the world and specifications vary somewhat in different markets. The pictures and equipment in this brochure are not fully adapted to any individual market so please consult your local Volvo dealer who will be pleased to give you full details.





Blue plush upholstery



Migrano and leather upholstery

Colour and upholstery

CODE NO	COLOUR	PLUSH	MIGRANO/LEATHER
234	White	Grey, Blue	Grey
235	Red	Grey	Grey
306	Silver grey metallic	Grey	Grey
314	Green metallic	Grey	Grey
318	Blue metallic	Blue	Grey
319	Grey metallic	Blue	Grey
322	Red pearl	Grey	Grey



234 White



235 Red



306 Silver grey metallic



314 Green metallic



318 Blue metallic



319 Grey metallic



322 Red pearl

NB: It is not possible to reproduce exact original shades in printed matter. Please ask your Volvo dealer to show you samples.

Owner support

Your Volvo is an investment in safety, reliability and long service life. The best way to maintain that investment is to have your Volvo serviced regularly by an authorised Volvo dealer.

Volvo has a nationwide network of authorised dealers with Volvo trained technicians and factory equipped workshops. The Volvo dealer exists to

ensure that you gain the maximum utility from your Volvo and, when you are ready to sell or trade in, to get you the maximum return on your investment.

Ask your Volvo dealer for details on the Volvo extended warranty programmes for new and used Volvos as well as for the Volvo insurance programme.

VOLVO

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