VOLVO XC90

OVERVIEW

In brief:

Stylish and modern, with the flexibility of up to seven forward facing seats, powerful engines and comprehensive safety features including a Roll Over Protection System (ROPS), the Volvo XC90 is not only highly desirable, but a next generation Sports Utility Vehicle (SUV) that has taken a step ahead of other key premium brand rivals.

The XC90 is Volvo's first SUV, and one that has made a big impact with its innovative interior, comprehensive standard specification, competitive pricing, and advanced safety standards. More than 2,200 customers placed their XC90 orders before it even arrived in UK showrooms. Volvo increased production by nearly 50 per cent to nearly 90,000 per annum to meet the global demand for the XC90, which has quickly become Volvo's best selling model.

The XC90 has won many prestigious SUV awards, both in the USA, homeland of the SUV, and the UK, including *What Car?* magazine's 'Best 4x4' and *The Sun* newspaper's 'SUV of the Year'.

In Full:

- Flagship of Volvo's XC range (XC70 and XC90) with 218 mm of ground clearance.
- Flexible and innovative interior with up to seven, individual forward facing seats.
- Car-like driveability with Electronic Haldex AWD with Instant Traction™.
- S, SE and Executive trim levels, plus Luxury 'Inscription' interiors available.
- Innovative safety: Roll Over Protection System and Roll Stability Control.
- Fully crash tested at the Volvo Safety Centre including compatibility with smaller cars.
- Superior Volvo safety levels, inc. BLIS, WHIPS, SIPS, IC, DSTC, EBD etc.
- Higher standard specifications than rival SUVs from other premium brands.
- High Performance and Premium Sound audio with Dolby Pro Logic II surround sound™.
- Headphone sockets available for rear passengers to listen to different music sources.
- Turbo engines: 272bhp T6 or 210bhp 2.5T petrol engines, and new 185bhp D5 diesel.
- Only 87mm longer than a Volvo V70 estate.
- Healthier Oeko-tex standard compliant, emissions-free interior.
- Produced in Volvo's Torslanda plant in Gothenburg, Sweden.

The XC90 has proved an instant success since its launch in 2003, and has rapidly become Volvo's best selling model, globally and in the UK, with total sales of over 84,000 in 2004, of which over 7,000 came to British customers.

With its modern design, powerful diesel and petrol engines, Roll Over Protection System (ROPS) and seven-seat capability, the Volvo XC90 is not only stylish and desirable – but a next generation Sport Utility Vehicle (SUV) that takes it a step ahead of other key premium brand rivals.

The XC90 has made a big impact on the press and public alike, with its innovative interior, comprehensive standard specification, competitive pricing, and advanced safety features – with over 2,200 customers placing orders before it arrived in showrooms. It has become Volvo's best selling model, and XC90 production at Volvo's Torslanda plant in Sweden has increased by nearly 50 per cent over initial plans to nearly 90,000 per annum.

The XC90 has won prestigious SUV awards over in USA - the homeland of the SUV - while here in the UK its many awards include *What Car?* Magazine's 'Best 4x4', and *The Sun* newspaper's 'SUV of the Year'.

Design concept

Inside and out, the XC90 showcases great design:

"Masculine, but not macho; muscular, but not aggressive," is how Peter Horbury, former Vice President and Chief Designer at Volvo Cars describes the XC90. "Nobody should be in any doubt that this is a modern Volvo."

The interior design is characterised by airiness, space and quality with a dashboard set low for a car-like driving experience and using typically simple Scandinavian style.

Typical of the XC90's ingenuity and flexibility is the removable armrest between the front seats to offer more legroom for the passenger in the centre seat in the second row of seats. But there's more: That centre seat also has an integrated booster cushion and slides forward to bring a child closer to the passengers in the front seats.

In fact, all seven seats are individual with head restraints and seatbelt pretensioners, while, unlike some rivals, the XC90's sixth and seventh seats don't take up valuable loadspace or have to be clumsily removed; instead they simply and cleverly fold away individually under the boot floor when not required.

Yet, despite all these features and ingenuity, the Volvo XC90 is just 87mm longer than a Volvo V70 estate – and smaller than the new Audi A6 saloon!

Driving Dynamics

The XC90 is designed for all types of road surfaces and has intelligent Haldex, electronically controlled all-wheel drive with Instant Traction™ with a choice of powerful petrol or diesel turbo engines:

- **T6**: transverse 6-cylinder, 24 valve, 2.9-litre petrol engine with twin turbochargers. 272bhp and 380 Nm of torque from 1,800-5,000 rpm.
- **2.5T**: transverse, 5-cylinder, 2.5-litre turbo petrol engine. 210bhp and 320Nm of torque at 1,500-4,500 rpm.
- New D5: transverse 5-cylinder, 2.4-litre common rail turbodiesel engine with standard DPF (diesel particulate filter) with oxidising coating. Now with 185bhp and 400 Nm of torque from 2,000-2,750 rpm. Euro IV compliant.

Engine	T6	2.5T	D5 (Euro IV)
Туре	2922cc transverse	2521cc transverse	2401cc transverse
	6 cyl/24v turbo	5 cyl/20v turbo	5 cyl/20v turbo
Fuel	Petrol	Petrol	Diesel
Power	272 bhp	210 bhp	185 bhp
Torque	380 Nm at	320 Nm at	400 Nm at
Nm at rpm	1,800 – 5,000 rpm	1,500 - 4,500 rpm	2,000 – 2,750 rpm
0-62mph	n/a	9.5 manual	10.9 manual
manual/auto	9.3 geartronic	9.9 geartronic	11.5 geartronic
Top speed	n/a	130 manual	121 manual
manual/auto	130 geartronic	130 geartronic	118 geartronic
CO2	n/a	269 manual	219 manual
g/km	304 geartronic	282 geartronic	239 geartronic
MPG man/auto			
Urban	-/15.4	18.8/17.4	26.4/23.7
Extra urban	-/29.7	31.7/30.4	40.9/38.2
Combined	-/22.2	25.2/23.9	34.0/31.4

Service intervals for the T6 are 12,500 miles/12 months, while the 2.5T and the new D5 engine have both now increased from 12,000 to 18,000 miles or 12 months (whichever is sooner).

The XC90 is as easy, responsive and rewarding to drive as any regular Volvo saloon or estate model. Its torsionally rigid body, transverse engines and all-wheel drive combine to give an almost even weight distribution (53 per cent front, 47 per cent rear).

The front MacPherson suspension, together with the ZF steering gear, promotes increased precision and sharp response. Speed Sensitive Steering is standard on T6 petrol models and optional for the 2.5T and D5 diesel.

The XC90's braking system is designed and tested to help stop the vehicle safely, even when it is fully loaded with seven people and luggage.

Quality and equipment

The XC90 is available with S, SE and Executive trim levels, all offering a high standard level of specifications compared to most other premium brand rivals.

A high level of luxury equipment is fitted as standard to every model, including Electronic Climate Control with Volvo's Air Quality System (AQS) and pollen and active carbon filters, a high performance or premium sound audio system with CD and at least 8 speakers, alloy wheels, rear park assist, information centre, RSC (Roll Stability Control) and DSTC (Dynamic Stability and Traction Control).

The standard specification of the 'S' model includes:

- Alarm with immobiliser.
- ECC (Electronic Climate Control) with AQS (Air Quality System) and pollen filter.
- Information system.
- Steering wheel remote audio controls.
- High Performance sound system with CD, 4x40w amplifier and 8 speakers.
- Key-integrated remote control central locking with deadlocking system.
- 17in alloy wheels.
- · Piano black trim.
- Front fog lights.
- DSTC (Dynamic Stability and Traction Control) with EBA
- Siljan textile/vinyl upholstery.
- Electronic all wheel drive with Instant Traction™.
- Load compensating suspension.

<u>Upgrading to the SE specification offers:</u>

- Electric folding door mirrors with water repellent glass and ground lights.
- Electric driver's seat (with memory) and door mirror memory
- Leather-faced upholstery.
- High-performance audio system with 6 x CD, 4x40w amplifier and 8 speakers.
- 18in alloy wheels.
- Rain sensor automatic windscreen wiper activation.
- Auto-dimming rear view mirror.
- Wood or aluminium trim.

SE models can be upgraded with the bespoke Volvo 'Inscription'™, launched for the 2006 model year, which opens a whole new colourful world of interior sophistication with a collection of bespoke, exclusively designed interiors. Soft 'semi Aniline' leather upholstery, with ribbed inserts on the seats, comes from the finest hides and is available in a kaleidoscope of eight exciting colour combinations for all three rows of seats, and door panels. It also includes a soft leather sports steering wheel and Nubuck trimmed floor mats with contrasting piping. Inscription™ black walnut wood trim is also exclusively available with this option.

Optional rear headphone sockets allow the passengers in the second and third rows of seats to listen to a CD, radio or mini disc simultaneously. In addition, a choice of DVD-based rear seat entertainment systems is also available.

A comprehensive range of optional items includes Bi-Xenon headlights, heated seats, integrated telephone and Volvo's RTI satellite navigation system now with TMC (Traffic Message Channel) that warns of traffic problems ahead and can even re-route the driver, if required.

The Executive represents the ultimate XC90 with the following additional specification:

- Executive soft leather upholstery and door inserts with contrast piping.
- Executive soft leather extra padded front door armrests.
- RTI satellite navigation system with RDS-TMC and Europe DVD maps.
- Integrated GSM telephone.
- Premium sound audio system with Dolby Pro Logic II digital surround sound™.
- Mini disc player and sub woofer under load area floor.
- Rear seat headphone sockets.
- Refrigerator in front centre armrest.
- Executive Nubuck trimmed floor mats.
- 18in Split-rim alloy wheels.

- Bi-Xenon headlamps with cleaning system.
- Brushed aluminium roof rails.
- Metallic paint.
- Colour co-ordinated door handles, door mirrors and rubbing strips.
- Unique matt silver grille.
- Rear skid plate.
- Electric passenger seat.
- Heated front seats.
- Walnut wood trim in door panels, centre console and gear lever knob.

Safety

"Cars are driven by people. The guiding principle behind everything we make at Volvo, therefore, is – and must remain – safety," said Assar Gabrielsson and Gustaf Larson, founders of Volvo, in the early 1930s.

Volvo's founders were the first to take a clear and unambiguous approach to the issue of safety. The company's safety philosophy is based on a holistic approach.

In order to optimise the XC90's safety and, in particular, reduce the risk of a roll-over, Volvo has developed a Roll Over Protection System with new Roll Stability Control (RSC) technology. This uses a gyro-sensor to register the car's roll speed and roll angle to instantly calculate the terminal angle and risk of a roll-over, and automatically activate the DSTC (Dynamic Stability and Traction Control) anti-skid system, if required, to help the driver maintain control.

For added protection, Volvo has also reinforced the XC90's roof structure with extremely tough Boron steel, which is four to five times stronger than normal steel. In addition, the side Inflatable Curtain (IC) protects all three rows of seats and has been designed to stay inflated longer in case of multiple roll-overs, and to help keep occupants inside the vehicle. As you would expect, the XC90 scores highly in a variety of international safety ratings, including pedestrian protection.

In addition, an integrated booster seat is standard in the centre seat of the middle row, plus Volvo offers a passenger airbag cut-off switch to enable child seats to be carried in the front of the car, and ISOFIX mounting points.

In 2005, to improve the driver's visibility and help avoid accidents, Volvo has introduced water repellent glass for door mirrors (standard on some models) and side windows (optional).

Volvo has also considered the XC90's crash compatibility with other, smaller cars, and designed a lower cross-member - concealed behind the front spoiler - at the height of a bumper in a conventional car to impact with and activate its crumple zones as intended.

Environment

Naturally, Volvo has not forgotten the XC90's environmental credentials, either, and ensured its fuel economy and low emissions are class leading.

Volvo's 'clean inside and out' environmental programme reflects its continuing commitment to the environment. Its plants are some of the automotive world's cleanest factories, and 85 per cent of each car can be recycled, plus every new Volvo is backed by an EPI (Environmental Product Information) which is available at www.volvocars.com/epi. Volvo also produces an annual Corporate Citizenship report, available on www.volvocars.com/citizenship.

Like all Volvos, the XC90's interior is free from allergy inducing emissions, and an active carbon filter ensures dust and exhaust particles do not enter the cabin, while an Air Quality System (AQS) shuts down the air input if outside air is too dirty.

Volvo's PremAir® - a special catalytic coating on the radiator which converts up to 75 per cent of the harmful ground-level ozone passing through it into pure oxygen, is available with the XC90 engine range. In addition, they already meet the stringent EU 2005 emissions requirements.