

PRESS INFORMATION

The all new Volvo C70 - Driveline and chassis

Sporty, stable and comfortable

- Multi-dimensional driving experience
- Stable, compliant chassis for sporty driving yet with a comfortable ride
- Reinforced body structure with good rigidity
- Five-cylinder engines with power and an agreeable character
- High-performance T5 model

The all new Volvo C70 is two cars in one – and not just visually. The driving experience is also multi-dimensional.

The Volvo C70 is a car to be driven under an open sky. The softly purring engine and compliant chassis transform driving into a beautiful, harmonious experience.

At the same time, the car has the potential for sporty driving thanks to its powerful, responsive driveline, rigid body and stable roadholding.

Volvo's new convertible is designed to offer a lively driving experience without sacrificing comfort. It shares its basic technology with other Volvo models, including front-wheel drive and an extremely stable, compliant chassis. It has MacPherson front suspension and a Multilink rear axle.

The individual wheel suspension with a number of links is designed to provide a combination of comfortable suspension and fast, exact steering response. A broad track and a long wheelbase give the car stability. The chassis height has been lowered by 10 mm at the front and 15 mm at the rear (compared with a standard chassis), which further contributes to the stable driving characteristics.

DSTC (Dynamic Stability and Traction Control System) is standard and offers extra stability when driving on a slippery road surface.

The steering is electro-hydraulic with a light, distinct, controlled feeling.

Body with very high rigidity

The new C70 model has Volvo's modern, advanced front structure while the side members, doors and sills have been reinforced in various ways to compensate for the lack of a fixed roof. The body structure, in the form of an ingeniously designed member system, not only contributes to the high level of safety in the car, it also gives the body very high torsional rigidity – twice as high as the earlier C70 model.

"A rigid body is important for the car's driving characteristics," says project manager Patrik Widerstrand. "It makes the car stable and easier to control, thus enhancing driving pleasure."

Five-cylinder, transverse engines

The all new Volvo C70 is being launched with a choice of three petrol engines. They are all extremely compact in-line engines and, in accordance with Volvo's engine concept, are mounted transversely. The compact format in combination with the transverse mounting contributes to excellent crash safety by creating a generous crumple zone in the engine compartment.

All three petrol engines are five-cylinder units. Two of them are naturally aspirated with a cylinder volume of 2.4 litres and a power output of 140 hp and 170 hp. The five cylinders and the large displacement ensure high torque even at low engine speeds – and rapid acceleration. The five-cylinder, long-stroke engine also has an agreeable nature with a low vibration level and gentle running.

The engines feature four-valve technology with double overhead camshafts that contribute to the high power output and rapid response. The variable camshaft control (CVVT) offers high output and high torque in combination with reduced petrol consumption and reduced emissions.

Volvo C70 T5 – with power and temperament

The top model in the C70 range is the Volvo C70 T5. With a T5 engine, driving pleasure takes on another dimension. A 2.5 litre petrol engine with a light-pressure turbo charger, it offers maximum power output at 162 kW/220 hp and 320 Nm of torque. High, even spread of torque from low to high engine speeds makes the car highly responsive and offers excellent acceleration.

The T5 engine is extremely energy efficient. As the manifold and turbo unit have been cast together in high-alloy cast steel, which is extremely resistant to heat (emission temperatures are permitted to reach 1,050°C), the need for cooling using petrol has been minimised. The engine can therefore be run on a leaner petrol mix with lower fuel consumption and emissions as a result, particularly when driving at high speed or with a heavy load.

The T5 engine is fitted with a five-speed automatic transmission, or the six-speed, manual gearbox originally developed for the Volvo S60 R and V70 R. The six gears are adapted to combine rapid acceleration with a high top speed. The gearbox has triple synchronisation and a very distinct gear change.

"The all new Volvo C70 has a great deal of temperament, particularly the T5 model," says Patrik Widerstrand. "But for Volvo temperament is never the same as unpredictability."

The driving pleasure is to be found in the harmonious interplay between the responsive driveline and the compliant chassis.

The wide choice of aluminium wheels and low-profile tyres enhances both the appearance and the driving experience. The car can be equipped with:

- A 7.5x16" aluminium wheel with 215/55-16 tyre
- Two 7.5x17" aluminium wheels (one polished) with 215/50-17" or 235/45-17" tyres
- Two 8.0x18" aluminium wheels with 235/40-18" tyres

Engine range (at launch)

Engine	Configuration	Output kW/hp	Torque
T5	I5	162/220	320 Nm
2.4i	I5	125/170	230 Nm
2.4	I5	103/140	220 Nm

Later during 2006, a 2.4 litre, 5-cylinder diesel engine, producing 180 hp (132 kW) will be available.

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2005-09-12

Descriptions and facts in this press material relate to Volvo Cars' international car range. Vehicle specifications may vary from one country to another and may be altered without prior notification.