

## Press Release

Feb 28, 2006 | ID: 3552

# The 2007 Volvo S80 Chassis

### Advanced technology provides a premium driving experience

The second generation Volvo S80 has been designed to provide a superior experience behind the wheel. To help meet that objective, the engineers and designers combined exceptional torsional rigidity, an electronically controlled 'active suspension', adjustable power steering, all-wheel-drive power delivery and a host of refinements into the flagship of the Volvo sedan line.

It is the intelligent integration of these features, rather than any specific technology, that makes the new S80 such a joy to drive.

The prescription for the outstanding ride, handling and comfort of the 2007 Volvo S80 begins with its completely new structure, featuring a patented design that serves double duty delivering both safety and performance. The highly rigid structure provides the solid base from which the S80's suspension works. That same structure is integral in delivering sophisticated crash energy management, and includes four types of steel that work in a sophisticated interplay to help control the forces of a collision.

The chassis design has been developed to ensure even more stability, predictability and controlled driving characteristics.

Next, the new S80 gets an enhanced version of the Volvo Four C (Continuously Controlled Chassis Concept) 'active' suspension. This is an advanced self-adjusting system that uses sensors to continuously monitor the car's behavior. The shock absorbers can adjust to a change in driving situation in a mere fraction of a second.

Four C modifies the chassis setting to suit the car's speed (the higher the speed – the greater the damping). As a result, the car remains poised and easy to control, even at higher speeds.

This technology also reduces the car's tendency to squat, dip or roll under firm acceleration, hard braking or quick steering maneuvers.

"The active chassis adds an extra dimension to the driving pleasure," says Silvia Güllsdorf, S80 Project Director at Volvo Cars. "The driving properties improve whatever the situation. Progress is both safer and more entertaining."

The newest Four C system ups the ante from the previous S80 model and now offers three alternative chassis settings instead of the previous two. The driver simply presses a button to alter the car's personality to suit his or her personal tastes.

- COMFORT makes for sedate progress with gentle, harmonious body movements
- SPORT provides more controlled body movements, faster steering response and added road contact
- ADVANCED minimizes damper movement and maximizes contact between the tires and the surface of the road – a setting for enthusiastic driving on smooth tarmac.

The Four C system is an available option on all 2007 Volvo S80 cars in Canada.

All-Wheel-Drive also contributes to the S80 driving experience. The second generation of the

latest Volvo all-wheel drive system with Instant Traction uses sophisticated electronic controls to distribute power between the front and rear wheels for optimum traction, road-holding and performance. The popular AWD feature is standard on all S80s in Canada.

Speed-dependent power steering is also an option in the new Volvo S80. The system provides more power assistance at low speeds, for example, to make parking easier. The power assistance gradually declines as road speed increases, disappearing entirely at high cruising speeds.

In order to give all drivers an optimum feeling for the road, the steering servo assistance can now be adjusted by way of the car's information and set-up system. Power steering assistance can be set at one of three levels.

DSTC (Dynamic Safety and Traction Control) is fitted as standard in the new Volvo S80 versions. DSTC is an electronic stability system, first introduced on the original S80, which reduces the engine's torque and applies suitable braking force to help reduce the risk of a skid, when necessary.

To assist from a standing start on an uphill gradient, V8 versions of the new Volvo S80 are equipped with an intelligent electronically operated Power Parking Brake. If the parking brake is engaged at a stop light on a hill, for instance, it is automatically released as the car moves off. S80 cars without Power Parking Brake have a pedal-operated parking brake.

The entire car, not just the driveline, has been refined and honed to provide a driving experience of absolute premium calibre. "Each one of these systems contributes to both safer driving and greater driving pleasure," says project director Gllsdorf. "The systems working in concert in the new Volvo S80 offer a particularly refined driving experience, whatever the driving conditions."

Volvo Cars of Canada Corp. is part of the Volvo Car Corporation of Gteborg, Sweden. The company provides marketing, sales, parts, service, technology and training support to the 43 Volvo automobile retailers across the country. The company's product range includes the flagship S80 luxury sedan, the versatile V70 wagon, the S60 sports sedan, the compact and sporty S40 and V50, and an XC-line of vehicles that includes the rugged XC70 and the award-winning XC90 sport utility vehicle. For 2006, the company is proud to introduce the second-generation C70 convertible with a new retractable three piece hardtop.

- 30 -

**Contact:**

Doug Mepham  
613-966-4969 office  
613-922-6097 mobile  
doug.mepham@bellnet.ca

Chad Heard  
416-540-4229  
chadheard@rogers.com

**Media website:**

<http://www.volvocars-pr.ca>

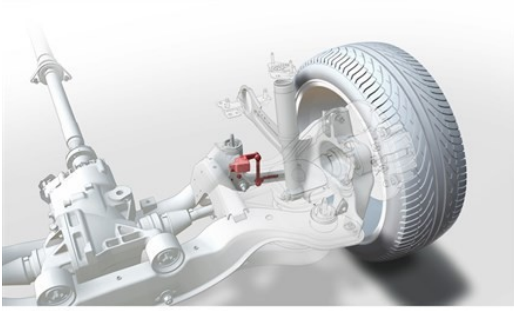
**Keywords:**

S80 (2007), Press Releases, 2007, Product News

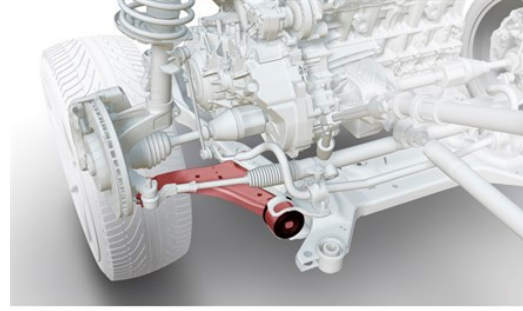
---

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

Related Images



Rear Suspension



Front Suspension

[More Images >](#)

[media.volvocars.com >](https://media.volvocars.com)

[volvocars.com >](https://volvocars.com)

Copyright © 2025 Volvo Car Corporation (or its affiliates or licensors).