



VOLVO S60 & V60

**DRIVE**



Supplement to owner's manual



## About this supplement

### This publication

These operating instructions are a supplementary addition to the normal owner's manual for the car.

The supplement covers the differences between the normal manual's description of this car model and the DRIVe functions in the car in question.

In the event of uncertainty over any of the car's functions:

- First refer to the normal owner's manual for the car.

For answers to further questions we recommended contact with a distributor or a representative for Volvo Car Corporation.

### Internet

The development of environmentally friendly technologies is continuously evolving and printed information can quickly become obsolete or out-of-date.

We therefore recommend a visit to Volvo's website [www.volvocars.com](http://www.volvocars.com) - which has the latest and most up-to-date information about your car.

### Changes

The specifications, design features and illustrations contained in this supplement are not binding.

Volvo reserves the right to make modifications without prior notice.

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## General

### Quieter and cleaner



Environmental care is one of Volvo Car Corporation's core values which guides all our activities. This target orientation has resulted in the vehicle series DRIVE, the concept of which involves the interaction of several separate energy-saving functions, with the collective task of reducing fuel consumption, which in turn helps to reduce exhaust emissions.

Examples of energy-saving functions are Smart charging, Adapted power steering and Aerodynamics.

#### Smart charging

The car's kinetic energy is used during engine braking by means of it being converted into electrical current and stored in the car's battery.

#### Adapted power steering

Another DRIVE function is that the power steering's energy take-off is adapted according to requirements. By means of optimisation and the introduction of an energy saving function the energy take-off can be minimised on occasions where power assistance (help in turning the steering wheel) is not necessary.

#### Aerodynamics

The DRIVE concept can include a lowered chassis. There are also front and rear spoilers<sup>1</sup> with low wind resistance, as well as specially developed wheel rims<sup>1</sup>.

#### Environment and economy tips

Here is some advice that reduces fuel consumption without the need to increase travelling time, or reduce the pleasure of driving.

- Cars with the DRIVE engine and 6-speed manual transmission are started in 2nd gear under normal conditions on level ground.
- Space box and load carriers result in higher wind resistance, which increases fuel consumption - remove them immediately after use.
- Drive with the correct air pressure in the tyres (see the section, Wheels and tyres on page 4).

- Clear the car of unnecessary items - the more load and higher weight, the higher the fuel consumption.
- If the car is equipped with an engine block heater, always use it before cold starting - it lowers consumption and reduces emissions.
- Drive smoothly and avoid sudden braking.
- Drive in the highest possible gear - lower engine speeds result in lower fuel consumption.
- Use engine braking to slow down.
- High speed increases consumption significantly due to increased wind resistance - twice the speed increases wind resistance four times.
- Maintain the car regularly - follow Volvo's recommended service intervals.

<sup>1</sup> The range varies depending on the car model and market.

## Specifications

### Engine

Engine designation <sup>A</sup>	D4162T
Output (kW/rpm)	84/3600
Output (hp/rpm)	115/3600
Torque (Nm/rpm)	270/1750-2500
No. of cylinders	4
Bore (mm)	75
Stroke (mm)	88.3
Swept volume (litres)	1.56
Compression ratio	16.0:1

<sup>A</sup> The engine type designation, component and serial numbers can be read on the engine, for location see the normal owner's manual.

### Engine oil

Oil grade<sup>1</sup>: ACEA A5/B5

Viscosity: SAE 5W-30

For checking the level/topping up - see the normal owner's manual, section "Maintenance and service"/"Checking the engine oil".

### Coolant

Use coolant with corrosion inhibitor mixed with water<sup>2</sup> (see the instructions on the packaging).

Volume: 10.5 litres.

The thermostat opens at: 82 °C.

### Gearbox

MMT6, manual 6 speed.

Prescribed transmission fluid: BOT 350 M3.

Volume: 1.65 litres.

### Consumption and emissions<sup>3</sup>

S60		CO <sub>2</sub>
A	5,1	134
B	3,9	103
C	4.3	114

V60		CO <sub>2</sub>
A	5,2	137
B	4,1	109
C	4.5	119

### Table contents

 : Consumption (litres/100 km)

**CO<sub>2</sub>** : Emissions of carbon dioxide (g/km)

A = city driving

B = driving on main roads

<sup>1</sup> When driving under adverse conditions, use ACEA A5/B5 SAE 0W-30.

<sup>2</sup> Water quality must fulfil the standard STD 1285.1.

<sup>3</sup> Official fuel consumption figures are based on two standardised driving cycles in a laboratory environment ("EU driving cycles") all in accordance with EU Directive 80/1268/EEC (Euro 4), EU Regulation no 692/2008 (Euro 5) and UN ECE Regulation No. 101. The regulations cover the driving cycles for urban driving and extra-urban driving. - Urban driving - the measurement starts with cold starting the engine. The driving is simulated. - Extra-urban driving - the car is accelerated and braked at speeds between 0-120 km/h. The driving is simulated. - Cars with the DRIVE engine and 6-speed manual transmission are started in 2nd gear. The value for mixed driving, which is given in the table, according to legislation, is a combination of urban driving and extra-urban driving. CO<sub>2</sub> emission - to calculate the carbon dioxide emissions from the two drive cycles, the exhaust gases are collected. These are then analysed and give the value for CO<sub>2</sub> emissions.



## Specifications

C = combined driving

### Trailer

Max. weight (kg)	Braked trailer	Unbraked trailer
S60	1300	750
V60	1300	750
Towball load	75	50

### NOTE

Towing trailers with heavy loads on steep inclines and at high altitudes involves higher fuel consumption and higher emissions.

### Wheels & tyres

An important detail in connection with environmentally-conscious driving is to use the right type of tyres and to drive with the correct air pressure inside them.

### Dimensions

When fitting new tyres, the same type and brand as the car was equipped with from the

factory are recommended - they are designed for low fuel consumption.

The following dimensions generally provide a slightly lower consumption than wider variants.

S60	V60
205/60-16	205/60-16

### Air pressure

Inadequate tyre pressure increases fuel consumption. For this reason, check the pressure in the tyres regularly.

By using so-called ECO pressure<sup>4</sup> fuel consumption is minimised. A certain impact on ride comfort, road noise and steering characteristics may be experienced, but this does not affect safety.

See the decal with the recommended tyre pressure adjacent to the driver's door pillar.

### Battery charging

Driving in an environmentally way also includes energy conservation - just like at home.

The more consumers there are that are switched on in the car (stereo, electric heating in windows, mirrors and seats, very cold air from the climate control system, etc.) the more the electrical current that needs to be generated to recharge the battery.

### NOTE

The higher the power takeoff in the vehicle, the more the starter battery has to be charged = Higher fuel consumption.

<sup>4</sup> The pressure that is recommended for maximum load.

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