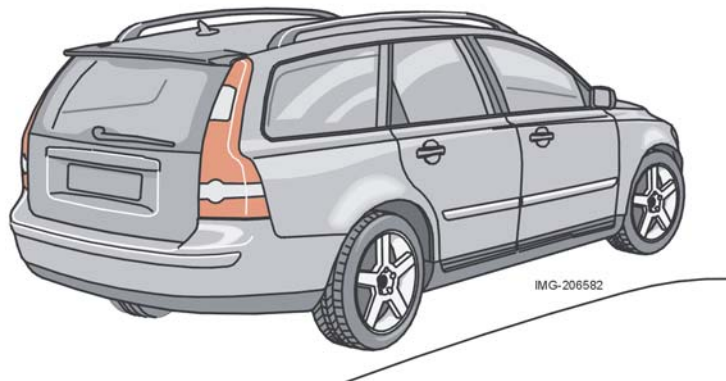


VOLVO
V50

VOLVO
for life



WEB EDITION



Dear Volvo owner

We hope you will enjoy many years of driving pleasure in your Volvo. The car has been designed for the safety and comfort of you and your passengers. Volvo is one of the safest cars in the world. Your Volvo has also been designed to satisfy all current safety and environmental requirements. In order to increase your enjoyment of the car, we recommend that you familiarise yourself with the equipment, instructions and maintenance information contained in this owner's manual.

Thank you for choosing Volvo!

Owner's manual

A good way of getting to know your new car is to read the owner's manual, ideally before your first journey. This will give you the opportunity to familiarise yourself with new functions, to see how best to handle the car in different situations, and to make the best use of all the car's features. Please pay attention to the safety instructions contained in the manual:



WARNING!

Warning texts indicate where there is a risk of personal injury in the event of the instructions not being followed.

IMPORTANT!

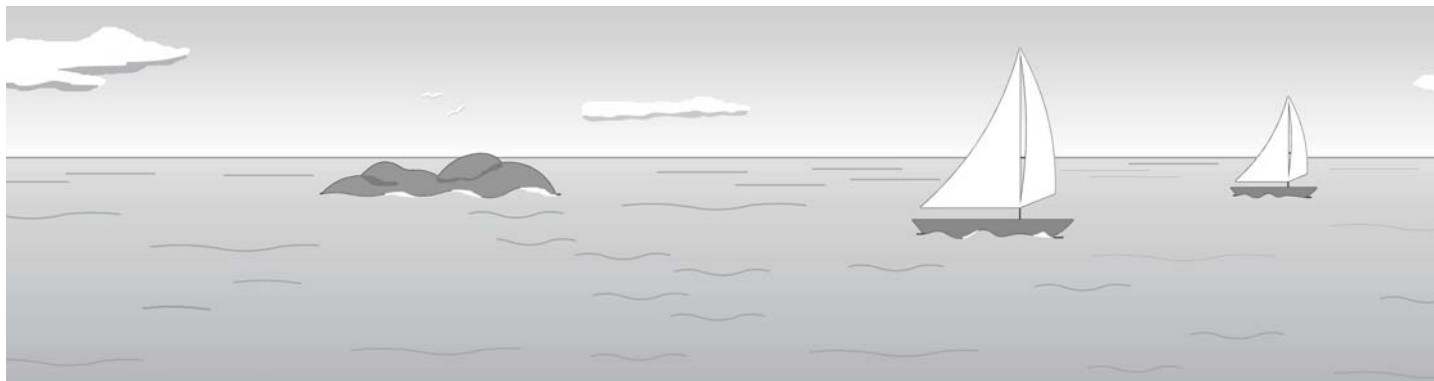
Caution texts indicate a risk of damage to the car in the event of the instructions not being followed.

The equipment described in the owner's manual is not present in all models. In addition to standard equipment, this manual also describes options (factory fitted equipment) and certain accessories (extra equipment).

NOTE! Volvo cars are differently equipped depending on the requirements of the different markets and the national or local legal requirements and regulations.

The specifications, design features and illustrations in this Owner's Manual are not binding. We reserve the right to make modifications without prior notice.

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Volvo Cars' Environmental philosophy

Environmental care, safety and quality are the three core values which influence all operations of the Volvo Car Corporation. Volvo cars comply with strict international environmental standards and are manufactured in plants, which are among the cleanest and most resource-efficient in the world. Most units within Volvo Car Corporation are certified to the environmental standards ISO 14001 or EMAS, which leads to continuous improvements within the area of the environment. Volvo Cars is the first car manufacturer to have a third-party certified environmental declaration where the customer can compare the environmental effects of different models and engines. Read more at:

www.epd.volvocars.se

Clean inside and out

Your Volvo is built to be "Clean inside and out", a concept which means you benefit in two ways - from a clean cabin and a highly efficient exhaust purification system. Your car saves fuel and releases minimal quantities of harmful substances. It also ensures that you and your passengers do not inhale emissions from other cars by cleaning the air that comes into the passenger compartment. A sophisticated air cleaning system ensures that the air in the passenger compartment is cleaner than the air outside. The interior is free of allergenic substances and there is a special coating, Premair®¹, on the radiator which converts dangerous ground level ozone to pure oxygen.

¹ Applies to cars with five cylinder engines.

Volvo's workshops and the environment

Regular maintenance at a Volvo workshop creates the conditions for low fuel consumption and thus contributes to a cleaner environment. The personnel have the knowledge and tools to guarantee the best possible environmental care.

Save the environment

We believe that our customers share our concerns about the environment. You can help save the environment by purchasing environmentally optimised car care products and by servicing and maintaining the car according to the instructions in the owner's manual.

Below are a few tips on how to save the environment:

- Always ensure that the tyres are at the correct pressure. Too low tyre pressure results in increased fuel consumption.
- The roof rack and ski-boxes have greater air resistance and raise fuel consumption considerably. Remove them directly after use.
- Remove unnecessary items from the car. The greater the load, the higher the fuel consumption.
- Always use the engine block heater before a cold start, if the car is equipped with one. This will reduce fuel consumption and emissions.
- Drive gently. Avoid unnecessary quick acceleration and heavy braking.
- Drive in the highest gear possible. Low engine rpm gives lower consumption.

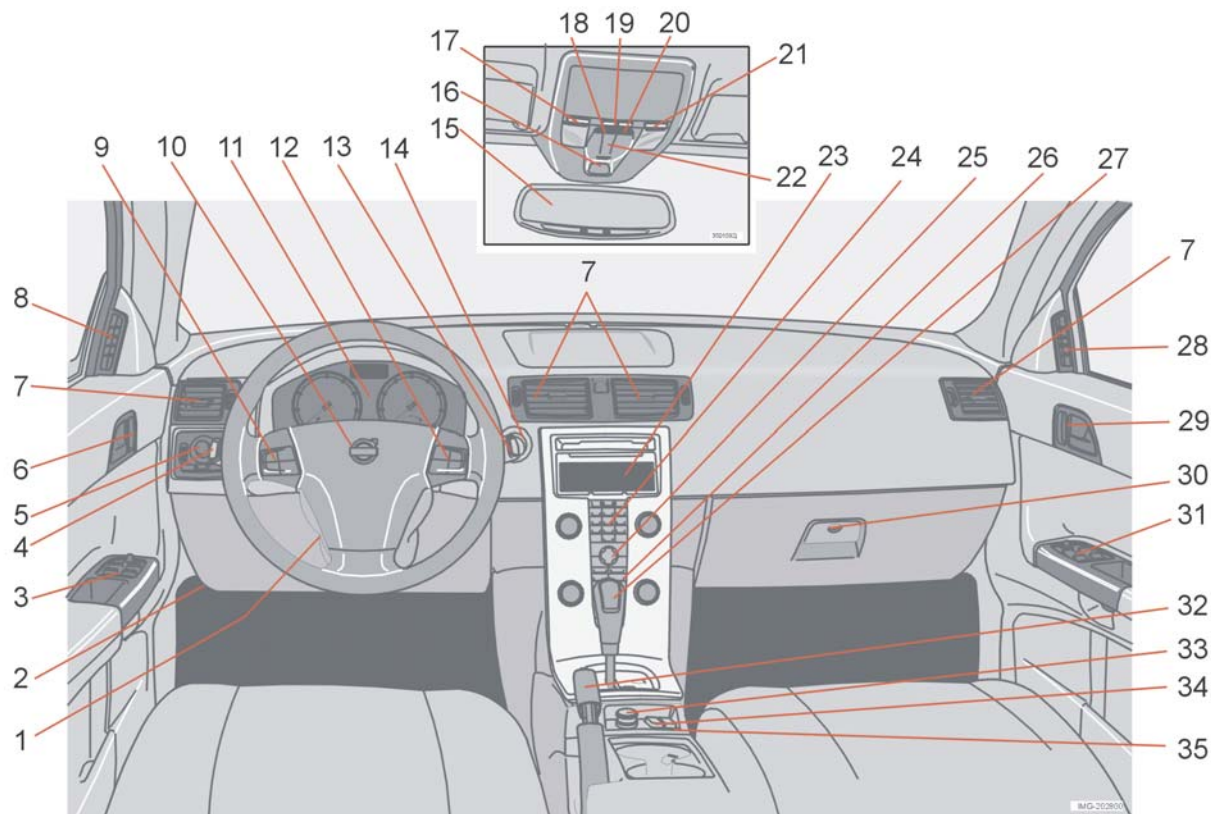
- Relax the accelerator pedal on downhill slopes.
- Use engine braking. Release the accelerator and change down.
- Avoid idling. Switch off the engine when queuing in traffic.
- Remember to dispose of hazardous waste, e.g. batteries and oil, in an environmentally favourable manner. Seek advice from your Volvo workshop if unsure about disposal.
- Maintain the ignition and fuel systems, which directly reduce exhaust emissions.

By following this advice fuel consumption can be reduced without affecting either the journey time or the enjoyment of driving. You preserve the car, money and the planet's resources.

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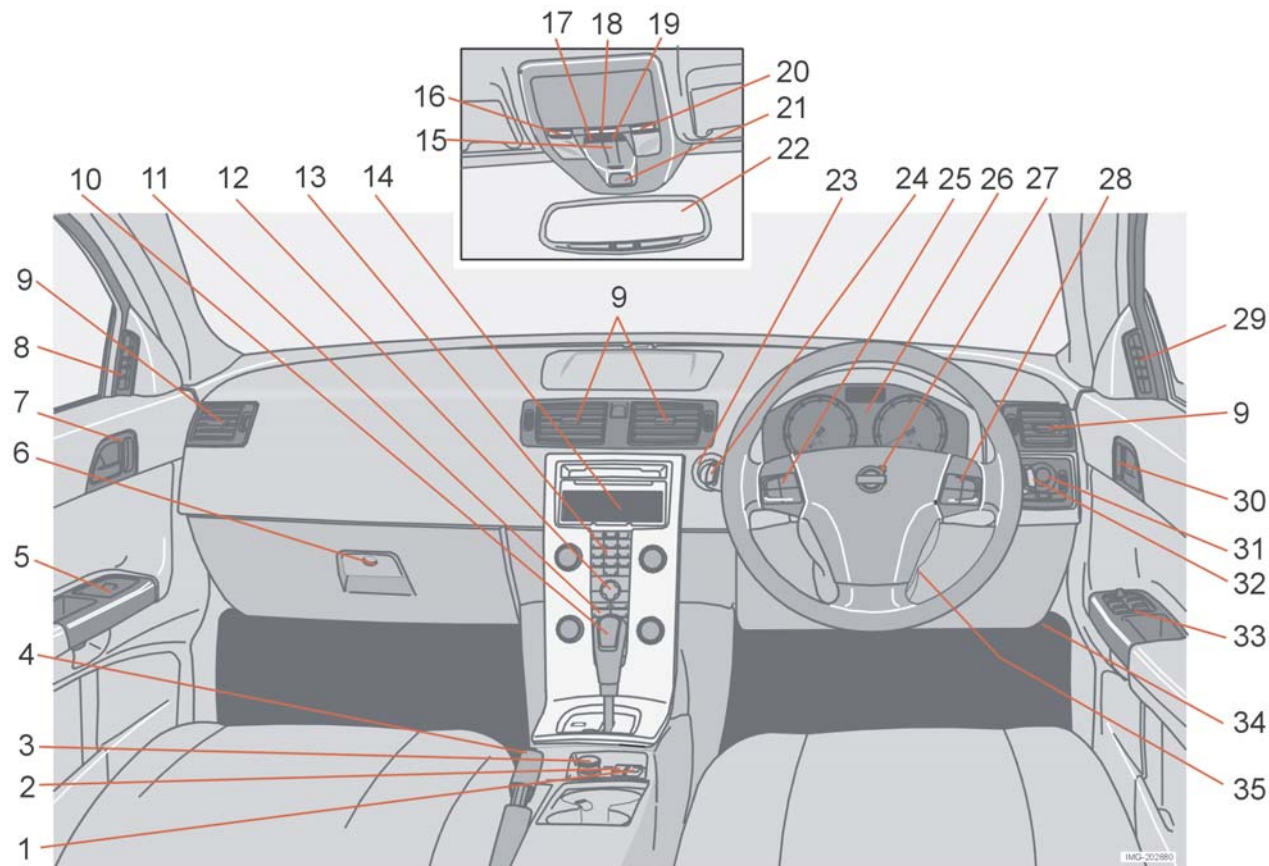
Overview, left-hand drive cars



Left-hand drive

- | | | | |
|-----|-------------------------------------------------|-----|------------------------------------------------------------------|
| 1. | Steering wheel adjustment | 23. | Display for climate control and infotainment |
| 2. | Bonnet release | 24. | Infotainment |
| 3. | Control panel | 25. | Settings for climate control, infotainment and personal settings |
| 4. | Direction indicators, main beam, trip computer | 26. | Climate control |
| 5. | Lighting, fuel filler flap opener | 27. | Gear lever |
| 6. | Door handle, central locking | 28. | Air vent, side window |
| 7. | Air vents in the dashboard | 29. | Door handle |
| 8. | Air vent side window | 30. | Glovebox |
| 9. | Cruise control | 31. | Control panel |
| 10. | Horn, airbag | 32. | Parking brake |
| 11. | Combined instrument panel | 33. | Electric socket/Cigarette lighter |
| 12. | Keypad Infotainment | 34. | Stability system STC or DSTC |
| 13. | Windscreen wipers and washers, headlamp washers | 35. | Switch, optional equipment |
| 14. | Ignition switch | | |
| 15. | Rearview mirror, compass | | |
| 16. | Seat belt reminder | | |
| 17. | Interior lighting left-hand side | | |
| 18. | Movement detector, alarm | | |
| 19. | Interior lighting function switch | | |
| 20. | Position for accessory switch | | |
| 21. | Interior lighting right-hand side | | |
| 22. | Operation, sunroof | | |

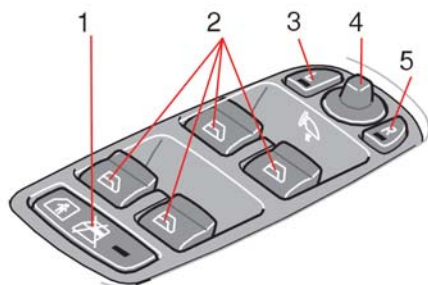
Overview right-hand drive car



Right-hand drive

- | | | | |
|-----|--------------------------------------------|-----|-------------------------------------------------|
| 1. | Switch, post installed accessory | 24. | Direction indicators, main beam, trip computer |
| 2. | Stability system STC or DSTC | 25. | Cruise control |
| 3. | Electric socket | 26. | Combined instrument panel |
| 4. | Parking brake | 27. | Horn, airbag |
| 5. | Control panel | 28. | Infotainment |
| 6. | Glovebox | 29. | Air vent, side window |
| 7. | Central locking | 30. | Central locking |
| 8. | Air vent, side window | 31. | Lighting, fuel filler flap opener |
| 9. | Air vents in the dashboard | 32. | Windscreen wipers and washers, headlamp washers |
| 10. | Gear lever | 33. | Control panel |
| 11. | Climate control | 34. | Bonnet release |
| 12. | Settings, climate control and infotainment | 35. | Steering wheel adjustment |
| 13. | Infotainment | | |
| 14. | Display, climate control and infotainment | | |
| 15. | Operation, sunroof | | |
| 16. | Interior lighting, left-hand side | | |
| 17. | Central locking | | |
| 18. | Interior lighting, switch | | |
| 19. | Switch, post installed accessory | | |
| 20. | Interior lighting, right-hand side | | |
| 21. | Seat belt reminder | | |
| 22. | Mirrors, compass | | |
| 23. | Ignition switch | | |

Driver's door control panel

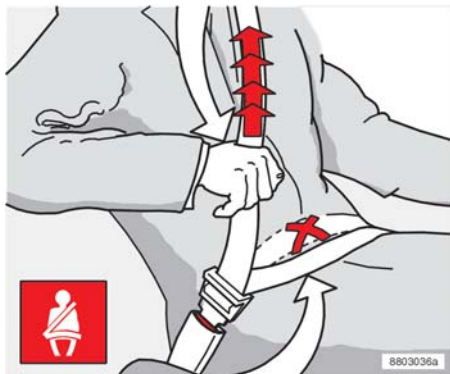


IMG-203441

1. Electric child lock (option).
2. Power windows
3. Door mirror, left-hand side
4. Door mirrors, setting
5. Door mirror, right-hand side

Seat belts	14
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Seat belts



Extending the lap belt. The belt must be positioned low down.

Always use a seat belt

Braking could have serious consequences if the seat belt is not used. Ensure that all passengers are wearing their seatbelts. Otherwise, rear seat passengers may be thrown against the front seat backrests in a collision.

Putting on the seat belt:

- Pull the belt out slowly and secure it by inserting the locking tab into the lock. A loud "click" indicates that the belt is locked.

Release the belt:

- Press the red button in the lock and allow the reel to retract the belt. If the belt is not completely retracted, feed in the belt manually to prevent it from hanging loose.

The belt is restricted and cannot be pulled out further:

- if it is pulled out too fast
- during braking and acceleration
- if the car leans heavily.

It is important that the belt lies snugly against the body so it can provide maximum protection. Do not lean the backrest too far back. The seat belt is designed to protect in a normal seating position.

Keep the following in mind:

- do not use clips or anything else that prevents the belt from fitting correctly
- ensure the belt is not twisted or caught on anything
- the lap belt must sit low down (not over the abdomen)
- stretch the lap belt over the lap by pulling the diagonal shoulder belt as illustrated.

WARNING!

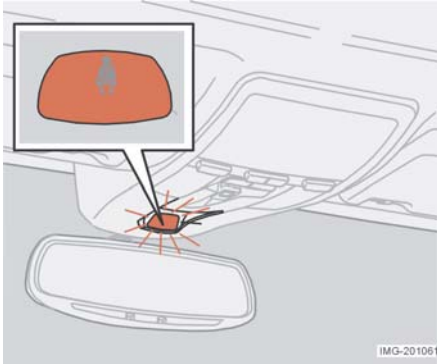
The seat belt and airbag operate together. If the seatbelt is not used or is incorrectly used airbag operation can be affected in the event of a collision.

WARNING!

Each belt is intended for one person only.

WARNING!

- If the belt has been exposed to a major load, in a collision for example, the entire belt must be replaced. This includes reels, mountings, screws and locks. Some of the protective characteristics of the belt may have been lost, even if the belt does not appear to be damaged. Replace the seat belt if it is worn or damaged. The new seat belt must be approved and intended for installation in the same position as the replaced belt.
- Never modify or repair the seatbelts yourself. Contact a Volvo workshop.



Seat belt reminder¹

A symbol lights up in the roof console (above the rearview mirror) as a reminder that the seat belt is not being worn. A symbol also lights up on the dashboard. If the car is stationary, the reminder disappears after approximately 6 seconds.

Front seat

The symbols remain lit if the driver or front passenger is not wearing their seat belt. (No signal is given if a child seat is installed in the front seat.) In addition to the two lit symbols,

an audible signal is heard that changes frequency depending on the speed of the car.

Rear seat

The seat belt reminder is activated if a passenger in the rear seat takes off the seat belt during a journey. If one of the rear doors is opened and closed, the system checks for ten seconds how many of the seat belts are in use and presents this number in the information display, e.g. 2-3 REAR BELTS IN USE. No light or audible reminder is given. This only takes place when a seat belt is removed.

The seat belt reminder for the rear seat can be switched off:

- Hold in the **READ**-button on the left-hand steering wheel stalk until a message verifies that the function has been switched off.



Pregnant women

Pregnant women must take particular care when securing the seat belt. Position the belt so that it does not exert unnecessary pressure on the womb. The lap belt of the three-point seat belt should be low.

¹ The functions may vary slightly depending on the market

Seat belt tensioner

All the seat belts (with the exception of the rear centre position) have seat belt tensioners. This is a mechanism which, at the moment of impact, tensions the seatbelt around the body. The belt therefore restrains the passenger more quickly.



Marking on seat belts with seat belt tensioners

Airbags



Driver's airbag

In addition to the seat belts, the car has an airbag (SRS - Supplemental Restraint System) in the steering wheel. The airbag is folded into the centre of the steering wheel. The wheel is marked SRS AIRBAG.



WARNING!

The seat belt and airbag operate together. If the seatbelt is not used or is incorrectly used airbag operation can be affected in the event of a collision.



Front passenger airbag¹

The airbag on the passenger side is folded up in a compartment above the glove box. The panel is marked SRS AIRBAG.



WARNING!

To minimise the risk of injury if the airbag deploys, passengers must sit as upright as possible with their feet on the floor and backs against the backrest. Seat belts should be secured.



WARNING!

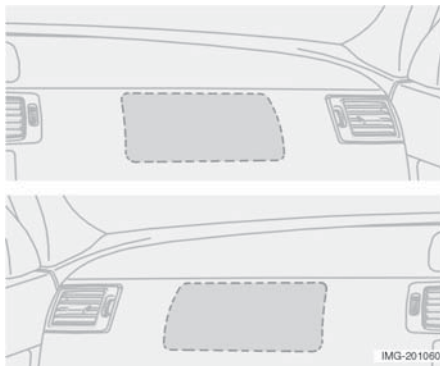
- No objects or accessories may be positioned or stuck on, or near, the SRS AIRBAG panel (above the glove box) or in the area affected by the airbag.
- Never interfere with SRS components in the steering wheel or the panel above the glove box.



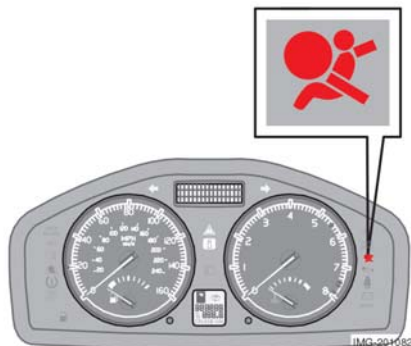
WARNING!

- Never place a child seat or booster cushion on the passenger seat if the car has an airbag on the passenger side.
- Never allow a child to stand or sit in front of the front passenger seat.
- No one shorter than 140 cm (4 ft 7) should sit in the front passenger seat.

¹ Not all cars have passenger side air bags. It can be optionally excluded at purchase.



Location of the airbag on the passenger side, left-hand drive/right-hand drive cars



Warning symbol in the centre of the dashboard

The SRS system is continuously monitored by the car's electronic system. The warning symbol in the combined instrument panel lights when the ignition key is turned to positions **I**, **II** or **III**. The symbol goes out after approximately six seconds if the SRS system is fault-free.

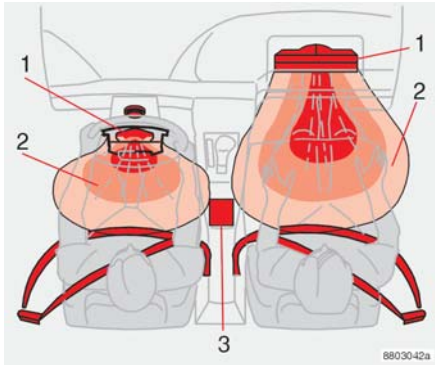


WARNING!

If the SRS warning symbol remains lit or lights while driving, it means that the SRS system is not functioning fully. The symbol can also indicate a fault in the seat belt buckle, the SIPS or the IC system. Contact a Volvo workshop immediately.



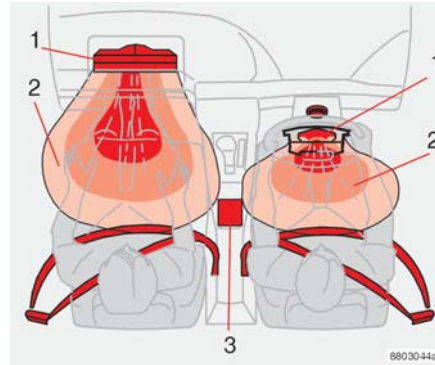
As well as the symbol, a message appears in the information display. If the warning symbol is defective, the warning triangle is lit and the message **SRS AIRBAG SERVICE URGENT** appears in the display.



SRS system, left-hand drive

SRS System

The system consists of a gas generator (1) surrounded by the inflatable airbag (2). Upon a sufficiently violent collision, sensors (3) react, activating the gas generator igniters and the airbag inflates as it heats up. To cushion the impact, the airbag deflates when compressed. When this occurs, smoke also escapes into the car. This is completely normal. The entire process, including inflation and deflation of the airbag, occurs in tenths of a second.



SRS system, right-hand drive.

NOTE! The sensors (3) react differently depending on the severity of the collision and whether the driver or passenger side seat belts are in use. Crash situations may occur where only one airbag is deployed. In a collision, the SRS system sensors detect the deceleration caused by the collision. The system determines if the collision is of the character and nature requiring one or more airbags to deploy to protect the occupants.

NOTE! In certain collisions, only one (or no) airbag is activated.

WARNING!

Any interference in the SRS system could cause malfunction and serious injury.

Repair work may only be performed by a Volvo workshop.

Dual-stage airbags

(Volvo Dual-Stage Airbag)

If a collision is mild but sufficiently violent that there is a risk of personal injury, the airbags are partially inflated. If the collision is more severe, the airbags are inflated fully.

Side airbags



WARNING!

Only use Volvo upholstery or upholstery approved by Volvo. Other upholstery may impede the function of the side airbags.

Child seats and side airbags

A child seat/booster cushion can be placed in the front seat as long as the car is not equipped with an airbag on the passenger side.

Side airbags - SIPS bag

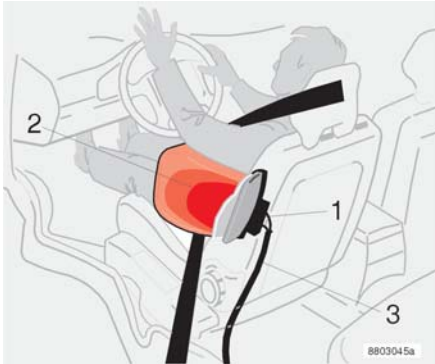
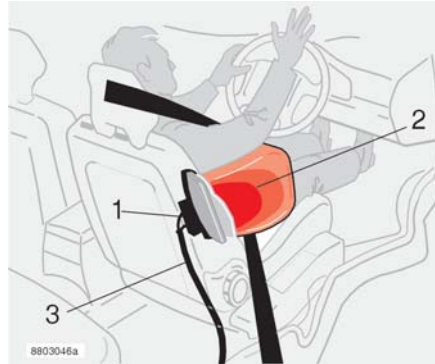
A large proportion of the collision force is distributed by SIPS to the members, posts, floor, roof and other parts of the car body. The side airbags protect the chest and are an important part of SIPS. The SIPS airbag system consists of two main components: Side airbags and sensors. The side airbags are installed in the frames of the front seat backrests and the sensors are located on the insides of the centre and rear pillars.

WARNING!

The side airbags supplement the existing SIPS system. Always use seat belts.

WARNING!

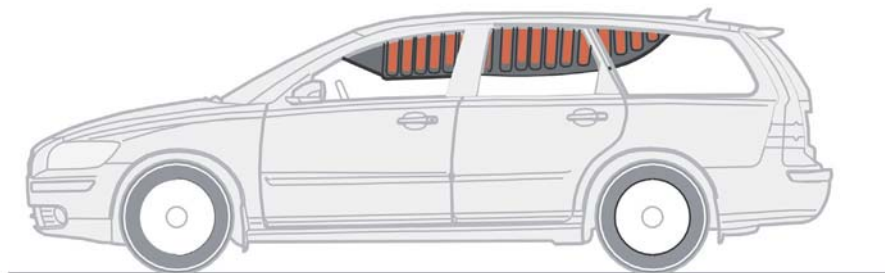
- Any interference with the SIPS (side impact protection system) airbag system could cause malfunction and serious injury. Contact a Volvo Workshop instead.
- No objects or accessories may be placed between the outer side of the seat and the door panel because this area may be affected by the side airbag.

*Left-hand drive**Right-hand drive*

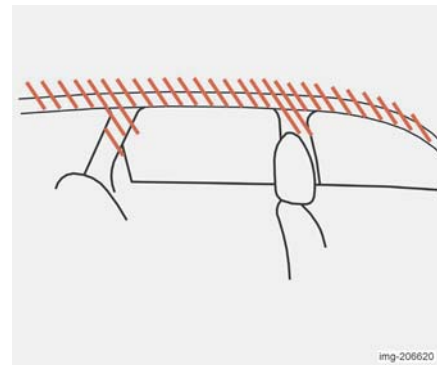
Side impact protection system (SIPS)

The SIPS airbag consists of a gas generator (1), side airbag(2) and sensors (3). When a sufficiently violent collision occurs, the sensors react and activate the gas generator which inflates the side airbag. The airbag inflates between the occupant and the door panel, cushioning the impact at the moment of collision, and then deflates. Normally, only the side airbag on the side of the collision inflates.

Inflatable curtain



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Properties

The inflatable curtain supplements the existing SIPS system. The inflatable curtain is concealed in the headlining along both sides of the car. It protects both the front and rear seat. If the car is hit from the side, the inflatable curtain deploys within a few thousandths of a second. It is then inflated for approximately three seconds to provide maximum protection in the event of a complicated, severe collision. The inflatable curtain is activated by the SIPS system collision sensors if the car is hit from the side. The inflatable curtain is filled with gas when activated. The inflatable curtain helps to prevent the driver's and passengers heads from hitting the inside of the car in the event of a collision.

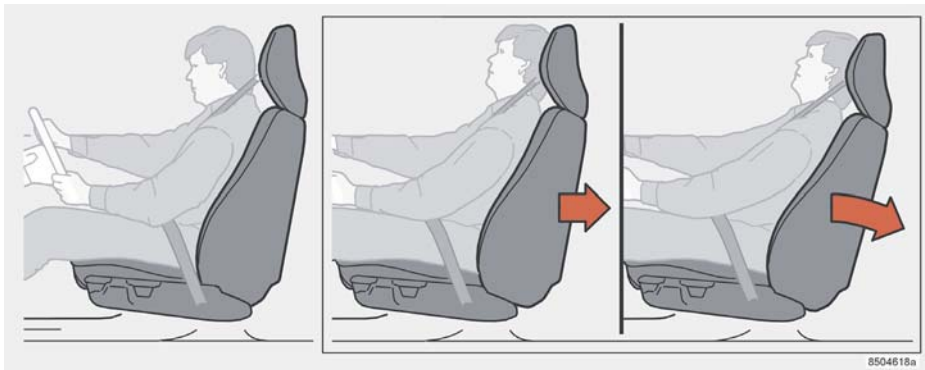
WARNING!

- Never hang or secure anything from the handles in the roof. The hook is only intended for light outer garments (not for hard objects such as umbrellas).
- Do not screw to, or mount anything on the headlining, door pillars or side panels. The intended protection may then be compromised. Only Volvo Genuine parts that are approved for placement in these areas should be used.

WARNING!

The inflatable curtain is a supplement to the seat belt.
Always use a seat belt.

WHIPS



Protection against whiplash injuries - WHIPS

The WHIPS system (Whiplash Protection System) consists of energy absorbing backrests and specially developed head restraints in both front seats. The system is activated upon a collision from behind, based on the collision angle, speed and nature of the colliding vehicle.



WARNING!

The WHIPS system is a supplement to the seat belt. Always use seat belts.

The seat's properties

When the WHIPS system is activated the front seat backrests fall backwards to alter the position of the driver's and passengers in the front. This diminishes the risk of whiplash injury.



WARNING!

- If the seat has been exposed to a heavy load strain, such as in a rear-end collision, the WHIPS system must be inspected by a Volvo workshop.
- Even if the seat seems undamaged, some of the protective properties of the WHIPS system may have been lost. Contact a Volvo workshop to check the system, even after minor rear end collisions.



WARNING!

Never modify or repair the seat or WHIPS system yourself. Contact a Volvo workshop.

Correct seating position

For the best possible protection, the driver and front seat passenger should sit in the centre of the seat with as little distance as possible between the head restraints and head.

WHIPS system and child seats

The WHIPS system does not negatively affect the protective properties of the car with regard to child seats.

The following can be used:

- a child seat in the front passenger seat, provided that the airbag on the passenger side has been deactivated.
- a rear facing child seat in the rear seat supported against the backrest of the front seat.



Do not hinder the function of the WHIPS system

WARNING!

If a rear backrest is folded down, the corresponding front seat must be moved forward so that it is not in contact with the folded backrest.

WARNING!

Do not place a box or similar cargo so that it is squeezed between the seat cushion of the rear seat and the backrest of the front seat. Be sure to never hinder the function of the WHIPS system.

When are the safety systems activated?

System	Triggered
Seat belt tensioner	In frontal collisions. The seat belt is tensioned around the body to restrain the passenger more quickly.
Airbags (SRS)	In collisions if there is a risk that front seat passengers could be injured by hitting the dashboard or steering wheel.
Side airbags SIPS	In side-on collisions if the car is hit with sufficient force.
Inflatable Curtain (IC)	In side-on collisions. The curtain reduces the risk of head injuries.
Whiplash protection (WHIPS)	When hit from behind. Reduces the risk of whiplash.

If the airbags have been deployed, we recommend the following:

- Tow the car to a Volvo workshop. Never drive with deployed airbags.
- Let a Volvo workshop replace components in the car's safety system.
- The airbags do not always deploy in the event of a frontal collision. This means that the function was not needed at that moment and the passengers were protected by the other safety systems of the car.

NOTE! The SRS, SIPS and IC systems are only deployed once in a collision.



WARNING!

The SRS system sensor is located in the centre console. Disconnect the battery cables if the floor of the passenger compartment has been drenched with water. Do not try to start the car, as the airbags may deploy. Have the car recovered to a Volvo workshop.



WARNING!

Never drive with deployed airbags. This may make the car difficult to steer. Other safety systems may also be damaged. Intense exposure to the smoke and dust released when the airbags are deployed can cause skin and eye irritation. In case of problems, wash with cold water and contact a doctor. The speed of the deployment and the airbag fabric may cause friction burns on the skin.

Crash mode



Driving after a collision

If the car has been involved in a collision, the text CRASH MODE - SEE MANUAL may appear in the information display. This means the functionality of the car has been reduced. CRASH MODE is a safety feature that comes into effect when the collision could have damaged an important function in the car, for example fuel lines, sensors for one of the safety systems or the brake system.

WARNING!

Never try to repair the car yourself or to reset the electronics after the car has been in CRASH MODE. This could result in injury or the car not functioning as normal. Always allow a Volvo workshop to handle checking and restoring the car to normal status after CRASH MODE has been displayed.

Attempting to start the car

First check that no fuel has escaped from the car. There should not be any fuel odour.

WARNING!

Do not attempt to restart the car under any circumstances if there is any fuel odour when the CRASH MODE message is displayed. Leave the car immediately.

If everything appears normal and you have checked for fuel leakage, you may attempt to start the car.

- First remove the ignition key, then reinsert it. The car's electronics will try to reset themselves to normal mode. Then try to start the car.

Moving the car

If the normal mode is displayed after the CRASH MODE has been reset, the car may be moved carefully out of its present dangerous position. Do not move the car further than necessary.

Recovery

Even if the car appears driveable after it has been put into CRASH MODE, it should not be driven or towed. When travelling, concealed damage can make the car impossible to manoeuvre.

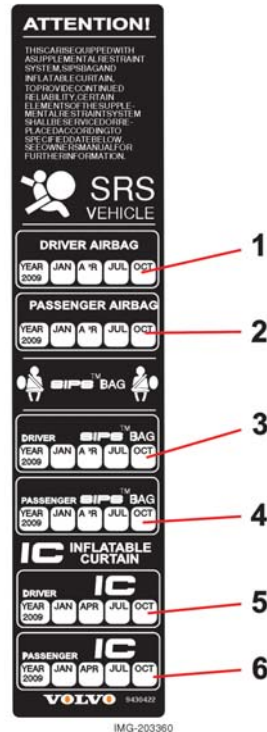
WARNING!

The car may not be towed once it has been put in CRASH MODE. It must be recovered from its present location to a Volvo workshop.

Inspecting air bags and inflatable curtains

Inspection intervals

The year and month specified on the decal on the door pillar(s) is the date you should contact your Volvo Workshop to inspect, and if necessary, replace the airbags, seat belt tensioners and inflatable curtains. If you have any questions about the systems, please contact a Volvo workshop.



1. Driver's airbag
2. Front passenger airbag
3. Side airbag on the driver's side
4. Side airbag on the passenger side
5. Inflatable curtain on the driver's side
6. Inflatable curtain on the passenger side

This decal is located in the rear left door opening.

Child safety



Children should sit comfortably and safely

The position of the child in the car and the equipment required is dictated by the weight and height of the child. The table "Position of children" page 30 in the car gives the necessary information.

- Children of all ages and sizes must always be secured in the car. Never allow a child to sit on the knee of a passenger.

Volvo's own child safety equipment is designed for your car. The use of Volvo genuine equipment ensures that the mounting points and attachments are correctly positioned and sufficiently strong.

NOTE! Regulations regarding where children may be placed in the car vary from country to country. Check what laws apply.



Child seats and airbags are not compatible

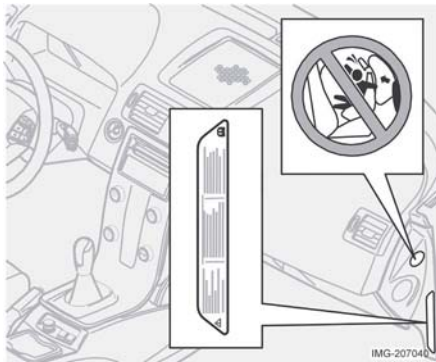
Child seats and airbags

Always place the child in the rear seat if the passenger seat airbag is activated. If the airbag deploys, a child seated in a child seat on the passenger side may suffer serious injury.



WARNING!

No one shorter than 140 cm (4 ft 7 in) should sit in the front seat.



Decals on the side of the dashboard



WARNING!

Never place a child seat/booster cushion on the front seat if the car has an airbag on the passenger side.

Position of children in the car

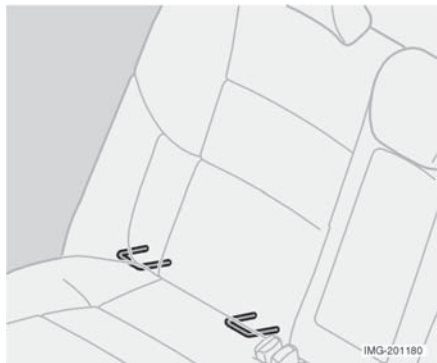
Weight/age	Front seat	Outer rear seats	Centre rear seat
<10 kg (22 lbs) (0–9 months)	Rear-facing child seat, secured with seat belt and mounting strap. L: Type approval no. E5 03135	Rear-facing child seat, secured with seat belt, support and mounting strap. L: Type approval no. E5 03135	Rear-facing child seat, secured with seat belt, support and mounting strap. L: Type approval no. E5 03135
9-18 kg (19 – 40 lbs) (9 –36 months)	Rear-facing child seat, secured with seat belt and mounting strap. L: Type approval no. E5 03135	Rear-facing child seat, secured with seat belt, support and mounting strap. L: Type approval no. E5 03135	Rear-facing child seat, secured with seat belt, support and mounting strap. L: Type approval no. E5 03135
15-36 kg (33 – 80 lbs) (3-12 years)	Booster cushion with or without backrest. L: Type approval no. E5 03139	Alternatives: Booster cushion with or without backrest. L: Type approval no. E5 03139 Integrated booster cushion. L: Type approval no. E5 03168	Booster cushion with or without backrest. L: Type approval no. E5 03139

L: Suitable for certain child seats as listed in the specified type approval. Child seats may be vehicle-specific, limited, semi-universal or universal.



WARNING!

- Never place a child in a child seat or on a booster cushion on the front seat if the passenger seat airbag is activated.
- Never leave children unattended.



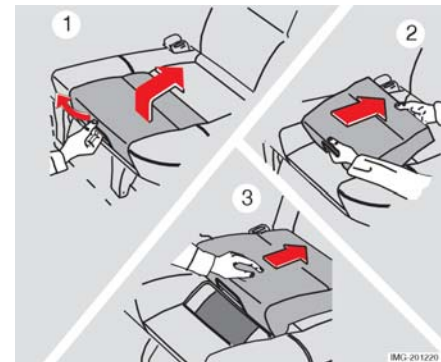
ISOFIX mounting system for child seats (option)

The outer rear seats are fitted with ISOFIX mountings. Contact a Volvo dealer for further information on child safety equipment.



Integrated booster cushions (option)

Volvo's integrated booster cushion for the rear outer seats is specially designed to provide optimum safety for children. Combined with the regular seat belts, the booster cushion is approved for children weighing between 15 and 36 kg. (33 – 80 lbs).



Raising the booster cushion

1. Pull the handle to raise the booster cushion.
2. Grasp the cushion with both hands and move it backwards.
3. Press until it locks.

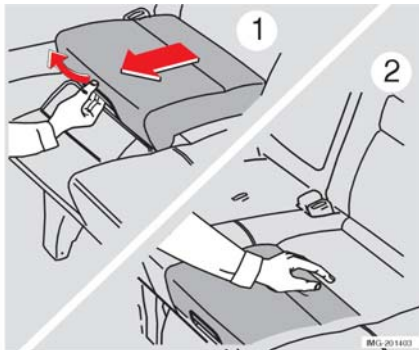


WARNING!

The booster cushion must be in the locked position before a child is placed there.

Check that:

- the seat belt is in contact with the child's body and is not slack or twisted over the shoulder



- the lap belt is low over the pelvis for optimum protection
- the seat belt does not touch the child's throat or lie below the shoulders.

Carefully adjust the position of the head restraint to suit the child.

See also page 158.

Lowering

1. Pull the handle
2. Move the seat down and press until it locks

NOTE! Remember to first stow the booster -cushion if you wish to lower the seat's backrest.

WARNING!

If an integrated booster cushion has been exposed to a major load, in a collision for example, the entire booster cushion must be replaced. This includes the seat belt, complete with bolts. Even if the booster cushion appears undamaged, some of the protective properties may have been lost. The booster cushion must be replaced if it is worn.

Replacing the booster cushion

It is important that the integrated booster cushion is properly secured. Therefore, replacement and any repairs to the cushion should be carried out by a Volvo workshop. Do not modify or adapt the booster cushion in any way.

Installing the child seat

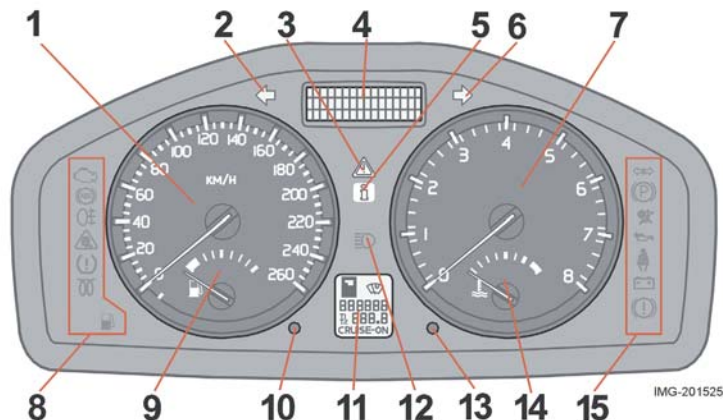
Volvo has child safety products that are designed for and tested by Volvo.

When using other products that are available on the market, it is important to read the installation instructions that accompany the product and to follow them carefully.

- Do not attach the child seat straps to the horizontal adjustment bar, springs or the rails and struts under the seat. Sharp edges may damage the mounting straps.
- Allow the backrest of the child seat to rest against the dashboard. This applies to cars that do not have a passenger side airbag or if the airbag is deactivated.
- Never place a child seat on the front seat if the car has a passenger side airbag that is not deactivated. If there are any problems with installation of child safety products, contact the manufacturer for clearer installation instructions.

Combined instrument panel	34
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Combined instrument panel



1. Speedometer

2. Direction indicators, left

3. Warning symbol

4. Information display

The display presents information and warning messages, outside temperature and clock. When the temperature is between +2 °C and -5 °C, a snowflake symbol is shown in the display. This symbol serves as a warning for slippery road surfaces. When the car has been stationary, the outside temperature gauge may display a higher reading than the actual temperature.

5. Information symbol

6. Direction indicators, right

7. Tachometer

Indicates engine speed in thousands of revolutions per minute (RPM). Do not allow the needle of the tachometer to enter the red field.

8. Check and warning symbols

9. Fuel gauge

10. Button for the trip odometer

Used to measure short distances. Briefly pressing the button switches between the two trip odometers T1 and T2. A long

press (more than 2 seconds) resets the activated trip odometer.

11. Display

Displays the gear positions for automatic gearbox, rain sensor, trip and odometer and cruise control.

12. Main beam indication

13. Button for the clock

Turn the button to set the time.

14. Temperature gauge



The temperature of the engine cooling system. If the temperature is abnormally high and the needle enters the red zone, a message is shown in the display. Bear in mind that extra lamps in front of the air intake reduce the cooling capacity at high outside temperatures and high engine loads.

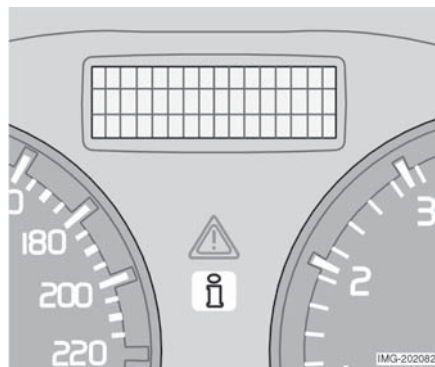
15. Check and warning symbols

Check and warning symbols

Function test, symbols

All the check and warning symbols light when the ignition key is turned to position II before starting. The operation of the symbols is then verified. All the symbols should go out when the engine is started, apart from the handbrake symbol which only goes out when the handbrake is disengaged.

If the engine is not started within 5 seconds, all symbols go out except for  and . Certain symbols may not have the function indicated, depending on the car's specification.



3. Remedy according to the instructions or contact a Volvo workshop.



If there is a deviation in one of the systems in the car, the yellow information symbol lights up in combination with text in the display. The information symbol can also be lit in combination with other symbols.

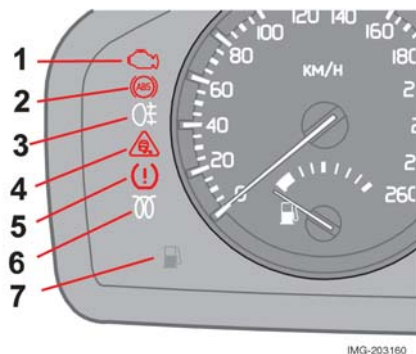
NOTE! The car can be driven for a further period following a service-related message. Consult your Volvo workshop.

Symbols in the centre of the dashboard



The red warning triangle is lit when a fault has been indicated that can affect safety and/or the car's driveability. Explanatory text appears in the information display at the same time. The warning symbol can also be lit in combination with other symbols.

1. Stop in a safe place. The car should not be driven any further.
2. Read the information in the display.



Indicator symbols - left-hand side

1. Fault in the emissions system



Drive to a Volvo workshop to have the system checked.

2. Fault in the ABS system



The system is not working if the symbol lights. The car's normal braking system continues to work, but without the ABS function.

1. Stop the car in a safe place and switch off the engine.
2. Restart the engine.

3. If the symbol remains lit, drive to a Volvo workshop to have the ABS system checked.

3. Rear fog lamp



This symbol lights when the fog lamp is on.

4. Stability system STC or DSTC



The flashing symbol indicates that the stability system is in operation. If the warning symbol remains lit, this indicates low road friction.

5. No function

6. Engine preheater (diesel)

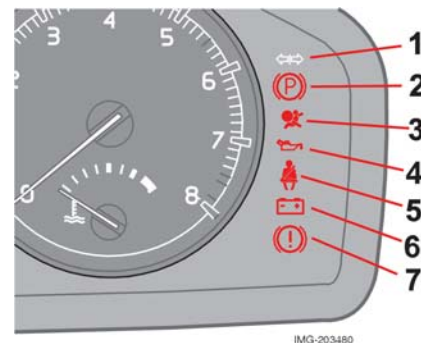


The symbol is lit while the engine is being preheated. Preheating starts when the temperature falls below -2 °C. The car can be started when the lamp goes out.

7. Low level in the fuel tank



There are approximately 8 litres left when this symbol is lit.



Indicator symbol - right-hand side

1. Trailer indicator lamp



The symbol flashes when the direction indicators of the car and trailer are used. If the symbol does not flash, one of the lamps on the trailer or car is defective.

2. Parking brake applied



The symbol lights even if the parking brake has only been applied one "click". Check that the lever is properly applied.

3. Airbags - SRS



If the symbol remains lit or lights while driving, a fault has been detected in the SRS, SIPS or IC system. Drive to an authorised Volvo workshop as soon as possible to have the system checked.

4. Low oil pressure



If the symbol lights while driving, the engine oil pressure is too low. Stop the engine immediately and check the engine oil level. Top up if necessary. If the symbol is lit and the oil level is normal, contact a Volvo workshop.

5. Seat belt reminder



The symbol remains lit if the driver or front passenger is not wearing their seat belt.

6. Generator not charging



If this symbol lights while driving, there is a fault in the electrical system. Contact a Volvo workshop.

7. Fault in the brake system



If the symbol lights, the brake fluid level may be too low.

1. Stop the car in a safe place and check the brake fluid reservoir level.
2. If the reservoir level is below MIN, the car should not be driven further. Have the car recovered to a Volvo workshop to have the brake system checked.



If the BRAKE and ABS symbols light at the same time, there may be a problem in the brake force-distribution.



1. Stop the car in a safe place and switch off the engine.
 2. Restart the engine.
- If both symbols go out, continue driving.
 - If the symbols remain lit, check the brake fluid reservoir level.
 - If the brake fluid level is normal and the symbols remain lit, carefully drive the car to a Volvo workshop to have the brake system checked.
 - If the reservoir level is below MIN, the car should not be driven further. Have the car recovered to a Volvo workshop to have the brake system checked.



WARNING!

If the BRAKE and ABS symbols light at the same time, there is a risk that the rear end will slide during heavy braking.

Reminder - doors not closed

If one of the doors, the bonnet or the boot lid is not correctly closed, the driver will be warned.

Low speed



While the car is moving at a maximum of 7 km/h (4.5 mph), the symbol lights. At the same time, one of the following will appear in the display: DRIVER DOOR OPEN, PASSENGER DOOR OPEN, LEFT REAR DOOR OPEN or RIGHT REAR DOOR OPEN. Stop the car as soon as it is safe to do so. Close the door or the hatch which is open.

High speed



If the car is being driven at 7 km/h (4.5 mph) or more, the symbol lights. At the same time one of the texts in the previous paragraph is displayed.

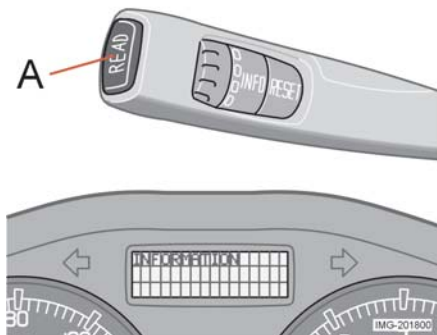
Bonnet ¹ and boot lid



Irrespective of speed, the symbol lights and the display shows BONNET OPEN or BOOT LID OPEN.

¹ Only cars with an alarm.

Information display



Messages

At the same time as a warning or indicator symbol is lit, a supplementary message appears in the information display.

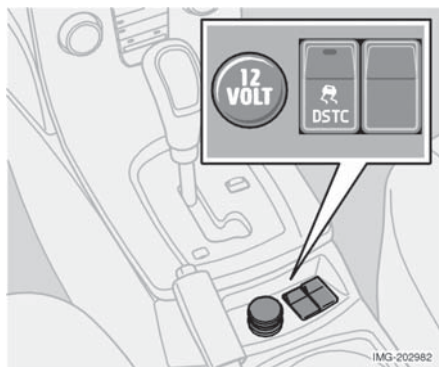
- Press the READ button (A).

Scroll between the messages using the READ button. Fault messages are stored in the memory until the fault has been remedied.

NOTE! If a warning message is displayed when the trip computer is being used, the message must be read (press the READ button) before the previous activity can be resumed.

Message	Specification
STOP SAFELY	Stop the car and switch off the engine. Serious risk of damage.
STOP ENGINE	Stop the car and switch off the engine. Serious risk of damage.
SERVICE URGENT	Take your car in for service immediately.
SEE MANUAL	Read the owner's manual.
SERVICE REQUIRED	Take your car in for service as soon as possible.
TIME FOR REGULAR SERVICE	Time for service. The time is affected by the distance travelled, number of months since last service and engine running time.

Electrical socket and switch for the centre console



Electric socket, DSTC system, extra equipment

12V electric socket

The electric socket can be used for different 12 V accessories, such as mobile phones and coolers. The maximum current is 10A. In order for the socket to supply current, the ignition key must be in position **I**.



WARNING!

Always leave the plug in the socket when the socket is not in use.

Cigarette lighter (option)

The lighter is activated by pushing in the button. Once the lighter has been heated, the button pops out again. Pull out the lighter and use the heated coils.

Stability system STC or DSTC¹

The stability and traction control system is activated automatically when the car is started.

To reduce the stability control system:

- Hold the button pressed for at least half a second.

For further information, see page 138.



WARNING!

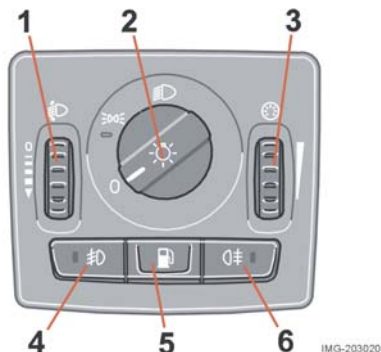
The driving characteristics of the car differ if the stability control system function is reduced.

Extra equipment

Space for extra switch for post installed equipment.

¹ Option in certain markets

Lighting panel



1. Headlamp levelling

The headlamp height is adjusted using this control. This is used when the car is so heavily laden that it affects the height of the beams.

- Normal beam height - move the control upwards (0).
- Lowered beam height - move the control downwards.

Cars with Bi-Xenon lighting (option) have automatic headlamp levelling.

2. Headlamps and position/parking lamps

0

All lighting off.

Cars with daytime running lights (certain countries)

Dipped beam lights automatically when the ignition key is switched to the driving position (II) and cannot be switched off. Before trips to certain countries, the daytime running lights can be deactivated. Contact a Volvo workshop. Front and rear parking lamps, number plate lighting and instrument lighting are lit at the same time as dipped beam.

Position/parking lamps



Front and rear position/parking lamps as well as number plate lighting and instrument lighting.



Main and dipped beam

Ignition key in position II:

Headlamps (plus front and rear parking lamps, number plate lighting and instrument lighting) are lit.

NOTE! The light switch must be turned to position II to switch on the main beam. However, it is possible to flash the main beam

in all positions, even when the key is not in the ignition switch. See also page 43.

3. Instrument lighting

Manual adjustment:

- Brighter illumination - move the control upwards.
- Weaker illumination - move the control downwards.

Automatic control:

A twilight sensor automatically adjusts the brightness of instrument illumination.

4. Fog lamps (option)

Ignition key in position II:

- Press the button.
The fog lamps light in combination with the position/parking lamps and main/dipped beam. The LED in the button is lit while the fog lamps are on.

NOTE! In some countries, dipped beam or main beam may not be used in combination with front fog lamps.

5. Fuel filler flap

- Press the button to open the flap covering the fuel cap.

6. Rear fog lamp

Ignition key in position II:

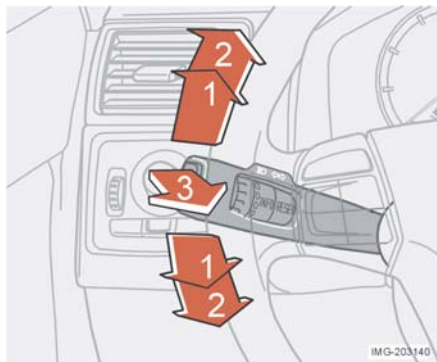
- Press the button to switch the fog tail lamp on. The rear fog lamp lights in combination with the main/dipped beam. The LED in the button and the symbol in the combined instrument panel light. If the front fog lamps and the main or dipped beam are switched off and on again, the rear fog lamp goes out. Press the button to switch it on again.

Dazzling

Remember to switch off the fog tail lamp when a car is seen in the rear view mirror. Only the last car in a queue should have the fog tail lamp switched on.

NOTE! Regulations for use of front and rear fog lamps vary from country to country.

Left-hand steering wheel stalk



Direction indicators, light switch and main beam flash

Resistance point position (1)

When changing lanes or overtaking, move the lever until you feel a distinct resistance. The lever returns when released. This action results in three flashes.

Normal turns (2)

The direction indicators light when you move the lever in the direction the wheel moves during the turn. When the steering wheel returns to centre after a turn, the direction indicators switch off automatically.

Main beam flash (3)

Pull the lever towards you (until you feel a slight resistance). The main beam remains lit until the lever is released.

Switching, main and dipped beam (3)

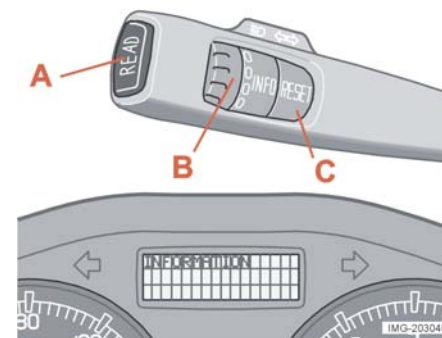
Pull the lever towards you past the flash position and release it to change between main and dipped beam.

Home safe light (3)

Carry out the following when you leave your car when it is dark outside or when there is poor visibility:

1. Remove the key from the ignition switch.
2. Move the steering wheel lever towards you.
3. Exit the car.
4. Lock the doors.

The dipped-beam lighting, position/parking lights, number plate lighting and door mirror lamps (option) will switch on. These lamps will remain lit for 30, 60 or 90 seconds. The desired time setting can be adjusted in the Car settings menu in the centre console display. See the Personal Settings section for further information.



Trip computer

Controls

In order to gain access to the information in the trip computer, the thumbwheel INFO (B) must be turned in steps, either upward or downward. By turning again, you return to the starting point.

NOTE! If a warning message interrupts while the trip computer is in use, the message must be acknowledged. Acknowledge by pressing the READ button (A) and to revert to the trip computer function.

Functions

The trip computer receives a great deal of data that is continuously evaluated by a microprocessor.

The system has four functions which are shown in the display:

- Average speed
- Current fuel consumption
- Average fuel consumption
- Range to empty fuel tank

Average speed

When the ignition is switched off, the average speed is stored and used as the basis of the new value when you continue driving. Reset using the RESET button (C).

Current fuel consumption

Present fuel consumption is calculated every second. The information in the display is updated every couple of seconds. When the car is stationary, “----” appears in the display.

Average fuel consumption

The average fuel consumption since the last reset (RESET). When the ignition is switched off, the average fuel consumption is stored and remains until the function is reset. Reset using the RESET button (C).

NOTE! Some incorrect readings may occur if a fuel-driven heater is used.

Range to empty fuel tank

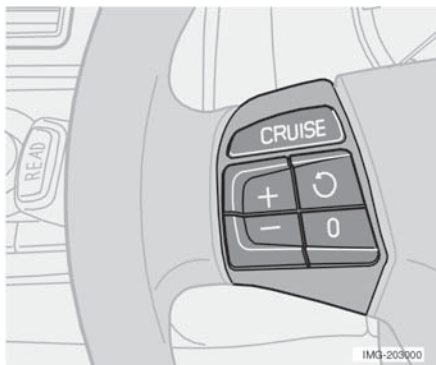
This calculation is based on the average fuel consumption over the last 30 km (19 miles) and the remaining fuel volume. It displays the approximate distance that can be driven with the fuel remaining in the tank. When the range to empty is less than 20 km (12 miles), “----” is shown in the display.

NOTE! Some incorrect readings may occur if a fuel-driven heater is used.

Resetting

Keep the RESET button (C) pressed for at least five seconds to reset the average speed and average fuel consumption at the same time.

Cruise control (option)



Operation

Activating

The controls for cruise control are to the left of the steering wheel.

Setting the desired speed:

- Press the CRUISE button. CRUISE is displayed.
- Increase or decrease the speed by pressing + or –.

NOTE! Cruise control cannot be engaged at speeds below 35 km/h (22 mph).

- Lightly press + or – to lock the desired speed.

CRUISE ON is displayed when the cruise control is activated.

Temporary disengagement

- Press 0 to temporarily disengage the cruise control.

Cruise control is automatically disengaged:

- if the speed drops below the limit for engagement
- when the brake pedal or the clutch pedal is depressed.
- if the gear selector is moved to position **N**

- during wheel spin or wheel lock-up.

The last set speed is stored in the memory.

Return to the set speed



Press the button to resume the previously set speed.

Acceleration

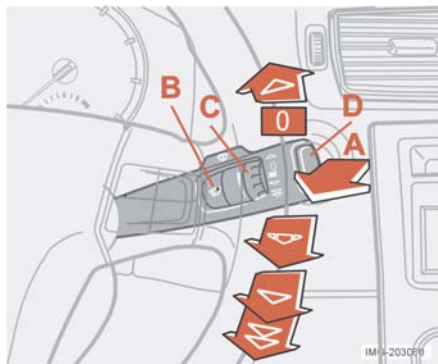
A temporary increase in speed, during overtaking for example, does not affect the cruise control setting. The car will resume the previously set speed afterwards. If cruise control is engaged, the speed can be increased or decreased using the + or – button.

A short press corresponds to approximately 1 km/h (0.6 mph). The speed of the car at the time the button is released will be programmed instead.

Disengagement

- Press CRUISE to disengage the cruise control. CRUISE ON will go out in the display. The cruise control is automatically disengaged when the ignition is switched off.

Right-hand steering wheel stalk



Windscreen wipers

- A. Windscreen and headlamp washers
- B. Rain sensor - on/off
- C. Thumb wheel
- D. No function

Windscreen wipers off

0

The windscreen wipers are off when the stalk is in position 0

Single sweep



Move the stalk up to make a single sweep.

Intermittent wiping



The number of sweeps per time unit can be adjusted. Turn the thumb wheel (C) upwards for a shorter interval between the sweeps. Turn downwards to increase the interval.

Continuous wiping



The wipers sweep at normal speed



The wipers sweep at high speed

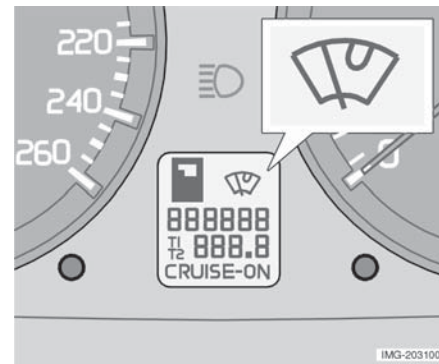
A - Windscreen/ headlamp washers

Pull the lever towards the steering wheel to start the windscreen and headlamp washers. The wipers will make three more sweeps once the stalk is released.

Headlamp washing

(option in certain markets)

High pressure washing of the headlamps consumes a large quantity of washer fluid. To save fluid, the headlamps are only washed every fifth time (within a ten minute interval). When ten minutes has passed since the last time the windscreen was washed, the headlamps are washed again at high pressure the next time the windscreen is washed.



B - Rain sensor (option)

The rain sensor detects the amount of water on the windscreen so that the speed of the windscreen wipers increases or decreases. The sensitivity of the rain sensors is adjusted using the thumb wheel (C).

On/Off

When activating the rain sensor, the windshield wiper stalk must be in position 0.

To activate the rain sensor:

- press the button (B). The rain sensor symbol is shown in the lower display.

To switch off the rain sensor, either:

- press the button (B)
- change the wiper program by moving the stalk to another position.

The rain sensor switches off automatically when the ignition is switched off.

IMPORTANT!

Disengage the rain sensor at automatic car washes or switch off the ignition. The windshield wipers start and may become damaged.

Intermittent wiping:

- Press in the top section of the switch.

Regular speed:

- Press in the lower section of the switch.

Neutral position:

- The function is deactivated.

C – Thumb wheel

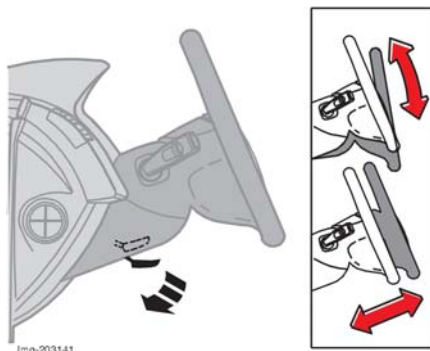
The thumb wheel is used to adjust the number of sweeps per interval when Intermittent wiping is selected or the sensitivity to rainfall when the rain sensor is selected.

D - Wiper and washer, rear window

Wash and wipe are activated on the rear windshield by moving the stalk forward. The wiper blade will make a few more sweeps once washing is complete.

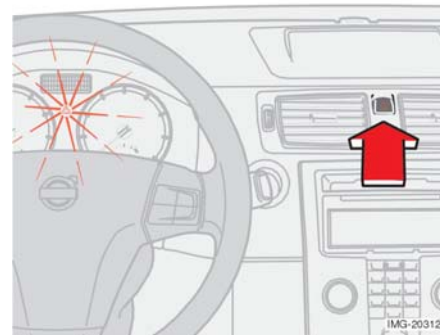
The button on the end of the stalk is a three position switch:

Steering wheel adjustment, hazard warning flashers



WARNING!

Adjust the steering wheel before driving, never while driving. Before driving, check that the steering wheel is fixed in position.



Steering wheel adjustment

The steering wheel can be adjusted for both rake and reach.

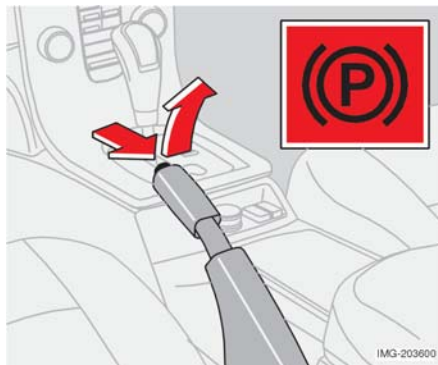
1. Fold down the lever by the steering column to release the steering wheel.
2. Adjust the steering wheel to the position that suits you best.
3. Fold the lever back to secure the steering wheel position. If the lever is hard to move, press on the steering wheel at the same time as pressing the lever back.

Hazard warning flashers

Use the hazard warning flashers (all direction indicators flash) when the car is stopped where it could be a possible traffic hazard or obstruction. Press the button to activate the function.

NOTE! Regulations for use of hazard warning flashers vary from country to country.

Parking brake, electrical socket



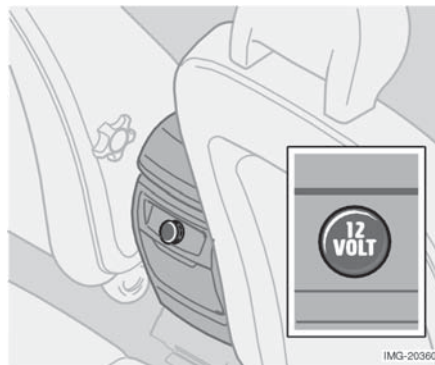
Parking brake (handbrake)

The lever is located between the front seats. The parking brake holds the rear wheels. The warning symbol in the combined instrument panel lights when the brake is applied.

The warning symbol lights even if the parking brake has only been applied one "click". Check that the lever is properly applied.

To release the parking brake:

- Pull the lever up slightly and press in the button. Lower the lever and release the button.



Electric socket in the rear seat

The electric socket can be used for various accessories, such as mobile phones and coolers. It is intended for 12 V. The maximum current is 10A. The ignition key must be in the lowest position **I** for the socket to supply current.

WARNING!

Always leave the plug in the socket when the socket is not in use.

Cigarette lighter (option)

Press the lighter in to activate the function. Once the lighter has been heated, it pops out again. Pull out the lighter and use the heated coils.

Power windows

Operation

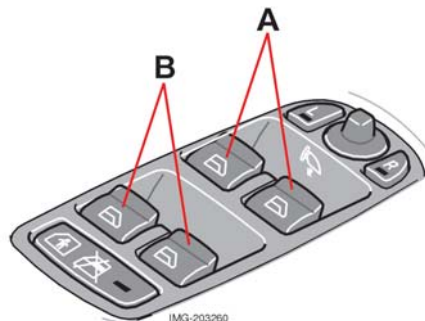
The power windows are operated using the controls in the door armrests. The ignition key must be in position I or II for the power windows to work. Once you have stopped driving and removed the ignition key, the windows can still be opened or closed as long as neither of the front doors are opened.

To open the window:

- Depress the front section of the control.

To close the window:

- Pull the front section of the control up.



A. Front door windows B. Rear door windows



WARNING!

Ensure that children's or other passengers' hands are clear when closing the windows.

Remote control and central locking buttons

All side windows can automatically be opened/closed using the remote control or the central locking buttons:

- Hold the lock button pressed for two seconds - the windows open or close.

If you need to interrupt opening/closing:

- Press the lock button again.

Driver's door

The driver can control all the power windows from his seat.

The windows in the front doors can be opened and closed in two ways:

1. Press one of the controls (A) or (B) down gently or pull it up gently. The power windows go up or down as long as the switch is actuated.
2. Press one of the controls (A) or (B) down fully or pull it up fully, then release. The windows then open or close automatically. Movement is stopped if the window is blocked in any way.



WARNING!

If the rear door windows are being operated from the driver's door, check that no rear seat passengers are in danger of getting caught when the windows close.

Blocking power windows in the rear doors

The LED in the switch is unlit

Rear door windows can be operated both by the controls on the doors and the control on the driver's door.

The LED in the switch is lit

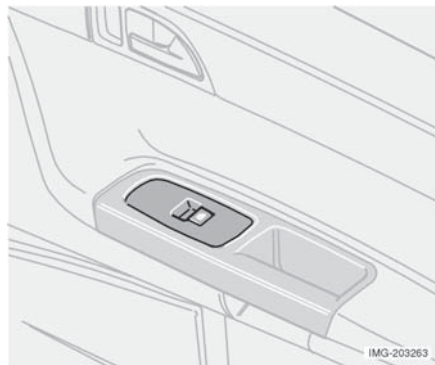
Rear door windows can only be operated from the driver's door.

NOTE! If the car has electric child safety locks ¹the LED indicates that these are activated. The doors cannot then be opened from the inside.



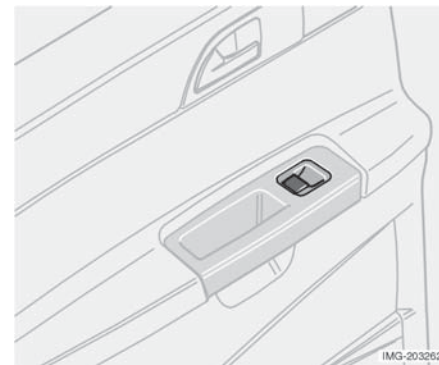
WARNING!

Always remember to switch off the current to the power windows (i.e. remove the ignition key) if children are left in the car unattended.



Passenger seat, front

The control for the power window at the passenger seat operates that window only.



Power windows in the rear doors

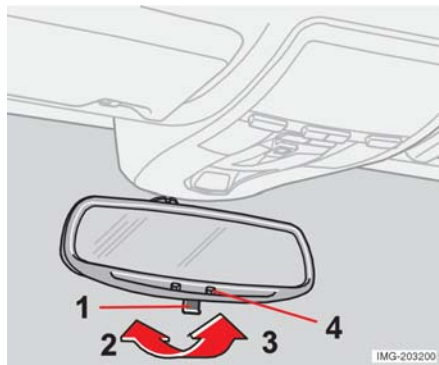
The rear door windows can be operated with the controls on the doors or the switch on the driver's door.

If the LED in the switch for blocking power windows in the rear doors (located in the control panel in the driver's door) is lit, the rear door windows can only be operated from the driver's door.

The windows in the rear doors are operated in the same way as the windows in the front doors.

¹ Option

Rearview/Door mirrors



Rearview mirror

Dimming

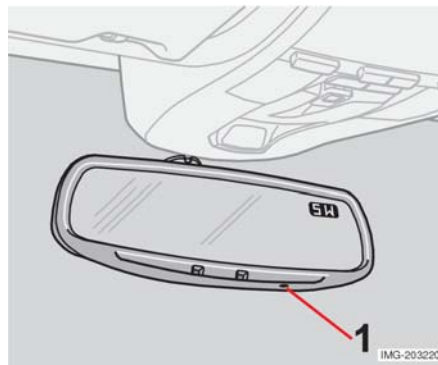
Dimming is performed with the lever (1).

2. Normal position
3. Dimming position. Used when the light from the vehicle behind is intrusive.

Dimming, automatic dim function (option)

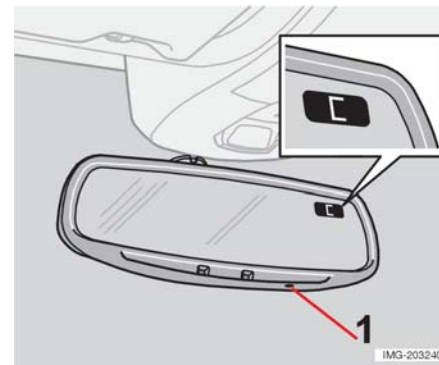
A sensor (4) in the bottom edge of the mirror detects light coming from behind, and dims the mirror when the light is strong. A Volvo workshop can adjust the sensitivity.

NOTE! The illustration is a montage. The mirror has either manual or automatic dimming, never both at the same time.



Rearview mirror with compass (option)

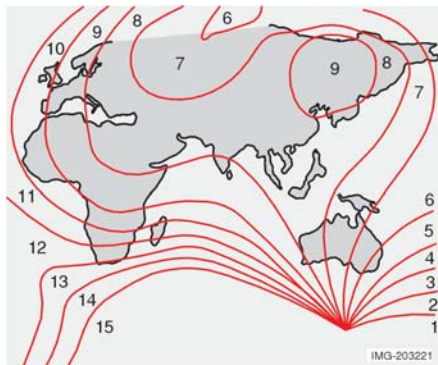
The upper right-hand corner of the rearview mirror has an integrated display that shows the compass direction in which the front of the car is pointing. Eight different illustrations are displayed with English abbreviations: N (North), NE (North East), E (East), SE (South East), S (South), SW (South West), W (West) and NW (North West).



Calibrating the compass

The compass may need to be calibrated in special cases. (installing weatherstrip). If calibration is required, the character C appears in the mirror's display.

1. Stop the car in a large, open area.
2. Start the car.
3. Hold the button (1) depressed (use a pen, for example) for at least six seconds. The character C will be displayed again.
4. Drive slowly in a circle at a maximum speed of 10 km/h (6 mph) until a compass direction is displayed.
5. Calibration is complete.



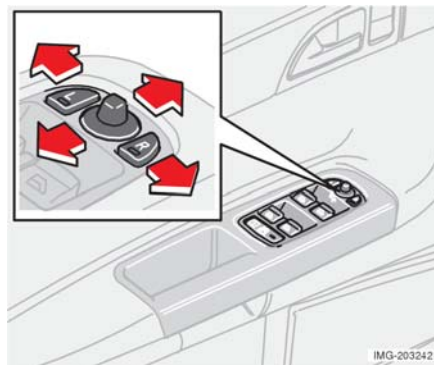
Magnetic zones

Adjusting the zone

The earth is divided into 15 magnetic zones. The compass is adjusted for the geographical area to which the car was delivered.

Select a different compass area as follows:

1. Turn on the ignition.
2. Hold the button (1) depressed (use a pen, for example) for at least 3 seconds. The number for the current area is displayed.
3. Press the button repeatedly until the number for the required geographical area (1-15) is displayed.
4. A few seconds after browsing is complete, the display reverts to the compass direction.



Door mirrors

The controls for setting the door mirrors are at the front of the armrest on the driver's door.

1. Press the **L** button for the left-hand door mirror or **R** for the right-hand door mirror. The LED in the button lights.
2. Adjust the position with the adjustment control in the centre.
3. Press the **L** or **R** button again. The LED should no longer be lit.

IMPORTANT!

Do not use ice scrapers with steel blades to remove ice from the mirrors as the glass could be scratched. Use the defroster function instead. See the Climate Control section for more information.



WARNING!

The driver's side mirror is wide angled to provide optimal vision. Objects may appear further away than they actually are.

Retractable power door mirrors (option)

The mirrors can be retracted for parking/driving in narrow areas.

- Press the **L** and **R** buttons at the same time. Release them after approximately one second. The mirrors automatically stop in the fully retracted position.

Fold out the mirrors

- Press the **L** and **R** buttons at the same time. The mirrors automatically stop in the fully extended position.

Resetting to the neutral position

Mirrors that have been moved out of position as a result of external influences must be reset to the neutral position in order for electric folding to function.

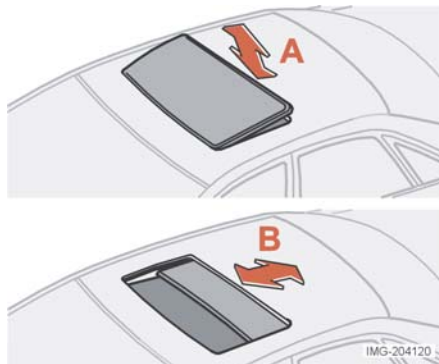
Proceed as follows:

- Fold in the mirrors using the **L** and **R** buttons.
- Fold out the mirrors again using the **L** and **R** buttons. The mirrors are now reset to the neutral position.

Approach lighting

The lamps on the door mirrors light when home safe lighting or approach lighting is selected.

Power sunroof (option)



Opening positions

The sunroof controls are located in the headlining. The sunroof can be opened to two positions:

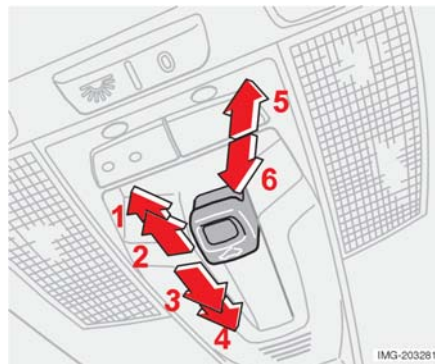
- Ventilation position, raised at the rear edge (A)
- Sliding position, backwards/forwards (B)

The ignition key must be in position **I** or **II**.



WARNING!

Remember to switch off the current to the sunroof (remove the ignition key) if children are left in the car unattended.



1. Opening, automatic
2. Opening, manual
3. Closing, manual
4. Closing, automatic
5. Opening, ventilation position
6. Closing, ventilation position

Ventilation position

Open:

- Push the trailing edge of the control (5) upward.

Close:

- Pull the trailing edge of the control (6) downward.

From ventilation position to fully open sun roof:

- Pull the control backwards to the end position (1) and release.

Sliding position

Automatic operation

Pull the control over the resistance point position (2) to the rear end position (1) or over the resistance point position (3) to the forward end position (4) and release. Sun roof opens/closes fully.

Manual operation

Open:

- Pull the control backwards to the resistance point position (2). The sunroof will move towards maximum opening position as long as the button is held in.

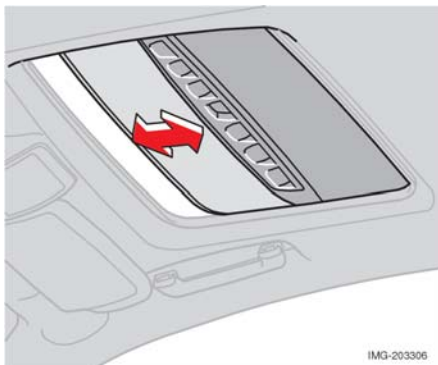
Close:

- Press the control forwards to the resistance point (3). The sunroof will move towards the closed position as long as the button is held in.



WARNING!

The sunroof's pinch protection function only operates during automatic closing, not manual closing.



Closing using the remote control or the central locking button

Closing using the remote control or the central locking button:

- Hold the lock button pressed for two seconds. The sunroof and windows close. The doors lock.

If you need to interrupt closing:

- Press the lock button again.

Sun screen

The sunroof features a manually-operated sliding inner sun screen. The sun screen slides back automatically when the sunroof is

opened. Grip the handle and slide the screen forwards to close the screen.

Pinch protection

The sunroof pinch protection function is activated if the hatch is blocked by an object. If blocked, the sunroof will stop and automatically open to the previous position.



WARNING!

The sunroof's pinch protection function only operates during automatic closing, not manual closing.

Make sure that children's hands are clear when closing the sunroof.

Personal preferences

General

Personal preferences are available for some of the car's functions. Applies to locks-, climate control and audio functions. For audio functions, see page 167.

Control panel

- A. Display
- B. MENU
- C. EXIT
- D. ENTER
- E. Navigation

Use

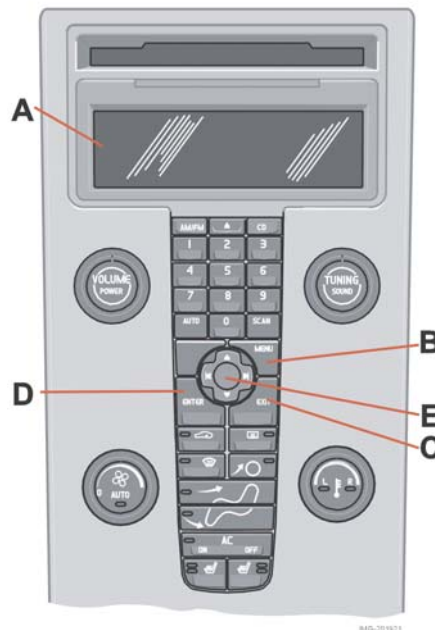
The settings are presented in the display (A).

Open the menu to enter settings:

1. Press the MENU (B).
2. Scroll to Car Settings using the navigation button (E).
3. Press ENTER (D).
4. Select an alternative using the navigation button (E).
5. Confirm your selection with ENTER.

Close the menu:

- Press EXIT (C).



Control panel

Possible settings

Personal preferences can be entered for climate, locks and audio functions. For audio functions, see page 167

Lock functions

Lock Feedback Light

When the car is locked/unlocked using the remote control, the hazard warning flashers can be selected to flash. The alternatives On/Off are available for both locking and unlocking.

Autolock

When the car starts to move, the doors and boot lid can be locked automatically. The alternatives On/Off are available.

Unlock

There are two alternatives for unlocking:

1. Global (all doors). Unlocks all doors with one press on the remote control.
2. Two Step (two step unlocking). Unlocks the driver's door with one press on the remote control. Another press unlocks all the doors.

Approach light

Selects the time the car's light should remain lit when pressing the Approach Light button on the remote control. The following options can be selected: 30/60/90 seconds.

Home safe light

Selects the time the car's light should remain lit when the left-hand steering wheel stalk is pulled backwards after the ignition key has been removed.

The following options can be selected: 30/60/90 seconds.

Information

- The VIN (Vehicle Identification Number) is the car's unique identity number.
- Number of Keys The number of keys registered for the car is displayed here.

Climate functions

Auto blower adjust (Automatic fan adjustment)

The fan speed can be set to AUTO mode in cars that have ECC:

- Select between Low, Normal and High.

Recirculation timer

When the timer is active, the air recirculates in the car for 3-12 minutes depending on the outside temperature.

- Select On/Off depending on whether the recirculation timer should be active or not.

Reset to factory settings

Resetting the climate function options to factory settings.

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Manual climate control, Air conditioning	62
Electronic climate control, ECC (option)	64
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Fuel driven heater (option)	68
Additional heater (diesel)	70

General information about climate control

Air conditioning – A/C

The climate control system cools or heats and dehumidifies the air in the passenger compartment. The car has either manual (MCC) or automatic (ECC) climate control.

NOTE! The air conditioning can be switched off, but for optimal air quality in the passenger compartment and to prevent the windows from misting it should always be on (even at temperatures of 0-15°C.).

Misting on window interiors

Reduce the problem of fogging by wiping the inside of the windows. Use a normal window cleaner.

Ice and snow

Remove ice and snow from the climate control air intake (the grille between the bonnet and the windscreen).

Fault tracing

Your Volvo workshop has the instruments and tools required for any fault tracing or repair of your climate control system. Entrust checks and repairs only to trained personnel.

Refrigerant

Refrigerant R134a is in the air conditioning system. This contains no chlorine, which means it is harmless to the ozone layer. Only use R134a when filling/changing refrigerant. Have a Volvo workshop carry out this work.

Passenger compartment filter

All air which enters the passenger compartment is cleaned by a filter. This must be regularly replaced. Follow the Volvo Service Programme for the recommended replacement interval. If the car is used in a severely contaminated environment, it may be necessary to replace the filter more often.

NOTE! There are two different types of passenger compartment ventilation filter. Ensure that the correct filter is installed.

Display

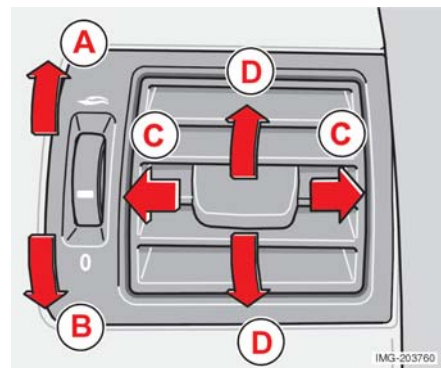
There is a display above the climate control panel. This is where the climate settings are displayed.

Personal preferences

The climate control system can be set to two functions:

- Fan speed to AUTO mode (only applies to cars with ECC).
- Timer controlled recirculation of the air in the passenger compartment.

For information about settings see page 57 .



Air vents in the dashboard

- A. Open
- B. Closed
- C. Lateral airflow
- D. Vertical airflow.

Aim the outer vents towards the front side windows to remove misting.

Cold climates: Close the centre vents for the most comfortable climate and best demisting.

ECC (option)

Actual temperature

The temperature you select corresponds to the physical experience with reference to air speed, humidity, exposure to sun, etc. which affect the interior and exterior of the car.

Sensor placement:

- The sun sensor is on the upper side of the dashboard.
- The temperature sensor for the passenger compartment is behind the climate control panel.

NOTE! Do not cover or block the sensors with clothing or other objects.

Side windows and sunroof

To ensure that the air conditioning works satisfactorily, close all the side windows and the sunroof.

NOTE! Do not obstruct the ventilation holes for the cargo compartment in the parcel shelf with clothing or other objects.

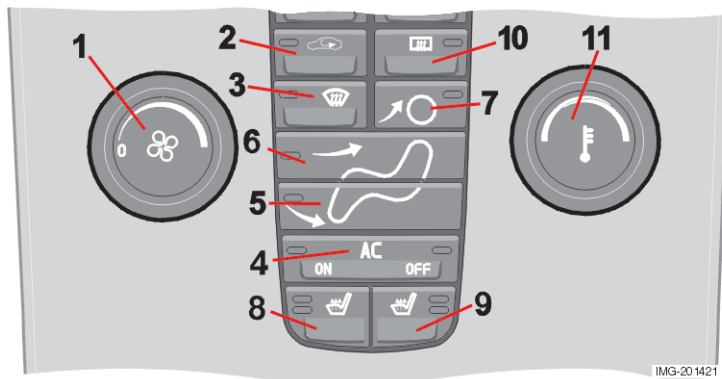
Acceleration

The air conditioning system switches off temporarily during full acceleration. You may feel a temporary rise in temperature.

Condensation

In warm weather, condensation from the air conditioning system may drip under the car. This is normal.

Manual climate control, Air conditioning



Control panel

1. Fan
2. Recirculation
3. Defroster
4. A/C - On/Off
5. Airflow to the floor
6. Airflow to head and body
7. Airflow to the windscreen
8. Heated front left seat
9. Heated front right seat
10. Rear window and door mirror defrosters
11. Temperature selector

Functions



1. Fan

Reduce the fan speed by turning the knob. If the knob is turned anticlockwise and the fan indication in the display

goes out, the fan and the air conditioning are switched off. The display shows the fan symbol and OFF.



2. Recirculation

Recirculation can be used to shut out bad air, exhaust, etc. from the passenger compartment. The air in the passenger compartment is

recirculated. No outside air is taken into the

car when this function is activated. Recirculation (together with the air conditioning system) cools the passenger compartment more quickly in a warm climate. If the air in the car recirculates for too long, there is a risk of misting on the insides of the windows.

Timer

The timer function minimises the risk of ice, misting and bad air - when the recirculation function is selected. See the "Personal preferences" section page 58 to activate/deactivate the function. Recirculation is always disengaged when you select Defroster (3).



3. Defroster

Defroster is used to quickly remove misting and ice from the windscreen and side windows.

- Air flows to the windows at high fan speed.
- The LED in the defroster button lights when this function is activated. The air conditioning system is controlled so that there is maximum air dehumidification.
- The air is not recirculated.



4. A/C - On/Off

ON: Air conditioning is connected.
 OFF: Air conditioning (A/C) system disconnected. If Defroster (3) is activated the air conditioning is always engaged.

Manually selected airflow

Press one of the three buttons (5), (6) or (7). Selected airflow is opened completely. A symbol in the display above the climate control panel and a lit LED in the relevant button indicate that manual function has been selected.



5. Airflow to the floor

Air to legs and feet.



6. Airflow to the head and chest



7. Airflow to the windscreen and side windows



8 and 9. Heated front seats

(option in certain markets)

Higher heat level
Lower heat level
Heat off

Press the button once
 - both LEDs light.
 Press the button twice
 - one LED lights.
 Press the button three times
 - no LEDs are lit.



10. Rear window and door mirror defrosters

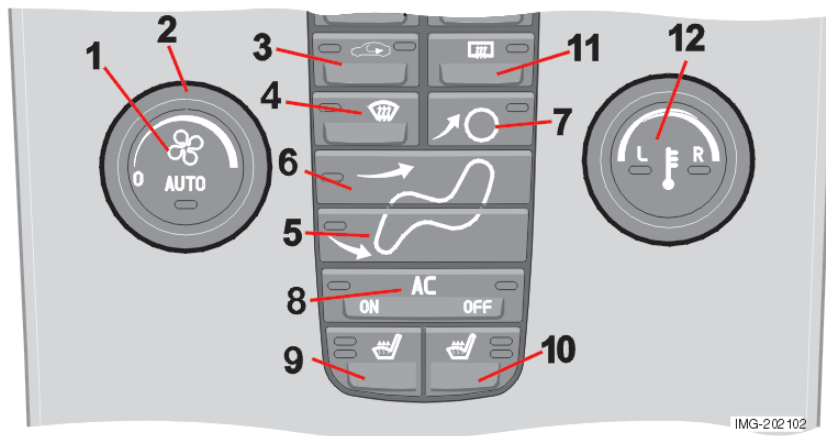
Heating is used to quickly remove misting and ice from the rear windscreen and door mirrors.



11. Temperature selector

Select cooling or heating for both the driver's and passenger sides.

Electronic climate control, ECC (option)



1. Auto -On/Off
2. Fan
3. Recirculation
4. Defroster
5. Airflow to the floor
6. Airflow to head and body
7. Airflow to the windscreen
8. ECC - ON/OFF
9. Heated front seat, left
10. Heated front seat, right

11. Rear window and door mirror defrosters
12. Temperature selector

Functions

1. Auto -On/Off



The AUTO function automatically regulates climate control so that the desired temperature is attained. The automatic function controls heating, air conditioning, fan speed, recirculation, and air distribution. If you select one or more

manual functions, the other functions continue to be controlled automatically. All manual settings are switched off when AUTO is switched on. The display shows AUTO CLIMATE.

2. Fan



Fan speed can be increased or decreased by turning the knob. The fan speed is regulated automatically if AUTO is selected. The previously set fan speed is disconnected.

NOTE! If the knob is turned anticlockwise and the fan indication in the display goes out, the fan and the air conditioning are switched off. The display shows the fan symbol and OFF.

3. Recirculation



This function can be used to shut out bad air, exhaust fumes etc. from the passenger compartment. The air in the passenger compartment is recirculated. No outside air is taken into the car when this function is activated. If the air in

the car recirculates for too long, there is a risk of misting on the insides of the windows.

Timer

The timer function minimises the risk of ice, misting and bad air - when the recirculation function is selected. See the "Personal preferences" section to activate/deactivate the function.

NOTE! Recirculation is always disengaged when you select Defroster (4).

3. Air quality system (option)

(same button as recirculation)



The air quality system consists of a multifilter and a sensor. The filter separates gases and particles, reducing odour and contaminants in the

passenger compartment. The air intake is shut and the air is recirculated in the passenger compartment if the sensor detects contaminated outside air. When the air quality sensor is active, the green LED (A) in the button lights.

Activate the air quality sensor:

- Press the AUTO button (1) to activate the air quality sensor (normal setting).

Or:

Select one of the following three functions by pressing the recirculation button repeatedly.

- The air quality sensor is active - the LED (A) lights.
- Recirculation is not activated unless required for cooling in a warm climate - no LED is lit.
- Recirculation is active - the LED (M) lights.

Tip!

- Have the air quality sensor connected.
- Recirculation is limited in cold climates to avoid misting.
- The air quality sensor should be deactivated if the windows begin to mist.
- If there is misting, use the defrosters for the windscreen, rear windscreen and side windows.

4. Defroster



Defroster is used to quickly remove misting and ice from the windscreen and side windows. Air flows to the windows at high fan speed. The LED in the

defroster button lights when this function is activated. The air conditioning system is

controlled so that there is maximum air dehumidification. The air is not recirculated.



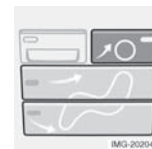
5. Airflow to the floor

Air to the legs and feet

6. Airflow to the head and chest



7. Air to the windscreen and side windows



8. ECC ON/OFF



The air conditioning system is controlled automatically by the system when the ON LED is lit. This way, incoming air is cooled and dehumidified

sufficiently. The air conditioning (A/C) system is disengaged when the OFF LED lights.

Other functions are still controlled automatically. When Defroster (4) is selected, the air conditioning system is set for maximum dehumidifying.

9 and 10. Heated front seats

(option in certain markets)



To heat the front seat:

Higher heat level

Press the button once
- both LEDs light.

Lower heat level

Press the button twice
- one LED lights.

Heat off

Press the button three times - no LEDs are lit.

11. Rear windscreen and door mirror defrosters



Use the defroster to remove ice and misting from the rear window and door mirrors.

The rear window and door mirrors are defrosted simultaneously if the switch is pressed once. The function is active if one LED is lit in the switch. The door mirrors are deactivated automatically after approximately 6 minutes. The rear windscreen is deactivated after approximately 12 minutes.

12. Temperature selector










The temperatures on the driver and passenger sides can be set independently.

Both sides are activated when the car is started. Only one side is activated if the button is pressed once. If pressed again, only the other side is activated. Both sides are activated again if the button is pressed a third time. The active side is indicated by an LED in the button and in the display above the climate control panel.

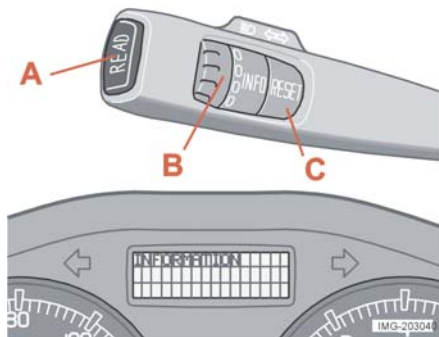
NOTE! Heating or cooling cannot be hastened by selecting a higher or lower temperature than the actual desired temperature.

Air distribution

Air distribution

	Air distribution	Use:			Air distribution	Use:
	Air to windows. There is a certain amount of airflow to the air vents. The air is not recirculated. Air conditioning is always connected.	to remove ice and misting quickly.			Air to the floor and windows. There is a certain amount of airflow to the air vents.	to ensure comfortable conditions and good demisting in a cold or humid climate.
	Air to windows.	to ensure efficient cooling in a warm climate. Prevents misting and icing in a cold climate.			Air to the floor and air vents.	in sunny weather with cool outside temperatures.
	Air to the windows and dashboard air vents.	to ensure good comfort in a warm and dry climate.			Air to the floor. There is a certain amount of airflow to the air vents and windows.	to warm the feet.
	Air to the dashboard air vents.	to ensure efficient cooling in a warm climate.				

Fuel driven heater (option)



General information about heaters

The parking heater can be started immediately or set with two different start times using TIMER 1 and TIMER 2. Here, start time refers to the time the car should be heated and ready. The car's electronic system calculates when heating should be started based on the outside temperature. There will be no heating if the outdoor temperature exceeds 25°C. At temperatures of -7°C and below, the maximum running time of the parking heater is 60 minutes.



WARNING!

The car must be outdoors if using petrol and diesel heaters.

Activating the heater

1. Enter the time when the car is to be used. Press RESET (C) to enter the hours and minutes when the car is to be used.
2. Press RESET again. The timer is activated.

Press RESET button to activate the Timer.

- The timer is activated: ON lamp lights with a steady glow.
- The heater operates: ON lamp flashes.

Parking on a hill

If the car is parked on a steep incline, the front of the car should point downhill to ensure that there is a supply of fuel to the parking heater.

Heater direct start

1. Use the thumb wheel (B) to scroll to "DIRECT START".
2. Press the RESET button (C) to make ON and OFF selections available.
3. Select ON.
The heater will now run for 60 minutes. The passenger compartment will begin to heat up as soon as the engine coolant has reached a temperature of 38°C

Immediate stop of heater

1. Use the thumb wheel to scroll to "DIRECT START".
2. Press the RESET button (C) to make ON and OFF selections available.
3. Select OFF.

Battery and fuel

If the battery is not sufficiently charged or the petrol level is too low, the parking heater will be switched off automatically. A message appears in the information display. Confirm the message by pressing the READ button (A).

IMPORTANT!

Repeated use of the parking heater combined with short journeys may discharge the battery and impair starting. In order to ensure that the generator has time to produce the energy required by the heater without discharging the battery, if the heater is used regularly the car must be driven for a period equalling the time during which the heater has been active.

Setting TIMER 1 and 2

For reasons of safety, you can only programme times for the following 24 hours, not several days in a row.

1. Use the thumb wheel to scroll to TIMER
2. Press the RESET button briefly to select the flashing hours setting.
3. Use the thumb wheel to scroll to the required hours.
4. Press the RESET button briefly to select the minutes setting.
5. Use the thumb wheel to set the desired minutes.
6. Press the RESET button briefly to confirm the setting.
7. Press the RESET button to activate the timer.

Once TIMER 1 has been set, a second start time can be programmed in TIMER 2 which is accessed using the thumb wheel. The alternative start time is set in the same way as with TIMER 1.

Messages in the display

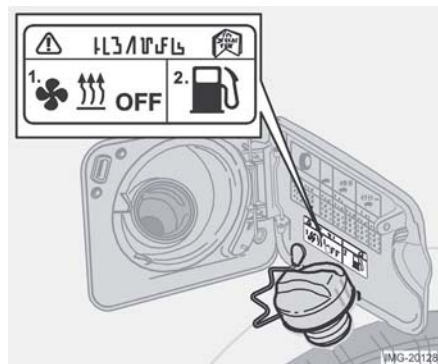
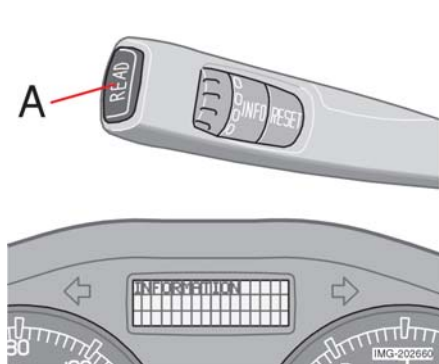
Once the TIMER 1, TIMER 2 and Immediate start settings are activated, the information symbol in the combined instrument panel lights and an explanatory text is shown in the information display. The display indicates

which timer is active when the driver removes the key from the ignition and is leaving the car.

Car clock/timer

If the car clock is reset after the clocks in the heater are programmed, the selected times will be cancelled for safety reasons.

Additional heater (diesel)



WARNING!

- Switch off the fuel driven heater before beginning refuelling.
- Spilled fuel could be ignited by the exhaust gases.
- Check in the information display that the heater is off.

Additional heater

(certain markets)

In certain conditions, diesel cars may require extra heating to ensure sufficient heating in the passenger compartment. The additional heater is fully automatic and only starts when it is sufficiently cold.



When the additional heater is running, it is indicated by an information symbol on the dashboard, combined with FUEL HEATER ON, which flashes in the display above the dashboard.

Manual shut off

In certain situations it may be desirable to be able to switch off the additional heater, such as when refuelling.

- Press the READ button (A) once. The heater switches off and FUEL HEATER OFF is displayed.

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Front seats



IMG-203502

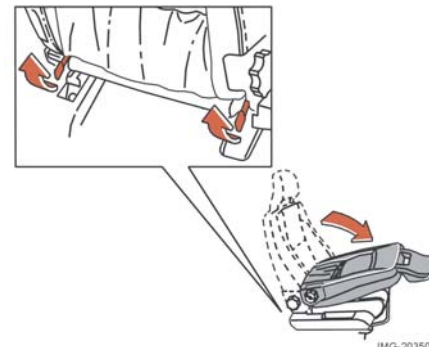
5. Change the angle of the backrest, turn the knob

6. Control panel for power seats.

Position controls (2) and (3) are not fitted to all seat models.

WARNING!

- Adjust the driver's seat position before driving, never while driving.
- Check that the seat is locked in position.



IMG-203501

Position controls (2) and (3) are not fitted to all seat models

Seating position

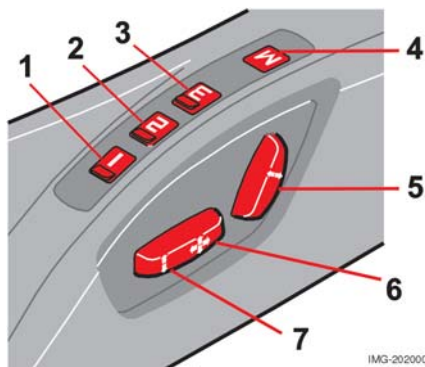
The driver and passenger seats can be adjusted to the optimum sitting and driving positions.

1. Forwards/backwards, lift the handle to set the correct distance to the steering wheels and pedals. Check that the seat has locked into position after adjusting.
2. Raise/lower the front edge of the seat cushion, pump up or down (option)
3. Raise/lower the seat, pump up or down (option)
4. Change the lumbar support, turn the knob

Lowering the front seat backrest (option)

The passenger seat backrest can be folded forwards to make room for long loads.

1. Move the seat as far back as possible.
2. Set the backrest to 90°, the upright position.
3. Lift the catches on the rear of the backrest whilst folding it forwards.



Power seat (option)

Preparations

The seat can normally only be adjusted if the ignition - key is in position **I** or **II**. It can also be adjusted within 10 minutes of the door being unlocked with the key or remote control. If the door is closed and the ignition key is not yet in the ignition, or the ignition is in position **0**, settings can be made within 40 seconds of the door being closed.

Memory function in the remote control (option)

The remote control used to unlock the car stores information about the seat settings which are changed. The next time the car is unlocked using the same remote control and

the driver's door is opened within 2 minutes, the driver's seat will assume the stored position.

Seats with memory function (option)

1. Seat setting, program 1
2. Seat setting, program 2
3. Seat setting, program 3
4. Storing seat settings

Three positions can be stored. After setting the seat, hold the **M** button (4) pressed in while pressing button (1). Further seat settings can be stored in the memory using the memory buttons (2) and (3).

Setting preset positions

Hold memory button (1), (2) or (3) pressed until the seat stops. For safety reasons, the seat will stop moving immediately if the button is released.

Seat adjustment

The following can be set using the two switches (5), (6) and (7):

5. Backrest rake
6. Seat forwards/backwards and up/down
7. Front edge of seat cushion up/down

Only one of the electric motors can be operated at a time. The power seats have an overload protector that activates if a seat is

blocked by any object. If this occurs, switch off the ignition (key in position **0**) and wait about 20 seconds before using the seat again.

Emergency stop

If the seat accidentally begins to move, press one of the buttons to stop the seat.

WARNING!

- Ensure that there are no obstructions in front of, behind or underneath the seat when setting the position.
- Ensure that none of the rear seat passengers will be trapped.
- To avoid injury, ensure that children do not play with the switches.

Interior lighting



*A. Lighting left-hand side. B. Switch.
C. Lighting right-hand side*

Lighting front seat

The lighting in the front section of the passenger compartment can be controlled using the buttons in the roof console.

Three positions can be selected for lighting the entire passenger compartment using switch (B)

1. **Off** - left-hand side pressed, passenger lighting off.
2. **Neutral position** - passenger compartment lighting lit when a door is opened and goes out when the door is closed. The dimmer function is active.
3. **On** - right-hand side pressed, passenger lighting lit.

Automatic lighting

The interior lighting comes on and goes out automatically when the switch (B), see the illustration, is in the neutral position.

The lighting comes on and remains lit for 30 seconds when:

- the car is unlocked from the outside using the key or remote control.
- the engine is stopped and the ignition key is turned to the **0** position.

The lighting comes on and remains lit for five seconds when:

- one of the doors is open
- the lighting is not switched off.

The interior lighting goes out when:

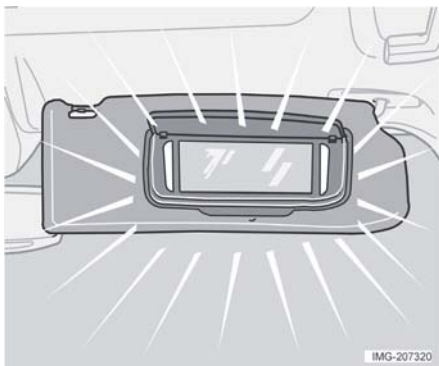
- the engine is started
- the car is locked from the outside using the key or remote control.

The interior lighting goes out automatically five minutes after the engine is switched off. The interior lighting can be switched on or off within 30 minutes of the key being turned to position **0** by pressing the button (B) briefly. The programmed times can be changed. See the instructions in the section about "Personal preferences" page 57 .



Lighting rear seat

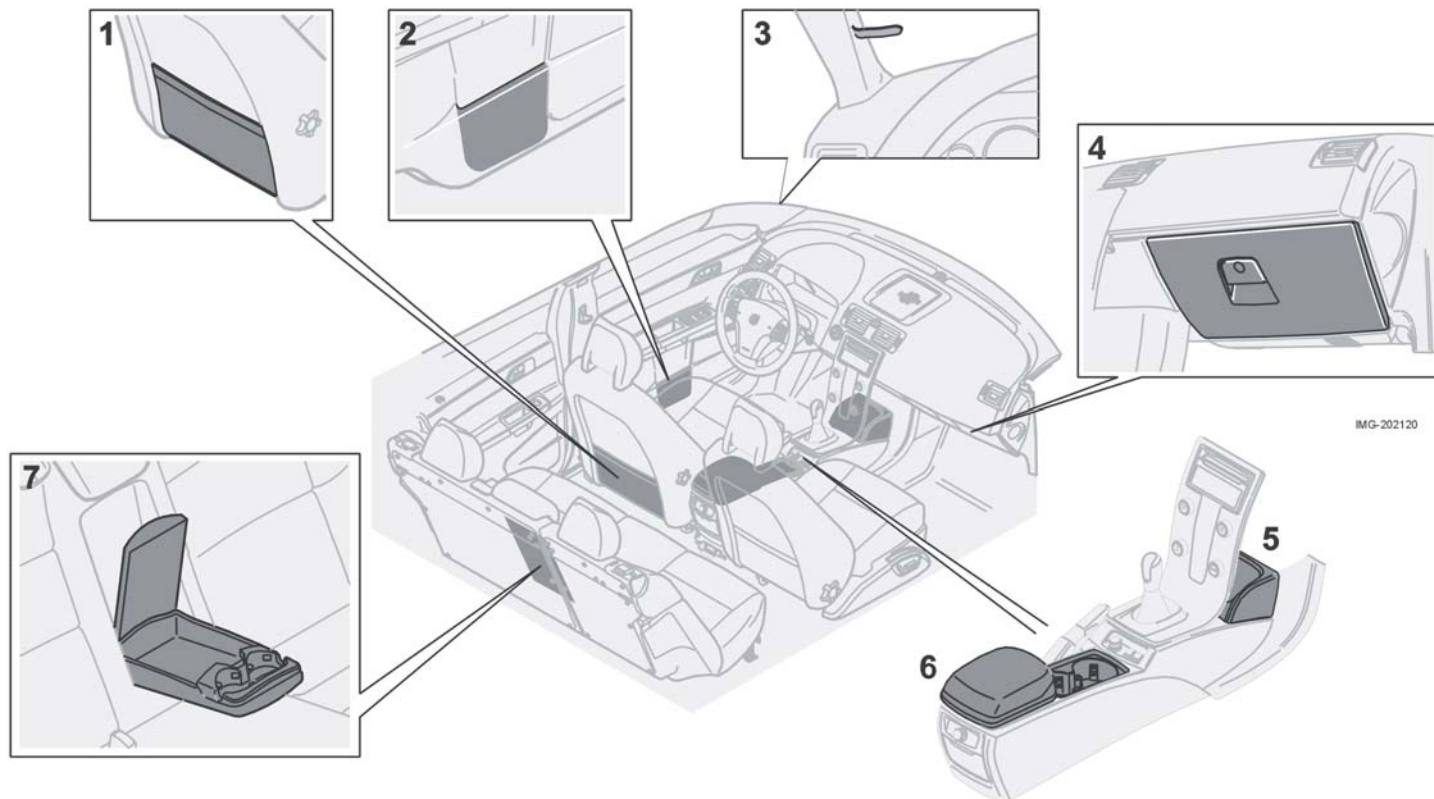
Lamps can be switched on or off by pressing the respective button. The lighting goes out automatically ten minutes after the engine is switched off.



Vanity mirror

The lamp comes on automatically when the cover is lifted.

Storage compartments in the passenger compartment



1. Centre console locker (also at the front edge of the front seat, seat cushions.)
2. Door panel compartment
3. Ticket clip.
4. Glovebox.
5. Waste basket (accessory).
6. Storage compartment and cup holder.
7. Storage compartment and cup holder.



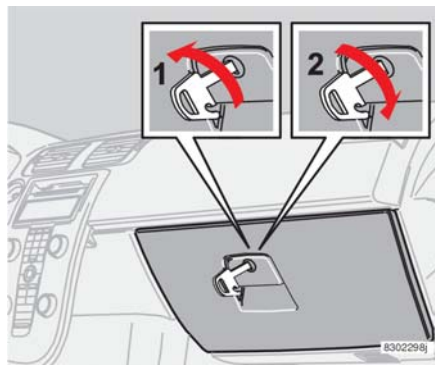
WARNING!

Waste paper basket (5) must not be installed if the handset is mounted on the right hand side of the centre console.



WARNING!

- Make sure that no hard, sharp or heavy objects lie or protrude in such a way that they could cause injuries during heavy braking.
- Always secure large, heavy loads with one of the seat belts or a retaining strap.



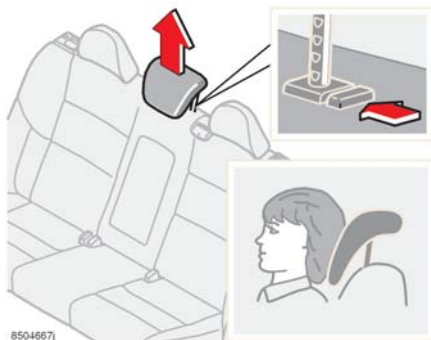
Glovebox

The owners manual and maps can be stored here. There are also holders for coins, pens and fuel cards. The glovebox can only be locked and unlocked using the detachable key blade on the remote control. See the Lock and Alarm section page 84 for further information about the key.

Floor mats (option)

Volvo offers floor mats specially manufactured for your car. They must be firmly secured in the clips on the floor so that they cannot slide and become trapped under the pedals on the driver's side.

Rear seat



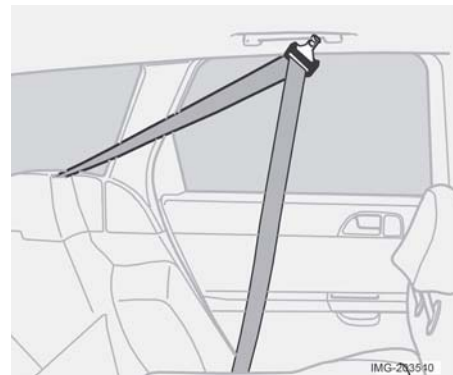
Adjust the head restraint vertically

Rear centre seat head restraint

All the head restraints can be adjusted vertically to suit the height of the passenger. The upper edge of the head restraint should be aligned to the centre of the rear of the head. Slide the head restraint up as desired. Press the button on the right hand pillar of the head restraint while pushing down to return the head restraint to the down position. Press the button on the right hand pillar of the head restraint while pulling upwards to remove the head restraint.

IMPORTANT!

The head restraints can be damaged if they are not removed when loading. The centre head restraint must be removed when transporting heavy loads.

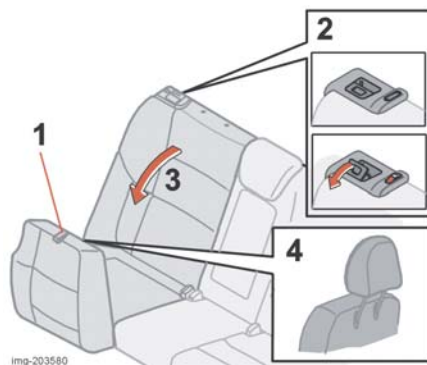


Hanging up seat belts

Tipping the rear seat backrest

The rear seat backrests can be folded forwards, either together or individually, to make it easier to transport long objects. To avoid damaging the seat belts when folding the backrest up or down, they must be hung on the grab handle hook.

- Hang the seat belt up before folding the backrests up or down.



NOTE! The red indicator must not be visible when the backrest is folded back into the upright position. The backrest is not secure if still visible.



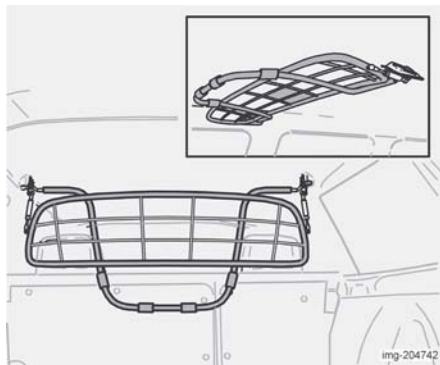
WARNING!

Do not forget to remove the seat belt from the hooks again when backrest has been folded up.

Folding the backrest

1. Pull the straps to fold the seat cushions forwards.
2. Pull the latches up and forward to detach the backrest. A red mark on the latches indicates that the backrest is not in the locked position
3. Fold the backrest halfway forward and remove the outer head restraints. The head restraint in the centre seat must be pressed down fully or removed
4. Place the head restraints in the plastic sleeves on the bottom of the folded seat cushions.

Cargo compartment



Cargo compartment safety grille (option)

The protective grille prevents cargo or pets from being thrown forward in the passenger compartment in the event of heavy braking. For reasons of safety, the grille must always be mounted and secured correctly.

Folding up

If the cargo compartment safety grille is in the way it can be easily folded up towards the roof:

1. Take hold of the bottom of the cargo compartment safety grille.
2. Pull straight backwards and upwards. Then release. The gas struts prevent the grille from dropping down.

To fold down the grille carry out in reverse order.

Removal

Remove the protective grille as follows:

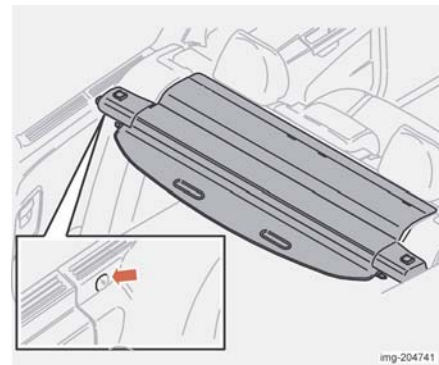
1. Fold the rear seat backrest forward slightly (to relieve the load from the gas struts).
2. Remove the protective caps from the nuts holding the cargo compartment safety grille on both sides.
3. Unscrew the nuts until the threads are flush with the edge of the nuts.
4. Turn the grille backwards in the car slightly to release it from the upholstery. Do not angle the grille too much as it can become wedged, making it difficult to pull out.
5. Carry out the same procedure on the other mounting and then lift out the grille carefully.

Fitting

To install the grille:

- Follow the instructions in reverse order.
- Tighten both the nuts. Tighten to 24 Nm.

If unsure about installing or removing the protective grille, contact a Volvo workshop for advice.



Privacy panel (option)

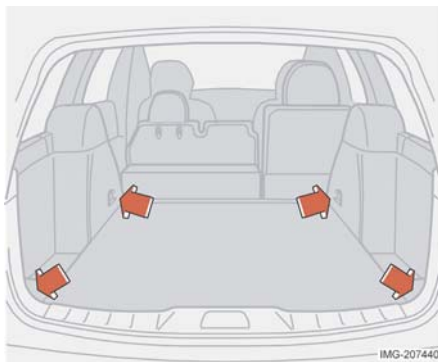
Pull the privacy panel over the cargo and hook it into the holes in the rear pillars of the cargo compartment.

Fitting the privacy panel:

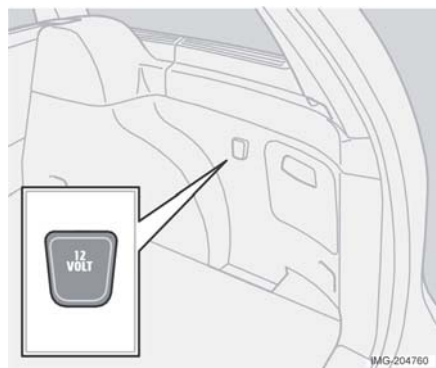
- Press the end pieces of the privacy panel down into the holders.

Removing the privacy panel:

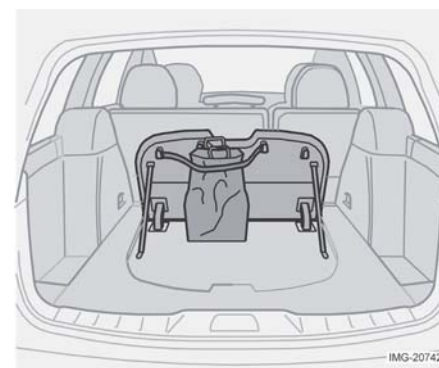
- Press the end pieces of the privacy panel inwards, pull up and release.



IMG-207440



IMG-204760



IMG-207420

Load retaining eyelets¹

The load retaining eyelets are used to secure the restraining strap or net holding goods in the cargo compartment.

Electrical socket in the cargo compartment

Fold down the cover to access the electric socket. This operates regardless of whether the ignition is switched on or not. If the ignition is switched off and load with a power consumption higher than 0.1 A is connected to the electric socket, a warning message appears in the information display. The maximum current for the electric socket is 15A. Remember not to use the electric socket when the ignition is switched off. There is a risk of the battery being discharged.

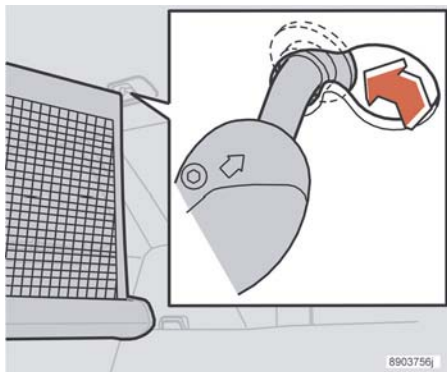
Grocery bag holder

The grocery bag holder holds bags in place and prevents them tipping over and spilling their contents in the cargo compartment.

- Fold up the hatch in the cargo compartment.
- Hang or secure the grocery bags using the tensioning strap or holders.

¹ Option in certain markets

Cargo compartment



Safety net (option)

The storage cassette of the extractable safety net is mounted on the rear of the backrest.

Using the safety net with upright backrest

- Pull the safety net straight back.
- Pull out the right mounting and hold it pulled out. Insert the mounting in the rear large part of the hole in the roof panel's rear bracket.
- Then push the mounting forward to the front part of the hole.
- Do the same on the other side. The net mountings retract inwards, so pull the net over to the left bracket to fit it in place.

- Check that the safety net mountings are properly fastened in the roof panel brackets.

Using with folded backrest

- The safety net can also be used when the backrest is folded down. The roof panel's front brackets are then used.

Removing the safety net

- Pull back one of the net mountings to the large hole and pull it out.
- Release the other mounting the same way.

Removing the safety net storage cassette

- Fold down the entire backrest.
- Slide the cassette outwards until it is released from the retainers.



WARNING!

Cargo compartment loads must be properly secured even if the safety net is correctly fitted.

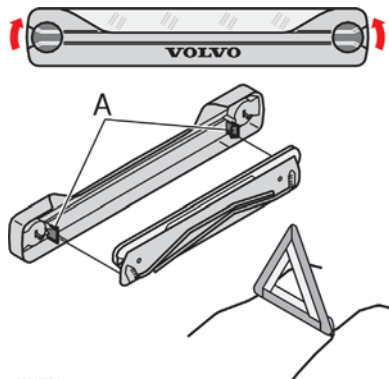


Using the safety net together with the privacy panel

- Lower the backrest slightly to access the safety net cassette. Start with the 40% section.
- Pull the safety net back at an angle.
- Restore the backrest to its upright position.
- Hook the net into the roof panel brackets following the procedure used when the backrest is upright.

NOTE! When the backrest is upright, the red indicator should no longer be visible. If it is visible, the backrest is not locked in position.

Warning triangle



location that is appropriate for the traffic situation.

After use:

1. Reinstall everything in reverse order.
2. Make sure the warning triangle and its case are properly secured in the cargo compartment.

Setting up the warning triangle¹

Follow the applicable regulations for the use of warning triangles.

1. Release the cover containing the warning triangle. It is secured with Velcro.
2. Remove the warning triangle from its case (A).
3. Fold out the four support legs on the warning triangle.
4. Fold out both red sides of the warning triangle. Place the warning triangle in a

¹ Certain markets

Remote control with key blade	84
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Remote control with key blade

Remote control

The car is supplied with two remote controls. These also work as ignition keys. The remote controls contain detachable metal key blades for mechanical locking/unlocking of the driver's door and glove compartment. A separate label with the code of the key blade is supplied. Store the label in a safe place. Take the label to a Volvo workshop when ordering new keys. A maximum of six remote controls/key blades can be programmed and used for one car.

Loss of a remote control

If either of the remote controls is lost, the other must be taken with the car to a Volvo workshop. As a crime prevention measure, the code of the lost remote control must be erased from the system.

Immobilizer

The remote controls have coded chips. The code must match the reader (receiver) in the ignition switch. The car can only be started if the correct remote control with the correct code is used.

IMPORTANT!

Never use force on the narrow section of the remote control - this is where the chip is located. The car cannot be started if the chip is damaged.



Remote control functions

1. **Locking** - Locks all doors and the boot lid. A long press also closes the side windows and sun roof.
2. **Unlocking** - Unlocks all doors and the boot lid. A long press also opens the side windows.
3. **Approach lighting** - As you approach the car:
Press the yellow button on the remote control to light the interior lighting, position/parking lamps, number plate lighting and the lamps in the door mirrors (option). The lighting switches off automatically after 30, 60 or 90

seconds. To set the desired timer setting, see page 58 .

4. **Boot lid**- Press the button once to unlock the boot lid only.
5. **Panic function**- Used to attract attention during emergency situations. If the red button is held in for at least three seconds or pressed twice within three seconds, the direction indicators, interior lighting and horn will be activated. This function can be deactivated using the same button after it has been active for at least five seconds. Otherwise it switches off after 30 seconds.

Key blade

This function is intended to be used when handing over the car for servicing, or valet parking at a hotel etc. The remote control is handed over without the detached key blade, which the owner keeps.



Removing the key blade

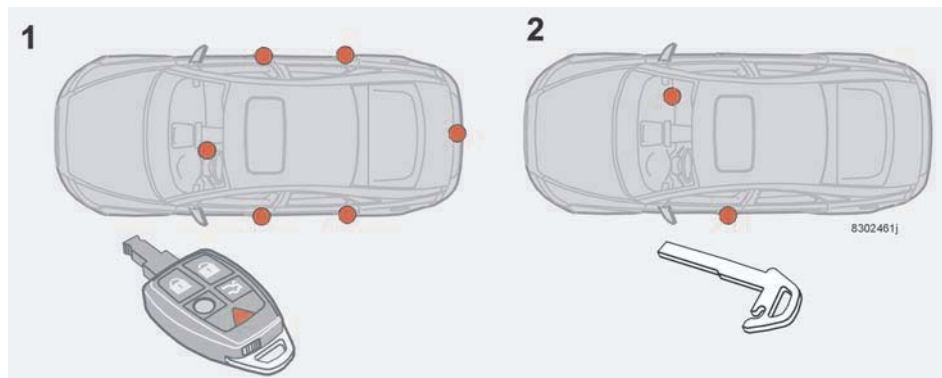
Open the key blade out of the remote control:

- Slide the spring loaded catch (1) to the side whilst pulling the key blade (2) out to the rear.

Installing the key blade

Be careful when putting the key blade back into the remote control.

- Hold the remote control with the pointed end down. Release the key blade in its groove.



1. Locking points, normal position 2. Locking points, service position

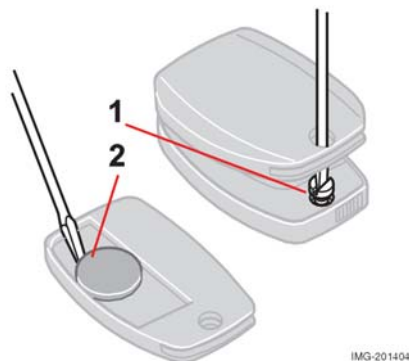
- Gently press the key blade to lock it in position. It will click.

Locking the glove box

The key blade is used to lock or unlock the glove box. The driver's door can also be locked or unlocked using the key blade.

Weak battery in the remote control

When the battery begins to reach the point where full functionality cannot be guaranteed, the Information symbol lights and REMOTE BATTERY LOW VOLTAGE is shown in the display.



5. Pry out (2) and change the battery.
Avoid touching the battery and its contact surfaces with your fingers.
6. Reinstall and screw the cover into place.
7. Press the key blade back into position.

Ensure that the old battery is disposed of in an environmentally friendly way.

Changing the remote control battery

If the locks repeatedly fail to react to signals from the remote control at a normal distance, the battery should be replaced (type CR 2032, 3 volt).

1. Pull out the key blade.
2. Place the remote control with the keypad downwards. Remove the screw (1) using a small screwdriver.
3. Remove the cover.
4. Note how the + and – poles of the battery are positioned on the inside of the cover.

Locking and unlocking

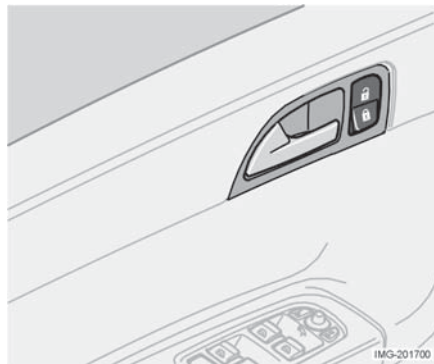
Locking/unlocking from outside the car

The remote control can be used to lock or unlock all the car doors and the boot lid at the same time. The doors can be unlocked using the detached key blade.



WARNING!

Note that occupants can be locked inside the car if it is locked from the outside.



The doors cannot be opened by pulling up the lock button. All the doors can also be locked manually using the relevant lock button. This applies only if the car is not locked from the outside. The doors can also be unlocked using the opening handle.

This applies only if the car is not locked from the outside. The doors can also be unlocked (and door opened) using the handle.

Automatic re-locking

If none of the doors or the boot lid are opened within two minutes of unlocking, all locks re-lock automatically. This function prevents the car from unintentionally being left unlocked. For cars with alarms, see the Alarm System section.

Opening the boot lid

Carry out the following to unlock the boot lid only:

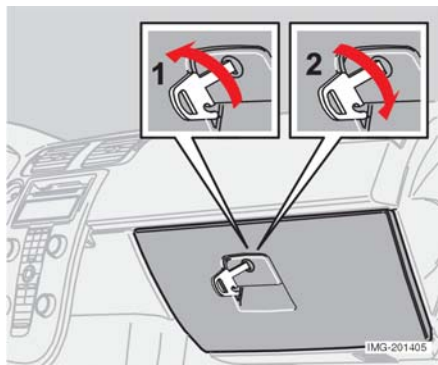
- Press the boot lid button on the remote control .

If all the doors are locked when the boot lid is closed, it locks automatically.

Locking/unlocking from inside the car

The switches in the door panel can be used to lock or unlock all the doors and the boot lid simultaneously.

- **Unlocking:**
Press in the upper section in the lock button. A long press also opens all the side windows.
- **Locking:**
Press in the lower section of the lock button. A long press also closes all the side windows and the sun roof.



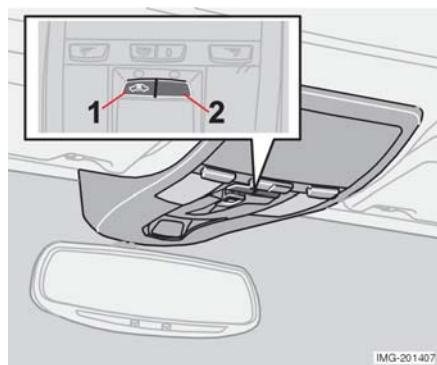
Locking the glovebox

The glovebox can only be locked and unlocked using the detachable key blade on the remote control.

1. Unlock the glovebox by turning the key a quarter of a turn (90°) anti-clockwise. The key hole is vertical when unlocked.
2. Lock the glove compartment by turning the key a quarter of a turn (90°) clockwise. The key hole is horizontal when locked.

Deadlocks

When deadlocked, the doors cannot be opened from the inside if they are locked.



1. Disconnecting the sensors. 2. No function.

Activated using the remote control.

Deadlocks are activated after 25 seconds delay after the doors are locked. The car can only be deadlocked using the remote control. The doors can also be opened using the key from the outside.

Temporary deactivation of deadlocks and any detectors.

If others prefer to remain seated in the car with the doors locked from the outside, the deadlocks can be deactivated.

1. Insert the key in the ignition switch, turn it to position **II** and then back to position **I** or **0**.

2. Press the button 1.

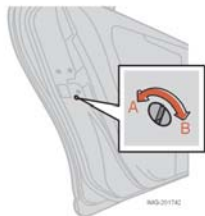
If the car is equipped with an alarm, the movement and tilt detectors are also deactivated. See page 91. The LED in the button lights until the car is locked with the key or remote control. A message is shown in the display as long as the key remains in the ignition switch. The next time the car ignition is switched on, the sensors will be re-engaged.



WARNING!

Do not allow anyone to remain in the car without first deactivating the deadlocking.

Child safety locks



Manual lock in the left-hand rear door

Locks in the doors, rear

To lock manually: The controls for the child safety locks are in the rear edges of the rear doors and are only accessible when the door is open. Use the key blade to turn the control and thus activate or deactivate the child safety locks.

A: The doors cannot be opened from the inside.

B: The doors can be opened from the inside.

To lock electronically: Press the controls in the driver's door. A message appears in the information display.



Electrical lock for opening the rear door and window

WARNING!

Always keep the lock buttons up when driving. In the event of an accident, rescue personnel will then be able to quickly get into the car. The rear seat passengers cannot open the doors from the inside if the child safety locks are activated.

Lock in the window, rear (option)

When the electric child safety locks are active, the rear windows cannot be used.

Activate the child safety locks:

1. Turn the ignition key to position **I** or **II**.
2. Press the button. The rear windows cannot be opened when the LED in the button is lit.

A message will appear in the information display when the child safety locks are activated.

NOTE! When the electric child safety locks are activated, the settings made in the manual child safety system are overwritten.

Child safety locks activated

The LED comes on at the same time as a text message in the display indicates that the lock has been activated. The doors cannot be opened from the inside. The window lift mechanisms can only be controlled using the controls on the driver's door.

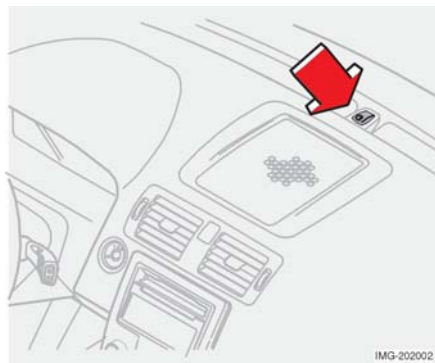
Alarm (option)

The alarm system

When the alarm is armed, it continually monitors all alarm points.

The alarm is triggered if:

- a door, the bonnet or boot lid is opened
- the boot lid is opened
- a non-approved key is used in the ignition or if an attempt is made to force the lock
- movement is detected in the passenger compartment (if a motion sensor is fitted)
- the car is raised or towed away (if a tilt sensor is fitted)
- the battery cable is disconnected
- anyone tries to disconnect the siren.



Alarm LED in the dashboard

An alarm LED on the dashboard (see the illustration) shows the status of the alarm system:

- Lamp off - the alarm is deactivated.
- The lamp flashes once a second - the alarm is activated.
- The lamp flashes quickly after the alarm is deactivated and until the ignition is switched on - the alarm has been triggered.

A message will appear in the information display if a fault occurs in the alarm system. If this should happen, please contact a Volvo

workshop.

If the alarm system does not function correctly, have a Volvo workshop examine the car.

NOTE! Do not attempt to repair or modify alarm system components. Any such attempts may affect the terms of insurance.

Connecting the alarm function

- Press the LOCK button on the remote control. A long flash from the car's direction indicators confirms that the alarm is armed and that all doors are locked.

Disconnecting the alarm function

- Press the UNLOCK button on the remote control. Two short flashes from the car's direction indicators confirm that the alarm has been deactivated and that all doors are unlocked.

Automatic alarm activation

This function prevents you from accidentally leaving the car without the alarm on. If none of the doors or the boot lid are opened within two minutes of the alarm being deactivated (and the car was unlocked with the remote control), the alarm is armed automatically. The car locks at the same time.

Switching off a triggered alarm

- Press the UNLOCK button on the remote control.

Two short flashes of the direction indicators are given as confirmation.

Alarm signals

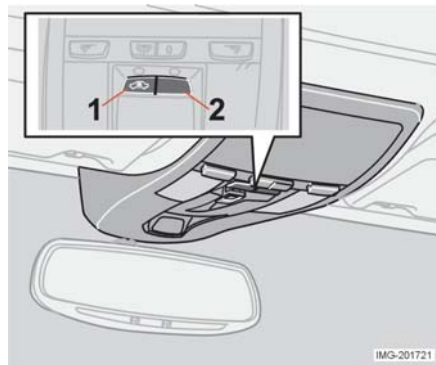
The following happens if the alarm is triggered:

- A siren sounds for 30 seconds. It has its own battery which is engaged if the car battery has insufficient charge or is disconnected.
- All turn signal lamps flash for five minutes or until the alarm is switched off.

Remote control not working

Even if the remote control is not working, the car can still be started as follows:

- Open the driver's door using the key blade. The alarm is triggered and the siren sounds.
- Insert the key blade in the remote control in the ignition. The alarm is deactivated. The LED flashes rapidly until the ignition key is turned to position **II**.



1. Disconnecting the sensors. 2. No function

Temporary deactivation of detectors and deadlocks

To avoid accidentally triggering the alarm, on a ferry for example, the motion and tilt sensors can be temporarily disengaged.

- Turn the ignition key to position **II** and then back to position **0**. Remove the key.
- Press the button (1). The LED in the button is lit until the car is locked.

A message remains in the display as long as the key is in the ignition (or for 1 minute after the key is removed)

The next time the ignition is switched on, the sensors will be re-connected.

If the car has deadlocks, these are engaged at the same time.

Testing the alarmsystem

Testing the passenger compartment motion sensor

- Open all windows.
- Activate the alarm. The LED flashes slowly to confirm that the alarm is armed.
- Wait 30 seconds.
- Test the motion sensor in the passenger compartment by lifting a bag or similar from the seat. The alarm should now sound and flash.
- Deactivate the alarm by unlocking with the remote control.

Testing the doors

- Activate the alarm.
- Wait 30 seconds.
- Unlock using the key on the driver's side.
- Open one of the doors. The alarm should now sound and flash.
- Deactivate the alarm by unlocking with the remote control.

Testing the bonnet

1. Get into the car and deactivate the motion sensor.
2. Activate the alarm. Remain in the car and lock the doors with the button on the remote control.
3. Wait 30 seconds.
4. Open the bonnet with the handle under the dashboard. The alarm should now sound and flash.
5. Deactivate the alarm by unlocking with the remote control.

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General

Economical driving

Economical driving results from driving gently with anticipation and adapting your driving style and speed to the prevailing conditions.

- Run the engine to operating temperature as soon as possible.
- Do not let the engine idle, but drive at light load as soon as possible.
- A cold engine consumes more fuel than a warm one.
- Avoid unnecessary quick acceleration and heavy braking.
- Do not drive with unnecessary loads in the car.
- Do not use winter tyres on dry roads.
- Remove the roof rack when it is not in use.
- Avoid driving with open windows.

Slippery surfaces

Driving on slippery surfaces can be experienced differently. Practice driving in mock slippery conditions in order to determine how the car will react.

Engine and cooling system

Under certain conditions, e.g. when driving in hilly terrain or with a heavy load, there is a risk of the engine and cooling system overheating.

Avoid overheating the cooling system

- Drive at low speeds if driving with a trailer up a long, steep incline.
- Do not turn the engine off immediately you stop if the car has been driven hard.
- Remove any auxiliary lamps from in front of the grille if driving in extreme high temperatures.

Avoid overheating the engine

- Do not drive the car above 4500 rpm when towing a trailer or caravan in hilly areas. The oil temperature may rise too high.

Open boot lid

Avoid driving with an open boot lid. If you must drive a short distance with the boot lid open, do as follows:

- Close all windows.
- Distribute the air between the windscreen and floor and run the fan at high speed.



WARNING!

Do not drive with an open boot lid. Poisonous exhaust gases could be drawn into the car via the cargo compartment.

Do not overload the battery

The electrical functions of the car load the battery to varying degrees. Avoid leaving the ignition key in position **II** when the engine is switched off. Use position **I** instead. Less power will then be consumed. Remove the key if no functions are required. Less power will then be consumed.

NOTE! The 12 volt socket in the cargo compartment provides voltage even when the ignition key has been removed. Examples of functions that draw a lot of current are:

- blower fan
- windscreen wipers
- audio equipment (high volume)
- parking lamps

Be aware of different accessories that load the electrical system. Do not use functions that draw a lot of current when the engine is switched off.

If the battery charge is low, a message is shown in the display. Charge the battery by starting the engine.

Refuelling



Switch off the fuel driven heater before refuelling.

Opening the fuel filler flap

The fuel tank filler flap is unlocked and opened using the central button under the light switch on the dashboard. The flap is folded out.

Closing

Press the flap into the body until it clicks.

Emergency opening

If the flap does not open, it can be opened manually from inside the cargo compartment. Once the interior upholstery is moved to one side, there is a handle visible by the lock mechanism for the flap. Pull it straight back.

Fuel cap

The fuel cap is inside the fuel filler flap on the right rear wing.

There may be overpressure in the tank if outdoor temperatures are high. Do not overfill the fuel tank.

Reinstall the cap after refuelling. Turn until a click is heard.

Fuel driven heater (option)

WARNING!

Switch off the fuel driven heater before beginning refuelling.
Spilled fuel could be ignited by the exhaust gases.

Filling with petrol

IMPORTANT!

Petrol engine cars must always be refuelled with unleaded petrol to prevent damage to the catalytic converter.

IMPORTANT!

Do not add any cleaning agents to the petrol, unless recommended by Volvo.

WARNING!

Never carry a switched on mobile phone when refuelling. The ring tone can generate sparks, igniting the fuel vapours. This could cause a fire and result in injury.

Filling with diesel

At low temperatures, paraffin can precipitate out of diesel fuel (–5°C– –40°C). This can cause problems when starting.

IMPORTANT!

Use special winter fuel during the cold season.

Starting the car

Depending on the engine temperature when starting, the engine speed after a cold start may be higher than normal for certain engine types. Volvo strives to minimise exhaust emissions by having the engine exhaust system reach the correct operating temperature as quickly as possible.

NOTE! Never rev the engine hard immediately after a cold start. Contact a Volvo workshop if the engine does not start or misfires.



WARNING!

Never remove the ignition key from the steering wheel lock while driving or while the car is being towed. Never switch off the ignition or remove the ignition key while the car is moving. This could engage the steering wheel lock, making the car impossible to steer.

Start petrol engines as follows

1. Apply the handbrake.
2. **Automatic gearbox:**
Move the gear selector to position **P** or **N**.

Manual gearbox:

Move the gear lever to neutral and hold the clutch pedal completely depressed. This is especially important in severe cold.

3. Turn the ignition key to the start position. If the engine does not start within 5-10 seconds, release the key and try again.

Start diesel engines as follows

1. Apply the handbrake.
2. **Automatic gearbox:**
Move the gear selector to position **P** or **N**.

Manual gearbox:

Move the gear lever to neutral and hold the clutch pedal completely depressed. This is especially important in severe cold.

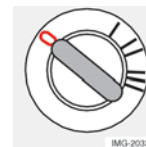
3. Turn the ignition key to the drive position. A lamp on the combined instrument panel will come on indicating that the engine preheater is activated. Turn the key to the start position when the lamp extinguishes.

Ignition keys and immobilizer

The ignition key must not hang next to other keys or metal objects on the same key ring.

The electronic immobilizer could be activated by accident.

Ignition switch and steering wheel lock



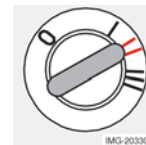
0 – Locked position

The steering wheel lock engages when the key is removed from the ignition.



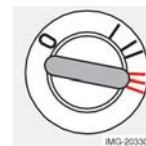
I – Radio position

Certain electrical components can be switched on. The engine electrical system is not connected.



II – Driving position

The key position when driving. The car's electrical system is connected.



III – Start position

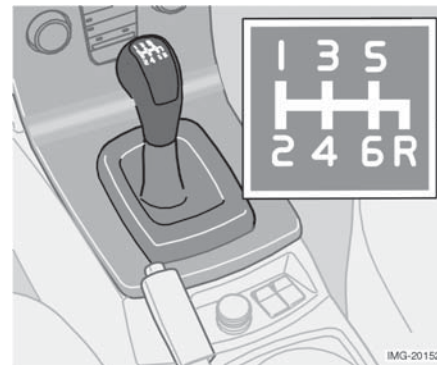
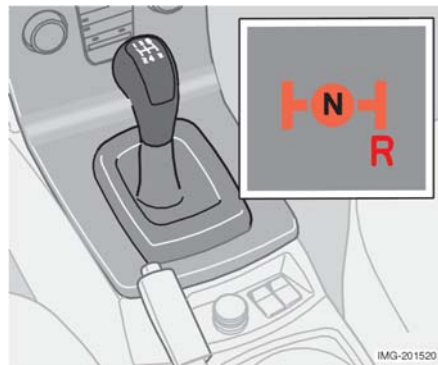
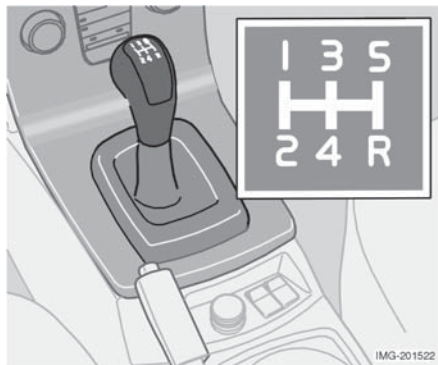
The starter motor engages. Release the key once the engine has started. The key automatically springs back to the driving position.

If the front wheels are turned in such a way that there is tension in the steering wheel lock a warning message is displayed and the car cannot be started. Remove the ignition key, turn the steering wheel so that the steering wheel lock is released. Insert the key and make a new start attempt. Make sure the steering wheel lock is engaged when leaving the car. This reduces the risk of theft.

**WARNING!**

- Never remove the ignition key from the ignition while driving or while the car is being towed. The steering wheel lock will engage and it will be impossible to steer the car.
- Always remove the ignition key from the ignition when leaving the car, especially if there are children in the car.

Manual gearbox



Gear positions, five speed

Depress the clutch pedal fully with each gear change. Remove your foot from the clutch pedal between gear changes. Follow the appropriate shifting pattern.

Use the higher gears as often as possible to achieve the best possible fuel economy.

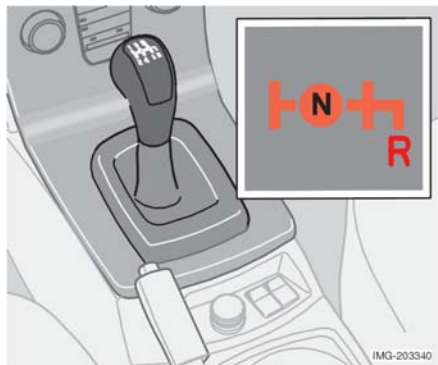
Reverse gear inhibitor

Only engage reverse gear when the car is stationary. The gear selector lever must first be moved to neutral **N** before reverse gear can be engaged. Reverse cannot be directly selected from fifth gear due to the reverse gear inhibitor.

Gear positions, six speed (petrol)

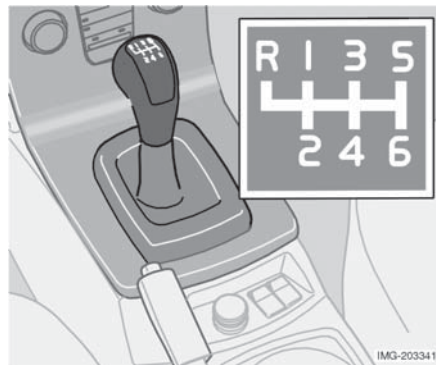
Depress the clutch pedal fully with each gear change. Remove your foot from the clutch pedal between gear changes. Follow the appropriate shifting pattern.

Use the higher gears as often as possible to achieve the best possible fuel economy.



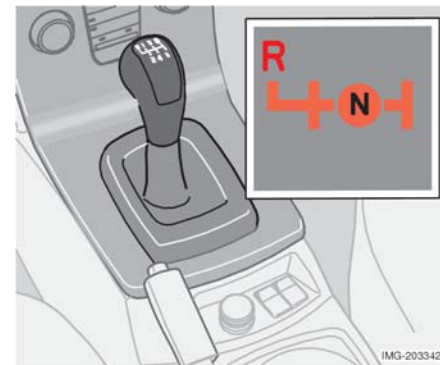
Reverse gear inhibitor

Only engage reverse gear when the car is stationary. The gear selector lever must first be moved to neutral **N** before reverse gear can be engaged. Reverse cannot be directly selected from fifth gear due to the reverse gear inhibitor.



Gear positions, six speed (diesel)

Depress the clutch pedal fully with each gear change. Remove your foot from the clutch pedal between gear changes. Follow the appropriate shifting pattern. Use the higher gears as often as possible to achieve the best possible fuel economy.



Reverse gear inhibitor

Only engage reverse gear when the car is stationary. The gear selector lever must first be moved to neutral **N** before reverse gear can be engaged. Reverse cannot be directly selected from second gear due to the reverse gear inhibitor.

Automatic gearbox (option)

Cold start

When starting in low temperatures, shifting may feel harder. This is due to the viscosity of the gearbox oil at low temperatures. To minimise engine emissions, the gearbox shifts up later than normal if the engine has been started at low temperature.

NOTE! Depending on the engine temperature when starting, the engine speed after a cold start may be higher than normal for certain engine types.

Turbo engine

When the engine is cold, the transmission shifts gears at higher engine speeds than normal. This is to help the catalytic converter reach normal operating temperature faster with less exhaust emission.

Adaptive system

The gearbox is controlled by what is known as an adaptive system. The control module continually "learns" how the gearbox behaves. It senses how the gearbox shifts gears and achieves optimal gear shifts each time. The control module also senses driving behaviour, such as how hard the driver depresses the accelerator, and adjusts the sensitivity of the shift schedule to a driving style. The gears have a Lock-up function

(locked gears) which provides better engine braking and lower fuel consumption.

Safety systems

Cars with automatic gearboxes have special safety systems:

Keylock

The gear selector must be in position **P** before the key can be removed from the ignition. The key is blocked in all other positions.

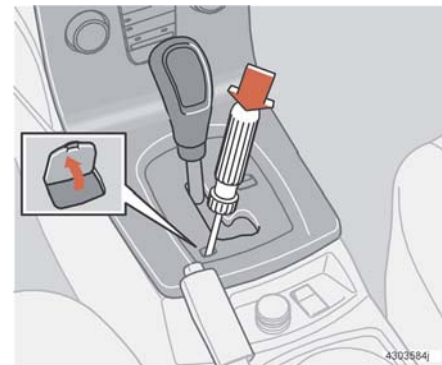
Parking position (P)

Stationary car with the engine running:

- Hold your foot on the brake pedal when moving the gear selector to another position.

Shiftlock

The ignition key must be in position **II** and the brake pedal pressed before the gearshift can be moved from position **P**.



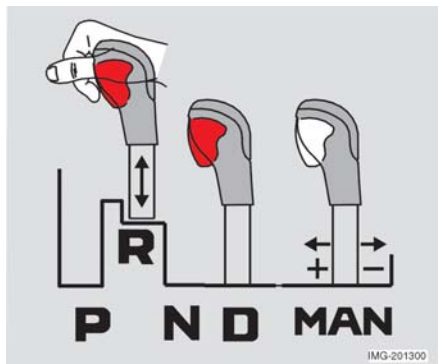
Disengaging the shift lock

In certain cases it may be necessary to move the car when it is not driveable, for example if the battery is discharged. Carry out the following to move the car:

1. There is a small cover behind **P-R-N-D** on the gear selector panel. Open the rear edge of the panel.
2. Insert a screwdriver or similar to the bottom whilst pressing the lever out of the **P** position.

Neutral (N)

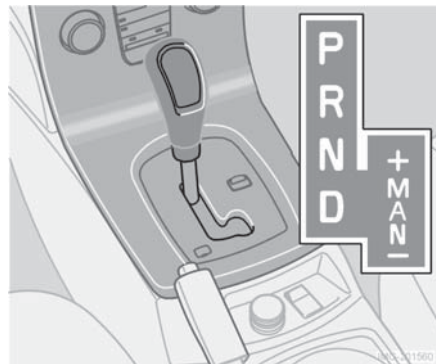
If the car has been stationary for more than 5 seconds, the ignition key must be in position **II** and the brake pedal pressed before the gear selector can be moved from **N**.



Gear selector inhibitor

The gear lever can be moved freely forwards or backwards between **N** and **D**. Other positions are locked with a latch which is operated by the inhibitor button on the gear selector. The lever can only be moved when the engine is running.

Press the inhibitor button to move the gear selector lever forwards or backwards between **R**, **N** and **D**.



Automatic gear positions

P - Parking position

Select **P** position when you wish to start the engine or park the car.

IMPORTANT!

The car must be stationary when selecting position **P**.

In **P**, the gearbox is mechanically blocked. Always apply the handbrake when parking.

R - Reverse

The car must be stationary when selecting position **R**.

N - Neutral

N is the neutral position. The engine can be started, but no gear is selected. Apply the handbrake when the car is stationary with the gear lever in **N**.

D - Drive

D is the normal driving position. The car automatically shifts between the different gears of the gearbox based on the level of acceleration and speed. The car must be stationary when selecting position **D** from position **R**.

Manual positions

To move from automatic mode **D** to a manual position, press the gear selector to the right. To move from **MAN** to automatic position **D**, press the gear selector to the left to **D**.

While driving

Manual gearshift mode can be selected at anytime whilst driving. The engaged gear is locked until you another gear is selected. The car will only shift down automatically if you slow to a very low speed.

If the gear selector is moved to – (minus), the car downshifts automatically one gear at a time while engine braking. If the gear selector is moved to plus (+), the car shifts up one gear.

W – Winter

Use the button to engage or disengage the winter program **W**. The program is activated if an LED is lit in the button. The winter program makes it easier to drive at low speeds in slippery road conditions. When the program is engaged, the driving wheels utilise less power than normal and all upshifting occurs at a lower engine rpm.

NOTE! The winter program **W** cannot be engaged if a manual position is selected – it can only be selected in position **D**.

Kick-down

When the accelerator pedal is pressed all the way down, beyond the position normally regarded as full acceleration, a lower gear is immediately engaged. This is called kick-down.

When maximum speed for that gear is reached or the accelerator pedal is released from the kick-down position, there is an automatic upshift.

Kick-down should be used when maximum acceleration is required, for example during overtaking. The function can only be used when the gear selector is in automatic position **D**.

Brake system

If the brake servo is not working

If the car is rolling or being towed with the engine switched off, approximately 5 times more pressure must be applied to the brake pedal than when the engine is running. The brake pedal feels rigid and hard when the brake servo is not operating.



WARNING!

The brake servo only works when the engine is running.

Brake circuits



The symbol lights if a brake circuit is not working

Braking is still possible if a fault occurs in one of the circuits. Press the pedal hard once. The brake pedal takes longer to press down and feels softer than normal. The pedal needs to be pressed harder for normal braking power.

NOTE! When braking with the engine switched off, press the brake pedal once hard and distinctly, not repeatedly.

Dampness can affect braking characteristics

Brake components become wet when the car is driven in heavy rain or through pools of water or when washing the car. The friction characteristic of the brake pads may change, reducing braking power.

- Gently press the brake pedal occasionally if driving longer distances in rain or slush and after starting in extremely damp or cold weather. The brake pads heat up and the water dries. This action is also advisable before parking the car for long periods in these weather conditions.

If the brakes are heavily loaded

When driving in mountains or on other roads with similar characteristics, the car's brakes are heavily loaded even when not pressing the brake pedal especially hard. Because speed is often low, the brakes are not cooled as effectively as when driving on flat roads.

To ensure that the brakes are not more heavily loaded than necessary, shift down on downhill slopes rather than using the brake pedal. Use the same gear when driving downhill as you would uphill. This ensures that engine braking works more efficiently

and brake use will only be necessary for short periods. Remember that driving with a trailer further loads the brakes.

Anti-lock braking system (ABS)



The ABS system (Anti-lock Brake System) prevents the wheels from locking when braking. This maintains the ability to steer, making it easier to avoid obstacles.

- After the engine has started and reached a speed of about 20 km/h (12mph), there is a short self-test of the ABS system. This can be both heard and felt as pulses in the brake pedal.

To fully utilise the ABS system:

- Press the brake pedal with maximum force. Pulses will be felt.
- Steer the car in the direction of travel. Do not reduce the pedal pressure.

Practice braking with the ABS system in a traffic free area and in different weather conditions.

The ABS symbol lights and remains on:

- for approximately two seconds before the car starts
- if the ABS system is disabled due to a fault



WARNING!

If the BRAKE and ABS warning symbols light at the same time, there may be a problem in the brake system. If the brake fluid level is normal in these circumstances, drive carefully to the nearest Volvo workshop to have the brake system checked.

Stability system

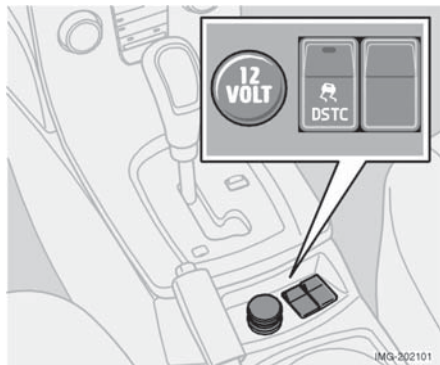
When the stability system is operating it may seem as if the car does not respond to the throttle opening. This is because the system senses the friction of the road surface and allows the different functions of the stability system to take effect.

The car is either equipped with **STC** (Stability and Traction Control) or **DSTC** (Dynamic Stability and Traction Control).

Function/ system	STC	DSTC ^a
TC	X	X
SC	X	X
AYC		X
EBA		X

^a Option in certain markets

- The **Traction Control** function transfers power from the spinning drive wheel to the drive wheel which has grip. To increase forward traction in this situation, you may need to depress the accelerator more than usual. A pulsing sound is heard when Traction Control is working. This is completely normal. The Traction control function is most active at low speeds. The function cannot be switched off.
- **Spin control** Stability control prevents the driven wheels from slipping on the road surface during acceleration. This improves road safety on slippery surfaces. When driving with snow chains or in deep snow or sand, it may be beneficial to switch off the anti-spin function to increase traction. The function can be deactivated with the STC/DSTC button.
- The **Active Yaw Control (AYC)** function automatically brakes one or more wheels to stabilise the car in the event of a skid. The brake pedal is more rigid than normal and a pulsing sound is heard while braking. The Active Yaw Control function is active at all times. It cannot be switched off.
- **Emergency Brake Assistance - EBA** At hard braking the full brake force is provided immediately. The system detects the need for heavier braking by registering how quickly the brake pedal is applied. The brake pedal falls when the system is operating. Continue braking without releasing the brake pedal. The function disengages when the pressure on the brake pedal is released. The power brake boosting is active at all times. It cannot be switched off.



STC or DSTC button

The button in the centre console is used to deactivate or reactivate the STC (Stability and traction control)/DSTC (Dynamic stability and traction control) system. The LED in the button is lit when the system is activated. The LED in the button goes out when the stability system function has reduced. Other functions are not affected.

NOTE! Press the button for at least half a second in order to deactivate the STC (Stability and traction control)/DSTC (Dynamic stability and traction control) function. The LED in the button goes out and the text STC/DSTC SPIN CONTROL OFF is shown in the display. The system is automatically reactivated each time the engine is started.

Symbols in the centre of the dashboard



The symbol lights and goes out again after approximately 2 seconds

The symbol lights for a system check when the car is started.



Flashing warning symbol

The stability control function prevents the car's drive wheels from spinning. The traction control function works to improve the car's traction. The active yaw control (AYC) function works to keep the car from skidding.



The information symbol lights with a constant light

STC/DSTC SPIN CONTROL OFF appears in the information display with the symbol.

- The Spin Control function has been deactivated using the STC/DSTC button.



The information symbol lights with a constant light

TRACTION CONTROL TEMPORARILY OFF appears in the information display with the symbol.

- The traction control function has been temporarily reduced due to high brake temperature. The function is reactivated automatically when the brake temperature returns to normal levels.



The information symbol lights with a constant light

ANTI-SKID SERVICE REQUIRED appears in the information display with the symbol.

- The STC or DSTC (Dynamic stability and traction control) system is disabled due to a fault.
1. Stop the car in a safe place and switch off the engine.
 2. Restart the engine.
 3. If the warning symbol remains lit, drive to a Volvo workshop to have the system checked.



WARNING!

Keep in mind that the car's driving characteristics are altered if you deactivate the STC or DSTC systems. Always follow the usual precautions for safe cornering and driving on slippery surfaces.

Towing and transportation

Never tow the car to jump start it

Use a booster battery if the battery is discharged and the engine will not start. Do not tow the car to jump start it

IMPORTANT!

The catalytic converter could be damaged if the car is towed.

Towing

Before towing the car, check the highest permitted legal speed for towing.

1. Insert the key in the ignition switch in position **I** and unlock the ignition lock so that the car can be steered. See page 96.
NOTE! The key must remain in the ignition switch during the towing.
2. **Automatic gearbox:** Move the gear selector to position **N**.
Manual gearbox: Move the gear lever to neutral.
3. Ensure that the towing line is fully stretched to avoid heavy jerking. Keep your foot on the brake pedal.

Cars with automatic gearboxes must not be towed at speeds above 80 km/h (50 mph). It should not be towed further than 80 km (50 miles).

WARNING!

The steering lock in a car without power is always activated, and the car cannot therefore be steered. The steering lock must be unlocked before starting towing.

Never remove the ignition key from the ignition while driving or while the car is being towed.

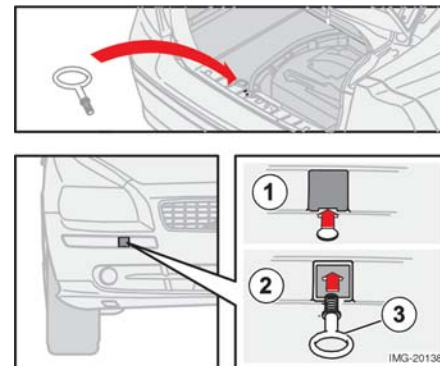
WARNING!

The brake servo and power steering do not work when the engine is off. Approximately five times more pressure must be exerted on the brake pedal and steering is considerably heavier than usual.

Do not tow a car with an automatic transmission further than 80 km (50 miles).

Recovery

Cars with automatic gearboxes must not (unless partially raised) be towed at speeds above 80 km/h (50 mph). It should not be towed further than 80 km (50 miles).



Towing eye

Use the towing eye if the car must be towed on roads. The towing eye is secured in the outlet on the right hand side of the front or rear bumper. Installing the towing eye:

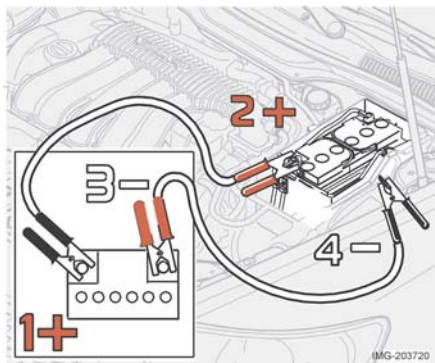
1. Take out the towing eye which is under the floor hatch in the cargo compartment.
2. Remove the bottom of the cover in the bumper using a slotted screwdriver or a large coin.
3. Screw the towing eye securely into place up to the flange. Use the wheel brace to turn the towing eye.

4. After use, unscrew the towing eye and place it in the cargo compartment.
Reinstall the cover on the bumper.

IMPORTANT!

The towing eye is only intended for towing on roads, not for recovery after driving into a ditch etc. Call professional help for recovery.

Start assistance



Starting with another battery

If the car battery has discharged, the power from either a free standing battery or the battery from another car can be used. Always check that the clamps on the starting cable are secure so that there are no sparks during the start attempt.

When using another battery to assist starting the following steps are recommended to prevent the risk of explosion:

1. Turn the ignition key to the **0** position.
2. Ensure that the booster battery has 12 volt current.

3. If the booster battery is in another car, stop the engine of that car. Ensure the cars are not touching.
4. Connect the red start cable between the positive terminal (1+) of the booster battery and the positive terminal (2+) of the second battery.
5. Connect one clamp of the black cable to the negative terminal of the booster battery (3-).
6. Connect the other clamp on the black cable to the ground terminal (4-) mounted on the upper right-hand spring strut.
7. Start the engine of the "booster car". Let the engine run for a few minutes at a speed slightly higher than idle, 1500 rpm.
8. Start the engine of the car with the discharged battery.
9. Remove the starter cables. First remove the black cable then remove the red cable. Ensure that none of the clamps on the black start cable come into contact with the battery positive terminal or the cable connected to the red start cable.

NOTE! Do not touch the terminals during the start attempt. There is a risk of sparking.



WARNING!

The battery can generate oxyhydrogen, which is highly explosive. A spark, which can be generated if the jump leads are incorrectly connected, is sufficient to explode the battery.

The battery also contains sulphuric acid, which can cause serious corrosive damage. If the acid comes into contact with your eyes, skin or clothes, flush with large quantities of water. If acid splashes into your eyes, contact a doctor immediately.

Driving with a trailer

General

If the towing bracket is a Volvo factory installation, the car is delivered with the necessary equipment to drive with a trailer.

- The car's towing bracket must be of an approved type.
- If retrofitting, check with your Volvo dealer to ensure that the car is fully equipped to drive with a trailer.
- Increase the tyre pressure to the recommended pressure for full load. See the tyre pressure table on the inside of the fuel filler flap.
- Clean the tow bar regularly and grease the connector pin¹.
- Do not drive with a heavy trailer when your car is brand new. Wait until it has driven at least 1000 km (600 miles).
- The brakes are loaded much more than usual on long and steep downhill slopes. Downshift to a lower gear and adjust your speed.
- The engine is loaded more heavily than usual when driving with a trailer.

- If the car is driven with a heavy load in a hot climate, the engine and gearbox may overheat. If the temperature gauge for the coolant in the combined instrument panel enters the red zone, stop and allow the engine to idle for a few minutes. If the car overheats, the air conditioning system may switch off temporarily. The gearbox reacts with a built-in protection function. Read the message in the information display.
- For reasons of safety, you should not drive faster than 80 km/h (50 mph), even if the laws of certain countries permit higher speeds.
- The maximum permissible weight for a trailer without brakes is 750 kg (1600 lbs).
- The gear selector must be in position **P** when parking an automatic car with trailer. Always use the parking brake.
- If parking a car with a trailer on a steep incline, place chocks behind the wheels. The gear selector must be in position **P** when parking an automatic car with trailer. Always use the parking brake

Trailer weights

Maximum permissible trailer weight for a trailer with brakes	Maximum ball pressure
0 – 1200 kg (0 - 2650lbs)	50 kg (110 lbs)
1201 – 1500 kg (2652 – 3300 lbs)	75 kg (165 lbs)

NOTE! The above are the highest trailer weights permitted by Volvo. National regulations may limit trailer weights and speeds further. Towbars may be certified for higher tow weights than the car may tow.



WARNING!

Follow the listed recommendations for trailer weight. The trailer and car could otherwise be difficult to control during avoidance manoeuvres and when braking.

¹ Does not apply when using a ball hitch with vibration damper.

Automatic gearbox

Parking on a hill:

- Apply the handbrake.
- Move the gear selector to **P**, the parking position.

Starting on a hill:

- Move the gear selector to **D**, the drive position.
- Release the handbrake.

Steep ascents:

- Select an appropriate gear position when driving up steep ascents or at low speed. This prevents the gearbox from shifting up and the gearbox fluid from thinning out.
- Do not use a higher manual gear than the engine can "handle". It is not always economical to drive in high gears.
- Avoid driving with a trailer on inclines exceeding 15%.

Towing bracket

Towbars

The connector pin must be cleaned and lubricated with grease regularly. When ball hitch with vibration damper is used there is no need to grease the connection pin. If the car is equipped with a detachable tow hitch the installation instructions for installing the connector pin must be followed closely. See page 114.



WARNING!

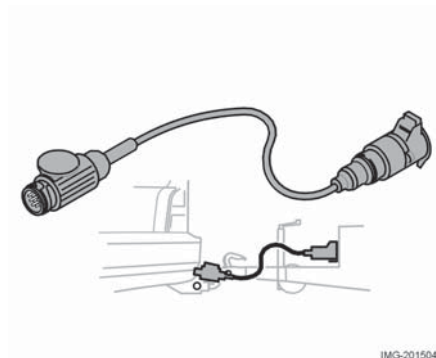
Ensure that the trailer's safety cable is secured to the correct mounting.



WARNING!

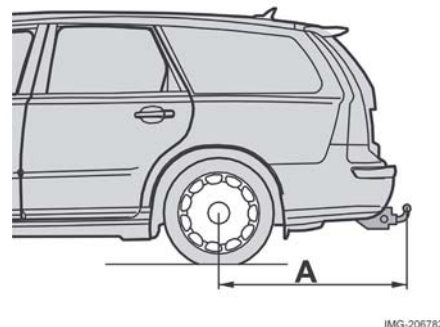
If the car is equipped with a Volvo detachable towbar:

- Follow the installation instructions for the connector pin carefully.
- The connector pin must be locked by the key before moving off.
- Check that the indicator window is showing green.



Trailer cable

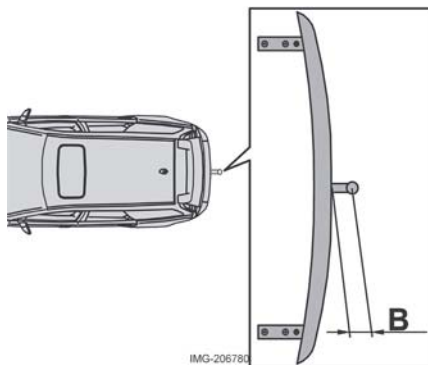
An adapter is required if the car's towing bracket has a 13-pin electrical connector and the trailer has a 7-pin connector. Use a Volvo approved adapter cable. Make sure that the cable does not drag on the ground.



Specifications

Distance A

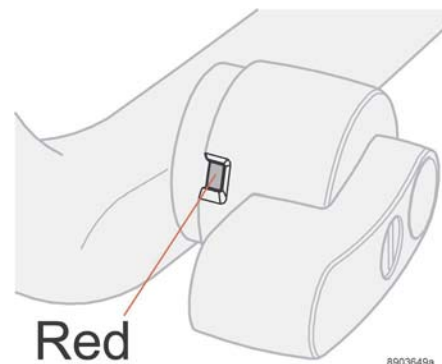
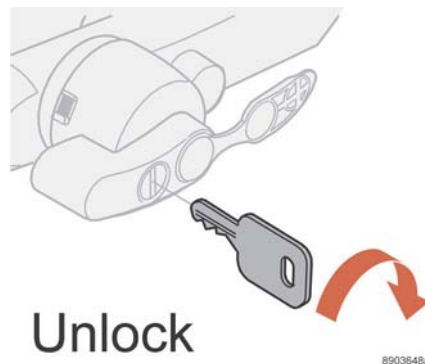
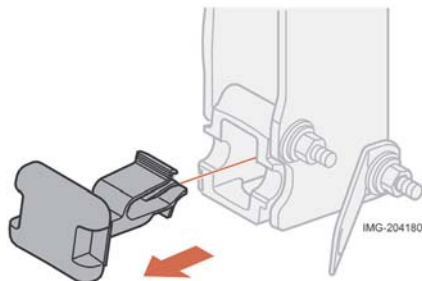
Fixed towbar:	1100 mm (43 inches)
Detachable towbar:	1100 mm (43 inches)
Maximum ball pressure:	75 kg (165 lbs)

**Distance B**

Fixed towbar: 72 mm (2.8 inches)

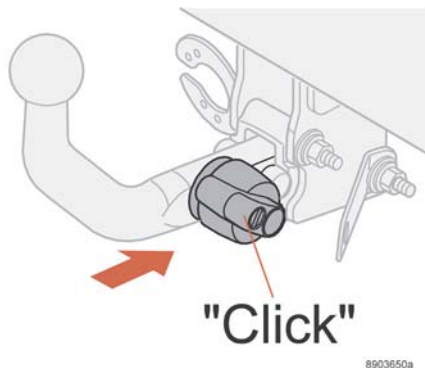
Detachable towbar: 72 mm (2.8 inches)

Detachable towbar

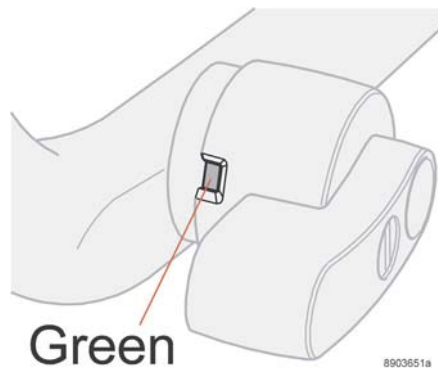


Installing the connector pin

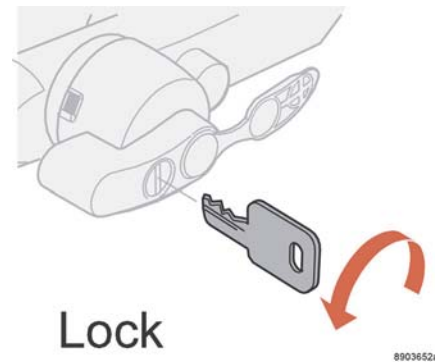
1. Remove the cover plug.
2. Check that the mechanism is in the unlocked position by turning the key clockwise.
3. Check that the indicator window is showing red.



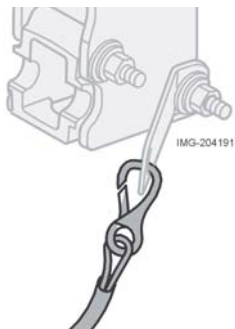
4. Insert and slide in the towball section until it clicks.



5. Check that the indicator window is showing green.

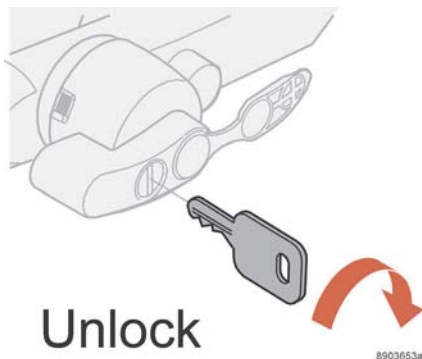


6. Turn the key anti-clockwise to the locked position. Remove the key from the lock.

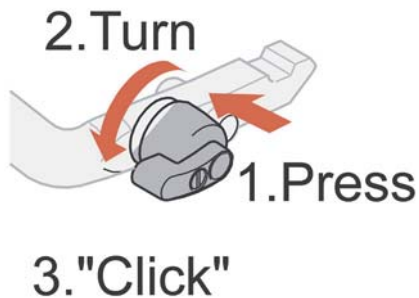


NOTE! The trailer's safety cable must be fastened to the attachment in the towing bracket.

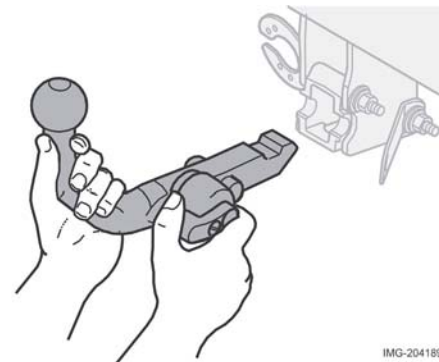
Removing the connector pin



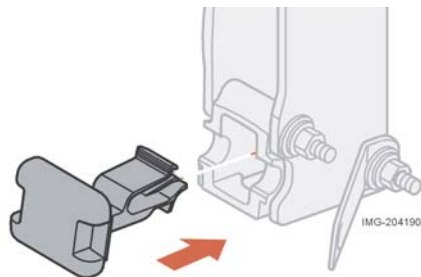
1. Insert the key and turn it clockwise to the unlocked position.



2. Press in the locking knob and turn it anti-clockwise until it clicks.



3. Continue turning the lock knob as far as it will go. Hold it down at the same time as pulling the towball section out.



4. Slide in the cover plug.

Loading

Loading the cargo compartment

Turn off the engine and apply the parking brake when loading or unloading long objects. The gear lever or gear selector can be knocked out of position by long cargo, causing the car to move off. Seats can be folded down and head restraints removed to extend the cargo compartment.

Position all cargo securely against the backrest in front

- Do not damage the head restraint when folding the rear seat. The head restraints can be removed as necessary.
- Centre wide loads.
- Heavy objects should be positioned as low as possible. Avoid placing heavy loads on the folded backrest.
- Cover sharp edges with something soft.
- Secure all cargo with normal or restraining straps in the load securing eyelets



WARNING!

- Never load cargo above the backrests.
- The protection of the inflatable curtain hidden in the headlining may be compromised by high loads.
- Always secure the load. During heavy braking the load may otherwise shift, causing personal injury.



WARNING!

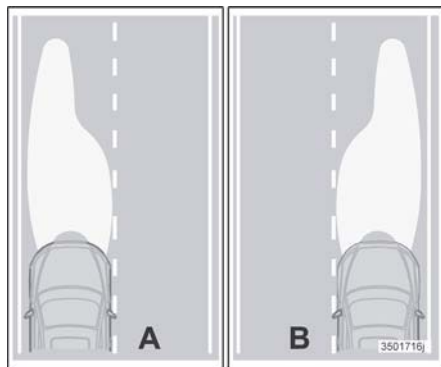
Bear in mind that if an object weighing 20 kg (44 lbs) is subjected to a head-on collision at a speed of 50 km/h (30 mph), its impact weight will be 1000 kg (2200 lbs).

- Check periodically that the load carriers and load are properly secured. Lash the load securely with cargo straps.
- The maximum roof load is 75 kg (165 lbs) (including load carriers).
- Distribute the load evenly over the load carriers. Do not load lopsidedly. Place the heaviest items at the bottom.
- The car's centre of gravity and driving characteristics change with a load on the roof.
- The wind resistance and fuel consumption increases with the size of the load.
- Drive gently. Avoid quick accelerations, heavy braking and hard cornering.

Using load carriers

To avoid damage to the car and to ensure the greatest possible safety while driving, it is recommended that the load carriers developed by Volvo for your car are used. Follow the Installation Instructions supplied with the load carriers.

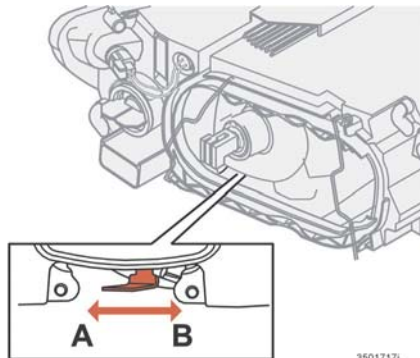
Adapting light pattern, right and left hand drive traffic



A. Light pattern for left hand drive traffic B. Right hand drive traffic

Correct light pattern.

The light pattern of the headlamps can be adjusted to prevent blinding the oncoming traffic when driving with the wrong light pattern. The correct light pattern gives effective illumination of the edges of the road.

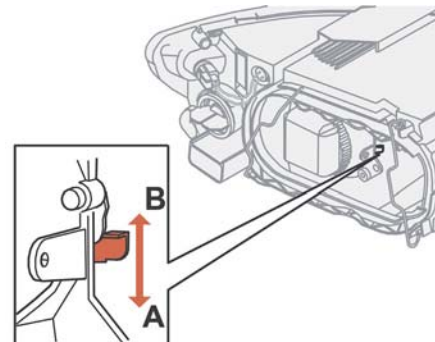


3501717j

Halogen light

Headlamps with halogen lights

The control on the headlamp must be in position (A) for left hand drive traffic and position (B) for right hand drive traffic.



3501718j

Bi-Xenon lamp

Headlamps with Bi-Xenon lights

The control on the headlamp must be in position (A) for left hand drive traffic and position (B) for right hand drive traffic.



WARNING!

If the car is equipped with Bi-xenon headlamps, all work on the headlamps must be carried out by a Volvo workshop.
Bi-Xenon headlamps require great care due to the high voltage element.

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General information

Driving characteristics and tyres

Tyres affect driving characteristics greatly. Tyre type, size and tyre pressure are important to how the car performs.

When replacing tyres, be sure to use the same type, size and brand on all four wheels. Otherwise the handling of the car could be affected. Follow the recommended tyre pressures stated on the decal on the fuel tank filler cap.

List of dimensions

There is a size designation for all car tyres. Example designation: 205/55R16 91 W.

205	Section width (mm)
55	Relationship between section height and width (%)
R	Radial tyre
16	Wheel rim diameter in inches (")
91	Code digits for maximum permissible tyre load (in this case 615 kg (1355 lbs))
W	The tyre is designed for speeds up to 240 or 270 km/h (150 or 170 mph).

New tyres

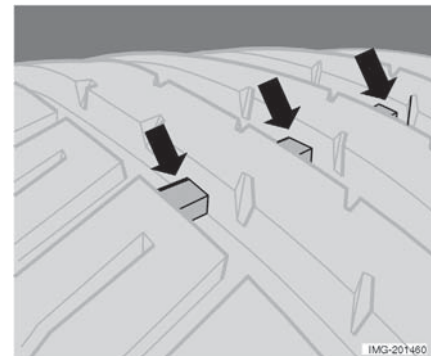


Tyres are perishable goods. They will begin to harden after a few years and their friction properties will be reduced. When changing tyres always try to get as fresh tyres as possible. This is particularly important for Winter tyres. The week

and year of manufacture is indicated by 4 digits, for example 1502. The tyre shown in the illustration were manufactured week 15, 2002.

Tyre age

Even if tyres have a theoretical service life of up to ten years, it is recommended that tyres older than six years are not used.



Tyres with tread wear indicators

Tread wear indicators are narrow, raised areas located at right angles to the tread. TWI is printed on the side of the tyre. When a tyre is worn so that only 1.6 mm (0.06 inch) of tread remains, the indicators will be clearly visible. Replace with new tyres immediately. Remember that tyres with little tread have very poor grip in rain or snow.

Winter tyres

Volvo recommends winter tyres with a fixed dimension. These are given on a decal on the inside of the fuel filler flap. The tyre size is dependent on the size of the engine. Always use winter tyres on all four wheels.

NOTE! Consult a Volvo dealership for advice on the most suitable rims and tyre types.

Studded tyres

Studded winter tyres should be carefully broken in over a distance of 500-1000 km (300 – 600 miles) so that the studs become properly positioned in the tyre. This gives the tyre, especially the studs, a longer life.

NOTE! Regulations for the use of studded tyres vary from country to country.

Tread depth

Roads with ice, snow and low temperatures demand more from tyres than summer driving. We therefore recommend a minimum tread depth of 4 mm (0.15 inch) on winter tyres.

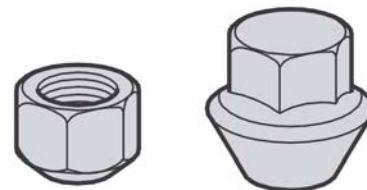
Snow chains

Snow chains may only be used on the front wheels.

NOTE! Never drive faster than 50 km/h (32 mph) with snow chains. Do not drive on unfinished roads unnecessarily as this causes heavy wear to both snow chains and tyres. Never use "quick links" because the space between the disc brakes and the wheels is too small.

IMPORTANT!

Only use Volvo Genuine snow chains or similar that are adapted to the correct model, tyre and wheel rim dimensions. Consult your Volvo workshop. Never use "quick links" because the space between the disc brakes and the wheels is too small.



IMG-201462

Low and high wheel nuts

Rims and wheel nuts

Only rims which have been tested and approved by Volvo and are Volvo Genuine accessories may be used on the car. There are two different types of wheel nut, depending on whether the rims are steel or aluminium.

Steel rims – low nut

Steel rims are normally secured using the low type of nut, although steel rims may also use the high type. Tighten to 140 Nm. Check torques using a torque wrench.



WARNING!

Never use the short type of nut for aluminium rims. The wheel can become loose.

Aluminium rim – high nut

Only the high type of nut can be used for aluminium rims. This is considerably different from other types of nut because it has a rotating conical thrust washer.

Tighten to 85 Nm. Check torques using a torque wrench.



WARNING!

The higher wheel nuts must be tightened to a maximum of 85 Nm. Harder tightening can cause washer damage.

NOTE! This nut can also be used on steel rims.

Lockable wheel nut

If steel rims with lockable wheel nuts are used in combination with wheel covers, the lockable wheel nut must be fitted to the stud nearest the air valve. Otherwise the wheel cover cannot be installed on the wheel.

Spare wheel Temporary Spare

The “Temporary Spare”¹ should only be used for the short time it takes to repair or replace the normal tyre. Switch back to a normal wheel as soon as possible. The

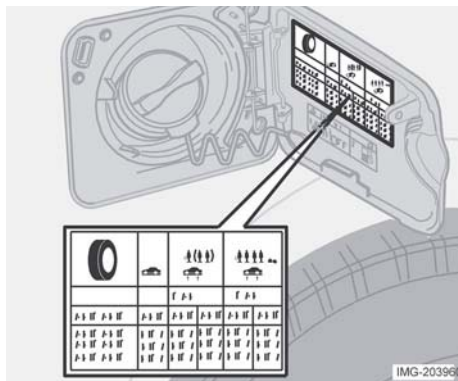
handling of the car when using the “Temporary spare” may be different. Never drive above 80 km/h (50 mph) when driving with a “Temporary spare wheel”.

IMPORTANT!

The car should never be driven with more than one spare wheel fitted at the same time.

¹ Certain markets

Tyre pressure



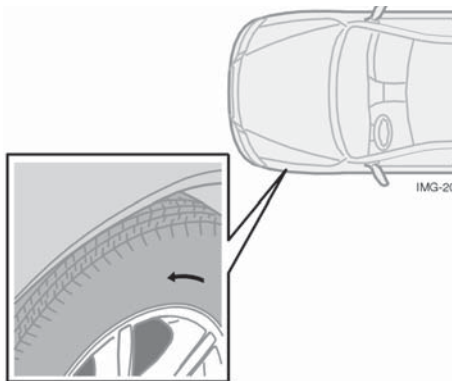
Checking the tyre pressure

Check tyre pressure regularly. The correct tyre pressures are specified in the tyre pressure table. The specified tyre pressures relate to cold tyres (vary according to the outside temperature). Driving on tyres with incorrect tyre pressures impairs the car's handling and increases tyre wear. Tyres get warm and pressure increases after just a few kilometres driving. Therefore, do not let out air if you check the pressure when the tyres are warm. However, you should increase the pressure if it is too low.

Recommended tyre pressure

The decal located on the inside of the fuel filler flap indicates the correct tyre pressure. Your car is fully approved, which means that you may not deviate from those dimensions and performance ratings indicated in the vehicle registration. The only exceptions to these regulations are winter and studded tyres. If a winter or studded tyre is used the car must not be driven faster than the tyre classification, which is usually class Q with a maximum permitted speed of 160 km/h (100 mph).

Changing wheels



The arrow shows the direction of rotation of the tyre

Summer and winter wheels

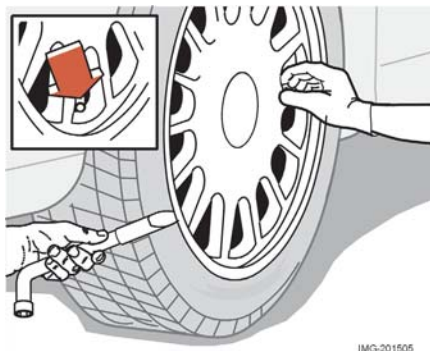
When shifting between summer and winter wheels, mark the wheels to indicate where they were fitted on the car, e.g. L = left, R = right. Tyres with tread that are designed in such a way that they should only roll in one direction are marked with an arrow. Tyres should have the same rotational direction throughout their service life. Tyres should only be switched between front and rear, never between left and right and vice-versa. Incorrectly fitted tyres impair the car's braking properties and ability to force aside rain, snow and slush. The tyres with the most tread

should always be at the rear (to reduce the risk of skidding).

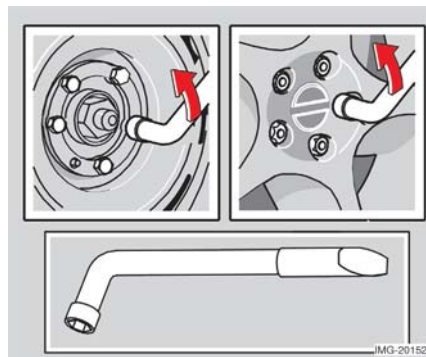
Wheels should be stored hanging up or on their sides, never standing.

Contact a Volvo workshop if unsure about the tread depth.

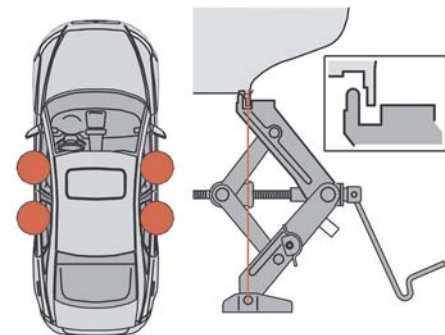
Removing wheels



IMG-201505



IMG-201523



IMG-201524

Place at least one warning triangle if changing a wheel on a public road. Ensure that the car and jack are on a secure flat surface.

1. Take out the spare wheel, jack and wheel brace. These are under the carpet in the cargo compartment.
2. Apply the handbrake. If the car is manual, engage first gear. Select **P** if the car is automatic.
3. Place chocks on either side of the wheels remaining on the ground. Use large wooden blocks or large stones.
4. Cars with steel rims have removable wheel covers. Pry off the wheel cover using the end of the wheel brace. It can also be pulled off by hand. When refitting the wheel cover, make sure the cover is properly aligned over the air valve.
5. Slacken off the wheel nuts by $\frac{1}{2}$ -1 turns anti-clockwise using the wheel brace.

6. There are two jacking points on either side of the car. Hold the jack against the pin in the jacking point as shown and wind down the jack foot so that it is pressed flat against the ground. Check that the jack sits securely in the anchorage as shown and that the foot is positioned vertically underneath the anchorage.
7. Lift the car so that the wheel is free. Remove the wheel nuts and lift off the wheel.



WARNING!

- Never crawl under the car when it is raised on a jack.
- Never leave passengers in the car when jacking it up.
- Ensure that the car (and preferably a barrier) is between passengers and the road.

The car's original jack

Only use the car's original jack when replacing a wheel. All other work on the car must be carried out using workshop jacks and axle stands under the part of the car that is raised. The jack screw should be kept well lubricated.

Fitting the wheel

1. Clean the mating surfaces on the wheel and hub.
2. Fit the wheel. Screw the wheel nuts into place.
3. Lower the car so that the wheels cannot rotate.
4. Tighten the wheel nuts crosswise. It is important that the wheel nuts are correctly tightened. The low wheel nut must be tightened to 140 Nm.

Check torques using a torque wrench. High wheel nuts with a rotating conical thrust washer must be tightened to 85 Nm. Check torques using a torque wrench.

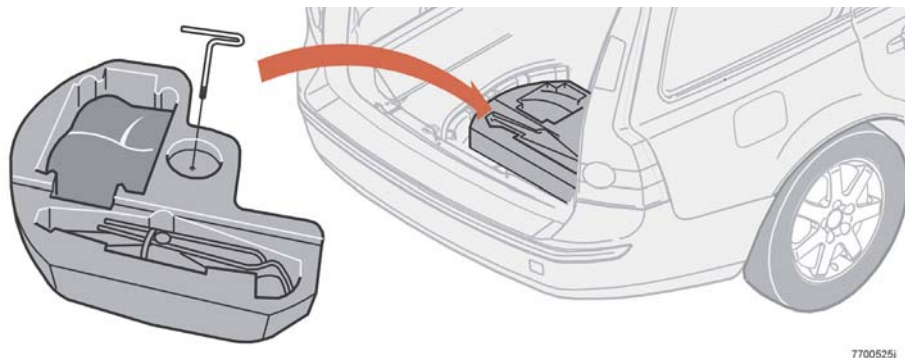


WARNING!

The higher wheel nuts must be tightened to a maximum of 85 Nm. Harder tightening can cause washer damage.

5. Install the wheel cover.
6. Screw the jack together completely before returning it to the cargo compartment. Ensure that the jack and the wheel brace are properly secured.

Spare wheel and tools



7700525j

Spare wheel/Tyre Sealant System, jack and wheel brace

The spare wheel or Tyre Sealant System with a compressor, the jack and the wheelbrace are placed under the floor in the cargo compartment.

Taking out the Tyre Sealant System:

1. Pull up the floor mat, front and rear.
2. Lift up the Tyre Sealant System.

Taking out the spare wheel:

1. Pull up the floor mat, front and rear.
2. Lift out the jack and the wheelbrace.
3. Unscrew the spare wheel and lift it out.

Tyre Sealant System (certain markets)

General

Cars not fitted with a spare wheel have been supplied with a Tyre Sealant System instead. The Tyre Sealant System comprises an electric air compressor and a container of sealing compound.

The Tyre Sealant System is only intended to act as a temporary emergency repair, allowing the car to be driven at most a further 200 km (120 miles) or to the nearest tyre workshop. The sealing compound effectively seals tyres that have been punctured by objects with a diameter of up to 6 mm (0.23 inch). There is a risk that punctured tyres that have sustained larger damage cannot be sealed.

The Tyre Sealant System should only be used in temperatures ranging from -40 °C to 70 °C. The container of sealing compound must not be used after the expiry date has passed. It must be replaced before this.

NOTE!

- Carefully read the instructions and the warning information before using the Tyre Sealant System.
- If other objects are to be inflated, a nozzle specially intended for this purposed must be used.
- Objects with a volume exceeding 50 litres (inflatable mattresses, inflatable boats, etc.) should not be inflated using the air compressor.



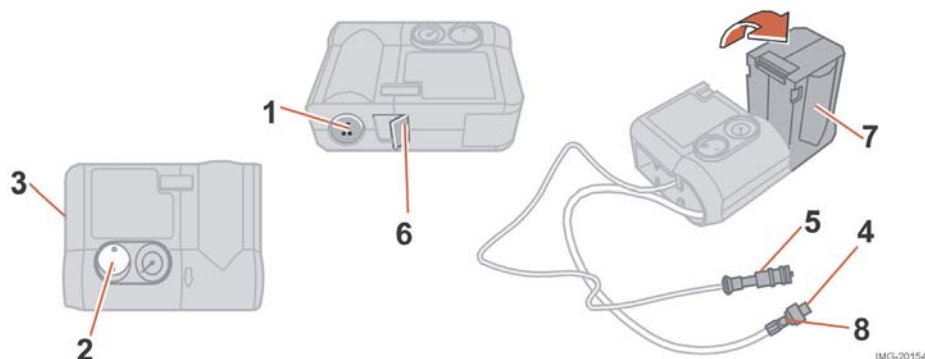
WARNING!

- The Tyre Sealant System is only intended for sealing tyres with a puncture in the contact surface.
- Do not use the Tyre Sealant System to repair tyres that have been punctured on the sidewall of the tyre or tyres that display grooves, cracks, unevenness or similar damage.

3. Read the instructions and warning information, if available. Otherwise follow these instructions and the decals on the air compressor and the container of sealing compound.
4. Do not remove objects that remain in the tyre after the tyre has been punctured.
5. The compressor should not operate for longer than 10 minutes. Allow the compressor to cool when there is a risk of overheating. Never drive above 80 km/h (50 mph) when the Tyre Sealant System has been used for an emergency repair.

Procedure

1. Ensure that the car is parked so that other vehicles are not put at risk and the traffic is not obstructed.
2. Position the warning triangle to warn other road-users.



Sealing a punctured tyre

1. Remove the label about the maximum permitted speed (1) from the Tyre Sealant System and attach it where the driver can clearly see it.
2. Ensure that the orange On/Off button is in the 0 position.
3. Take the cable and the hose from the side compartment (3).
4. Unscrew the valve cap on the punctured tyre.
5. Screw the hose (4) onto the tyre valve.
6. Connect the connector (5) to the car's 12V electrical socket.

7. Release the safety catch (6) and turn the orange section (7) 90 degrees to the vertical position.
8. If the car is in a well-ventilated location, the engine can be started to prevent the battery from discharging.

WARNING!

Inhaling car exhaust fumes can be fatal. Never leave the engine running in areas that are enclosed or lack sufficient ventilation.

9. Start the compressor by switching the ON/OFF button (2) to position I. A temporary increase in pressure of 4-6 bar will occur while the sealing compound is being pumped. After approximately 30 seconds the pressure will drop and the pressure gauge will display a more accurate tyre pressure reading.

WARNING!

Never stand next to the tyre while the compressor is pumping. Pay particular attention to the sidewalls of the tyres. In the event of cracks, unevenness or similar damage, the compressor should be switched off immediately. In such circumstances you should terminate your journey. Contact an authorised tyre workshop.

10. Fill the tyre to a minimum pressure of 1.8 bar. The pressure should not exceed 3.5 bar. Pump for approximately 7 minutes. Switch off the compressor to check the actual pressure in the tyre. If the pressure has not reached 1.8 bar after pumping for 10 minutes, the compressor should be disconnected.

NOTE! The compressor should not operate for longer than 10 minutes. Allow the compressor to cool when there is a risk of overheating.

11. Drive the car carefully approximately 10 metres forwards and backwards to distribute the sealing compound in the tyre. Repeat step 10.



WARNING!

If the pressure has still not reached 1.8 bar after 10 minutes, the tyre cannot be sealed. Do not attempt to pump up the tyre again. Contact an authorised tyre workshop.

12. Disconnect the hose from the tyre valve and refit the valve cap. Remove the connector from the electric socket. Fold back the orange section to its original position and secure the catch. Store the Tyre Sealant System in a safe place in the car.

13. To ensure that the sealing compound seals the tyre successfully, drive approximately 3 kilometres (2 miles) as soon as possible at a maximum speed of 80 km/h (50 mph).



WARNING!

Do not drive above 80 km/h (50 mph) after the provisional puncture repair has been used. The provisionally sealed tyre must be replaced as soon as possible (maximum recommended distance 200km (120 miles)).

14. Checking the tyre pressure again:
 1. Connect the hose to the tyre valve.
 2. Fit the connector in the electric socket.
 3. Read off the pressure on the compressor's pressure gauge.



WARNING!

If the tyre pressure is below 1.3 bar, the tyre has not been sealed sufficiently. In such circumstances you should terminate your journey. Contact an authorised tyre workshop.

15. If the tyre pressure is higher than 1.3 bar, the tyre should be pumped to the pressure specified in the tyre pressure table on the fuel filler cap. If the tyre pressure is too high, release air using the relief valve (8).

16. Switch off the compressor. The On/Off button should be in the 0 position. Disconnect the hose from the tyre valve. Reinstall the Tyre Sealant System under the floor in the cargo compartment.

NOTE! The tyre pressure should be checked again after an extended period of rest.

Pumping air only

(only applies if there is a special nozzle)

NOTE! Objects with a volume exceeding 50 litres (inflatable mattresses, inflatable boats, etc.) should not be inflated using the air compressor.

1. Ensure that the On/Off button is in the 0 position.
2. Take the cable and the hose from the side compartment (3).

3. Screw the special nozzle (may be purchased from dealers) into place on the hose (4). Connect the hose and nozzle to the object that is to be inflated.

IMPORTANT!

The safety catch (6) should not be released when the orange section is not going to be used. The orange section should be in the horizontal position.

4. Connect the connector (5) to the car's 12V electrical socket.
5. Start the engine. The car must be standing in a well-ventilated area.

**WARNING!**

Inhaling car exhaust fumes can be fatal. Never leave the engine running in areas that are enclosed or lack sufficient ventilation.

8. Switch off the compressor by setting the On/Off switch to the 0 position when the correct pressure has been achieved.

NOTE! The compressor should not operate for longer than 10 minutes. Allow the compressor to cool when there is a risk of overheating.

6. Start the compressor by switching the ON/OFF button (2) to position I.
7. Pump the object to the required pressure. Do not inflate objects that require a pressure higher than 4 bar.

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Cleaning

Washing the car

Wash the car as soon as it becomes dirty. Use car shampoo. Road salt and moisture can lead to corrosion.

- Thoroughly rinse dirt off the underbody of the car.
- Rinse the entire car until the dirt has softened. When using a high pressure washer: Make sure that the nozzle of the high pressure washer does not come closer than 30 cm (12 inches) from the bodywork. Do not spray directly at the locks.
- Wash using a sponge, car shampoo and lukewarm water (maximum of 35 °C).
- If the dirt is difficult to dislodge, wash the car using a cold degreasing agent. Do not expose the car to direct sunlight as this can damage the paintwork. Be sure that there is a drain separator where you are washing the car
- Dry the car using a clean, soft chamois.
- Clean the wiper blades with a lukewarm soap solution.

Removing bird droppings

Wash bird droppings off the paintwork as soon as possible. Bird droppings contain

chemicals that affect and discolour paintwork quickly. The discolouration cannot be polished off.

WARNING!

Always have the engine cleaned by a workshop. There is a fire risk if the engine is hot.

Automatic car wash

Although an automatic car wash is a quick and easy way to clean the car, it is no substitute for a proper hand wash. The brushes of an automatic car wash cannot reach all points. We recommend that the car is washed by hand for the first few months.

WARNING!

Always test the brakes after washing the car to ensure that moisture and corrosion do not affect the brake pads and impair the brakes.

Gently press the brake pedal occasionally if driving for long periods in rain or slush. This heats and dries the brake pads. You should also do this when you begin driving in extremely damp or cold weather.

Cleaning the upholstery

Treating marks on fabric

A special cleaning agent available at your Volvo dealer is recommended when cleaning fabric upholstery. Other chemicals can impair the fire retardant qualities of the upholstery.

IMPORTANT!

Sharp objects and Velcro may damage the textile upholstery.

Treating marks on vinyl

Wash the vinyl with a weak soap solution and lukewarm water. Never scrape or rub a mark. Never use strong stain removers.

Treating marks on leather

A special cleaning agent available at your Volvo dealer is recommended when cleaning leather upholstery. Treat the leather upholstery once or twice a year using Volvo's leather care kit. Never use strong stain removers. Such products may damage fabric, vinyl and leather upholstery.

Cleaning seat belts

Use water and synthetic detergent.

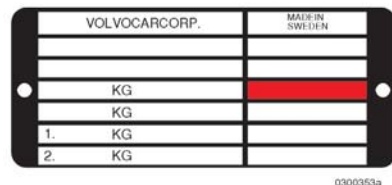
Polishing and waxing

Polish and wax the car when the paintwork is dull or when you wish to give the paintwork extra protection.

The car does not need to be polished until it is at least one year old. However the car can be waxed during this time. Do not polish or wax surfaces warmer than 45° C.

- Wash and dry the car thoroughly before you begin polishing or waxing. Clean off asphalt and tar stains using white spirit. More stubborn marks can be removed using fine rubbing paste designed for paintwork.
- Polish first with a polish and then wax with liquid or solid wax. Carefully follow the instructions on the packaging. Many preparations contain both polish and wax.

Touching up paintwork damage



Paint

Paint is an important part of the car's rustproofing and should therefore be checked regularly. To avoid the onset of rust, damaged paintwork must be rectified immediately. The most common types of damage to paintwork are stone chips, scratches and marks on the wing edges and doors for example.

Colour code

It is important that the correct colour is used. The code for the car's paint is on the product plate on the B-post. See page 192.



Stone chips and scratches

Before touching up paintwork, the car must be clean and dry and at a temperature above 15°C.

Material

- Primer in a can
- Paint in a can or a touch-up pen
- Brush
- Masking tape.

Minor stone chips and scratches

If the stone chip has not penetrated to the bare metal and an undamaged colour coat remains, you can add paint immediately after removing dirt.

If the stone chip has penetrated to the panel

1. Apply a piece of masking tape over the damaged surface. Then remove the tape, removing any paint residue.
2. Stir the primer thoroughly and apply using a fine brush or matchstick. Apply paint using a brush once the primer is dry.
3. For scratches, proceed as above, but mask around the damaged area to protect the undamaged paintwork.
4. After a few days, polish the touched-up areas. Use a soft rag and apply lapping paste sparingly.

Rustproofing

Checks and maintenance

Your car received a thorough and complete rustproofing at the factory. Parts of the body are made of galvanised sheet metal. The underbody is protected by a wear-resistant anti-corrosion compound. A thin, penetrative rustproofing liquid was sprayed into the members, cavities and closed sections.

Maintaining the car's rustproofing.

- Keep the car clean. Hose down the underbody. When using a pressure washer, keep the nozzle at least 30 cm (12 inches) from painted surfaces.
- Regularly check and touch-up the rustproofing treatment as necessary.

The car's rustproofing does not normally require treatment for approximately eight years. After that time, it should be treated at three yearly intervals. If the car needs further treatment, please contact a Volvo workshop.

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Volvo Service

Volvo service programme

Before the car left the factory, it was thoroughly test driven. It was checked again in accordance with Volvo Car Corporation regulations before it was handed over to you. To keep your Volvo as safe and reliable as possible, follow the Volvo service programme specified in the Service and Warranty Booklet. Have a Volvo workshop carry out service and maintenance work. Volvo workshops have the personnel, special tools and service literature that guarantee the highest quality of service.

IMPORTANT!

For the Volvo warranty to apply, check and follow the instructions in the Service and Warranty Booklets.

Special service measures

Certain service measures, which affect the car's electrical system, can only be carried out using electronic equipment specially developed for your car. Always contact your Volvo workshop before beginning or carrying out service work which affects the electrical system.

Installing accessories

Incorrect connection and installation of accessories can negatively affect the car's electrical system. Certain accessories only function when the appropriate software has been programmed into the car's electrical system. Always contact your Volvo workshop before installing accessories which are connected to or affect the electrical system.

Recording vehicle data

One or more of the computers in your Volvo are capable of recording detailed information. This information is intended for use in research in order to further develop safety and for diagnosing faults in some of the car's systems and may include details regarding; frequency of seat belt use by the driver and passenger, information on various vehicle system/module functions and information regarding engine, throttle, steering, brakes and other system status. This information can include details concerning the way the driver drives the car. This type of information can include, without being limited to, specific details such as the car's speed, the use of the brake and accelerator pedals and steering wheel position. The latter data can be stored for a limited period while the car is being driven and subsequently during a collision or a near-collision. Volvo Car Corporation will

not distribute the stored information without consent. However, Volvo Car Corporation may be forced to distribute the information due to national legislation. Volvo Car Corporation and its workshops may also read and utilise the information.

Adverse driving conditions

Change engine oil and replace air and oil filters more often than recommended in the Service and Warranty manual when driving in adverse conditions.

Adverse driving conditions include regular use:

- in dusty or sandy environments
- when towing caravans or trailers
- in mountainous regions
- at high speed
- at idle or at low speed
- short journeys (less than 10 km (6 miles) at low temperatures (below 5°C).

Maintaining your car yourself

Before starting work on the car

The battery

- Check that the battery cables are correctly connected and tightened.
- Never disconnect the battery when the engine is running (e.g. when replacing the battery).
- Never use a fast charger to charge the battery. The battery cables should be disconnected while charging.
- The battery contains acid that is both corrosive and poisonous. It is important that the battery is handled in an environmentally friendly way. Let your Volvo dealer assist you.



WARNING!

- The ignition system has very high voltage. The voltage in the ignition system is dangerous. The ignition must therefore always be switched off when working in the engine compartment.
- Do not touch the spark plugs or ignition coils when the ignition is on or the engine is hot.

Bonnet and engine compartment



Opening the bonnet

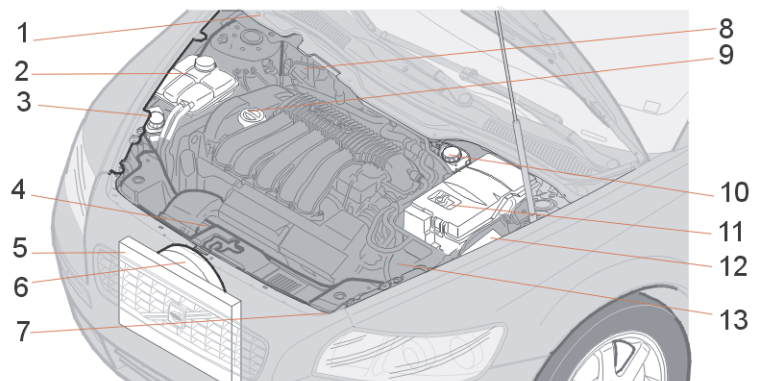
Open the bonnet:

- Pull the handle on the far left under the dashboard. You will hear when the catch releases.
- Insert your hand in the centre of the front edge of the bonnet and press up the safety catch handle.
- Open the bonnet.



WARNING!

Check that the bonnet catches engage properly when closed.



Engine compartment

1. Washer fluid reservoir, 4 l (4 cyl.)
2. Expansion tank for cooling system
3. Power steering fluid reservoir
4. Dipstick for engine oil¹
5. Radiator
6. Radiator fan
7. Washer fluid reservoir, 6.5 l (5 cyl.)
8. Clutch and brake fluid reservoir (right-hand drive)
9. Topping up, engine oil¹
10. Clutch and brake fluid reservoir (left-hand drive)

11. Battery

12. Relay and fuse box

13. Air filter*

¹ Tyre pressure may vary depending on the ambient temperature.

Check regularly

Check the following at regular intervals, for example, when filling up:

- Coolant - The level must be between the MIN and MAX marks on the expansion tank.
- Engine oil - The level should be between the MIN and MAX marks.
- Power steering fluid - The level should be between the MIN and MAX marks.
- Washer fluid - The reservoir must be well filled. Top up with anti-freeze at temperatures around freezing.
- Brake and clutch fluid - The level must be between the MIN and MAX marks.



WARNING!

- Remember that the radiator fan may start automatically after the engine has been switched off.
- Always have the engine cleaned by a workshop. There is a fire risk if the engine is hot.

Diesel

Fuel system

Diesel engines are sensitive to contaminants. Only use diesel from a well-known oil company. Never fill up with diesel if the quality is dubious. The large oil companies also produce a special diesel for use when the outside temperature is around freezing. This fuel is less viscous at low temperatures and reduces the risk of wax building up in the fuel system.

The risk of condensation building up in the tank is reduced if the tank is kept well filled. When refuelling, check that the area around the fuel filler pipe is clean. Avoid spilling onto the paintwork. Wash off any spillage with detergent and water.

Empty tank

No special procedures are required if the tank runs dry.

RME (Rape Methyl Ester)

A maximum of 5% RME may be mixed with the diesel.

IMPORTANT!

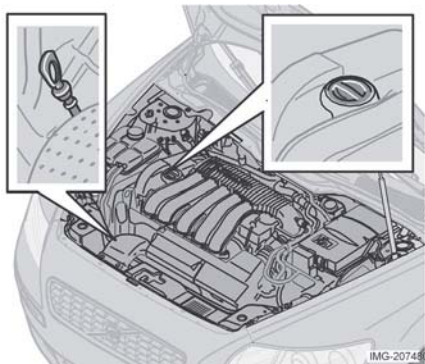
There is a danger of engine damage if the RME concentration is greater than 5%.

Draining condensation from the fuel filter

Condensation is separated from the fuel in the fuel filter. Condensation can disrupt the engine.

The fuel filter must be drained at the intervals specified in the Service and Warranty Book or if it is suspected that the car has been filled with contaminated fuel.

Oils and fluids



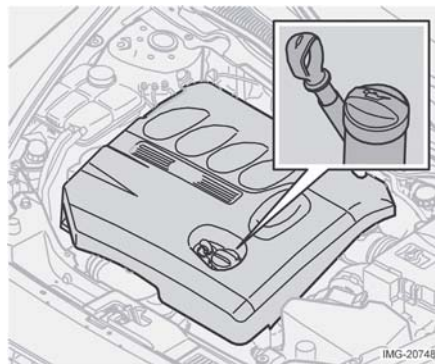
Dipstick, petrol engines

Changing the oil and oil filter

There are instructions in the Service and Warranty Manual indicating the replacement intervals for oil and oil filters. Shorter intervals are recommended if driving in adverse conditions. See page 140.

Check the oil level

The engine oil level must be checked and the oil must be changed regularly. It is important to check the oil level before the first regular oil change is due on the new car. The service- and warranty book specify measurements.

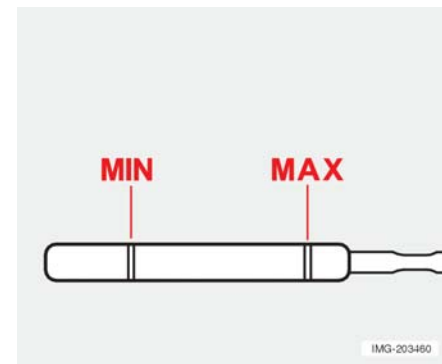


Dipstick, diesel engines

Volvo recommends that the oil level is checked every 2500 km (1550 miles). The most accurate measurement is made on a cold engine before starting. An incorrect measurement may be taken immediately after the engine is switched off. The dipstick indicates that the level is too low because the oil has not had time to flow down into the oil sump.

Checking the oil in cold cars:

- Wipe the dipstick clean before the check.
- Check the oil level using the dipstick. The oil level should be between the MIN and MAX marks. If the level is close to



The oil level must be within the marked area on the dipstick.

the MIN mark, top up using 1.0 litre of oil. Top up until the oil level is nearer the MAX mark than the MIN mark.

Checking the oil in warm cars:

- Park the car on a level surface and wait at least 10 to 15 minutes after switching off the engine so that the oil has time to run back to the oil sump.
- Wipe the dipstick before checking.
- Check the oil level using the dipstick. The oil level should be between the MIN and MAX marks.

- Top up with engine oil if necessary. If the level is close to the MIN mark, top up using 1.0 litre of oil. Run the car to operating temperature and switch off the engine. Wait 10-15 minutes and check the level again. Top up until the oil level is nearer the MAX mark than the MIN mark.

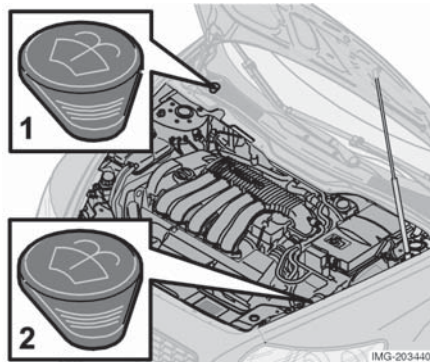
IMPORTANT!

Never fill above the MAX mark. Oil consumption may increase if too much oil is poured into the engine.



WARNING!

Do not spill oil on the hot exhaust manifold as this is a fire risk.



Topping up washer fluid, depending on engine type

Washer fluid reservoir

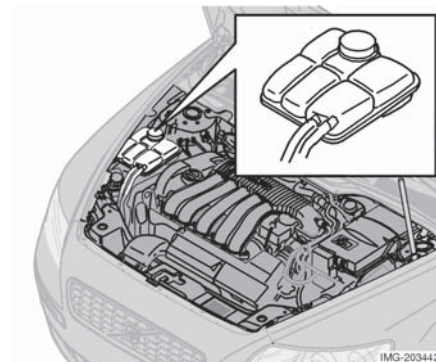
The windscreen and headlamp washers share a common fluid reservoir.

1. Filling 4 cylinder models and diesel. The reservoir holds approx. 4 litres.
2. Filling 5 cylinder models. The reservoir holds approx. 6.5 litres.

Add anti-freeze protection in the winter so that the fluid does not freeze in the pump, reservoir and hoses.

IMPORTANT!

Mix the anti-freeze with water before filling.



Coolant reservoir

Coolant

Use a mixture of half water, half coolant. Follow the instructions on the packaging. It is important to use equal amounts. Never top up with ordinary water only. The risk of freezing increases with both too little and too much coolant.

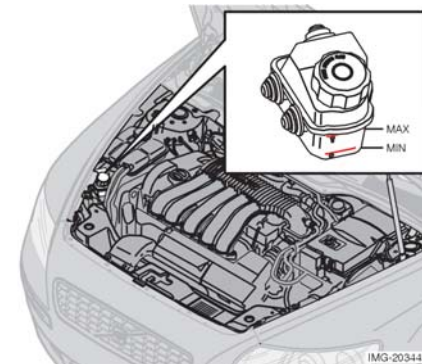
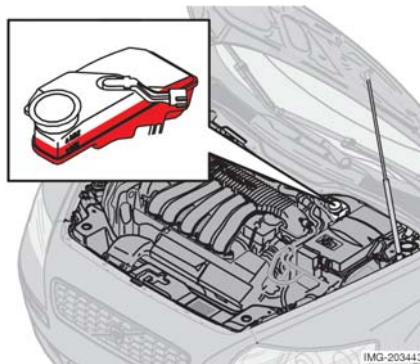
IMPORTANT!

Some engine components are manufactured in aluminium alloy. Therefore it is extremely important always to use coolant with anti-corrosion agent as recommended by Volvo. When the car is new, it is filled with coolant that can withstand approximately -35°C .

Check the coolant regularly

The level must be between the MIN and MAX marks on the expansion tank. If the system is not filled sufficiently, high local temperatures could occur, causing a risk of damage (cracks) to the cylinder head. Top up the coolant when the level falls to the MIN mark.

NOTE! The engine must only be run with a well-filled cooling system. High temperatures can occur, causing a risk of damage (cracks) to the cylinder head.



WARNING!

The coolant may be extremely hot. If topping up is required when the engine is at operating temperature, slowly unscrew the expansion tank cap to disperse overpressure.

Clutch and brake fluid reservoir

The brake and clutch fluid have a common reservoir. The location of the reservoir differs between right and left-hand drive cars. The level must be between the MIN and MAX marks.

Recommended brake fluid: DOT 4+. Check the level regularly. Change the fluid every other year or at every other regular service interval.

IMPORTANT!

The fluid should be changed annually on cars used in conditions requiring hard, frequent braking, such as driving in mountains or tropical climates with high humidity.

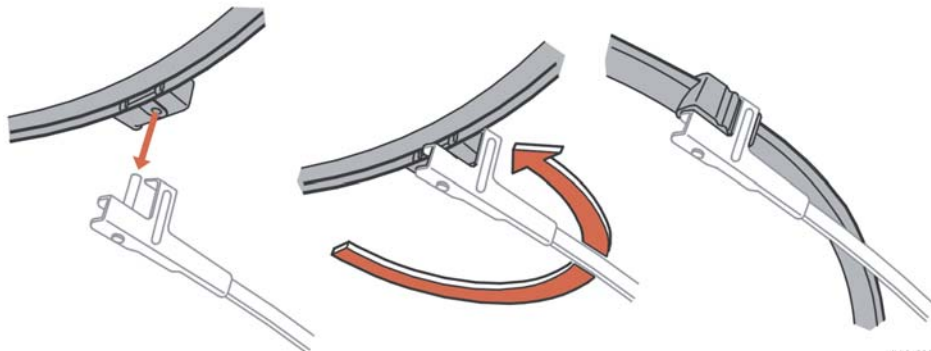
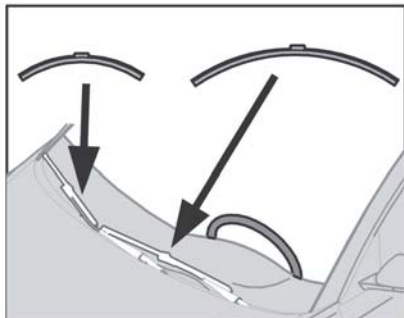
Power steering fluid reservoir

The level must be between the MIN and MAX marks.

Grade: Volvo Power steering fluid. Check the level at every service. It is not necessary to change the fluid.

NOTE! If a fault should arise in the power steering system or if the car is without power and must be towed, it can still be steered. However the steering will be much heavier than normal and more power will be required to turn the wheel.

Wiper blades



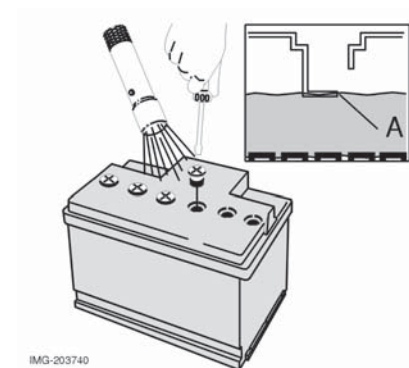
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Replacing wiper blades

1. Fold out the wiper arm and fold out the wiper blade at 90° to the wiper arm.
2. Pull the wiper blade off the shaft, straight to the side.
3. Slide in the new wiper blade, at 90° to the wiper arm.
4. Fold in the wiper blade under the metal plate and fold the wiper arm down.

NOTE! The wiper blades are different lengths. The blade on the driver's side is longer than the blade on the passenger side.

Battery



Battery care

The service life and function of the battery can be affected by numerous starts, discharges, driving styles, conditions and climate conditions etc.

For the battery to function satisfactorily, consider the following:

- Regularly check that the battery fluid level is correct (A).
- Check all cells. Use a screwdriver to remove the cover. Each cell has its own maximum level mark.
- If necessary, top up to the battery's maximum mark using distilled water.

NOTE! Never fill above the maximum mark (A).

IMPORTANT!

Always use distilled or deionised water (battery water).

- Tighten the cover properly.

NOTE! The service life of the battery may be negatively affected if it is repeatedly discharged.

Symbols on the battery

The symbols are on the battery.



Use protective goggles.



Further information can be found in the owner's manual.



Store the battery out of the reach of children.



The battery contains corrosive acid.



Avoid sparks and open flames.



Risk of explosion.

Replacing the battery

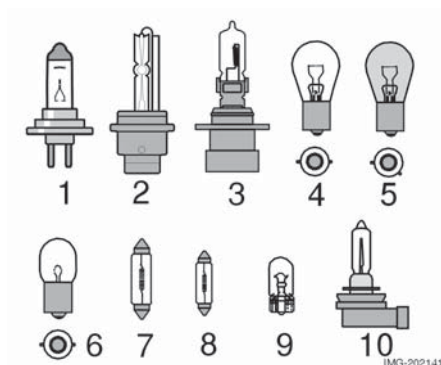
1. Switch off the ignition and remove the key.
 2. Unscrew the cover over the battery.
 3. Wait at least 5 minutes before touching any electrical terminals (so that the information in the car's electrical system can be stored in the different control modules).
 4. Remove the cover and unscrew the front wall of the battery box using a screwdriver.
 5. Disconnect the battery negative lead.
 6. Release the clamp holding the battery.
 7. Disconnect the positive lead.
- Install the battery in the reverse order.



WARNING!

Batteries can generate oxyhydrogen, which is highly explosive. A spark, which can be generated if the jump leads are incorrectly connected, is sufficient to explode the battery. The battery also contains sulphuric acid, which can cause serious corrosive damage. If the acid comes into contact with your eyes, skin or clothes, flush with large quantities of water. If acid splashes into your eyes, contact a doctor immediately.

Lamp types



- | | | |
|-----|--------------------------------------------------------------------------------------------------|---------|
| 7. | Courtesy lighting,
Cargo compartment
lighting | W5W |
| 8. | Vanity mirror | 1.2W |
| 9. | Number plate lighting,
Parking lamps in
headlamps Direction
indicator lamps
(yellow) | W5W |
| 10. | Fog lamps | 55W H11 |

Bulbs in the car

- | | | |
|----|--------------------------------------------------------------|-------------|
| 1. | Dipped beam | 55W
H7LL |
| 2. | Bi-Xenon (option) gas
discharge lamps | 35W D2S |
| 3. | Main beam | 55W HB3 |
| 4. | Brake lamp, Fog
lamp, rear | P21W |
| 5. | Direction indicator,
rear + front (yellow) | PY21W |
| 6. | Tail lamps, Position/
parking lamps, Side
marker lamps | W5WLL |

Environment

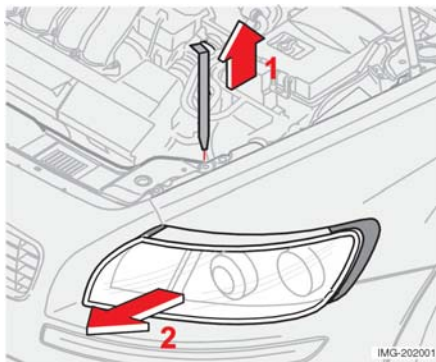
Bi-Xenon lamps contain a small amount of mercury. Burnt out bulbs must be handled correctly. Contact a Volvo workshop for advice.

IMPORTANT!

Never touch the glass of bulbs with your fingers. Grease and oils from your fingers are vaporised by the heat. This coats and damages the reflector.

NOTE! Lamps and spotlights that are not presented here should be replaced by a Volvo workshop.

Replacing front bulbs



Removing the bulb holder

All front bulbs (except for fog lamps) are replaced by disconnecting and removing the lamp housing via the engine compartment.

WARNING!

If the car is equipped with Bi-Xenon headlamps, all work on the headlamps must be carried out by a Volvo workshop.

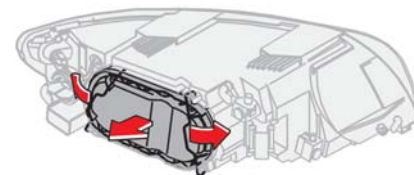
Bi-Xenon headlamps require great care due to the high voltage element.

1. Remove the ignition key and turn the light switch to position 0
2. Pull up the lamp housing's locking pin (1)
3. Pull the lamp housing to one side and then forwards (2)
4. Disconnect the connector
5. Lift out the lamp housing and place it on a soft surface so as not to damage the lens.

Installing the lamp housing:

1. Install the lamp housing in reverse order. Check that the lock pin is correctly situated.
2. Check the lighting.

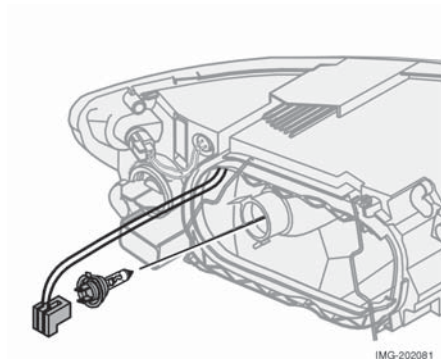
NOTE! The lamp housing must be connected and securely positioned before turning on the lights or before inserting the ignition key in the ignition.



Cover with lock catches

Dipped beam

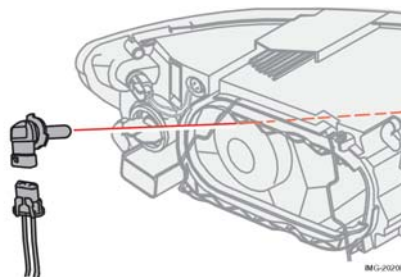
1. Remove the entire lamp housing.
2. Move the lock catches to one side and remove the cover.
3. Release the spring clamp holding the bulb. First push to the right so that the spring clamp releases, then out and down.
4. Pull out the bulb.
5. Remove the connector from the bulb.



Dipped beam

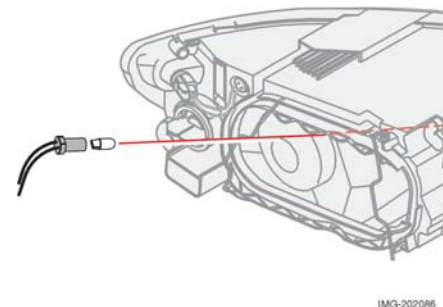
Fitting the bulb

1. Install the new bulb. It can only be fitted in one position.
2. Press the spring clamp up and a little to the left so that it snaps into place.
3. Press the connector back into position.
4. Reinstall the plastic cover.
5. Reinstall the lamp housing.



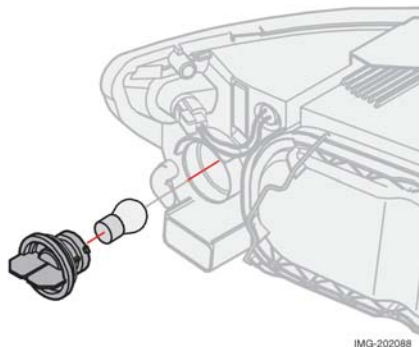
Main beam

1. Remove the entire lamp housing.
2. Twist the bulb holder anticlockwise, pull it out and replace the bulb. (Note how the bulb holder is positioned.)
3. Reinstall the bulb holder. It can only be installed one way



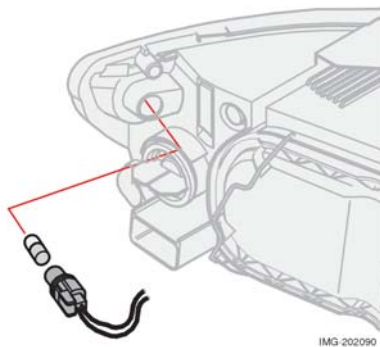
Position/parking lamps

1. Pull the bulb holder out using pliers. Do not pull out the bulb holder by pulling the electrical cable.
2. Replace the bulb.
3. Press the bulb holder back into position. It can only be installed one way.



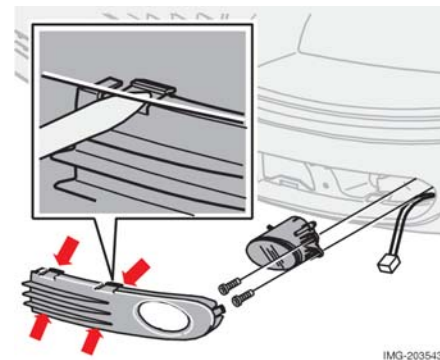
Direction indicator

1. Twist the bulb holder anti-clockwise and remove it.
2. Press the bulb inwards, turn it anticlockwise and remove it from the bulb holder.
3. Replace with a new bulb and reinstall the bulb holder in the lamp housing.



Side marker lamps

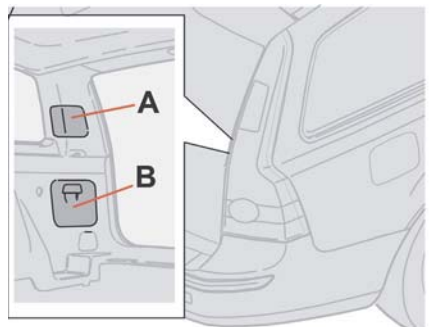
1. Twist the bulb anticlockwise, pull it out and replace the bulb.
2. Reinstall the bulb holder. It can only be fitted in one position.



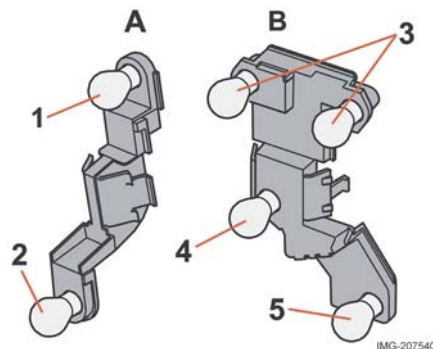
Fog lamps

1. Switch off all lights and turn the ignition key to position 0.
2. Remove the panel around the lamp housing.
3. Unscrew both the torx screws in the lamp housing and take out the lamp housing.
4. Remove the connector from the bulb.
5. Turn the bulb anticlockwise and pull it out.
6. Locate the new bulb in its seat and turn clockwise.
7. Connect the connector to the bulb.
8. Secure the lamp housing using the screws and press the panel back.

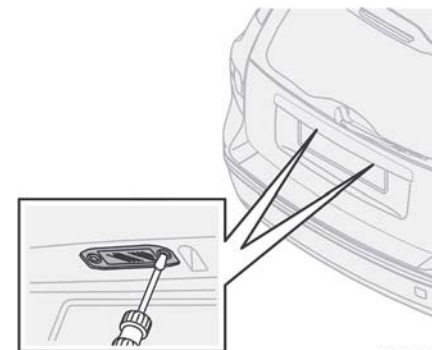
Replacing rear bulbs



IMG-207520



IMG-207540



IMG-207541

Removing the bulb holder

All bulbs in the rear lamp cluster can be replaced from inside the cargo compartment

1. Switch off all lights and turn the ignition key to position 0.
2. Remove the hatches in the left/right panels to access the bulbs.

These bulbs are placed in a common bulb holder.

1. Disconnect the connector from the bulb holder.
2. Press the catches together and pull out the holder.
3. Replace the bulb.
4. Press the connector back into position.

5. Press the bulb holder into place. Reinstall the cover.

Location of bulbs in the rear lamp cluster

- | | |
|-----------------------------|------------------|
| 1. Brake light | P21W LL
BA15s |
| 2. Position/parking lamps | P5W LL
BAY15d |
| 3. Direction indicator | PY21W
LL |
| 4. Rear fog lamp (one side) | P21W LL
BA15s |
| 5. Reversing lamp | P21W LL
BA15s |

High-level brake light

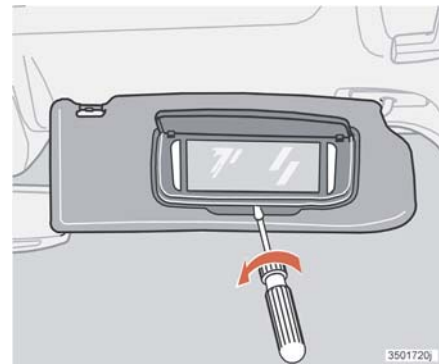
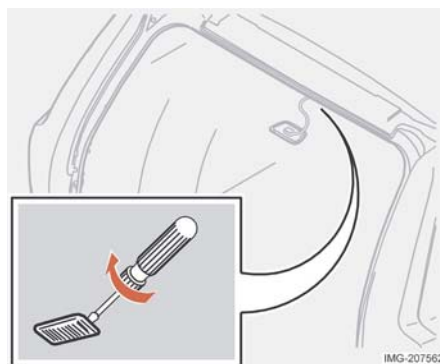
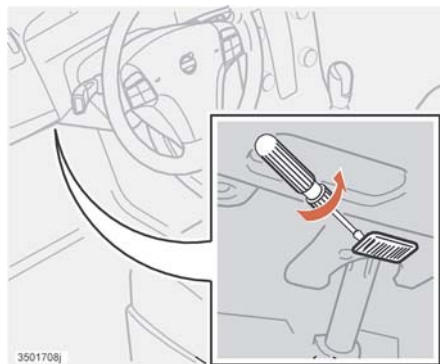
These bulbs are of a special type. It is recommended that these are replaced by a Volvo workshop.

Number plate lighting

Replacing bulb

1. Switch off all lights and turn the ignition key to position 0.
2. Remove the screw using a screwdriver.
3. Carefully detach the entire lamp housing and pull it out. Turn the connector anticlockwise and pull out the bulb.
4. Replace the bulb.
5. Refit the contact and turn clockwise.
6. Refit the entire lamp housing and screw it into place.

Replacing inner bulbs



Courtesy lighting

There is courtesy lighting under the dashboard on the driver and passenger sides.

1. Insert a screwdriver and gently turn so that the lens detaches.
2. Remove the faulty bulb.
3. Install the new bulb.
4. Reinstall the lens.

Cargo compartment

1. Insert a screwdriver and gently turn so that the lamp housing loosens.
2. Remove the faulty bulb.
3. Install the new bulb.
4. Reinstall the lamp housing.

Vanity mirror lighting

Removing mirror glass:

1. Insert a screwdriver underneath the lower edge, in the centre. Carefully pry up the lug on the edge.
2. Insert the screwdriver underneath the edge on the left and right-hand side (by the black rubber sections). Carefully pry up so that the lower edge of the glass releases.
3. Carefully detach and lift out the entire mirror glass and cover
4. Remove the blown bulb and replace it with a new one.

Installing the mirror glass:

1. First press the three lugs at top edge of mirror glass back into position.
2. Then press the three lower lugs back into position.

Fuses

All electrical functions and components are protected by number of fuses to protect the car's electrical system from damage by short-circuits or overloads.

The fuses are in two different locations in the car:

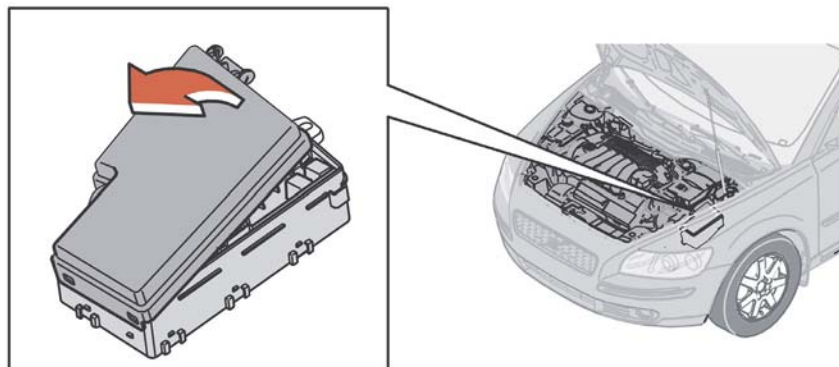
- Relay/fuse box in the engine compartment.
- Relay/fuse box in the passenger compartment.

Replacement

If an electrical component or function does not work, it may be because the component's fuse was temporarily overloaded and blew.

1. Look in the fuse diagram to locate the fuse.
2. Pull out the fuse and look at it from the side to see if the curved wire is burned out.
3. If this is the case, replace it with a new fuse of the same colour and amperage.

If the same fuse burns out repeatedly it means that there is a fault in the component. Please contact a Volvo workshop to carry out a check.



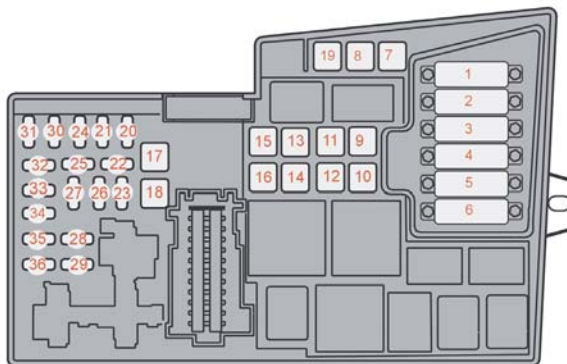
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Relay/fuse box in the engine compartment

The fuse box contains 36 fuse positions. Be sure to replace a blown fuse with a new fuse of the same colour and amperage.

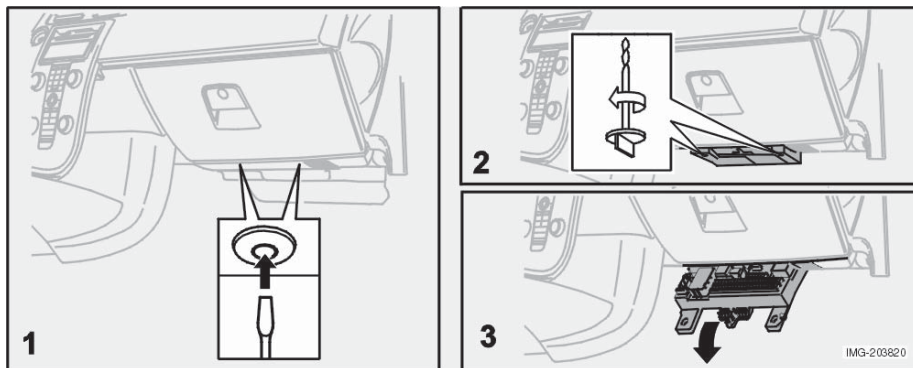
- 1-6 are the "Midi Fuse" type and may only be replaced by a Volvo workshop.
- 7-18 are the "JCASE" type and should be replaced by a Volvo workshop.
- 19 - 36 are the "Midi Fuse" type.

On the inside of the cover there are spare fuses and pliers to assist in removing and replacing fuses.



Fuse positions in the relay/fuse box in the engine compartment

1. Radiator fan, 50A
2. Power steering, 80A
3. Supply to the fuse box in the passenger compartment, 60A
4. Supply to the fuse box in the passenger compartment, 60A
5. Element climate control unit, 80 A
6. Glow plugs (diesel), 60 A
7. ABS pump, 30 A
8. ABS valves, 20 A
9. Engine control module, 30A
10. Fan climate control unit, 40 A
11. Headlamp washers, 20 A
12. Heated rear window , 30A
13. Starter motor relay, 30A
14. Electrical socket for trailers, parking assistance, accessory module, 40 A
15. Spare position
16. Supply to the fuse box in the passenger compartment, 30A
17. Windscreen wipers, 30A
18. Supply to the fuse box in the passenger compartment, 40A
19. Spare position
20. Horn, 15A
21. Additional heater, passenger compartment heater (fuel powered), 20A
22. Spare position
23. Engine control module (ECM) / transmission control module (TCM), 10A
24. Heater diesel filter, 20 A
25. Spare position
26. Ignition switch, 15A
27. Air conditioning (A/C) compressor, 10A
28. Spare position
29. Fog lamps front, 15A
30. Engine control module, 3A
31. Voltage regulator, generator, 10 A
32. Injectors (5 cyl.), 10 A
33. Heater element heated oxygen sensor (HO2S) (5 cyl), air preheating valve (diesel), 20A
34. Ignition coils, fuel pump (diesel), 10A
35. Engine sensor valves, relay air conditioning, 15 A
36. Engine control module (ECM), 10A



Relay/fuse box in the passenger compartment

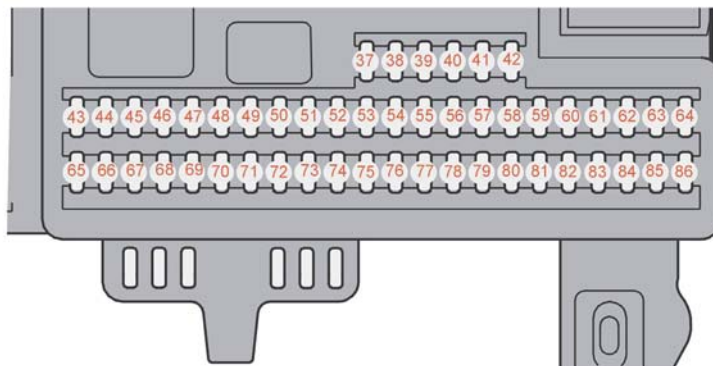
The fuse box contains 56 fuse positions. The fuses are located under the glove compartment.

There are spare fuses and pliers in the in the integrated relay/fusebox in the engine compartment to assist in removing and replacing fuses.

Replacing fuses:

1. Remove the interior upholstery covering the fuse box by first pressing in the centre pins in the mounting clips (1) approximately 1 cm (0.4 inch) and then pulling these out

2. Turn both the butterfly screws (holding the fuse box in position) (2) anti-clockwise until they release
3. Fold down the fuse box (3) half way. Pull towards the seat until it stops. Fold down completely. The fusebox can be unhooked completely.
4. Close the fusebox in reverse order.
5. Pull the centre pins fully out of the mounting clips, secure the upholstery with the mounting clips and press the loose pins into the mounting clips again. The mounting clips then expand, holding the upholstery in position.



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Fuse positions in the relay/fuse box in the passenger compartment

- 37. Spare position
- 38. Spare position
- 39. Spare position
- 40. Spare position
- 41. Spare position
- 42. Spare position
- 43. Telephone, audio, 15 A
- 44. SRS system, 10 A
- 45. Electric socket, rear seat, 15 A
- 46. Lighting in passenger compartment, glove compartment and entry, 5 A
- 47. Lighting in the roof, door mirrors, 5 A

- 48. Windscreen washer, wiper rear window, 15 A
- 49. SRS system, 10 A
- 50. Spare position
- 51. Additional heater (Positive temperature coefficient (PTC)) lighting front, 10 A
- 52. ABS-system, 5 A
- 53. Power steering, 10 A
- 54. Transmission control module (TCM), differential gear, 10 A
- 55. Remote control receiver, 20 A
- 56. Battery charging, 10 A
- 57. Computer system, brake light contact, 15 A
- 58. Main beam right, auxiliary lamp, 7.5 A
- 59. Main beam left, auxiliary lamp, 7.5 A
- 60. Seat heater driver's side, 15 A
- 61. Seat heater passenger side, 15 A

- 62. Sunroof, 20 A
- 63. Power window rear, right-hand side, 20 A
- 64. Audio, 5 A
- 65. Infotainment, 5 A
- 66. Climate control module (CCM)/infotainment control module (ICM), 10 A
- 67. Sub-bass, 15 A
- 68. Cruise control, 5 A
- 69. Climate control, rain sensor, 5 A
- 70. Spare position
- 71. Spare position
- 72. Spare position
- 73. Sun roof, console for interior lighting (OHC), seat belt reminder rear, 5 A
- 74. Relay fuel pump, 15 A
- 75. Spare position
- 76. Spare position
- 77. Electric socket, cargo compartment, 15 A
- 78. Spare position
- 79. Reversing lamps, 5 A
- 80. Spare position
- 81. Power window rear, left-hand side, 20 A
- 82. Power window front, passenger side, 25 A
- 83. Power window front, driver's side, 25 A
- 84. Power passenger seat, 25 A
- 85. Power driver's seat, 25 A
- 86. Interior lighting relay, power seats, 5 A

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Infotainment

Audio and telephone system (option)

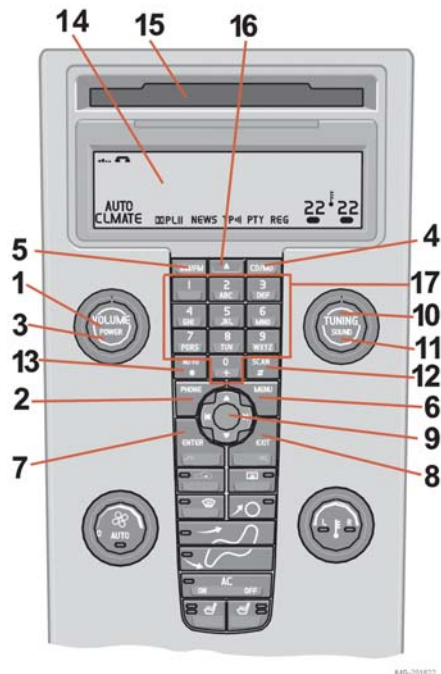
Infotainment is a system with integrated audio and telephone functions. The infotainment system can be used easily and conveniently using the common control panel or the steering wheel keypad. The control panel display indicates the present function. The system can be equipped with Dolby Surround Pro Logic II (option). It gives more natural sound reproduction.

There are three levels of audio system:

- Performance:
AM/FM radio, CD player, 4x25W, four broad range loudspeakers (or four broad range speakers and two treble speakers in certain markets).
- High Performance:
AM/FM radio, CD player, 4x40W, eight loudspeakers (bass and treble speakers in each door).
- Premium Sound:
AM/FM radio, CD changer (six discs), 4x70W + 25W, Dolby Pro Logic II, 12 speaker (bass, mid range and treble in the front doors, bass and treble in the rear doors, bass and treble in the dashboard centre loudspeaker).

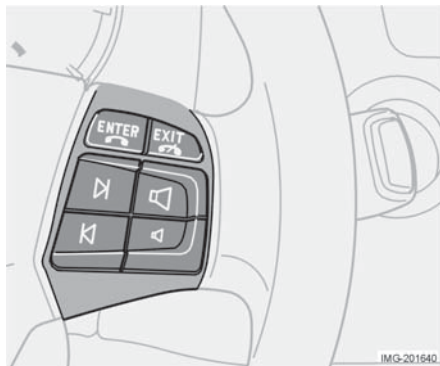
The exact specifications for these levels may vary between markets. Certain levels are not offered in all markets. The option list (sub-bass, CD/MD player, CD changers, telephone, navigation etc.) differs between the different markets. Not all options are available for all levels.

Control panel



1. POWER – Audio On/Off
2. PHONE – Telephone on/off/standby
3. VOLUME – Controls the volume
4. CD/MD – Changes between CD or MD
5. AM/FM – Shortcut button to switch between FM1, FM2 and AM
6. MENU – Opens the main menu
7. ENTER – Select in the menu, activate a selection or activate the telephone from standby mode
8. EXIT – Scroll back in the menu, cancel a selection, put the telephone in standby mode, or erase the previous character when entering text and numbers.
9. Navigation button – scroll up or down in the menus, scan/change tracks, stations or scroll forwards or back when entering text and digits
10. TUNING – Scan/change tracks, station
11. SOUND – Sound settings
12. SCAN – Automatic station search
13. AUTO – Find and store the strongest stations
14. Display – Presents options, menus and information
15. Opening for insert/eject
16. Eject – CD/MD
17. Station setting buttons/selecting CD changer position (1-6), number/character buttons for the telephone and menu shortcuts

Control panel centre console



Steering wheel keypad

Steering wheel keypad (option)

The four buttons at the bottom of the steering wheel keypad control both the radio and the telephone. The function of the button depends on which system is active. The steering wheel keypad can be used to adjust volume, shift between preset stations and change CD/MD tracks.

The telephone must be activated in order to control the telephone functions using the arrow keys. The telephone must be in standby mode to make audio system settings using these buttons. Hold the one of arrow keys depressed to fast forward/rewind or search for the next station.

Display

The display will show the function in use, for example menu selections, messages, telephone numbers or settings. In daylight the information is displayed against a light background. In darkness it is displayed against a dark background. Clean the display with a soft, dry cloth. Never use cleaning agent.

This display is also used for the climate control.

Using the menu

Press MENU to access the main menu. The settings for audio system source (radio for example) are selected from the main menu. Audio settings cannot be made if the audio system is not switched on.

Using the menu:

- The navigation button scrolls up and down in the menu.
- A brief press on EXIT allows you to clear, cancel or decline an alternative or to go back one step in the menu structure.
- Press ENTER to confirm, select or scroll from a submenu to the next submenu.

Audio functions



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Audio On/Off

Press the POWER button to switch the audio system on or off. If the audio system is active when the ignition is switched off, it will reactivate automatically when the car is restarted.

Selecting the sound source

Use the CD/MD and AM/FM quick selection buttons when selecting the sound source.

- Press the AM/FM button repeatedly to shift between FM1, FM2 and AM.

The selected sound source is shown in the display.

Volume control

Turn the volume knob clockwise or anticlockwise to increase or lower the volume. Volume control is infinitely variable. The volume can also be increased or lowered using the steering wheel keypad.

Pause mode

When the volume at zero, the CD/MD player switches to pause mode. Reactivate the player by turning up the volume.

Volume control for TP, PTY, news and alarm

If a CD is playing when the radio receives a traffic bulletin, the CD player enters pause mode. The message is played at the volume selected for that type of message. It then returns to the CD player function. If the volume is adjusted while the bulletin is played, the new volume is saved and used for the next bulletin.

Sound setting

- Press SOUND
- Press the SOUND button repeatedly until you reach the function you wish to set. Select between SUB-BASS (option), TREBLE, FADER, BALANCE, CENTER (option) or SURROUND (option).

- Use the TUNING knob to set the sound. The display shows a scale from min. to max. position. The middle indicates the normal position.

Sound setting	Shown in the display
Bass	BASS
Treble	TREBLE
Balance between the right and left-hand speakers	FADER
Balance between the front and rear speakers	BALANCE
Level for bass speaker (option)	SUB-BASS
Level for centre speaker (option)	CENTRE
Level for surround sound (option)	SURROUND

The level of the centre speaker can only be set if Dolby Pro Logic II (DPL II) or three-channel stereo (3CH) has been selected from the menu.

The level for Sub bass can only be set if the sub bass is activated.

Dolby Pro Logic II (option)

Dolby Surround Pro Logic II with centre dashboard speaker in the middle of the

dashboard provides a more realistic audio experience.

The normal left and right stereo channels are divided into left-centre-right. In addition, ambient surround sound is produced by the rear loudspeaker channels .

Dolby Surround Pro Logic II functions in CD and MD modes. 3-Channel stereo is recommended for AM and FM radio broadcasts. Dolby Surround Pro Logic II is only available for the highest audio level, Premium Sound.

Setting the surround sound:

1. Press MENU.
2. Select the menu for the present sound source and press ENTER.
3. Select Sound settings in the menu and press ENTER.
4. Select Surround AM/FM or Surround CD/MD and press ENTER.
5. Select Pro Logic II, 3 channel stereo or Off and press ENTER.

The symbol Dolby PL II is shown in the display if Pro Logic II has been selected. 3 CH is shown in the display if 3 channel stereo has been selected.

OFF means the audio system is in normal stereo mode.



Dolby Surround Pro Logic II and the Dolby icon are trademarks of Dolby Laboratories Licensing Corporation. Dolby Pro Logic II Surround System is manufactured under license from Dolby Laboratories Licensing Corporation.

Bass speaker- Sub-bass

(accessory)

Gives a fuller sound and deeper bass to the system:

1. Press MENU.
2. Select the menu for the present sound source and press ENTER.
3. Select sub bass and press ENTER. A check in the box (in the display) indicates that it is activated.

Equalizer, front

(certain models)

Fine adjustment of the sound in the front speakers:

1. Press MENU.
2. Select the menu for the present sound source and press ENTER.
3. Select Sound settings in the menu and press ENTER.

4. Select Equalizer Front and press ENTER.
5. Use the navigation button or TUNING knob to set the level.
6. Use the navigation button to select the next frequency. Five frequencies can be adjusted.
7. Press ENTER to save any changes and exit.
8. Press EXIT to exit without saving any changes made.

Equalizer, rear

(certain models)

Fine adjustment of the sound in the rear speakers:

1. Press MENU.
2. Select the menu for the present sound source and press ENTER.
3. Select Sound settings in the menu and press ENTER.
4. Select Equalizer rear and press ENTER.
5. Use the navigation button or TUNING knob to set the level.
6. Use the navigation button to select the next frequency. Five frequencies can be adjusted.
7. Press ENTER to save any changes and exit.
8. Press EXIT to exit without saving any changes made.

Radio functions



Station search

1. Select radio mode AM, FM1 or FM2 using the AM/FM button.
2. Briefly press the left or right arrow on the navigation button to search for the next strong station.
3. Press one of the arrows again to make a new search.

Manual station searching

There are two ways of searching for a station manually.

- Turn the TUNING knob to find the required frequency

- Press the left or right arrow on the navigation button and hold it in. The radio scans slowly in the selected direction and increases tempo after a few seconds. Release the button when the desired frequency appears in the display.

If the frequency needs adjusting, press one of the arrows briefly.

Storing stations

To store a selected station under one of the station setting buttons 0-9:

1. Set the desired station.
2. Press the button under which the station is to be stored and keep it held in. The sound will disappear for a few seconds and Station stored will appear in the display.

Up to 10 stations can be stored in AM, FM1 and FM2, a total of 30 stations.

Automatic storage of stations

This function automatically searches and stores up to ten strong AM or FM stations in a separate memory. If more than ten stations are found, the ten strongest are stored. This function is especially beneficial in areas in which you are not acquainted with radio stations or their frequencies.

1. Select radio mode using the AM/FM button.
2. Start the search by pressing Auto for longer than 2 seconds.
3. Autostoring appears in the display and a number of stations with strong signals (max. 10) from the set frequency band will be stored in the autostore memory. If there are no stations with sufficient signal strength, No stn found is shown.

The stored stations can be found using the buttons 0-9.

When the radio is in Autostore mode, Auto is shown in the display. The text disappears when you return to the ordinary radio mode. Return to the standard radio mode by pressing the AM/FM button, EXIT or by pressing Auto for less than 0.7 seconds.

Return to the Autostore mode:

- To access the latest saved stations, briefly press AUTO and then select the channel using the buttons 0-9.

Scanning

Scanning for a station:

1. Select radio mode using the AM/FM button.
2. Press SCAN. Scan is shown in the display
3. Press the SCAN or EXIT button to exit. Scanning then continues.

This function automatically searches for the next strong AM or FM station signals. When the radio finds a station, scanning is interrupted for approximately 8 seconds. S

PI searching (automatic search for transmitter)

PI search is shown in the display when reception is poor. The radio automatically searches for the strongest transmitter for the set radio channel. PI-searching Exit to cancel is displayed until a station is located or PI-searching is switched off.

Radio Data System - RDS

RDS is a system which links specific network transmitters together. It is used, for example, to set the correct frequency irrespective of the transmitter to which the car occupants are listening or the active audio source (e.g. CD). The system can also be used for receiving traffic information and for finding broadcasts of a specific type. Radio text is also a component of RDS. A radio station can transmit information about the radio program broadcasting.

NOTE! Certain radio stations do not use RDS or only use specific parts of RDS broadcast possibilities.

News

Program coded messages (such as news from RDS stations) will interrupt other audio sources using the volume setting for this specific purpose. As soon as the news broadcast is finished, the audio system returns to the previous audio source and resumes the previous volume setting.

Setting News:

1. Select radio mode using the AM/FM button.
 2. Press MENU.
 3. Select the menu for the present sound source and press ENTER.
 4. Select News in the menu and press ENTER.
 5. Select News station.
 6. Select News from present station
- News is displayed. If you do not wish to listen to a news item in progress, press the EXIT button. The News function remains active and the radio waits for the next news programme. Deactivate the function: Select News again and press ENTER.

Select Exit for news from present station.

1. Select radio mode using the AM/FM button.
2. Activate the station from which news is to be received.

3. Press MENU.
4. Select Advanced sound settings and press ENTER.
5. Select News station and press ENTER.
6. Select News from the present station and press ENTER.

Traffic information - TP Station

Traffic information from RDS stations interrupts other audio sources in order to broadcast . The message is heard at the volume set for this specific purpose. As soon as the message ends, the audio system returns to the previous audio source and resumes the previous volume setting.

Setting traffic information:

1. Press MENU.
 2. Select the menu for the present sound source.
 3. Select TP and press ENTER.
- TP is shown in the display when this function is active. If the set station can transmit traffic information, TP))) is shown in the display. If you do not wish to listen to a traffic item in progress, press the EXIT button. The TP function, however, remains active and the radio waits for the next traffic bulletin.

Set traffic information from a special channel:

1. Select radio mode using the AM/FM button.
2. Activate the station from which traffic information is to be received.
3. Press MENU. Select the menu for the present sound source and press ENTER.
4. Select Advanced radio settings in the menu and press ENTER.
5. Select TP and press ENTER.
6. Select TP Station and press ENTER.
7. Select TP and present station.

Deactivate TP station:

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Advanced radio settings in the menu and press ENTER.
3. Select TP and press ENTER.
4. Select TP Station and press ENTER.
5. Select TP from all stations and press ENTER.

TP searching

This function allows you to listen to traffic information when travelling between different areas and countries without needing to select a station.

1. Press MENU.
 2. Select present source.
 3. Select Advanced radio settings in the menu and press ENTER.
 4. Select TP and press ENTER.
 5. Select TP searching and press ENTER.
- Deactivate the function: Select TP searching and press ENTER.

Radio text

Some RDS stations send information about programme content, artists, etc.

Display information with text in the display.

1. Press MENU. Select the menu for the relevant sound source. Press ENTER (the current sound source is always marked in the menu if the audio system is on).
2. Select Radio text in the menu and press ENTER.

Deactivate:

Select Radio text again and press ENTER.

Alarm

The alarm is transmitted automatically. The function cannot be deactivated. **ALARM!** is shown in the radio display when an alarm message is sent. The function is used to warn motorists of serious accidents or disasters.

Programme type - PTY

Use the PTY function to select between the different programme types.

3. Press MENU. Select the menu for the present sound source and press ENTER.
4. Select PTY from the menu and press ENTER.
5. Select Display PTY and press ENTER. The set station's PTY type will be shown in the display.

NOTE! Not all radio stations have a PTY designation.

Programme type display

Current affairs

Information

Sport

Education

Theatre

Culture and Art

Science

Varied chat

Pop music

Rock music

Easy listening

Light classical

Classical music

Other music

Weather

Economics

For children

Social questions

Religion

Phone-in

Travel and holiday

Shown in the

Current affairs

Information

Sport

Education

Theatre

Culture

Science

Entertainment

Pop music

Rock music

Easy listening

Light classical

Classical music

Other music

Weather

Economics

For children

Social questions

Spiritual issues

Phone-ins

Travel and holiday

Leisure and hobby hobby	Leisure and hobby
Jazz music	Jazz music
Country music	Country music
National music	National music
Golden oldies	Golden oldies
Folk music	Folk music
Documentary	Documentary

Search for a specific programme type

Search through the entire wave band:

1. Select FM 1 or FM 2 and press the MENU button.
2. Select the menu for the present sound source and press ENTER.
3. Select PTY and press ENTER.
4. Scroll to Select PTY and press ENTER.
5. Press ENTER for one or more of the listed programme types. The PTY symbol in the display lights up when the first selection is made and the radio continues in standby for PTY.
6. Press EXIT to go back.
7. Select Search PTY and press ENTER. If the radio finds a station with the selected programme type, it is played through the speakers.

8. If the radio finds a station that is unsuitable, continue the search with the left or right arrow on the navigation button.
9. If no stations with the selected programme type are found, the radio resumes its previous frequency.

PTY mode is then in standby mode until the selected type of programme begins transmission. When this happens, the radio automatically switches to the station transmitting the selected programme type.

To deactivate PTY standby mode, select Reset all PTYs. The PTY symbol is removed from the display and the radio resumes normal mode.

PTY standby

To continue with the radio in PTY standby, repeat steps 1-6.

Automatic frequency upda-ting

The AF function is usually active and makes sure that the strongest available transmitter for a radio station is used.

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Advanced radio settings in the menu and press ENTER.
3. Select AF and press ENTER.

Reactivate: Select AF and press ENTER.

Regional radio program

The regional-function is normally deactivated. When the function is activated a regional transmission can be listened to despite a weak signal.

Activate regional radio program:

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Advanced radio settings in the menu and press ENTER.
3. Select Regional and press ENTER.
4. REG is shown in the display.

Deactivate:

Select REG again and press ENTER.

EON - Local/Distant (Enhanced Other Networks)

With EON activated traffic information and news broadcasts interrupt radio programs.

EON is normally in the distant position. The function has three levels:

- Local - Only interrupts if the signals are strong.
- Distant - Interrupts even if the signals are weak.
- Off - Not activated.

Activate EON:

1. Press MENU.
2. Select the menu for the present sound source and press ENTER.

3. Select Advanced radio settings in the menu and press ENTER.
4. Select EON and press ENTER.
5. Select Local, Distant or Off and press ENTER.

Resetting RDS functions

Restores all radio settings to the original factory settings.

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Advanced radio settings in the menu and press ENTER.
3. Select Reset in the menu and press ENTER.
4. Press ENTER again to confirm.

CD/MD (option)



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Starting the CD/MD player (option)

Start the CD/MD player by pressing the CD/MD button. Insert a disc in the player.

CDs

If the quality of the CD does not comply with the requirements of standard EN60908 or if it has been recorded using poor equipment, sound quality may be poor or playback interrupted

IMPORTANT!

- Use only 12 cm CDs, no smaller!
- Do not use CDs with adhesive disc labels. The heat from the CD player can cause the label to come loose from the disc. The CD player could be damaged.

Changing tracks

Press the left or right arrow on the navigation button to skip to the previous or next track. The track number is shown in the display. The TUNING knob (or keypad unit in the steering wheel) can also be used for this purpose.

Fast forward/rewind

Press and hold down the left or right arrows on the navigation button to search within a track or the whole disc. The search continues as long as the buttons are held in.

Random

This function chooses a CD track randomly.

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Random in the menu and press ENTER.

3. RND is shown in the display as long as the function is activated.

Select Random again and press ENTER or press EXIT to deactivate.

Scan

Scan plays the first ten seconds of each track.

1. Press SCAN.
2. Press EXIT to play the relevant track.

Disc text

Some CDs have title information. The information is displayed as text in the display.

Activate Disc text:

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Disc text in the menu and press ENTER.
3. If information is stored on the disc, it will now appear in the display.

Deactivate:

- Select Disc text and press ENTER.

CD/MD eject

Press the eject button to eject the disc. For traffic safety reasons, an ejected CD remains out for 12 seconds. The player will then draw the disc back in and the player will switch to pause mode. (does not apply to MD). Press CD/MD to reactivate the player.

CD changer (option)



IMG-201664

Starting the CD changer

The CD changer can hold up to six discs.

Starting the CD changer:

1. Press the CD/MD button.
 2. Select an empty position using the 1-6 buttons (or up/down using the navigation button). The display shows which positions are empty.
 3. Insert a disc into the changer.
- Ensure that Insert disc is displayed before inserting a new disc.

CDs

If the quality of the CD does not comply with the requirements of standard EN60908 or if it has been recorded using poor equipment, sound quality may be poor or playback interrupted.

IMPORTANT!

- Use only 12 cm CDs, no smaller!
- Do not use CDs with adhesive disc labels. The heat from the CD player can cause the label to come loose from the disc. The CD player could be damaged.

Selecting position

The disc to be played is selected using the buttons 1-6 or by pressing the up or down arrow on the navigation button. The number of the disc and track are shown in the display.

Changing tracks

Press the left or right arrow on the navigation button to skip to the previous or next track. The track number is shown in the display. The TUNING knob (or keypad unit in the steering wheel) can also be used for this purpose.

Fast forward/rewind

Press and hold down the left or right arrows on the navigation button to search within a track or the whole disc. The search continues as long as the buttons are held in.

Scan

Scan plays the first ten seconds of each track.

1. Press SCAN.
2. Press EXIT to play the relevant track.

Random

Plays tracks from the disc in random order.

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Random in the menu and press ENTER.
3. Select Single disc or All discs for the player to randomly choose from one or all discs in the CD changer.
4. RND or RND ALL is shown in the display while the function is active.

Press the right arrow on the navigation button to select the next random track. Deactivate: Press EXIT.

NOTE! You can only select the next random track on the current disc.

Disc text

Some CDs have title information. The information is displayed as text in the display.

Activate Disc text:

1. Press MENU. Select the menu for the present sound source and press ENTER.
2. Select Disc text in the menu and press ENTER.
3. If information is stored on the disc, it will now appear in the display.

Deactivate:

- Select Disc text and press ENTER.

must then be removed, or the function is cancelled.

CD - eject, 1 disc

Press the eject button to eject the disc.

For traffic safety reasons, the CD remains out for 12 seconds. The player will then draw back in the disc and switch to pause mode. Press CD/MD to reactivate the player.

CD eject, all discs

Press the eject button (for longer than 2 seconds) to initiate the eject function. The entire magazine is emptied, disc by disc. Eject all is shown in the display.

This function can only be activated when the car is stationary and is interrupted if the car starts to move. For traffic safety reasons, the ejected CD remains out for 12 seconds. It

Menu settings and selections - Audio

FM1/FM2 menu

1. News Off/On*
2. TP Off/On*
3. PTY
 - 3.1. Select PTY
 - 3.1.1. Reset all PTY's
 - 3.1.2. Current affairs On*/Off
 - 3.1.3. Information On/Off*
 - 3.1.4. Sport On/Off*
 - 3.1.5. Education On/Off*
 - 3.1.6. Theatre On/Off*
 - 3.1.7. Documentaries On/Off*
- 3.2. Search PTY
- 3.3. Display PTY On/Off
4. Radio text On /Off*
5. Advanced radio settings
 - 5.1. TP
 - 5.1.1. TP station
 - 5.1.2. TP search Off/On*
 - 5.2. News station
 - 5.3. AF On*/Off
 - 5.4. Regional On/Off*
 - 5.5. EON
 - 5.5.1. Off
 - 5.5.2. Local
 - 5.5.3. Distant*
 - 5.6. Reset all
6. Sound settings
 - 6.1. Surround AM/FM (option)
 - 6.1.1. Dolby Pro Logic II

- 6.1.2. 3 channel stereo
 - 6.1.3. Off*
 - 6.2. Surround CD/MD (accessory*)
 - 6.2.1. Dolby Pro Logic II
 - 6.2.2. 3 channel stereo
 - 6.2.3. Off
 - 6.3. Sub-bass On*/Off (accessory)
 - 6.4. Equalizer front (certain models)
 - 6.5. Equalizer rear (certain models)
 - 6.6. Speed compensation
 - 6.6.1. Low
 - 6.6.2. Medium
 - 6.6.3. High
 - 6.7. Reset all
- *Default/Factory settings

AM menu

7. Sound settings
 - 7.1. Surround AM/FM (option)
 - 7.1.1. Dolby Pro Logic II
 - 7.1.2. 3-channel stereo Off*
 - 7.2. Surround CD/MD (accessory)
 - 7.2.1. Dolby Pro Logic II
 - 7.2.2. 3 channel stereo
 - 7.2.3. Off
 - 7.3. Sub-bass On*/Off (accessory)
 - 7.4. Equalizer front (certain models)
 - 7.5. Equalizer rear (certain models)
 - 7.6. Speed compensation
 - 7.6.1. Low
 - 7.6.2. Medium

- 7.6.3. High
 - 7.7. Reset all
- * Default/Factory settings

CD menu

1. Random
 2. News (Off*)
 3. TP (Off*)
 4. Sound settings
 - 4.1. Surround AM/FM (option)
 - 4.1.1. Dolby Pro Logic II
 - 4.1.2. 3 channel stereo
 - 4.1.3. Off*
 - 4.2. Surround CD/MD (accessory)
 - 4.2.1. Dolby Pro Logic II
 - 4.2.2. 3 channel stereo
 - 4.2.3. Off
 - 4.3. Sub-bass (On*) (option)
 - 4.4. Equalizer front (certain models)
 - 4.5. Equalizer rear (certain models)
 - 4.6. Speed compensation
 - 4.6.1. Low
 - 4.6.2. Medium
 - 4.6.3. High
 - 4.7. Reset all
- * Default/Factory settings

CD changer menu

1. Random
- 1.1. Off*
- 1.2. One disc
- 1.3. All discs
2. News (Off*)
3. TP (Off*)
4. Disc text (Off*)
5. Sound settings
 - 5.1. Surround AM/FM (option)
 - 5.1.1. Dolby Pro Logic II
 - 5.1.2. 3 channel stereo
 - 5.1.3. Off*
 - 5.2. Surround CD/MD (accessory)
 - 5.2.1. Dolby Pro Logic II*
 - 5.2.2. 3 channel stereo
 - 5.2.3. Off
 - 5.3. Sub-bass (On*) (option)
 - 5.4. Equalizer front (certain models)
 - 5.5. Equalizer rear (certain models)
 - 5.6. Speed compensation
 - 5.6.1. Low
 - 5.6.2. Medium
 - 5.6.3. High
 - 5.7. Reset all

* Default/Factory settings

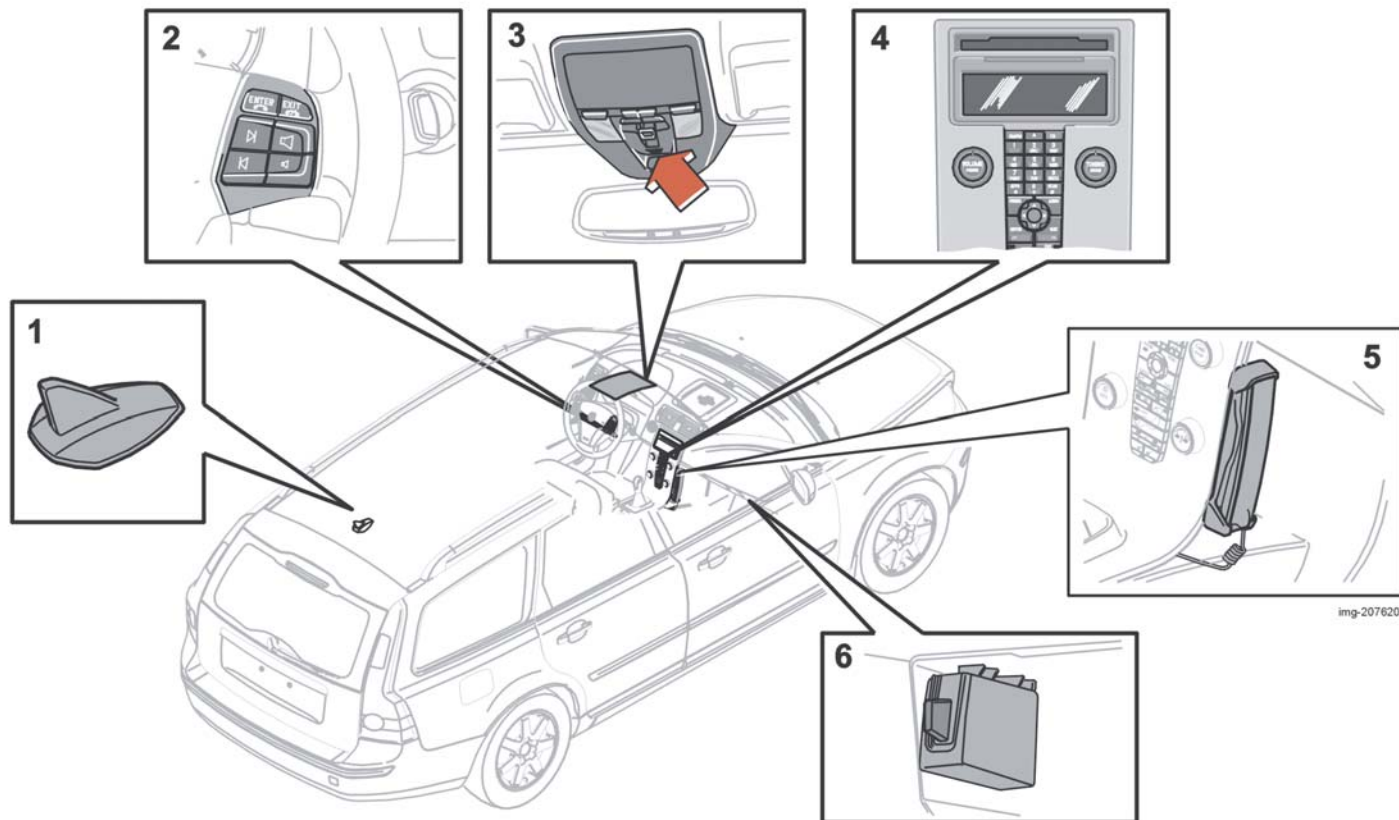
4. Disc text (Off*)
5. Sound settings
 - 5.1. Surround AM/FM (option)
 - 5.1.1. Dolby Pro Logic II
 - 5.1.2. 3 channel stereo
 - 5.1.3. Off*
 - 5.2. Surround CD/MD (accessory)
 - 5.2.1. Dolby Pro Logic II*
 - 5.2.2. 3 channel stereo
 - 5.2.3. Off
 - 5.3. Sub-bass (On*) (option)
 - 5.4. Equalizer front (option)
 - 5.5. Equalizer rear (option)
 - 5.6. Speed compensation
 - 5.6.1. Low
 - 5.6.2. Medium
 - 5.6.3. High
 - 5.7. Reset all

* Default/Factory settings

CD/MD menu

1. Random
2. News (Off*)
3. TP (Off*)

Telephone functions (option)



Telephone system components

1. Antenna
The antenna is on the roof.
2. Steering wheel keypad
The majority of the telephone functions can be controlled using the keypad. When the telephone is active, the keypad can only be used for telephone functions. There is always telephone information in the display when the telephone is activated.
3. Microphone
The hands free microphone is integrated in the roof console beside the rear-view mirror.
4. Control panel
All functions (except call volume) can be controlled from the keypad in the control panel. The display shows menu functions, messages, telephone numbers, etc.
5. Privacy handset (option)
6. SIM card-The SIM card is placed in a holder in the glove compartment.

General

Always put traffic safety first.

- If the driver needs to use the privacy handset, park the car in a safe place first.
- Switch off the telephone system when refuelling the car.

- Switch off the system near blasting work.
- Let only authorised personnel service the telephone system.

Emergency calls

Emergency calls to alarm centres can be made without a SIM card as long as there is coverage by a GSM operator.

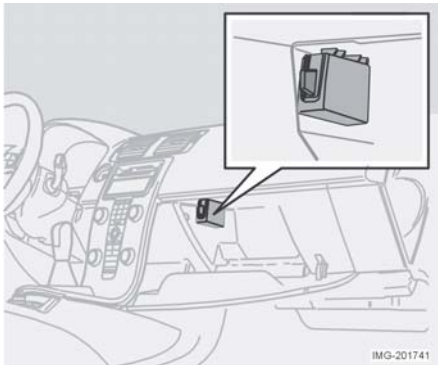
Making an emergency call:

1. Activate the telephone.
2. Ring the emergency number that applies to your region (within EU: 112).
3. Press ENTER.

Speaker

The telephone uses the speaker in the driver's door (or the centre speaker of the audio system, if there is one).

Telephone functions



SIM card

The telephone can only be used with a valid SIM card (Subscriber Identity Module). The card is managed by different network operators. Contact your network operator if you experience difficulties with the SIM card.

Insert the SIM card to start using the telephone.

1. Switch off the telephone.
2. Open the glovebox and the cover for the SIM card holder.
3. Pull out the SIM card holder.
4. Place the card metal side up. Ensure that the bevelled corner of the SIM card matches the bevel of the holder.
5. Carefully press in the holder again.

Double SIM card

Many network operators offer double SIM cards, one for your car and one for another telephone. A double SIM card allows you to have the same number for two different telephones. Ask your network operator about the offers available and the use of double SIM cards.

Specifications

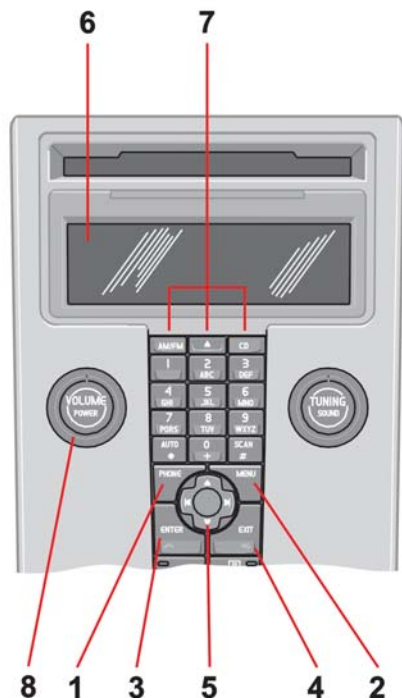
Output	2W
SIM card	Small
Memory positions	255
SMS (Short Message Service)	Yes
Computer/Fax	No
Dual band	Yes (900/1800)

The number of SIM card memory positions varies depending on the subscription.

IMEI number

To restrict a telephone the network operator must be informed of the telephone's IMEI number. This is a 15 digit serial number programmed into the telephone. To display

this number, press *#06#. Make a note of this number and keep it in a safe place.



IMG-203701

1. PHONE – On/off/standby.
2. MENU – Open the main menu.
3. ENTER – Accept a call, make a menu selection or activate the telephone from standby mode. A short press of the ENTER button displays the last dialled number.
4. EXIT – Terminate/reject a call, scroll back in the menu, cancel a selection or erase entered digits/characters.
5. Navigation button – Scroll up or down in the menus, scroll forwards or back when entering text and digits.
6. Display
7. Number and character buttons as well as menu shortcuts.
8. VOLUME – Controls the background noise from the radio etc. during a call.



IMG-203703

Steering wheel keypad

1. ENTER – Accept a call, scroll the menu or activate the telephone from standby mode. One press of the ENTER button displays the last dialled number.
2. EXIT – Terminate/reject a call, scroll back in the menu, cancel a selection or erase entered digits/characters.
3. Volume - Increase/decrease call volume during a call.
4. Navigation button – Scroll up or down in the menus, scroll forwards / back when entering text and digits.

Switch

When the telephone system is active or in standby mode, a handset is shown in the display.

If the car's ignition is switched off while the telephone system is on, the system will be on the next time the ignition is switched on. No calls can be received when the telephone system is switched off.

Activate:

1. Press PHONE to start the telephone system.
2. Enter the PIN code and press ENTER.

Switch off:

- Hold PHONE in to switch off the telephone system.

Standby:

- Press PHONE or EXIT to keep the telephone system in standby mode.
- Press PHONE briefly to reactivate the system.

NOTE! With the audio model Performance, it is not possible to listen to the radio, CD, MD or receive traffic messages during a telephone call.

Volume reduction during a telephone call

If the telephone rings when the radio is switched on, the volume is lowered when the call is answered. When the call is concluded, the volume returns to the previously set level. It is possible to adjust radio volume when the telephone is engaged in order to maintain the new volume level when the call is ended. The audio volume can be switched off completely during a telephone call. See menu 5.5.3. This function only applies to the Volvo integrated telephone system.

Standby mode

Calls can be received while the audio system is active and information from the audio system sources is shown in the display. The telephone must be in active mode to use the other functions of the telephone system.

Menu shortcuts

In the menu system, you can use numbers instead of the arrows and ENTER to select the right menu on the main menu level. Each menu selection is numbered. The numbers are shown in the display together with the menu alternative.

Traffic safety

For reasons of safety, the menu system cannot be accessed at speeds in excess of 8

km/h (5 mph). Only activities started in the menu system can be completed. The speed limiter can be disconnected using menu function 5.6 1 Menu lock.

IDIS

(Intelligent Driver Information System) The IDIS system allows the priority of incoming telephone calls and SMS messages to be reduced so that the driver can concentrate on driving. Incoming calls and SMS messages can be delayed for 5 seconds before they are connected. Missed calls are shown in the display. IDIS can be disconnected using menu function 5.6.2

Making and receiving calls

To call:

- Dial the number and press ENTER on the steering wheel or the control panel keypads or lift the handset.

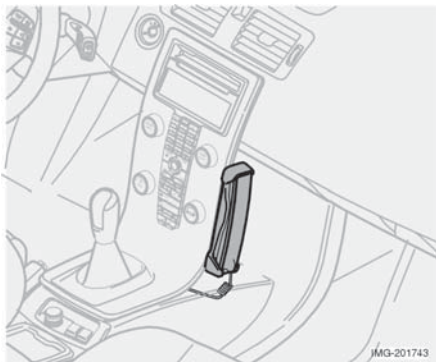
To receive a call:

- Press ENTER (or lift the handset). Automatic Answer can also be used. See menu function 4.3.

The car audio system can be muted automatically while a telephone conversation is in progress. See menu alternative 5.5.3.

Ending a call

Press EXIT on the steering wheel or control panel keypad or hang up the handset. The audio system resumes its previous activity. Reject an incoming call by pressing EXIT.



Privacy handset (option)

Making a call using the handset:

1. Select the desired telephone number using the centre console keypad and lift the handset to make the call. Press the handset down before lifting.
2. The call is cancelled when the handset is replaced in the holder.

Adjust the volume using the dial on the side of the handset.

To switch to handsfree without ending the call:

- Press the right arrow on the steering wheel keypad (or the menu buttons in the control panel) and select Handsfree. Press ENTER and replace the handset in its cradle. If the handset is already removed from its cradle, the other party will be audible in the handsfree system. Press the MENU button, scroll to Handset and press ENTER in order to transfer to the handset.

Last dialled number

The telephone automatically stores the last telephone numbers/names dialled.

Calling the last dialled number:

1. Press ENTER on the keypad on the steering wheel or control panel (when in active mode).
2. Use the menu buttons to scroll forward or back through the last numbers dialled. These are shown in the display.
3. Press ENTER.

Speed dialling

A number stored in the phone book can be linked to a speed dial button (1-9).

1. Select Phone book from the menu and press ENTER

2. Scroll to speed dial, menu 3.4, and press ENTER.
3. Select which number is to be the speed dial number. Press ENTER to confirm.
4. Search for the desired name or telephone number in the phone book. Press ENTER to select.

Hold in the desired speed dial button for approximately two seconds to make the call or press the number briefly followed by ENTER.

NOTE! When the telephone is switched on, it takes a while before speed dialling is available. Menu 3.4.1 must be activated to use a speed dial number

Call waiting

A two-tone signal during a telephone call indicates that there is another incoming call. The display shows: Answer?

To receive a call:

1. Press ENTER. Your current call will be put in hold mode.
2. Select Hold/Resume to finish the call and return to a call on hold.

To reject necessary call: Press EXIT.

Exit the current call: Press EXIT. The function can be de-selected in the menu.

Functions during a call

Several functions are available during a call.

Use the navigation button to scroll and press ENTER to make a selection.

Secret mode/ Secret mode off	Secret mode
Park/Resume	Choose if the current call is to be held or resumed
Handsfree/ Handset	Use the handset or handsfree
Phone book	Show phone book

Several functions are available during a call while another call is on hold.
Use the navigation button to scroll and press ENTER to make a selection.

Secret mode/ Secret mode off	Secret mode
Handsfree/ Handset	Use the handset or handsfree
Three-way calling	Conference call (provides further options)
Switch	Select between two calls

Phone book Show phone book

Call volume

Control the call volume during the call by pressing the buttons with the large or small loudspeaker on the keypad on the steering wheel.

When the telephone is activated, the steering wheel keypad only controls the telephone functions.

The telephone must be in standby mode to control the audio system using the steering wheel keypad.

Phone book

Telephone numbers and names can be stored in either the telephone memory or the SIM card memory.

If the number of the person calling is stored in the phone book, the name of the caller will be shown in the display.

The telephone memory can store up to 255 names.

Storing telephone numbers with names:
1. Press MENU.
2. Select Telephone book and press ENTER.

3. Scroll to Enter item and press ENTER.
4. Enter a name and press ENTER.
5. Enter a number and press ENTER.
6. Select the menu to which it should be saved and press ENTER.

Copy between the SIM card and Phone book

Copy from the SIM card to the phone card:

- Select MENU.
- Select Phone book.
- Select Copy all.
- Select From SIM card to Phonebook and press ENTER.

It is also possible to copy from the phone card to
SIM card.

Erase names

Erase from the phone book:

- Select MENU.
- Select Phone book.
- Select Search.
- Specify the first letter of the name (or the entire name) and press ENTER
- Scroll to the name to be erased and press ENTER.
- Select Erase to remove the name.

Enter a name/message

Press the button with the relevant character. Press once for the first character, twice for the second character and so on. Press 1 for space.

1	space 1- ? ! , . : " ' ()
2	a b c 2 ä å à æ ç
3	d e f 3 è é
4	g h i 4 ì
5	j k l 5
6	m n o 6 ñ ö ò Ø
7	p q r s 7 ß
8	t u v 8 ü ù
9	w x y z 9
*	if you enter two letters in a row from the same button, press * between them or wait a few seconds
0	+ 0 @ * # & \$ £ / %
#	switch between upper and lower case
EXIT	erase the last entered character. If you press this for a long time, the entire number or text is deleted.

Interrupting text input:

1. Erase all entered characters with a long press on the EXIT button.
2. Return to the menu with an additional long press on the EXIT button.

Calling from the memory

1. Press MENU
2. Scroll downwards using the navigation button (or the left arrow button on the steering wheel to search the phone book)
3. Press ENTER. Scroll to the desired name using the navigation button or press the first letter of the name (or enter the entire name). Press ENTER
4. Press ENTER to dial the selected number.

Menu settings and selections - Telephone

Telephone menu

- 1. Call log. - CALL
 - 1.1. Missed calls
 - 1.2. Received calls
 - 1.3. Outgoing calls
 - 1.4. Erase list
 - 1.4.1. All calls
 - 1.4.2. Missed calls
 - 1.4.3. Received calls
 - 1.4.4. Outgoing calls
 - 1.5. Call duration
 - 1.5.1. Last call
 - 1.5.2. Number of calls
 - 1.5.3. Total time
 - 1.5.4. Reset time
- 2. Messages
 - 2.1. Read
 - 2.2. Write
 - 2.3. Message settings
 - 2.3.1. SMSC number
 - 2.3.2. Validity period
 - 2.3.3. Message type
- 3. Phone book
 - 3.1. Enter item
 - 3.2. Search
 - 3.3. Copy all
 - 3.3.1. SIM to telephone
 - 3.3.2. Telephone to SIM
 - 3.4. Speed dial
 - 3.4.1. Active

- 3.4.2. Select number
- 3.5. Empty SIM
- 3.6. Empty telephone
- 3.7. Memory status
- 4. Call options
 - 4.1. Transmit number
 - 4.2. Call waiting
 - 4.3. Automatic answer
 - 4.4. Automatic redial
 - 4.5. Call divert
 - 4.5.1. All calls
 - 4.5.2. When busy
 - 4.5.3. No reply
 - 4.5.4. Unobtainable
 - 4.5.5. Fax calls
 - 4.5.6. Computer calls
 - 4.5.7. Cancel all divers
- 5. Tel. settings
 - 5.1. Network selection
 - 5.1.1. Automatic
 - 5.1.2. Manual
 - 5.2. Language
 - 5.2.1. English UK
 - 5.2.2. English US
 - 5.2.3. Español
 - 5.2.4. Français CAN
 - 5.2.5. Français FR
 - 5.2.6. Italiano
 - 5.2.7. Nederlands
 - 5.2.8. Português BR
 - 5.2.9. Português P

- 5.2.10. Suomi
- 5.2.11. Svenska
- 5.2.12. Dansk
- 5.2.13. Deutsch
- 5.3. SIM security
 - 5.3.1. On
 - 5.3.2. Off
 - 5.3.3. Automatic
- 5.4. Change codes
 - 5.4.1. PIN code
 - 5.4.2. Telephone code
- 5.5. Volume
 - 5.5.1. Ringer volume
 - 5.5.2. Ringer tone
 - 5.5.3. Mute radio
 - 5.5.4. Message beep
- 5.6. Traffic safety
 - 5.6.1. Menu lock
 - 5.6.2. IDIS
- 5.7. Factory settings

Menu options, description

Menu 1. Call log

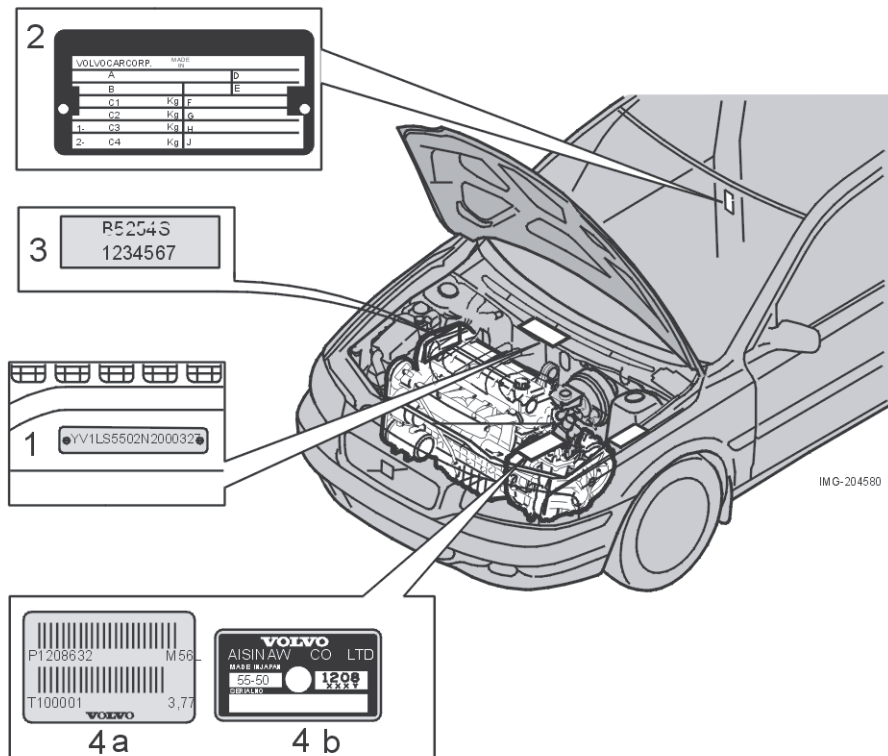
- 1.1. Missed calls** List of missed calls. You can choose to call, erase or store the number in the phone book.

1.2. Received calls	List of received calls. You can choose to call, erase or store the number in the phone book.	2.1. Read	Received text messages. Select whether to erase, forward, change or save the entire message or parts of it.	3.3. Copy all	Copy the telephone numbers and names from the SIM card to the telephone memory. 3.3.1. From SIM to telephone memory 3.3.2. From telephone to SIM memory.
1.3. Outgoing calls	List of dialled numbers. You can choose to call, erase or store the number in the phone book.	2.2. Write	Write a message using the keypad unit. Choose whether to save or send it.		
1.4. Erase list	Erase the lists found in the menus 1.1, 1.2 and 1.3 as below. 1.4.1. All 1.4.2. Missed 1.4.3. Received 1.4.4. Outgoing	2.3. Message setting	Enter the number (SMSC number) of the message centre to which you want your messages transferred as well as how long they are to be saved at the message centre. 2.3.1. SMSC number 2.3.2. Validity period 2.3.3. Message type Contact your network operator for information about these settings and for an SMSC number. Normally, these settings should not be altered.	3.4. Speed dial	A number stored in the telephone book can be stored as a speed dial number.
1.5. Call duration	Call duration of all calls or of the latest call. 1.5.1. Last call 1.5.2. Number of calls 1.5.3. Total time 1.5.4. Reset time The telephone code is required to reset the call timer (see Menu 0.4)	3.1. Enter item	Store names and numbers in the phone book. See the section on phone book functions for more information.	3.5. Empty SIM	Select to erase the entire memory of the SIM card
Menu 2. Messages		3.2. Search	Search for a name in the phone book	3.6. Empty memory	Erase the entire telephone memory.
Menu 3. Phone book				3.7. Memory status	Shows how many positions are occupied by names and numbers in the SIM card and telephone memory. The table displays how many of the available spaces are occupied, e.g 100(250).
Menu 4. Call options					
Menu 5. Telephone settings					

4.1. Transmit number	Select whether or not your own number should be displayed to the person you call. Contact your network operator regarding ex-directory numbers.	5.1. Network selection	Choose a network automatically or manually. The selected operator is shown in the display in the telephone's basic mode. 5.1.1. Auto 5.1.2. Manual	5.4. Change codes	Change the PIN code or telephone code 5.4.1 PIN code 5.4.2. Telephone code (use 1234 until you change to your own code). The telephone code is used to reset the call timer. Make a note of your code and save it in a safe place.
4.2. Call waiting	Select whether or not you want to be alerted during a phone call that there is another incoming call.	5.2. Language	Select the telephone language. 5.2.1. English UK 5.2.2. English US 5.2.3. Español 5.2.4. Français CAN 5.2.5. Français FR 5.2.6. Italiano 5.2.7. Nederlands 5.2.8. Português BR 5.2.9. Português P 5.2.10. Suomi 5.2.11. Svenska 5.2.12. Dansk 5.2.13. Deutsch	5.5. Volume	5.5.1. Volume. Adjust the ring tone volume. 5.5.2. Ring tone. There are seven different ring tones. 5.5.3. Mute radio. On/Off 5.5.4. Message beep
4.3. Automatic answer	To automatically receive an incoming call:.			5.6. Traffic information	Disengaging the speed function , i.e. the entire menu selection can be made available while driving. 5.6.1. Menu lock 5.6.2. IDIS The IDIS function can be disconnected. Incoming calls will not be delayed, irrespective of whether the car is being driven or not.
4.4. Redial	Call a previously engaged number.			5.7. Factory settings	Return to the system's factory settings.
4.5. Transfer	Choose when and what type of calls are to be diverted to a specified telephone number. 4.5.1. All calls (this setting only applies during the call in progress) 4.5.2. When busy 4.5.3. No reply 4.5.4. Unobtainable 4.5.5. Fax calls 4.5.6. Computer calls 4.5.7. Cancel all diverts	5.3. SIM security	Select if the PIN code should be on, off or if the telephone should automatically give the PIN code. 5.3.1. On 5.3.2. Off 5.3.3. Automatic		

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Type designations



When contacting your Volvo dealer and when ordering spare parts and accessories for your car, it makes things easier if you know your car's type designation, vehicle identification number and engine number.

1. The VIN (Type and model year designations and chassis number) is stamped in the engine compartment underneath the windscreen
2. Type designation, chassis number, maximum permissible weights, codes for colour and upholstery and type approval number (on the right-hand B-post)
3. Engine type designation, component and serial number (on the right hand side of the engine)
4. Gearbox type designation and serial number,
 - (a) manual gearbox (on the front)
 - (b) automatic gearbox (on the top).

Measurements, weights, capacities

Measurements

Length:	451 cm
Width:	177 cm
Wheelbase:	264 cm
Front track:	154-155 cm
Rear track:	153-154 cm



IMG-201680

Weights

1. Max. total weight
2. Max. train weight (car+trailer)
3. Max. front axle load
4. Max. rear axle load

Permissible weight (excluding driver) =

Total weight – Curb weight

Weight specifications can be found on the right-hand B-post.

Max. load, see registration papers	
Maximum roof load:	75 kg
Maximum trailer weight:	1,500 kg

Capacities

Fuel tank	litres
Petrol	62
Diesel	52

Engine oil (with filter replacement)

	litres
2.4 + 2.4i	approx. 5.8
T5	approx. 5.8
2.0D	approx. 5.5

Gearbox oil

	litres
Manual 5-speed	approx. 2.1
Manual 6-speed	approx. 2.0
Manual 6-speed diesel	approx. 1.7
Automatic	approx. 7.0

Specifications

Miscellaneous

litres

Windscreen washer
reservoir, 4-cyl +
diesel 5-cyl.

4
6,5

Air conditioning

gramme

Compressor oil

180-200

Refrigerant

500-600

Cooling system

Engine

litres

5 cyl, manual
gearbox

approx. 8.0

5 cyl, automatic gearbox

approx. 8.5

4 cyl. Diesel

9.5

All cooling systems are closed overpressure systems. The thermostat starts opening at 90 °C for petrol engines and at 82 °C for diesel engines.

Lubricants

Oil grade

Petrol engines

Recommended oil grade: ACEA A1/B1
Engine oil with grade designations ACEA A3/B3/B4 or ACEA A5/B5 may also be used.

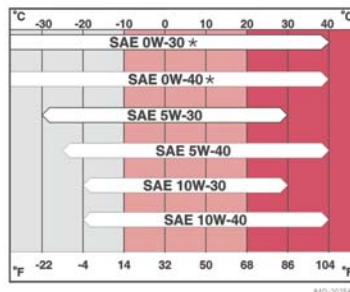
Diesel engines

Recommended oil grade:
WSS-M2C913B

IMPORTANT!

Do not use extra additives. These can damage the engine.

Volvo recommends Castrol® oil products.



Viscosity, (the table assumes constant air temperature)

Viscosity

* Engine oil with a viscosity of 0W-30 and 0W-40 must fulfil ACEA A3/B3/B4 or ACEA A5/B5.

Extreme driving conditions

In extreme driving conditions resulting in abnormally high oil temperature or oil consumption, such as alpine driving with a great deal of engine braking or motorway driving at high speed.

Petrol engines

Recommended oil grade: ACEA A5/B5

Engine oil ACEA A3/B3/B4 grade oil can also be used. Oils with a viscosity of 0W-30 and 0W-40 must fulfil these oil grade requirements.

In extreme driving conditions, select a fully synthetic engine oil that provides the engine with added protection.

Diesel engines

Recommended oil grade: WSS-M2C913B

Gearbox

Manual gearbox (petrol engines)
Only use Volvo's synthetic gearbox oil or similar products with the same specifications.
Manual gearbox (diesel engines)
Use only transmission oil WSD-M2C200-C.

IMPORTANT!

Castrol's® gearbox oil may not be mixed with any other gearbox oil.

Automatic gearbox
Only use Volvo recommended gearbox oil. Do not mix with any other oil.

IMPORTANT!

If in doubt regarding the correct oil grade, contact a Volvo workshop.

Power steering

Grade: Only use Volvos power steering oil or products with similar specifications.

Volume:

the system: approx. 1.2 litres
the reservoir: approx. 0.2 litres

Brake fluid

Fluid type: Brake fluid DOT 4+

Volume: approx. 0.6 litres

Air conditioning

Refrigerant R134a

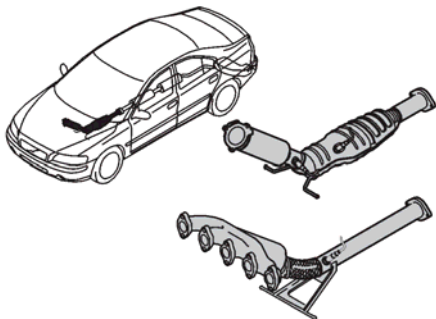
Quantity 500-600 g*

Compressor oil PAG

Quantity 180-200 g*

* The weight varies depending on the engine type. Contact a Volvo workshop for the correct information.

Catalytic converter



Catalytic converter

The three-way catalytic converter (TWC) is an additional part of the exhaust system. Its purpose is to purify exhaust gases. The three-way catalytic converter (TWC) primarily consists of a housing with two monoliths that are designed so that the exhaust gases pass through a honeycomb of channels. The channel walls are lined with a thin layer of platinum, rhodium and palladium. These metals act as catalysts, i.e. they participate in and accelerate a chemical reaction without being used up themselves.

Lambda sensor™ heated oxygen sensor

The lambda sensor is part of a management system intended to reduce emissions and improve fuel economy.

An oxygen sensor monitors the oxygen content of the exhaust gases leaving the engine. These values are fed into an electronic system that continuously controls the injectors. The ratio of air to fuel is continuously adjusted. These adjustments create optimal conditions for efficient combustion, and together with the three-way catalytic converter reduce harmful emissions (hydrocarbons, carbon monoxide and nitrous oxides).

Fuel

Fuel consumption and carbon dioxide emissions

Engine	Gearbox	Consumption in litres/100 km	Carbon dioxide emission (CO ₂) g/km
2.4i	Manual 5	8,6	204
	Automatic	9,2	220
2.4	Manual 5	8,5	203
	Automatic	9,2	220
T5	Manual 6	8,8	209
	Automatic	9,5	227
2.0D	Manual 6	5,6	148

Official fuel consumption figures are based on a standard driving cycle in accordance with EU directive 80/1268 comb. Fuel consumption figures may be altered if the car is equipped with extra options which affect car weight. The manner in which the car is driven and other non-technical factors can affect fuel consumption. Consumption is higher and power output lower when driving using fuel with an octane rating of 91 RON.

Petrol

The engine can be run with octane ratings of 91, 95 and 98 RON.

- 98 RON is recommended for maximum effect and minimum fuel consumption.
- 95 RON can be used for normal driving.
- 91 RON should only be used as an exception. However, the engine will not be damaged by this fuel grade.

Standard DIN 51600. Min. 91 Octane RON Unleaded.

Diesel

Standard SS-EN 590.

Electrical system

General

12 volt system with a voltage regulated alternating current generator. Single pole system in which the chassis and engine block are used as conductors. The negative pole is connected to the chassis.

Battery

Voltage	12 V	12 V	12 V
Cold start capacity (CCA)	520 A	600 A*	700 A**
Reserve capacity (RC)	100 min	120 min	150 min

* Cars equipped with High Performance audio level.

** Diesel cars with Premium Sound audio level, fuel-driven heaters, Telematic, RTI or Mobile Office. If the battery is replaced, replace it with a battery of the same cold start capacity and reserve capacity as the original (see the decal on the battery).

Generator¹ max. current 120/150 A

Starter motor¹, power 1.4/1.9 kW

¹ Depending on engine variant

Bulbs

Bulbs	Output	Socket
Dipped beam	55 W	H7 LL
Main beam	55 W	HB3
Bi-Xenon (option)	35 W	DS
Fog lamps	55 W	H11
Front parking lamp	5 W LL	BAY15d
Side direction indicator	5 W	W 2.1 x 9.5d
Direction indicators, front (yellow)	21 W	BAU 15s
Direction indicators, rear (yellow)	21 W	BAU 15s
Front parking lamp, rear	5 W LL	BA 15
Brake light	21 W LL	BA 15
Reversing lamp	21 W LL	BA 15s
Rear fog lamp	21 W LL	BA 15s
Number plate lighting	5 W	W 2.1 x 9.5d
Courtesy lighting	5 W	SV 8.5

Cargo compartment	5 W	SV 8.5
Glovebox lighting	3 W	BA 9
Vanity mirror	1.2 W	SV 5.5

Engine specifications

	2.4i B5244S4	2.4 B5244S5	T5 B5254T3	2.0 D D4204T
Output (kW/rps)	125/100	103/83	162/83	100/67
(hp/rpm)	170/6000	140/5000	220/5000	136/4000
Torque (Nm/rps)	230/73	220/67	320/25-80	340/33
(kpm/rpm)	23,4/4400	22,4/4000	32,6/1500-4800	34,7/2000
No. of cylinders	5	5	5	4
Bore (mm)	83	83	83	85
Stroke (mm)	90	90	93,2	88
Cylinder displacement (dm³ or litres)	2,44	2,44	2,52	2,00
Compression ratio	10,3:1	10,3:1	9,0:1	18,5:1
Spark plugs:				
Electrode gap (mm)	1,2	1,2	0,7-0,8	
Tightening torque (Nm)	30	30	30	

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