STARTING AND DRIVING

Starting the car

The car is started using the start button beside the steering wheel when the remote control key is in the passenger compartment.

Start button location.

WARNING

Before starting:

- Fasten the seatbelt.
- Adjust the seat, steering wheel and mirrors.
- Make sure that the brake pedal can be fully depressed.

The remote control key is not physically used when starting the car since it is equipped with support for keyless starting (Passive start).

To start the car:

IMPORTANT

The car cannot be started if the charging cable is still engaged. Make sure the charging cable is removed from the charging input socket before the starting the car.

1. The remote control key must be inside the car. For cars with Passive Start, the key needs to be located in the front part of the passenger compartment. With the option for keyless locking/unlocking* of the car, the key can be anywhere in the car.

2. Hold the brake pedal depressed 1 fully. For cars with automatic gear changing, make sure that gear position P or N is selected. For cars with a manual gearbox, make sure that the gear lever is in neutral position or that the clutch pedal is depressed.

3. Press the start button.

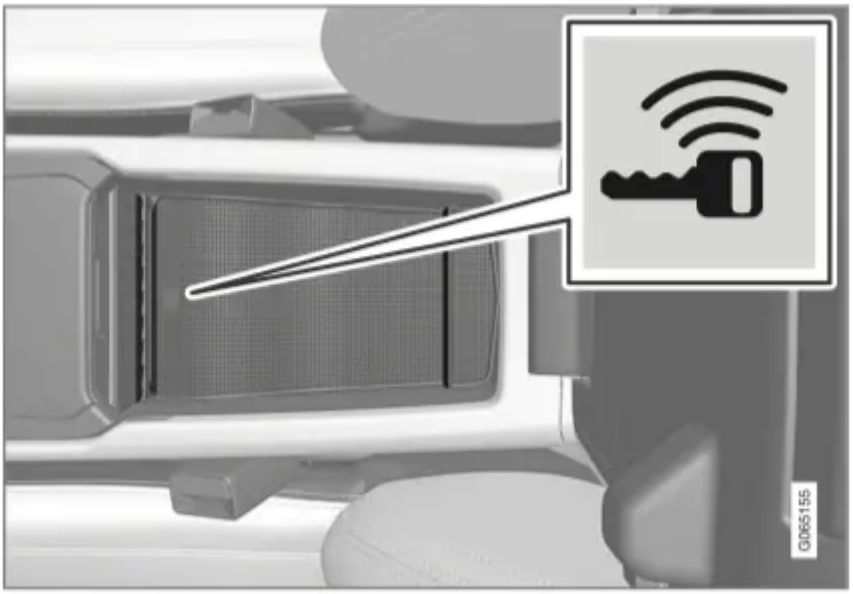
When the engine is started, the starter motor works until the engine is started or until its overheating protection triggers.

When starting in normal conditions, the car's electric drive motor is prioritised - the petrol engine remains switched off. This means that after the start button has been pressed, the electric motor has "started" and the car is ready to move. A started car is indicated by the driver display's indicator lamps extinguishing and its preset theme illuminating.

However there are situations where the petrol engine is started instead e.g. in the event of the temperature being too low or if the hybrid battery needs charging.

Error messages

If the Car key not found message is shown in the driver display when starting, place the remote control key by the backup reader. Then try to start the car again.



Backup reader's location.

NOTE

When the remote control key is positioned by the backup reader, make sure that there are no car keys, metal objects or electronic apparatus by the backup reader, (e.g. mobile phones, tablets, laptops or chargers). Several car keys close to one another by the backup reader may cause interference with each other.

If the message Car start System check, wait is shown in the driver display when starting, wait until the message disappears and then try to start the car again.

IMPORTANT

If the engine fails to start after 3 attempts wait for 3 minutes before making a further attempt. Starting capacity increases if the battery is allowed to recover.

NOTE

The car cannot be started if the hybrid battery is discharged.

WARNING

Never remove the remote control key from the car while driving.

WARNING

Always take the remote control key out from the car when leaving the car and make sure the car's electrical system is in ignition position 0 - especially if there are children in the car.

NOTE

The idling speed can be noticeably higher than normal for certain engine types during cold starting. This is done in order that the emissions system can reach normal operating temperature as quickly as possible, which minimises exhaust emissions and protects the environment.

Switching off the car

The car is switched off using the start button beside the steering wheel.

Start button location.

To switch off the car:

– Press the start button - the car is switched off.

If the gear selector for cars with an automatic gearbox is not in position P or if the car rolls:

– Press the start button and hold it depressed until the car is switched off.

Ignition positions

The car's electrical system can be set in different levels/positions and in this way make the different functions available.

In order to facilitate the use of a limited number of functions with the engine switched off, the car's electrical system can be set in three different levels – 0, I and II. These levels are described with the denomination "ignition position" throughout the owner's manual.

The following table shows the functions available in each ignition position/level:

Level	Functions
0	• Odometer, clock and tempera- ture gauge are illuminatedA. • Power* seats can be adjusted. • The power windows can be used. • The centre display is started and can be usedA. • The infotainment system can be usedA. In this mode, the functions are con- trolled by time and are switched off automatically after a short while.
I	• Panoramic roof, power win- dows, 12V power socket in the passenger compartment, Bluetooth, navigation, phone, ventilation fan and windscreen wipers can be used. • Power seats can be adjusted. • 12 V power sockets* in the cargo area can be used. • The infotainment system is started automatically if it was running when the car was left. Power is taken from the battery in this ignition position.
II	• The headlamps come on. • Warning/indicator lamps illuminate for 5 seconds. • Several other systems are activated. However, heating in seat cushions and the rear window can only be activated after the car has been started. This ignition position consumes a lot of current from the battery and should therefore be avoided!

A - Also activated when the door is opened.

Selecting ignition mode

The car's electrical system can be set in different levels/positions and in this way make the different functions available.

Selecting ignition position

Start button location.

- Ignition position 0 – Unlock the car and store the remote control key inside the car.

NOTE

To reach level I or II without starting the engine - do not depress the brake pedal, or the clutch pedal for cars with manual gear changing, when these ignition positions are to be selected.

- Ignition position I – Depress the start button and release.
- Ignition position II – Press and hold the button depressed for approx. 5 seconds. Then release the button.
- Back to ignition position0 – To return to ignition position 0 from position I and II press the start button.

Alcohol lock*

The function of the alcohol lock is to prevent the car from being driven by individuals under the influence of alcohol. Before the engine can be started the driver must take a breath test that verifies that he/she is not under the influence of alcohol. Alcohol lock calibration takes place in accordance with each market's limit value in force for driving legally.

The car has an interface for the electrical connection of the different makes and models of alcohol lock recommended by Volvo. The interface facilitates alcohol lock connection, and gives the option of an integrated function including messages related to the alcohol lock in the car's main display.

For information about a specific alcohol lock, please refer to the owner's manual from the respective alcohol lock manufacturer.

WARNING

The alcohol lock is an aid and does not exempt the driver from responsibility. It is always the responsibility of the driver to be sober and to drive the car safely.

Bypass of the alcohol lock*

In the event of an emergency situation or if the alcohol lock is out of order, it is possible to bypass the alcohol lock in order to drive the car.

For deactivation via the alcohol lock, see supplier's manual.

Before starting the engine with the alcohol lock*

The alcohol lock is activated automatically and is then ready for use when the car is opened.

To bear in mind

In order to obtain correct function and as accurate a measurement result as possible:

- Avoid eating or drinking approx. 5 minutes before the breath test.
- Avoid excess windscreen washing - the alcohol in the washer fluid may result in an incorrect measurement result.

NOTE

After a completed period of driving, the engine can be restarted within 30 minutes without a new breath test.

Brake functions

The car's brakes are used to reduce the speed or prevent the car from rolling.

In addition to the foot brake and parking brake, the car is equipped with several automatic brake assist functions. These can assist the driver by not needing to keep his/her foot on the brake pedal when at a traffic light, or when starting on an uphill gradient.

Depending on the car's equipment, the following auto braking functions are available:

- Automatic brake when stationary (Auto Hold)
- Hill start assist (Hill Start Assist)
- Auto braking after a collision
- City Safety

Foot brake

The foot brake is part of the brake system. The car is equipped with two brake circuits. If a brake circuit is damaged, the brake pedal may engage deeper. Higher pressure on the pedal will therefore be needed to produce the normal braking effect.

WARNING

The brake servo only works when the electric motor or internal combustion engine is running.

If the foot brake is used when the car is switched off, the brake pedal needs to be depressed passed the normal braking position using a higher pressure to brake the car.

In very hilly terrain or when driving with a heavy load the brakes can be relieved by using engine braking in gearshift mode B.

Anti-lock braking system

The car has anti-lock brakes (ABS2), which prevents the wheels from locking while braking and allows maintained steering control. Vibration may be felt in the brake pedal when this is engaged and this is normal.

A short test of the ABS system is made automatically after the car has been started when the driver releases the brake pedal. A further automatic test of the system may be made at low speed. The test may be felt as pulses in the brake pedal.

Light braking charges the hybrid battery

The electric motor's engine brake is used during light braking. The car's kinetic energy is then converted to electrical energy instead, which is used to charge the hybrid battery. Battery charging with electric motor braking is indicated in the driver display.

The driver display indicates charging during electric motor braking.

This function is active in the speed interval 150-5 km/h (93-3 mph). During heavier braking, as well as outside the speed interval, braking is supplemented by the hydraulic brake system. The driver's display shows this by the indicator being down in the red zone.

Symbols in the driver display

Symbol	Specification
	Check the brake fluid level. If the level is low, fill with brake fluid and check for the cause of the brake fluid loss.
	Fault in pedal sensor.
	Constant glow for 2 seconds when the engine is started: Automatic function check. Constant glow for more than 2 seconds: Fault in the ABS system. The car's normal brake system is still working, but without the ABS function.
	If the message **Brake pedal Characteristics changed Service required** is shown, the system for "Brake-by-wire" is disengaged. The brake pedal needs to be depressed passed the normal braking position using a higher pressure to brake the car.

WARNING

If both the warning lamps for brake fault and ABS fault illuminate at the same time, a fault has occurred in the brake system.

• If the level in the brake fluid reservoir is normal at this stage, drive carefully to the nearest workshop and have the brake system checked - an authorised Volvo workshop is recommended.

• If the brake fluid is below the MIN level in the brake fluid reservoir, do not drive further before topping up the brake fluid. The reason for the loss of brake fluid must be investigated.

Brake assistance

The brake assist system (BAS3) helps to increase brake force during braking, and can thereby shorten the braking distance.

The system detects the way in which the driver brakes and increases brake force where necessary. The brake force can be boosted up to the level when the ABS system is engaged.

Braking on wet roads

When driving for a prolonged period of time in heavy rain without braking, the braking effect may be delayed slightly when next using the brakes.

This may also be the case after a car wash. It is then necessary to depress the brake pedal more forcefully. You should therefore maintain a greater distance to the vehicles in front.

Brake the car firmly after driving on wet roads or using a car wash. This warms up the brake discs, enabling them to dry faster and protecting them against corrosion. Bear in mind the current traffic situation when braking.

Braking on gritted roads

When driving on salted roads, a layer of salt may form on the brake discs and brake linings.

This may extend braking distance. You should therefore maintain a greater safety distance to vehicles in front. In addition, make sure you do the following:

• Brake now and again to remove any layer of salt. Make sure that other road users are not put at risk by the braking.

• Gently depress the brake pedal after finishing driving and before starting your next trip.

Brake system maintenance

Check brake system components regularly for wear.

To keep the car as safe and reliable as possible, follow the Volvo service intervals as specified in the Service and Warranty Booklet. After replacing brake linings and brake discs, braking effect is only adapted after they have been "worn in" for a few hundred kilometres (miles). Compensate for the reduced braking effect by depressing the brake pedal harder. Volvo recommends only fitting brake linings that are approved for your Volvo.

IMPORTANT

The wear on the brake system's components must be checked regularly.

Contact a workshop for information about the procedure or engage a workshop to carry out the inspection - an authorised Volvo workshop is recommended.

Parking brake

The parking brake prevents the car from rolling away from stationary by means of mechanically locking/blocking two wheels.

A faint electric motor noise can be heard when the electrically-operated parking brake is being applied. The noise can also be heard during the automatic function checking of the parking brake.

If the car is stationary when the parking brake is activated, it only acts on the rear wheels. If it is activated when the car is moving then the normal foot brake is used, i.e. the brake acts on all four wheels. Brake function changes over to the rear wheels when the car is almost stationary.

Activating and deactivating the parking brake

Use the parking brake to prevent the car from rolling from stationary.

Activating the parking brake

1. Pull the control upward.

   > The symbol in the driver display illuminates when the parking brake is activated.

2. Check that the car is stationary.

Symbol in the driver display

Symbol	Specification
	The symbol is illuminated when the parking brake is activated. If the symbol flashes, it indicates a fault has occurred. Read the message in the driver display.

Automatic activation

The parking brake is activated automatically

- when the car is switched off and the setting for automatic activation of the parking brake is activated in the centre display.
- when gear position P is selected on a steep hill.
- if the Auto hold (Automatic brake when stationary) function is activated and
- the car has been stationary for a long time (5-10 minutes)
- the car is switched off
- the driver leaves the car.

Emergency brake

In an emergency, the parking brake can be activated when the car is in motion by pulling and holding up the control. Braking stops when the control is released, or if the accelerator pedal is depressed.

NOTE

An acoustic signal sounds while emergency braking is active at high speeds.

Deactivating the parking brake

Deactivate manually

To deactivate the parking brake, the engine needs to be running.

1. Depress the brake pedal firmly.
2. Press the control down.

    > The parking brake releases and the symbol in the driver display extinguishes.

Deactivate automatically

1. Start the car.
2. Depress the brake pedal firmly. Select gear position D or R and depress the accelerator pedal.

    > The parking brake releases and the symbol in the driver display extinguishes.

NOTE

For automatic deactivation, either the driver has to have put on their seatbelt or the driver door has to be closed.

Automatic parking brake activation setting

Choose whether the parking brake is to be activated automatically when the car is switched off.

To change setting:

1. Tap on Settings in the centre display's top view.

2. Press My Car → Parking Brake and Suspension to select or deselect the function Auto Activate Parking Brake.

Parking on a hill

Always use the parking brake when parking on a hill.

WARNING

Always use the parking brake when parking on an inclined surface. Engaging a gear or the automatic transmission's P position is not sufficient to hold the car stationary in all situations.

If the car is parked facing uphill:

- Turn the wheels away from the kerb.

If the car is parked facing downhill:

- Turn the wheels towards the kerb.

Heavy load uphill

A heavy load, such as a trailer, can cause the car to roll backward when the parking brake is released automatically on a steep incline. Avoid this by pulling the control upwards while driving the car away. Release the control when the engine achieves traction.

In the event of a fault in the parking brake

Contact an authorised Volvo workshop if it is not possible to deactivate or activate the parking brake after several attempts.

An acoustic warning signal sounds when driving with the parking brake activated.

If the car must be parked before a possible fault is rectified, then the wheels must be turned as for parking on a hill and the gear selector must be in position P.

Low battery voltage

If the battery voltage is too low then the parking brake can be neither deactivated nor activated. Connect a donor battery if the battery voltage is too low.

Replacing the brake linings

The rear brake linings must be replaced at a workshop due to the design of the electricallyoperated parking brake - an authorised Volvo workshop is recommended.

Symbols in the driver display

Symbol	Specification
	If the symbol flashes, it indicates a fault has occurred. See the message in the driver display.
	Fault in brake system. See the message in the driver display.
	Information message in driver display.

Automatic braking when stationary

Automatic brake when stationary (Auto hold) means that the driver can release the brake pedal while maintaining braking effect when the car has stopped at traffic lights or a junction.

When the car has stopped, the brakes are activated automatically. The function can use either foot brake or parking brake to hold the car stationary and it works on all gradients. When driving off, the brakes are released automatically if the driver is wearing the seatbelt and/or the driver's door is closed.

NOTE

When braking to a standstill on an uphill or downhill slope, the brake pedal should be depressed a little harder before being released to ensure the car does not roll.

The parking brake is activated if

- the car is switched off
- the driver's door is opened
- the driver's seatbelt is unbuckled
- the car has been stationary for a longer time (5-10 minutes).

Symbols in the driver display

Symbol	Specification
	The symbol is illuminated when the function uses the foot brake to keep the car stationary.
	The symbol is illuminated when the function uses the parking brake to keep the car stationary.

Activating and deactivating the automatic brake at a standstill

The automatic brake function at a standstill is activated using the button in the tunnel console.

– Press the button in the tunnel console to activate or deactivate the function.

> The indicator in the button illuminates when the function is activated. Activated function remains even when the car is started next time.

Applicable when switching off

If the function is active and holds the car with the foot brake (A-symbol illuminated in the driver display), the brake pedal must be depressed at the same time as the button is depressed in order to deactivate.

- The function remains deactivated until it is reactivated.

• When the function is deactivated, hill start assist (HSA) remains active to prevent the car from rolling backwards when starting on an uphill gradient.

Help when starting on a hill

Hill start assist (HSA4) prevents the car from rolling backwards when starting on an uphill gradient. When reversing uphill, it prevents the car from rolling forwards.

The function means that the pedal pressure in the brake system remains for several seconds while the driver's foot is moved from brake pedal to accelerator pedal.

The temporary braking effect releases after several seconds or when the driver starts to drive away.

The Hill Start Assist is activated when stopping on a sleep slope. The function is available even when the automatic braking when stationary (Auto hold) function is deactivated.

Auto braking after a collision

In the event of a collision in which the activation level is reached for the pyrotechnic seatbelt tensioners or airbags, or if a collision with a large animal is detected, the car's brakes are automatically applied. This function is to prevent or reduce the effects of any subsequent collision.

After a serious collision there is a risk that it is no longer possible to control and steer the car. In order to avoid or mitigate a possible further collision with a vehicle or an object in the vehicle's path, the auto braking system is activated automatically and brakes the car in a safe manner.

Brake lights and hazard warning lights are activated during braking. When the car has stopped, the hazard warning lights continue to flash and the parking brake is applied.

If braking is not appropriate, e.g. if there is a risk of being hit by following traffic, the system can be overridden by the driver depressing the accelerator pedal.

The function assumes that the brake system is intact after the collision.

Regenerative braking*

The car recovers kinetic energy during braking in order to reduce fuel consumption and emissions.

 The battery symbol is shown in the driver display when the car is generating power for the battery.

The function is available in all drive modes together with gear position D or B.

Activating brake regeneration

Brake regeneration is activated by gentle pressure on the brake pedal or during engine braking.

Regeneration increases during engine braking when manual gearshift mode B is selected.

Gearbox

The gearbox is part of the car's powertrain (power transmission) between engine and drive wheels. The function of the gearbox is to change the gear ratio depending on speed and power requirements.

The car has a seven-speed automatic gearbox with dual clutch, integrated electric motor for electric drive and brake energy recovery. The number of gear changes means that the engine's torque and power range can be used effectively.

Both the gear lever and the shift paddles can be used to shift up or down manually. The driver display shows the selected gear position.

Automatic gearbox

Gears are selected automatically so that you can drive as energy-efficiently as possible. The gearbox also has a manual gearshift mode.

Overview of gear lever and shift pattern in the driver display.

The driver display shows the selected gear position:

P, R, N, D or B.

Changing gear with automatic gearbox

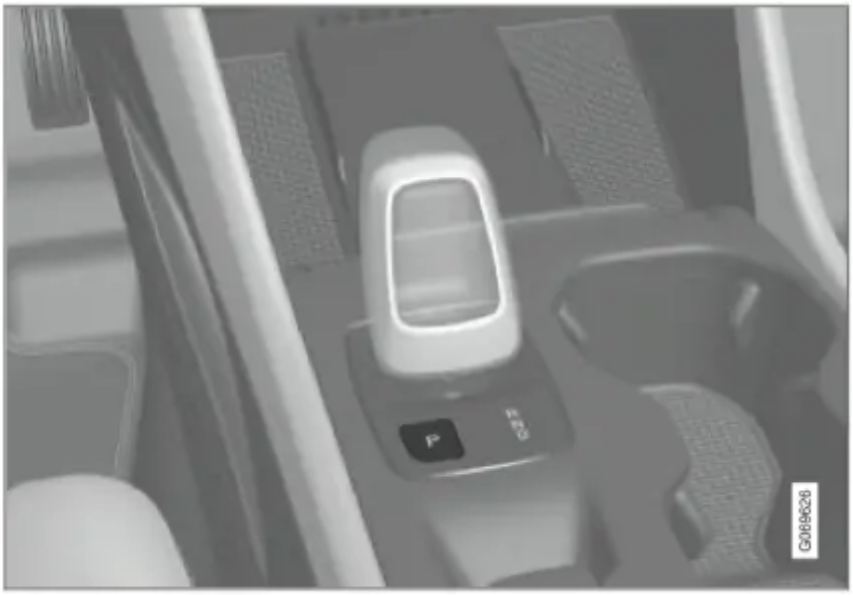
Change gear position by pressing the springloaded gear selector forwards or backwards, or sideways for manual shifting.

Changing gear

Overview of gear lever and gear positions.

Gear positions

Parking – P



Overview of gear lever and position P.

Parking is activated with the P button located next to the gear selector.

The gearbox is mechanically blocked when the P position is engaged.

Select position P for parking. The car can start in position P. The car must be stationary when the P position is selected.

To park - first apply the parking bake and then select P position.

WARNING

Always use the parking brake when parking on an inclined surface. Engaging a gear or the automatic transmission's P position is not sufficient to hold the car stationary in all situations.

NOTE

To be able to lock the car and arm the alarm, the gear position must be in P.

Help functions

The system will change to the P position automatically:

- if the car is switched off in position D or R.
- if the driver unfastens the seatbelt and opens the driver's door when the car is running in a mode other than P.

To park a car without wearing the seatbelt and with the door open - exit the P position by selecting R or D again.

If the car is switched off in N position there is no automatic change-over to P position. This makes it possible to wash the car in an automatic car wash.

Reverse – R

Select position R to reverse. The car must be stationary when the R position is selected.

Neutral – N

The car freewheels in position N. The car can start in position N. Apply the parking brake if the car is stationary with the gear selector in the N position.

In order to change from N position to another gear position, the brake pedal must be depressed and the ignition position must be II.

Drive position - D D is the normal driving position. Shifting up and down takes place automatically based on the level of acceleration and speed.

The car must be stationary when changing gear from R position to D position.

Brake – B

Overview of brake positions in the driver display.

In B position, it is possible to change gear manually. The car brakes using its electric motor when the accelerator pedal is released, while also charging the hybrid battery.

Position B is selected by moving the gear selector backwards from the D position.

- Press the gear selector to the right to "+" (plus) to change up one step and release it.
- Press the gear selector to the left to "–" (minus) to change down one step and release it.
- Press the gear selector backwards to return to the D position.

The gearbox automatically shifts down if the speed decreases to a level lower than appropriate for the selected gear, in order to avoid jerking and stalling.

Changing gear with steering wheel paddles*

The steering wheel paddles are a complement to the gear selector and make it possible to change gear manually without releasing hands from the steering wheel.

The function is available in position D or B.

1 "-": Selects the next lower gear.

2 "+": Selects the next higher gear.

Switch

To change gear:

– Pull one of the paddles backwards towards the steering wheel - and release.

A gear change occurs at each pull of the paddle, provided that the engine speed does not leave the permitted range. The driver display shows the current gear.

In B position the steering wheel paddles are automatically activated.

Driver display when changing gear with steering wheel paddles in manual gearshift mode.

Activating the steering wheel paddles in position D

To be able to change gear with the steering wheel paddles, they must be activated:

– Pull one of the paddles toward the steering wheel.

> A figure in the driver display indicates current gear.

Driver display when changing gear with steering wheel paddles.

Deactivating the steering wheel paddles in position D

Manual deactivation

– Pull the right-hand paddle (+) toward the steering wheel and hold in place until the number in the driver display extinguishes.

> The gearbox returns to position D.

Automatic deactivation

The steering wheel paddles are deactivated after a short time if they are not used. This is indicated by means of the figure for the current gear extinguishing. The exception is during engine braking - then the paddles are activated for as long as engine braking is in progress.

Gear selector inhibitor

The gear selector inhibitor prevents accidental changing between different gear positions in an automatic gearbox.

Automatic gear selector inhibitor

The automatic gear selector inhibitor has special safety systems.

From park position – P or neutral position N

In order to move the gear selector from P or N position to another gear position, the brake pedal must be depressed and the ignition position must be II. For some gearbox variants, the engine must be running.

If the gear selector is in the N position and the car has been stationary for at least 3 seconds (irrespective of whether the engine is running) then the gear selector is locked.

Message in the driver display

If the gear selector is inhibited a message is shown in the driver display e.g. Gear lever Press brake pedal to activate gear lever.

The gear selector is not inhibited mechanically.

Kick-down function

Kick-down can be used when maximum acceleration is needed such as for overtaking. When the accelerator pedal is pressed all the way to the floor (beyond the position normally regarded as full acceleration) a lower gear is immediately engaged. This is known as kickdown.

If the accelerator is released from the kickdown position, the gearbox automatically changes up.

Safety function

To prevent over-revving of the engine, the gearbox control program has a protective downshift inhibitor.

The gearbox does not permit downshifting/ kick-down which would result in an engine speed high enough to damage the engine. Nothing happens if the driver still tries to shift down in this way at high engine speed – the original gear remains engaged.

On kick-down the car can shift down one or more steps at a time, depending in engine speed. The car shifts up when the engine has reached is maximum engine speed in order to prevent engine damage.

Launch function*

Launch can be used when maximum acceleration is required from stationary. The function is available in the following drive modes: Hybrid, Constant AWD, Power and Individual.

Activate Launch

Make sure the car is stationary and the wheels are pointing straight forward.

1. Move to gear position D.
2. Depress the brake pedal fully.
3. Then fully depress the accelerator pedal.
4. Release the brake pedal within 2 seconds.

NOTE

If the Launch function does not work, wait a few minutes and let the drivetrain cool down to working temperature before retrying.

IMPORTANT

The drivetrain is subject to wear and tear when using Launch and therefore the function is only available a limited number of times.

Symbols and messages for automatic gearbox

If a fault should occur in the gearbox, a symbol and a message are shown in the driver display.

IMPORTANT

To prevent damage to any drive system components, the working temperature of the gearbox is checked. If there is a risk of overheating, a warning symbol illuminates in the driver display and a text message is shown - follow the recommendation given.

Symbol	Specification
	An error has occurred in the transmission. Read the message in the driver display.
	Hot or overheated gearbox. Read the message in the driver display.
	Temporary fault on drivetrain. Read the message in the driver display.

Gear shift indicator

The gear shift indicator in the driver display shows the current gear during manual gearshifting and when it is appropriate to engage the next gear for optimum fuel economy. For eco-driving during manual gear changing, it is important to drive in the right gear and to change gear in good time.

Gear shift indicator in the driver display[5].

The gear shift indicator is shown in gear position B. The gear shift indicator shows the current gear in the driver display and indicates recommended shifting to a higher gear by a flashing plus sign.

NOTE

On automatic cars, the gear shift indicator is only available on certain markets.

Drive systems

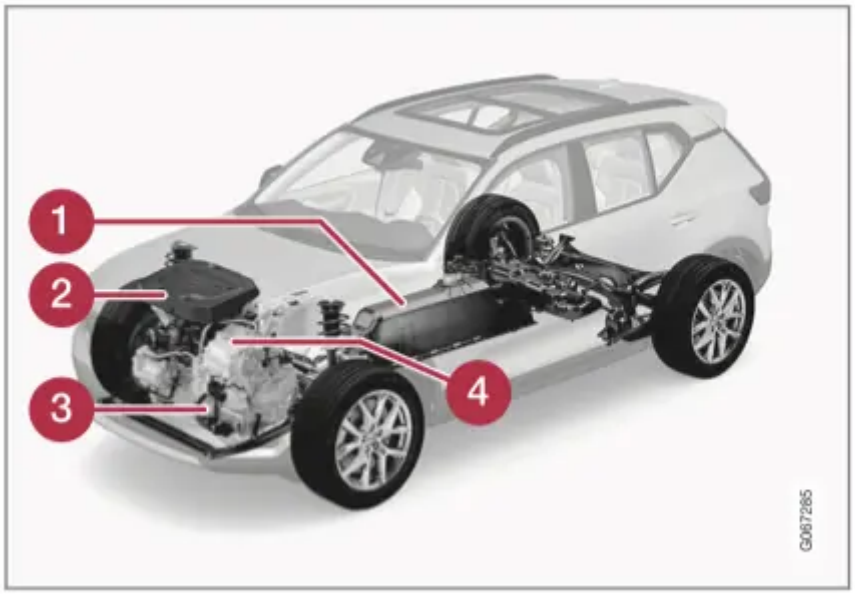
The car combines an internal combustion engine with an electric motor.

Two drive systems

Depending on the driver-selected drive mode and available electric energy, the two drive systems can be used either individually or in parallel.

The electric motor is supplied its energy from a hybrid battery fitted in the tunnel console. The hybrid battery can be charged in a wall socket, or in a special charging station.

Both the internal combustion engine and electric motor can generate motive force directly to the wheels. An advanced control system combines the properties of both drive systems in order to provide optimum driving economy.



1. Hybrid battery - The function of the hybrid battery is to store energy. This receives energy by charging from the power grid or by means of regenerative braking. It provides energy for electric operation as well as for temporarily operating the electric air conditioning during the preconditioning of the passenger compartment.
2. Internal combustion engine - The internal combustion engine starts when the energy level in the hybrid battery is insufficient for the engine power that the driver requests.
3. Super condenser – Provides energy to start the car, which saves the regular 12 V battery.
4. Electric motor - Powers the car in electric operation. If necessary, provides extra torque and power during acceleration. Recycles brake energy to electrical energy.

Starting and stopping the combustion engine

An advanced control system determines the extent to which the car is driven on internal combustion engine, electric motor or both in parallel. During electric operation, the car may sometimes need to start the internal combustion engine automatically due to external circumstances, e.g. in low outside temperatures, which is completely normal. In addition, the internal combustion engine always starts when the hybrid battery reaches its lowest state of charge.

Climate settings at low temperatures

In low outside temperatures, the internal combustion engine sometimes starts automatically in order to achieve the desired passenger compartment temperature and air quality. The amount of time that the internal combustion engine runs can be affected by

- lowering the temperature
- reducing the fan strength

- activating drive mode Pure.

Electric operation in low or high temperatures

In low or high outside temperatures, the car's range and output for electric operation may be reduced and affect how often the internal combustion engine is started automatically.

Emission control

To ensure that emission control operates as energy-efficiently as possible, the internal combustion engine must be run for several minutes once it has been started. The duration of the internal combustion engine's running time varies depending on the temperature of the catalytic converter.

Drive modes

Selection of drive mode affects the car's driving characteristics in order to enhance the driving experience and facilitate driving in special situations.

Using the drive modes it is possible to quickly have access to the car's numerous functions and settings for different driving needs. Each drive mode is adapted to provide optimum driving characteristics:

- Steering
- Engine/gearbox
- Brakes
- Shock absorption
- Driver display
- Climate settings

Select the drive mode adapted for the current driving conditions. Remember that not all drive modes are available in all situations.

Selectable drive modes

WARNING

Remember that the car does not emit any engine noise when it is only powered by the electric motor and may therefore be difficult to notice by children, pedestrians, cyclists and animals. This applies in particular at low speeds such as in car parks.

WARNING

Do not leave the car in an unventilated area with activated drive mode and the fueldriven engine switched off - automatic engine start occurs at low energy level in the hybrid battery, and the exhaust gases could then cause serious injury to people and animals.

Hybrid

• This is the car's normal mode where the electric motor and internal combustion engine work together.

When the car starts, it is in the Hybrid mode. The control system uses both the electric motor and internal combustion engine – individually or in parallel – and adapts use with regard to performance, fuel consumption and comfort. The capacity to run solely with the electric motor depends on the hybrid battery's energy level and, for example, the need for heating or cooling in the passenger compartment.

If high power output is available, it is possible to drive with electrical power alone. When the accelerator pedal is depressed, only the electric motor is activated until a certain position is reached. The internal combustion engine starts when this position is exceeded and the energy level in the battery is insufficient for the engine power that the driver requests with the accelerator pedal.

At low energy level (hybrid battery almost empty) the battery's energy level must be maintained, leading to the internal combustion engine starting more often. Charge the hybrid battery from a 230 VAC socket with the charging cable, or activate Charge in the function view in order to restore the capacity to run on electricity alone.

The drive mode is designed for low energy consumption with a mix of the electric motor and the internal combustion engine, without compromising the climate comfort and driving experience. When higher acceleration is required, maximum additional power from the electric drive line is used.

Information in the driver display

When driving in hybrid mode the driver display shows a hybrid gauge. The pointer in the hybrid gauge indicates how much energy the driver requests with the accelerator pedal. The marking between the lightning bolt and the drop shows how much energy is available.

The driver display for propulsion with both the electric motor and internal combustion engine.

The driver display also shows when energy is returned to the battery (regenerated) during light braking.

Pure

- Drive the car with electric motor, with energy consumption as low as possible and with lowest possible carbon dioxide emissions.

The drive mode prioritises driving on the hybrid battery. This means, for example, that the output of certain climate settings is reduced to provide the longest possible mileage on electric power alone.

The Pure mode is available when the hybrid battery has a sufficiently high energy level. The internal combustion engine also starts in the Pure mode if the energy level in the battery falls too low. The internal combustion engine also starts

- if the speed exceeds 125 km/h (78 mph)
- if the driver requests more motive force than electric drive can provide
- in the event of system/component limitations e.g. low outside temperature.

NOTE

The internal combustion engine may start temporarily in certain driving situations when the Pure drive mode is in use. This is in order to provide the wheels with the desired torque in driving situations that require higher load, e.g. when driving with a trailer or on an uphill gradient.

The drive mode is adapted for maximum range with electric propulsion and especially developed for urban traffic. Pure means lowest combustion even when the hybrid battery is empty.

ECO climate control

In the Pure drive mode, eco climate control is activated automatically in the passenger compartment in order to reduce energy consumption.

NOTE

When the Pure drive mode is activated, several parameters in the climate control system's settings are changed, and several electricity consumer functions are reduced. Certain settings can be reset manually, but full functionality is only regained by leaving Pure drive mode or adapting Individual drive mode with full climate functionality.

In the event of difficulties due to misting, press the button for max. defroster which has normal functionality.

Power

- The car has sportier characteristics and faster response to accelerating.

The drive mode adapts the combined output of the internal combustion engine and electric motor. The gear changes become faster and more distinct, and the gearbox prioritises a gear with greater traction. Steering response is faster and shock absorption is harder.

The drive mode is adapted for maximum performance and response on acceleration. It changes the internal combustion engine's accelerator pedal response, gear shift pattern and boost pressure system. Chassis settings, steering and brake response are also as good as possible. Power drive mode is always available regardless of the battery's state of charge.

The Power mode is also available in the Polestar Engineered version*.

Changing drive mode

Select the drive mode adapted for the current driving conditions.

Change the drive mode using the button in the centre console.

Remember that not all drive modes are available in all situations.

To change drive mode:

1. Press the DRIVE MODE button.

   > A pop-up menu is opened in the centre display with the active drive mode highlighted.

2. Select the drive mode in one of two ways:

   • Tap the desired drive mode directly on the touchscreen to select and activate the drive mode.

   • Press the DRIVE MODE button again to move the cursor to the desired drive mode. The selected drive mode is activated after a short delay.

Energy distribution using map data*

In the driving position Hybrid the car is powered by both the electric motor and the internal combustion engine. If a destination has been selected in the navigation system*, the Predictive Efficiency 7 function distributes the electric energy consumption along the whole driving distance using the map data.

Fuel consumption can then be reduced compared with normal hybrid drive when the car is first driven on electricity, to then change over to being driven by the internal combustion engine when the hybrid battery has been discharged.

Function

If the distance to the selected destination is greater than the estimated range when running on electricity, this function distributes the electric energy for consumption that is as energy-efficient as possible for the entire distance to be travelled. This makes it possible to avoid situations where normal hybrid drive would otherwise use a large proportion of the electric energy, for example, to run electric drive at high speed on a motorway and then use the internal combustion engine at low speed in urban driving.

The greatest fuel saving is achieved when

- the distance to be travelled begins with driving on a motorway
- the distance to be travelled is between 50 and 100 km (30 and 60 miles)
- the hybrid battery is fully charged at the beginning.

Conditions for the function

For the function to work requires that a number of conditions are met:

- A destination is set in the navigation system and the driving distance to the destination is longer than the range possible only on electric drive.
- Hybrid drive mode is selected.
- The Hold and Charge functions are deactivated.
- The hybrid battery is charged.

Tips for use

If the car is used for commuting to work and it is not possible to charge the car at the place of work, specify the place of work as an intermediate destination and your home as the final destination. The discharging of the hybrid battery will then take place over your runs both to and from work.

Add similar commuting routes, i.e. the route between two charging points, as Favourites in the navigation system to facilitate arrival.

Economical driving

To achieve the longest possible range, the driver should plan driving and adapt driving style and speed to the prevailing situation.

Before driving

- Precondition the car before driving if possible using the charging cable connected to the mains power circuit.
- If preconditioning is not possible when it is cold outside, use seat heating and steering wheel heating first of all. Avoid warming up the whole of the interior which takes energy from the hybrid battery.
- Choice of tyres and tyre pressure can affect energy consumption - seek advice on suitable tyres from an authorised Volvo dealer.
- Remove unnecessary items from the car the greater the load the higher the consumption.

While driving

- Activate drive mode Pure.
- Activate the Hold function at higher speeds during journeys that are longer than the range of the electricity.

• If possible, avoid using the Charge function to charge the hybrid battery.

• Drive at a steady speed and keep a good distance to other vehicles and objects in order to avoid braking.

• The hybrid battery is recharged during braking by braking gently with the brake pedal.

• High speed results in increased energy consumption since the wind resistance increases with speed.

• In a cold climate, reduce electrical heating of windows, mirrors, seats and steering wheel, if possible.

• Avoid driving with open windows.

• Do not hold the car stationary on a hill with the accelerator pedal. Instead, activate the function for braking when stationary.

• If possible, deactivate the climate control while driving a short distance after preconditioning.

After driving

• If possible, park in an acclimated garage with charging facilities.

Range

The car's range depends on several factors. The ability to achieve a long range varies according to the circumstances and conditions under which the car is being driven. The certified value for the car's mileage should not be interpreted as an expected range. The certified value should primarily be used to compare different cars and is obtained during special test cycles.

Range in the driver display

When the car is delivered from the factory, or after a factory reset, the range is based on the certified value

When the car has been driven for a while, the range is based on historical driving patterns. The amount of history used depends on the battery's state of charge. Therefore, the less charge there is in the hybrid battery, the faster the range adapts to a changed driving pattern.

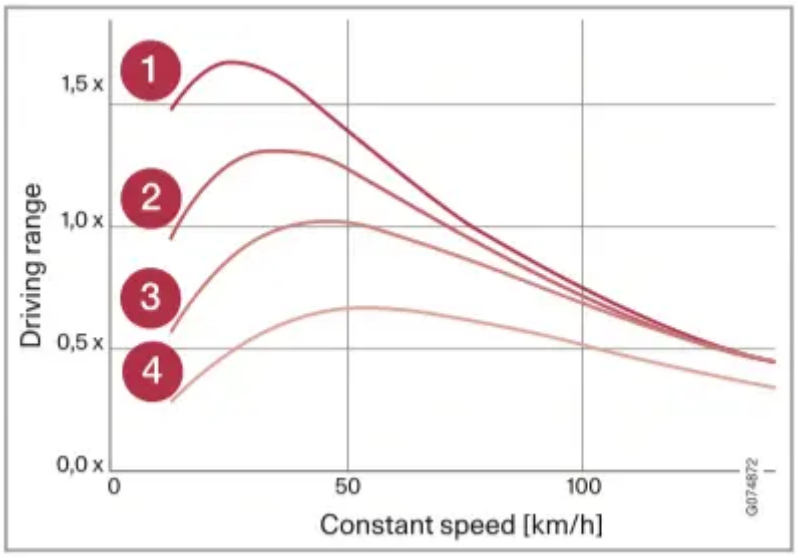
Factors that affect the range

In addition to historical trip data, there are several different factors that affect the range. The longest range is achieved under extremely favourable conditions when all factors have a positive impact.

Examples of factors that affect the range:

- speed
- climate settings
- topography
- preconditioning
- tyres and tyre pressure
- traffic situation
- temperature and weather
- road conditions.

Range based on speed and outside temperature



1. 20 °C (68 °F) outside temperature and passenger compartment climate Off.
2. 20 °C (68 °F) outside temperature and passenger compartment climate On.
3. 35 °C (95 °F) outside temperature and passenger compartment climate On.
4. -10 °C (14 °F) outside temperature and passenger compartment climate On.

The graph shows the approximate relationship between constant speed and range, where a lower constant speed has a positive effect on range.

A higher outside temperature and deactivated climate control are also more beneficial for the range.

Hold and Charge

In some situations, it can be useful to be able to control the hybrid battery's state of charge while driving is in progress. This is possible with the functions Hold and Charge.

Hold and Charge are available in all drive modes. The functions are cancelled if Pure drive mode is activated.

Activating Hold and Charge

The functions are activated in the centre display's function view.

Hold

Battery level sustained for later use.

The function maintains the charge in the hybrid battery for electric drive and saves available electricity for later use e.g. for driving in an urban environment.

The car works as for normal hybrid operation with discharged battery where, in addition to re-using brake-generated energy, for example, the car starts the internal combustion engine more often in order to maintain the charge in the battery.

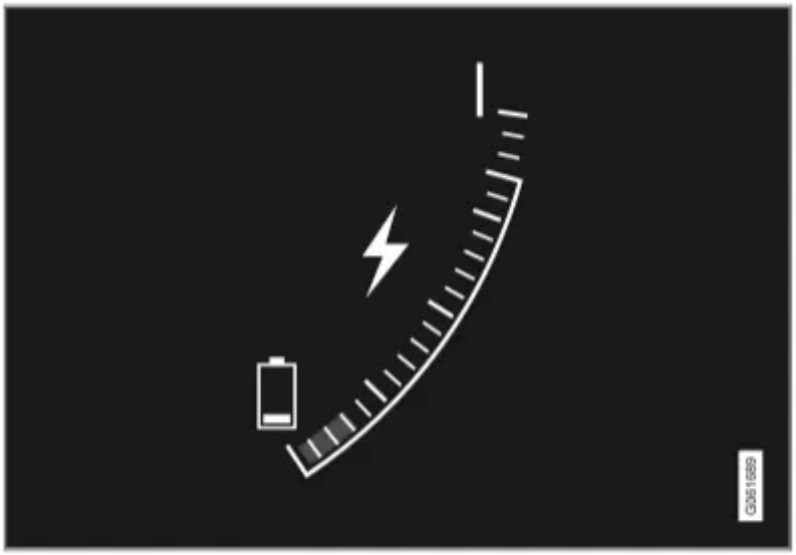
Charge

Engine charges hybrid battery.

The function charges the hybrid battery with assistance from the internal combustion engine for using increased electric operation at a later time.

Symbols in the driver display

The symbol is shown in the hybrid battery gauge when Hold is activated.



The symbol is shown in the hybrid battery gauge when Charge is activated.

Preparations for a long trip

Before a driving holiday or some other type of long journey, it is important to check the car's functions and equipment particularly carefully.

Check that

- the engine is working normally and that fuel consumption is normal
- there are no leaks (fuel, oil or other fluid)
- braking effect on braking works as intended

• the tyres have sufficient tread depth and pressure. Change to winter tyres when driving to areas where there is a risk of snowy or icy road surfaces

• starter battery charging is good

• the wiper blades are in good condition

• a warning triangle and high-visibility vest are located in the car - legally required in certain countries

Winter driving

For winter driving it is important to perform certain checks of the car in order to ensure that it can be driven safely.

Check the following in particular before the cold season:

• The engine coolant must contain 50% glycol. This mixture protects the engine against frost down to approx. -35°C (-31°F). To avoid health risks, different types of glycol must not be mixed.

• The fuel tank must be kept filled to prevent condensation.

• Engine oil viscosity is important. Oils with lower viscosity (thinner oils) facilitate starting in cold weather and also reduce fuel consumption while the engine is cold.

• The condition of the starter battery and charge level must be inspected. Cold weather places great demands on the starter battery and its capacity is reduced by the cold.

• Use washer fluid with antifreeze to avoid ice forming in the washer fluid reservoir.

See the separate section for engine oil recommendations.

Slippery driving conditions

To achieve optimum roadholding Volvo recommends using winter tyres on all wheels if there is a risk of snow or ice.

NOTE

The use of winter tyres is a legal requirement in certain countries. Studded tyres are not permitted in all countries.

Practise driving on slippery surfaces under controlled conditions to learn how the car reacts.

Driving in water

Wading means the car being driven through water e.g. on a flooded road. Driving in water must be performed with great caution. Observe the following to prevent damage to the car when driving through water:

• The water level must not be higher than the floor of the car. If possible, check the depth at the deepest point before starting to drive through the water. Extra caution should be exercised when passing through flowing water.

• Do not drive faster than walking pace.

• Do not stop the car in the water. Drive forward carefully or reverse the car back out of the water.

• Remember that waves created by oncoming traffic may rise above the level for the floor of the car.

• Avoid driving through salt water (corrosion risk).

IMPORTANT

Parts of the car (e.g. engine, gearbox, driveline or electrical components) may be damaged when driving through water with a level higher than the floor of the car. Damaged caused to a component caused by submersion, hydrolock or lack of oil is not covered by the warranty.

In the event of stalling in water, do not try to restart. Instead, tow the car out of the water and transported on a low loader to a workshop. An authorised Volvo workshop is recommended.

When the water has been passed, depress the brake pedal lightly and check that full brake function is achieved. Water and mud for example can make the brake linings wet resulting in delayed brake function.

If necessary, clean the contact for the trailer coupling after driving in water and mud.

Opening and closing the fuel filler flap

The fuel filler flap is unlocked by pressing a button on the instrument panel.

In the driver display, the arrow next to the tank symbol indicates which side of the car the fuel filler flap is located.

1. Press the button on the instrument panel.

   > Pressure equalisation of the fuel tank involves a certain delay in opening the flap. The message Fuel tank Fuel filler cap open is shown in the driver display, and then Fuel tank Ready for refuelling in the driver display. If the internal combustion engine is switched on when the button is pressed, it is generally switched off and the car switches to electric mode.

NOTE

After the fuel filler flap has been opened, refuelling must take place within about 15 minutes. After this, the valve that was opened by pressing the button to open the fuel filler cap is closed, and it is no longer possible to refuel because the pump nozzle cuts out.

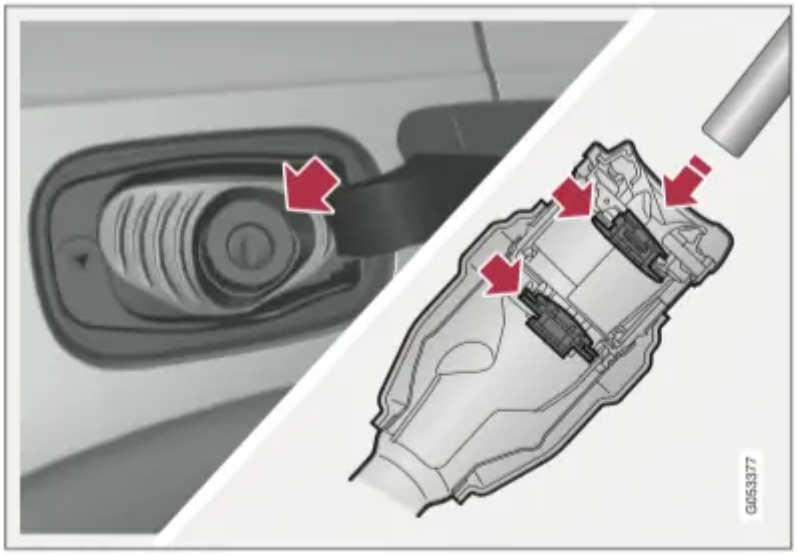
If the valve is closed before refuelling is complete - press the button again and wait until the driver display shows the message Fuel tank Ready for refuelling.

2. After refuelling is finished - close the flap with a gentle press.

Filling fuel

The fuel tank is fitted with a coverless fuel filler system.

Refuelling the car at a petrol station



It is important to feed the pump nozzle past the filler pipe's two openable hatches before starting to fuel the car.

Fuelling instruction:

1. Switch off the car and open the fuel filler flap.

NOTE

After the fuel filler flap has been opened, refuelling must take place within about 15 minutes. After this, the valve that was opened by pressing the button to open the fuel filler cap is closed, and it is no longer possible to refuel because the pump nozzle cuts out.

If the valve is closed before refuelling is complete - press the button again and wait until the driver display shows the message Fuel tank Ready for refuelling.

2. Choose fuel that is approved for use in the car. See information on approved fuels in the section on "Petrol".

3. Insert the pump nozzle in the fuel filler opening. The filler pipe has two opening caps. The pump nozzle must be pushed past both caps before refuelling is started.

4. Do not overfill the tank but fill until the pump nozzle cuts out the first time.

> The tank is full.

NOTE

Overfilled fuel in the tank can overflow in hot weather.

Topping up fuel from a fuel can

When filling with a fuel can, use the funnel located in the foam block under the floor hatch in the cargo area.

1. Open the fuel filler flap.

2. Insert the funnel in the fuel filler opening. The filler pipe has two opening caps. The funnel's pipe must be pushed past both caps before filling can be started.

Applicable to cars with fuel-driven auxiliary heater*

Never use the fuel-driven heater when the car is in a filling station area.

Decal on the inside of the fuel filler flap.

Handling of fuel

Do not use fuel with a lower quality than that recommended by Volvo, as this will negatively affect engine power and fuel consumption.

WARNING

Always avoid inhaling fuel vapour and getting fuel splashes in the eyes.

In the event of fuel in the eyes, remove any contact lenses and rinse the eyes in plenty of water for at least 15 minutes and seek medical attention.

Never swallow fuel. Fuels such as petrol, bioethanol and mixtures of them and diesel are highly toxic and could cause permanent injury or be fatal if swallowed. Seek medical attention immediately if fuel has been swallowed.

WARNING

Fuel which spills onto the ground can be ignited.

Switch off the fuel-driven heater before starting to refuel.

Never carry an activated mobile phone when refuelling. The ring signal could cause spark build-up and ignite petrol fumes, leading to fire and injury.

IMPORTANT

Mixtures of various fuel types or use of fuels which are not recommended will invalidate Volvo's guarantees and any supplementary service agreements; this is applicable to all engines.

Petrol

It is important to use the correct fuel during refuelling. Petrol is available with different octane ratings that are adapted for different types of driving.

Only use petrol from well-known producers. Never use fuel of dubious quality. The petrol must fulfil the EN 228 standard.

IMPORTANT

- Fuel that contains up to 10 percent by volume ethanol is permitted.
- EN 228 E10 petrol (max 10 percent by volume ethanol) is approved for use.
- Ethanol higher than E10 (max. 10 percent by volume ethanol) is not permitted, e.g. E85 is not permitted.

Octane rating

- RON 95 can be used for normal driving.
- RON 98 is recommended for good power and low fuel consumption.
- An octane rating lower than RON 95 must not be used.

When driving in temperatures above +38 °C (100 °F), fuel with the highest octane rating is recommended for adapted performance and fuel economy.

IMPORTANT

- Use only unleaded petrol to avoid damaging the catalytic converter.
- Fuel containing metallic additives must not be used.
- Do not use any additives which have not been recommended by Volvo.

Overheating in the engine and drive system

Under certain conditions, e.g. hard driving in hilly terrain and hot climate, there is a risk that the engine and drive system may overheat – in particular with a heavy load.

- In the event of overheating, the engine's power may be limited temporarily.
- Remove any auxiliary lamps from in front of the grille when driving in hot climates.
- If the temperature in the engine's cooling system becomes too high then a warning symbol is illuminated and the driver display shows the message Engine temperature High temperature Stop safely. Stop the car in a safe way and allow the engine to run at idling speed for several minutes and cool down.

• If the message Engine temperature High temperature Turn off engine or Engine coolant Level low, turn off engine is shown, stop the car and switch off the engine.

• In the event of overheating in the gearbox, an alternative gear shift program will be selected. In addition, a built-in protection function is activated that, amongst other things, illuminates a warning symbol and the driver display shows the message

Transmission warm Reduce speed to lower temperature or Transmission hot Stop safely, wait for cooling. Follow the recommendation given, reduce speed or stop the car in a safe way and allow the engine to run at idling speed for several minutes to enable the gearbox to cool down.

• If the car overheats, the air conditioning may be switched off temporarily.

• Do not turn the engine off immediately you stop after a hard drive.

NOTE

It is normal for the engine's cooling fan to operate for a time after the engine has been switched off.

Symbols in the driver display

Symbol	Specification
	High engine temperature. Follow the recommendation given.
	Low level, coolant. Follow the recommendation given.
	Gearbox hot/overheated/cooled. Follow the recommendation given.

Overloading the starter battery

The electrical functions in the car load the starter battery to varying degrees. Avoid using the ignition position II when the car is switched off. Instead, use ignition position I which uses less power.

Also, be aware of different accessories that load the electrical system. Do not use functions which use a lot of power when the car is switched off. Examples of such functions are:

• ventilation fan

• headlamps

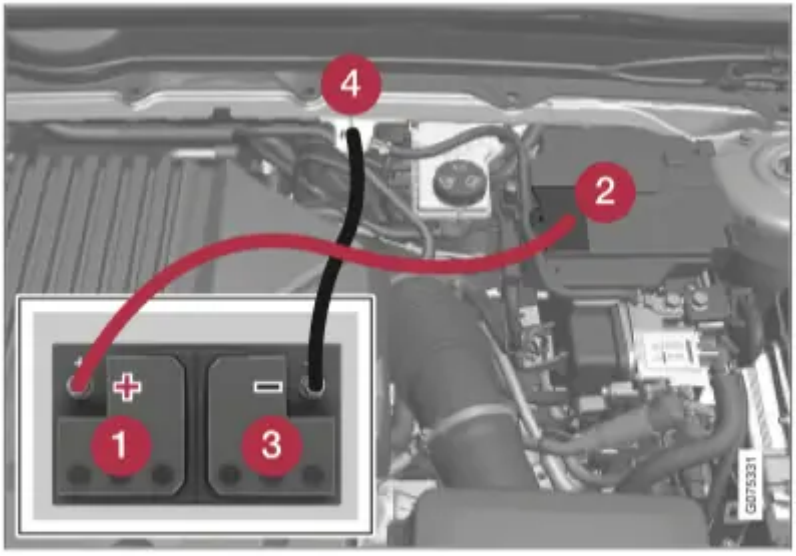
• windscreen wiper

• audio system (high volume). If the starter battery voltage is low, a message is shown in the driver display. The energy-saving function then shuts down certain functions or reduces certain functions such as the ventilation fan and/or audio system.

– In which case, charge the starter battery by starting the car and then running it for at least 15 minutes - starter battery charging is more effective during driving than running the engine at idling speed while stationary.

Using jump starting with another battery

If the starter battery is discharged then the car can be started with current from another battery.



Charging point for jump-starting own car. There are two connection points under the cover. Only use the one closest to the passenger compartment.

IMPORTANT

The car’s charging point is only intended for jump-starting the car itself. The charging point is not intended for jump-starting another car. Using the charging point to jump start another car may cause a fuse to blow, which means the charging point will stop working.

When a fuse has blown the message 12 V Battery Fuse failure Service required is shown in the driver display. Volvo recommends that an authorised Volvo workshop is contacted.

When jump-starting the car, the following steps are recommended to avoid short circuits or other damage:

1. Set the car's electrical system in ignition position 0.

2. Check that the donor battery has a voltage of 12 V.

3. If the donor battery is installed in another car - switch off the donor car's engine and make sure that the two cars do not touch each other.

4. Connect one of the red jump lead's clamps to the donor battery's positive terminal (1).

IMPORTANT

Connect the start cable carefully to avoid short circuits with other components in the engine compartment.

5. Open the positive jump-starting point's cover (2).

There are two connection points under the cover. Only use the connection point closest to the passenger compartment.

6. Connect the red jump lead's other clamp onto the car's positive jump-starting point (2).

7. Connect one of the black jump lead's clamps to the donor battery's negative terminal (3).

8. Connect the black jump lead's other clamp onto the car's negative jump-starting point (4).

9. Check that the jump lead clamps are affixed securely so that there are no sparks during the starting attempt.

10. Start the engine of the "donor car" and allow it to run a few minutes at a speed slightly higher than idle approx. 1500 rpm.

11. Hold down the start button for at least 5 seconds without your foot on the brake to activate the car's electrical system.

NOTE

When starting the engine in normal conditions, the car's electric drive motor is prioritised – the internal combustion engine remains switched off. This means that after the start button has been depressed, the electric motor has "started" and the car is ready to move. A started motor is indicated by the driver display's indicator lamps extinguishing and its preset theme illuminating.

IMPORTANT

Do not touch the connections between cable and car during the starting attempt. There is a risk of sparks forming.

12. Wait at least 2 minutes in order to charge the starter battery and then make a start attempt.

13. If the attempt at starting fails, repeat points 11 and 12.

14. Remove the jump leads in reverse order first the black and then the red.

Make sure that none of the black jump lead's clamps comes into contact with the car's positive jump-starting point/donor battery's positive terminal or the clamp connected to the red jump lead.

WARNING

• The battery can generate oxyhydrogen gas, which is highly explosive. A spark can be formed if a jump lead is connected incorrectly, and this can be enough for the battery to explode.

• Do not connect the jump leads to any fuel system component or any moving part. Be careful of hot engine parts.

• The battery contains sulphuric acid, which can cause serious burns.

• If sulphuric acid comes into contact with eyes, skin or clothing, flush with large quantities of water. If acid splashes into the eyes - seek medical attention immediately.

• Never smoke near the battery.

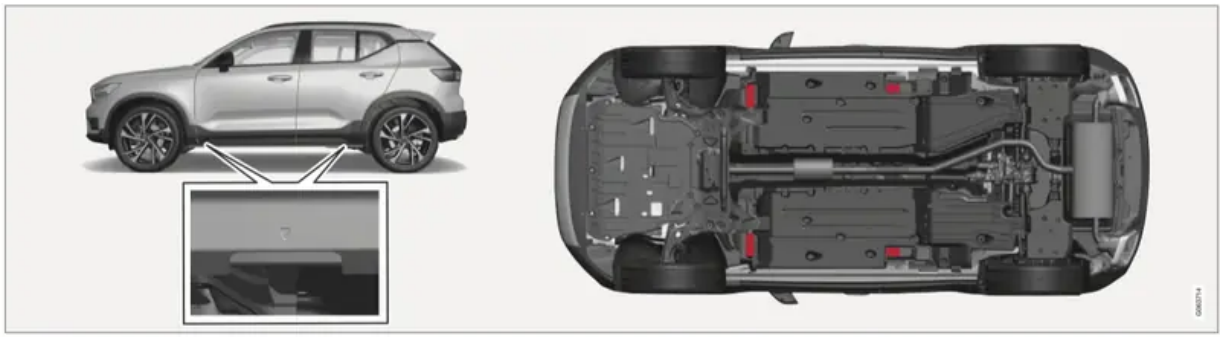
NOTE

The car cannot be started if the hybrid battery is discharged.

MAINTENANCE AND SERVICE

Raise the car

When raising the car, it is important that the jack is fitted in the intended points on the car's underbody.



The triangles in the plastic cover indicate the locations of the lifting points (marked in red).

NOTE

Volvo recommends only using the jack that belongs to the car model in question. If a jack is selected other than the one recommended by Volvo, follow the instructions supplied with the equipment.

The normal car jack is only designed for occasional, short-term use, such as when changing a wheel after a puncture. If the car is to be jacked up more often, or for a longer time than is required just to change a wheel, use of a garage jack is recommended. In this instance, follow the instructions for use that come with the equipment.

WARNING

• Apply the parking brake and set the gear selector in Park position (P).

• Chock the wheels standing on the ground using solid wood blocks or large stones.

• Check that the jack is not damaged, that the threads are thoroughly lubricated and that it is free from dirt.

• Check that the jack is resting on a firm, level surface that is not slippery and is not slanted.

• The jack must be correctly attached in the jack's bracket.

• Never position anything between the ground and the jack, nor between the jack and the car's jacking point.

• Passengers must leave the car when it is raised on the jack.

• If a wheel must be changed in a trafficked environment, passengers must stand in a safe place.

• Use a jack designed for the car when changing tyres. Use supports to secure the car for all other work.

• Never crawl under the car or reach under with a part of your body when it is raised on a jack.

WARNING

If the car is raised using a workshop jack, this must be placed beneath one of the four jacking points. Take care to position the workshop jack so that the car cannot slip off. Make sure that the jack plate is fitted with a rubber guard so that the car remains stable and is not damaged. Always use axle stands or similar.

When not in use, the jack* should be stored in its stowage space under the cargo area floor.

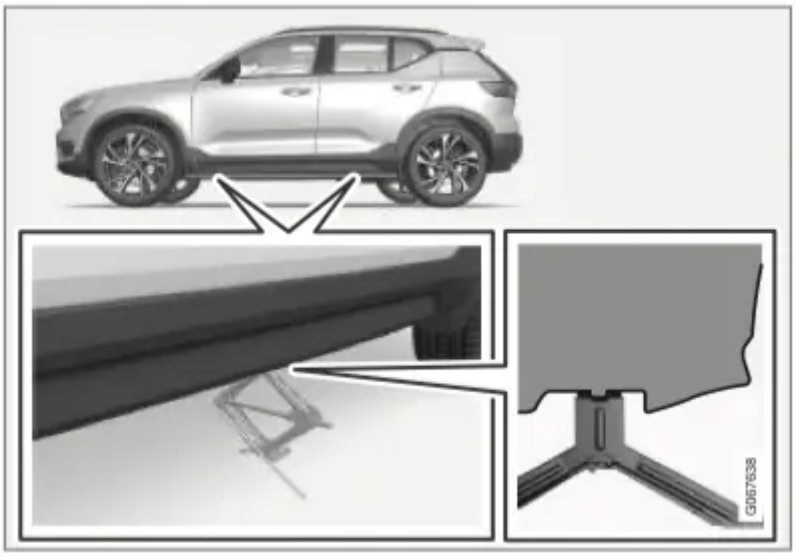
Read through all instructions before beginning. Take out the tools needed before jacking up the car.

1. Set up the warning triangle and activate the hazard warning lights if, for example, a tyre is being changed in a trafficked location.

2. Apply the parking brake and engage gear position P, or engage first gear if the car has a manual gearbox.

3. Chock in front of and behind the wheels that remain on the ground. Use, for example, heavy wooden blocks or large stones.

4. Position the jack or the lift arms at the designated spots of the car's undercarriage. The triangle markings in the plastic cover indicate the locations of the jacking/ lifting points. There are two jacking points on each side of the car. There is a recess for the jack at each point.



5. Position the jack on level, firm and nonslippery ground under the jacking point that will be used.

6. Crank up until it is correctly aligned and so that it makes contact with the car's jacking point. Check that the head of the jack (or lifting arms at a workshop) is correctly positioned in the jacking point so that the bump in the centre of the head fits into the jacking point hole, and check that the base of the jack is positioned vertically below the jacking point.

7. Turn the jack so that the crank is as far away from the side of the car as possible, at which point the jack's arms are perpendicular to the direction of the car.

8. Raise the car high enough to perform the intended measure.

Servicing the climate control system

The air conditioning system must only be serviced and repaired by an authorised workshop.

Troubleshooting and repair

The air conditioning system contains fluorescent tracing agents. Ultraviolet light must be used during leak detection.

Volvo recommends that an authorised Volvo workshop is contacted.

The car's climate control system uses a freonfree refrigerant either R1234yf or R134a depending on market. Information about which refrigerant the car's climate control system uses is printed on a decal located on the inside of the bonnet.

WARNING

The air conditioning system contains pressurised refrigerant R134a. This system must only be serviced and repaired by an authorised workshop.

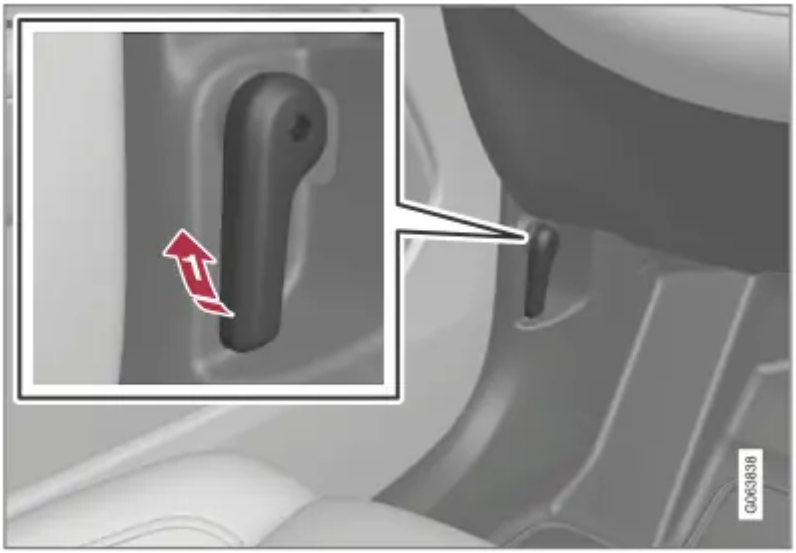
WARNING

The air conditioning system contains pressurised refrigerant R1234yf. In accordance with SAE J2845 (Technician Training for Safe Service and Containment of Refrigerants Used in Mobile A/C System), service and repair of the refrigerant system must only be performed by trained and certified technicians in order to ensure the safety of the system.

Opening and closing the bonnet

The bonnet can be opened using the handle in the passenger compartment and a handle under the bonnet.

Open the bonnet



1 Pull the handle on the left of the brake pedal in order to release the bonnet from fully closed position.

2 Move the handle under the bonnet upwards to release the bonnet from the lock catch and lift the bonnet.

Warning - bonnet not closed

When the bonnet is released, a warning symbol and graphics in the driver display will light up and an acoustic reminder will sound. If the car starts rolling, an acoustic warning signal will repeat.

NOTE

If the warning symbol is lit or the warning signal is heard despite the bonnet being closed properly, contact an authorised Volvo workshop.

Close the bonnet

1. Push the bonnet down until it starts to fall from its own weight.
2. When the bonnet stops against the lock catch, push the bonnet to close it completely.

WARNING

Risk of crushing! Ensure that the closing path under the bonnet is not obstructed, otherwise there is a risk of personal injury.

WARNING

Check that the bonnet locks properly when closed. The bonnet must engage at both sides audibly.

Bonnet not completely closed.

Bonnet completely closed.

WARNING

Never drive with an open bonnet!

If this symbol is visible or something else indicates that the bonnet is not fully closed while driving – stop immediately and close it properly.

Engine compartment overview

The overview shows some service-related components.

Some of the components included in the car's electric drive system are located under the bonnet. Exercise caution in this area and only touch anything that is related to normal maintenance.

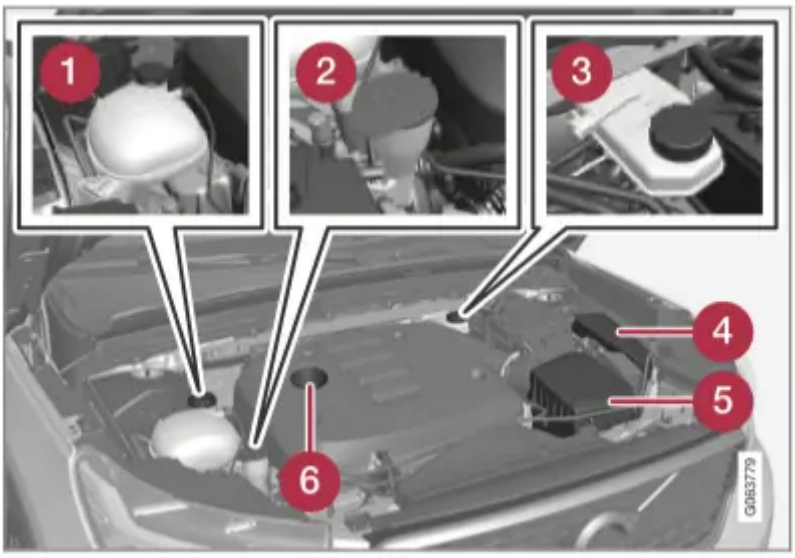
WARNING

Orange-coloured cables must only be handled by qualified personnel.

WARNING

Several components in the car work with high-voltage current that could be dangerous in the event of incorrect intervention.

- Do not touch anything that is not clearly described in the owner's manual.
- Exercise caution when checking/refilling fluids in the engine compartment.



The appearance of the engine compartment may differ depending on model and engine variant.

The appearance of the engine compartment may differ depending on model and engine variant.

1. Coolant expansion tank
2. Washer fluid filler pipe
3. Reservoir for brake fluid (located on the driver's side)
4. Central electrical unit
5. Air filter
6. Engine oil filler pipe

Location of warning decal for the engine compartment. The appearance of the engine compartment may differ depending on model and engine variant.

NOTE

It is not intended that the decals illustrated in the owner's manual should be exact replicas of those in the car. They are included to show their approximate appearance and locations in the car. The information that applies to your particular car can be found on the decal on the car.

WARNING

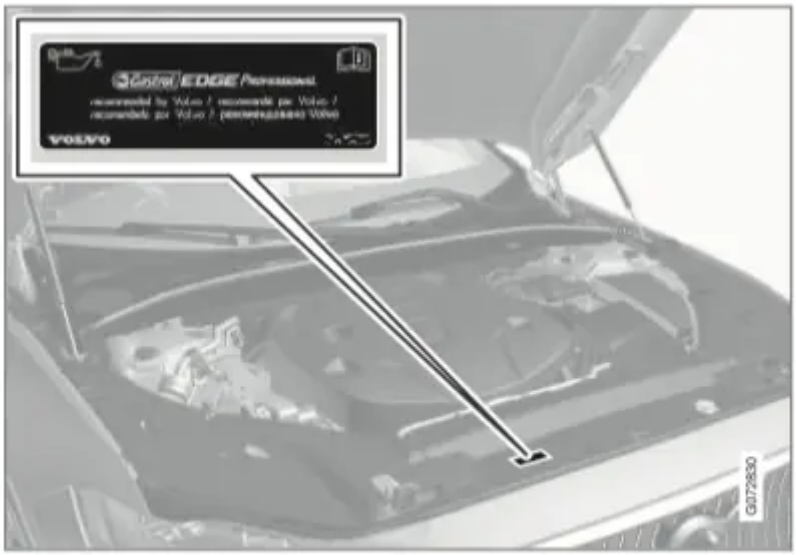
Remember that the radiator fan (located at the front of the engine compartment, behind the radiator) may start or continue to operate automatically for up to approx. 6 minutes after the engine has been switched off.

Always have the engine cleaned by a workshop - an authorised Volvo workshop is recommended. There is a risk of fire if the engine is hot.

WARNING

The ignition system works at a very high and hazardous voltage. The car's electrical system must always be in ignition position 0 when work is being performed in the engine compartment.

Do not touch the spark plugs or ignition coil when the car's electrical system is in ignition position II or when the engine is hot.



Location of warning decal for the engine compartment. The appearance of the engine compartment may differ depending on model and engine variant.

Volvo recommends:

If the engine oil cannot be checked on a regular basis and the level falls too low, there is a risk that this will cause serious damage to the engine.

NOTE

It is not intended that the decals illustrated in the owner's manual should be exact replicas of those in the car. They are included to show their approximate appearance and locations in the car. The information that applies to your particular car can be found on the decal on the car.

IMPORTANT

In order to fulfil the requirements for the engine's service intervals all engines are filled with a specially adapted synthetic engine oil at the factory. The choice of oil has been made very carefully with regard to service life, starting characteristics, fuel consumption and environmental impact.

An approved engine oil must be used in order that the recommended service intervals can be applied. Only use a prescribed grade of oil for both filling and oil change, otherwise there is a risk of the service life, starting characteristics, fuel consumption and environmental impact of the car being affected.

If engine oil of the prescribed grade and viscosity is not used, engine related components may become damaged. Volvo disclaims any liability for any such damage.

Volvo recommends that oil changes are carried out at an authorised Volvo workshop.

Symbols for low oil level

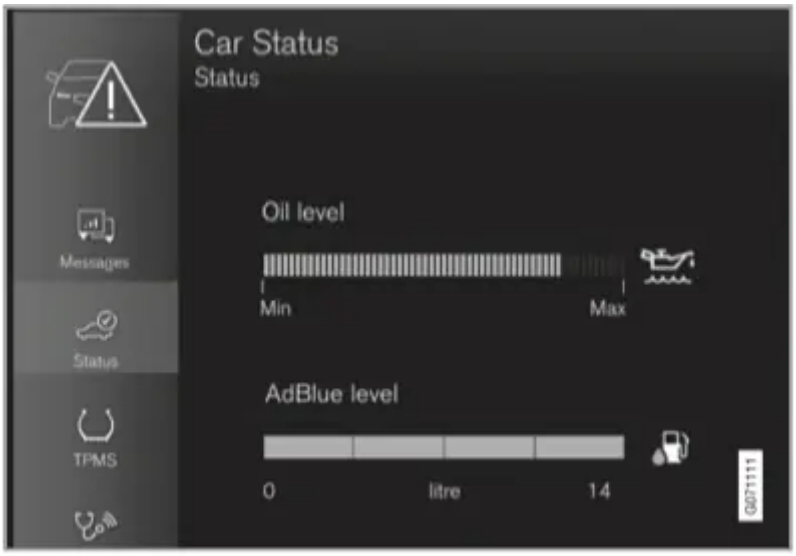
Volvo uses different systems to warn about the oil level if it is too low/high, or in the event of low oil pressure. The driver display's warning symbol for low oil pressure is used for the oil pressure sensor  . For oil level sensor, the driver is informed via the driver display's warning symbol  and display texts. Certain variants have both systems. Contact a Volvo dealer for more information.

Change the engine oil and oil filter in accordance with the intervals specified in the Service and Warranty Booklet. Using oil of a higher than specified grade is permitted. If the car is driven in adverse conditions, Volvo recommends using an oil of a higher grade than the one specified.

Checking and filling with engine oil

The oil level is detected with the electronic oil level sensor.

See oil level in the centre display



Example of graphic for oil level in the centre display

The oil level is visualised using the electronic oil level gauge in the centre display when the car has been started. The oil level should be checked regularly.

1. Open the Car Status app from the app view in the centre display.
2. Press Status to show the oil level.

NOTE

The system cannot directly detect changes when the oil is filled or drained. The car must have been driven approx. 30 km (approx. 20 miles) and have been stationary for 5 minutes with the engine switched off and on level ground before the oil level indication is correct.

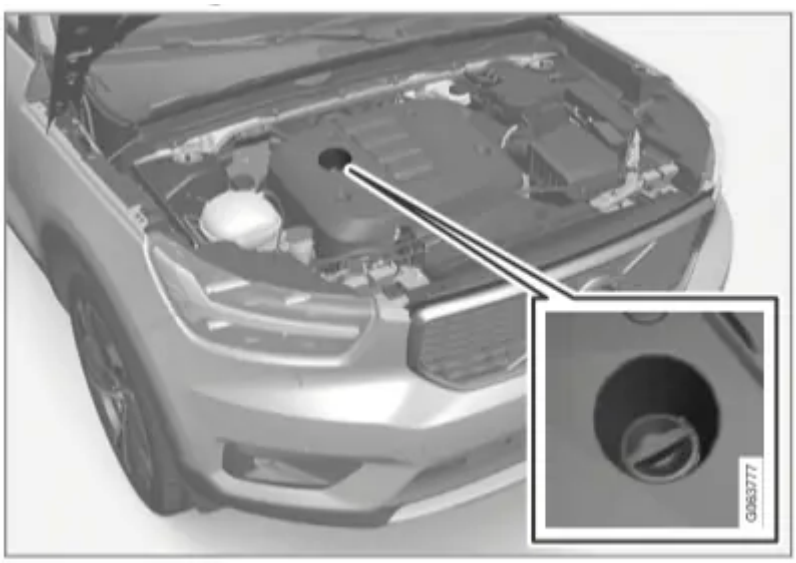
NOTE

If the right conditions for measuring the oil level (time after engine shutdown, the car's inclination, outside temperature, etc.) are not met, then the message No value available will be shown in the centre display. This does not mean that there is something wrong in the car's systems.

IMPORTANT

If this symbol is shown then the oil pressure may be too low. Stop the car as quickly as possible and have the car recovered to a workshop – an authorised Volvo workshop is recommended.

Fill the engine oil



Filler pipe[12],[13]

In some cases, oil may need to be topped up between service intervals. No action with regard to engine oil level needs to be taken until a message is shown in the driver display.

WARNING

If the Engine oil level Service required message is shown, visit a workshop – an authorised Volvo workshop is recommended. The oil level may be too high.

WARNING

Do not spill oil onto the hot exhaust manifold due to the risk of fire.

IMPORTANT

If the Engine oil level low Refill 1 litre message is shown, fill only with the specified volume, e.g. 1 litre (1 quart).

Coolant

The coolant ensures that surplus heat is distributed in the circuit, e.g. in order to heat the starter battery or provide heat for the passenger compartment.

Only coolant approved by Volvo should be used in order to prevent impairment of the cooling system, engine problems, etc.

Prescribed grade: Ready-mixed coolant approved by Volvo. If concentrated coolant is used, mix with 50% water (of approved water quality, not salt water, etc.). Consult a Volvo dealer if unsure.

Only coolant approved by Volvo should be used in order to prevent impairment of the cooling system, engine problems, etc.

WARNING

Swallowing coolant is hazardous, it may cause damage to organs (kidneys). The product contains ethylene glycol, inhibitor, water, etc.

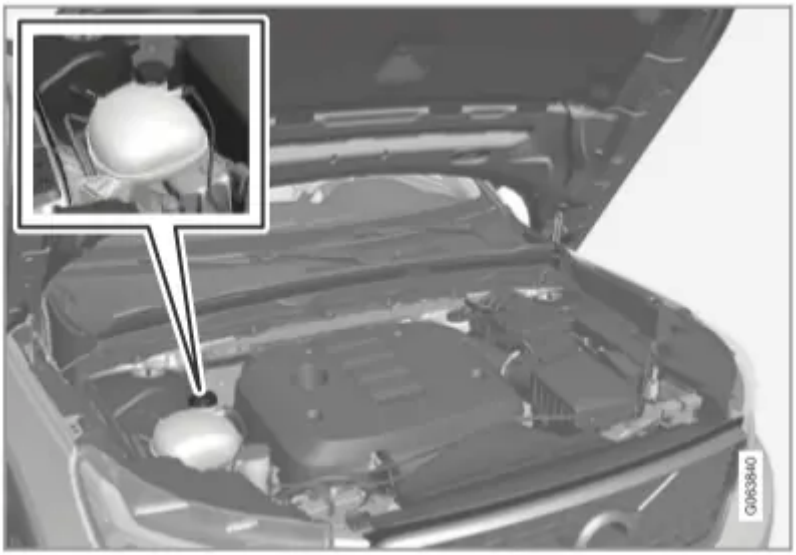
Topping up coolant

When topping up the coolant, follow the instructions on the packaging. Never top up with water only. The risk of freezing increases with both too little and too much coolant concentrate.

If there is coolant under the car, if there is coolant smoke, or if more than 2 litres (approx. 2 quarts) have been filled, always call for recovery to avoid the risk of engine damage due to a defective cooling system when attempting to start the car.

WARNING

The coolant may be very hot. Never open the cap when the coolant is hot. If a top-up is required, unscrew the expansion tank cap slowly to allow any overpressure to disappear.



Coolant expansion tank

– Screw off the cap and top up with coolant if necessary. The coolant level must not exceed the MAX mark outside the expansion tank.

IMPORTANT

- Harmful if ingested. May cause organ (kidney) damage.
- Use ready-mixed coolant as recommended by Volvo. If concentrated liquid is used, make sure that the ratio is 50 % coolant to 50 % water of an approved quality.

• Do not mix different coolants.

• Only new coolant should be used when replacing major cooling system components to ensure the system has sufficient corrosion protection.

• The engine must only be run with a well-filled cooling system. Otherwise, temperatures that are too high may occur resulting in the risk of damage (cracks) in the cylinder head.

• A high content of chlorine, chlorides and other salts may cause corrosion in the cooling system.

Starter battery

The starter battery is used to start up the electrical system and drive electrical equipment in the car. The hybrid battery is used when the internal combustion engine is started.

The electrical system is single-pole and uses the chassis and engine casing as a conductor.

The starter battery is a 12 V AGM battery (Absorbed Glass Mat), designed for regenerative charging, and to support the functionality of the car's different systems.

The service life and function of the starter battery is influenced by factors such as the number of starts, discharging, driving style, driving conditions, climatic conditions etc.

• Never disconnect the starter battery when the engine is running.

• Check that the cables to the starter battery are correctly connected and properly tightened.

WARNING

• The battery can generate oxyhydrogen gas, which is highly explosive. A spark can be formed if a jump lead is connected incorrectly, and this can be enough for the battery to explode.

• Do not connect the jump leads to any fuel system component or any moving part. Be careful of hot engine parts.

• The battery contains sulphuric acid, which can cause serious burns.

• If sulphuric acid comes into contact with eyes, skin or clothing, flush with large quantities of water. If acid splashes into the eyes - seek medical attention immediately.

• Never smoke near the battery.

The service life and capacity of the starter battery

The service life of the battery is affected by several factors, including factors such as the number of starts, discharging, driving style, driving conditions, climatic conditions, etc. Battery starting capacity decreases gradually with time and therefore needs to be recharged if the car is not used for a long time or when it is only driven short distances. Extreme cold further limits starting capacity. If the starter battery is discharged a large number of times, it will negatively affect the service life.

In order to maintain the starter battery in good condition, it is recommended that there is at least 15 minutes driving/week or that the battery is connected to a battery charger with automatic trickle charging. A starter battery that is kept fully charged has a maximum service life.

Location

The starter battery is located in the cargo area.

WARNING

If the starter battery is disconnected, the automatic opening and closing function must be reset to work properly. A reset must take place for pinch protection to work.

IMPORTANT

On certain models, the battery is attached with a retaining strap. Make sure the retaining strap is properly tightened.

Specifications for starter battery

Battery type	H7 AGM
Voltage (V)	12
Cold start capacity A- CCA B(A)	800
Size, L×B×H	315×175×190 mm (12.4×6.9×7.5 inches)
Capacity (Ah)	80

A According to EN standard.

B Cold Cranking Amperes.

Volvo recommends entrusting battery replacement to an authorised Volvo workshop.

IMPORTANT

If the battery is replaced, make sure you replace it with a battery with the same size, cold starting capacity and type as the original battery (see the decal on the battery).

Hybrid battery

The car is equipped with a hybrid battery for electric motor operation - a maintenance-free rechargeable Lithium-ion type battery.

NOTE

The car cannot be started if the hybrid battery is discharged.

If both the starter battery and the hybrid battery are discharged then both batteries must be charged. In such a case, charging only the hybrid battery is not possible. In order for the hybrid battery to be charged, the starter battery must have a certain state of charge.

WARNING

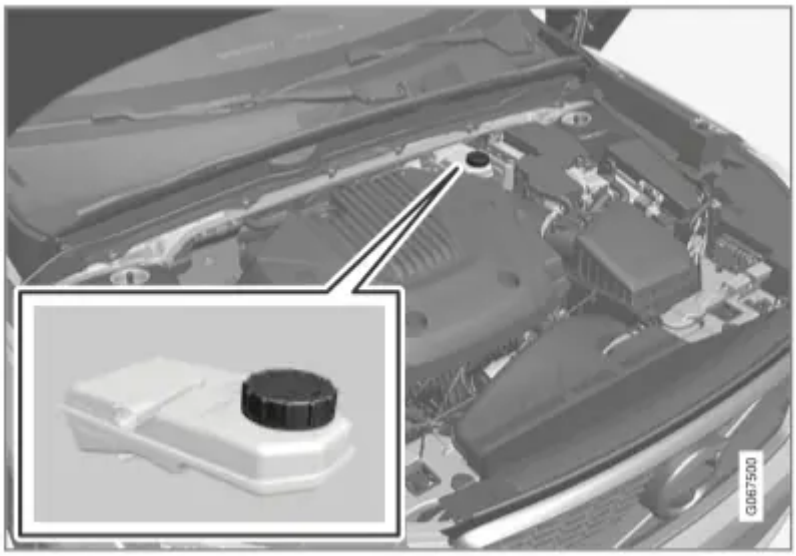
The hybrid battery must only be replaced by a workshop - an authorised Volvo workshop is recommended.

The service life and capacity of the hybrid battery

The capacity of the hybrid battery diminishes with age and use, which may result in increased use of the internal combustion engine and, as a consequence, reduced fuel economy and reduced range during electric operation.

Coolant

The hybrid battery's cooling system has a separate expansion tank.



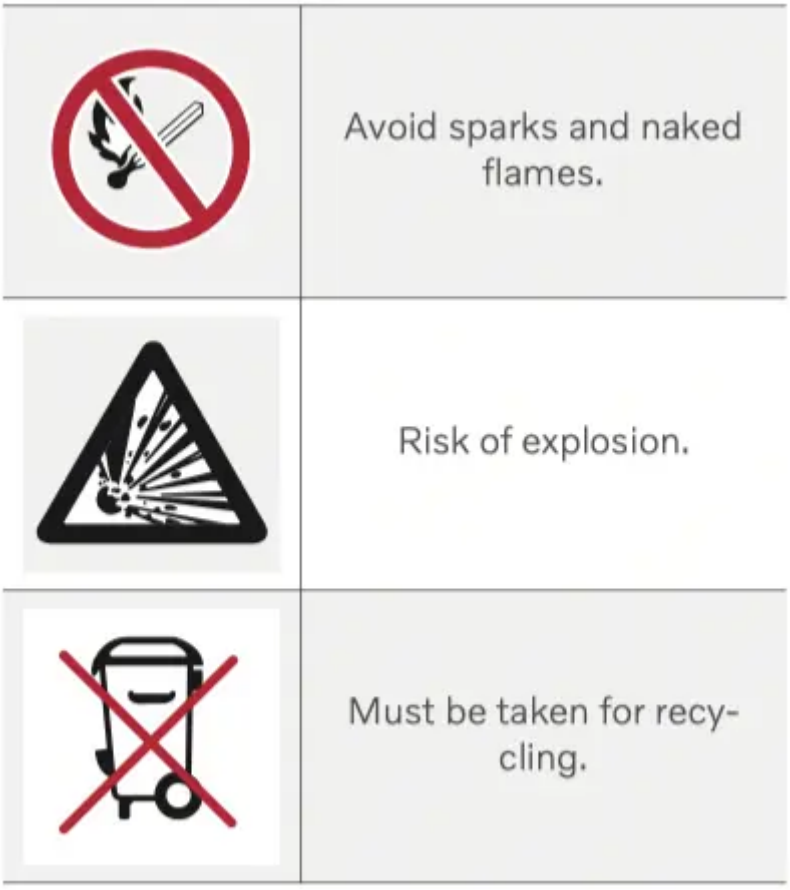
IMPORTANT

The hybrid battery's coolant must only be topped up by a workshop - an authorised Volvo workshop is recommended.

Symbols on the batteries

There are information and warning symbols on the batteries.

	Use protective goggles.
	Further information in the owner's manual for the car.
	Store the battery out of the reach of children.
	The battery contains corrosive acid.



Battery recycle

A used starter battery must be recycled in an environmentally sound manner.

Consult a workshop in the event of uncertainty about how this type of waste should be discarded - an authorised Volvo workshop is recommended.

Fuses and central electrical units

All electrical functions and components are protected by a number of fuses in order to protect the car's electrical system from damage by short circuiting or overloading.

WARNING

Never use a foreign object or a fuse with an amperage higher than that specified when replacing a fuse. This could cause significant damage to the electrical system and possibly lead to fire.

WARNING

Orange-coloured cables must only be handled by qualified personnel.

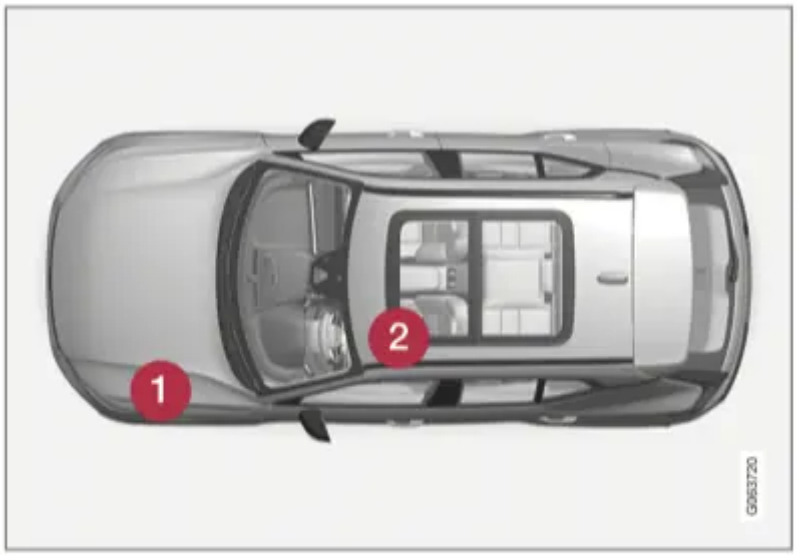
WARNING

Several components in the car work with high-voltage current that could be dangerous in the event of incorrect intervention.

Do not touch anything that is not clearly described in the owner's manual for the car.

If an electrical component or function does not work, it may be because the component's fuse was temporarily overloaded and failed. If the same fuse fails repeatedly then there is a fault in the circuit. Volvo recommends contacting an authorised Volvo workshop for checking.

Location of central electrical units



1 Engine compartment

2 Under the left-hand front seat

Replacing a fuse

All electrical functions and components are protected by a number of fuses in order to protect the car's electrical system from damage by short circuiting or overloading.

1. Look in the fuse diagram to locate the fuse.
2. Pull out the fuse and check from the side to see whether the curved wire has blown.
3. If this is the case, replace it with a new fuse of the same colour and amperage.

WARNING

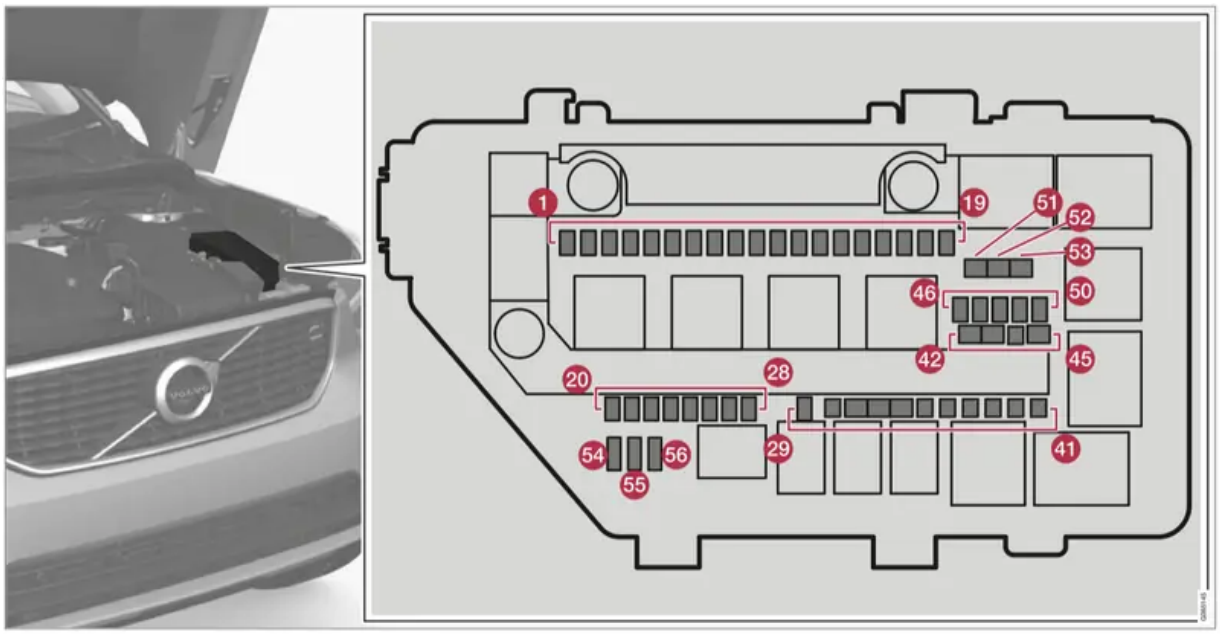
Never use a foreign object or a fuse with an amperage higher than that specified when replacing a fuse. This could cause significant damage to the electrical system and possibly lead to fire.

WARNING

Contact an authorised Volvo workshop about the fuses not mentioned in the owner's manual. If replacing the fuse is not performed correctly, it can cause serious damage to the electrical systems.

Fuses in engine compartment

Fuses in the engine compartment protect engine and brake functions, amongst other things.



On the inside of the cover there are tweezers that facilitate the procedure for the removal and fitting of fuses.

The fuse box also provides space for several spare fuses.

Positions

On the inside of the cover is a label that shows the location of the fuses.

	Function	Ampere	Type
1	USB port, tunnel console, rear*	5	Micro
	Double USB ports, tunnel console, rear*	7,5	Micro
2	12 V socket in tunnel console, front	15	Micro
3	–	–	Micro
4	12 V socket in cargo area*	15	Micro
5	Engine Control Module (ECM)	20	Micro
6	Ignition coils; Spark plugs	15	Micro
7	Solenoids (petrol); Valve; Thermostat for engine cooling system (petrol); EGR cooling pump (diesel); Glow control module (diesel) Engine Control Module (ECM)	15	Micro
8	Solenoids (petrol); Valve; Thermostat for engine cooling system (petrol); Cooling pump for EGR (diesel); Glow control module (diesel); Vacuum regulators; Valve; Valve for output pulse (diesel) Valves for cooling[A]	10 15[A]	Micro
9	Lambda probe, centre (petrol); Lambda probe, rear (diesel)	15	Micro
10	Sensor for nitrous oxides (diesel); Engine Control Module (ECM)	15	Micro
11	Coolant pump	20	Micro

	Function	Ampere	Type
12	Right-hand headlamp	20	Micro
13	Left-hand headlamp	20	Micro
14	Airbags	5	Micro
15	Accelerator pedal sensor	5	Micro
16	Supplied when the ignition is switched on: Engine control module; Transmission components; Electric steering servo; Central electronic module; Control module for brake system	5	Micro
17	Exterior audio module OBD-II firewall	5	Micro
18	Alcohol lock*	5	Micro
19	–	–	Micro
20	Internal relay coils	5	Micro
21	–	–	Micro
22	Sensor for brake pedal	5	Micro
23	Calculation unit	5	Micro
24	Control module for actuator for engagement/change of automatic gearbox gear positions	5	Micro
	Hydraulic clutch control unit	25	Micro
25	Transmission control module	15	Micro
	Hydraulic clutch control unit	25	Micro

	Function	Ampere	Type
26	Engine Control Module (ECM)	5	Micro
27	Charging unit (OBC)	5	Micro
28	High voltage battery; Inverter generator	5	Micro
29	Horn	20	Micro
30	Siren*	5	Micro
31	Windscreen wipers	30	MCase
32	Control module for brake system (valves, parking brake)	40	MCase
33	Control unit for brake system (ABS pump)	40	MCase
34	Brake booster	40	MCase
35	Actuator for transmission	30	MCase
36	Actuator for transmission	30	MCase
37	–	–	–
38	Right-hand headlamp; Left-hand headlamp	30	MCase
39	–	–	MCase
40	Start relay	30	MCase
41	Towbar control module*	25	MCase
42	Towbar control module*	40	MCase

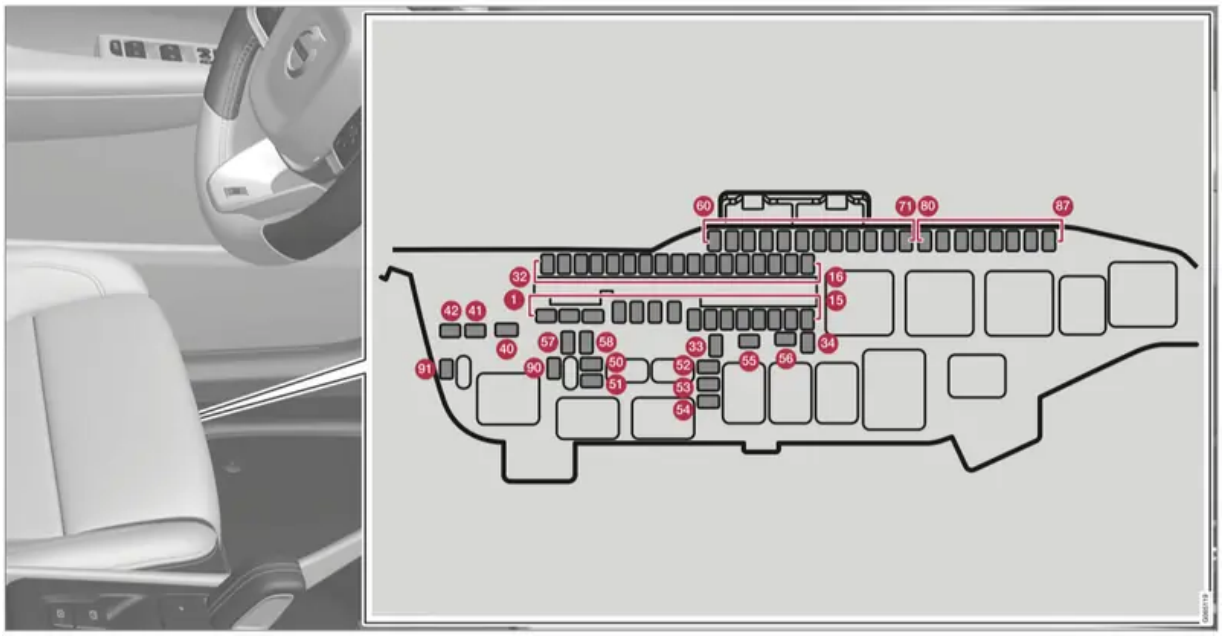
	Function	Ampere	Type
43	–	–	MCase[B]
44	Power driver seat*	20	MCase[B]
45	–	–	MCase[B]
46	–	–	Micro
47	Air conditioning	5	Micro
48	High voltage battery; Inverter generator	5	Micro
49	Shut-off valve for the hybrid battery's coolant; Coolant pump 1 for hybrid battery	15	Micro
50	Coolant pump for electric drive system	15	Micro
51	Fuel filter heater (diesel)	30	MCase[B]
52	Heated windscreen* right-hand side	40	MCase[B]
53	Heated windscreen* left-hand side	40	MCase[B]
54	Control function for support battery	5	Micro
55	Left-hand headlamp	20	Micro
56	Right-hand headlamp	20	Micro

A - Applies to petrol engines, generation 3 (VEP4_G3).

B- This type of fuse should be replaced by a workshop. An authorised Volvo workshop is recommended.

Fuses under the left-hand front seat

Fuses under the left-hand front seat protect, amongst other things, electrical sockets, displays and door modules.



	Function	Ampere	Type
1	Audio control device (amplifier)[A]	40	MCase[B]
2	Central Electric Module A: Sensors, radar units, power seats*	40	MCase[B]
3	Central Electric Module B: Sensors, radar units, power seats*	40	MCase[B]
4	Fan module for climate control system, front	40	MCase[B]
5	Power operated tailgate*	25	MCase[B]
6	Power seat*, right	20	MCase[B]
7	Parking heater*	25	MCase[B]
8	Control module for reduction of nitrous oxides (diesel)	30	MCase[B]
9	Door module in right-hand rear door	20	Micro
10	Door module in left-hand rear door	20	Micro
11	Door module in left-hand front door	20	Micro
12	–	–	Micro
13	Door module in right-hand front door	20	Micro
14	Seat heating, rear*	15	Micro
15	The fuel tank's insulation valve; Intermediate voltage module	5	Micro
16	Calculation module	5	Micro
17	Sun sensor	5	Micro

	Function	Ampere	Type
18	Steering lock	7.5	Micro
19	Control module for climate control system	7.5	Micro
20	Interior movement detectors*	5	Micro
21	Driver display	5	Micro
22	Keypad in centre console	5	Micro
23	Steering wheel module	5	Micro
24	Module for start knob; Electronic shifting module; Electronic parking brake	5	Micro
25	Centre display	5	Micro
26	Control module for online car; Control module for Volvo On Call	5	Micro
27	Module for multi-band antenna	5	Micro
28	Relay coils	5	Micro
29	Module for detecting foot movement* (for opening the power operated tailgate)	5	Micro
30	Sensus control module TV*[C]	15	Micro
31	Diagnostic socket OBDII	10	Micro
32	Alcohol lock*	5	Micro
33	Lock motor for head restraint on rear left-hand side	15	Micro

	Function	Ampere	Type
34	Lock motor for head restraint on rear right-hand side	15	Micro
40	Rear window defroster	30	MCase[B]
41	Seatbelt pretensioner module, left-hand side	40	MCase[B]
42	Seatbelt pretensioner module, right-hand side	40	MCase[B]
50	Humidity sensor	5	Micro
51	Control module for fuel pump	20	Micro
52	Coolant pump	7.5	Micro
53	Steering wheel module for heated steering wheel*	15	Micro
54	Air humidity sensor Electric additional heater	5	Micro
55	Headlamp washers*	25	MCase[B]
56	Windscreen and rear window washers	25	MCase[B]
57	–	–	MCase[B]
58	–	–	MCase[B]
59	–	–	Micro
60	–	–	Micro
61	–	–	Micro

	Function	Ampere	Type
62	–	–	Micro
63	Seatbelt pretensioner module	5	Micro
64	Blind Spot Information (BLIS)*: control module, exterior reversing sound	5	Micro
65	–	–	Micro
66	–	–	Micro
67	All Wheel Drive (AWD) control module*	15	Micro
68	–	–	Micro
69	Parking camera*	5	Micro
70	–	–	Micro
71	Control module for airbags and seatbelt tensioners	5	Micro
80	Rear window wiper	15	Micro
81	Roof console for panoramic roof*	20	Micro
82	–	–	Micro
83	Interior lighting; Dimming of interior rearview mirror*; Rain and light sensor*; Control panels in rear doors and cargo area	7.5	Micro
84	–	–	Micro
85	Control module for driver support functions	5	Micro
86	Alcohol lock*	5	Micro

	Function	Ampere	Type
87	Wireless mobile charger*; USB port	5	Micro
90	–	–	Micro
91	–	–	Micro

A - Applicable to certain variants.

B - This type of fuse should be replaced by a workshop. An authorised Volvo workshop is recommended.

C - Applies to certain markets.

Bulb replacement

Lamp types vary depending on model and equipment level. If a bulb 14 breaks, it can be replaced according to the method described in the Owner's Manual.

If a fault occurs in LED 15 lamps, the entire lamp unit usually must be replaced.

NOTE

For information about bulbs not covered in this Owner's Manual, contact a Volvo dealer or an authorised Volvo workshop.

WARNING

The car's electrical system must be in ignition position 0 when replacing bulbs.

IMPORTANT

Never touch the glass part of the bulbs with your fingers. Grease from your fingers is vaporised by the heat, coating the reflector and then causing damage.

NOTE

If an error message remains after the broken bulb has been replaced then we recommend visiting an authorised Volvo workshop.

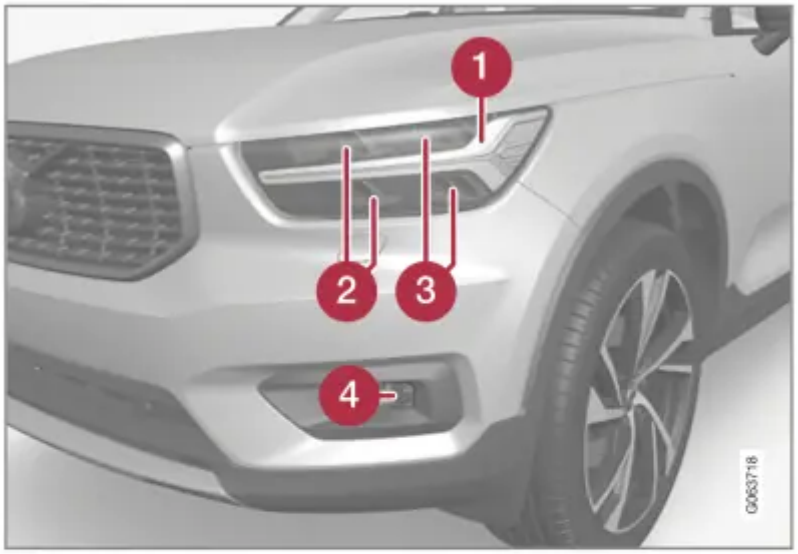
NOTE

Outside lighting such as headlamps and rear lamps may temporarily have condensation on the inside of the lens. This is normal, all exterior lighting is designed to withstand this. Condensation is normally vented out of the lamp housing when the lamp has been switched on for a time.

Exterior lamp positions

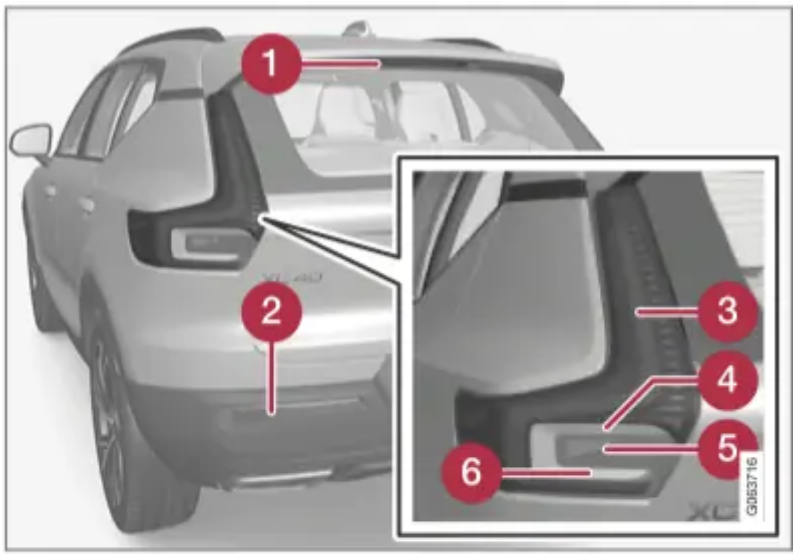
The exterior lighting of the car uses a number of different lamps. An LED 16 type lamp must be replaced by a workshop. An authorised Volvo workshop is recommended.

Lamps, front



1. Daytime running lights/position lamps/ direction indicators (LED)
2. Main beam (LED)
3. Dipped beam (LED)
4. Front fog lamps/cornering lights* (LED)

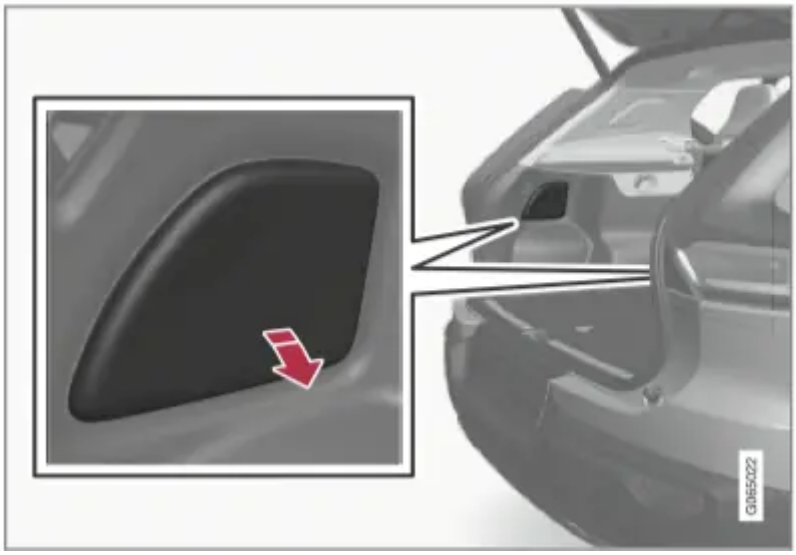
Lamps, rear



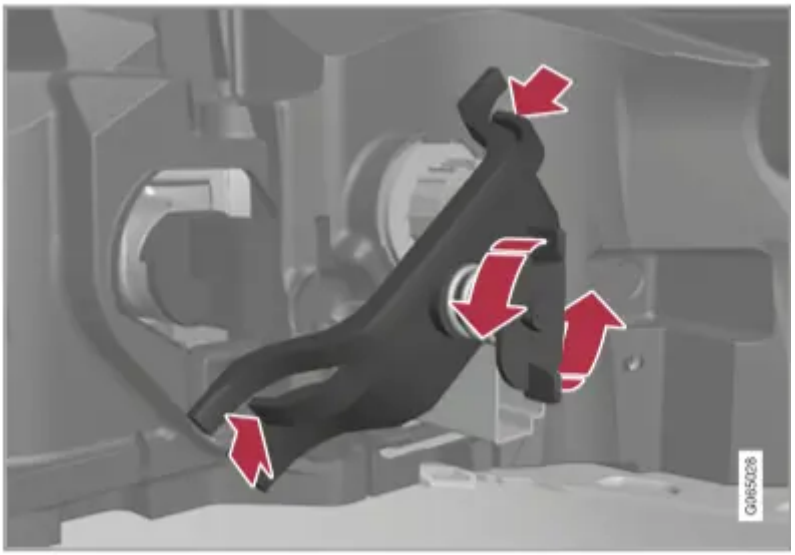
1. Brake light - central, high-level (LED)
2. Fog lamp
3. Position lamps (LED)
4. Direction indicators
5. Brake lights
6. Reversing lamps (LED)

Replacing the rear direction indicator bulb

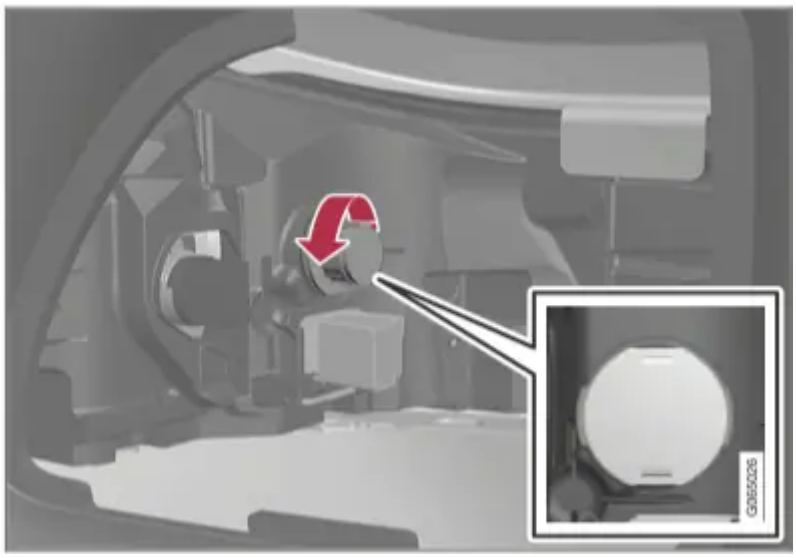
Bulbs for rear direction indicators are located behind the panel in the side of the cargo area.



1. Press in the panel hatch at the upper edge to detach it.
2. Move the insulation aside to access the supporting bridge.



3. Unscrew and remove the spring bolt anticlockwise, press the clips into the sides and remove the supporting bridge. It is easiest to allow the screw to remain in the supporting bridge.



4. Undo the grey bulb holder by turning it anticlockwise and pulling it out.

5. Remove the bulb by pressing it in and turning anticlockwise.

6. Fit a new bulb by pressing it in and turning it clockwise.

7. Attach the bulb holder by turning it clockwise.

8. Fit the supporting bridge with associated spring bolt and make sure that the clips align in the correct position. Tighten the spring bolt until it stops, max. 2 Nm (1.5 ft lbs).

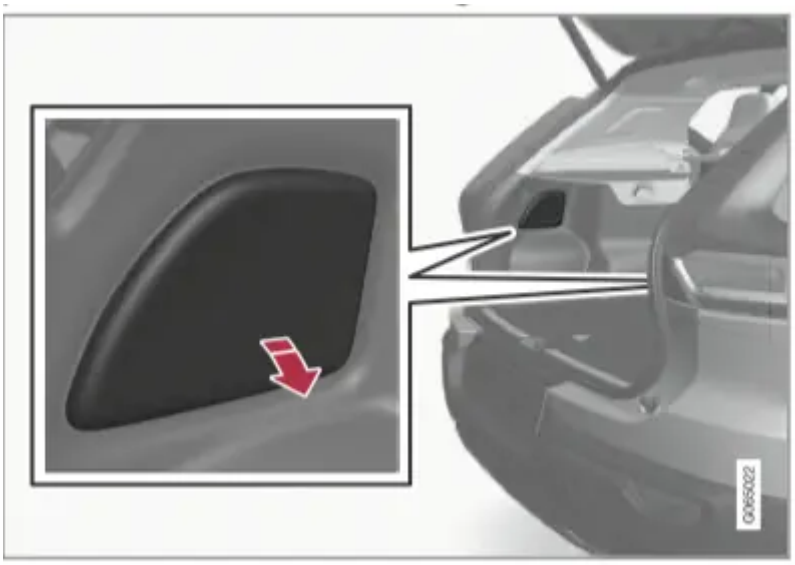
9. Move back the insulation and then hook in the panel and press it back into place.

IMPORTANT

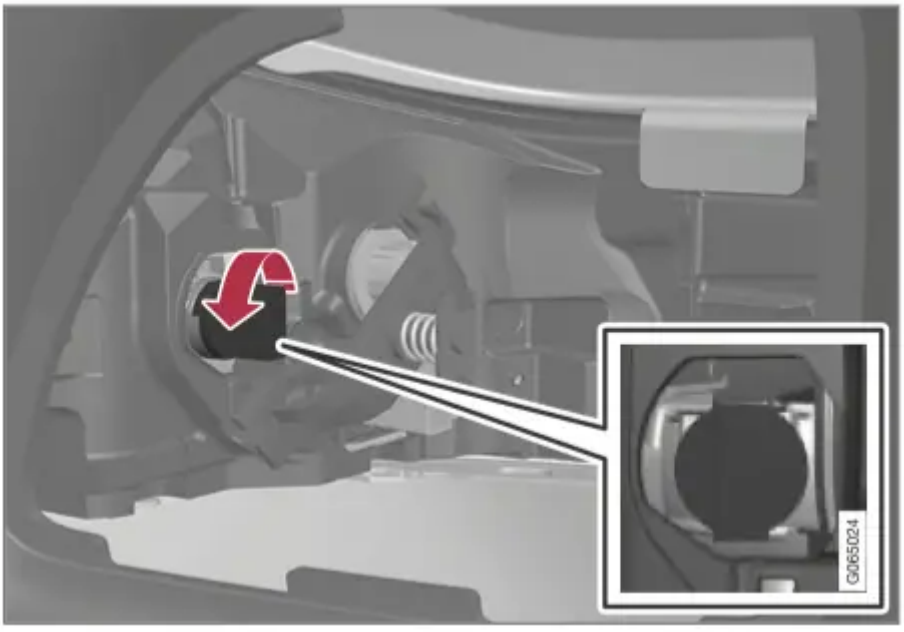
Never touch the glass part of the bulbs with your fingers. Grease from your fingers is vaporised by the heat, coating the reflector and then causing damage.

Changing brake light bulb

Bulbs for brake lights are located behind the panel in the side of the cargo area.



1. Press in the panel hatch at the upper edge to detach it.
2. Move the insulation aside to access the brake light bulb.



3. Undo the black bulb holder by turning it anticlockwise and pulling it out.
4. Remove the bulb by pressing it in and turning anticlockwise.
5. Fit a new bulb by pressing it in and turning it clockwise.
6. Attach the bulb holder by turning it clockwise.
7. Move back the insulation and then hook in the panel and press it back into place.

IMPORTANT

Never touch the glass part of the bulbs with your fingers. Grease from your fingers is vaporised by the heat, coating the reflector and then causing damage.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.
