VÄLKOMMEN!

We trust that you will enjoy many years of safe driving in your Volvo, an automobile designed with your safety and comfort in mind.

This printed supplement is a complement to the owner’s manual available in the center display. It additionally includes specifications, tire pressures and fuses as well as a summary of other important and practical information. To help get the most from your Volvo, we urge you to familiarize yourself with this supplement and the instructions and maintenance information in the owner’s manual. The owner’s manual can also be found in a mobile app (Volvo manual) and on Volvo Car’s support site at support.volvocars.com.

We also urge you and your passengers to wear seat belts at all times in this (or any other) vehicle. And, of course, please do not operate a vehicle if you may be affected by alcohol, medication or any impairment that could hinder your ability to drive.

Your Volvo is designed to meet all applicable federal safety and emission standards. If you have any questions regarding your vehicle, please contact your Volvo retailer or see the article "Contacting Volvo" for information on getting in touch with Volvo in the United States and Canada.
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INTRODUCTION
Contacting Volvo
Use the following contact information if you would like to get in touch with Volvo in the United States or Canada.

In the USA:
Volvo Car USA, LLC
Customer Care Center
1 Volvo Drive,
P.O. Box 914
Rockleigh, New Jersey 07647
1-800-458-1552
www.volvocars.com/us

In Canada:
Volvo Car Canada Ltd.
Customer Care Centre
9130 Leslie Street, Suite 101
Richmond Hill, Ontario L4B 0B9
1-800-663-8255
www.volvocars.com/ca

Volvo Roadside Assistance
Your new Volvo comes with a four year Volvo Roadside Assistance program.

Additional information, features, and benefits of this program are described in a separate information package in your glove compartment.

If you require assistance, dial:
In the U.S. 1-800-638-6586 (1-800-63-VOLVO)
In Canada 1-800-263-0475

Additional information about your vehicle
Volvo Cars’ website and support site provide additional information about your vehicle.

Support on the Internet
Go to support.volvocars.com to visit the site, which is available in most markets.

The information on the support site is searchable and is grouped into different categories. It includes support for e.g., Internet-based services and functions, Volvo On Call, the navigation system and apps. Video and step-by-step instructions explain various procedures such as how to connect the vehicle to the Internet via a cell phone.

Downloadable information
Maps
Sensus Navigation system maps can be downloaded from the support site.

Mobile apps
Beginning with model year 2014, the owner’s manual is available in the form of an app for certain Volvo models. The Volvo On Call app can also be found here.
Owner's manuals for earlier model Volvos
Owner's manuals for earlier model Volvos are available in PDF format. Quick Guides and supplements can also be found on the support site. Select a model and a model year and download the desired information.

Contact
Contact information for customer support and the nearest Volvo retailer are available on the site.

Related information
- Using the owner's manual (p. 42)
- On-board digital owner's manual (p. 44)
- Volvo ID (p. 21)

Volvo and the environment
Volvo is committed to the well-being of its customers. As a natural part of this commitment, we care about the environment in which we all live. Concern for the environment means an everyday involvement in reducing our environmental impact.

Volvo's environmental activities are based on a holistic view, which means we consider the overall environmental impact of a product throughout its complete life cycle. In this context, design, production, product use, and recycling are all important considerations. In production, Volvo has partly or completely phased out several chemicals including CFCs, lead chromates, asbestos, and cadmium; and reduced the number of chemicals used in our plants 50% since 1991.

Volvo was the first in the world to introduce into production a three-way catalytic converter with a Lambda sensor, now called the heated oxygen sensor, in 1976. The current version of this highly efficient system reduces emissions of harmful substances (CO, HC, NOx) from the exhaust pipe by approximately 95 – 99% and the search to eliminate the remaining emissions continues.

Volvo is the only automobile manufacturer to offer CFC-free retrofit kits for the air conditioning system of all models as far back as the 1975 model 240. Advanced electronic engine controls and cleaner fuels are bringing us closer to our goal. In addition to continuous environmental refinement of conventional gasoline-powered internal combustion engines, Volvo is actively looking at advanced technology alternative-fuel vehicles.

When you drive a Volvo, you become our partner in the work to lessen the car’s impact on the environment. To reduce your vehicle's environmental impact, you can:
- Maintain proper air pressure in your tires. Tests have shown decreased fuel economy with improperly inflated tires.
- Follow the recommended maintenance schedule in your Warranty and Service Records Information booklet.
- Drive at a constant speed whenever possible.
- See a trained and qualified Volvo service technician as soon as possible for inspection if the check engine (malfunction indicator) light illuminates, or stays on after the vehicle has started.
- Properly dispose of any vehicle-related waste such as used motor oil, used batteries, brake pads, etc.
- When cleaning your vehicle, please use genuine Volvo car care products. All Volvo car care products are formulated to be environmentally friendly.
**Owner's manual and the environment**

The wood pulp in Volvo's printed owner's information comes from FSC® (Forest Stewardship Council®) certified forests and other responsible sources.

![FSC® Logo]

The symbol above indicates that the wood pulp is FSC® certified.

**Related information**
- Volvo and the environment (p. 9)

**IntelliSafe—driver support**

IntelliSafe is Volvo's philosophy regarding vehicle safety. It encompasses a number of systems, both standard and optional, that are designed to help make driving and traveling in a Volvo safer.

**Support**

Systems that help make driving safer are an integral part of IntelliSafe. These include optional features such as Adaptive Cruise Control* that helps maintain a set distance to a vehicle ahead, Park Assist Pilot*, which assists in parking the vehicle, Cross Traffic Alert*, Blind Spot Information*, etc.

**Accident prevention**

Systems such as City Safety are designed to automatically apply the brakes in situations in which the driver does not have time to react. Lane Keeping Aid* alerts the driver if the vehicle inadvertently crosses a lane's/road's side marker line.

**Protection**

The vehicle is equipped with e.g., seat belt pretensioners that pull the seat belts taut in critical situations when there is a collision risk and numerous airbags designed to help provide cushioning if certain types of collisions should occur.

**Related information**
- Airbag system (p. 59)
- Seat belts (p. 54)

* Option/accessory.
Sensus
Sensus is the core of your personal Volvo experience and provides information, entertainment and features that make owning your vehicle easier.

This is Sensus

Sensus provides an intelligent interface and Internet-connected service with an intuitive navigation structure that offers access to relevant information when it is needed, with minimal distractions.

Sensus also includes all of your vehicle’s solutions relating to entertainment, connecting to the Internet, navigation and the user interface between the driver and the vehicle. Sensus makes communication between you, the vehicle and the digital world around you possible.
Information when it’s needed, where it’s needed

Information is presented in different displays depending on how it should be prioritized (generic illustration).

**Head-up-display**

The head-up-display presents types of information that the driver should be aware of immediately, such as traffic warnings, speed information and navigation. Road sign information and incoming phone calls are also displayed here. The head-up display is controlled from the right-side steering wheel keypad and the center display.

**Instrument panel**

12" instrument panel

* Option/accessory.
The instrument panel displays information such as speed, an incoming phone call or the track that is currently playing. It is controlled using both steering wheel keypads.

**Center display**

Many of the vehicle's main functions are controlled from the center display, a touchscreen that reacts to taps or other gestures. The number of physical buttons is thereby minimized. The screen can be operated with or without gloves.

The center display is used to control e.g., the climate and infotainment systems and to adjust the power seats*. The information shown here can be dealt with by the driver or the front seat passenger.

**Voice control system**

The voice control system enables the driver to operate certain vehicle functions without removing his/her hands from the steering wheel and it understands natural speech. Use voice commands to e.g., play a track on the infotainment system, make a phone call, raise the passenger compartment temperature or to read a text message.

For additional information about all of the functions/system, see the respective articles in the on-board owner's manual or the printed supplement.

**Related information**

- Using the center display (p. 38)
- Center display overview (p. 22)
- Navigating in the center display's views (p. 32)
INTRODUCTION

**Owner’s manual in mobile devices**

Owner’s information mobile app\(^1\) can be downloaded from the App Store and Google Play and is adapted for both cell phones and tablets. These apps also contain videos and interior/exterior hotspot views of the vehicle that you can click on for additional information.

This QR code will take you directly to the app or you can search for “Volvo manual” in the App Store or Google Play.

The mobile app is available at the App Store and Google Play.

**Options, accessories and the On-board Diagnostic (OBDII) socket**

We strongly recommend that Volvo owners install only genuine, Volvo-approved accessories, and that accessory installations be performed only by a trained and qualified Volvo service technician.

Optional or accessory equipment described in this manual is indicated by an asterisk.

Optional or accessory equipment may not be available in all countries or markets. Please note that some vehicles may be equipped differently, depending on special legal requirements.

Contact your Volvo retailer for additional information.

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\(^1\) Certain models and mobile devices
NOTE

- Do not export your Volvo to another country before investigating that country’s applicable safety and exhaust emission requirements. In some cases it may be difficult or impossible to comply with these requirements. Modifications to the emission control system(s) may render your Volvo not certifiable for legal operation in the U.S., Canada and other countries.
- All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. Please note that some vehicles may be equipped differently, depending on market-specific adaptations or special legal requirements. Optional equipment described in this manual may not be available in all markets.
- Some of the illustrations shown are generic and are intended as examples only, and may not depict the exact model for which this owner’s information is intended.
- Volvo reserves the right to make model and product changes at any time, or to change specifications or design without notice and without incurring obligation.

WARNING

If your vehicle is involved in an accident, unseen damage may affect its drivability and safety.

WARNING

CALIFORNIA proposition 65

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the state of California to cause cancer, and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm.

WARNING

Certain components of this vehicle such as air bag modules, seat belt pretensioners, adaptive steering columns, and button cell batteries may contain Perchlorate material. Special handling may apply for service or vehicle end of life disposal. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

- Genuine Volvo accessories are tested to ensure compatibility with the performance, safety, and emission systems in your vehicle.

Additionally, a trained and qualified Volvo service technician knows where accessories may and may not be safely installed in your Volvo. In all cases, please consult a trained and qualified Volvo service technician before installing any accessory in or on your vehicle.
- Accessories that have not been approved by Volvo may or may not be specifically tested for compatibility with your vehicle. Additionally, an inexperienced installer may not be familiar with some of your car’s systems.
- Any of your car’s performance and safety systems could be adversely affected if you install accessories that Volvo has not tested, or if you allow accessories to be installed by someone unfamiliar with your vehicle.
- Damage caused by unapproved or improperly installed accessories may not be covered by your new vehicle warranty. See your Warranty and Service Records Information booklet for more warranty information. Volvo assumes no responsibility for death, injury, or expenses that may result from the installation of non-genuine accessories.
INTRODUCTION

Connecting equipment to the On-board Diagnostic (OBDII) socket

**WARNING**
Volvo Cars takes no responsibility for the consequences of connecting non-authorized equipment to the On-board Diagnostic (OBDII) socket. This socket should only be used by a trained and qualified Volvo service technician.

(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

**WARNING**
Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

The diagnostic socket OBDII under the dashboard on the driver's side

Type approval

**USA**
FCC ID: 2AGKKACUII-06
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

**Canada**
IC: 20839-ACUII06
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Finding owner's information
Owner's information is available in several different formats in both digital and printed form. The owner's manual is available on the vehicle's center display, as a mobile app and on Volvo's support website.

There is also a Quick Guide in the glove compartment as well as a printed supplement to the owner's manual containing information about e.g., fuses, specifications, etc. A complete printed owner's manual can also be ordered.
The vehicle's center display

In the center display, pull down Top view and tap Owner's manual. This gives you access to visual navigation with exterior and interior images of the vehicle. The information is searchable and is divided into categories.

Mobile app

In App Store or Google Play, search for "Volvo Manual." Download the app to a smartphone or tablet and select a vehicle model. The app contains instructive videos and offers visual navigation, including interior and exterior images of the vehicle. Navigation between the various articles in the owner's manual is designed to provide easy access to the information and the information is searchable.

Volvo Cars' support site

Go to support.volvocars.com and select your country. Owner's manuals are available here online and in PDF format. Volvo Cars' support site also contains instructional videos and additional information about your vehicle and owning a Volvo.

Printed owner's information

The glove compartment contains a printed supplement to the owner's manual containing information about fuses and specifications as well as a summary of other important and practical information.

A printed Quick Guide can also be found in the glove compartment containing useful information about the most commonly used features and functions in your vehicle.

Other printed owner's information may also be found in the vehicle, depending on options and/or accessories that the vehicle is equipped with.

A complete printed version of the owner's information (or a new owner's manual supplement) can be ordered through a Volvo retailer.

NOTE

If the content of the digital information in the center display and the printed information differ, the printed information always has precedence.

WARNING

The driver is always responsible for operating the vehicle in a safe manner and adhering to current laws and traffic regulations.

It is also important that the vehicle be operated, maintained and serviced according to Volvo's recommendations/instructions in the owner's manual.

Changing the language used in the vehicle's center display

Changing languages in the center display could mean that some of the owner's information provided may not comply with national or local statutes and regulations. Changing to a language that you do not understand may also make it difficult to change back to the original language.

Related information

- Owner's manual in mobile devices (p. 14)
- Navigating in the digital owner's manual (p. 45)
- On-board digital owner's manual (p. 44)
- Navigating in the digital owner's manual (p. 45)
- Using the owner's manual (p. 42)
- Additional information about your vehicle (p. 8)
INTRODUCTION

Driver distraction
Please keep the following warnings in mind when operating/servicing your vehicle.

A driver has a responsibility to do everything possible to ensure his or her own safety and the safety of passengers in the vehicle and others sharing the roadway. Avoiding distractions is part of that responsibility.

Driver distraction results from driver activities that are not directly related to controlling the vehicle in the driving environment. Your new Volvo is, or can be, equipped with many feature-rich entertainment and communication systems. These include hands-free cellular telephones, navigation systems, and multipurpose audio systems. You may also own other portable electronic devices for your own convenience. When used properly and safely, they enrich the driving experience. Improperly used, any of these could cause a distraction.

For all of these systems, we want to provide the following warning that reflects the strong Volvo concern for your safety. Never use these devices or any feature of your vehicle in a way that distracts you from the task of driving safely. Distraction can lead to a serious accident. In addition to this general warning, we offer the following guidance regarding specific newer features that may be found in your vehicle:

**WARNING**

- Never use a hand-held cellular telephone while driving. Some jurisdictions prohibit cellular telephone use by a driver while the vehicle is moving.
- If your vehicle is equipped with a navigation system, set and make changes to your travel itinerary only with the vehicle parked.
- Never program your audio system while the vehicle is moving. Program radio presets with the vehicle parked, and use your programmed presets to make radio use quicker and simpler.
- Never use portable computers or personal digital assistants while the vehicle is moving.

Accessory installation

- We strongly recommend that Volvo owners install only genuine, Volvo-approved accessories, and that accessory installations be performed only by a trained and qualified Volvo service technician.
- Genuine Volvo accessories are tested to ensure compatibility with the performance, safety, and emission systems in your vehicle. Additionally, a trained and qualified Volvo service technician knows where accessories may and may not be safely installed in your Volvo. In all cases, please consult a trained and qualified Volvo service technician before installing any accessory in or on your vehicle.
- Accessories that have not been approved by Volvo may or may not be specifically tested for compatibility with your vehicle. Additionally, an inexperienced installer may not be familiar with some of your car's systems.
- Any of your car's performance and safety systems could be adversely affected if you install accessories that Volvo has not tested, or if you allow accessories to be installed by someone unfamiliar with your vehicle.
- Damage caused by unapproved or improperly installed accessories may not be covered by your new vehicle warranty. See your Warranty and Service Records Information booklet for more warranty information. Volvo assumes no responsibility for death, injury, or expenses that may result from the installation of non-genuine accessories.
**WARNING**

The driver is always responsible for operating the vehicle in a safe manner and for complying with current statutes and regulations.

It is also essential to maintain and service the vehicle according to Volvo's recommendations as stated in the owner's information and the service and warranty booklet.

If the on-board information differs from the printed owner's manual, the printed information always takes precedence.

**Volvo Structural Parts Statement**

Volvo has always been and continues to be a leader in automotive safety.

Volvo engineers and manufactures vehicles designed to help protect vehicle occupants in the event of a collision.

Volvos are designed to absorb the impact of a collision. This energy absorption system including, but not limited to, structural components such as bumper reinforcement bars, bumper energy absorbers, frames, rails, fender aprons, A-pillars, B-pillars and body panels must work together to maintain cabin integrity and protect the vehicle occupants.

The supplemental restraint system including but not limited to air bags, side curtain air bags, and deployment sensors work together with the above components to provide proper timing for air bag deployment.

Due to the above, Volvo Car USA does not support the use of aftermarket, alternative or anything other than original Volvo parts for collision repair.

Volvo Car USA also recommends using Volvo-approved replacement glass. The use of aftermarket glass, particularly a windshield, can have an adverse effect on collision avoidance and advanced lighting systems.

In addition Volvo does not support the use or reuse of structural components from an existing vehicle that has been previously damaged. Although these parts may appear equivalent, it is difficult to tell if the parts have been previously replaced with non-OE parts or if the part has been damaged as a result of a prior collision. The quality of these used parts may also have been affected due to environmental exposure.

**Related information**

- Crash event data (p. 20)
- Contacting Volvo (p. 8)
INTRODUCTION

Crash event data
This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle’s systems performed.

The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and the EDR never registers who is driving the vehicle or the location of a crash or a near-crash-like situation. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation. To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed.

Furthermore, your vehicle is equipped with a number of computers whose task is to continuously control and monitor the vehicle’s operation. They can also register some of this information during normal driving conditions, most importantly if they detect a fault relating to the vehicle’s operation and functionality or upon activation of the vehicle’s active safety systems (e.g. City Safety and the auto-brake function). Some of the registered information is required by technicians when carrying out service and maintenance to enable them to diagnose and rectify any faults that have occurred in the vehicle and to enable Volvo to fulfill legal and other regulatory requirements. Information thus registered in the vehicle is registered in the vehicle’s computers until the vehicle is serviced or repaired. In addition to the above, the registered information may – on an aggregated basis – be used for research and product development purposes in order to continuously improve the safety and quality of Volvo vehicles.

For additional information, contact:

In the United States
Volvo Car USA, LLC
Customer Care Center
1 Volvo Drive, P.O. box 914
Rockleigh, New Jersey 07647
1-800-458-1552
www.volvocars.com/us

In Canada
Volvo Car Canada Ltd.
Customer Care Centre
9130 Leslie Street
Richmond Hill, Ontario L4B 0B9
1-800-663-8255
www.volvocars.com/ca
**Volvo ID**
A Volvo ID can be used to access a number of online services.

**Creating a Volvo ID**
A Volvo ID can be created in two ways:

**Using the Volvo ID app**
1. If you have not already done so, download the Volvo ID app from the Download Center.
2. Start the app and register a personal email address.
3. Follow the instructions that will be sent automatically to this email address.
   > A Volvo ID has now been created and has been automatically registered to the vehicle. The Volvo ID services available can now be used.

**Using the Volvo On Call app**
1. Download the latest version of the Volvo On Call app to your cell phone from e.g., the App Store, Windows Phone or Google Play.
2. Start the app and create a Volvo ID on the start page.
3. Register a personal email address and then follow the instructions that will be sent automatically to this address.

**Registering your Volvo ID to the vehicle**
If your Volvo ID was created using the Volvo On Call mobile app, the ID has to be registered to the vehicle:

1. With the vehicle connected to the Internet, download the Volvo ID app from the Download Center in the center display's App view. See also the article "Downloading, updating and uninstalling apps."
2. Start the app and enter your Volvo ID.
3. Follow the instructions that will be sent automatically to the email address linked to your Volvo ID.
   > Your Volvo ID is now registered to the vehicle and the Volvo ID services available can be used.

**Advantages of having a Volvo ID**
- Only one user name and password are required to access online services.
- If you change a user name or password for one of the online service (e.g., Volvo On Call), it/they will also be automatically changed for the other services.

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2 These services vary and may be subject to change. Consult your Volvo retailer.
Center display overview

Many of the vehicle's functions are controlled from the center display.

Three of the center display's basic views. Swipe to the right/left to access the Function/App view (generic illustration)
Function view: vehicle functions can be activated/deactivated by tapping. Certain functions are called "trigger functions", which open settings windows, e.g., Camera and parking functions. Settings for the head-up display* are also started from Function view but the actual interaction is controlled from the steering wheel keypad buttons and the instrument panel.

Home view: the initial view shown when the center display is started.

App (Application) view: shows apps that have been downloaded (third-party apps) as well as ones for integrated functions such as FM radio. Tap an icon to open the app.

Status bar: vehicle activities are shown at the top of the screen. Network/connection information is shown on the left side of the bar. Media-related information, the clock and information about background activities are shown to the right.

Top view: pull down the tab to open Top view. From here, you can access Settings, Owner's manual and stored messages.

Navigation: leads to map navigation. Tap the sub-view to expand it.

Media: the most recently used media-related apps. Tap the sub-view to expand it.

Phone: used to access phone-related functions. Tap the sub-view to expand it.

The extra sub-view: the most recently used apps/vehicle functions that do not belong in any of the other sub-views are listed here. Tap the sub-view to expand it.

Climate bar: information and direct access to settings such as temperature, seat heating* and blower speed. Tap the symbol at the center of the Climate bar to open Climate view for additional settings.

Related information
- Using the center display (p. 38)
**Changing center display settings**
The center display activates automatically when the driver's door is opened. Settings can be made for e.g., sounds, background and themes.

**Turning off or changing the volume of center display sounds**
System sounds in the center display can be turned off or their volume can be changed:
1. Tap **Settings** in the center display's Top view.
2. Tap **Sound ➔ System Volumes**.
3. Pull the control under **Screen Touch** to the desired level to change volume or turn off the sound for tapping the screen or **Keypad Touch**.

**Changing the screen's appearance (theme)**
1. Tap **Settings** in the center display's Top view.
2. Tap **My Car ➔ Displays ➔ Display Themes**.
3. Select a theme, e.g., **Minimalistic** or **Chrome Rings**.

In addition, the settings: **Normal** and **Bright** can also be selected. For **Normal**, the screen's background is dark and the text is light. This is the default setting. If **Bright** is selected, the background will be light and the text will be dark, which can increase readability in strong ambient lighting.

These alternatives are always available and do not shift automatically according to changes in ambient lighting.

**Related information**
- Using the center display (p. 38)
- Sensus (p. 11)
Using the center display keyboard
A keyboard can be used on the center display to enter characters and search for e.g., destinations using the navigation system, adding contacts in phone book, etc. It is also possible to use handwriting on the screen.

Entering text using the keyboard
The keyboard will only appear at the bottom of the center display in situations when it is possible to write on the screen.

NOTE
The keyboard cannot be used if the vehicle is moving.
INTRODUCTION

Field for possible search hits. The word changes as new letters are added. Scroll in the list using the left/right arrows. Tap a word to select it. The keyboard may not support all language selections, in which case this line on the screen will not be displayed.

The characters that can be entered are language-dependent (see point 7). Tap a character to enter it.
Several buttons (depending on the context for which the keyboard is being used) will be displayed here. In certain cases, it can be used to enter @ (for an email address) or to start a new line.

Press to hide the keyboard. In cases where this is not possible, the button will not be displayed.

Tap once to enter one uppercase letter. Double-tap for Caps lock (tap again to return to lowercase letters). Letters entered after the !, , and ? characters will automatically be uppercase. The first letter in the text field or in text fields intended for names, addresses or company names will also automatically be uppercase. The first letter in text fields intended for passwords, web addresses or email addresses will automatically be lowercase unless upper case is chosen.

Press to display the numbers that can be entered. When numbers are displayed, tap ABC to resume entering text or to enter special characters.

Tap to change the keyboard language (in this example, English is the selected language). The characters available will change according to the selected language (2). This button will only be displayed if several keyboard languages have been selected (see the section "Changing keyboard languages" below). Press and hold to display a list of possible languages and tap a language to use it. To add keyboard languages, see the heading "Changing keyboard languages" below.

Tap to enter blank spaces.

Tap to erase one character at a time.

Tap to enable handwriting. See the section "Handwritten text" below.

Press to display the numbers that can be entered. When numbers are displayed, tap ABC to resume entering text or to enter special characters.

Changing keyboard languages
In order to change keyboard languages, they must first be selected under Settings.

The keyboard language can be changed without changing the language used for the other systems/menus in the vehicle.

1. Pull down the center display's Top view and tap Settings.
2. Tap System ➔ Keyboard Layouts.
3. Select and one or more of the languages in the list.
   > This makes it possible to change the keyboard layout and characters available depending on the language(s) selected.

When more than one language has been selected, this button (7) will appear on the keyboard.

To shift between keyboard languages by displaying the list of available languages:

1. Press and hold the button (7).
   > A list will be displayed.
2. Tap the desired language. If more than four languages have been selected in Settings, scroll in the list.
   > The keyboard layout and characters available will change to the selected language.

To shift between keyboard languages without displaying the list of available languages:

– Tap the button (7).
   > The keyboard will switch to the next language in the list (without displaying the list itself).
INTRODUCTION

**Special characters**

To enter language-specific characters such as é or ê (if available):

1. Press and hold a character key.
   > A box with available characters will open.
2. Tap the desired character. If none of the special characters is selected, the key's initial character will be entered.

**Handwritten text**

Tap button (10), see the overview illustration above, to enter the handwriting mode.

---

**Entering characters**

1. Enter a handwritten character (1) using a fingertip or by holding e.g., a pen near the screen.
   > Several character suggestions will appear (3). The most likely character will be at the top of the list.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not touch the screen with sharp objects because this could cause scratches.</td>
</tr>
</tbody>
</table>

2. Continue entering characters.
   > If no other choice is made, the character at the top of the list will be used. Tap one of the other characters in the list to use it instead.

---

1. Area for entering characters.
2. Text box where the characters entered in area (1) appear.
3. Suggested characters. Scroll in the list if necessary.
5. Tap to erase one character at a time.
6. Tap to return to the standard keyboard.
7. Press to hide the keyboard. In cases where this is not possible, the button will not be displayed.
8. Tap to change the keyboard language.
Erasing/changing handwritten characters

Erase a character by swiping over the handwriting area (1)

Characters can be erased/changed in several ways:

- Tap the desired character in the list (3).
- Tap button (5) to erase the character and start again.
- Sweep horizontally from right to left over the handwriting area (1). Erase several characters by swiping over the area several times.
- Tap the "x" in the text box (2) to delete all characters.

New lines

Create a new line by drawing above the characters as shown in the illustration

Blank spaces

Add a blank space by swiping from left to right

Related information

- Using the center display (p. 38)
- Center display overview (p. 22)
- Navigating in the center display's views (p. 32)
**Function view buttons**

The Function view, which is one of the center display's basic views, contains all of the vehicle's on-screen function buttons. From the Home view, swipe from left to right on the screen to come to the Function view.

<table>
<thead>
<tr>
<th>Type of button</th>
<th>Functions</th>
<th>Vehicle function affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function buttons</td>
<td>Have On/Off modes. An LED indicator light to the left of the button's icon will illuminate when a function is active. Press the button to turn the function on or off.</td>
<td>Most of the buttons in the function view are function buttons.</td>
</tr>
<tr>
<td>Start buttons</td>
<td>Do not have On/Off modes. Pressing a start button opens a function's window, e.g., a window for adjusting the driver's seat.</td>
<td>• Camera. • Headrest fold. • Functions for folding down a seat. • Head-up display adjustments.</td>
</tr>
<tr>
<td>Parking buttons</td>
<td>Have On/Off and scanning modes. Similar to function buttons but have an additional parking scanning mode.</td>
<td>• Park In. • Park Out.</td>
</tr>
</tbody>
</table>

**Button modes**

A function is activated (on) when the LED indicator is green. A function is deactivated (off) when the LED indicator is off.
The yellow triangle indicates that the function is not working correctly

**Related information**
- Center display overview (p. 22)
- Navigating in the center display’s views (p. 32)
Navigating in the center display's views

There are 5 different basic views in the center display: Home view, Top view, Climate view, App view and Function view. The display is activated automatically when the driver's door is opened.

Home view
Home view is displayed when the screen is activated. It consists of four sub-views: Navigation, Media, Phone and an extra sub-view. The extra sub-view contains the most recently used app/vehicle function that is not related to the other three sub-views. For example, if the most recently used app/vehicle function is a music app, the Media sub-view will be displayed.

The sub-views display brief information about the respective apps.

The first time the vehicle is started, some of the Home view's sub-views will not contain any information.

NOTE
In Home view's standard mode (reached by pressing the Home button briefly), an animation explaining how to access the different views will be shown on the screen.

NOTE
When the vehicle is moving:
- Some functions (using the center display keyboard, etc.) may be disabled.
- Certain texts (e.g., those generated by apps) will be truncated to three lines. Tap the Read out button to have the entire text read aloud.
- Text messages will be truncated to one line. Tap the Read out button to have the entire text read aloud.
Expanding a sub-view from the standard view

Standard view and an expanded sub-view in the center display
Expanding a sub-view:
- To expand sub-view one, two or three: tap the screen anywhere in the sub-view. When a sub-view is expanded, the Home view’s fourth sub-view will temporarily not be displayed. The other two views will be minimized and will only show limited information. Tapping the fourth sub-view will minimize the other three sub-views and they will only show limited information.

Expanding a sub-view provides access the respective apps’ basic functions.

Closing an expanded sub-view:
- A sub-view can be closed in three different ways:
  - Tap the upper section of the expanded sub-view.
  - Tap one of the other sub-views (which will then open in expanded view).
  - Press the Home button below the center display briefly.

Opening/closing a sub-view in full-screen mode
The extra sub-view and the Navigation sub-view can be opened in full-screen mode to show additional information and possible settings.

Status bar
Current vehicle activities are shown in the status bar at the top of the screen. Network and connection information is shown to the left. Brief information about currently running apps and the clock are shown to the right.

Top view
The top view has a tab at the center of the status bar. Pull down (expand) the Top view by swiping the tab downward.
To leave (minimize) Top view, tap the screen outside of this view or tap at the bottom of Top view and swipe upward. The views behind will become visible again. Top view is not available when the ignition is being started/switched off or when a message is displayed on the screen.

**Going to Top view from an app**
To pull down Top view when an app is running (e.g., FM radio):

- Tap **FM Radio Settings** to display these settings.
- Tap **Owner's manual** to open an article related to the specific app.

**This applies only to your vehicle’s factory-installed apps.** This is not possible for third-party apps that have been downloaded.

**Climate view**
The climate bar, where the most common climate system settings can be made, is located at the bottom of the screen and is always visible.

- Tap the symbol at the center of the climate bar to open Climate view for access to additional climate system settings.
- Tap the symbol to close Climate view and return to a previous view.

**App view**

App view (generic illustration)

- Swipe the screen from right to left to access App view from Home view. This displays factory-installed apps such as **FM** as well as any apps that have been downloaded. Brief information will be displayed for certain apps, for example missed phone calls, etc.
- Tap an app to open it.

**Function view**

When applicable, swipe downward to scroll in the list of apps (depending on the number of apps currently running).

To move an app, press and hold it. It will become slightly bigger and transparent and can then be dragged to the desired position and released.

Return to Home view by swiping the screen from left to right or by pressing the Home button.
INTRODUCTION

Swipe the screen from left to right to access Function view from Home view. From Function view, you can activate/deactivate various vehicle functions such as Drive Modes, Speed Sign Assist and Park Assist.

When applicable, swipe upward to scroll in the list of functions (depending on the number of functions).

Activate/deactivate a function by tapping its button. Certain functions will open in their own windows.

To move a function button, press and hold it. It will become slightly smaller and transparent and can then be dragged to the desired position and released.

Related information
- Using the center display (p. 38)
- Center display overview (p. 22)
Symbols in the center display status bar
The following table provides an overview of the symbols used in the center display's status bar.

The status bar shows current vehicle activities and in certain cases, also their status. Due to limited space in the status bar, not all symbols will be displayed at all times.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>📡</td>
<td>Roaming activated.</td>
</tr>
<tr>
<td>📡</td>
<td>Cell phone network signal strength.</td>
</tr>
<tr>
<td>📡</td>
<td>Bluetooth device connected.</td>
</tr>
<tr>
<td>📡</td>
<td>Bluetooth activated but no device connected.</td>
</tr>
<tr>
<td>📡</td>
<td>Connected to a Wi-Fi network.</td>
</tr>
<tr>
<td>📡</td>
<td>Tethering activated. (Wi-Fi hotspot).</td>
</tr>
<tr>
<td>📡</td>
<td>Vehicle modem activated.</td>
</tr>
<tr>
<td>📡</td>
<td>Action in progress.</td>
</tr>
<tr>
<td>📡</td>
<td>Preconditioning timer active (hybrid models only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧</td>
<td>Audio source being played.</td>
</tr>
<tr>
<td>🎧</td>
<td>Audio source paused.</td>
</tr>
<tr>
<td>🗳️</td>
<td>Phone call in progress.</td>
</tr>
<tr>
<td>🎧</td>
<td>Audio source muted.</td>
</tr>
<tr>
<td>NEWS</td>
<td>News broadcasts from current radio station(^a).</td>
</tr>
<tr>
<td>TP</td>
<td>Traffic information being received(^a).</td>
</tr>
<tr>
<td>15:45</td>
<td>Clock.</td>
</tr>
</tbody>
</table>

\(^a\) Not available in all markets.

Related information
- Navigating in the center display's views (p. 32)

Changing settings in different types of apps
App view, which is one of the center display's basic views, contains all of the vehicle's apps (applications/programs). Access this view by swiping the screen from right to left.

Basic apps
A number of apps are standard and are part of Volvo Sensus, such as FM Radio, USB and CD.

To change settings in a basic app:
1. Open the app, for example Phone, either on the home screen or full-screen from App view.
2. Pull down Top view.
3. Tap Phone settings.
4. Change the desired settings and confirm.
5. Press the Home button, tap the screen outside of Top view or pull Top view up.

Third-party apps
Third party apps have to be selected and downloaded. In these apps, setting are made from within the app, not from Top view.
Using the center display
Many of the vehicle’s functions can be controlled and settings can be made from the screen in the center console, referred to in this owner’s information as the center display, which is a touchscreen.

Using the center display’s touchscreen functionality
Two people can interact with the screen at the same time, e.g., to adjust the temperature for the driver and passenger sides.

The screen reacts differently depending on whether the user taps, drags or swipes on the screen. This makes it possible to move between views, mark objects, scroll in lists and move apps by touching the screen in various ways. The following table lists the gestures that can be used on the screen:

An infrared film on the screen enables it to react if a finger is directly in front of the screen (but not actually touching it). This makes it possible to use the screen while wearing gloves.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Gesture</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap once.</td>
<td>Marks an object, confirms a selection or activates a function.</td>
<td></td>
</tr>
<tr>
<td>Double-tap.</td>
<td>Zooms in on an object such as a map.</td>
<td></td>
</tr>
<tr>
<td>Press and hold.</td>
<td>&quot;Grabs&quot; an object so that it can be dragged. Press and hold on the screen and drag the object to the desired position.</td>
<td></td>
</tr>
<tr>
<td>Tap with two fingers.</td>
<td>Zooms out from an object such as a map.</td>
<td></td>
</tr>
</tbody>
</table>

⚠️ CAUTION
Do not touch the screen with sharp objects because this could cause scratches.
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Gesture</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drag</td>
<td>Moves between screen views, scrolls in a list, text or a view. Press and hold to drag apps or objects in a list.</td>
<td></td>
</tr>
<tr>
<td>Swipe</td>
<td>Moves between screen views, scrolls in a list, text or a view</td>
<td></td>
</tr>
<tr>
<td>Stretch</td>
<td>Zooms in.</td>
<td></td>
</tr>
<tr>
<td>Pinch</td>
<td>Zooms out.</td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

Turning off and reactivating the center display

When the center display is turned off, the screen goes dark to avoid disturbing the driver. However, the climate bar remains visible and apps or other functions connected to the display remain active.

1. Press and hold the Home button below the screen.
   > The screen will go dark. However, the climate bar remains visible and apps or other functions connected to the display remain active. The screen can also be cleaned while it is turned off.

2. Reactivate by pressing the Home button briefly.
   > The view that was displayed when the screen was turned off will be displayed again.

   **NOTE**
   - The display cannot be turned off while a message requiring action is on the screen.
   - The display turns off automatically when the ignition is switched off and the driver’s door is opened.

   Returning to Home view
   1. Press the Home button briefly.
      > The most recent Home view mode will be displayed.
   2. Press again briefly.
      > All of the Home view’s sub-views will return to standard mode.

   **NOTE**
   From Home view’s standard mode, press the Home button to start animated on-screen instructions describing how to display the various views.

Moving apps and vehicle function buttons

Apps and function buttons can be moved and organized in their respective views.

1. Press and hold an app/button.
   > The app/button will change size and become transparent. It can then be moved.

2. Drag the app/button to an available position in the view.

   A maximum of 48 lines can be utilized for placing apps/buttons. To move an app/button outside of the visible view, drag it to the bottom of the view. A new line will then be added where the app/button can be placed (this line may not be visible). Swipe the screen to scroll up or down in the view to display information that may be outside of the view.

Scrolling in lists, articles or views

A scroll indicator on the screen shows that it is possible to scroll up or down in the view. Press the indicator and move it up or down or swipe up or down anywhere in the view.
Using center display controls

Digital controls are available for many of the vehicle’s functions. For example, to set the temperature:

- Drag the control to the desired temperature
- Tap +/− to raise or lower the temperature incrementally, or
- Tap the desired temperature on the control

**Related information**

- Navigating in the center display’s views (p. 32)

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3 Generic illustration. The temperature in your vehicle may be set to degrees Fahrenheit.
Using the owner's manual
Reading your owner's manual is a good way of familiarizing yourself with the features and systems in your vehicle.

On-board owner's manual
Reading the owner's manual is a good way to become familiar with your vehicle and to learn to utilize the features and functions that it offers. Pay particular attention to the warnings provided.

Volvo reserves the right to make model changes at any time, or to change specifications or design without notice and without incurring obligation.
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Printed owner's information
We advise keeping printed owner's information in the vehicle for quick access to necessary information and how to contact Volvo if help is required.

Illustrations
Some of the illustrations and images used in your owner's information may be generic and are intended to provide a general view or an example of a certain feature or function. The features or functions in the illustrations may differ slightly from the equipment in your vehicle depending on the level of instrumentation or market.

Options and accessories
Optional or accessory equipment described in this manual is indicated by an asterisk.
Optional or accessory equipment may not be available in all countries or markets. Please note that some vehicles may be equipped differently, depending on special legal requirements.
Contact your Volvo retailer for additional information.

Footnotes
Certain pages of this manual contain information in the form of footnotes at the bottom of the page. This information supplements the text that the footnote number refers to (a letter is used if the footnote refers to text in a table).

Messages
There are several displays in the vehicle that show messages generated by various systems and functions in the vehicle. The appearance of these texts differs slightly from normal texts (for example: Phone, Accept).

Decals
There are various types of decals in the vehicle whose purpose is to provide important information in a clear and concise way. The importance of these decals is explained as follows, in descending order of importance.

Risk of injury
Black ISO symbols on a yellow warning background, white text/image on a black background. Decals of this type are used to indicate potential danger. Ignoring a warning of this type could result in serious injury or death.
White ISO symbols and white text/image on a black background. These decals provide general information.

### NOTE
The decals shown in the Owner’s Manual are examples only and are not intended to be reproductions of the decals actually used in the vehicle. The purpose is to give an indication of how they look and their approximate location in the vehicle. The applicable information for your particular vehicle can be found on the respective decals in the vehicle.

### Types of lists

#### Procedures
Procedures (step-by-step instructions), or actions that must be carried out in a certain order, are arranged in numbered lists in this manual.

1. If there is a series of illustrations associated with step-by-step instructions, each step in the procedure is numbered in the same way as the corresponding illustration.

A. Lists in which letters are used can be found with series of illustrations in cases where the order in which the instructions are carried out is not important.

A. Arrows with or without numbers are used to indicate the direction of a movement.

A. Arrows containing letters are used to indicate movement.

If there are no illustrations associated with a step-by-step list, the steps in the procedure are indicated by ordinary numbers.

#### Position lists

1. Red circles containing a number are used in general overview illustrations in which certain components are pointed out. The corresponding number is also used in the position list’s description of the various components.

#### Bullet lists

Bullets are used to differentiate a number of components/functions/points of information that can be listed in random order.

For example:

- Coolant
- Engine oil

#### Related information

Related information offers references to articles containing information associated with the information that you are currently reading.

### Continues on next page

This symbol can be found at the lower right corner to indicate that the current topic continues on the following page.
On-board digital owner's manual
When printed owner's information refers to digital owner's information, this is the on-board information available in the vehicle's center display.

The digital on-board owner's manual is accessed from the center display's Top view.

There are a number of ways to find information in the digital owner's manual, which can be accessed from the manual's top menu by tapping .

NOTE
The on-board owner's information cannot be accessed while the vehicle is moving.

Symbols and their descriptions

- Takes you to the owner's information start page.
- All articles sorted by category. An article may be listed in several categories.
- A selection of useful articles about the most commonly used functions in the vehicle.
Symbols and their descriptions

Exterior/interior views of the vehicle in which certain areas/components are highlighted as hotspots. Tap a hotspot to come to a relevant article.

This offers access to a list of articles that have been saved as favorites. Tap an article to read it in its entirety.

Symbols and their descriptions

Leads to short instructional videos for various vehicle functions.

This offers information about the current version of the owner's information in your vehicle and other useful information.

Related information

- Navigating in the digital owner's manual (p. 45)

Navigating in the digital owner's manual

The digital on-board owner's manual is accessed from the center display. The contents are searchable and it is easy to navigate among the various sections.

Opening the digital owner's information

To open the digital owner's information, pull down the center display's Top view and tap **Owner's manual**.

There are several ways of finding information.

To access the owner's manual's menu, tap **in the upper bar.**
**Searching using categories**

The articles in the owner’s manual are structured in main and sub-categories. The same article may appear in several pertinent categories in order to make them easier to find.

1. Tap ⬤ followed by Categories.
   > The main categories will be listed.
2. Tap a main category (确认)
   > A list of sub-categories and ( ) and articles (退出) will be displayed.
3. Tap an article to open it. Tap the left arrow to go back.

**Interior and exterior hotspots**

Exterior and interior views of the vehicle where certain components are pointed out are called hotspots.

1. Tap ⬤ followed by Exterior/Interior.
   > Exterior/interior views will be displayed with hotspots, which lead to relevant articles. Swipe the screen horizontally to scroll among the views.
2. Tap a hotspot.
   > The title of a relevant article will be displayed.
3. Tap the title to open the article. Tap the left arrow to go back or ⬤ to begin a new search.

**Quick Guide**

The heading Quick Guide in the owner’s manual’s menu leads to a selection of articles that may be helpful in familiarizing you with your vehicle’s most common features and functions. These articles can also be found through categories but have been gathered here for quick access. Tap an article to read it in its entirety.

**Favorites**

This is a list of articles that have been saved as favorites. Tap an article to read it in its entirety.

**Saving/deleting favorites**

Save an article as a favorite by tapping the star ( ) at the upper right when an article is open. The star symbol will be filled in ( ) when its article has been saved as a favorite.

To delete a favorite, tap its star again.

**Video**

Tap for short instructional videos for various vehicle functions.

**Information**

Tap the symbol for information about the current version of the owner’s information in your vehicle and other useful information.

**Start page**

Tap the symbol to come to the owner’s information start page.
Using the search function
1. Tap the magnifying glass icon (Q) in the owner's manual's upper menu. A keyboard will appear at the bottom of the screen.
2. Enter a word, e.g., "seat belt." > Suggested articles will be displayed as more characters are entered.
3. Confirm by tapping the article. To leave search mode tap the up-arrow next to the search box.

Related information
• On-board digital owner's manual (p. 44)

Glass

Laminated glass
The windshield and panoramic roof* are made of laminated glass, which is reinforced to help prevent break-ins and to provide additional soundproofing. Laminated glass is optional for the other side windows.

Technician certification
In addition to Volvo factory training, Volvo supports certification by the National Institute for Automotive Service Excellence (A.S.E.).

Certified technicians have demonstrated a high degree of competence in specific areas. Besides passing exams, each technician must also have worked in the field for two or more years before a certificate is issued. These professional technicians are best able to analyze vehicle problems and perform the necessary maintenance procedures to keep your Volvo at peak operating condition.

4 This symbol is not shown on the windshield or panoramic roof.
General safety information

The vehicle is equipped with a number of safety systems for the driver and passengers.

In the event of an accident, there are a number of sensors in the vehicle that react and trigger safety systems such as Roll Stability Control, airbags, seat belt pretensioners, etc., depending on the severity of the collision. There are also mechanical systems such as the Whiplash Protection System.

Warning symbol in the instrument panel

The warning symbol in the instrument panel illuminates when the ignition is in mode II or higher. It will go out after approx. 6 seconds if no faults are detected in the airbag system.

If the dedicated warning symbol is not functioning, the general warning symbol will illuminate instead and the same message will be displayed in the instrument panel.

Related information

- Safety during pregnancy (p. 52)
- Seat belts (p. 54)
- Airbag system (p. 59)
- Safety mode (p. 67)
- Whiplash protection system (p. 53)
- Child safety (p. 69)

WARNING

- If the SRS warning light stays on after the engine has started or if it illuminates while you are driving, have the vehicle inspected by a trained and qualified Volvo service technician as soon as possible.

- Never try to repair any component or part of the SRS yourself. Any interference in the system could cause malfunction and serious injury. All work on these systems should be performed by a trained and qualified Volvo service technician.

Occupant safety

Safety is Volvo’s cornerstone.

Volvo’s concern for safety

Our concern for safety dates back to 1927 when the first Volvo rolled off the production line. Three-point seat belts (a Volvo invention), safety cages, and energy-absorbing impact zones were designed into Volvo vehicles long before it was fashionable or required by government regulation.

We will not compromise our commitment to safety. We continue to seek out new safety features and to refine those already in our vehicles. You can help. We would appreciate hearing your suggestions about improving automobile safety.

We also want to know if you ever have a safety concern with your vehicle. Call us in the U.S. at: 1-800-458-1552 or in Canada at: 1-800-663-8255.
Occupant safety reminders
How safely you drive doesn’t depend on how old you are but rather on:

- How well you see.
- Your ability to concentrate.
- How quickly you make decisions under stress to avoid an accident.

The following suggestions are intended to help you cope with the ever changing traffic environment.

- Never drink and drive.
- If you are taking any medication, consult your physician about its potential effects on your driving abilities.
- Take a driver-retraining course.
- Have your eyes checked regularly.
- Keep your windshield and headlights clean.
- Replace wiper blades when they start to leave streaks.
- Take into account the traffic, road, and weather conditions, particularly with regard to stopping distance.
- Never send text messages while driving.
- Refrain from using or minimize the use of a cell phone while driving.

Related information

- Recall information (p. 52)
- Reporting safety defects (p. 51)

Reporting safety defects
The following information will help you report any perceived safety-related defects in your vehicle.

Reporting safety defects in the U.S.
If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Volvo Car USA, LLC. If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your retailer, or Volvo Car USA, LLC. To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153) or write to: NHTSA, U.S. Department of Transportation, Washington D.C. 20590.

You can also obtain other information about motor vehicle safety from http://www.safercar.gov, where you can also enter your vehicle’s VIN (Vehicle Identification Number) to see if it has any open recalls.

Volvo strongly recommends that if your vehicle is covered under a service campaign, safety or emission recall or similar action, it should be completed as soon as possible. Please check with your local retailer or Volvo Car USA, LLC if your vehicle is covered under these conditions.

NHTSA can be reached at:

Internet: http://www.nhtsa.gov

Reporting safety defects in Canada
If you believe your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform Transport Canada in addition to notifying Volvo Car Canada Ltd.
Transport Canada can be contacted at:
1-800-333-0510
Teletypewriter (TTY): 613 990-4500
Fax: 1-819-994-3372
Mailing Address: Transport Canada - Road Safety, 80 rue Noël, Gatineau, (Quebec) J8Z 0A1

Related information
- Recall information (p. 52)
- Occupant safety (p. 50)

Recall information
On our website, select the "Own" tab on the upper left side of the screen and click the heading "Recall Information" on the right side of the screen. Enter your Vehicle Identification Number (VIN) for your vehicle (found at the base of the windshield). If your vehicle has any open Recalls, they will be displayed on this page.

You can also enter the Vehicle Identification Number in the search field on the National Highway Traffic Safety Administration's (NHTSA) website at: www.nhtsa.gov.

Volvo customers in Canada
For any questions regarding open recalls for your vehicle, please contact your authorized Volvo retailer. If your retailer is unable to answer your questions, please contact Volvo Customer Relations at 800-663-8255, Monday through Friday, 8:30 A.M. to 5:00 P.M. EST or volvocars.com/ca.

You may also write us at:
Volvo Car Canada Ltd.
Customer Care Centre
9130 Leslie Street, Suite 101
Richmond Hill, Ontario L4B 0B9
www.tc.gc.ca

Related information
- Occupant safety (p. 50)
- Reporting safety defects (p. 51)

Safety during pregnancy
The seat belt should always be worn during pregnancy. However, it is crucial that it be worn correctly.

The diagonal section should wrap over the shoulder then be routed between the breasts and to the side of the belly. The lap section should lay flat over the thighs and as low as possible under the belly. It must never be allowed to ride upward. Remove all slack from the belt and ensure that it fits close to the body without any twists.

As a pregnancy progresses, pregnant drivers should adjust their seats and steering wheel such that they can easily maintain control of the vehicle as they drive (which means they must be able to easily operate the foot pedals and steering wheel). Within this context, they should strive to position the seat with as large a distance as possible between their belly and the steering wheel.
Related information
- Buckling and unbuckling seat belts (p. 56)

**Whiplash protection system**

The Whiplash protection system (WHIPS) consists of specially designed hinges and brackets on the front seat backrests designed to help absorb some of the energy generated in a collision from the rear (when the vehicle is rear-ended).

**Function**

In the event of certain rear-end collisions, the hinges and brackets of the front seat backrests are designed to change position slightly to allow the backrest/head restraint to help support the occupant's head before moving slightly rearward. This movement helps absorb some of the forces that could result in whiplash.

**WARNING**

- The WHIPS system is designed to supplement the other safety systems in your vehicle. For this system to function properly, the three-point seat belt must be worn. Please be aware that no system can prevent all possible injuries that may occur in an accident.
- The WHIPS system is designed to function in certain collisions from the rear, depending on the crash severity, angle and speed.

**WARNING**

- Occupants in the front seats must never sit out of position. The occupant's back must be as upright as comfort allows and be against the seat back with the seat belt properly fastened.
- If your vehicle has been involved in a rear-end collision, the front seat backrests must be inspected by a trained and qualified Volvo service technician, even if the seats appear to be undamaged. Certain components in the WHIPS system may need to be replaced.
- Do not attempt to service any component in the WHIPS system yourself.

**WARNING**

- Boxes, suitcases, etc. wedged behind the front seats could impede the function of the Whiplash Protection System.
- If the rear seat backrests are folded down, cargo must be secured to prevent it from sliding forward against the front seat backrests in the event of a collision from the rear. This could interfere with the action of the Whiplash Protection System.
Seat belts
Seat belts should always be worn by all occupants of your vehicle. Children should be properly restrained, using an infant, car, or booster seat determined by age, weight and height.

Most states and provinces make it mandatory for occupants of a vehicle to use seat belts.

Reversible seat belt pretensioners
Reversible seat belt pretensioners is a system in the front seats that pulls the seat belts slightly taut prior to a collision. This function helps position the front seat occupants to help improve the effects of other safety systems, e.g., the airbag system.

Seat belt maintenance
Check periodically that the seat belts are in good condition. Use water and a mild detergent for cleaning. Check seat belt mechanism function as follows: attach the seat belt and pull rapidly on the strap.

WARNING
- Never repair the belt yourself; have this work done by a trained and qualified Volvo service technician only.
- Any device used to induce slack into the shoulder belt portion of the three-point belt system will have a detrimental effect on the amount of protection available to you in the event of a collision.
- The seat back should not be tilted too far back. The shoulder belt must be taut in order to function properly.
- Do not use child safety seats or child booster cushions/backrests in the front passenger’s seat. We also recommend that children who have outgrown these devices sit in the rear seat with the seat belt properly fastened.

Related information
- General safety information (p. 50)
- Buckling and unbuckling seat belts (p. 56)
- Door and seat belt reminders (p. 58)
- Seat belt pretensioners (p. 55)
Seat belt pretensioners
The vehicle’s seat belts are equipped with standard and electric pretensioners that can help pull the seat belts taut in a critical situation or a collision. Some or all of the pretensioners will be triggered in certain types of collisions, depending on the direction and severity of the impact.

Reversible seat belt pretensioners
Reversible seat belt pretensioners is a system in the front seats that pulls the seat belts slightly taut prior to a collision. This function helps position the front seat occupants to help improve the effects of other safety systems, e.g., the airbag system.

Seat belt pretensioners in collisions
The seat belts are equipped with standard pretensioners that are triggered according to the severity of a collision.

Seat belt pretensioners in critical situations
In addition to the standard pretensioners, the seat belts in the front seats are also equipped with electric pretensioners. The pretensioners interact and can be triggered along with the City Safety and Rear Collision Warning systems. In critical situations such as sudden braking, evasive maneuvers, etc., the seat belt can be pulled taut by the pretensioner’s electric motor.

The electric pretensioner positions the occupant in the seat to help reduce the risk of striking the interior of the passenger compartment and improves the effect of other safety systems such as the airbags.

Resetting the electric pretensioners
When a critical situation has passed, the seat belt and the electric pretensioner are reset automatically.

If the seat belt should remain taut:
1. Stop the vehicle safely.
2. Unbuckle the seat belt and rebuckle it.
   > The seat belt and the electric pretensioner will be reset.

WARNING

- Never repair the belt yourself; have this work done by a trained and qualified Volvo service technician only.
- Any device used to induce slack into the shoulder belt portion of the three-point belt system will have a detrimental effect on the amount of protection available to you in the event of a collision.
- The seat back should not be tilted too far back. The shoulder belt must be taut in order to function properly.
- Do not use child safety seats or child booster cushions/backrests in the front passenger’s seat. We also recommend that children who have outgrown these devices sit in the rear seat with the seat belt properly fastened.

Related information
- Seat belts (p. 54)
- Door and seat belt reminders (p. 58)
- Buckling and unbuckling seat belts (p. 56)
Buckling and unbuckling seat belts

Seat belts should be used by all occupants in the vehicle when it is in motion.

Buckling a seat belt

1. Pull the belt out slowly. It should not be twisted or turned.

2. Insert the latch plate into the receptacle. The seat belt retractor is normally "unlocked" and you can move freely, provided that the shoulder belt is not pulled out too far.
   > A distinct click will be audible.

3. The height of the seat belts in the front seats can be adjusted. The height of the shoulder section of the seat belt must be correctly adjusted.

   [Image of seat belt adjustment]

   Press the button and move the upper seat belt anchor up or down.

   Position it as high as possible so that the shoulder section of the belt is across the seat occupant's collarbone and not across the throat.

**NOTE**

Each seat belt is equipped with a seat belt retractor that will lock up in the following situations:

- if the belt is pulled out rapidly
- during braking and acceleration
- if the vehicle is leaning excessively
- when driving in turns
- if the Automatic Locking Retractor/Emergency Locking Retractor (ALR/ELR) is activated (each seat belt (except for the driver's belt) is equipped with the ALR/ELR function, which is designed to help keep the seat belt taut. ALR/ELR activates if the seat belt is pulled out as far as possible. If this is done, a sound from the seat belt retractor will be audible, which is normal, and the seat belt will be pulled taut and locked in place. This function is automatically disabled when the seat belt is unbuckled and fully retracted).

**WARNING**

The seat belt latch plate should only be inserted into its intended receptacle. Inserting it into one of the other receptacles may prevent it from functioning properly.
The seat belt should be positioned over the shoulder (not over the arm)

4. Tighten the lap section of the seat belt by pulling the diagonal section upward toward the shoulder.

The lap section of the belt must be positioned low on the hips (not pressing against the abdomen)

Make sure that the shoulder belt is rolled up into its retractor and that the shoulder and lap belts are taut.

**WARNING**

Never use a seat belt for more than one occupant. Never wear the shoulder portion of the belt under the arm, behind the back or otherwise out of position. Such use could cause injury in the event of an accident. As seat belts lose much of their strength when exposed to violent stretching, they should be replaced after any collision, even if they appear to be undamaged.

**Unbuckling the seat belt**

To remove the seat belt, press the red section on the seat belt receptacle. Before exiting the vehicle, check that the seat belt retracts fully after being unbuckled. If necessary, guide the belt back into the retractor slot.

**Related information**

- Door and seat belt reminders (p. 58)
- Seat belts (p. 54)
Door and seat belt reminders
The door and seat belt reminders are intended to alert all occupants of the vehicle that their seat belts should be buckled before the vehicle begins to move or if a door, the hood, tailgate or fuel filler door have not been closed properly.

Graphics in the instrument panel

The instrument panel graphic shows the seats where seat belts are not buckled.

The same graphic also indicates if a door, the hood, tailgate or fuel filler door is/are open.

This graphic disappears automatically after approx. 6 seconds or if the if the 0 button on the steering wheel keypad is pressed.

Seat belt reminder

The seat belt reminder consists of an audible signal, an indicator light near the rearview mirror and a symbol in the instrument panel that alert all occupants of the vehicle to buckle their seat belts.

The audible signal is speed-dependent and will sound for several seconds.

If the driver’s or a passenger’s seat belt is not buckled, this will be indicated in the instrument panel.

Child seats are not included in the seat belt reminder system.

Front seats
An audible signal and an indicator light will remind the driver and front seat passenger to buckle their seat belts.

Rear seats
The rear seat belt reminder has two functions.

• It indicates which seat belts are buckled in the rear seats. This will also be displayed in an instrument panel graphic. This graphic can be erased by pressing the 0 button on the steering wheel keypad.

• It also provides audio and visual reminders if a rear seat belt is unbuckled while the vehicle is in motion. The reminders will disappear when the seat belt has been buckled again.

Door/hood/tailgate/fuel filler door reminder
If a door, the hood, tailgate or fuel filler door is/are not properly closed, this will be indicated in a graphic in the instrument panel. Stop the vehicle safely and close the source of the reminder.

If the vehicle is moving at a speed under approx.6 mph (10 km/h), the information symbol will illuminate in the instrument panel.

At speeds above approx. 6 mph (10 km/h), the warning symbol will illuminate in the instrument panel.

Related information
• Seat belts (p. 54)
• Buckling and unbuckling seat belts (p. 56)
• Seat belt pretensioners (p. 55)
Airbag system
As an enhancement to the three-point seat belts, your vehicle is equipped with an airbag system.

**WARNING**
- If the airbag warning light stays on after the engine has started or if it illuminates while you are driving, have the vehicle inspected by a trained and qualified Volvo service technician as soon as possible.
- Never try to repair any component or part of the airbag systems yourself. Any interference in the system could cause malfunction and serious injury. All work on these systems should be performed by a trained and qualified Volvo service technician.

Deployed airbags

**WARNING**
If any of the airbags have deployed:
- Do not attempt to drive the vehicle. Have it towed to a qualified repair facility.
- If necessary seek medical attention.

Driver/passenger side airbags
The front airbags supplement the three-point seat belts. For these airbags to provide the protection intended, seat belts must be worn at all times.

Driver and passenger side front airbags

The front airbag system
The front airbag system includes gas generators surrounded by the airbags, and deceleration sensors that activate the gas generators, causing the airbags to be inflated with nitrogen gas.

As the movement of the seats' occupants compresses the airbags, some of the gas is expelled at a controlled rate to provide better cushioning. Both seat belt pretensioners also deploy, minimizing seat belt slack. The entire process, including inflation and deflation of the airbags, takes approximately one fifth of a second.
IMPORTANT INFORMATION

The location of the front airbags is indicated by SRS AIRBAG embossed on the steering wheel pad and above the glove compartment, and by decals on both sun visors and on the front and far right side of the dash.

The driver's side front airbag is folded and located in the steering wheel hub.

The knee airbag is folded on the underside of the dashboard on the driver's side. The text AIRBAG is embossed on the panel.

The passenger's side front airbag is folded behind a panel located above the glove compartment.

WARNING

- The airbags in the vehicle are designed to be a SUPPLEMENT to—not a replacement for—the three-point seat belts. For maximum protection, wear seat belts at all times. Be aware that no system can prevent all possible injuries that may occur in an accident.
- Never drive with your hands on the steering wheel pad/airbag housing.
- The front airbags are designed to help prevent serious injury. Deployment occurs very quickly and with considerable force. During normal deployment and depending on variables such as seating position, one may experience abrasions, bruises, swellings, or other injuries as a result from deployment of one or both of the airbags.
- When installing any accessory equipment, make sure that the front airbag system is not damaged. Any interference in the system could cause malfunction.

Front airbag deployment

- The front airbags are designed to deploy during certain frontal or front-angular collisions, impacts, or decelerations, depending on the crash severity, angle, speed and object impacted. The airbags may also deploy in certain non-frontal collisions where rapid deceleration occurs.
- The airbag system sensors, which trigger the front airbags, are designed to react to both the impact of the collision and the inertial forces generated by it, and to determine if the intensity of the collision is sufficient for the seat belt pretensioners and/or airbags to be deployed.

However, not all frontal collisions activate the front airbags.

- If the collision involves a nonrigid object (e.g., a snow drift or bush), or a rigid, fixed object at a low speed, the front airbags will not necessarily deploy.
- Front airbags do not normally deploy in a side impact collision, in a collision from the rear or in a rollover situation.
- The amount of damage to the bodywork does not reliably indicate if the airbags should have deployed or not.
NOTE

- Deployment of front airbags occurs only one time during an accident. In a collision where deployment occurs, the airbags and seat belt pretensioners activate. Some noise occurs and a small amount of powder is released. The release of the powder may appear as smoke-like matter. This is a normal characteristic and does not indicate fire.
- Volvo’s front airbags use special sensors that are integrated with the front seat buckles. The point at which the airbag deploys is determined by whether or not the seat belt is being used, as well as the severity of the collision.
- Collisions can occur where only one of the airbags deploys. If the impact is less severe, but severe enough to present a clear injury risk, the airbags are triggered at partial capacity. If the impact is more severe, the airbags are triggered at full capacity.

WARNING

- Do not use child safety seats or child booster cushions/backrests in the front passenger’s seat. We also recommend that occupants under 4 feet 7 inches (140 cm) in height who have outgrown these devices sit in the rear seat with the seat belt fastened. See also the Occupant Weight Sensor information.
- Never drive with the airbags deployed. The fact that they hang out can impair the steering of your vehicle. Other safety systems can also be damaged.
- The smoke and dust formed when the airbags are deployed can cause skin and eye irritation in the event of prolonged exposure.

Should you have questions about any component in the SRS system, please contact a trained and qualified Volvo service technician or Volvo customer support:

In the USA
Volvo Car USA, LLC
Customer Care Center
1 Volvo Drive
P.O. Box 914
Rockleigh, New Jersey 07647

1-800-458-1552
www.volvocars.com/us

In Canada
Volvo Car Canada Ltd.
Customer Care Centre
9130 Leslie Street, Suite 101
Richmond Hill, Ontario L4B 0B9
1-800-663-8255
www.volvocars.com/ca

Airbag decals

Airbag decal on the outside of both sun visors
**Important Information**

**Passenger's side airbag decal**

**Warning**

- Children must never be allowed in the front passenger's seat.
- Occupants in the front passenger's seat must never sit on the edge of the seat, sit leaning toward the instrument panel or otherwise sit out of position.
- The occupant's back must be as upright as comfort allows and be against the seat back with the seat belt properly fastened.
- Feet must be on the floor, e.g., not on the dash, seat or out of the window.

**Related information**

- Seat belts (p. 54)
- Occupant weight sensor (p. 62)

**Occupant weight sensor**

The Occupant Weight Sensor (OWS) is designed to meet the regulatory requirements of Federal Motor Vehicle Safety Standard (FMVSS) 208 and is designed to disable (will not inflate) the passenger's side front airbag under certain conditions.

**Disabling the passenger's side front airbag**

Volvo recommends that ALL occupants (adults and children) shorter than 4 feet 7 inches (140 cm) be seated in the back seat of any vehicle with a front passenger side airbag and be properly restrained for their size and weight.

The OWS works with sensors that are part of the front passenger's seat and seat belt. The sensors are designed to detect the presence of a properly
seated occupant and determine if the passenger's side front airbag should be enabled (may inflate) or disabled (will not inflate).

The OWS will disable (will not inflate) the passenger's side front airbag when:

- the front passenger's seat is unoccupied, or has small/medium objects in the front seat,
- the system determines that an infant is present in a rear-facing infant seat that is installed according to the manufacturer's instructions,
- the system determines that a small child is present in a forward-facing child restraint that is installed according to the manufacturer's instructions,
- the system determines that a small child is present in a booster seat,
- a front passenger takes his/her weight off of the seat for a period of time,
- a child or a small person occupies the front passenger's seat.

The OWS uses a PASSENGER AIRBAG OFF indicator lamp which will illuminate and stay on to remind you that the passenger's side front airbag is disabled. The PASSENGER AIRBAG OFF indicator lamp is located in the overhead console, near the base of the rearview mirror.

NOTE

When the ignition is switched on, the OWS indicator light will illuminate for several seconds while the system performs a self-diagnostic test.

However, if a fault is detected in the system:

- The OWS indicator light will stay on
- The SRS warning light will come on and stay on and a text message will be displayed.

WARNING

If a fault in the system is detected and indicated as described, be aware that the passenger's side front airbag will not deploy in the event of a collision. In this case, the SRS system and Occupant Weight Sensor should be inspected by a trained and qualified Volvo service technician as soon as possible.

WARNING

- Never try to open, remove, or repair any components in the OWS system. This could result in system malfunction. Maintenance or repairs should only be carried out by a trained and qualified Volvo service technician.
- The front passenger's seat should not be modified in any way. This could reduce pressure on the seat cushion, which might interfere with the OWS system's function.
Passenger’s seat occupancy status | OWS indicator light status | Passenger’s side front airbag status
--- | --- | ---
Seat unoccupied | OWS indicator light lights up. | Passenger’s side front airbag disabled
Seat occupied by low weight occupant/object\(^a\) | OWS indicator light lights up | Passenger’s side front airbag disabled
Seat occupied by heavy occupant/object | OWS indicator light is not lit | Passenger’s side front airbag enabled

\(^a\) Volvo recommends that children always be properly restrained in appropriate child restraints in the rear seats. Do not assume that the passenger’s side front airbag is disabled unless the PASSENGER AIRBAG OFF indicator lamp is lit. Make sure the child restraint is properly installed. If there is any doubt as to the status of the passenger’s side front airbag, move the child restraint to the rear seat.

The OWS is designed to enable (may inflate) the passenger’s side front airbag in the event of a collision anytime the system senses that a person of adult size is sitting properly in the front passenger’s seat. The PASSENGER AIRBAG OFF indicator lamp will be off and remain off.

If a person of adult size is sitting in the front passenger’s seat, but the PASSENGER AIRBAG OFF indicator lamp is on, it is possible that the person isn’t sitting properly in the seat. If this happens:

- Turn the vehicle off and ask the person to place the seatback in an upright position.
- Have the person sit upright in the seat, centered on the seat cushion, with the person’s legs comfortably extended.
- Restart the vehicle and have the person remain in this position for about two minutes. This will allow the system to detect that person and enable the passenger’s frontal airbag.
- If the PASSENGER AIRBAG OFF indicator lamp remains on even after this, the person should be advised to ride in the rear seat.

This condition reflects limitations of the OWS classification capability. It does not indicate OWS malfunction.

**Modifications**

If you are considering modifying your vehicle in any way to accommodate a disability, for example by altering or adapting the driver’s or front passenger’s seat(s) and/or airbag systems, please contact Volvo at:

**In the USA**

Volvo Car USA, LLC
Customer Care Center
1 Volvo Drive

**In Canada**

Volvo Car Canada Ltd.
Customer Care Centre
9130 Leslie Street, Suite 101
Richmond Hill, Ontario L4B 0B9
1-800-663-8255
**WARNING**

- No objects that add to the total weight on the seat should be placed on the front passenger's seat. If a child is seated in the front passenger's seat with any additional weight, this extra weight could cause the OWS system to enable the airbag, which might cause it to deploy in the event of a collision, thereby injuring the child.

- The seat belt should never be wrapped around an object on the front passenger's seat. This could interfere with the OWS system's function.

- The front passenger's seat belt should never be used in a way that exerts more pressure on the passenger than normal. This could increase the pressure exerted on the weight sensor by a child, and could result in the airbag being enabled, which might cause it to deploy in the event of a collision, thereby injuring the child.

**WARNING**

- Keep the following points in mind with respect to the OWS system. Failure to follow these instructions could adversely affect the system's function and result in serious injury to the occupant of the front passenger's seat:
  - The full weight of the front seat passenger should always be on the seat cushion. The passenger should never lift him/herself off the seat cushion using the armrest in the door or the center console, by pressing the feet on the floor, by sitting on the edge of the seat cushion, or by pressing against the backrest in a way that reduces pressure on the seat cushion. This could cause OWS to disable the front, passenger's side airbag.

**WARNING**

- Do not place any type of object on the front passenger's seat in such a way that jamming, pressing, or squeezing occurs between the object and the front seat, other than as a direct result of the correct use of the Automatic Locking Retractor/Emergency Locking Retractor (ALR/ELR) seat belt.

- No objects should be placed under the front passenger's seat. This could interfere with the OWS system's function.

**Related information**

- Airbag system (p. 59)
**Side impact airbags**

As an enhancement to the structural side impact protection built into your vehicle, it is also equipped with Side Impact Protection System (SIPS) airbags.

The SIPS airbag system is designed to help increase occupant protection in the event of certain side impact collisions. The SIPS airbags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact.

**NOTE**

SIPS airbag deployment (one airbag) occurs only on the side of the vehicle affected by the impact. The airbags are not designed to deploy in all side impact situations.

**Components in the SIPS airbag system**

This SIPS airbag system consists of a gas generator, the side airbag modules built into the outboard sides of both front seat backrests, and electronic sensors/wiring.

**WARNING**

- The SIPS airbag system is a supplement to the structural Side Impact Protection System and the three-point seat belt system. It is not designed to deploy during collisions from the front or rear of the vehicle or in rollover situations.
- The use of seat covers on the front seats may impede SIPS airbag deployment.
- No objects, accessory equipment or stickers may be placed on, attached to or installed near the SIPS airbag system or in the area affected by SIPS airbag deployment.
- Never try to open or repair any components of the SIPS airbag system. This should be done only by a trained and qualified Volvo service technician.
- In order for the SIPS airbag to provide its best protection, both front seat occupants should sit in an upright position with the seat belt properly fastened.
- Failure to follow these instructions can result in injury to the occupants of the vehicle in the event of an accident.

**Related information**

- Airbag system (p. 59)
- Seat belts (p. 54)
**Inflatable curtains**

The inflatable curtain is designed to help protect the heads of the occupants of the front seats and the occupant of the outboard rear seating positions in certain side impact collisions.

This system consists of inflatable curtains located along the sides of the roof liners, stretching from the center of both front side windows to the rear edge of the rear side door windows.

In certain side impacts, both the Inflatable Curtain (IC) and the side Impact Airbag System (SIPS airbag) will deploy. The IC and the SIPS airbag deploy simultaneously.

**WARNING**

- Never try to open or repair any components of the IC system. This should be done only by a trained and qualified Volvo service technician.
- Never hang heavy items from the ceiling handles. This could impede deployment of the Inflatable Curtain.
- The cargo compartment and rear seat should not be loaded to a level higher than 4 in. (10 cm) below the upper edge of the rear side windows. Objects placed higher than this level could impede the function of the Inflatable Curtain.
- In order for the IC to provide its best protection, both front seat occupants and both outboard rear seat occupants should sit in an upright position with the seat belt properly fastened; adults using the seat belt and children using the proper child restraint system.

**Safety mode**

As a safety precaution after a collision, the functionality of some of the vehicle’s systems may be reduced.

If the vehicle has been involved in a collision, the text **Safety mode** may appear in the information display.

**NOTE**

This text can only be shown if the display is undamaged and the vehicle's electrical system is intact.

Safety mode is a feature that is triggered if one or more of the safety systems such as the front/side airbags inflatable curtain, etc., or one or more of the seat belt pretensioners has deployed. The collision may have damaged an important function in the vehicle, such as the fuel lines, sensors for one of the safety systems, the brake system, etc.

**Related information**

- Airbag system (p. 59)
- Side impact airbags (p. 66)
- Child safety (p. 69)
- Seat belts (p. 54)
**WARNING**

- Never attempt to repair the vehicle yourself or to reset the electrical system after the vehicle has displayed Safety mode. This could result in injury or improper system function.
- Restoring the vehicle to normal operating status should only be done by a trained and qualified Volvo service technician.
- After Safety mode has been displayed, if you detect the odor of fuel vapor, or see any signs of fuel leakage, do not attempt to start the vehicle. Leave the vehicle immediately.

**Related information**

- Starting or moving a vehicle in safety mode (p. 68)
- General safety information (p. 50)

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**Starting or moving a vehicle in safety mode**

If Safety mode has been set, it may be possible to start and move the vehicle, for example, if it is blocking traffic.

**Starting the vehicle in safety mode**

1. Check the vehicle for damage, particularly for fuel leakage or the smell of gasoline fumes.
   - If the damage to the vehicle is minor and there is no fuel leakage/fumes, you may attempt to start the engine and move the vehicle.

**WARNING**

If you smell gasoline fumes or detect fuel leakage while Safety mode See Owner's manual is displayed in the instrument panel, do not attempt to start the vehicle. Leave the vehicle immediately.

2. Turn the start knob clockwise as far as possible and release it.
3. Try to start the vehicle.
   - Vehicle start System check, wait will be displayed in the instrument panel while the vehicle's electrical system attempts to reset to normal mode.

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**Moving the vehicle after safety mode has been set**

If the message Normal mode The vehicle is now in normal mode is displayed, the vehicle may be moved carefully from its present position if, for example, it is blocking traffic.

**WARNING**

After Safety mode has been set, the vehicle should not be driven or towed (pulled on the ground by another vehicle). It must be transported on a flatbed tow truck to a trained and qualified Volvo service technician for inspection/repairs.

**Related information**

- Safety mode (p. 67)
Child safety
Children should always be seated safely when traveling in the vehicle.

General information
Volvo recommends the proper use of restraint systems for all occupants including children. Remember that, regardless of age and size, a child should always be properly restrained in a vehicle.

Your vehicle is also equipped with ISOFIX/LATCH attachments, which make it more convenient to install child seats.

Some restraint systems for children are designed to be secured in the vehicle by lap belts or the lap portion of a lap-shoulder belt. Such child restraint systems can help protect children in vehicles in the event of an accident only if they are used properly. However, children could be endangered in a crash if the child restraints are not properly secured in the vehicle. Failure to follow the installation instructions for your child restraint can result in your child striking the vehicle's interior in a sudden stop.

Holding a child in your arms is NOT a suitable substitute for a child restraint system. In an accident, a child held in a person's arms can be crushed between the vehicle's interior and an unrestrained person. The child could also be injured by striking the interior, or by being ejected from the vehicle during a sudden maneuver or impact. The same can also happen if the infant or child rides unrestrained on the seat. Other occupants should also be properly restrained to help reduce the chance of injuring or increasing the injury of a child.

All states and provinces have legislation governing how and where children should be carried in a vehicle. Find out the regulations existing in your state or province. Recent accident statistics have shown that children are safer in rear seating positions than front seating positions when properly restrained. A child restraint system can help protect a child in a vehicle. Here's what to look for when selecting a child restraint system:

It should have a label certifying that it meets applicable Federal Motor Vehicle Safety Standards (FMVSS 213) – or in Canada, CMVSS 213.

Make sure the child restraint system is approved for the child's height, weight and development – the label required by the standard or regulation, or instructions for infant restraints, typically provide this information.

In using any child restraint system, we urge you to carefully look over the instructions that are provided with the restraint. Be sure you understand them and can use the device properly and safely in this vehicle. A misused child restraint system can result in increased injuries for both the infant or child and other occupants in the vehicle.

When a child has outgrown the child safety seat, you should use the rear seat with the standard seat belt fastened. The best way to help protect the child here is to place the child on a cushion so that the seat belt is properly located on the hips. Legislation in your state or province may mandate the use of a child seat or cushion in combination with the seat belt, depending on the child's age and/or size. Please check local regulations.

A specially designed and tested booster cushion and backrest can be obtained from your Volvo retailer. See also the article "Integrated booster cushion."
WARNING

- Do not use child safety seats or child booster cushions/backrests in the front passenger's seat. We also recommend that children under 4 feet 7 inches (140 cm) in height who have outgrown these devices sit in the rear seat with the seat belt fastened.

- On hot days, the temperature in the vehicle interior can rise very quickly. Exposure to these high temperatures for even a short period of time can cause heat-related injury or death. Small children are particularly at risk. Never leave children unattended in a vehicle.

Child seats should always be registered.

Volvo's recommendations

Why does Volvo believe that no child should sit in the front seat of a car? It's quite simple really. A front airbag is a very powerful device designed, by law, to help protect an adult.

Because of the size of the airbag and its speed of inflation, a child should never be placed in the front seat, even if he or she is properly belted or strapped into a child safety seat. Volvo has been an innovator in safety for over seventy-five years, and we'll continue to do our part. But we need your help. Please remember to put your children in the back seat, and buckle them up.

Volvo has some very specific recommendations

- Always wear your seat belt.
- Airbags are a SUPPLEMENTAL safety device which, when used with a three-point seat belt can help reduce serious injuries during certain types of accidents. Volvo recommends that you do not disconnect the airbag system in your vehicle.
- Volvo strongly recommends that everyone in the vehicle be properly restrained.
- Volvo recommends that ALL occupants (adults and children) shorter than 4 feet 7 inches (140 cm) be seated in the back seat of any vehicle with a front passenger side airbag.
- Drive safely!

Related information

- Booster cushions (p. 77)
- Convertible seats (p. 74)

- Infant seats (p. 72)
- ISOFIX/LATCH lower anchors (p. 78)
- Top tether anchors (p. 80)
**Child restraints**
Suitable child restraints should always be used when children travel in the vehicle.

**Child restraint systems**

- **Infant seat**
  
  There are three main types of child restraint systems: infant seats, convertible seats and booster cushions. They are classified according to the child's age and size.

  The child restraint should be secured using a three-point seat belt, ISOFIX/LATCH anchors or top tether anchors.

- **WARNING**
  A child seat should never be used in the front passenger seat of any vehicle with a front passenger airbag – not even if the "Passenger airbag off" symbol near the rear-view mirror is illuminated (on vehicles equipped with Occupant Weight Sensor). If the severity of an accident were to cause the airbag to inflate, this could lead to serious injury or death to a child seated in this position.

- **Convertible seat**

- **Booster cushion**

- **WARNING**
  Always refer to the child restraint manufacturer’s instructions for detailed information on securing the restraint.
IMPORTANT INFORMATION

WARNING

- When not in use, keep the child restraint system secured or remove it from the passenger compartment to help prevent it from injuring passengers in the event of a sudden stop or collision.

- A small child's head represents a considerable part of its total weight and its neck is still very weak. Volvo recommends that children up to age 4 travel, properly restrained, facing rearward. In addition, Volvo recommends that children should ride rearward facing, properly restrained, as long as possible.

Automatic Locking Retractor/ Emergency Locking Retractor (ALR/ ELR)

To make child seat installation easier, each seat belt (except for the driver's belt) is equipped with a locking mechanism to help keep the seat belt taut.

When attaching the seat belt to a child seat:

1. Attach the seat belt to the child seat according to the child seat manufacturer’s instructions.
2. Pull the seat belt out as far as possible.
3. Insert the seat belt latch plate into the buckle (lock) in the usual way.
4. Release the seat belt and pull it taut around the child seat.

A sound from the seat belt retractor will be audible at this time and is normal. The belt will now be locked in place. This function is automatically disabled when the seat belt is unlocked and the belt is fully retracted.

WARNING

Do not use child safety seats or child booster cushions/backrests in the front passenger's seat. We also recommend that children who have outgrown these devices sit in the rear seat with the seat belt properly fastened.

Child restraint registration and recalls

Child restraints could be recalled for safety reasons. You must register your child restraint to be reached in a recall. To stay informed about child safety seat recalls, be sure to fill out and return the registration card that comes with new child restraints.


Infant seats

Suitable child restraints should always be used when children (depending on their age/size) are seated in the vehicle.

Securing an infant seat with a seat belt

Do not place the infant seat in the front passenger's seat
1. Place the infant seat in the rear seat of the vehicle.
2. Attach the seat belt to the infant seat according to the manufacturer's instructions.
Positioning the seat belt through the infant seat

- An infant seat must be in the rear-facing position only.
- The infant seat should not be positioned behind the driver's seat unless there is adequate space for safe installation.

**WARNING**

A child seat should never be used in the front passenger seat of any vehicle with a front passenger airbag – not even if the "Passenger airbag off" symbol near the rear-view mirror is illuminated (on vehicles equipped with Occupant Weight Sensor). If the severity of an accident were to cause the airbag to inflate, this could lead to serious injury or death to a child seated in this position.

3. Fasten the seat belt

Fasten the seat belt by inserting the latch plate into the buckle (lock) until a distinct click is audible.

4. Pull out the shoulder section of the seat belt

Pull the shoulder section of the seat belt out as far as possible to activate the belt’s automatic locking function.
5. Press the infant seat firmly in place, let the seat belt retract and pull it taut. A sound from the seat belt retractor’s automatic locking function will be audible at this time and is normal. The seat belt should now be locked in place.

The infant seat can be removed by unbuckling the seat belt and letting it retract completely.

Related information
- ISOFIX/LATCH lower anchors (p. 78)
- Top tether anchors (p. 80)
- Convertible seats (p. 74)
- Buckling and unbuckling seat belts (p. 56)
- Child safety (p. 69)

6. Push and pull the infant seat along the seat belt path to ensure that it is held securely in place by the seat belt.

**WARNING**

It should not be possible to move the child restraint (child seat) more than 1 in. (2.5 cm) in any direction along the seat belt path.

**Convertible seats**

Suitable child restraints should always be used when children (depending on their age/size) are seated in the vehicle.

**Securing a convertible seat with a seat belt**

Do not place the convertible seat in the front passenger’s seat.

Convertible seats can be used in either a forward or rearward-facing position, depending on the age and size of the child.
IMPORTANT INFORMATION

Route the seat belt through the convertible seat

**WARNING**

Always use a convertible seat that is suitable for the child's age and size. See the convertible seat manufacturer's recommendations.

1. Place the convertible seat in the rear seat of the vehicle.

2. Attach the seat belt to the convertible seat according to the manufacturer's instructions.

**WARNING**

- A small child's head represents a considerable part of its total weight and its neck is still very weak. Volvo recommends that children up to age 4 travel, properly restrained, facing rearward. In addition, Volvo recommends that children should ride rearward facing, properly restrained, as long as possible.
- Convertible child seats should be installed in the rear seat only.
- A rear-facing convertible seat should not be positioned behind the driver's seat unless there is adequate space for safe installation.

3. Fasten the seat belt by inserting the latch plate into the buckle (lock) until a distinct click is audible.

4. Pull the shoulder section of the seat belt out as far as possible to activate the belt's automatic locking function.
5. Press the convertible seat firmly in place, let the seat belt retract and pull it taut. A sound from the seat belt retractor's automatic locking function will be audible at this time and is normal. The seat belt should now be locked in place.

6. Push and pull the convertible seat along the seat belt path to ensure that it is held securely in place by the seat belt.

**NOTE**

The locking retractor will automatically release when the seat belt is unbuckled and allowed to retract fully.

**WARNING**

It should not be possible to move the child restraint (child seat) more than 1 in. (2.5 cm) in any direction along the seat belt path.

The convertible seat can be removed by unbuckling the seat belt and letting it retract completely.

**WARNING**

A child seat should never be used in the front passenger seat of any vehicle with a front passenger airbag – not even if the "Passenger airbag off" symbol near the rear-view mirror is illuminated. If the severity of an accident were to cause the airbag to inflate, this could lead to serious injury or death to a child seated in this position.

**Related information**

- ISOFIX/LATCH lower anchors (p. 78)
- Top tether anchors (p. 80)
- Booster cushions (p. 77)
- Buckling and unbuckling seat belts (p. 56)
- Child safety (p. 69)
Booster cushions

Securing a booster cushion

1. Place the booster cushion in the rear seat of the vehicle.
2. With the child properly seated on the booster cushion, attach the seat belt to or around the cushion according to the manufacturer’s instructions.
3. Fasten the seat belt by inserting the latch plate into the buckle (lock) until a distinct click is audible.
4. Ensure that the seat belt is pulled taut and fits snugly around the child.

WARNING

- The hip section of the three-point seat belt must fit snugly across the child’s hips, not across the stomach.
- The shoulder section of the three-point seat belt should be positioned across the chest and shoulder.
- The shoulder belt must never be placed behind the child’s back or under the arm.

Related information

- ISOFIX/LATCH lower anchors (p. 78)
- Top tether anchors (p. 80)
- Child safety (p. 69)
- Buckling and unbuckling seat belts (p. 56)
IMPORTANT INFORMATION

**ISOFIX/LATCH lower anchors**
Lower anchors for ISOFIX/LATCH-equipped child seats are located in the rear, outboard seats, hidden below the backrest cushions.

**Using the ISOFIX/LATCH lower child seat anchors**

Location of the ISOFIX/LATCH anchors
Symbols on the seat back upholstery mark the ISOFIX/LATCH anchor positions as shown. To access the anchors, kneel on the seat cushion and locate the anchors by feel. Always follow your child seat manufacturer’s installation instructions, and use both ISOFIX/LATCH lower anchors and top tethers whenever possible.

**To access the anchors**
1. Put the child restraint in position.
2. Kneel on the child restraint to press down the seat cushion and locate the anchors by feel.
3. Fasten the attachment on the child restraint’s lower straps to the ISOFIX/LATCH lower anchors.
4. Firmly tension the lower child seat straps according to the manufacturer’s instructions.

**WARNING**
Volvo’s ISOFIX/LATCH anchors conform to FMVSS/CMVSS standards. Always refer to the child restraint system’s manual for weight and size ratings.

**NOTE**
- The rear seat’s center position is not equipped with ISOFIX/LATCH lower anchors. When installing a child restraint in this position, attach the restraint’s top tether strap (if it is so equipped) to the top tether anchorage point and secure the restraint with the vehicle’s center seat belt.
- Always follow your child seat manufacturer’s installation instructions, and use both ISOFIX/LATCH lower anchors and top tethers whenever possible.

**WARNING**
- Be sure to fasten the attachment correctly to the anchor (see the illustration). If the attachment is not correctly fastened, the child restraint may not be properly secured in the event of a collision.
- The ISOFIX/LATCH lower child restraint anchors are only intended for use with child seats positioned in the outboard seating positions. These anchors are not certified for use with any child restraint that is positioned in the center seating position. When securing a child restraint in the center seating position, use only the vehicle’s center seat belt.
Related information
- Top tether anchors (p. 80)

Lower child seat attachment points
The vehicle is equipped with lower attachment points for child seats in the rear seats.

The lower attachment points are intended for use with rear-facing child restraints.

Always follow the child restraint manufacturer’s installation instructions when attaching a child restraint to these attachment points.

Location

Attachment points in the rear seats

The attachment points in the rear seat are in the rear section of the front seat's floor rails.

**WARNING**

A child seat should never be used in the front passenger seat of any vehicle with a front passenger airbag – not even if the "Passenger airbag off" symbol near the rear-view mirror is illuminated (on vehicles equipped with Occupant Weight Sensor). If the severity of an accident were to cause the airbag to inflate, this could lead to serious injury or death to a child seated in this position.

Related information
- Child restraints (p. 71)
- ISOFIX/LATCH lower anchors (p. 78)
- Occupant weight sensor (p. 62)

1 Not available in all markets
Top tether anchors

Your Volvo is equipped with child restraint top tether anchorages, located on the rear side of the backrests, for all three seating positions in the rear seat.

Child restraint anchorages

Top tether anchors and symbols on the rear side of the rear seat backrests.

Securing a child seat

1. Place the child restraint on the rear seat.
2. Route the top tether strap under the head restraint and attach it to the anchor.
3. Attach lower tether straps to the lower ISO-FIX/LATCH anchors. If the child restraint is not equipped with lower tether straps, or the restraint is used in the center seating position, follow instructions for securing a child restraint using the Automatic Locking Retractor seat belt.
   – Firmly tension all straps.

Refer also to the child seat manufacturer’s instructions for information on securing the child seat.

NOTE

On models equipped with the optional cargo compartment cover, this cover should be removed before a child seat is attached to the child restraint anchors.

WARNING

- Always refer to the recommendations made by the child restraint manufacturer.
- Volvo recommends that the top tether anchors be used when installing a forward-facing child restraint.
- Never route a top tether strap over the top of the head restraint. The strap should be routed beneath the head restraint.
- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses. The anchorages are not able to withstand excessive forces on them in the event of collision if full harness seat belts or adult seat belts are installed to them. An adult who uses a belt anchored in a child restraint anchorage runs a great risk of suffering severe injuries should a collision occur.
- Do not install rear speakers that require the removal of the top tether anchors or interfere with the proper use of the top tether strap.

Related information

- Child safety (p. 69)
- Child restraints (p. 71)
PRACTICAL INFORMATION
Passenger compartment storage spaces

The following is an overview of the passenger compartment and its storage spaces.

Front seats

Storage spaces in the door panel, the glove compartment and the sun visors

Storage spaces, cup holders and 12-volt socket/USB socket in the tunnel console

Rear seats

Storage compartments in the door panels, cup holders in the center seat's backrest, storage pockets on the rear side of the front seat backrest, 12-volt socket on the rear side of the tunnel console and a storage compartment under the seat

Related information

• Tunnel console (p. 85)
• Using the glove compartment (p. 84)
• Electrical sockets (p. 124)
• Sun visors (p. 86)
Engine compartment overview
The engine compartment overview shows some maintenance points.

The layout of the engine compartment may differ slightly from model to model

1. Coolant expansion tank
2. Brake fluid reservoir
3. Washer fluid reservoir
4. Relay/fuse box
5. Air cleaner
6. Engine oil filler cap

**WARNING**

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

- Engine cleaning should only be done by a workshop. If engine cleaning agents are used when the engine has been running, there may be a fire risk.

- Before performing any operations in the engine compartment, the ignition should always be completely switched off (in mode 0) and there should be no remote keys in the passenger compartment. The gear selector should be in the P (park) position. If the engine has been running, wait until it has cooled before touching any components in the engine compartment.

- The distributor ignition system operates at very high voltages. Special safety precautions must be followed to prevent injury. Always turn the ignition off when replacing distributor ignition components e.g. plugs, coil, etc.

- Do not touch any part of the distributor ignition system while the engine is running. This may result in unintended movements and body injury.

**Related information**

- Opening and closing the hood (p. 137)
- Refilling the windshield washer fluid reservoir (p. 136)
Using the glove compartment
The glove compartment provides storage space for small items.

The owner’s manual and maps can be kept here. There are also holders for pens on the inside of the glove compartment door.

Using the glove compartment as a cooler*
The glove compartment can be used to cool drinks or food and the cooling feature functions when the climate system is active (i.e., when the ignition is in mode II or when the engine is running).

Locking/unlocking the glove compartment*

Storage compartment for the key
The glove compartment and tailgate can be locked when e.g., the vehicle is in a workshop for service, etc. See also the article "Private locking" for additional information.

To lock the glove compartment:
1. Insert the key into the lock.
2. Turn the key 90 degrees clockwise.
3. Remove the key from the lock.

To unlock the glove compartment in the reverse order:

* Option/accessory.
Cooling activated

Cooling deactivated

Activate/deactivate cooling by moving the control as far as possible toward the passenger compartment/glove compartment.

**Related information**

- Passenger compartment storage spaces (p. 82)

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**Tunnel console**

The tunnel console, located between the front seats, contains a 12-volt electrical socket, cup holders and storage spaces, etc.

**Storage space**

Press the handle to open the cover.

**Storage space with cup holders**

For the driver and passenger and a 12-volt socket

**Storage space and USB socket**

Under the armrest

**Climate control panel**

For the rear seats or storage space

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**NOTE**

One of the alarm sensors, which is sensitive to metallic objects, is located under the tunnel console cup holders. Avoid leaving coins, keys, etc., in the cup holders because they may inadvertently trigger the alarm.

**Related information**

- Passenger compartment storage spaces (p. 82)
- Electrical sockets (p. 124)
**Sun visors**

There are vanity mirrors with card holders on the upper sides of the sun visors.

Lighted vanity mirror and card holder

The vanity mirror lighting comes on when the mirror is opened.

The vanity mirror's frame has a holder for e.g., a card or ticket.

**Related information**

- Passenger compartment storage spaces (p. 82)

**Loading**

The load carrying capacity of your vehicle is determined by factors such as the number of passengers, the amount of cargo, the weight of any accessories that may be installed, etc.

**Loading recommendations**

- Load objects in the cargo compartment against the backrest whenever possible.
- If the backrests of the second row seats are folded down, they should not be in contact with the front seat backrests. This could impede the function of the Whiplash Protection System (WHIPS).
- Unstable loads can be secured to the load anchoring eyelets with straps or web lashings to help keep them from shifting.
- Stop the engine and apply the parking brake when loading or unloading long objects. The gear selector can be knocked out of position by long loads, which could set the vehicle in motion.

**WARNING**

- Stop the engine, put the gear selector in P, and apply the parking brake when loading or unloading long objects.
- The vehicle's driving characteristics may change depending on the weight and distribution of the load.
- A 44-pound (20 kg) object produces a force of 2,200 pounds (1,000 kg) in a head-on collision at 30 mph (50 km/h).
- The cargo compartment and rear seat should not be loaded to a level higher than 2 in. (5 cm) below the upper edge of the rear side windows. Objects placed higher than this level could impede the function of the Inflatable Curtain.

**WARNING**

- Cover sharp edges on long loads to help prevent injury to occupants. Secure the load to help prevent shifting during sudden stops.
- Always secure large and heavy objects with a seat belt or cargo retaining straps.
- Always secure the load to help prevent it from moving in the event of sudden stops.
- Switch off the engine, apply the parking brake and put the gear selector in P when loading and unloading the vehicle.
Extra loading space
The vehicle has flexible cargo capacity that makes it possible to load and secure large objects and loading capacity can be increased when needed.

By folding down the rear seat backrests, the cargo capacity of the vehicle increases considerably. Use the load anchoring eyelets or the grocery bag holder to secure objects and the cargo compartment cover to help conceal the load.

The hatch in the center section of the rear seat backrest can be opened without folding the backrest down to transport long objects such as skis, etc.

The jack*, tire sealing system and tools can be found under the cargo compartment’s floor.

**WARNING**
- Boxes, suitcases, etc. wedged behind the front seats could impede the function of the Whiplash Protection System.
- If the rear seat backrests are folded down, cargo must be secured to prevent it from sliding forward against the front seat backrests in the event of a collision from the rear. This could interfere with the action of the Whiplash Protection System.

Roof loads
Load carriers are available as Volvo accessories. Observe the following points when in use:

**WARNING**
- Cover sharp edges on long loads to help prevent injury to occupants. Secure the load to help prevent shifting during sudden stops.
- Always secure large and heavy objects with a seat belt or cargo retaining straps.
- Always secure the load to help prevent it from moving in the event of sudden stops.
- Switch off the engine, apply the parking brake and put the gear selector in P when loading and unloading the vehicle.
- Place heavier cargo at the bottom of the load.
- Secure the cargo correctly with appropriate tie-down equipment.
- Check periodically that the load carriers and load are properly secured.
- Remember that the vehicle's center of gravity and handling change when you carry a load on the roof.
- The vehicle's wind resistance and fuel consumption will increase with the size of the load.
- Drive smoothly. Avoid rapid starts, fast cornering and hard braking.

**CAUTION**
The optional panoramic roof should not be opened while load carriers are installed on the vehicle.

See the article "Weights" for information about the maximum permissible load that can be transported on the roof.

Related information
- Weights (p. 161)
- Cargo net (p. 88)
- Cargo compartment cover* (p. 92)
- Steel cargo grid* (p. 90)

* Option/accessory.
PRACTICAL INFORMATION

- Load anchoring eyelets (p. 91)
- Whiplash protection system (p. 53)

**Grocery bag holder**
The grocery bag holders (hooks) and elastic strap help keep shopping bags in place.

**On the sides**

There is a hook on each side of the cargo compartment.

<table>
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<tr>
<th>CAUTION</th>
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The grocery bag holders (hooks) are only intended to hold weights less than approx. 11 lbs (5 kg).

**Related information**
- Cargo net (p. 88)
- Steel cargo grid* (p. 90)
- Cargo compartment cover* (p. 92)

**Cargo net**
The cargo net helps protect passengers from objects in the cargo compartment in the event of a sudden stop or hard braking.

The cargo net is attached at four points.

The cargo net can be mounted in two positions:
- Rear mounting: behind the rear seat backrests.
- Front mounting: behind the front seats' backrests.

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<th>WARNING</th>
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- Objects in the cargo compartment should always be securely anchored.
- All of the net's attachment points must be securely in place when the net is used.
- A damaged net must never be used.

* Option/accessory.
Installing the net

NOTE
Front mounting is done most easily through one of the rear doors.

1. Fold out the cargo net and be sure the two sections of the upper rod are locked in the folded-out position.

2. Insert one of the net's upper hooks into the front or rear ceiling mounting point with the net's lower straps' locks facing you.

3. Insert the other upper hook into the ceiling mounting point on the opposite side. It is spring-loaded to make mounting easier.
   Press each of the hooks as far forward into the respective mounting points as possible.

4. **Rear mounting**: with the upper hooks inserted into the rear ceiling mounting points, hook the lower straps through the load anchoring eyelets on the floor of the cargo compartment that are closest to the rear seat backrest.

5. Pull the lower straps taut.

CAUTION
When moving the front seats with the cargo net installed, only move the seat(s)/backrest(s) rearward until they touch the net.

Excessive pressure from the front seats against the cargo net could damage the net and/or its brackets.
**Removing and storing**

1. Reduce tension on the net by pressing the button on the lower straps' respective locks and allow some slack on both sides.
2. Press in the catches and release both of the straps' hooks.
3. Remove the upper hooks from the ceiling mounting points.
4. Press the red button on the upper rod to allow it to fold.
5. Fold and roll up the net.

Store the net under the cargo compartment floor.

**Related information**

- Cargo compartment cover* (p. 92)
- Load anchoring eyelets (p. 91)
- Steel cargo grid* (p. 90)
- Loading (p. 86)

---

**Steel cargo grid***

Your vehicle can be equipped with a steel grid that helps prevent objects in the cargo compartment from moving forward into the passenger area.

---

**WARNING**

- No one should ever be allowed to remain in the cargo compartment when the vehicle is moving.
- The steel grid may only be used in the rear position described in this article. The ceiling attachment points above the front seats are **not** intended to anchor the steel grid.
- After being mounted, be sure that the steel grid is securely anchored in place.

---

**Mounting**

Before installing the steel grid, the existing plastic ceiling mounting consoles must be replaced by steel ones. This should preferably be done by a trained and qualified Volvo service technician.

1. Fold down the rear seat backrests.
2. Be sure that the steel grid is turned in the right direction. Lift the grid into the vehicle through one of the rear doors.
3. Place the grid's attachment points in the ceiling mounting consoles.

This is easier to do if two people hold the grid in the correct position prior to the following step.

* Option/accessory.
4. Insert the screw included in the kit into the hole and tighten it. Do the same on the opposite side.  
   - Check that the steel grid is securely attached.

For additional information about the installation procedure and the tools required, see the installation instructions included with the steel grid kit.

**NOTE**

The steel grid cannot be folded up or down when the optional cargo compartment cover is in place.

**Related information**

- Cargo net (p. 88)
- Cargo compartment cover* (p. 92)
- Load anchoring eyelets (p. 91)
- Loading (p. 86)

**Load anchoring eyelets**

The eyelets in the cargo compartment can be folded out to secure objects with straps, a net, etc.

**WARNING**

- Cover sharp edges on long loads to help prevent injury to occupants. Secure the load to help prevent shifting during sudden stops.
- Always secure large and heavy objects with a seat belt or cargo retaining straps.
- Always secure the load to help prevent it from moving in the event of sudden stops.
- Switch off the engine, apply the parking brake and put the gear selector in P when loading and unloading the vehicle.

**Related information**

- Loading (p. 86)
- Grocery bag holder (p. 88)
- Cargo net (p. 88)
- Steel cargo grid* (p. 90)
- Cargo compartment cover* (p. 92)
Cargo compartment cover*
The cover can be used to conceal objects in the cargo compartment.

Installing the cover

With the cover retracted, press the end piece on one side of the cargo compartment cover into the retaining bracket in the side panel of the cargo compartment.

Do the same on the opposite side.

Be sure that the front section of the cover is angled downward before the cassette is put in place.

Press both sides of the cover, one at a time, until they click into place.

> The red mark will no longer be visible.
Check that both ends of the cover are securely locked in place.

Using the cover
The cover can be used in two positions: fully open to completely cover the cargo compartment or partially retracted to make it easier to reach farther into the cargo compartment.

Fully open

1. Grasp the handle and pull out the cover as far as possible.
2. Press the attaching pins on the rear corners of the cover into the grooves in the rear pillars.

The rear cover blade is mounted on the inside of the cargo door as a complement.
Loading (partially retracted) position
From the fully open position:

- Grasp the handle to release the attaching pins from the grooves.
  > The cover will retract until it reaches the loading position.

To fully open the cover from the loading position:
1. Grasp the handle and pull out the cover to the fully open position.
2. Release the handle so that the attaching pins hook into the grooves in the rear pillars.
  > The cover will remain in the fully open position.

Retracting the cover
From the fully open position:
- Lift the cover’s handle and pull it rearward slightly to release the attaching pins from their grooves. Allow the cover to retract.

From the partially retracted position:
- Grasp the handle and lift it slightly to release the attaching pins from their grooves. Pull the cover to the fully open position.
  > Allow the cover to retract completely.

Removing the cover
1. With the cover retracted, press the button on one of the cover’s ends and lift out that end.
2. Carefully lift the cover up/out.
  > The other end will release automatically.
  Lift the cover out of the cargo compartment.

WARNING
When the cargo area cover is in the loading position, it may partially obscure the driver’s rear view. For this reason, the cover should either be fully open or fully retracted when the vehicle is being driven.

Automatically arming/disarming the alarm
Automatically arming the alarm helps prevent inadvertently leaving the vehicle without alarm protection.

If the vehicle has been unlocked with the remote key (and the alarm has been disarmed) but no door or the tailgate has been opened within 2 minutes, the vehicle will automatically relock and the alarm will re-arm.

In certain markets, the alarm will be re-armed automatically after a slight delay after the driver’s door has been opened and closed without being locked.
Octane rating
Volvo requires premium fuel (91 octane or above) for best performance.

Minimum octane

<table>
<thead>
<tr>
<th>MINIMUM OCTANE RATING (R + M)/2 METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>91</td>
</tr>
</tbody>
</table>

Sample fuel pump octane label

**TOP TIER Detergent Gasoline**
Volvo endorses the use of “TOP TIER Detergent Gasoline” where available to help maintain engine performance and reliability. TOP TIER Detergent Gasoline meets a new standard jointly established by leading automotive manufactures to meet the needs of today’s advanced engines. Qualifying gasoline retailers (stations) will, in most cases, identify their gasoline as having met the “TOP TIER Detergent Gasoline” standards.

**Use of Additives**
With the exception of gas line antifreeze during winter months, do not add solvents, thickeners, or other store-bought additives to your vehicle's fuel, cooling, or lubricating systems. Overuse may damage your engine, and some of these additives contain organically volatile chemicals. Do not needlessly expose yourself to these chemicals.

**WARNING**
Never carry a cell phone that is **switched on** while refueling your vehicle. If the phone rings, this may cause a spark that could ignite gasoline fumes, resulting in fire and injury.

**WARNING**
Carbon monoxide is a poisonous, colorless, and odorless gas. It is present in all exhaust gases. If you ever smell exhaust fumes inside the vehicle, make sure the passenger compartment is ventilated, and immediately return the vehicle to a trained and qualified Volvo service technician for correction.

**NOTE**
Information about TOP TIER Detergent Gasoline is available at www.toptiergas.com.

**NOTE**
When switching to higher octane fuel or changing gasoline brands, it may be necessary to fill the tank more than once before a difference in engine operation is noticeable.

**Fuel Formulations**
Do not use gasoline that contains lead as a knock inhibitor, and do not use lead additives. Besides damaging the exhaust emission control systems on your vehicle, lead has been strongly linked to certain forms of cancer.

Many fuels contain benzene as a solvent. Unburned benzene has been strongly linked to certain forms of cancer. If you live in an area where you must fill your own gas tank, take precautions. These may include:

- standing upwind away from the filler nozzle while refueling.
- refueling only at gas stations with vapor recovery systems that fully seal the mouth of the filler neck during refueling.
- wearing neoprene gloves while handling a fuel filler nozzle.
Opening/closing the fuel filler door
The fuel tank has a filling system that does not have a cover.

Opening/closing the fuel filler door
The vehicle must be unlocked before the fuel filler door can be opened.

An arrow next to the fuel pump symbol in the instrument panel indicates the side of the vehicle where the fuel filler door is located.

1. Open the fuel filler door by pressing lightly on its rear edge.
2. After refueling, close the fuel filler door by pressing lightly.

Refueling from a service station pump

To refuel:
1. Open the fuel filler door. Do not refuel with the engine running
2. Insert the pump's nozzle into the fuel filler pipe's opening as far as possible (see the illustration).
3. Avoid overfilling the fuel tank. Do not press the handle on the filler nozzle after it has stopped pumping. Too much fuel in the tank in hot weather conditions can cause the fuel to overflow. Overfilling could also cause damage to the emission control systems.

CAUTION
Avoid spilling gasoline during refueling. In addition to causing damage to the environment, gasolines containing alcohol can cause damage to painted surfaces, which may not be covered under the New Vehicle Limited Warranty.

Related information
• Octane rating (p. 94)

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1 If the engine is running when the vehicle is refueled, the Check Engine Light (malfunction indicator lamp) may indicate a fault. However, your vehicle's performance will not be affected.
**Tires**

Your vehicle is equipped with tires according to the vehicle's tire information placard on the B-pillar (the structural member at the side of the vehicle, at the rear of the driver's door opening).

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some Volvo models are equipped with an Ultra High Performance tire and wheel combination designed to provide maximum dry pavement performance with consideration for hydroplaning resistance. They may be more susceptible to road hazard damage and, depending on driving conditions, may achieve a tread life of less than 20,000 miles (30,000 km). Even if this vehicle is equipped with Volvo’s advanced AWD or stability system, these tires are not designed for winter driving, and should be replaced with winter tires when weather conditions dictate.</td>
</tr>
</tbody>
</table>

The tires have good road holding characteristics and offer good handling on dry and wet surfaces. It should be noted however that the tires have been developed to give these features on snow/ice-free surfaces.

Most models are equipped with "all-season" tires, which provide a somewhat higher degree of road holding on slippery surfaces than tires without the "all-season" rating. However, for optimum road holding on icy or snow-covered roads, we recommend suitable winter tires on all four wheels.

When replacing tires, be sure that the new tires are the same size designation, type (radial) and preferably from the same manufacturer, on all four wheels. Otherwise there is a risk of altering the car’s roadholding and handling characteristics.

**Recommended tires**

Your vehicle is factory-equipped with Volvo original tires that are marked VOL on the sidewall. These tires have been carefully adapted to your vehicle. When replacing tires, it is important that the new ones also have the VOL designation in order to help maintain the vehicle’s driving and handling characteristics.

**New tires**

Remember that tires are perishable goods. As of 2000, the manufacturing week and year (Department of Transportation (DOT) stamp) will be indicated with 4 digits (e.g., 0715 means that the tire illustrated was manufactured during week 7 of 2015).

**Tire age**

Tires degrade over time, even when they are not being used. It is recommended that tires generally be replaced after 6 years of normal service. Heat caused by hot climates, frequent high loading conditions or Ultra Violet (U.V.) exposure can accelerate the aging process. The temporary spare should also be replaced at 6-year intervals, even if it has never been used. A tire's age can be determined by the DOT stamp on the
sidewall (see the illustration). A tire with e.g., visible cracks or discoloration should be replaced immediately.

**Tire economy**
- Maintain correct tire pressure.
- Avoid fast starts, hard braking and tire screeching.
- Tire wear increases with speed.
- Correct front wheel alignment is very important.
- Unbalanced wheels impair tire economy and driving comfort.
- Tires must maintain the same direction of rotation throughout their lifetime.
- When replacing tires, the tires with the most tread should be mounted on the rear wheels to reduce the chance of oversteer during hard braking.
- Hitting curbs or potholes can damage the tires and/or wheels permanently.

**Tire rotation**
Your vehicle has no required tire rotation. Tire wear is affected by a number of factors such as tire inflation, ambient temperature, driving style, etc.

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**NOTE**
- If the tires are rotated, they should only be moved from front to rear or vice versa. They should never be rotated left to right/right to left.
- Ideally, tire rotation should be done the first time after approximately 3,000 miles (5,000 km) and thereafter at 6,000-mile (10,000-km) intervals. Some customers find that tire rotation may help to get extra mileage from tire life.
- Tire rotation should only be performed if front/rear tire wear is fairly even and tread height is above 1/16" (1.6 mm).

**Storing wheels and tires**
When storing complete wheels (tires mounted on rims), they should be suspended off the floor or placed on their sides on the floor. Tires not mounted on rims should be stored on their sides or standing upright, but should not be suspended.

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**CAUTION**
Tires should preferably be stored in a cool, dry, dark place, and should never be stored in close proximity to solvents, gasoline, oils, etc.

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**WARNING**
- The wheel and tire sizes for your Volvo are specified to meet stringent stability and handling requirements. Unapproved wheel/tire size combinations can negatively affect your vehicle's stability and handling.
- Any damage caused by installation of unapproved wheel/tire size combinations will not be covered by your new vehicle warranty. Volvo assumes no responsibility for death, injury, or expenses that may result from such installations.

**Related information**
- Checking tire inflation pressure (p. 104)
- Tread wear indicator (p. 101)
Tire sidewall designations

The following information can be found on a tire's sidewall:

1. **215**: the width of the tire (in millimeters) from sidewall edge to sidewall edge. The larger the number, the wider the tire.
2. **65**: The ratio of the tire's height to its width in percent.
3. **R**: Radial tire (the designation RF and the symbol indicate that the vehicle is equipped with optional self-supporting run flat tires⁴).
4. **15**: The diameter of the wheel rim (in inches).
5. **95**: The tire's load index. In this example, a load index of 95 equals a maximum load of 1521 lbs (690 kg).
6. **H**: The tire's speed rating, or the maximum speed at which the tire is designed to be driven for extended periods of time, carrying a permissible load for the vehicle, and with correct inflation pressure. For example, H indicates a speed rating of 130 mph (210 km/h).

Federal law mandates that tire manufacturers place standardized information on the sidewall of all tires (see the illustration).

The vehicle has been certified with certain combinations of wheels and tires.

The following information is listed on the tire sidewall:

**NOTE**

Please be aware that the following tire designation is an example only and that this particular tire may not be available on your vehicle.

7. **M+S or M/S** = Mud and Snow, **AT** = All Terrain, **AS** = All Season

8. **U.S. DOT Tire Identification Number (TIN)**: This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, 1510 means that the tire was manufactured during week 15 of 2010. The numbers in between are marketing codes used at the manufacturer's discretion. This information helps a tire manufacturer identify a tire for safety recall purposes.

9. **Tire Ply Composition and Material Used**: Indicates the number of plies indicates or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

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⁴ Self-supporting run flat tires may not be available on all models
10. **Maximum Load**: Indicates the maximum load in pounds and kilograms that can be carried by the tire. Refer to the vehicle's tire information placard located on the B-Pillar for the correct tire pressure for your vehicle.

11. **Treadwear, Traction, and Temperature grades**.

12. **Maximum permissible inflation pressure**: the greatest amount of air pressure that should ever be put in the tire. This limit is set by the tire manufacturer.

### Speed Symbol

A tire's Speed Symbol (SS) indicates the maximum speed for which the tire has been certified and should be at least equivalent to the vehicle's top speed.

Winter tires, with or without studs, are exceptions and may use a lower SS. When winter tires are installed, the vehicle may not be driven faster than the tires' SS.

The vehicle's speed should always be determined by the posted speed limit and traffic and road conditions, not the tire's SS.

The following table indicates the maximum permissible speed for each SS.

<table>
<thead>
<tr>
<th>Speed Symbol</th>
<th>Maximum Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>81 mph (130 km/h)</td>
</tr>
<tr>
<td>Q</td>
<td>100 mph (160 km/h)</td>
</tr>
<tr>
<td>T</td>
<td>118 mph (190 km/h)</td>
</tr>
<tr>
<td>H</td>
<td>130 mph (210 km/h)</td>
</tr>
<tr>
<td>V</td>
<td>149 mph (240 km/h)</td>
</tr>
<tr>
<td>W</td>
<td>168 mph (270 km/h)</td>
</tr>
<tr>
<td>Y</td>
<td>186 mph (300 km/h)</td>
</tr>
</tbody>
</table>

**WARNING**

- The wheel and tire sizes for your Volvo are specified to meet stringent stability and handling requirements. Unapproved wheel/tire size combinations can negatively affect your vehicle's stability and handling.
- Any damage caused by installation of unapproved wheel/tire size combinations will not be covered by your new vehicle warranty. Volvo assumes no responsibility for death, injury, or expenses that may result from such installations.

### Wheel (rim) designations

Wheel and rim dimensions are shown in the following table.

The vehicle has been certified with certain combinations of wheels and tires.

The following table shows an example of wheel dimensions: 7.5Jx19x50.5. This particular wheel may not be available on your vehicle.

<table>
<thead>
<tr>
<th>Wheel Width</th>
<th>Wheel Diameter</th>
<th>Offset in mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>19</td>
<td>50.5</td>
</tr>
</tbody>
</table>

**Related information**

- Tire sidewall designations (p. 98)
Tire terminology
The following is a glossary of tire-related terms.

The tire suppliers may have additional markings, notes or warnings such as standard load, radial tubeless, etc.

- **Tire information placard**: A placard showing the OE (Original Equipment) tire sizes, recommended inflation pressure, and the maximum weight the vehicle can carry.
- **Tire Identification Number (TIN)**: A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacturer.
- **Inflation pressure**: A measure of the amount of air in a tire.
- **Standard load**: A class of P-metric or Metric tires designed to carry a maximum load at 35 psi [37 psi (2.5 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tires load carrying capability.
- **Extra load**: A class of P-metric or Metric tires designed to carry a heavier maximum load at 41 psi [43 psi (2.9 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.
- **kPa**: Kilopascal, a metric unit of air pressure.
- **PSI**: Pounds per square inch, a standard unit of air pressure.
- **B-pillar**: The structural member at the side of the vehicle behind the front door.
- **Bead area of the tire**: Area of the tire next to the rim.
- **Sidewall of the tire**: Area between the bead area and the tread.
- **Tread area of the tire**: Area of the perimeter of the tire that contacts the road when mounted on the vehicle.
- **Rim**: The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.
- **Maximum load rating**: A figure indicating the maximum load in pounds and kilograms that can be carried by the tire. This rating is established by the tire manufacturer.
- **Maximum permissible inflation pressure**: The greatest amount of air pressure that should ever be put in the tire. This limit is set by the tire manufacturer.
- **Recommended tire inflation pressure**: Inflation pressure, established by Volvo, which is based on the type of tires that are mounted on a vehicle at the factory. This information can be found on the tire inflation placard(s) located on the driver’s side B-pillar and in the tire inflation table in this chapter.
- **Cold tires**: The tires are considered to be cold when they have the same temperature as the surrounding (ambient) air. This temperature is normally reached after the vehicle has been parked for at least 3 hours.
**Tire direction of rotation**

Incorrectly mounted tires impair the car's braking properties and ability to force aside rain, snow and slush.

- The arrows shows the direction of rotation of the tire

**Related information**
- Tires (p. 96)

**Tread wear indicator**

The tires have wear indicator strips running across or parallel to the tread.

The letters TWI are printed on the side of the tire. When approximately 1/16" (1.6 mm) is left on the tread, these strips become visible and indicate that the tire should be replaced. Tires with less than 1/16" (1.6 mm) tread offer very poor traction.

When replacing worn tires, it is recommended that the tire be identical in type (radial) and size as the one being replaced. Using a tire of the same make (manufacturer) will help prevent alteration of the driving characteristics of the vehicle.

**Related information**
- Tire direction of rotation (p. 101)
- Checking tire inflation pressure (p. 104)
Loading specifications
Properly loading your vehicle will provide maximum return of vehicle design performance.

Weight designations
Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle’s weight ratings, with or without a trailer, from the vehicle’s Federal/Canadian Motor Vehicle Safety Standards (FMVSS/CMVSS) label, and the vehicle’s tire information placard:

Curb weight
The weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Capacity weight
All weight added to the curb weight, including cargo and optional equipment. When towing, trailer hitch tongue load is also part of cargo weight.

Permissible axle weight
The maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Federal/Canadian Motor Vehicle Safety Standards (FMVSS/CMVSS) label. The total load on each axle must never exceed its maximum permissible weight.

Gross vehicle weight (GVW)
The vehicle’s curb weight + cargo + passengers.

Steps for Determining Correct Load Limit
1. Locate the statement "the combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle’s placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 × 150) = 650 lbs.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

WARNING
• Exceeding the permissible axle weight, gross vehicle weight, or any other weight rating limits can cause tire overheating resulting in permanent deformation or catastrophic failure.
• Do not use replacement tires with lower load carrying capacities than the tires that were original equipment on the vehicle because this will lower the vehicle’s GVW rating. Use only tires with the correct load carrying capacity. Consult your Volvo retailer for information.

Related information
• Label information (p. 156)
• Weights (p. 161)
Uniform Tire Quality Grading

ALL PASSENGER VEHICLE TIRES MUST CONFORM TO FEDERAL SAFETY REQUIREMENTS IN ADDITION TO THESE GRADES.

Quality grades can be found, where applicable, on the tire sidewall between the tread shoulder and maximum section width. For example:

Treadwear 200 Traction AA Temperature A

TREADWEAR
The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one half (1 ½) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and many depart significantly from the norm due to variation in driving habits, maintenance practices and differences in road characteristics and climate.

TRACTION
The traction grades, from highest to lowest, are AA, A, B, and C, as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance. The traction grade assigned to this tire is based on braking (straight-ahead) traction tests and is not a measure of cornering (turning) traction.

WARNING
The traction grade assigned to this tire is based on braking (straight-ahead) traction tests and is not a measure of cornering (turning) traction.

TEMPERATURE
The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a minimum level of performance that all passenger vehicle tires must meet under the Federal Motor Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

WARNING
The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and tire failure.

Snow tires and chains

The use of snow chains and/or winter tires can help improve traction in winter driving conditions.

Snow chains can be used on your Volvo with the following restrictions:

- Snow chains should be installed on front wheels only. Use only Volvo approved snow chains.
- If accessory, aftermarket or "custom" tires and wheels are installed and are of a size different than the original tires and wheels, chains in some cases CANNOT be used. Sufficient clearances between chains and brakes, suspension and body components must be maintained.
- Some strap-on type chains will interfere with brake components and therefore CANNOT be used.
- All Wheel Drive models: Snow chains should only be installed on the front wheels.
- Certain size tires may not allow the assembly of snow chains/traction devices.

Consult your Volvo retailer for additional snow chain information.
CAUTION

- Snow chains should not be used on wheels larger than 18”.
- Always follow the chain manufacturer’s installation instructions carefully. Install chains as tightly as possible and retighten periodically.
- Check local regulations regarding the use of snow chains before installing.
- Use single-sided snow chains only.
- Never exceed the chain manufacturer’s specified maximum speed limit. (Under no circumstances should you exceed 31 mph (50 km/h).
- Avoid bumps, holes or sharp turns when driving with snow chains.
- The handling of the vehicle can be adversely affected when driving with chains. Avoid fast or sharp turns as well as locked wheel braking.

Checking tire inflation pressure

Correct tire inflation pressure helps improve driving stability, save fuel and increase the service life of the tires.

WARNING

- Under-inflation is the most common cause of tire failure and may result in severe tire cracking, tread separation, or "blow-out," with unexpected loss of vehicle control and increased risk of injury.
- Under-inflated tires reduce the load carrying capacity of your vehicle.

Cold tires

Inflation pressure should be checked when the tires are cold.

The tires are considered to be cold when they have the same temperature as the surrounding (ambient) air.

This temperature is normally reached after the vehicle has been parked for at least 3 hours.

After driving a distance of approximately 1 mile (1.6 km), the tires are considered to be hot. If you have to drive farther than this distance to pump your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump.

When weather temperature changes occur, tire inflation pressures also change. A 10-degree temperature drop causes a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure, which can be found on the vehicle’s tire information placard or certification label.

If checking tire pressure when the tire is hot, never "bleed" or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.

Recommended inflation pressures

Tire inflation placard

A tire inflation pressure placard is located on the driver’s side B-pillar (the structural member at the side of the vehicle, at the rear of the driver’s door opening). This placard indicates the designation...
of the factory-mounted tires on your vehicle, as well as load limits and inflation pressure.

**NOTE**
- The placard shown indicates inflation pressure for the tires installed on the vehicle at the factory only.
- A certain amount of air seepage from the tires occurs naturally and tire pressure fluctuates with seasonal changes in temperature. Always check tire pressure regularly.

- Use a tire gauge to check the tire inflation pressure, including the spare, at least once a month and before long trips. You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate.
- Use the recommended cold inflation pressure for optimum tire performance and wear.
- Under-inflation or over-inflation may cause uneven treadwear patterns.

### Checking tire pressure

1. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve.

2. Add air to reach the recommended air pressure.

3. Replace the valve cap.

4. Visually inspect the tires to make sure there are no nails or other objects embedded that could puncture the tire and cause an air leak.

5. Check the sidewalls to make sure there are no gouges, cuts, bulges or other irregularities.

6. Repeat this procedure for each tire, including the spare.

**CAUTION**
- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

**NOTE**
- If you overfill the tire, release air by pushing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.
- Some spare tires require higher inflation pressure than the other tires. Consult the tire inflation pressure table or the inflation pressure placard.

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5 Not available in all models.
Changing tires

When changing wheels to another dimension, always follow Volvo’s instructions.

When changing to tires of another dimension
If you mount tires with a dimension other than the factory-installed tires, contact an authorized Volvo retailer to update the vehicle’s software. This may also be necessary when changing from summer to winter tires, or vice versa.

Related information
- Snow tires and chains (p. 103)
- Spare tire (p. 107)
- Installing a wheel (p. 110)
- Removing a wheel (p. 109)

Tools

Tools for e.g., changing wheels, etc., are located under the cargo compartment floor.

Jack

The jack is used to raise the vehicle, for example when mounting winter wheels, etc.

**WARNING**

- The jack must correctly engage the jack attachment.
- Be sure the jack is on a firm, level, non-slippery surface.
- Never allow any part of your body to be extended under a vehicle supported by a jack.
- Use the jack intended for the vehicle when changing a tire. For any other job, use stands to support the vehicle.
- Apply the parking brake and put the gear selector in the Park (P) position.
- Block the wheels standing on the ground, use rigid wooden blocks or large stones.
- The jack should be kept well-greased and clean, and should not be damaged.
- No objects should be placed between the base of jack and the ground, or between the jack and the attachment bar on the vehicle.

Generic illustration - the appearance and location of the foam block may vary from model to model

The foam block under the cargo compartment floor contains the towing eyelet, the tool for removing plastic wheel bolt covers, the jack* and the lug wrench*. There is also a storage space for the tool used to remove locking wheel bolts.

Related information
- Jack (p. 106)
- Changing tires (p. 106)

* Option/accessory.
CAUTION

- When not in use, the jack* should be kept in its storage compartment under the cargo compartment floor.
- The jack provided with your vehicle is intended to be used only in temporary situations such as changing wheels in the event of a flat tire. Only the jack that came with your particular model should be used to lift the vehicle. If the vehicle needs to be lifted more frequently or for a prolonged period, using a garage jack or hoist is recommended. Always follow this device’s instructions for use.

Models with leveling control*

If the vehicle is equipped with the optional pneumatic suspension, this feature must be turned off before raising the vehicle with the jack.

To do so, go to Settings → Vehicle → Disable Leveling Control in the center display's Top view.

Spare tire

The spare tire in your vehicle is called a "Temporary Spare".

NOTE

- The vehicle should never be driven faster than 50 mph (80 km/h) when the spare tire is being used.
- The spare tire is only intended for temporary use. Replace it with a normal wheel as soon as possible.
- The vehicle’s handling may be altered by the use of the spare tire and ground clearance will be reduced. Do not wash the vehicle in an automatic car wash if the Temporary Spare is being used.
- Recommended tire pressure (see the placard on the B-pillar) should be maintained irrespective of which position on the vehicle the temporary spare tire is used on.
- In the event of damage to this tire, a new one can be purchased from your Volvo retailer.

WARNING

Current legislation prohibits the use of the "Temporary Spare" tire other than as a temporary replacement for a punctured tire. It must be replaced as soon as possible by a standard tire. Road holding and handling may be affected with the "Temporary Spare" in use. Do not exceed 50 mph (80 km/h).

CAUTION

The vehicle must not be driven with wheels of different dimensions or with a spare tire other than the one that came with the vehicle. The use of different size wheels can seriously damage your vehicle’s transmission.

CAUTION

The vehicle must never be driven with more than one temporary spare wheel.

The spare tire is located under the floor of the cargo compartment and is held in place by two straps. The foam block in front of the spare tire contains tools needed for changing a wheel.

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* Option/accessory. 107

6 Not available on all models.
**Accessing the spare tire**

1. Lift the rear edge of the cargo compartment floor.
2. Unhook the retaining straps and lift out the spare tire.

**Stowing a flat tire**

1. Take out the package containing a wheel bag from the foam block and put the wheel in the bag.
2. Put the tools back in the foam block and lower the compartment floor.
3. Place the bag containing the wheel in the cargo compartment.

**Related information**

- Changing tires (p. 106)
- Removing a wheel (p. 109)
- Wheel bolts (p. 108)

**Wheel bolts**

The wheel bolts hold the wheel in place.

**CAUTION**

Wheel bolts should be tightened to 103 ft. lbs. (140 Nm). Over-tightening could damage the threads.

Only use wheels/rims that have been tested and approved by Volvo and are included in Volvo's product range.

Use a torque wrench to check that the wheel bolts are tightened correctly.

* Never lubricate the wheel bolts' threads.

**Locking wheel bolts**

A tool for removing locking wheel bolts can be found in the foam block under the cargo compartment floor.

**Related information**

- Changing tires (p. 106)
- Installing a wheel (p. 110)
Removing a wheel
Wheel changes should always be carried out correctly.

1. Turn on the hazard warning flashers if the wheel change has to be done near passing traffic.
2. Apply the parking brake and put the gear selector in P.

⚠️ CAUTION
Models with suspension and level control*

Turn this function off before raising the vehicle.

To do so, go to Settings ➔ Vehicle ➔ Disable Leveling Control in the center display’s Top view.

⚠️ WARNING
• The jack must correctly engage the jack attachment.
• Be sure the jack is on a firm, level, non-slippery surface.
• Never allow any part of your body to be extended under a vehicle supported by a jack.
• Use the jack intended for the vehicle when changing a tire. For any other job, use stands to support the vehicle.
• Apply the parking brake and put the gear selector in the Park (P) position.
• Block the wheels standing on the ground, use rigid wooden blocks or large stones.
• The jack should be kept well-greased and clean, and should not be damaged.
• No objects should be placed between the base of jack and the ground, or between the jack and the attachment bar on the vehicle.

⚠️ NOTE
The jack provided with your vehicle is intended to be used only in temporary situations such as changing wheels in the event of a flat tire. Only the jack that came with your particular model should be used to lift the vehicle. If the vehicle needs to be lifted more frequently or for a prolonged period, using a garage jack or hoist is recommended. Always follow this device’s instructions for use.

3. Take out the jack*, lug wrench*, the tool for removing the plastic covers on the wheel bolts and the towing eyelet stowed under the floor of the cargo compartment.

4. Block the wheels that are on the ground with wooden blocks or large stones.

* Option/accessory.
5. Lug wrench and towing eyelet

Screw the towing eyelet into the lug wrench as shown in the illustration.

**CAUTION**
The towing eyelet must be screwed into the lug wrench as far as possible.

6. With the vehicle still on the ground, use the lug wrench/towing eyelet to loosen the wheel bolts ½ – 1 turn by exerting downward (counterclockwise) pressure.

7. When hoisting the vehicle, it is essential that the jack (or garage lift arms) are positioned correctly on the underside of the vehicle. There are two jack attachment points on each side of the vehicle and there is a groove in the plastic cover at each attachment point. Position the jack under the attachment point to be used on a level, firm, non-slippery surface and crank it up until it is correctly aligned and seated in the attachment point. The pin on the jack's head must be positioned in the hole in the attachment point.

8. Raise the vehicle until the wheel to be changed is lifted off the ground. Remove the wheel bolts.

**Related information**
- Wheel bolts (p. 108)
- Installing a wheel (p. 110)
- Jack (p. 106)

**Installing a wheel**

It is important to install wheels properly.

1. Clean the contact surfaces on the wheel and hub.
2. Lift the wheel and place it on the hub.
3. Install the wheel bolts and tighten hand-tight. Using the lug wrench, tighten crosswise until all bolts are snug.
4. Lower the vehicle to the ground and alternately tighten the bolts crosswise to 103 ft. lbs. (140 Nm).
5. Press the plastic covers onto the wheel bolts.
CAUTION

- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

Related information
- Wheel bolts (p. 108)
- Jack (p. 106)

## Tire Pressure Monitoring System (TPMS)

TPMS provides a warning if inflation pressure in one or more tires is too low. It also uses a symbol (called a telltale) that will flash for 60 seconds and then glow steadily if there is a system malfunction.

TPMS uses the rotational speed of the tires in combination with signal analysis of the ABS sensor signals to determine if they are properly inflated. When a tire is under-inflated, its diameter (and consequently also its rotational speed) changes. By comparing the individual tires with each other it is possible to determine if one or more tires are under inflated. If inflation pressure is too low, an indicator symbol will illuminate in the instrument panel and a text message will be displayed.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>The symbol illuminates to indicate low tire inflation pressure. If a malfunction occurs in the system, the tire pressure warning symbol will flash for approximately 1 minute and then remain illuminated.</td>
</tr>
</tbody>
</table>

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure.

Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability. Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale.
When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

Messages in the instrument panel
When the TPMS symbol illuminates, the following text messages may also be displayed:

- Tire pressure low Check tires, calibrate after fill
- Tire pressure system Temporarily unavailable
- Tire pressure system Service required

If TPMS cannot determine which tire(s) have low inflation pressure:

- All four tires will be shown as affected in the center display

After changing wheels, always calibrate the system to avoid false warnings.

TPMS does not replace the need for regular tire inspection and maintenance.

**NOTE**

If you change to tires with a different dimension than the factory-installed ones, the TPMS system must be calibrated for these tires.

TPMS cannot be turned off.

**WARNING**

Incorrect inflation pressure could lead to tire failure, resulting in a loss of control of the vehicle.

**Checking tire inflation pressure**

The Tire Pressure Monitoring System (TPMS) makes it possible to view the current inflation pressure status of all four tires.

1. Open the **Car status** app in the center display’s Application view.
2. Tap **TPMS** to see the tires’ current inflation pressure status.

The on-screen graphic displays the inflation pressure status.
PRACTICAL INFORMATION

Status view. The illustration is generic and may vary from model to model or after a software update.

Color indications:

Green: tire pressure is above the threshold for a low inflation pressure warning.

Yellow: low tire pressure.
  - One yellow wheel: the tire indicated is under-inflated.
  - All wheels yellow: two or more tires are under-inflated.

Stop safely and check/re-inflate the tire(s) as soon as possible. Calibrate TPMS after re-inflating the tire(s).

All wheels gray:
  - Calibration is underway
  - Inflation pressure status is not known

It might be necessary to drive at a speed of at least 22 mph (35 km/h) for several minutes for the system to become operational.

All wheels gray combined with the message Tire pressure system Temporarily unavailable and the TPMS symbol in the instrument panel (⚠️) remains illuminated after flashing for 1 minute: the system is temporarily unavailable. It should become operational again shortly.

All wheels gray combined with the message Tire pressure system Service required and the TPMS symbol in the instrument panel (⚠️) remains illuminated after flashing for 1 minute: the system is not functioning correctly. Have it checked by a trained and qualified Volvo service technician.

Related information
  - Calibrating the Tire Pressure Monitoring System (TPMS) (p. 114)
  - Re-inflating tires equipped with the Tire Pressure Monitoring System (TPMS) (p. 113)
  - Tire Pressure Monitoring System (TPMS) (p. 111)

Reinflating tires equipped with the Tire Pressure Monitoring System (TPMS)

When low tire pressure has been detected, a message will be displayed in the instrument panel and the Tire Pressure Monitoring System symbol will illuminate.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️</td>
<td>When the TPMS symbol illuminates and a message is displayed, check, re-inflate the tire(s) and calibrate TPMS.</td>
</tr>
</tbody>
</table>

1. Use a tire pressure gauge to check the inflation pressure of all four tires.

2. Re-inflate the tire(s) to the correct pressure. Consult the tire pressure decal located on the driver's side B-pillar (the structural member at the side of the vehicle, at the rear of the driver's door opening) or the inflation pressure table in your printed owner's manual supplement.

3. Calibrate the Tire Pressure Monitoring System, see the article "Calibrating the Tire Pressure Monitoring System".
4. Drive the vehicle at a speed of at least 22 mph (35 km/h). Please be aware that the TPMS telltale warning will not go out until the low tire pressure has been corrected and calibration has been carried out.

**NOTE**

To help avoid incorrect tire inflation pressure, if possible only inflate the tires when they are cold. The tires are considered to be cold when they have the same temperature as the surrounding (ambient) air. This temperature is normally reached after the vehicle has been parked for at least 3 hours. After driving a distance of approximately 1 mile (1.6 km), the tires are considered to be warm.

**CAUTION**

When inflating tires, press the pump's mouthpiece straight onto the valve to help avoid bending or otherwise damaging the valve.

**CAUTION**

- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

**WARNING**

- Incorrect inflation pressure could lead to tire failure, resulting in a loss of control of the vehicle.
- Tire monitoring systems cannot indicate sudden tire damage caused by external factors (e.g., a blowout) in advance.

**Related information**

- Tire Pressure Monitoring System (TPMS) (p. 111)
- Checking tire inflation pressure (p. 112)
- Calibrating the Tire Pressure Monitoring System (TPMS) (p. 114)

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**Calibrating the Tire Pressure Monitoring System (TPMS)**

In order for the Tire Pressure Monitoring System to work properly, tire pressure reference values must be set correctly. This must be done each time wheels are changed or tire inflation pressures are modified.

**Calibrating TPMS**

To calibrate the system:

1. Switch off the engine. The vehicle must be at a standstill when calibration is started.
2. Re-inflate the tire(s) to the correct pressure. Consult the tire pressure placard located on the driver's side B-pillar (the structural member at the side of the vehicle, at the rear of the driver's door opening) or the inflation pressure table in your printed owner's manual supplement.

3. Start the engine.

4. Open the **Car status** app in the center display's App view.

5. Tap **TPMS** to access Tire Pressure Monitoring System.

6. Tap **Calibrate**.

7. Tap **OK** to confirm that the tire inflation pressure has been checked and adjusted in all four tires.

8. Drive the vehicle.
   
   > Calibration is performed when the vehicle is driven at a speed of at least 22 mph (35 km/h) and will be interrupted if the vehicle is parked and the engine is switched off. Calibration continues automatically in the background when driving resumes.

When enough data has been collected to detect a low tire pressure situation, the tires' color in the center display will change to green. The system will not give any text confirmation when calibration is finished although it will state if calibration fails. When driving with heavy loads or at sustained highway speeds, the tire pressure should be adjusted to the recommended inflation pressures.

After adjusting inflation pressure, repeat steps 1-8.

**NOTE**

Always remember to calibrate the Tire Pressure Monitoring System when the wheels have been changed or the tire inflation pressure has been corrected according to the tire pressure placard or tire inflation pressure table.

If correct reference values have not been set, the system cannot issue low tire pressure alerts correctly.

The vehicle must be parked with the engine running to access the calibration button and to start the calibration process.

**WARNING**

The exhaust gases contain carbon monoxide, which is invisible and odorless but very poisonous. For this reason, always perform the calibration procedure outdoors or in a workshop with exhaust gas evacuation equipment.
Related information

- Tire Pressure Monitoring System (TPMS) (p. 111)
- Checking tire inflation pressure (p. 112)
- Reinfating tires equipped with the Tire Pressure Monitoring System (TPMS) (p. 113)

Tire sealing system

Certain models are equipped with a tire sealing system that enables you to temporarily seal a hole in the tread surface and re-inflate a flat tire, or to adjust a tire's inflation pressure.

Models equipped with a spare tire do not have the tire sealing system.

Location

The tire sealing system is located under the floor of the cargo compartment.

Introduction

The tire sealing system consists of an air compressor, a container for the sealing compound, wiring to connect the system to the vehicle's electrical system via one of the 12-volt sockets, and a hose used to connect the system to the tire's inflation valve.

NOTE

The tire sealing system's compressor has been tested and approved by Volvo.

The 12-volt sockets are located in the front tunnel console, on the rear side of the center console in the rear seat and in the cargo compartment*.

Accessing the tire sealing system

The tire sealing system is stowed under the floor of the cargo compartment. To access it:

1. Lift the floor hatch in the cargo compartment.
2. Lift out the tire sealing system.

NOTE

- The tire sealing system is only intended to seal holes on the tire's tread area, not the sidewall.
- Tires with large holes or tears cannot be repaired with the tire sealing system.
- After use, stow the tire sealing system properly to help prevent rattling.

7 Certain models only.
**WARNING**

- After using the tire sealing system, the vehicle should not be driven farther than approximately 120 miles (200 km).
- Have the tire inspected by a trained and qualified Volvo service technician as soon as possible to determine if it can be permanently repaired or must be replaced.
- The vehicle should not be driven faster than 50 mph (80 km/h) while using a tire that has been temporarily repaired with the tire sealing system.
- After using the tire sealing system, drive carefully and avoid abrupt steering maneuvers and sudden stops.

**Sealing compound container**
The sealing compound container must be replaced if the tire sealing system has been used to repair a tire or if the container’s expiration date has passed (see the date on decal).

**NOTE**

- After use, the sealing compound bottle, the hose, and certain other system components must be replaced. Please consult your Volvo retailer for replacement parts.
- If the sealing compound bottle’s expiration date has passed, please take it to a Volvo retailer or a recycling station that can properly dispose of harmful substances.

**WARNING**

Please keep the following points in mind when using the tire sealing system:

- The sealing compound bottle (no. 8 in the illustration) contains 1) rubber latex, natural and 2) ethanediol. These substances are harmful if swallowed.
- The contents of this bottle may cause allergic skin reactions or otherwise be potentially harmful to the respiratory tract, the skin, the central nervous system, and the eyes.

**Precautions:**

- Keep out of reach of children.
- Do not ingest the contents.
- Avoid prolonged or repeated contact with the skin.
- Wash thoroughly after handling.

**First aid:**

- Skin: Wash affected areas of skin with soap and water. Get medical attention if symptoms occur.
- Eyes: Flush with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Inhalation: Move the exposed person to fresh air. If irritation persists, get medical attention.
**Using the tire sealing system**

**Overview**

1. Electrical wire
2. Hose
3. Air release valve
4. Protective hose cover
5. Speed limit sticker (on the rear side of the compressor)
6. Bottle holder (orange cover)
7. Air pressure gauge
8. Bottle with sealing compound
9. On/Off switch

**Connecting**

1. Activate the vehicle's hazard warning flashers if the tire sealing system is to be used in an area with traffic.

   If the flat tire was caused by a nail, etc., do not remove it from the tire. It will help to seal the hole.

2. Peel off the speed limit sticker and affix it to the windshield so that it is clearly visible to the driver. The vehicle should not be driven faster than 50 mph (80 km/h) while using a tire that has been temporarily repaired with the tire sealing system.

3. Ensure that the on/off switch is in position 0 and take out the electrical wire and hose.

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**Related information**

- Inflating a tire with the tire sealing system compressor (p. 122)
- Using the tire sealing system (p. 118)

**PRACTICAL INFORMATION**

- **Ingestion:** Do **NOT** induce vomiting unless directed to do so by medical personnel. Get medical attention.
- **Disposal:** Dispose of this material and its container to a hazardous or special waste collection point.
PRACTICAL INFORMATION

1. **NOTE**
   Do not break the seal on the bottle. This occurs automatically when the bottle is screwed into the holder.

2. **WARNING**
   Contact with the sealing compound may cause skin irritation. If contact occurs, wash the affected area immediately with soap and water.

3. **WARNING**
   The bottle is equipped with a catch to keep it securely in place and help prevent sealing compound leakage. Once in place, the bottle cannot be unscrewed. This must be done by a trained and qualified Volvo service technician.

4. Unscrew the orange cover over the bottle holder on the compressor and unscrew the cap on the bottle of sealing compound.

5. Screw the bottle into the bottle holder as far as possible.

6. Be sure the air release valve on the compressor’s hose is completely closed. Remove the valve cap from the tire’s inflation valve and screw the tire sealing system’s hose connector onto the valve as tightly as possible by hand.

7. Connect the electrical wire to the nearest 12-volt socket in the vehicle.

   **NOTE**
   Be sure that none of the other 12-volt sockets is being used while the compressor is in operation.

8. Start the tire sealing system’s compressor by pressing the on/off switch to position I.

   **WARNING**
   - Never stand next to the tire being inflated when the compressor is in operation.
   - If cracks, bubbles, etc. form on the tire, switch off the compressor immediately.
   - If there is visible damage to the sidewall or the rim, the tire cannot be repaired. The vehicle should not be driven if this occurs. Contact a towing service, use the Volvo On Call feature in your vehicle or contact Volvo Roadside Assistance if applicable.

   **NOTE**
   The air pressure gauge will temporarily show an increase in pressure to approximately 88 psi (6 bar) while the sealing compound is being pumped into the tire. The pressure should return to a normal level after approximately 30 seconds.
9. Pump the tire for 7 minutes.

10. Switch off the compressor and check the inflation pressure on the air pressure gauge. Inflation pressure should be between 22—51 psi (1.8—3.5 bar). Use the air release valve to release some air from the tire if necessary.

11. Switch off the compressor and disconnect the electrical wire from the 12-volt socket.

12. Unscrew the hose from the tire’s inflation valve and put the cover on the hose back into place to help prevent seepage of residual sealing compound from the hose.

13. Reinstall the valve cap.

14. Immediately drive the vehicle for approximately 2 miles (3 km) at a maximum speed of 50 mph (80 km/h) to distribute the sealing compound in the tire. During the tire’s first revolution, some sealing compound may spray out of the puncture hole.

**WARNING**

No one should stand closer to the vehicle than approx. 7 ft (2 m) when it drives away to help avoid being sprayed with sealing compound.

**CAUTION**

- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

**WARNING**

If the pressure remains below 22 psi (1.8 bar) after approximately seven minutes, turn off the compressor. In this case, the hole is too large to be sealed and the vehicle should not be driven.

**CAUTION**

- Safely stow the tire sealing system in a convenient place as it will soon be used again to check the tire’s inflation pressure.
- The empty bottle of sealing compound cannot be removed from the bottle holder. Consult a trained and qualified Volvo serv-
ice technician to have the bottle removed and properly disposed of.

**WARNING**

If heavy vibrations, unsteady steering behavior, or noises should occur while driving, reduce speed and park the vehicle in a safe place. Recheck the tire for bumps, cracks, or other visible damage, and recheck its inflation pressure. If the pressure is below 19 psi (1.3 bar), do not continue driving. Have the vehicle towed to a trained and qualified Volvo service technician.

### 15. Rechecking the pressure

Reconnect the tire sealing system’s hose to the tire's inflation valve.

### 16. Without starting the compressor, check the inflation pressure on the air pressure gauge.

- If the pressure is under 19 psi (1.3 bar), the puncture has not been sealed sufficiently and the vehicle should not be driven. Have the vehicle towed to a trained and qualified Volvo service technician.
- If the pressure is more than 19 psi (1.3 bar), connect the electrical wire to a 12-volt socket, start the compressor and inflate the tire to the correct pressure (see the tire pressure decal on the on the driver's side B-pillar (the structural member at the side of the vehicle, at the rear of the driver's door opening). Use the air release valve to release some air from the tire if necessary.

### 17. Switch off the compressor and disconnect the electrical wire from the 12-volt socket. Unscrew the hose from the tire's inflation valve and reinstall the valve cap.

Do not attempt to remove the sealing compound bottle from the tire sealing system. It cannot be turned counterclockwise.

### 18. Fold the hose into the sealing system box and return the components to the cargo compartment.

---

**CAUTION**

- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

**NOTE**

- After use, the sealing compound bottle, the hose, and certain other system components must be replaced. Please consult your Volvo retailer for replacement parts.
- If the sealing compound bottle's expiration date has passed, please take it to a Volvo retailer or a recycling station that can properly dispose of harmful substances.

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**WARNING**

Always check tire inflation pressure regularly.

Volvo recommends driving to an authorized Volvo workshop to have the damaged tire repaired/ replaced. Inform the workshop that the tire contains sealing compound.
Inflating a tire with the tire sealing system compressor

The compressor can be used to inflate a tire.

1. The compressor should be switched off. Ensure that the on/off switch is in position 0. Take out the electrical wire and hose.
2. Be sure the air release valve on the compressor's hose is completely closed. Remove the valve cap from the tire's inflation valve and screw the hose connector onto the valve as tightly as possible by hand.
3. Connect the electrical wire to the nearest 12-volt socket in the vehicle and start the engine.
4. Start the compressor by pressing the on/off switch to position I. The vehicle's engine should be running when the tire sealing system is used to avoid battery drain. Therefore, be sure the vehicle is parked in a well ventilated place, or outdoors, before using the system. The parking brake should be securely applied and the gear selector should be in the P (park) position.
5. Inflate the tire to the correct pressure (see the tire pressure decal on the on the driver's side B-pillar (the structural member at the side of the vehicle, at the rear of the driver's door opening). Use the air release valve to release some air from the tire if necessary.

Related information

- Tire sealing system (p. 116)
- Checking tire inflation pressure (p. 104)
- Volvo Roadside Assistance (p. 8)
6. Turn off the compressor (press the on/off switch to position 0) when the correct inflation pressure has been reached.

![CAUTION]

- After inflating the tires, always reinstall the valve cap to help avoid damage to the valve from dirt, gravel, etc.
- Use plastic valve caps only. Metal caps could corrode and become difficult to remove.

7. Disconnect the electrical wire from the 12-volt socket.

**Related information**

- Checking tire inflation pressure (p. 104)
- Tire sealing system (p. 116)
Electrical sockets
There are two 12-volt sockets in the tunnel console, a 120-volt socket on the rear side of the tunnel console, and one 12-volt socket in the cargo compartment.

120-volt socket in the tunnel console

120-volt socket in the tunnel console for the rear seats
This socket is intended for 120-volt devices such as laptops, chargers, etc.

Using the sockets
1. Slide down the cover over the socket and plug in the device.
   > The socket's indicator light will indicate its status. The socket can only provide electrical current when the light is green.

2. Disconnect the device by pulling its plug, not its cord. Pull up the cover over the socket when it is not in use.

**CAUTION**
- Do not connect devices with large or heavy plugs that could come loose while driving.
- Do not use devices that can cause interference with the vehicle's radio receiver or electrical system.

**WARNING**
- Be sure to place any devices connected to the socket safely so that they do not become projectiles in the event of a sudden stop and injure the occupants of the vehicle.
- Be aware that connected devices may generate heat and become very hot.
- Only connect devices that function correctly and are free from defects. These devices should be intended for use in a 120-volt, 60Hz socket with a plug intended for the socket in the vehicle and be UL-approved (or the equivalent thereof).
- Never let the device, its plug or the socket itself come in contact with fluids of any kind. Never touch or use the socket if it appears to be damaged or wet.
- Never connect multiple plugs, adapters or extension cords to the socket. This could override the socket's safety functions.
- Never let children play or tamper with the socket, or attempt to insert any objects into it. Never leave children unattended in the vehicle when the socket is active.
- Never try to modify or repair the 120-volt socket. This should only be done by a professional.

* Certain models only.

* Option/accessory.
**Status indication**

An LED (Light Emitting Diode) on the socket indicates its status:

<table>
<thead>
<tr>
<th>Status indicator light</th>
<th>Socket status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady green light</td>
<td>The socket is providing current to a connected device.</td>
<td>None.</td>
</tr>
<tr>
<td>Flashing orange light</td>
<td>The socket's voltage converter is too hot (the connected device draws too much current, etc. or the temperature in the passenger compartment is very high).</td>
<td>Unplug the device, let the converter cool down and plug in the device again.</td>
</tr>
<tr>
<td></td>
<td>The connected device draws too much current (constantly or currently) or is not functioning properly.</td>
<td>None. The device should not be plugged into the socket.</td>
</tr>
<tr>
<td>Indicator light off</td>
<td>The socket has not detected a plugged in device.</td>
<td>Be sure the device is correctly plugged into the socket.</td>
</tr>
<tr>
<td></td>
<td>The socket is not active.</td>
<td>Put the vehicle's ignition in at least mode 1.</td>
</tr>
<tr>
<td></td>
<td>The socket has been active but has been deactivated.</td>
<td>Start the engine and/or charge the start battery.</td>
</tr>
</tbody>
</table>

If a problem persists, have the socket checked by a trained and qualified Volvo service technician.
12-volt socket in the tunnel console

**WARNING**
Always keep the sockets covered when not in use.

**CAUTION**
Max. current provided is 10 A (120 W) if one socket is used at a time. If both of the sockets in the tunnel console are used at the same time, the max. current provided per socket is 7.5 A (90 W).

If a tire sealing system's compressor is being used, no other device should be connected to any of the other sockets while the compressor is operating.

Fold down the cover to access the socket. Max. current provided is 10 A (120 W).

**NOTE**
The 12-volt socket in the cargo compartment provides electrical current even when the ignition is switched off. Using the socket while the engine is not running will drain the battery.

Related information
- Passenger compartment storage spaces (p. 82)
Replacing bulbs

The halogen headlight bulbs\(^9\) can be replaced by the owner.

Models with LED (Light Emitting Diode) headlights: these lights must be replaced by a trained and authorized Volvo service technician.

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halogen headlights are not available on all models or in all markets. Consult your Volvo retailer if you are uncertain about the type of headlights in your vehicle.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>For information regarding any bulbs not mentioned in this section, please contact your Volvo retailer or a trained and authorized Volvo service technician.</td>
</tr>
<tr>
<td>Always switch off the ignition before starting to replace a bulb.</td>
</tr>
<tr>
<td>If an error message remains in the display after a faulty bulb has been replaced, contact an authorized Volvo workshop.</td>
</tr>
<tr>
<td>Condensation may form temporarily on the inside of the lenses of exterior lights such as headlights, fog lights, or taillights. This is normal and the lights are designed to withstand moisture. Normally, condensation will dissipate after the lights have been on for a short time.</td>
</tr>
<tr>
<td>The optional Active Bending Light bulbs contain trace amounts of mercury. These bulbs should always be disposed of by a trained and qualified Volvo service technician.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never touch the glass of bulbs with your fingers. Grease and oils from your fingers vaporize in the heat and will leave a deposit on the reflector, which will damage it.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ignition should be switched off completely (be in ignition mode 0) when replacing bulbs.</td>
</tr>
<tr>
<td>If the engine has been running just prior to replacing bulbs in the headlight housing, please keep in mind that components in the engine compartment will be hot.</td>
</tr>
</tbody>
</table>

The low beam headlight bulb will be accessible when the round rubber cover has been removed.

\(^9\) Halogen headlights are not available on all models.
**PRACTICAL INFORMATION**

### Front bulbs (vehicles with halogen headlights)

1. Turn signal
2. Parking light/Daytime Running Light
3. High beam
4. Low beam
5. Fog light with corner illumination (LED)*

### Taillight bulbs

1. Side marker light (LED)
2. Turn signal (LED)
3. Taillight (LED)
4. Fog light (LED)
5. Backup light*¹⁰
6. Brake light (LED)
7. High-mounted brake light (LED)

**Related information**

- Replacing low beam headlight bulbs (p. 129)
- Replacing High Beam headlight bulbs (p. 130)

---

* Option/accessory.

¹⁰ Must be replaced by a trained and qualified Volvo service technician.
Replacing low beam headlight bulbs

On models with halogen headlights, the low beam headlight bulb can be replaced by the owner.

Before the bulb can be replaced, the plastic covering over the headlight housing has to be removed, see the article "Replacing bulbs."

**CAUTION**

Never touch the glass of bulbs with your fingers. Grease and oils from your fingers vaporize in the heat and will leave a deposit on the reflector, which will damage it.

Driver's side bulb housing shown

1. Remove the low beam round rubber cover from the headlight housing.
2. Remove the connector from the bulb.
3. Remove the bulb by pressing it slightly upward and then pulling it out.
4. Insert the bulb in the socket. The bulb's guiding pin should point straight up.
5. Press the connector into place.
6. Put the rubber cover back into place.

Related information

- Replacing bulbs (p. 127)
- Bulb specifications (p. 133)
Replacing High Beam headlight bulbs
On models with halogen headlights, the High Beam headlight bulb can be replaced by the owner.

Before the bulb can be accessed, the headlight housing's cover must be removed, see the article "Replacing bulbs."

**CAUTION**

Never touch the glass of bulbs with your fingers. Grease and oils from your fingers vaporize in the heat and will leave a deposit on the reflector, which will damage it.

1. Remove the high beam round rubber cover from the headlight housing.
2. Remove the bulb by turning the bulb holder upward and then pulling it straight out.
3. Carefully pry the plastic sleeve by the connector's locking lug to release it.
4. Remove the connector from the bulb.
5. Replace the bulb.
6. Position the bulb in the socket and turn it downward.
7. Put the rubber cover back into place.

---

Driver's side bulb housing shown

1. Remove the bulb by turning the bulb holder upward and then pulling it straight out.
2. Carefully pry the plastic sleeve by the connector's locking lug to release it.
3. Remove the connector from the bulb.
4. Insert a new bulb.
5. Insert the bulb in the socket and turn it downward.

**Related information**

- Bulb specifications (p. 133)
- Replacing bulbs (p. 127)
Replacing front parking light bulbs
On models with halogen headlights, the front parking light/Daytime Running Light bulb can be replaced by the owner.

Before the bulb can be accessed, the headlight housing’s cover must be removed, see the article "Replacing bulbs."

Remove the high beam bulb first by turning the bulb holder upward and then pulling it straight out. This makes it easier to access the parking light bulb.

1. Remove the rubber cover over the parking light bulb.
2. Pull the bulb holder straight out.
3. Remove the bulb by pulling it straight out.
4. Insert a new bulb.
5. Insert the bulb holder in the socket and press it into place.
6. If the high beam bulb was removed, insert the bulb in the socket and turn downward.
7. Put the rubber cover back into position.

Driver’s side bulb housing shown

1. Pull the bulb holder straight out.
2. Remove the bulb by pulling it straight out.
3. Insert a new bulb.
4. Insert the bulb holder in the socket and press it into place.
5. If the high beam bulb was removed, insert the bulb in the socket and turn downward.

Related information
- Replacing bulbs (p. 127)
- Bulb specifications (p. 133)

Replacing front turn signal bulbs
On models with halogen headlights, the front turn signal bulb can be replaced by the owner.

Before the bulb can be replaced, the headlight housing’s cover must be removed, see the article "Replacing bulbs."

1. Remove the rubber cover over the turn signal bulb.
2. Press the retaining catches together and pull the bulb holder straight out.
3. The bulb holder and bulb must be replaced as one unit.
4. Press the new bulb holder into the socket.
5. Put the rubber cover back in place.

Driver’s side headlight housing shown
Replacing backup lights
The backup light bulb is behind the panel in the tailgate.

1. Remove the panel on the inside of the tailgate by turning both clips counterclockwise a quarter turn. Remove the panel.
2. Remove the bulb holder by turning it counterclockwise and pulling it out.
3. Remove the defective bulb by pressing it in and turning it counterclockwise.
4. Insert a new bulb by pressing it in and turning it clockwise.
5. Insert the bulb holder by turning it clockwise.
6. Put the panel back in place and turn both clips a quarter turn clockwise.

Related information
- Replacing bulbs (p. 127)
- Bulb specifications (p. 133)
Replacing the rear fog light
The rear fog light bulb is located behind the panel on the inside of the tailgate on the driver’s side of the vehicle.

NOTE
Rear fog lights are not available on all models or in all markets.

Related information
• Bulb specifications (p. 133)

Bulb specifications
The following specifications apply to models equipped with halogen\(^{11}\) headlights. If other bulbs need to be replaced, contact a trained and qualified Volvo service technician.

<table>
<thead>
<tr>
<th>Function</th>
<th>[W](^{1})</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low beam</td>
<td>55</td>
<td>H11</td>
</tr>
<tr>
<td>High Beam</td>
<td>65</td>
<td>H9</td>
</tr>
<tr>
<td>Front turn signal</td>
<td>24</td>
<td>PY24W</td>
</tr>
<tr>
<td>Daytime running light/parking light</td>
<td>21/5</td>
<td>W21/5W</td>
</tr>
</tbody>
</table>

\(^{1}\) Watt

Related information
• Replacing bulbs (p. 127)

Replacing wiper blades
The wiper blades should be replaced regularly for best effect.

The windshield wiper blades must be in the vertical (service) position for replacement, washing or to lift them away from the windshield when e.g., removing ice or snow.

Replacing the windshield wiper blades

1. With the wipers in the service position, fold out the wiper arm from the windshield.

2. 1. Fold out the wiper blade from the wiper arm until it clicks. The wiper blade is now in the removal position.

\(^{11}\) Halogen headlights are not available in all models.
3. Press the button on the wiper blade attachment and pull the wiper blade straight out, parallel with the wiper arm while keeping the wiper blade folded out.

4. Slide in the new wiper blade into position, hold it in the removal position and ensure that its attachments are correctly positioned.

5. Fold the wiper blade toward the wiper arm until it clicks into position.

6. Press the wipers back against the windshield.

Cleaning
Keeping the windshield/rear window and wiper blades clean helps improve visibility and prolongs the service life of the wiper blades. Clean the wiper blades with a stiff-bristle brush and luke-warm soap solution or car washing detergent.

Replacing the tailgate wiper blade

1. Fold the wiper arm outward.
2. Grasp the inner section of wiper blade (at the arrow).
3. Use one end of the wiper blade as a lever to help release it from the wiper arm.
4. Press the new wiper blade until it clicks into place and check that it seats securely.
5. Fold the wiper arm back toward the tailgate window.

NOTE
The windshield wiper blades are different lengths. The blade on the driver’s side is longer than the one on the passenger side.
Windshield wipers in the service position
The windshield wiper blades must be in the vertical (service) position for replacement, washing or to lift them away from the windshield when e.g., removing ice or snow.

The service position can be activated in two ways from the center display:

**Via Function view**
- From Function view, tap the **Wiper Service Position** button. The indicator light in the button will illuminate when the service position is activated.
  > The windshield wipers will move to the vertical position.

**Via Settings**
1. Tap **Settings** in the center display's Top view.
2. Tap **My Car ➔ Wipers**
3. Tap the **Wiper Service Position** box.
  > The windshield wipers will move to the vertical position.

Deactivating service position
The service position can be deactivated in two ways from the center display:

**Via Function view**
- From Function view, tap the **Wiper Service Position** button. The indicator light in the button will go out when the service position is deactivated.

**Via Settings**
1. Tap **Settings** in the center display's Top view.
2. **My Car ➔ Wipers**
3. Tap the **Wiper Service Position** to deselect the box.

The wipers will also leave the service position if:
- The wipers are activated.
- The windshield washers are activated.
- The rain sensor is activated.

If the wiper arms have been folded out from the windshield while in the service position, fold them back against the windshield before returning the wipers to the normal position to help avoid scratching the paint on the hood.

---

CAUTION

Be sure the wiper blades are not frozen in position before attempting to move them to the service position.

Putting the windshield wipers in the service position
The service position can be activated while the vehicle is stationary and the wipers are not activated.
Refilling the windshield washer fluid reservoir
Washer fluid helps keep the windshield, tailgate window and headlights clean.

The windshield and headlight washers* share a common reservoir. Open the blue cap to refill washer fluid (see the illustration for the location of the reservoir).

During cold weather, the reservoir should be filled with windshield washer solvent containing anti-freeze. Use Volvo Original Washer Fluid or the equivalent with a recommended pH value between 6 and 8 in a 1:1 solution.

When there is approx. 1 qt (1 liter) of washer fluid remaining in the reservoir, a text message and the 🛋 symbol will be displayed in the instrument panel.

Volume:
- Models with headlight washers: 5.8 qts (5.5 liters).
- Models without headlight washers: 3.7 qts (3.5 liter).

Related information
- Opening and closing the hood (p. 137)
- Engine compartment overview (p. 83)
Opening and closing the hood

The hood is opened by releasing it from the passenger compartment and then by using the handle under the front edge of the hood.

Opening

With the hood completely closed, pull the control (located to the left of the brake pedal).

Move your hand from left to right in the opening under the hood, lift the handle up and to the side to release the hood from the lock and lift.

Warning—hood not closed

When the hood lock has been completely released, this symbol and a graphic will illuminate in the instrument panel and an audible signal will be given. If the vehicle begins to roll, the audible signal will be repeated several times.

Closing

1. Press down the hood until it begins to close due to its own weight.
2. When the handle under the front edge of the hood is in the lock, press down on the hood to close it completely.

**WARNING**

- Be sure the hood is completely unobstructed while it is being closed.
- Check that the hood locks properly when closed. It must audibly lock on both sides.
- Never drive if the hood is not completely closed and locked.
- While driving, if there are any indications that the hood is not locked in the closed position, stop safely as soon as possible and close it completely.

**NOTE**

If the warning symbol remains on or if the audible signal is given even if the hood is completely closed and locked, consult a trained and qualified Volvo service technician.
Hood completely closed

Related information
- Engine compartment overview (p. 83)

Detachable trailer hitch*
Volvo recommends the use of Volvo trailer hitches that are specially designed for the vehicle.

NOTE
The optional detachable trailer hitch may not be available in all markets or on all models. Consult your Volvo retailer.

Installing the ball holder
1. If necessary, remove the cotter pin from the locking bolt and slide the locking bolt out of the hitch assembly.
2. Slide the ball holder into the hitch assembly.
3. Align the hole in the ball holder with the one in the hitch assembly.
4. Slide the locking bolt through the hitch assembly/ball holder.
5. Insert the cotter pin in the hole at the end of the locking bolt.

WARNING
- Be sure the towbar is securely locked in position before attaching anything to it.
- Always attach the trailer’s safety wire securely to the towbar’s safety wire attachment bracket.

Removing the ball holder
1. Remove the cotter pin from the locking bolt and slide the locking bolt out of the ball holder/hitch assembly.
2. Pull the ball holder out of the hitch assembly.

NOTE
A cover for the hitch assembly is also included in the kit.
Stowing the ball holder

⚠️ WARNING

When not in use, the detachable trailer hitch should always be properly stowed under the cargo compartment floor.
FUSES

Fuses
The fuses help protect the vehicle's electrical components from overloading or short circuits.

⚠️ WARNING
Never use metal objects or fuses with higher amperage than those stated on the lists of fuses. Doing so could seriously damage or overload the vehicle's electrical system.

If an electrical component fails to function, this may be due to a blown fuse. If the same fuse blows repeatedly, this indicates a problem with the component, which should be inspected by a trained and qualified Volvo service technician.

Location of the fuseboxes

1. Engine compartment
2. Under the glove compartment
3. Cargo compartment

Replacing fuses
The fuses help protect the vehicle's electrical components from overloading or short circuits.

Fuse replacement
1. See the list of fuse boxes for their locations.
2. Pull the fuse straight out and examine it from the side to see if the curved metal wire in the fuse is intact.
3. If the wire is broken, insert a new fuse of the same color and amperage (written on the fuse).

⚠️ WARNING
Never use metal objects or fuses with higher amperage than those stated on the following pages. Doing so could seriously damage or overload the vehicle's electrical system.

Related information
- Replacing fuses (p. 142)
- Fuses in the cargo compartment (p. 151)
- Fuses in the engine compartment (p. 143)
- Fuses in the passenger compartment (p. 147)
Fuses in the engine compartment

The fuses in the engine compartment help protect electrical components such as engine and brake functions.
There is a fuse removal tool on the inside of the fuse box cover. There are also positions in the fuse box for several extra fuses.

**Positions**

There is a decal on the inside of the cover with a list of fuses.
- Fuses 1–13, 18–30, 35–37 and 46–54 are called "Micro".
- Fuses 31–34 and 38–45 are called "MCase" and should only be replaced by a trained and qualified Volvo service technician.

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>4</td>
<td>Ignition coils, spark plugs</td>
</tr>
<tr>
<td>5</td>
<td>Oil pump solenoid Electromagnetic relay A/C, Center oxygen sensor</td>
</tr>
<tr>
<td>6</td>
<td>Vacuum regulators, Valve</td>
</tr>
<tr>
<td>7</td>
<td>Engine control module, Actuator, throttle unit, Turbocharger valve</td>
</tr>
<tr>
<td>8</td>
<td>Engine control module</td>
</tr>
<tr>
<td>9</td>
<td>–</td>
</tr>
<tr>
<td>10</td>
<td>Solenoids, Valve, Coolant thermostat</td>
</tr>
<tr>
<td>11</td>
<td>Spoiler shutter control module, Radiator shutter control module</td>
</tr>
<tr>
<td>12</td>
<td>Front/rear oxygen sensors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Engine control module</td>
</tr>
<tr>
<td>14</td>
<td>Starter motor</td>
</tr>
<tr>
<td>15</td>
<td>Starter motor</td>
</tr>
<tr>
<td>16</td>
<td>–</td>
</tr>
<tr>
<td>17</td>
<td>–</td>
</tr>
<tr>
<td>18</td>
<td>–</td>
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<tr>
<td>19</td>
<td>–</td>
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<tr>
<td>20</td>
<td>–</td>
</tr>
<tr>
<td>21</td>
<td>–</td>
</tr>
<tr>
<td>22</td>
<td>–</td>
</tr>
<tr>
<td>23</td>
<td>–</td>
</tr>
<tr>
<td>24</td>
<td>12-volt socket in the front tunnel console</td>
</tr>
<tr>
<td>25</td>
<td>12-volt socket on the rear side of the tunnel console</td>
</tr>
<tr>
<td>26</td>
<td>12-volt socket in the cargo compartment</td>
</tr>
<tr>
<td>27</td>
<td>–</td>
</tr>
</tbody>
</table>

* Option/accessory. 145
### FUSES

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake system control module (ABS pump)</td>
<td>40</td>
</tr>
<tr>
<td>Heated windshield*, passenger side</td>
<td></td>
</tr>
<tr>
<td>Feed when ignition is switched on to: engine control module, transmission components, electrical power steering, central electrical module; Brake system control module</td>
<td>5</td>
</tr>
<tr>
<td>Passenger side headlight</td>
<td>7.5</td>
</tr>
<tr>
<td>Passenger's side headlight, certain LED models</td>
<td>15</td>
</tr>
<tr>
<td>Battery connection module</td>
<td></td>
</tr>
<tr>
<td>Air bags; Occupant Weight Sensor (OWS)</td>
<td>5</td>
</tr>
</tbody>
</table>

**Related information**
- Fuses (p. 142)
- Replacing fuses (p. 142)
Fuses in the passenger compartment

The fuses in the passenger compartment (located under the glove compartment) help protect electrical components such as the 120-volt socket, displays and door modules. There is a fuse removal tool on the inside of the fuse box covers. There are also positions in the fuse box for several extra fuses.
Positions

- Fuses 1, 3–21, 23–36, 39–53 and 55–59 are called "Micro".
- Fuses 2, 22, 37–38 and 54 are called "MCase" and should only be replaced by a trained and qualified Volvo service technician.

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>120-volt socket on the rear side of the tunnel console*</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Alarm system movement sensorA</td>
</tr>
<tr>
<td>5</td>
<td>Media player</td>
</tr>
<tr>
<td>6</td>
<td>Instrument panel</td>
</tr>
<tr>
<td>7</td>
<td>Center console buttons</td>
</tr>
<tr>
<td>8</td>
<td>Sun sensor</td>
</tr>
<tr>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Steering wheel module</td>
</tr>
<tr>
<td>12</td>
<td>Module for start knob and parking brake</td>
</tr>
<tr>
<td>13</td>
<td>Heated steering wheel* module</td>
</tr>
<tr>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Climate system control module</td>
</tr>
<tr>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>On-board diagnostics (OBDII)</td>
</tr>
<tr>
<td>21</td>
<td>Center display</td>
</tr>
<tr>
<td>22</td>
<td>Climate system blower module (front)</td>
</tr>
<tr>
<td>23</td>
<td>USB hub</td>
</tr>
<tr>
<td>24</td>
<td>Instrument lighting; Courtesy lighting; Rearview mirror auto-dim function; Rain and light sensor; Rear tunnel console keypad*; Power front seats*; Rear door control panels</td>
</tr>
<tr>
<td>25</td>
<td>Control module for driver support functions</td>
</tr>
<tr>
<td>26</td>
<td>Panorama roof and sun shade*</td>
</tr>
<tr>
<td>27</td>
<td>Head-up display*</td>
</tr>
<tr>
<td>28</td>
<td>Courtesy lighting</td>
</tr>
<tr>
<td>29</td>
<td>-</td>
</tr>
<tr>
<td>30</td>
<td>Ceiling console display (seat belt reminder, front passenger side airbag indicator)</td>
</tr>
<tr>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>32</td>
<td>Humidity sensor</td>
</tr>
<tr>
<td>33</td>
<td>Rear passenger-side door module</td>
</tr>
<tr>
<td>34</td>
<td>Fuses in the cargo compartment</td>
</tr>
<tr>
<td>35</td>
<td>Internet connection/Volvo On Call control modules</td>
</tr>
<tr>
<td>36</td>
<td>Rear driver-side door module</td>
</tr>
<tr>
<td>37</td>
<td>Infotainment control module (amplifier)</td>
</tr>
<tr>
<td>38</td>
<td>-</td>
</tr>
<tr>
<td>39</td>
<td>Multi-band antenna module</td>
</tr>
<tr>
<td>40</td>
<td>Front seat massage function</td>
</tr>
</tbody>
</table>

* Option/accessory.
### FUSES

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>–</td>
</tr>
<tr>
<td>42</td>
<td>Tailgate window wiper 15</td>
</tr>
<tr>
<td>43</td>
<td>Fuel pump control module 15</td>
</tr>
<tr>
<td>44</td>
<td>–</td>
</tr>
<tr>
<td>45</td>
<td>–</td>
</tr>
<tr>
<td>46</td>
<td>Driver side front seat heating* 15</td>
</tr>
<tr>
<td>47</td>
<td>Passenger side front seat heating* 15</td>
</tr>
<tr>
<td>48</td>
<td>Coolant pump 10</td>
</tr>
<tr>
<td>49</td>
<td>–</td>
</tr>
<tr>
<td>50</td>
<td>Front driver-side front door module 20</td>
</tr>
<tr>
<td>51</td>
<td>Active chassis control module* 20</td>
</tr>
<tr>
<td>52</td>
<td>–</td>
</tr>
<tr>
<td>53</td>
<td>Sensus control module 10</td>
</tr>
<tr>
<td>54</td>
<td>–</td>
</tr>
<tr>
<td>55</td>
<td>–</td>
</tr>
<tr>
<td>56</td>
<td>Front passenger-side front door module 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>–</td>
</tr>
<tr>
<td>58</td>
<td>–</td>
</tr>
<tr>
<td>59</td>
<td>Circuit breaker for fuses 53 and 58 15</td>
</tr>
</tbody>
</table>

*A Certain markets only

**Related information**
- Fuses (p. 142)
- Replacing fuses (p. 142)
- Fuses in the engine compartment (p. 143)
- Fuses in the cargo compartment (p. 151)
Fuses in the cargo compartment

The fuses in the cargo compartment help protect electrical components such as power seats*, airbags and seat belt tensioners.

* Option/accessory.
There is a fuse removal tool on the inside of the fuse box cover. There are also positions in the fuse box in the engine compartment for several extra fuses.
Positions
- Fuses 13–17 and 21–36 are called "Micro".
- Fuses 1–12, 18–20 and 37 are called "MCase" and should only be replaced by a trained and qualified Volvo service technician.

<table>
<thead>
<tr>
<th>Function</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heated rear window</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Pneumatic suspension* compressor</td>
</tr>
<tr>
<td>4</td>
<td>Lock motor for rear seat backrest, passenger's side</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Lock motor for rear seat backrest, driver's side</td>
</tr>
<tr>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Power tailgate*</td>
</tr>
<tr>
<td>10</td>
<td>Power front seat (passenger side)* module</td>
</tr>
<tr>
<td>11</td>
<td>Trailer hitch* control module</td>
</tr>
<tr>
<td>12</td>
<td>Seat belt tensioner module (passenger side)</td>
</tr>
<tr>
<td>13</td>
<td>Internal relay windings</td>
</tr>
<tr>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Foot movement detection module for opening the power tailgate*</td>
</tr>
<tr>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Trailer hitch* control module</td>
</tr>
<tr>
<td>19</td>
<td>Power front seat (driver seat* module</td>
</tr>
<tr>
<td>20</td>
<td>Seat belt tensioner module (driver side)</td>
</tr>
<tr>
<td>21</td>
<td>Parking camera*</td>
</tr>
<tr>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>Airbag and seat belt tensioner modules</td>
</tr>
<tr>
<td>26</td>
<td>Heated rear seat (driver side)*</td>
</tr>
<tr>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>28</td>
<td>Blind Spot Information (BLIS)*, Control module for exterior audible reverse warning (certain markets only)</td>
</tr>
<tr>
<td>29</td>
<td>-</td>
</tr>
<tr>
<td>30</td>
<td>Seat belt tensioner modules</td>
</tr>
<tr>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>32</td>
<td>Emission system actuator</td>
</tr>
<tr>
<td>33</td>
<td>All Wheel Drive control module*</td>
</tr>
<tr>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>35</td>
<td>Heated rear seat (passenger side)*</td>
</tr>
<tr>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>37</td>
<td>Related information</td>
</tr>
</tbody>
</table>

- Replacing fuses (p. 142)
- Fuses (p. 142)
- Fuses in the passenger compartment (p. 147)
- Fuses in the engine compartment (p. 143)
**Label information**
The labels in your vehicle provide information such as the chassis number, paint code, tire inflation pressure, etc.
Location of labels

Generic illustration - details may vary slightly depending on model/market
List of labels

1. **Vehicle Emission Control Information. (A)** US models, (B) Canadian models. Your Volvo is designed to meet all applicable emission standards, as evidenced by the certification label on the underside of the hood. For further information regarding these regulations, please consult your Volvo retailer.

2. **Engine oil.** This label contains the recommended engine oil specifications.

3. **Vehicle Identification Number (VIN).** The VIN plate is located on the top left surface of the dashboard. The Vehicle Identification Number (VIN) should always be quoted in all correspondence concerning your vehicle with the retailer and when ordering parts.

4. **Tire inflation pressures.** This label indicates the correct inflation pressures for the tires that were on the vehicle when it left the factory.

5. **Federal Motor Vehicle Safety Standards (FMVSS) specifications (USA) and Ministry of Transport (CMVSS) standards (Canada).** Your Volvo is designed to meet all applicable safety standards, as evidenced by the certification label on the driver’s side B-pillar (the structural member at the side of the vehicle, at the rear of the driver’s door opening). This label also includes codes for paint color, etc. For further information regarding these regulations, please consult your Volvo retailer. U.S. models have the upper decal; Canadian models have the lower one.
## Dimensions

The following table lists your vehicle's most important dimensions.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>In. (mm)</th>
<th>Dimension</th>
<th>In. (mm)</th>
<th>Dimension</th>
<th>In. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Ground clearance (curb weight + 2 people)</td>
<td>8.2 (207)</td>
<td>E Load length, floor</td>
<td>37.8 (960)</td>
<td>H Track, front</td>
<td>65.1 (1653)</td>
</tr>
<tr>
<td>B Wheelbase</td>
<td>112.8 (2865)</td>
<td>F Height</td>
<td>65.3 (1658)</td>
<td>64.9 (1649)</td>
<td></td>
</tr>
<tr>
<td>C Length</td>
<td>184.6 (4688)</td>
<td>G Load height</td>
<td>30.6 (776)</td>
<td>65.2 (1655)</td>
<td></td>
</tr>
<tr>
<td>D Load length, floor, seat-back down</td>
<td>68.7 (1746)</td>
<td></td>
<td></td>
<td>65.7 (1668)</td>
<td></td>
</tr>
</tbody>
</table>
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>In. (mm)</th>
</tr>
</thead>
</table>
| I Track, rear | 65.2 (1657)<sup>B</sup>  
| | 65.1 (1653)<sup>C</sup>  
| | 65.3 (1659)<sup>D</sup>  
| | 65.9 (1673)<sup>E</sup>  |
| J Load width, floor | 39.8 (1010)  |
| K Width | 74.9 (1902)  |
| L Width incl. door mirrors (folded out) | 83.3 (2117)  |
| M Width incl. door mirrors (folded in) | 78.7 (1999)  |

<sup>A</sup> Varies slightly depending on tire size, chassis options, etc.  
<sup>B</sup> 18/19" wheels  
<sup>C</sup> 20" wheels  
<sup>D</sup> 21" wheels  
<sup>E</sup> 22" wheels  

### Related information
- Weights (p. 161)
Weights
The following table lists important weight data for your vehicle.

<table>
<thead>
<tr>
<th>Category</th>
<th>USA</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross vehicle weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5 AWD(^{A}) (B4204T23)</td>
<td>5,430 lbs</td>
<td>2,470 kg</td>
</tr>
<tr>
<td>T6 AWD (B4204T27)</td>
<td>5,475 lbs</td>
<td>2,490 kg</td>
</tr>
<tr>
<td>Capacity weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All models</td>
<td>950 lbs</td>
<td>430 kg</td>
</tr>
<tr>
<td>Permissible axle weights, front</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5 AWD (B4204T23)</td>
<td>2,660 lbs</td>
<td>1,210 kg</td>
</tr>
<tr>
<td>T6 AWD (B4204T27)</td>
<td>2,705 lbs</td>
<td>1,230 kg</td>
</tr>
<tr>
<td>Permissible axle weights, rear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5 AWD (B4204T23)</td>
<td>2,770 lbs</td>
<td>1,260 kg</td>
</tr>
<tr>
<td>T6 AWD (B4204T27)</td>
<td>2,770 lbs</td>
<td>1,260 kg</td>
</tr>
<tr>
<td>Curb weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All models</td>
<td>4,103-4,744 lbs</td>
<td>1,860-2,150 kg</td>
</tr>
<tr>
<td>Max. roof load</td>
<td>220 lbs</td>
<td>100 kg</td>
</tr>
<tr>
<td>Max. trailer weights (without brakes)</td>
<td>1,650 lbs</td>
<td>750 kg</td>
</tr>
</tbody>
</table>
### Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>USA</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max. trailer weights (with brakes)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All models</td>
<td>3,500 lbs</td>
<td>1,580 kg</td>
</tr>
<tr>
<td><strong>Max. tongue weight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5 FWD (B4204T23)</td>
<td>350 lbs</td>
<td>150 kg</td>
</tr>
<tr>
<td>T6 AWD (B4204T27)</td>
<td>350 lbs</td>
<td>150 kg</td>
</tr>
</tbody>
</table>

⚠️ All Wheel Drive

#### CAUTION

- When loading the vehicle, the maximum gross vehicle weight and permissible axle weights may not be exceeded.
- The maximum trailer weights listed are only applicable for altitudes up to 3280 ft (1,000 m) above sea level. With increasing altitude the engine power and therefore the car’s climbing ability are impaired because of the reduced air density, so the maximum trailer weight has to be reduced accordingly. The weight of the car and trailer must be reduced by 10% for every further 3280 ft (1,000 m) (or part thereof).
Air conditioning refrigerant
The air conditioning system in your car contains a CFC-free refrigerant.

A/C decal

<table>
<thead>
<tr>
<th>Weight</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.54 lbs (700 g)</td>
<td>R134a</td>
</tr>
</tbody>
</table>

**WARNING**
The air conditioning system contains R134a refrigerant under pressure. Service and repairs may only be carried out by a trained and qualified Volvo service technician.

Evaporator
The A/C system’s evaporator may never be repaired or replaced with a previously used evaporator. A new evaporator must be certified and marked according to SAE J2842.

Brake fluid specification and volume
Brake fluid transfers braking force when the brake pedal is depressed to the master cylinder and to the slave cylinders on each wheel.

Topping up or replacing brake fluid should only be done by a trained and qualified Volvo service technician.

**Specification:** Volvo Original Dot 4 class 6 or equivalent

Compressor oil

<table>
<thead>
<tr>
<th>Volume</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.23 fl. oz. (125 ml)</td>
<td>PAG SP-A2</td>
</tr>
</tbody>
</table>
Coolant specifications

Specification: Coolant with corrosion inhibitor mixed with water (50/50 mix), see packaging.

Consult a Volvo retailer if you are uncertain.

Different types of coolant should not be mixed to help avoid health risks.
**Engine specifications**
The following table provides technical data for the respective engines. Engine specifications for Special Edition vehicles may vary.

<table>
<thead>
<tr>
<th>Specification</th>
<th>T6 AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine designation</td>
<td>B4204T27</td>
</tr>
<tr>
<td>Output (kW/rps)</td>
<td>235/95</td>
</tr>
<tr>
<td>Output (hp/rpm)</td>
<td>316/5700</td>
</tr>
<tr>
<td>Torque (Nm/rps)</td>
<td>400/37–90</td>
</tr>
<tr>
<td>Torque (ft. lbs./rpm)</td>
<td>295/2,200–5,400</td>
</tr>
<tr>
<td>No. of cylinders</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>T5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine designation</td>
<td>B4204T23</td>
</tr>
<tr>
<td>Output (kW/rps)</td>
<td>187/92</td>
</tr>
<tr>
<td>Output (hp/rpm)</td>
<td>250/5,500</td>
</tr>
<tr>
<td>Torque (Nm/rps)</td>
<td>350/25–80</td>
</tr>
<tr>
<td>Torque (ft. lbs./rpm)</td>
<td>258/1,500–4,800</td>
</tr>
<tr>
<td>No. of cylinders</td>
<td>4</td>
</tr>
</tbody>
</table>

Not all engines listed here are available in all markets.
Related information
- Engine oil specifications and volume (p. 167)
- Coolant specifications (p. 164)
Engine oil specifications and volume
Full synthetic engine oil meeting the minimum ACEA A5/B5 must be used. Lower quality oils may not offer the same fuel economy, engine performance, or engine protection.

Volvo recommends:

![Castrol EDGE Professional Logo]

Refer to the warranty and Service Records information booklet for information on oil change intervals and oil type requirements.

**NOTE**
This vehicle comes from the factory with synthetic oil.

Oil additives must not be used.

Oil viscosity
Incorrect viscosity oil can shorten engine life under normal use. SAE 5W-30 will provide good fuel economy and engine protection. See the viscosity chart.

**Viscosity chart**

<table>
<thead>
<tr>
<th>°C</th>
<th>-30</th>
<th>-20</th>
<th>-10</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE 0W-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAE 5W-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Extreme engine operation**
Volvo oil VCC RBS0-2AE/SAE 0W20 is recommended for extreme driving conditions.

**Oil volume**
The oil volume for the engine is:
5.9 US qts (5.6 liters)

Fuel tank volume
The fuel tank’s volume is shown below.
The fuel tank’s refillable volume is approx. 18.8 US gallons (71 liters).
**Tire inflation pressure table**  
The following tire pressures are recommended by Volvo for your vehicle. Refer to the tire inflation placard for information specific to the tires installed on your vehicle at the factory.

<table>
<thead>
<tr>
<th>Tire sizes: XC60</th>
<th>Cold tire pressure for up to five persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Front psi (kPa)</td>
</tr>
<tr>
<td>235/60 R18</td>
<td>35 (240)</td>
</tr>
<tr>
<td>235/55 R19</td>
<td></td>
</tr>
<tr>
<td>255/45 R20</td>
<td></td>
</tr>
<tr>
<td>255/40 R21</td>
<td></td>
</tr>
<tr>
<td>265/35 R22</td>
<td></td>
</tr>
<tr>
<td>Temporary spare tire</td>
<td>60 (420)</td>
</tr>
<tr>
<td>T125/80 R18</td>
<td></td>
</tr>
</tbody>
</table>

**Related information**  
- Checking tire inflation pressure (p. 104)
Transmission fluid specification and volume
Under normal driving conditions the transmission fluid does not need to be changed during its service life. However, it may be necessary under adverse driving conditions.

Transmission: TG-81SC
Specification: Transmission fluid AW-1
A

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<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
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<td>114</td>
</tr>
<tr>
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