

V O L V O



Driver support systems by Volvo Trucks

SAFETY IN EVERY DIRECTION

Volvo Trucks. Driving Progress



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The features presented are designed to help improve road safety, when used as intended. Some of the features shown or mentioned may only be available as options and may vary from one country to another in accordance with local legislation. Your Volvo Trucks dealer will be happy to provide you with more detailed information. We reserve the right to alter product specifications without prior notice.

ADAPTIVE CRUISE CONTROL

Keep a safe distance to vehicles ahead. With the Adaptive Cruise Control, the truck maintains a distance to other vehicles down to a full stop – and then automatically starts again when the traffic keeps going. Drivers can use the Adaptive Cruise Control in busy highway traffic and stop and go driving.

Keep the distance

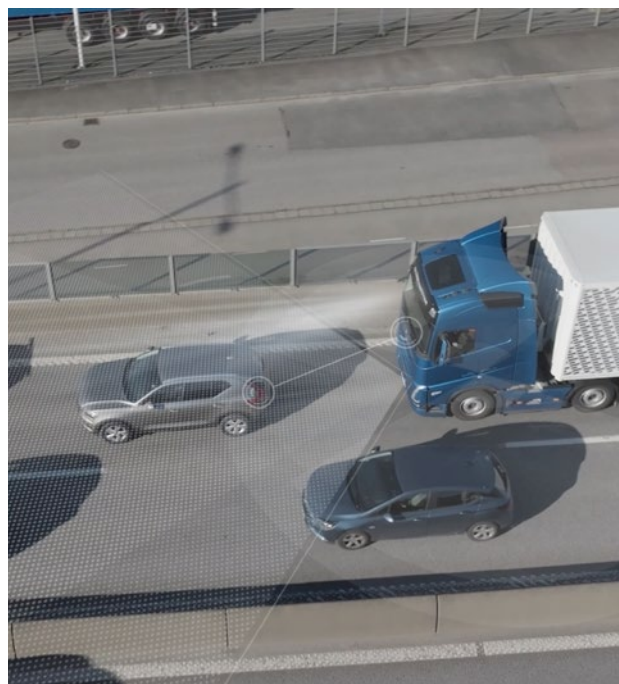
The Adaptive Cruise Control uses radar sensors to detect other vehicles front of the truck. The system then analyzes their speed and automatically adapts the speed to the traffic ahead. As long as the Adaptive Cruise Control is activated, it helps the driver to keep a distance and follow the traffic flow.

Automated stop and go

The Adaptive Cruise Control can be active and follow the traffic rhythm at any speed down to a standstill. If the traffic ahead slows down to a full stop, so does the truck. If the traffic starts moving again within two seconds, the truck will automatically follow. After a longer stop, the driver needs to press the accelerator again or push the resume button on the steering wheel.

Cruise more

Using cruise control is often associated with higher speeds but the Adaptive Cruise Control has a wide area of use. The Adaptive Cruise Control can be activated at speeds above 4 km/h but works down to a standstill. This makes it a helpful function in busy traffic.



BENEFITS

- Relaxed driving with a lower stress level
- Maintains a safe distance to other vehicles
- Works down to a full stop
- Automated stop and go

For more information, contact your Volvo Trucks dealer.

ADAPTIVE HIGH BEAM

The driver's direct vision is the most valuable asset to drive safely. Ensuring the best view forward in dark conditions is key. The Adaptive High Beam enables driving in dark conditions with the high beam on for optimized illumination without disturbing drivers of other vehicles.

Easy to improve vision

The Adaptive High Beam makes optimizing the vision in dark conditions easy. The driver can switch on the high beam as soon as it's dark without needing to bother about dipping it. Both headlights automatically and dynamically adapt their beams individually to improve the vision, while avoiding disturbing other drivers.

Sensors detect

The system uses both a radar sensor and a camera to detect traffic ahead. When the system detects other vehicles, it automatically reduces the light directed towards them to avoid glaring.

LED lights tailor the beam

Each headlamp unit consists of 12 LED lights sitting in four reflectors. The system engages and disengages each LED light automatically. Combined, the 24 LED lights in eight reflectors shape a dynamic light beam that maximizes the view in real time. If no oncoming traffic or vehicles ahead are detected, all LED lights are activated to deliver an uncompromising forward illumination.



BENEFITS

- Adapts the beam in real time
- Optimized vision even in busy traffic
- Improved safety for the truck driver and other road users
- Automatic operation and easy to use
- Improved road safety

For more information, contact your Volvo Trucks dealer.

AUTO HOLD

With Auto Hold, taking off as well as stop and go driving is made more convenient and safer. The system applies the brakes and holds the truck in position until the driver pushes the accelerator. There's no need to keep the foot on the brake pedal.

Taking off smoothly

Auto Hold reduces the risk of rolling back or forward when taking off – regardless if it's uphill, downhill or a flat surface. Brakes are applied until the driver pushes the accelerator. Managing challenging passages is made safer and more comfortable.

Apply the brakes and stay put

When braking the truck to a full stop, Auto Hold keeps the last applied braking pressure to hold the truck in position. Should the system's sensors detect any movement, the brake pressure is increased to hold the truck and any connected trailers. The brakes are applied until the driver pushes the accelerator again, and there's no need to hold the foot on the brake pedal. Driving with frequent starts and stops is made even more convenient.

Works in any direction

The Auto Hold function works when driving forward or reversing. Uphill, downhill or on flat surfaces. And regardless of load.



BENEFITS

- Taking off is made more convenient and safer
- Reduced risk of unintentional roll offs
- Stop and go driving is made easy
- Works in both forward and reverse
- Holds the truck uphill, downhill and on flat surfaces
- Improved road safety

For more information, contact your Volvo Trucks dealer.

COLLISION WARNING WITH EMERGENCY BRAKE

When driving at high speed, the distance to vehicles ahead is the safety margin. The Collision Warning with Emergency Brake alerts the driver in steps when the distance shrinks and the system detects a certain risk of a collision. If no action is taken by the driver, the vehicle brakes are applied automatically to stop the truck.

Detecting and identifying

To detect the risk of an upcoming collision, the truck uses both a radar sensor and a camera to collect information and identify vehicles on the road ahead. The system measures if the distance to other vehicles decreases, and alerts the driver that there's a risk of a collision.

Alerts, warns and brakes

The first alert is indicated by a static red light reflected on the windshield. If the driver doesn't address the first alert and the risk remains, the light flashes and a warning sound is added. If the risk remains and still no action is taken on the warning, the wheel brakes are applied to brake the truck to avoid an upcoming collision.

Switched on automatically

The Collision Warning with Emergency Brake is switched on automatically when starting the truck and the system is active at speeds over 5 km/h.



BENEFITS

- Reduces the risk of collisions and accidents
- Alerts and intervenes in steps
- Uses both radar and camera to secure optimal functionality
- Improved road safety

For more information, contact your Volvo Trucks dealer.

DRIVER ALERT SUPPORT

The driver is responsible to stay alert and focused behind the wheel. Driver Alert Support is designed to detect and alert a driver that shows signs of inattention or drowsiness. It's there to improve safety.

Detects inattention and drowsiness

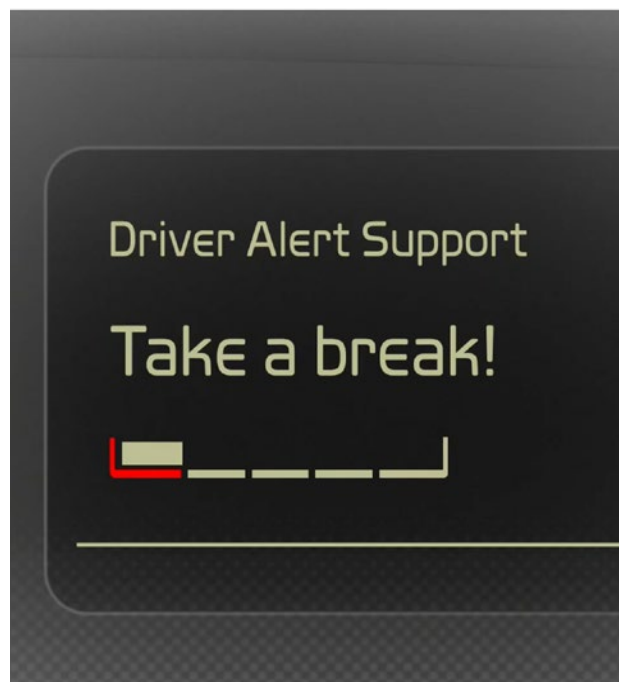
When drivers get tired or inattentive behind the wheel, the risks for accidents increase. Driver Alert Support prevents this by monitoring the movement of the truck in the lane by using a camera in the front.

Alerts in steps

If the system detects signs of inattentive or drowsy driving, the driver is alerted with sound and a message in the driver display to focus on driving. Should the system still detect deviant driver behavior – Driver Alert Support alerts even louder, switches off the audio system and cruise control, if activated. The driver is also advised to take a break.

Switched on automatically

Driver Alert Support is automatically switched on when the ignition is turned on and is activated at speeds over 65 km/h.



BENEFITS

- Detects and alerts drivers that show signs of inattention or drowsiness
- Alerts in steps
- Automatically switched on
- Improved road safety

For more information, contact your Volvo Trucks dealer.

INTELLIGENT SPEED ASSIST

Staying within the legal speed limits is an important aspect of road safety. Intelligent Speed Assist presents the correct speed limit for the specific vehicle combination in the driver information display. It's an information feature and doesn't limit speed actively.

Road signs and GPS

The Intelligent Speed Assist uses a camera to read the speed limit road signs. In some cases it also uses map data as a source of information.

Tailored for each vehicle combination

The Intelligent Speed Assist does more than registering and presenting the speed limits. It also takes the actual vehicle combination driven into consideration. The speed limit shown in the driver display will be adapted following local regulations.

Informs and warns

Intelligent Speed Assist presents the speed limit for the vehicle combination in the driver information display. When the speed limit changes, the system alerts visually and with sound. A driver that overspeeds is warned visually and with sound.



BENEFITS

- Easy to stay within speed limits
- Improved road safety
- Avoid unintentional overspeeding
- Information based on your vehicle combination
- Easy to use
- Improved road safety

For more information, contact your Volvo Trucks dealer.

TIRE PRESSURE MONITORING SYSTEM

Reducing the risk of an exploding tire is a big improvement in road safety. The best way to reduce the risk is by making sure that the tires are in good condition and have the right pressure. The Tire Pressure Monitoring System puts the driver in control of the pressure in every tire of the vehicle combination.

Avoid accidents and downtime

An explosion or another tire failure could result in the driver losing control over the truck and having an accident with severe consequences. Even if it doesn't lead to an accident, a flat tire means unplanned downtime that comes with costs for repairs and delayed deliveries.

Easy to use

Sensors in each tire of the truck register the exact pressure and temperature. In the driver information display, the driver can easily monitor the tire pressure. And the system alerts the driver about low air pressure, fast leakage or high temperature with a warning in the display.

Trailer support

If the trailer is equipped with a monitoring system, the driver can monitor the pressure in each tire and get alerts from the entire vehicle combination – including the trailer.

Less energy and wear

Having the right tire pressure also comes with cost advantages. It optimizes energy efficiency and reduces wear on the tires.

A robust solution

The system consists of components designed and matched for reliable and accurate operation during a long service life. There's a sensor mounted on the inside of each wheel rim. The sensor continuously measures air pressure – and transmits the values wirelessly to the driver information display.



BENEFITS

- Easy to use
- Reduced risk for tire explosions and other failures
- Less unplanned downtime
- Improved energy efficiency
- Including the trailer
- Improved road safety
- Tire Management

For more information, contact your Volvo Trucks dealer.

PROTECTING PEDESTRIANS AND CYCLISTS

Knowing what's going on around the truck is crucial to drive safely. A package of systems is available – designed to detect and alert drivers about pedestrians and cyclists in close-proximity to the truck. The systems are there to protect people and avoid accidents. They utilize radar sensors and cameras to improve safety around the truck.

Detect, inform and warn

Front Short Range Assist, Side Collision Avoidance Support and Door Opening Warning all use radar sensors around the truck to detect other road users. There's also a rear camera that provides a clear view of what's going on behind the truck, and the camera is automatically activated when putting the gear in reverse. The systems are there to keep the driver informed, warn about risks, and avoid potential accidents.

Front Short Range Assist

The front radar is used to detect other road users when the truck is standing still and at speeds up to 10 km/h. If the truck is standing still with the brakes applied and the system detects a road user in the close-proximity in front of the truck, the driver is informed via the driver information display. Should the driver press the accelerator, there's a clear visible and audible warning to alert the driver and minimize the risk of a collision. If the truck is already in motion when a road user is detected, the system warns visually and with sound.

Side Collision Avoidance Support

Radar sensors on both sides of the truck detect pedestrians, cyclists and other vehicles on the sides. When a road user is detected on the side, the driver is informed via a light signal in the side mirror. Should the driver activate the turning indicator – the system warns with a flashing light and sound.

Door Opening Warning

Radar sensors scan both sides of the truck to warn the driver and the passenger of other road users before opening any of the cab doors. This prevents the doors from colliding with other road users. The system warns even when parked, up to two minutes after the ignition is switched off.



BENEFITS

- Improved control over areas around the truck
- Reduced risks of accidents involving pedestrians and cyclists
- Reduced risk of accidents when turning and changing lanes
- Intuitive and easy to use
- Covers the front, sides and the rear end of the truck
- Improved road safety

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