
VOLVO
VNL SAFETY SYSTEMS
Volvo Trucks. Driving Progress.

Safety drives everything

From the roads we've conquered to the road ahead, safety has been and will continue to be our top priority.

We are constantly striving to reduce injury and make it easier for drivers to avoid issues before they occur.

At Volvo Trucks, developing safety innovations that help protect everyone is a process that never ends. We've set a goal of zero accidents, because it's the only number that's acceptable.

New safety innovations on the all new Volvo VNL

The all-new Volvo VNL offers lots of new safety features. It's almost impossible to choose the most important innovations that have been added, but we've done our best. Here's our list of the top new safety options available in this incredible truck.

Emergency calling system
In the event of a rollover or airbag deployment, the truck can automatically call 911 to summon help to the scene.

Pedestrian detection
The VNL can be equipped with a radar system to detect other road users, including pedestrians and bicyclists, that enter the vehicle's blind spots.

Camera Monitoring System
A state-of-the-art Camera Monitoring System will soon be available to provide superior rear views during backing and lane changes.

Next-generation Volvo Dynamic Steering (VDS)
The latest improvements to VDS include optional personal settings and Oversteer Guidance which aids in rapid, minute adjustments to help prevent rollovers or jackknifes.

Road Sign Recognition
A forward-looking camera automatically identifies many road signs and displays them in the instrument panel, giving the driver more time to make adjustments safely.

Automated high beams and cornering lamps
Intelligent headlights can switch high beams on and off automatically while cornering lights provide improved visibility when entering and exiting turns or curves at low speeds.

Volvo Active Driver Assist
Our next-generation Volvo Active Driver Assist package comes standard on the new VNL. It is designed to help drivers maintain an appropriate following speed and distance.

Volvo Active Driver Assist +
The optional new Volvo Active Driver Assist + package can be chosen for your vehicle. It provides support for lane changes and lane keeping, as well as providing a variety of warning settings to help drivers prevent side-collisions.

Read on to learn about these and more.



For the good of all

The best way to protect the driver and those around them is to provide safety systems that reduce the chance of an accident. Our safety support systems aid the driver on the highway and in congested urban routes.

The next-generation VNL comes with our standard safety package and can be upgraded with our optional advanced safety package that includes additional driver assistance features:

Volvo Active Driver Assist (VADA) Package Standard	Volvo Active Driver Assist + (VADA+) Advanced Package Optional
Long-range forward pedestrian detection	All standard VADA package elements plus:
Forward collision warning and mitigation	Volvo Dynamic Steering with oversteer guidance
Lane departure warning	Lane keep assist
Adaptive cruise control with Traffic Stop & Go	Pilot Assist with Auto Stop
Automatic emergency braking	Lane change support
	Side detection for pedestrians and road users (alert only)

Volvo Dynamic Steering may be added as an option on the standard VADA package

Volvo Dynamic Steering (VDS)
When the Volvo Dynamic Steering option is added to the standard VADA package, VDS continuously assists drivers with proactive steering adjustments to keep the vehicle from leaving the lane. It also helps minimize mental and physical fatigue while delivering greater steering control in crosswinds, at low- or high-speeds, or in the event of a tire blowout. Volvo Dynamic Steering with oversteer guidance provides additional support to the driver to avoid rollover events. The new VNL also features cornering lamps which are activated by steering input to increase visibility when entering and exiting a curve at low speeds.

Driver protection gets even smarter
We recognize that unfortunately there will still be situations when accidents cannot be avoided. Therefore, our VNL is equipped with intelligent driver protection measures, including the new e-call system and rollover protection actions like fuel supply cutoff and engine shutdown. These smart safety technologies are designed to reduce risk of serious injury in the event of an accident.

A High-Strength Steel (HSS) cab absorbs and deflects the energy of a crash. Advanced driver side airbags come standard, while side curtain airbags are an available option. The impact-absorbing dash and steering column protect drivers' arms, legs, knees, and ankles. The engine and transmission are designed to drop down and away from the driver in the event of a frontal collision. These driver protection measures continue to meet and exceed the rigorous standards set forth by the Swedish Cab Safety Test.

Pedestrian detection

Drivers can now benefit from an extra set of “eyes” in congested urban areas. The radar system can provide long-range detection of pedestrians ahead, while short-range detection senses pedestrians and bicyclists that may appear in blind spots on either side of the truck and trailer. Alerts warn the driver when a pedestrian or object may be in their path.

More visibility. Less risk.

Innovative camera system options debut in the VNL

The VNL features a host of new camera solutions. On the cutting edge is our innovative new, fully-integrated Camera Monitoring System (CMS). It replaces traditional side mirrors and provides better aerodynamics because they are mounted inside the cab on the A-pillar. They provide superior visibility, which can help drivers make safer lane changes and backing maneuvers. Available soon on the VNL, the system features infrared technology that creates sharper views in low light for easier, safer operation at night. It also offers reference lines that indicate the rear of the trailer and cameras that track the trailer's rear corners. The cameras sit high above each door, offering an overall wider viewing angle and reduced road spray effects.

Back-up camera

A camera positioned on the back of the cab provides an excellent view of the back of chassis and fifth wheel, making trailer connect much easier. The camera activates as soon as reverse is engaged. This camera can be viewed through the Instrument Cluster or on the Infotainment Center screen.

Multi-camera system connections

With the Volvo multi-camera system installed on your VNL via the optional Infotainment Center you can connect up to six additional cameras. Whether you choose Volvo proprietary cameras or aftermarket options, the units can be placed where you need them most.

Lens covers

Each Volvo proprietary back-up camera and multi-camera system unit (digital and analog) features a camera lens cover. The covers open only when that view is on screen, protecting the lens from dirt and damage when the unit is not in use.

Infrared technology

All Volvo proprietary cameras feature infrared technology. This improves visibility in low-light conditions. It can also create sharper views in dark warehouses or alleys where ambient light is insufficient. Infrared technology is available when you choose Volvo cameras for the Camera Monitoring System, back-up camera, or the multi-camera system.













Road sign recognition

A forward-looking camera can recognize many road signs ahead of time and display them right in the instrument panel. Overspeed warnings, based on the last posted speed limit sign, can be enabled.



Intelligent lighting

Automatic high beams automatically turn on and off based on surrounding light environment to deliver optimal driver visibility. Cornering lamps anticipate needed sightlines, providing additional lighting for entering or exiting curves and turns at low speeds.



High-visibility grab handles

Grab handles come standard for safer cab entry and exit. A high visibility color option is available for interior handles. Grab handles are standard for back of cab access as well.



CO and smoke detector

An alarm alerts drivers when increased levels of smoke or carbon monoxide are detected and helps reduce the risk of smoke inhalation. This is especially helpful when drivers are asleep in the cab.



Electronic braking

An improved electronic braking system provides better balance between truck and trailer brakes. When faster braking is required, the system seamlessly blends the engine brake with foundation brakes.



Parking brake

The next-generation parking brake engages automatically if the truck is put in park and the driver door is opened. Auto-release occur if the truck is placed in gear and the accelerator is pressed.

Safety you can see and feel

Drivers know that two of the most important aspects of safety are visibility and maneuverability. The Volvo VNL excels at both.

Designed with a unique slope and curvature, our panoramic windshield provides drivers with a clear, unobstructed view of the road. Greater visibility gives drivers more time to react, further reducing risk of collision. The driver's seat position can adjust as needed to take full advantage of the already exceptional site lines. The windshield is also engineered to reduce glass shatter in the event of an accident and features a bonded installation.

This VNL also protects the driver by making it easier to operate in tight spaces and congested areas. The short back-of-cab distance and up to 50-inch wheel cut give the VNL a turning radius to rival any long-haul tractor in the industry. All of this is complimented by Volvo Dynamic Steering and the I-Shift transmission, making steering at low-speeds easier than ever.

Ready for every “what if”

At Volvo Trucks, we know that regardless of how sophisticated the technology and how careful the driver, there may be situations where an accident is unavoidable. Our newest VNLs are outfitted with intelligent driver protection features designed to reduce risk of serious injury and potentially save lives during an accident.

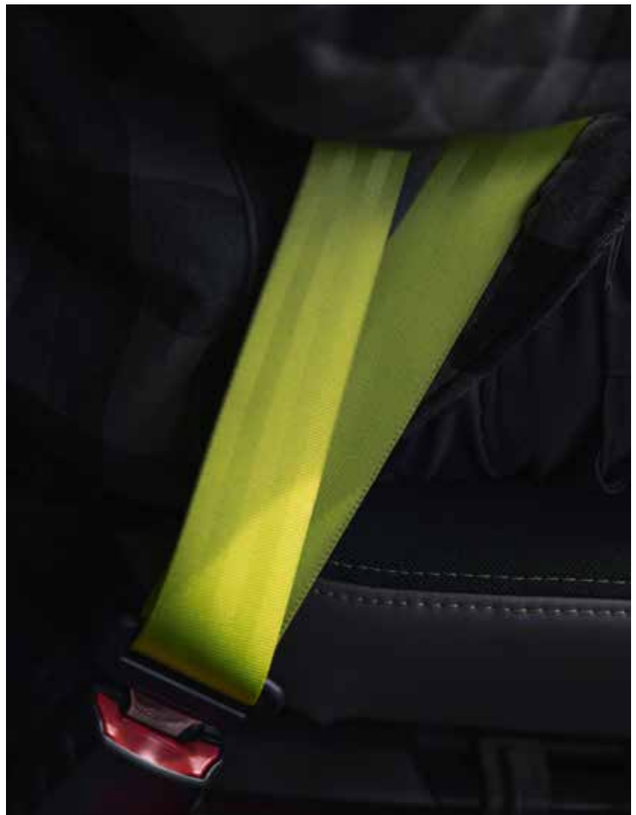
High-Strength Steel construction

Our High-Strength Steel (HSS) cab absorbs and deflects the energy of a crash and reduces the chance of injury. HSS delivers a strength-to-weight ratio that’s three times stronger than standard aluminum. With greater rigidity and strength in the cab and increased structural integrity, our vehicles are better able to withstand severe external impacts. Each VNL is designed to meet and exceed the rigorous standards set forth by the Swedish Cab Safety Test.

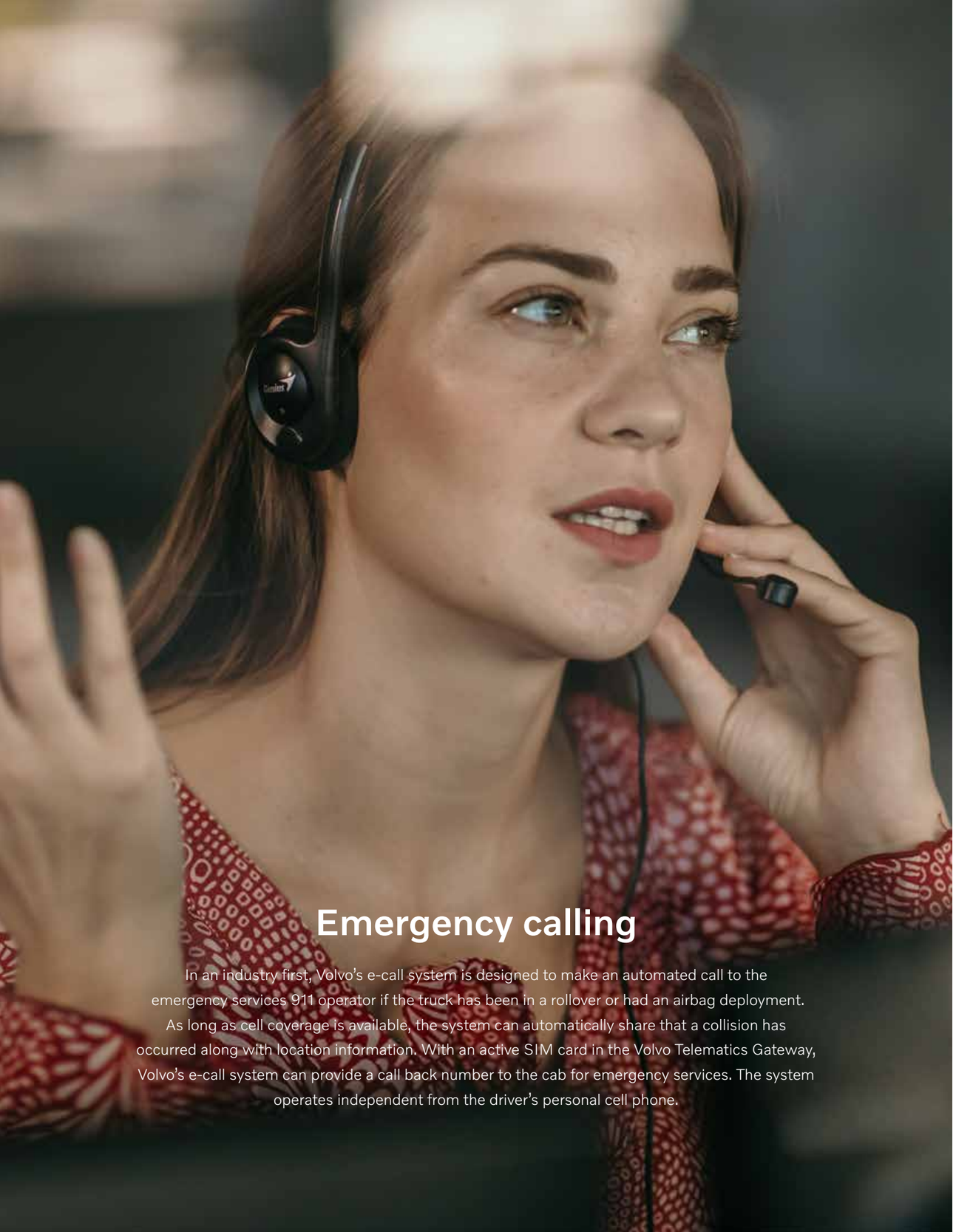
Three-point safety belts

In 1959, we invented the revolutionary three-point safety belt, and it has been credited with saving more than one million lives. Today, it is available in multiple colors to encourage usage and driver compliance.









Emergency calling

In an industry first, Volvo's e-call system is designed to make an automated call to the emergency services 911 operator if the truck has been in a rollover or had an airbag deployment. As long as cell coverage is available, the system can automatically share that a collision has occurred along with location information. With an active SIM card in the Volvo Telematics Gateway, Volvo's e-call system can provide a call back number to the cab for emergency services. The system operates independent from the driver's personal cell phone.

In an instant

At the moment of an accident, the vehicle's protection measures simultaneously work to reduce risk or the severity of injuries inside the cab. Inside of the protective High-Strength Steel structure, the driver is surrounded by an impact absorbing dash and steering column which are designed to protect arms, legs, knees, and ankles. The windshield comes standard with laminated safety glass, to minimize flying debris during a collision. Laminated safety glass is also optional for doors and rear windows.

Powertrain drop

The flared frame rail is designed to release the powertrain below the cab in a collision, protecting the driver from having the engine and transmission forced directly back toward them.

Front airbag

Volvo Trucks is the first and only Class 8 manufacturer to provide driver-side airbags standard in every vehicle. The airbag can help reduce the risk of severe injury to a driver's face and upper body.

Side airbag

Optional integrated side airbags are available in the new VNL. These curtain style airbags cover the door and window for additional protection to driver and passenger during a rollover.

Engine shutdown

If airbags deploy, the fuel supply is designed to immediately cut off, shutting down the engine and reducing the risk of fire. The emergency parking brake also engages.

Reinforced hinges

Our strongest-in-industry hinges are designed to keep doors securely shut during a crash. Afterward, the hinges and auto unlock feature make it easier to open the door.

Hazard lights

If an airbag deploys or a rollover is detected, your VNL is designed to automatically trigger hazard lights on the truck and trailer after the vehicle comes to rest.

History is about to repeat itself

The first VN debuted in North America in 1996 and quickly turned the trucking industry on its head. Other truck makers took the next decade playing catchup to our innovations. The all-new Volvo VNL is filled with hundreds of next-generation features to improve your productivity and profitability.

In addition to the safety improvements covered in this brochure, here are some additional highlights on the next-generation VNL:

- Revolutionary aerodynamics and powertrain innovations that improve fuel efficiency by up to 10% versus our previous models
- Industry leading connectivity that powers the new My Truck App
- The first of its kind, all-inclusive Volvo Blue Service Contract with predictive maintenance to improve uptime
- Interior and exterior design that stops you in your tracks, conveniently packaged into trim levels for easy decisions



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VOLVO

Some vehicle options and services may not be available at time of introduction.
Some vehicles shown with optional equipment. All specs current at time of publication release.
Performance data based on engineering calculations and real-world data.

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