



Volvo EX90
Standard Safety Equipment

2025



Adult Occupant



92%

Child Occupant



93%

Vulnerable Road Users



82%

Safety Assist



86%

SPECIFICATION

Tested Model	Volvo EX90 Plus, LHD
Body Type	- 5 door SUV
Year Of Publication	2025
Kerb Weight	2797kg
VIN From Which Rating Applies	- all EX90s
Class	Large SUV

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	—
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	●	✗	—
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✗
Side pelvis airbag	●	●	✗
Centre Airbag	●	●	—

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	○	●
Integrated CRS	—	✗	✗
Airbag cut-off switch	—	●	—
Child presence detection	●	●	●
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

OTHER SYSTEMS		
Active Bonnet		●
AEB Vulnerable Road Users		●
AEB Pedestrian - Reverse		●
Cyclist Dooring Prevention		●
AEB Motorcyclist		●
AEB Car-to-Car		●
Speed Assistance		●
Lane Assist System		●
Fatigue / Distraction Detection		●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard
- Fitted to the vehicle as part of the safety pack
- Not fitted to the test vehicle but available as option or as part of the safety pack
- ✗ Not available
- Not applicable

 ADULT OCCUPANT

Total 36.9 Pts / 92%

GOOD ADEQUATE MARGINAL WEAK POOR

Frontal Impact

13.3 / 16 Pts



Mobile Progressive Deformable Barrier



Full Width Rigid Barrier

Lateral Impact

16.0 / 16 Pts



Side Mobile Barrier



Side Pole



Far-Side Excursion



Occupant Interaction

Rear Impact

3.7 / 4 Pts



Rear Seat



Front Seat

 ADULT OCCUPANT

Total 36.9 Pts / 92%

GOOD

ADEQUATE

MARGINAL

WEAK

POOR

Rescue and Extrication		4.0 / 4 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Available	
Submergence Check	Compliant	

Comments

The passenger compartment of the Volvo EX90 remained stable in the frontal offset test. Protection of all critical body areas was good for the front passenger. Dummy readings indicated good protection of the knees and femurs of both the driver and the front seat passenger. Volvo showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the Volvo EX90 would be a somewhat aggressive impact partner in a frontal collision. In the full-width rigid barrier test, protection was good for all critical body regions of the driver and at least adequate for the rear seat passenger. In both the side barrier test and the more severe side pole impact, good protection was provided to all critical body areas and the Volvo EX90 scored maximum points in this part of the assessment. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was found to be adequate. The Volvo EX90 has a countermeasure to mitigate against occupant-to-occupant injuries in such impacts. The airbag performed well in Euro NCAP's tests with dummy readings indicating good protection for both the driver and passenger. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection. The car has an advanced eCall system which alerts the emergency services in the event of a crash, and a system to prevent secondary impacts after the car has been in a collision. Volvo demonstrated that the doors and windows would be openable to allow occupants to escape in the event of vehicle submergence.

 CHILD OCCUPANT

Total 46.0 Pts / 93%

 GOOD	 ADEQUATE	 MARGINAL	 WEAK	 POOR
--	--	--	--	--

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts

Frontal Impact	16 Pts	Lateral Impact	8 Pts
			

Restraint for 6 year old child: *Volvo booster seat*
Restraint for 10 year old child: *Volvo booster cushion*

Safety Features

10.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center	3rd row outboard *
Isofix				
i-Size				
Integrated CRS				
Top tether				
Child Presence Detection				

* Third row seats available as option

 Fitted to test car as standard  Not on test car but available as option  Not available

CRS Installation Check

12.0 / 12 Pts

 i-Size	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	—	—		—		—	—

 Easy  Difficult  Safety critical  Not allowed

 Airbag ON Rearward facing restraint installation not allowed  Airbag OFF

 CHILD OCCUPANT

Total 46.0 Pts / 93%

 Isofix	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	—	—	●	—	●	—	—
	—	—	●	—	●	—	—
	—	—	●	—	●	—	—
	—	—	●	—	●	—	—
	—	—	●	—	●	—	—
	—	—	●	—	●	—	—

● Easy ● Difficult ● Safety critical ✗ Not allowed

 Airbag ON Rearward facing restraint installation not allowed  Airbag OFF

Seatbelt Attached	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	✗	●	●	●	●	●	●
	●	✗	●	●	●	●	●
	●	✗	●	●	●	●	●
	●	✗	●	●	●	●	●
	●	✗	●	●	●	✗	✗
	✗	●	●	●	●	✗	✗

● Easy ● Difficult ● Safety critical ✗ Not allowed

 Airbag ON Rearward facing restraint installation not allowed  Airbag OFF

 CHILD OCCUPANT

Total 46.0 Pts / 93%

Comments

In both the frontal offset and the side barrier tests protection of all critical body areas was good for the 6 and 10 year dummies, and the Volvo EX90 scored maximum points in this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. The Volvo EX90 is equipped with a direct 'child presence detection' system which issues a warning when it detects that a child or infant has been left in the car. All of the child restraint types for which the Volvo EX90 is designed could be properly installed and accommodated in the car.

 VULNERABLE ROAD USERS

Total 52.2 Pts / 82%

GOOD

ADEQUATE

MARGINAL

WEAK

POOR

VRU Impact Protection25.6 / 36 Pts



Pedestrian & Cyclist Head	15.8 Pts
Pelvis	0.5 Pts
Femur	4.3 Pts
Knee & Tibia	5.0 Pts

VRU Impact Mitigation26.7 / 27 Pts

System Name	Forward & Rear Collision Warning and Mitigation / Exit Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	1 km/h
PERFORMANCE	

AEB Pedestrian8.9 / 9 Pts

Scenario	Day time	Night time
Car reversing into adult or child		
Adult crossing a road into which a car is turning		
Adult crossing the road		
Child running from behind parked vehicles		
Adult along the roadside		

Currently not tested

AEB Cyclist8.0 / 8 Pts

Scenario	Day time
Approaching cyclist crossing from behind parked vehicles	
Turning across path of an oncoming cyclist	
Approaching a crossing cyclist	
Approaching a cyclist along the roadside	



VULNERABLE ROAD USERS

Total 52.2 Pts / 82%

GOOD

ADEQUATE

MARGINAL

WEAK

POOR

Cyclist Dooring Prevention

0.8 / 1 Pts

Scenario	
Dooring a passing cyclist	warning, all side doors"

AEB Motorcyclist

6.0 / 6 Pts

Scenario	Autobrake function only	Driver reacts to warning
Approaching a stationary motorcyclist		
Approaching a braking motorcyclist		
Turn across the path of an oncoming motorcyclist		—

— Currently not tested

Lane Support Motorcyclist

3.0 / 3 Pts

Scenario	Day time
Changing lane across the path of an oncoming motorcyclist	
Changing lane across the path of an overtaking motorcyclist	

Comments

The Volvo EX90 has an 'active' bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet surface to provide more space to the hard structures underneath. Volvo showed that the system worked robustly over a range of speeds and for different statures. Accordingly, the car was tested with the bonnet in the raised, deployed position. Protection of the head of a struck pedestrian or cyclist was predominantly good or adequate, with poor results recorded on the stiff windscreen pillars. Protection of the pelvis was almost completely poor. If it were not for the fraction of a point scored, the EX90 would have been ineligible for a five-star rating. Protection of the femur was mostly good while that of the knee and tibia was mixed. The autonomous emergency braking system of the Volvo EX90 responds to vulnerable road users such as pedestrians and cyclists, as well as to other vehicles. In tests of its response to pedestrians, the system performed well, including the protection of those to the rear of the car. The system also performed well in tests of its reaction to cyclists, including 'dooring', where a door is opened into the path of a cyclist approaching from behind. The system's response to motorcyclists was good.

 SAFETY ASSIST

Total 15.6 Pts / 86%

GOOD

ADEQUATE

MARGINAL

WEAK

POOR

Speed Assistance 2.0 / 3 Pts

System Name	Road Sign Information
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent Speed Limiter not default ON (accurate to 5km/h)

Occupant Status Monitoring 2.9 / 3 Pts

> Seatbelt Reminder

 1.0 / 1 Pts

Applies To	Front and rear seats, including optional third row		
Warning	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Visual			
Audible			
Occupant Detection			

Pass Fail Not available

> Driver Monitoring

 1.9 / 2 Pts

System Name	Driver Monitor System
Type	Direct eye monitoring
Operational From	10 km/h
Fatigue	Drowsiness, Microsleep and Sleep
Distraction	Long & Short Distraction and Phone Use
Impairment	Unresponsive Driver

 SAFETY ASSIST

Total 15.6 Pts / 86%

Lane Support 3.0 / 3 Pts

System Name	Lane Departure Prevention
Type	LKA and ELK
Operational From	40 km/h
PERFORMANCE	
Emergency Lane Keeping	 GOOD
Lane Keep Assist	 GOOD
Human Machine Interface	 GOOD

AEB Car-to-Car 7.7 / 9 Pts

System Name	Forward Collision Avoidance
Type	Autonomous emergency braking and forward collision warning
Operational From	1 km/h
Sensor Used	camera and radar

Scenario	Autobrake function only	Driver reacts to warning
Approaching a car crossing a junction		
Approaching a car head-on		
Turning across the path of an oncoming car		
Approaching a stationary car		
Approaching a slower moving car		
Approaching a braking car		

 Currently not tested

 SAFETY ASSIST

Total 15.6 Pts / 86%

Comments

Overall, the performance of the autonomous emergency braking (AEB) system was good in tests of its reaction to other vehicles. A seatbelt reminder system is fitted as standard to the front and rear seats. The car has a direct driver status monitoring system as standard, detecting driver fatigue and some types of distraction. The lane support system gently corrects the vehicle's path if it is drifting out of lane and also intervenes in some more critical situations. The speed assistance system identifies the local speed limit. The driver can choose to allow the limiter to be set automatically by the system.

RATING VALIDITY



Variants of Model Range

Body Type	Engine	Model Name	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	Electric	Twin Motor Performance 7-seat	4 x 4	✓	✓
5 door SUV	Electric	Single Motor 7-seat	4 x 2	✓	✓
5 door SUV	Electric	Twin Motor 7-seat *	4 x 4	✓	✓
5 door SUV	Electric	Twin Motor Performance 6-seat	4 x 4	✓	✓
5 door SUV	Electric	Single Motor 6-seat	4 x 2	✓	✓
5 door SUV	Electric	Twin Motor 6-seat	4 x 4	✓	✓
5 door SUV	Electric	Single Motor 5-seat	4 x 2	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome	
November 2025	Rating Published	2025 ★★★★★	✓