



Volvo V60
Pilot Assist

2020



MODERATE



ASSISTANCE
COMPETENCE



71%

SAFETY
BACKUP



49%

SPECIFICATION

SYSTEM NAME	Pilot Assist
STANDARD ACTIVE SAFETY SYSTEMS	
AEB Car-to-Car	●
AEB Vulnerable Road User	●
Lane Support Systems	●
Speed Assistance Systems	●
ALSO AVAILABLE ON	S/V60 - S/V90 - XC40 - XC60 - XC90

Comments

Volvo's system name **Pilot Assist** accurately portrays system functionality. The promotional material and the handbook correctly indicate the limitations of the system capabilities. Status information is clear, and the V60 offers a head-up display showing the system status in the driver's direct line of sight. Volvo did not equip the V60 with an internal camera and relies only on steering wheel input for Driver Monitoring. The system balances driver steering input with lane guidance, promoting co-operative driving.

Volvo combines map-based speed limit information with real time camera inputs to manage fixed, variable and temporary speed limit signs. The system adapt speed for upcoming curves. The V60 avoids a collision with moving vehicles in the ACC test scenarios but fails to respond to stopped cars. AEB interventions provide limited additional support in critical situations. The driver is supported through the S-Bend, staying centred in the lane at all test speeds. The vehicle has an Active Blindspot system designed to prevent lane changing into adjacent vehicles, but it fails to support at higher lateral speeds. A lane-change assist function is not available. In case of an unresponsive driver, the V60 deactivates the system leaving the vehicle without control. If the radar or camera are blocked the V60 provides a timely warning and prevents system activation.

The Volvo V60 provides a good level of Vehicle Assistance with a similar level of Driver Engagement but a Moderate Safety Backup resulting in a Moderate but balanced system.

ASSISTANCE COMPETENCE

Total 71%

DRIVER ENGAGEMENT

78.3 / 100 PTS

CONSUMER INFORMATION 25.0 / 25 Pts

SYSTEM NAME	Pilot Assist
MARKETING MATERIAL	Pilot Assist Volvo Viewed 12 September 2020
QUICK START GUIDE	
VEHICLE HANDBOOK	Viewed 12 September 2020

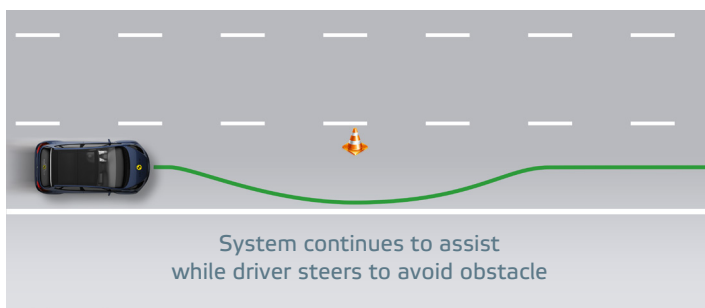
SYSTEM STATUS 18.3 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

DRIVER MONITORING 10.0 / 25 Pts

DRIVING COLLABORATION 25.0 / 25 Pts

Steering to avoid an obstacle



GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

ASSISTANCE COMPETENCE

Total 71%

VEHICLE ASSISTANCE

71.9 / 100 PTS

SPEED ASSISTANCE



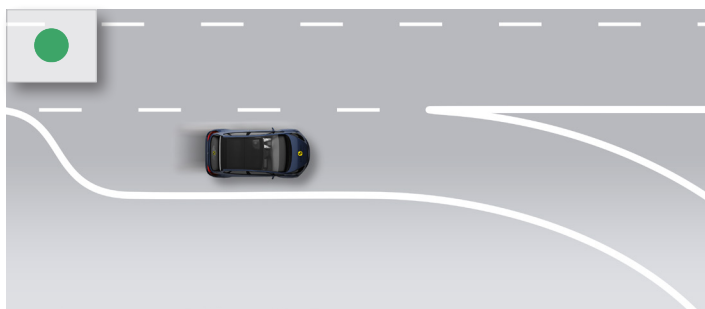
21.0 / 25 Pts

SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	At speed at sign
Vehicle response to variable Speed limits	Slowing down at sign

ROAD FEATURES

Speed adaptation for corners



Speed adaptation for roundabouts



Speed adaptation for junctions



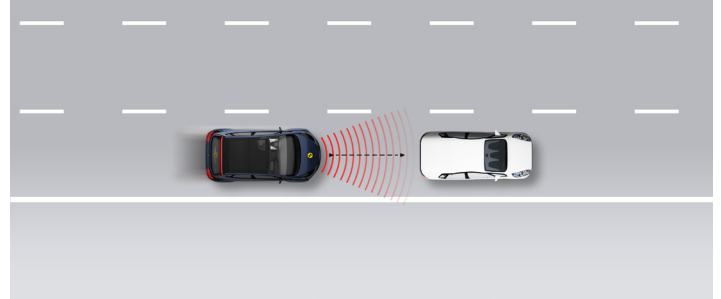
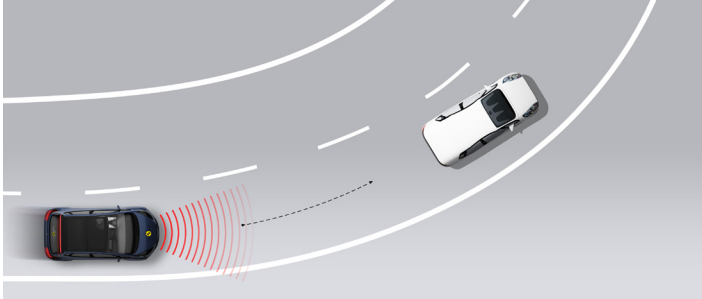
FITTED TO THE VEHICLE NOT AVAILABLE

ASSISTANCE COMPETENCE

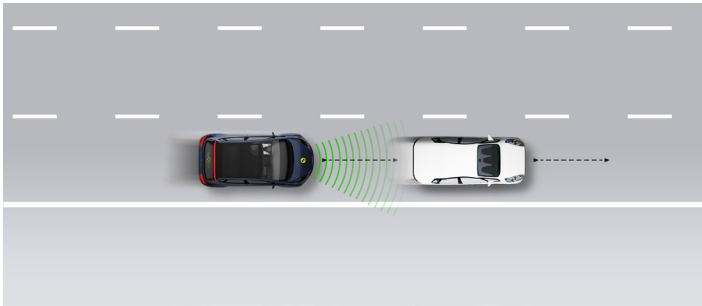
Total 71%

ADAPTIVE CRUISE CONTROL PERFORMANCE 20.9 / 40 Pts

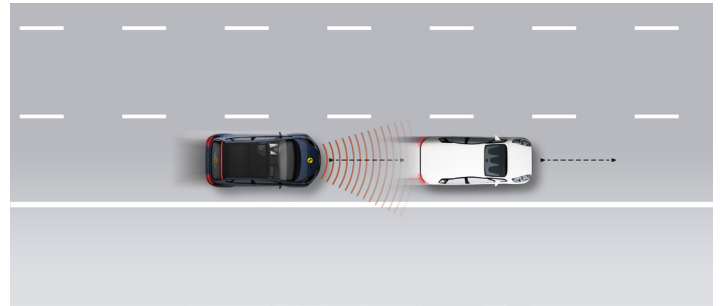
Approaching a stationary car



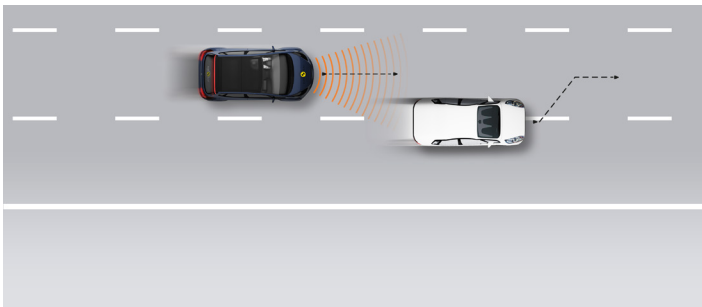
Approaching a slower moving car



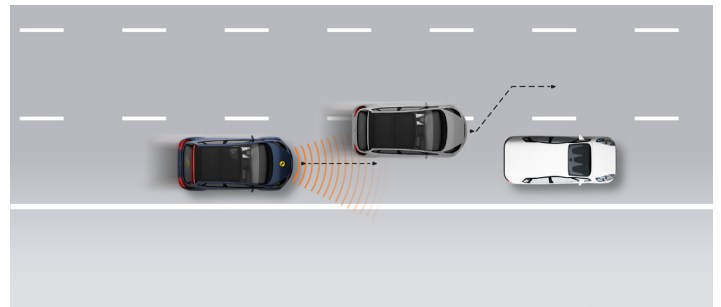
Approaching a braking car



Car cutting-in in front



Car cutting-out in front



UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	✗

ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	●
System assistance maintained by	Automatic resume within 5s of stop and driver input required over 5s





 ASSISTANCE COMPETENCE

Total 71%

STEERING ASSISTANCE  30.0 / 35 Pts

Steering in an S-curve



80 km/h	
100 km/h	
120 km/h	
Lane Change Assist	

SAFETY BACKUP

Total 49%

SYSTEM FAILURE 20.0 / 25 Pts

	ENGAGEMENT	WARNING
SENSOR BLOCKED AT START-UP		
Camera	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
Radar	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM INACTIVE		
Camera	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
Radar	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE		
Camera	System cancels within 2 minutes after blocking	Visual Warning within 5 minutes after sensor blocking
Radar	System stays active after sensor blocking	Visual Warning within 5 minutes after sensor blocking

UNRESPONSIVE DRIVER INTERVENTION 0.0 / 25 Pts

Hands Off Warning Timeline

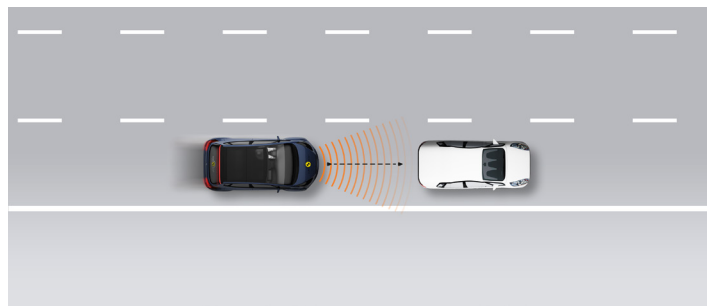
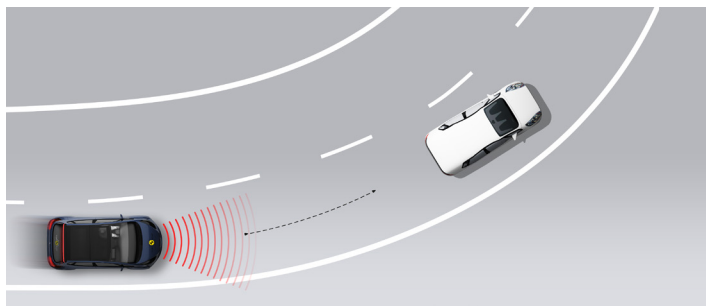


 SAFETY BACKUP

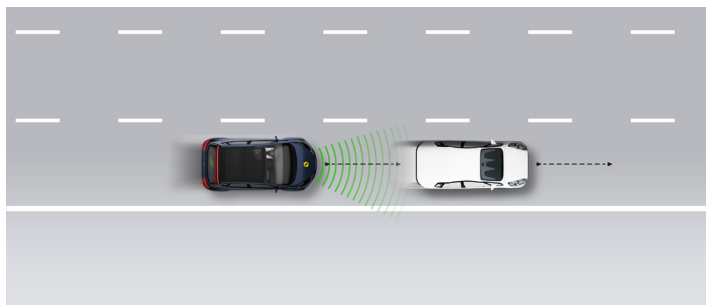
Total 49%



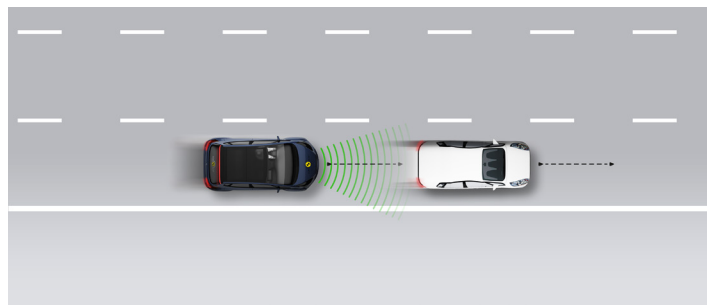
Approaching a stationary car



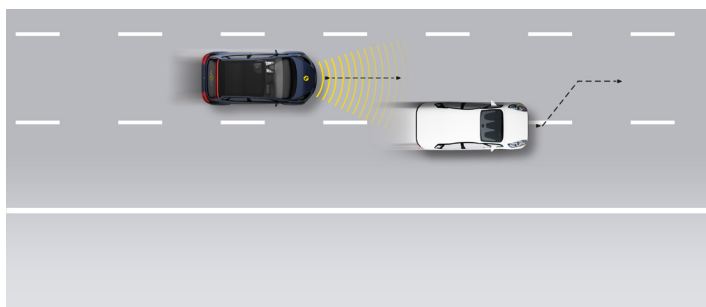
Approaching a slower moving car



Approaching a braking car



Car cutting-in in front



Car cutting-out in front

