

# INTRODUCING THE ALL-NEW 2017 VOLVO V90 CROSS COUNTRY



## 2017 VOLVO V90 CROSS COUNTRY PRODUCT GUIDE UNITED STATES

Version 2 – January 2017

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## **Changes / Additions since Previous Version:**

- MY2017 Fuel Economy data has been added (see Pages 4, 46, 48)
- Load & Versatility updated with info about Folding Seats from the Rear (see Page 34)
- Semi-Automatic Load Cover was changed to a Manual Load Cover (see Page 40)
- New Interior Color & Upholstery images have been added (see Page 45)
- Towing Capacity has been added (see Page 46)
- Interior Dimensions have been updated (see Pages 47, 49)





# NEW FOR MY2017



## Powertrain

All-New for MY2017

## Trim Levels and Standard Equipment

All-New for MY2017

## Options & Packages

All-New for MY2017



# SEGMENT OVERVIEW



## Segment & Key Competitors of V90 Cross Country



**2017  
Volvo**



**2016  
Mercedes-Benz**

### V90 Cross Country T6 AWD:

- 2.0L I-4 Turbocharged & Supercharged
- 316 hp / 295 lb-ft torque
- City / Highway : 22 / 30
- MSRP : \$55,300

### E350 4Matic Wagon:



- 3.5L V-6
- 302 hp / 273 lb-ft torque
- City / Highway : 20 / 27
- MSRP : \$59,900



# SEGMENT OVERVIEW





## Demographic Overview of Competitors:

Model Year	2016	2016
Model	 <b>XC70</b>	 Mercedes-Benz <b>E-Class Wagon</b>
Sample Size	247	29
Gender - Male	54%	68%
Gender - Female	46%	32%
Mean Age	62	61
College Grad	33%	53%
Post Grad Degree	51%	36%
Married	85%	93%
% with Children	22%	22%
HHI \$200k +	40%	87%
Price Paid	\$43,200	\$64,600
% Leased	25%	35%
% Financed	41%	21%
% Purchased	34%	44%

## Top 5 Most Important Purchase Reasons

### Purchase Reasons of Competitors:

 <b>XC70 Owners</b>
<b>Past Exp. with Brand 23%</b>
<b>Overall Safety 16%</b>
<b>Safety Features 9%</b>
<b>Durability/Reliability 6%</b>
<b>Driving Performance 6%</b>
Sample size XC70 owners = 247

 <b>Mercedes-Benz E-Class Wagon Owners</b>
<b>Reputation/Prestige 21%</b>
<b>Past Exp. with Brand 15%</b>
<b>Engine Performance 14%</b>
<b>Loading/Unloading 5%</b>
<b>Driving Performance 5%</b>
Sample size E-Class owners = 29

Source:  
2016 Strategic Vision  
NVES, W1-W2 with Part 3 (Oct '15-Mar '16 Buyers)



# CUSTOMER PROFILE



## The V90 Cross Country Customer:

- **They will come to you from all types of Vehicle Segments** - They will come from different segments but with “adventure” as the common thread. These conquest customers have confidence in Volvo Crossovers & SUVs but have demands that needs to be met for them in order to place their trust in Volvo. We need to take these expectations into careful considerations when engaging with them.
- **They are buying an Adventure Vehicle** - The customer seeks adventure, this is the key attribute that this vehicle must confirm. This is more important than the size and body type of the vehicle. They appreciate the opportunity to get away and this vehicle serves as a tool, enabling them to do something physical and recreational.
- **They want an Adventure Vehicle that also has Capability and Style** - Many SUVs have lost their off-road character, having become “too soft” and “suburban like.” At the same time, many off-road vehicles lack in luxury and refinement, forcing a customer to sacrifice and choose. The V90 Cross Country’s key selling point is that it combines capability and style without sacrificing the luxury, refinement, and latest driver assist technologies that these customers want and value.
- **They put Hobbies First, Business second** - While they typically work in managerial and executive positions in business, finance, sales or in a marketing/creative related position, what defines them is their recreational hobby or sport. Ultimately, their self-image would be described as mountain climber first, CEO second.
- **They Expect the Best Service, Every Time** - When buying a vehicle they want more than a transactional purchase, they want a luxury experience. Many of these customers will be new to the Volvo brand and they may need time and multiple engagements with you to consider buying the V90 Cross Country.

### Demographic Target:

- Affluent, mostly Male buyer, 35-55 year age, married.
- Lives mostly in a large urban and suburban areas – Tri-State NY, New England, California, and Northwest.
- During-Family (30%) and Post-Family (60%) – with kids there is less time and flexibility for spontaneous adventure. Even if kids live at home, this car is not “the family car.”
- They are highly active, hardworking and thrill seekers at heart. Affluent individuals/couples that seek to find more time in their life to do the things that they love. They long for excitement, physical challenge and recreation.
- They are affluent individuals in higher managerial positions, but it’s their recreational hobby or sport that defines their character.
- We will target some existing XC70 owners and conquest customers, with “adventure” being the common thread.

(Represents approx. 50% of potential V90 Cross Country customer base.)



As a guideline always remember Volvos customer promise:

- We understand You
- We protect what’s important to You
- We make You feel special

# PRODUCT PROFILE



## Introduction to V90 Cross Country

The all-new 2017 Volvo V90 Cross Country is the luxurious crossover that attracts people making a conscious decision to drive an SUV alternative. It delivers car-like refined driving characteristics while still providing a high level of versatility. The V90 Cross Country combines craftsmanship, technology and capability for the adventure-minded thrill seeker. This is the next generation of Volvo Cars.



**ENTER THE ALL-NEW V90 CROSS COUNTRY**  
**THE ADVENTURE CROSSOVER - MADE FOR THRILL SEEKERS**

- **VERSATILITY**
- **CAR-LIKE REFINEMENT**
- **ADVENTURE-MINDED**

# PRODUCT PROFILE - HIGHLIGHTS

## Top 6 Highlights & Key Attributes of V90 Cross Country



### VERSATILITY

- 1. Rugged Exterior Design** - All Luxury crossovers carry highly advanced tech, but it's the packaging and design execution of the exterior that separates Volvo from the rest. The all-new V90 Cross Country's exterior is exceptionally well surfaced with luxury proportions, that's uniquely Cross Country, yet rugged and refined.

**Benefits:** Stand out from other adventure crossovers, starting at the signature Thor's hammer that creates an imposing aggressive face, to the broad shoulder lines and higher ride height that exudes capability and strength, encouraging you to head out on a new adventure each day.



### CAR-LIKE REFINEMENT

- 2. 9-inch Sensus Touchscreen** - Our principle focus for the all-new V90 Cross Country's user interface was to make it feel as natural and intuitive as possible. The key to achieving that was to virtually eliminate buttons and switches and instead rely on our unique touch screen technology for functions like climate control, entertainment and navigation.

The user interface is focused around the large 9-inch touch screen on the center console, which is itself very clean and easy to use. And a further advantage of displaying 'buttons' on a screen is that they can be made to appear bigger, as the screen is dynamic – that makes it easier to control.



**Benefits:** An easy and convenient way of getting the information you need, while driving.

- 3. Laminated Panoramic Moonroof (Standard)** -

The all-new V90 Cross Country continues our "Designed Around You" philosophy by offering a Panoramic Moonroof standard. Similar to the XC90's, it was designed to be the largest openable glass roof in our history. You can open the power operated sunshade to let in natural light or open the roof to create a light and airy feeling throughout the cabin.

**Benefits:** We know you love to be outside and the standard Panoramic Moonroof allows you to stay connected to the great outdoors, all while contributing to a quiet and refined driving experience.





# PRODUCT PROFILE - HIGHLIGHTS



## Top 6 Highlights & Key Attributes of V90 Cross Country - Continued

4. **Pilot Assist, Gen 2 (Standard)** - The advanced Semi-Autonomous Drive System gives gentle steering inputs to keep the car properly aligned within lane markings up to highway speeds of 80 mph and no longer needs to follow another car. The system controls acceleration, braking and steering.



Pilot Assist is another step towards full autonomous drive – a key innovation area for Volvo Cars.

**Benefits:** We know you love to drive, but we also know that there are times when traffic takes away that fun. Pilot Assist allows you to delegate more control to the car when the boring monotonous commute dictates, allowing you to enjoy the ride more and arrive at your destination refreshed.

5. **Blind Spot Information System (BLIS) with Cross Traffic Alert (Standard)** - Pioneered by Volvo Cars in 2003, BLIS has become one of the top expected safety features in a new vehicle with the all-new V90 Cross Country offering it as standard. The system watches out for vehicles approaching alongside and offset to the rear. When another vehicle enters your blind spot area, a warning light comes on to warn you and give ample time to react. At the same time, Cross Traffic Alert will help you when reversing out of a parking space or anywhere else with restricted vision.



**Benefits:** As a preventive safety feature, the Blind Spot Information System reduces the risk of changing lanes when another vehicle is about to overtake or already overtaking your lane. The feature will also help you avoid serious collisions when another vehicle is rapidly approaching from behind. Cross Traffic Alert makes it considerably easier and less stressful when reversing out of a parking space while also watching out for approaching vehicles, cyclists, and pedestrians.

6. **5 Best Seats in the House (or Crossover)** - Seating comfort is traditionally one of the highest priority areas for us at Volvo and an essential part of our “Designed Around You” thinking. Our seats have been considered to be among the best on the market by independent sources for decades. Even so, we decided not to rest on our laurels and designed new seats for the 90-cluster, including the all-new V90 Cross Country.



**Benefits:** Volvo’s industry leading seat design delivers maximum comfort in all seating positions and the new front seats’ slimmer backrests contribute to increased rear legroom.

# PRODUCT PROFILE – WORLD FIRST SAFETY



## Volvo World Firsts in V90 Cross Country

### ADVENTURE-MINDED

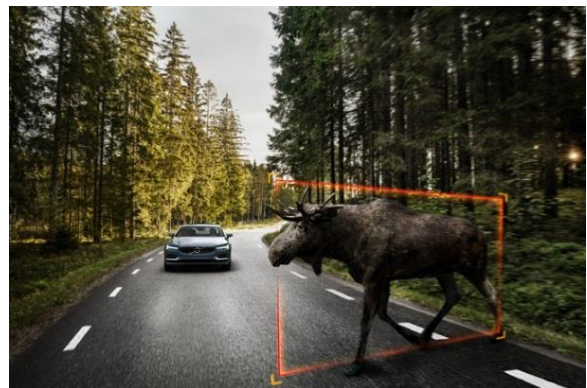
- **Run-off Road Mitigation** - This is a new World First standard-fitted preventive safety system in the all-new Volvo V90 Cross Country. It supplements the standard-fitted Lane Keeping Aid. Run-off Road Mitigation with steer assist technology operates at higher speeds, working out if you stray over lane markings to the road edge. It only intervenes if a road departure is calculated to be imminent.



The calculation is based on information from the standard-fitted radar/camera unit in the windscreen and relies on visible road markings and road edges. The system is active from 40-86 mph, day and night.

**Benefits:** Reduces the risk of a road departure. It will assist with steering, helping put you back on a safer path.

- **Large Animal Detection**- The standard-fitted radar/camera unit can detect large animals standing on the road or slowly moving across it with the side towards the car. If a large animal is detected, the Volvo Cross Country warns the driver. If the driver does not react the car applies the brakes to mitigate the possible effects of an impending collision.



Detection includes large animals such as moose/elk, large deer, horses and cattle at night or day.

**Benefits:** Accidents with large animals can be deadly and are even more unpredictable than accidents with another vehicle. Large Animal Detection can help reduce the chances of impact, and can help mitigate the damage if the impact is unavoidable.

## INNOVATION WITH PEOPLE IN MIND

**World First Safety is the logical outcome of the creativity and inventiveness of Volvo Cars' engineers.**



# PRODUCT PROFILE - PLATFORM



## The Foundation of V90 Cross Country – Scalable Product Architecture (SPA)

The all-new Volvo V90 Cross Country is the third Volvo to be built on our new **Scalable Product Architecture (SPA)**, the advanced modular platform that underpins the all-new Volvo S90, XC90 and which will be the foundation of all of our 90 and 60 products. A visible result is great proportions, with short overhangs and a long wheelbase, which gives a stretched, powerful look.

Our designers drew the inspiration for the front with its distinctive grille and headlights, from the much appreciated Volvo Concept XC Coupé, which was unveiled in 2014. The upright grille, the high belt line, the stance, the big wheels and the body shape exudes self-confidence and a unique Volvo identity. And even though the Volvo V90 Cross Country is modern and contemporary in its design, it also employs classic Volvo style cues, such as the strong shoulders that run back to the rear.



From the beginning of development, the SPA platform was designed and crafted solely around Volvo's specific requirements. What is fixed is the area from the firewall to front axle (see above). This fixed area is centered on our 4-cylinder strategy + electrification, and how around this area the interior / exterior proportions are completely flexible. The platform can accommodate different heights, lengths, widths, and wheelbases.

Not only does SPA allow for elegant design possibilities, this ingenious new architecture offers **new and improved possibilities to offer protection** in worst-case scenarios. The new, patented SPA safety cage (See Page 39), with its mix of different steel grades, has been made stronger and smarter. This superior strength, without added mass, is achieved by more extensive use of boron steel.

The Scalable Product Architecture is also designed to accommodate the implementation of autonomous technologies all the way to fully autonomous cars. Its architecture includes a **ground-breaking new electrical architecture** that boosts the car's intelligence level significantly. The architecture is designed to make it easy to add sophisticated functions and rapidly implement new technology in fast-moving areas such as microprocessor, sensor and camera technology. It allows engineers the ability **to create new innovative features that support the driver in avoiding accidents**. Therefore, SPA enables Volvo to **reinforce its safety leadership**.

# PRODUCT PROFILE - EXTERIOR



## Exterior Walkaround of V90 Cross Country – Features



### Top 10 Cross Country Exterior Features

1. Front Grille, High-Gloss Black Bars	6. Door Handle Illumination
2. Active Bending Lights w/ Full LED Headlights	7. LED Taillights w/ Side Marker lights
3. LED Fog Lamps w/ Corner Illumination	8. Rear Park Assist Camera w/Rear Park Assist
4. High Gloss Integrated Aluminum Roof Rails	9. 20" 8-Spoke Tech Matt Black Wheels (Option)
5. Power-Retractable Sideview Mirrors	10. Dual Integrated Tailpipes



Pictured: V90 Cross Country T6 AWD in Osmium Grey equipped with optional 20" 10-Spoke Tech Matt Black Alloy Wheels

The all-new V90 Cross Country is the most luxurious crossover we have ever built. We have raised the level of luxury with authentic high end craftsmanship that's complemented by a unique Scandinavian design. Our Cross Country heritage delivers the highest levels of rugged luxury.



# PRODUCT PROFILE – EXTERIOR



## Exterior Differences of V90 Cross Country – Trim Level

Following our new trim level strategy, the all-new Volvo V90 Cross Country will offer a single trim level that expresses a uniquely rugged look and classic Cross Country identity. Pictured below is the Cross Country trim level as well as the visual change when equipped with the optional Luxury Package.



### CROSS COUNTRY STANDARD TRIM

- Front Grille, High-Gloss Vertical Black Bars, inserts in Matte Black with Chrome Dots and Glossy Chrome Frame
- Lower Outer Grilles, Black
- Lower Skid Plate in Silver
- Active Bending Lights (ABL), added to standard LED Headlights w/ Thor's Hammer DRL & Auto Highbeam (AHB)
- LED Fog Lamps with Corner Illumination
- Headlight High Pressure Cleaning
- Integrated Aluminum Roof Rails
- Wheel Arch & Lower Body Moldings, Black
- Side Window Trim, Glossy Black

- Tinted Windows, Rear & Cargo
- Dual Integrated Tailpipes
- 19" 6-Double Spoke Tech Matte Black Alloy Wheels (Standard, pictured below)
- 20" 10-Spoke Tech Matte Black Alloy Wheels (Optional, pictured above)



### LUXURY PACKAGE (OPTIONAL)

V90 Cross Country equipped with the optional Luxury Package has the same exterior design features and details as the standard variant but goes a step further by adding the following unique features:

- Fully Color-Coordinated Sills, Lower Body Moldings & Bumpers

# PRODUCT PROFILE - INTERIOR



## Interior Walkaround of V90 Cross Country – Features



Note: V90 Cross Country interior with Linear Walnut Wood Inlays shown, actual inlays will be Dark Walnut Wood

### Top 10 Cross Country Interior Features

1. 3-spoke Adjustable Heated Steering Wheel	6. Laminated Panoramic Sunroof w/ Sunshade
2. Leather Upholstery w/ Heated Front Seats	7. 10-way, Power Front Comfort Seats
3. Keyless Drive Entry & Drive	8. Smartphone Integration w/ USB Hub
4. 12.3” Digital Driver Display	9. Laminated Side Windows
5. Sensus Connect w/ 9” Sensus Touchscreen	10. CleanZone – Air Quality System



# PRODUCT PROFILE – INTERIOR



## Interior Design of V90 Cross Country – Overview

The all-new Volvo V90 Cross Country is the most luxurious crossover we have ever built, with an interior that exudes quality and craftsmanship. The three principles that guided our interior design are proportion, the intelligent use of technology and the best Scandinavian expression of luxury. In terms of proportion, the visual lines of the interior are stretched horizontally, which gives an impression of width and space, the hallmarks of an elegant and luxurious experience.



The design also reflects our “Designed Around You” concept where we start with the human in sharp focus and develop everything from there.

- Steering wheel is designed for the best possible ergonomic experience – the rim features just the right thickness for comfort and feel. The positive grip is particularly useful during dynamic driving.
- 9-inch Sensus Touchscreen used to replace the large number of switches that tend to plague the interiors of luxury cars reflects our own intelligent use of technology.
- We have angled the touch screen and dashboard slightly more towards the driver, to give a more driver focused look and feel.
- The dashboard air vents have uniquely designed control knobs, placed on elegant vertical design elements in the same metal finish.

All in all, the interior design of the V90 Cross Country creates a harmonious and relaxing environment.

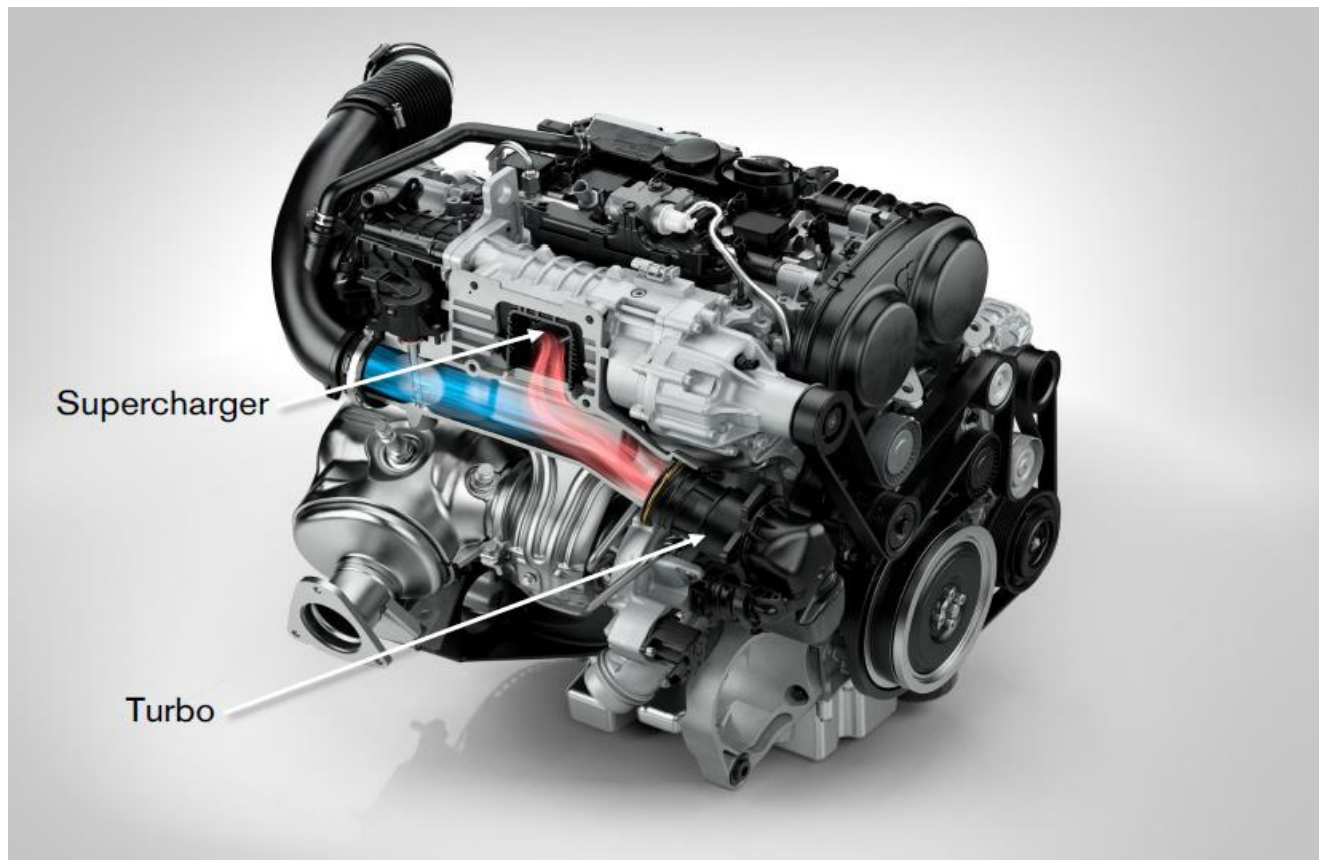
# PRODUCT PROFILE – POWERTRAIN



## The Heart of the V90 Cross Country – Drive-E Engine Technology

The focus of the all-new Volvo V90 Cross Country's powertrains is lightweight design, performance, efficiency and a great driving experience. At the heart of this strategy is our range of aluminium four-cylinder engines that actually offer performance equivalent to six and even eight-cylinder powerplants.

**Benefits:** An exhilarating driving experience delivered with lower fuel consumption and emissions.



**DRIVE-E**

### T6 AWD

- **316 HP and 295 lb/ft. of torque** between 1800rpm and 5500rpm.
- Supercharged and Turbocharged – Power development occurs via supercharger for superb low-rev power delivery and throttle response, and a turbocharger that keeps the engine punching hard at higher revs.
- Very high-performance at all engine-speeds/revs comparable to that of bigger naturally aspirated engines with more cylinders, but with lower fuel costs and CO2 emissions.

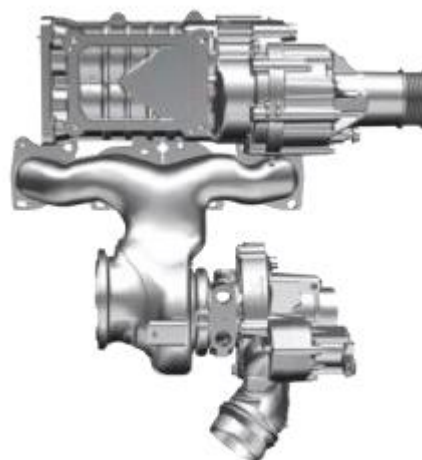


## Benefits and Features

- Compact 4-cylinder design
- Lightweight, which contributes to better fuel economy, better driving dynamics and more agile cornering.
- Balancing shafts for smooth and vibration free running.
- Direct injection with high pressure, also for the petrol engines.
- Volvo engineers optimized our new gasoline engines by designing camshafts with ball bearings, creating a special internal surface treatment, general machining refinement and a fully variable oil pump. Even the engine oil has been specially developed for our new engines, with a low viscosity range of 0W-20.

## Why Supercharging & Turbocharging?

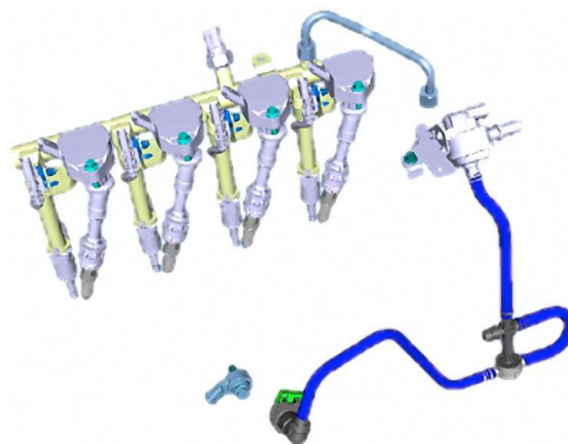
- A supercharger delivers torque in low and medium engine speeds up to 3500 rpm until the turbo takes over. The supercharger is then disengaged in order to reduce friction and thus fuel consumption and CO2 emissions.
- A turbocharger delivers horsepower. Turbocharging means that the air volume that goes into the engine's combustion chambers is made smaller (compressed) rather than physically making the engine's combustion chambers bigger to accommodate more air. More air means more oxygen, which means more power. The result is a smaller engine that performs like a bigger one.



Supercharger & Turbo (T6)

## Advanced Combustion

- The combustion system designed for our gasoline engines is comprised of a centrally mounted spark plug and injector with a unique spray layout that provides a homogenous air-fuel mixture.



## Direct Injection technique enables:

- Stratified start and an effective catalyst heating mode that outperforms Port Fuel Injection (PFI) and side mounted Direct Injection engines, resulting in low fuel consumption and enabling LEVIII emission compliance.
- The intake ports are designed to generate a high tumble motion, promoting the mixing of air and fuel during the intake stroke. In the succeeding compression stroke, this tumble motion is broken down into turbulence, accelerating the combustion speed. The combustion is therefore very stable, enabling a high degree of internal EGR, which minimizes pumping losses, hence reducing the fuel consumption.



# PRODUCT PROFILE – POWERTRAIN



## What Drives V90 Cross Country – Drive Modes

The standard Drive Mode settings allow the driver to choose different settings for the engine via an elegant and ergonomic rotary knob in the center console. The control systems for the engine, automatic gearbox, steering, brakes, Electronic Stability Control and Stop/Start function are programmed to give different characteristics for each of the drive modes.

### 1. Comfort Mode (Default)

All parameters are set to offer maximum comfort and the Driver Display is set to the Comfort mode. This is the default mode every time the engine is started.

**Benefits:** A comfortable driving and riding experience.

### 2. Dynamic Mode

As the name implies, this mode is calibrated for dynamic driving characteristics, with quick engine, gearbox, accelerator, steering and brake responses. And in the 316 hp, high-performance T6 engine, even the supercharger is more responsive. The automatic gearbox allows for higher engine speeds/revs before it changes gears, and the gear changes can be felt a bit more, which contributes to a dynamic experience. Even the lock-up schedule is calibrated for dynamic driving. The Electronic Stability Control and the Driver Display are set to Sport mode. The Stop/Start function is disabled in Dynamic mode.

**Benefits:** A dynamic driving experience, with quicker gear changes. Quicker take-off from standstill, as the Stop/Start system is disabled.

### 3. ECO Mode

In this mode the engine and gearbox control systems are calibrated for the lowest possible fuel consumption and consequently emissions. The accelerator has a 'softer' function (less engine power for the same amount of depression) and the automatic gearbox changes up earlier (for lower engine speeds/revs). An ECO Coast function helps the driver utilize the car's kinetic energy. When the accelerator is released fully at speeds above 40 mph with the automatic gearbox in D-position, there is no engine-braking – instead the car rolls freely, or coasts, with the engine at idle and a bare minimum of fuel consumption. The Stop/Start system is on by default, with optimization for low fuel consumption.

**Benefits:** Helps the driver to drive economically with as little impact on the environment as possible.

### 4. Individual Mode

The driver can tailor an individual drive mode. The Individual mode is only displayed if the driver has made individual settings. The individual settings are stored in the remote control memory and is activated every time the car is unlocked with that particular remote control.

**Benefits:** Stores the driver's personal preferences of a tailored driving mode.



## Drive Modes - Continued



### 5. Off Road Mode

This mode can be set at speeds below approximately 12 mph to maximize the car's performance on poor roads. If 25 mph is exceeded, the Off Road mode is disconnected and it will not be connected automatically again if the speed is reduced.

- The accelerator is adjusted to reduce the risk for inadvertently exceeding 25 mph, when the Off Road mode is disconnected.
- The differentials are locked.
- Hill Descent Control is automatically activated when driving down hills.
- The steering is set to comfort mode.
- The engine and gearbox are optimized for traction.
- The Electronic Stability Control is set to Traction/Sport.
- The Stop/Start function is deactivated.
- The Driver Display is set to XC mode.

**Benefits:** Facilitates driving on really poor roads and in difficult driving conditions.



Note: The car always starts in the Default Comfort Mode.

### Driver Adjustable Power Steering

The driver can choose between three levels of overall power assistance. The power steering is still progressive, but depending on the setting, the assistance is stronger or weaker right through the entire speed range.

**Benefits:** The driver can tailor the steering feel according to personal preferences or the circumstances at any time.



# PRODUCT PROFILE – POWERTRAIN



## What Drives V90 Cross Country – 8-Speed Automatic Transmission

The all-new Volvo V90 Cross Country comes with our 8-speed Geartronic automatic transmission, which is a vital part of the Drive-E powertrain technology.

The number of gears means that the engine's torque and power band can be utilized more efficiently. Two of the gears are 'overdrives', which save fuel when cruising at constant speeds.

The Lock-up (LU) system is comprised of the latest NVH damping technology (pendulum damper for diesels and super long travel damper for the petrol engine). This enables frequent use of LU and allows the engine to run on low revs for best fuel economy.



### Benefits and Features

- Best in class efficiency
- Quick and smooth shifting
- Converter technology for powerful launches
- High torque capacity considering small size and low weight
- Start-stop technology (electric oil pump keep transmission ready for re-start)



# PRODUCT PROFILE - POWERTRAIN



## What Drives V90 Cross Country – All-Wheel Drive (AWD)

The all-new Volvo V90 Cross Country T6 comes with all-wheel drive standard and has a very efficient type of all-wheel drive system. A compact and lightweight coupling (BorgWarner Generation 5) distributes the engine's power between the front and rear wheels. Under normal, dry conditions practically all of the power is distributed to the front wheels.

The system constantly calculates the need for torque to the rear wheels and can instantly redistribute up to 50 percent of the engine's torque to the rear wheels. When at a standstill, full all-wheel drive is always engaged to prepare for maximum traction during acceleration.

## All-Wheel Drive



# PRODUCT PROFILE – TECHNOLOGY



## Stay Visually Connected in V90 Cross Country – Sensus

The all-new Volvo V90 Cross Country has three different ways to communicate visually with the driver. When it comes to priorities, information that the driver needs now is displayed in the windscreen by means of an optional Head-up display or the Digital Driver Display. Information and commands that can be taken care of whenever, are handled by the 9-inch Sensus Touchscreen center display in the center console.

**Benefits:** Reduces distraction at times when the highest level of concentration is needed, and provides information in a convenient seamless way, according to its importance.



## Head-Up Display (HUD) – Optional

A Head-up display means that text and graphical information is displayed on the lower part of the windscreen, in front of the driver. Our optional head-up technology has made it possible for the driver to experience the information as hovering in the air about 6 feet in front of the car. The messages are semi-transparent and do not block the driver's vision. The brightness is automatically adapted to the surrounding light. The driver can adjust the brightness and image position, as well as make personal settings. The image position is included in the memory function for the power-operated seat.

### Benefits and Features

- Reduced risk that the driver misses important information.
- Extremely convenient way to get information from the navigation system, for example.
- Less strain on the eyes, as there is no need to change focus from the road ahead or to look down.
- Possibility to adjust the head-up information to personal preferences, manually or automatically.

# PRODUCT PROFILE – TECHNOLOGY



## Stay Visually Connected in V90 Cross Country – Sensus

### Driver Display

The Driver Display is digital and uses the latest technology. When the ignition is off, the display is high-gloss black. When the ignition is switched on, the Driver Display comes alive.



12.3-inch Driver Display (Standard)

- The resolution is extremely good and thanks to advanced technology, even the front seat passenger has a clear view of the display.
- The driver can choose between different visual appearances, all with great color depth and color variations.

### How Does it Work?

- Light sensors control the brightness of the display according to exterior light sources, such as sunshine through any of the windows or, for example, the headlights of following vehicles at night.
- The display also adapts to dark exterior conditions, such as tunnels or night time. In addition, the driver can control the brightness manually.
- There is one Driver Display available – the top-of-the-line 12.3-inch (Standard). The 12.3-inch variant displays two large round instruments and an information display in between.
- The information display can differ in size, depending on the use. For example, if the navigation system is used, it becomes bigger, and the two round instruments smaller.

### Benefits and Features

- A very exclusive and high-tech impression when entering the car thanks to the black glossy Driver Display, and also when the ignition is turned on and the Driver Display comes alive.
- Safety and security, thanks to the clear information in the Driver Display, which can also be seen by the front seat passenger.
- Great choice between different looks and color schemes, contributing to a good driving experience.
- Comfortable and restful for the eyes, the brightness is automatically adapted to surrounding light.



# PRODUCT PROFILE – TECHNOLOGY



## Stay Visually Connected in V90 Cross Country – Sensus

### 9-inch Sensus Touchscreen

The display in the center console is an example of genuine Scandinavian design, with form and function combined. It really makes the all-new Volvo V90 Cross Country stand out from its competitors.



The impressively large 9-inch Sensus Touchscreen has the largest surface area in the segment and not so large that it overwhelms the beautiful and luxurious design of the interior. It's placed as high as possible in the center console. The upper part is mainly used for information that needs to be viewed and the lower part for touch functions – the best possible ergonomic solution.

### Benefits and Features

- Information on the upper part of the large and high-mounted screen is easy and safe to view, without diverting unnecessary attention from the road ahead.
- The touch screen's large display allows for bigger virtual buttons, which are placed on the lower part of the screen to be easy to reach.
- Viewing and following routes on maps is particularly easy as the vertical screen can display more of the road that the car is travelling on. And compared with horizontal landscape format screens in most competitors, it's also easier to view menus, for example, with less need for scrolling.
- Very easy and convenient to touch the big virtual buttons on the touch screen, compared with physical buttons on the center console and dashboard, which are often smaller.
- Larger surface area than some competitors' screens, in spite of them having a larger diagonal measurement.
- The somewhat more angled 9-inch Sensus Touchscreen center display helps improve access to the information displayed for the driver.

# PRODUCT PROFILE – TECHNOLOGY

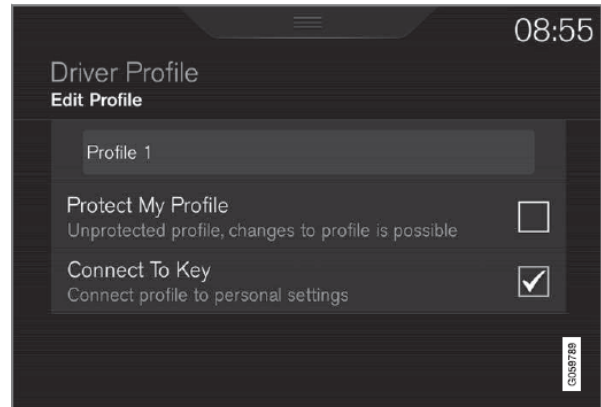


## Customize Your Settings in V90 Cross Country

### Driver Profiles

Many of the vehicle's settings can be adapted to the driver's personal preferences and saved in one or more Driver Profiles.

- The personal settings made are automatically saved in the active driver profile. Each remote key fob is linked to a driver profile and when this key is used, the vehicle's settings are adapted according to the specific ones saved in that profile.



### How Does it Work, Which Settings are Saved in Driver Profiles?

- The settings that can be changed in the vehicle are either **(1) Global** or **(2) Personal**.
- Changes made to personal settings are saved automatically in the active (current) driver profile, assuming that this profile is not locked. Changes to Global settings are not saved in a specific driver profile but instead affect all driver profiles.

#### (1) Global Settings

- Global Settings and parameters remain the same regardless of which driver profile is currently active and in use. Keyboard layout is an example of a Global setting. If Driver Profile X is used to add additional keyboard languages, these languages will also be available even if Driver Profile Y is used. This type of Global change is not specific to a single driver profile.

#### (2) Personal Settings

- If, for example Driver Profile X has been used to set the brightness for the center display, Driver Profile Y will not be affected by this setting since it is specific (personal) to Driver Profile X.

### Selecting a Driver Profile

- The most recently selected driver profile will be used automatically the next time the vehicle is started. However, a different driver profile can be selected after the vehicle has been started.

### Editing a Driver Profile

- The driver profiles can be edited at any time (i.e. in order to change their names or to lock a profile).

### Linking a Remote Key to a Driver Profile

*Note: We recommend helping your customer set up their first driver profile while delivering their vehicle.*

- A remote key can be linked to a driver profile, which means that all of the settings stored in the driver profile will apply each time that particular remote key is used with the vehicle.

Please see the Owner's Manual for the section "Driver Profiles" for an overview of both Global and Personal settings, how to select / edit a driver profile and how to link a remote key to a driver profile.

# PRODUCT PROFILE – TECHNOLOGY



## Hear the Best Sounds in V90 Cross Country – Audio Systems

Two audio system levels are available – (1) High Performance (2) Premium Sound by Bowers & Wilkins

The all-new Volvo V90 Cross Country's architecture has been designed from the ground up with audio performance in mind when it comes to the placement and integration of the speakers and subwoofer in the cars, as can be seen in the picture below. The focus of the audio development team at Volvo has been "We believe in music. It's all about soul, not just measurements."

### High Performance Audio System

This is the V90 Cross Country's standard audio system and as the name implies, it offers high performance. With this level of performance comes a six-channel amplifier delivering a total of 330 watts to ten speakers. The High Performance audio level includes the large, 9-inch Sensus Touchscreen and steering wheel controls with a scroll wheel. The High Performance audio system is a part of Sensus Connect.



### Speakers

In each front door:

- One tweeter (1 inch)
- One mid-range speaker (3 inches)
- One woofer (6 inches)

In each rear door:

- One woofer (6 inches)

Parcel shelf rear:

- Two full-range speakers (3 inches)

The audio system is compatible with the following audio files: MP3, AAC, WMA, WAV and FLAC.

### Benefits and Features

- Unusually good value for money – such sound quality and bass performance are rare at this level.
- Three separate speakers in the front doors with a separate mid-range speaker is an exclusive solution that delivers top sound quality.



# PRODUCT PROFILE - TECHNOLOGY



## Hear the Best Sounds in V90 Cross Country – Audio Systems

### Premium Sound by Bowers & Wilkins

Our Premium Sound by Bowers & Wilkins is one of the best audio systems in the segment, if not the entire market. It has been developed together with renowned high-end audio manufacturer Bowers & Wilkins. Their name carries such great authority and respect in audio circles that we have decided to cooperate with them to reach new levels when it comes to audio. For this top performing sound system, we also developed a new type of subwoofer, which has been integrated into the new vehicle architecture itself.

### How Does it Work?

- The system features the unique 'Room Transformation' technology that has been developed together with the Swedish audio software specialists Dirac Research.
- This technology has made it possible to recreate the acoustics of a specific room inside the car. There are three different 'Room Modes', which is a unique feature.
- The modes are 'Studio', 'Individual Stage' and 'Gothenburg Concert Hall', which has an acoustic design recreating the unique acoustic experience of the Gothenburg Concert Hall.
- Our top-of-the-line audio system delivers an astonishing 1,400 watts to 19 speakers. A separate sub-woofer is included.
- The Bowers & Wilkins Sound System audio level includes the large, 9-inch Sensus Touchscreen and steering wheel controls with a scroll wheel.



## Premium Sound by Bowers & Wilkins – Continued



### Speakers

Dashboard:

- One center tweeter (1 inch)
- One mid-range speaker with a Kevlar cone (4 inches)

In each front door:

- One tweeter (1 inch)
- One mid-range speaker with a Kevlar cone (4 inches)
- One woofer (6 inches)

In each rear door:

- One tweeter (1 inch)
- One mid-range speaker with a Kevlar cone (3 inches)
- One woofer (6 inches)

Parcel shelf rear:

- Two 2-way speakers, each containing one tweeter (1 inch)
- One mid-range speaker with a Kevlar cone (3 inches)

Beside the luggage compartment:

- Sub-woofer (9.8 inches)

The audio system is compatible with the following audio files: MP3, AAC, WMA, WAV and FLAC.



### Stainless Steel Panels

The speaker grilles in the doors and on the dashboard are in stainless steel with Bowers & Wilkins logotypes. The front and rear door mid-range speaker panels are also in stainless steel and the trademark Bowers & Wilkins yellow speaker cone can be seen through the mesh.

### Benefits and Features

- A sound experience in its own class. True high-end in-car audio performance.
- The unique feature of three different room modes, including the 'Gothenburg Concert Hall', which in itself is a unique sound experience.
- Sub-woofer, for an extraordinary bass experience, included.
- Speaker panels – material, logotypes and visible yellow speaker cones – that give a unique, very exclusive impression both from the inside and outside, through the windows.

# PRODUCT PROFILE – TECHNOLOGY



## Stay Connected in V90 Cross Country – Sensus Connect

Sensus Connect is an umbrella name for the following standard features:

- 12.3-inch Driver Display
- 9-inch Sensus Touchscreen
- Bluetooth Audio Streaming
- USB and AUX inputs
- Voice Control
- Tethering via Wi-Fi or Bluetooth
- High Performance Audio System
- Sensus Navigation
- Internet Radio via the apps below

In addition, a digital owners manual is included.

### Standard Apps:

- HERE Local Search
- TuneIn
- Pandora Internet Radio
- Glympse
- Local Search
- Yelp
- Weather
- Send to car
- Wiki Locations
- Park & Pay
- Spotify
- Record & Send



### Benefits and Features

- Large portrait format 9-inch Sensus Touchscreen center display
- A comprehensive array of useful standard features
- Possibility to use mobile phone for a host of functions



# PRODUCT PROFILE – TECHNOLOGY



## Find Your Way in V90 Cross Country – Sensus Navigation

The standard Sensus Navigation system means that the driver and front seat passenger have access to Volvo's fully integrated, connected navigation system with all its features and functions, like SiriusXM Travel Link in the US.

SiriusXM Travel Link makes your drive smarter by providing you with detailed information that's seamlessly integrated into the Sensus Navigation system so you can stay in the know, while you're on the road. Services include:

- Weather
- Fuel Finder
- Sports Scores
- Safety Alerts



### Features

- Very clear maps and guidance via the large portrait format 9-inch Sensus Touchscreen and additional guidance via the Driver Display.
- 3D graphics
- Voice recognition
- USB map upgrade
- Lifetime free map upgrades
- Eco-driving function
- Active safety support
- Many useful apps

### Smartphone Integration (Apple CarPlay / Android Auto)

Smartphone Integration makes it possible to access an iPhone (5 or later) or an Android smartphone (5.0 Lollipop or later), via the car's 9-inch Sensus Touchscreen center display. The phone can be controlled via the touch screen or by 'Siri' voice commands via the car's audio system.

Smartphone Integration is standard under Sensus Connect.

### Benefits and Features

- Extremely convenient and user-friendly application of the iPhone or Android phone interface.
- Smartphone Integration takes the things you want to do with your phone while driving and puts them right on your vehicle's 9-inch Sensus Touchscreen.
- You can get directions, make calls, send and receive messages, and listen to music, all in a way that allows you to stay focused on the road.



# PRODUCT PROFILE – TECHNOLOGY

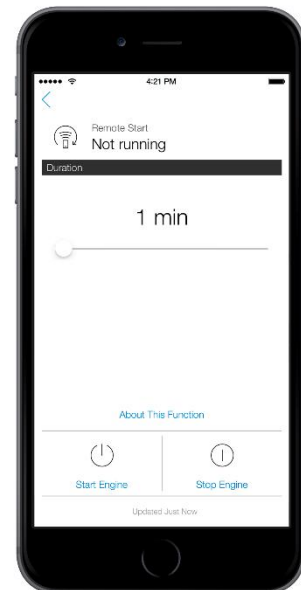
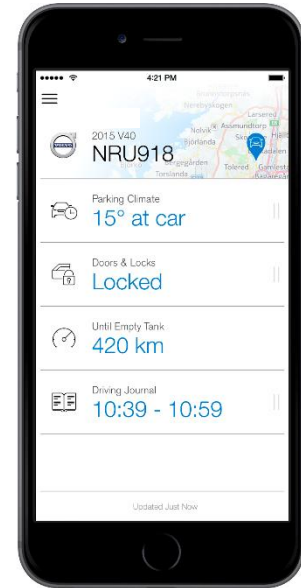


## Making Your Life Easier in V90 Cross Country – Volvo On Call

Volvo On Call was one of the first systems of its kind. It is constantly being enhanced and today this feature includes many functions in addition to the traditional safety and security ones with connection made via a roof antenna.

### How Does it Work?

- With a smartphone, the driver can be in constant touch with his/her Volvo via the Volvo On Call app – anywhere, anytime.
- It is, for example, possible to start the engine remotely in order for the air-conditioning to cool or preheat the interior.
- With Volvo On Call the driver can anytime press a button in the car and ask for roadside assistance, or in an emergency situation press an SOS button for help.
- In an accident where the safety belt pre-tensioners and/or airbags are activated, and/or a large animal impact is detected, the car makes an emergency call itself.
- In case of theft, the owner will be notified automatically via SMS text message. Unless deactivated, the Volvo On Call Center will follow-up with the customer and can start tracking the vehicle's whereabouts. The Call Center will assist the authorities in the vehicle's recovery.



SOS and On Call buttons in the overhead console above the rear-view mirror are easily accessible for both the driver and passenger.

### Benefits

- All functions and possibilities make everyday life easier.
- Outstanding connection via roof antenna.
- Safety and peace of mind in the knowledge that help is always available within arms' reach or even automatically after an accident.
- Possibility to track the car if it has been stolen.

# PRODUCT PROFILE – LOAD & VERSATILITY



## Easy Loading in V90 Cross Country - Power-Operated Tailgate

The all-new Volvo V90 Cross Country is equipped with a Hands-Free Power-Operated Tailgate as standard equipment.

Opening can be activated by a button on the remote control, a 'soft button' on the tailgate, a button on the left side of the dashboard or by the 'comfort opening' function. Closing can be activated by a button on the inside edge of the open tailgate, by the button on the remote control, from the button on the dashboard or by the 'comfort closing' function.

The comfort opening and closing function uses a sensor under the left side of the rear bumper (See below picture). When a foot is waved under that part of the car, the tailgate will open. When it is open, it can be closed by waving the foot under the car in the same way.



### How Does it Work?

- The Hands-Free Power-Operated Tailgate is operated by an electric motor.
- The tailgate has sensors that detect if something is in the way when it is closing and opening.
- If something is in the way when closing, the tailgate stops closing and opens fully. If something gets in the way when opening, the tailgate stops opening.
- The closing or opening action can be stopped at any time by pushing the closing button on the edge of the tailgate, or any of the opening buttons – on the outside of the tailgate, on the remote control, or inside the car.



### Benefits

- The convenience of being able to open the tailgate remotely when approaching the car.
- No need to touch the tailgate, which easily gets dusty or dirty.
- For ease-of-use, great to be able to close the tailgate lid without having to stretch up and pull it down.
- Very handy to be able to open the tailgate from the driver's position, for instance, outside a hotel.
- Extremely convenient opening and closing, particularly when carrying load or suitcases or when loading or unloading bulky items.



# PRODUCT PROFILE - LOAD & VERSATILITY



## Easy Loading in V90 Cross Country - Compartment Design

The load compartment in the V90 Cross Country has a regular shape and the rear-wheel suspension is designed not to intrude on the load compartment or reduce the width between the wheel arches. The practical solutions together with a really premium look, is a true example of Scandinavian design, with both form and function.



### Benefits

- Easy to load even really bulky items thanks to the regular shape.
- Practical details and solutions.

## Hidden Storage Compartment

There is a hidden storage compartment under the load floor. When the tailgate is shut, it overlaps the rear edge of the floor hatch and makes it impossible to open. If the private locking function is activated, the floor hatch cannot be opened from inside the car, as the tailgate can't be opened without a private code. With the tire repair kit, smaller additional storage compartments are integrated into the holder. A molded 'cargo divider' between the storage compartment and the spare wheel/repair kit compartment is standard.



### Benefits

- Practical to be able to put, for example, a laptop or camera separated from the load area.
- The perfect place to hide valuable items, from prying eyes.
- If the car is broken into through one of the side doors or windows, it is impossible to open the floor hatch from inside.

## Grocery Bag Holder - (Optional)

An available grocery bag holder can be folded out of the load floor as part of the optional Convenience Package (see picture to the right). There are hooks and an elastic band to secure the bags or other items. The elastic band can be attached at different points on the grocery bag holder and on the floor to suit different types of items.



### Benefits

- A solution to the problem of transporting shopping bags, or other smaller items in the cargo area.

# PRODUCT PROFILE - LOAD & VERSATILITY



## Easy Loading in V90 Cross Country - Versatility

### Split Folding Rear Backrest

The rear backrest is split and folding in the proportions 60/40. Either part of the backrest can be individually folded with a simple grip. When the backrest is folded about half-way, the head restraint folds automatically. If the center head restraint is raised, it can easily be pushed down manually if needed.



### Benefits

- Very easy to fold the backrests.
- Very convenient with automatically folding head restraints.
- Versatility thanks to the possibility to fold one or both parts of the split backrest.



### Folding Seats from the Rear

The left and right part of the rear backrests can be folded by utilizing the two buttons on the right side of the cargo area near the tailgate's opening.

**Benefits** - Extremely convenient to be able to fold one or both parts of the rear backrest when standing behind the car, for example when loading.

### Completely Flat Load Surface

When the rear backrest is folded, it leaves a completely flat load surface.

**Benefits** - The flat floor can be an advantage with different types of loads and can also facilitate loading.



### Long Items Inside

A through-loading hatch behind the rear center folding armrest is standard.

**Benefits** - Possibility to bring long items, for example skis, inside the car and still have the two most comfortable rear seating positions available.



# PRODUCT PROFILE – INTELLISAFE

## V90 Cross Country Safety – IntelliSafe Systems Overview



## INTELLISAFE

### Standard Safety Features:

- **Volvo On Call**
- **Pilot Assist, Gen 2 – <80mph** includes Adaptive Cruise Control and Distance Alert
- **Lane Keeping Aid**
- **Driver Alert Control**
- **Road Sign Information**
- **Rear Park Assist**
- **Blind Spot Information System (BLIS)** includes Cross Traffic Alert
- **Run-off Road Mitigation**
- **Run-off Road Protection** includes occupant safe positioning, front seat structure energy-absorbing, reducing the vertical forces
- **Safety Cage** – 35% of total body weight is hot formed steel
- **Speed Limiter** – with road sign limiter
- **Airbags and Safety Belts**

- **Collision Avoidance by City Safety Technology**

Works day and night detecting: vehicle, pedestrian, cyclist, large animal, warning: light, sound and brake pulse preparing: brakes and front seat belt braking: automatic braking including intersection braking.

### Optional Safety Features:

- **360° Surround View Camera**
- **Park Assist Pilot**
- **Front Park Assist**
- **Integrated, 2 Outer Child Booster Seats (2nd Row)**



# PRODUCT PROFILE – INTELLISAFE



## V90 Cross Country Safety – Run-off Road

### Run-off Road Mitigation

Volvo introduces a world's first Run-off Road Mitigation System with the V90 Cross Country to help prevent unintentional road departure at vehicle speeds between 40-86 mph.

Run-off Road accidents are amongst the most common type of single-vehicle accidents. Reasons for such accidents include driver inattentiveness, fatigue or poor weather conditions. Half of all traffic fatalities in the United States are unintentional road departure crashes.



### How Does it Work?

- The system works by using evasive steering manoeuvres and braking to support the driver in keeping the car on the road in situations where accidental road departure is detected as imminent.
- When a potential run off road situation arises torque is applied to the steering to support the driver along with braking action if needed. The system can always be overridden by the active intervention of the driver.

### Run-off Road Protection

In 2014 Volvo launched Run-off Road Protection in the XC90. It is a world first solution focusing on accidental road departure.

### How Does it Work?

- Using input from the car's advanced sensor system, the technology is able to detect a run off road scenario.
- When an unavoidable run off road situation arises the front safety belts are electrically tightened as much as possible to keep the occupants in position.
- To prevent spine injuries Volvo has designed an energy-absorbing functionality between the seat and seat frame which deforms mechanically to cushion the vertical forces that can arise when the car encounters a hard landing in the terrain.
- Based on real-life data, Volvo Cars has developed three complete vehicle crash test track methods, called Ditch, Airborne and Rough terrain, for evaluating the consequences of various Run-off Road protection scenarios.



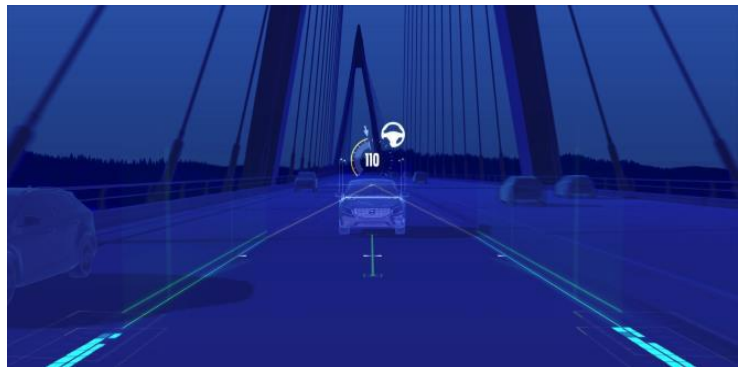
# PRODUCT PROFILE – INTELLISAFE



## V90 Cross Country Safety – Pilot Assist: Semi-Autonomous Drive System

Pilot Assist is a stepping-stone technology on the way to fully autonomous cars. The second generation of Pilot Assist, standard on the V90 Cross Country, extends the scope of this semi-autonomous function to not only include low speed traffic jam situations but also include general driving situations on highways with proper road markings.

Pilot Assist makes driving safer and more relaxed in monotonous stop-and-go traffic by adding steering assistance to the highly popular Adaptive Cruise Control functionality.



### How Does it Work?

- When the semi-autonomous Pilot Assist system is activated, acceleration, braking and steering are assisted in order to help the driver comfortably follow the traffic flow within the current lane. This has the effect of reducing driver strain in tedious driving situations and increasing safety margins. The system also delivers enhanced speed and distance keeping and a more consistent and precise position in lane.
- With Generation 2 of Pilot Assist the system now offers steering assistance functionality up to 80mph and no longer needs a lead car. This means that Pilot Assist will be increasingly useful on long highway trips where the road markings are clearly visible.
- However the driver is expected to actively participate in the driving and remains responsible for monitoring, supervision, and over all operation of the vehicle. It is also important to emphasize that semi-autonomous systems are restricted in how much acceleration, braking and steering force they can apply.
- The driver can override the system at any time by using either the brake pedal, accelerator pedal or steering wheel. The turn indicator can be used to temporarily abort the steering support if the driver wants to change lanes.
- Pilot Assist is automatically switched off if the driver does not keep a hand on the steering wheel.



### Interface:

- Pilot Assist is selected and activated by the driver using the steering wheel buttons on the left side of the steering wheel. Adaptive Cruise Control settings like time gap and set speed are available and the driver display shows necessary status information, i.e. steering support on/off. If the system for some reason must be turned off, the driver receives a warning.

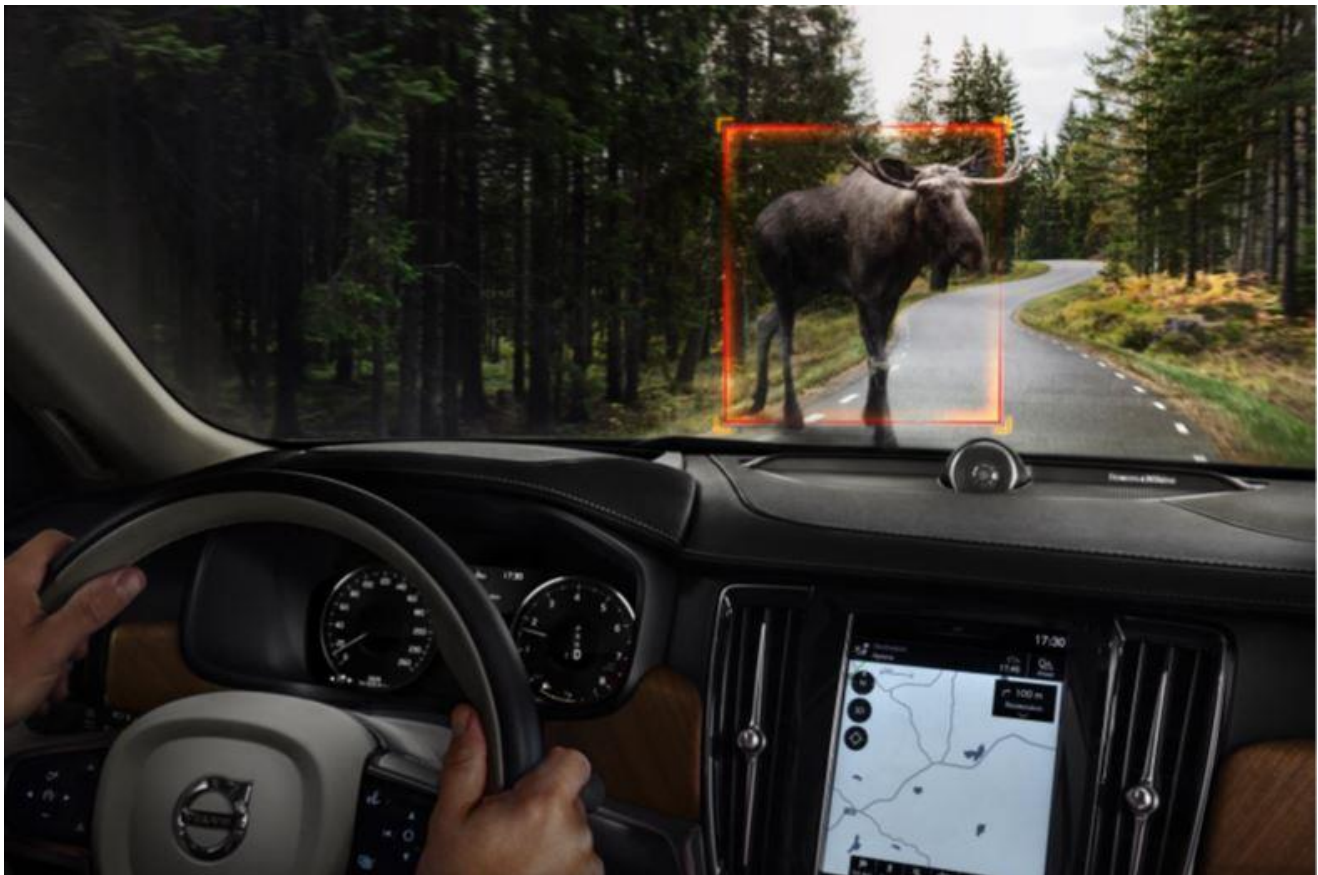
Pilot Assist is a driver support system – the function is to support the driver. It is a hands-on-the-wheel system that offers support in steering, braking, and acceleration. It is optimized for highway driving. On curvy roads the driver will need to be more involved in steering. With Pilot Assist, the driver is always legally responsible for control of the vehicle and must keep their hands on the wheel at all times. Fully autonomous cars from Volvo are coming – but the technology is not yet ready.

# PRODUCT PROFILE - INTELLISAFE



## V90 Cross Country City Safety Technology – Large Animal Detection

In the Volvo V90 Cross Country our comprehensive standard collision avoidance package, City Safety, also includes detection of large animals, like moose/elk and large deer - another world first from Volvo Cars.



### How Does it Work?

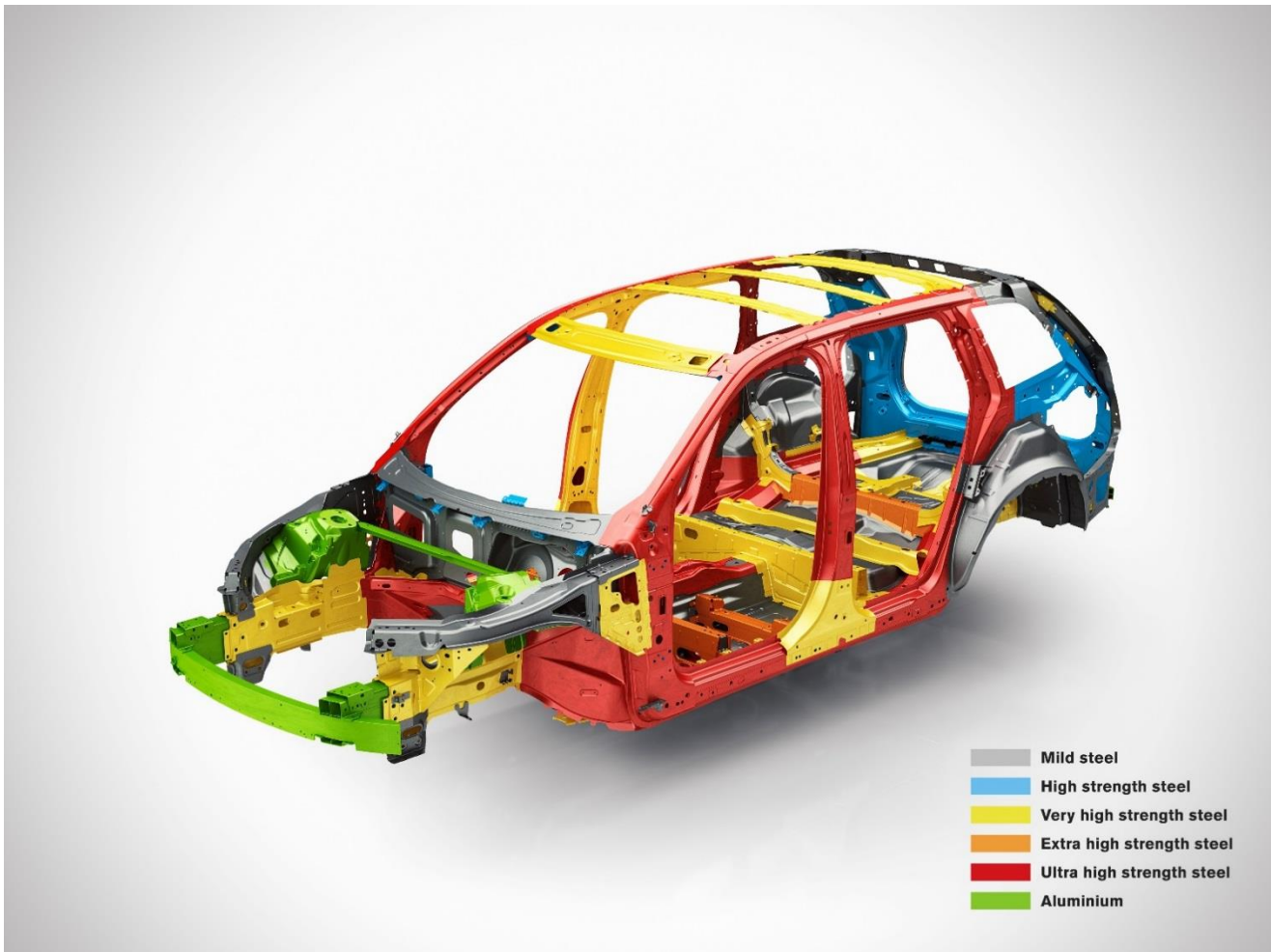
- The standard-fitted radar/camera unit can detect large animals standing on the road or slowly moving across it with the side towards the car. If a large animal is detected, the Volvo V90 Cross Country warns the driver. When the driver brakes, additional brake pressure is provided to support avoidance if needed.
- If the driver does not react the car applies the brakes to mitigate the possible effects of an impending collision. In this way collisions with large animals can be avoided or mitigated. The car's speed can be reduced by up to 9 mph.
- If a collision is imminent, at speeds above 18 mph, the front safety belts are tightened to secure the driver's and front seat passenger's position.



# PRODUCT PROFILE - INTELLISAFE



## The V90 Cross Country Safety Cage



### Keeping You Safe

- To help keep the occupant space inside intact in a crash, the all-new V90 Cross Country has literally been made stronger in every sense. This is achieved by more extensive use of hot-formed boron steel, which is the strongest type of steel presently used in the car body industry.
- The complete safety cage around the occupants is made of this steel and is designed for maximum occupant protection in all types of crash scenarios. The hot-formed steel amounts to about 35 percent of the total body weight.



# Standard & Optional Equipment – Continued




OPTIONS		Description/Notes/Restrictions
<b>Convenience Package</b>		
372	HomeLink™	
454	Compass in inner rear view mirror	
346	Grocery bag holder	
870	Park Assist Pilot	
879	High Level Interior Illumination	
63	Heated washer nozzles	
139	360° Surround View Camera	
<b>Luxury Package</b>		
XCX0	Comfort Seats - Ventilated Nappa Leather	
1045	Power adjustable side support & cushion extension, front seats	
384	Backrest massage, front seats	
204	Leather Upgrade on Dash Board & Front / Rear Door Panels	
752	Heated rear seat, outer positions	
5	4-zone Electronic Climate Control & Cooled Glovebox	
170	Rear Sun Curtains, rear side doors	
72	Power Operated Load Cover	
564	Fully Color Coordinated Sills & Bumpers	
<b>Single Options</b>		
XXX	Metallic Paint	
322	Integrated, 2 Outer Position Booster Cushions, 2nd row	N/A with Luxury Package
440	Metal Mesh Decor Inlays	No cost substitute over Dark Walnut
1048	Premium Air Suspension in Rear & Active Chassis (Four-C)	
117	Graphical Head-Up Display (HUD)	
553	Bowers & Wilkins Premium Sound System	
226	20" 10-Spoke Alloy Wheels in Tech Grey Diamond Cut	



# COLOR & TRIM - EXTERIOR

## V90 Cross Country Wheel & Tire Program

### STANDARD WHEEL

Model	T6 AWD Cross Country
	
Wheel Name	19" 6-Double Spoke Tech Matt Black Diamond Cut Alloy Wheel
Option code	151
Tires	235/50R19
Tire Brand	Pirelli VAS
Wheel Dimension Width/Diameter/Offset	7.5x19x50.5
Color	Tech Matt Black 955



### OPTIONAL WHEEL

Model	T6 AWD Cross Country
	
Wheel Name	20" 10-Spoke Tech Matt Black Diamond Cut Alloy Wheel
Option code	226
Tires	245/45R20
Tire Brand	Pirelli VAS
Wheel Dimension Width/Diameter/Offset	8x20x49.5
Color	Tech Matt Black 955



# COLOR & TRIM - EXTERIOR



## V90 Cross Country Exterior Colors - Paint

### Exterior Paint Samples



Ice White Solid - 614



Magic Blue Metallic - 467



Twilight Bronze - 700



Crystal White Pearl Metallic - 707



Bright Silver Metallic - 711



Osmium Grey Metallic - 714



Onyx Black Metallic - 717



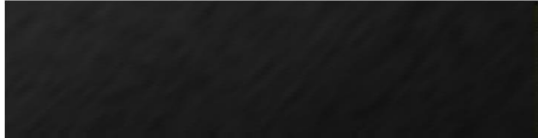
Maple Brown Metallic - 722

### MY17 V90 Cross Country Exterior Colors

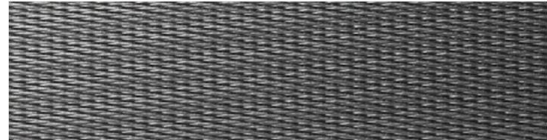
Code	Color	Cross Country	Cross Country w/ Luxury Package (Fully Color-Coordinated Body & Moldings)
<b>Solid Colors - (Standard)</b>			
614	Ice White	●	N/A
<b>Metallic Colors - (Optional)</b>			
467	Magic Blue	●	N/A
700	Twilight Bronze	●	N/A
707	Crystal White Pearl	●	●
711	Bright Silver	●	N/A
714	Osmium Grey	●	●
717	Onyx Black	●	●
722	Maple Brown	●	●

# COLOR & TRIM - INTERIOR

## V90 Cross Country Interior Inlays



**Dark Walnut Wood Inlays – 458**  
Standard



**Metal Mesh Aluminum Inlays – 440**  
Optional



**Comfort Seat**



# COLOR & TRIM - INTERIOR



## V90 Cross Country Interior Color and Upholstery

### **CROSS COUNTRY** STANDARD TRIM



Charcoal Leather in Charcoal interior (RA00)



Amber Leather in Charcoal interior (RA20)



Blond Leather in Blond/Charcoal interior (UA00)

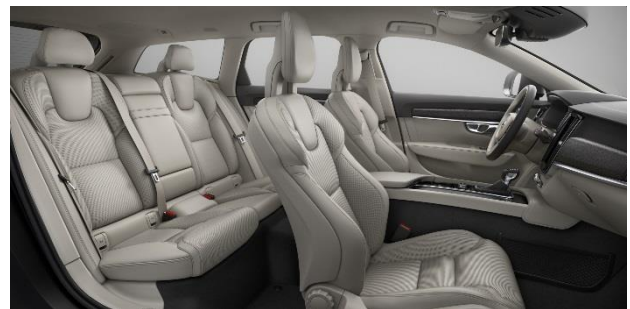
### **LUXURY PACKAGE** (OPTIONAL)



Charcoal Nappa Leather w/Comfort Seat in Charcoal interior (RC00)



Amber Nappa Leather w/Comfort Seat in Charcoal interior (RC20)



Blond Nappa Leather w/Comfort Seat in Blond/Charcoal interior (UC00)

# VEHICLE SPECIFICATIONS & TECHNICAL DATA



## MY17 V90 Cross Country Vehicle Specification & Technical Data

Model		V90 Cross Country T6 AWD
Engine	Engine Code	B4204T27
	Configuration	2.0L Inline 4-cylinder, Supercharged & Turbocharged
	Horsepower	316 hp @ 5,700 rpm
	Torque	295 lb-ft @ 2,200 - 5,400 rpm
	Displacement, Liters	2.0
	Engine Block Material	Aluminum
	Cylinderhead Material	Aluminum
Drivetrain	Transmission	8 - Speed Automatic Geartronic
	Gearbox Type	AW TG-81SC
	Drive Configuration	All-Wheel Drive
Traction & Stability	Electronic Stability Control	ESC enhances driving stability in slippery conditions by comparing the rotation of the drive wheels and, if needed, varying the power supply. The system uses information from the anti-lock brake (ABS) sensors, which constantly monitor the rotation of each wheel. If the sensors detect that one of the driving wheels has a higher rotational speed than the other, it is interpreted as wheel spin and the brakes are applied to the spinning wheel. In the S90, the traction control system is adapted to allow for an optimal amount of wheel spin to get the quickest possible acceleration from a standstill.
	Corner Traction Control (CTC) through Torque Vectoring	Traction Control with Torque Vectoring is a technology that measures the rotational speed of the driving wheels and makes Corner Traction Control act like a differential brake at higher speeds and under high cornering loads. During fast cornering, it is common that the inner wheel starts to spin. Torque vectoring solves this by using the traction control to brake the spinning wheel. Torque Vectoring also reduces understeer when cornering at higher speeds.
	All-Wheel Drive with Instant Traction	The advanced AWD system with Instant Traction™ has an electronic management system that constantly monitors the speed of the wheels, the throttle, engine torque, engine speed and the brakes. As conditions change, so will the wheels with the best grip.
Performance	Acceleration, Seconds (0-60 MPH)	6.0
	Fuel Economy (City/Highway & Combined)	22 / 30 / 25
	Towing Capacity	3,500 lbs
	Turning Radius (ft.) (curb to curb)	37.4 / 38.7

## MY17 V90 Cross Country Vehicle Specification & Technical Data

Wheels & Tires	Standard Wheels	19" Alloy Wheels (Standard) 20" Alloy Wheels (Optional)
	Standard Tires	Pirelli VAS 235/50R19 (Standard for 19") Pirelli VAS 245/45R20 (Standard for 20")
Braking System	Anti-Lock Braking System (ABS)	The anti-locking disc brakes are designed for optimal performance even during repetitive and intensive use. Emergency Brake Assistance (EBA) detects an attempted emergency braking.
Exterior Dimensions (inches)	Height	60.7
	Length	194.4
	Width (incl mirrors outer edge)	80.8
	Width (incl mirrors folded)	75.9
	Width (no mirrors)	74.0
	Wheelbase	115.8
	Ground Clearance	8.3
	Max Total Weight (lbs.)	5,335 lbs
	Curb Weight (lbs.)	4,221 lbs
Interior Dimensions (inches)	Head Room Front / Rear	37.8 / 37.7
	Leg Room Front / Rear	42.2 / 35.9
	Shoulder Room Front / Rear	57.5 / 55.9
	Hip Room Front / Rear	56.4 / 55.7
	Cargo Capacity (SAE; cu. ft)	53.9
Capacity	Fuel Tank	15.9 gallons [US]



## V90 Cross Country Engine Performance vs Key Competitors



### ENGINE - T6 LEVEL PERFORMANCE

	MY17	MY16
	Volvo V90 Cross Country T6 AWD	Mercedes-Benz E350 4Matic Wagon
Engine Type	I-4 Super & Turbocharged	V-6
Engine Displacement	2.0	3.5
Horsepower (HP)	316	302
Torque	295	273
0 - 60, mph	6.0	6.9
Top Track Speed (mph)	130	130
Recommended Fuel	Premium	Premium
Emissions Rating	LEV 3-ULEV125	LEV 2-ULEV125
Fuel Economy - City	22	20
Fuel Economy - Hwy	30	27
Fuel Economy - Combined	25	23

## V90 Cross Country Exterior & Interior Dimensions vs Key Competitors



### EXTERIOR DIMENSIONS

	MY17 Volvo V90 Cross Country	MY16 Mercedes-Benz E350 Wagon
Length	194.4	192.7
Width (with mirrors / without mirrors)	80.8 / 74.0	81.5 / 75.9
Height	60.7	58.9
Wheelbase	115.8	113.2
Front Track Width	65.0	62.4
Rear Track Width	64.7	63.2
Ground Clearance	8.3	4.1
Drag Coefficient (cd)	0.33	0.31
Curb Weight (lb)	4,221	4,431
Fuel Tank Capacity, US Gallons	15.9	21.1

Measurements in inches unless otherwise noted

### INTERIOR DIMENSIONS

	MY17 Volvo V90 Cross Country	MY16 Mercedes-Benz E350 Wagon
Front Headroom	37.8	38.3
Front Shoulder Room	57.5	57.8
Front Legroom	42.2	41.3
Rear Headroom	37.7	39.8
Rear Shoulder Room	55.9	56.8
Rear Legroom	35.9	36.0
Maximum Seating Capacity	5	7
Passenger Volume (cubic feet)	98.4	N/A
Luggage Capacity Volume (cubic feet)	53.9	57.4

Measurements in inches unless otherwise noted

### Disclaimer:

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