



# PRODUCT AND SPECIFICATION GUIDE

# 2016 XC90





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# INTRODUCTION

The All-New Volvo XC90 is the successor to a car that has been greatly received. The first XC90 was launched in 2002 and was one of Volvo's biggest sales achievements. Before it was even shown to customers, 15,000 orders had already been placed. It received more than 110 international awards and was Sweden's most valuable export product in the mid 2000's. Additionally, it was ranked Top Safety Pick in 2014 by the American Highway Safety Institute (IIHS), twelve years after the car was launched. The car also introduced features new to the industry: Roll Stability Control (RSC), Inflatable Curtains for all 3 rows, safety belts with pretensioners for all seats and a Dolby 5.1 Surround system. Needless to say, after a successful run of 12 years, the expectations for the new car are very high.

In order to not only meet but exceed these expectations, the all-new Volvo XC90 will again offer a number of World First's in the area of safety. Next to that, the XC90 will stand out in its segment with a 9" centre stack touchscreen, a new generation of City safety with night performance and unrivalled flexibility for the 2<sup>nd</sup> (3 individual sliding and reclining seats including an integrated booster cushion) and 3<sup>rd</sup> row (power operated folding and raising). In terms of fuel economy and CO2 emissions, and especially the relationship between performance and emissions, the XC90 sets new standards.



# INTRODUCTION CONTINUED...

Our car competes in the large SUV segment with the likes of the BMW X5, Mercedes-Benz M-class and the soon to be refreshed Audi Q7. Other competitors in the segment include the Volkswagen Touareg, Lexus RX and some Land Rover products.

For Volvo as a company, the All-New Volvo XC90 is a very important car. It's the first car to use the Scalable Product Architecture platform (SPA) which was entirely developed in house. The platform allows us to take a major step forward in terms of giving our new cars exactly the right proportions as well as providing great passenger volume and cargo capacity in a very efficient way. Next to that, the dynamic behaviour and ride comfort are taken to the next level using new front and rear suspension systems. Crash safety has also received major attention. The All-New Volvo XC90 also uses the recently launched Drive-E engines and marks the launch of a state of the art Plug-in Hybrid powertrain, the T8 Twin Engine.



# UNIQUE SELLING POINTS

- A unique exterior design leading to an imposing road presence setting the All New Volvo XC90 customer apart from the crowd.
- A high quality interior design with a high focus on the unique Human Machine Interface (HMI), audio and Connectivity solutions.
- Best in class Drive-E powertrains from a CO<sub>2</sub> vs performance perspective and a high tech T8 Twin Engine hybrid powertrain.
- The first Volvo product out on the new SPA platform delivering a no compromise driving experience and true premium class proportions.
- Class leading intelligent safety features.
- Practicality and flexibility for the whole family making them love the ride as much as the driver will.



# TRIM LEVEL AND SALES VERSION STRATEGY

The All-New Volvo XC90 is the first car which will be introduced with Volvo's new trim level strategy. From now on, new Volvo models will be available as Kinetic, Momentum, R-Design and Inscription – four different expressions of the brand which will not only look visually different than the trim levels on current cars, but will, also each assume their own identity:

## INSCRIPTION

New top of the line variant which offers luxury, exclusivity and enhancing features. Focus on craftsmanship, comfort, elegance and exclusiveness (several Inscription features not available as options on lower trim levels).

## R-DESIGN

Trim level directed towards customers who want a more sporty, dynamic look and experience. Keywords are energy, appeal and enhanced driving experience.

## MOMENTUM

Clear visual interior and exterior upgrades from Kinetic. A very attractive car, it will be the main seller. Full pack and option availability, except for typical Inscription/R-design features.



# SCALABLE PRODUCT ARCHITECTURE (SPA)

The benefits of SPA are twofold. First, the flexibility of SPA liberates Volvo's engineers and designers, allowing them to devise and introduce a wide range of new and alluring design features at the same time as improving drivability, introducing world-first safety features, offering the latest connected car technologies and creating more interior space.

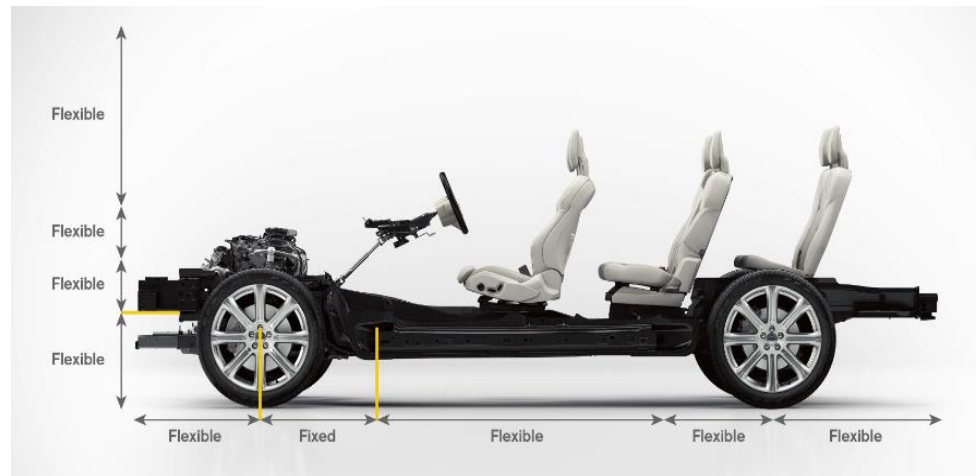
## More freedom for designers:

With SPA, previous design limitations in areas such as wheelbase, overhang, vehicle height and the height of the front are removed.

## Outstanding driving pleasure and flexibility:

The new SPA chassis technology reduces weight and improves weight distribution, improving driving pleasure without compromising on ride comfort.

SPA also allows for far more flexibility inside the car. The new XC90 features innovatively designed seats that free up interior space for passengers in the second and third rows, helping make the new XC90 a genuine seven-seater.





# ROLLOVER PREVENTION AND PROTECTION

The all-new XC90 comes with the latest generation Roll Stability Control as standard. The system uses advanced sensors to calculate the risk of rolling over. If the risk is assessed as high, engine torque is restricted and some braking force is applied to one or more wheels to counteract the rollover tendency.

If a rollover is inevitable, the Inflatable Curtains are activated. They cover all three seat rows for an extended period of time to help prevent head injuries.

All seven seats in the XC90 have pyrotechnical safety belt pre-tensioners that also activate in rollover situations.

## **Pre-crash protection in rear impacts**

Rearward facing radars detect if a rear impact is imminent and safety belts are tightened in advance in order to keep the occupant in a good position. Lights also start flashing to warn the driver behind, and the brakes are activated to help reduce the impact on the occupants.

Together with Volvo Cars' new seat design, which integrates the next generation of the groundbreaking Whiplash Protection System (WHIPS), this new holistic rear impact pre-crash function helps reduce whiplash injuries.







# TRIM LEVEL DIFFERENTIATION - GRILLE

Following the new trim level strategy, the four different trim levels of the Volvo XC90 will display differing characteristics/features and express their own identity.

The design of the grille enhances the strong identity of the different trim levels.



Bright frame with centre in piano black. "Waterfall" design.

**MOMENTUM**



Bright frame with centre in matte silver. "Waterfall" design.

**INSCRIPTION**



Silk metal frame with centre in high gloss black. "R-Mesh" design.

**R-DESIGN**

# TRIM LEVEL DIFFERENTIATION - COLOUR COORDINATION



The lower body mouldings around the car are body coloured in all variants available to the Canadian marketplace. By having colour coordination, the car appears more premium in all of its available variants.



Colour coordinated lower body mouldings.

**MOMENTUM**



Colour coordinated lower body mouldings with high gloss chrome strip with Inscription logo, adding elegance and exclusivity.

**INSCRIPTION**



Colour coordinated lower body mouldings.

**R-DESIGN**

# TRIM LEVEL DIFFERENTIATION - LOWER OUTER GRILLES FRONT



The lower outer grille finish adds to the All New Volvo XC90's extrovert styling.



Black outer grilles with elegant chrome deco strip.

**MOMENTUM**



Black outer grilles with elegant chrome deco strip.

**INSCRIPTION**



Dark grey painted outer grilles with high gloss black insert, visually repeating the hammer shape which also occurs in the LED headlights and adding dynamism to the car's looks.

**R-DESIGN**

# TRIM LEVEL DIFFERENTIATION - ROOF RAILS & MIRROR CAPS



Roof rails on the Momentum trim are a matte anodized aluminum with charcoal coloured feet.



In the Inscription and R-Design execution, the rails feature a high gloss anodized aluminum finish and are flush with the roof. These rails harmonize with the elegance of the Inscription variant as well as with the dynamic sportiness of the R-Design, and are not available as option on lower trim levels.

Exterior mirror caps come in body colour for all trim levels (upper picture), except for R-Design which comes with semi matte silver finish (lower picture). The lower part of the mirror housing as well as its foot, is always black.



The door mirrors are fitted on the shoulder of the door, which allows for a better three-quarter view. They have a clean and fresh Scandinavian design with slim LED indicators elegantly integrated.



# TRIM LEVEL DIFFERENTIATION - REAR SKID PLATE AND EXHAUST END-PIPE



The skid plate and end-pipes as well as the finish of the whiskers contribute to the exterior differentiation of the trim levels in the rear of the car.



Matte Silver Bright metallic skid plate, dual visible end pipes with 80mm chromed sleeves.



Matte Silver Bright metallic skid plate, dual integrated end pipes adding to the exclusive look of the car, whiskers with high gloss chrome finish.



Dark grey skid plate with body coloured insert, dual integrated end pipes enhancing the dynamic look of the car, whiskers with high gloss black finish



# TRIM LEVEL DIFFERENTIATION – FRONT VIEW



**MOMENTUM\***



**INSCRIPTION**



**R-DESIGN**

\* Momentum shown is equipped with optional headlamps, however, it is missing the correct roof rails and fog lights.



# TRIM LEVEL DIFFERENTIATION – SIDE VIEW



**MOMENTUM**



**INSCRIPTION**



**R-DESIGN**

\* Momentum shown is equipped with optional headlamps, however, it is missing the correct roof rails and fog lights.



# TRIM LEVEL DIFFERENTIATION – REAR VIEW



**MOMENTUM\***



**INSCRIPTION**



**R-DESIGN**

\* Momentum image displayed is missing correct roof rails.



# VOLVO SYMBOL



On the Volvo XC90 the Volvo symbol has a slightly revised design and the Volvo logotype has a black background, instead of the traditional blue. This contributes to a modern and fresh look.





# “THOR’S HAMMER” DAYTIME RUNNING LIGHTS

The 'face' of the new XC90 is distinguished by its T-shaped running lights, christened 'Thor's Hammer' by the design team after the shape of the hammer used by the famous Norse god of thunder Thor.



Daytime Running Lights



Indicators

The LED headlight units have a unique design. The light, in the shape of a hammer, guides the light from invisible LEDs behind to give a solid light without any visible LED dots. The light guide is used for Daytime Running Lights, position lights and indicators.

LED cornering lights are integrated in the fog lights. When the steering wheel is turned more than 30° or the indicators are activated, the left or right side cornering light lights up the area close to the car (15° from the car). Cornering Lights are activated at speeds under 30 km/h, and turned off above 40 km/h. When reversing, cornering lights on both sides are turned on so as to illuminate the area around the car and make maneuvers easier in the dark.

- Requires pairing with headlight washers



# LED HEADLIGHTS

LEDs, or Light Emitting Diodes, project extremely strong light – more than twice as strong as halogen lamps – as well as giving a longer and wider light pattern comparable to Xenon lights. However, LED light does not have the bluish colour of Xenon light – according to research, the whiter light makes the human eye experience LED light 15–20 % stronger than Xenon light. In addition, Volvo's LED headlights are designed to emit an even stronger light than competitors' LEDs. This is no surprise, as strong and efficient headlights have been a Volvo priority for decades.

## **Benefits:**

- More relaxed, safe and comfortable to drive in the dark thanks to the strong, white light and the long and wide light pattern.
- The LEDs do not lose any luminance over time and last the lifetime of the car.
- Safety and security as the light is always as strong as possible and as there is no risk that a bulb will blow while driving or, for example, on a trip where it could be difficult to replace.
- Lower running costs over the life of the car, and avoiding the inconvenience of blown headlight bulbs.
- LEDs consume extremely small amounts of current compared with halogen or Xenon lights. A contribution to lower environmental impact and running costs.





# CAPLESS FUEL FILLING

When the fuel lid is opened by a gentle push, there is no cap that needs to be removed. The fuel pipe has an integrated seal that opens when the filling nozzle is inserted, and closes when it is removed. This feature perfectly fits the Designed Around You strategy as it delights customers with unexpected convenience and less risk of getting dirty hands.

The fuel lid can be opened via a simple Push/Pull mechanism on all cars.





# PANORAMIC SUNROOF

The panoramic sunroof, only available on cars with roof rails, offers the widest glass roof ever available at Volvo (50% larger compared to XC60), and stretches further back than in other Volvos in order to make sure the rear passengers can enjoy a light and airy feeling. New construction and sealant help to keep the weight to the minimum and optimize the visual appearance from inside the car: the large glass area is only interrupted by a minimal transverse division.

A power operated sunshade is integrated on the inside, in order to reduce heat and glare very efficiently. A personal setting in the menu can be selected to automatically close the sunshade when the car is parked and locked at an outside temperature of 25° or more during daytime.





# INTERIOR COMFORT

The All New Volvo XC90 is the most luxurious Volvo ever. Its interior has been built around three guiding principles:

- **Proportion:** the visual lines of the interior are stretched horizontally, which gives a real impression of width and space
- **Intelligent use of technology:** the use of a big touchscreen rather than an overwhelming number of switches and buttons
- **Scandinavian expression of luxury:** the use of fine, handcrafted materials creates a harmonious and relaxing environment. Wood is real wood, carbon fibre is real carbon fibre, etc.

These three themes have been developed all with people in mind. The All New Volvo XC90 will be popular with families. As such, a great deal of attention has been given to the comfort of all passengers via the clever use of space, versatility and ease of use.





# TOUCHSCREEN DISPLAY

On the XC90, most of the buttons have been replaced by a very elegant 9" touch screen. This impressively large screen has a vertical "portrait" format and is placed as high as possible in the centre console, to make sure it is easy and safe to view without diverting unnecessary attention from the road. The upper part of the screen is mainly used for things that need to be viewed, whereas for optimal ergonomics, the lower part mainly shows touch functions, often with larger virtual buttons than physical buttons tend to be. Moreover, the advantage of a vertically positioned screen is that you can view menus more easily (less scrolling), and that navigation maps can be displayed in an optimal way.





# PLAYER MODULE

Most of the buttons left in the center stack, are grouped in the Player Module. This very elegant expression of Scandinavian design groups the following functions:



Hazard Lights

Heated  
Windscreen

Heated  
rearview  
mirrors and  
rear window

Center button with  
jewelry finish:  
volume / Enter

Left and right: buttons  
to move  
forward/backward

Temperature  
Sensor

Glove box  
Opening

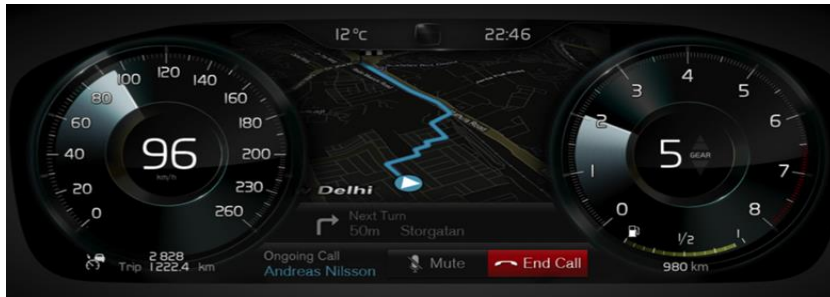




# 12.3" FULL GRAPHICAL INSTRUMENT CLUSTER

A 12.3" Full Graphical Instrument Cluster is available as option and standard on select trims. This variant displays two large round instruments and an information area in-between, which can differ in size depending on use (fi. when navigation is used, the info section becomes larger and the two round instruments smaller).

Just like on today's cars, the driver can choose between different visual appearances, all with great colour depth and colour variations.



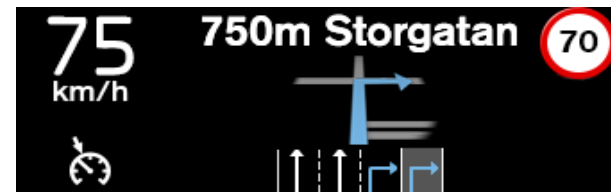
12.3" driver display (example with navi in use and larger information area)



12.3" display (example with larger outer instruments and smaller information area, sporty mode)

The instrument cluster can be complemented with a **Graphical Head-Up display**. With this option, text and graphical information about road signs, set speed and navigation is displayed on the lower part of the windscreen, in front of the driver, to make sure he doesn't miss any important information.

The driver will see the messages hovering in the air about 2m in front of the car. That means the driver will not need to change focus from the road ahead, which contributes to his safety and convenience.



(example of the type of information shown in head-up display)



# KEYLESS DRIVE AND REMOTE CONTROL

The Volvo XC90 is equipped from the factory with Keyless Drive. That means that there is no physical slot to insert the key, but as long as you have the remote control with you in the car, you can start the engine by simply turning the Start knob on the tunnel console while depressing the brake at the same time.

The remote control in itself is a really nice example of smart Scandinavian design: the wide upper and lower surfaces are clean, and all buttons are located discretely in the sides. Moreover, the upper and lower shells can be personalized.

Depending on your chosen trim level, the key remotes have an available leather cover (Perforated for R-Design).

Please note that a button for Welcome (previously called Approach) lights is no longer as available on the remote, as this function is now always automatically activated when you unlock the car, contributing to a welcoming feel.





# STEERING WHEEL

The steering wheel in the All New Volvo XC90 is designed to harmonize with the overall design and image of the car. It is clad with Charcoal leather or with Blond leather with Charcoal outer rim, depending on the choice of interior colour family. As from Momentum, Silk metal uni-deco surrounds the cruise/audio buttons as well as the lower part of the airbag.



Standard leather steering wheel, Charcoal only



Leather steering wheel with uni deco, Charcoal (also available with heating)



Leather steering wheel with uni-deco, Blond/Charcoal (also available with heating)

The R-Design steering wheel has a four split design and is clad with Charcoal perforated leather. It includes the Silk metal uni-deco as well as the “R” emblem.

R-Design always comes with gear shift paddles as standard. When you opt for a heated steering wheel, the specific R-Design steering wheel is replaced by a regular steering wheel with uni deco, without paddles.



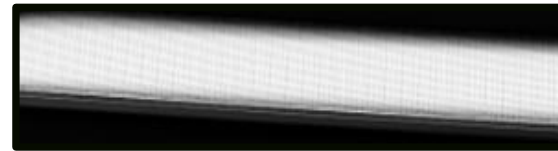


# INLAYS

Interior décor panels cover a generous surface in the dashboard, centre console, tunnel console (incl. roller blind over the cup holder) and doors. A great selection of optional inlays is available, and the higher the trim level you go for, the more choice you have. The most luxurious inlays are only available with the top interior illumination level, as they are developed to come with the mood light guide for instrument panel and doors included.



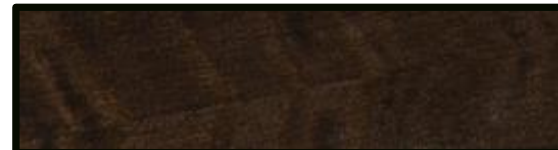
Cross Brushed Aluminum (437)



Metal Mesh Aluminum (440)



Inscription Linear Walnut (315)



Dark Flame Birch (458)

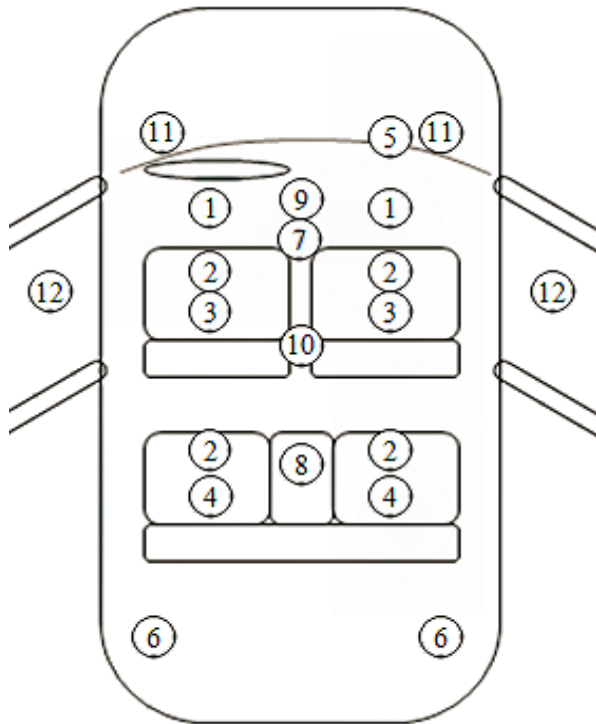


Carbon Fibre (480)



# INTERIOR ILLUMINATION

Two levels of interior illumination are available for the Volvo XC90. These include not only interior and mood lights, but also illuminated tread plates and ground lighting. With the high level, there is a very generous amount of lighting, welcoming driver and passengers with a luxurious feeling when unlocking and entering the car.



## Level 1: Momentum

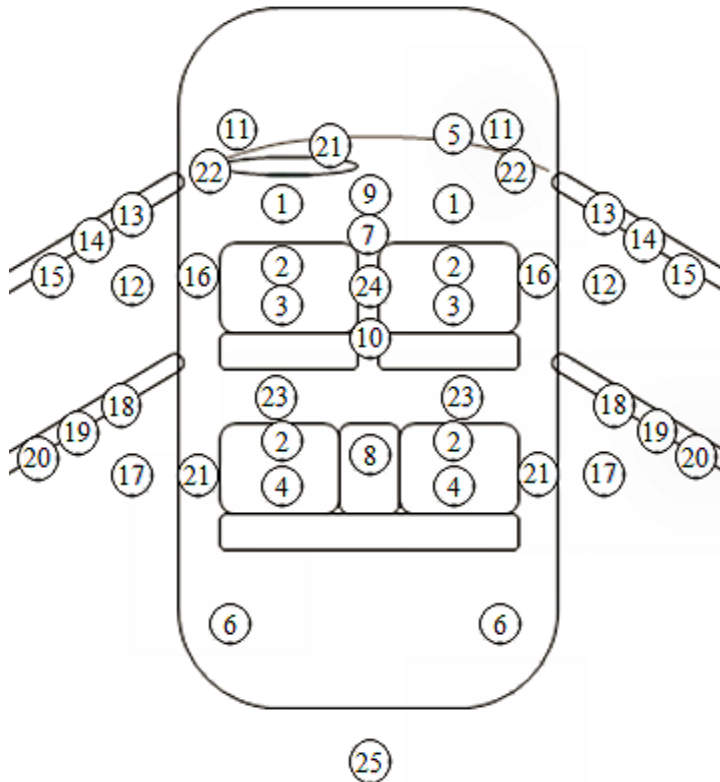
- Foot well lights, front (incl. ambience) (1)
- Courtesy lighting, front & rear (2)
- Reading lights, front & rear (3+4)
- Glove box light (5)
- Cargo area lights (6)
- Illuminated vanity mirrors (11)
- Mood lighting (white), front & rear (7 - 8)
- Tunnel storage illumination, front & rear (9 - 10)
- Side step lights, front (12), illuminating the ground when the doors are opened.



# INTERIOR ILLUMINATION

Tread plates are fitted in both front and rear doors. They are part of the trim level differentiation:

- Momentum, they are in aluminum, with “Volvo” engraved in the front ones (“R-Design” on R-Design)
- Inscription and R-Design, illumination around the edges of the front and rear tread plates is included as part of the high level interior illumination.



## Level 2: Inscription and R-Design

- Mid level illumination (1 – 12)
- Mood lighting (multi-colour, 7 themes) front & rear (7 – 8)
- Door pocket illumination, front & rear (13 + 18)
- In door opening illumination, front & rear (14 + 19)
- Ambient door lights, front & rear (15 + 20)
- Tread plate illumination (16 + 21)
- Side step lights, rear (17)
- Ambience instrument panel lights (22)
- Foot well lights, rear (incl. ambience) (23)
- Cup holder illumination 24)
- Tailgate working light (25)
- This level also includes Piano Black deco on dashboard air vents.



# FRONT SEATS

In order to make the backrests as slim as possible and increase legroom in the 2<sup>nd</sup> row, a completely new frame and specially designed hard back has been developed. For a premium look and feel, the hard backs are covered with a soft coating. A net pocket is added for all upholsteries except textile.

- Larger range for adjustment back and forth and a greater angle for adjusting the front end of the seat cushion on the driver side, to make life more comfortable for tall people.
- Six-way power seats are available for driver and passenger side. The intuitive controls are placed on the outside of the seat cushion, and have the shape of a seat cushion and backrest for ease of use. Memory for the driver seat as well as the door mirror settings is included in the option power seat driver. Unlike on current cars, the buttons for memory are positioned on the front door interior panels. Power seats also include an Easy Ingress/Egress function for the driver side.
- Power operated seat cushion extensions for driver and passenger can be added as option to the power seats. The cushion extension is very wide to offer better thigh support. When you add cushion extension on the passenger side, the power seat on this side also gets a memory function.
- Power adjustable back rest side bolsters offer increased side support and a tighter fit for power seat passengers.
- Alongside heating functionality, even ventilation and massage (as of 15W19) are made available, offering maximum comfort for the driver and front seat passenger during long drives.





# UPHOLSTERY

When it comes to upholsteries, 5 different levels are available. The base upholstery is available in Charcoal, however, other variations in Blond or Amber, in Charcoal, Blond or Espresso interiors are available on higher levels. R-Design always gets Charcoal upholstery, suiting the sporty character of the car.

- Leather upholstery (xAx0): Comfort seats, included in Momentum
- Nappa leather upholstery: Comfort seats (xBx0) – included in Inscription, or Contour seats (xBx1)
- Perforated Nappa leather upholstery with ventilation (xCx0): Comfort seats
- Nubuck / Nappa leather upholstery (RB0R): Contour seats – included in R-Design
- Perforated Nappa leather upholstery (RC0R): Contour seats

Nappa leather as well as Nubuck/Nappa leather upholstery can be complemented with an optional leather-clad dashboard. This elegant and premium touch includes not only the dashboard top but also the upper panels of the front and rear doors. As these leather-clad upper door panels only exist in one variant, the combination with optional integrated sun-blinds for the rear doors is mandatory.

\*Please note: Unlike on current cars, the *second* digit of the upholstery code indicates the type of material.





## 2<sup>ND</sup> ROW SEATS

The Volvo XC90 is available as five- or seven-seater, to make sure every type of family can travel in style and there is plenty of room for friends. The second row of seats is positioned higher than the first, and the third row in a seven-seater is again higher than the second. That way, all passengers have a good view forward and a spacious feeling.

The second seat-row seats are designed for maximum comfort. It consists of three individual seats with backrest recline adjustments (seven possible steps). Thanks to the new and slimmer design of the front seats, legroom is generous. In the centre position, a child booster cushion, similar to the one on today's XC90, can be integrated as option.

A center armrest with two cup holders covered by a lid, integrated in the backrest of the middle seat, is included in all upholsteries except textile. Additional comfort and convenience can be added with heating of the outer seats of the second row, or with the 4-zone ECC.

The three seats of the second row can be folded individually for maximum versatility. They always have the same type of seat foam, regardless of upholstery type.





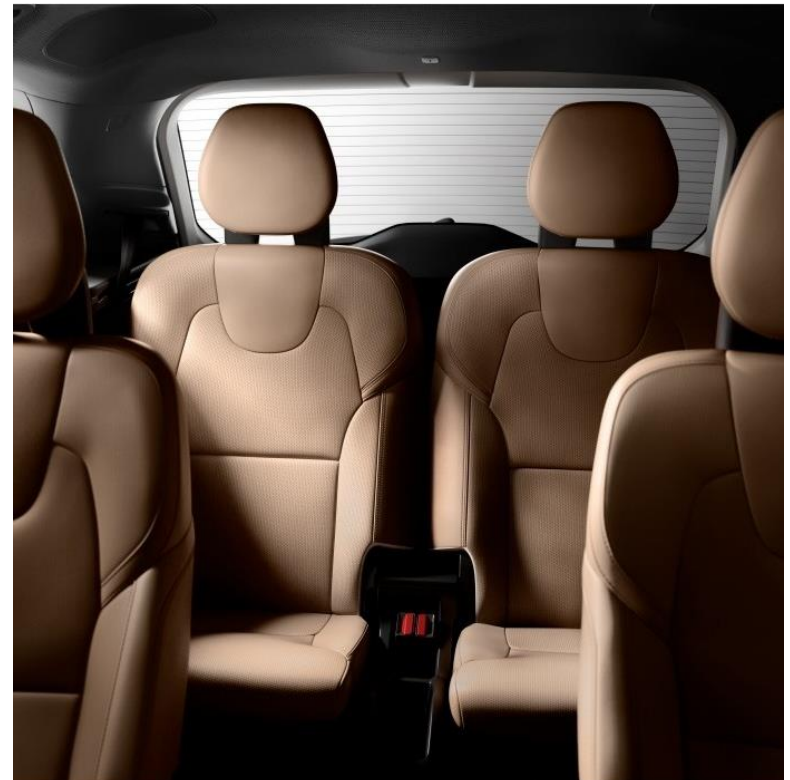
# 3<sup>RD</sup> ROW SEATS

The two individual seats in the third row of the seven-seater are generously proportioned and designed to offer exceptional comfort for passengers up to 170cm. Unlike on the outgoing generation of XC90, the third row cushions don't slide under the load floor, but they stay in place when the seats are folded. Still, the All New Volvo XC90 offers a completely flat load floor with folded seats.

Easy ingress and egress to the third row is secured in the same way as on the first XC90: when you lift the handle on top of the outer second row backrest and the backrest is folded forward to its halfway point, the seat can be pushed forward for easy entrance.

The third row seats can be folded manually very easily with a button located close to the headrests, which releases the backrests thus also automatically folding the head restraints in one go. For more convenience, power operated backrest release is available for the third row seats, which means that you can also electrically fold and raise the backrests via a button in the same location (folding also via a button in the center stack display).

Outer armrests with cup holder and integrated storage space make life more comfortable for the third row passengers.





# SWEDISH HERITAGE

Two premium reminders of our heritage have been added to the seats:

- The part of the safety belt that is most visible, the tongue, will get an engraved message "Since 1959" on the front seat belts. This refers to the year in which Volvo pioneered the three-point safety belt, and reminds the driver or passenger of Volvo's unequalled heritage when it comes to safety.
- A tag with a small Swedish flag is attached to the left side of the front passenger seat, a symbol of the Swedish Volvo heritage.
- A gear lever made from crystal by Swedish glass maker Orrefors (Available on top trim T8)





# SEATS, SEAT BELTS AND AIRBAGS

The newly designed seats in the All New Volvo XC90 have extremely strong frames, made of different steel grades. Moreover, the front seats are capable of absorbing high energy loads even in severe accidents – a World First! Thanks to this new design, high vertical loads pushing the human body downward in several types of accidents are absorbed by the front seats foam and frame, and the risk for spinal injuries is substantially decreased.

Of course, the new front seats also offer the latest development of Volvo's WHIPS Whiplash Injury Protection System.

Three point safety belts with seat belt pre-tensioners are available for all (up to seven) occupants. The upper safety belt mounting points for the third row in the seven-seater have a special design to give the best possible protection over the shoulder.





# SEATS, SEAT BELTS AND AIRBAGS

Moreover, in the Volvo XC90, information from different sources like the sensors that activate the airbags, the radar/camera unit behind the windscreen, the brake system etc, is constantly monitored. Should a critical situation occur, the safety belts are tightened (and released afterwards) electrically on two different levels, depending on the severity of the situation. The way in which this is done, as well as the number of different situations where it is activated (particularly if the car runs off road into rough terrain), make the Prepared Safety Belts another World First to be proud of!



Airbags complement the protection offered by the safety belts. They are located in the front (including a knee airbag on the driver side) as well as integrated in the side of the front seat back rests. Passengers in the second and third seat row are protected in an optimal way by the Inflatable Curtains integrated in the longitudinal part of the roof, above the doors and (7-seater) the rearmost side windows.



# CARGO AREA

The Volvo XC90 offers generous cargo space (up to 1,899 L) and clever load solutions in both five- and seven-seat configurations. The one-piece tailgate offers good weather protection and allows easy reach inside the cargo area. On select trims, a power operated tailgate with soft close is available. The tailgate can be opened via the remote control, a soft button on the tailgate (outside for opening, on the edge of the tailgate for closing) or a button on the left side of the dashboard.

On cars with Keyless Entry, hands-free opening of the power operated tailgate (by waving your foot under the bumper) is included for even more convenience. With this option, you can also close and lock the tailgate with one simple push on a button on the edge of the tailgate.

The cargo area itself has a regular shape, and wheel arch suspension has been designed not to intrude on the load compartment or reduce the width between the wheel arches. That way, it is easy to load even bulky objects. Several practical solutions, like standard shopping bag hooks (2) or four load securing eyelets and an optional grocery bag holder with adjustable elastic band, contribute to the ease of use of the cargo area.





# CARGO AREA

A hidden storage compartment under the load floor (with a moulded cargo divider storage tray) allows for easy transport of small or valuable objects. The shape of the space available differs depending on whether the car has a spare wheel or not, as well as on engine choice (less space on T8 Twin Engine). As it is impossible to open the floor hatch when the tailgate is closed, this area is safe when it is included in Private Locking or when someone breaks into the car.

A 12V outlet, which comes together with an elastic holding strap fitted above the storage recess to the right side of the load compartment (picture above, left), is also available as option.

To hide luggage from people's view, the Volvo XC90 is equipped from the factory with a semi-automatic luggage cover behind the second seat row. If the luggage cover handle is depressed, the load cover automatically retracts halfway, which makes it easy to access the load area when you have your hands full of luggage. A foldable safety net is available as option.

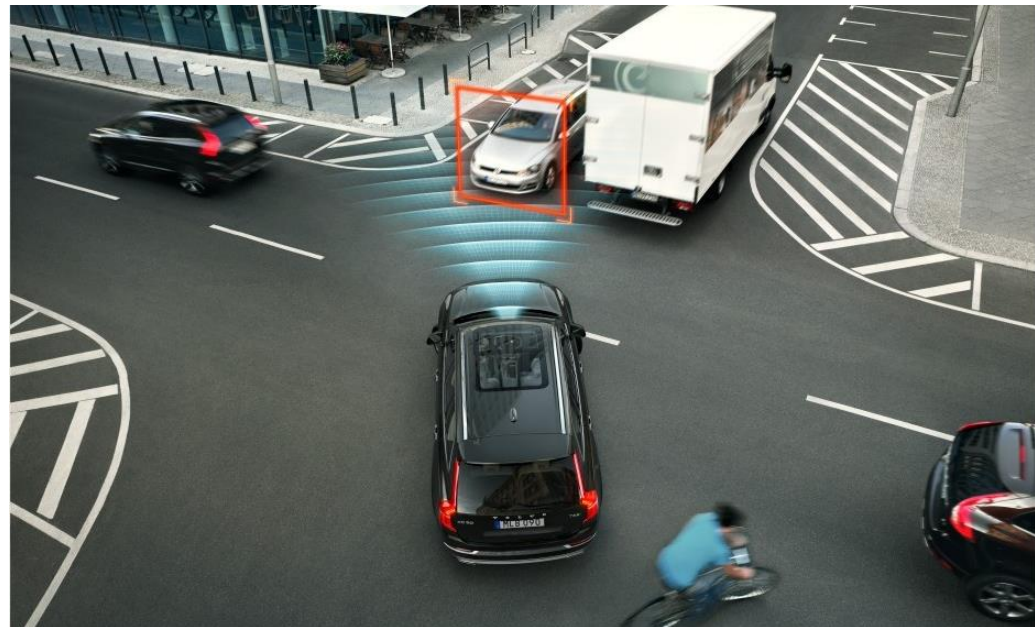




# CITY SAFETY

City Safety will from the All New Volvo XC90 onwards be used as an umbrella name for all collision avoidance functionalities, previously known as City Safety but also as Collision Warning with Full Auto Brake. A compact combined radar and camera unit behind the windscreen will detect other road users. If City Safety judges that a collision is imminent, it will warn the driver with a head-up light in the windscreen, an audible warning sound as well as a short, light brake pulse, and at the same time prepares the brake system as well as the safety belts for immediate efficiency. Should the driver not react or react too late, City Safety will brake the car autonomously.

City Safety detects other vehicles, but also cyclists and even pedestrians, and is active at all speeds over 4 km/h, during the day and even in the dark. Up to a relative speed difference of 50 km/h, accidents with other cars can be avoided. At higher speed differences, the collision is mitigated. Avoiding collisions with cyclists or pedestrians is possible up to speeds up to 45 km/h relative speed difference.



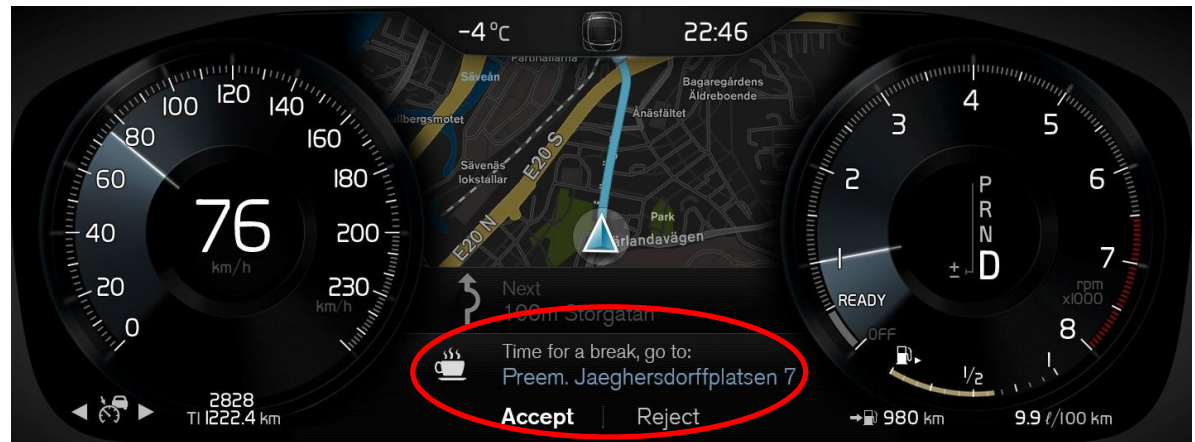


# LANE DEPARTURE WARNING AND DRIVER ALERT CONTROL



Driver Alert Control keeps track of the car's path in relation to lane markings on either side. If the system detects that the car is not being driven in a normal way (parallel to the markings), it will alert the driver that it might be time to take a break, by emitting with an audible warning sound and showing a coffee cup symbol in the instrument cluster. When the car has navigation, the driver can even get guidance to the next rest area to take the break (shown below).

Lane Departure Warning will warn the driver with vibrations in the steering wheel or a warning sound if the car is about to cross a lane. As standard, the car will not assist the driver to steer back to the road – that function is added if you add optional IntelliSafe Assist, which includes Lane Keeping Aid





# STABILITY AND BRAKE SYSTEMS

Going forward, DSTC will be referred to as ESC, or Electronic Stability System. Volvo's system has the same functions as previously, which are individually tuned and calibrated for each Volvo model. In addition to these, Roll Stability Control reduces the risk for rollover accidents with the Volvo XC90 by constantly monitoring the amount of roll.

Should a collision occur and the safety belt pre-tensioners or an airbag have been activated, the car's brakes are automatically activated in order to help avoid more damage after a collision. The brake pedal in the Volvo XC90 has a completely new construction. When the sensors that trigger the safety belt pre-tensioners and frontal airbags sense that a frontal collision is taking place, the brake pedal is released by a pyrotechnical device (a unique solution compared to what some competitors offer). That way, the risk for injuries on the right foot and leg is reduced – another World First !



# INTELLISAFE

IntelliSafe Surround includes BLIS with Cross Traffic Alert and Rear Collision Mitigation. Active at speeds above 12 km/h, the Blind Spot Information system uses a radar unit inside each corner of the rear bumper of the car and measures the distance to vehicles coming from behind. The driver is warned by a light in the door mirror glass about vehicles which are about to pass. The light is constant if a vehicle is approaching rapidly from behind in the lanes to the left or right of the car (at a distance up to 70m). If the driver ignores the light and turns on the indicator to change lanes, the warning light starts to flash.



BLIS also offers Cross Traffic Alert, which makes it considerably easier to reverse out of parking spaces as it detects and warns for vehicles approaching at a distance of up to 30m (cyclists and pedestrians at shorter distance) by emitting an audible warning as well as displaying a graphic warning on the center screen.



# INTELLISAFE

Compared to radar-based BLIS on lifecycle cars, not only the location and function of the warning light differs, but also Rear Collision Mitigation has been added: if a vehicle is approaching from behind and the system calculates that there is a risk for a collision, the Volvo XC90 flashes all indicators at a high rate in order to try and catch the attention of the driver of the approaching vehicle and make him brake. If the car is at standstill and another vehicle is about to hit it from behind, the system activates and tensions the seatbelts just before the collision and then applies full auto-braking.



IntelliSafe Assist is the new name grouping the following well known features, which make use of the camera and radar integrated behind the windscreen:

- **Adaptive Cruise Control**, automatically adjusting speed to slower vehicles in front (including a toggle function to normal Cruise Control)
- **Queue Assist**, supporting the driver to keep the car's position in its lane (new !! if needed by light steering torque), in relation to visible lane markings and a vehicle in front (below 50 km/h)
- **Distance Alert**, monitoring the car's distance to the car in front at speeds above 30 km/h when ACC is not in use
- **Lane Keeping Aid**, adding the automatic and gently steering back of the car if it is about to cross a lane marking



# PARK ASSIST PILOT

Different levels of parking aid systems are available for the All New Volvo XC90. The traditional Park Assist rear (included as from Momentum) offers basic assistance (sound/graphics) in rearward parking maneuvers, whereas the Park Assist camera, hidden under the tailgate handle, displays in the centre screen a nice view behind the car as well as guide lines showing the path of the rear wheels according to the steering wheel angle.

Park Assist Pilot adds front (4) and side (2) sensors to Park Assist rear, and takes over the steering completely when parking (the driver being in control of accelerator, brakes and gear changing).

On the All New Volvo XC90, an additional level of parking support is available: the 360° Camera. With this option, the driver can (up to 10 km/h) see a birds-eye view of the car's surroundings around a virtual picture of the car on the centre screen.



This birds-eye view is enabled by four hidden cameras: one integrated in the front (lower part of the Volvo badge), one in each of the door mirrors and one in the rear (the same one as comes with the regular Park Assist camera option). These four views are digitally processed to create an uninterrupted view of the surroundings, as seen from a point above the car. By sweeping up or down over the touch screen, the driver can get a view of only the front or rear camera. All in all a very convenient feature when you want to drive safely out into a street or a junction and buildings or other obstacles block your view, or when you want to maneuver into a tight parking space.



# SENSUS CONNECT INFOTAINMENT

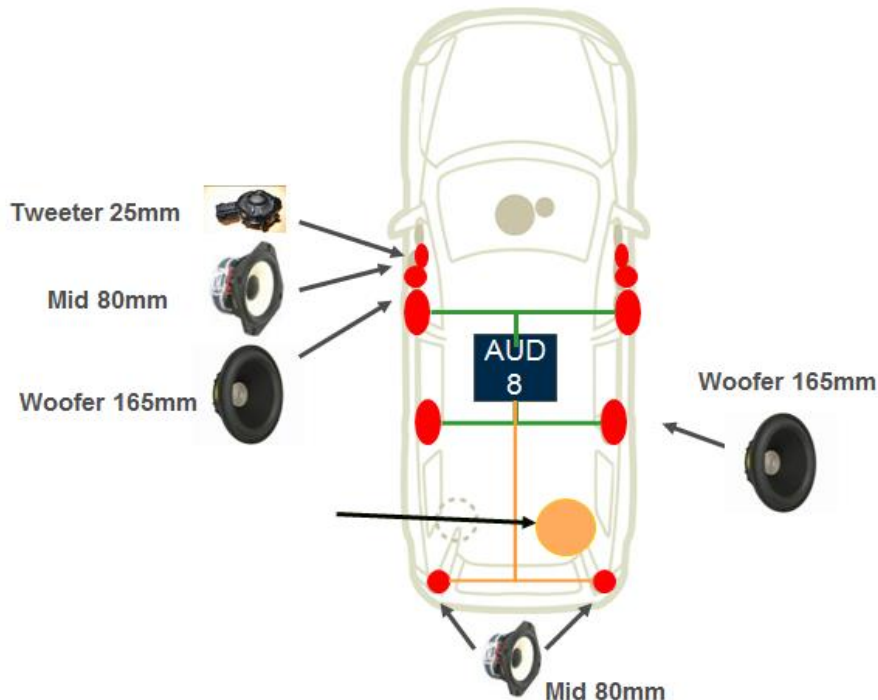
According to Volvo's Designed Around You strategy, the driver's interaction with the car should be as natural and intuitive as possible. In the Volvo XC90, Sensus infotainment and car settings can be controlled very easily via the unique touch screen. Most of the buttons which traditionally populate the centre stack are displayed and can be accessed via the different menus of the Sensus system. As the screen is dynamic, buttons can be made to appear bigger (than they would be physically) and thus safer and easier to manipulate.

Moreover, many functions can also be controlled via advanced Voice Control technology. The All New Volvo XC90's Sensus system recognizes voice commands for climate control, navigation, media playing, telephone and even for the digital owner's manual. Thanks to Natural Speech technology, you can speak to the car as you would to a person.



# HIGH PERFORMANCE AUDIO

Two audio levels are available from start for the Volvo XC90. They are both designed to deliver the best possible top performing sound quality, regardless of the power figures (the watts) mentioned. This was possible thanks to the fact that the new vehicle architecture has been designed from the start with audio performance in mind. All audio systems include Bluetooth, AUX as well as a USB connection integrated in the front armrest.



From launch, the Volvo XC90 is equipped as standard with the Sensus High Performance audio system. A six-channel amplifier delivers 330 Watts to 10 speakers for a top quality sound experience for all passengers, including those in the 3<sup>rd</sup> row.

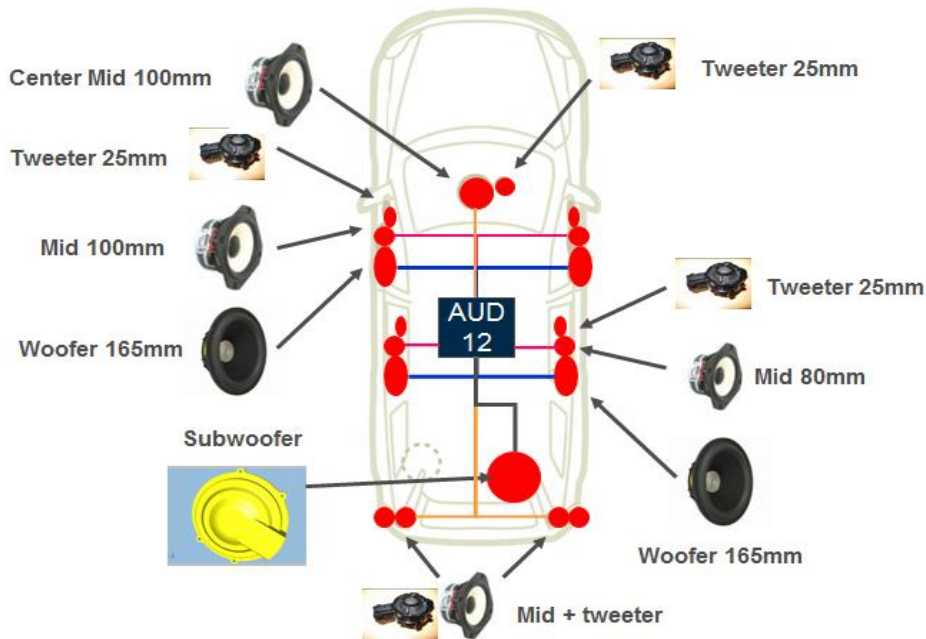
A USB connection, integrated under the front armrest, is standard. A separate subwoofer for really deep bass tones.



# PREMIUM AUDIO – BOWERS AND WILKINS

The Premium Sound system of the Volvo XC90 is one of the best audio systems in the market. It has been developed together with the renowned high-end audio manufacturer Bowers & Wilkins, a name which carries great authority and respect in audio circles.

Moreover, unique “Room Transformation” technology, developed with the Swedish software specialist Dirac Research, makes it possible to recreate the acoustics of a specific room inside the car. Customers have the choice between 3 different ‘room modes’: Studio, Individual Stage and Gothenburg Concert Hall.



Premium Sound by Bowers & Wilkins delivers an astonishing 1400 Watts to 19 speakers. The tweeter panels in the door panels 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.

The newly designed and extremely thin sub-woofer is integrated in the architecture of the car, by the rear wheel arch. Thanks to an opening in the wheel arch, the subwoofer can pulse more air, which enables extremely low bass tones down to 20 Hz, and thus a sound quality similar to that of a movie theatre.





# NAVIGATION AND CONNECTIVITY

Just like on current Volvo cars, Sensus Connect High Performance includes connectivity and a number of interesting apps. Also Connected Service Booking as well as a digital owners manual are standard. Thanks to the large portrait format centre screen, these apps have become even more user-friendly.

When you add optional Sensus Navigation, maps are displayed very clearly in the large centre display and additional guidance is given via the driver display (“turn-by-turn” arrows in the standard driver display, very nice map details in the 12,3” digital instrument cluster) and, if applicable, via the Head-Up Display. Free lifetime map upgrades, to be done via USB, are included. Sensus Navigation also gives access to a number of additional apps which use your location: Park&Pay, Yelp, Glympse, Local Search and Send to Car.





# APPLE CARPLAY

As proudly announced during the Geneva Motorshow last March, Apple and Volvo Cars are joining forces to make Apple's widely-used and hugely admired operating system available to drivers. The All New Volvo XC90 will be the first Volvo to offer this functionality on cars produced as from W1546 (retrofit possible on earlier cars). Apple CarPlay makes it possible to seamlessly integrate an iPhone (5 or later) and access selected well-known functionalities and apps directly via the large centre console touch screen. The iPhone can be controlled via the touch screen or by Siri voice commands via the cars' audio system. A similar interface for Android phones is under development and will be introduced at a later stage.



With these new developments, Volvo confirms its leading position in the digital area, as internationally recognized also by Telematics Update. Last June, they awarded Volvo's Sensus Connect system with the prestigious Global OEM Infotainment Solutions Award for its cloud-based integrated applications that can be easily updated without need for downloads or workshop visits, and for its robust, reliable mobile and secure internet connection that protects both personal and car-related data.





# 4-ZONE CLIMATE CONTROL

From the factory, the All New Volvo XC90 is equipped with an efficient, electronically controlled automatic two-zone climate system. While driver and front seat passenger can set the temperature individually for their side of the car (including the 2<sup>nd</sup> row outlets), the third seat row in the seven seat version gets a mix of these temperature settings.

A four-zone climate system is available as an option, and allows also the two outer second row seat passengers to adjust temperature and fan speed individually, for their greatest comfort. This is done via an elegant touch screen panel on the rear end of the tunnel console. Four-zone ECC also allows to cool the glove box compartment to keep drinks cool.

When the car also has optional heated rear seats, these are controlled as well via the rear touch screen (as opposed to via buttons on cars without 4-zone ECC).

The Four-Zone ECC can be complimented with a separate air conditioning unit for the third row for even greater comfort for third-row passengers in the seven seat version. This unit has no separate controls and is activated if at least one of the seatbelts in the third row is used, or via the touch screen if you for instance want to offer extra comfort to your pet. Adjustable vents in the C-pillars supply cooled air from the climate system, or (in cold conditions) additional PTC elements can supply warmed air quickly after a cold start.





# CLEANZONE

CleanZone will as from now be used as the umbrella name for technologies that offer the driver a better interior environment, like incoming air, interior emissions and odours, and requirements regarding interior surfaces. The interior Air Quality System (AQS), standard on all cars as from Momentum, is a good example of this. Cars with AQS have a CleanZone logotype on the two central adjustable air vents. The AQS now also includes a pre-ventilation function, which starts the climate system fan when the car is unlocked, in order to ventilate the cabin (previously marketed as CZIP) even before the driver enters the car.

A new feature which the All New Volvo XC90 offers, is the possibility to pre-ventilate the car up to 40min without starting the engine, a function which is activated via the Volvo On Call app or via the centre touch screen. After the car has been stopped and the engine switched off, it's also possible to use "post climatization" and keep the set cabin temperature (or as close as possible) for up to 15min by starting the climate system and engine coolant pump via the centre touch screen. Ventilation is done with outside air, for warming the remaining engine heat is used.



# BUILT IN CONNECTIVITY

Already from early stages of design, we created today's Volvo to be a platform for connectivity. Whether it's about connecting USB and AUX devices, wireless in-car connections using technologies like Bluetooth or broadband technologies that give access to internet and cloud-based services and apps – each Volvo model is prepared.

- A Volvo unique cloud developed with Ericsson, a leader in mobile and fixed networking
- Cloud based apps
- Connected service booking
- On screen vehicle owner's manual
- Internet browser
- Connection achieved via internal modem, which includes 6-months\* trial service period.
- Beyond the trial period, the system can also be connected the personal hotspot in the owners smartphone (Utilizes customer's existing data plan, and requires tethering capabilities within the customer's plan)

\* 6 month estimate based on 1 gigabyte data per month usage, 6 gigabytes total provided



# VOICE CONTROL

Sensus connect now includes an improved speech engine on all cars, with and without a Navigation system. Voice control is an important element in Volvo's ambition to make the interface between the car and the user as easy as possible. Less distraction means higher concentration on the road and vehicle surroundings.

- The state-of-the-art speech engine is powered by Nuance, an industry leader in speech recognition software.
- Instead of the previous input prompting one step at a time, the new speech recognition uses "one shot destination" approach in the navigation system. The user just provides the full address in one stream (e.g. "one main street, Anytown, New State").
- On top of improved function, voice control is extended to infotainment including radio functions; in addition to Navigation and telephone control we already include today.



# WIFI HOTSPOT

Allowing the Volvo buyer to enjoy the possibilities of in-car connectivity, our standard 3G-based Volvo On Call solution gives them powerful reception by making use of the car's rooftop antenna (monthly data charges apply after introductory trial expires). The driver does not need a smartphone onboard to have access to the cloud-based Volvo services. Volvo On Call also means they can create a Wi-Fi hotspot inside every model year 2015.5 Volvo – anybody in the car can easily connect his or her smartphone, laptop or tablet to the internet.





# BOOKING SERVICE AND REPAIRS

Connected Service Booking (CSB) is a great way for your store to keep in contact with your customers. It makes setting up a time for service, maintenance and/or, repairs directly from the vehicle, quick and convenient for your customer. Once some prerequisites have been established, all CSB-related menus can be accessed in MY CAR by pressing OK/MENU and then selecting Maintenance & repair. This service can be used in three different ways:

**Owner initiated (Repair):** Your customer can request an appointment from their vehicle. Booking info and data about the vehicle will be transmitted directly to you, their preferred dealer.

**Maintenance schedule:** If the time for the next regularly scheduled service is approaching, a message is displayed on the center console screen, and the customer will be guided through the necessary booking steps.

**Unscheduled maintenance/repairs:** If the vehicle requires certain types of repairs or if any systems need to be inspected, guidance will also be provided.

The customer accesses the *Volvo On-Line Service Scheduler* portal from a smartphone or a computer to select a day and time that suits them; while allowing them to specify any other service requests they may have. Once their request is submitted, it is entered into your booking portal and they receive immediate confirmation online and via email. The vehicle will also generate on-screen reminders and will provide directions to your store if required.





# VOLVO ID

The Volvo ID is your customer's personal account that provides access to various services related to their new connected Volvo.

This is one of those delivery steps that will go a long way in supporting your customer's new vehicle experience. They will clearly appreciate your support to get them set up. Some of the features available with the Volvo ID:

- My Volvo – A personal web page for your customer and their car.
- Internet-connected car - certain features and services require that your customer has registered their Volvo to a personal Volvo ID, such as sending an address from a map service on the Internet directly to the vehicle.
- Volvo On Call - Volvo ID is used to log in to the Volvo On Call mobile app.



Note: The services available may vary over time and vary depending on equipment level and market.



# VOLVO ON-CALL

Up until now, “On Call” represented one of the industry’s best roadside assistance programs. And now, for model year 2015.5, On Call adds a sophisticated telematics system. Volvo On Call is your customer’s lifeline when something goes wrong.

Remember, cars are driven by people and, as Volvo, we will always do our best to protect them and those who are important to them. That’s why it only makes sense, that the new Volvo On Call system is standard on every new model year 2015.5 Volvo sells.

## In an Emergency

Pressing the SOS button will send for help. And if an airbag or a seatbelt pre-tensioner is deployed, emergency assistance is notified even if the driver is unable to press the button.



### **THE SOS BUTTON**

The SOS button puts those in the car in direct contact with a trained Volvo On Call crisis manager who will call the police, ambulance or other relevant assistance.



### **AUTOMATIC COLLISION ALERT**

If an airbag deploys or safety belt pre-tensioners are activated during a collision, an alarm will automatically transmit to the Volvo On Call emergency center and a trained Volvo On Call crisis manager will call for assistance.



### **THE CAR WILL BE FOUND**

Regardless of the vehicle occupants’ ability to explain where they are, the built-in GPS system shows the location to the operator who transfers the position to the emergency service, to help locate the vehicle.



# VOLVO ON-CALL CONTINUED...

## Theft Recovery

We can never completely protect ourselves from carjackers. But with the Volvo On Call service, it will at least be much harder for a thief to get away with a 2015.5 Volvo.



### **IMMEDIATE ALERT**

If anyone tries to break into the car, the Volvo On Call service is automatically alerted. The operator first makes a call to the car's integrated phone. If an unauthorized person is using the car, our team member will notify the owner immediately.



### **RECOVER THE STOLEN VEHICLE**

If a MY2015.5 Volvo is stolen, we can track it via GPS location. The Volvo On Call operator will be able to determine the car's location regardless whether it's being driven or transported by any other method.

## The Car Within the Smartphone

With our built-in Volvo On Call road assistance and convenience service, the owner can also have a great app to connect their Volvo with their smartphone. Whenever they want and wherever they are, they can use their smartphone (Android and iPhone to start) to check the status of the Volvo. They can lock and unlock the doors – and even start the engine to warm up or cool down the cabin before travelling. Take a look at what the app can do below.





# VOLVO ON-CALL CONTINUED...

## Remote Start

Volvo's new remote start function is a cut above most out in the market. Utilizing the customer's smart phone, the engine can be started from just about anywhere. And the app will tell you when the car is running. No more guessing if you were within range. Pre-heat in the winter, cool it down in the sweltering heat, either way, the car is ready when your customer opens the door.

## On Call Services

Volvo On Call comes with e-Call service for life\*. That includes emergency crash notification and manual emergency (911).

Others services provided via the On Call app, as described below, are available through a paid subscription service. There is a complimentary 6 month trial service from the date of vehicle sale. Prices and details for continuation of the trial service will be supplied in a separate communication at a later date.



# VOLVO ON-CALL CONTINUED...

## Other On Call App Functions



### CHECK THE FUEL LEVEL

With the Volvo On Call app the driver can check on how much fuel is left from wherever they are. Never again will they wonder if they have sufficient fuel for tomorrow morning's drive.



### FIND THE CAR

Forgot where the car is parked? The app will show the location of the car on a map and provide directions. The app can also be used to make the car horn sound and the lights flash so it is easier to spot in a crowded lot.



### LOCK THE CAR

Everyone has, at one time or another, wondered if they really locked their car! With the On Call app, there's no need to walk back and check. The app lets the driver lock and unlock the car remotely. They can also check if the car's doors are open or closed.



### GET AN OVERVIEW WITH THE DRIVER'S LOG

With the app, the driver has an automated driving journal in their pocket. They get all their trips on record and can transfer the data to Excel – a perfect feature for company car or business owners who need to track expenses.



### HEAT OR COOL THE CAR

What better way to minimize the sting of a cold or hot seat, than to warm or cool the car ahead of time. The On Call app can start the engine anywhere there is a cell signal or Wi-Fi connection. No more wondering if they are close enough for the remote to connect with the car.



### READ THE DASHBOARD REMOTELY

The owner can read the car's dashboard remotely through the app. They can see if something needs to be fixed, for example if a bulb is broken or the washer fluid is low.



### A DETAILED LOOK AT TRIPS TAKEN

The owner can see recorded trips on a map. This map view shows where the car has driven from where it started until the ignition was switched off. It also shows, at specific time intervals, graphs of speed and fuel consumption.



### IS IT COLD WHERE THE CAR IS PARKED?

If your customer ever wonders what the temperature is like where they left the car, using web-based weather information, they can check the temperature forecast at the car's location with the Volvo On Call app.



### PLAN TRIPS FROM HOME

With the app the driver can plan trips from the comfort of their couch. Search for a destination and send it to the car for the route to appear in the car's navigation system. Please note that the possible search area depends on the phone's map functionality.

Please note some functions may vary depending on phone and car models.

\* "Lifetime service" defined as at least 10 years from date of sale.



# **XC90 STANDARD EQUIPMENT, PACKAGES AND OPTIONS**



**T6 AWD**



# STANDARD EQUIPMENT – T6 AWD

## Momentum

MSRP  
\$60,700

Navigation - Pro  
320 HP  
AWD  
Leather Upholstery  
Alloy 19" + 235/55  
3rd row seating  
4-zone Electronic Climate Control, ECC  
Climate Unit, 3rd Row  
Outer armrest with cupholders and storage, 3rd row  
Textile floor mats, 3rd row  
Panoramic Sunroof  
Color coordinated ext. Silver roof rails, raised  
Silver deco strip, door handles  
Brightwork, front spoiler  
Dual integrated tail pipes  
Tinted windows, rear & cargo  
Door handle illumination  
LED fog & cornering light  
Front grille, high gloss black  
Tempa spare wheel incl jack kit  
Power driver seat w/ mem  
Power passenger seat  
4-way pwr lumbar, frt seats  
Power-folding rear head restraints  
Keyless Entry [doors and tailgate]

Leather steering wheel Aluminum Inlay  
Auto dim mirror  
Metal tread plates, frt & rear  
Drive mode settings  
Power child lock  
7-seat configuration  
Volvo Sensus w/ 9.3" screen, voice control  
8" Digital DIM  
High Performance Audio w/10 spks, 224w  
City Safety – Low & High Speed Collision Mitigation  
Volvo On Call w/hot spot & internet maps  
Sirius radio, 1 USB, AUX  
Park Assist Camera  
Park Assist Rear  
Semi auto load cover  
Cargo divider, under floor  
Metal threshold plate  
Power Tailgate  
Pedestrian & Cyclist Detection  
Lane Departure Warning  
Road Sign information  
Driver Alert  
Road-edge and barrier detection w/auto steer  
Piano black grille with chrome frame





# STANDARD EQUIPMENT – T6 AWD

## R-Design (In addition to Momentum equipment)

MSRP  
\$65,200

Full LED headlights w/ ABL, AHB2 + LED DRL

Headlight high pressure cleaning

12.3" Full graphical instrument cluster

Illuminated tread plates

Interior high level illumination

Power cushion extension, front seats

R-Design Leather-wrapped remote key

R-Design pedals

Floor mats upgrade - R-Design mats, front/rear

Tread plates upgrade - R-Design illuminated, front

R-Design silk metal window trim

Front grille "R-Design"

R-Design front spoiler

R-Design TL element exterior front

R-Design TL element exterior rear

R-Design dual integrated tail pipes

Bright mirror covers (as window trim)

R-Design leather gear shift knob

Special DIM execution

Rear R-Design badge

Bright integrated roof rails

R-design sport seats - Nubuck / Leather

Metal Mesh decor inlays

Black headlining

R-design perforated leather steering wheel

Steering wheel gear shift paddles

R-Design 20" Wheels [275/45/20]



# STANDARD EQUIPMENT – T6 AWD

## Inscription (In addition to Momentum equipment)

MSRP  
\$66,800

Full LED headlights w/ ABL, AHB2 + LED DRL  
Headlight high pressure cleaning  
12.3" Full graphical instrument cluster  
Illuminated tread plates  
Interior high level illumination  
Modern Wood Inlays  
Front grille "Inscription"  
Inscription brightwork, lower door molding  
Inscription brightwork, rear fascia  
Inscription brightwork, exterior mirror covers  
Inscription exterior badge  
Leather remote key

Interior accents, piano black [console, switch gear]  
"Inscription" start up sequence [DIM]  
Inscription mats + cargo area  
Bright integrated roof rails  
Inscription 20" wheels [275/45/20]  
Ventilated front seats  
Leather dash board & upper door panel  
Power side support, front seats  
Power cushion extension, front seats  
Sun curtain, rear side doors (manual)  
Nappa Soft Leather Upholstery (cost step for T6/T8)



# PACKAGES – T6 AWD

## Momentum Plus MSRP \$2,600

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- Full LED headlights w/ ABL, AHB2 + LED DRL
- Headlight high pressure cleaning
- 12.3" Full graphical instrument cluster
- Illuminated tread plates
- Interior high level illumination
- Dark Flame Birch decor inlays

## Climate MSRP \$1,350

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- Heated rear seat, outer positions
- Heated steering wheel
- Air Quality System
- Heated washer nozzles (wet arms)
- Clean Zone Interior software
- Heated windscreen

## Vision MSRP \$1,800

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- Automatically dimmed inner + exterior mirrors
- Retractable rear view mirrors
- Blind Spot Information System + Cross Traffic Alert
- Visual Park Assist + Front "Fisheye" view

## Convenience MSRP \$2,200

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- Park Assist Pilot + Park Assist Front & Rear
- Adaptive Cruise Control, incl Traffic jam assist & lane keeping
- Power operated fold & raise of backrest 3<sup>rd</sup> row
- HomeLink™
- Compass in inner rear view mirror
- Grocery bag holder
- 12V power outlet, cargo area
- Additional USB connector (1 USB + 1 AUX = Std)



# STAND ALONE OPTIONS – T6 AWD

	Momentum	R-Design	Inscription	MSRP
Metallic paint	•	•	•	\$800
Booster cushion, centre position, second row	•	•	•	\$325
Bowers & Wilkins Premium Sound	•	•	•	\$3,250
Graphical head-up display	•	•	•	\$1,150
4-corner air suspension	•	•	•	\$2,350
Dark Flame Birch decor inlays	•	-	-	\$525
Leather steering wheel with wood inlay	•	-	-	\$425
Full LED headlights w/ ABL & cleaning	•	-	-	\$1,825
Sport Seats in Nappa Leather (avail w20)	•	-	-	\$1,800
Alloy 20" + 275/45	•	-	-	\$975
Carbon Fiber Inlays (RD only)	-	•	-	\$1,000
Alloy 22" + 275/35	-	•	-	\$1,300
Alloy 21" + 275/40	-	-	•	\$975



**T8 PHEV**



# STANDARD EQUIPMENT – T8 PHEV

## R-Design (In addition to T6 Momentum equipment)

MSRP  
\$73,400

320 HP + 80 HP

eAWD

Crystal gear shift knob

PHEV Unique Alloy 19" + 235/55

Full LED headlights w/ ABL, AHB2 + LED DRL

Headlight high pressure cleaning

12.3" Full graphical instrument cluster

Interior high level illumination

Power cushion extension, front seats

R-Design Leather-wrapped remote key

R-Design pedals

Floor mats upgrade - R-Design mats, front/rear

Tread plates upgrade - R-Design illuminated, front

R-Design silk metal window trim

Front grille "R-Design"

R-Design front spoiler

R-Design TL element exterior front

R-Design TL element exterior rear

R-Design dual integrated tail pipes

Bright mirror covers (as window trim)

R-Design leather gear shift knob

Special DIM execution

Rear R-Design badge

Bright integrated roof rails

R-design sport seats - Nubuck / Leather

Metal Mesh decor inlays

Black headlining

R-design perforated leather steering wheel

Steering wheel gear shift paddles

R-Design 20" Wheels [275/45/20]



# STANDARD EQUIPMENT – T8 PHEV

## Inscription (In addition to T6 Momentum equipment)

MSRP  
\$75,000

320 HP + 80 HP	Inscription brightwork, exterior mirror covers
eAWD	Inscription exterior badge
Crystal gear shift knob	Leather remote key
PHEV Unique Alloy 19" + 235/55	Interior accents, piano black [console, switch gear]
Full LED headlights w/ ABL, AHB2 + LED DRL	"Inscription" start up sequence [DIM]
Headlight high pressure cleaning	Inscription mats + cargo area
12.3" Full graphical instrument cluster	Bright integrated roof rails
Illuminated tread plates	Inscription 20" wheels [275/45/20]
Interior high level illumination	Ventilated front seats
Power cushion extension, front seats	Leather dash board & upper door panel
Modern Wood Inlays	Power side support, front seats
Front grille "Inscription"	Power cushion extension, front seats
Inscription brightwork, lower door molding	Sun curtain, rear side doors (manual)
Inscription brightwork, rear fascia	Nappa Soft Leather Upholstery



# PACKAGES – T8 PHEV

## Climate

MSRP  
\$1,350

Heated rear seat, outer positions  
Heated steering wheel  
Air Quality System  
Heated washer nozzles (wet arms)  
Clean Zone Interior software  
Heated windscreen

## Convenience

MSRP  
\$2,200

Park Assist Pilot + Park Assist Front & Rear  
Adaptive Cruise Control, incl Traffic jam assist & lane keeping  
Power operated fold & raise of backrest 3'rd row  
HomeLink™  
Compass in inner rear view mirror  
Grocery bag holder  
12V power outlet, cargo area  
Additional USB connector (1 USB + 1 AUX = Std)

## Vision

MSRP  
\$1,800

Automatically dimmed inner + exterior mirrors  
Retractable rear view mirrors  
Blind Spot Information System + Cross Traffic Alert  
Visual Park Assist + Front "Fisheye" view









# STAND ALONE OPTIONS – T8 PHEV

	R-Design	Inscription	MSRP
Metallic paint	•	•	\$800
Booster cushion, centre position, second row	•	•	\$325
Bowers & Wilkins Premium Sound	•	•	\$3,250
Graphical head-up display	•	•	\$1,150
4-corner air suspension	•	•	\$2,350
Alloy 20" + 275/45	•	•	\$975
Carbon Fiber Inlays (RD only)	•	-	\$1,000
Alloy 22" + 275/35	•	-	\$1,300
Alloy 21" + 275/40	-	•	\$975







# STANDARD WHEELS

Model	T6 MOMENTUM	T8 MOMENTUM	INSCRIPTION	R-DESIGN
				
Wheel Name	19" 10-Spoke Turbine Silver Bright	19" 7-Spoke Turbine Silver Bright	20" 10-Spoke Tinted Silver Diamond Cut	20" 5-Spoke Tech Matte Grey Diamond Cut
Option code	172	177	173	-
Tires	235/60R19	235/60	275/45	275/45
Tire Brand	Continental	Michelin	Pirelli	Pirelli
Wheel Dimension Width/Diameter/Offset	8x19x42.5	8x19x42.5	9x20x38.5	9x20x38.5
Color	Silver Elegance, 965	Silver Elegance, 965	Light Grey Glossy, 960	Technical Matte Black, 955

Please note: Wheel availability is subject to change. Any changes will be communicated at that time.



# OPTIONAL WHEELS

Model	T6 MOMENTUM	T8 MOMENTUM	INSCRIPTION	R-DESIGN
				
Wheel Name	20" 5-Double Spoke, Matte Tech Black Diamond Cut	20" 10-Spoke, Tinted Silver Diamond Cut	21" 8-Spoke, Silver Bright Diamond Cut	22" 5-Double Spoke, Matte Black Diamond Cut
Option code	234	173	174	175
Tires	275/45	275/45	275/40	275/35
Tire Brand	Pirelli	Pirelli	Pirelli	Pirelli
Wheel Dimension Width/Diameter/Offset	9x20x38.5	9x20x38.5	9x21x38.5	9x22x38.5
Color	Technical Matte Black, 955	Light Grey Glossy, 960	Silver Elegance, 965	Matte Black Stone, 968

Please note: Wheel availability is subject to change. Any changes will be communicated at that time.



# EXTERIOR COLOURS

MOMENTUM & INSCRIPTION

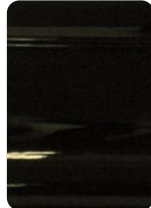
Ice White  
Solid (614)



Bright Silver  
Metallic (711)



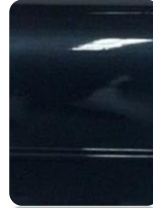
Magic Blue  
Metallic (467)



Osmium Grey  
Metallic (714)



Saville Grey  
Metallic (492)



Onyx Black  
Metallic (717)



Twilight Bronze  
Metallic (700)



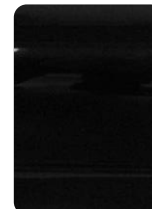
Luminous Sand  
Metallic (719)



Crystal White  
Metallic (707)



Ember Black  
Metallic (487)



R-DESIGN

Crystal White  
Metallic (707)



Passion Red  
Solid (612)



Bursting Blue  
Metallic (720)



Electric Silver  
Metallic (477)



Onyx Black  
Metallic (717)



Please note: Colour availability is subject to change. Any changes will be communicated at that time.



# UPHOLSTERY MATRIX

Code	Desc.	Upholstery type	Upholstery Color	Interior	Upper IP and Door Panels	Material	Availability
RA00	CHARCOAL/LEAA/CHARCOAL	Leather	Charcoal	Charcoal	Charcoal	Leather	T6 Momentum - std
RA20	CHARCOAL/LEAA/AMBER	Leather	Amber	Charcoal	Charcoal	Leather	
WA00	BLOND ESPBL/LEAA/BLOND	Leather	Blond	Blond / Charcoal	Charcoal	Leather	
RC00	CHARCOAL/LEABPERF/CHARC	Inscription Nappa Leather Seats	Charcoal	Charcoal	Charcoal	Nappa Leather	T6/T8 Inscription - std
RC20	CHARCOAL/LEABPERF/AMBER	Inscription Nappa Leather Seats	Amber	Charcoal	Charcoal	Nappa Leather	
WC00	BLOND ESPBL/LEAC/BLOND	Inscription Nappa Leather Seats	Blond	Blond / Charcoal	Charcoal	Nappa Leather	
RB01	CHARCOAL/LEAB/CHARCOAL/S	Nappa Leather Contour Seats	Charcoal	Charcoal	Charcoal	Nappa Leather	T6 Momentum - opt
RB21	CHARCOAL/LEAB/AMBER/S	Nappa Leather Contour Seats	Amber	Charcoal	Charcoal	Nappa Leather	
UB01	BLOND CHAR/LEAB/BLOND/S	Nappa Leather Contour Seats	Blond	Blond / Charcoal	Charcoal	Nappa Leather	
RB0R	CHARCOAL/LEABR/CHARC/S	Leather and Nubuck	Charcoal	Charcoal	Charcoal	Leather and Nubuck	R-Design



# **XC90 TECHNICAL INFORMATION AND DATA**



# ENGINE

The focus of the All New Volvo XC90's powertrains is a lightweight design, performance, efficiency and a great driving experience. At the heart of this strategy is our range of aluminum four-cylinder engines that actually offer performance equivalent to six and even eight-cylinder power plants – our range-topping engine features not only a supercharger for superb low-rev throttle response, but also a turbocharger that keeps the engine punching hard at higher revs. All of this is delivered with lower fuel consumption and emissions.

The characteristics of our new engines include:

- Compact 4-cylinder design
- Lightweight, contributing to lower fuel consumption, better driving dynamics and more agile cornering
- Balancer shafts for smooth and vibration free running
- Turbocharging for better performance
- Direct injection with high pressure
- Variable valve timing contributing to higher performance and instant throttle response





# TRANSMISSION AND DRIVELINE

The Volvo XC90 is equipped with a new 8-speed automatic transmission using the latest technology. It has 2 overdrive speeds which help save fuel and a lock-up function (bypassing the torque converter to reduce energy-consumption). It can be manually operated via the gear lever or (on R-Design) via steering wheel paddles.

The AWD-variants of the All New Volvo XC90 have a very efficient type of four-wheel drive system. A compact and lightweight coupling (Haldex 5<sup>th</sup> generation) 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 power to the rear wheels and can instantly redistribute up to 50% of the engine's power to the rear wheels. When at a standstill, full all-wheel drive is always engaged to prepare for maximum traction during accelerations.







# CHASSIS AND SUSPENSION

The All New Volvo XC90 chassis also features a couple of innovations to our brand.

In previous Volvos, a McPherson suspension is utilized, which is an efficient design that takes up little space. In the All New Volvo XC90, a double wishbone suspension is mounted in the front, which means the wheel is attached to the car by two transverse links. With this type of suspension, the handling and road holding characteristics can be made perfect, with a neutral balance, excellent comfort, a minimal roll and no unwanted understeer. The front suspension design also counteracts torque steer.

The rear-wheel suspension is also completely new to Volvo. It is called Integral Axle, which is a very advanced and exclusive type of rear-wheel suspension. A great advantage with this design is that all characteristics can be individually tuned. In variants without the optional air-suspension, a very special and exclusive solution is a transverse leaf spring made of a composite material, which is very lightweight and strong, and replaces traditional coil springs.

Most suspension parts in front and rear are made of aluminum, to reduce weight.

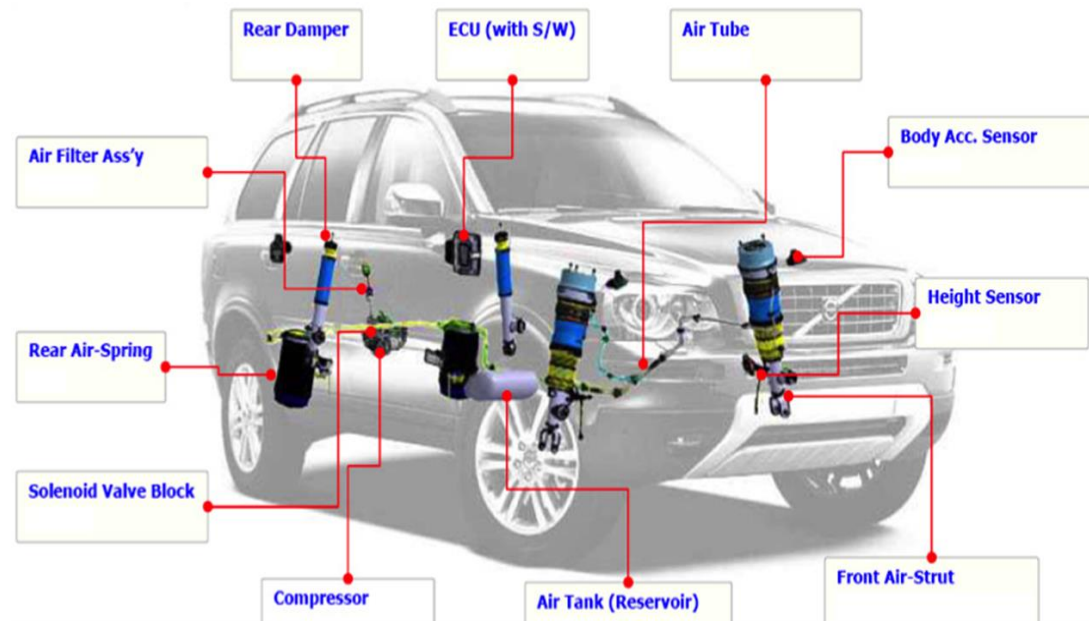




# AIR SUSPENSION

The All New Volvo XC90 can be ordered with an optional air suspension system, which replaces the springs, with an electronically controlled damping system called Four-C, that replaces the traditional dampers/shock absorbers. Both are combined in one option code. The Four-C system has been adapted to work together with the air-suspension system. The suspension offers an outstanding ride comfort, handling and road holding. On top of that, Drive Mode settings enable the driver to fine-tune the behavior of the car to suit the conditions even better.

Air suspension includes automatic levelling to keep the same ground clearance and level regardless of the number of passengers and the amount of load. Above  $\pm 110$  km/h, ride height is automatically lowered with 1 cm for lower aerodynamic drag. An Easy Ingress/Egress mode allows lowering the car with 4cm for easier access. Air suspension also offers the nice possibility to lower the rear of the car with 5cm by pushing a button inside the load compartment. That way, loading of heavy items is facilitated, and it's also a very convenient feature if you want to hitch a trailer.





# DRIVE MODE

The optional Drive Mode settings allow the driver via an elegant rotary knob in the centre console to choose different settings for the engine (even the supercharger in the T6), the gearbox and if the car is equipped with them, the air suspension and Four-C system. The driver can personalize his car and always enjoy the driving characteristics which he prefers.

Drive Mode settings are included in Inscription and R-Design cars, and always standard on T8 Twin Engine.

The settings available to choose from are:

- **Comfort mode**
- **Eco mode:** calibrates engine, gearbox and even climate control systems for the lowest possible fuel consumption, including coasting when releasing the accelerator fully above 65km/h, and (on cars with air suspension) lowering the car with 2 cm above 70km/h for lower aerodynamic drag,
- **Dynamic mode:** more sporty driving experience thanks to a quicker response of throttle/gearbox, the gearbox allowing for higher speeds/revs before it changes gears, and (on cars with air suspension) lowering the chassis with 2cm and adapting the Four C dampers,
- **Off road mode:** for speeds below 40 km/h, including Hill Descent Control for AWD cars, offering a 4cm greater ground clearance on cars with air suspension
- **Individual mode:** allowing the storage of the driver's personal preferences into the remote control memory.



# DRIVE MODE

	Off Road	Eco	Comfort	Dynamic	Individual
<b>Steering Characteristics</b>	Light Force	Medium Force	Light Force	High Force	Customer Setting
<b>Powertrain Characteristics</b>	Off Road - Hill Descent Control - PT optimized for traction	Eco	Normal	Dynamic	
<b>Brake Characteristics</b>	Normal	Normal	Normal	Sport	
<b>DSTC/ESC</b>	Traction	Normal	Normal	Normal	
<b>Suspension Characteristics (Air Suspension + CCD)</b>	Off Road - Height +40mm	Eco - Height -20mm > 60km/h	Comfort - Height 0mm	Dynamic - Height -20mm	Customer Setting
<b>Active Noise Control</b>	Quiet	Quiet	Quiet	Sporty	
<b>DIM Display</b>	Off Road	Eco	Comfort	Dynamic	
<b>Start/Stop</b>	Off	On	On	Off	
<b>Energy Save (Climate and Visibility)</b>	Normal	Eco	Normal	Normal	



# T8 DRIVE MODES

For the T8 Twin Engine, specific Drive Modes are available to choose from, fitting the hybrid character of the car:

- **Hybrid** mode (default) where both engines use is optimized in terms of performance, fuel consumption and comfort. On cars with air suspension, focus is on comfort.
- **Pure/Eco** mode affecting engine, gearbox and climate system: prioritizing electric operation and low-energy consumption including information to the driver to drive economically. On cars with air suspension, the car is lowered with 2 cm above 70km/h for lower aerodynamic drag.
- **AWD** mode: activating AWD to overcome slippery conditions at low speeds. Air suspension is programmed for maximum comfort.
- **Power** mode: petrol and electric motor are working in parallel and ensuring maximum performance, sporty characteristics and quick response by tuning the steering, brakes, ESC, Start/Stop and active (engine) sound control. On cars with air suspension, the chassis is lowered with 2cm and the Four-C dampers are adapted.
- **Off road** mode: up to 40 km/h, this mode reduces the accelerator sensitivity, locks the differentials, automatically activates Hill Descent Control, sets the steering in Comfort mode, optimizes gearbox and engine for traction and sets the ECS to Traction/Sport. On cars with air suspension, ground clearance is increased with 4cm.
- **Save for later** mode: charges the battery securing at least 20km pure electric driving when arriving at a city.
- **Individual** mode: allowing the driver to change any of the settings relating to the preset modes.

# TECHNICAL DATA



ENGINE	T6 AWD	T8 AWD
<b>Type</b>	In-line 4-cyl. supercharged and turbocharged	In-line 4-cyl. supercharged and turbocharged w/ electrification
<b>Configuration</b>	Transverse, All-Wheel-Drive	Transverse, All-Wheel-Drive
<b>Displacement, cm3</b>	1969	1969
<b>Bore (mm)</b>	82	82
<b>Stroke (mm)</b>	93.2	93.2
<b>Engine cylinder block material</b>	Aluminum	Aluminum
<b>Cylinder head material</b>	Aluminum	Aluminum
<b>Compression ratio</b>	10.8:1	10.8:1
<b>Valves, no/cylinder</b>	4	4
<b>Camshafts</b>	2	2
<b>Engine management system</b>	Integrated fuel (SFI)/ignition control systems	Integrated fuel (SFI)/ignition control systems
<b>Ignition sequence</b>	1 - 3 - 4 - 2	1 - 3 - 4 - 2
<b>Engine idling speed, rpm</b>	825	825
<b>Fuel, rec. octane</b>	91	91
<b>Max output, hp/rpm</b>	320 / 5700	320 + 80 / TBD
<b>Max torque, lb-ft/rpm</b>	TBD	TBD

Please note: All technical data is currently being finalized. All posted data should be treated as preliminary and is subject to change.



# TECHNICAL DATA

<b>PERFORMANCE</b>	<b>T6 AWD</b>	<b>T8 AWD</b>
<b>Acceleration, 0 - 100 km/h (sec)</b>	7.5 - preliminary	TBD
<b>Top speed, km/h (electronically limited)</b>	210	210
<b>Fuel Economy</b>		
<b>City</b>	TBD	TBD
<b>Highway</b>	TBD	TBD
<b>Combined</b>	7.7 - preliminary	2.7 - preliminary

<b>TRANSMISSION</b>	<b>T6 AWD</b>	<b>T8 AWD</b>
<b>8-speed automatic gearbox</b>		
<b>Ratio</b>	AW TG-81SC	AW TG-81SC
<b>First</b>	5.250	5.250
<b>Second</b>	3.029	3.029
<b>Third</b>	1.950	1.950
<b>Fourth</b>	1.457	1.457
<b>Fifth</b>	1.221	1.221
<b>Sixth</b>	1.000	1.000
<b>Seventh</b>	0.809	0.809
<b>Eighth</b>	0.673	0.673
<b>Reverse</b>	4.015	4.015
<b>Final Drive</b>	3.329	3.329

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# TECHNICAL DATA

MEASUREMENTS AND VOLUMES	T6 AWD	T8 AWD
<b>Exterior</b>		
Length	4,950	
Width (including mirrors / mirrors folded)	2,140 / 2,008	
Height	1,775	
Wheelbase	2,984	
Overhang (front/rear)	887 / 1,079	
Tread width, front, (Offset 38,5/42,5)	1,669 / 1,677	
Tread width, rear, (Offset 38,5/42,5)	1,671 / 1,679	
Ground clearance (mm)	237	
<b>Interior</b>		
Headroom with panorama roof (front/rear/third row)	987 / 979 / 902	
Shoulder width (front/rear/third row)	1,465 / 1,435 / 1,192	
Leg room (front/rear/third row)	1,038 / 940 / 811	
Cargo volume, Max SAE, (L)	2,427	
<b>Weights/Miscellaneous</b>		
Weight, lb.	4,394	
Fuel tank (L)	71	
Max roof load (lb.)	220	
Drag coefficient	0.33	

Please note: All technical data is currently being finalized. All posted data should be treated as preliminary and is subject to change.





# VEHICLE DIMENSIONS (MM)

