

Press Release

Jan 24, 2013 | ID: 47470

ALL-NEW VOLVO V40 R-DESIGN

- Brand new sports-inspired derivative of the all-new V40
- Sports-coupe design but with full five-door practicality and optional sports chassis
- Class leading emissions from 94g/km CO₂ for the D2
- Features the world's first Pedestrian Airbag
- V40 D2 R-Design will still benefit from 100% first-year write-down allowance after April's tax banding change
- Company car taxation from just £47.11 per month BIK for a 20% tax payer

Overview

The eye-catching design of the V40 has been further enhanced with the addition of the V40 R-Design derivative, which features interior and exterior design changes to differentiate itself from the class norm.

Volvo's range is no stranger to receiving the R-Design treatment from the Special Vehicles Team in Gothenburg, Sweden. The S60, V60, V70, XC60 and XC90 have all received interior and exterior refinements, along with changes to the chassis and suspension, to give a more sports inspired appearance and feel to the standard cars.

The V40 is the smallest vehicle in the Volvo range and is squarely aimed at a younger and more design influenced audience. The R-Design derivatives have historically accounted for up to 60% of a model's sales volume, dependant on the model, and the V40 R-Design is expected to account for 25% of all the V40 sales in the UK.

As with the V40, the V40 R-Design has received special attention from Volvo's chassis engineering team, ensuring the car has optimum handling, steering feel, agility and ride comfort. The R-Design can also be specified with the Sports Chassis, to give a more sports oriented ride to go with its looks.

Safety, as with all Volvos, has not been overlooked. The V40 R-Design, comes as standard with City Safety and the world's first pedestrian airbag. Along with a host of other safety features, it ensures Volvo's reputation for safety leadership continues. These safety features have resulted in the V40 having the highest overall score in Euro NCAP's tests and the fitment of City Safety as standard has resulted in the car benefitting from lower insurance ratings after being tested by Thatcham on behalf of the Association of British Insurers.

Volvo's time-honoured reputation for environmentally friendly motoring, such as the invention of the three-way catalytic converter with lambda sensor, ensures the V40 R-Design is amongst the cleanest in its class. The V40 R-Design D2 emits just 94g/km of CO₂ (fitted with 205/50 R17 tyres) which offers major benefits not only to retail customer but to business users too, with regards to BIK, road tax and residential parking savings.

The V40 R-Design is fitted with Volvo's SENSUS infotainment system, designed to give outstanding connectivity, security and personalisation. As part of SENSUS, the V40 R-Design comes as standard with Bluetooth music streaming and handsfree mobile connectivity.

The new seats fitted to the V40 have been fitted with additional bolster support but continue to offer occupant comfort, one of Volvo's trademarks. The rear seats offer the same level of comfort with

two sculptured seating positions, however there is room for three, all with three-point safety belts.

Stand-out features of the V40 R-Design, fitted as standard, include the rimless rear view mirror and illuminated gear-knob, which are further proof of a clean design focus with crisp and uncluttered detailing.

Volvo's continuing efforts in reducing exhaust emissions has resulted in the V40 D2 R-Design still qualifying for the 100% first year write-down allowance, even from April 2013 where the Government has changed the threshold from 110g/km to 95g/km. Because of the low CO₂ emissions, the V40 D2 R-Design, as well V40 D2, are within the lowest BIK band for a conventionally engine vehicle, one band lower than its premium competitors. Benefit-in-Kind figures for the V40 D2 R-Design start from £47.11 for a 20% tax payer and from £94.22 for a 40% tax payer.

Coupled with an attractive start price, it is good news for fleet buyers who want low emissions, low fuel consumption, low tax payments and high levels of comfort and driving pleasure.

The V40 R-Design is available in two specification levels, R-Design and R-Design Lux. Prices start from £22,295 on the road for the V40 D2 R-Design, up to £31,390 for the V40 T5 R-Design Lux Nav Geartronic.

Production of the V40 R-Design started in November 2012 and first customer deliveries are expected to take place in February. All specification levels and the entire engine range is available to order now.

Just over 14,000 V40s are likely to be sold in the UK during 2013, of which 3,500 is expected to be R-Design.

Exterior Design and Features

The V40 R-Design is low, sleek and sporty, making it one of the most eye-catching Volvos ever. The five-door, five-seat hatchback has a low-roof and bonnet lines, but offers the functionality and practicality as any other Volvo.

For the first time on the V40, R-Design specifications can be ordered in the distinctive Rebel Blue, along with a choice of six other colours.

A trademark of Volvo's R-Design treatment is the unique front and rear bumpers. The front bumper has been re-profiled to incorporate a new lower spoiler and it also houses new vertical LED day-running lights, as standard. The rear bumper incorporates a new ironstone diffuser with twin tail-pipes and chrome surround, no matter what engine is fitted.

The sleek exterior profile is accentuated by a unique silk-metal framed high gloss grille with R-Design logo. To complement this, the mirror caps are finished off in the same silk-metal finish, with the side windows framed with chrome trim.

Fitted as standard on the V40 R-Design are distinctive diamond-cut five-spoke 17" Ixion alloy wheels, with the cost option of upgrading them to 18".

Volvo's classic V-shaped bonnet has bolder edging with wide shoulders that stretch from just behind the headlamps. At the end of the rear door it sweeps into an integrated "hook", a design legacy from the P1800 coupé.

The roof silhouette is wedge shaped and contributes to the lean-forward stance. Rear tail lamps are positioned high, for maximum visibility, and follow the curvature of the shoulders. The broad-shouldered look is another Volvo design trademark, which goes back to the Amazon models of the '50s and was re-introduced on the S80 and V70. A 'pull' on the D-pillars has given a teardrop shape to the rearmost side window, which has given the rear a distinctive look with a powerful rear shoulder. All this, along with a low ride height improves the frontal area, which leads to better aerodynamics and lower CO₂ emissions.

The hexagonal shape of the tailgate is now something of a Volvo hallmark, aligning the V40 design with the look of the V60 sports-wagon. The tailgate design, first introduced on the C30 and also inspired by the P1800ES, is a further Volvo signature.

The V40 R-Design also has some nice design touches to finish off the look, such as body coloured washer jet nozzles and is the first Volvo that uses hemmed wheel flanges, which allows the use of bigger wheel and tyre combinations.

Smart and practical, the fuel-filler pipe is cap-less and self-closing to make fuel-filling easier.

As well as LEDs being used in the DRLs, they are also used in the door mirror turn indicators, rear position lights, high position rear brake light and in rear number plate illumination.

A fixed panoramic glass roof can be specified, stretching from the front windscreen to the backrest of the rear seats, improves the feeling of light and space in the car and makes the cabin even airier and brighter. The roof is tinted to reduce infrared radiation into the cabin. A fabric curtain, under the roof, provides shade, and can be used to block out the sun for part of the cabin. So the rear passengers, for example, can enjoy sunshine while the driver relaxes in shade.

Interior Design and Features

Volvo's "Designed Around You" can clearly be seen in the design and functionality of the interior cabin of the Volvo V40 R-Design. It is comfortable, simple in design and visually pleasing. It has been designed to be the most intuitive driver interface ever in a Volvo. The premise is to find everything instinctively and 'be-at-hand' instantly.

The unique interior R-Design design features continue into the interior of the car. Once the driver's door is opened, a number of unique features are instantly noticeable, such as the newly designed extra bolstered R-Design black Nubuck textile/leather with embroidered R-Design logo on the backrest, or leather-faced bolstered seats with the R-Design logo embossed onto the backrest. The three-spoke leather sports steering wheel with R-Design logo is complimented with the illuminated gear-knob.

The TFT (thin film transistor) instrument display, 1st seen in the V40, offers excellent legibility in all light conditions, can prioritise information in emergency situations and also allows the display to be personalised - all part of Volvo's "Designed Around You" philosophy.

The three settings in the V40 R-Design are the same, Eco, Elegance and Performance, but unique to the R-Design, all three have a blue background. This TFT screen also shows the R-Design logo when locking/unlocking the vehicle.

The instrument display also includes navigation instructions, when satellite navigation is fitted.

Unique to the R-Design specification, the headlining, roof panels, sun visors and upper switch panels are finished off in black.

Finishing touches on R-Designs include inlay mats with contrast stitching, sports pedals and the gear-knob and boot in perforated leather.

The floating centre stack, now a Volvo design trademark, is the centrepiece of the V40 cockpit. It was inspired by Swedish furniture and the depth of the stack gives the effect that it "floats".

It's larger at the top and tapers down to help increase knee room for the driver and front passenger. In R-Design trim, it comes as standard with an aluminium trim with a dark inlay and blue-edging. It is finished off with a chrome frame to enhance the décor. This chrome trim is also found on the doors, instrument panel, around the centre display, outer air vents, start button and gearshift gaiter.

The cabin is full of easy-to-use technology, all part of Volvo's high-tech but easy to use HMI (Human-Machine Interface). The infotainment system - combining audio, navigation, mobile phone and other functions - is presented on a five- or seven-inch colour screen in the upper part of the centre console. It's set high to make it easier for the driver to keep his or her eyes on the road. All functions can be controlled from the steering wheel, or by controls directly below the screen.

The "My Car" button on the dashboard offers easy access to a wide range of personalised settings for City Safety, Collision Warning, Pedestrian Detection, Driver Alert System, Active Cruise Control, lighting, door mirrors, climate unit, central locking and the audio system.

If the customer chooses a Multimedia audio system, Volvo's infotainment system comes upgraded with the larger seven-inch screen that also displays information and images from the navigation system, phone, reversing camera, DVD player, digital TV and more.

Bluetooth, fitted as standard, allows for not only hands-free phone conversations, but also music streaming from your preferred Bluetooth-enabled portable music player. Integrated navigation with voice commands is available as an option.

Both R-Design versions come standard with the excellent High Performance Audio System that uses a CD and RDS radio, four 45W amplifiers, USB/iPod input and eight speakers. There is a five-inch integrated colour screen.

The optional High Performance Multimedia system uses a DVD and seven-inch colour display screen.

The top-of-the-range Premium Multimedia Sound audio system is one of the finest car entertainment systems in the world. It has Dolby Pro-Logic II surround sound and Dolby Digital 5.0 Cinema Edition, a DVD and seven-inch screen, 5 x 130W digital class D amplifiers and 10 speakers.

This superb sound system is one of the first, in an automotive application, to use Audyssey Laboratories MultEQ technology, the standard for room equalization in the home and professional theatre markets. MultEQ removes distortion caused by the car cabin's acoustics, enabling crisp, clear sound with improved soundstage for everyone in the car.

A DAB (Digital Audio Broadcasting) radio is available, as is Digital TV.

Volvo is famed for its seating comfort. On the V40 the seats are new. Like the front seats, the outer rear seats are also noticeably sculpted, to offer greater comfort and support. You sit slightly more inboard than the norm, moving you further from the doors and allowing greater forward visibility. The rear seat is ideal for two people, although there is ample room for three.

There is extensive storage space. Below the armrest is a storage compartment suitable for CDs and other small items. It also has a connector for a USB/iPod. Two cupholders and a 12V power outlet are integrated in the console in front of the armrest.

The glovebox has space for two soft-drinks cans or bottles and is refrigerated with cold air from the Electronic Climate Control system.

Other convenient features include a pen holder in the glove compartment, handy storage compartments under the instrument panel and on the outside of the outer rear seats, and also a drainage hole for an ice scraper built into the driver's door panel.

The interior lighting is designed to give a "theatre lighting" feel. This adds to the luxury feel of the interior, LED lamps are used to light up strategic areas, such as the footwells. The driver can enjoy a red-to-blue setting that adapts the light to the interior temperature - or choose between another seven mood themes. The reading lights front and rear can also be dimmed independently.

The two-piece, 40/60, rear seat backrest can be easily folded in different ways when carrying long objects. The front passenger seat can be folded forward to create even more space.

There is a practical hanging load net in the load compartment. A soft safety net is optional and a metal version is available as an accessory.

The V40 can be equipped with an "extra" floor in the load compartment, making the floor flat when the rear seat is folded. In addition to the two permanent hooks, the extra floor integrates hooks for grocery bags. Between the upper and lower floors there is a concealed storage area. Continuing the darker theme from the headlining, both types of R-Design trim come in charcoal.

Driving Dynamics

Unique to the V40 R-Design, compared to the rest of Volvo's R-Design range, is the standard fitment of the dynamic chassis, as fitted to the V40. This allows drivers to opt for the more sports inspired looks, while keeping the comfort of the standard chassis. However, the sports chassis is still available as an option.

A huge effort has gone into making the Volvo V40 the most dynamic Volvo to date, creating a balance of ride, handling, steering and braking, as well as the driver assistance functions.

Special emphasis has put into the steering to ensure that it provided an intuitive and linear feel between driver and the road, that way it's very responsive and very precise.

The Electrical Power Assist Steering (EPAS) system uses electric power on a rack and pinion. Early electric steering systems were sometimes criticised for lack of feel but Karlsson says Volvo has conquered that failing, and claims that feedback and feel is now as "as good as a good hydraulic steering system". A key benefit of electric steering is that, because there is no hydraulic assistance, there are fuel economy savings.

The steering column's thick tubing and stiff insulation increase torsional rigidity. This also contributes to the enhanced feeling of direct contact with the wheels and the road.

If fitted with the optional adjustable steering, it allows the driver to choose between three levels of power assistance with varying levels of steering support.

The Electrical Power Assist Steering also allows for the integration of safety and driver support functions that involve the steering, such as Lane Departure Warning and Park Assist Pilot.

The dampers, affecting ride, handling and steering, was tuned mostly in the UK, on the country's legendary B-roads. The V40 Project Team tested every possible area of damping and because of the roughness, camber changes, undulations and the variety of corners, 90 per cent of the damper tuning in the UK.

The dampers include rear monotube designs that have compression and rebound damping done by the same valve. This gives shorter, faster fluid flow, which in turn means that the damper responds more quickly.

The chassis set up - fully independent suspension front and rear, using MacPherson struts at the front - is complemented by a suite of electronic controls, designed to boost safety but also improve driving enjoyment.

The Dynamic Stability and Traction Control (DSTC) system on the V40 R-Design includes several sophisticated features that offer a unique blend of driving pleasure and safety. The Advanced Stability Control, that is part of it, uses a roll angle sensor that makes it possible to identify any skidding tendency at an early stage. This means that the stability control system can step in earlier and with greater precision. Advanced Stability Control is a great asset in dynamic driving involving considerable lateral forces, improving handling and rapid avoidance manoeuvres.

Part of the DSTC system is used if the car is equipped with a tow-bar. Trailer Stability Assist helps dampen the snaking action that may occur when towing a trailer or caravan. The car is stabilised by braking one or more wheels and by reducing torque.

Corner Traction Control is a feature that uses torque vectoring to make the car corner even more smoothly. The car's inner driven wheel is braked, causing more power to be transmitted to the outer driven wheel. This allows the driver to corner more tightly while reducing any tendency to understeer.

This system makes it easier to smoothly maintain the desired line on winding roads, in roundabouts and on wet surfaces. Corner Traction Control is a huge asset when exiting from a small side road to merge swiftly with faster highway traffic.

The optional sports chassis has been developed in co-operation with the Polestar Black Team, runners in the Swedish TTA Series. The ride height is lowered by 10mm, lowering the centre of gravity and offering firmer springs and dampers, to give even more responsive driving. The front McPherson struts have 25mm piston rods which allows them to absorb lateral loads better. The anti-roll bars also have an increased diameter.

A dynamic and safe car obviously needs excellent brakes. The V40 R-Design comes with four wheel discs, ventilated at the front. Anti-lock braking system (ABS) is standard, and so is Electronic Brake Distribution (EBD) and Electronic Brake Assist (EBA).

EBA helps the driver stop in the shortest possible time in an emergency stop. The system detects

if the driver is in an emergency brake situation and, even if the pedal has not been pushed with maximum force, it applies maximum braking power.

EBD varies the braking pressure to each wheel - depending on speed and road conditions - ensuring maximum stopping power yet full vehicle control.

Both EBA and EBD work in conjunction with the anti-lock brakes.

Powertrains

The V40 R-Design is available with the same engine choice as the V40 and fitted with start/stop technology, no matter which gearbox is specified. It has a wide range of turbocharged diesel or petrol engines, both available in four- and five-cylinder forms. In the UK, diesel is likely to account for over 80 per cent of sales.

All V40 engines meet the latest Euro V exhaust emissions standards. They are all fitted transversely, to improve packaging - so more space is devoted to passengers - and also to improve safety: a transverse engine is less likely to intrude into the passenger cell than a longitudinally mounted engine in a severe front impact.

Petrol Engines

New for the V40 R-Design, but also available in the V40 and V40 Cross Country, is the high-performance T5 engine. This five-cylinder 2.5-litre 254hp unit uses an aluminium block and head and is the sportiest choice in the V40 range. It is available with an automatic Geartronic transmission only.

0-60mph acceleration takes just 5.7 seconds, while top speed is 155mph. Despite the high performance, the engine emits 185g/km of CO₂ and achieves 35.8mpg on the combined cycle.

The four-cylinder T3 and T4 engines are among the world's most advanced four-cylinder petrol engines, being exceptionally light and efficient.

They are compact and made from die-cast aluminium, which reduces weight and improves heat dissipation. The plastic inlet manifold also cuts weight. Both engines use direct injection to give far more precise combustion with improved performance and emissions.

The variable valve timing and quick-acting turbocharger helps give this petrol engine almost diesel-like lugging power. Maximum torque, for the T4, is over a wide rev band: from 1600 to 5000rpm. On the less powerful T3, the maximum torque is developed from 1600 to 4000rpm. Maximum torque for both versions is 240 Nm. The T3 produces 150hp, the T4 180hp.

The T3 and T4 are both available with six-speed manual transmissions and the T4 can be optionally specified with an automatic Powershift gearbox. Manual versions for the T3 and T4 have a 0-60mph acceleration of 8.4 and 7.3 seconds respectively.

Their highly efficient engines give excellent economy and low emissions. Thus, CO₂ emissions are 125 g/km (T3) and 129 g/km (T4). They both qualify for free first year vehicle tax, and are classified in vehicle tax band D.

Diesel engines

The biggest seller in 2014 is expected to be the 1.6-litre four-cylinder diesel D2, accounting for just over 60 per cent. The highly-efficient engine delivers an amazing 94g/km CO₂, equating to 78.5mpg on the combined cycle.

With such low figures, it makes the Benefit in Kind company car tax very low (£43 BIK a month for 20% tax payers). There are also major benefits in other taxation. For example, the sub-100g figure means there is no vehicle tax either in the first year or in subsequent years. It is also currently exempt from the London Congestion Charge.

The D2 is an eight-valve engine using the latest common rail direct injection. Piezo-electric injectors ensure particularly precise distribution of the atomized fuel, resulting in efficient combustion and low emissions. The cylinder block and head are both made from aluminium,

ensuring low weight.

Maximum power is 115hp while maximum torque is a healthy 270 Nm, available from 1750-2500rpm. Even at 4000rpm, the engine is still producing almost 200 Nm of torque. The D2 is only available with a six-speed manual transmission. Top speed is 118mph and 0-60 mph acceleration takes 11.7 seconds.

If the 18" wheels are specified, CO₂ emissions increase to 99g/km.

The other two diesel engines on offer are the five-cylinder D3 and D4. Both have aluminium blocks and heads for lighter weight, and use four valves per cylinder for improved breathing.

The D3 and D4 both have 2.0-litre capacities. The D3, likely to be the second bestselling engine in the UK - produces 150hp and 350 Nm of torque from 1500-2750rpm. The flat torque curve makes for better acceleration over a broader rev range, meaning it is still producing over 200 Nm at 4750rpm.

On the top diesel version, the D4, the extra turbo boost means power jumps to 177hp and maximum torque to 400 Nm. Maximum torque is achieved from 1750 to 2750rpm. As with the D3, it is also strong even at very low revs: at just over 1000rpm, 100 Nm is being produced. This makes both the D3 and D4 very flexible and tractable.

The D3 and D4 both come with a choice of six-speed manual or automatic Geartronic transmissions. In manual guise, top speed is 130mph (D3) and 137mph (D4), while 0-60mph acceleration takes 9.1 seconds and 8.2 seconds respectively.

Both five-cylinder engines also offer fine economy and low emissions. The D3 produces 114g/km of CO₂ as a manual, which puts it in vehicle tax band C. No vehicle tax is payable in the first year. The manual D4 emits the same CO₂, excellent for a high performance diesel. Combined fuel economy for both engines is 65.7mpg.

Transmissions

All versions, apart from the high performance T5, come with six-speed manual gearboxes as standard. The petrol T4 and diesel D3 and D4, additionally, come with the option of six-speed automatic gearboxes.

All versions of the V40 come with front-wheel drive. Volvo believes this offers safer and more predictable handling than the alternative rear-wheel drive solution. It is especially advantageous in slippery conditions, such as may be experienced on cold winter days.

Safety

"Cars are driven by people, therefore the guiding principle behind everything at Volvo is, and must remain, safety." declared co-founders Assar Gabrielsson and Gustaf Larson. This has been the guiding principle behind everything designed and built at Volvo Cars since the first car was built back in 1927.

Volvo has been a safety pioneer ever since the company was founded with inventions such as the three-point seat belt, the safety cage, rear seat belts and side impact airbags. Continuing this trend, the V40 is fitted as standard with City Safety and the world's first Pedestrian Airbag. Safety features, most fitted as standard, all help the Volvo V40 achieve the highest score ever recorded in a Euro NCAP test, helping toward Volvo's 2020 vision that no-one should be seriously injured or killed in a new Volvo.

World's First Pedestrian Airbag

In Europe, 14 per cent of all traffic fatalities are pedestrians. Accordingly, the Pedestrian Airbag means that, if collision with a pedestrian is unavoidable, the new technology will try and mitigate any injury.

Seven different sensors in the front bumper register the contact between the car and the pedestrian. The rear end of the bonnet is released and at the same time elevated by the deploying airbag, which is sited under the trailing edge of the bonnet. The inflated airbag covers the area

under the raised bonnet and approximately one third of the windscreen area and the lower part of the A-pillar.

The raised bonnet - made from soft metal - helps to absorb the pedestrian impact, while the airbag helps to cushion the pedestrian from potentially dangerous hard points on the car, the windscreen and A-pillars.

It works between 12 and 31 mph due to 90 per cent of pedestrian accidents happening below 41mph.

City Safety

City Safety avoids low speed accidents - statistically, the most common type of crash. These accidents typically happen in towns and they typically involve tailbacks of traffic. City Safety either eliminates such accidents or reduces the severity of the impact. The system works up to speeds of 31mph.

A laser sensor, fitted behind the rear-view mirror and looking through the windscreen, keeps an eye on traffic in front of the vehicle. It can detect vehicles up to 6 metres (approximately 30 feet) in front of the car's front bumper. City Safety reacts to vehicles in front that are either stationary or moving in the same direction.

City Safety helps either avoid or reduce the severity of the collision by automatically braking the car and reducing the throttle opening.

Volvo Car UK's own statistics show that chauffeur company, Tristar, reduced its 'at fault' rear impacts by 28% in the first six months of trialling City Safety.

Pedestrian Detection

Pedestrian Detection with Full Auto Brake, first shown on the Volvo S60, uses a radar unit integrated into the car's grille, a camera fitted just behind the interior rear-view mirror, and a central control unit. The radar detects any object in front of the car and determines the distance to it. The camera determines what type of object it is.

Thanks to the newly developed dual-mode radar's much wider field of vision, pedestrians about to step into the road are detected. The system can detect pedestrians who are 80cm (31 inches) tall and upwards - so that includes children.

If a pedestrian is detected, the driver first receives an audible warning combined with a flashing light in the windscreen's head-up display. At the same time, the car's brakes are pre-charged. If the driver does not react to the warning and an accident is imminent, full braking power is automatically applied.

Half of all pedestrian accidents occur at speeds below 15mph. Pedestrian Detection with Full Auto Brake can avoid a collision with a pedestrian at speeds up to 21mph if the driver does not react in time. At higher speeds, the focus is on reducing the car's speed as much as possible prior to the impact, reducing the likelihood of serious injury or death.

Collision Warning

Volvo's world-first Pedestrian Detection is a technical development of the company's Collision Warning system, which uses the nose-mounted radar to warn drivers if they're about to hit another vehicle, and apply the brakes automatically if necessary.

Unlike Pedestrian Detection and City Safety, this automatic braking technology is designed for higher speed, such as that encountered on motorways. A radar sensor fitted behind the grille, and a digital camera behind the windscreen, automatically monitor the distance to the vehicle in front.

If the vehicle in front suddenly brakes, or is stationary, or you are travelling too close, a red warning light flashes on the windscreen and a warning buzzer sounds. The braking system is also automatically pre-charged to prepare for panic braking: the pads move closer to the discs and the hydraulic brake pressure is increased. If the driver does not react to the warnings and a collision is imminent, automatic braking is applied to reduce the severity of the accident.

Automatic braking is only applied as a last resort. If the driver does not react or is too late, the car

will automatically brake.

Lane Keeping Aid

The Lane Keeping Aid in the V40 helps the driver stay in the intended lane. This feature applies extra steering torque to the steering column when the car gets close to a lane marking and is about to leave the lane. The system is active at speeds between 40mph and 125mph.

The forward-looking digital camera monitors the left and right lane markings. Lane Keeping Aid registers the car's progress between the lane markings and takes action if the driver shows signs of unintentionally drifting out of the lane.

As a first step, the car applies gentle steering wheel torque to help the driver steer back onto the intended course. If the car leaves the lane, the technology generates a distinctive warning through a haptic vibration in the steering wheel.

Blind Spot Information System

The V40 R-Design offers enhanced Blind Spot Information System (BLIS), which is now radar-based, to help the driver avoid potentially dangerous lane-changing manoeuvres. The technology can monitor and alert the driver to rapidly approaching vehicles up to 70 m (166 feet) behind the car. Of course, it still informs the driver about vehicles in the blind spots on both sides of the car.

The BLIS uses radar sensors located in the rear corners of the car, behind the bumper cover. The radar continuously scans the area behind and alongside the vehicle.

Warnings are displayed in LED indicators located in each A-pillar. A steadily glowing LED indicates when the radars cover a vehicle in the zone. The second warning level - LED flashing - occurs if the driver uses the turn indicator when the first alert is active.

Cross Traffic Alert

Cross Traffic Alert uses the same radar sensors at the rear end of the car to alert the driver to traffic crossing from the sides when he or she is reversing out of a parking space. This is especially helpful in tight and crowded areas where the side view might be limited or impaired.

The function warns of traffic up to 30 metres (100 feet) from the car. Smaller objects like bicycles and pedestrians may also be detected. The alert, which remains active as long as the target is present in the zone, is delivered to the driver as an audible signal and a warning in the centre screen.

Adaptive Cruise Control

To help the driver maintain a safe distance from the car in front, Volvo has developed Adaptive Cruise Control (ACC). It uses a radar sensor to measure continuously the distance to the vehicles in front and automatically adapts the speed of the car to help ensure the distance is not too short. This technology also forms the basis of several of Volvo's advanced driving and support systems, including Collision Warning, and Pedestrian Detection, with Full Auto Brake.

Driver Alert Control

A unique technology to alert tired and distracted drivers, Driver Alert Control monitors the car's progress between the lane markers and warns the driver if his or her driving pattern changes in a random or uncontrolled way.

Active High Beam

Active High Beam means you can drive on high beam - if you wish - and the car will dip the lights automatically. The advantage is you always get maximum illumination of the road ahead.

A digital camera monitors other vehicles and their headlamps and tail lamps. Advanced image processing software analyses this data and provides information about the position and direction of other vehicles. The calculation serves as the basis for automatic switching between low and high beam.

Active Bending Xenon Lights

Compared with conventional halogen headlights, Volvo's active bending lights - using dual xenon technology - more than doubles the driver's range of vision. The lamps are motorised, and can turn up to 15 degrees in either direction, as they follow the direction of the steered wheels. Thus, they help the driver to "see around corners". The headlights also self-adjust, always maintaining the correct angle to the road, maximising illumination and avoid dazzling oncoming motorists.

Road Sign Information

This technology displays road signs in the instrument display. The forward-facing camera detects speed limit signs as well as "no overtaking" signs and the road sign icon is then displayed until a new sign is detected.

Park Assist Pilot

When this technology is fitted, parallel parking becomes easy as the steering is taken care of by the car, the driver only has to control the speed. The parking manoeuvre is based on front, rear and side-facing ultrasonic sensors.

Other Safety Equipment - all fitted as standard

The all-new Volvo V40 features world-class crash safety including a safety cage with effective deformation zones and various grades of high-strength steel.

Safety belt pre-tensioners are standard in the front and outer rear seats and the front seats are equipped with whiplash protection (WHIPS) to help prevent neck injuries. Both the driver and front seat passenger seat have dual stage airbags. There are also side airbags integrated in the front seat backrests.

The driver's side is also fitted with a new knee airbag. It is installed in the dashboard above the pedals and deployed together with the other airbags in the event of a frontal collision.

The Roll Over Protection System includes a robust body structure, seat pre-tensioners and Inflatable Curtains. The Inflatable Curtains cover both sides, from the A-pillar to the C-pillar, and deploy in frontal offset, side or rollover accident situations.

ISOFIX attachments are standard and Volvo offers thoroughly tested child seats that cover ages from newborn up to 10 years.

Option Packs

To decrease the number of single options, which creates less confusion when customers are ordering and ultimately helps with residual values, Volvo has created a number of value option packs that are grouped within themes.

The Winter Pack groups heated front seats, heated front windscreen and a headlight cleaning system.

The Winter Illumination Pack includes active bending xenon lights, headlight cleaning, LED day running lights, heated front seats, heated front screen and rear reading, theatre and front door side step lights.

The Driver Support Pack groups Collision Warning with Full Auto Brake, Pedestrian Detection, Adaptive Cruise Control (with Queue Assist on automatic versions), Lane Departure Warning, Blind Spot Information System, Driver Alert Control plus Active High Beam and the Road Sign Information display.

The Sports Pack includes the lowered sports chassis, three-way adjustable steering with memory plus tinted rear/side windows.

Nav Variants can be specified on both R-Design and R-Design Lux and come fitted with the fully integrated satellite navigation system with voice activated control, a 7-inch colour display screen and DVD player. As well as full European mapping, two complimentary annual map updates are included.

Security

Volvo's On Call system uses advanced telematics to call for help during an emergency. The system uses the integrated GSM telephone and GPS satellite navigation to automatically call the emergency services when an airbag or seatbelt pre-tensioner is triggered during an accident. Alternatively, you can ring the emergency services by pushing a red SOS button located by the front reading light switches.

If the car breaks down or you need help, pressing the Volvo On Call button will put you straight through to a Volvo On Call operator who can offer roadside assistance.

Volvo On Call also offers vehicle tracking in case of theft.

Mobile app

The owner of a V40 R-Design can use a mobile application to stay in touch with the car via a smart phone. The mobile application is an extension of Volvo On Call, which originally focused on direct access to a call centre in the event of an accident or other emergency.

The mobile app, which is free and downloaded via the application stores, is designed to offer the owner an intuitive, easy-to-use relationship with the car from a distance. It is available on iPhone, Android and Windows smart phones. It includes a number of features:

- Enhanced driving journal. Detailed data of each trip during the last 40 days can be downloaded and stored. There is also a possibility to extract the data as an Excel file. Now allows you to see the route the car took on a map (incl. Google Street View) and gives speed/fuel consumption/battery consumption at specific time intervals.
- Send destination to the car. Using the map function within the app, select a location (within 50km) and send the destination to the car. This will then show-up in the car's RTI system.
- Outside temperature. Shows the temperature using web-based weather information at the parked location of the car.
- Honk and Flash. Allows the user to activate the horn or flash the lights independently to allow easy location of the car in busy areas.
- Car in motion. Shows if the car is in use.
- Car locator. The location of the car is shown on a map. There is also a digital compass that points the driver in the right direction.
- Remote door lock. The status of all doors and windows is displayed - and the driver can lock and unlock the car with a push on the touch screen.
- Vehicle dashboard. This feature gives the driver access to a wide range of information: fuel level, remaining range to empty tank, average fuel consumption, average speed, odometer reading and trip meter reading.
- Car check. The mobile app performs a "health" check of the car, displaying information about bulbs, brake fluid level, coolant level, engine oil level and engine oil pressure.
- Vehicle information. Basic car data such as model, registration number and VIN number are stored and can be displayed.
- Theft notification. If the car alarm is triggered, the driver is alerted.

Personal Car Communicator

Although very similar to the look of the standard remote fob, the PCC can do a lot more than just activate the locks and alarm. A simple push of a button can, within a few seconds, tell the car owner if:

- if the car is locked or unlocked
- The alarm has been triggered

The information is available and up-to-date as long as the distance between the PCC and the car is 100 metres or less. In addition, the most recent data is logged so the owner can at any time and any place check whether the car was locked when it was parked.

Locks, immobiliser and alarm

Standard features include a remote-control key fob that activates an alarm and strong deadlocks. Even if a thief does break into the car, for instance through breaking the glass, the deadlocks make it impossible to open the doors from the inside. The key fob also activates an electronic

immobiliser that makes starting the car impossible without the correct key. You can also take advantage of Volvo's "Global Opening and Closing", allowing the user to open or close of the windows and sunroof (if fitted) via the remote.

Customer Test Drives

Together with test drives offered by Volvo Dealerships, Volvo's own Freedom test drive programme allows potential customers, both retail and fleet, to attend a number of different locations to test drive the V40, the V40 R-Design and the V40 Cross Country. Offering two 45 minute unaccompanied test drives, at a time to suit the customer. Bookings can be made at www.volvocars.co.uk/freedom.

Keywords:

V40, Press Releases, 2013

Descriptions and facts in this press material relate to Volvo Car UK's car range. Described features might be optional. All information is correct at time of going to press and may be altered without prior notification.

media.volvocars.com >

volvocars.com >

Copyright © 2025 Volvo Car Corporation (or its affiliates or licensors).