

SUV world premiere – the new Cross Coupé GTE

North American International Auto Show

Detroit, January 2015

Key aspects

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Please note:

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All fuel economy and driving performance figures given in this press release are estimated values as of December 2014.

1 = US EPA standard adapted for hybrid vehicles with full utilization of the battery charge; highway and city cycle combined.

2 = New European Driving Cycle for cars with plug-in hybrid drive.

World premiere of the Cross Coupé GTE in Detroit: SUV is the ambassador of a new Volkswagen design language for the U.S.

German design and engineering merge with the American way of life

The Cross Coupé GTE offers a preview of a new Volkswagen SUV series

Ten important facts on the world premiere of the Cross Coupé GTE:

1. The Volkswagen Cross Coupé GTE is a mid-size SUV with V6 plug-in hybrid drive.
2. The Cross Coupé GTE combines German engineering and design with the automotive American way of life.
3. The SUV concept car is the protagonist of a new Volkswagen design language developed for the USA.
4. The front end of the concept car painted in "Grand Pacific Glacier" offers a look ahead at the face of a new SUV for the U.S.
5. With interactive gesture control, the instrument panel opens up a new dimension of information and operating quality.
6. 3.6 V6 FSI (206 kW), two electric motors (40 and 85 kW) and all-wheel drive with an "electric cardan shaft".
7. System output of 265 kW and a range of 70 MPGe¹ (combined).
8. Extremely sporty in "GTE Mode", zero emissions over distances of up to 20 miles (32 kilometers) in "E-Mode".
9. The concept car with five seats and a length of 190.8 inches (4.85 meters) offers outstanding comfort on long journeys.
10. From the end of 2016, Volkswagen will build the seven-seater mid-size SUV at the Chattanooga plant in Tennessee, United States.

Wolfsburg / Detroit, January 2015. At the end of 2016, Volkswagen of America will start production of one of the most important new models for the company in the last five decades in Chattanooga, Tennessee: a seven-seater mid-size SUV. The countdown for the premiere of the all-rounder with a length of around five meters (approx. 197 inches) has started. As a trailer to this new automotive blockbuster, Volkswagen is now presenting the five-seater Cross Coupé GTE at the North American International Auto Show (NAIAS, 12–25 January 2014) in Detroit: an exclusive SUV with a plug-in hybrid system, all-wheel drive via an "electric cardan shaft," maximum system output of 265 kW / 360 PS and a range of 70 MPGe¹. Klaus Bischoff, chief designer at Volkswagen says "The Cross Coupé GTE is the ambassador of a new design language developed by Volkswagen for the U.S." And he continues: "The concept car has a commanding presence; it is powerful with a look that could almost be described as aggressive. Numerous details hint at how we envisage a future production SUV model for North America. The underlying concept combines German engineering and design with the style of the automotive "American way of life". And that means high efficiency, clear and powerful lines, logical operation and supreme quality – combined with lots of space, superior performance figures and extremely good comfort.

Sporty and fuel-efficient. The acronym "GTE" describes the special concept of the Cross Coupé and generally applies to all Volkswagen models with plug-in hybrid drive – they are superior sporty vehicles with high-tech engines. They offer the touring characteristics of a grand tourer (Gran Turismo = GT) and, thanks to one or more electric motors and a battery (accounting for the "E" – as in Electric – in the acronym) that can also be charged externally, zero-emission driving is also possible. In Europe, the first GTE is already on the market and the second is waiting in the wings. They are able to drive longer distances in all-electric mode. The SUV presented in Detroit also becomes a zero-emission vehicle over distances of up to 20 miles or 32 kilometers (due to different type approval procedures the electric ranges for the USA and Europe cannot be compared on a 1:1

basis.) All GTE models can be driven in various operating modes. The Cross Coupé GTE has the programs "E-Mode," "GTE," "Hybrid," "Offroad" and "Battery Hold / Battery Charge".

Innovative technological matrix. The Cross Coupé GTE is the third concept car presented by Volkswagen on the way to the production version of the mid-size SUV. Together, all three concept cars – the CrossBlue presented in Detroit in January 2013, the CrossBlue Coupé most recently shown in Los Angeles in November 2013 and the Cross Coupé GTE that is now being presented at the NAIAS – represent just a part of the wide spectrum of SUV variants that can be realized on the basis of the modular transverse matrix (MQB) developed by Volkswagen. They were developed with the aim of offering an SUV in North America in the near future that is consistently tailored to the U.S. market.

Exterior

Dimensions. The Cross Coupé GTE painted in "Grand Pacific Glacier" blue demonstrates even stronger presence on the road than the concept cars unveiled in 2013. Although the design of all three SUVs was based on the Volkswagen design DNA and they have stylistic features in common, in all details the Cross Coupé GTE breaks with the concept cars previously presented and thus increases the momentum on the roadmap to series production. The concept car now presented in Detroit has a length of 190.8 in (4,847 mm) and a height of 68.3 in (1,736 mm). The concept car is 79.9 in (2,030 mm) wide. Klaus Bischoff says: "The car makes a visual statement from every angle. Regardless of whether you imagine the Cross Coupé GTE in Manhattan, driving along the Pacific coast in California or in the middle of the Rocky Mountains – this SUV designed especially for the USA has an effortlessly superior look everywhere.

Sophisticated front end. The powerful and exclusive exterior design is characterized by a very clear and logical line structure. The precise edges of the long hood look like they have been cut with a laser; it is raised in the middle and continues outwards and backwards to the striking fenders. The charismatic radiator grille is

the dominant feature of the very high front. More than ever, the headlights, indicators and the radiator grille merge to a single design module. Two solid aluminum transverse struts (polished at the front, brushed at the top) form the basic structure of the radiator grille. Like wings, the transverse struts become much flatter toward the outside in the direction of the LED dual headlights. The design of the lower air inlet is just as striking as that of the radiator grille. The outside is framed by a high-gloss black trim; on the inside, there is a polished aluminum insert with wing-shaped lines that are a mirror image of the corresponding elements on the radiator grille. The LED dual headlights are a particularly striking and distinctive feature and are reminiscent of the eyes of a bird of prey. The compact LED modules (which form a centrally positioned light spot like a pupil in every headlight) are partly responsible for this, as is an "eyebrow" positioned outside above it. The outer headlight modules generate the low beam, while the inner modules provide the high beam. The distinctive signature of the daytime running lights will also be recognized in future production models. This signature will be positively imprinted in the viewer's memory. It consists of the total of four light spots of the LED dual headlights and four "LED light wings": two at the top in the radiator grille and two in the lower air inlet.

Side profile. The sharp front ridge of the hood takes up a line that extends to the side over the front fenders and below the windows right across the side profile to the tailgate of the Cross Coupé GTE. Like the entire car, the side profile itself has powerful proportions and an extremely superior presence. The A-pillar set a long way to the back (thus emphasizing the raised hood) and the striking sloping C-pillars also characterize the design that has a clear focus on sporty exclusiveness yet also emphasizes the superior robustness of the large SUV.

In keeping with this is the dynamic area between the very high window line and the feature line with its deliberate low position with the precisely integrated door handles. A distinguishing characteristic

of the Cross Coupé GTE is that the feature line continues right to the flared wheel arches. The wheel arches themselves emphasize the power and the volume of the SUV with its extremely confident road stance. The wheel arch on the driver's side has the service flap for connecting the charging plug for the lithium-ion battery; the counterpart on the other side houses the tank filler neck. The 22-inch alloy wheels (tires: 285/40), each with ten highly polished spokes perfect the superior look of the side profile. The deliberately short and crisp body overhangs also catch the eye: in practical terms they make for optimum approach and departure angles during off-road driving.

Rear end. At the rear, the side feature line of the Cross Coupé GTE merges into a polished aluminum trim strip. Above this strip, the LED rear lights with a trapezoidal design are positioned. At the rear, too, the Cross Coupé GTE follows the parameters of the new Volkswagen design language for the USA. In this area it focuses on clear horizontal line structures. The geometry itself is extremely clear and unambiguous – a further typical feature. Fully in keeping with this are the striking design of the rear lights, the strict horizontal structure of the tailgate and the exhaust tailpipes with a high position typical of SUVs, which are part of an aluminum panel extending right across the bumper. In the middle of the vehicle, a skid plate underride protection with an integrated diffuser form the design element closest to the road. Klaus Bischoff says: "When you drive behind this vehicle you know which league it plays in. And that it is a Volkswagen."

The Volkswagen design team has made the LED rear lights just as striking as the LED headlights and the daytime running lights. The main red elements feature various glass inserts (colorless, transparent) and covers (high-gloss black and chrome). Even without active light, these rear lights therefore have their own special technical look, with the inner details taking up the outer shape of the lights again. At night, the individual light segments seem to float in the otherwise dark space of the rear lights.

Interior

Progressive, intuitive. The Cross Coupé GTE opens a window that offers a look at the immediate design future of the Volkswagen brand. This does not only apply to the exterior – the interior of the concept car also shows how the Volkswagen designers envisage a mid-size SUV of tomorrow. This look ahead to coming years does not reveal a break with the present but rather the consistent further development of two key features of Volkswagen interiors. The first feature is the clear, horizontal orientation of the interior architecture, especially the control panel. The second characteristic feature of every Volkswagen interior is the self-explanatory, intuitive operation and perception of all elements and systems. And Volkswagen will retain this in the age of interactive information and control systems. For example, the Cross Coupé GTE: the final switch from the analog to the fully electronic era of interior systems is taking place here on exactly this basis. With noticeably positive results: the consistent horizontal structure of the instrument panel creates a pleasant, clearly arranged, spacious and yet also cool and progressive atmosphere. The glossy black applications with the seamlessly integrated displays and chrome elements create an impression as though the elegant and precise details of modern touchscreen modules and the clear architecture of a design language influenced by the German Bauhaus movement have merged to create a new interior world.

Clearly structured instrument panel. In the area of the windshield, the concept car features a horizontal surface with a blue nappa leather border. The dark blue of the nappa leather ("Ink Blue") matches the exterior paintwork of the Cross Coupé GTE in the color "Grand Pacific Glacier". At the sides, there is a smooth transition of the leather surface to the door panels covered with the same material. Like a wing, the actual information and control level extends across the whole width of the Cross Coupé GTE. The dominant colors and materials in this area are polished aluminum and high-gloss Plexiglas with a black underlay (color "Piano Black")

and a scratch-resistant coating. On the outside, there are two horizontally positioned air vents made of polished aluminum. The 10.1-inch touchscreen of the infotainment system, which is integrated in the middle of the control panel, is framed by two sets of three vertically arranged air vents on the left and right-hand sides. The elements and materials are connected with exceptional precision and perfection in every detail.

The touchscreen of the infotainment system right at the top of the instrument panel has also been seamlessly incorporated. The whole area boasts a completely new architecture so that infotainment and instrument panel appear to be a single unit. All functions are controlled via the touchscreen. This high-end digital world in front of the driver is perfected by an Active Info Display, with displays that can be individually set by the driver. The infotainment touchscreen and the Active Info Display in detail:

- **Infotainment touchscreen / control.** The driver and front passenger can manage all infotainment functions and the basic vehicle configuration via the 10.1-inch touchscreen with approach sensors and – as a first – gesture control. The approach sensors are a familiar feature. By contrast, gesture control is a completely new feature. It is sufficient to swipe over a playlist with songs from some distance away to browse the list and play a different song.
- **Infotainment touchscreen / graphics.** The layout of the graphics changes depending on the driving profile – "Snow," "Sport," "Onroad" and "Offroad". Furthermore, navigation data can be displayed in a two-dimensional or three-dimensional space. In the 3-D view the user can configure the display individually at three or even more levels that float above one another in a virtual space. They all show the map with the position of the vehicle but with different information. An example of such a configuration: on the top level the driver has configured the "Points-of-Interest" (POI), the middle level has geographic information such as the current altitude while the

bottom "Car" level has the route and the position of the Cross Coupé GTE. The levels can be freely moved from the top to the bottom, but individual settings are always made on the top level. As outlined, the 3-D-configured map can also be displayed in 2-D. The system retrieves content information from the Internet, via satellite or from data media (navigation software, individually entered by the user). Furthermore, data such as the weather is also shown on the display. Here, too, the driver and front passenger can select the levels and information with gesture control. Needless to say, the screen can also be operated by directly tapping or swiping it.

- **Active Info Display.** The digital instrument has a classic tube shape. All instruments are realized purely virtually with software. Only the symbol lamps in the top part of the display are still designed as hardware. Here, too, the navigation information can be shown in 2-D and 3-D form. The display is 12.3 inches in size; the resolution of 1,440 x 540 pixels allows extremely precise high-quality interactive graphic presentation of all details. Individual interactions/graphics are allocated to different basic functions. The graphics change, for example depending on the drive mode selected (e.g. "E-Mode" or "GTE"). What's more, information such as driving, navigation and assistance functions can be integrated in the graphic areas as required. The driver can also transfer data shown on the touchscreen (e.g. telephone contact pictures or CD covers) to the Active Info Display.

Climate control via touchscreen. A horizontal strip made of brushed aluminum, which runs across the whole width of the interior, and additional elements with a horizontal arrangement and ambient lighting upgrade the area below the infotainment system and the Active Info Display. As with the infotainment system, a touchscreen is used for the climate control, including climatized seats. On the left-hand side of the level surfaces of the center console that are ergonomically tailored to the driver is the selector

lever for the 6-speed DSG with a switching logic controlled by wire: like a joystick, it is always in a central position. A quick click activates the "R," "N" and "D" modes. A separate button, integrated in the selector lever, is used to switch to "P" position. The driving profile selector for the four driving profiles "Onroad," "Offroad," "Sport" and "Snow" has also been consistently positioned for easy access by the driver on the left-hand side (behind the DSG shift lever). The high-tech design of the driving profile selector with "light pipe" elements (transparent, perfused with LED light) and an HD display is fully in keeping with the progressive overall look of the interior. In the middle (between the DSG selector lever, driving profile selector and cup holder area) are the black hard keys for "ESC," "E-Mode" and "GTE-Mode" and (separately with an aluminum design) "start/stop engine". Two cup holders are positioned to the right of the DSG selector lever where they are easily accessible. When not in use, they are covered by a flap in "Piano Black".

Panoramic glass sunroof. There is a further console above the center console in the roof area: touch buttons here control the panoramic glass sunroof, a corresponding sunblind and the interior light functions.

Five seats and level cargo floor. The seat system features elegant bi-color nappa leather (also semi-aniline). A dark "Ink Blue" creates a bucket effect and thus emphasizes the striking shape of the seats. The sports seats with comfortable contours offer excellent support and outstanding comfort on long journeys. The seat center panels feature perforated leather; the pattern creates a visual link to the aluminum covers of the high-end door loudspeakers. The rear seat bench (three seats) can be folded in the ratio 1/3 to 2/3; this results in a continuous cargo floor. As in the front, the interior temperature can also be controlled via a touchscreen in the center console at the rear.

Rear seat entertainment. Attachments for tablets are incorporated in the headrests of the rear seats. The Volkswagen "Media Control"

app enables the tablets to access various functions of the infotainment system via Wi-Fi. The functions that can be controlled include the radio, all media sources and navigation.

Drive system

One car, all drive types. The design of the Cross Coupé GTE is based on the modular transverse matrix (MQB) developed by Volkswagen. This matrix is one of the most innovative technical platforms worldwide, since MQB enables Volkswagen not only to offer a model with conventional drive types (gasoline and diesel engines) but also to realize them as a plug-in hybrid, a natural gas version and as zero-emission vehicles (pure electric drive and hydrogen fuel cell). This means that the Cross Coupé GTE, too, can be realized with every conceivable drive type.

3.6 FSI and two electric motors. The SUV concept car is powered by a 3.6-liter V6 gasoline engine and two electric motors. The six-cylinder direct-injection engine (FSI) delivers power of 206 kW / 280 PS and maximum torque of 350 Nm. The two electric motors deliver 40 kW and 220 Nm (front) and 85 kW and 270 Nm (rear). They are powered by a compact lithium-ion battery housed in the center tunnel, with energy content of 14.1 kWh. The total output of the drive system adds up to 265 kW / 360 PS. With this full power, the Cross Coupé GTE, which has a top speed of 130 mph (209 km/h), accelerates to 60 mph (97 km/h) in just 6.0 seconds.

Driving profiles. The following driving profiles are available for the Cross Coupé GTE: "Onroad" (with the sub-modes "Comfort" and "Eco"), "Offroad" (with "Rocks," "Sludge & Sand" and "Gravel"), "Sport" and "Snow". The driving profiles change the setup of the SUV.

Drive modes. The Cross Coupé GTE can be driven in five different modes, which are intuitive to use: "E-Mode," "Hybrid," "GTE," "Offroad" and "Battery Hold / Battery Charge".

"E-Mode". Thanks to the lithium-ion battery in the center tunnel, the Cross Coupé GTE can travel, as described, a distance of up to 20 miles (32 kilometers) powered purely by electricity. In E-Mode, which is activated when the driver presses a button, the 85 kW rear axle electric motor alone drives the vehicle. In all-electric mode, the V6 FSI is decoupled from the drivetrain by disengaging the clutch and shut down. As soon as the six-cylinder engine needs to be restarted due to the battery charge status or other parameters, it engages smoothly in the drivetrain again in a fraction of a second. A lithium-ion battery, with energy content of 14.1 kWh, supplies energy to the electric motors. Power electronics integrated in the front engine compartment manage the flow of high-voltage energy from and to the battery and to the electric motors. The 12 volt electrical system is supplied by a DC/DC converter. The battery is charged via external power sources or while driving.

"Hybrid". The concept car starts in "Hybrid Mode" by default. The Cross Coupé GTE is then a classic full hybrid that charges the battery via regenerative braking and automatically uses the FSI and/or the electric motor depending on the drive situation. In this mode, the battery state of charge is kept constant; the driver can also actively influence this with the battery hold function.

- **"Coasting"**. As soon as the driver takes his or her foot off the accelerator and the battery is sufficiently charged, the engine and all motors are shut down and disengaged from the drivetrain. This is called "coasting" and does not produce any emissions either.
- **"Recuperation Mode"**. If the driver removes his or her foot from the accelerator or brakes when the battery is not sufficiently charged, both electric motors work as generators and feed the energy generated during braking to the lithium-ion battery. In this case, too, the FSI is shut down and disengaged.
- **Driving with the FSI**. When the gasoline engine alone is powering the vehicle, the concept car is a purely front-wheel-drive vehicle. Thanks to the efficient technology of the six-

cylinder direct injection engine, the Cross Coupé GTE continues to be very economical.

"GTE". The driver uses the GTE button to switch to GTE mode and activate the particularly agile side of the concept car. This makes the accelerator pedal, transmission and steering characteristics even sportier. In addition, the FSI and the electric motors work together in "GTE Mode" during "boosting" to deliver the full system output and the maximum system torque.

"Offroad". Needless to say, the "Offroad" drive mode is particularly important for an SUV. All four wheels are powered as soon as the driver activates this mode. In this case and when the battery state of charge is low, the front electric motor is employed exclusively as a generator that is driven by the V6 FSI in order to provide the power for its counterpart on the rear axle. As the power to drive the rear axle flows by wire and not mechanically, we speak of an "electric cardan shaft". Due to the fact that the FSI drives the rear electric motor via the front electric motor in off-road mode, all-wheel drive is available even when the battery has a low state of charge. This means that the Cross Coupé SUV features an off-road capable all-wheel drive even as a plug-in-hybrid version.

"Battery Charge / Battery Hold". The dual mode "Battery Hold" (energy content of the battery stays constant) and "Battery Charge" (battery is charged whilst driving) is activated via a sub-menu in the infotainment system. It serves to deliberately drive in all-electric mode ("E-Mode"), for example when reaching an urban destination, without producing any emissions.