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The new Audi A5 and S5 Coupé

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The equipment, data and prices specified in this document refer to the model range offered in Germany. Subject to change without notice; errors and omissions excepted.

Compact

Spotlighting the new Audi A5 and S5 Coupé

Ingolstadt, June 2, 2016 – Audi is celebrating the world premiere of the new A5* and S5 Coupé* with a spectacular 3D light show at the company's headquarters in Ingolstadt. Both of these sophisticated cars demonstrate sporty elegance and deliver loads of high-tech features to customers.

Designers have thoroughly revamped the appearance of the Audi A5 Coupé. Now they are showcasing the elegant and athletic two-door car. At 4.67 meters (*15.4 ft*) long and 1.37 meters (*4.5 ft*) high, it claims the sportiest proportions in the premium segment. The hood is long; the low roof flows gently to the short rear end. Especially distinctive: the wide, flat Singleframe, the Matrix LED headlights, the wavelike side lines and the flared wheel arches. The exterior mirrors are placed on the door top shoulders, like a racing car – one more indicator of the sporty nature of the A5 Coupé.

Its newly developed steering features a direct ratio, responds spontaneously and provides precise road feedback. The A5 winds its way nimbly through tight curves. The body features even greater torsional rigidity than its predecessor and is among the lightest contenders in its class. It also takes top position in terms of aerodynamics and aeroacoustics. As a result, the Coupé glides quietly through the wind and its newly designed suspension offers greater comfort, especially for long-distance driving. The icing on the cake is the suspension with damper control, which switches its focus at the push of a button from comfort to sporty dynamics.

Engineers have boosted the performance of the new gasoline- and diesel-powered engines by 17 percent while also improving their fuel economy by almost a quarter. A six-speed manual transmission sends power to the front axle. Drivers can also choose to leave the selection of gears to the swift seven-speed dual clutch transmission or the equally proficient eight-speed torque-converter transmission, now available in the A5 for the first time. The optional quattro drive system can distribute power to all four wheels.

The ultimate highlight is the new turbocharged V6 engine in the S5. With 354 hp, it delivers 500 newton meters (*368.8 lb-ft*) of torque to the crankshaft, sending the speedometer from 0 to 100 km/h (*62.1 mph*) in just 4.7 seconds. And, thanks to its S sport suspension, the top model sits even closer to the road. At higher speeds, the optional sport differential – also available for the TDI with 286 hp – pushes the car resolutely into curves. Understeering? No sign of that here!

The power contained within the trim exterior is emphasized by the S5 logo with a red rhombus on the flanks, grille and tailgate. The logo is also found on the interior – as the welcome screen on the MMI display, on the chrome trim around the gear selector and on the door sill trim.

Cruising the Internet at high speed: Using LTE online, the A5 displays traffic information, interesting locations, fuel prices and news, streams audio files from your smartphone, transfers its calendar to the MMI and automatically summons help in an accident, among other things. Drivers can also use an app to lock and unlock the Coupé as well as to find out where it is parked. Support is provided by a long list of assistance systems that set new standards in the class. In congested traffic the A5 drives in a semiautomated mode, maintains a distance to the car in front, helps avoid rear-end collisions and evades obstacles. It also monitors oncoming traffic when turning left, recognizes traffic signals, warns of cars in the blind spot and if your car leaves its lane, and parks autonomously. Seats with a massage function, three-zone climate control, steering wheel heating, electrically extending and retracting seat belt feeders, 3D sound system and a large, panoramic glass roof round out the premium features of the A5.

The new Audi A5 and S5 Coupé will be available at dealerships in fall. Both models roll off the assembly line in Ingolstadt.

Summary

Sporty elegance – the new Audi A5 and S5 Coupé

Audi revolutionized its mid-size class in 2007 with the A5. The Ingolstadt-based carmaker created a work of art that took fans around the world by storm. Nine years later marks the launch of the second generation – with a new, honed look and high tech everywhere. The new generation of the A5 Coupé* is athletic, sporty and elegant. Its design goes hand in hand with sophisticated aerodynamics. Under the skin the A5 impresses with an all-new chassis, powerful engines, and innovative infotainment features and driver assistance systems.

How do you make a design masterpiece even more beautiful? Audi designers have been pondering this question for years. The results are impressive: The new Audi A5 Coupé sports a fresh, modern and honed look. It is nevertheless true to its DNA with the sporty and elegant character being passed down to the new version. The best example is the now three-dimensional wave-shaped shoulder line that already characterized the previous model. The precisely sweeping line with pronounced bulges over the wheel arches emphasizes all four wheels – a cue to the quattro all-wheel drive.

The perfectly balanced proportions with a long engine hood, the stretched wheelbase and short overhangs underscore the sportiness of the new A5 Coupé. The sculpted Singleframe grille is significantly flatter and wider than in the previous model. The LED rear lights and optional LED or Matrix LED headlights with dynamic turn signals make high-end technology visible even after dark.

Engines

The new Audi A5 Coupé* will launch in Germany with five engines: two TFSI and three TDI units. Their power output has increased considerably and is now between 140 kW (190 hp) and 210 kW (286 hp). Compared with the previous model, they offer up to 17 percent more performance while consuming as much as 22 percent less fuel. All the engines combine high efficiency with sporty power development and smooth running – especially the two 3.0 TDI six-cylinder engines.

With its newly developed 3.0 TFSI, the Audi S5 Coupé* is now in a league of its own. The turbo V6 exhibits highly efficient, sports car-like performance. From its 2,995 cc of displacement, the boosted six-cylinder engine produces 260 kW (354 hp) of power, which is 15 kW (21 hp) more than the engine in the previous model.

Drivetrain

The new Audi A5 Coupé* comes with a drivetrain solution tailor-made for each engine variant. The manual six-speed gearbox and the seven-speed S tronic are used with the four-cylinder engines as well as the 160 kW (218 hp) 3.0 TDI with front- or all-wheel drive. The eight-speed tiptronic is reserved for the top diesel with 210 kW (286 hp) and the S5 engine. Both engines come standard with quattro all-wheel drive. Audi also offers the optional rear-axle sport differential for even more dynamic driving and precision.

The new quattro with ultra technology is also available for the first time. At the moment it can be combined with the four-cylinder TFSI and TDI engines with manual transmission. Optimized for efficiency, the drive system does not exhibit any perceptible differences to permanent systems in terms of traction and driving dynamics.

Chassis

The all-new chassis is among the strengths of the Audi A5 Coupé*. It offers the driver optimal comfort combined with a high degree of agility. The A5 thus handles narrow, winding mountain roads and long trips on the *Autobahn* with equal aplomb. Audi offers a suspension with damper control as an option. This is integrated into the dynamic handling system known as Audi drive select, which enables the driver to modify the basic characteristic in multiple steps.

The electromechanical power steering is also a new development from Audi. It adapts according to the vehicle's current speed and provides highly precise road feedback. Optionally available is the dynamic steering, which varies its gear ratio depending on the speed and steering angle.

Body

The Audi A5 Coupé* is significantly more efficient than its predecessor. This is due in large part to a reduction in weight as well as sophisticated aerodynamics. The engineers were able to trim the curb weight by as much as 60 kilograms (*132.3 lb*). The body is the lightest in the competitive field thanks to an intelligent mix of materials and lightweight design. With a drag coefficient of 0.25, the A5 Coupé is also the segment leader with respect to aerodynamics.

Interior

The interior benefits from the increased dimensions and longer wheelbase. Space for driver and passengers is more generous. The horizontal architecture of the instrument panel and the continuous air vent strip create a wide sense of space. As is typical for Audi, interior build quality is uncompromisingly high. High-quality materials in a wide range of colors provide for a particularly pleasant ambiance and underscore the premium character of the mid-sized model. Optional ambient lighting highlights the interior with a choice of 30 adjustable shades. The new A5 Coupé* also redefines the class benchmark for aeroacoustics. The acoustic comfort is almost that of a luxury-class model.

The luggage compartment offers a volume of 465 liters (*16.4 cu ft*), 10 liters (*0.4 cu ft*) more than with the previous model. The rear seat has a 40:20:40 split and can be easily folded forward using levers in the luggage compartment. Audi also offers the two-door coupé with optional gesture control for opening the luggage compartment lid via a foot motion. The optional trailer hitch is electrically released at the press of a button.

Display and controls

The A5 Coupé* is now available for the first time with the optional Audi virtual cockpit, a 12.3-inch TFT display with a resolution of 1,440 x 540 pixels. Together with the MMI navigation plus including 8.3-inch monitor on the center console, it forms the central information unit. The focal point of the MMI terminal is the round rotary pushbutton. Its surface is home to the touch-sensitive touchpad. The touchpad is used to input characters and also for multifinger gestures, enabling the driver to zoom in on the map, for example.

The whole MMI control logic is similar to that of a smartphone, including the intelligent free text search function. The new, more natural voice control system can recognize input made using everyday language, such as: “I would like to call Peter.”

Infotainment and Audi connect

Customers choosing MMI navigation plus automatically also get the hardware module Audi connect and the new Audi connect SIM, a SIM card permanently installed in the car. The new Audi A5 Coupé* uses this to connect to the Internet via the ultrafast LTE network. Use of the versatile Audi connect services is free of charge of three years, both in Germany and in most European countries. The respective national provider is selected automatically as needed.

Independent of the integrated Audi connect services, customers can also purchase optional data packages for individual Internet use using the Wi-Fi hotspot. This allows all passengers to surf the Web and send/receive email with up to eight mobile devices at attractive rates.

The A5 can also be equipped with the optional Audi connect safety & service package. This includes such functions as an automatic emergency call in the event of an accident, online roadside assistance and Audi service request as well as remote functions that can be used with the MMI connect app on a smartphone, smartwatch or – in conjunction with the fourth generation Apple TV – from a television. Examples include locking and unlocking the car, checking where the car is parked and calling up the vehicle status.

With the Audi smartphone interface, Apple Car Play and Android Auto bring the familiar smartphone environment to the car, if desired. The optional Audi phone box with wireless charging in the center armrest uses near-field coupling to link smartphones wirelessly to the vehicle’s antenna and enables inductive charging according to the Qi standard. For very discerning hi-fi fans, the Bang & Olufsen sound system with its innovative 3D sound is available as an option.

Driver assistance systems

An intelligent combination of different technologies enhances the safety, comfort and efficiency of the new Audi A5 Coupé*. At the same time, Audi is also taking the next step toward piloted driving.

The broad choice of innovative driver assistance systems sets standards in the segment. Compared with the previous model, nearly all of the systems are either completely new or have been extensively updated.

The predictive efficiency assistant helps the driver save fuel, Audi active lane assist helps keep the car on track in the driving lane, and the Stop&Go adaptive cruise control including traffic jam assist offers the driver relief in slow-moving traffic. New and important safety features include the park assist, cross traffic assist rear, exit warning, collision avoidance assist and turn assist as well as the Audi pre sense systems. Camera-based recognition of traffic signs rounds out the lineup.

The new Audi A5 Coupé will launch in Germany and additional European countries in fall 2016. Compared with the previous model, the list of standard equipment is even more generous. Among the features included are xenon headlights with LED daytime running lights and LED rear lights, LED interior lights, the Audi MMI radio plus with 7-inch MMI color display, Bluetooth and USB charging function, the three-spoke multifunction steering wheel (including shift paddles in models with automatic transmission), height-adjustable belt feeds, the Audi drive select dynamic handling system and Audi pre sense city.

New trim lines provide numerous customization opportunities, for both the interior and the exterior. Besides the base model, there are also the sport and design lines. The S line sport package and the Audi design selection are available for sophisticated customization, particularly for the interior. Audi offers the S line exterior package for a particularly dynamic appearance.

The Audi S5 Coupé

From 0 to 100 km/h (*62.1 mph*) in 4.7 seconds. The new Audi S5 Coupé* combines dramatic elegance with the performance of a sports car. Its newly developed, turbocharged V6 engine produces 260 kW (354 hp) and consumes just 7.3 liters of fuel per 100 km (*32.2 US mpg*). The sharper S exterior design and the S-specific details in the interior underscore the dynamic character of the Audi two-door sports coupé.

At a glance

The new Audi A5 and S5 Coupé

Exterior design

- Elegant sportiness: further development of a design highlight
- Emotional and sporty proportions
- Sporty and athletic coupé front end with wide, flat Singleframe, hood with power dome visualization
- Sharp, precise shoulder line in the form of a wave emphasizes the sculpturally expressed quattro visualization
- Finely contoured headlights, optional LED and Matrix LED headlights with dynamic indicator
- Elegant three-dimensional LED rear lights and long brake lights at the upper edge of the rear window

Engines

- New TFSI and TDI engines with up to 17 percent more power and up to 22 percent lower fuel consumption
- 2.0 TFSI with 140 kW (190 hp) and 320 Nm (*236.0 lb-ft*)
- 2.0 TFSI with 185 kW (252 hp) and 370 Nm (*272.9 lb-ft*)
- 3.0 TFSI with 260 kW (354 hp) and 500 Nm (*368.8 lb-ft*)
- 2.0 TDI with 140 kW (190 hp) and 400 Nm (*295.0 lb-ft*)
- 2.0 TDI ultra with 140 kW (190 hp) and 400 Nm (*295.0 lb-ft*)
- 3.0 TDI with 160 kW (218 hp) and 400 Nm (*295.0 lb-ft*)
- 3.0 TDI with 210 kW (286 hp) and 620 Nm (*457.3 lb-ft*)

Drivetrain

- New versions of manual gearbox, S tronic and tiptronic
- For four-cylinder models with manual gearbox: new quattro with ultra technology and improved efficiency
- Option for 3.0 TDI with 210 kw (286 hp) and S5 3.0 TFSI 260 kW (354 hp): quattro with sport differential

Chassis

- Five-link construction: Chassis even more dynamic and precise while simultaneously offering greater comfort
- Newly developed electromechanical power steering for better road feedback and steering precision; optionally with dynamic steering for improved driving feel and greater comfort

- Audi drive select dynamic handling system standard
- Optional suspension with damper control featuring wider adjustment range of the individual Audi drive select modes
- Audi A5: Suspension with low ride height as standard, sport suspension and suspension with damper control as options
- Audi S5: S-specific sport suspension standard; optionally with damper control

Interior

- New, horizontally oriented architecture with continuous air vent strip creates a feeling of spaciousness
- Perfect workmanship with optimal functionality
- Use of high-quality materials and new colors
- Interior with 17 millimeters (*0.7 in*) added length; more shoulder, head and knee room
- Pneumatic massage function (optional for sport seat and standard seat)
- Deluxe automatic air conditioning for particularly high air quality and with new user interface
- Seat belt height adjustment for the front seats with power belt feeds
- Best-in-class luggage compartment: 465 liters (*16.4 cu ft*) – 10 liters (*0.4 cu ft*) more than the previous model
- Full-surface, retractable panoramic glass sunroof for a light-flooded interior (optional)
- Optional automatic heated windshield and heated steering wheel

Operation

- Completely redesigned MMI operating concept including intuitive free text search function
- Operation also with the multifunction steering wheel and natural language voice control
- Optional Audi virtual cockpit and head-up display

Infotainment and Audi connect

- Optional top infotainment system MMI navigation plus with MMI touch, including 8.3-inch MMI monitor and three years of free Audi connect, LTE data transmission
- Numerous new Audi connect services, including remote control via smartphone app for operation and checking of the car
- Audi connect SIM, Wi-Fi hotspot data packages and EU-wide roaming

- Audi MMI connect app for smartphone, smartwatch and Apple TV Generation 4
- Audi connect safety & service
- Audi smartphone interface for integrating Apple and Android cell phones into the Audi MMI color display (optional)
- Audi phone box with inductive charging available
- High-end option: Bang & Olufsen Sound System with innovative 3D sound, 19 loudspeakers and 755 watts of power

Driver assistance systems

- Next step toward piloted driving: intelligent interaction between various driver assistance systems
- adaptive cruise control with Stop&Go function, including traffic jam assist for driving in slow-moving traffic
- Predictive efficiency assistant helps with anticipatory driving to save fuel and reduce CO₂
- Audi active lane assist and Audi side assist
- Also new: park assist, cross traffic assist rear, exit warning, turn assist, collision avoidance assist and camera-based recognition of traffic signs
- Safety systems: Audi pre sense city, basic and rear, multicollision brake assist system

Body:

- Length 4,673 millimeters (*15.3 ft*), wheelbase 2,764 millimeters (*9.1 ft*), width 1,846 millimeters (*6.1 ft*), height 1,371 millimeters (*4.5 ft*)
- Lightweight construction: Weight reduced as much as 60 kilograms (*132.3 lb*) versus previous version
- Best c_d value in its class: 0.25

Equipment

- Comprehensive standard equipment: Xenon headlights with LED daytime running lights, LED rear lights, belt feeds with height adjustment, LED interior lighting, Audi drive select dynamic handling system, Audi pre sense city and more.
- Optional large panoramic glass sunroof can be almost fully opened
- S sport seat with pneumatic massage function and side bolster adjustment (A5 S line and S5)

- New equipment concept with the lines sport and design – for the first time also with exterior differentiations as well as the S line sport package, Audi design selection and S line exterior package equipment packages

Audi S5 Coupé

- Newly developed 3.0 TFSI engine combines sports car performance with a new level of efficiency
- 260 kW (354 hp) of power and 500 Nm (*368.8 lb-ft*) of torque
- In 4.7 seconds from 0 to 100 km/h (*62.1 mph*)
- More power, yet five percent lower fuel consumption: 7.3 liters of per 100 kilometers (*32.2 US mpg*)
- 60 kilograms (*132.3 lb*) lighter than its predecessor.
- Sharper exterior design and S-specific details in the interior
- Audi virtual cockpit with S-specific display for a sportier look; option for tachometer in the middle

Full version

The new Audi A5 Coupé – the aesthete from Ingolstadt

A design highlight embarks into the future. The new A5 Coupé* combines emotional design with sporty handling characteristics and progressive technology. The mid-size model is fully networked and offers the latest infotainment solutions from the brand with the four rings. The intelligent interaction between various driver assistance systems represents the next step in the direction of piloted driving. Up to 60 kilograms (*132.3 lb*) less weight, a top value for aerodynamics plus very efficient and even more powerful engines – these facts and figures also speak for themselves.

Exterior design

The Audi designers combined dramatic shapes and athletically taut surfaces in the design of the new A5 Coupé*. The two-door coupé clearly exhibits sporty, perfectly balanced proportions. The stretched wheelbase, the short overhangs and the long, encompassing engine hood with power dome underscore the dynamics of the model.

Side view

The sharply drawn, wave-like shoulder line gives the Audi A5 Coupé* a unique expression of dramatic elegance. The characteristic wave was already the defining design element that characterized the previous model. It is now even more precisely formed and captivates with its three dimensionality allowing for an exciting play between light and shadow. The sweeping line with the pronounced bulges over the wheel arches underscore the quattro DNA. At the transition from the front wheel arch to the doors, a three-dimensional chrome trim element underscores the sporty ambitions of the new Audi A5 Coupé. The exterior mirrors are sportily mounted on the top shoulders of the doors. From the A-pillar, which has been shifted far to the rear, the roof extends over the athletic body as a flat, flowing dome. The side windows are framed by a matt, aluminum silver trim strip. From the forward-inclined C-pillar, it becomes steadily wider and runs in a curve.

Sporty coupé front end

The pronounced sportiness of the front end is another identifying feature of the new Audi A5 Coupé*. The three-dimensionally designed Singleframe grille is significantly flatter and wider than in the previous model. Depending on the equipment level and trim line, the radiator grille is either a subtle matt black, a light and sporty matt twilight gray with matt aluminum silver horizontal slats in the trim line A5 sport, or an elegantly dark titanium black with chrome horizontal slats in the trim line A5 design. The side air intakes have bold edges, and with the optional S line exterior package honeycomb grilles and sporty, horizontal trim strip in matt aluminum silver extending across the entire width of the automobile.

Headlights

The finely contoured headlights in the new Audi A5 Coupé* harmonize perfectly with the horizontal lines of the front end. They are positioned slightly above the top edge of the Singleframe grille, which is drawn down quite far – a surprising design detail and a first in the A5 model line.

The optional LED headlights and Audi Matrix LED headlights have all lighting functions in LED technology. The new light signature of the Audi Matrix LED headlights has a characteristic and focused four-eyed face, with the low and high beam giving the impression of a double eye. For the standard xenon headlights, the daytime running lights are located on the upper edge of the housing and also serve as the turn signal.

18 LEDs shine through two lenses to produce the high beam of the Matrix LED headlights. Provided with information from the camera on the interior mirror, the LED control unit switches them on and off individually or dims them in 64 steps as necessary. This enables the Matrix LED headlights to produce several million light distribution variants. They always light the road with the optimal distribution of a light similar to daylight, but without blinding other road users with glare. To prevent the driver from being blinded by glare from highly reflective traffic signs, these are specifically illuminated with reduced power.

The cornering light of the Matrix LED headlights is produced by shifting the focal point of the light. Thanks to predictive route data provided by the optional MMI navigation plus, it is activated before the steering wheel is turned. The dynamic turn signals, which are produced by a row of sequentially activated light-emitting diodes, run from the inside out in the direction the driver is turning to send clear and intuitively understood signals to the surroundings.

Rear end

The short rear end of the new Audi A5 Coupé* features clearly horizontal lines. The luggage compartment lid ends in a distinctive spoiler lip. Separate reflectors in the lower section of the rear apron, which is painted in the body color, emphasize the width of the two-door coupé.

Depending on the engine, the exhaust system is either a single or dual-branch system. It terminates either in a twin exhaust tailpipe on the left (TDI) or two separate tailpipes (TFSI), which with the trim lines sport chrome tips.

The slim, three-dimensional rear lights are implemented in LED technology as a standard feature. Their sculpted geometry is underscored by the LED light signature. The outer vertical edge emphasizes the full width of the rear end. The delicate brake light sits below the luminaries, and the dynamic turn signal (LED headlights and above) from a strip in the upper section. The third brake light, which uses light guide technology, is a very delicate element at the upper edge of the rear window spanning its entire width.

Greater freedom of choice: the new lines

With the model changeover Audi is introducing modular equipment lines for the new A5 Coupé*. These give customers greater freedom of choice and also include exterior details. Besides the base model, there are also the sport and design lines. The S line sport package and the Audi design selection appearance packages are aimed at upgrading the interior, in particular.

And the new A5 Coupé is also available with the S line exterior package for a custom, particularly dynamic appearance. It can be combined with any of the trim lines and styling packages, and includes such bold, sporty accents as:

- the twilight gray radiator grille with matt aluminum silver slats
- sporty, boldly styled front and rear bumpers
- matt titanium black air inlet grilles in honeycomb look
- a sporty, horizontal trim strip in matt aluminum silver that spans entire width of the front end and connects the air inlets with one another
- sill trims painted in body color with black textured side sill strips
- the matt twilight gray diffuser with integrated, black textured honeycomb grille

The illuminated door sill trims bear an S rhombus symbol and the chrome trim element above the front fenders has an S line logo.

Color palette and dimensions

A choice of 15 paint finishes is available for the new Audi A5 Coupé*. The solid paint finishes are brilliant black and ibis white; the metallic finishes are Argus brown, cuvée silver, Daytona gray (S line sport package and S line exterior package), floret silver, glacier white, Gotland green, Manhattan gray, matador red, moonlight blue, monsoon gray, mythos black, scuba blue and tango red.

The new Audi A5 Coupé has gained 47 millimeters (*1.9 in*) in length and now measures 4,673 millimeters (*15.3 ft*). Width is 1,846 millimeters (minus 8 mm) (*6.1 ft / minus 0.3 in*) and the height 1,371 millimeters (minus 1 mm) (*4.5 ft / minus 0.04 in*) – that is the sportiest ratio in the premium segment. The wheelbase measures 2,764 millimeters (*9.1 ft*), an increase of 13 millimeters (*0.5 in*).

Engines

The new Audi A5 Coupé* will launch in Germany with a choice of two TFSI and three TDI engines. They produce between 140 kW (190 hp) and 210 kW (286 hp). Compared with the previous model, their fuel consumption has been reduced by as much as 22 percent while power output has increased by up to 17 percent.

All engines satisfy the limits of the Euro 6 emissions standard. There is a 12-liter (*3.2 US gal*) tank for the AdBlue additive in addition to the standard tank. A 24-liter (*6.3 US gal*) tank is available as an option. The standard, updated start-stop system includes changes that further reduce fuel consumption. When the driver approaches a red light, it can already deactivate the engine at speeds below 7 km/h (*4.3 mph*) (with S tronic; with tiptronic: 3 km/h (*1.9 mph*)).

The new Audi S5 Coupé* is in a league of its own. Its newly developed 3.0 TFSI engine combines sports car performance with a new level of efficiency. From its 2,995 cc of displacement, the turbocharged six-cylinder engine produces 260 kW (354 hp), which is 15 kW (21 hp) more than the engine in the previous model.

2.0 TFSI engines

Two versions of the 1,984 cc, 2.0 TFSI engine are available in the new Audi A5 Coupé*. Technical highlights include the exhaust manifold integrated into the cylinder head, the rotating core module for the thermal management system, the Audi valvelift system (AVS) for the exhaust valves, the turbocharger's electric waste gate and dual injection, in which indirect manifold injection supplements FSI direct injection.

The top version of the 2.0 TFSI produces 185 kW (252 hp). 370 Nm (*272.9 lb-ft*) of torque is available between 1,600 and 4,500 rpm. Performance is sporty: With quattro all-wheel drive, the Audi A5 Coupé sprints from 0 to 100 km/h (*62.1 mph*) in 5.8 seconds on its way to an electronically limited top speed of 250 km/h (*155.3 mph*). The unit consumes 5.9 liters of fuel per 100 kilometers (*39.9 US mpg*), which corresponds to 136 grams CO₂ per kilometer (*218.9 g/mi*).

The second variant of the 2.0 TFSI puts out 140 kW (190 hp), with 320 Nm (*236.0 lb-ft*) of torque available between 1,450 and 4,200 rpm.

Performance is extremely agile here, as well: 7.3 seconds from 0 to 100 km/h (*62.1 mph*) and a top speed of 240 km/h (*149.1 mph*) (with S tronic).

The unit consumes 5.1 liters of fuel per 100 kilometers (*46.1 US mpg*), which corresponds to 117 grams CO₂ per kilometer (*188.3 g/mi*).

Innovative combustion process and rightsizing

Behind these values is a new strategy: Audi is taking the successful downsizing of its engines a step further with rightsizing. The groundbreaking efficiency of the 2.0 TFSI with 140 kW (190 hp) is the result of an innovative combustion process. Rather than a handicap, the relatively large displacement is a prerequisite here. Customers of the new Audi A5 Coupé* enjoy the advantages of a small-displacement engine when driving at moderate speeds, but without having to compromise when it comes to sporty driving.

The new combustion process with a shortened compression stroke and a long power stroke as well as an increased compression ratio has been specially designed for part load operation, by far the most common operating mode. The intake valves close much sooner than usual. In combination with increased pressure in the intake manifold, this reduces throttle losses during intake.

The shortened compression stroke made it possible to increase the compression ratio from 9.6 to 11.7:1. During the compression stroke, the engine therefore only has to compress the same amount of gas as a 1.4 TFSI. During the power stroke, in which the engine takes full advantage of its two liters of displacement, it benefits once again from the high compression ratio. The resultant higher pressure during combustion further increases efficiency.

So that the charge sufficiently swirls despite the short inlet time, the combustion chambers, piston recesses and inlet ducts as well as the turbocharging of the new 2.0 TFSI are specially tuned to the new combustion method. At higher loads, the Audi valvelift system delays opening of the intake valves to achieve a higher fill and thus good power and torque development. Injection pressure has been increased to 250 bar.

2.0 TDI

The 1,968 cc, four-cylinder TDI in the new Audi A5 Coupé* produces 140 kW (190 hp). Peak torque of 400 Nm (*295.0 lb-ft*) is available between 1,750 and 3,000 rpm. The powerful four-cylinder diesel offers superior performance and maximum efficiency. With quattro all-wheel drive and the seven-speed S tronic, from 0 to 100 km/h (*62.1 mph*) takes 7.2 seconds. Top speed is 235 km/h (*146.0 mph*). In combination with the seven-speed S tronic and front-wheel drive, the 2.0 TDI consumes just 4.4 liters of fuel per 100 kilometers (*53.5 US mpg*) according to the NEDC standard, a CO₂ equivalent of 114 grams per kilometer (*183.5 g/mi*).

The 2.0 TDI is packed with clever technical solutions: separate coolant circuits, two balance shafts in the crankcase, a cylinder pressure sensor, greatly reduced internal friction and a common rail injection system that keeps the fuel at a maximum pressure of 2,000 bar. High and low-pressure exhaust gas recirculation and sophisticated exhaust gas treatment including an SCR system (SCR: selective catalytic reduction) provide for low emissions.

Audi also offers the 2.0 TDI in an ultra version, whose presence is indicated by a badge on the rear end. ultra stands for the most efficient models of a model line. Modifications to the transmission ratio, the body and the chassis as well as the use of low-rolling-resistance tires help to further reduce consumption. The new Audi A5 Coupé 2.0 TDI ultra with S tronic consumes a best-in-class 4.0 liters of fuel per 100 kilometers (*58.8 US mpg*) in the NEDC, corresponding to 105 grams CO₂ per kilometer (*169.0 g/mi*).

3.0 TDI

Supreme power, cultivated refinement and exemplary efficiency – these agreeable characteristics are common to both six-cylinder TDI engines used in the new Audi A5 Coupé*. The 3.0 TDI has a displacement of 2,967 cc and is available with a power output of either 160 kW (218 hp) or 210 kW (286 hp).

Highly efficient: 3.0 TDI with 160 kW (218 hp)

The first variant of the 3.0 TDI produces 160 kW (218 hp). Its torque of 400 Nm (*295.0 lb-ft*) is available between 1,250 and 3,750 rpm. In the NEDC, the new Audi A5 Coupé* consumes just 4.6 liters of fuel (*51.1 US mpg*), corresponding to CO₂ emissions of 119 grams per kilometer (*191.5 g/mi*).

The 218 hp TDI, which only weighs around 190 kilograms (*418.9 lb*), combines numerous high-tech solutions: a very complex thermal management system, new friction-optimized cylinder heads and an electrically adjustable turbocharger that builds up as much as 2.6 bar of charge pressure. The exhaust treatment system is located directly at the back side of the engine; its NO_x catalytic converter (combination of a NO_x storage-type converter and an oxidizing catalytic converter) works in conjunction with a diesel particulate filter with an SCR coating.

Extremely powerful: 3.0 TDI with 210 kW (286 hp)

The new top TDI increases power output by an additional 30 kW (40 hp) for a total of 210 kW (286 hp) and offers 620 Nm (*457.3 lb-ft*) of torque between 1,500 and 3,000 rpm. As this engine is currently still in type approval, there are no consumption values available yet.

The Audi developers have extensively updated numerous aspects of the new 3.0 TDI with 210 kW (286 hp). The objectives were: optimize combustion chamber filling, charge exchange and thermal management in order to increase power output while simultaneously further reducing consumption. Close-coupled catalytic converters treat the exhaust gas effectively.

One important component in the updated three-liter TDI is the Audi valvelift system (AVS), which adjusts the stroke of the exhaust valves in two stages. The AVS initiates a second, small opening stroke after the valves close allowing a certain amount of exhaust gas to reenter the combustion chamber. This back suction increases the exhaust gas temperature and at the same time the efficiency of the exhaust gas treatment: This brings the exhaust gas up to temperature quickly following a cold start and at low load so that both emissions control systems mounted close to the engine are activated very early.

The first component is a large NO_x catalytic converter. It stores the nitrogen oxides until it is full. Cleaning is by means of mixture enrichment in the engine. In order to increase the efficiency, the NOC is only active at low exhaust gas temperatures – after starting. In all other situations, NO_x conversion is handled by the second component, the diesel particulate filter with SCR coating.

A newly developed, 20-percent lighter turbocharger with variable turbine geometry (VTG) and maximum charging pressure of 3.3 bar is working in the top diesel engine. The developers paid attention to an optimized inflow, through which the engine responds very spontaneously to the accelerator. The new external low-pressure exhaust gas recirculation increases the efficiency of the turbocharger. Particularly at intermediate and high load, it enables the full exhaust gas mass flow to drive the turbine.

The thermal management system of the powerful 3.0 TDI supplies coolant to the independent cooling circuits of the cylinder crankcase and the cylinder heads in such a way that the engine oil quickly comes up to operating temperature following a cold start. The cylinder heads feature two-piece water jackets, and the oil cooler is included in or excluded from the coolant flow path as needed. The cylinder crankcase, the crankshaft and the cylinder heads are extremely light. Each of these technologies makes the engine even more efficient.

Drivetrain

Innovative manual gearbox, seven-speed S tronic and eight-speed tiptronic, front- and quattro all-wheel drive: In the new Audi A5 Coupé*, there is a tailored drivetrain technology for each engine variant.

These include new, efficiency-optimized, six-speed manual gearboxes with injection lubrication. An integrated oil pump conveys the precise volumetric flow required for lubrication and thermal management. A spur gear stage replaces the shaft to the front-axle differential used in the previous version of the gearbox. This brings major advantages with respect to friction and space requirements. Forged gearwheels and hollow-formed shafts reduce the weight. Large parts of the casings are made of ultra-lightweight magnesium. The new gearbox platform reduces the weight by as much as 16 kilograms (*35.3 lb*).

Audi offers the six-speed manual gearbox for the following variants:

- 2.0 TFSI 140 kW (190 hp) with front-wheel drive
- 2.0 TDI 140 kW (190 hp) with front-wheel drive
- 2.0 TFSI 185 kW (252 hp) quattro
- 2.0 TDI 140 kW (190 hp) quattro
- 2.0 TDI ultra 140 kW (190 hp)

The new seven-speed S tronic is available with all engines except the top TDI and the S5*. The dual-clutch transmission is standard with the 3.0 TDI with 160 kW (218 hp). The S tronic, which replaces the continuously variable multitronic, offers impressively high efficiency. The most important improvements are further reductions in friction, the low weight, a highly efficient oil supply and dual-mass flywheel with a centrifugal force pendulum, which allows for very low engine speeds while driving.

To reduce drag torque, the two compact multi-plate clutches of the new seven-speed S tronic are arranged axially one behind the other rather than radially one above the other as was the case with the predecessor. The clutches operate two independent sub-transmissions, which are constructed like manual gearboxes. They are continuously active, but only one is connected to the engine at any given time. Gear changes are performed within a few hundredths of a second and with virtually no interruption in the power flow by changing the clutches. With the quattro transmissions, the power flows from the output shaft to the front-axle differential via a spur gear stage and via a propshaft to the rear-axle differential.

Eight-speed tiptronic

The eight-speed tiptronic makes its debut in the A5 model line in the 3.0 TDI with 210 kW (286 hp). The smooth, rapid and spontaneously shifting torque-converter transmission has been completely redeveloped. Its high number of gears enables the engine to operate close to the ideal load point very often. An rpm-adaptive torsion damper balances out undesired engine vibrations to enable efficient driving at particularly low engine speeds. The layout of the gear sets and shifting elements provide for low drag torques and thus high efficiency.

Both automatic transmissions in the new Audi A5 Coupé* are state of the art. They are distinguished by a broad spread of gears: Their lower gears feature short, sporty ratios, while the upper gears are long to reduce revs and fuel consumption. The S tronic and tiptronic transmissions are integrated into the engine's thermal management and designed for start-stop operation. Drivers can choose between the modes D, S and E, and change gears manually at any time using either the selector lever or the standard shift paddles on the steering wheel. All commands are passed purely electrically – by wire – to the transmission. A brief tap against the selector lever triggers the shift command.

There is another efficiency function added in combination with the new cruise control, the predictive efficiency assistant or the adaptive cruise control Stop&Go including traffic jam assist. As soon as fuel can be saved, the automatic transmission switches to freewheeling mode in a speed range between 50 and 160 km/h (*31.1 and 99.4 mph*).

In the new Audi A5 Coupé, front-wheel drive is standard with quattro all-wheel drive available as an option. quattro is standard for the 3.0 TDI with 210 kW (286 hp).

Two versions: quattro all-wheel drive

The ultimate plus in dynamics, traction, driving safety and straight-line stability: For more than three decades, that has been the promise of quattro permanent all-wheel drive from Audi. The new quattro with ultra technology is available for Audi A5 Coupé* models equipped with TFSI and TDI four-cylinder engines and a manual gearbox.

For the future: quattro with ultra technology

The development goal of quattro with ultra technology is an all-wheel drive system optimized for efficiency with no discernible differences to permanent systems with respect to traction and driving dynamics. These requirements seem irreconcilable at first glance, but the combination of the newly developed all-wheel drive components, a sophisticated operating strategy and a torque split perfectly matched to the car does just that. The all-wheel drive system's intelligent control works predictively, always looking ahead by means of a comprehensive array of sensors and the continuous analysis of the driving dynamics, road condition and driver behavior data collected.

During standard operation a low loads without the risk of wheel slip, the new quattro drive enjoys all the benefits of a front-wheel drive system, but is always at the ready should it be needed. This enables the potential fuel consumption difference between front-wheel and permanent all-wheel drive to be reduced significantly.

Operating strategy

The quattro electronics are networked with a number of other control units. Every ten milliseconds, the system acquires and analyzes a wide variety of data, such as steering angle, lateral and longitudinal acceleration and engine torque to name just a few. Activation of the all-wheel drive system follows a two-stage strategy: predictive, i.e. forward-looking, and reactive.

On the predictive level, the focus is on the data delivered by the networked systems in the car. The control unit uses these data to, for example, compute the point when the inside front tire will reach the limit of grip during fast cornering. The calculation is completed roughly 0.5 seconds prior. If the wheel approaches the limit of grip to within a defined threshold, the all-wheel drive system is activated. With predictive activation, the quattro control unit orients primarily on the driver's style, the status of the ESC and the mode selected in the Audi drive select system, and on the trailer detection system. Consequently, quattro all-wheel drive is always ready shortly before it is needed, and the changeover is imperceptible to the driver. Should a driving situation occur that could not be predicted, such as when the tires go from dry asphalt to a sheet of ice, the system reacts to the sudden change in the coefficient of friction without the driver even noticing and reactively switches on the quattro.

quattro torque split

The innovative control philosophy continuously senses the ambient conditions, driving status and the driver's intention. This means that the ideal distribution of torque is calculated and the dynamic drive characteristics of the A5* enhanced in every situation. By networking quattro drive with Audi drive select, the driver can adapt the all-wheel-drive properties to suit his or her individual requirements. In "auto" mode, the driver gets optimal traction and balanced handling.

In “dynamic” mode, torque is distributed to the rear axle earlier and to a higher degree, which means that driving dynamics are enhanced further, especially on surfaces with low friction coefficients.

Technology: two clutches

The decisive gain in efficiency is made possible by the special arrangement of two clutches in the quattro drivetrain. When the system changes to front-wheel drive, the front clutch – a multi-plate clutch at the transmission takeoff – disconnects the propshaft. In addition, an integrated decoupler in the rear-axle differential opens. It deactivates the primary cause of drag losses in the rear section of the drivetrain, such as the large final drive gear rotating in the oil bath. At the same time, the quattro drivetrain is nearly four kilograms (*8.8 lb*) lighter than the previous system despite the new technical components. That, too, saves fuel and benefits handling.

Heart of the matter: limited-slip center differential

All engine variants of the Audi A5 Coupé* with S tronic or tiptronic continue to be equipped with quattro permanent all-wheel drive. It is an extremely reliable mechanical system. Designed as a planetary gear, the self-locking center differential funnels 60 percent of engine torque to the rear axle and 40 percent to the front during normal driving. When it redistributes the power, up to 70 percent can go to the front and up to 85 percent to the rear. These high locking figures enable a clearly defined distribution of drive torque and precise interplay with control systems.

Sport differential

As an option for the top TDI and the S5*, Audi will complement quattro all-wheel drive with another dynamic technology component – the sport differential. It distributes torque between the rear wheels via two superposition gears. The latest generation of the differential is roughly one kilogram (*2.2 lb*) lighter. During fast driving, the sport differential literally pushes the car into the curve, nipping understeer in the bud. A software function integrated into the central chassis control unit (electronic chassis platform ECP) continuously computes the ideal torque split for dynamic driving. When turning into or accelerating in a curve, most of the torque is directed to the outside wheel.

Before the rear end can break out, the vehicle is stabilized by the distribution of torque and thus easily controlled. The control unit for the sport differential is tightly networked with Audi drive select so that the driver can influence the torque split.

Wheel-selective torque control

Both versions of quattro drive are partnered in the new Audi A5 Coupé* with the updated wheel-selective torque control system, which is active on any surface. During dynamic cornering, the software function brakes both inside wheels curve minimally before they can slip. This intervention also occurs even if the driver does not press the accelerator pedal. Due to the difference in propulsive forces at the wheels, the car turns into the curve ever so slightly. Self-steering behavior remains neutral longer, making handling even more precise, agile and stable.

Driving dynamics

One of the primary character traits of the new Audi A5 Coupé* is the sporty and agile handling. In its segment, both sporty driving pleasure and comfort are decisive criteria when tuning the chassis. The Audi A5 Coupé succeeds in bridging the gap between being fun to drive in winding passages and offering excellent comfort over long distances.

The new front and rear suspensions, each of which have five links, and the precise electromechanical steering are perfectly matched. Drivers can also chose an optional variable suspension that supports a dynamic driving style. Ride comfort can also be adapted to any situation. The Audi drive select system enables the driver to influence the characteristics of the power steering boost and the accelerator as well as the optional variable suspension as needed for an even more customized driving feel.

Chassis

The all-new chassis is among the strengths of the Audi A5 Coupé*, including with respect to systematic lightweight construction and precise response. From dynamic handling to comfortable cruising – the two-door coupé has luxury-class qualities.

The broad track – 1,587 millimeters (*5.2 ft*) up front and 1,568 millimeters (*5.1 ft*) in the rear – and a wheelbase that is relatively long for this segment are the foundation for a suspension tuning that is both sporty and balanced. The wheelbase measures 2,764 millimeters (*9.1 ft*).

An updated five-link suspension is used on the front axle. The axle principle enables optimal absorption of longitudinal and transverse forces. Its mounts are sporty-stiff in a lateral direction and supple and soft longitudinally. Vibrations are consistently eliminated with the use of a hydromount, which ensures excellent comfort along with a high degree of agility.

Unlike on the previous model, the Audi engineers integrated the upper links directly into the body for optimal stiffness. All suspension control arms, the pivot bearing and the damper stilts are forged aluminum. The lightweight concept is completed with the use of monotube dampers and high-strength, thin-wall tubular stabilizer bars and segmented wheel hubs. Compared with the previous model, the weight of the front axle has been reduced by more than six kilograms. The lower link level is attached with newly designed rubber mounts to a hybrid subframe made of high-strength steel and aluminum consoles. The stiff connection of the subframe to the front end enables high vibrational comfort and provides the foundation for optimal agility.

Electromechanical power steering

The electromechanical power steering, a compact, new development from Audi, saves 3.5 kilograms (*7.7 lb*) compared with the previous model. It consumes little energy and has a direct, sporty ratio of 15.9:1. Power assistance is based on the vehicle's speed.

The steering provides very exact feedback from the road, responds spontaneously and is very precise. The new electromechanical power steering is functionally connected with some of the new driver assistance systems, such as the Stop&Go adaptive cruise control including traffic jam assist.

Dynamic steering

The optional dynamic steering uses a superposition gear to vary its ratio by up to 100 percent, depending on the car's speed and the mode selected in the Audi drive select driving dynamics system. Vehicle stabilization is also supported by lightning-fast steering impulses, further enhancing stability and safety.

Rear suspension

In the rear of the new Audi A5 Coupé*, a five-link axle replaces the trapezoidal-link axle of the previous model. Audi has used an intelligent mix of materials to reduce the weight of the axle components by an additional five kilograms (*11.0 lb*). Low unsprung mass provides a sporty driving experience, and together with the new damper and elastomer tuning, it allows a smooth ride, a reduction in body movements and improved wheel damping.

The reduced-weight alloy wheels also contribute to this. Depending on the model, they weigh less than 13 kilograms (*28.7 lb*) per wheel, even the 19-inch versions. Monotube shock absorbers have been used for the first time, resulting in a further weight reduction and improves responsiveness, which in turn improves body control. The axle is insulated from the body with hydraulically damped axle mounts. They reduce the shocks from the road surface significantly without adversely affecting lateral guidance. Friction-optimized wheel bearings reduce rolling resistance, and aero-deflectors on the floor pan reduce aerodynamic drag.

Central chassis control unit – the electronic chassis platform (ECP)

A central chassis control unit has been applied to achieve ideal interaction between the various driving dynamics systems. Developed for the new Audi A5 Coupé*, this highly integrated control device – the electronic chassis platform (ECP) – processes all the information relevant for driving dynamics, from which it computes the driving situation and the current road surface frictional coefficient. This information enables optimal control of the systems for highly precise, dynamic handling and maximum ride comfort.

Suspension with damper control

As an alternative to the standard suspension with highly sensitive monotube shock absorbers, the new A5 Coupé* can also be equipped with a suspension with damper control. Sensors measure the movements of all four wheels plus lateral and longitudinal acceleration. The damper characteristic is then adjusted accordingly to the road surface conditions and driving situation. The result is enhanced driving dynamics with even more comfort. Furthermore, the driver can push a button to choose the default setting of the suspension in the Audi drive select system and thus call up the desired handling characteristics at any time.

The variable suspension works with newly developed CDC dampers (CDC = continuous damping control) with electromagnetically actuated valves in their pistons. They allow hydraulic fluid to flow faster or more slowly as required. A new actuation concept makes them very energy efficient. The central chassis control unit processes all sensor signals within milliseconds and controls each damper individually. Together with the wide range of the damper valves, this ensures a wide spectrum between a soft ride and firm handling.

The A5 Coupé already has a sporty, low ride height in the standard version (from standard suspension).

Audi drive select dynamic handling system

The damper controller is integrated into the standard Audi drive select dynamic handling system. In the basic configuration, the driver can use it to switch between multiple modes for the function of the throttle valve, automatic transmission, steering, cruise control or adaptive cruise control (ACC) as well as the automatic air conditioning. The modes are “comfort,” “auto,” “dynamic” and “efficiency.” In combination with a navigation system, there is also the mode “individual,” with which the driver can further customize the individual systems such as the steering and suspension.

Lightweight and efficient: the wheels and tires

The base version of the new Audi A5 Coupé is factory-equipped with 17-inch forged alloy wheels. The lines design and sport are equipped with 18-inch cast aluminum wheels. Audi and quattro GmbH offer a number of different models as options, ranging from 18-inch cast aluminum wheels (standard with S line sport package and Audi design selection) to 19-inch wheels.

All Audi wheels for the new A5 Coupé are characterized by their low weight. The low unsprung mass contributes to the sporty driving experience. All tires have been optimized for rolling resistance, which significantly reduces CO₂ emissions by an average of 2.8 grams per kilometer (*4.5 g/mi*). A tire repair kit and tire pressure loss indicator are standard; an ultra-compact spare wheel is optional.

A wide range of brakes are also used. The TFSI with 140 kW (190 hp) has 16-inch floating caliper brakes on the front axle. Models with other engines are stopped by particularly lightweight, 17-inch aluminum fixed caliper brakes. Compared with the previous model, the brakes weight a total of five kilograms (*11.0 lb*) less.

The front axle is equipped with internally-vented discs up to 338 mm (*13.3 in*) in diameter. The electromechanical parking brake is integrated into the rear axle and features new holding and starting functions.

Many aspects of the Electronic Stabilization Control (ESC) have been updated; it is now even more precise and sensitive than on the previous model. In the ESC sport mode, engine intervention is largely deactivated and braking intervention slightly reduced.

Interior

Perfect workmanship with optimal functionality – the new A5 Coupé* takes these Audi-typical properties to the highest degree. High-quality materials are painstakingly crafted and can be showcased by the optional ambient lighting with 30 adjustable colors. The horizontal architecture of the instrument panel creates a wide sense of space.

The new A5 Coupé has become even more generous in virtually every dimension. The interior of the new Audi A5 Coupé has gained 17 millimeters (*0.7 in*) in length. Shoulder room (plus 26 millimeters (*1.0 in*)) and headroom (plus 12 (*0.5 in*)) for both the driver and front passenger have also increased. Knee room in the back has even increased by 23 millimeters (*0.9 in*). The luggage compartment offers 10 liters (*0.4 cu ft*) more volume than before. It now holds a best-in-segment 465 liters (*16.4 cu ft*).

Seats

The seats in the Audi A5 Coupé* have been redeveloped from the ground up and for the first time include the option of a pneumatic massage function. One standard feature offering additional convenience to the driver and front passenger is the seat belt height adjustment for the front seats, including power belt feeds. The head restraints of the anatomically correct front seats are not only height-adjustable, their distance to the back of the head is also variable. Power adjustment of both the seats and the lumbar support is available as an option. Audi offers heating for many of the seat choices, and the sport seats are available with optional ventilation.

There is a front center armrest – sliding and with a storage compartment – large door pockets, two cup holders and a new, closed storage compartment beneath the rotary light switch. The new Audi A5 Coupé has two seats in the rear plus a center armrest.

Functional and sporty: steering wheels

The steering wheels have also been redesigned. Because the driver airbag is a compact micromodule, the steering wheel allows a better view of the instrument cluster. There is a broad range of steering wheels, beginning with the three-spoke multifunction steering wheel with a round impact absorber. Customers can choose from such options as a heated leather rim, a rim flattened at the bottom and the plus option for the multifunction feature. Shift paddles are standard with automatic transmissions. All steering wheels have a frame of weight-saving magnesium.

Weight savings in the interior

Lightweight construction is used throughout the interior. For example, the substructure of the front seats is made of high-strength steel. The support structure for the through-loading facility in the rear seat is made of magnesium. Compared with the previous model, the weight of the seats has been reduced by eight kilograms (*17.6 lb*). A weight-optimized carpet, an aluminum brake pedal and foamed defroster ducts make the car a total of a further four kilograms (*8.8 lb*) lighter.

Numerous choices: interior equipment

The new A5 Coupé* comes standard with white LEDs in the interior. The driver can operate the reading lights via sensors. At night, the optional interior lighting package or the optional ambient lighting set small accents in the interior. With the latter, the MMI can be used to choose from 30 colors, in several profiles and in separate zones, including the cup holders. If desired, the colors can also change depending on the mode chosen in Audi drive select. In the door trim, narrow LED light guides generate dramatic contour lighting.

Choice materials and colors emphasize the generous dimensions and elegance of the interior. The palette offers numerous new shades and combinations. Besides black, the instrument panel can be divided into two color zones with the trim line design: a dark upper area and a light lower zone, such as granite gray-atlas beige or granite gray-rock gray. The Audi design selection equipment package also includes the color combination wapiti brown-rock gray. The colors of the lower zone of the instrument panel can be found again in the seat upholstery.

The first option level following the standard cloth upholstery includes one exclusive cloth each for the trim lines design and sport. A robust leather/artificial leather combination is also available. The Milano leather and the Alcantara/leather combination (only for sport seats) are elegant alternatives. The fine Nappa leather with contrasting stitching and piping is the top equipment version.

The large, three-dimensional decorative surfaces are a significant feature of the interior's appearance. Alternatives are a variety of aluminum inlays as well as dark walnut, oak natural gray and black piano finish. The generous use of high-quality inlays across the entire width with a smooth transition to the long doors gives the driver and front passenger the sense of being embraced without being constrained. At the same time, the horizontal application strips clearly align the interior and divide the instrument panel.

S line sport package and Audi design selection

With the S line sport package, the interior is black or rotor gray. The sport seats are covered with a combination of leather and cloth; options include an Alcantara/leather combination or fine Nappa leather. The front seat backrests are embossed with the rhombus S. The decorative surfaces are made of brushed aluminum, piano finish or gray oak. The three-spoke sport leather steering wheel and the illuminated door sill trims bear rhombus S emblems. The stainless-steel pedals and footrest as well as the floor mats with contrasting stitching round out the sporty appearance.

The new, design-oriented counterpart to the S line sport package for the interior is the Audi design selection. The instrument cluster is available in the color combinations granite gray-Atlas beige, granite gray-rock gray, wapiti brown-rock gray or all in black. The seat upholstery matches the color of the lower zone of the instrument panel. The colors cedar brown and Arras red are also available. Upholstery materials correspond to those of the S line sport package. The steering wheel is also available in color-coordinated black, granite gray or wapiti brown. Customers can choose from inlays in aluminum Trimaran, black piano finish and gray natural oak. Ambient lighting with 30 adjustable colors supplements the Audi design selection. Both packages have illuminated door sill trims up front.

Comfortable climate: the continuous air vent strip

A continuous air vent strip and the plunging center console underscore the impression of a floating instrument panel in the new Audi A5 Coupé*. With the deluxe automatic air-conditioning, the broad band of air vents allows indirect ventilation while increasing the volume of air circulated. The interior can be air-conditioned in three separate zones; the rear passengers have their own control unit with a digital display. Audi also offers an auxiliary heating system, which quickly warms the interior. In connection with the optional Audi connect safety & service, the customer can conveniently program the auxiliary heating using the Audi MMI connect app.

Both the standard single-zone system and the triple-zone deluxe automatic air conditioning have been completely redesigned. Both systems consume little energy thanks to efficient solutions for the fan motor and fresh air supply, an efficient cooling circuit and highly flexible controls. They also provide extremely high air quality: In both fresh air and recirculating operation, an active-carbon combination filter removes the smallest particulate matter. The control panel of the automatic air conditioning is another highlight, particularly with the optional deluxe automatic air conditioning, which has the digital temperature displays integrated into the control dials. Just a few buttons and dials are sufficient for convenient control. When a finger approaches one of the capacitive rocker switches, its function is shown enlarged on the dark LCD display and selected.

Audi offers a panoramic glass sunroof for even more fresh air. In the new A5 Coupé, it spans the entire width of the roof. It is nine percent larger than the previous model, and for the first time it can be opened with a tilt-and-slide function (752 x 278 millimeters (*29.6 x 10.9 in*) = size of opening).

Spacious and practical: the luggage compartment

The combination of aesthetic design and good use of space plays an important role in the new Audi A5 Coupé*, too. In the base configuration, the luggage compartment offers a volume of 465 liters (*16.4 cu ft*), 10 liters (*0.4 cu ft*) more than with the previous model.

The standard rear seat backrest is split 40:20:40 and can be folded down to the seat cushions using a lever on the side of the luggage compartment. The load-area width measures exactly one meter (*3.3 ft*). The cuboid dimensions make the luggage compartment outstandingly practical.

Audi also offers the two-door coupé with optional sensor control for opening the luggage compartment lid: A proximity sensor in the rear bumper reacts to a kicking motion. The hatch unlocks and opens automatically if the optional convenience key is detected.

The trailer hitch unlocks electronically at the push of a button. The new Audi A5 Coupé is certified to tow loads of up to 2,100 kilograms (*4,629.7 lb*) (with an eight percent gradient).

Display and controls

The Audi virtual cockpit and MMI touch are available as high-end options for the new Audi A5 Coupé*. The driver can intuitively use a wealth of functions via the two central components of the innovative MMI display and control concept.

A large, easy-to-read analog speedometer and tachometer are standard in the new Audi A5 Coupé. Between them is the display of the driver information system (DIS). In the basic version the DIS has a 5-inch display; the color Audi MMI display measures 7 inches. MMI navigation plus (and the Audi design selection) bring a color 7-inch driver information system and an 8.3-inch Audi MMI display on board.

Audi virtual cockpit

For the new A5 Coupé*, there is the Audi virtual cockpit as an alternative to the analog round instruments. It assumes that MMI navigation plus with MMI touch is on-board. The various display options offer the driver added convenience and numerous customization possibilities. Thanks to its resolution of 1,440 x 540 pixels, the large TFT monitor (12.3 inch) displays richly detailed graphics.

The image is refreshed 60 times per second so that the virtual needle of the tachometer spins smoothly and very precisely. Scrolling operations in lists are based on a physical model that considers such factors as inertia, elasticity and damping.

The Audi virtual cockpit presents comprehensive and diverse information, from navigation arrows to the dynamic animation of the navigation map and infotainment content (including Audi connect services) to the graphics of some assistance systems. The display changes its context-related color scheme according to the main menu selected. In the Media menu, for example, it glows orange, while green is used for the Phone menu. At the lower edge are permanent displays of outside temperature, time of day and odometer readings as well as warning and information symbols.

As with the DIS display in the analog instrument, the driver operates the Audi virtual cockpit with the optional multifunction steering wheel plus. The switches on the left spoke are used to move through the menus of the audio system, onboard computer and – if equipped – navigation system and telephone. Located on the right side of the steering wheel are the volume roller, the voice control button, telephone express controls and the skip function for quickly changing the radio station or song.

The driver can switch between two user interfaces by pressing the “View” button on the multifunction steering wheel plus. The infotainment mode is dominated by a central window – it offers plenty of space for items such as the navigation map or lists from the telephone, radio and audio functions. The tachometer and speedometer are presented here as round instruments. In the classic view, the instruments are approximately the same size as analog instruments, and the center window is correspondingly smaller.

Always in view: the head-up display

The head-up display in the new Audi A5 Coupé* projects relevant information onto the windshield as easily comprehensible symbols and digits, thus enabling the driver to keep his or her eyes on the road. A TFT monitor with white LED backlighting generates the color image. Two aspherical mirrors enlarge and reflect it, as well as compensating for distortion caused by the geometry of the windshield.

The information appears to hover around two meters (*6.6 ft*) in front of the driver within a window area measuring 200 x 80 mm (*7.9 x 3.1 in*). The human eye registers the information extremely quickly – there’s no need to switch from the accustomed long-range vision. The driver can use the Audi MMI to specify which information should be shown in the head-up display; the height and brightness can also be adjusted here.

Slim tablet look: the new Audi MMI display

The new Audi MMI monitor embodies Audi’s innovative technology and design expertise. With its slightly rounded, black glass surface, it looks like a premium tablet computer. The monitor is just 13 millimeters (*0.5 in*) thick. It has a discreet silver-colored magnesium frame in the top version with Audi MMI Navigation plus. The brilliantly resolved animations shown on its 8.3-inch surface are of unmatched quality.

MMI control element

The system is controlled via the Audi MMI control elements on the wide, asymmetrically split center console. Its design and position vary according to the car’s transmission. If the car is equipped with S tronic or tiptronic, the terminal is placed close to the instrument panel; the low automatic selector lever offers the wrist a comfortable resting place. With a manual gearbox, the selector lever is in front of the MMI terminal. In both cases, the volume dial and a storage tray are located on the right of the MMI control terminal. This arrangement makes the philosophy of the new Audi A5 Coupé clear. Although the cockpit is rigorously tailored to the driver, the Audi MMI display can be used equally well by the front passenger.

The focal point of the terminal is the round rotary pushbutton, whose ring is illuminated in white with the optional MMI touch. Its surface is home to the touch-sensitive touchpad. The touchpad is used to input characters and also for multifinger gestures, enabling the driver to zoom in on the map, for example.

Toggle switches for the most important basic menus, the general Menu button, the Back button and eight freely-programmable favorite buttons supplement the terminal. Two further buttons to the left and right of the rotary pushbutton provide access to the Function and Option menus, which supplement many areas of operation. For example, the driver can select the frequency band of the desired station in the Radio menu or call up traffic information in the Map menu. With these functions and options, the driver can get directions to an entered destination and display nearby parking lots or save the destination to the Favorites list.

Flat hierarchies: new menu structure

The menu structure of the Audi MMI has also been redesigned from the ground up: With its flat hierarchies, operation is based on modern smartphones. An intelligent, easy-to-understand logic replaces static menu trees, and frequently used functions can be reached with just a few clicks.

A particular highlight is MMI search, which is available for all basic menus and like a search engine uses free text entry. It generally answers queries after just a few letters, taking into consideration the car's current location. When searching for a place to eat, for instance, simply enter the name of the restaurant and the first letters of the city and a list of hits throughout Europe appears together with the addresses. Searching for songs, albums and radio stations also works this way.

Voice control system: "Where can I refuel?"

The voice control system has also been extensively updated. It now understands a large number of everyday expressions. To call a contact, the driver can just say "I would like to call Peter Miller." The navigation system also responds to natural language inputs ("Where can I refuel?", "Where is the closest Italian restaurant?"). The new voice control system, which also permits dictation of text messages, is also available without an Internet connection and works with the Radio and Media menus as well.

Infotainment and Audi connect

The standard Audi MMI radio plus with eight loudspeakers includes an SDXC card reader, an AUX jack, a USB connection, Bluetooth and voice control for telephone and radio. The color MMI monitor has a 7-inch diagonal and a resolution of 800 x 480 pixels. The rotary pushbutton is the central feature of the MMI control concept.

Audi MMI navigation, the next step, additionally offers two card readers, the voice control system and a navigation function for which the data are stored on a memory card. With MMI navigation, the rotary pushbutton includes a joystick function for switching between the individual menus. The system also allows access to the voice control system of the customer's smartphone, displays emails and reads them out loud.

Audi's top version is MMI navigation plus with MMI touch. In addition to the Audi MMI navigation features, it includes 10 GB of flash storage, a DVD drive, Audi connect services for three years, up to five free navigation updates (available at six-month intervals), an even more comprehensive voice control system and an 8.3-inch monitor with a resolution of 1,024 x 480 pixels. Audi MMI navigation plus works in close cooperation with many of the assistance and safety systems. It packs the power of Audi's second-generation modular infotainment platform (MIB).

Online with LTE: Audi connect

The hardware module Audi connect with LTE is the ideal complement to Audi MMI navigation plus with MMI touch. An LTE/UTMS module provide the fastest connection to the Internet available today, with download speeds up to 100 MBit/s. The integrated Wi-Fi hotspot enables passengers to freely surf, stream and email with up to eight mobile devices. For the driver, it includes the tailored online services of Audi connect.

Audi connect offers a broad spectrum of features ranging from navigation with Google Earth and Google Street View to traffic information online and parking space searches to the Twitter social network with a special interface designed for use in the car.

Audi connect SIM – online without borders

The Audi connect SIM is an embedded SIM (e-SIM), a SIM permanently installed in the car and which customers in Europe receive together with Audi connect. The data flat rate required to use the Audi connect services is included for a three-year period from the purchase of the new car. The driver does not have to activate the SIM. An Audi service partner can reactivate it at the end of this period for a fee.

The new Audi connect SIM also makes it more convenient to travel and surf the Internet in Europe. It permits roaming in most European countries, as it is set automatically to the provider for the respective country, as necessary. This eliminates high, country-specific roaming charges and inconvenient roaming confirmations for the customer.

The customer can also purchase additional data packages for the Wi-Fi hotspot, independent of the integrated Audi connect services. This allows all passengers to surf the Web and send/receive email with up to eight mobile devices at attractive rates. In this case, too, data transfer continues automatically at a fixed price when crossing a national border, i.e. when changing networks. Data packages for the Wi-Fi hotspot can be booked flexibly via a special web portal or directly in the car – quickly and conveniently via the Audi MMI system. Customers can also use their own SIM card in the car and establish Wi-Fi Internet access through their own cellular provider. In this case, the data volume used by the Audi connect services will also be charged to the customer's SIM card; the Audi connect SIM is temporarily deactivated.

The new Audi connect SIM is the first result of a collaboration between Audi and the Irish company Cubic Telecom, a leading supplier of seamless worldwide connectivity solutions.

Well connected: the Audi MMI connect app

The free Audi MMI connect app for smartphones and smartwatches brings additional services to the Audi A5 Coupé* and offers a wide range of possibilities. For example, the appointment calendar on the smartphone can be transferred to the MMI. The driver uses his or her smartphone to set a meeting location as a navigation destination, and the system can read out the location, time and subject of an appointment. Online media streaming with access to Napster and Aupeo! plus the new online radio offer a wide range of entertainment. Music data are transmitted by Wi-Fi from the smartphone to Audi MMI navigation plus and from there to the sound system. Destinations from Google maps, points of interest (POI) and the dates from the City Events service can be transferred from the cell phone to the car using the app.

The functions included in the Audi connect safety & service package are convenient and informative. These also include remote functions. For example, the customer can use the Audi MMI connect app to remotely access the vehicle status and the location of where the car is parked as well as to lock and unlock the car. If the A5 Coupé is equipped with auxiliary heating, this can also be switched on remotely.

The smartphone and the car are already tightly networked at Audi, and now the home is being added in, too. The television there has to be connected to a fourth-generation Apple TV, however. In this case, many functions of the Audi MMI connect app can be controlled via the television. The customer can check the current vehicle status, for example, or use remote functions without having to pick up their cell phone.

The Audi connect emergency call & service package also includes the new functions emergency call, online roadside assistance and Audi service request online. With the latter service, the car sends at the customer's request service-related data via an Audi server to the customer's chosen workshop. In the event of an accident, the emergency call function makes an automatic emergency call to the dispatch center and sends data about the severity of the accident. These services may be used free of charge for ten years.

Optimally connected: the Audi smartphone interface

Apple Car Play and Android Auto – the familiar smartphone environment can be brought on board the new Audi A5 Coupé*, if desired. Smartphone content such as navigation, telephony, music and selected third-party apps appear with the accustomed smartphone look in a separate MMI window. Audi MMI or the voice control system provide the customer with convenient access to the content of their iOS or Android device (iOS 7.1 and above, Android at least 5.0 Lollipop) connected via the USB port.

Further components round out the infotainment program, including a digital tuner with DAB+ for radio and – depending on the country – TV. The Audi phone box with wireless charging in the center armrest wirelessly connects the cell phone to the car antenna per near-field coupling. Provided the mobile device supports it, the box enables inductive charging according to the Qi standard. The current flows from a coil in the base of the Audi phone box to the receiver coil in the smartphone.

Audiophile delights: 3D B&O Sound System

The new Audi A5 Coupé* also sets entirely new standards for high fidelity audio in segment. The optional 3D Bang & Olufsen Sound System offers a fascinating innovation – a sound that includes the spatial dimension of height. It utilizes four additional loudspeakers, two each in the instrument panel and the A-pillars. The 3D sound creates something that is completely new in a car: a concert hall-type listening experience.

Behind the new technology is an algorithm that Audi developed in collaboration with the Fraunhofer Institute for Integrated Circuits (IIS) in Erlangen. The program uses stereo or 5.1 recordings to calculate the information for the third dimension and processes it for the additional loudspeakers.

The heart of the 3D Bang & Olufsen Sound System is a 755-watt, 16-channel amplifier that drives 19 loudspeakers. The speaker covers feature a new design with long aluminum strips harmonizing with the lines of the A5 interior. White light guides illuminate the woofers in the front doors.

Driver assistance systems

An intelligent combination of different technologies enhances the safety, comfort and efficiency of the new Audi A5 Coupé*. At the same time, Audi is also taking the next step toward piloted driving. The broad choice of innovative driver assistance systems sets new standards in the segment. Compared with the previous model, nearly all of the systems are either completely new or have been extensively updated. Some of the solutions are standard features, whereas the options can be chosen individually or are available in the packages “Parking,” “City” and “Tour.”

Greater safety: Audi pre sense

The A5 Coupé* comes standard with the safety system Audi pre sense city. At speeds of up to 85 km/h (*52.8 mph*), the system scans the road for other vehicles and pedestrians using a windshield-mounted front camera with a range of over 100 meters (*328.1 ft*). If it detects an impending collision, the driver receives a series of warnings, and if necessary the car initiates maximum braking. At speeds up to 40 km/h (*24.9 mph*) accidents can be avoided completely within the system limits. At higher speeds (up to 85 km/h (*52.8 mph*)), warnings and brake intervention reduce the impact velocity.

The optional Audi pre sense basic uses information from a variety of different vehicle systems. Once it detects an unstable driving condition, it initiates preventive measures to protect the occupants. The front seat belts are tightened electrically, and the windows and the sunroof close. The hazard flashers are also activated. If a collision cannot be avoided and an accident is detected on the basis of contact, the multicollision brake assist system supports the driver with controlled application of the brakes. This can help to prevent the car from skidding, which in turn prevents additional collisions.

Fewer traffic tickets thanks to the speed limiter

Another standard feature in the new Audi A5 Coupé* is attention assist. A component of the driver information system, it analyzes driver behavior and issues a warning when it detects that the driver is becoming inattentive.

The adjustable speed limiter, a standard feature, can be set to a particular speed ranging from 30 to 250 km/h (*18.6 to 155.3 mph*) – a very helpful tool for maintaining speed within city limits, in construction sites, and so on.

Adaptive cruise control (ACC) Stop&Go including traffic jam assist

A highlight among the optional systems is the adaptive cruise control (ACC) Stop&Go including traffic jam assist. It relieves the driver and is a major plus with respect to convenience and safety. The ACC maintains a specified distance between the new Audi A5 Coupé and the car ahead; the driver can choose one of five distances and use Audi drive select to adjust the rate of acceleration and control dynamics.

The system, which relies primarily on the signals from the two front radar sensors and the camera, interacts with the S tronic and the tiptronic to cover the full range of speeds from 0 to 250 km/h (*155.3 mph*); with manual transmissions, it starts at 30 km/h (*18.6 mph*).

The Stop&Go function of the ACC (in conjunction with automatic transmissions) brakes the new A5 Coupé* to a full stop and lets it resume driving again at the driver's request. When the system is deactivated, the distance display shows the distance to the car ahead and warns drivers when they are tailgating. Its operating range is at speeds of 60 km/h (*37.3 mph*) and above.

In combination with automatic transmission, an extension of the ACC called traffic jam assist can take over steering at speeds of up to 65 km/h (*40.4 mph*) on well-developed roads when traffic is congested. The system uses the radar and ultrasound sensors as well as the front camera, guiding the car by gently adjusting the steering and following the traffic ahead within system limits. The traffic jam assist orients itself to the lane markings and the other vehicles on the road.

When traffic jam assist reaches its system limits – such as when the traffic thins out or there is a sharp curve ahead – the driver has to take over again. If the driver does not, the system warns the driver in several stages. As a final measure, it safely and autonomously brings the Audi A5 Coupé to a full stop.

ACC Stop&Go including traffic jam assist means that the Audi pre sense front safety system is also on board. It can prevent rear collisions or help minimize their consequences. In dangerous situations, the system prompts the driver to apply the brakes according to a complex warning concept – with visual and acoustic signals as well as a sharp tap on the brakes. If the driver does not respond, the car first starts to brake while simultaneously closing the windows and the sunroof as well as activating the hazard flashers. The A5 Coupé is the only car in its class to perform maximum braking thereafter. The system also tightens the seat belts at this point.

Anticipatory: the predictive efficiency assistant

Also included in the Tour assistance package is the predictive efficiency assistant. Unique in its class, the system works in close conjunction with the Audi adaptive cruise control (ACC), the Audi navigation system and the camera-based recognition of traffic signs. When ACC is active, the system predictively and automatically adjusts the preselected speed to conditions – the route topography, speed limits and the traffic ahead.

Regardless of whether route guidance is active or not, the predictive efficiency assistant uses the route data to alert the driver about situations that call for lower speeds. The system recognizes curves, traffic circles, intersections, gradients, city limits and speed limit signs – in many cases long before the driver sees them. A corresponding warning appears in the instrument cluster and/or the Audi virtual cockpit and head-up display. If the assistant screen is active, detailed graphics can be seen.

If the driver wishes, the system can control the freewheeling of the automatic transmission under defined parameters. This form of coasting is only activated if it can last for at least five seconds. When it ends, the car automatically accelerates to the speed the driver has selected provided the ACC is activated. The predictive efficiency assistant can reduce fuel consumption on country roads by up to 10 percent.

Other systems in the Tour assist package

From a speed of 65 km/h (*40.4 mph*), Audi active lane assist – part of the Tour assist package and also available separately – helps drivers stay in their lanes. It receives its signals primarily from the front camera, which detects lane markings. If the new Audi A5 Coupé* approaches a marking without the turn signal being activated, the system makes a gentle adjustment to the electromechanical power steering to bring the car back into its lane.

Using the Audi MMI system, drivers can decide whether this support should be active at all times or only take place before the lane marking is crossed. If the driver opts for early intervention, the system guides the car to the center of the lane. There is also the optional setting of making the steering wheel vibrate.

The collision avoidance assist is yet another high-end feature in the Tour assistance package. It activates when an obstacle must be avoided to prevent an accident. Within fractions of a second, it uses data from the front camera, the ACC and radar sensors to calculate the distance of the car ahead as well as its width and degree of offset. Its first warning is a tap on the brakes to alert drivers to the potential danger. As soon as the driver starts steering, the system offers support with the necessary lane changes with controlled interventions in the power steering.

Another Audi innovation is turn assist, which at speeds between 2 and 10 km/h (*1.2 – 6.2 mph*) monitors oncoming traffic when turning left. In dangerous situations, it brings the car to a complete stop. The system becomes active in the background as soon as the driver turns on the left turn signal.

Camera-based recognition of traffic signs rounds out the Tour assist package. This is also available outside the Tour assist package in combination with one of the two Audi navigation systems and the color DIS. It detects numerous traffic signs, including digital displays and supplemental signs, and presents them to the driver as graphics in the head-up display and instrument cluster. In addition, the driver can opt for a visual warning if the sign-based speed limit is exceeded.

City assist package

The City assist package includes the lane-changing feature Audi side assist, which is also available separately. At speeds of 15 km/h (*9.3 mph*) and above, it uses the two rear radar sensors with a scanning range of some 70 meters (*229.7 ft*) to support drivers when changing lanes. If a vehicle approaches rapidly or is located in the blind spot, a warning LED in the housing of the respective exterior mirror lights up. If the driver activates the turn signal anyway, the LED flashes brightly several times in succession.

Audi pre sense rear warns about potential collisions from behind and takes preventive measures, such as activating Audi pre sense basic. The hazard lights also flash rapidly as a warning to traffic behind the car. It remains active in the background at every speed even if the Audi side assist is turned off, unless a trailer is in use.

The new cross traffic assist rear is enabled when the parking system is activated. When this occurs, drivers who are slowly driving backwards, such as when leaving a parking spot at right angles to the road, are warned about approaching vehicles in critical range. There are different levels of warnings: visual, acoustic and a short jolt of the brakes. The back radar sensors provide the necessary data.

The exit warning helps the new Audi A5 Coupé* move more safely through urban traffic. It is activated when the car comes to a stop. If other vehicles are approaching from behind, it warns occupants as they open the doors. The system warns drivers by means of LED light guides above the inside door handles (contour lighting). In situations that are assessed as dangerous, special high-output red LEDs blink and light up. The exit warning stays on for approximately three minutes after the ignition is turned off.

Additional systems round out the City assist package: the reversing camera as well as the acoustic and visual parking system plus. They activate automatically when an obstacle is detected while maneuvering. Both solutions are also available separately.

FlexRay: networking

A fully equipped new Audi A5 Coupé* has some 90 control units on board, all of which exchange data with each other. This high degree of networking, especially among the driver assistance systems, would not be possible without a brand new approach to the car's electronic architecture.

The new FlexRay bus system connects multiple control units with each other and guarantees extremely fast and reliable data transfer. The most important components are the engine, the automatic transmission, the central chassis control unit, electronic stabilization control (ESC), the power steering control unit, adaptive cruise control Stop&Go including traffic jam assist, the image processing control unit and the safety computer, which controls the safety systems.

There are other data networks in addition to the FlexRay bus. CAN (controller area network) buses are the standard networking technology. CAN is used for such things as the air conditioning, convenience electronics and assistance systems (Audi side assist). Furthermore, CAN is used for communication between the infotainment system and the central display and control components, such as MMI and Audi virtual cockpit

LIN (local interconnect network) buses complement the CAN buses by operating less complex integrated systems such as interior lighting. The 3D Bang & Olufsen Sound System, the TV tuner and the Audi virtual cockpit use MOST (media oriented systems transport) technology.

The electrical system also contributes to lightweight construction in the new A5 Coupé: enhanced topology, new aluminum cables and a fleece battery lower the weight by six kilograms (*13.2 lb*) compared with the previous model.

Body

The new Audi A5 Coupé* is really fit; despite the greater dimensions, the model weighs up to 60 kilograms (*132.3 lb*) less than the previous model. The entry-level TFSI, the 2.0 liter TFSI, has a curb weight of just 1,390 kilograms (*3,064.4 lb*).

The body of the new Audi A5 Coupé is among the lightest in the segment. Thanks to geometrical lightweight construction and an intelligent mix of materials, it weighs 15 kilograms (*33.1 lb*) less than the body of the previous model. For example, the module cross-member under the instrument panel is made of aluminum extruded sections and aluminum sheets, while the front cross-member is an extruded section.

The front suspension strut domes are highly integrated aluminum castings. Compared with components made of sheet steel, which are welded together from multiple individual parts, they reduce weight by a total of eight kilograms (*17.6 lb*). This construction allows a very stiff connection between the upper links and the body for excellent steering response – optimal conditions for handling.

In the new Audi A5 Coupé, hot-shaped components form the high-strength, crash-proof backbone of the occupant cell. They strengthen the transition from the front end to the interior, the front zone of the roof frame, the B-pillars, the side sills and parts of the floor. Hot-shaped components constitute 17 percent of the body structure.

Peace and quiet on board: top acoustic marks

With its excellent torsional rigidity, the body lays the foundation for highly precise handling and a quiet interior. The new Audi A5 Coupé* surpasses its competitors in this respect. Switchable engine mounts ensure exemplary comfort at idle. The sealing concept for the doors is complex, and an acoustic windshield is standard. Audi offers tinted privacy glass for the rear doors as an option.

The low drag coefficient contributes to efficiency. Particularly at high speeds, the sophisticated aerodynamics pay off in the form of low fuel consumption. And with a drag coefficient of 0.25, the new A5 Coupé leads the competition. The new Audi A5 Coupé also scores top marks for passive safety. In the interior, the adaptive occupant restraint system for the front seats offers outstanding protection. It adjusts the effect of the front airbags and the seat-belt force limiters to the seating position of the driver and front passenger as well as to the type of frontal collision.

Equipment

The Audi A5 Coupé* is launching with an upgraded list of standard equipment that has been expanded by numerous functions. Included are xenon headlights with LED daytime running lights and LED rear lights, Audi MMI radio plus with 7-inch color display, Bluetooth, USB charging, three-spoke leather multifunction steering wheel (including shift paddles in models with automatic transmission), front center armrest, height-adjustable belt feeds, 40:20:40 split rear seat back, remote unlocking of the seat backs and LED interior lighting. Also standard are the Audi drive select dynamic handling system, the assistance systems Audi pre sense city and multicollision brake assist system, and the adjustable speed limiter.

The new lines concept increases the customization options for the new Audi A5 Coupé. With the lines design, sport, design selection, S line and the S line sport package, customers have more design freedom than ever before.

The new Audi A5 Coupé will roll into showrooms in Germany and additional European countries in fall 2016.

The new Audi S5 Coupé

From 0 to 100 km/h (*62.1 mph*) in 4.7 seconds. The new Audi S5 Coupé* combines dramatic design with the performance of a sports car. Its newly developed, turbocharged V6 engine produces 260 kW (354 hp) and consumes just 7.3 liters of fuel per 100 km (*32.2 US mpg*). With a unladen weight of 1,615 kilograms (*3,560.5 lb*), the car weighs 60 kilograms (*132.3 lb*) less than the previous model. The precision-honed exterior design and the numerous S-specific details in the interior underscore the dynamic character of the Audi two-door sports coupé.

Strong heart: 3.0 V6 TFSI

The completely redesigned, turbocharged 3.0 TFSI engine for the Audi S5 Coupé* offers powerful performance: high power, ample torque, spontaneous response and a sonorous sound. All of that paired with a new level of efficiency.

From its 2,995 cc of displacement, the V6 TFSI produces 260 kW (354 hp), which is 15 kW (21 hp) more than the previous engine. A constant 500 Nm (*368.8 lb-ft*) (plus 60 Nm/*44.3 lb-ft*) of torque is available from a low 1,370 all the way to 4,500 rpm. In the NEDC, the new 3.0 TFSI in the S5 Coupé consumes just 7.3 liters per 100 kilometers (*32.2 US mpg*) – a CO₂ equivalent of 166 grams per kilometer (*267.2 g/mi*). Fuel consumption has dropped by five percent compared with the predecessor engine.

New combustion process: higher efficiency

The decisive success factor for the efficiency of the V6 3.0 TFSI is the new combustion process from Audi. It is based on what is known as the B-cycle, which is similar to the process used in the Audi A4 2.0 TFSI with 140 kW (190 hp)* and utilizes the high-pressure injection valves that are arranged centrally in the combustion chambers.

The shortened compression stroke of the updated combustion process enables the use of an engine process with a significantly higher geometric compression ratio in the V6 TFSI. Combined with a power stroke that, while normal, is longer relative to the compression stroke, this allows for more efficient combustion and increased engine efficiency.

This measure normally significantly reduces the fill of the cylinders, however, and the high compression ratio increases the engine's tendency to knock, which significantly limits the maximum achievable output. The Audi valvelift system resolves this conflict between efficiency and output orientation. Under part load, it enables a very short intake aperture duration of 130 degrees of camshaft angle coupled with the early closure of the intake valve. At higher loads, the engine can switch to a camshaft contour with a longer aperture duration and greater intake valve lift, with which the engine achieves its maximum output.

Turbocharger: separate exhaust gas flows

The turbocharger, which replaces the mechanical compressor of the previous engine, operates according to the twin-scroll principle. The exhaust branches of the two cylinder banks run separately in the exhaust manifold and in the turbocharger housing, and only merge before the turbine wheel. This technology avoids undesirable interactions between the two gas columns, and it makes a major contribution toward early and powerful torque build-up.

The turbocharger is located within the 90-degree V of the cylinder banks. It normally sits on the outside next to the crankcase. Accordingly, the exhaust side is on the inner side of the cylinder heads and the intake side on the outer side. This layout enables compact construction and short gas flow paths with minimal flow losses – the 3.0 TFSI responds extremely spontaneously and directly.

Weight reduction: minus 14 kilograms (30.9 lb)

Thanks to a thorough redesign, the V6 TFSI has shed 14 kilograms (*30.9 lb*) and now weighs 172 kilograms (*379.2 lb*). Made with an aluminum alloy using the complex sand casting process, the cylinder crankcase features integrated, thin-walled cylinder liners of gray cast iron. In combination with the newly developed rings for the aluminum pistons, this reduces friction.

Another efficiency module is the thermal management system. The crankcase and the cylinder head have separate coolant circuits. After a cold start, the switchable water pump controls the flow of coolant through the engine so that the oil comes up to its operating temperature as quickly as possible. The exhaust manifold is integrated into the cylinder head and coolant circulates around it, which helps to heat up the engine quickly. When the engine is warm the system reduces the exhaust gas temperature, which reduces fuel consumption, particularly during sporty driving.

Eight-speed tiptronic

The drivetrain of the Audi S5 Coupé* has also been completely updated. This also applies to the smooth, rapid and spontaneously shifting, eight-speed tiptronic. The layout of its gear sets and shifting elements results in low drag torques and thereby to a high efficiency level. Its large number of gears makes it possible to operate the engine close to its ideal load point very frequently. Their lower gears have short, sporty ratios, while the upper gears are long to reduce revs and fuel consumption.

The torque-converter transmission is integrated into the engine's thermal management system and is designed for start-stop operation (from 3 km/h (*1.9 mph*) residual speed). The driver can select the D, S or E mode and can use shift paddles on the steering wheel for manual gear changes. All commands are transmitted to the transmission electrically – by wire.

As soon as the driver lifts off the accelerator at speeds between 55 and 160 km/h (*34.2 and 99.4 mph*), the transmission begins freewheeling mode if this will save fuel (exception: Mode S). If the car is equipped with the optional systems predictive efficiency assistant and adaptive cruise control Stop&Go including traffic jam assist, coasting is managed in a very anticipatory manner.

Standard: quattro drive

The quattro permanent all-wheel drive system with its asymmetrically dynamic layout makes a major contribution toward sporty and stable handling of the new Audi S5 Coupé*. During normal driving, its all-mechanical center differential directs 60 percent of the torque to the rear axle and 40 percent to the front. If slip occurs at one axle, most of the forces are rapidly redirected to the other axle – up to 85 percent to the front or up to 70 percent to the rear axle. These high locking figures enable a clearly defined torque distribution and precise interplay with control systems.

Wheel-selective torque control – an intelligent software function – complements the work of the quattro drive system. In dynamic cornering, it applies minimal brake interventions at the wheels on the inside of the curve before they begin to spin. These interventions are made even if the driver does not press the accelerator pedal. The difference between propulsive forces at the wheels makes the car turn into the curve ever so slightly – making handling even more precise, agile and stable.

Wheel-selective torque control at the rear axle: the sport differential

The optional sport differential provides for even more dynamic response when steering and accelerating. It distributes torque between the rear wheels via two superposition gears. The latest generation of the differential is roughly one kilogram (*2.2 lb*) lighter.

During fast driving, the sport differential literally pushes the car into the curve, nipping understeer in the bud. A software function integrated into the central suspension control unit continuously computes the ideal torque split for dynamic driving. When turning into or accelerating in a curve, the majority of the torque is directed to the outside wheel, pushing the car into the curve. Before the rear end can break out, the car is stabilized and thus easily controlled. The control unit for the sport differential is tightly networked with Audi drive select so that the driver can influence the torque split.

Optional control: the S sport suspension

The Audi S5 Coupé features a newly developed S sport suspension with five-link suspensions front and rear. The axle principle enables optimal absorption of longitudinal and transverse forces. Its mounts are sporty-stiff in a lateral direction and supple and soft longitudinally. Together with the updated electromechanical power steering with direct steering ratios, the mounts lay the foundation for dynamic handling, good comfort and a high degree of stability. With their low weight, the new parts also reduce fuel consumption. Audi also offers optional dynamic steering, which adapts its steering ratio to the vehicle's speed and the steering angle.

As an alternative to the standard S sport suspension with highly sensitive monotube shock absorbers, Audi also offers a version with S-specific damper control for the new S5 Coupé. The driver can push a button to choose the default setting of the suspension in Audi drive select and thus call up the desired handling characteristics at any time. The variable S sport suspension works with newly developed CDC dampers (CDC = continuous damping control) with electromagnetically actuated valves in their pistons. They allow hydraulic fluid to flow faster or more slowly as required. A new actuation concept makes them very energy efficient. The central suspension control unit processes all sensor signals within milliseconds and controls each damper individually. Together with the wide range of the damper valves, this ensures a wide spectrum between a soft ride and firm handling.

The brakes are dimensioned to be large. At the front wheels, the internally-vented discs are 350 mm (*13.8 in*) in diameter. They are gripped by black (or optionally red) painted six-piston fixed calipers with rhombus S logos. Electronic Stabilization Control (ESC) operates even more precisely and sensitively than in the previous model. The driver can choose to deactivate it partially or entirely over two stages.

The new S5 Coupé comes standard with 18-inch wheels in a five-spoke start design. The 245/40-series tires weigh less than 12 kilograms (*26.5 lb*). A number of 19-inch wheels are available as options.

Body and exterior

The new Audi S5 Coupé* spans a length of 4,692 millimeters (*15.4 ft*). It is 1,846 millimeters (*6.1 ft*) wide and 1,371 millimeters (*4.5 ft*) high. The long wheelbase of 2,764 millimeters (*9.1 ft*) emphasizes the dynamic silhouette of the two-door sports coupé.

The intelligent combination of materials makes the body very torsionally stiff, safe and lightweight. The new Audi S5 Coupé with standard quattro all-wheel drive weighs 1,615 kilograms (*3,560.5 lb*), 60 kilograms (*132.3 lb*) less than the previous model.

Audi equips the new S5 Coupé standard with LED headlights. The lower edge of the wide and flat Singleframe extends much farther upward than in the previous model. The striking bumper is expressively shaped. The flat air inlet below is adorned by a matt aluminum silver trim strip and spans the entire width of the vehicle. The side air inlets have bold edges and honeycomb grilles in matt titanium black as well as vertical bars evoking the blades of a racing car. At the front end, the new Audi S5 Coupé expresses its independence with additional sporty details, such as the S-specific radiator grille in matt twilight gray with double slats in matt aluminum silver.

When viewed from the side, the new Audi S5 Coupé exhibits a characteristic, wave-shaped shoulder line. The sweeping line with pronounced bulges over the wheel arches is a visual cue to the quattro all-wheel drive. At the transition from the front wheel arch to the A-pillar, a three-dimensional trim element in matt aluminum silver with an integrated S5 logo underscores the supreme sportiness of the new Audi S5 Coupé. As with a racing car, the aluminum-look exterior mirrors are mounted on the top shoulders. Chrome inserts for the door handles and powerfully contoured sill trims in the body color with textured black sill top strips also contributed to the honed exterior.

The rear end sports slim LED rear lights with dynamic turn signals. A distinctive spoiler in the body color on the luggage compartment lid improves the aerodynamics. Integrated into the boldly shaped rear bumper is a flat, black honeycomb grille. The matt twilight gray diffuser with vertical struts and a matt aluminum silver clasp frame the two dual chrome tailpipes.

The three-dimensional trim elements on the flanks, the radiator grille and the luggage compartment lid bear S5 logos with a red rhombus. The 11-shade color palette includes two new colors exclusive to the S model: Navarra blue and Misano red.

Interior

The new Audi S5 Coupé* also features cultivated sportiness in the interior. The clean design with its strong horizontal orientation makes the spaciouly designed interior – which seats four – appear even larger. With a volume of 465 liters (*16.4 cu ft*) the luggage compartment of the S5 Coupé offers everyday practicality.

A broadly extended band of air vents, an elegant air conditioning panel and a large decorative surface define the instrument panel layout. The Audi MMI display welcomes the driver and passengers with a screen featuring the S5 logo. At night, LED light guides trace the contours of the doors and the center console – in 30 colors with the optional ambient light package. The illuminated door sill strips, the three-spoke sport leather steering wheel with multifunction plus and the chrome clasp on the tiptronic selector lever bear the S logo with a red rhombus (as do the welcome screens of the color DIS or Audi virtual cockpit and the MMI display).

Thanks to the vehicle's excellent aeroacoustics, the interior noise level is exceptionally low. The workmanship quality is on the high level that distinguishes an Audi. As is typical for an S model, the color black dominates. For example on the headlining and the instrument panel. The decorative inlays provide elegant contrasts. They come standard in matt brushed aluminum, with options for carbon Atlas, gray natural oak and black piano finish.

The optional S sport seats have integrated head restraints, adjustable bolsters and a pneumatic massage function. Fine Nappa leather in the colors black, rotor gray or magma red with diamond pattern, contrasting stitching and an S badge is the standard upholstery.

Audi virtual cockpit

One highlight is the optional Audi virtual cockpit. It displays all key information in razor-sharp graphics on its 12.3-inch monitor. Views available to the driver include a sport mode centered around the tachometer.

Controls & displays, infotainment and Audi connect

In the new MMI operating system, the flat menu structure is based on that of today's smartphones, including intelligent free-text search. It suggests various search results after just a few letters have been entered. In addition, user operation is possible from the multifunction steering wheel or by natural language voice control.

MMI navigation plus with MMI touch and an 8.3-inch monitor top the infotainment range. MMI touch has a touchpad for zooming and scrolling and for entering characters. The system includes the Audi connect hardware component, which connects the new Audi S5 Coupé to the Internet via LTE. Passengers can freely surf and email with their mobile devices thanks to the integrated Wi-Fi hotspot with optional data packages. The driver can use the diverse online services from the Audi connect portfolio.

The optional Audi phone box with wireless charging connects smartphones to the on-board antenna via near-field coupling and simultaneously charges them inductively according to the Qi standard. The Audi smartphone interface brings Apple Car Play and Android Auto into the car. For discerning hi-fi fans, the Bang & Olufsen Sound System with new 3D sound is available.

Leading role: driver assistance systems

The new Audi S5 Coupé* is at the front of its segment with a wide range of driver assistance systems. The systems come from the full-size class; their intelligent interplay represents another step on the road to piloted driving. Audi offers the same systems for the S5 Coupé as for the A5 Coupé.

Equipment

The new Audi S5 Coupé* will be available on the European market from fall 2016. Its extensive list of standard equipment includes LED headlights, 18-inch cast aluminum wheels, an eight-speed tiptronic and quattro all-wheel drive.

History

The A5/S5 models from Audi have enjoyed tremendous success ever since their introduction in 2007. The Sportback and Cabriolet followed in 2009. Over 320,000 units of the Coupé alone have been sold to date since the market launch.

In 2007, the S5 Coupé was equipped with the 4.2 liter V8 engine producing 260 kW (354 hp) and 440 Nm (*324.5 lb-ft*) of torque. The S5 Sportback and S5 Cabriolet, which followed somewhat later, already had a new 3.0 liter V6 engine with supercharging under the hood. The two-door Coupé followed suit in 2011. Its output data: 245 kW (333 hp) and 440 Nm (*324.5 lb-ft*).

Numerous top placements in reader and expert polls underscored the strong position of the A5/S5 model family. In 2010, the renowned German Design Council honored it with the Design Award of the Federal Republic of Germany. Customers are fascinated by the design of the A5/S5 models. It is by far their most important reason for buying.

The Audi RS 5 Coupé* as the model athlete and the RS 5 Cabriolet* as an open-top, high-performance model have been fascinating customers with supreme performance since 2010 and 2012, respectively. Their 4.2 FSI engine, a high-revving, naturally aspirated V8, catapults them from 0 to 100 km/h (*62.1 mph*) with 33 kW (450 hp) in 4.5 seconds (Cabriolet: 4.9 seconds). Top speed can be optionally increased to 280 km/h (*174.0 mph*).

Fuel consumption of the models named above:

Audi A5 Coupé

Combined fuel consumption in l/100 km: 6.3 – 4.0** (*37.3 – 58.8 US mpg*);

Combined CO₂ emissions in g/km: 144 – 105** (*231.7 – 169.0 g/mi*)

Audi S5 Coupé

Combined fuel consumption in l/100 km: 7.4 – 7.3** (*31.8 – 32.2 US mpg*);

Combined CO₂ emissions in g/km: 170 – 166** (*273.6 – 267.2 g/mi*)

Audi RS 5 Coupé

Combined fuel consumption in l/100 km: 10.5 (*22.4 US mpg*);

Combined CO₂ emissions in g/km: 246 (*395.9 g/mi*)

Audi RS 5 Cabriolet

Combined fuel consumption in l/100 km: 10.7 (*22.0 US mpg*);

Combined CO₂ emissions in g/km: 249 (*400.7 g/mi*)

Audi A4 2.0 TFSI ultra (140 kW)

Combined fuel consumption in l/100 km: 6.1 – 4.8** (*38.6 – 49.0 US mpg*);

Combined CO₂ emissions in g/km: 139 – 109** (*223.7 – 175.4 g/mi*)

**Fuel consumption and CO₂ emissions data are dependent on the choice of wheels and tyres as well as on the combination of engine and gearbox.