

Q5 Updated for 2012- new engine & transmissions

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Q5 Updated- new engine/ transmissions with 15% efficiency increase. New 3.0 litre V6 TFSI engine



Completely updated Q5 model series

New engine-transmission pairings are up to 15 percent more efficient

Audi connect services set new benchmark for infotainment

The Q5 hybrid quattro, the brand's first production hybrid model, unites the power of a V6 with the fuel economy of a four cylinder.



Engines

Audi is launching the updated Q5 with five engine options: three TDI and two TFSI engines. All of these engines combine direct fuel injection with charging, and a start-stop system is standard in all versions. Although most of the engines have enhanced performance, their fuel consumption values were reduced by up to 15 percent.

The most efficient Q5 engine is the 2.0 TDI; Audi offers it in two versions; 143 hp and 320 Nm (236.02 lb-ft) of torque, the four-cylinder engine in combination with manual transmission and front-wheel drive has an average fuel consumption of 44.38 US mpg – and a CO2 equivalent of 139 grams per km (223.70 g/mile). The 75 litre (19.81 US gallon) fuel tank enables driving ranges of up to 870 miles.

The Audi Q5 with 177 hp and 380 Nm (280.27 lb-ft) of torque (with S tronic and quattro drive) has a fuel consumption value 39.20 US mpg. The 3.0 TDI delivers 180 with 245 hp and 580 Nm (427.79 lb-ft) of torque. The V6 diesel – which appears in a new, advanced design and is always paired with a seven-speed S tronic and quattro drive system – accelerates the Q5 from

zero to 62mph in 6.5 seconds and has a top speed of 139.81 mph. Its combined fuel consumption is just 36.75 US mpg.

A highlight of the TFSI engine line-up is the new two-litre, four-cylinder engine that has numerous innovations such as in the control of valves and their stroke, innovative thermal management, the fuel injection system, turbocharger and integration of the exhaust manifold in the cylinder head.

The new 2.0 TFSI outputs 225 hp and 350 Nm (258.15 lb-ft). Its fuel consumption (with a manual transmission) is 30.95 US mpg. Producing even more power is the new 3.0 TFSI – the three-litre V6 with supercharging, which replaces the 3.2-litre engine. This engine outputs 272 hp of power and 400 Nm (295.02 lb-ft) of torque. Key performance data: zero to 62 in 5.9 seconds, top speed 145mph, combined fuel consumption 27.67 US mpg.



Transmissions

Each of the engines in the updated Q5 has an optimal transmission system. The four-cylinder engine operates with a manual six-speed transmission as standard equipment. The highly convenient eight-speed tiptronic is available as an option for the 2.0 TFSI with 225 hp; it is standard in the 3.0 TFSI. The sporty seven-speed S tronic, on the other hand, is standard in the 3.0 TDI and available as an option in the 2.0 TDI with 177 hp.

The transmissions are integrated in the innovative thermal management system of the four-cylinder versions, a system that significantly shortens the warm-up phase after a cold start. All transmissions have wide gear spreads – the long gear ratios in the upper gears reduce fuel consumption, while the short gear ratios of the lower gears improve dynamic performance in highway driving.

The quattro permanent all-wheel drive system is standard with all but one engine – only the 2.0 TDI with 143 hp has front-wheel drive. Normally, the centre differential distributes engine power to the rear and front axle at a ratio of 60:40, but it can redistribute the power at lightning speed when necessary. The torque vectoring system finishes its job with finely tuned brake interventions.



Chassis

The chassis of the Audi Q5 – with its five-link front suspension and trapezoidal-link rear suspension – adds new refinement and comfort in the characteristics of the springs, shock absorbers and stabilizers. The new electromechanical power steering system gives the driver a better feel for the road with direct gearing. The system – which adjusts its power assist to vehicle speed – does not consume any energy in straight-line driving, reducing fuel consumption by about 0.2 litres per 100 km.

The Q5 has 17-inch aluminium wheels and size 235/65 tires (18-inch wheels from 225 hp). Audi and quattro GmbH can deliver wheels with up to 20-inch diagonals and tires up to 255/45. Customers who are particularly focused on sports performance can order the S line sport suspension. The electromechanical parking brake may be supplemented with the optional Audi hold assist, and the standard downhill assist function controls vehicle speed on steep descents. Electronic stabilization control (ESC) adapts its interventions to characteristics of the road surface.

Another high-end feature in the Audi Q5 is the Audi drive select system. It lets the driver vary the characteristic of the accelerator pedal, the shift points of the automatic transmission, amount of power steering assist and operation of the automatic air conditioning system via four modes, including an efficiency mode. When an Audi navigation system is ordered, a fifth mode is added that is largely user-programmable.

In addition, three optional components may be integrated in Audi drive select. They are adaptive cruise control, chassis with damping control and dynamic steering, in which the steering gear ratio is modified as a function of vehicle speed via a harmonic drive system. At performance limits in driving through curves, it compensates for understeer and oversteer by intervening with slight steering pulses.

The Audi Q5 also performs very well on rugged terrain. Its maximum climbing angle is 31 degrees. The vehicle's approach and departure angles are each 25 degrees, while its ramp angle is 17 degrees. The vehicle's ground clearance measures 20 centimeters (7.87 inches).



Exterior styling

The Audi Q5 is progressive and sporty, spacious and functional. Its styling, with a coupe-like roof line and wrap-around tailgate, visualizes all of these properties – and it is now acquiring distinctive new traits. The interior design of the headlights has been modified; the LED daytime running lights of the optional xenon plus units are shaped as curved bands that surround the headlights. Audi also offers the optional adaptive light with dynamic cornering light and static turning light.

The horizontal lines of the high-performance SUV's front end are emphasized more strongly. The high-gloss black Singleframe grille has beveled upper edges; its vertical chrome struts and the Audi rings have a sculpted look. The modified bumpers integrate air inlets with high-gloss black inserts and fog lights with chrome rings.

When xenon plus headlights are ordered, the tail lights are also designed with a layout of visually uniform LED light bands. The diffuser insert and the tailpipes that taper at the bottom have been redesigned – in two versions, depending on the engine. Roof rails and crossbars are standard equipment.

There is a range of 15 colours, including four new colours. As options, Audi can deliver an S line exterior package or an offroad styling package; both give the Q5 a unique look with their design details and the colours of add-on parts.

The updated SUV is 4.63 meters (15.19 feet) long, 1.90 meters (6.23 feet) wide and 1.65 meters (5.41 feet) tall. Its drag coefficient is 0.33 and its frontal area is 2.65 m² (28.52 square feet); the curb weight of the base version is 1,755 kg (3,869.11 lb).

The engine hood and trunk lid consist of aluminium, while a large share of the car's structural elements integrate ultra-high-strength steels; they reduce weight and improve crash safety. The high-performance SUV's interior has a solid and highly comfortable look. Audi received the "Euro Car Body Award" for the Q5 body – the most prestigious award in car design.

Interior



The interior of the Audi Q5 has made additional strides in refined styling. Many of the user controls have narrow chrome trim; the steering column control stalks, ignition key and instruments were given subtle modifications. The narrow panels of the center console are high-gloss black. All steering wheel versions, including versions with shift paddles, reflect the new Q-specific styling.

The ergonomics have also been fine-tuned. The central media component, MMI navigation plus, now has four buttons, and its volume dial has an additional skip function. Other refinements have been made to the controls for the seat heating, the new highly efficient air conditioning system, the Audi drive select system and the multifunction steering wheel.

Extras worthy of special mention are the convenience key, three-zone automatic air conditioning system and climate-controlled comfort seats with a ventilation function. The panoramic glass roof also creates a pleasant atmosphere in the interior.

An uncompromisingly high quality of workmanship is a matter of pride at Audi. Selections of materials, colours and upholstery fabrics have been updated – three new interior colors, three fabric and three leather qualities and a total of 35 different combinations offer plenty of latitude when it comes to customization.

Large fabric-upholstered surfaces are standard on the door trim panels; inlay options include three wood veneers and one aluminium version.

The S line sport package offers a black interior; sport seats and elegant trim components make it even more elegant. The package is completed by 19-inch wheels with 235/55 tires, a sport suspension and the exclusive exterior colour Daytona Grey, pearl effect. The design packages, Audi exclusive program and Audi exclusive line offer other exclusive choices.

The Audi Q5 is a car with outstanding practical talents when it comes to recreational and family activities. It offers ample interior space with a long wheelbase of 2.81 meters (9.22 feet). The seatback angles can be adjusted on the rear seats. When these seats are folded – which is very easy using the remote seatback unlatching feature – the cargo capacity increases from 540 to 1,560 litres (19.07 to 55.09 cubic feet).

Audi offers an optional rail system for the cargo space, an electric drive for the tailgate, folding front passenger seatback and rear seating system with ten centimeters (3.94 inches) of longitudinal adjustment together with cargo pass-through feature. The Audi Q5 is also a powerful towing vehicle with up to 2.4 metric tons of trailer load, depending on the engine and

hill incline.

Driver assistance systems

In the updated Q5, the driving is relaxed and carefree – in part due to the highly developed assistance systems from Audi. The driver information system with rest recommendation is a standard feature. If the system detects that the driver's attentiveness is waning – based on steering wheel movements and other parameters – it recommends that the driver take a break from driving.

Assuming a central role among the optional assistance systems is adaptive cruise control. The radar-based cruise control system controls the distance to the car ahead in traffic; at speeds under 30 km/h (18.64 mph) it can initiate hard braking if it detects an impending collision. Audi active lane assist can support the driver with small steering interventions to stay on track in a lane. Audi side assist monitors the space behind the Q5 to support the driver in changing lanes.

Infotainment systems and Audi connect

Audi offers a broad selection of infotainment systems in the updated Q5. Positioned at the top: the Bang & Olufsen sound system and MMI navigation plus with a large hard drive, seven-inch color monitor, 3D graphics and DVD player. Many system details have been improved, e.g. voice control and the optional digital radio reception. The system is a standard feature in the Q5 hybrid quattro, together with the Audi sound system and colour driver information system.



The Bluetooth car phone online perfectly complements MMI navigation plus. Its integrated WLAN hotspot lets passengers surf the Internet and email with their mobile devices. For the driver, it brings customized Audi connect online services into the car, such as Google Point of Interest search by voice control, navigation with Google Earth images and Google Street View. Audi traffic information online, a service of Audi connect, offers the driver up-to-the-minute information about traffic on the selected route.

Another new feature is the smartphone app Audi music stream. Q5 drivers can use it to receive more than 5,000 Internet radio stations, and they can save their favourites to their cell phones. The selected program accesses MMI navigation plus via WLAN, and its audio signal is output over the audio system loudspeakers. Web radio is also controlled from the vehicle's user terminal.

Audi Q5 hybrid quattro

The Q5 hybrid quattro, the first hybrid model from Audi, is designed as a highly efficient parallel hybrid. Propulsive power is supplied by a 2.0 TFSI with 211 hp and 350 Nm (258.15 lb-ft) of

torque as well as an electric motor with a peak output of 54 hp and peak torque of 210 Nm (154.89 lb-ft). Together, the two power sources can briefly output a system power of 245 hp and a system torque of 480 Nm (354.03 lb-ft).

The Audi Q5 hybrid quattro accelerates from zero to 62mph in 7.1 seconds and can reach a top speed of 139mph. In pure electric mode, it can cover up to 1.86 miles at a constant speed of 37mph. In this mode, its top speed is 62mph, while its combined fuel consumption is 34.09 US mpg.

A highly modified eight-speed tiptronic transmission transfers engine power to the drivetrain without requiring a torque converter; its mounting space is taken by the electric motor, which is combined with a multi-plate clutch. The clutch engages and disengages the electric motor and the TFSI. A compact and lightweight lithium-ion battery system with 1.3 kWh energy capacity stores electrical energy. A complex air cooling system maintains battery temperatures within a suitable window.

The driver switches between the three driving modes with a button and with the tiptronic gear selection lever. The EV characteristic map prioritizes the electric drive, while the D mode efficiently controls both the internal combustion engine and electric motor. The S mode and the manual shift gate of the tiptronic are configured for a sporty style of driving.

Within these constraints, the hybrid control module chooses the best operating mode at any given time. The Audi Q5 hybrid quattro can be driven with just the TFSI, just the electric drive or in hybrid mode. It can also recover energy during deceleration, or it can boost output for powerful acceleration when both drives work together.

Outside, the Audi Q5 hybrid quattro can be recognized by its fully painted bumpers and by the hybrid-specific ten-arm turbine design of its wheels. 19-inch wheels are standard; 20-inch wheels are optional. Inside, special instruments display the hybrid's operating state – such as the powermeter, which replaces the tachometer.

Prices

Despite extensive vehicle upgrading and the addition of new features, the price of the Audi Q5 has barely risen for customers. For example, the 2.0 TDI with 177 hp costs just 150 euros more than the previous model with 170 hp; its base price is 39,900 euros. The high-performance SUV will arrive at dealers later this summer.

UK specifications and prices are yet to be announced.

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