The new A1 Sportback – more agility for the compact model

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Sporty and efficient, fresh and attractive – the new Audi A1 Sportback.

Compact
A clear sign of the popularity of the Audi A1 and A1 Sportback is the over 500,000 cars sold since its market launch in 2010. The Audi compact model is now even more attractive, with benefits to both interior and exterior design. Fresh trim elements and paint colours give it an even sportier appearance. The small compact exhibits handling that is like that of a mid-class car. The rigid body and short-wheelbase makes it agile and manoeuvrable.

The three petrol engines are either new or have been intensively further developed. For the first time, Audi is offering the completely new three-cylinder engine, the 1.0 TFSI – it is efficient without neglecting driving fun. Fuel economy has been improved by as much as ten percent throughout the engine lineup, and power output ranges from 70kW to 141kW.

The electromechanical power steering system for the A1 Sportback is entirely new. It reduces power assist as vehicle speed increases. Its operation can also be modified by the new Audi drive select system. Wheels are available in sizes up to 18 inches.
At a glance

The new Audi A1 Sportback

Exterior design and body
- Progressive design, wrap-around shoulder line and wrap-around hood and tailgate, Optional contrasting colour for roof dome
- Striking modification on the exterior, Singleframe wider and flatter, headlights and rear lights with new graphics
- Lightweight, high-strength body with outstanding rigidity and safety

Drivetrain
- Three new TFSI engines, power output from 70kW to 141kW (192 hp), start-stop system is standard
- Seven-speed S tronic available for all engines

Chassis
- Wheels from 15 to 18 inch, new electromechanical power steering
- Two-stage Electronic Stabilisation Control ESC with extended, torque vectoring at the front axle
- Audi drive select standard on sport and S line

Interior, equipment and Audi connect
- Fresh materials and colours, clear controls, top quality
- Numerous packages, colours, upholstery versions, options and kits for further customization
- Optional MMI navigation plus and Bose surround sound system
Even more agile –
the new Audi A1 Sportback

Audi has extensively revised the A1 Sportback – it’s now even sportier, more
customised and attractive. In the thoroughly updated engine lineup, two
entirely new engines to the A1 range set the benchmark. The Audi S1
Sportback is available for customers who prefer especially dynamic driving.

1.0 TFSI
The new 1.0 TFSI engine is a perfect entry point into the Audi A1 Sportback
range. It features the same distinctive design and urban versatility as the
other models in the range, with an even more attractive price point.
Importantly, this new entry point is available with the six-speed S tronic
automatic transmission.

1.4 TFSI Sport
Drivers who are looking for a sporty and dynamic lifestyle also want to
display it in their cars. These two properties are top priorities in the sport
equipment line. 16-inch aluminium wheels, chrome-plated tailpipe trims
and fog lights mark the exterior. The model’s sporty appearance is continued
in the interior. The air vents are designed in a cool, high-gloss black, and the
aluminium package and the tornado cloth on the sport seats create a
dynamic ambiance. The A1 moves with agility through the city and in the
country with a three-spoke leather-trimmed sport steering wheel in
combination with the Audi drive select dynamic handling system and the
dynamic suspension. The driver information system always provides the
driver with key information.

1.8 TFSI: sporty engine – sporty design
The design of the new Audi A1 Sportback is sporty, and its defining lines are
striking. When the most powerful engine is selected – the 1.8 TFSI – the
visual impression is even more dynamic.

It combines all of the elements of the new Sport line with other exclusive
features. The front is trimmed with a modified front bumper with a colour-
contrast blade, and the standard xenon plus headlights offer ideal
visibility. In a side view, the 17-inch wheels are especially eye-catching. At
the rear, the black tailpipe trim pieces of the exhaust system, LED tail lights and high-gloss black diffuser express the sporty potential of the top engine.

Lifestyle: variety of colours
Audi has once again updated its choices of colours and materials for its youthful, lifestyle-oriented lineup. As an option, the surfaces of accents are available in fresh colours. These surfaces are the console on the centre tunnel, the map pockets, armrests in the doors, seat upholstery and sleeves of the air vents. On the latter, printed films – coated with a three millimetre thick glass-clear coating – give an extraordinary sense of depth.

Black is the dominant colour in the interior. As an alternative to cloth upholstery, Milano leather is available, including in a mix with Alcantara. The contrasting stitching of the leather seats is rock grey. The sport line offers the hues steel grey, laser blue and black. The air vent sleeves are styled in high-gloss black; the contrasting stitching of the optional leather seats is rock grey or laser blue.

The S line sport package (1.8 TFSI) comes in the colours black and rotor grey, and the contrasting stitching and carpet piping are in silver. Fine Nappa leather is available as an upholstery material. Supplemental to this, the air vent gaiters can be ordered in the optional designs glacier white and aluminium look (in the S line sport package).

New colours: colour range
As in the interior, Audi freshened up exterior colour choices. Buyers can choose from twelve exterior colours, including five new ones. The solid paint finishes are Brilliant black and Cortina white, while the metallic colours are called Floret silver, Glacier white and Scuba blue. The colour choices are rounded out by the pearlescent paint colours Daytona grey (exclusively for S line sport package), Misano red, Mythos black, Nano grey, Shiraz red, Utopia blue and Soho brown. In addition, customers can choose from over 100 other multifaceted paints from Audi exclusive.

As an option, Audi can paint the entire roof dome (on the A1 Sportback) in the contrasting colours Brilliant black, florett silver, metallic or Daytona grey, pearl effect.

Drivetrain
Audi offers three TFSI engines for the A1 Sportback. All three are either entirely new or were fundamentally re-designed; power outputs range from 70 kW to 141 kW. All engines combine direct fuel injection and turbocharging. They conform to limits of the Euro 6 emissions standard and include a standard start-stop system. While the power and torque of most of the engines increased, fuel economy was improved by up to ten percent.

**Compact and refined: the 1.0 TFSI with three cylinders**
The most compact of the three gasoline engines in the new Audi A1 Sportback is the 1.0 TFSI, which was essentially re-designed from the ground up. It is the first three-cylinder gasoline engine in the history of the Audi brand. From 999 cc of engine displacement (bore x stroke: 74.5 x 75.4 mm), it has an output of 70 kW and 160 Nm of torque. The 1.0 TFSI propels the Audi A1 Sportback from 0 to 100 km/h in 11.1 seconds with the standard seven-speed S tronic transmission; its top speed is 186 km/h. ADR/81 fuel consumption is just 4.4 litres per 100 kilometres.

**Lightweight design: just 88 kilograms of weight**
The new three-cylinder weighs just 88 kilograms without add-on parts. It shares some sophisticated solutions with the two 1.4 TFSI engines that belong to the same engine family: its crankcase is made of cast aluminium. Throughout the crankcase the masses are minimal, and friction losses are low; the piston pins have a DLC coating for extremely smooth operation. The forged connecting rods and aluminium pistons are so finely balanced that the engine does not need a balancer shaft for quiet and smooth running.

There are twelve valves at work in the cylinder head of the new 1.0 TFSI; their intake and exhaust camshafts can be adjusted by 50 and 40 degree crank angles, respectively. The valve train module in which they rotate is lightweight and rigid. The cylinder head incorporates the exhaust manifold – which is an important component of effective thermal management. The cylinder head has its own cooling loop, as does the crankcase; the coolant stays in the hot running phase there to warm up the engine as quickly as possible.

Integration of the intercooler into the intake manifold results in short gas paths and spontaneous buildup of charge pressure which can reach a relative pressure of up to 1.4 bar. The electrically actuated wastegate of the turbocharger operates with great precision. The common rail system builds
fuel injection pressure up to 250 bar – a new top figure in the TFSI sector. Their five-hole injectors can deliver three individual injections per work cycle.

**Gasoline engines: direct injection and turbocharging**

**The 1.4 TFSI**

The 1.4 TFSI has 1,395 cc of displacement (bore x stroke: 74.5 x 80.0 mm), and it is equipped with a package of technologies similar to that of the 1.0 TFSI. The powerful 1.4 TFSI generates 92 kW and 200 Nm of torque, the latter of which is available between 1,400 and 4,000 rpm. With the seven-speed S tronic, the sprint from 0 to 100 km/h takes 8.9 seconds, and its top speed is 204 km/h. It has a combined ASR/81 fuel consumption of just 4.9 litres per 100 kilometres (112 g CO₂ per km).

**Performance engine: the 1.8 TFSI**

The most powerful engine that Audi is offering for the new A1 Sportback is the new 1.8 TFSI with 141 kW; it mobilizes 250 Nm of torque over the broad range from 1,250 to 5,300 rpm. The top engine works together with the seven-speed S tronic as standard equipment. The sprint from 0 to 100 km/h takes 6.9 seconds; it reaches its top speed at 234 km/h. ADR/82 combined fuel consumption is just 5.6 l/100 km, which is equivalent to CO₂ emissions of 129 grams per kilometre.

The 1.8 TFSI, which offers 1,798 cc of displacement (bore x stroke 82.5 x 84.1 mm), is full of very effective efficiency technologies. Under part-load, an additional injection is made into the induction pipe of the FSI gasoline direct-injection engine. Two adjustable camshafts and the Audi valvelift system, which switches the stroke of the exhaust valves over two stages, ensure good filling of the combustion chambers. The thermal management system utilises a high-performance rotary vane module and integration of the exhaust manifold in the cylinder head. Two balance shafts ensure very smooth running performance.

**Tailor-made: the transmission**

Audi provides the right transmission for every engine in the A1 Sportback. For the 1.0 TFSI engine, there is a standard five-speed transmission, and there is a six-speed transmission for the 1.4 TFSI engines with 92 kW.

The most powerful TFSI gets a standard seven-speed S tronic. This transmission is optional for the other engines. The driver can operate the dual clutch S tronic transmission from either the selector lever or the shift
paddles on the steering wheel. The automatic D mode is configured for maximum fuel economy; the gear shift points are sportier in the S mode. Hill hold assist is a standard feature.

The seven-speed S tronic consists of two sub-transmissions; two multi-plate clutches operate the gear wheels of gears that are on separate drive shafts. Both transmission structures are continuously active, but only one is connected to the engine at any one time. Shifts are performed by switching the clutches. This takes just a few hundredths of a second and occurs with no perceptible interruption to the flow of power – it is dynamic and comfortable.

At a weight of around 70 kilograms, the compact seven-speed S tronic is exceptionally lightweight. Its clutches work without an oil supply, which boosts engine efficiency even more. The electric pump, which circulates the oil for the gear set area, operates as needed. The transmission ratio in the lower gears is short and sporty; the top gear is long to reduce engine speed.

**Exterior design**

The new Audi A1 Sportback has a strong and compact stance on the road and the styling has been made much sportier. The Singleframe is a dominant feature at the front. It is wider, and the areas around the corners are more distinctive than before. The headlights have a low-profile, wedge-shaped cut. The interiors of the headlights – which may be ordered in xenon plus technology – have been redesigned. The bumper has powerful contours; the air intakes and fog lights (standard on the sport line) were reconfigured.

From a side view, the car has an extended and sporty appearance. The dome-shaped roof line, shaped differently for the two models, defines the car’s silhouette. The hood wraps over the top area of the front fender; its seam is visually extended by the tornado line, which runs over the doors and the side panels and forms part of the continuous shoulder line. Above the side sill, the dynamic line ascends steeply. The exterior mirrors were aerodynamically modified, and they are mounted on the door shoulders.

At the rear, the wrap-around tailgate lid also emphasises the car’s width. The diffuser is now lower in profile and wider; on the left side of the diffuser the exhaust system terminates in one or two tailpipes. The newly styled tail lights, which are in LED technology in the design line, are defining elements of the styling; their wedge shapes are a variation on the motif of the
headlights in front. The backs of the C pillars also feature small LED lights – they become visible when the trunk lid is open.

**Body**

High-strength and ultra high-strength steels comprise roughly two-thirds of the body of the Audi A1 Sportback. Form-hardened parts represent another 11 percent – the blanks are heated in a furnace to extremely high temperatures and are then immediately shaped in a cooled pressing tool. The temperature jump gives it extreme tensile strength which enables thinner wall thicknesses and lower weight.

The body’s rigidity also plays an important role in the acoustics of the both compact models. Great effort went into optimizing the noise emissions and rigidity of the metal components; all areas in which forces are introduced have been reinforced. The acoustic concept is rounded out by an insulating package that consists of lightweight materials.

The new A1 Sportback attains a low $c_D$ value of 0.31, and wind noises are minimal. Many car body details – from the wheels to the small trailing edges of the tail lights and the roof edge spoiler – contribute towards aerodynamic air flow. Polymer sheathing covers much of the underbody; it reduces the $c_D$ value by around ten percent. The Singleframe and the area around it are fully sealed, so that the inflowing air reaches the radiator with practically no losses.

In terms of passive safety, the two premium compacts have state-of-the-art equipment. The form-hardened sheets in the A and B pillars, in the roof line, in the wall in front of the footwell and in the rear sections of the side members make the occupant cell very strong. In the field of pedestrian safety as well, the two models exceed legal requirements. The engine hood is secured to the body by two release latches.

**Chassis**

In terms of handling, the Audi A1 Sportback offers qualities of the next higher vehicle class – it is very maneuverable and agile in the city, and stiff and precise on highways and expressways. The axle load distribution – in the range of 62:38 – harmonises excellently with the front-wheel drive; with most engines, the battery is located in the luggage compartment.
A MacPherson-type suspension is used at the front with lower wishbones and a subframe made of high-strength steel. Rigid front transverse link mounts produce precise lateral stability. The track width is 1,477 millimetres.

A new feature in this model series is electromechanical steering with its electric motor mounted on the steering column. It has a sporty, direct steering ratio of 14.8:1; it offers a precise feeling of contact with the road; and the steering boost gradually decreases with increasing speed. The new steering system is lightweight, and it consumes less energy for its drive than the previous system which was already a very efficient electrohydraulic steering system. The turning circle measures just 10.6 metres.

Operating at the rear of the revised Audi A1 Sportback is a semi-independent suspension with separately mounted springs and shock absorbers. Rear track width is 1,471 mm. Guide bearings make a major contribution to elasto-kinematics that combine agile driving with comfort. A sport suspension is standard in the sport equipment line. As an alternative, Audi can install the dedicated stiff S line sport suspension which – together with 17-inch wheels – is also available in the S line sport package.

**Multifaceted: Audi drive select**
The Audi drive select dynamic handling system is a standard feature for the sport line. The driver can use it to vary the characteristics of the accelerator pedal and steering assist – as well as the standard climate control system (optional on 1.0 TFSI) and cruise control system – between the modes efficiency, auto and dynamic. Engine sound is added with the 1.8 TFSI.

In all versions, Electronic Stabilisation Control ESC was systematically further developed, and for the first time it can be deactivated over two levels. It adds a revised sport mode, and it may be deactivated entirely.

Thanks to defined interventions, a more agile driving style is enabled by the sport mode together with torque vectoring with its more direct response. When ESC is completely deactivated, torque vectoring remains active for precise vehicle handling, and the Electronic Differential Lock (EDL) remains active for optimal traction. The control strategy for torque vectoring was extended, and it now takes all road friction values into account.
Before the understeer threshold is reached, finely metered brake torque that is imperceptible is applied to the wheels at the inside of a curve. When power is applied, the excess torque flows to the outer wheel; this makes the car steer into bends and hairpins precisely. Within physical limits, the tendency to understeer is minimized by this ESC function.

A sub-function of ESC is the standard multicollision brake assist system. After a crash, it prevents continued uncontrolled rolling of the car and possibly a secondary collision.

The wheels lineup consists of 13 versions, seven of which are new. The basic wheels are 15-inch alloy wheels for size 185/60 tyres. The sport line has 16-inch alloy wheels with tyres sized 215/45. The 1.8 TFSI S line has 17-inch wheels with size 215/40 tyres.

As options, Audi can fit further aluminium wheels from 17 inches in diameter, and quattro GmbH also offers impressive 18-inch wheels with 225/35 tyres. Some of these wheels are two-tone or partially polished. Audi Genuine Accessories supplements the diverse wheel lineup with six additional designs. A tyre pressure indicator is standard.

Mounted behind the large wheels are powerful brakes. The front brakes are internally ventilated and are either 256 or 310 millimetres in diameter, depending on the engine. At the rear wheels, all models feature 230 millimetres discs gripped by aluminium floating calipers. In an emergency braking situation, the adaptive brake lights flash as a warning to drivers behind.

**Interior**

The interior of the new Audi A1 Sportback is sporty and sophisticated at the same time. The sweeping instrument panel with its horizontally stepped front takes its cue from an airplane wing; its four powerfully flared round air vents are reminiscent of jet engine turbines. The console on the centre tunnel is similar in design to the stern of a sailing yacht.

Like all Audi models, the compacts car has an impressive logical operating concept. The instrument set is clearly arranged. Between the large round instruments, there is the display of the driver information system – a standard feature of the sport and design lines. The integrated efficiency program assists the driver in achieving an efficient style of driving. The
standard colour monitor is lowered into the instrument panel when inactive; when it is tapped with the finger it slides upward.

**Very comfortable: the seats**
The front seats offer good comfort to people of every height and stature, providing stability and support. In the sport and design equipment lines, two height-adjustable sport seats with lumbar supports are installed; the next higher level is S sport seats (optionally available on 1.8 TFSI) with integrated head restraints. Heated seats are available as an option for all versions.

The Audi A1 Sportback comes from the factory configured as a five-seater car.

The luggage compartment of the A1 Sportback is 270 litres. The walls are plane, and the step to the loading lip is low. The hatch unlocks electronically, including via the remote key fob. When the split rear seatbacks are folded down, cargo capacity increases to 920 litres up to the headlining. Audi offers a luggage compartment package as an option, as well as a ski and snowboard bag.

Audi premium character is reflected all areas of the interior; all of its details make an elegant and sophisticated impression. Buttons and other controls are fitted without play, and they move with finely graduated clicking sounds. Window lift buttons, the rotary/pushbutton control of the optional MMI navigation plus and the CD player have fine chrome accents; a high-gloss black frame encloses the fold-out monitor. In the design and sport lines, many of the controls feature an aluminium look.

An especially elegant feature is the LED interior lighting package with white LEDs. When the Bose surround sound system is installed, the frames of the woofers are illuminated by LED light conductors. Audi delivers the LED interior lighting package in the 1.4 TFSI Sport and 1.8 TFSI S line.

**Infotainment and Audi connect**

The infotainment lineup for the A1 Sportback was conceptualized as a modular system. The base system is the MMI radio with three tuners, SD card reader, AUX-IN port and eight loudspeakers; it already offers MMI operating logic and a fold-out 6.5-inch monitor.
It boasts a Bluetooth interface and the Audi music interface (AMI) to connect to a mobile player. Also included is a leather multifunction steering wheel and the driver information system.

The top solution of the lineup is MMI navigation plus, which sets standards in this vehicle class. The system can store 20 GB of music data; it integrates two card readers, the AMI, a Bluetooth interface, CD/DVD drive and speech control. Now, the driver can speak the entire navigation address in a single step and also control the main functions of the radio, media and telephone by voice. The fold-out monitor presents graphics in 3D representation; the navigation map also has a three-dimensional appearance.

The top audio solution is the Bose surround sound system that can be selected. Its digital amplifier has 465 watts of output power, and it can play back stereo signals in 5.1 surround sound. It uses a microphone to analyse intrusive noises and adjusts playback accordingly. In this system, 14 loudspeakers are installed in the car, including a subwoofer that is mounted under the luggage compartment.