Audi A4 allroad – quattro ultra and MHEV-Technology

The consummate onroad and offroad experience: the Audi A4 allroad quattro

Thanks to its quattro all-wheel drive and ground clearance raised by 35 millimeters (1.4 in) the Audi A4 allroad quattro combines superb ride comfort and good offroad qualities. With the optional allroad-specific suspension with damper control, comfort and dynamism can be enhanced further. It differs from the A4 Avant through details such as the underbody protection or the wheel arch trims and also by its 12-millimeter (0.5 in)larger wheels and its wider track –six millimeters (0.2 in)wider at the front and eleven millimeters wider (0.4 in)at the rear.

Automatic transmissions come standardwith the Audi A4 allroad qattroa suspension with damper control provides an alternative to the standard suspension. As on the A4 Avant, the luggage compartment has a capacity of 495 liters (17.5cu ft) –this increases to 1,495 liters (52.8 cu ft) with the rear seats folded down and cargo loaded to the roof.The rear hatch and the luggage compartment cover are electrically operated as standard. With the additional offroad mode on the Audidrive select dynamic handling system, the driver can choose from six profiles in the A4 allroad quattro.

Both S models of the A4 family – the Audi S4 Sedan TDI (combined fuel consumption 6.3 – 6.2 l/100 km (37.3 - 37.9 US mpg)*; combined CO2 emissions 164 – 163 g/km (263.9 - 262.3 g/mi)* and the S4 Avant TDI (combined fuel consumption 6.3 l/100 km (37.3 US mpg)*; combined CO2 emissions 166 – 165 g/km (267.2 - 265.5 g/mi)* – are now equipped with a V6 diesel engine as a power package. The 3.0 TDI combines hefty torque, smooth running and a long range and provides a power output of up to 255 kW (347 PS) and maximum torque of 700 Nm (516.3 lb-ft). It accelerates the S4 Sedan TDI from zero to 100 km/h (62.1 mph) in 4.8 seconds on the way to an electronically governed top speed of 250 km/h (155.3 mph). This combination of power, torque and efficiency makes the Audi S4 TDI unique in the segment. The electric powered compressor delivers powerful drive-off performance and virtually seamless power buildup when accelerating. As such, it eliminates any turbo lag, providing instant responsiveness in all driving situations. The electric powered compressor is integrated into a new 48-volt main electrical system, which also incorporates the mild-hybrid system. This provides even more efficiency potential than the MHEV system in the 12-volt electrical system on the A4 models. In the S4 TDI this is the next expansion stage in which the mild-hybrid technology will be rolled out based on 48 volts. The 12-volt subsidiary electrical system is connected to the 48-volt main electrical system via a powerful DC/DC converter. For the first time a powerful 48-volt belt

alternator starter is being used in the S4 TDI as the heart of the mild-hybrid system with a maximum recuperation power of up to 8 kW when braking. A compact, air-cooled lithium-ion battery with a capacity of 0.5 kWh, which is located under the luggage compartment floor, acts as an energy management center. The mild-hybrid system on the S models has the potential to reduce customer fuel consumption by up to 0.4 liters per 100 kilometers.

An eight-speed tiptronic and the quattro permanent all-wheel drive make up the drivetrain. If desired, an optional sport differential is available to actively distribute power between the rear wheels. In this way, more power can be directed specifically to the wheel on the outside of the bend when cornering at speed, which combats the tendency to understeer early on. The S sport suspension is standard. With its S-specific setup it provides a sporty driving sensation. This can be enhanced even further with the optional S sport suspension with damper control. Inside and out, a host of design details point to the unique position of the S models – from the exhaust tailpipes to the S mode in the display of the optional Audi virtual cockpit.

* *Fuel consumption and CO2 emission figures given in ranges depend on the tires/wheels used*

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