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AUDI A4'01 - Technical Features

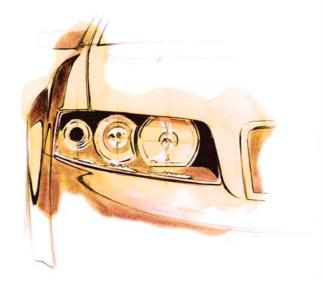
Design and Function

Self-study programme 254

Advance by technology

The new Audi A4,

a vehicle which combines driving pleasure and good sense with the highest level of quality and sports styling.



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New engine programme ...18

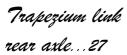
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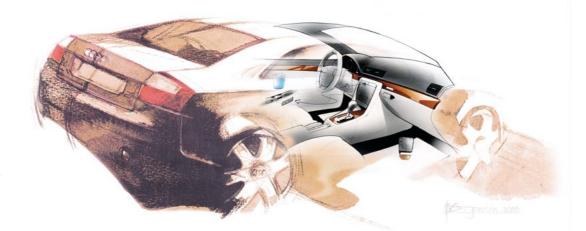


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The self-study programme will provide you with information on design and functions.

It is not intended as a workshop manual.

For maintenance and repair operations it is essential that you refer to the current technical literature.



















Introduction



The architecture of motion

Performance and smooth running

The engine programme of the new Audi A4 includes two petrol engines of a completely new design, with aluminium housings. The 2.0 litre 4-cylinder in-line engine with 96 kW (130 PS) and the 3.0 litre V6 with 162 kW (220 PS) fulfil the EU 4 emissions standard.

A high degree of running smoothness is achieved via balancer shafts.

Infinitely variable perfection

For the first time in this vehicle class, Audi offers the infinitely variable "multitronic" automatic gearbox for all front-wheel drive versions.



The new light alloy running gear

With the four-link front axle, each wheel is controlled by four aluminium transverse links. The pivot bearings are also made from the same light alloy.

The trapezium link rear axle for the quattro drive system is also used in the front-wheel drive models of the Audi A4.



Finely-tuned aerodynamics

Despite the greater frontal area and the cooling air current for the air conditioner (standard), it was possible to improve the C_D value by 5 %, in comparison to its predecessor, to 0.28.

A special feature is the so-called aero-floor, which provides for optimal airflow on the underside of the vehicle.



High safety standards

With a thoroughly optimised body design and comprehensive safety equipment, the new Audi A4 is able to comply with all current valid safety standards, throughout the world. Crash sensors for the front airbags integrated directly into the bumper bar, improve occupant protection.

Communication centre on wheels

With regard to infotainment, the new Audi A4 leaves nothing to be desired. 4 different audio systems, 2 differently configured Navigation systems and a car phone with voice operation are on offer.

SSP254_048

Electronic stability programme (ESP) including brake assistant

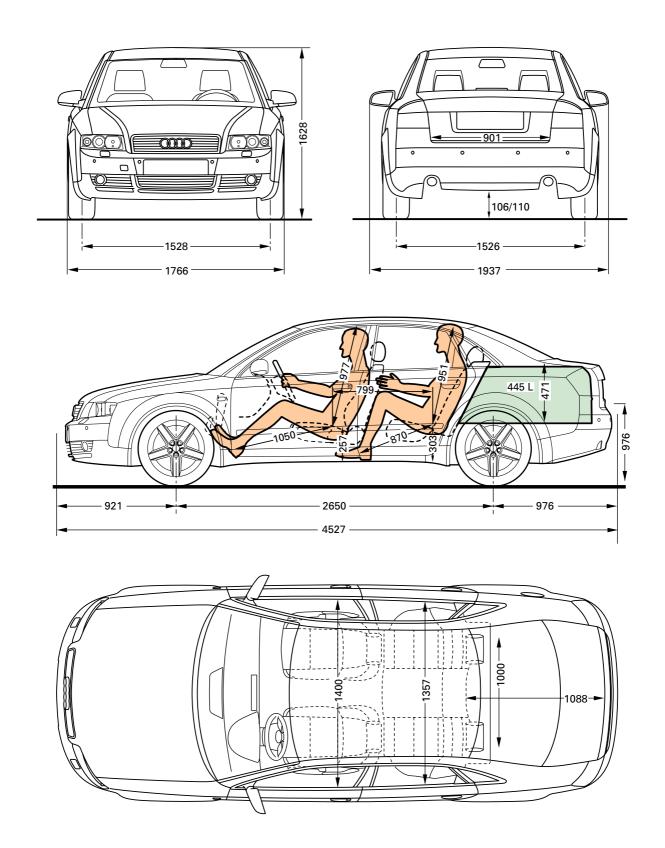
For the latest ESP generation, the hydraulic brake assistant is an integral part of the standard equipment.

It is intended to assist the driver by automatically increasing the brake pressure during emergency braking.

Introduction



Vehicle dimensions of Audi A4'01



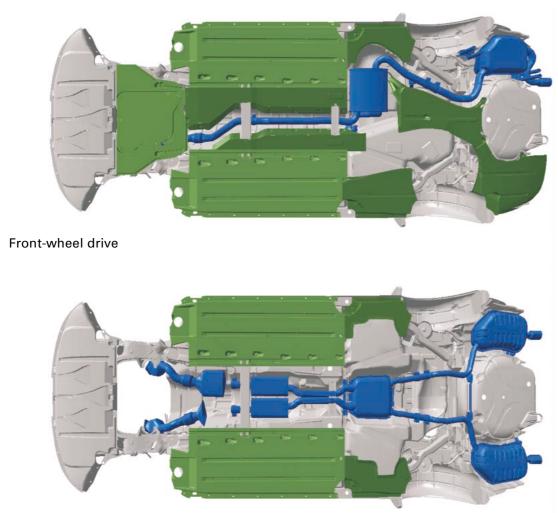


The aero-floor

not only contributes to improved aerodynamics.

It was also possible to reduce the noise level by approx. 3 dB (A).

The aero-floor was designed so as to guarantee ground clearance and resistance to stone impact and to prevent accumulation of dirt, stones and snow.



Four-wheel drive quattro and V6 engine

SSP254_053

Part of the additional costs generated by the aero-floor could be compensated by dispensing with certain panelling components as well as by dispensing with PVC protection of the underside of the vehicle. The latter is of advantage during recycling.



The engine compartment noise insulation does not form part of the aerofloor.



The new Audi A4 is designed for optimal conformance with current crash requirements and safety standards.

This could only be achieved by increasing the body weight.

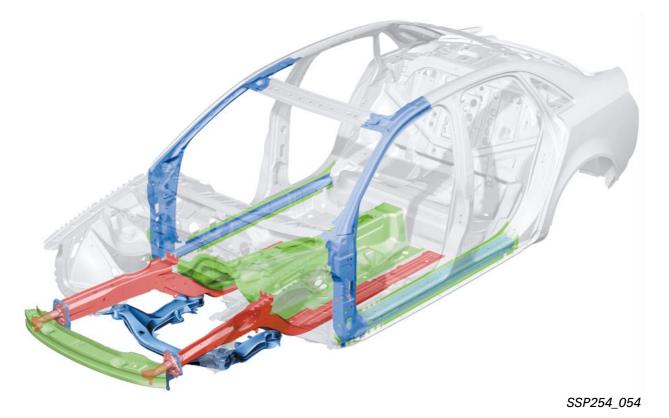
In order to reduce this additional weight to a minimum, the proportion of light-weight materials has been increased in comparison to its predecessor.

The proportion of high-strength sheet metal parts as well as the use of a total of 10 large component "tailored blanks", contribute significantly to weight reduction.

Body rigidity has been increased by 45 % by increasing the number of connection points by 25 %.

Front impact design features

- the straightened longitudinal member with crash-optimised octagonal cross-piece
- the rigid and significantly wider bumper cross-piece
- the integration of the member structures into the passenger cell
- strength, rigidity and weight-optimised suspension strut cross-piece



Depending upon vehicle weight, performance and fuel consumption are the characteristics which our customers can experience at first hand.