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## **The Audi A5 / Audi S5**

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## Short version

### **The Audi A5**

Audi's exciting new interpretation of a classic vehicle concept, the Audi A5, is a modern grand tourer, a touring coupé in the best tradition. It marries sporty dynamism with refined elegance to produce a fascinating car – exhilarating driving and generous refinement all combined with the Audi brand's legendary sophistication and quality. The progressive design is both elegant and dynamic. The powerful and economical FSI and TDI engines and the A5's wholly new high-precision running gear and innovative, luxury-class equipment make Audi's new offering in the coupé segment without peer.

The A5 extends the Audi range as a new model line, taking up the tradition of classic two-door sports and touring coupés. Expertly styled with a powerful presence, it uses elements of Audi's progressive design language, creating a new coupé that makes a clear design statement of sportiness and elegance. Moreover, the A5 offers a great dynamic driving experience and excellent long-distance comfort.

With a length of 4.63 metres, the Audi A5 belongs to a superior class of coupé. Four comfortable seats and an ample load volume of 455 litres make this car a spacious long-distance tourer. The dynamic performance is supplied by FSI and TDI engines with rated power ranging from 125 to 195 kW.

All engines have high efficiency and eco-friendly characteristics in common and the diesel units already comply with the EU5 standard which will apply in future and, thanks to a range of technical innovations, their fuel consumption and CO<sub>2</sub> values are impressively low.

The drivetrain options on offer include front-wheel drive and quattro versions and a six-speed manual gearbox or the multitronic continuously variable transmission. The running gear developed for the A5 is entirely new and combines agile handling with optimum driving safety.

#### **Design – sportiness and elegance**

For coupé customers, the design is decisive in their choice of car. And on that point the Audi A5 speaks for itself – it takes Audi's progressive and stylish design language to new heights. The sporty silhouette, the precisely drawn lines, which gracefully interact with the powerful surfaces, the expressive front face, and the equally distinctive tail end yield a wholly desirable coupé.

“The Audi A5 is the most beautiful car I have ever designed,” says Walter de’Silva, Head of Design, with absolute conviction.

The new A5 naturally displays a sporting intent with an emphasis on elegance and power. The proportions of this coupé are characterised by a very wide and low stance, a short front overhang and a long, flowing transition from the C pillar to the short rear.

### **Lines and surfaces play with light and shadows**

An expression of determination characterises the features of the front end. The single-frame grille is the distinguishing feature of the front and the A5's slim, right-angled headlights and large air inlets reinforce the impression of breadth in the car's face-on view. The same holds true for the rear. Distinct horizontal lines underscore the sporting intent of the A5.

Audi's customary devotion to detail is particularly evident in the headlights. Their elaborate styling perfectly reflects precision and high-tech engineering. The daytime running lights, comprising a strip of eight light-emitting diodes on each side, make the A5's xenon plus headlights absolutely unmistakable.

### **Interior – the luxurious perfection of an Audi**

The interior, the interface between person and vehicle, is characterised by ergonomic design and functionality and equally by the exclusiveness of the materials selected and the Audi brand's typically superb build quality.

The entire cockpit architecture is clearly focused on the driver and brings together the instruments and the centre console to form one unit. The animated shapes, the precision of the workmanship, and the sophisticated design of the controls – they add up to an interior that is a visual delight and very tactile.

Although the instrument panel comprises typical Audi features, with the characteristic droplet-shaped surrounds for the speedometer and rev counter, it has been developed as a new design in all its details. In the new A5, the screen of the MMI operating system retains its ergonomically perfect high position in the cockpit. A new advanced version of the acclaimed intuitive MMI operating logic makes the wide range of functions easy to understand.

### **Key with memory**

The new key is another elegant design item that also provides sophisticated functionality. With its soft contours and pleasant surfaces, it sits beautifully in the hand. But above all, the innovative key dispenses with the conventional key bit. This is possible because it communicates electronically with the vehicle electrical system as soon as it is inserted into the cockpit. It can also store important information, such as the car's current mileage or warning messages from the Audi A5's driver information system. That makes taking the A5 in for servicing that little bit quicker.

## **Engines – for powerful driving pleasure**

A coupé with a distinctly sporty character requires powerful and highly efficient engines. For the Audi A5, power is provided by innovative technology across the board. All engines supplied for the new model series feature direct fuel injection, for which the petrol engines employ the FSI concept and the diesels are equipped with common rail TDI. This gives all engines a sonorous free-revving character, allowing them to effortlessly unwind their generous torque with optimum energy efficiency.

The refined TDI engines with their outstanding sporting talents suit the A5 just as well as the petrol units. Which type to go for depends entirely on the driver's personal preference. All of the engines impressively demonstrate that efficiency and driving pleasure are by no means mutually exclusive.

### **FSI – The high-tech engine with variable valve lift**

The top-of-the-range petrol engine in the Audi A5 is a new 3.2-litre FSI with innovative valve gear comprising the Audi valvelift system. The effect is an appreciable increase in engine efficiency. The driver benefits from greater power and improved driveability, while enjoying a marked reduction in fuel consumption. At the wheel of an Audi A5 3.2 FSI there is 195 kW of power output available and a superb torque of 330 Nm in a broad rev band of 3,000 to 5,000 rpm, ensuring blistering acceleration at all times. Thrilling performance potential contrasts with the 3.2 FSI multitronic's very moderate fuel consumption of only 8.7 litres per 100 kilometres. Joining the A5 range from June 2008 will be the 3.2 FSI quattro tiptronic. This model has a combined fuel consumption figure of 9.3 litres per 100 kilometres.

The all-new high-tech four-cylinder unit in the A5 also does full justice to Audi's reputation for leading engine technology. The 1.8 TFSI, delivering 125 kW will be available in Australia towards the end of 2008. It combines turbocharger technology with petrol direct injection and provides a burst of acceleration and pulling power unrivalled in its class from virtually every rev band. Just as it did with its TDI engines, Audi has accomplished a pioneering feat of engineering with its turbocharged petrol units, taking spark-ignition engines to a new dimension in fuel consumption and driveability.

### **TDI – Impressive performance combined with exemplary eco-friendliness**

The V6 TDI engines from Audi also set the standard in their segment. Their copious torque and outstanding economy accompanied by superb refinement mean that they score highly on all counts. In addition to all this, they offer eco-friendly performance that is hard to beat. The TDI engines fitted in the Audi A5, for instance, are equipped with diesel particulate filters as standard and already comply with the Euro 5 exhaust standard which will apply in future.

The sporty top-of-the-range TDI in the new Audi A5 is the thoroughly revised 3.0-litre engine. It now delivers a power output of 176 kW and its maximum torque is an immense 500 Nm.

With its supreme 0 to 100 km/h acceleration time of 5.9 seconds and a maximum speed of 250 km/h, the Audi A5 3.0 TDI quattro stands out as a high-performance coupé of the first order and also offers an average fuel consumption of just 7.2 litres per 100 km.

As in numerous other Audi models, in its basic setting the quattro permanent four-wheel drive in the Audi A5 distributes 40 percent of engine power to the front axle and 60 percent to the rear axle for optimum handling characteristics. The system instantly adjusts the power distribution depending on the situation and road surface grip.

### **multitronic with eight forward gears and sport mode**

The multitronic continuously variable transmission offers unparalleled power transmission comfort. At the same time its high efficiency and now even taller maximum transmission ratio make it very economical on fuel, since it operates in the most efficient range at all times. Whenever the driver prefers a more sporty driving style, the gearbox can be switched to a manual mode that now has eight defined gear ratios.

### **Running gear – precise and agile handling**

Even when stationary, the Audi A5 makes a dynamic impression: the wide track, large wheels, long wheelbase and short overhangs not only characterise its muscular appearance, they also form part of the formula that produces its peerless active driving feel. The Audi A5 defines the new standard in its class for precise steering response, outstanding directional stability and superb agility, while also offering first-class ride comfort.

Audi engineers have achieved this with a completely new design of running gear: the front wheels are located by a five-link suspension arrangement with upper and lower wishbones. Another completely re-engineered component is the rack-and-pinion steering. It is positioned in front of the front axle close to the wheel centre line, and enhances the car's very agile handling by its direct transmission of the steering forces.

Overall, the front axle is located a long way forward for a longitudinal engine configuration with front- and four-wheel drive. This new vehicle architecture makes it possible to have a long wheelbase with a short front overhang, and to optimise the axle load distribution. These are all additional elements that enhance the supreme handling qualities of the new Audi A5.

A key element of the rear running gear is its trapezoidal-link rear suspension with completely new kinematics. It provides a high degree of ride comfort combined with excellent directional stability. At both the front and rear, the main

components of the suspension are made of aluminium. The generous dimensions of the brakes are designed to match the car's high performance ratings. The standard electromechanical parking brake, familiar from the A8 and A6, is activated via a button next to the gear lever.

### **Body – generous and superlatively solid**

The Audi A5 offers ample space and, for the rear seat passengers too, is a full-size touring car. Likewise, with a luggage compartment volume of 455 litres, there is always space left over for a bit of extra shopping, even on a long tour. The loading width of one metre allows easy stowage of large items of luggage, and even well-filled golf bags will fit crossways into the Audi A5 boot. The rear seat backrest folds in two separate sections and features a convenient remote release mechanism operated from the boot.

The extremely high bodyshell rigidity, typical of an Audi, provides the basis both for the car's crisp handling and its agreeable feeling of solidness and comfort. In the development of the A5, the engineers have successfully combined supreme sporty performance and agility with outstanding vibrational comfort. Its lightweight body construction was achieved using the latest technologies, such as metal plates with varying wall thicknesses, combined spot welded and bonded joints, and the use of aluminium, for example, in the front wings.

### **Equipment – high-tech from the luxury class**

Where equipment is concerned, the Audi A5 is characterised by a comprehensive standard specification. This includes 17-inch alloy wheels along with the xenon plus headlights with daytime running lights in the form of an LED strip, keyless access for the doors and boot and keyless engine starting are all features of the advanced key system. The deluxe automatic air conditioning system with three temperature zones allows the passengers to adjust the climate for their individual comfort – in the rear, too, a Symphony system with 6-stack CD player, a separate screen plus MMI operating logic, and the automatically opening boot lid. Even the standard Audi parking system advanced features a rearview camera, helping to make tricky parking in cramped multi-storeys easily negotiable.

The list of options offers even more luxury-class high-tech: Audi adaptive light combines xenon plus headlights with the dynamic cornering light system. The extra-large panoramic tilting roof lends the A5 an especially generous feeling of open space. DVD-based Navigation is another exceptional option. Alongside the navigation system with DVD including MMI, DAB digital radio reception and DVB TV reception, is a sound system also offers pure delight for the ears. The top sound system for the Audi A5 is supplied by the Danish high-end sound specialist Bang & Olufsen.

At a glance

## The Audi A5/S5

### Launch plan for Australia:

Engine & transmission	Pricing	Introduction dates
S5 4.2 FSI quattro manual	\$131,900	October 2007
A5 3.2 FSI multitronic	\$91,900	December 2007
A5 3.2 FSI quattro tiptronic	\$95,900	June 2008
S5 4.2 FSI quattro tiptronic	\$131,900	June 2008
A5 1.8T FSI multitronic	Approx. \$70,000	2009
A5 3.0 TDI quattro tiptronic	\$96,900	November 2008

### Body:

- powerfully dynamic and elegant design
- dimensions: L 4.63 m, W 1.85 m, H 1.37 m
- long wheelbase of 2.75 m
- generous space for a grand touring coupé
- luggage compartment 455 l, folding rear seat back

### Engine:

- direct injection FSI and TDI engines
- 3.0 TDI engine already complies with the Euro 5 emissions standard which will apply in the future, diesel particulate filter fitted as standard
- low fuel consumption with sporty performance

### Gearbox and driveline:

- sporty 6-speed manual and tiptronic gearboxes
- multitronic automatic transmission with 8 forward gear ratios in manual mode
- front-wheel drive or quattro permanent four-wheel drive

### Running gear:

- five-link front suspension, trapezoidal-link rear suspension, safe self-steering characteristics, high agility
- long wheelbase, good weight distribution
- 17 to 19-inch wheels, high-performance brakes

### Equipment:

- luxurious interior look and feel, large scope for customisation
- extensive standard specification including xenon plus headlights with daytime running lights in the form of an LED strip, Bluetooth in-car phone, Audi advanced key
- optional Bang & Olufsen sound system, Audi Music Interface.

## Long version

### **The design**

#### **Quite simply a desirable coupé**

Coupés have always been special in the way they bring together the joy of driving and the fun of mobility itself. A coupé is a car that also says something about your personality; it is an expression of independence and a zest for life, of individuality and an enjoyment of sports performance.

For coupé customers, emotion plays a major role in their choice of car; the most important reason to buy, in the case of a sporty two-door car, is the design. And on that point the Audi A5 wins you over at first sight – this coupé is clearly a character actor of the automobile world. It takes Audi's progressive and stylish design language to new heights. "The Audi A5 is the most beautiful car I have ever designed," says Audi chief designer Walter de'Silva, now Head of Volkswagen Group Design, with absolute conviction.

#### **Classic elegance, harmony of proportions**

For Walter de'Silva, the Audi A5 is a very important car: it combines sportiness, power, sophistication and elegance – the core elements of the Audi brand's genetic code – in a highly concentrated formula. The sporty, low silhouette, the few but very precisely drawn lines, the expressive front face, and the equally distinctive tail end yield a wholly desirable coupé.

"The A5 is of course a very powerful and superlatively sporty car," says Walter de'Silva.

"Nevertheless, it doesn't come across as the least bit aggressive or arrogant." There is a classic elegance and a harmony of proportions, lines and surfaces that set the Audi brand's new two-door model apart.

The coupé's proportions, for instance, are characterised by a very wide and low stance, a long wheelbase with a short front overhang and a long, flowing transition from the C pillar to the short rear.

"It is especially the way the shoulder line extends, with the back roof pillar flowing into it and the long transition to the short rear, which gives the A5 the identity of a typical *gran turismo*, a sophisticated touring sports car," explains Walter de'Silva.



## **Lines and surfaces play with light and shadows**

An expression of determination characterises the features of the front end: the single-frame grille is the striking hallmark of the new Audi model, where it is interpreted in a somewhat sleeker manner and directed more towards the road. The slim, rectangular headlights are angled slightly towards the centre and together with the large air inlets they reinforce the impression of breadth in the car's face-on view. The bonnet is characterised by two distinct feature lines, ridges that extend down in a V-shape from the end of the bonnet, continuing into the bumper. These feature lines thus unite all elements of the front end and underscore the presence of the single-frame radiator grille.

The same holds true for the rear. Here again, the design emphasises the width of the car. Distinct horizontal lines and wide, powerfully styled tail lights, whose shape seems to push outwards, underscore the A5's sporting intent. This impression is enhanced by the spoiler moulded into the boot lid and the rear diffuser highlighted by its contrasting paint finish and framed by the exhaust tailpipes.

## **Visual tribute to the Ur-quattro and the Audi R8**

The side line is dominated by the mighty trapezoidal C pillar. This not only emphasises the car's sporty appeal, but also creates a look reminiscent of the legendary Audi Ur-quattro. A second stylistic tribute to Audi's four-wheel drive pioneer model and to the new high-performance sports car, the Audi R8, can be found in the marked outline of the wheel arches, with their curving contours drawn into the shoulder line. Another aspect that perfectly reflects the Audi design philosophy is the ratio of two thirds car body to one third glass surfaces.

The typical Audi dynamic line in the lower body section gives the A5 an energetic stance, even when stationary. Added to this is the pronounced three-dimensionality of the Audi A5's surfaces. They play with light and shadows, bringing its shape to life and endowing the body with the sculpted intensity that makes Audi design unique. The grille surround and the window frames in anodised aluminium are additional highlights of the A5 look.

## **Headlights show devotion to detail**

Audi's customary devotion to detail is particularly evident in the headlights: their elaborate design reflects the precision and advanced engineering that characterise the entire vehicle. The individual chambers of the xenon plus headlight modules, accommodating the xenon main and dipped beam headlights, the turn signals, and the parking lights, are separated by stylish chrome webs. The daytime running lights are a dramatic feature consisting of a strip of eight light-emitting diodes running along the lower edge of the headlights and rising to the outside. They are easy to make out even in poor light, thus improving safety. They also guarantee the Audi A5 a clear and unmistakable look.

The new bow-type door handles are solid to grip and have been optimised for minimum wind noise. Extensive wind tunnel testing was also needed to perfect the details of the exterior mirrors with integrated LED turn signals. They not only look outstandingly elegant, but their especially added grooves and ribs mean that hardly any dirt is deposited on them.

## **The interior**

### **The luxurious perfection of an Audi**

A sophisticated car's interior has to first of all fulfil two very different needs: it must be the cockpit of a precise driving machine and equally ensure comfortable accommodation for long journeys. The completely new interior of the Audi A5 provides both to the highest standards. Key features are ergonomic design, functionality and easy operation, while the exclusiveness of the materials selected and Audi's typically superb build quality are equally important. An atmosphere in which you feel perfectly at ease, even on long journeys – that is the characteristic quality of the A5 interior.

The entire cockpit architecture is clearly focused on the driver who is the “pilot” at the centre of the car. The instruments and centre console are brought together in one unit integrating all display elements and controls. The design philosophy is based on a variety of shapes combined to form harmonious units. This results in a complex and consistent architecture and creates an animated atmosphere.

### **Making interior design a high-quality tactile experience**

The shapes, the precision of the workmanship, the sophisticated design of the controls, and the quality of the surfaces throughout – together they add up to an interior that is a visual delight and also a joy to touch. The interior design provides a high-quality tactile experience each time you drive the Audi A5. One example of the all-encompassing design approach can be found in the door panel trim, where the controls, inlays, armrest and stowage compartment combine to form one visually harmonious unit.

Although the instrument panel comprises typical Audi features with the characteristic droplet-shaped surrounds for the speedometer and rev counter, it has been developed as a new design in all its details.

In the centre of the driver's field of vision between the two main dials is the driver information system that supplies information on the vehicle, navigation, audio system or telephone. It also features the new gearshift indicator, which provides gear selection recommendations for an economical driving style.

## **MMI operating system with intuitive logic**

The latest generation of premium automobiles such as the Audi A5 have extremely powerful vehicle electronics. However, the customisable convenience functions and the infotainment, navigation and telephone systems must remain easily understandable and easy to operate. To ensure this is the case, Audi has developed the MMI operating system, which has already won major acclaim for its simple and intuitively comprehensible logic. A new advanced version of this multi-media interface has been created and refined for the A5. The large screen has been given an ergonomically ideal high position in the cockpit. Vital information is also displayed on the instrument cluster.

The standard Symphony Radio has a 6-stack CD player and 6.5-inch screen with the MMI operating concept and an operating unit positioned on the radio. The optional navigation system is equipped with the separate operating panel on the centre tunnel.

At the centre of the operating system is the steering wheel: the Audi A5 has a leather sports steering wheel equipped with multifunction controls and shift paddles in conjunction with an automatic gearbox.

## **Conceived and built with great devotion to detail**

Throughout the interior you can find examples of the devotion to detail and the high standards to which an Audi is designed, engineered and built. For instance, all design and function elements are assembled with that unique precision that has for a long time made Audi the benchmark among its competitors worldwide.

The overall visual and tactile impression of the electric seats is characterised by the superb craftsmanship of their expertly executed stitching. In particular, the optional sports seats have beautiful, elaborate stitching and their visual appeal surpasses that of finely crafted luxury furniture – especially when they are upholstered in subtly shimmering Valcona leather.

The electric seats themselves have an impressively comfortable shape for people of various statures, and offer excellent comfort on long journeys. Finally, the seats also help keep you refreshed and fit on long journeys, thanks to their vibration-damping properties and their ergonomic body support. As an alternative, the range includes sports seats with enlarged side sections, an extendable thigh support and electric 4-way lumbar support.

## **A comfortable climate to combat fatigue**

The right climate in the vehicle interior is important to prevent fatigue. The deluxe three-zone automatic air conditioning system is even more sophisticated: it allows the adjustment of separate temperature zones for the driver, front passenger, and rear passengers.

In addition, the air distribution can be set differently for the driver and front passenger sides. A control wheel on the rear part of the centre console allows a desired temperature to be selected for the rear.

This allows each individual occupant in the Audi A5 to enjoy their own personal comfort zone. The system also features a moisture sensor in the base of the interior mirror, to detect whether the glass may be about to mist up and regulate the flow of air to the defroster vents accordingly. A third sensor in the intake duct monitors the air quality. This sensor, which represents the latest generation, detects pollutants from road traffic and automatically switches to air recirculation when required.

If desired, the A5 can also be fitted with an auxiliary heating and ventilation system. This is controlled by timer or remote control and in winter it preheats the interior to keep it at a comfortable temperature and de-ice the windows. In summer, the auxiliary ventilation delivers fresh air to the interior and keeps the temperature low.

## **The body**

### **Spacious, safe and solid**

A coupé must naturally have a fascinating shape to charm the motoring fan's senses. On that score, the Audi A5's sporty, elegant design can hardly fail. Yet its metal structure also has equally impressive tangible qualities: it offers plenty of space, is extremely safe and has a combination of outstanding rigidity and good aerodynamics as a sound basis for the car's excellent handling.

As a true *gran turismo* and a comfortable sports tourer, the Audi A5 cossets its occupants with a spacious luxury interior. At a length of 4.63 metres and with its long wheelbase of 2.75 metres it offers ample space for four passengers and their luggage, even on long trips. The driver and front passenger benefit from an interior width of 1.38 metres, and up to 99 centimetres are available between the seat surface and the roof. That makes for a relaxed feeling of space without a loss of contact with the vehicle.

### **Luggage space with plenty to spare**

The spaciousness of the A5 interior not only benefits the front seats; in the rear, too, the A5 is a full-size touring car, even with its sporty, elegant coupé shape. Here the passengers enjoy an interior width of 1.34 metres and a usable height of 91 centimetres in addition to the ergonomically shaped rear seat bench. The extended forward-folding function for the front seats – easy entry – allows comfortable access to the second row, either as a manually operated version or with electric seat adjustment.

The luggage compartment volume of 455 litres means there is always space to spare for a bit of extra shopping, even on a long tour. The loading width of one metre allows easy stowage of large items of luggage, and even well-filled golf bags will fit crossways into the Audi A5 boot.

The boot lid is beautifully easy to use. It gently swings open on its special hinged arms when you press lightly on the soft touch release in the handle recess, on the interior door panel or the remote control unit, and it can be closed again with little effort.

### **Exemplary anti-theft protection**

And should you need even more than the basic luggage volume, the rear seat back, lockable from the interior with two locks, folds down in two sections. You can then make use of the maximum load capacity of 829 litres. A load-through hatch including a ski bag is available as an optional extra. Both sections of the seat back are released using a lever in the luggage compartment – a solution that is very handy to use.

Like all current Audi models, the A5 has exemplary perimeter security and anti-theft protection, owing, for instance, to the sophisticated design of the doors and locks and the ingenious logic of the engine immobiliser. Since it is not possible to give any details on a sensitive issue of this kind, the verdict of an impartial specialist is called for: the Thatcham Institute serving British insurers tests the cars on the market every year and has awarded Audi the highest possible score of five stars for anti-theft protection. An anti-theft alarm is also available with interior monitoring and a tow-away protection feature using a tilt angle sensor.

DataDot microdot identification is a standard feature.

### **Safety concept based on real-life accident research**

In the event of an accident, the Audi A5 provides the exemplary safety you would expect. Its structure is optimised for crashworthiness and there is an improved range of safety equipment, including new features, to guarantee optimum protection for the car's occupants. Audi has developed the overall safety concept with findings drawn from actual accidents: the Audi Accident Research Unit examines real road traffic accidents throughout the world and analyses accident databases.

The unit's highly specialised engineers use these findings to formulate guidelines for their colleagues to apply in the design of new models. Right from the conceptual design phase, the requirements defined are simulated on a computer and over the course of a vehicle's development a special team drawn from various departments continuously assesses the protective effect afforded by the body structure, the interior and the restraint systems.

In the A5 the result is a comprehensive safety package, which, of course, includes pedestrian protection, but especially takes the possibility of a roll-over accident into account: the roof pillars and the frame are designed to provide the best possible passenger survival space if the car rolls over. To achieve this, the newly developed high-strength and highest-strength steels are used extensively in the construction of the passenger compartment.

For the driver and front passenger the Audi A5 has two full-size airbags, which inflate in two stages, and thorax/pelvis side airbags. Additional protection is provided by the sideguard head airbag system for all four occupants and the optimised design of the seat structure, the seat components and, above all, the head restraint geometry and position for the front seats. In the optimised seat design, especially shaped seatbacks and head restraints protect the upper body and head in a rear collision. To ensure the best possible protection for young passengers, the rear seats are equipped with fittings for the ISOFIX child seat mounting system. This is also available as an optional extra for the front passenger seat, in combination with a deactivation switch for the front passenger airbag.

#### **Additional sensors for more precise airbag triggering**

In addition to the usual acceleration sensor in the airbag control unit, the Audi A5 also has two extra sensors under the headlights. In a head-on collision they are able to register the relevant data a few milliseconds earlier than the central sensor, thus enabling the system to more precisely control the triggering of the airbags. The same applies in a side impact: in this case, the system uses additional acceleration sensors close to the C pillars and pressure sensors mounted in the doors. They optimise the triggering process of the side airbags positioned in the seats and the large-volume sideguard head airbag system.

Adaptive frontal restraint systems (belt force limiters and front passenger airbag) are a new feature introduced with the Audi A5. They adjust their protective functions to the occupant's sitting position to reduce the specific load acting on the body. The belt and airbag work in combination with a newly developed safety steering column with an integrated sliding mechanism and damping function.

Audi has a long-established practice of improving vehicle safety on an advanced engineering level requiring extensive fine tuning of all details. For example: in the fuel system great importance was attached to protection against leakage in the event of a rear collision. The tank was therefore not only positioned for optimum safety, but the routing of all fuel lines also was designed for crash safety. Moreover, the system is equipped with a sensor-controlled fuel cut-off plus an additional safety valve to prevent fuel loss in a roll-over.

However, not every crash is quite that severe. The vast majority of accidents result in damage to the vehicle only. When this is the case, simple and low-cost repair is important.

The combination of weight-optimised cross members at the front and rear and aluminium deformation elements can prevent any damage to the actual body structure at impact speeds of up to 20 km/h. Thanks to bolted fastenings, damaged bumper systems can be replaced quickly and at low expense.

### **New types of steel, latest technologies**

The extremely high bodyshell rigidity, typical of an Audi, provides the basis not only for superior accident safety, but also for the car's crisp handling and its agreeable feeling of solidness and comfort. In the development of the A5, the engineers have successfully combined supreme sporty performance and agility with outstanding vibrational comfort. The car's lightweight body construction was achieved using the latest technologies, such as highest-strength varieties of steel, metal plates with varying wall thicknesses or material qualities (tailored blanks), combined spot welded and bonded joints, and the use of aluminium, for example, in the front wings. A galvanised body has for many years been a matter of course at Audi and the 12-year warranty against rust perforation testifies to its effectiveness.

### **Elaborate fine tuning in the wind tunnel**

A sporty, elegant design combined with extremely good aerodynamics characterises the shape of the Audi A5. Put in figures, the highly competitive drag coefficient of approximately 0.29 reflects the extensive fine tuning carried out in the wind tunnel. The Audi A5 also owes its low wind noise and reduced body soiling, for instance on the mirrors, to work done here. Underbody panelling that produces a largely smooth surface is an important element in good aerodynamics: it reduces overall wind resistance by roughly 13 percent. One small but typical example of the extensive high-precision work carried out in the wind tunnel can be seen in the spoilers moulded into the sides of the tail lights. They provide a defined airflow separation and are also integrated perfectly into the lines of the body design.

Low wind noise is vital for good long-distance comfort in a touring coupé. On this score, the Audi A5 attains the level of a luxury-class saloon car. The relative quiet prevailing in the cabin even at high speeds is thanks to important aspects such as the body's superb airflow characteristics, its frameless doors with two consecutive lines of seals, the excellent aero acoustics of the bow-type door handles and the aero wipers, which are hidden below the bonnet.

### **Perfection down to the smallest details**

A few small ingenious features of these windscreen wipers: the windscreen wipers are "parked" in the invisible area below the edge of the bonnet, underscoring their sophisticated design and their high-quality look, while also improving the driver's field of vision. The wiper motors' electronic control system brakes the wiper movement before the end of each sweep. This reduces wiper blade wear and wiping noise.

In addition, when the wiper blades are returned to their resting points, they are positioned slightly differently each time as this enhances their durability. As you can see, perfection is reflected in every detail.

The panoramic tilting sunroof is an additional highlight of the interior – thanks to its extra-large area, the electric glass roof gives the interior of the A5 a generous feeling of light and space.

Using the central locking or the remote control in the vehicle key, you can close the panoramic tilting sunroof from outside the car via its convenience feature. A steplessly adjustable sun blind provides the necessary protection against the summer heat. An electrically operated blind for the rear window can also be added. It moves on rails on the sides of the window and covers the entire surface of the glass.

## **The engines**

### **Sportiness and effortless driving pleasure**

A coupé with a distinctly sporty character requires powerful and highly efficient engines. For the Audi A5, power is provided by innovative technology across the board. All engines supplied for the new model series feature direct fuel injection, for which the petrol engines employ the FSI concept and the diesels are equipped with common rail TDI.

This gives all engines a thrilling free-revving character, allowing them to effortlessly unwind their generous torque with optimum energy efficiency. The refined TDI engines with their outstanding sporting talents suit the A5 just as well as the petrol units. Which type to go for depends entirely on the driver's personal preference. All of the engines also impressively demonstrate that efficiency and driving pleasure can superbly complement each other.

### **The innovative power of direct injection**

High peak output, muscular pulling power at all engine speeds, refined running and this combined with low fuel consumption – these strengths typify the current Audi engine range. Here the new family of V-engines is particularly impressive. They have a 90-degree cylinder angle with a cylinder spacing of 90 mm, and the engine ancillaries are powered from a space-saving, high-durability chain drive on the rear side of the engine. And however different their combustion processes and designs, they all share the innovative power of direct injection.

In engine technology, Audi engineering has always shown “Vorsprung durch Technik”: in 1989, for instance, Audi launched the TDI engines, which have gone from strength to strength since. Throughout these eighteen years Audi has been the leader in diesel technology.



The petrol direct injection system FSI, another piece of pioneering engineering from Audi, was a celebrated success right from its introduction. In June 2001, the Audi R8 racing car won the Le Mans 24 Hours, proving the speed and reliability of FSI power. Over the following years, 64 more wins out of 80 starts followed. FSI technology is also the perfect example of a parallel development for motor racing and production vehicles: on the roads FSI engines have become another exceptional success story.

### **FSI – The high-tech engine with variable valve lift**

The top-of-the-range petrol engine in the Audi A5 is a new 3.2-litre V6. It is, of course, equipped with FSI direct injection, but also features another masterpiece from the engine developers in Ingolstadt and Neckarsulm: the innovative Audi valvelift system.

This innovation varies the valve lift between two levels. The effect is an appreciable increase in engine efficiency. The driver benefits from more harmonious power build-up and improved engine dynamics, while enjoying a marked reduction in fuel consumption.

At the wheel of an Audi A5 3.2 FSI, you have a whole 195 kW of power output at your disposal and a superb torque of 330 Nm in a broad rev band of 3,000 to 5,000 rpm, ensuring blistering acceleration at all times. This thrilling performance potential contrasts with the 3.2 FSI multitronic's very moderate fuel consumption of only 8.7 litres per 100 kilometres. Joining the A5 range from June 2008 will be the 3.2 FSI quattro tiptronic. This model has a combined fuel consumption figure of 9.3 litres per 100 kilometres.

The fact that this engine successfully marries energetic power development and efficient use of fuel owes much to its direct fuel injection, which makes possible the extremely high compression ratio of 12.5:1, thus leading to highly efficient combustion. The second major factor is the Audi valvelift system. To briefly explain the background: a petrol engine needs the throttle valve to regulate the flow of intake air. At part throttle, however, the engine draws air against the resistance caused by the throttle valve. That results in a considerable loss in operating efficiency.

### **The engine can breathe freely**

With the Audi valvelift system the throttle valve can remain open over a wide scope of engine operating states – the engine can breathe more freely and there are no throttle losses. Instead, the flow of intake air is controlled via the valve stroke: at part throttle, the intake valve opens less widely and less combustion air flows into the cylinder. The valvelift system in itself considerably reduces fuel consumption, with potential savings of seven percent.

Audi's comparatively simple design of the variable valve stroke is truly revolutionary. It requires no additional components, but is located directly on the

intake camshaft. It has sliding cam units which support two cam contours, side by side, for small and large valve travel. Electromechanical actuators move the cam units in accordance with the engine power demand and adjust the valve stroke between two and eleven millimetres.

The all-new high-tech four-cylinder unit in the Audi A5 also does full justice to Audi's reputation for leading engine technology. The 1.8 TFSI, delivering 125 kW, will be available in 2008. It combines turbocharger technology with petrol direct injection and provides a burst of acceleration and pulling power unrivalled in its class from virtually every rev band.

### **TFSI – a new benchmark for its class**

The injection pressure, increased to 150 bar, and the new six-hole injectors guarantee highly homogeneous mixture preparation and also extremely efficient combustion. The optimised turbocharger and a new engine management system provide a spontaneous engine response and a very smooth torque build-up. The entirely new basic engine is designed with an eye to especially high refinement and low vibrations.

The 1.8 TFSI consequently redefines the standard in its class for output, torque and also acoustic behaviour.

Just as it did with its TDI engines, Audi has accomplished a pioneering feat of engineering with its turbocharged direct-injection petrol units, taking spark-ignition engines to a new dimension in fuel consumption and driveability. Like the V6 FSI, the 1.8 TFSI is an extremely efficient engine that delivers low fuel consumption and consequently reduced CO<sub>2</sub> emissions, thanks to a wide range of technical innovations.

### **TDI – the best diesel engine is now even better**

The V6 TDI units from Audi also set the standard in their segment. Their copious torque and outstanding economy accompanied by superb refinement mean that they score highly on all counts. In addition to all this, they offer eco-friendly performance that is hard to beat. Moreover the TDI engines fitted in the Audi A5 are – as in all Audi models – equipped with diesel particulate filters as standard and already comply with the Euro 5 standard which will apply in future.

The sporty top-of-the-range TDI for the coupé is the thoroughly revised 3.0-litre engine. It now delivers a power output of 176 kW and its maximum torque is an immense 500 Nm. But that is not all: with its supreme 0 to 100 km/h acceleration time of 5.9 seconds and a maximum speed of 250 km/h, the Audi A5 3.0 TDI quattro stands out as a high-performance coupé of the first order. It is also one of the cleanest and most economical, consuming only 7.2 litres over 100 kilometres, with exceptionally low emissions.

### **An advanced sports engine with fascinating economy**

The way the 3.0 TDI goes to work is simply fascinating – at low and medium revs it delivers ample muscle, becoming more free-revving with even greater thrust in the upper range. The Audi diesel developers have increased the rated engine speed of the new TDI by 400 rpm and the maximum power output of 176 kW is delivered between 4,000 and 4,400 rpm. That makes the 3.0 TDI a premium sports engine.

This latest version of the three-litre TDI is also based on Audi's current V-engine family, characterised by very compact dimensions. The engine block is made of vermicular graphite cast iron and is extremely rigid, providing the necessary conditions for smooth engine running. To reduce friction, the engine has been extensively fine-tuned, for instance, with a new design of low-friction pistons. The third-generation common rail injection system now uses piezo inline injectors with an eight-hole configuration, which allow five finely controlled partial injections per power stroke.

### **Particulate filter located close to the engine**

The 3.0 TDI is equipped with the latest generation of VTG turbocharger featuring variable turbine geometry. An electric actuating motor controls the position of its guide vanes. A new intercooler, located in front of the water radiator in the front end, cools the charge air. The diesel particulate filter with primary oxidation catalyst is now located close to the engine. This increases its working temperature with the effect that it requires fewer regeneration cycles. That also helps to improve fuel economy by cutting the extra fuel consumption caused by the particulate filter. Above all, positioning the filter close to the engine contributes to its especially low emissions. Usually increasing power output and reducing fuel consumption and pollutant emissions represent irreconcilable goals. The fact that the 3.0 TDI achieves both convincingly demonstrates the leading role of Audi engineering in the development of diesel engines.

### **quattro – superb handling in every situation**

The Audi A5 3.2 quattro and 3.0-litre TDI constantly supplies power to all four wheels. The quattro permanent four-wheel drive delivers the superior capabilities that have become characteristic of Audi models over the last two decades: quattro offers impressive enhancements in vehicle handling and safety and an effortless independence in the way you travel, completely untroubled by external factors.

The permanent four-wheel drive system not only considerably improves traction, it also enables the wheels to transmit greater lateral forces. This in turn means greater driving enjoyment and safety. The handling of the Audi A5 quattro also benefits from better directional stability, a much lower sensitivity to side winds, and excellent towing vehicle qualities.

Finally the coupé is also available with a towing bracket – for towing a trailer, for instance. The owner is sure to make an elegant impression at any riding event.

A self-locking centre differential controls the optimum power distribution. As in numerous other Audi models, this distributes 40 percent of engine power to the front axle and 60 percent to the rear axle at its basic setting for optimum handling. This asymmetric/dynamic torque distribution adjusts automatically to the driving situation and the grip conditions, and the self-locking centre differential responds to changes in the road surface within a fraction of a second.

### **New gearshift indicator assists in economical driving**

In the standard specification, the Audi A5 powertrain features a six-speed manual gearbox with sporty ratios. This is noted for its very precise action with crisp, short gearshifts. A special mount for the selector forks effectively isolates the gear lever from driveline vibrations; that means no trembling sensation in the driver's hand, except perhaps a tingle of excitement in anticipation of the next gear change. Various different measures have been implemented to reduce the manual gearbox's internal friction and increase its efficiency.

A hydraulically operated single-plate dry clutch is used, which has asbestos-free linings and a dual-mass flywheel.

The new gearshift indicator helps the driver to adopt a fuel-saving driving style. The gear currently engaged is shown in the driver information system. If a higher or lower gear can deliver the same performance with better fuel economy, an arrow and a number are displayed to indicate the gearshift recommendation and the suggested gear.

### **multitronic – perfection in comfort and fuel economy**

The multitronic continuously variable automatic transmission is available in conjunction with the 3.2 FSI and the 1.8 TFSI engines. This transmission combines the advantages of a manual gearbox and geared automatic transmission. It offers unparalleled power transmission comfort with its superbly dynamic and completely jolt-free acceleration. At the same time, the multitronic's high efficiency and tall maximum transmission ratio make it very economical on fuel, since it operates in the most efficient range at all times.

The multitronic variator in the Audi A5 allows an especially wide range of gear ratios: the ratio between the minimum and maximum transmission ratios has been extended to 6.73 – virtually the ideal range for a gearbox. On the one hand, this permits sports-style acceleration using the largest possible ratio, while, on the other hand, the engine's fuel-saving potential can be fully exploited with the smallest ratio. The transmission's adaptive control system adjusts to the chosen driving style. At the touch of a button, the automatic sports program can be activated and the transmission will use generally shorter gear ratios.

## **Eight-speed gearbox with paddle gearshift**

Moreover, multitronic is actually two gearboxes in one. For a more sporty driving style or whenever fixed gear ratios are preferable, on mountainous roads for instance, the driver simply switches the multitronic to manual mode. The latest version of multitronic now offers eight forward gears. And no matter how dynamically the A5 is driven, even the manually controlled gear changes are smooth and jolt-free thanks to continuous variation. The manual mode can be operated either using the gear lever or via shift paddles behind the leather sports steering wheel.

## **The running gear**

### **Precise instruments for agile handling**

Designing a good grand tourer coupé is a particular challenge to the developers of the running gear, since the car's handling must reflect its sporty performance and elegance at every turn. That means precise steering, high agility and outstanding directional stability combined with excellent ride and suspension comfort, to make even the longest journey a relaxing pleasure.

Even when stationary, the Audi A5 makes a dynamic impression: the wide track, large wheels and short overhangs not only characterise its muscular appearance, they also form part of the formula that produces its peerless active driving feel. Audi engineers have achieved this by creating an entirely new running gear design and the result is enough to make the Audi A5 the new standard for its class.

### **New suspension with lightweight design**

The new five-link front suspension with a wide track of 1,590 millimetres plays a major role in this. The wheels are located by upper and lower wishbones manufactured from aluminium. The lightweight design of the suspension reduces the unsprung weight, thus enhancing driving comfort. The wishbones are mounted on a subframe, which is firmly bolted to the body for high rigidity.

The rear running gear features a trapezoidal-link rear suspension with completely new kinematics, also largely made from aluminium. The optimum tuning of the dampers effectively reduces movement of the body while also ensuring very good suspension comfort.

Two different sports suspensions are available as options. The sports suspension with high-performance tuning of the springs and dampers for direct road contact guarantees agile handling. The S line sports package features a suspension tuned for an even greater enhancement of handling dynamics, with the body lowered by 10 mm.

Another completely re-engineered component is the rack-and-pinion steering. It is located in front of the front axle close to the wheel centre line and enhances the car's very agile handling with its direct transmission of the steering forces. In conjunction with the top engine versions, the 3.2 FSI and 3.0 TDI, the steering is equipped with servotronic speed-dependent power assistance as standard. The steering wheel itself can be adjusted in height by 50 mm and for reach by 60 mm, allowing a relaxed sitting position for drivers of all statures.

### **Long wheelbase, short overhang**

Overall, the front axle is located a long way forward for a longitudinal engine configuration with front-wheel and four-wheel drive. The new vehicle architecture with an overall length of 4.63 metres allows a long wheelbase of 2.75 metres. That results in a short front overhang and a very good axle load distribution in individual versions of almost 50 to 50 – all additional elements that give the Audi A5 its superb handling. To accomplish this special design, the engineers used a trick adopted from the Audi A8: the front axle differential is located in front of the clutch, so the drive shafts and wheels can also be positioned further forward.

The generous dimensions of the brakes – 16 inches for the A5 or 17 inches for the S5 – are designed to match the cars' high performance ratings. They allow the braking force to be precisely modulated and provide an excellent pedal feeling. In addition, the kinematics of the new rear suspension significantly reduce the so-called braking dive effect.

The front brake discs have an optimised design with a new form of internal ventilation, giving them greater resistance to high stress. The Audi A5 does not have the traditional handbrake lever. Instead, the electromechanical parking brake, familiar from the A8 and A6, is fitted as standard. It is activated and released via a button next to the gear lever or by an automatic function. The A5 is also available with the option of Audi hold assist: this ensures that the car cannot accidentally roll back after stopping on a hill.

### **Integrated driver assistance systems**

ESP in the Audi A5 is an integrated driving dynamics assistance system comprising the functions of the anti-lock brake system, hydraulic brake assist, electronic differential lock, traction control and, of course, yawing moment control – the actual ESP itself. However, this latest version can do even more, such as cleaning the brake discs; this is done by briefly bringing the brake pads into contact with the discs at regular intervals when the car is driven in the rain. The hydraulic fading compensation increases the braking pressure to the required level during extremely heavy use of the brakes. Trailer stabilisation acts to counter incipient snaking by specific application of the brakes. In combination with the cruise control system, automatic braking intervention also maintains a constant speed during downhill driving. This leaves the driver to concentrate on the road.

Above all, ESP reduces the vehicle's tendency to skid when driven close to its handling limits. Statistics have long established the high effectiveness of electronic stabilisation in preventing accidents and mitigating the consequences of accidents. For particular situations the assistance functions may, however, be deactivated in two stages. The first stage switches off only the traction control system. This allows wheelspin, which may be advantageous, for instance, when driving with snow chains. The second stage completely deactivates ESP and may be used by a skilled driver wishing to make full use of the Audi A5's dynamic handling potential on a suitable stretch of road.

## **The equipment**

### **High-tech from the luxury class**

You can appreciate one example of how the Audi A5 marries good design and high functionality as soon as you pick up the key: with its soft contours and pleasant surfaces it sits beautifully in the hand. But the key also represents the modern electronics and the advanced equipment level of the Audi A5. For one thing, it dispenses with the conventional key bit. The innovative key communicates electronically with the vehicle electrical system as soon as it is inserted into the cockpit. Pressing the key stops and starts the engine.

The new key can also store important information, such as the car's current mileage or warning messages from the Audi A5's driver information system. The data are always up to date and available to allow staff at a dealership to receive the vehicle for servicing quickly and easily.

### **Extensive standard equipment**

The electronic convenience key is part of the Audi A5's standard equipment specification, which also includes the electromechanical parking brake, 17-inch forged aluminium wheels, the multifunction leather sports steering wheel, servotronic power steering, three-zone automatic air conditioning, Symphony radio system featuring a 6-stack CD player, MMI operating logic and a separate screen, and the driver information system. The xenon plus headlights with their characteristic strips of LED daytime running lights and the front fog lights are also standard, as are the folding rear seat backs and the automatically opening boot lid. The Audi parking system advanced with rearview camera and the Audi Bluetooth car phone are all standard features.

### **Optional equipment from the luxury class**

The Audi A5 can also be ideally adapted to buyers' and drivers' personal wishes and requirements with a wide range of customisation features. These include numerous high-tech options that are typically the preserve of luxury class cars, such as the dynamic cornering light system Audi adaptive light, DAB digital radio reception, navigation system with DVD including MMI or the high-end sound system from Bang & Olufsen.

### **Access by a gentle touch**

Hard to beat for ingenious convenience: the optional advanced key system, which allows you to leave the key in your pocket or briefcase, where sensors can still detect it within a range of roughly 1.5 metres from the car door. As soon as you touch the sensor surface on the new bow-type door handle or the button on the boot lid, the key identity is checked and the lock is released. This happens so fast that the normal movement of opening the door is not interrupted. You can then start the engine using the start-stop button next to the gear lever. An intelligent search function detects whether the key has been left behind in the car and makes it impossible for the driver to be locked out.

### **Daytime running lights make an impression**

The xenon plus headlights on the Audi A5 with the optional adaptive light system include a raft of innovations that were previously unavailable in this vehicle segment. The most striking feature of the stylishly designed light modules is the revolutionary strip of daytime running lights comprising eight light-emitting diodes on each side. From a safety point of view, they provide an important enhancement by making the Audi A5 easier to see, especially in critical visibility conditions, for instance, when the sun is low in the sky. Moreover, the LED strip on the lower edge of the headlight is also a clear distinguishing feature for the Audi A5.

Separate daytime running lights are expected to become legally obligatory for all new cars in the EU from September 2010. Audi is already offering the maximum safety advantage of this feature today with an extraordinary design and low energy draw. The power consumption per headlight is only 12 watts. That ultimately saves fuel.

### **Motorway lighting for extended headlight range**

The A5 headlights use a new mercury-free xenon system. Conventional xenon bulbs contain small quantities of mercury, which can now be eliminated thanks to new bulb and control unit technology. At speeds of 120 km/h or higher, the dynamic headlight range control raises the light cone slightly to illuminate a longer stretch of road ahead for motorway driving.



The adaptive light is an additional feature of the xenon headlights. At speeds between 10 and 110 km/h, this dynamic cornering light system turns the ellipsoidal module for the dipped and main beams to follow the line of the road and bends. This greatly improves illumination in front of the vehicle and to the sides, making it easier for the driver to anticipate the course of the road ahead.

The two-section tail lights each have three rear light bulbs, helping to make them easily visible in adverse weather conditions. In emergency braking, the hazard warning lights are automatically switched on. All bulbs are designed for very long life and electronically protected against voltage surges.

### **A clear view behind**

The standard Audi parking system advanced is another feature that is more typical of a luxury class model. Its rearview camera and the large image on the MMI system monitor make even cramped multi-storey car parks easy to negotiate. The camera is inconspicuously integrated into the boot lid and captures the area behind the vehicle with a wide angle of 130 degrees. Reference lines are shown in the monitor image to assist the driver in judging the vehicle size and distances. In addition to this real image mode, the system also provides parking assistance with the familiar acoustic and visual signals.

### **Infotainment program for all demands**

The range of infotainment features on offer in the Audi A5 can be perfectly adapted to individual demands with various radio systems, CD players, digital radio reception (DAB), and top-class sound systems. The Symphony sound system with 6-stack CD player is fully integrated into the MMI operating system, which can play MP3 and WMA files from CDs and SD/MMC memory cards. The radio has the phase diversity reception concept, in which the digital signals are continuously monitored by two aerials and combined to give a robust, interference-free reception. This maintains a high-quality signal even in adverse conditions.

### **Digital-quality radio sound**

The optional DAB tuner offers radio reception with unprecedented quality. Digital radio is far superior to even the best analogue FM receivers in terms of dynamic range, transparency and spatiality. And digital quality really comes into its own in combination with the high-performance sound systems in the Audi A5. Digital audio broadcast (DAB) is already widely used in many European countries. In Germany, the UK and Belgium, for instance, almost full coverage has been achieved. If you should come across a gap in the DAB network, the audio system instantly switches to the corresponding FM transmitter – this is noticeable, however, due to the different sound of the music.

The standard or optional sound systems in the Audi A5 ensure optimum conversion of the electronic signals into sound waves. The Audi sound system does so with a six-channel amplifier and ten speakers, including centre speakers and subwoofers, and produces a maximum amplifier output of 180 watts.

### **Perfect sound experience**

The Bang & Olufsen sound system in the Audi A5 turns music into a perfect experience for your ears. For the A5, as for the luxury-class Audi A8 and S8 saloons and the Audi R8 high-performance sports car, the experts from the high-end specialist Bang & Olufsen have created absolute listening pleasure.

Highest requirements were set out for the development of this top sound system: it has to have sufficient dynamic range from pianissimo to fortissimo possibile; an orchestra should come over as one unit, but the individual instruments still have to be clearly place able. The Bang & Olufsen sound system achieves all this with a precision and quality hitherto unknown in this vehicle segment.

This, of course, requires an advanced range of components: in total, 14 speakers of up to 270 millimetres in diameter are distributed at optimum locations in the interior. They are powered by a ten-channel amplifier with a total output of 505 watts. The digital sound processor delivers surround sound, has dynamic vehicle noise compensation and can be adjusted to the listener's preferences via the MMI operating system.

### **Direct iPod connection**

For many, a constantly available, portable music collection has become a fixed part of their lifestyle. Using the Audi music interface you can connect up an Apple iPod to the A5's audio system and control it via the MMI operating system with the same intuitive logic that iPod users know and value. But many other MP3 players with a USB interface can also be used to play music via the Audi sound system.

An Audi A5 always knows for sure where it's heading – when fitted with one of the available navigation system. If desired, this screen can also display TV – only when the vehicle is stationary, but then with a choice of analogue and digital channels (DVB-T).

### **The ideal car phone**

Safe and easy use of the phone is an important requirement today, not just for motorists who travel long distances for work. Combining the advantages of a hands-free mobile phone system with the strengths of a classic built-in phone, the standard Audi Bluetooth car phone offers the best possible solution. That makes phoning on the move convenient, more flexible and simpler than ever.

The handy feature of this telephone solution is that your mobile phone can simply stay in your jacket pocket once you have registered it with the system, which can then automatically access your phone's functions as soon as you get into the car. The only condition is that your phone must support the so-called SIM access profile, as many current-generation models do. This allows the car phone to retrieve the data of your mobile phone's SIM card, your own telephone number and personal phone book. The mobile phone's telephone module is then switched off, which also prevents radiation in the vehicle interior. The car phone uses the vehicle aerial for an optimum reception at all times.

### **Simple operation via MMI and speech control**

The Audi Bluetooth car phone is operated via the easy-to-use speech control system, the MMI operating system or the multifunction steering wheel. The latest digital voice processor, especially adapted for the A5, largely suppresses interference from echoes or vehicle noise to deliver excellent hands-free voice quality. For discrete phone use, a cordless operating handset can also be added to the system.

Practical details are often essential to the everyday value of a car, especially when it is used for work. One example is the optional 230V power socket.

It is positioned in the centre console at the rear and is invaluable for recharging a laptop after a business meeting.

## In a league of its own

### The Audi S5

The Audi S5 is a superb athlete in a league of its own. It is a truly unique competitor among high-performance coupés, thanks to its combination of V8 FSI technology and quattro permanent four-wheel drive. The eight-cylinder engine with its superb power delivery has worthy counterparts in the dynamically tuned sports suspension and high-performance brakes. Subtle but clear design elements inside and out serve to visually reinforce the sporty character.

**The Audi S5 coupé was the first A5 model to go on sale in Australia in October 2007, leading the range from the top down.**

With these qualities the S5 follows in the footsteps of the legendary Audi quattro. As the pioneer of permanent four-wheel drive for the road, the Audi quattro was nothing short of a revolution in handling at its launch in 1980. Moreover, the Ur-quattro, today a prized classic car with devoted fans, was endowed with superior power, thanks to its five-cylinder turbocharged engine. In the sports car world of 27 years ago its 147 kW (200 bhp) were a clear declaration of sporting intent. Later on, in the form of a limited-edition Sport quattro, the boxy athlete was fitted with a 306-bhp engine, taking its performance to extreme levels.

Today, the new Audi S5 also has figures that promise superb performance, although they can only hint at the exhilarating driving experience it offers: the latest generation of eight-cylinder engine delivers 260 kW. Its maximum torque is 440 Nm – sufficient to propel the Audi S5 with a manual transmission to 100 km/h in just 5.1 seconds whilst the tiptronic, available from June 2008, will cover the same distance in 5.4 seconds. With its quattro permanent four-wheel drive, two six-speed gearboxes with an optimum set of ratios, the S sports suspension for extremely dynamic handling, and its heavy-duty brakes, the Audi S5 is well equipped to compete among high-performance sports cars and make the occasional outing onto the race track.

Alongside this, however, the S5 is still a spacious grand tourer sports car with four full-size seats, a generous luggage compartment and a wide range of luxury-class comfort features. The Audi S5 is thus a master of both styles – athletic high performance and effortless composure.

## **Engine and running gear**

### **Fascination no figures can express**

The mighty eight-cylinder engine in the new Audi S5 is closely related to the high-revving mid-mounted engine of the new Audi R8 sports car. To suitably match the character of the grand tourer, in the S5 it develops 260 kW (354 bhp) at 7,000 rpm. This is combined with an extremely flat torque curve: the maximum torque of 440 Nm is already available from 3,500 rpm. But more importantly, at only 2,000 rpm drivers already have 85 percent of the full torque at their disposal. The effect is sheer exhilaration: no matter at what engine speed the driver presses the accelerator, the A5 charges forward with breathtaking pace.

Back to the figures: sprinting from stationary the S5 reaches the 100 km/h mark in 5.1 seconds whilst the 6-speed tiptronic will cover the same distance in 5.4 seconds. As a matter of form, we should note that the top speed is governed to 250 km/h. However, no measurement can truly convey the outstanding free-revving character, the instant response, the continuous power build-up or the thrilling sound of the eight-cylinder engine.

### **High-performance in a compact form**

This V8 with a displacement of 4,163 cm<sup>3</sup> belongs to Audi's family of modern V-engines, which includes units with six, eight and ten cylinders. They are all characterised by a cylinder angle of 90 degrees and a cylinder spacing of 90 millimetres. The four camshafts are driven by a two-stage chain timing drive mounted on the rear side of the engine, which allows easy maintenance.

The cylinder block of the V8 engine is cast from an aluminium-silicon alloy; the pistons and rings glide in the liners on the hard silicon crystals. Separate inserted liners are not necessary. This helps give the engine its compact dimensions and low weight. The oil sump and oil pump have been suitably designed to maintain a reliable supply of lubricant to the engine even at high lateral acceleration.

### **High torque and efficient combustion**

The V8 draws its air through a newly designed two-stage variable intake manifold made of magnesium. Electric motors control the manifold length and the tumble, i.e. the movement of air in the combustion chamber, by means of flaps. The effect of these measures is high torque and efficient combustion

The V8 naturally derives its enormous power potential from the innovative FSI direct injection technology with high compression and optimum fuel mixture formation.

Two high-pressure pumps, driven by the intake camshafts, deliver the fuel to two interconnected chambers made of stainless steel and then on to the injectors. One of the most modern and fastest engine management systems on the world market controls the whole process – the Motronic MED 9.1.1.

Thanks to FSI technology, the combined cycle fuel consumption is just 12.4 litres, despite the engine's enormous power potential. The exhaust system is manufactured from highly durable materials and the exhaust catalysts are integrated close to the engine. Tubular sheet-metal manifolds with air-gap insulation ensure that the gas treatment system quickly reaches its optimum operating temperature for maximum effectiveness. The two exhaust silencers each have a volume of 14 litres and are tuned so that only a well-modulated, pleasing sound emanates from the left and right tailpipes – powerful and sporty during acceleration, otherwise moderate and relaxing.

### **Every gear change a sheer delight**

The engine power is transmitted by either a six-speed manual gearbox or a smooth tiptronic transmission. The manual gearbox has a very short and precise throw action which makes every gear change a sheer delight. It also features a dual-mass flywheel with an asbestos-free single-plate dry clutch is an integral part of the housing. As in the Audi A5, the differential and drive shafts in the S5 are positioned in front of the clutch. The advantages this offers are an exceptionally long wheelbase, a short front overhang and a good weight distribution. In combination with the Audi S5's newly developed suspension, this helps set new standards in handling agility and precision.

The quattro permanent four-wheel drive, of course, provides perfect traction with variable torque distribution from its basic setting of 40 percent to the front and 60 percent to the rear axle. Within a fraction of a second, the asymmetrical dynamic system adjusts to driving situation prevailing at any one instant. It constantly delivers the perfect torque distribution and combines nimble sporty dynamics with a reliable and extremely safe self-steering effect at all times.

### **S sports suspension for firm road surface contact**

To enhance the Audi A5's overall performance, its especially designed S sports suspension is tuned for exceptionally dynamic handling. Its firmly tuned springs and dampers provide a direct and precise contact with the road and a cross brace has been added to give the solid front structure additional stiffness for high torsional loads. Nevertheless, the S5 also retains the ride and suspension comfort that make it a first-class touring car for long journeys. The lightweight five-link front suspension is bolted to the body via a rigid subframe and the trapezoidal link rear suspension is located by an elastically mounted wheel carrier.

The standard 18-inch cast aluminium wheels of S design with five parallel spokes are fitted with mighty 245/40 R 18 tyres.

The heavy-duty 17-inch brakes – recognisable by their black painted brake calipers with S5 lettering at the front – always ensure precise deceleration. Audi S5 drivers also benefit from all handling dynamics functions of the ESP system such as ABS, traction control, electronic braking force distribution and electronic differential lock. Here again, though, the electronic stabilisation program ESP can be deactivated in two stages whenever the driver wishes to exploit the potential of the Audi S5 to the full on a suitable stretch of road.

## **Design and interiors**

### **Sporty aesthetics with clear functionality**

While the design of the Audi A5 forms a balanced synthesis of sportiness and elegance, the Audi S5 displays the more vigorous features of a powerfully built athlete. Here it stays true to the tradition of the Ur-quattro. It also expressed its power subtly, but clearly – admittedly with the stylistic devices of the eighties.

Head of Design Walter de’Silva also remembers the Ur-quattro, that pioneering sports icon of its day: “The Audi quattro had to express power and show its performance – and demonstrate “Vorsprung durch Technik”. With the Audi S5 we are showing today that performance can also be combined with great elegance.” In a few details on the new coupé, Walter de’Silva and the Audi design team have paid tribute to its legendary ancestor: the trapezoidal rear roof pillar is almost a direct reference to the Ur-quattro. So are the flared wheel arches, emphasised by the shoulder line’s double contours: they are also doubly reminiscent of the quattro – of the permanent four-wheel drive and the Audi sports car of 1980.

### **Close contact with a high-precision automobile**

The differentiation between the S5 and A5 is subtle, but still sends clear signals to the discerning motoring connoisseur. For instance, the radiator grille possesses the specific look of an Audi S model – painted in platinum grey and fitted with vertical chrome inlays. The front and rear bumpers have a more pronounced outline and aluminium blades emphasise the air inlet grilles. The aluminium-look exterior mirror housings make an overtly sporty impression, as do the colour-keyed door sill trims and the dual-branch exhaust system with four oval tailpipes. Nevertheless, the model’s sporty attributes always have a functional aspect: for instance, the more pronounced spoiler in the boot lid yields additional aerodynamic downforce.

However, true strength comes from within and the interior design of the Audi A5 thoroughly underscores its athletic character. The strongly formed S sports seats and the multifunction leather sports steering wheel create a close contact between driver and high-precision automobile. The instruments with grey dials and aluminium door sill plates with S5 lettering provide a dynamic and refined atmosphere.

## **Ample scope for individual ideas**

The program does, of course, provide ample scope to fulfil individual interior design wishes: the seat centre sections are upholstered in Alcantara suede and the side sections in leather. The seats can also be completely upholstered in luxurious Silk Nappa leather, in classic sporty black, vibrant magma red or in the elegant shades pearl silver and mustang brown.

Alongside the standard Matt brushed aluminium inlays, the selection features Carbon Atlas, Vavona wood assam grey or the new Stainless steel mesh grey inlays. Naturally, every Audi S5 can be turned into a unique creation with leather colours and inlays or a customised paint finish from the Audi exclusive programme supplied by quattro GmbH. After all, the Audi S5 should perfectly match its owner's very own high expectations.

Alongside the 18-inch wheels and the electrically adjustable S5 sports seats, the standard equipment specification for the S5 features items such as xenon plus headlights with impressive daytime running lights in the form of an LED light strip, and three-zone automatic air conditioning. All luxury-class options from the A5 program are also available, including the Bang & Olufsen sound system.

## **Additional specifications**

### **Features specific to the new S5**

#### **Exterior**

- Radiator grille in S-specific look: matt Platinum Grey, vertical bars with chrome inserts
- Aluminium-look exterior mirror housings
- S-specific front and rear bumpers
- Lower air inlet with aluminium-look blade
- Black brake callipers with S5 inscription
- V8 emblem on front guards
- Dual-branch exhaust system with four oval tailpipes
- Add-on sill trim strips in body colour
- Rear spoiler integrated into boot lid
- Diffuser with aluminium-look blade
- Sprint Blue, pearl effect paint finish

#### **Interior**

- Door sill trims with aluminium inserts and S5 inscription
- Leather-covered multifunction sports steering wheel with S5 emblem
- S-specific instrument panel with grey dials and white needles
- S sports seats with S5 emblem
- S-specific inlays



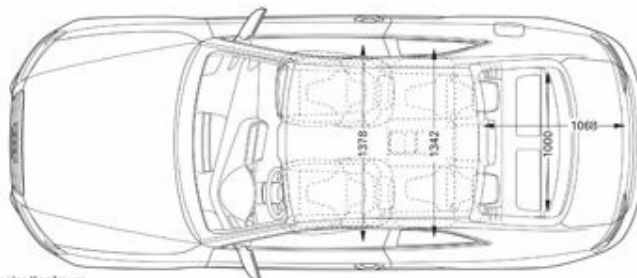
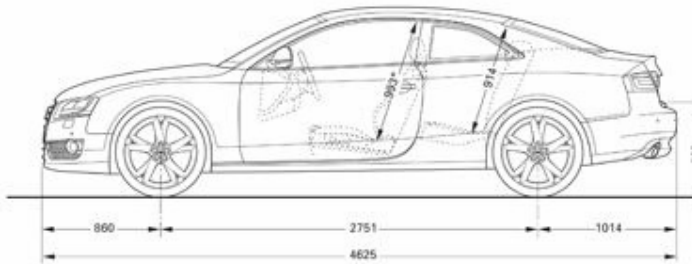
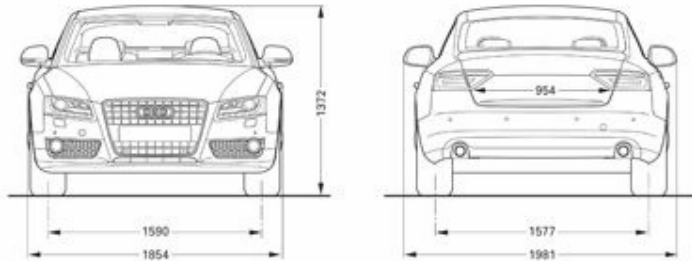
**S5 Standard equipment highlights (on top of A5 3.2 FSI equipment)**

18 inch alloy wheels in 5-parallel spoke S design  
Front sports seats in S design  
Alcantara/Leather interior trim  
Navigation, DVD based with MMI control and 7" colour screen  
Inlays in Carbon Atlas  
Adaptive headlights

**S5 Option highlights (additional to A5 3.2)**

19 inch wheels  
Silk Nappa leather

**Audi A5**  
Abmessungen  
Dimensions  
03/07



\* maximaler Kopfraum  
Angaben in Millimeter  
Angabe der Abmessungen bei Fahrzeugleergewicht

# Power and Torque diagram – A5

## 3,2 Liter-V6-FSI-Motor

mit FSI®- Benzindirekteinspritzung, Schaltsaugrohr, kontinuierliche Nockenwellenverstellung und Nockenwellenantrieb per Kette



### 3.2 litre V6 FSI engine

with FSI®- Fuel direct injection, variable intake manifold, variable camshaft timing, and chain driven camshafts

3.197 cm<sup>3</sup>

195 kW (265 PS) bei 6.500 min<sup>-1</sup>

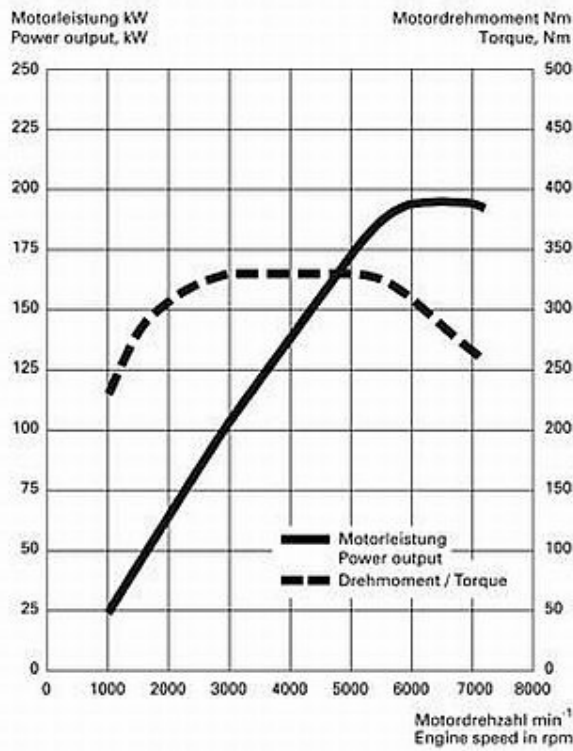
330 Nm von 3.000 bis 5.000 min<sup>-1</sup>

3.197 cc

195 kW (265 bhp) at 6,500 rpm

330 Nm from 3,000 to 5,000 rpm

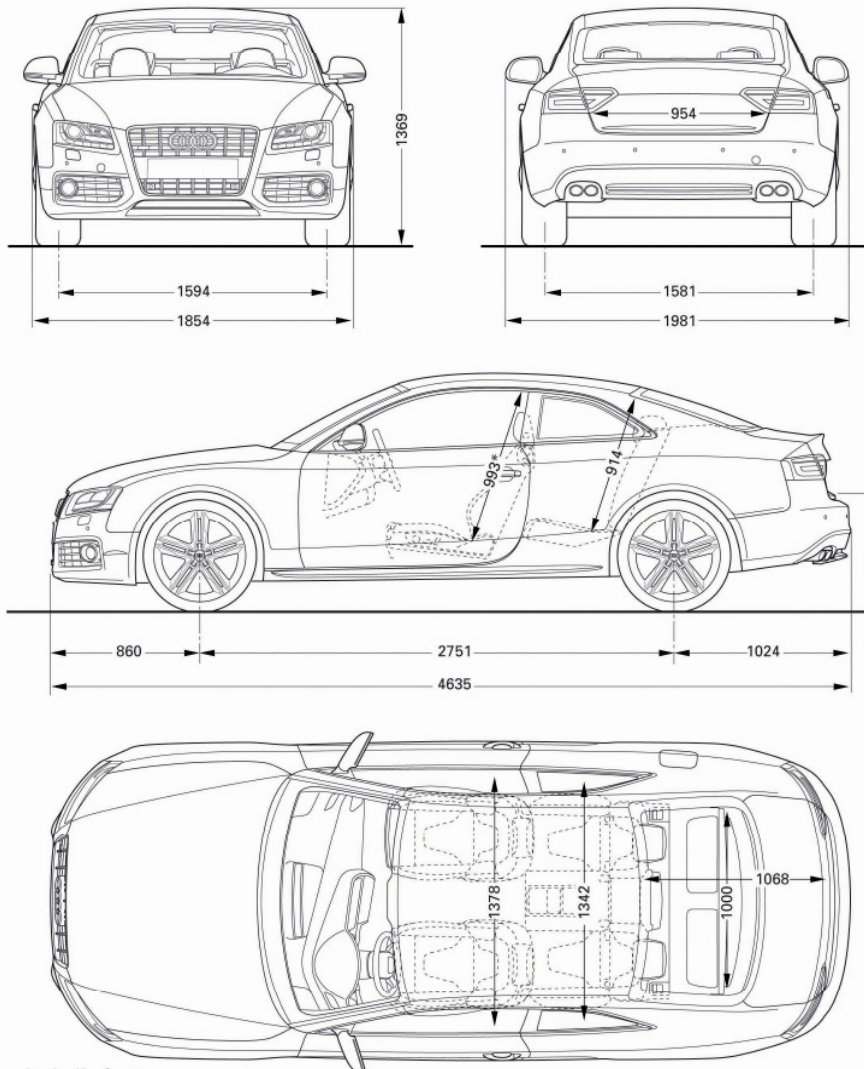
03/07



# Audi S5

Abmessungen  
Dimensions

03/07



\* maximaler Kopfraum  
Angaben in Millimeter  
Angabe der Abmessungen bei Fahrzeugleergewicht

# Power and Torque diagram – S5

## 4,2 Liter-V8-FSI-Motor

4,2 Liter V8-Motor mit Benzindirekteinspritzung, kontinuierlicher Nockenwellenverstellung und Nockenwellenantrieb per Kette



4.2 litre V8 FSI engine with Fuel direct injection, variable camshaft timing, and chain driven camshafts

4,163 cm <sup>3</sup>	4,163 cc
260 kW (354PS) bei 7.000 min <sup>-1</sup>	260 kW (354 bhp) at 7.000 rpm
440 Nm bei 3.500 min <sup>-1</sup>	440 Nm at 3.500 min <sup>-1</sup>

03/07

