

ALFA 166 3.0 V6 24V Sportronic

# ALFA ROMEO 166 ARRIVES WITH A NEW LEVEL OF ELEGANCE

The new Alfa Romeo 166 has arrived in Australia with a new level of elegance matched by a host of refinements under the skin that enable the Alfa 166 to enhance its unique combination of Alfa performance, luxury and style.

"The Alfa Romeo 166 is quintessentially Italian in its approach to motoring," explains Kevin Wall, General Manager for Alfa Romeo in Australia. "It is, of course, stylish in a way that everything that comes out of Italy can only be and in that unique Italian style that sets it apart from all its rivals. Equally it offers the level of driver involvement that is demanded from all automotive products from Italy. There can be no doubt that this is a car from the same stable as such unmatched driving machines as the Alfa Romeo 147 GTA and the new Alfa Romeo GT. Finally, as no Italian would ever pay full price for everything and they know how to bargain harder than anyone else, the Alfa Romeo 166 comes wealth of equipment and features at an outstanding price."

The most obvious change to the Alfa Romeo 166 is that it now sports the latest interpretation of the classic Alfa Romeo shield, which now plunges through the bumper line and it is crowned by a new, larger Alfa Romeo badge. From its top corners new, stronger ribs run to the base of the A pillars, providing a strong more, purposeful bonnet shape. The Alfa Romeo shield is flanked by new headlights that are both fresh in their styling and which offer a new level of optical performance. The reinterpretation of the Alfa Romeo 166 has been created by the same team in Alfa Romeo Style Centre responsible for the original design and this has enabled the new features to blend perfectly with the strength and purpose of the Alfa Romeo 166's imaginative original design.

The technical changes to the Alfa Romeo 166 under the skin have been predominantly aimed at enhancing refinement by reducing interior noise, diminish vibration through the body shell from course road surfaces and isolate the interior from extraneous external noises. This has been done without reducing the glorious sound of the classic Alfa Romeo V6 that powers the Alfa Romeo 166 or hampering the driving dynamics of the 166, indeed the Alfa 166 benefits from sharper response to driver demands.





The Alfa Romeo 166 is powered, as before, by the 3.0 litre V6 engine that has become a legendary byword for performance, aural pleasure and even stylish good looks with its polished chrome inlet manifold. Delivering 162 kW, this engine is one of the most powerful in its category. It delivers a peak torque of 265 Nm at 5000 rpm and takes 8.6 seconds to speed from 0 to 100 kmh. Its top speed is also one of the best in its category: 236 kmh. This performance is delivered through the Sportronic gearbox which offers the choice of normal automatic mode, performance self-shifting and Tiptronic style manual gear selection.

The interior of the Alfa Romeo 166 is no less stylish, indeed it provides the ideal driving environment with its blend of comfort, ergonomics and luxurious appointments. For the driver there is a sports-car like instrument panel with all the controls ideally placed for control and safety, while for the passengers there are seats trimmed in hand-crafted Italian leather, shaped for comfort in all driving conditions and with the accourtements that are demanded in this class.

Standard equipment is well beyond comprehensive. Of course there are electric windows, power locks and remotely controllable door mirrors, as well as cruise control, auxiliary power points front and rear and power seats in the front with memories and heating. But there is also a GSM mobile phone, a central control system wit a large LCD colour screen that controls the extensive CD stacker/cassette audio system, the ventilation system which features climate control, comprehensive trip computer and the GSM phone. The locks not just remotely controlled, the boot may also be opened remotely.

"The Alfa Romeo 166 is a clear standout model in its class," says Kevin Wall. "It is elegantly stylish in a form that is both timeless and clearly denotes that Alfa Romeo understand the difference between style and merely fashionable. This is matched by real performance from an engine that can truthfully be described as race-track bred. This is matched by a list of stand equipment much of which resides on the options list of its rivals and yet it is available at a price that compares very favorably to those sparsely equipped rivals."

The Alfa Romeo 166 has a recommended retail price of \$84,950 and is on sale in Australia from 1 August 2004.





#### THE NEW ALFA ROMEO 166 IN DETAIL

#### The new style of the Alfa Romeo 166

#### The Exterior of the Alfa Romeo 166

The new Alfa Romeo flagship inherits from its predecessor a clean, cutting shape that makes it look agile and ready to leap into action: the New Alfa 166 takes Alfa's dual mission of 'sportiness and elegance' and turns it into an understated beauty that is quintessentially Italian. Classic brand styling cues are not brazenly flaunted but subtly hinted at. The car's volumes and chrome trim are carefully balanced.

The Alfa Romeo Style Centre has yet again succeeded in finding the right aesthetic balance to bring the Alfa 166 right up to date. In its shape, for example, rounded surfaces and corners work out their natural tensions to achieve an ideal balance point. Understated, updated retro Alfa traits are apparent. More recent style motifs that the public now recognizes and appreciate as distinguishing Alfa Romeo features are also present in a new form.

Firstly, the front end has been fully redesigned. The shield is now more upright and forms, together with the two side air intakes, the traditional three-part Alfa motif that suggests a link to famous cars of the past. This motif marks a family resemblance to more recent models while allowing the Alfa Style Centre to reclaim and reinterpret distinctive traits from Alfa's illustrious past.

The imposing front is dominated by a big shield whose upper edge follows the bonnet round and then plunges down to break the bumper line. The badge, again at the top in the centre, is also surrounded by a hint of chrome that underscores the strength and communicative value of the signature. The badge hangs from the slight convexity in the metal that emphasizes the join between the bonnet and the upper tip of the shield known as the 'comet'.

One of the most distinctive features on the New Alfa 166 is the light cluster arrangement. These high-tech design creations are compact and made out of clear, non-faceted glass that allows a clear view of the underlying mathematically-modeled reflectors.

As on the previous model, two converging ribs define and emphasize a central bulge that hints at the presence of the powerful, beefy engine beneath. The relatively unchanged bumpers are still flush with the metal surface and blend into the vehicle body. The lower part of the extended, rounded bumpers houses turn signals masked by darkened glass that delineates the three-part graphic motif.

The side view of the New Alfa 166 features some of the chrome trim that was present on the previous model on the door handles, roof outline and door sills. The ratio of metal prevails over the glass and makes the vehicle look like a coupé from the side. The body is smooth and rounded, completely free of sharp edges or drip channels. The side handles and flashers are flush with the body.

The dynamic wheel arches and the wheels flush with the body create an image of a strong, compact car that is firmly glued to the ground. This impression is emphasised by a taut, horizontal muscle from which the entire side is apparently suspended. This feature tapers off smoothly, high up on the rear pillar. Overall, the curved shape of the outline suggests roominess, strength and protection: exactly what you want from a flagship.

When viewed from behind, the New Alfa 166 is immediately recognisable for its broad shoulders that make it look like an animal waiting to pounce - and for its short, fleeting tail. The rear window is joined to a slender





pillar that drops from the passenger compartment and rests strongly on the two wheelarches to give the car an impression of power. The slightly drooping tail evokes the sensation of a very agile car despite its large saloon dimensions. The Alfa Romeo badge sits in the upper part of the luggage compartment. Underneath, the taillights mitigate the taut, muscular sides. These are separate, small and embedded in the body.

#### The Interior of the Alfa Romeo 166

The New 166 brings the stylistic good looks that are part of Alfa Romeo's great tradition, reinterpreted to meet the demands of today's sensibilities and aesthetic tastes. The same good looks are apparent inside, where ample space is backed by outstanding comfort, sophisticated trim and padding and attention to detail.

The lines that run inside the new Alfa 166 passenger compartment are continuations of the exterior shape. The design is flowing and well proportioned, the curves sweeping seamlessly between the front and rear, between the central console and the seats and between the facia and the quilted door panels.

The real attraction of the new model lies in a passenger compartment that has been made lighter through careful choice of colours and materials that are a pleasure to touch and look at. The trim is opulent in terms of aesthetic appearance and also its substance. The environment has been carefully thought out in every detail: from mats that match the ceiling to sealing strip in the same colour as the body. An extensive range of materials and colours are combined to create a combination of three different environments: performance, elegance and classic Alfa Romeo.

As on all Alfa Romeo models, the central focus is the driver's cockpit and this has been designed with the maximum care. The driving position is sporty yet comfortable and allows full control of the car under all circumstances. The dashboard, which curves to mirror the shape of the steering wheel, contains the four main instrument dials. These are strictly analogue as Alfa tradition dictates and overlap slightly (like Olympic rings) because they are arranged over different reading planes so that they can easily be identified at a glance. All the other hi-tech items (controls of the climate control system, radio and Trip computer) are clustered on a console in the middle of the car where they can be reached with ease and do not distract the driver's attention. The new central console display delivers a stylish metallic effect.

When designing the facia, the need to deliver optimum climate control was considered. The user-friendly, intuitive controls allow fast, very accurate adjustment. The central diffuser and five front outlets are round and very stylish with chrome outlines and ensure a high air output with even distribution throughout the passenger compartment.

The two drawers and numerous compartments in the side panels, console and central armrest complete an array of creature comforts designed specifically for a prestige car with a sporting heart. Last but not least, the seats are big, comfortable and enveloping and offer plenty of space, even at the back, while still leaving plenty of room for a capacious boot.

The new Alfa 166 is fitted as standard with a fully automatic climate control system able to assure the best possible comfort and safety conditions. Passenger compartment temperature, humidity and ventilation can all affect the driver's level of awareness and wellbeing. And of course the heating and ventilation system is also responsible for demisting the windscreen and side windows. And there is more. The Alfa 166 system is also fitted with a temperature estimator that records internal and external temperature by means of sensors and assesses the sensation of thermal well-being experienced by passengers, the energy exchange between human body and passenger compartment that is affected by humidity, temperature and treated air flow. Another sensor located in the middle of the windscreen base detects solar radiation striking the car. In other





words, the sensor allows the system to prevent an excessive increase in temperature inside the car caused by the sun and thus to inform the climate control system in time.

All these parameters are monitored continuously and used to update the distribution, ventilation and mixing automatically. Outlet air temperature and fan speed can be adjusted to maintain the sensation of thermal wellbeing preset by the user in the passenger compartment. The result is a very constant interior temperature, even with significant changes in external conditions.

Each of these parameters may also be adjusted manually. Manual settings take precedence over the automatic system and are stored until the user cancels the command.

Particular attention has also been directed to the quality of the air that reaches the car interior through a two-layer filter. The first traps particles that measure more than 0.5 microns in diameter and pollen (that can cause allergic reactions). The second active carbon filter reduces polluting substances and absorbs unpleasant smells.

The recirculation function is activated automatically when the passenger compartment temperature has to be reduced quickly. It may also be activated manually to prevent unclean air entering when the car is in queues or driving through a tunnel.





### The incomparable 3.0 litre V6 in the Alfa Romeo 166

The New Alfa 166 is powered by the legendary 3.0 litre quad cam V6 engine that is as good to look at as it is to drive behind and even listen to. It offers 162 kW which makes this one of the most powerful cars in its category. It delivers a peak torque of 265 Nm at 5000 rpm and takes 8.6 seconds to speed from 0 to 100 km. Its speed is also one of the best in its category: 236 km/h.

The six cylinder 60 'V' configuration engine has a four valve per cylinder head that contains a roofed combustion chamber and a central spark plug. The angle between valves is 37 degrees. Throttle opening is controlled by an electronic control unit without any mechanical connection between accelerator pedal and throttle body. Electronic engine management is assured by a Bosch Motronic ME 2.1 system.

The electronic throttle also assures fast catalytic converter activation when the engine is cold (the throttle opening is wider than requested by the accelerator) for improved emission control. Other new engineering features:

- A no-return fuel feed system;
- A lubrication system that directs oil jets on the piston crown;
- An air-oil heat exchanger that heats up the oil and engine more rapidly after cold starts;
- Static ignition with one coil per cylinder with dual knock control.

The 3.0 V6 24 valve power unit is available only with automatic transmission. This takes the form of a 27 kgm torque Sportronic unit that adapts automatically to the driver's driving style and the type of route. It chooses the most effective gearshift strategies itself on the basis of these two parameters.

The 27 kgm Sportronic C.A.E. (Cambio Automatico Elettronico - electronic automatic transmission) is an innovative four-speed automatic transmission (electronically controlled) which offers a choice between fully power-assisted self-adaptive management and manual mode. In the first case, the system analyses the way that the driver uses certain controls for a short period. Then it decides on the best gearshift sequence on the basis of this information (and also on car condition and route type). The transmission achieves this by comparing results obtained with certain algorithms present in its memory. When in manual mode, the Sportronic allows the driver to decide which gear to engage to ensure typical Alfa Romeo driving satisfaction



ALFA 166

## The remarkable driving experience of the Alfa Romeo 166

Driving satisfaction, travelling satisfaction. The former has always been one of Alfa Romeo's strengths and the latter is compulsory in a car with the character of an Alfa and the class of a great saloon.

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The new Alfa 166 is prestige car and its personality shines through during any road test. The reasons? Because it is as comfortable and quiet as you would expect from a flagship - and its roadholding and stability are all you would expect from an Alfa Romeo. Other typical Alfa Romeo features include limited roll, surefooted rear suspension support on corners and prompt, gradual steering.

The new Alfa 166 is also easy to drive because the driver inputs are always accurately executed. A very direct steering wheel ratio ensures clean steering and makes the car a delight to drive.

The secret of this performance lies in sophisticated mechanical systems. In the case of the suspension, for example, a high double wishbone configuration at the front is combined with a multilink system at the rear. From a technical viewpoint, this means that the front tyres always work in an ideal manner in relation to the ground with uniform specific pressures over the entire contact area. The rear tyres are led along trajectories that allow them to turn without ever sliding to ensure maximum roadholding in all situations.

This kind of behaviour is naturally very important when it comes to active safety. When the new Alfa 166 needs to avoid a sudden obstacle, it makes the most of its attributes at the most crucial stages of the manoeuvre: the beginning and end. In the former case, by responding quickly, due, above all to the front suspension, and offering maximum lateral grip. In the latter case, by responding smoothly and intuitively. This action is aided by the small steering actions imposed by the rear suspension. The car's performance is aided by a braking system that is closer in structure, size and materials to that of a sports car than the braking systems of other models in the same segment.

It is easy to imagine the driving satisfaction afforded to aficionados by a car able to exploit the response of a truly outstanding suspension. The front suspension renders the car neutral and almost lacking in understeer so it can be directed exactly where the driver wishes. The rear configuration imposes a slight steering action on the rear wheel to address any bend smoothly and progressively.

The Alfa Romeo flagship combines the great driving comfort assured by the suspension with ultra-low noise levels and outstanding climate control because safety begins here: i.e. the ability to control the car with full mental and physical wellbeing.







#### The enhance safety of the Alfa Romeo 166

The Alfa Romeo 166 was designed from day one to be an extraordinarily safe car, from it ability to avoid accident to protecting its occupants when they become inevitable. This has been further enhanced in the new Alfa Romeo 166 with the following features.

#### **Bi-Xenon headlights**

Excellent visibility at all times, especially in the dark in the dark, is an important preventive safety factor. The new Alfa 166 is therefore fitted as standard with innovative dual 'bi-Xenon' headlights that, as the name suggests, generate high and low beams from a single xenon bulb. These devices are produced in conjunction with Valeo, a leading European company, and offer the best possible light quality and excellent efficiency under all atmospheric conditions.

In a gas discharge bulb, the usual internal filament is replaced by two electrodes spaced a few millimetres apart. These generate a voltaic discharge in an environment saturated with low-pressure xenon gas. These headlights are so technically complex that they require an electronic control unit on each headlight for general function control and to control supply voltage.

The light produced is projected onto the road through a glass lens with a spherical area measuring 70 mm in diameter. A mobile panel then distributes the light and differentiates between high and low beams: in the first case, the panel rises to create the light-dark effect typical of dipped beams. When the main beams are turned on, the panel lowers in fractions of a second to unleash the headlight's full lighting power. The benefits over normal halogen headlights are easy to enumerate: light intensity doubles (from 1500 to 3000 lumens); efficiency increases from 25 to 85 lumen per Watt and hours of duration also increase (from 1500 to 3000).

Bi-Xenon headlights also consume 35 per cent energy less than halogen headlights and distribute the light beam more effectively. Because they emit a shade that is closer to white light, they also ensure improved visibility even though the level of illumination remains the same.

Due to the improved performance offered by the system (brighter light and greater depth), bi-Xenon headlights are combined with an automatic ride corrector that performs two functions. It avoids dazzling the drivers of oncoming cars while maintaining a constant lit area to ensure greater driving comfort. The device cuts in automatically to compensate for static car changes (due to changing load on the axles) and also dynamic changes (caused by acceleration and braking). This result is guaranteed by sensors on the front and rear suspension that continually read body movements to detect acceleration or braking movements. This allows yawing to be predicted so that ride control can cut in.

The headlights are also equipped with headlight washers with telescopic nozzles built into the bumpers.

#### **Window Air bags**

Fitted as standard, these new air bags drop down along the windows to safeguard the passengers' heads in the front seats in the case of side impact. Compared to other solutions, the window-bags adopted on the new Alfa 166 are more protective because they always take up the correct position, faster to inflate and less invasive for passengers. They open from top to bottom and do not involve a risk of secondary damage to occupants' arms.

Two bags, one on the right and the other on the left, are located under the roof rails where they are folded into a closed compartment. At the appropriate moment, the covering bends open to allow the bags to expand and





drop downward.

#### **Electric central locking**

The new Alfa 166 is equipped with a central locking device that locks all the doors. When the customer activates this option, the system automatically locks the doors and boot when the car exceeds 20 kmh. Passengers inside can always get out by operating the handles but when the car is stationary at traffic lights, anyone who is up to no good is shut out and cannot open the boot. To let friends in, all you have to do is press a central lock-release key located on the armrest.

#### Follow me home

Getting in and out of the new Alfa 166 is easy even by night in poorly lit areas. To simplify this operation, the new model is equipped with a delayed headlight deactivation function (follow-me-home function). The aim is to make the motorist's life easier. The device keeps the dipped beams and side lights on for a while even with the engine off and ignition key out. These few minutes are all you need to see the garage door or garden gate in the dark. After this period, the headlights go off - automatically of course.

The follow me home device is turned on by operating the light flasher stalk within 2 minutes of turning off the engine. Each time the stalk is operated, light activation is extended for 30 seconds up to a maximum of three and a half minutes.

#### Sound system and radio controls on the steering wheel

The radio can store up to 24 stations and it comes with a device that adjusts volume and bass/treble mix according to car speed and it also boasts RDS, the Radio Data System. When activated by radio stations using this system, this device offers traffic news throughout the trip and also cuts out interference by means of imperceptible frequency changes. By means of automatic screening (auto best), the receiver continually searches the available frequencies to find the best ones for the set programme and begins a new selection when reception quality worsens. The aerial is built into the back window, the tape player offers autoreverse and the package can also includes a CD-changer for six CDs.

This system may be fully operated from the new steering wheel via finger-tip controls.





## **The Alfa Romeo 166: Technical Specifications**

	3.0 V6 24V Sportronic
ENGINE	
No. of cylinders, layout	6 in 60° V, front transverse
Bore x stroke (mm)	93 x 72.6
Capacity (cc)	2959
Compression ratio	10:1
Maximum power EC kW (bhp)	162 (220)
at rpm	6200
Maximum torque EC Nm (kgm)	265 (28)
at rpm	5000
Timing system (drive)	DOHC for each bank, hydraulic tappets (toothed belt), 4 valves/cylinder
Fuel system	Bosch Multipoint ME 7.3.1
ELECTRICAL EQUIPMENT (12V)	Bosch Mulupolit ME 7.3.1
Battery: capacity (Ah)	100
Generator (A)	120
TRANSMISSION	120
Drive	Front
	2.718:1
2nd	1.481:1
3rd	1.000:1
4th	0.720:1
Reverse	2.568:1
Final drive	4.223:1(69/20 x 71/58)
WHEELS	205/45 111 47 7 51 11
Tyres	225/45 with 17x 7.5J alloy wheels
STEERING	
Steering box	rack and pinion with power steering
Turning circle (m)	11.6
SUSPENSION	
Front	independent, double wishbone with upper and lower arms, coaxial
Door	springs on the damper and anti-roll bar independent, multi-link with lower wishbone and three control rods,
Rear	coaxial springs on the damper and anti-roll bar
DDAVEC D (DICC)	with ABS+EBD
BRAKES - D (DISC)	D 310 x 28 (ventilated)
Front: dia. (mm) Rear: dia. (mm)	D276 x 10
	D270 X 10
BODY - DIMENSIONS	
No. of seats	5
No. of doors	4
Length / width (mm)	4720/1800
Unladen height (mm)	1416
Wheelbase (mm)	2700
Front / rear track (mm)	1554/1542
Luggage compartment capacity (dm <sup>3</sup> )	490
CAPACITIES -WEIGHTS	



<b>ALFA</b>
166
3.0 V6 24V Sportronic

Fuel tank (I)	69
Kerb weight DIN (kg)	1550
Maximum towable weight (kg)	1500
PERFORMANCE - FUEL CONSUMPTION	
Top speed (km/h)	236
Acceleration	
(2 people + 20 kg): 0 - 100 km/h	8.6
0 - 1000 m	28.5
Fuel consumption as per EC directive	
93/116 (I/100 km)	
- urban cycle	19.4
- out-of-town cycle	9.3
- combined	13.0

## The Alfa Romeo 166: Trim and equipment

EXTERIOR	
Alloy wheels 225 (17")	Standard
Bi-Xenon headlights	Standard
Body-coloured exterior door mirrors	Standard
Chrome-plated exterior door handles	Standard
Polished panel on B pillars	Standard
Power steering	Standard
Remote Central locking/boot opening	Standard
Twin electric folding door mirrors with demister	Standard
INTERIOR	Standard
3-spoked steering wheel	Standard
6-loader CD-changer	Standard
Active matrix multifunctional display	Standard
Audio system with aerial in rear window	Standard
Automatic climate control system	Standard
Automatic night/day rear-view mirror	Standard
Built-in GSM phone	Standard
Chrome sill covers	Standard
Cruise Control	Standard
Door lock button	Standard
Eccentric electric windows, front and rear	Standard
Front armrest	Standard
Front, rear and central pillar upholstered as ceiling	Standard
Galvanic central trim	Standard
Gear lever trim with chrome-plated border	Standard
Heated, electric front seats	Standard
Leather steering wheel and gear knob	Standard
Leather upholstery	Standard
Mats	Standard
Power socket	Standard
Radio controls on steering wheel spokes	Standard
Ski tunnel	Standard
Trip Computer	Standard
Two courtesy lights on sun visors	Standard
SAFETY	
ABS brakes with EBD and traction control	Standard
Auto door locks at 20 kmh	Standard
Automatic headlight height adjustment	Standard
Electric deadlocks	Standard
Fire Prevention System	Standard
Foglights, front and rear	Standard



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Follow me home	Standard
Front seat-belts with pretensioners	Standard
Front/Side/window airbags	Standard
Headlight washers	Standard
Rain sensor	Standard
Reinforcements on front/rear door frames	Standard
VDC + Brake Assistance	Standard