ALFA ROMEO BRERA STUNS AUSTRALIA

It has been described by experts as the sexiest car in the world, a car that makes grown men weak at the knees, a car that makes all other cars in its category look plain and now Australia can see what all fuss is about with the Alfa Romeo Brera arriving in Australia on 16 June 2006.

Designed by Giorgetto Giugiaro in collaboration with Alfa Romeo Centro Stile, and built by Pininfarina, the road-going Alfa Brera remains remarkably true to the stunning, multi-award winning coupe concept first shown to global acclaim at the 2002 Geneva Motor Show. It combines superlative engineering with outstanding performance, and handling characteristics appropriate to the pedigree of one of the world's most famous sporting marques.

Two versions of the new Alfa Brera, starting with a recommended retail price of $69,950, will be available from launch, with a choice of engines, a 2.2 litre JTS 136 kW four cylinder unit, and a 3.2 litre JTS 191 kW V6.

With specific power outputs of up to 62 kW/litre, and almost 90 per cent of maximum torque available at just 2000 rpm, both petrol JTS (Jet Thrust Stoichiometric) units boast outstanding performance, yet offer significant fuel savings and readily comply with the stringent Euro Stage 4 exhaust emission limits. Both these advanced direct injection engines feature continuously variable valve timing governing both inlet and exhaust camshafts.

Both Brera versions are fitted with 6-speed manual gearboxes, whilst the 3.2 V6 JTS is equipped with, as standard, with Alfa Romeo's Q4 permanent four-wheel drive system. Q4 employs three differentials, with a self-locking Torsen C unit at the centre of the system which in normal conditions divides drive torque by a ratio of 57 per cent to the rear wheels and 43 per cent to the front.

Torque split between front and rear axles is constantly modulated by the central Torsen differential on the basis of available grip, with a bias towards the rear axle promoting handling characteristics appropriate to an Alfa Romeo coupe.

Sharing an all-new platform and components with the Alfa 159, albeit on a 175 mm shorter wheelbase optimised for appropriate handling responses, the chassis of the new Alfa Brera combines a proven high double wishbone front suspension system with a new, sophisticated multilink rear configuration. The combination generates smooth, accurate steering response, exceptional stability and controllability – even when close to adhesion limits, and first class body control allied to remarkable comfort over all road surface conditions.

The 2.2 JTS Alfa Brera's braking system comprises powerful, 305 mm ventilated front discs and 278 mm solid discs at the rear. When powered by the 3.2 JTS V6, the Brera features larger, 330 mm ventilated discs with Brembo four piston monobloc aluminium callipers at the front, and 292 mm ventilated discs at the rear for even greater, fade-free stopping power.

The Alfa Brera offers direct, lively and responsive speed-sensitive power assisted steering, with a rack requiring only 2.25 turns lock-to-lock; the most direct steering in its class. The turning circle is just 10.7 m between kerbs.

Both passive and active safety features are comprehensively represented in the new Brera. In addition to seven standard equipment airbags, seatbelt pre-tensioners and a fully integrated Fire Prevention System, the new car comes with a comprehensive range of state-of-the-art electronic braking, traction control and stability systems fitted as standard. ABS anti-lock braking is combined with Electronic Brakeforce Distribution over all four wheels, and a sophisticated switchable Vehicle Dynamic Control unit enhances cornering stability. VDC is further augmented by ASR to limit wheelspin during acceleration, MSR to modulate braking torque when changing down through the gears, and a unique Hill Holder function to facilitate smooth hill starts.

As with all Alfa Romeo models, driver orientated ergonomics, superior passenger comfort and lavish standard equipment levels are fundamental to the interior design of the new sports car. The Brera boasts a notably generous standard equipment specification, offering, even at entry level, many features only available as expensive options on rival models, including automatic Dual Zone climate control, full length Sky View glass roof, cruise control, a multi-function display and trip computer, fog lights, 18 inch spoked alloy wheels and an RDS 6-speaker stereo radio with CD player.

In addition, the Brera 3.2 JTS V6 is equipped with premium Pieno Fiore Sports Leather, electrically adjustable and heated front seats, Xenon headlights with headlight washers, Bose audio system and Bluetooth telephone connection system. The alloy wheels are also a different style for the V6.

Options are metallic paint and the SkyView panoramic sunroof and on the 2.2 JTS Brera, the electrically adjustable seats and Bluetooth system.

ALFA ROMEO BRERA ~ DESIGN

Styled by Giorgetto Giugiaro in collaboration with Alfa Romeo Centro Stile at Arese, Milan, the design of the new Brera remains faithful to the stunning coupe concept first shown at the 2002 Geneva Motorshow.

The prototype has won numerous, prestigious international design awards including First Prize – *'Concorso d'Eleganza Villa d'Este 2002'*; Most Fascinating Car and Most Innovative Design of the Year – *Michelin Challenge Bibendum 2002*; Best Concept of the Year – *Automotive News 2003*; The Most Beautiful Car in the World – *Automobilia, Milan 2003*; and the XX ADI 'Compaso d'Oro award for Design – *2004*.

More recently, the Brera itself won The 2005 Design Award in *Autocar* magazine's Annual Awards, the new Alfa Romeo being described as 'an imposing coupe with rare grace.'

"When we premiered the car I referred to as 'very sexy', I didn't know if it would ever go beyond the prototype stage," Giugiaro recalls. "All I knew was that the concept could definitely go into production with only a few minor changes. I took care of the exterior personally, for example, and no great changes were necessary."

"Despite its large dimensions, this coupe is not massive," continues Giugiaro. "It conveys a sense of power and solidity, but combined with an overall harmonious unity. We worked extensively on the balance and overhang volume to ensure it was not over-heavy. I'm proud to note that the Brera is so obviously an Italian product," he adds. "Alfa Romeo will never go out of fashion."

Styling

With dimensions of 4410 mm length, 1830 mm width, 1341 mm height and with a 2528 mm wheelbase, the generous dimensions of the new Brera are elegantly compacted through sharp front and rear bodywork tapering, and the exterior is rich in styling cues from Alfa Romeo's peerless tradition of sporting coupes, from the 1900 SS to the Giulietta Sprint, Alfetta and Giulia Sprint GT.

Continuing a design trend prevalent in the recent Alfa Romeo model range, the legendary Villa d'Este style Alfa shield with horizontal chrome bars dominates the front of the Brera. Extending almost full height, the grille bisects an upper air intake housing purposeful, three-lamp headlight clusters, before punctuating a deep front air dam featuring an expansive lower air intake with integral fog lamps. The top of the shield generates powerful bonnet coachwork lines which flow seamlessly into steeply raked A pillars. Once again, the number plate is offset to the left; a style signature echoing past classics, and unique to Alfa Romeo.

In profile, the new Alfa's taut, rising waistline flows from the pronounced flare of the front wheel arches to give the Brera an assertive purposeful stance. The cockpit 'sits' on a powerful 'shoulder', which reaches its broadest point above the rear wheel arch to reinforce the new Brera's wide track. From the steeply raked windscreen, the 'A' pillar flows seamlessly into a low, sweeping roofline, the elegance of which is enhanced by the internal placement of the slender 'B' pillar, giving the full-length side glazing a pillarless appearance in classic coupe style.

Unique to this class, the Brera may also be equipped with a fixed, full-length, laminated and tinted glass sunroof incorporating an electrically controlled, three-section interior blind.

At the rear, the Brera's broad 'shoulders' taper to the focal point of the Alfa Romeo badge, beneath a steeply raked rear window – reminiscent of the Giulietta Sprint. Integral, colour coded bumpers and four chromed, flush mounted exhausts further reinforce the new Brera's broad, muscular rear end stance.

Brera will become available in a choice of 10 colours at launch, including one solid, one special and eight metallic finishes.

Interior

As with all Alfa Romeos, the interior of the new 2+2 Brera coupe is focused on the driver's immediate surroundings, which have been designed with an emphasis on ergonomic functionality. A height adjustable driver's seat allied to a rake and reach adjustable, leather clad steering wheel help to guarantee a perfect driving position for the widest possible cross-section of customers.

The driver's instrument binnacle houses large, deeply hooded speedometer and rev counter dials with subsidiary fuel and temperature gauges in the centre console. A multi-lingual, multi-function display gives access to a wide range of functions as well as the trip computer.

The Alfa Brera's centre console houses a new, electronic key-activated engine start button, the sophisticated, Dual Zone climate controls and a stereo radio/CD player – all within easy operational reach of the driver.

Specifically built for Brera, the stereo features a power output of 4x30 watts and employs six speakers, offering outstanding sound quality.

Divided by a through console for optimum comfort and lateral support, the rear seats feature a 60:40 split/folding squab with integral armrest and ski hatch fitted as standard. This allows for the rapid expansion of the 300 litre luggage compartment into a robust, practical load platform offering an impressive 610 litres of stowage.

With great attention being paid to build quality and cabin ambience, superior comfort levels are assured aboard the new Alfa Brera. Major contributions are made by a new state-of-the-art platform, a notably rigid bodyshell, a high quality fascia, extensive carpet soundproofing, and thicker, 5 mm front side window glazing designed to reduce cabin noise and vibration to a minimum.

The new Alfa Brera range features a choice of three two-tone interior trim options – Black/Grey, Blue/Tobacco and Red/Beige – with complementary dashboard finishes. All Brera versions offer leather upholstery fitted as standard, and the 3.2 is trimmed in the finest Frau Pieno Fiore leather upholstery, which also includes electrically adjustable, heated front seats with driver's side memory.

ALFA ROMEO BRERA ~ MODEL RANGE AND EQUIPMENT

The two specification levels include the following:

Brera 2.2 JTS

- Electric windows with one-touch function
- Dual Zone climate control
- Remote central locking with alarm and immobiliser
- 7 airbags, including driver's knee airbag
- Electronic key and start button
- Stereo radio/CD with steering wheel audio controls and 6 speakers
- 10 Disk CD Stacker
- Leather steering wheel and gearknob
- Fog lights
- SkyView glass roof with sunshade
- Rear parking sensor
- Cruise control
- Multifunction display with trip computer
- ABS anti-lock braking with EBD, Hillholder and HBA
- VDC with Hill Holder
- Rear armrest with ski tunnel
- 60:40 split folding rear seats
- 18 inch spoke alloy wheels
- Leather interior trim

Brera 3.2 JTS V6:

In addition, SV adds:

- 18 inch CloverLeaf alloy wheels
- Pieno Fiore leather interior
- Electrically adjustable seats with heating and memories
- Electrically folding door mirrors
- Bose sound system
- Blue and Me Bluetooth connection system with i-Pod/USB connection
- Xenon headlights
- Headlight washers
- Q4 all wheel drive

ENHANCED COMFORT AND TELEMATICS

Sky View panoramic roof

Unique to this segment, the new Alfa Romeo is fitted with a fixed, full-length, laminated glass sunroof incorporating an electrically controlled interior blind.

Dual Zone climate control

The Dual Zone climate control system, fitted as standard across the Alfa Brera range, makes it possible for driver and front seat passenger to select a temperature differential on either side of the cabin.

The system uses solar sensors to monitor solar gain within the two zones and adjust the temperature accordingly. The system also features a highly efficient active carbon pollen filter, and an Air Quality Sensor which automatically activates the climate control recirculation function to prevent the intake of air in areas of high pollution.

Bose sound system

The Bose sound system standard on the Brera 3.2 JTS V6, has been developed for Alfa Romeo by America's leading acoustic Hi-Fi company, offers peerless acoustic sophistication, boasting exceptional listening quality for each passenger under all conditions.

The 570 watt system comprises a radio/CD player with MP3 compatibility and eight loudspeakers, including a subwoofer built into the luggage compartment with its own 6-channel, 200 watt, digital amplifier for the reproduction of the lowest frequencies. An integrated signal processor automatically adjusts base tones so that they remain natural at any system volume.

Bluetooth connectivity

The new Alfa Brera 3.2 JTS V6 is equipped with Bluetooth hands-free mobile phone technology with voice recognition, to ensure maximum driving safety under all conditions. The system allows for the use of Bluetooth compatible mobile phones anywhere on board, even when stowed in storage compartments, jackets or handbags.

The Bluetooth hands-free system is fully integrated into the new Alfa. It is accessed via a control panel display allied to control keys located on the steering wheel as well as the latest voice activation technology, which has no need to learn a user's voice in advance.

The system automatically lowers the volume of the radio, and allows occupants to hear a caller through the stereo loudspeakers. An integral, echo-cancellation system maintains sound quality without any deterioration in timbre, thus preventing unpleasant, metallic tones.

Xenon headlamps

The safety benefits of xenon headlights fitted to the Brera 3.2 JTS V6 over conventional halogen lamps are upheld by simple statistics: light intensity doubles, as does the longevity of the lamp itself. Xenon headlamps also consume less energy and distribute the light beam more effectively.

Due to their brighter, far reaching illumination, the new Alfa Brera's optional xenon headlamps are combined with an automatic ride corrector which compensates not only for static changes due to axle load variation, but also dynamic changes caused by acceleration and braking.

Cruise Control

Cruise Control, operable at speeds over 30 kmh, instantly cuts out when the driver presses the brake or clutch pedal. When the ASR traction control is active, this naturally takes priority over Cruise Control, the system returning the car to the previous set speed once ASR has ceased to function.

Follow Me Home headlights

A practical, safety conscious innovation designed to light the interior of a garage or the path to the front door after the car has been locked. Follow Me Home activates the dipped beams and sidelights of the new Alfa Brera by operating the light flasher stalk within two minutes of turning off the engine. Each time the stalk is operated, light activation is extended by 30 seconds up to a maximum of three and a half minutes.

Parking sensors

The new Alfa Brera is equipped as standard with rear parking sensor equipment, which is activated whenever the ignition is turned on and reverse gear engaged.

The system consists of four ultrasound sensors fitted in the rear bumper linked to an electronic control unit and a buzzer. The four detectors cover the rear corners of the new Alfa Brera from a distance of less than 60 cm, and the area immediately behind the car from a distance of less than 150 cm. Proximity information is transmitted to the driver in the form of bleeps at intervals. The bleeps are emitted with increasing frequency, becoming a continuous signal when the car reaches a distance of 30 cm from any obstacle.

ALFA ROMEO BRERA ~ ENGINES AND TRANSMISSIONS

The new Alfa Brera goes on sale in Australia with a choice of two powerplants, two spirited JTS direct injection petrol engines – a 2.2 litre, 136 kW four cylinder unit, and a new, 191 kW 3.2 litre JTS V6.

They combine JTS (Jet Thrust Stoichiometric) direct injection technology with Alfa's 'Twin Phaser' continuously variable valve timing operating on both intake and exhaust camshafts. With specific power outputs in excess of 62 kW/litre, and almost 90 per cent of maximum torque available at just 2000 rpm, both these new JTS units boast outstanding performance yet offer significant fuel savings and readily comply with the stringent Euro Stage 4 exhaust emission limits.

The 2.2 JTS version of the new Alfa Brera is mated to an M32.6 6-speed manual gearbox, whilst 3.2 JTS model is equipped with the F40 6-speed manual transmission. The ratios of both transmissions have been chosen to emphasize performance, and gear change smoothness and accuracy has been enhanced by the use of multiple cone synchronizers.

3.2 JTS versions of the new Brera are fitted, as standard, with Alfa Romeo's Q4 permanent four-wheel drive system.

3.2 JTS V6

- 3195cc
- 60 degree V, 6-cylinders, 24 valves
- Power: 191 kW @ 6300rpm
- Torque: 322 Nm @ 4500rpm
- Timing gear: 4 OHC, continuous dual VVT
- Transmission: 6-speed manual, 4-wheel drive
- Top speed: 240 kmh
- Acceleration 0-100 kmh: 6.8 seconds
- Fuel consumption:
  - in town: 16.9 l/100 km
  - out of town: 8.5 l/100 km
  - combined: 11.5 l/100 km
  - CO_2: 273 g/km

Having made its debut in the new Alfa 159, the spirited new quadruple overhead camshaft all-aluminium 24-valve V6 powerplant features both the company's JTS direct petrol injection system and twin phase continuously variable valve timing.

Developed by Fiat Powertrain Technologies, a new industrial enterprise created to integrate all the Fiat Group's innovation capabilities and expertise in engines and transmissions, the new all-alloy engine features cylinder heads, pistons, induction and exhaust systems designed and built by Alfa Romeo. Final assembly of this engine is carried out in Italy, at the Pomigliano D'Arco Alfa Romeo plant.

The JTS direct fuel injection and 'Twin Phaser' continuously variable valve timing combine to generate an 8% increase in power and an 11% increase in torque over the previous 3.2 litre unit.

This outstanding new 3195 cc engine takes its name – Jet Thrust Stoichiometric – from its specific combustion system, an original Alfa Romeo concept that involves the high pressure injection of fuel, at 120 bar, directly into the combustion chamber with a stoichiometric mixture optimised to increase engine power and torque first and foremost – thus adapting this technology to the requirements of a sporting car – whilst adopting the stratified charge method to reduce fuel consumption in a limited speed band close to idling.

Hence, via an electronically activated 72 mm throttle valve and an aluminium inlet port casing designed to both maximise air delivery and optimise the air/fuel mixture, the 3.2 JTS engine in the new Brera operates with a lean burn system up to about 1500 rpm, making significant fuel savings. Above this engine speed, however, it burns a stoichiometric fuel-air mixture – i.e. with a conventional 14.7:1 ratio between the two components – thus guaranteeing performance superior to that achievable by a conventional, indirect injection unit.

Primarily, this is because fuel injected directly into the combustion chamber – instead of the intake ports – cools intake air, thus increasing the engine's volumetric efficiency. As the temperature drops the gases increase in density and the volume therefore decreases, allowing more air into the combustion chamber. Cooling the chamber also reduces the risk of engine knock, allowing for an increase in compression ratio – in this case to 11.25:1 – and a commensurate improvement in engine efficiency.

Allied to JTS technology, the light aluminium alloy cylinder heads of the new 3.2 litre V6 also feature 'Twin Phaser' continuously variable valve timing – for both intake and exhaust camshafts – already adopted on 4-cylinder JTS Alfa Romeo engines. Via two camshafts per cylinder bank, variable valve timing allows the phase angle of both inlet and exhaust cams to be varied by up to 50 degrees, optimising the volumetric efficiency of the engine at all engine speeds whilst reducing fuel consumption and emissions under lighter throttle settings.

The new camshaft drive system features a maintenance-free chain drive with automatic hydraulic tensioners, whilst the valves themselves – 33.4 mm inlet and 28.4 mm exhaust diameter – are controlled by a low friction roller finger system with automatic uptake of hydraulic tappet play.

The new Alfa Romeo 3.2 litre JTS V6 combines power and torque peaks of 191 kW at 6300 rpm and 322 Nm at 4500 rpm respectively, with smooth, linear power delivery from low speeds. Some 90% of peak torque is available from just 1800 rpm and maintained up to 6250 rpm. Hence, the 3.2 litre V6 24v unit delivers sensational performance, but is also very docile, and the Brera can cruise effortlessly in sixth gear at less than 2000 rpm, yet accelerate rapidly and smoothly away without the need for changing gear.

Mated to an F40 6-speed manual transmission and Alfa Romeo's Q4 permanent four-wheel drive system, the 3.2 litre JTS V6 engine will accelerate the new Alfa Brera from 0-100 kmh in 6.8 seconds and on to a top speed of 240 kph.

The V6 exhaust system features a first group of catalysing elements mounted close to the cylinder heads, ensuring optimum operational temperature is achieved as soon as possible after engine start-up. Two underfloor catalysts and four lambda sensors complete the system, which easily meets stringent Euro Stage 4 exhaust emission limits.

2.2 JTS

- 2198cc
- 4-cylinders, 16 valves
- Power: 136 kW @ 6500rpm
- Torque: 230 Nm @ 4500rpm
- Timing gear: DOHC, continuous dual VVT
- Transmission: 6-speed manual
- Top speed: 222 kmh
- Acceleration 0-100 kmh: 8.8 seconds
- Fuel consumption:
  - in town: 13.0 l/100 km
  - out of town: 7.3 l/100 km
  - combined: 9.4 l/100 km
  - CO_2: 221 g/km

The all-aluminium 2.2 litre Alfa Romeo 4-cylinder JTS powerplant offers a weight reduction of some 20% over the unit it replaces.

The 16v 2198 cc powerplant also uses 'Twin Phaser' continuously variable valve timing, as previously described, with large, 35.3 mm (inlet) and 30.3 mm (exhaust) diameter valves. In addition, it features a maintenance-free chain drive to the twin counter-rotating balance shafts, water pump and low friction camshaft drive system, and is further equipped with a dual detonation sensor to improve sensitivity to engine knock, enhancing maximum performance.

Mated to an M32.6 6-speed manual transmission, the Euro 4-compliant 2.2 litre unit develops 136 kW at 6500 rpm, and 230 Nm of torque at 4500 rpm – this high power output requiring the use of sodium cooled exhaust valves. The Brera 2.2 JTS will accelerate from 0-100 kmh in just 8.6 seconds, and still offer a fuel consumption of just 7.3 l/100 km or better than 30 mpg in the old money.

ALFA ROMEO BRERA ~ RIDE AND HANDLING

The new Alfa Brera has a wheelbase of 2528 mm, 175 mm shorter than that of the Alfa 159, with which it shares platform and suspension designs. The suspension system is the outcome of an extensive and thorough development process aimed at achieving the highest possible levels of driveability and handling appropriate to a sporting marque, combined with optimum travelling comfort.

It combines a proven, high double wishbone front set-up with a new, sophisticated multilink rear configuration, the combination generating smooth, accurate steering response, exceptional stability and controllability – even when close to adhesion limits, and first class body control allied to remarkable comfort over all road surface conditions.

The 3.2 JTS versions of the new Brera further benefit from Alfa Romeo's Q4 four-wheel drive system; a mechanical system enhanced by cutting-edge electronic technology to guarantee the smoothest possible power delivery and optimum traction under all driving conditions.

Front suspension

The Alfa Brera's high double wishbone front suspension is an improved version of the set-up so successfully employed on the Alfa 156, and then further revised on the new Alfa 159. Its design is based on that universally employed in motorsport, offering precise control of wheel movement and affording the new Alfa Romeo outstanding dynamic performance allied to extremely sensitive, accurate steering.

Engineering improvements to the aluminium upper and lower arm set-up include an increase in the size of the coaxial damper spring to improve its capacity to absorb poor road surfaces, the use of a pair of dry friction sliding bushes to the aluminium upper arm for strength, reliability and a more progressive action, and a relocation of the steering axis closer to the centre of the wheel for improved cornering response. Additionally, the suspension is now connected to the chassis via a closed geometry frame, which is stiffer than the previously employed crossbeam.

From a dynamic viewpoint, the high double wishbone layout combines long wheel travel with outstanding control. This configuration offers the Alfa Brera maximum tyre grip, improved traction under extreme conditions, a self-alignment effect proportional to the lateral acceleration applied in a corner, superior steering precision and sensitivity, graduated steering wheel effort up to adhesion limits and the minimisation of pitching under extreme acceleration or braking.

Rear suspension

At the rear, the Alfa Brera employs a new multilink suspension system to maximise driveability, handling performance and ride comfort. Through a combination of transverse and longitudinal links, the system facilitates extremely precise wheel movements in the vertical plane, whilst limiting longitudinal and transverse displacements to maintain optimum wheel positioning under load. Pitching is reduced, and maximum stability under braking is ensured by the reduction of any tendency to understeer.

Key features of the new multilink configuration include a higher anchorage point of the longitudinal link to facilitate a longer, more flexible suspension stroke, an enlarged bi-tube spring damper unit for improved ride comfort, and an aluminium upright with a high rigidity hub supporting the connection bushes for both camber and longitudinal links. In addition, the new set up features a rear hydraulic bush to optimise filtering of poor road surfaces, and a high yield steel crossbeam isolated from the bodyshell by four flexible bushes to dampen high frequency vibration.

Steering

All Alfa Romeos are renowned for their direct, lively and responsive steering feel. The Brera is no exception, and is fitted with hydraulically power assisted, speed sensitive steering which achieves a highly effective balance between low speed maneuverability and high speed accuracy and feel. With just 2.25 turns lock-to-lock and a ratio of 12.7 degrees of steer for every degree of steering wheel input, the new Brera offers the most direct steering in its class.

The telescopic steering column is divided into two sections for comfort and safety. The lower section is collapsible to ensure that steering wheel position is maintained relative to the driver during an impact. The upper section offers both reach and rake adjustment to the driver. A steel bracket and a rigid magnesium mount prevent vibration.

Careful matching of the steering geometry to the wheel arch volume has facilitated high steering angles even with the largest tyres fitted, affording the new Alfa a turning circle of just 10.7 metres between kerbs.

Q4 four-wheel drive

The 3.2 JTS engined versions of the new Brera are equipped, as standard, with Alfa Romeo's Q4 permanent four-wheel drive system. Q4 employs three differentials, with a self-locking Torsen C unit at the centre of the system, which in normal conditions divides drive torque by a ratio of 57% to the rear wheels and 43% to the front – the rear axle bias promoting sporting handling appropriate to the marque.

Torque split between front and rear axles is constantly modulated by the central Torsen differential on the basis of available grip, with a maximum available bias of 72% to the front, and 78% to the rear. Modulation is mechanical and continuous to guarantee the smoothest possible power delivery, and the system is further enhanced by the full range of electronic stability controls to guarantee optimum traction and performance under all driving conditions.

ALFA ROMEO BRERA ~ SAFETY

The new Alfa Brera is at the top of its category in terms of active, passive and preventive safety. It meets preventive safety needs with an adjustable cockpit that adapts perfectly to drivers of any size. The combination of a height adjustable driver's seat and reach and rake adjustable steering, allied to an extensive glazed area, allows the best possible view of the road ahead. User-friendly ergonomics allow drivers to operate all instruments and controls without taking their eyes off the road. And the new Brera's excellent all-round visibility is further enhanced by the availability of rain, dusk and demisting sensors.

PASSIVE SAFETY

Within an all new bodyshell designed to provide maximum torsional rigidity yet absorb impact with maximum efficiency, the new Alfa Brera is fitted with seven standard airbags, whilst height adjustable front seatbelts with pretensioners and load limiters, anti-whiplash front seat head restraints, three-point rear seatbelts, anti-submarining front seats and an FPS Fire Prevention System are all fitted as standard.

Airbags

The new Brera is equipped with no less than seven airbags; 60 litre driver and 120 litre passenger dual-stage front airbags, driver knee airbags, front side airbags, as well as two full-length side curtain airbags providing head protection in the case of side impacts. Their operation is controlled by an electronic control unit that evaluates crash severity via a number of sensors located throughout the car.

Fire Prevention System

The FPS includes a cut-off valve and an inertia switch which immediately locks the electric petrol pump. This prevents fuel loss in the case of impact, roll-over or damage to the fuel lines. The fuel tank is formed in a plastic resistant to mechanical stress and fire. Special care has been taken over the location of key components within the engine bay, electrical system, fuel system and brakes to minimise the risk of damage. The new Alfa Brera's interior trim is also flame resistant.

ACTIVE SAFETY

The new Alfa Romeo's servo assisted braking system features two independent crossover hydraulic circuits to ensure prompt, linear braking and minimal stopping distances. Brera versions powered by the 2.2 JTS engine are equipped with 305 mm ventilated front discs and 278 mm solid discs at the rear. The 3.2 JTS V6 version features larger, 330 mm ventilated discs and powerful, Brembo, four piston monobloc aluminium callipers at the front, with 292 mm ventilated discs at the rear.

The new Alfa Brera is equipped, as standard, with a comprehensive range of state-of-the-art electronic braking, traction control and stability systems: ABS anti-lock braking is combined with Electronic Brakeforce Distribution over all four wheels and Hydraulic Brake Assistance, whilst a sophisticated Vehicle Dynamic Control unit enhances cornering stability. VDC is further augmented by Anti-Slip Regulation to limit wheelspin during acceleration, Motor Slip Regulation to modulate braking torque when changing down through the gears, and a unique Hill Holder function to facilitate smooth hill starts.

ABS with EBD and HBA

The Alfa Brera is fitted as standard with a Bosch 5.7 anti-lock braking system, one of the most advanced units currently available. The system incorporates an electronic brakeforce distributor with four active sensors, four channels and a hydraulic control unit with 12 solenoids. Because the active sensors can themselves process a wheel input signal, rather than passing it on to the control unit, the system can both activate more quickly and detect speed signals far closer to zero.

The active sensors are less sensitive to interference from electromagnetic fields and road surface heating and, because they can detect very low speeds, augment the efficiency of the satellite navigation system by allowing more accurate updating of data on the route covered by the car.

EBD distributes braking action over all four wheels to prevent them locking, and ensures full control of the car in all situations. To reduce brake pad overheating, the system also adapts its operation to both grip availability and brake pad efficiency.

Though primarily conceived to automatically increase brake force when insufficient brake pedal loading has been applied during an emergency stopping procedure, Hydraulic Brake Assistance can even help experienced drivers who have applied the correct amount of pedal pressure, by reducing braking attenuation time in all cases (the time between initial pedal loading and maximum brake circuit pressure).

VDC

This innovative switchable Vehicle Dynamic Control system is activated under extreme conditions when vehicle stability is at risk, helping the driver to control the car. As befits a true Alfa Romeo, however, VDC is a sporting system that does not interfere prematurely, allowing the full satisfaction of driver control to the limit of critical conditions. It can also be disengaged at the driver's command.

The Brera's VDC continuously monitors tyre grip in both longitudinal and lateral directions. If the car starts to slide, VDC cuts in to restore directional stability. It uses sensors to detect rotation of the car body about its vertical axis (yaw), lateral acceleration, and steering input. Comparing this data with computer generated parameters, the system establishes whether the car is cornering within its adhesion limits or if the front or rear wheels are about to lose grip.

To restore the required trajectory, VDC generates a yawing movement to counter that responsible for the vehicle's instability by braking the appropriate wheel individually, and reducing engine power via the throttle.

Exceptionally smooth brake modulation and engine power reduction are key attributes of a system designed by Alfa engineers to maintain outstanding performance and driving satisfaction throughout its operation.

ASR

Anti-Schlupf Regelung is an additional feature of the Alfa Brera's VDC system, designed to limit wheelspin in cases of low road surface grip. This sophisticated system works at any speed and prevents the driven wheels from spinning by adjusting torque according to the grip coefficient detected at the time of slip.

The system recognizes loss of traction via the ABS sensors, and activates two different control systems to restore grip: in the case of both driven wheels spinning it reduces engine power via the throttle. If only one wheel spins, however, it is automatically braked; the resultant effect similar to that of a self-locking differential.

ASR not only optimises vehicle safety in conditions of minimal or constantly varying degrees of grip, but also greatly reduces mechanical stress to the differential and gearbox through effective control of low speed take-off and traction.

The system is activated automatically whenever the engine is started, but may be deactivated via a switch on the centre console. A flashing warning light indicates ASR operation, whilst a second light illuminates to indicate system faults or irregularities. ASR deactivation is required when snow chains are fitted to allow for their effective use.

MSR

The new Brera further benefits from Motor Schleppmoment Regelung. MSR cuts in when a gear is shifted down abruptly under conditions of low grip, restoring torque to the engine to prevent skidding as a result of wheel lock-up.

Hill Holder

Also integral to VDC, the Alfa Romeo's Hill Holder system helps drivers pull away smoothly from an upwards-facing hill start. Operating via the ESP longitudinal acceleration sensor when first gear is engaged and both clutch and brake pedals are pressed, the control unit maintains front calliper pressure for about 1.5 seconds after the brake pedal is released to eliminate the risk of rolling backwards and ensure a smooth pull away. Hill Holder does not operate when setting off downhill in first gear, but does so when reverse is engaged and the driver wishes to back uphill.

Alfa Romeo Brera

Technical Specifications

	Brera 2.2 JTS	Brera 3.2 JTS V6 Q4
ENGINE		
No. of cylinders, arrangement	4 in line	60 degree V6
Bore x stroke (mm)	86 x 94.6	89 x 85.6
Displacement (cc)	2198	3195
Compression ratio	11.3 : 1	11.25 : 1
Max. power output: bhp (kW-EC) at rpm	185 (136) 6500	260 (191) 6300
Peak torque: Nm (kgm-EC) (lb.ft) at rpm	230 (23.4) (170) 4500	322 (32.8) (237) 4500
Timing system (control)	DOHC (chain), 4 valves per cylinder, double electrohydraulic continuous phase variator	4 OHCs (chain), 4 electrohydraulic continuous phase variators
Fuel feed	MED 7.6.1 electronic direct injection integrated with ignition system	MED 7.6.2 electronic direct injection integrated with ignition system
ELECTRICAL SYSTEM (12V)		
Battery: capacity (Ah) / Generator (A)	70/120	90/150
TRANSMISSION		
Drive	Front	Four-wheel drive
Gearbox: 1st	3.818 : 1	3.917 : 1
2nd	2.353 : 1	2.040 : 1
3rd	1.571 : 1	1.365 : 1
4th	1.146 : 1	1.048 : 1
5th	0.943 : 1	0.846 : 1
6th	0.861 : 1	0.740 : 1
Reverse	3.545 : 1	3.749 : 1
Final ratio	4.176 : 1	3.895 : 1

TYRES/WHEELS		
Standard version	235/45 R18	235/45 R18
Wheels	18 x 8	18 x 8
Steering system	Rack and pinion with power steering	Rack and pinion with power steering
Turning circle (m)	10.7	10.7
SUSPENSION		
Front	Independent with double wishbones and anti-roll bar anchored via ball joints	Independent with double wishbones and anti-roll bar anchored via ball joints
Rear	Independent Multilink system	Independent Multilink system
BRAKES – (DISCS)		
Front (mm)	Ventilated 305 x 28 D, 60 mm pistons, floating calliper	Brembo Ventilated 330 x 28 D, fixed aluminium calliper with four 42 mm pistons
Rear (mm)	Solid 278 x 12 D, combined 38 mm pistons floating calliper	Ventilated 292 x 22 D, combined 42 mm pistons floating calliper
WEIGHTS – TANK CAPACITY		
Fuel tank capacity (litres)	70	69
Kerb weight DIN (kg)	1470	1630
Max towable weight (kg)	1450	1500
PERFORMANCE		
Top speed km/h	222	240
Acceleration (driver + 30 kg): 0 to 62 mph (s)	8.6	6.8
0 to 1000 m (s)	29.5	27
FUEL CONSUMPTION – EMISSIONS According to 1999/100/EC Directive		
Urban cycle (l/100km)	13	16.9
Extra urban cycle (l/100km)	7.3	8.4
Combined cycle mpg (l/100km)	9.4	11.5

Exhaust emissions – CO_2 (g/km)	**221**	**273**
DIMENSIONS		
No. of seats	**2+2**	**2+2**
No. of doors	**3**	**3**
Length / width (mm)	**4410 / 1830**	**4410 / 1830**
Height (mm)	**1341**	**1341**
Wheelbase (mm)	**2528**	**2528**
Front / rear track (mm)	**1579/1559**	**1579/1559**
Luggage compartment capacity (dm^3)	**300 / 610**	**236 / 546 + 20 lt. cargo box**

Alfa Romeo Brera

STANDARD EQUIPMENT AND OPTIONS

● = standard ❍ = optional - = not available

EXTERIOR EQUIPMENT	BRERA 2.2	BRERA V6
Electrically adjustable, heated wing mirrors	●	●
Electrically folding, adjustable, heated wing mirrors	❍	●
Hydrodynamic windscreen washer jets	●	●
Panoramic glass roof with electrically operated blinds	●	●
Metallic paint	❍	❍
18" wire-spoke design alloy wheels with 235/45 R18 tyres	●	=
18" 7 hole design alloy wheels with 235/45 R18 tyres	=	●
INTERIOR EQUIPMENT		
Electric front windows with one touch function and anti-intrusion sensor	●	●

Stainless steel kick plates	●	●
Front armrest with temperature controlled storage compartment	●	●
Rear armrest with ski tunnel	●	●
Electronic key with remote central locking and boot release	●	●
Dual zone automatic climate control with split temperature and distribution function (pollen filter with active carbon filter and AQS(2))	●	●
5 mm thick glass panes on front windows	●	●
Internal electric boot release switch	●	●
Tinted windows	●	●
Cruise control	●	●
Diffused ambient lighting in cockpit	●	●
Engine oil gauge	●	●
Luggage compartment with courtesy light	●	●
Glove compartment with courtesy light	●	●
Puddle lights on front doors	●	●
Courtesy lights with reading spotlights	●	●
Courtesy mirror on driver and passenger sun visors with built-in light	●	●
Electronic start / stop button	●	●
Asymmetrically split folding rear seats with storage compartment in armrest	●	●

Electrically adjustable heated front seats and electrically folding, adjustable, heated wing mirrors, with memory on driver's side	❍	●
Manually adjustable passenger seat (height, distance, electrical inclination, tilting and lumbar adjustment)	●	=
Leather upholstery	●	=
Frau® Pieno Fiore leather upholstery with electrically adjustable heated front seats and electrically folding, adjustable, heated wing mirrors, with memory on driver's side	=	●
Interior carpeting in tufted velour	●	●
On-board instrumentation with multifunctional display	●	●
Trip computer	●	●
Steering wheel adjustable for distance and height	●	●
Leather steering wheel and gear knob	●	●
SAFETY / MECHANICAL PARTS		
Full size driver and passenger front airbags	●	●
Full size window airbags (front and rear protection)	●	●
Front side airbags (chest and pelvis protection)	●	●
Driver knee airbag	●	●
Alfa code immobiliser	●	●
Volumetric antitheft alarm with cut-out switch and anti-lifting module	●	●
VDC with Hill Holder (ABS + ASR + EBD + Brake Assistant)	●	●

ASR/VDC cut-out control	●	●
Fire Prevention System	●	●
Anti-intrusion bars in front doors	●	●
Front seatbelts with digressive load limiter and pretensioners on buckle	●	●
Belt not buckled buzzer, timed and deactivated when the car is stationary	●	●
Headlight washer system	=	●
Halogen headlights	●	=
Bi-xenon headlights (includes headlight washer system)	=	●
"Follow me home" headlights	●	●
Fog lights	●	●
Parking sensor built into rear bumper with audible obstacle alert	●	●
Brake pad wear and braking system malfunction sensor	●	●
Aluminium brake callipers with Alfa Romeo designation	●	●
Space saver spare wheel	●	●
Fuel cap secured by central locking	●	●
AUDIO / PHONE / NAVIGATION		
Car radio with audio CD player (6 speakers)	●	●
CD auto-changer (10 disc)	●	●

Bose® sound system with digital amplifier (6 speakers, 1 central, subwoofer) with a cargo box under loading floor	❍	●
Hands-free system with voice recognition and Bluetooth™ technology	❍	●

ALFA ROMEO BRERA

Recommended Retail Price List

These prices do not include dealer delivery, on-road costs or statutory charges

	Engine	Gearbox	Trim	Recommended Retail Price
Alfa Romeo Brera 2.2 JTS	2.2 litre petrol	Six Speed manual	Leather	$69,950
Alfa Romeo Brera 3.2 JTS V6	3.2 litre V6 engine	Six Speed manual Four wheel drive	Leather	$94,950

ALFA ROMEO BRERA

Options and option prices

	Brera 2.2 JTS	Brera JTS 3.2	Recommended Retail Price
Metallic paint	❍	❍	**$1750**
Electrically adjustable front seats with three stage heating and electrically folding, adjustable, heated wing mirrors, with memory on driver's side	❍	●	**$3250**