



ALFA ROMEO AUSTRALIA

ALFA ROMEO SPIDER DEBUTS AT THE AUSTRALIAN INTERNATIONAL MOTOR SHOW

The Australian International Motor Show (26 October – 4 November 2006) will see the return of iconic automotive name, the Alfa Romeo Spider, with the launch of the all-new open-top Alfa Romeo just in time for Spring.

Although the archetypal Alfa Romeo Spider is the 1960's Duetto that entered the public consciousness when a Dustin Hoffman piloted a red – of course – Duetto Spider on his way to his fateful meeting with Mrs Robinson in the film 'The Graduate', the Spider has been at the heart of the company right back to its foundation. Although early models such as the 40-60hp and the RL were known generically as spiders, the first model to carry Spider as part of its name was the 8C 2300 Spider.

"Alfa Romeo's core values are performance and style," explains David Stone, General Manager for Alfa Romeo in Australia. "The Spider is the embodiment of these values. Originally the quickest way to achieve performance was with a light, open top body that was sleek and aerodynamic to maximize the available potential from the engine and chassis, in other words, the original sports car. Today, the new Spider is the epitome of the Alfa Romeo, with performance, style and ability in depth. It remains the very definition of Alfa Romeo."



Although the all-new Alfa Romeo Spider is based on the acclaimed Brera Coupe, it is much more than a roofless version of the Brera. The Spider is strictly a two seat sports car; it has been extensively styled at the rear to focus attention on its open top character, with pronounced rear wheel arches, a cover for the folded roof that is shaped to flow up towards the polished chrome roll bars in the form of a 'speedster' top.

Two versions of the new Alfa Spider, starting with a recommended retail price of \$76,950, 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 Spider versions are fitted with 6-speed manual gearboxes, whilst the Spider 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 sports car.

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 Spider 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 Spider'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 Spider 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 Spider 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 Spider. 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 Spider boasts a notably generous standard equipment specification, offering, even at entry level, many features only available as expensive options on rival models, including chrome roll bars, wind break, rear storage compartments, automatic Dual Zone climate control, electric folding 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 Spider 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 for the 2.2 JTS Spider, the electrically adjustable seats and Bluetooth system.

The Alfa Romeo Spider is on sale now, with a recommended retail price for the Spider 2.2 JTS of \$76,950 and the Spider 3.2 JTS Q4 is priced at \$100,950. The Spider will be available with the new Q-Tronic six speed automatic gearbox early in 2007, when prices for this version will be announced.



ALFA ROMEO SPIDER ~ HERITAGE

The four words 'Spider is Alfa Romeo', an advertising slogan in use nearly 30 years ago, neatly sum up eighty years of Alfa Romeo Spider production in both technical and emotional terms.

This is because an automotive manufacturer such as Alfa Romeo whose name has always been a synonymous with motorsport, can only give free rein to its idea of freedom and passion by building a convertible sports car.

Like many historical icons that have passed into the common consciousness over the course of the decades, the Alfa Romeo convertible was originally created without a specific name to identify it.

The period was the beginning of the twentieth century, Alfa cars created in Portello, such as the 40-60 HP, the 20-30 ES, up to the RL were put through their paces against the chequered flag over circuits such as Targa Florio, Brescia, Modena and Parma. The management of the day was quick to realise that they could never come up with a better advertising slogan than that of offering customers a car that could boast such a wealth of sporting accolades.

Through the intuitions and passion of designers and engineers such as Merosi and then Jani, Alfa Romeo became speed champions on the track and style icons on roads throughout the world, due to their impeccable engines and the artistry of bodybuilders such as Zagato and Touring, who channelled the power of the 1500 and 1750 engines into sleek, open-topped shapes.

The English-speaking world looked on with great interest at these open-topped cars whose streamlined shapes allowed them to reach much higher speeds than saloons. The vehicles were therefore described as 'speeders' and the term became corrupted into 'spiders', even though they had nothing whatsoever to do with the eight-legged insects of the same name.

Throughout the 1930s, the already cutting-edge engineering and styling of these cars underwent further refinement. The engines were upgraded to eight cylinders and their capacities were increased: the difficulties posed by circuits throughout Europe (from Le Mans to Monza) and the toughest adversaries did not deter the all-powerful 8C 2300 Spider Corsa or the 8C 2900 A and B.

At the wheel of these racing cars, with his habit of hurtling headlong into the middle of bends and skidding out, was perhaps the greatest of them all: Tazio Nuvolari.

The interlude of World War II brought a temporary halt to Italian automotive production. The first signs of recovery came at the beginning of the Fifties, but the clamour for coupés and convertibles did not really begin to make itself heard until the time of new prosperity in the Sixties.

Alfa Romeo responded to this need with a car derived from a coupé version but with a shape that belied its great personality: thus 1955 saw the advent of the Giulietta Spider.



Though Zagato and Touring had built the bodies of previous convertibles, for the Giulietta Spider, the powers that be at Alfa Romeo decided to commission two prototypes from Bertone for the Giulietta Sprint that was the forerunner of the coupe and from Pininfarina.

Graceful, regular proportions coupled with suave yet razor-sharp design assured the victory of the model produced by the factory set up by Giovan Battista Farina, who referred to his car affectionately as 'la signorina'.

The Giulietta Spider was initially launched only on the US market, where that well-proportioned design oozing artistic culture and the brand name redolent of so many racetrack triumphs symbolised a different way of life. The small cars (very often white) from Milan caused a sensation when they were first seen driving down the avenues of New York.

In Italy, Alfa Romeo convertibles became a must-have phenomenon: these fast cars had the acceleration to burn up heavy saloons at the traffic lights and competition was beginning to arise between opposing ranks, as Giulietta drivers took on the British open-topped sports cars.

Italian national spirit and pride, based on well-founded awareness of the product's attributes, always won out and it was not by chance that the Giulietta Spider entered the world of advertising with Domenico Modugno at the wheel.

But the Giulietta was no ordinary style icon and amounted to much more than a status symbol: like any other Alfa Romeo, this car was put through its paces on the race track (in a 12 hour race at Sebring in 1960 for example) and in the world of competitive motorsport. The most original race and the one that aroused most press attention was won by a Giulietta Spider Veloce driven by Sanesi that came in 20 minutes ahead of the Settebello train (pride of the railway industry at that time) on the Milan-Rome line.

The Touring body introduced between the end of the 1950s and the beginning of the 1960s was no less admired. This look, where elegance was more important than racing muscle, typified the 2000 and 2600 convertibles and proved itself perfectly attuned to the jetset lifestyle. It stood as a model of refinement and good taste, immortalised by memorable performances by actors such as Rossano Brazzi and Ugo Tognazzi, whose style blended perfectly with that of the Touring class.

So far the Spiders we have examined were essentially open-topped versions of saloon or coupé models, but at the Geneva Motor Show of 1966, Alfa Romeo introduced a Spider so original, it was viewed in an entirely different light to any other model in production at that time.

The Fiat top-management decided that they needed to get away from the Giulietta shape, which they considered outdated and commissioned Pininfarina (now inseparably linked with the Alfa Romeo name) to build a new car on the 1600 engine.

1966 saw the advent of the 1600 Spider, with a double convex shape that was drawn out harmoniously to give the car a cuttlebone form contained within a wraparound rounded shape with a quintessentially mannerist flavour. Such shapes were actually nothing new to Alfa



Romeo convertibles: fourteen years earlier, the 1900 C 52 convertible known as the 'Flying Saucer' had aroused much curiosity and interest.

After cars with evocative names such as the Giulietta and Giulia, this 1600 spider could hardly remain restricted by such a dry-sounding technical title. The Alfa Romeo top management, led by Giuseppe Luraghi, therefore announced a competition: anyone who came up with a name good enough to satisfy a special jury would be given a 1600 Spider. Many more people entered the competition than Alfa ever expected. So many, in fact, that once the jury had chosen the name 'Duetto', they had to pick a winner from all the entrants who had suggested this name. Mr Guidobaldo Trionfi was the lucky contestant: he based his entry on the number of passengers, the engine tone and the inseparable harmony of shape and feeling.

The Duetto had only just entered the stage: then the young Dustin Hoffman arrived on Italian cinema screens aboard a red Duetto, driven in dashing style on the set of the film 'The Graduate', to the accompaniment of 'Mrs. Robinson' by Simon & Garfunkel. The film and the car were so popular that a special series of the Spider in the US was given the name of 'Graduate'.

The Seventies ushered in another look entirely and the car underwent a radical restyling. This mainly affected the rear end, with the disappearance of the cuttlebone shape in favour of a cut-off rear end. Different engines also came and went over the years, from the 1300 to the 2000 with the 1750 in between.

The 1991 Alfa Romeo Proteo heralded the next generation Alfa Romeo Spider and in 1995 the Alfa Romeo Spider was re-born with a design that was a collaboration between the Alfa Romeo Styling Centre and Pininfarina. This car is particularly significant for Alfa Romeo in Australia – it is the car that, along with the Alfa Romeo GTV, brought the marque back to Australia in 1998. With a major facelift in 2000, this generation of the Spider continued until 2005.

And so production of Alfa Romeo spiders has continued in an almost unbroken strand up to the present day, a sign of the importance and awareness of Alfa Romeo's place in the world of convertibles, i.e. in the world of passion, motor racing, wind and asphalt.

After all, Spider is Alfa Romeo.



ALFA ROMEO SPIDER ~ DESIGN

The new Alfa Romeo Spider, derived from the gorgeous Alfa Brera coupé, was developed by Pininfarina in conjunction with the Alfa Romeo Style Centre and will be assembled in Pininfarina's San Giorgio Canavese plant.

A byword for sporting prowess, Italian flair and quality, the model is a stylish and generously proportioned 2-seater. The Alfa Spider is 183 centimetres wide, 439 cm long and 131 cm high with a wheelbase of 253 cm, although the sharply tapered front and rear make it look more compact.

Despite this, Alfa Romeo has not had to stoop to compromise by choosing between comfort and function, as designers are often forced to do with this type of car. The luggage compartment offers 253 litres which is always available whether the hood is up or down, while there are numerous roomy oddments recesses, including the chilled one in the central console.

In detail, the new Alfa Spider offers an up-to-date appealing front end, similar to that of the coupé on which it is based, with a shield occupying pride of place in the centre, the starting point of the lines that run along the bonnet and frame the headlights, 'suspended' on an air inlet: a stylistic and functional device that Alfa Romeo reserves for its out-and-out sports cars, which makes the front look even wider and more imposing, because the shoulder of the wing and the front pillar are stronger and thicker.

From the side, the combination of a short wheelbase, long bonnet and compact, rear-mounted cabin enhances the car's sporty, dynamic looks. This impression of great temperament is underlined by the elongated rear lights and four exhaust terminals. But the styling of the new Spider also includes some 'romantic' elements, in the best Alfa Romeo tradition, such as the fold-away, light hood, and the design of the rear shoulder muscle that is borrowed directly from the famous Giulietta Spider.

The collaboration between the Alfa Romeo style centre and Pininfarina continues inside the vehicle where a sporty look has been achieved by the general layout and one-off features such as the armrest area of the door panel or the band that wraps around the surface above the rear bench. The dash features an array of controls and instruments that all face the driver. The seats, while maintaining an area with distinctive Alfa piping, have been customised by incorporating the head-restraints into the structure and by side strips that connect the seatbelts and give a personality boost to the seat.

And finally, the Alfa Romeo soft top, an irresistible design feature, is distinctive for its light appearance and the way it blends in perfectly with the rest of the car. For example, the shaped hood cover fits in harmoniously with the body and houses a third brake light in its base.

Last but not least, the rear roll-bar is a safety element that slots perfectly into the silhouette of the car which tracks the line of the seat to shade off into the rear volume above the rigid hood cover. Everything is embellished by the two 'bosses' set behind the roll-bar and enriched by some high-tech details.



Sportiness and elegance combined in unique, exclusive styling. harmonious forms and volumes which produce a beautiful, powerful, solid car, when they are supported by Alfa Romeo mechanical and engineering excellence. All this without ever stooping to compromise in terms of comfort and on-board wellbeing.

The Spider Hood

The fully concealed Alfa Spider hood is equipped with a hydraulic system for automated movement. The hood comes with improved looks, streamlining and acoustic comfort. Its practical details have also been improved with mechanisms specially designed to make folding and unfolding operations easier, faster and safer.

In detail, the first of its five steel and aluminium arches is shaped to mould to the upper edge of the windscreen thus continuing the exterior shape seamlessly and making the car more aerodynamic with its hood closed. The hood consists of two skins: the outer skin is a multiplayer cloth with good fire resistance while the inner skin effectively soundproofs the passenger compartment. Special features have also been designed and applied to prevent wind noise during driving with the hood closed, even at high speed. Examples include the special shape of the window retaining channels.

Aboard convertibles driving comfort must be guaranteed both with the hood closed and with the hood open: hence the continuous quest for various individual performance aspects, such as body stiffness, individual frequencies, weight optimisation, aerodynamics, suspension settings and many other features that may be less well known to the general public but all add up to create a top quality product that can be used to best effect in both configurations.

The hood action is also electric and the fold/unfold operations take place automatically. To set the hood in motion, all the driver has to do is press a button after parking the car and applying the handbrake. This single manual operation has been maintained for safety reasons, since accidental system operation is prevented.

In detail, electric hood opening is performed by a specific hydraulic circuit co-ordinated by a special electronic control unit.

Lastly, the car may also be equipped with a transparent wind stop that limits air turbulence in the passenger compartment with the hood open to make it possible to enjoy an equally comfortable trip even at high speed.



ALFA ROMEO SPIDER ~ MODEL RANGE AND EQUIPMENT

The two specification levels include the following:

Spider 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
- Electrically operated roof
- Rear parking sensor
- Cruise control
- Multifunction display with trip computer
- ABS anti-lock braking with EBD, Hillholder and HBA
- VDC with Hill Holder
- 60:40 split folding rear seats
- 18 inch spoke alloy wheels
- Leather interior trim

Spider 3.2 JTS V6:

In addition, 3.2 JTS V6 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

Dual Zone climate control

The Dual Zone climate control system, fitted as standard across the Alfa Spider 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 Spider 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 Spider 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 Spider 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 Spider'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 Spider 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 Spider 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 Spider 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 SPIDER ~ ENGINES AND TRANSMISSIONS

The new Alfa Spider 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 Spider 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.

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

Spider 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: 235 kmh
- Acceleration 0-100 kmh: 7.0 seconds
- Fuel consumption:
 - in town: 16.9 l/100 km
 - out of town: 8.4 l/100 km
 - combined: 11.5 l/100 km
 - CO₂: 273 g/km

Having made its debut in the new Alfa 159 and Brera, the spirited new quadruple overhead camshaft all-aluminium 24-valve V6 powerplant in the Spider 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 Spider 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 Spider 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 Spider from 0-100 kmh in 7.0 seconds and on to a top speed of 235 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.

Spider 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: 217 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
 - CO₂: 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 Spider 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 SPIDER ~ RIDE AND HANDLING

The new Alfa Spider 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 Spider 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 Spider'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 Spider 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 Spider 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 Spider 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 Spider 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 Spider 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 SPIDER ~ SAFETY

The new Alfa Spider 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 Spider'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 Spider is fitted with five 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 Spider is equipped with no less than five airbags; 60 litre driver and 120 litre passenger dual-stage front airbags, driver knee airbags and front side airbags. 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 Spider'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. Spider 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 Spider 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 Spider 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 Spider'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 (Anti-Slip Regulation) is an additional feature of the Alfa Spider'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 Spider further benefits from Motor Schleppmoment Regelung (Motor Speed Regulation). 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.

(ends)



Alfa Romeo Spider Technical Specifications

	Spider 2.2 JTS	Spider 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)	1530	1690

PERFORMANCE

Top speed km/h	217	235
Acceleration (driver + 30 kg): 0 to 100 kmh (s)	8.8	7.0
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
No. of doors	2	2
Length / width (mm)	4410 / 1830	4410 / 1830
Height (mm)	1318	1318
Wheelbase (mm)	2528	2528
Front / rear track (mm)	1579/1559	1579/1559
Luggage compartment capacity (dm ³)	235	235

Alfa Romeo Spider

STANDARD EQUIPMENT AND OPTIONS

● = standard ○ = optional = = not available

EXTERIOR EQUIPMENT	SPIDER 2.2	SPIDER V6
Electrically adjustable, heated wing mirrors	●	●
Electrically folding, adjustable, heated wing mirrors	○	●
Hydrodynamic windscreen washer jets	●	●
Electro-hydraulically folding roof	●	●
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	●	●
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	●	●



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	●	●
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 SPIDER

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 Spider 2.2 JTS	2.2 litre petrol	Six Speed manual	Leather	\$76,950
Alfa Romeo Spider 3.2 JTS V6	3.2 litre V6 engine	Six Speed manual Four wheel drive	Leather	\$100,950

ALFA ROMEO SPIDER

Options and option prices

	Spider 2.2 JTS	Spider 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