



ALFA ROMEO AUSTRALIA

ALFA ROMEO BRERA BOWS OUT WITH FINAL TECHNOLOGICAL BOOST

The Alfa Romeo Brera, so beautiful that Jeremy Clarkson said it was the Angelina Jolie of cars, will close its account in 2011 but the Alfa Romeo coupe that is already a classic will not fade away, it will get one final technological boost so that its performance continues to match its dramatic good looks.

For its final months in the market place, the Alfa Romeo Brera will be available in limited numbers with the all new Alfa Romeo 1750 TBi engine, and despite the significantly better performance, economy and emissions offered by the engine, the Alfa Romeo Brera 1750 TBi costs the same as the car it replaces at \$64,990 not including statutory charges and delivery costs, and gains significant equipment improvements, including 19 inch alloy wheels, automatically folding door mirrors, electrically adjustable front seats and an interior trimmed with the finest Pieno Fiore leather. The range topping Brera, the 3.2 JTS V6 Q-Tronic also benefits from changes for its final model year, with a price of \$79,990 not including statutory charges and delivery costs, which represents a \$11,000 saving.

Equipped with the new 1750 TBi engine, the Brera's 0-100 kmh time cut from 8.6 seconds to 7.7 seconds, while top speed is boosted from 222 kmh to 235 kmh. But, despite this performance lift, fuel consumption is significantly reduced. Indeed, on the combined test cycle the Brera equipped with the new 1750 TBi engine saves 1.3 litres of fuel every 100 km with its figure of 8.1 litres per 100 km. Not only does the Brera 1750 TBi meet the EuroV emissions standard, the toughest in the world, its CO2 emissions drop from 221 g/km to 189 g/km.

This substantial gain in engine efficiency has been achieved with an advanced ignition control solutions including direct fuel injection, two continuously variable valve timing units, a turbocharger and a revolutionary scavenging control system.

But the blunt zero to 100 kmh time and top speed figures are just part of the story. As well as providing 147 kW at 5000, the new 1750 TBi engine delivers 90 more Nm of torque, up from 230 to 320 Nm from just 1400 rpm. The provides the Brera 1750 TBi with in-gear performance that rivals that of a 3.0 litre V6 and makes the Brera 1750 TBi an even more exciting and involving driving experience, something that is further enhanced by the reduction in weight over the front axle which means sharper, more responsive steering and better handling balance.



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

Complimenting the new Brera 1750 TBI, the Alfa Romeo Brera 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 the Q-Tronic six speed automatic transmission and Alfa Romeo's Q4 permanent four-wheel drive system as standard, the 3.2 litre JTS V6 engine will accelerate the Alfa Brera from 0-100 kmh in 7.0 seconds and on to a top speed of 240 kph.

Both versions are comprehensibly well equipped:

Brera 1750 TBI

- 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
- 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
- 19 inch spoke alloy wheels
- Pieno Fiore leather interior
- Electrically adjustable seats with heating and memories
- Electrically folding door mirrors
- Full length glass sun roof
- Blue and Me Bluetooth connection system with i-Pod/USB connection

Brera 3.2 JTS V6:

In addition, V6 adds:

- Bose sound system
- Xenon headlights
- Headlight washers
- Q4 all wheel drive



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.

The Alfa Romeo Brera 1750 TBi has a recommended retail price of \$64,990 not including statutory charges, delivery and dealer costs, while the Brera 3.2 JTS V6 Q-Tronic is priced at a recommended retail price of \$79,990 excluding statutory charges, delivery and dealer costs.



The technology behind the performance of the Alfa Romeo 1750 TBI engine

The new Alfa Romeo 1750 TBI engine is a remarkable tour de force. On one hand it offers the performance of a 3.0 litre V6 engine, in terms of top speed, straight line acceleration and in-gear performance. But, weighing in at around 100 kg less than a 3.0 litre V6 and with the efficiency of a compact four cylinder engine, it also offers outstanding fuel economy and low emissions. This unique combination has been achieved through a range of new technological solutions.

Scavenging technology

The engine's brilliant performance is largely the result of using scavenging technology to maximize torque even at very low speeds, making it incredibly responsive and confining the notion of turbo lag to the history books.

Effective scavenging is achieved by continuously monitoring and optimising the engine operating parameters such as fuel dosage, the position of the two variable valve timing units, the ignition advance and the injection timing. In practice, it is possible to define valve overlap angles and times with extreme precision, generating a direct air flow from the intake manifold to the exhaust manifold and driving the turbocharger in very short times. This new system therefore makes far better use of the turbocharger than conventional turbo petrol engines. It is controlled by an innovative ECU installed with ultra-modern engine parameter management software. In this way, the maximum torque at 1,400 rpm is 70% greater than that of a conventional turbo engine and response times have been more than halved, closely approaching those of a naturally aspirated engine.

Direct injection

Direct injection reduces temperatures in the combustion chamber through fuel evaporation, dramatically reducing the likelihood of detonation. This allows superior performance to be achieved even at quite high compression ratios (around 9.5) and guarantees low fuel consumption at partial throttle settings.

Direct injection is essential for reducing emissions through an advanced, dual-injection system. Precise control over the moment fuel injection takes place also ensures that no fuel arrives directly at the exhaust during the scavenging phase, which would compromise the functioning of the catalytic converter. Finally, the second-generation injection system features a new, high-pressure pump (capable of managing fuel pressures of 150 bar) and innovative seven-hole injectors capable of guaranteeing perfect fuel vaporisation under all engine operating conditions.

Dual variable valve timing

The two continuous variable valve timing units on the intake and exhaust camshafts optimise valve timing at all engine speeds and loads, minimising both fuel consumption and emissions. With the two valve timing units linked to the turbocharger, it is possible to manage the scavenging strategy by establishing the ideal valve opening and closing overlap. When the driver demands a sudden increase in torque, the system ensures rapid response even at very low revs.

Turbo

The engine is fitted with a next-generation turbocharger linked to an innovative pulse



converter exhaust manifold that optimises the use of exhaust pressure waves to increase torque at low engine speeds. Both the manifold and the turbine are made of microcast steel to withstand the very high operating temperatures (up to 1020 °C) needed to reduce fuel consumption while driving at medium-high speeds on motorways.

Thermal fluid dynamics

The intake ducts are designed and optimised through the use of mono- and three-dimensional computing technologies that have enabled them to reach the level of turbulence needed to obtain high combustion efficiency. This has made it possible to create both an optimal mixture of air and petrol and fast combustion with reduced cyclical dispersion even at low revs. The design of the combustion chamber has also been optimised by extending the squish areas and minimising the ratio between surface area and volume, to the benefit of combustion. Lastly, the exhaust ducts have been designed to work in sync with the exhaust manifold and to maximize its pulse converter effect.

Friction

The entire engine has been designed to minimize power losses through friction. The pistons feature rings with low tangential load, and advanced materials have been used to minimize wear. The cylinder head incorporates roller rocker arms that have reduced sliding contact losses at 2,000 rpm by 65% compared with the old Twin Spark cylinder heads. Optimised crank design based on a very long connecting rod and a fairly short piston stroke has minimised the vibrations normally associated with straight-four engines at high speed. In this way, balancing countershafts can be dispensed with, further improving engine consumption.

Performance

The scavenging technology and an innovative management system enable the engine to set new performance benchmarks. Specific torque is exceptional at 185 Nm/l, one of the highest figures for any modern engine. Maximum torque of 320 Nm is reached at only 1,400 rpm, a remarkably low engine speed for the petrol engine. This guarantees superb acceleration and allows you to drive in a relaxed manner without having to change down frequently. Finally, the engine reaches a high specific power of 115 hp/l at the relatively low speed of 4,750 rpm and keeps this power level constant up to 5,500 rpm.

Emissions

Thanks to a dual injection system and the high start pressure, a relatively small catalytic converter is sufficient to ensure compliance with Euro 5 emission standards, which benefits performance and economy as well as offering weight savings.

(ends)



The 2011 Alfa Romeo Brera Technical Specifications

	Brera 1750 TBI manual	Brera 3.2 JTS V6 Q4 Q Tronic automatic
ENGINE		
No. of cylinders, arrangement	4 in line	60 degree V6
Bore x stroke (mm)	83 x 80.5	89 x 85.6
Displacement (cc)	1742	3195
Compression ratio	9.5:1	11.25 : 1
Max. power output: bhp (kW-EC) at rpm	200 (147) @ 5000	260 (191) 6300
Peak torque: Nm (kgm-EC) (lb.ft) at rpm	320 (32.7) @ 1400	322 (32.8) (237) 4500
Timing system (control)	2 OHC, 4 valves per cylinder variable valve timing, direct injection Belt drive, roller rocker arms	4 OHCs (chain), 4 electrohydraulic continuous phase variators
Fuel feed	Direct injection with turbocharger integrated with ignition, scavenging functional mode	MED 7.6.2 electronic direct injection integrated with ignition system
ELECTRICAL SYSTEM (12V)		
Battery: capacity (Ah) / Generator (A)	90/120	90/150
TRANSMISSION		
Drive	Front/six speed manual	Four-wheel drive/six speed automatic
Gearbox: 1st	3.818 : 1	4.148 : 1
2nd	2.158 : 1	2.370 : 1
3rd	1.475 : 1	1.556 : 1
4th	1.067 : 1	1.155 : 1
5th	0.875 : 1	0.859 : 1
6th	0.744 : 1	0.686 : 1
Reverse	3.545 : 1	3.394 : 1



Final ratio	3.941 : 1	3.750 : 1
TYRES/WHEELS		
Standard version	235/40 R19	235/40 R19
Wheels	8J x 19	8J x 19
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)	Brembo Ventilated 330 x 28 D, fixed aluminium calliper with four 42 mm pistons	Brembo Ventilated 330 x 28 D, fixed aluminium calliper with four 42 mm pistons
Rear (mm)	Ventilated 292 x 22 D, combined 42 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)	1430	1650
Max towable weight (kg)	1450	1500
PERFORMANCE		
Top speed km/h	235	240
Acceleration (driver + 30 kg): 0 to 62 mph (s)	7.7	7.0
0 to 1000 m (s)	28.9	28.0
FUEL CONSUMPTION – EMISSIONS According to 1999/100/EC Directive		
Urban cycle (l/100km)	11.8	18.4
Extra urban cycle (l/100km)	6.0	8.6



Combined cycle mpg (l/100km)	8.1	12.2
Exhaust emissions – CO₂ (g/km)	189	289
Exhaust Emission Standard	EuroV	EuroIV
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 (dm³)	300 / 610	236 / 546 + 20 lt. cargo box

Alfa Romeo Brera

STANDARD EQUIPMENT AND OPTIONS

● = standard ○ = optional - = not available

EXTERIOR EQUIPMENT	BRERA 1750 TBI	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" Alloy Wheels	●	●
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	●	●
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	●	●