



JAGUAR

XJR

MEDIA INFORMATION



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The new XJR epitomises the three pillars of technology, performance and seductive design which the Jaguar brand stands for in the twenty-first century, while delivering new levels of dynamic ability in a luxury saloon.”

ADRIAN HALLMARK
GLOBAL BRAND DIRECTOR, JAGUAR



FAST FACTS

- A new Jaguar flagship sports saloon – the 550PS XJR – combines supercar performance and assertive looks with the high levels of luxury already associated with the XJ range
- With a 5.0-litre supercharged V8 engine delivering 550PS and 680Nm of torque, the XJR is the most focused, agile and responsive Jaguar XJ ever made
- The XJR is capable of sprinting from zero to 60mph in 4.4 seconds (0-100km/h in 4.6 seconds) and on to an electronically limited top speed of 174mph (280km/h)
- An eight-speed automatic transmission, with a bespoke tuning for the XJR, enables optimal acceleration throughout the speed and rev ranges while still maintaining a composed character for urban driving conditions
- A new front splitter and aerodynamic sill section combined with an additional rear spoiler and unique 'R' bonnet louvres give the car optimum levels of high speed stability and an assertive appearance on the road
- Electronic Active Differential and Dynamic Stability Control systems have been calibrated to enhance handling characteristics, allowing the driver to fully exploit the XJR's true performance capability
- New 20-inch 'Farallon' forged alloy wheels are shod with bespoke low-profile tyres to maximise grip and lend the car a dynamic, muscular stance
- Exclusive interior materials, including semi-aniline leather, a choice of veneers and contrasting stitching on the seats, bolster the XJR's dynamic intent





The XJR is a premium luxury supercar that also has an extremely purposeful, assertive look to it. It's the flagship XJ and I'm delighted we've got it back into the range. This car will surprise, there's no doubt about it."

IAN CALLUM
DESIGN DIRECTOR JAGUAR



SUMMARY

The first 'R' model in the latest generation of the XJ range, and the latest in a long line of high-performance, luxurious Jaguar sports saloons, the XJR incorporates bespoke chassis and aerodynamic developments to create the most focused, agile and responsive member of the XJ family.

Seamless performance is provided by a 5.0-litre supercharged V8 engine that boasts 550PS and 680Nm. Subtle exterior styling cues, which also optimise the flow of air over and around the car, have given the XJR a distinctively assertive appearance. A front splitter, special 'R' bonnet louvres and quad tailpipes also add to the car's stealthy yet purposeful demeanour.





> Combined with an eight-speed transmission that extends the performance characteristics of the car, the XJR is capable of accelerating from zero to 60mph in 4.4 seconds (0-100km/h in 4.6 seconds) and on to an electronically limited top speed of 174mph (280km/h).

The unique 20-inch lightweight forged alloy 'Farallon' wheels are shod with specially developed Pirelli rubber, giving the XJR a muscular stance and increasing its grip and stability. Allied to the tyre technology are tuned dampers and spring rates which both optimise the handling and stability of the car when driven at speed and increase the feeling of connectivity with the road surface, providing a controlled, supple ride which still retains the expected

Jaguar XJ ride comfort.

The settings for the active electronic differential and Dynamic Stability Control system have been calibrated in order to allow the enthusiastic driver to make the most of the huge performance potential of the XJR. In addition, the steering hydraulics and calibration have been engineered to enhance steering feel, response and feedback under all driving conditions.

The car's dynamic intent is underlined by the technical palette of materials used on the interior. This includes optional semi-aniline leather and veneers in either Carbon Fibre or Piano Black. Providing a further unique touch is a choice of contrasting colour stitching to bring out the design of the front and rear seats.



The XJR is the sporting pinnacle of the XJ range. This car has been dynamically set-up from the outset to deliver stunning performance, while still retaining the luxury and comfort common to the entire XJ range. The XJR has all the breadth of capability you could wish for in a high-performance luxury saloon car."

ANDREW DOBSON
CHIEF PROGRAMME ENGINEER, JAGUAR XJR



POWERTRAIN


5.0-litre supercharged V8

The XJR features Jaguar's acclaimed 5.0-litre supercharged V8 engine in its most potent form, matched to a responsive eight-speed transmission system. This all-new combination provides an exceptional blend of pure performance, driver involvement and exceptional levels of control.

The all-aluminium quad-cam engine delivers not only exhilarating performance but also tremendous efficiency thanks to the technologies incorporated into it, including spray-guided direct injection (SGDI) and dual independent variable cam timing (DIVCT).

The high-pressure die-cast lightweight aluminium block is stiffened with cast-iron





> liners and cross-bolted main bearing caps, providing refinement to match its power. The four-valve cylinder heads are constructed from recycled aluminium, between them sitting the Roots-type twin vortex supercharger fed by two intercoolers, which feature their own water-cooling circuit to reduce the temperature of the pressurised air thereby optimising power and efficiency. The result is a 0-60mph time of 4.4 seconds (0-100km/h in 4.6 seconds) and an electronically-limited top speed of 174mph (280km/h).





Eight-speed Transmission

Maximising the benefit of the engine calibration is the eight-speed automatic transmission, which has been engineered based on learnings from the development of the high-performance XFR-S saloon. This transmission system brings out the sporting nature of the XJR while still maintaining the car's composure in town and in low-speed driving environments.

When operating in automatic mode, the transmission can detect the manner in which the car is being driven by monitoring acceleration and braking, cornering forces, throttle and brake pedal activity, road load and kickdown request. On detecting a more

enthusiastic driving style, the transmission will automatically make the gearshifts more aggressive and move the shift-up point higher in the rev range. Steering wheel-mounted gearshift paddles also give the driver higher levels of control.

Corner Recognition senses when the car is negotiating a bend, the transmission holding the correct gear for the exit. The transmission will also recognise when the car is performing a series of overtaking manoeuvres requiring rapid changes in throttle position and, rather than change up, remain in a lower gear ready for the next demand for acceleration.

The eight-speed transmission also allows the XJR to be offered as standard with Jaguar's



The challenge with developing the powertrain for this car was to place it in character with the rest of the vehicle. It needed to have the necessary refinement for use in town while giving all the performance anyone would need everywhere else, without being overwhelming. With the XJR we achieved that balance.”

RON LEE

DIRECTOR OF POWERTRAIN ENGINEERING, JAGUAR



> Intelligent Stop/Start system. This automatically shuts down the engine when the car comes to a halt and the brake pedal is depressed. When the brake is released, the system will restart the engine in less time than it takes for the driver's foot to move to the accelerator.

A twin solenoid system, it allows for 'change of mind' functionality, bringing the engine back up to speed even during its run-down phase if, for instance, the car is coming to a halt at a junction and the driver sees an opportunity to join the traffic flow.



DYNAMICS

The dynamic characteristics of the XJR have been informed by the engineering development of the XFR-S, the result being an incredibly agile, responsive and involving luxury super saloon.

Both front and rear suspension systems have been carefully tuned at Jaguar's testing centre at the legendary Nürburgring, the high-speed Rockingham circuit in England, the roads around the Gaydon Research and Development centre and in north Wales.

In order to achieve the maximum

benefit from the suspension, the XJR has new lightweight, forged 20-inch 'Farallon' alloy wheels. The tyres, developed in conjunction with Pirelli, are 265/35 and 295/30 front/rear and have been selected to deliver optimal cornering grip, traction and stability over a wide range of speed and performance parameters. The difference between the wheel rim and tyre width has the effect of pre-loading the sidewall to improve handling and steering response without adversely affecting refinement. The steering





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The XJR offers greater steering precision, higher levels of control and enhanced high speed stability, with the trade-off in refinement being very small. The increase in power and torque give this car truly effortless, seamless performance.”

MIKE CROSS
CHIEF ENGINEER
VEHICLE INTEGRITY, JAGUAR





> system has additionally benefited from the fitment of the valving developed for the F-TYPE.

Working in harmony with the suspension, wheels and tyres are electronic programmes controlling the Adaptive Dynamics, active electronic differential and Dynamic Stability Control systems.

Jaguar's Adaptive Dynamics system actively controls vertical body movement, roll and pitch rates through the use of continuously variable dampers. The system monitors driver inputs and the road conditions, adjusting damper rates in



> response up to 500 times a second to optimise stability and agility. The driver's selection of Dynamic Mode offers enhanced body control through moving the damping rates to the firmer end of the available range.

The Jaguar active electronic differential – which can apply full locking torque almost instantaneously when necessary – has been calibrated in order to exploit the high levels of grip offered by the wide rear tyres, the more precisely controlled suspension and the engine output. Working in parallel with the differential, the 'Trac

DSC' setting of the Dynamic Stability Control system now offers the enthusiastic driver more opportunity to explore the outer edges of the handling envelope while nevertheless providing a discreet safety net.

Providing equal levels of confidence is Jaguar's High Performance Braking System, which offers an unmatched combination of power, stability and fine modulation. The 380mm front and 376mm rear discs are internally ventilated for assured, repeated stopping power.





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The Design Team wanted to create a graphic link to the performance credentials of this car, as well as delivering the optimal balance of aerodynamic down force front and rear. Hence the chrome-rimmed intakes on the front bumper have become an ‘R’ model ‘signature element’, acting as a visual reference to the car’s twin superchargers, while the front aero splitters are complemented by the rear spoiler.”

WAYNE BURGESS
STUDIO DIRECTOR, JAGUAR DESIGN





DESIGN

Reflecting the changes under the skin, the appearance of the XJR has been subtly modified in order to allow the car to achieve its full potential. The 'R' spec side sills, unique to the XJR, serve to create a sharp break-off point between the bodywork and the road surface in order to keep the airflow attached to the car's sides for as long as possible.

Rear lift is also reduced through the fitment of a bootlid-mounted lip spoiler to manage the airflow off the top rear surface of the car, while the special 'R' bonnet louvres aid in aerodynamics and engine cooling.

The five-spoke, lightweight Farallon forged alloy wheels provide the XJR with a purposeful, broad

shouldered stance and come as standard in either Sparkle silver or Technical grey finishes. The assertive appearance of the XJR is further enhanced with a Sport pack grille with chrome surround and black mesh.

XJR customers can choose from an exterior palette comprising ten colours: Polaris White, Ebony, Ultimate Black, Stratus Grey, Lunar Grey, Rhodium Silver, Cashmere, Caviar, Carnelian Red and Black Amethyst.

This colour palette is complemented inside the XJR with a unique combination of colourways. Jet leather trim is available with a choice of either Ivory, London Tan or Red Zone inserts on the seat facings. The seats themselves are embossed with the 'R' logo and can be

finished with a choice of stitching in either Red or London Tan. Jet suedecloth headlining comes as standard with an optional leather headlining in Jet to complement the XJR interior.

The XJR is fitted as standard with a 380W, 12-speaker surround-sound system from British audio experts Meridian. Recognised by audiophiles as a leader in audio reproduction and fidelity, the system uses digital signal processing to create a sound field that is second to none. An optional 825W, 18-speaker system features Meridian's proprietary Trifield System which places every occupant at the centre of their own perfectly focused surround-sound arena.

TECHNICAL SPECIFICATION

JAGUAR XJR

Engine	5.0-litre V8 supercharged petrol
Capacity (cc)	5000
Bore/Stroke (mm)	92.5/93
Peak Power (PS@rpm)	550@6500
Peak Power (kW@rpm)	405@6500
Peak Torque (lb/ft @rpm)	502@2500-5500
Peak Torque (Nm@rpm)	680@2500-5500
Transmission	Eight-speed automatic
Intelligent Stop/Start	Yes
0-60mph (secs)	4.4
0-100km/h (secs)	4.6
Top Speed (mph km/h)	174 280 (electronically limited)
Combined Economy (EU mpg l/100km US mpg)	24.4 11.6 18
CO ₂ Emissions (g/km)	270

*Manufacturer's estimates





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