

The Minis

Ignore the boring body shapes and forget that your bank manager might like them — the XJR and M5 are dragsters in disguise. Mark Walton grapples with 660bhp of super saloon



Government Health Warning: taking a Jaguar XJR or BMW M

try Of Speed



All of a sudden it's begun to gel. The headlights pick out verges, posts, trees, all flashing by at blurry speeds. Lots of grip, lots of engine noise, and the over-light but direct steering is turning the car's broad nose precisely into the corners, the powerful engine is hauling us out of the curves with a rapidity that belies the car's obvious weight.

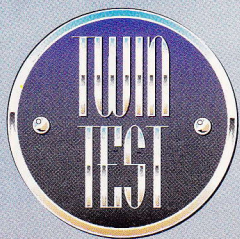
It's 8pm, and I'm on my way home after another long day at the Performance Car office (I don't expect I'll get any sympathy from you). It's November, it's dark, and I'm going home along the B-road that livens up my evenings by carrying me to my bed via bends, dips and short straights, rather than a dull plod up the A1. The car feels sharp, strong and willing, and more than anything it feels with me, not half a mile back, reacting instantly to all my inputs, without any numbing delay.

This sharpness would be no big deal in most £45,000 performance cars, but my transport this night, dear readers, is a Jag. A Jaguar. Yes, that's what I said, a Jaguar. I was surprised too.

I really don't mind cars that put icy baubles in my hair, give my skin the complexion of a Norwegian fishing boat captain, and leave my ears vibrating like a Black and Decker appliance, so long as it's

fun. Large saloon cars are rarely fun; cars that are quiet for long motorway hauls, that have electrically operated everything and a big boot, rarely make me go 'WOW'.

on a windy road will seriously enhance your driving pleasure



The Ministry Of Speed

Then there's this pair. Wow.

Don't be put off by the company director looks or the bank manager bearing of these cars. Between them, the BMW M5 and the Jaguar XJR hide 660bhp and excitement by the big-enough-for-golf-clubs bootful. As the high performance version of the new XJ range, the Jaguar XJR gets its own wheels (which look like an important piece of a power station), firmer suspension and a supercharged 4.0-litre engine. The BMW M5 won the 1992 Performance Car of the Year speed-fest, and it was so good then it has hardly changed since. The 1995 model gets a wider grill (*ooh*), new alloy wheels that are so slender and airy they look like they are about to snap (*big deal*), new brakes (*really?*), and a new six-speed gearbox (*uh huh*). Nothing to send lightning flashes of steely sexual desire coursing through your trembling body (*steady on, Mark — ed*). It also gets a price tag of £53,000. More money than the Jag, for a much older design — is it still good enough?

● **BMW oversteers, but the tail slides progressively, predictably**



● **M5 has terrific throttle response, quick steering. It's fantastic**

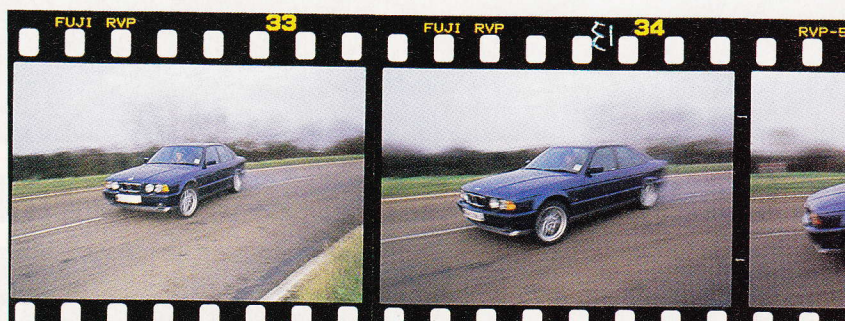
Performance and Economy

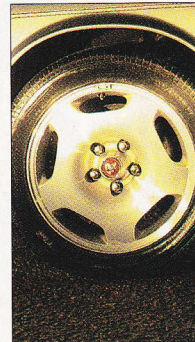
Some cars let you know how quickly you are accelerating simply by the push in your back and the increasingly noisy rush of wind. Others, like the Jaguar and BMW, also give you an eerie sense of gathering momentum, and you can actually feel the destructive power of almost two tons of metal charging down the road. It's a little unnerving, but it also fills the driver with even greater admiration for the engines.

The six-cylinder Jaguar engine produces 321bhp from just four litres with the help of a supercharger. This makes it a noisy and whistly affair, in a gruff, hardworking way, but it also produces lots of torque from very low revs — 378 lb ft at 3050rpm. The XJR wears enormous Pirelli P Zero tyres, and even with the annoying traction control switched off (it comes on automatically every time you turn the ignition on), the Jaguar pulls away from a standing start purposefully and aggressively, whistling and grinding to 60 mph in just 6.3 seconds (in the wet). From then on it becomes a jumbo

down the runway, the engine revving cleanly to the 5600rpm redline and pulling all the way. You never lose a sense of size in the Jaguar, however, and though you can overtake just about anywhere (the car recorded a TED time of 5.2 seconds), on the road this big surging car nevertheless feels like it needs a gap in the traffic of at least sixty feet to squash into.

The BMW disguises its size much better but accelerating hard still gives you that sensation of a circus train rushing down the tracks of an alpine mountain pass. First gear throws the car and its occupants forward, second likewise, and once you slot neatly into third, the car is just getting into its stride. By the time you reach 80mph (after just 9.3 seconds) you take on enough rolling force to knock a hole through a very thick wall. Despite this cannonball momentum, the car is fortunately at ease with its speed, and the engine feels contained and focused at all times. Where the Jag, with its supercharged, low compression engine, will run on unaffected





when you take your foot off the throttle, the BMW has an instant response, engine-braking almost as effectively as it accelerates. The pedal is a little stiff and rather springy, but the long travel and superb response allows you to modulate the revs perfectly to unleash exactly as many of the 340bhp as you need. If you want everything, keep your foot buried, and the smooth 3.8-litre straight six will spin all the way to 6900rpm, making a wonderful mechanical rushing noise all the way. It's a gem of an engine, and it punches the M5 through the 60mph barrier after just 5.9 seconds (in the wet) and gives a TED time of just 4.9 seconds.

For those who love the smell of petrol, you will find yourself filling the Jag more often than the BMW, the XJR offering just 14.2mpg, and a range of 253 miles, compared to the M5's 18mpg and a 356 mile range.

Ride, Handling and Brakes

When dealing with over 170bhp per ton, for each of the two tons, body control over the road is vital. This is where most big cars leave me cold — wibbly-wobbliness in the chassis ruins whatever performance the engine might have once you start hustling down a windy road. This is not the case with these two, however. The BMW has all the grace and poise of a much smaller performance car, and its body control is

remarkable. The car has two spring settings — firm is very firm, soft is just firm, though neither setting creates any harshness in the M5's progress. Cornering is predictable and progressive, and that superb throttle response always allows the car's trajectory to be altered minutely using your right foot as well as the steering. Once the rear loses grip into oversteer, which happens a lot in the wet, the throttle sharpness is again useful, balancing the car; the quick steering makes the job of bringing all the metal behind you back into line relatively easy.

The XJR, by comparison, has a bit of a problem with body control. Rocket along a straight in the Jag and half way down the Jaguar will start to jiggle and sway and rock, like the whole body is loose and about to fall off the back of a trailer. This only occurs at high speed, but it limits the degree of confidence the XJ driver feels if they have just stepped out of the M5. Similarly, when cornering, the Jag is almost as effective as the M5, but never as inspiring. The car rolls slightly under the initial load, until a 'here we go' body attitude is adopted, and then the car powers through the bend with balance and confidence. It feels big though, and when the uncontrolled traction breaks and the Jag oversteers (both cars felt a little twitchy in the wet) the Jag is the car that sends alarm signals to the driver that say 'BIG CAR, BIG CAR'. *Whoaaa*, catch it, catch it, catch it. Phew. It can be fun, but unlike the BMW it never feels entirely natural to have the Jaguar askew.

The brakes of both cars must be up to scratch, and not surprisingly both cars stop as well as they go. One of the features of

the 1995 M5 are new mega-brakes, using 'floating' discs made of alloy. They are effective and reassuring, and in our fade test the BMW's brake pedal pressure rose only minutely, with a little vibration around the seventh stop from 102 mph. The XJR's pedal required no more pressure, but mushiness set in around stop six. Nonetheless, after ten stops each, both cars felt safe.

Comfort and Controls

Both Jaguar and BMW have reputations to keep in the area of luxury and refinement, and neither the XJR nor the M5 let you down. The Jaguar is the most opulent of the two, with bulging, overstuffed and leather-clad fittings and fixtures. The interior is so padded it actually begins to feel a little claustrophobic, and I wasn't the only one to find it difficult to squeeze in between the cushions and the steering wheel. Once in, the most intrusive element is the noise. The Jaguar's engine is probably as smooth as ever, but the silence is drowned out by the whine of the supercharger, which sounds like a bus gearbox pulling away from a stop. When you're really gunning it, it's great, but only if you like to hear the engine storming ahead — not every sporty executive will go for that. To be fair, though, it's quiet on the motorway — a waste of an XJR but let's

● **Jag will roll to start with, but tackles corners with verve once it's made its mind up. When the XJR's tail steps out, though, you gotta move quickly**



● **XJR's body control isn't great but its handling is still fun**





face it, home to most Jaguars.

The BMW offers a different kind of refinement. Door casings and dash mouldings are all plain, less bulky, less luxurious, but solid and reassuring all the same. This gives the BMW interior a much more open and spacious feel, but its origins quite obviously lie in a cheaper car — the £18,000 BMW 518i shares the same mouldings. Fortunately for BMW this isn't a problem, because all its cars are generally well-screwed together. And the M5 seats are quite brilliant, electrically twisting, turning and tilting in every direction, trying to get you comfortable.

Gearbox feel also separates the two cars — the Jaguar's isn't bad, but it suffers in comparison, the BMW's is so tight and precise. Yawn, I know this sounds a bit predictable, but it's true. Anyone who grasps the BMW gearlever and pushes it left to engage reverse will notice the beautifully loaded spring that divides the forward gears from reverse. The pressure you need to overcome it is perfect — when it's in, you know it's in. Through the gears too, the BMW six-speed 'box is fluent and well-engineered, overwhelming the Jaguar's loose and slightly disconnected five.

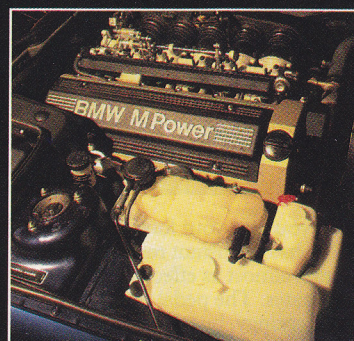
Verdict

Delving into the particular merits of these cars it's easy to be distracted from the overwhelming fact that they're both brilliant. They offer monstrous performance, dished out in a way that totally involves the driver. Both rush down winding B-roads with vehemence, and provide well-defined feedback through the

seats and steering wheel. Importantly, for such big cars, both the XJR and the M5 are able to carry their speed through corners, balancing and containing their weight and avoiding the need to brake down to chauffeur-driven rolling speeds until well past the apex — unlike most luxury saloons. Uniquely for supercars, both the XJR and M5 offer this kind of high speed mile-eating performance hand in hand with motorway refinement and four doors.

Of the two, there is little doubt that the BMW M5 is the better car. It has an abundance of everything a hard driver needs, and lacks very little a smooth cruiser would require to navigate the whole UK motorway network in great comfort. However, the Jaguar is actually the better accomplishment. BMW has a history of M-powered versions of its saloons, so it's no surprise to find the M5 is a corker. However, like pulling the proverbial white rabbit out of the cliché hat, Jaguar has developed the terrific abilities of the XJR from practically nowhere — you have to go back to the '60s to find a Jaguar car which goes so hard and has such driving ability. The supercharger must surely have something to do with that — it lends itself to coarse gutsy driving. Starting with that engine, the Jaguar engineers probably thought, what the hell, let's go all the way down the performance road.

The BMW engine offers the best of both worlds. It's very smooth, but bursting with potential. It sounds well-oiled and limber, but floor it and as you're squeezed in your seat for the full rev range, you'll hear a fabulous, muffled growl from up ahead. The M5 deserves medals and awards for that alone. ○



● XJR has supercharged 4-litre BMW has muscular six-cylinder

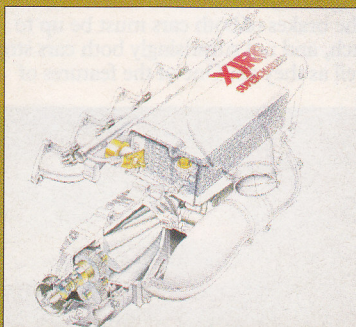


Supercharging — how do they do that?

You can even buy 'turbo' stickers now, to glue a little credibility onto your car, so synonymous is the word with performance. 'Supercharging', by comparison, is a bit of a dark horse. Sounds good though, and most people imagine it to be a derivative of the turbo, with more power. A super-turbo, perhaps.

In fact, it's the other way around — supercharging came first, a mere 20 years after the internal combustion engine itself. The idea was, and still is, quite simple — instead of sucking air into the engine to add to the petrol, you ram it in under great pressure. This increases the density of the air, making it more potent and able to mix with more fuel, thereby creating more power. The ramming is done by a small mechanical compressor, run directly off the engine's spinning motion, a compressor which creates a 'charge' of air which is then squirted into the engine. This is so effective, it quickly became a common phenomenon in the thirties, wherever powerful engines were a necessity — planes, boats and Mercedes-Benz Grand Prix cars all used superchargers.

A neat derivative that followed closely behind the supercharger was the idea of forcing the air with a little turbine which ran at high speed off exhaust gases, but the development of the 'turbo-charger' was relatively slow, because of the tremendous heat involved. By the early eighties, however, it had reached family cars, and everybody wanted one. Or they thought they did. Supercharging is now staging a comeback, as engineers promote the low speed efficiency of the supercharger compared to the turbo's lag, and everyone tries to find a way around the introduction of catalytic converters, which stunts the exhaust gas flow which spins the turbo's turbines. Aston's DB7 and the Jaguar XJR will be the first of many new supercharged engines. So watch out for the 'supercharger' stickers.



PERFORMANCE

Jaguar XJR BMW M5

Acceleration through the gears (secs)

0-30mph	2.6	2.6
0-40mph	3.7	3.6
0-50mph	4.9	4.7
0-60mph	6.3	5.9
0-70mph	8.0	7.5
0-80mph	10.2	9.3
0-90mph	12.5	11.2
0-100mph	14.6	13.6
0-110mph	19.4	16.7
0-120mph	24.3	20.1
0-130mph	-	24.2

Standing 1/4mile (secs/mph)	14.8/98	14.4/102
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TED (secs/ft)	5.2/470	4.95/455
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(Time Exposed to Danger)

Time and distance required to overtake an articulated lorry travelling at a constant 45mph

Acceleration (secs)

	3rd 4th 5th	3rd 4th 5th 6th
20-40mph	3.8/6.4 / -	4.4/6.1/9.1/11.4
30-50mph	3.5/5.4/8.5	4.2/5.9/7.5/10.1
40-60mph	3.4/5.1/8.0	3.8/5.7/7.5/10.0
50-70mph	3.5/4.9/7.8	3.6/5.6/7.5/10.4
60-80mph	3.9/5.0/7.7	3.7/5.3/7.4/11.1
70-90mph	4.5/5.1/8.1	4.0/5.3/7.4/11.1
80-100mph	- /5.4/8.6	4.5/5.4/7.4/11.5
90-110mph	- /6.6/9.5	- /6.0/7.4/ -
Top speed	155mph*	155mph (limited)

Speed per 1000rpm in top	30.1mph	28.5mph
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Overall mpg	14.2mpg	18.0mpg
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Touring mpg. (from Govt figs)	21.7mpg	21.8mpg
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Track conditions	Wet	Wet
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Temperature (C)	10	10
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Wind speed (mph)	0	0
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Pressure (mbar)	1002	1002
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Stopping distance in wet (ft)

From 30mph	38.6	-
From 50mph	107.3	-
From 70mph	210.0	-

NOTES: The BMW brake test could not be carried out because of technical problems (oil on Millbrook's high speed bowl). *The XJR top speed is Jaguar's own claimed figure, given here for the same reason.

SPECIFICATION

Jaguar XJR

Engine	Six-cylinder, in-line, supercharged
Location	Front, longitudinal
Displacement	3980cc
Bore x Stroke	91.0mm x 102.0mm
Compression ratio	8.5 to 1
Cylinder block	Aluminium alloy
Cylinder head	Aluminium alloy, dohc, four valves per cylinder
Fuel and ignition	Electronic fuel injection and ignition
Max power	321bhp @ 5100rpm
Max torque	378lb ft @ 3050rpm
Transmission	Five-speed manual, rear drive
Front suspension	Subframe-mounted double wishbones, coil springs, dampers and anti-roll bar
Rear suspension	Double wishbones (driveshafts acting as upper links), coil springs, dampers and anti-roll bar
Steering	Rack and pinion, power assisted
Brakes	Front and rear vented discs. Anti-lock standard
Wheels	8J x 17in cast alloy
Tyres	255/45 ZR17 Pirelli P Zero
Wheelbase	9ft 5in
Fuel tank capacity	17.8 gal / 81.0 litres
Weight (kerb/test)	3695lb / 4025lb
Power to weight (test)	179bhp per ton
Basic price	£45,450
Alloy wheels	Standard
Traction control	Standard
Auto box	£1500
Airbag, driver/pass	Standard
Air conditioning	Standard
Alarm/immobiliser	Standard
Anti-lock brakes	Standard
Adj steering col	Standard
Sunroof	£860
Electric windows	Standard
Leather trim	standard
Metallic paint	£670
Price as tested	£46,840 including heated windscreen £220, and a 'living' stereo ('dig it') with CD player £1170
Insurance group	20

BMW M5

Engine	Six-cylinder, in-line
Location	Front, longitudinal
Displacement	3795cc
Bore x Stroke	90.0mm x 94.6mm
Compression ratio	10.5 to 1
Cylinder block	Aluminium alloy
Cylinder head	Aluminium alloy, dohc, four valves per cylinder
Fuel and ignition	Electronic fuel injection and ignition
Max power	340bhp @ 6900rpm
Max torque	295lb ft @ 4750rpm
Transmission	Six-speed manual, rear drive
Front suspension	Struts, lower wishbones coil springs and anti-roll bar
Rear suspension	Trailing arms, coil springs, dampers and anti-roll bar
Steering	Recirculating ball, power assisted
Brakes	Vented alloy front discs, rear discs. Anti-lock standard
Wheels	8J x 18in fr, 9J x 18in rr, cast alloy
Tyres	245/40 ZR18 Michelin Pilot MXX3
Wheelbase	9ft 6in
Fuel tank capacity	19.8gal / 90.0 litres
Weight (kerb/test)	3638lb / 3968lb
Power to weight	206bhp per ton
Basic price	£52,480
Alloy wheels	Standard
Traction control	N/A
Auto box	N/A
Airbag, driver/pass	Standard / £400
Air conditioning	Standard
Alarm/immobiliser	£705/standard
Anti-lock brakes	Standard
Adj steering col	Standard
Sunroof	Standard
Electric windows	Standard
Leather trim	£3495
Metallic paint	Standard
Price as tested	£54,640, including anti theft £705, automatic air con £1040, and radio £415
Insurance group	20

