

Biggest ever issue!

# car

INCORPORATING

performance car

NEW  
64

PAGE LISTINGS

EVERY  
NEW  
CAR  
RATED

AUGUST

1998

£3.00

FRANCE FRF

GERMANY DM

UK £3.00

ITALY L. 11.500

USA \$5.95

USA \$5.95

**EXCLUSIVE**  
Merc's Smart  
Volvo S80  
Jaguar XJ8  
Audi A8  
Silver Seraph  
BMW 750iL  
Mercedes S600  
Peugeot 106 GTi  
Mondeo ST24  
Vectra GSi  
Laguna V6 Sport  
Peugeot 406 V6



**F1  
FITNESS**

Sweating  
with Arrows  
ace Mika Salo

**STEVE  
McQUEEN**

His Le Mans  
Porsche and  
watch

**LE MANS'  
25th HOUR**

**BMW** M Coupé

Munich's new 321bhp muscle car thunders into TVR territory

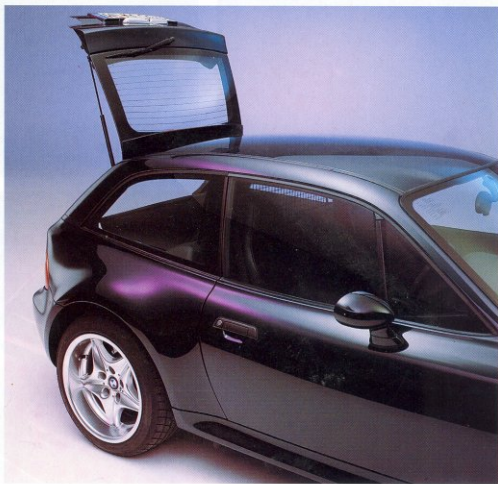


**BMW M COUPÉ**



A renegade band of BMW engineers got together to turn the original Z3 concept into the stunning coupé you see here. It's a purer driver's car than the roadster, but is it also the car that finally does justice to the magnificent M3 engine? **Story by Paul Horrell. Photography by Tim Kent and Ian Dawson**

# Hatch of the day

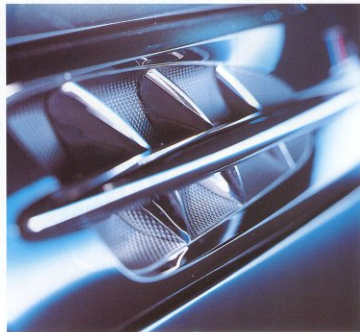
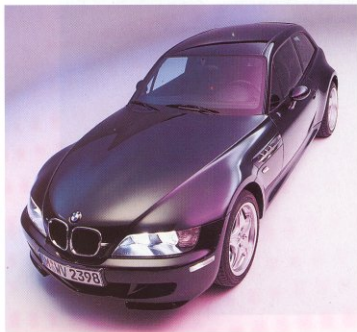


**W**HEN THEY'RE UNVEILING A CAR like this, manufacturers usually spark up their word-processors and churn out a standard puff-piece, using the handy search-and-replace function to insert the name of the model in question. I fully expected we'd get it this time too: 'Don't assume the M Coupé is just a roadster with a roof... blah blah... No, it's an integral part of the range... blah blah... conceived and integrated from the start... blah blah... long-term twobodystyle strategy... blah blah... designed entirely on computer alongside the roadster... blah... brought to market in record time... blaaaaah.' But no. Turns out a squad of five engineers got a hold of a finished Z3 prototype three years ago and whistled it away into a quiet corner of the basement at BMW's vast R&D complex. Working in the evenings, they hacked off the rear wings and boot, unbolted the hood, and got to work on the back end with expanded polystyrene

and foil. They reckoned this mock-up, their notion of a fixed-roof coupé, would be the basis of a purer driver's car than the roadster.

They also knew that, because the original Z3 project called for a roadster only, this would be a bit of a side-show and they'd have to bide their time until the roadster was fully in production. When the idea was passed on to the design department, it remained confined to a small crew. Which is part of the reason for the oddball long-roof styling – a development of that original hacked-up roadster's shape – instead of a more conventional fastback. BMW staff are happy to acknowledge that some people aren't going to like it. Apparently, when engineering and marketing boss Wolfgang Reitzle first saw it, there was a long silence.

This strikes us as strange. BMW would have you believe everyone loves the look of the Z3 roadster. Yet around these premises we reckon it's a bit fishy, especially from the back. If I wasn't over-keen on the new coupé at first, prolonged ex-



posure to it has rather turned me and I'm now quite struck on the way the low, narrow glasshouse is squashed onto the broad lower body. I like the long roof, which resembles something filched from a '60s Le Mans car. I like the clean tailgate, and the way the coupé does away with the roadster's apologetically drooping tail. The low view from the back is mad, all huge tyres and fat tailpipes and the cooling fins on the diff. And in a world where everyone's pushing the windscreen towards the front bumper, here's a shape that's defiantly cab-backwards, the bonnet stretched impossibly long and the driver squeezed back over the rear wheels.

But the real point is the driving. The original M Roadster makes a pretty memorable drive, but that's because it so nearly disproves the maxim that you can never have too much power. Adding a stiff suspension and brutally fast engine to a roadster body that was never meant for them was bound to cause problems in the rigidity department. Sure

enough, if the road isn't glassy-smooth, going quickly is like driving nails with an inflatable hammer. Using the top speed can be dramatic, too. Roof-up, you're afraid the car might lose its little folding head. Roof-down, it feels like you'll lose yours. Imagine, then, a car twice as stiff, with a steel roof. That's why those engineers wanted to build the M Coupé.

Right now I'm grateful. Closing in on its electronic speedlimiter (the speedo actually says we've over-run the notional 250km/h, or 155mph), it's calm enough in here to pause and think about the wonder of it all. Not about the awesome 321bhp M engine – though that is one of the wonders of motordom – or the stonking brakes that allow you to use it, nor about how it's all so stable and refined at big speed. Or about the fact that here's a proper supercar, more powerful than a new 911, for 60 percent of the price. The real wonder is that this is entirely legal. Unrestricted German autobahn and a 155mph car, eh? Well, it would be rude not to.

**'The real wonder is that it's entirely legal. German autobahn and 155mph car, eh? Well, it would be rude not to'**



**O**F COURSE, IT'S NOT JUST SPEED LAWS (OR their glorious absence) that occupy car makers, and it's fair to say the M Coupé is pretty much as close as you can get to something like an E-type Jag while still fitting modern safety and emissions diktats. Point of fact, the E-type is openly acknowledged by BMW as part of its new baby's inspiration (which is pretty decent of them, given Munich will soon be locked in renewed combat with Coventry when Jag's S-type saloon goes to work in the showrooms). The Triumph GT6 and even MGB also get a namecheck by the project team, though really these are more in the context of the 2.8-litre BMW, called the Z Coupé, which isn't going on sale in Britain for the moment.

Incidentally, BMW says that unlike the Z3 Roadster, the coupé will never get a 1.9-litre engine. It's too much of a sports car, they say. Besides, it's worth remembering the 1.9-litre Z3 has a narrower rear body than the 2.8 and M

Roadster, so they'd likely have to build a special narrow-hipped coupé if they wanted to use the four-cylinder engine, and that would cost them.

Unusually, the coupé uses the same windscreen as the rag-top edition. The same doors, too, except they have different glass. They also come with sidebags, as an option. Behind, it's all different. There's a bulkhead behind the seats, which is deep enough to embody a couple of storage bins, and is the base for a roller blind to cover the luggage and a dog net that unrolls up to the roof. Apparently the marketing people reckon there's a demand for a sports car that'll hold two big dogs. The actual boot is shallow but a perfectly useful size. It even gets load lashing eyes, which you'd certainly have to make use of if you're going to drive this car around corners in the manner it invites. As for the dog guard net, wouldn't canine four-point harnesses be a better idea when there's 321bhp ahead?

Forget for a moment the fancy duotone leather trim (if you *can* forget it, for it's pretty eye-assaulting) and there's quite a race-harness feel to the driving position. You have to fold yourself up a bit to make an entrance as the roof is low, and, inherited from the roadster, the sill high. It's all very intimate in here, making a 911 seem airy. The windscreen is shallow, which concentrates your eyeline on the road. There's also a gratifying landscape of metalwork to take aim by. The main part of the bonnet is a broad arrow pointing straight down the road. It carries a softly formed central hump that changes shape as the light moves over it. To the sides of the arrow section the shape drops steeply down, but on the driver's side you catch sight of the top of the meaningful wheel-arch.

The cabin design also comes straight out of the roadster, an edifice that owes a lot to the schemes of old Corvettes and Thunderbirds. The bits that aren't black are coloured to tone with the exterior paint, except in a black car when it's a pretty sudden shade of orange. The coloured section swells up from the centre console until, by the base of the screen, it's the whole width of the cabin, which could be a recipe for distracting reflections but isn't. The same colour covers much of the centre console right back to the rear bulkhead, the side panels of the seats and the door inlays. It even covers the steering-wheel spokes. Given that the wheel is also stitched with the blue, purple and red of BMW M, and it has the blue and white BMW roundel in the middle, the orange spokes turn it from 'colourful' to 'dog's breakfast'. While we're at it, the wheel could do with being a smaller diameter in this cosy space. Shiny bezels circle the instruments, gear gaiter surround and one or two other bits and bobs. It isn't any too convincing, mind. Obviously tinselly 'metallised' plastic rather than the real thing.

In the end, the M Coupé's cabin can't quite disguise what it is: a pretty effective start-up job of a much cheaper car. Remember that we don't even get the basic Z3 roadster in Europe. It's a 1.8-litre eight-valve job with steel wheels for preppy American college kids, and it's built down to that price. Given that constraint, though, the M Coupé's cockpit is a good place to be. And the important bits all work with the convincing precision you'd expect from BMW.

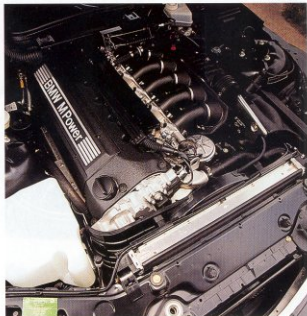
The complete coupé body is about twice as stiff as the roadster's, the engineers say. But it's only 20kg heavier, so they haven't changed the springs from the M Roadster's. It's just that, under the stiff body, the suspension can do its job as designed. It's an almost laughably simple system actually: just struts at the front and semi-trailing arms behind instead of the current M3's multi-link 'Z-axle'. Still, that's what the original four-cylinder M3 used.

Nothing simple about the engine: it's that wonderful 24-valve 3.2-litre unit out of the M3, doing 100bhp per litre. It looks a bit like a race engine, with its rank of fat induction pipes, a throttle butterfly for each of the six cylinders, 11.3-to-one compression and wide-spaced twin camshafts. But to make it torquey and clean on the road, there's a variable phasing device on the nose of each of the camshafts. It's also capable of being remarkably economical if you drive like an EC cyclist. You won't be surprised to learn *CAR* didn't have the self-control, and I saw the 11-gallon fuel tank's red light after just 150 miles.

It's a five-speed gearbox here: the M3 gets six, but with this engine's terrific torque spread in a car that runs a shorter axle ratio than the M3, you don't really miss the extra one.



This fantastic engine looks like something you would expect to find in a racing car. It's the 24-valve 3.2-litre lump from the M3, with gloriously fat induction pipes. Red-lining at a heady 7500rpm, it gives amazingly level power delivery right the way through the range



## Seven wonders of the hatch world

BMW wasn't first. We've picked seven other sporty hatches that changed history, or tried to...



**MGB GT V8, 1973**

This MGB had the go to match its GT looks. Trouble is, its 3.5-litre V8 engine was in lazy Range Rover tune so that the puny carburettors could fit without a power bulge.

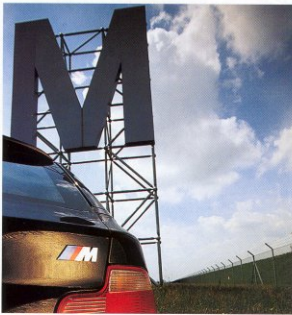
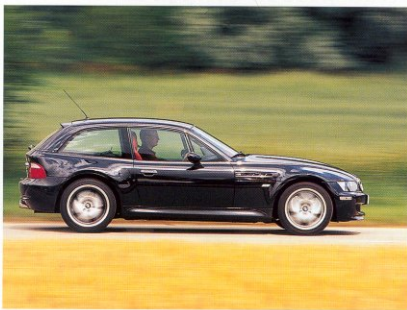
**TVR TAMAR, 1976**

Clearly descended from the first TVRs, the Tamar was a 3000M (Ford V6 power) with a huge lift-up rear window. Some models came with 230bhp Broadspeed turbocharged engines (worryingly, there were no chassis changes) and were madly quick. Replaced by the hatchback Tasmin in 1980.



**LOTUS ELITE, 1974**

Lotus aimed upmarket with this extraordinary wedge. Powered by Lotus's own 16V engine, 'developed' by buyers of Jensen's Healey. Rear suspension prone to collapse.



**'Just as they promised, the coupé always feels a more tightly honed driver's car than the M Roadster'**

There's a limited-slip diff behind, but the only electronic traction assistance is the weather forecast on the radio. Stopping gets electronic ABS, of course, and the front discs are the M3's fancy multi-piece devices. They consist of a lightweight hub piece onto which the iron disc is pinned so as to give scope for free radial heat-expansion of the disc. That's lighter than a conventional design, but also means there's less chance of the brake distorting after a few violent red-hot stops.

**O**N THE AUTOBAHN, I USE THOSE BRAKE Anyone who drives quickly there will. The carniageways mostly have just two lanes, which means that when one truck – doing an electronically limited 56mph – wants to overtake another whose speed-limiter is misadjusted to 55.5mph, you are going to have to slow down by some 100mph. Physicists will delight in the knowledge that since energy rises with speed, this is a job 2.1 times as hard as going from 100mph to a standstill. With the engine's huge power, it doesn't take long to regain the speed, but if you need to slow again soon, the brakes will be right by your side. There's so little drama in their action, no sharpness in the pedal at lower speed, that you easily forget what a feat this is.

So much of the M Coupé is like this. For the first few miles, it's just like a 316i Compact and never mind the Ferrari performance. The steering has the usual BMW smoothly-damped-yet-slightly-remote feel, the clutch is easy, the gearshift nothing special, the brakes just slightly soft in their initial action. Only the throttle really gives the game away. Its linkage, like a Ferrari's, is so perfectly accurate that it doesn't smother your errors. Tickle it clumsily at low speed and the car hops along. Feed it smoothly and the reward is liquid motion. Raise the game, though, and the other controls are ready for you. They throw off their ennui, and sharpen up to the task.

Just like they promised, the coupé always feels a more tightly honed driver's car than the M Roadster, its ability to tote large hounds notwithstanding. The first time you run over a change in road surface or a man-hole cover will tell you it's more rigid, and not just in whole-body stiffness. Because the windscreen is better tied in to the complete structure, the A-pillars don't shimmy about, and they don't take the steering wheel along with them. It makes a big difference: in this hardtop you know you're in command of a precision instrument.

That's when you notice that the springs, even though they're as stiff as the roadster's poor body can decently manage, are actually quite forgiving. The coupé makes an easy-going path over make-do-and-mend urban roadways and higher-speed forgotten countryside backroads. It can crash and thump into big holes, but generally the suspension and tyres are quiet too. Again you're grateful for the rigidity, because the dampers cancel out body movement after the bump has passed under the wheels. In the roadster the body, acting as a huge undamped spring, wobbles on for a few moments afterwards.

If the road and wind are quiet, the heroic engine lives right there inside your head. It's always there, not exactly loud, but insistent. Around 1500rpm it's actually pretty boomy, which is a bit of a pity because it's tolerant enough to pull quite strongly from that speed if you're being lazy with the stick. But once clear of 2000 revs it turns into some-



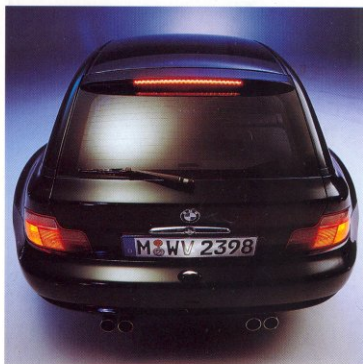
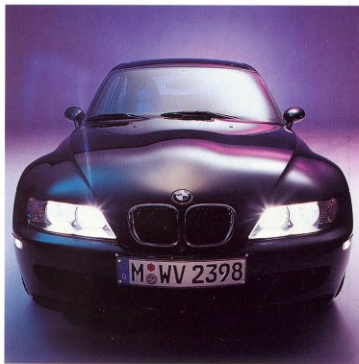
**JAGUAR E-TYPE COUPÉ, 1961**  
Now we're talking. This is the closest you'll get to a template for the M Coupé. Sleek E-type had side-hinged rear hatch, impossibly long bonnet, styling to exercise Freud students for years, and a pence-per-pound factor probably never bettered since. Didn't really do 150mph, though.

**RELIANT SCIMITAR GTE, 1969**  
Prototypical GT estate from three-wheeler maker had fat Ford V6 plus loyal (and royal) following. Became a sorted car, but then build rights bought by Middlebridge, which went bust.

**ASTON MARTIN DB2/4, 1953**  
Never recognised as the first hatchback GT, but it was because Aston incorporated the rear window in the boot-lid while no-one was looking. Hit 60mph in under 11sec.



**TRIUMPH GT6, 1966**  
Spitfire plus Triumph 2000 straight-six and a fastback, hatchback tail equals miniature E-type, at least in theory. It would have been brilliant if Triumph had given it proper rear suspension: that eventually happened two years later. Then they took it away again.



thing unique. For a start there's the noise, a smooth but serious harmonic hum like the turbines in a power-station generator hall.

That sound isn't misleading, for this is a mega-wattage item we're dealing with. It's hard to believe there are just 3.2 litres in there. Sure, when you're closing in on the 7500rpm red line – and the sound is joined by some hard extra voices above and below the main note – it delivers the power and throttle response of a highly tuned little screamer. But everywhere else on the rev-counter, the solid irresistible force, the determined gathering of momentum, just don't square with that at all.

This amazingly level power delivery can throw you a curve ball at times. Scan your way through the memorable supercar engines: the NSX's VTEC scream, the F355's second-exhaust mania, the 911's high-rev urgency, the Skyline's inflated middle-order turbo force. They all have a kick point, a sweet spot in the engine's delivery where warp drive suddenly breaks loose. It gives you something to aim at when driving, and seems extra potent because you can always compare it with the (relative) calm that went before. The M engine isn't like that. It is always up for it, but that very permanence is what allows you to get blasé.

Don't. If you do, just get real when you find an overtaking chance and pelt past something – almost anything, really – that's ahead of you. Or you regain another 20 or 30 or 40mph on a clear motorway stretch, or you catapult out of a corner with those scalp-pricking high-rev chords playing in your ears.

You'll want to use the gearbox to find those revs. Especially in the fore-aft movements, it's a delight, transmitting a superb image of polished selector forks and gliding, well-oiled cogs. Side-to-side – especially fourth to fifth – you're relying on the strong spring loading, as it's otherwise a bit rubbery in that direction.

The coupé's fine autobahn showing isn't just down to the engine or the brakes. The steering is set up with a slight softness in the middle so as to stop the rig feeling twitchy. Call

**'You'll want to use the gearbox to find the revs. It's a delight, transmitting a superb image of polished selector forks and gliding, well-oiled cogs'**

it a reassuring BMW brand character, as the engineers would, but I think they've gone too far with it. An alert tiller can itself be reassuring at speed as well as exciting (in the right sort of way), and in corners it would be much more rewarding. The M Roadster is meant to be BMW's most agile product – and it is – but there's still an unenthusiastic quality to the way it peels into a corner. But once you've put some side loads on the front tyres, the thing comes to life. The wheel gets more incisive and begins to yield information about the tyres' contact patch, the sort of loadings they're under and the surface they are passing over. Reassuring information it is too. There's also the right sort of detail from the ultra-fine suspension movements transmitted through the seat. You know what's up.

I drove the M Coupé in the dry, and gentle understeer was what was up. If anything at all. The grip is just colossal, partly because of the intrinsic qualities of the low-slung stance of the car, partly the suspension control and partly the monster tyres. But when you do get close to the limiting force, it's the nose that runs gently wide first – or quite a long way wide if the corner's truly tight. Back off on that lovely progressive throttle pedal and you can trim it. Get back on the pedal and it is technically possible to loosen the tail, but I wouldn't want to make a habit of it on the road. The one time I found space and a loose surface to give it a try in second gear, everything came back very neatly although the low-g geared steering and big wheel mean you're flailing around a bit. But this is not a car you lightly throw about.

Bumpy country roads aren't a problem, as it's supple enough not to hop or skip around. I dare say the rain's different, mind. Wide rear tyres, lightly loaded and passing lots of torque, find it hard to claw through a film of water. If you didn't want oversteer everywhere every time, caution on the accelerator would be very much advised.

The engineers at BMW M – the subsidiary that engineers the M cars – have a bit of an obsession about the old Nürburgring. 'It's the most important test for our cars,' says MD Adolf Prommesberger. They hire the place *solus* at



nearly £7000 a day, and career around lap after lap of those madcap forest twists and dips. All their cars have to do 6000 miles of testing there before they're signed off, which is why you can be pretty confident about the brakes, the engines, the handling and the tyres. It's also worth remembering that the original idea for the coupé came from the engineering department at BMW, not design or marketing.

Though it's clearly a more practical car to own year-round than the ragtop, it's not being pitched as something with a bigger boot or better weather and theft protection. It's the serious driver's option, BMW says. Clearly, though, the design plays a part, because it always does with coupés and because this one is pretty distinctive. Especially in the test car's sinister black, its Batcar curves really grew on me. According to Jurgen Pawlik, who is charged with marketing it, the actual buyers are the sort who don't care too much what the neighbours think if they like a car themselves. 'Emancipated navigators' is the psycho-social label, apparently. But the M Coupé and Z3 Coupé 2.8 will together add only about a fifth to the total production of roadsters from South Carolina. BMW UK reckons the M car will find 250 buyers a year when it goes on sale in October, at about £42,000 – that's just more than the roadster, but air-con is standard to compensate. It's also more than the German-made M3, and it's hard to see quite why. But if you get less metal than the M3, you get a lot more fun.

It's hard to predict where a new niche will lead, and BMW thinks this car is a new niche, or rather a revived one. The front-engined, two-seat sports car certainly isn't there at every dealer, and since emissions regs hounded the Supra out of Europe there are few indeed. Pawlik makes a lot of the indi-



**'It's also worth remembering that the idea for the coupé came from the engineering department, not design or marketing'**

vidual nature of the M Coupé's target audience, but in Britain we have the TVR Cerbera and it's impossible not to line the two up in the mind's eye. The TVR might have tiny back seats, but it's actually an even more urgent and edgy car than the BMW. It makes the M car feel mainstream.

Mainstream but not ordinary. I fell for this car in a pretty big way, much more than the humourless M3 or the wobbly M Roadster. Not just for the looks, but simply because in the way it drives, it's the first car to have the character to do justice to one of the world's truly great engines. For the simple addition of a hard roof, that's a mighty big gain.

SPECIFICATIONS	BMW M COUPÉ
Price	approx £42,000
Engine	3.2lit 24V in-line six, variable camshaft timing, front longitudinally mounted
Bore/stroke, mm	86.4/91.0
Compression ratio (to one)	11.3
Power	321bhp at 7400rpm
Torque	258lb ft at 3250rpm
Power-to-weight ratio	231bhp per tonne
Transmission	Five-speed manual, rear-wheel drive
Suspension, front	MacPherson struts, lower wishbones, coil springs, anti-roll bar
Suspension, rear	Semi-trailing arms, coil springs, anti-roll bar
Brakes	Ventilated discs all-round, ABS
Tyres	225/45 ZR 17 front, 245/40 ZR 17 rear
Weight	1390kg
<b>PERFORMANCE</b>	
Maximum speed	155mph (limited)
0-60mph	5.1sec
Mpg (EC average)	25.6mpg