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WRAPS OFF THE SECRET 8-SERIES COUPE



**BMW
GOES FOR
PORSCHE'S
THROAT**

MUNICH MANIA

NEW 8-SERIES COUPE

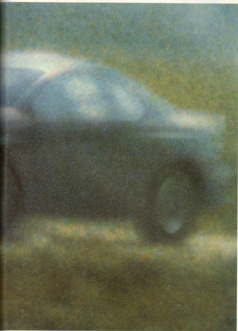
TWO YEARS BEFORE ITS PUBLIC LAUNCH, BMW'S big and brazen-looking 8-series coupe is caught on test (right, and over the page) for the first time in largely undisguised form. The style of the new car is clearly a dramatic departure for the fundamentally conservative Munich company – a bravura concept that pushes the prestige coupe squarely into the market now convincingly dominated by such machinery as the SEC Benz, Porsche 928, the XJS, Jaguar and the 412 Ferrari. That the BMW will trounce the venerable Ferrari can be in little doubt, but this is a rarefied field that will not easily be over-awed by the intrusion into its ranks of the BMW stunner. Presently code-named E31, the 8-series was originally conceived as a straightforward replacement for the 11-year-old 6-series. But when Wolfgang Reitzle took over as chief engineer, the plan was revised and upgraded. To save weight and improve flexibility, the coupe was separated from the common components notion that tied it to the new 5- and 7-series. As our scoop pictures show, the radical 8-series differs from the M635CSi in having a very low nose incorporating pop-up headlamps, edgy Quattro-style wing extensions, and an unusually high and stubby rear end. Despite the aerodynamic and aggressive elan of the car, E31 is a spacious coupe offering room for four adults with luggage. But unlike the decidedly comfort-oriented 560iEC and XJS HE, the 850i (most probably harnessing, at least initially, industry sources suggest, the new 300bhp 5.0litre V12) is said to offer a unique combination of luxury and unrivalled driver appeal. Indeed, a cabrio version, developed with help from Heinz Prechter's American Sunroof Corporation, is still under evaluation. The long list of features includes ASC (electronic traction), 4wd, ABS, a load- and speed-sensitive adjustable suspension, tyre pressure sensors, alloy wheels shod with 240/45VR tyres already fitted to the 735iSE, a six-speed manual or five-speed automatic box, and much more. The jump from there to active suspension and fourth-generation 4wd system employing four viscous control units, is only a small one.



PHOTOGRAPHS BY AUTOBILDERIAN/ARTSTOCK, JANK HOUER/STOCK.COM



MUNICH FEST



BMW's mighty 8-series is only part a wide-ranging plan to rejuvenate the whole range. Georg Kacher explains

WITH THE LAUNCH OF the new 7-series late last year, a major renovation of the entire BMW range began in earnest. Every year, between now and 1990, a major model will be launched. There will also be several models which point the Munich company in new and exciting directions.

BMW is undoubtedly reacting to accusations made earlier in the '80s that it was content to sit on laurels largely won in the '70s. It was fielding little-changed versions of the vulnerable 3- and 5-series models, a 6-series that had hardly changed in years, and a 7-series that had been much tuned but never perfected. Now the company's managers are facing the future very positively. We present here a blow-by-blow guide to tomorrow's BMWs...

1987

The flagship version of BMW's 7-series, the 5.0litre V12-powered long wheelbase model called 750L, will go on sale in left-hand-drive versions this July. Standard wheelbase, 'shadowline'

(no chrome) and right-hand-drive editions are to come in 1988.

For Frankfurt this September, BMW is preparing three important new models: a facelifted 3-series saloon, a revised Touring model, and (probably) a production version of the recently previewed Z1 two-seater.

The 1988 model 3-series differs from the existing model in having body colour bumpers, a new front spoiler, a lower rear apron, different wheels, a retuned suspension and detail changes made to the interior, which include improved seats. There will also be two new engine variants. While the (Europe-only) 324td uses the familiar 115bhp turbodiesel unit we know from the 524td, the 316i features an all-new four-cylinder powerplant, codenamed M40, which is lighter, more compact, more economical and more potent than its predecessor. The new 318i, which is expected to deliver around 115bhp, will be followed next year by an upgraded 316i. Its second-generation 1.6litre engine should be good for 100bhp. Although BMW originally planned later to add a

16-valve, 143bhp 318i), this idea was apparently dropped when the performance and fuel economy figures of the multi-valve Bavarian did not match those of a Golf GTI 16V.

On display in Frankfurt, but not available before the spring of 1988 is the resurrected Touring, which will be built only in five-door guise. The three-door design exercise, which looked more like a coupe than like an estate car, has been scrapped. The roomy and versatile five-seater will be offered as 325i and as 325ix with BMW's 4wd.

One of the most interesting new car projects to come out of Germany for a long time is the BMW Z1 roadster, created by the company's own Technik GmbH under Ulrich Bez (ex-Porsche). The Z1 started its career as an affordable, no-frills, open-top sports car that was scheduled to sell for less than £9000. But then it ran into an identity crisis in its astonishingly short development phase. An insider explains: 'A low price would have entailed a cheap-car image that does not suit BMW, and it would have also created a demand the company could never satisfy. This is why we decided to turn Z1 into a high-tech product which does most things as well or better than a comparable saloon. Getting in and out of the car is surprisingly easy, cabin space is generous, and in terms of handling and roadholding, it sets new standards, too.'

The Z1 chassis is believed to be the

forerunner of the new 3-series E36 suspension, the engine compartment can (at least theoretically) accommodate the upcoming V8, and the production technology is both revolutionary and simple. Since it had its surprise debut about a year ago, the car's front end has been extensively redesigned, and there have also been some packaging changes. The estimated asking price is apparently up from £9000 to £21,000, and the scheduled daily production rate has been cut back from 100 to approximately 20 units.

1988

In January, the new 5-series range will be introduced to the press. Two months later, the car will go on sale in most key markets except North America. Dubbed E34, the third generation 5-series saloon is closely related to the very successful 7-series (E32).

The newcomer's dimensions are similar to those of the Mercedes 190, but the distinctly wedged-shaped Bavarian car does of course retain such BMW-typical styling elements as chromed grille 'kidneys', a kinked C-post, L-shaped tail lights and four round headlamps.

Among the

most obvious visual distinctions from its bigger stablemate are fully integrated body colour bumper sections, an almost flat bonnet, the virtual absence of chrome, a more steeply raked rear window and no rear spoiler lip. Unlike the mule cars scooped so far, the real thing has rather wide, wraparound

front indicators.

Since the 5-series shares certain floorpan and suspension elements with the 7-series, the cabin dimensions of the two models are quite similar. According to information from within the BMW design department, the engineers have had to give the 5-series a thicker

rear backrest and a longer seat squab to provide the required 'class difference'.

One of the disadvantages of the cost-saving 'common components' concept is the weight penalty inherent in the shared body shell. At present, BMW is running a cost weight reduction programme for the 5-series, aimed at carving around 270lb off it, to give it a kerb weight of about 2700lb (as a 518i). Initially, the 5-series models will all have four-door notchbacks, but in two years there will be a five-door Touring estate, insiders say.

Although BMW engineers have been working for some time on a sophisticated active suspension, the new 5-series will again sit on conventional steel springs and dampers. These are, however, a few opti-



refinements such as variable rate shock absorbers, a ride height adjustment feature and so-called ASC device (automatic stability - control). Eventually, a four-wheel-drive system will come.

The engine selection starts with the 1160bhp 518i, to be equipped with the same new powerpack as the 1986 model 318i. One rung up the ladder

Stock new 5-series coupé (pic and sketches this page) will run a 300bhp version of forthcoming V12 engine, and will have a long list of high-tech features: 4wd, ABS, load- and speed-sensitive adjustable suspension, tyre pressure sensors, six-speed manual or a five-speed auto gearbox.





be phased out in favour of the 184bhp 530i. (All figures quoted refer to the catalytic-equipped versions.)

The 535i will again be the top-of-the-line model, and if 211bhp is still not enough, there is always the M5. In Mx2 guise, that car will boast M3-style flared wheel-arches and a huge rear wing, but there is also hope for an understated version, sans pizzazz.

The BMW Motorsport



engineers are currently working on a more powerful 24-valve M5 motor which is said to deliver 300bhp, thanks to bigger valves and a modified crankshaft, which pushes the displacement up to 3.6litres. This 300bhp M5 is likely to be offered at the same price as the 300bhp 750i. All of these six-cylinder units will later be replaced by brand-new six- and eight-cylinder powerplants.

On the diesel front, BMW plans to launch a 524cd which is fitted with a mechanical Compres supercharger, supplied by BBC. Offered in addition to the 860bhp 524d and the 115bhp 524td, the cd model is said to produce an extra 10 to 15bhp as well as notably more torque.



1989

If all goes according to a tight schedule, at Frankfurt 1989 BMW will unveil a new up-market coupe, codenamed E31. To emphasise the car's position at the top of the Bavarian model hierarchy, E31 is to be launched under the newly created 8-series banner: 830i, 835i and 850i are already registered BMW trademarks.

There is also a good chance that the existing 8-series coupe will remain

in production until 1991 or 1992. The Munich model planners are proposing to add a 184bhp 830CSi and an ambiguously priced, 170bhp 825CSi to stimulate demand.

1990

This is to be the year of the radically new 3-series, labelled E36, but in view of the massive workload of the r&d department, BMW may decide to postpone the introduction of the all-important volume model until the first half of 1991. Like its predecessors, E36 is again a rear-wheel-drive car with a longitudinally mounted engine and an all-independent suspension. In addition to the familiar body styles (two- and four-door notchback, five-door Touring and two-door cabriolet), the new 3-series may also appear as a two-door coupe. But if this project does get the nod, it will probably be badged 425i.

Unlike the conservatively shaped 3-series models we have seen so far, the new car is said to look fresh and modern. There is no doubt that it will be instantly recognisable as a BMW, but from what is known today there will be some quite drastic changes as far as the proportions and some of the detailing are concerned. The multi-link rear suspension is going to be an evolution of the hardware used in the new five and the Z1, and the existing engines which power the current 316-325i will successively be replaced by new and totally different designs. A list of future BMW

powerplants, in use by 1992, goes like this:

- M10 Four-cylinder, used in 316 and 318. Will give way to M40. Same displacement, but fuel-injected throughout. To comprise 1.4, 2.0litre and 18-valve options.

- M20 Small six-cylinder as used in 320i to 525e. Brand-new, electronically controlled, state-of-the-art engine. Expected displacements 2.0, 2.4 and 2.8litres.

- M30 Big six, as used in 528i to 750i. Will be phased out in favour of M60. Modular V8 based on M40 components, exclusively with 32-valve cylinder heads. Expected to be 3.2 and 4.0litre.

- M70 V12 used in 750i. Has 48-valve high-performance version for E31 under development. Twin-turbo possible for motorsport/marine use.

BEYOND 1990

After all these new releases, consolidation will undoubtedly be a top priority at BMW in the early part of the '90s. Remember: the 3-series will get new four- and six-cylinder engines, the 5-series will receive new six- and eight-cylinder engines, and the V12 powerplants of the 7- and 8-series models will also be complemented by new V8s. These changes are scheduled to be introduced between the 1988 and 1992 model years. They entail massive financial and r&d investments which can only be justified if the new powerplants provide production flexibility and near-ideal economies of scale. But why should it not be possible for BMW to repeat Fiat's F1RE engine strategy in a more up-market price and performance class?

Cautious expansion is also the name of the game on the model front. After all, BMW plans to add at least four new products, some of which will immediately replace an existing car: the Z1, the 3- and 5-series Touring and the 8-series coupe. Still under serious consideration are a mid-engined Z2 sports car, a 4-series coupe based on E36, and an E31 rag-top. Plus new diesels.

But there is a limit. It called profitability and production capacity. Flexible engineering and integrated assembly will allow BMW to offer an even wider range of products. But Herr von Kuenheim will not be so sure that this increased diversification will not affect the blameless bottom line.

World's first pictures of new 5-series for '88 (top two photos) show extreme similarity of middle-range model to new 7-series. Five-door Touring (centre, above) will show late this year at Frankfurt. Experimental Z1 sports (above) was designed as a £2600 car but will cost £21,000

the 1250bhp 520i; above that the 528i. This model spurns the present 150bhp 2.5litre six in favour of the more modern 170bhp version from the 325i. At present the future of the slow-selling 525e is still undecided, presumably BMW will either rebadge a 527e (after all, its true capacity is 2690 and not 2484cc) or drop it completely. The 528i will