

NEXT M3 TO GET TURBO

M-CARS TO LOSE NATURALLY ASPIRATED ENGINES, BUT WEIGHT WILL BE SHED TOO

The naturally aspirated M-car is dead – or rather it soon will be. During a recent media interview session, Ludwig Willisch, the CEO of BMW's M Division, let slip that the next-generation M3 will ditch the current 4-litre V8 in favour of a turbocharged six-cylinder engine.

It's already an open secret that when the M5 dies, the 500bhp 5-litre V10 will die with it, to be replaced for the next generation by the twin-turbo V8 from the recently announced X5M and X6M (see story below) – the M SUVs that were never supposed to happen. But the news that the M3, the lynchpin of the M range, is to move to turbocharging may be seen by some as the final nail in the coffin. Natural aspiration was the one thing that separated BMW's M-cars from the often less focused engines of AMG Mercs and RS Audis. Not any more.

So why is BMW taking this approach? For the altogether predictable reason of emissions – tough new regulations are coming into force in both Europe and America in the next few years. But moving to smaller-capacity forced-induction engines will also improve

packaging and lower weight.

The logical step would be a development of the 302bhp twin-turbo 3-litre straight-six from the 335i, but Willisch has confirmed that the next M3 will in fact get an all-new unit. 'And I'm not saying whether it is a twin-turbo,' he added. 'It will be a turbo six-cylinder engine. That is, I'd say, almost sure. We're really at the very, very beginning of the project. M3 hasn't started yet.'

Nor is it guaranteed to be a straight six. BMW's traditional layout would result in a lighter unit, but a move to a V6 would mean a more compact powerplant, one that could be butted up against the bulkhead to improve weight distribution. But it's not just the weight of the engine that the M Division is concentrating on. Reassuringly, Willisch went on to say, 'Engines don't necessarily have to be more powerful for the next car. As long as you have lighter weight, you have better performance. If you

have a lighter car, you need the power somewhere in the neighbourhood of the current M3.' Interesting stuff given that the current M3, even in coupe form with its carbonfibre roof, actually weighs more than the 4wd Audi RS4 saloon.

So when will the naturally aspirated M-car finally disappear? In about four years' time. The current 3-series is up for replacement in 2012, with the new M3 due a year later, possibly followed shortly afterwards by a new M Coupe. However, this one won't be based on the new Z4 – at the recent launch of that car we were told that 'there will not be an M version of the Z4'. Instead it is likely to be based on the second-generation 1-series coupe, which is also due in 2012.

The aim of the M Coupe is simple – to recapture the magic of the original E30 M3 (a car we've been driving this month – see page 90). This car, provided it gets the go ahead, will be

powered by a turbo four-cylinder unit producing about 300bhp. In order for it to fulfil the brief as a latter-day E30, Willisch knows that keeping it light is essential and has targeted a weight of 1300kg – 260kg less than the current 135i, which uses the 302bhp twin-turbo six. If the targets for the car are met, expect 0-60mph in under 5sec.

For what it's worth, we firmly expect both the M Coupe and M3 to follow the lead of the X6M and feature twin-turbocharging on the four- and six-cylinder engines. Not just because it gives a neat engine line-up, but for the low-rev response and high-rev power that a pair of sequential turbos deliver. We'd also expect the new engines to retain the high-rev characteristics that make the current units so special.

So, in five years the naturally aspirated M-car will be history. But we shouldn't be too despondent if we get turbo petrol replacements: at March's Geneva show the M people admitted they were also looking at diesels and hybrid technology...



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RANGIES REVISED

NEW ENGINES AND OTHER UPDATES FOR THE RANGE ROVER, SPORT AND DISCOVERY

BMW wasn't the only company at New York meeting the recession head on with a heavyweight barrage of politically incorrect metal. Land Rover unveiled updated versions of its three biggest hitters, the Range Rover, Range Rover Sport and Discovery.

All three gain the new engines jointly developed with Jaguar, with both Rangies now available with the 503bhp 5-litre supercharged V8, which in the Sport is good for 0-60mph in 5.9sec (still over a second adrift of the X6M, though). The biggest seller is likely to be the new twin-turbo 3-litre V6 diesel (242bhp and 443lb ft), which sits alongside the existing TDV8.

Most altered is the Range Rover Sport, which boasts 3000 changes, the aim being to take it more upmarket with superior dynamics, bodywork mods and a cabin inspired by its bigger brother. The company claims that variable damping and roll control enable it to pull 1.1g through corners.

Meanwhile, the seven-seater is also becoming more luxurious, and as a result has been renamed Discovery 4 (i.e. one better than the current Discovery 3), while the flagship Rangie gains such niceties as predictive adaptive damping, 360-degree cameras and Merc S-class-style 'virtual' dials.

Expect prices to be announced closer to the July on-sale date.



It may not look like it, but the new Range Rover Sport (above) features over 3000 changes. It's most obvious on the inside (right) where the cabin has been updated to feel more like the full-size Range Rover's

