

Dark Knight

The E46 is arguably the greatest M3 ever. Does it need more power? Pete's Performance thinks so. Which is why this one is supercharged.

STORY & PHOTOGRAPHY SHAPUR KOTWAL

It's a muggy, damp afternoon in Cochin and the sky is sweating bullets. Black moisture-laden clouds hang low, there's a constant drizzle and the tarmac is a slimy mix of oil and water. Not the best conditions to unleash a 450bhp-plus rear-wheel-drive M car with only decade-old technology. Still, one afternoon's all we have to play with, so there's nothing to do but go for it.

First impressions aren't great. I yank the door open and am confronted by a weathered and partially sun-bleached cabin. A slightly musty odour emanates, and then I see the odo – it reads 70,000-plus kilometres. This 2004 car is no spring chicken.

The engine bay is much more interesting.

Opening the thermocol-light carbon-fibre bonnet is like looking into the weapons bay of an F22 Raptor – this car's seriously packing it. There's no pansy-looking plastic cover to spoil the view. And then spotting the long, canted-over – and frankly massive – straight-six gets me grinning like a gibbon. BMW's garden-bench-sized S54 straight-six is so tall, the engineers had to push it over just to fit it under the hood. A large strut brace spans the suspension towers, and catching a glimpse of the twin fuel rails and individual throttle butterflies – one for each cylinder – gets me thoroughly excited. This was one of the first engines in the world to breach the 100bhp per litre mark, and this 3,246cc motor (in an unmodified state of →



'This is no computer-controlled push button spaceship. It squirms, wiggles, bucks and rears every time you execute a powershift.'



Attractive cabin focuses on the essentials; good driving position, clear instruments and perfect placement of pedals.



Driving the car at everyday speeds is actually quite easy.



Tarox aftermarket brakes add massive stopping power.

← tune) put out an eye-popping naturally aspirated 343bhp; a big deal at the time.

The S54 that sits deeply nestled in the engine bay however isn't stock or naturally-aspirated; far from it. Sitting on the right is an evil Vortech V3 supercharger, which, when perfectly tweaked or tuned, has the potential to spin 480bhp out to the rear wheels. Designed by VF Engineering, this system runs at a boost pressure of 5.5-6.0 pounds per square inch and uses an air/water intercooler for a compact construction. "This car needs a lot more work and fine tuning, but you can get a feel

of just how quick it is," says Pistol Pete, better known as Peter Chacko of Pete's Automotive products, the company that carried out this modification in Cochin.

Setting off into downtown traffic is actually less daunting than I expected. There's the heavy clutch, tightly sprung six-speed manual and weighty steering to get accustomed to. But before I know it, I'm turning many of Cochin's long straights into short ones, merely by leaning on the throttle and unleashing the explosive mid-range of the engine. I say explosive, and it feels it, but

power delivery, in true BMW naturally aspirated straight-six fashion, is still relatively a linear sort of controlled explosion. The slope of the power curve or ramp-up in power, however, is so steep in the mid-range, it feels like you are being flung forward on a long fishing line, the push in the back increasing in large, but equal, increments. And what makes it all the neater is that the throttle is deliciously responsive.

Some E46 traits come shining through. The steering puts the proverbial arm around your shoulders and speaks clearly in your ear, the →

'It's one of the greatest straight-sixes of all time.'





Massive rear-wing must add some amount of drag.



BMW yowl plus deep aftermarket rumble from exhaust.

BMW E46M3

L/W/H	4492/1780/1372mm
Wheelbase	2731mm
Engine	6-cyls, 3246cc, petrol
Installation	Front, longitudinal
Power	343bhp at 7900rpm**
Gearbox	6-Speed manual

MODIFICATIONS

- VF Engineering Stage 2 Supercharger kit tuned to around 480hp*
- Powerflex bushes
- Tarox front 12-pot kit
- Brembo rear-brake kit
- KW Sport suspension package
- Vosteiner carbon fibre bonnet, rear valance and rear spoiler
- Tyres 245mm(f), 285mm(r)

*CLAIMED ** STOCK FIGURE



◀ chassis feels well balanced and confidence-inspiring (despite the new springs, dampers and massive 285mm rear wheels), and the uprated anchors deliver bags of confidence as well. All this would have been impressive on its own. What's stupefying however is that this car still inspires me with enough confidence to push it, despite the soapy, slimy tarmac. Sure, some of the purity of the E46 M3 has been lost, but in its place now comes loads more excitement and plenty more fun. Extending the motor past the mid-range however reveals a bit

of unfinished work.

The surge isn't as seamless, the power curve isn't as linear, and why is this BMW motor feeling strained when it should be whooping for joy at the top end? Still, the additional power on hand means upshifts are accompanied by a wobble from the rear and a bit of a shimmy. There's an interference in the power delivery when the rear wags (as decade-old electronics cut in and out), and the harder I go, the more exaggerated it gets. Full-bore acceleration runs cause the rear to whip out by at least a foot, and

the steering thrashes around wildly in my hands. So much so that keeping my foot in sometimes is really difficult. The acceleration runs are nothing to write home about, expectedly. It does a 100kph in 7sec and 180kph in 18sec, and it's clear there's potential for much more.

Supercharging an already fast car is an easy way to go from rapid to lightning-quick. Would I take an all-time classic like the last straight-six M3 and bolt a supercharger on? Probably. Would I paint and kit my car out like it's popped right out of *Need For Speed*? Probably not. **AI**