

Shaken, not stirred





Built by Martini but nothing to do with '70s dinner parties, this E12 racer is a fearsome cocktail.

I don't know about you, but I find modern Touring Car racing really boring. It has its ups and downs but the last up was in 1994, when Alfa Romeo made a return with the bewinged 155.

Having virtually said that he was going to win, Andy Rouse's Ford Mondeo team played a second fiddle to the Italians and it was just such good racing. And now? Isn't it just Vauxhall and Honda racing? Hmm, two exciting

names to conjure with there. Think I'll mow the lawn when that comes on.

Proper Touring Cars used to be BMW M3s, Cosworth Sierras, big V8 Rovers and even some highly-strung Metro Turbos. Before that we had BMW CSLs dicing with Capris and in-between, the V12 Jaguar XJ12 Coupes which Broadspeed never quite made work. Who can forget the TWR XJ-S racers of the '80s? Proper racing in proper cars.

Modern Touring Cars are front-driven shopping trolleys, but here's a car which we'd like to see one of the current BTCC crop have a wrestle with. It's got 340 bhp, rear drive, no power steering, no ABS, no traction control and no steering wheel-mounted gearshift buttons. Think what you like about Tiff Needell as a TV presenter but I for one would love to see him wrestle with this evil thing. ➤

A couple of months back we featured the amazing BMW parts specialist Walloth & Nesch who seems to stock every conceivable new part for '60s and '70s BMWs. The firm was offered this car last year for an undisclosed sum, but it was cheap enough for it to have been rude not to buy it. Let's put it another way: to build a car like this from scratch would cost about £30,000 and it was absolutely nowhere near this figure, not even half. And it came with the original unused spare shell and a whole mountain of valuable spares. Get the picture?

Anyway, on with the story. This car's life began in 1981 when Willi Martini decided that he needed a new racer. Martini ran the official BMW Motorsport service point (now the test centre) at the Nürburgring and he needed a new steed with which to do long-distance racing. For this, the new M535i was ideal.

To start with though, he needed a shell to build the car with and the eagle-eyed (or terminally anoraked) among you will notice that this is in fact a pre-August 1976 shell with the small rear lamps.

It also had a steel sunroof and it's very likely that this was a shell built five years previously which had been gathering dust in a warehouse near Munich. I asked Albrecht Walloth why they used a sunroof shell. "Mainly because of strength," he explained. "The roof on a sunroof shell is a lot stronger and although it wasn't intentional, it's probably a better shell for racing."

So, in the Martini workshops at Nürburgring, chassis number MR181 began to take shape. Once the shell was seam-welded, an alloy multi-point cage was installed along with Group 2 Alpina wide wheelarches and spoilers, but apart from that, the shell was stock with steel panels. While they didn't fit the later, larger rear lamps, Martini fitted the latest type bonnet and grille and the shell was painted Alpine White, with the arches and spoiler in a green that looks very much like Porsche Viper Green to me.

Mechanically, this car was built for utmost reliability and there really isn't much to go wrong. Casting fuel injection aside, the 3.5-litre engine runs on triple 45 DCOE Weber sidedraught carbs with big chokes and the engine itself is a special unit with a lot of trick inside bits.

Although the block is basically standard, the crank is a special modified Group 2 item from BMW Motorsport with Motorsport con-rods and Mahle forged pistons. The flywheel is drilled and lightened and the ring gear is welded on just to be sure, since the heat generated by the clutch can mean that it could come off.

The head is a fully gas-flowed, big-valve job with a camshaft which came from either BMW Motorsport or Alpina and the exhaust is a proper racing one with a tubular manifold so big you could almost sleep in it.

An Alpina dry sump system protects the engine from oil surge, and to keep the



Above. Wide arches are Alpina group 2 parts and just about cover the 13 inch wide rear wheels.
Below. Later front grille was fitted by Martini Racing.





The 3.5-litre engine runs on triple 45 DCOE Weber sidedraught carbs



engine simple and reliable, the carbs were joined with a good old-fashioned points and condenser distributor. Likewise, the throttle linkage is a totally mechanical one with no cables involved and these used to work really well. Electronic fly-by-wire controls? Telemetry? Who needs them? All we have here is a nice, simple engine which is so basic that two mechanics could have it out on the floor in under an hour.

Behind this engine is a Sachs MFX200 sintered bronze racing clutch and a four-speed competition Getrag gearbox which only has four speeds because it didn't need five.

The final drive is a proper Alpina unit with the plates selected to give a 75 per cent lockup and the oil is drawn out of the differential and through an oil cooler by a separate oil pump. Because of Group 2 regulations, any major change to the suspension was out of bounds, so Martini modified what was there — and the standard M535i was a pretty sharp-handling car.

While the basic 'hard parts' such as the crossmembers are standard, the struts are built by Bilstein to Group 2 spec. The springs are smaller in diameter than standard road ones and the poundage isn't that high but

it's all fully adjustable — up and down, side to side, everything. Rose-jointed concentric top mounts, too.

Many rubber bushes in the suspension have been replaced by brass to eliminate any movement and that front strut brace is a Rose-jointed item to give that poor old taxi bodysell a bit of support.

As for the brakes, well it's simple — fast cars need big ones. Lockheed built the brakes for this car and we're talking four-piston fixed callipers with 320 mm front vented and drilled discs at the front and 280 mm rears. There's no servo and



ENGINE

BMW Motorsport M30 3.5, special crank and rods, Mahle forged pistons, gas-flowed big valve head, Alpina BMW racing cam, tubular exhaust manifold, Alpina dry sump, triple Weber 45 DCOE carbs, points distributor, mechanical throttle linkage, drilled flywheel and welded ring gear

TRANSMISSION

Getrag four-speed racing gearbox with helical cut gear teeth and oil cooler, Alpina limited-slip differential with 75% lock up, oil pump and oil cooler. Sachs MFX 200 racing sintered bronze clutch

SUSPENSION

Bilstein racing adjustable struts front and rear, adjustable ride height, concentric Rose-jointed top mounts, Rose-jointed strut brace, bronze suspension bushes, 518 higher ratio steering box with no power assistance

BRAKES

Lockheed racing brakes, 320 mm front drilled and vented discs with four-piston callipers, 280 mm rear drilled and vented discs with four-piston callipers, no servo. Hydraulic handbrake

WHEELS & TYRES

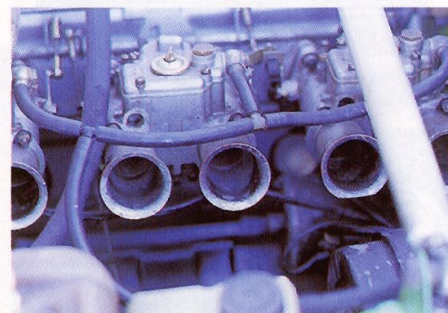
BBS split-rim racing wheels, 10 x 15 inch fronts with 260 mm wide Dunlop tyres, 13x15 rear with 290 mm Dunlop racing tyres

BODY

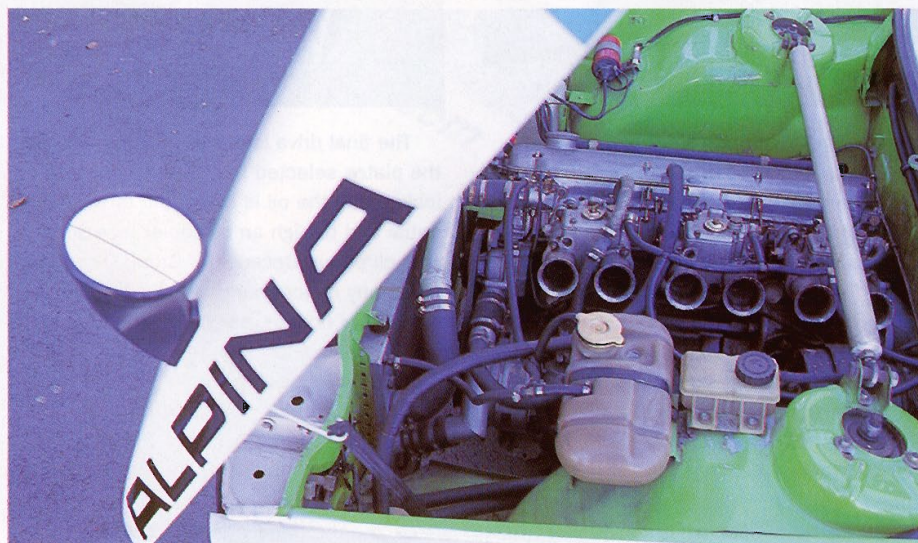
E12 pre-face-lift sunroof shell, later-style bonnet and grille, Alpina racing wheelarches and front spoiler, seam welded, alloy multi-point roll cage, Alpina 120 litre alloy fuel tank in boot

INTERIOR

Standard E12 door trims, Momo steering wheel, Recaro racing seat, harnesses, E9 dials, gauges for engine oil pressure and temperature, water temperature, fuel, gearbox and final drive oil temperature. Alpina wood gearknob

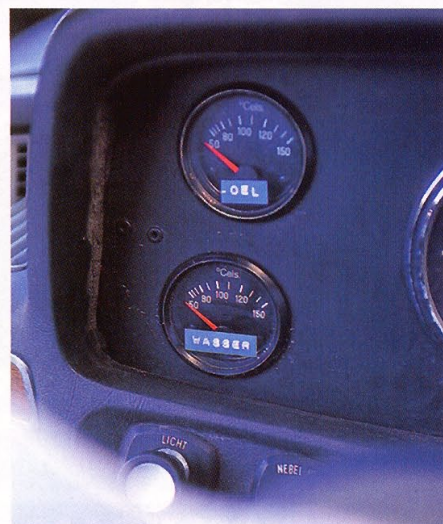


Above. With 10 inch wide BBS split-rims on the front and no power steering or power brakes, the E12 would have been a demanding car to race.





Stark interior uses CS rev counter. Oil temperature gauges for the gearbox and differential appear in the centre console.



therefore when cold, with no brakes or power steering, driving on its huge tyres must have been hard: they're BBS Racing split-rims, 10x15 front with 260 mm wide tyres and 13x15 rears with 290 rubber. Maybe the idea of doughnutting it was premature. Stick these rims on a 518i and it wouldn't move.

Now for the details. We've mentioned the alloy cage, but look at that Recaro racing seat. I bet that's seen a few 'Oh My God' moments. The pipes for brakes, fuel and the

oil supply and return pipes run along the floor and that steering wheel is the original Momo.

Recognise that rev counter? It's from a CS Coupe and it's joined by dials for the water temperature, oil pressure and oil temperature for the engine, while in the centre console are two more oil temperature gauges for the gearbox and diff.

That's it for the spec, but how did the car do? Well, it won its class many times and, as well as being raced by Michael Martini, it

was also raced by Christian Danner and female Formula 1 driver Giovanna Amati.

Its greatest success was a sixth overall at the 1982 Nürburgring ADAC 1000 km race — incredible, as the first five cars were Group C racers. By 1985 though, its homologation had expired and it went into storage instead of being butchered for another series.

Martini became a BMW test driver and since 1985 he's driven the Nürburgring Ring Taxi M5. Don't you just hate some people? ○