



Mission to Frankfurt

Ian Kua and the boys from Brabus go for the record in an EV12 sedan, the Guinness Book's entry for World's Fastest 4-door.

A big, black Mercedes-Benz sedan cruising at 140+ isn't an unusual sight on Germany's unrestricted autobahns, but this time the three occupants of this discreetly badged E-class were men with a mission.

No, this wasn't a terrorist plot in the hatching, although the very thought of what they were about to do would have struck terror into the heart of the Green Party. These three were from the small town of Bottrop near Essen in northwest Germany, and they intended to break the magic 200-mph barrier in a road-legal 4-door.

The A31 autobahn is a favorite test route for Brabus, the Mercedes tuning company started by Bodo Buschmann in the late 1970s, and the fairly standard-looking sedan the Brabus crew was driving had somewhat more power under its hood than, oh, say, a *Lamborghini Diablo*. This innocuous sedan pumped out 582 horses @ 6000 rpm and an

axle-twisting 570 lbs.-ft. of torque @ 4000, some 90% of which available at 2400.

Briefing Room

Ironically, this car's 52-horsepower gain over Brabus' previous 7.3-liter Mercedes V12 conversion wasn't originally intended. "We were actually looking to boost the torque," explains chief engineer Ulrich Gauffres. "The extra 52 bhp was just an incidental—but welcome—plus."

Gauffres, a former M-B development engineer, has a habit of finding that little extra bit of power or capacity where others have failed. This time his quest to improve the already-stonking oversized Brabus V12 centered around improving its torque. The engine was stripped down and carefully examined to see where improvements could be made to aid gas-flow and reduce friction. Other areas spotlighted were the cam profiles and engine-management system. In

pure engineering terms these weren't difficult tasks, but figuring in Germany's tough TUV smog laws complicated things. Worthwhile improvements to the ports, valves, and valve seats were made while the new cams were calculated, ground, and tested. The final bits tackled were the modified ECU and huge, free-flowing exhaust system with metal catalyzers.

Shoehorning the big V12 into a car that was never designed to take it represented another hassle. "We had to modify the front chassis legs and build new engine mounts," continues Gauffres, "and we tried to place the engine as far back as possible to help weight distribution. Of course there were problems with clearances for the larger radiator and so on, so lots of parts had to be made up from scratch. The sheer amount of hand labor involved is part of the reason that the completed car costs about \$170,000!"

Purpose-built springs and shocks help

balance out the fairly nose-heavy EV12 and maintain most of the ride comfort of the standard E-class. Rounding out the chassis mods is a braking system worthy of a Group C sports car—huge grooved-and-vented Alcon discs with 4-piston calipers give the Brabus EV12 stopping abilities appropriate to its performance.

The color-coded front spoiler, side sills, and rear valance are subtle enough that the non-enthusiast would probably pass them by without a second look—such is the *zeitgeist* of the late 1990s. But no such doubts linger over the 30mm-lower ride height and 18-inch Brabus Monoblock alloys. These wheels can be had in 18x8.5-inch or 9.5-inch sizes, both using Michelin Pilot tires, 235/40ZR18s up front and 265/35ZR18s in back. The distinctive Brabus twin-pipe

exhaust tips are another visual giveaway. As with all Brabus cars, the interior trim choice is up to the client, who can choose between leaving it standard, going for a totally bespoke leather package and special wheel, or anything in between.

Terrain Following

Brabus' "standard" 7.3-liter V12 brings the E-class to 190+ mph, so it only stands to reason that the added boost of this new engine should give it a shot at 200. Lower down on the speedo, even with a slightly over-tall rear axle fit for top speed, the EV12 rockets to 60 mph in 4.4 seconds and passes 100 in less than nine.

The only time you can reasonably expect a clear autobahn these days is early on a summer's Sunday morning. At 7:00 a.m.



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everyone is still tucked up in bed after Saturday night's proceedings, and the air is cool enough to help provide peak power. These are the conditions present when the Brabus crew, Bodo Buschmann at the helm, makes its top-speed attempt.

"Driving at 120 mph is easy," Buschmann offers casually. "On a long, wide autobahn, things happen slowly at that speed. Get past 140, though, and you really have to look ahead. Past about 170 the sides of the road disappear into a blur and you really have to have your wits about you, planning far, far ahead. If someone pulls into the outside lane at this speed, you need an awful lot of distance to brake!

"The E-class is very slippery," he continues. "Even with our big wheels and spoilers, the *Cd* is still 0.31, which helps high-speed performance a lot. You can still feel acceleration past 170, but after that it takes a while. You need a long runup and very still air."

The idea behind having three people on board is simple. The driver drives at 100%; there's no margin for error at these speeds. The front passenger scans the road far

ahead, and the partner in the back seat keeps an eye on the speedo. Simple.

Mission Accomplished

"People think that to do these top-speed runs you just nail the throttle from rest until the car peaks out. In fact, we start from around 150 mph and build speed progressively, letting the car settle in. That's why we need a long, clear stretch of road."

When the moment of truth finally approaches, the two front-seaters hold their breath as the man in back reels off the last few kph figures, verifying them with his digital test equipment. The speedometer proves well off the clock when he finally announces the sacred figure, and a quick check with a stopwatch against the kilometer posts confirms his calculations: 206.25 mph, a new 4-door world record.

With just a driver on board the car will likely be even faster, and perhaps that exercise will happen soon. For now, it's more than enough to know that the EV12's obvious adversary, AMG's Hammer, has been well and truly vanquished. That the comfortable sedan can also outrun any Ferrari or Lamborghini production car is a fine statement, too. Ladies and gentlemen, I give you the Brabus EV12 "Sledgehammer": the world's fastest 4-door! ●

SPECIFICATIONS

1997 Mercedes-Brabus EV12

General

Vehicle type: front-engine FWD sedan
Structure: steel unibody
Market as tested: Germany
MSRP: \$US295,000

Hardpoints

Engine type: longitudinal DOHC, 4-valve V12, aluminum block & heads
Displacement (cc): 7258
Power (bhp): 582 @ 6000 rpm
Torque (lbs. ft.): 570 @ 4000 rpm
Transmission type: 5-speed automatic
Curb weight (lbs.): 4080
Wheelbase (in.): 111.5
Track, f/r (in.): 60.2/59.9
Width (in.): 70.8

Suspension, brakes, steering

Suspension, front: double wishbones with coil springs and antiroll bar
Suspension, rear: 5-link with coil springs and antiroll bar
Steering type: power rack & pinion
Wheels, f/r (in.): 18x8.5 & 18x9.5
Tires, f/r: 245/40ZR18
Brakes, f/r: grooved & vented discs

Performance

0-60 (sec.): 4.75
Top speed (mph): 206 mph

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