



The M3 wagon BMW
never built is the one
we always wanted.

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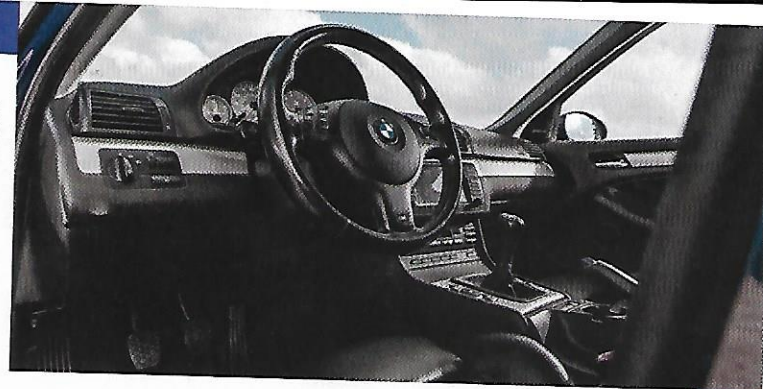
THE REGISTRATION PAPERWORK may call it a 2002 BMW 325i Touring, but in person, it's pure M3. Converted with fastidious attention to detail, this is the M3 wagon BMW never produced, the longroof remix of a driver's car icon. Aside from a one-off M3 Touring prototype BMW built in 2000 as a feasibility study, there's likely no other E46 M3 wagon conversion in the world that adheres as faithfully to factory specifications.

"There are a million ways to take shortcuts doing a build like this," Sam Craven explains, "but I wanted OEM quality."

Craven's passion for motorsports led him to tracks all over North America, wrenching for race teams. Eventually he put that behind him to start a real estate business in Houston. After seven years of devoting all his time and energy to his company, he was ready for a distraction. He wanted a project.

He first drove an E46 M3 in 2005, borrowed for a session at Texas World Speedway. "I was driving hard and all I could do was laugh," Craven says. "It was so connected, so communicative. The car just got me." Memories of how the car flowed through specific corner sequences are burned into his brain.

The E46 M3 coupe debuted at Geneva in 2000, packing an aggressive visual punch over the standard 3-series and across-the-board performance improvements, including the 333-horse-



power S54 engine. This was an era when BMW releases went from strength to strength: You just expected a new BMW would be better, faster, and prettier than the outgoing model, because they always were.

What BMW didn't do was offer this M3 in anything beyond coupe and convertible body styles. Other M3 generations had four doors and the E34 M5 was available as a wagon, but BMW denied the E46 M3 those variants. A factory M3 wagon would have made this driver's car into, seemingly, the perfect package: engagement, performance, and usability, without sacrifice.

In America, wagons spent decades as punchlines. But Europeans have long known the benefits of longroof performance cars: the capacity and usability of SUVs with the lower center of gravity and handling of sport sedans.

So while Europe enjoyed its Audi RS4 Avants, BMW M5 Tourings, and Mercedes C63 wagons, America went without. We did get a number of AMG E-class wagons, and Cadillac built its own competitor in the stellar CTS-V, but the take rates on both were low.

A FACTORY M3 WAGON WOULD HAVE BEEN THE PERFECT PACKAGE.





There was never any doubt what Craven's ideal wagon would be based on: an E46 M3. It would serve as his perfect daily driver, and he hoped to bottle up some of that M3 magic in a more usable, more personalized package. But he had to build it himself.

To begin, Craven needed an M3 coupe and a 325i Touring. Both needed to be mechanically sound and accident-free because the build would require sections from nearly every piece of bodywork from each car. Studying wiring diagrams, Craven found that a loaded 325i would be a fairly straightforward match with a well-equipped M3. And he sought out an Orient Blue Metallic example, because the base-layer color, visible in the engine bay, was also used by BMW as the base for the final paint: Interlagos Blue Metallic, an M-exclusive hue named for the Grand Prix circuit in São Paulo. Craven discovered a perfect, Sport Package-equipped 2002 325i Touring in San Francisco and drove it back to Texas.

After Hurricane Harvey ravaged Houston and the Gulf Coast in 2017, the region was overwhelmed with flood-damaged cars, and a Copart lot inside Texas World Speedway became a temporary resting place for thousands of vehicles that had been declared a total loss. It was there, the same place he first fell for the E46 M3 a decade earlier, that Craven discovered his M3 donor. The written-off 2004 M3 in question showed promise: clean bodywork and a drawn-on waterline indicator that, if accurate, would mean that the mechanical components didn't encounter flood waters. He felt good about it, took a chance, and bought it sight unseen. It arrived at his house on a flatbed, and after finding no traces of water in the fluids, he dropped in a fresh battery and fired it up. It drove like new.

He used it for a few months to establish that the M3 drivetrain was in good health and, once everything was ready,

pulled the engines from both cars in his driveway. He cleaned, valve-adjusted, resealed, and refreshed the M3's 3.2-liter inline-six, replacing wear items like the clutch, throwout bearing, rear main seal, and water pump.

Craven performed the mechanical conversion in his garage during the week between Christmas and New Year's. Far more than just a drivetrain swap, almost everything that could be unbolted from the M3 chassis was reattached to the 325i wagon shell. The entire suspension system, front cross-member, and both subframes migrated over, along with the driveshaft, fuel system, heat shields, and interior.

He was able to transfer countless components that you'd never think to order or source secondhand—stuff like wiring harness pins, and even M-branded sound-deadening material in the transmission tunnel. What he couldn't reuse, he replaced with new factory parts.

The M3-transplanted wagon ran on New Year's Day without drama, and he drove it for a couple months until he could arrange to have the bodywork done properly. Craven wasn't willing to settle for anything less than perfect.

From the factory, the E46 M3 stood apart from the lesser 3-series models by way of sportier bodywork that hinted at its performance: The fenders, bumpers, mirrors, side skirts, muffler, and hood were all reshaped to be more muscular and aggressive. Almost none of that could be swapped from the coupe to the wagon. Craven had to have just about everything fabricated.

He estimates there are fewer than a dozen other wagon-converted E46 M3s out there, but reckons this is the most OEM-like of the bunch. Doing the fender flares entirely in steel is rare, retaining functioning corner lights is rarer still, and fabricating a rear bumper to overcome the difference

THE E46 M3 SITS AT A REMARKABLE INTERSECTION OF CHARACTER, ROAD FEEL, AND PERFORMANCE.

in rear track between the wagon and the coupe is unique to his build. For good reason: That detail added 40 hours of fabrication. But there's no other E46 M3 wagon conversion in the world that adheres as faithfully to factory specifications. Including the one BMW built.

"I actually have an issue with BMW's M3 wagon prototype," Craven says, with a grin that suggests he's aware of how absurd he sounds. "They didn't continue the rear fender arch into the rear doors, so the flare ends too abruptly. It looks unfinished." His solution: reshape the edge of the doors to continue the flare, without having to weld on additional material.

In the end, it was a seven-month-long transformation—twice as long as the estimate, and 60 percent over budget. Craven's M3 Touring has a stunning presence. The unassuming wagon body bubbles with M3 visual touches. The quality in the details is evident up close, but it's the proportions and completeness of the whole package when viewed from afar that keeps you stealing second looks.

The seamless longroof helps preserve and even heighten the linearity of the E46 design, and the natural rake of the chassis is even more dramatic. The blistered rear-wheel arches visually pop, providing a pronounced relief from the expansive side surfaces. Those arches are filled with 19-inch E90 M3 Competition-style wheels to modernize the look.

The E46 isn't the grippiest, nor the lightest car to come out of Munich, but the combination of power delivery, balance, and road feel it delivers are harmonious and natural.

Beneath the M3's domed hood sits the S54, the last naturally aspirated inline-six fitted to a BMW M car. Producing more than a hundred horsepower per liter, it was pure fantasy



territory. The engine urges you towards the 8000-rpm redline, where the individual throttle bodies and exhaust produce a mechanical German howl.

Feedback pulses through the steering wheel, the shifter—even the pedals—in a tactile way that's been all but ironed out in the past 20 years of M development. It's not a large car, but it reacts to inputs like an even smaller one, firmly and directly. It's modern enough to be properly quick, and plush enough to drive every day.

Having three extra doors doesn't spoil the E46 M3 experience, but it does tweak it slightly. Craven, himself a handy driver and Spec Miata racer, believes there's a slightly more rearward weight bias, which he says actually makes the back-end rotation feel a little more forgiving and adjustable on a racetrack. He estimates that his wagon weighs about 200 lb more than a standard M3 coupe.

The E46 M3 sits at a remarkable intersection of character, road feel, and performance, which is why we're still talking about these cars. Changing one ingredient in that successful formula—in this case, a big one, the entire body—shows that recipe can be remixed and replicated in new ways. Call it wagon fusion. ■

