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CAR AND DRIVER



SPECIALTY FILE

RENNtech E60 4Matic

Mr. Feyhl's executive jet for kids.

BY AARON ROBINSON

Consider this the inevitable result of childhood in the modern age. The schedule of a 10th grader gunning for a prestige university with a full agenda of activities would give seizures to the White House appointments secretary.

Well, if the 420 horsepower and 464 pound-feet of torque in the RENNtech E60 4Matic can't deliver your child to the euphonium teacher on time, call Ferrari. No, call Sikorsky, because you'll need something big to duplicate this 155-mph *wunderwagen's* cargo space and seven-passenger seating capacity.

This is the first wagon built by Hartmut Feyhl since he defected from the AMG skunkworks in 1989 to start RENNtech in Lake Park, Florida. So far, it's a one-off, the successful outcome of a request by one of RENNtech's ballistic-missile owners for an all-weather family car that can frolic with an M5.

Feyhl will happily build a copy for you at his Florida shop in exchange for \$87,120. Of course, you must first supply him with an E320 4Matic wagon (current base price, \$52,711). With its factory options,

including sunroof, CD changer, and navigation system, and its RENNtech goodies, including \$3660 in burl-wood accents, the example pictured here pared a trust fund by \$151,942. At least the fit and finish of RENNtech's cosmetic work is as good as or better than that of the factory kit.

Built into the price is a Mercedes M113 SOHC three-valve V-8 from the S500, heavily modified by RENNtech's skilled surgeons. Mercedes' new pressure-cast aluminum blocks can crack if juiced to more than 400 horsepower, says Feyhl, so RENNtech first installs reinforcing brackets to shore up the casting's free-standing cylinder bores.

The bores widen by three millimeters to 100mm to swallow special Mahle pistons; a custom forged crankshaft from Germany strokes the AMG E55 connecting rods through an additional 11mm, to 95mm. The dimensional increases bump the S500's 4966cc V-8 to an atmosphere-inhaling 5969cc.

Air rushes in through K & N filters mounted in a carbon-fiber box baked at home by RENNtech and rushes out through a RENNtech-designed tubular exhaust. The heads are CNC-ported and -polished and contain bespoke camshafts. Engine management is handled by an older Bosch Motronic ME2.0 controller, which RENNtech programs itself with some backdoor help from the factory.

With four big paws grasping the asphalt, the E60 doesn't squeal tires. Stomp the throttle from idle, and the only sound is a muted snort from the rapidly spooling V-8. The torque band is fatter up top, but the thrust is



PHOTOGRAPHY BY AARON KILEY

instantaneous and the E60 will shadow an M5 in all the key measures. The 60-mph mark arrives in 4.7 seconds, the same as in the M5, and the quarter-mile arrives 0.2 second later, in 13.4 seconds at a velocity of 103 mph.

RENNtech reprogrammed the transmission controller for quicker shifts and added extra friction clutches to the five-speed automatic to handle the power. The E60's viscous center differential four-wheel-drive system is lifted from the AMG E55 4Matic, a variant not sold in the States. The main difference is the front differential's aluminum side cover, which is reinforced to accept higher torque loads.

RENNtech adds only a front differential oil cooler fed by a thematically controlled electric pump mounted to the forward subframe. The rubber mounts are inadequate, so the pump's persistent whining spoils the otherwise serene atmosphere of the cockpit.

Former Gestapo crossing guards will scatter when they see the hulking E60 headed their way. The steroid-enhanced looks result from RENNTech's seamless job of sectioning the stock fenders and welding in new wheel arches that flare out about 0.8 inch farther from the body sides. The Michelin Pilot Sports—255/40ZR-18s up front and 285/35ZR-18s in back—are wrapped around sturdy one-piece aluminum wheels that are spin-forged like those on Mika's Formula 1 Mercedes race car.

You'll be \$1100 lighter if you bend one, but Feyhl has been equipping cars for about a year with them and claims only one has been damaged so far. Rotating within the wheels are 14-inch front discs and 12-inch rears pinched by four-piston Brembo calipers. The brakes have precious few settings between "coast" and "brick wall," the latter being fade-free enough to haul the 4186-pound car down from 70 mph in 158 feet, plus or minus a few, five times in quick succession.

RENNtech nails down the E-class's handling by swapping in adjustable Koni shocks, pressing stiffer bushings into the rear control arms, and replacing the stamped-steel toe-control links with less-flexible machined aluminum jobs that lessen rear-end steering during squat. The car feels stable and planted as a big Mercedes should, but with the added benefit of almost no pitch during braking and little roll in corners. To RENNTech's credit, the ride remains Stratocruiser smooth.

The E60 is no M5, however. The front-end steering still feels Mercedes slow and numb, and the narrower front tires give up traction long before the rears break loose,



even on moderate-speed turns such as highway off-ramps. The resulting plow is Spanish fly for the car's electronic stability program, which madly pumps the brakes and shuts down the throttle.

Feyhl admits the factory ESP thresholds are out of synch with the E60's performance, but changing that software would require an army of engineers, a team of lawyers, and test tracks in two hemispheres.

That's cubic money even Feyhl's customers don't have, especially after they get their first bill from Harvard. ●

Vehicle type: front-engine, 4-wheel-drive, 7-passenger, 5-door wagon

Price as tested: \$151,942 (base price*: \$134,155)

Engine: SOHC 24-valve V-8, aluminum block and heads, RENNTech/Bosch Motronic ME2.0 engine-control system with port fuel injection

Displacement	.....	364 cu in, 5969cc
Power (SAE net)	.....	420 bhp @ 5700 rpm
Torque (SAE net)	.....	464 lb-ft @ 2400 rpm
Transmission	.....	5-speed automatic with lockup torque converter
Wheelbase	.....	111.5 in
Length	.....	190.4 in
Curb weight	.....	4186 lb
Zero to 60 mph	.....	4.7 sec
Zero to 100 mph	.....	12.4 sec
Zero to 130 mph	.....	23.7 sec
Street start, 5-60 mph	.....	4.8 sec
Standing 1/4-mile	.....	13.4 sec @ 103 mph
Top speed (governor limited)	.....	155 mph
Braking, 70-0 mph	.....	158 ft
Roadholding, 300-ft-dia skidpad	.....	0.88 g
C/D-observed fuel economy	.....	14 mpg

*Base price includes all performance-enhancing options.