

TESTS: 380-HP MERCEDES, PONTIAC GRAND AM

CAR DRIVER

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Renntech 600E

Put \$35,600 down, and it's only \$3177 a month for the next five years.

BY ARTHUR ST. ANTOINE

Sticker-shock sufferers, prepare to be electrocuted: the menacing black four-door automobile pictured here costs \$178,000.

Ooooooooo. Don't you hate that nasty burning smell?

Anyway, it'll probably come as no shock to learn that if you can come up with 178,000 George Washingtons—and not blow them on something clichéd like a vacation home in the Caribbean or college educations for the kids—you can buy one hell of an amazing car.

This one's called the Renntech 600E. Those of you who assumed it was an AMG Hammer are forgiven, because this superenergized sedan is very much like a Hammer. It follows the same basic blueprint—a Mercedes-Benz plumped up with a huge four-valve-per-cylinder V-8 and a host of chassis and cosmetic alterations. It uses parts produced by AMG in Germany, is built by a man who once forged Hammers for AMG, and it will hammer your financial picture.

That man is Renntech founder Hartmut Feyhl. Before opening the doors in 1990 to his business in Delray Beach, Florida,

Feyhl spent twelve years working for AMG founder Hans-Werner Aufrecht in Germany, and he also served briefly as technical director of the company's U.S. affiliate, Chicago-based AMG of North America.

He may have departed just in time: the parent AMG of Germany last year slammed its doors on all of its distributorships worldwide—including AMG of North America—and announced that it would henceforth sell its products through selected Mercedes-Benz dealerships. Many angered AMG vendors have since filed lawsuits. Richard Buxbaum, who was president of AMG of North America, says a new European network is already in place and that AMG is working on a similar system for the U.S. Meanwhile, parts are still available from the factory in Germany—hence the Renntech 600E.

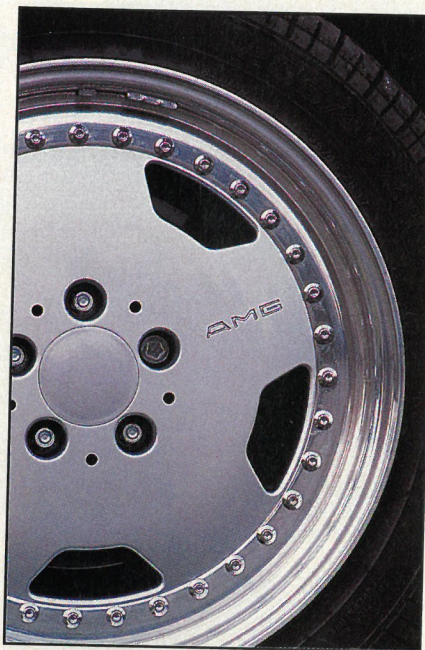
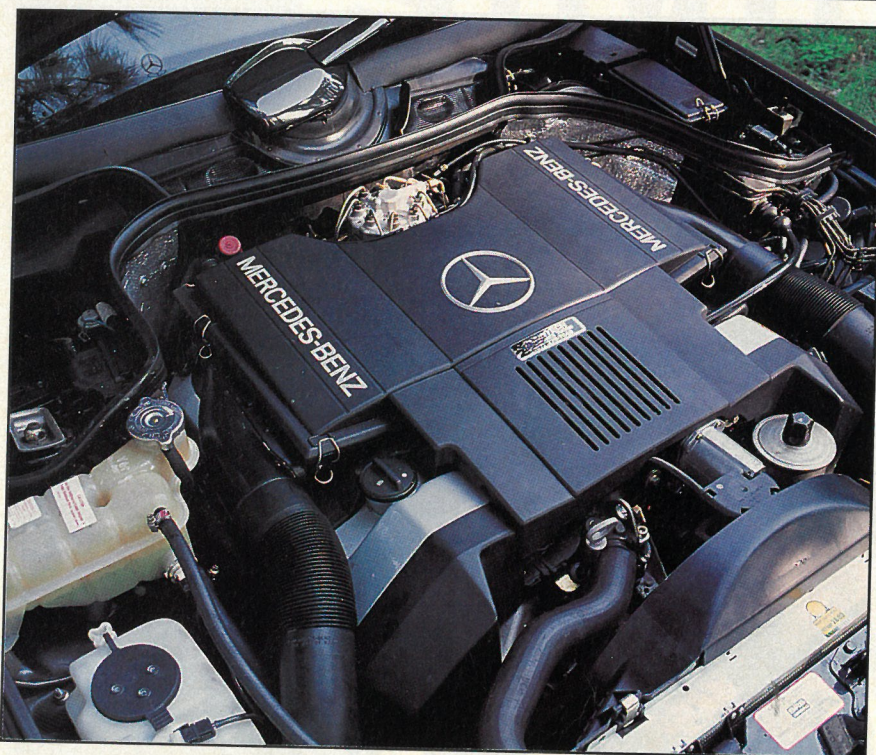
Renntech's main business is enlarging the engines of 500SL convertibles to make extrapotent "600SL" roadsters. But now, having built his first 600E, Feyhl also hopes to lure wealthy customers who might want an extramuscular sedan.

Two main Mercedes ingredients make up the 600E recipe: one 300E sedan, and

one new 32-valve 5.0-liter V-8 engine—the powerplant used in the 500SL convertible. (The original Hammer engine was based on the old Mercedes 560 V-8 and used AMG-designed four-valve heads.) In stock trim, this 5.0-liter V-8 makes 322 horsepower—robust, but barely adequate for a man with AMG in his blood. So before the V-8 goes into the bay previously occupied by the 300E's standard 3.0-liter six, Feyhl enlarges it to 5956cc, installs eight Kolbenschmidt pistons (\$1000), and replaces a chip in the Bosch engine-control system with one from the AMG catalog. (If you're counting pennies, know this: the price of the stock Mercedes V-8 is \$30,000, and the Renntech conversion adds another \$22,000!) Output climbs to 381 horsepower at 5600 rpm and 402 pound-feet of torque at 3900.

Greenfreaks needn't fret about such an extravagance of petrol-produced power: the engine exhales through standard Mercedes 500SL catalytic converters, and Feyhl claims it's as emissions-clean as the stock V-8.

The four-speed automatic transmission and torque converter are stock 500SL



Though the V-8 has been pumped up to six liters, the engine "looks" stock. Wallet alert: aluminum wheels cost \$1300 each.

the Verdict

Highs: Supercar speed with four-door comfort—the best of everything.

Lows: "Say-what?" price, appetite for accessory belts.

The Verdict: An extraordinary car whose sticker may render it obsolete.



pieces, though the transmission's shift points are revised to match the power delivery of the enlarged engine. To fit the 500SL automatic into the 300E body, however, Feyhl had to surgically alter the car's transmission tunnel and then reupholster the interior. The execution is masterful: it's impossible to see where the changes have been made.

Masterful, too, is the way this driveline operates. For maximum acceleration on dry surfaces, Feyhl recommends first pressing the "snow-chain" button on the dash—this instructs the standard Mercedes traction-control system to allow a bit of helpful wheelspin during the launch. Following Feyhl's instructions, we recorded an astonishing 0-to-60-mph run of 4.9 seconds—quite a feat for a 3709-pound four-door sedan. Yet, as testament to its breeding, the 600E doesn't feel that quick. Stoic and solid, it lunges off the line with

no theatrics and remains utterly composed as it hurtles forward. Your only clue to its speed is the Wagnerian crescendo building under the hood and the authoritative smack from the transmission as it slams another upshift at the 6000-rpm redline.

We're talking about Corvette ZR-1-class performance here: the quarter-mile comes up in just 13.5 seconds at 106 mph, and the speedo needle races past 130 mph just 8.4 seconds after that. The 600E is no autobahn king, though, because Renntech installs a low 2.82:1 rear differential, and the engine redlines in top gear at just 155 mph—far short of the 181-mph top speed recorded by the last Hammer we tested (*C/D*, December 1987). As one might expect from its performance and weight, the 600E won't garner any fuel-efficiency awards. But the 15 mpg we observed in our driving is actually 1 mpg better than

what we saw in the last 500SL we tested.

The stock 300E is bred for speed, and the Renntech 600E brims with additions that only enhance its high-velocity aplomb. The basic 300E chassis is unchanged, but Renntech adds stiff AMG springs and shocks, a pair of fat anti-roll bars, and four 235/45ZR-17 Pirelli P Zero tires on three-piece O.Z. aluminum wheels (each wheel costs \$1300!).

Over the road, the extra suspension stiffness is conspicuous, but the body's mass and rigidity mean that road imperfections never cause any undue harshness in the cockpit. At worst, the 600E has a tendency to *clump clump* over tar strips and such. However, the beefed-up chassis doesn't deliver much cornering magic, either. Although the Renntech 600E is very stable and controllable under all conditions, its 0.79 g of cornering grip is barely better than a stock 300E's.

Befitting a car that can rocket to 150 mph with ease, the 600E sports massive vented disc brakes all around. The fronts use four-piston Brembo aluminum calipers; in conjunction with the standard anti-lock system, they help stop the car from 70 mph in just 171 feet.

Like the Hammer, the 600E is a tractable, use-it-everyday sort of car. It idles smoothly and cruises around town without complaint, but it's always ready to deliver exotic performance at the request of your right foot. Our test car did suffer from one malady, though: during its stay with us, the 600E consumed three accessory belts. The V-8 uses one long serpentine belt to drive the cooling fan, the power-steering unit, and the water pumps (the 600E has two). But for some reason—probably a misaligned engine pulley—the belt in our test car would shred after only a few days of use. Feyhl assured us that the problem would be corrected forthwith.

Inside, the 600E is basically stock. The air-bag-equipped steering wheel is from the 500SL, but the only other major change is the addition of a stunning 640-watt stereo system with a ten-disc Sony CD changer and eleven a/d/s speakers. The amplifiers and control units are artfully mounted out of sight in the trunk; all that shows is the neat Sony head unit in the dash. Costing almost \$7000, this custom-crafted system ranks as one of the finest we've ever experienced.

Outside, the 600E wears an AMG body kit (\$6000 painted and installed) and even includes a piece of heresy: the center-high-mounted stoplight in the rear spoiler is from a Toyota Supra. Feyhl says he used this part—and it looks great—because he wanted the 600E's CHMSL to resemble the 500SL's. Not to worry: the 600E looks every bit the superbly built, expensive, and blindingly fast car that it is.

So the 600E is a great automobile. But let's get back to that price for a minute. We're talking about 178K here. *One hundred and seventy-eight thousand dollars.* Is any car worth that?

Maybe—if having only the best of everything matters to you, cost be damned. But maybe not even then. Remember that Mercedes-Benz is about to unleash its own supersedan, the factory-built 500E. True, that plumped-up 300E offers "only" the standard 322-horsepower 5.0-liter V-8. But it'll sprint to 60 mph in 6.1 seconds and reach a top speed of 155 mph. And it will likely go out the door (with the blessing and support of Mercedes-Benz) for "only" \$87,000 or so—\$91,000 less than the Renntech 600E.

Oooooo. There's that nasty burning smell again.



Vehicle type: front-engine, rear-wheel-drive, 5-passenger, 4-door sedan

Price as tested: \$178,000 (includes \$51,835 for Mercedes-Benz 300E)

Major standard accessories: power steering, windows, seats, locks, and sunroof, A/C, cruise control, rear defroster

Sound system: a/d/s/Sony AM/FM-stereo radio/cassette/CD player, 11 speakers

ENGINE
 Type..... V-8, aluminum block and heads
 Bore x stroke..... 3.93 x 3.73 in., 100.0 x 94.8mm
 Displacement..... 363 cu in., 5956cc
 Compression ratio..... 10.0:1
 Engine-control system..... Bosch KE-5-Jetronic with port fuel injection
 Emissions controls..... 3-way catalytic converter, feedback fuel-air-ratio control, EGR, auxiliary air pump
 Valve gear..... chain-driven double overhead cams, 4 valves per cylinder, hydraulic lifters
 Power (SAE net)..... 381 bhp @ 5600 rpm
 Torque (SAE net)..... 402 lb-ft @ 3900 rpm
 Redline..... 6000 rpm

DRIVETRAIN
 Transmission..... 4-speed automatic
 Final-drive ratio..... 2.82:1, limited slip

Gear	Ratio	Mph/1000 rpm	Max. test speed
I	3.87	6.7	40 mph (6000 rpm)
II	2.25	11.5	69 mph (6000 rpm)
III	1.44	18.0	108 mph (6000 rpm)
IV	1.00	25.9	155 mph (6000 rpm)

DIMENSIONS AND CAPACITIES
 Wheelbase..... 110.2 in
 Track, F/R..... 60.3/59.9 in
 Length..... 187.2 in
 Width..... 70.7 in
 Height..... 56.3 in
 Frontal area..... 22.4 sq ft
 Ground clearance..... 5.7 in

Curb weight..... 3709 lb
 Weight distribution, F/R..... 53.7/46.3%
 Fuel capacity..... 18.5 gal
 Oil capacity..... 8.5 qt
 Water capacity..... 15.9 qt

CHASSIS/BODY

Type..... unit construction with 1 rubber-isolated crossmember
 Body material..... welded steel stampings

INTERIOR

SAE volume, front seat..... 50 cu ft
 rear seat..... 40 cu ft
 luggage space..... 15 cu ft
 Front seats..... bucket
 Seat adjustments..... fore and aft, seatback angle, front height, rear height
 Restraint systems, front..... manual 3-point belts, driver and passenger air bags
 rear..... manual 3-point belts
 General comfort..... poor fair good **excellent**
 Fore-and-aft support..... poor fair good **excellent**
 Lateral support..... poor fair **good** excellent

SUSPENSION

F:..... ind, strut located by a control arm, coil springs, anti-roll bar
 R:..... ind, 2 lateral and 3 diagonal links per side, coil springs, anti-roll bar

STEERING

Type..... recirculating ball, power-assisted
 Turns lock-to-lock..... 3.2
 Turning circle curb-to-curb..... 36.7 ft

BRAKES

F:..... 12.0 x 1.3-in vented disc
 R:..... 10.3 x 1.0-in vented disc
 Power assist..... vacuum with anti-lock control

WHEELS AND TIRES

Wheel size..... 8.5 x 17 in
 Wheel type..... modular aluminum, 3-piece
 Tires..... Pirelli P Zero, 235/45ZR-17
 Test inflation pressures, F/R..... 34/34 psi

CAR AND DRIVER TEST RESULTS

ACCELERATION	Seconds	EPA highway driving..... 16 mpg
Zero to 30 mph.....	1.9	C/D observed fuel economy..... 15 mpg
40 mph.....	2.8	
50 mph.....	3.8	
60 mph.....	4.9	
70 mph.....	6.3	
80 mph.....	7.9	
90 mph.....	9.8	
100 mph.....	11.9	
110 mph.....	14.6	
120 mph.....	18.0	
130 mph.....	21.9	
140 mph.....	26.9	
150 mph.....	34.9	
Street start, 5-60 mph.....	5.2	
Top-gear passing time, 30-50 mph.....	2.7	
50-70 mph.....	3.2	
Standing 1/4-mile.....	13.5 sec @ 106 mph	
Top speed.....	155 mph	
PROJECTED FUEL ECONOMY		
EPA city driving.....	14 mpg	
BRAKING		
70-0 mph @ impending lockup.....	171 ft	
Fade.....	none	moderate heavy
HANDLING		
Roadholding, 300-ft-dia skidpad.....	0.79 g	
Understeer.....	minimal	moderate excessive
COAST-DOWN MEASUREMENTS		
Road horsepower @30 mph.....	6 hp	
50 mph.....	16 hp	
70 mph.....	33 hp	
INTERIOR SOUND LEVEL		
Idle.....	51 dBA	
Full-throttle acceleration.....	79 dBA	
70-mph cruising.....	71 dBA	
70-mph coasting.....	70 dBA	