

ROAD TEST: Mercedes-Benz E55

Torque is not cheap.

By BARRY WINFIELD

German engineers mining for torque deposits near Affalterbach must have hit a mother lode. At least, that's what it feels like from behind the AMG-monogrammed steering wheel of this E55. Somewhere between here and the three-pointed gun sight at the leading edge of the hood is housed 391 pound-feet of torque, available from 3000 rpm onward.

This is the kind of urge that prompts you to adjust your headrest—and those of the passengers—because a careless thrust at the throttle pedal will, in most circumstances, produce a lunge that snaps back heads faster than a space-shuttle launch.

Press the ESP button located on the console, disabling the stability-control system (lighting a prominent yellow triangle in the dash), and you can expect wheelspin if you mash the throttle from rest. That's with the five-speed automatic transmission that is standard equipment, folks. Brake-torque the E55 for a second before you go, and you'll light up the 35-series rear tires in a serious fashion.

But if you balance your launch in a mature manner, you can expect propulsion of a decidedly quick nature: 0 to 60 mph in 4.9 seconds and a quarter-mile sprint in 13.5 seconds at 105 mph. To get that sort of thrust from a big luxury car like this, did AMG turn the E55 into a hot rod of the brutal, kidney-crushing variety?

Well, yes and no. Fast it is. Rude it ain't. In fact, so suave is this E-class muscle car that its real potential will not be recognized by many passengers. You could pick up your boss at the airline terminal and transport him to his hotel at quarter-throttle, and he'd swear it was a luxury ride under him. That's because the quiet 5.4-liter V-8 wuffles along with hydraulic smoothness and slurs gearshifts in a seamless sequence. Even at low revs, there's enough torque to waft up hills without losing speed or digging for another gear.

And only if the roads are bad will your VIP sense the tensioned suspension (35 percent higher-rate springs, Bilstein shocks, beefier stabilizer bars) and high-pressure, low-profile doughnuts under him. As for the drivers around you, they'll just recognize another E-class Benz with the Sport package they're accustomed to seeing on E430s. Unless they close up tight on the car's tail, that is, and read the chrome letters that proclaim the car to be an E55 by AMG.

Yes, the latest "Hammer" from Mercedes and its in-house speed wizards is a Q-ship. According to Mike Jackson, the recently appointed boss of Mercedes-Benz of North America, the Germans are currently into inconspicuous consumption, and they want their cars—particularly the tuner-prepped rocket ships—to be unobtrusive. But that's not what Jackson wanted for his mid-size giant killer in our market, and the E55 you see here is the resulting compromise. It uses an existing AMG-derived Sport package, but it's allowed a subdued boast from its tail-mounted insignia, along with subtle AMG badging on the steering wheel and gauge cluster.

It's not a car that needs superfluous decoration, that's for sure. At a suggested price of \$71,717 (cheaper by 15 or so grand than its predecessor, the Porsche-assembled E500), every one of the 2000 examples earmarked for the U.S. over the next four years will be snapped up. Heck, most of the first shipment will likely be absorbed by dealer principals before the public even gets a shot.

Which is a pity, because this is an extraordinary vehicle, versatile beyond our wildest expectations, and as rewarding as the best drivers' cars around. To have achieved this at a lower price than that of the preceding E500 is commendable, accomplished by keeping as much of the original E-class car intact. Unlike the E500, the E55 is essentially a fully assembled and trimmed vehicle off Mercedes-Benz's Sindelfingen line before it is sent off to the AMG skunkworks in Affalterbach for its stroked and breathed-upon engine, its heavy-duty V-12-derived transmission, its uprated suspension and brakes, and its big wheels and tires. Because of that, the essence of the E-class car has been preserved, but with dynamic parameters that have been extended in every way. The primary differences are manifested as a more jiggly ride with much tauter roll control, a throttle that gets into the power without the Benz-signature long and progressive pedal travel, and acceleration—anytime—that is in another league. Oh, yeah, and an engine note that changes from a polite V-8 burble to a hard-edged snarl when the pedal's down and the tach is reaching for six grand.

Surprisingly, the steering-assist mechanism is identical to that of the E430, and it remains light at most speeds. So light that the mechanism in a BMW 328i feels leaden in comparison. But it directs the E55 with such accuracy and fluency that more weight at the rim doesn't seem necessary. In fact, when you add the car's tenacious grip (0.88 g on the skidpad) and tightly tied-down body motions to the razor-sharp helm, the E55 can take on almost anything in the corners. But be warned, the driver will likely need some recalibration; the car's abundantly stiff structure and good isolation lead one to underestimate corner entry speeds. On the introductory ride-and-drive in Napa, California, a couple of drivers from other publications went off the road, and we suspect that those incidents were partly due to the deceptive ease with which this car gathers speed.

What shouldn't go unnoticed in the E55 (and this is particularly seductive) is the push in the back you get when you pin the throttle. The torque is so prodigious (41 pound-feet more than a Corvette's), and the torque curve so flat, that the E55 pulls hard all the way through each gear, producing a concerted thrust like that of a 757 on a takeoff run. It just keeps on coming.

Aerodynamic drag beyond triple-digit speeds does little to blunt its charge, and our E55 was still accelerating when it hit an electronic limiter at 158 mph. Hard enough to suggest a real top speed somewhere around 180 mph. Still, 158 ought to be enough for most people, and at that speed the E55 tracks as straight as a die.

At more reasonable rates of travel, the E55 assumes its more civilized persona, providing a smooth, quiet ride that will take its occupants on interstate travel with little discomfort. This is perhaps the car's most noteworthy aspect. When not being flogged hard, it behaves more like a limo than a supercar. In fact, the transmission's computer reads driver inputs and adjusts its activities accordingly.

The compromises you accept for this broad operating bandwidth are few. A suspension designed for high speeds and massive cornering potential can't be expected to traverse broken surfaces without transmitting some impact shock and movement into the car. On the other end of the scale, the factory-issue seats (available in all-black leather or in two-tone combinations of black and blue and black and silver) are firm and supportive enough for a cross-continent tour, but they lack the wraparound support of dedicated sport seats. We also found the leather-wrapped wheel (also available in solid or two-tone hues) to have a rather obstructive arrangement of spokes and thumb pads, leaving too little rim available for those of us with large hands. Understand, please, that this is deliberate picking of the smallest nits.

For most people's needs, the mix of sporting and luxury attributes is right on the money. As the two

companies involved in the E55's genesis have drawn closer (AMG is being acquired by DaimlerChrysler), so the levels of sophistication have increased. Thus, the E55 retains all the elaborate technical aspects of the V-8-powered E-class cars: the stability- and traction-control systems; the twin-plug cylinder heads; the variable-volume intake tract; the oil-quality monitor—in short, all the assets of a factory-backed product.

Indeed, this close integration of a leading-edge manufacturer and its specialist engineering consulting service is really what defines the new E55 and its nearly perfect blend of pedigree and power. Remember, 1998 saw Mercedes and AMG bring home two world-championship motorsports trophies as well as launch the E55. It looks like a winning streak to us.

The Verdict

Highs: Masterful integration of power, poise, and refinement.

Lows: Seats could use more lateral support, steering-wheel spokes are too thick.

The Verdict: This is a real everyday supercar.

Counterpoint

Poor Mercedes. I have to write a counterpoint on the E55 having not so long ago driven a RENNTech E7.4RS, a 620-horsepower monster that will forever color my notions of what constitutes a "fast" E-class. That car's acceleration and grip, right up there with a Dodge Viper's, make this car feel merely tame, believe it or not. On the other hand, the E55 doesn't come with the E7.4RS's molar-pulverizing ride, its squeaks and rattles, or its oversize Pirellis that threatened to rip out the fender liners with every bump. As for the price, this new E-class is chump change in comparison. No doubt, for those of us with normal appetites, bank accounts, and sensibilities, the E55 is the best E-class ever.

—*Don Schroeder*

Five minutes behind the wheel, and suddenly I have a new favorite Mercedes. Floor the accelerator on most automatic Mercedes models, and the transmission responds, "You sure you want me to downshift? Positive? Right now? Okay." Floor the E55, and it says, "Faster? Yesss!" The muted V-8 burble, the taut suspension that still gives an excellent ride, the ultra-low-profile Michelins, the supple leather bucket seats that are as comfy as anything in your living room—the E55 may well be the ultimate in understated executive transport. At least until the new BMW M5 migrates to America.

—*Steven Cole Smith*

Isn't it interesting that Mercedes has always subscribed to the American big-engine approach when creating its sports sedans? To create the legendary 300SEL 6.3 back in 1968, Mercedes employed the 6.3-liter V-8 from the 600 limousine. With the new E55, Mercedes has followed the same path by shoehorning its largest V-8 into the mid-size E-class sedan. With about 70 percent more displacement than the base E-class 3.2-liter V-6 has, the E55 is a rocket, flattening you in your seat all the way to its 158-mph governor. And it produces this thrust with effortless refinement, proving once again that there is indeed no substitute for cubic inches.

—*Csaba Csere*

MERCEDES-BENZ E55 AMG

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

Price as tested: \$73,302

Price and option breakdown: base Mercedes-Benz E55 AMG (includes \$595 freight and \$2022 luxury tax), \$71,717; six-disc CD changer and cellular telephone, \$1495; luxury tax on options, \$90

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

Sound system: AM/FM-stereo radio/cassette/CD changer, 10 speakers

ENGINE

Type.....V-8, aluminum block and heads
 Bore x stroke.....3.82 x 3.62 in, 97.0 x 92.0mm
 Displacement.....332 cu in, 5439cc
 Compression ratio.....10.5:1
 Engine-control system.....Bosch ME2.0 with port fuel injection
 Emissions controls.....3-way catalytic converter, feedback air-fuel-ratio control
 Valve gear.....chain-driven single overhead cams, 3 valves per cylinder, hydraulic lifters
 Power (SAE net).....349 bhp @ 5500 rpm
 Torque (SAE net).....391 lb-ft @ 3000 rpm
 Redline.....6000 rpm

DRIVETRAIN

Transmission.....5-speed automatic with lockup torque converter
 Final-drive ratio.....2.82:1, electronic limited slip
 Gear.....Ratio.....Mph/1000 rpm.....Max. test speed
 I.....3.59.....7.3.....43 mph (6000 rpm)
 II.....2.19.....11.9.....71 mph (6000 rpm)
 III.....1.41.....18.5.....111 mph (6000 rpm)
 IV.....1.00.....26.0.....155 mph (6000 rpm)
 V.....0.83.....31.4.....158 mph (4950 rpm)

DIMENSIONS AND CAPACITIES

Wheelbase.....111.5 in
 Track, F/R.....60.2/59.9 in
 Length.....189.4 in
 Width.....70.8 in
 Height.....56.7 in
 Curb weight.....3765 lb
 Weight distribution, F/R.....52.6/47.4%
 Fuel capacity.....21.1 gal
 Oil capacity.....8.0 qt
 Water capacity.....11.8 qt

CHASSIS/BODY

Type.....unit construction

Body material.....welded steel stampings

INTERIOR

SAE volume, front seat.....51 cu ft

rear seat.....44 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 front, side, and head airbags

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, unequal-length control arms, coil springs, anti-roll bar

R:.....ind; 3 lateral links, 1 diagonal link, and 1 toe-control link per side; coil springs; anti-roll bar

STEERING

Type.....rack-and-pinion, power-assisted

Turns lock-to-lock.....3.1

Turning circle curb-to-curb.....37.1 ft

BRAKES

F:.....13.2 x 1.3-in vented disc

R:.....11.8 x 0.9-in vented disc

Power assist.....hydraulic with anti-lock control

WHEELS AND TIRES

Wheel size.....F: 8.0 x 18 in, R: 9.0 x 18 in

Wheel type.....cast aluminum

Tires.....Michelin Pilot Sport; F: 245/40ZR-18, R: 275/35ZR-18

Test inflation pressures, F/R.....36/36 psi

C/D TEST RESULTS

ACCELERATION.....Seconds

Zero to 30 mph.....1.9

40 mph.....2.7

50 mph.....3.8

60 mph.....4.9

70 mph.....6.3

80 mph.....8.1

90 mph.....10.0

100 mph.....12.1

110 mph.....14.7

120 mph.....18.1

130 mph.....22.4

140 mph.....27.4

Street start, 5-60 mph.....5.1
Top-gear acceleration, 30-50 mph.....3.0
50-70 mph.....3.4
Standing 1/4-mile.....13.5 sec @ 105 mph
Top speed (governor limited).....158 mph

BRAKING

70-0 mph @ impending lockup.....156 ft
Fade.....NONE light moderate heavy

HANDLING

Roadholding, 300-ft-dia skidpad.....0.88 g
Understeer.....minimal MODERATE excessive

FUEL ECONOMY

EPA city driving.....16 mpg
EPA highway driving.....23 mpg
C/D-observed fuel economy.....18 mpg

INTERIOR SOUND LEVEL

Idle.....45 dBA
Full-throttle acceleration.....75 dBA
70-mph cruising.....69 dBA
70-mph coasting.....69 dBA