

**AMG**

2004 Mercedes-Benz **AMG**

E55 AMG C32 AMG S55 AMG CLK55 AMG CL55 AMG SLK32 AMG SL55 AMG G55 AMG



Mercedes-Benz



# Only AMG

Imagine not one, not two, or even three superb performance cars, but an entire family. Eight models encompassing an unmatched range of vehicles — coupes, convertibles, sedans, even an SUV. Each vehicle unique in personality, but carrying the same mission: to be the finest high-performance vehicle in the world while at the same time setting the benchmark for civility and comfort. Each a technological masterpiece, endowed with an ultra-high-output engine painstakingly assembled by a single pair of expert hands. Suspensions proven in the heat of competition, braking systems pushed till discs glow bright red. Bodies subtly bristling with muscle, interiors offering exclusive luxury while retaining the single-minded purpose of a true driver's environment. Imagine that this range of vehicles is built by a manufacturer unmatched in balancing performance, quality, reliability, style and safety. It could only be Mercedes-Benz. And only AMG.



One man, one engine

Race-bred suspension

Tenacious brakes

Predatory presence

Dedicated driver's environment

Eight names for thunder





# One man, one engine



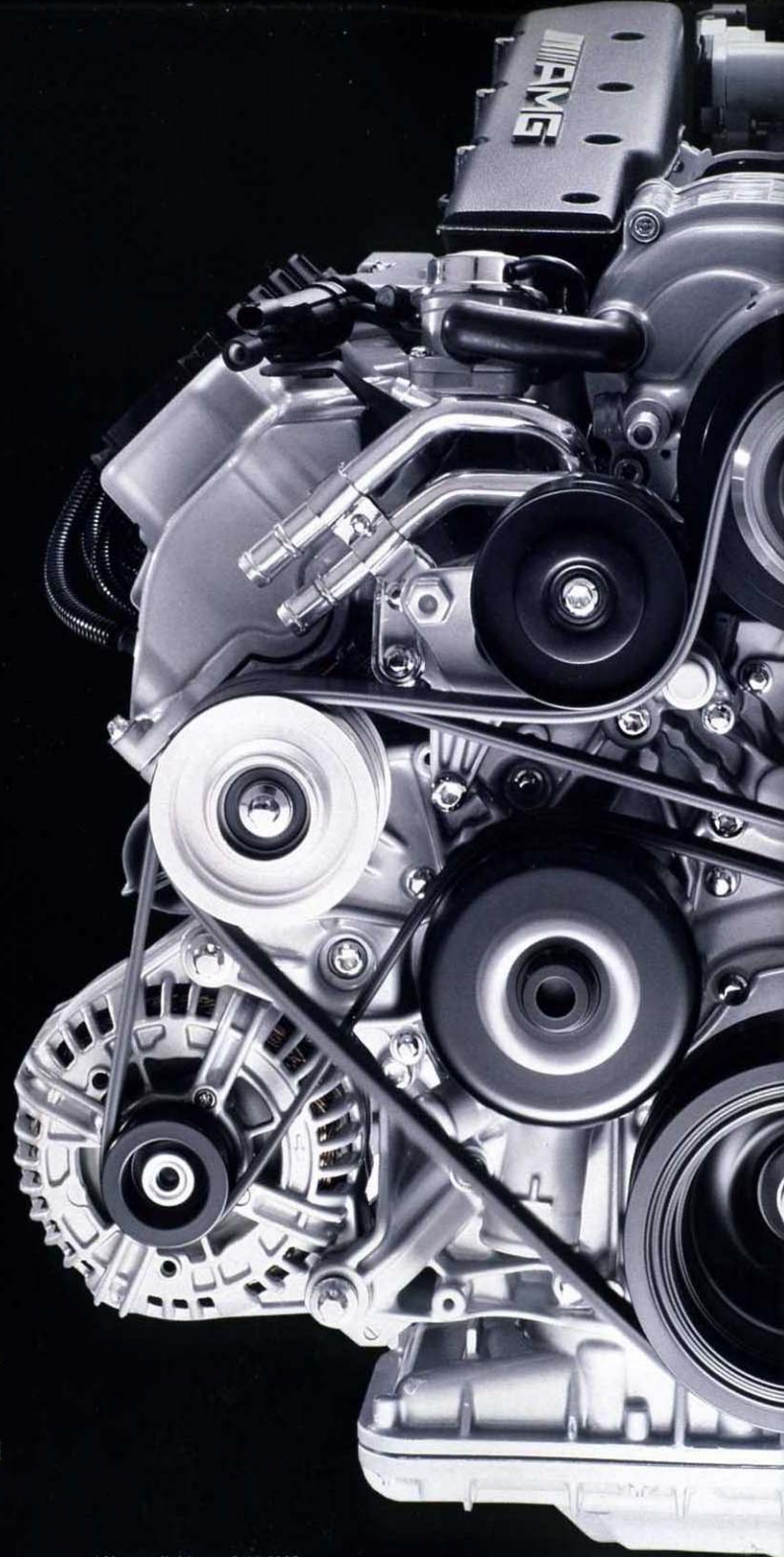
## THE POWER OF ONE

In these days of mass production and robotic manufacturing, it might seem indulgent to have each engine handcrafted by a single technician. Or to hand-select parts for perfect balance and minimum tolerances. But it's the best way we know to ensure a virtuoso performance. The AMG engine arsenal includes forged aluminum pistons for strength, individually balanced crankshafts to reduce vibration, and aggressively profiled camshafts for a scintillating redline surge. Low-backpressure exhausts for enhanced breathing and a throaty

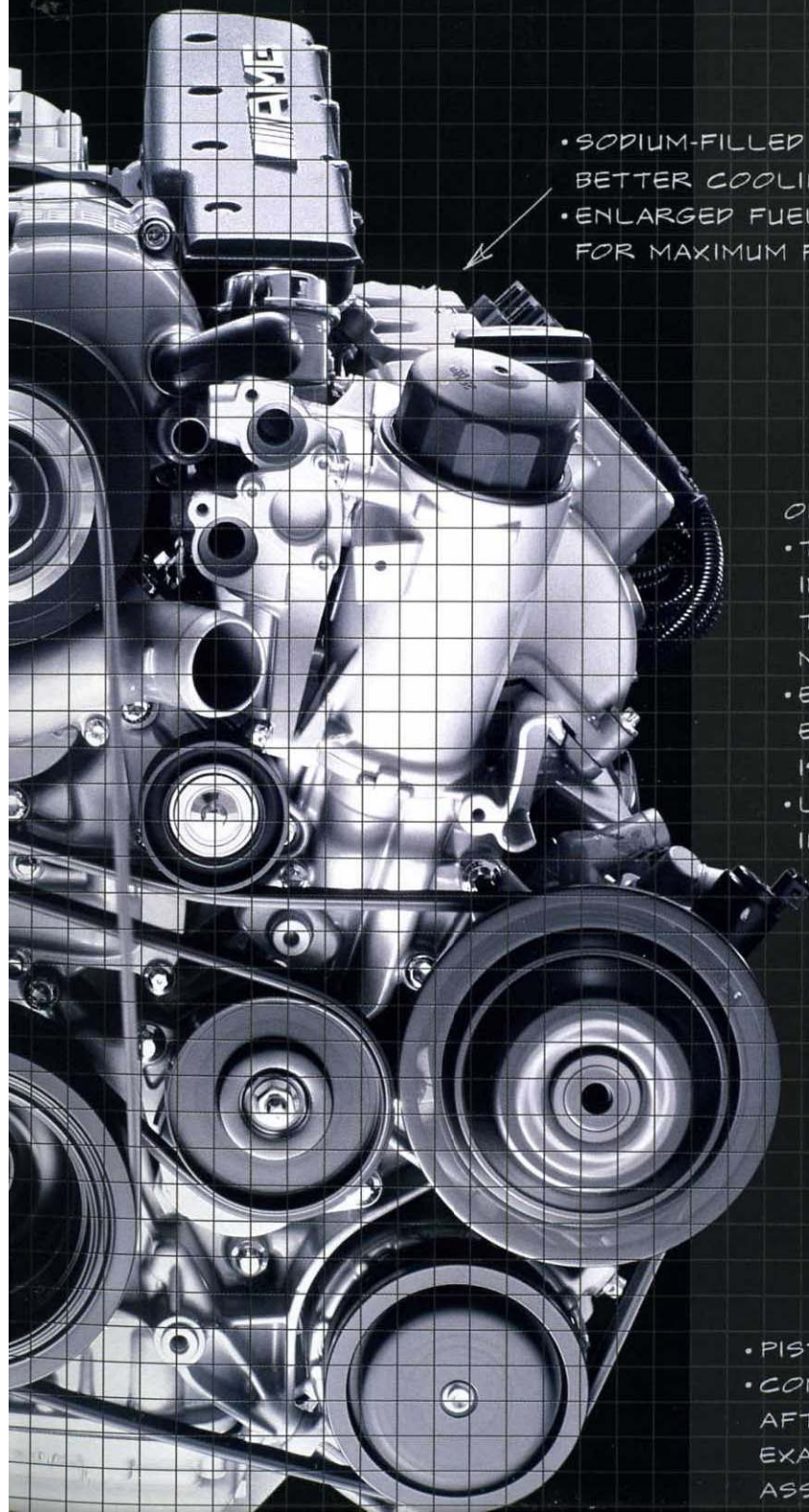
rumble. On six of the models, a helical supercharger and liquid-to-air intercooler add even more massive and instantaneous power. The Mercedes-AMG engine. Built by one person, for one person. You.

## A MATCH OF WITS

For intelligent use of power, AMG SpeedShift™ programming<sup>1</sup> provides 35% quicker gear changes, prevents unwanted upshifts in hard corners to help maintain handling poise, and can downshift automatically to provide engine braking. Its brilliance also means that instead of just opting for the lowest available gear on kickdown, the transmission instantly calculates and chooses the optimum gear for maximum acceleration. And many of the AMG models add an F1-inspired fingertip manual mode, letting you upshift and downshift by tapping buttons behind the upper steering wheel spokes.



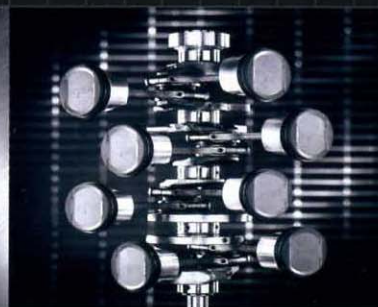




- SODIUM-FILLED VALVES FOR BETTER COOLING
- ENLARGED FUEL INJECTORS FOR MAXIMUM FLOW

ON KOMPRESSOR MODELS:

- TEFLON COATING ON SUPERCHARGER IMPELLER BLADE HELPS TO TURN UP TO 23,000 RPM AND CREATE 11.6 PSI OF MAXIMUM BOOST ON V-8s, 16 PSI ON V-6s
- ELECTROMAGNETIC CLUTCH SMOOTHLY ENGAGES SUPERCHARGER WHEN BOOST IS NEEDED
- LIQUID-TO-AIR INTERCOOLER INCREASES INTAKE-AIR DENSITY FOR MORE POWER



- PISTONS FORGED FOR STRENGTH
- CONNECTING RODS "CRACKED" AFTER FORGING TO ACHIEVE EXACTING TOLERANCES WHEN ASSEMBLED

- ALL MAJOR RECIPROCATING PARTS HAND-SELECTED AND PRECISELY BALANCED

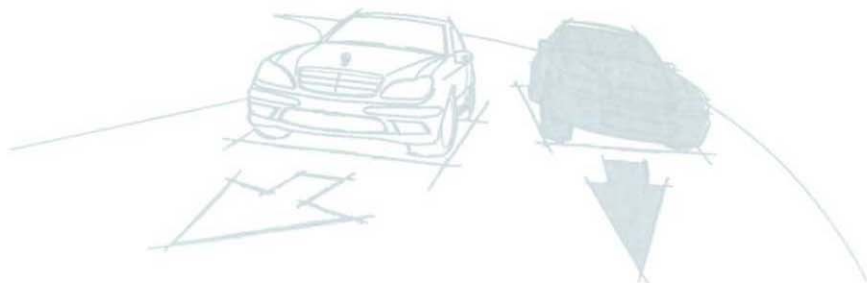


SUBJECT:	AMG SUSPENSION SYSTEMS
ORIGIN:	AFFALTERBACH, GERMANY

# Race-bred suspension

## SMILE AND SAY G's

It might surprise you, but we think calling AMG vehicles "racecars for the street" is almost an insult. Because in many ways, it's much more difficult to dial in a suspension that will give phenomenal handling, instant response and precise control – things of utmost importance in competition – while still providing the suppleness and road manners that satisfying day-to-day driving requires. To give you the best of both worlds, AMG models undergo extensive real-world autobahn testing as well as exhaustive high-speed evaluations on demanding race courses, including the 73 turns of the legendary Nürburgring and the mercilessly unforgiving surfaces of Nardo in southern Italy. So while every AMG suspension carries the knowledge earned from our successes in the DTM German Touring Car Championship, it's also equipped with a healthy dose of street smarts.



• ELECTRONIC CONTROLS FOR  
ADAPTIVE DAMPING SYSTEM (ADS)  
AND ACTIVE BODY CONTROL (ABC)  
RETUNED FOR EVEN SHARPER  
PERFORMANCE, RESPONSE AND  
ROAD FEEL





• SPRING-STRUTS FEATURE  
LOWER AIR VOLUME FOR  
FASTER RESPONSE

• THE E55 AMG'S AIRMATIC  
SUSPENSION SWITCHES BETWEEN  
4 DAMPING PROFILES, ADJUSTING  
COMPRESSION AND REBOUND OF  
EACH SHOCK INSTANTANEOUSLY  
WITH EACH MOVEMENT

• THE DRIVER CAN CONTROL THE THRESHOLD  
AT WHICH THE DAMPING PROFILES SWITCH  
OVER BY SELECTING COMFORT MODE OR  
EITHER OF 2 SPORT MODES



SUBJECT: BRAKING SYSTEMS

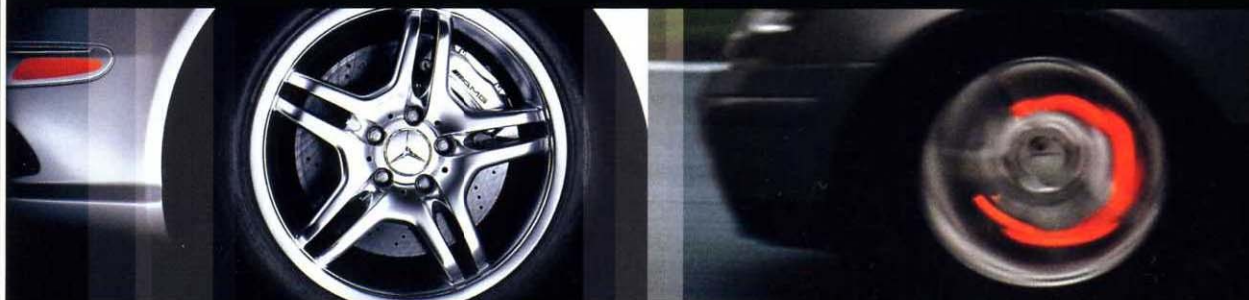
ORIGIN: AFFALTERBACH, GERMANY

# Tenacious brakes

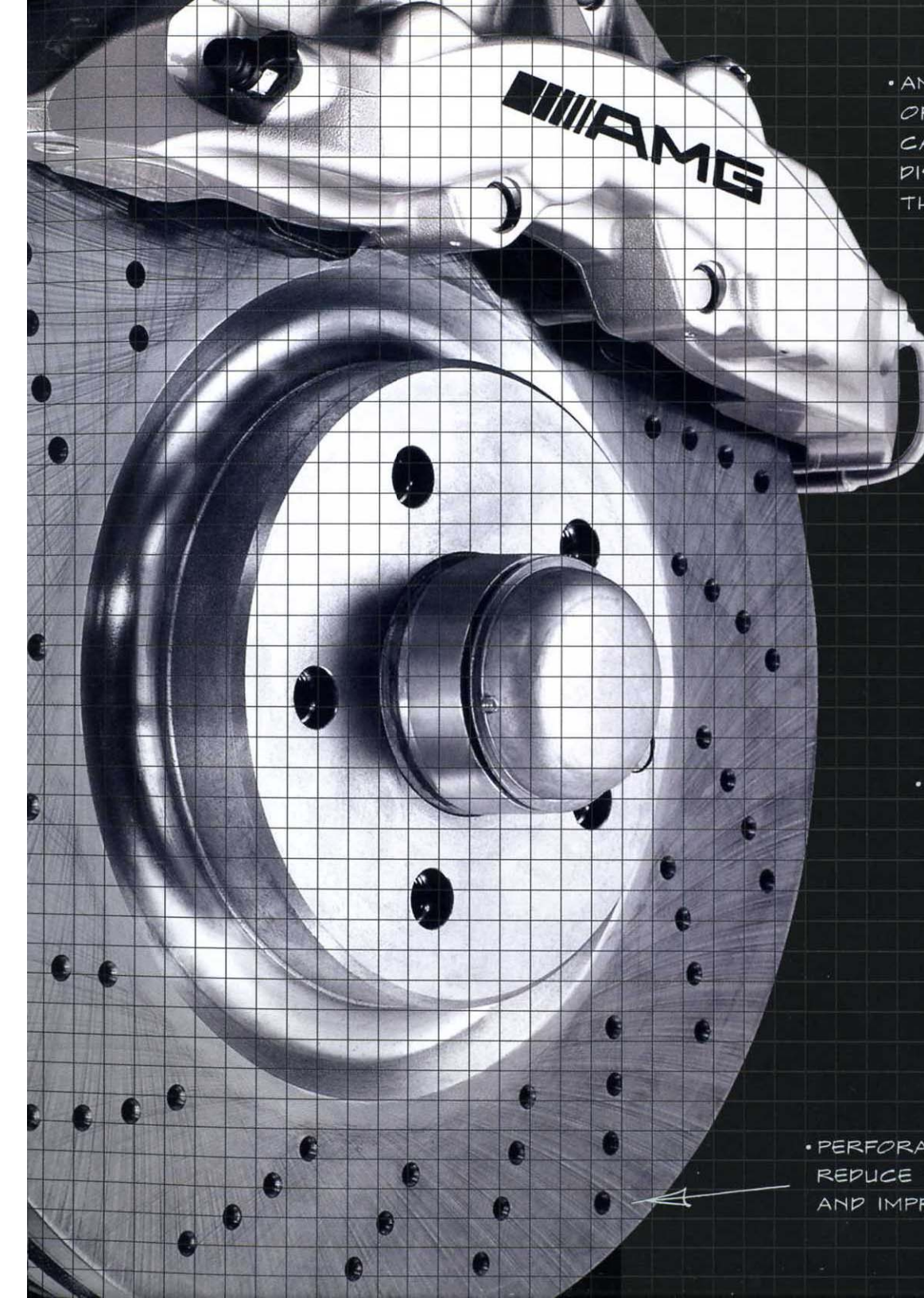
## IT'S ALL ABOUT THE BIG PEDAL

Sure, everyone understands about scorchingly fast 0-60 times. Or how pulling nearly 1g in a turn will solidly press you against your seat bolster. But what about braking? Does anybody consider braking numbers to be the sexiest part of performance? Probably not. But when you have to haul down from speed in a hurry, the brake pedal suddenly becomes the most important part of the vehicle. So it's especially comforting to know that Sensotronic — the world's first electrohydraulic braking system — is enhanced by AMG to match the awesome performance of the E55 and SL55. That the perforations in

the brake discs on select AMG models are cast in place, because drilling can create stress points. Or that we use oversized brake components because they provide even more stopping power. We could mention the punishment our braking systems receive in the unforgiving world of motorsport, or the rigorous testing down twisty Alpine mountain roads where failure is not an option. But really, the impressive stopping power, fade-resistant performance, and precise control of an AMG braking system need to be experienced. You can always look up the numbers later.








• AMG MODELS USE BRAUNY 4-PISTON  
OR MASSIVE 8-PISTON FRONT  
CALIPERS TO PROVIDE MORE EVEN  
DISTRIBUTION OF PRESSURE ACROSS  
THE HUGE PADS

• EMERGENCY-SENSING BRAKE  
ASSIST IS MODIFIED ON ALL  
AMG MODELS TO BETTER TAKE  
ADVANTAGE OF THE INCREASED  
BRAKING ABILITIES

• SENSOTRONIC BRAKE CONTROL— FOUND ON  
THE E55 AND SL55 — IS RECALIBRATED BY  
AMG FOR EVEN GREATER PERFORMANCE

• PERFORATED ROTORS  
REDUCE UNSPRUNG WEIGHT  
AND IMPROVE COOLING





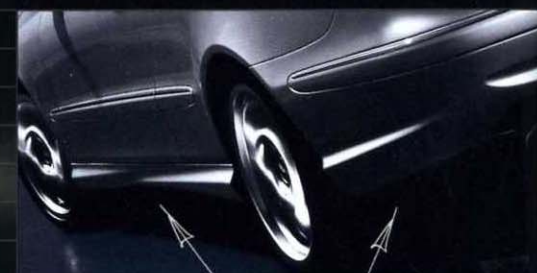
SUBJECT: EXTERIOR STYLING/  
INTERIOR DESIGN

ORIGIN: AFFALTERBACH, GERMANY

• E55 WHEELS USE A CORE OF VERMICULITE,  
AN INNOVATIVE WEIGHT-SAVING MATERIAL  
FROM OUR CHAMPIONSHIP DTM CAR



• WIRE MESH AIR INTAKES ARE  
VIRTUALLY INVISIBLE TO THE WIND,  
AND FEED COOLING AIR TO BRAKES  
AND ENGINE



• AMG SIGNATURE SIDE SILLS AND  
REAR APRON SET OFF THE MASSIVE  
WHEELS AND PROMINENT EXHAUST

## Predatory presence

### FLYING LOW

AMG cars are shaped by a master of aerodynamics – the wind. Building on what we've learned from racing, we carefully study airflow around the vehicle, making additions that help create downforce to plant the chassis more firmly on the road, help reduce drag for quicker acceleration, and help the vehicle slice through the wind with minimal interior noise. Large front air dams feature additional mesh intakes to maximize the flow of cooling air. Sculpted side sills, rear aprons and rear spoilers add to the authority and the aero. AMG wheels are light, strong and aerodynamically designed to allow the airflow across the brakes to help wick away heat. And, fitted with high-performance tires,<sup>1</sup> they help fill out the wheelwells for a decidedly purposeful look. Stainless-steel exhaust finishers give the perfect finishing touch. And perhaps the greatest benefit of all – like sleek executive jets, what looks good to the wind also looks exceptionally good to the eye.



# Dedicated driver's environment

## FROM THE COCKPIT

Whether you're challenging your favorite road or enjoying the serenity of your standard cruising altitude, AMG interiors are designed for your comfort and control. Step across stainless-steel door sill trim and into a lavishly equipped cabin with a special emphasis on the pilot in command. Unique features are suited to the mission of the vehicle, and, depending on model, include supportive sport seats with contrasting nubuck leather inserts, the G-suit-like support of Drive-Dynamic seats, and the rare thrill of a 200-mph speedometer.<sup>1</sup> You might find the opulence of special leather upholstery or the soothing effects of instruments backlit in white or amber. Select AMG models even feature buttons behind the spokes of the steering wheel to let you upshift and downshift without your hands ever leaving the wheel – not that we could ever get you to let go anyway.

<sup>1</sup> Obey speed laws. Top speed electronically limited to 155 mph.



• IF OUR RACECARS HAD  
INTERIORS LIKE THIS,  
WE'D NEVER GET OUR  
DRIVERS OUT!





# E 55

## IT'S TIME TO PUT YOUR FOOT DOWN

If your ultimate sport sedan doesn't provide 469 horsepower, it's not an E55 AMG. Make your demands known to the handcrafted 5,439-cc V-8, and 516 lb-ft of supercharged torque serves up 60 mph in just 4.5 seconds. Revel in the response of the 5-speed automatic transmission with AMG SpeedShift™ technology. Delight in manual-mode shifting, featuring steering-wheel-mounted fingertip controls. Scrub off speed with Sensotronic—the world's only electrohydraulic

braking system—specially recalibrated for performance by AMG, and featuring massive 8-piston front calipers gripping 14" perforated discs. Custom-tailored handling is provided by the adaptive damping of Airmatic Dual Control semi-active air suspension. Savor the luxury of Nappa leather seat bolsters, sanded nubuck leather inserts, and multicontour front seats. Or thrill to the active support of optional Drive-Dynamic seats that instantly inflate to provide additional support in turns. Black birdseye maple or optional burl walnut wood trim creates a rich ambience. Exterior presence is provided courtesy of AMG-design front and rear aprons and sculpted side sills. The icing on the cake: staggered-width tires<sup>2</sup> on 18" wheels constructed with a unique, lightweight vermiculite core, just like our class-dominating DTM racecar.



<sup>1</sup> Stated rates of acceleration are based upon manufacturer's track results and may vary depending upon model, environmental and road surface conditions, driving style, elevation and vehicle load.  
<sup>2</sup> Z-rated tires are optimized for performance driving and may provide reduced ride comfort, increased tire noise, substantially increased treadwear and greater susceptibility to damage compared with H-rated tires. Tire manufacturers may vary.





AMG

P: 012/013

MODEL: E 55 AMG

SPECS: 5,439-cc SUPERCHARGED V-8  
0-60 MPH: 4.5 sec<sup>1</sup>  
PEAK POWER: 469 hp  
PEAK TORQUE: 516 lb-ft





P: 028/029	
SUBJECT:	SPECIFICATIONS
ORIGIN:	AFFALTERBACH, GERMANY

ENGINE/DRIVETRAIN		E 55 AMG SPORT SEDAN	C 32 AMG SPORT SEDAN			
Engine	AMG-built <b>intercooled supercharged SOHC 24-valve 90° V-8</b> . High-pressure die-cast alloy cylinder block. Alloy cylinder heads. Reinforced crankshaft and valvetrain. Lightweight camshafts.		AMG-built <b>intercooled supercharged SOHC 18-valve 90° V-6</b> . High-pressure die-cast alloy cylinder block. Alloy cylinder heads. Reinforced crankshaft and valvetrain. Lightweight camshafts.			
Output	<b>Net power</b> 469 hp @ 6,100 rpm	<b>Net torque</b> 516 lb-ft @ 2,650–4,500 rpm	<b>Maximum engine speed</b> 6,500 rpm	<b>Net power</b> 349 hp @ 6,100 rpm	<b>Net torque</b> 332 lb-ft @ 4,400 rpm	<b>Maximum engine speed</b> 6,220 rpm
Dimensions	<b>Displacement</b> 331.9 cu in/5,439 cc	<b>Bore x stroke</b> 3.82 x 3.62 in/97.0 x 92.0 mm	<b>Compression ratio</b> 9.0:1	<b>Displacement</b> 195.2 cu in/3,199 cc	<b>Bore x stroke</b> 3.54 x 3.30 in/89.9 x 84.0 mm	<b>Compression ratio</b> 9.0:1
Fuel and ignition system	ME 2.8 engine management. Integrated <b>sequential multipoint fuel injection and phased twin-spark ignition</b> includes individual cylinder control of fuel spray, spark timing and phase, and antiknock. Electronic throttle. Two high-energy ignition coils and two spark plugs per cylinder, with 100,000-mile spark plug intervals.					
Fuel requirement	Premium unleaded gasoline, 91 pump octane.			Premium unleaded gasoline, 91 pump octane.		
Intake system	<b>Helical high-pressure supercharger</b> with <b>liquid-to-air intercooler</b> and electromechanical clutch. 11.6 psi maximum boost.			<b>Helical high-pressure supercharger</b> with <b>liquid-to-air intercooler</b> and electromechanical clutch. 16.0 psi maximum boost.		
Transmission	AMG-enhanced <b>driver-adaptive electronic 5-speed automatic</b> with driver-selectable comfort mode and instrument-cluster display of selected gear range. <b>AMG SpeedShift™</b> programming provides up to 35% faster gear changes, automatically downshifts during braking, prevents unwanted upshifting while cornering, offers one-touch selection of the best gear for maximum acceleration, and features torque converter lockup in all forward gears.					
Shift controls	<b>Touch Shift</b> allows driver to manually downshift and allow upshifts by nudging the shift lever left or right from the Drive position. <b>Fingertip manual mode</b> allows direct-access shifting through forward gears via buttons on back of upper steering-wheel spokes or via Touch Shift feature of shift lever, and will automatically intervene only to induce an upshift at redline and select 1st gear when the vehicle stops.			<b>Touch Shift</b> allows driver to manually downshift and allow upshifts by nudging the shift lever left or right from the Drive position.		
Rear axle ratio	2.65:1			3.06:1		
Acceleration, 0–60 mph <sup>1</sup>	4.5 sec			4.9 sec		

CHASSIS		E 55 AMG	C 32 AMG
Electronic Stability Program (ESP) and Automatic Slip Control (ASR)	Electronic Stability Program (ESP) and Automatic Slip Control (ASR)	AMG-recalibrated ESP compares the driver's intended course, via steering and braking inputs, to the vehicle's response, via lateral acceleration, rotation (yaw) and individual wheel speeds. ESP then brakes individual front or rear wheels and/or reduces excess engine power as needed to help correct understeer (plowing) or oversteer (fishtailing). ESP also incorporates ASR traction control, to counteract drive-wheel slip. <sup>2</sup>	
	Suspension, 4-wheel independent	<b>Front:</b> 4-link design. Stabilizer bar. Antidive geometry. <b>Rear:</b> 5-arm multilink with aluminum links and wheel-hub carriers. Stabilizer bar. Geometry for antisquat and alignment control. <b>Airmatic Dual Control:</b> AMG-tuned semi-active suspension instantaneously adjusts spring rates as driving dynamics change. Electronically controlled pneumatic AMG spring-struts integrate variable-rate shock absorbers and coil springs. AMG-recalibrated <b>Adaptive Damping System (ADS II)</b> automatically selects one of four damping profiles for each spring-strut every time a wheel changes its direction of up-down travel. <b>Dual driver-selectable Sport modes</b> engage firmer damping profiles either full-time or at lower thresholds of body movement. <b>Automatic 4-wheel level control</b> includes driver-selectable ride-height control, and automatic speed-sensitive lowering at higher speeds or with Sport mode selection. <sup>3</sup>	
Steering	Steering-wheel turns, lock-to-lock	<b>Rack-and-pinion</b> with speed-sensing power assist and integral hydraulic damper. 2.8	
	Turning circle, curb-to-curb	37.4 ft/11.4 m	
Wheels, aluminum-alloy	Wheels, aluminum-alloy	Polished <b>AMG double-spoke</b> design. <b>Front:</b> 8.0J x 18. <b>Rear:</b> 9.0J x 18.	
	Tires, steel-belted radial	High-performance. <sup>4</sup> <b>Front:</b> 245/40ZR18. <b>Rear:</b> 265/35ZR18 XL.	
Brakes	Brakes	AMG-enhanced 4-wheel disc. <b>Front:</b> Perforated and ventilated 14.2" discs with AMG 8-piston fixed-type calipers. <b>Rear:</b> Perforated and ventilated 13.0" discs with 4-piston fixed-type calipers.	
	Sensotronic Brake Control	AMG-recalibrated <b>Sensotronic electrohydraulic braking system</b> transmits brake pressure individually to each wheel based on driver input and various vehicle parameters. Sensotronic optimizes brake pressure at each wheel during normal braking, emergency stopping and ESP activity. <sup>2</sup> Sensotronic also includes Soft Stop, automatic brake drying based on windshield-wiper use, and predictive brake priming for faster brake response.	
ABS and Brake Assist	ABS and Brake Assist	AMG-recalibrated Antilock Braking System (ABS) and emergency-sensing Brake Assist. <sup>5</sup>	
		AMG-recalibrated Antilock Braking System (ABS) and emergency-sensing Brake Assist. <sup>5</sup>	

DIMENSIONS		E 55 AMG	C 32 AMG
Overall length	Overall length	190.3 in/4,833 mm	178.2 in/4,526 mm
	Overall width	71.3 in/1,810 mm	68.0 in/1,728 mm
Overall height	Overall height	57.2 in/1,454 mm	55.1 in/1,400 mm
	Coefficient of drag	Information not available.	0.27
Wheelbase	Wheelbase	112.4 in/2,857 mm	106.9 in/2,715 mm
	Track, front	61.4 in/1,559 mm	58.8 in/1,493 mm
Track, rear	Track, rear	61.1 in/1,552 mm	57.6 in/1,464 mm
	Curb weight	Information not available.	3,540 lb/1,605 kg