

1997 MERCEDES-BENZ

The S320 Sedan



The Long-wheelbase Sedans



The S500 Coupe



The S 320 Sedan is powered by a 3.2-liter DOHC 24-valve inline 6-cylinder engine. Matched to a new driver-adaptive 5-speed electronically controlled transmission, the S 320 is rated at 228 horsepower and 232 lb-ft of torque. The result is driving ease few luxury sedans can capture. And fewer still can equal the S 320 for value. In fact, IntelliChoice's *The Complete Car Cost Guide* has rated the S 320 a "Best Overall Luxury Value" three years in a row.¹ One reason the car offers such outstanding value is its long list of standard features, which includes dual side-impact air bags and pneumatically assisted door and trunk closing.

1 ©1996, 1995 and 1994, IntelliChoice, Inc., Campbell, CA, <http://www.intellichoice.com>

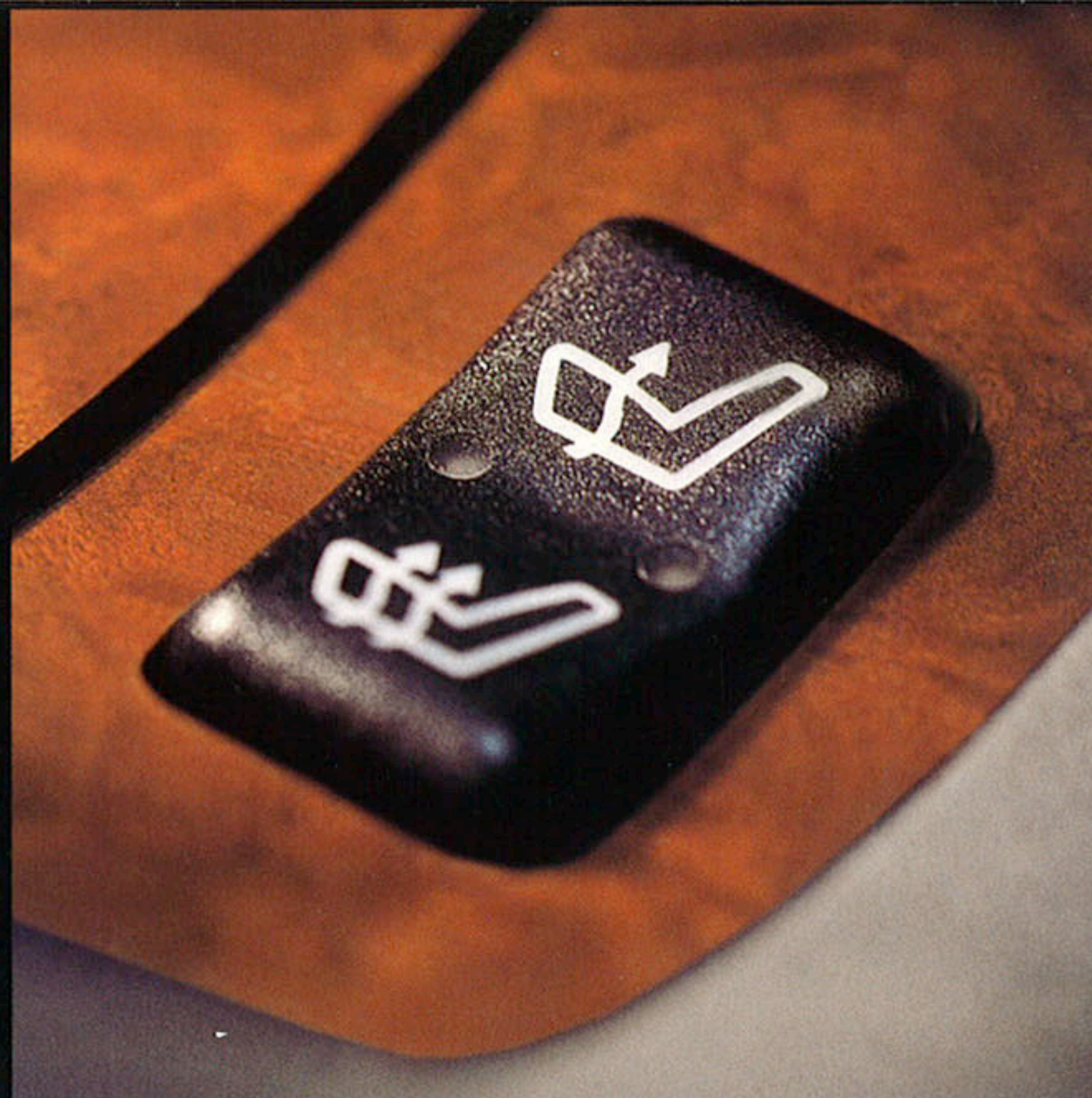
The S 500 Coupe. The latest in a rich tradition of sporting coupes from Mercedes-Benz, the 1997 S 500 Coupe remains that rare automotive design: the true, pillarless hardtop coupe. It's a more painstaking approach to coachbuilding, but one Mercedes-Benz insists yields a uniquely rewarding driving experience. Cushioned by new Nappa leather, a driver can't help but feel a powerful intimacy with the open road. A feeling no doubt enhanced by the performance of the S 500 Coupe's remarkable 315-horsepower 5.0-liter V-8 engine.

The S 320 Long-wheelbase Sedan. The same smooth 228-horsepower inline 6-cylinder engine as the S 320 Sedan powers the S 320 Long-wheelbase Sedan. Nearly four additional inches of body length provide increased rear-seat headroom and legroom. And like the S 320 Sedan, the S 320 Long-wheelbase Sedan was rated among the best overall values in the luxury car category in 1996's *The Complete Car Cost Guide*.

The S 420 Long-wheelbase Sedan features one of the most advanced engines ever put in a production Mercedes: a 32-valve V-8 rated at 275 hp and 295 lb-ft of torque. The electronically controlled 5-speed automatic transfers power seamlessly. Four-wheel ventilated discs are part of a proportional braking system which uses a g-force sensor to vary braking power between the front and rear wheels, to help prevent excessive rear-wheel braking in corners and reduce front brake-pad wear during straight-line stops.

The S 500 Long-wheelbase Sedan is powered by a 5.0-liter V-8 generating 315 hp and 347 lb-ft of torque. The S 500 Sedan offers the full complement of S-Class luxury. Heated front and rear seats are standard, as are Xenon High Intensity Discharge headlamps, whose blue-white light more closely approximates the eye's perception in natural daylight. And automatic rear-axle level control helps to maintain proper ride height, even with a full complement of passengers and their luggage.

The electrically adjustable rear seat back (not shown), available exclusively on the S 500 Sedan, lets your rear-seat passengers adjust the recline angle or raise their head restraints. Also for the S 500 Sedan, the 4-place multicontour seating package includes individual, electrically adjustable front and rear seats upholstered in soft Nappa leather and divided by wood-trimmed consoles.



Electrically heated front seats are optional on the S 320 and S 420 models. Individual controls (shown at left) allow the driver and front passenger to select either of two heating modes: "normal," which provides soothing warmth for approximately 30 minutes, and "rapid," which provides more intense heating for approximately five minutes before reverting to the "normal" mode.

Optional Equipment

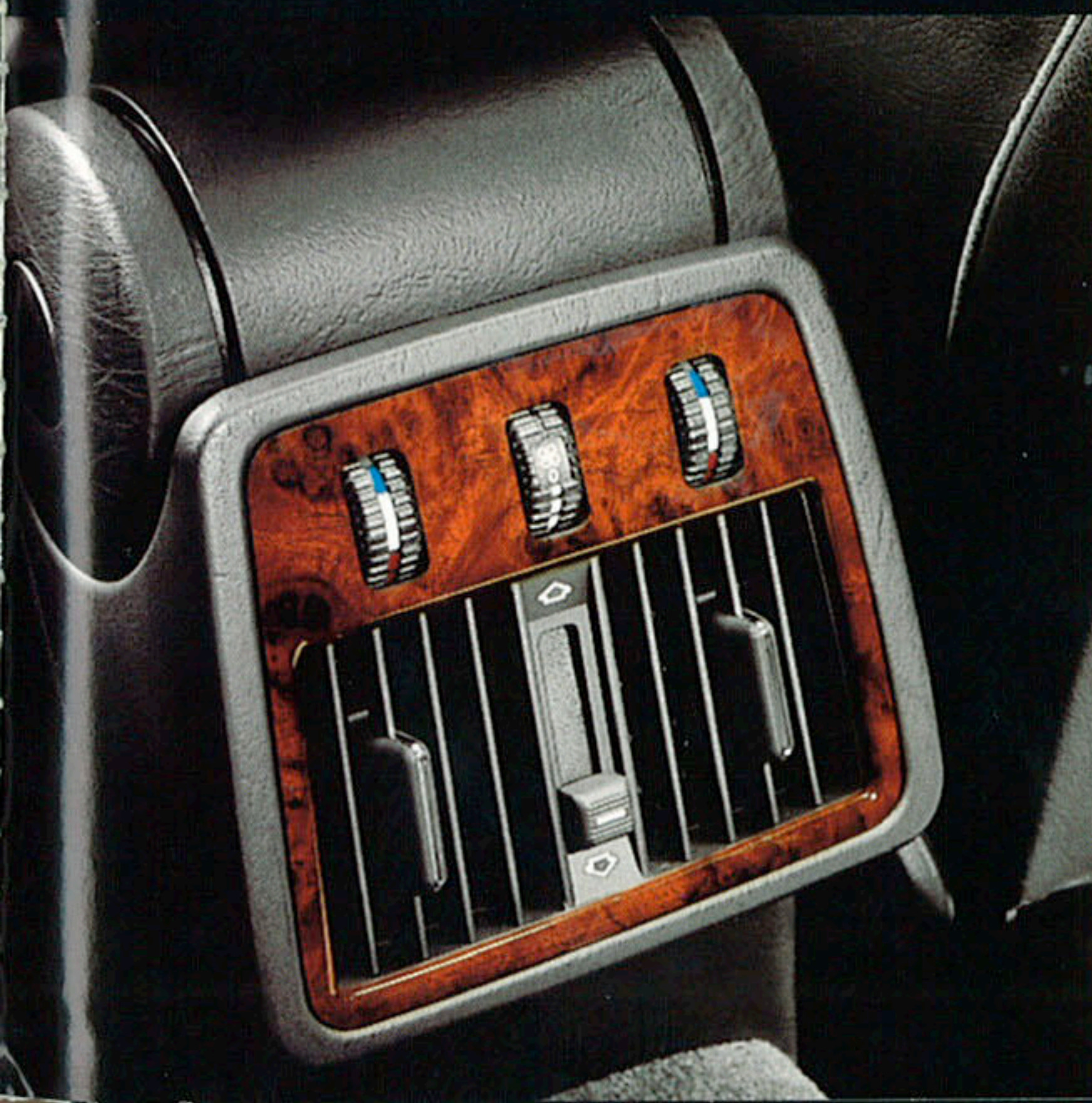
Multicontour front seat backs (shown at left, and individually optional on all S-Class models) let you precisely conform the contour of the seat backs by inflating or deflating internal supports at any of three points and adjusting the side bolsters in and out. Xenon High Intensity Discharge headlamps (shown at right, optional on S 320 and S 420 models) more closely approximate natural daylight, to enhance your nighttime vision. The new Parktronic system (shown below, optional on all sedans) helps ease parking in tight spaces. Parktronic calculates your car's distance from nearby objects using sound waves, and alerts you via audible and visual indicators inside the car.



Four-zone climate control (optional on all S-Class sedans and shown at right) includes individual left and right temperature controls for both front and rear passengers. Airflow can be adjusted to control both volume and direction. An optional rear window sunshade (not shown) is made of fine mesh, and raises or lowers at the touch of a button.



Every S-Class is prewired for the Mercedes-Benz compact disc changer. The third-generation changer design features quick disc-change time and better shock resistance. The 6-disc CD changer is trunk-mounted. Its controls are integrated with the in-dash radio, so playing a disc can be as easy as selecting a radio station. And there's no external evidence that you have this desirable feature.



Both optional Mercedes-Benz cellular phones offer voice-activated dialing. The docking portable cellular phone lets you remove the handset, even in mid-call, and continue your conversation when you leave the car.

For safety reasons, the driver should not use the cellular telephone while the vehicle is in motion. We encourage the driver to stop the vehicle in a safe location before answering or placing a call.



The Adaptive Damping System (ADS, available on S 500 models only) allows the driver to select from two suspension programs: "comfort" for normal driving, or "sport" for additional handling response. The new Electronic Stability Program (ESP, optional on the S 420 and S 500) dramatically enhances handling stability by helping to correct oversteer and understeer while cornering.



S-Class

S 320 Sedan

S 320 Long-wheelbase Sedan

S 420 Long-wheelbase Sedan

S 500 Long-wheelbase Sedan

S 500 Coupe



Body and Chassis

Body construction: Monocoque

Front suspension: Independent double wishbone with triangular lower control arms, antidive geometry and stabilizer bar. Separate gas-pressurized shock absorbers and coil springs.

Rear suspension: Independent 5-arm multilink with geometry for antilift, antisquat and alignment control and stabilizer bar. Separate single-tube gas-pressurized shock absorbers and coil springs (S320, S420). Hydropneumatic shock absorbers and automatic level control (S500).

Steering: Recirculating ball with speed-sensitive power assist and hydraulic damper, 3.2 turns lock-to-lock.

Wheels: Aluminum-alloy. 7.5J x 16.

Tires: All-season steel-belted radial.
225/60R16 98H (S320).
235/60R16 100H (S420, S500).

Brakes: 2-circuit power-assisted. Ventilated front discs with 4-piston calipers. Rear discs (ventilated on S420, S500) with 2-piston calipers. Front/rear brake force proportioning (S420, S500). Antilock Braking System (ABS).

Traction and Stability Systems

Automatic Slip Control (ASR): Standard ASR senses drive-wheel slip and individually brakes the slipping wheel or reduces throttle until available traction is regained.

Electronic Stability Program (ESP): Optional ESP (S420, S500) compares the driver's steering and braking inputs to the car's wheel speeds, lateral acceleration and rotation. ESP individually brakes any wheel and/or reduces engine torque to help correct oversteer or understeer.

Drivetrain

	S 320	S 420	S 500
Engine type	DOHC 24-valve inline 6-cylinder	Twin-DOHC 32-valve aluminum-alloy V-8	Twin-DOHC 32-valve aluminum-alloy V-8
Displacement	3,199 cc	4,196 cc	4,973 cc
Net power	228 hp @ 5,600 rpm	275 hp @ 5,700 rpm	315 hp @ 5,600 rpm
Net torque	232 lb-ft @ 3,750 rpm	295 lb-ft @ 3,900 rpm	347 lb-ft @ 3,900 rpm
Compression ratio	10.0:1	11.0:1	11.0:1
Maximum engine speed	6,400 rpm	6,000 rpm	6,000 rpm
Fuel injection, ignition and intake	ME 2.1 sequential multipoint fuel injection and ignition with individual cylinder control and electronic throttle, 2-stage tuned-resonance intake manifold, variable intake-valve timing	ME 1.0 sequential multipoint fuel injection and ignition with individual cylinder control and electronic throttle, variable intake-valve timing	ME 1.0 sequential multipoint fuel injection and ignition with individual cylinder control and electronic throttle, variable intake-valve timing
Fuel requirement	Premium unleaded, 91 pump octane	Premium unleaded, 91 pump octane	Premium unleaded, 91 pump octane
Transmission	Driver-adaptive electronic 5-speed automatic	Driver-adaptive electronic 5-speed automatic	Driver-adaptive electronic 5-speed automatic
Rear axle ratio	3.45:1	2.82:1	2.65:1

Exterior Dimensions

	S 320 Sedan	S 420	S 500
Wheelbase	119.7 in	3,040 mm	
Overall length	201.3 in	5,113 mm	
Overall height	58.5 in	1,486 mm	
Overall width	74.3 in	1,886 mm	
Front track	63.2 in	1,606 mm	
Rear track	62.2 in	1,579 mm	
Turning circle	39.9 ft	12.2 m	
Coefficient of drag	0.32		
Curb weight	4,480 lb	2,030 kg	
Long-wheelbase sedans			
Wheelbase	123.6 in	3,140 mm	
Overall length	205.2 in	5,213 mm	
Overall height	58.5 in	1,486 mm	
Overall width	74.3 in	1,886 mm	
Front track	63.2 in	1,606 mm	
Rear track	62.2 in	1,579 mm	
Turning circle	41.0 ft	12.5 m	
Coefficient of drag	0.32		
Curb weight (S320)	4,500 lb	2,040 kg	
Curb weight (S420)	4,650 lb	2,110 kg	
Curb weight (S500)	4,700 lb	2,130 kg	
S 500 Coupe			
Wheelbase	115.9 in	2,945 mm	
Overall length	199.4 in	5,065 mm	
Overall height	56.9 in	1,445 mm	
Overall width	75.3 in	1,912 mm	
Front track	63.2 in	1,606 mm	
Rear track	63.5 in	1,613 mm	
Turning circle	38.3 ft	11.7 m	
Coefficient of drag	0.30		
Curb weight	4,695 lb	2,130 kg	

Performance

	S 320	S 420	S 500
Acceleration, 0-60 mph¹	8.9 sec	8.1 sec	7.2 sec
Fuel economy			
EPA estimate²	17 mpg⁴	16 mpg	15 mpg
Highway estimate³	24 mpg⁴	22 mpg	21 mpg⁵

¹ 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.

² 1997 EPA estimated fuel economy. Compare the estimated mpg to the estimated mpg of other vehicles. You may get different mileage depending on how fast you drive, weather conditions and trip length.

³ Your actual highway mileage will probably be less than the highway estimate.

⁴ 1996 figures shown for S320. 1997 figures not available at time of printing.

⁵ S500 Sedan estimate shown. S500 Coupe highway estimate is 22 mpg.

Exterior Features

Power tilt/sliding tinted glass sunroof. Dual windshield wipers with heated park position. Rain sensor automatically adjusts intermittent wiper delay. Heated windshield washer reservoir, lines and nozzles. Electrically heated rear window. Dual heated power mirrors, included in driver's seat memory, with power fold-in. Auto-dimming driver-side mirror.

Variable-focus halogen headlamps. Xenon High Intensity Discharge headlamps (S500). Halogen front foglamps. Heated headlamp washers with wipers (S320 LWB Sedan, S420, S500). Red rear foglamp. Night security illumination.

Infrared-remote central locking of doors, trunk lid and fuel filler. Windows and sunroof can be closed with remote or key while locking car. Automatic antitheft alarm system is electronically engaged whenever car is locked with remote or key. Coded electronic transponder embedded in key disables engine computer whenever key is removed from ignition. Unlocking car with remote or key automatically activates interior lights. Infrared-remote trunk opener. Valet trunk lockout. Automatic retracting trunk handle. Pneumatic door and trunk closing assist.

Interior Features

CFC-free automatic climate control with individual left and right temperature and airflow controls, digital display, electrostatic dust filter, activated charcoal filter with smog-sensing automatic recirculation mode, residual-heat REST mode and adjustable rear-compartment air vents.

Power dual-pane windows, all with express up/down control (S500 Coupe rear windows express-down only). Electrically adjustable tilt/telescoping steering column, included in driver's seat memory. Electronic cruise control. Auto-dimming rearview mirror. Integrated 3-button garage door opener, compatible with many opener systems. Parktronic electronic audio-visual parking assistance system (S500 Coupe only). Remote trunk opener with valet lockout.

Delayed-shutoff front courtesy lamps. Rear-compartment courtesy lamps. Entrance lamps in all doors. Front and rear reading lamps. Illuminated visor vanity mirrors. Illuminated rear-compartment vanity mirrors (sedans). Front and rear center armrests with enclosed storage and dual beverage holders. Storage pockets in doors. Trunk cargo net.

Optional Equipment

Electronic Stability Program (ESP, S420 and S500).
Adaptive Damping System (ADS, S500).
Automatic rear-axle level control (S320, S420).
Parktronic parking assistance system (all sedans).
Xenon High Intensity Discharge headlamps (S320, S420).
Headlamp washers with wipers (S320 Sedan).
Integrated trunk-mounted 6-disc CD changer.¹
Integrated mobile cellular telephone.¹
Integrated docking portable cellular telephone.¹
Heated front seats (S320, S420).
Multicontour front seats with electropneumatically adjustable seat backs and side bolsters.
Nappa leather-upholstered 4-place multicontour seating package (S500 Sedan).
Electrically adjustable rear seat back and head restraints (S500 Sedan).
Rear-compartment climate control with individual left and right temperature controls (all sedans).
Electric rear-window sunshade.

¹ Dealer-installed.

Restraint Systems

Supplemental Restraint System (SRS): Driver and front passenger are each provided with a front air bag, door-mounted side-impact air bag, knee bolster and seat-belt Emergency Tensioning Retractor (ETR). Occupancy sensor prevents front passenger air bags from needlessly deploying if seat is unoccupied. Never use a rear-facing child seat where there is a front air bag.

Seat belts: 3-point front, attached to seat frames, with automatically height-adjusting shoulder belts (sedans) or automatic seat belt presenters (S500 Coupe). 3-point outboard rear, with automatically height-adjusting shoulder belts. Selectable locking retractors help secure child seats.

Head restraints: Driver and front passenger: adjustable electrically for height, manually fore-aft. Outboard rear passengers: adjustable fore-aft, with dashboard retraction control to improve driver's rearward vision when rear seat is unoccupied. Electric control allows driver or rear passengers to raise and lower rear head restraints (S500 Coupe).

Interior Dimensions

Front compartment

All sedans

Headroom	38.0 in	965 mm
Legroom	41.3 in	1,049 mm
Hiproom	57.1 in	1,450 mm
Shoulder room	61.7 in	1,568 mm

S500 Coupe

Headroom	36.5 in	926 mm
Legroom	41.7 in	1,058 mm
Hiproom	56.7 in	1,440 mm
Shoulder room	61.7 in	1,566 mm

Rear compartment

S320 Sedan

Headroom	37.8 in	960 mm
Legroom	36.1 in	917 mm
Hiproom	57.6 in	1,462 mm
Shoulder room	61.3 in	1,556 mm

Long-wheelbase sedans

Headroom	38.5 in	978 mm
Legroom	39.6 in	1,007 mm
Hiproom	57.6 in	1,462 mm
Shoulder room	61.3 in	1,556 mm

S500 Coupe

Headroom	37.2 in	945 mm
Legroom	31.5 in	800 mm
Hiproom	53.1 in	1,350 mm
Shoulder room	56.5 in	1,436 mm

Cabin capacity

S320 Sedan	108.1 cu ft	3,061 liters
LWB sedans	112.4 cu ft	3,183 liters
S500 Coupe	92.7 cu ft	2,625 liters

Trunk capacity

All sedans	15.6 cu ft	444 liters
S500 Coupe	14.2 cu ft	404 liters

Seating and Trim

12-way power front seats and head restraints. 3-position memory for each front seat. Driver's seat memory also includes settings for steering column and outside mirrors. Pneumatically adjustable lumbar support. Heated front seats (S500). Front-seat courtesy feature for easier rear-seat access (S500 Coupe).

Heated rear seats (S500 Sedan). Individual rear seats with electrically adjustable head restraints (S500 Coupe).

Color-keyed leather-trimmed steering wheel and gearshift knob. Calyptus wood trim (S320). Burl walnut trim (S420, S500). Leather and walnut trimmed gearshift knob (S500 Coupe).

Leather upholstery, including seat backs, map pockets, head restraints and door trim inserts. Nappa leather seat upholstery (S500 Coupe). Velour floor carpeting and floor mats.

Instrumentation

Electronic analog speedometer, tachometer, fuel economy indicator, fuel gauge, coolant temperature gauge, oil pressure gauge and quartz clock, all backlit with lighted indicators.

Electronic digital odometer, resettable trip meter and outside temperature indicator. Warning lights for unfastened seat belt, exterior light bulb failure, brake system/parking brake, front brake pad wear, self-diagnosis of SRS, ABS, traction control and engine electronics, and low fuel, engine oil, coolant and washer fluid levels. Audible alert for parking brake left on.

Audio System

11-speaker Bose® Beta sound system. Volume adjusts automatically as driving speed changes.

Anti-theft-coded AM/FM stereo/weatherband radio with scan and dual-sensitivity seek tuning, autoreverse cassette player and integrated controls for optional compact disc changer.

Automatic electric AM/FM/cellular antenna.

Factory prewiring for optional Mercedes-Benz integrated compact disc changer and integrated mobile or docking portable cellular telephone.

