

ENGINE		
	S 550	S 600
Engine Size and Type	5,461-cc DOHC 32-valve V-8 Die-cast aluminum alloy cylinder block. Aluminum alloy heads.	5,513-cc SOHC 5.5-liter bi-turbo 36-valve V-12 Die-cast aluminum alloy cylinder block. Aluminum alloy with die-cast magnesium cylinder heads.
Net Power	382 hp @ 6,000 rpm	510 hp @ 5,750 rpm
Net Torque	391 lb-ft @ 2,800-4,800 rpm	612 lb-ft @ 1,800-3,500 rpm
Compression Ratio	10.7:1	9.0:1
Fuel and Ignition System	Sequential fuel injection and twin-spark ignition. Electronic throttle. 2-stage resonance intake manifold.	ME 2.7.1 and twin-spark ignition. Electronic throttle.
Fuel Requirement	Premium unleaded gasoline, 91 pump octane.	Premium unleaded gasoline, 91 pump octane.
Fuel Tank (capacity—reserve)	23.8 gal/90 liters—2.9 gal/11 liters	23.8 gal/90 liters—2.9 gal/11 liters
DRIVETRAIN		
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Transmission Type	7-speed automatic.	5-speed automatic.
Transmission Features	Steering wheel mounted shift buttons allow for Touch Shift gear selection. Electronically controlled shifting. Driver-adaptive programming adjusts shift points to the driver's current driving style. Driver-selectable Comfort mode starts vehicle moving in 2nd gear, or a 2nd Reverse gear, and upshifts at lower rpm to help improve control on slippery surfaces.	
Drive Configuration	Rear-wheel drive.	Rear-wheel drive.
Rear Axle Ratio	2.65:1	2.65:1
TRACTION/STABILITY		
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Electronic Stability Program (ESP)	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 integrates all-speed traction control, which senses drive-wheel slip under acceleration and individually brakes the slipping wheel or wheels, and/or reduces excess engine power until control is regained. ¹	
PERFORMANCE		
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Acceleration ²	5.4 seconds	4.5 seconds
Fuel Economy, EPA Estimate ³	16 mpg	Unavailable at time of publication. See your dealer for details.
Highway Estimate ⁴	24 mpg	Unavailable at time of publication. See your dealer for details.
CHASSIS		
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Front Suspension	Four-link suspension, antilift control, gas shock absorbers, stabilizer.	
Rear Suspension	Multilink independent suspension, antisquat and antidive system.	
Airmatic Semi-Active Suspension with Adaptive Damping System (ADS-II)	ADS-II is an electronically controlled system that instantly adjusts Airmatic's sprint-struts to the road and driving conditions to optimize ride and handling.	Not available S600.
Active Body Control (ABC)	ABC, an active suspension system, utilizes a coil spring and an electronically controlled hydraulic cylinder in series, plus a separate gas-pressurized shock absorber at each wheel. Using a total system pressure of up to 2,900 psi, ABC continually adjusts each wheel's suspension to counteract vibration, pitch, dive, squat and roll. ABC also provides automatic 4-wheel level control, driver-selectable ride height and automatic lowering at higher speed. <i>Standard S600. Optional S550.</i>	
Steering	Power-assisted, speed-sensitive rack-and-pinion steering.	
WHEELS/TIRES		
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Wheels	18" 9-spoke light-alloy 18" x 8.5" ⁵	18" 5-spoke light-alloy 18" x 8.5"/18" x 9.5" staggered ⁵
Tires	255/45 R18 all-season ⁵	255/45 R18 front, 275/45 R18 high performance ⁵
BRAKES		
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Brake System	Dual-circuit power-assisted 4-wheel disc.	
Brake Disc - Calipers, Front	13.8" ventilated, cast iron, 4-piston fixed.	14.2" ventilated, cast iron, 8-piston fixed.
Brake Disc - Calipers, Rear	12.6" ventilated, cast iron, 1-piston floating.	13" ventilated, cast iron, 4-piston fixed.
Antilock Braking System (ABS)	ABS senses impending wheel lockup under heavy braking and pumps the front brakes individually or the rear brakes together (to help maintain stability) as needed up to 30 times per second, to prevent lockup and maintain steering ability.	
Brake Assist (BAS)	BAS senses emergency braking via the speed at which the driver presses the brake pedal and immediately applies maximum available power boost, potentially reducing the overall stopping distance by eliminating the delay caused by a common human tendency not to brake hard enough, soon enough. Reducing pressure on the brake pedal releases Brake Assist. ⁶	

S 550	S 600	INSTRUMENTATION
●	●	Digital display of speedometer, odometer and Touch Shift gear/mode selection. Electronic analog tachometer and fuel gauge.
●	●	Multifunction display in instrument cluster, scrolled via steering-wheel controls to operate and display various menus and vehicle features: -Outside temperature indicator. -Digital speedometer, Maintenance System (see below) and engine oil-level check. -Radio station, changer, optional SIRIUS Satellite Radio station! -Hard-drive-based navigation system route guidance! -Vehicle reminder and message indicator. -Driver-programmable settings for instruments, lighting, vehicle and convenience features. -Trip computer (elapsed time, fuel consumption, distance to empty). -Distronic Plus Radar cruise control settings. ¹
●	●	Mercedes-Benz Maintenance System Plus displays distance remaining to next basic maintenance service, indicates type of service due and provides automatic reminder feature when service interval draws near. System also monitors brake-pad wear.
●	●	Onboard tire-pressure monitoring system allows driver to check the inflation pressure of all four mounted tires via the multifunction display.
●	●	Messages/audible reminders for open door or sunroof; exterior lamp failure; low fuel, engine oil, coolant or washer fluid; and to switch off headlamps or remove ignition key.

S 550	S 600	LOCKING AND SECURITY
●	●	SmartKey uses an electronic code to unlock the steering column and ignition. Removing SmartKey from ignition disables engine computer to help prevent unauthorized starting.
●	●	SmartKey remote control integrates: Door lock/unlock buttons, trunk opener, removable valet key and panic alarm. Driver may selectively unlock only the driver's door and fuel filler, or all doors plus the trunk and fuel filler.
●	●	SmartKey offers infrared-remote opening/closing of windows and sunroof, and can remotely turn on Active Ventilated front seats (if equipped).
●	●	Driver-programmable driveaway locking automatically locks the doors when the car reaches 9 mph.
●	●	Night security illumination uses the car's exterior lights to help illuminate a path after parking.
●	●	Locator lighting uses the car's lights to help light a return path when the car is remote-unlocked in the darkness. Unlocking car activates illuminated entry system.
●	●	Anti-Theft Alarm Notification with towaway protection and remote panic feature.
●	●	Emergency trunk release, located inside trunk and illuminated for 60 minutes after trunk is closed.
●	●	Integrated 3-button garage door control, compatible with HomeLink [®] components and some other systems.
●	●	Tele Aid GPS-based Stolen Vehicle Recovery allows law enforcement agencies to track and recover stolen vehicle. ²
●	●	Tele Aid Remote Door Unlock allows owner to have doors automatically unlocked in the event the SmartKey becomes locked inside vehicle. ²
●	●	Tele Aid Automatic Alarm Notification alerts Mercedes-Benz to contact vehicle owner if antitheft alarm sounds. ²

S 550	S 600	RESTRAINT SYSTEMS
●	●	Integrated Restraint System: ³ -Driver and front passenger are each provided with an adaptive dual-stage front air bag, side-impact air bag, and 3-point seat belt with an Emergency Tensioning Device (ETD) and adaptive belt force limiter. 2nd-Row outboard passengers are each provided with a 3-point seat belt with ETD, belt force limiter and side-impact air bag.
●	●	Window Curtain Air Bags: ³ -In a side impact exceeding a preset threshold, a multichamber air bag deploys along the front and rear side windows on the affected side of the car. -Integrated rollover sensor automatically deploys the ETDs and, if deemed necessary, the Window Curtain Air Bags in the event of a detected rollover.
●	●	Adaptive dual-stage front air bags are deployed in response to frontal impact severity exceeding a preset deployment threshold. ³
●	●	PRE-SAFE helps prepare occupants for a possible collision before it occurs. If PRE-SAFE senses a possible accident based on brake pedal application pattern, steering wheel input pattern, or ESP activation level, it will take action to help protect you better depending on the situation including: -Electrically tensioning the front seat belts. -Adjusting the front passenger seat (and rear seats, with Rear Seat Package) for potentially more favorable seat-belt and air-bag effectiveness. -Inflates side bolsters and seat cushions of front seats on vehicles equipped with multicontour seats. -(If vehicle is about to spin out of control) closing the sunroof (not applicable with Panorama Roof) and shutting the windows. -If no collision occurs, PRE-SAFE releases the front seat-belt tensioners, and occupants may readjust their seats, the windows and the sunroof.
●	●	Occupant Classification System: ⁴ -OCS automatically turns the front passenger's front air bag on or off based on the weight category determined by weight sensor readings from the front passenger seat.
●	●	ETDs are deployed in a front or rear impact exceeding a preset threshold of severity, or certain rollovers. A front ETD will not deploy if seat belt is unfastened.
●	●	Automatic Collision Notification engages Tele Aid SOS function if an air bag or ETD deploys. ²
●	●	Universal LATCH system (Lower Anchors and Tethers for Children) at 2nd-row seating positions. Selectable passenger seat-belt retractors help secure child seats. ²
●	●	Front seat belts include automatically height-adjustable shoulder belts and lower points attached to seat frames.
●	●	Front head restraints, adjustable for height and fore-aft.
●	●	Automatically height-adjusting rear shoulder belts.
●	●	Three rear-seat head restraints, manually adjustable fore-aft. All three head restraints can also be remotely retracted by the driver for improved rearward vision when the rear seats are unoccupied. On models with power rear seats, rear head restraints rise automatically when seat belt is fastened.

		automatically illuminate at dusk.
●	●	Programmable daytime running lamps with auto-on override in darkness.
●	●	Automatic lamp substitution uses a nearby lamp if a critical bulb fails.
●	●	Touch Turn Signals flash three times with one touch of turn-signal lever. Auxiliary LED turn signal indicators are integrated into side mirror housings.

S 550	S 600	INTERIOR
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●	●	COMAND controller provides easy and convenient operation of the vehicle's systems, such as audio, climate control, navigation, telephone and most vehicle settings.
●	●	Multifunction steering wheel provides additional convenient controls for basic audio, voice control and phone functions, as well as operation of the multifunction display.
●	●	Fingertip shift buttons behind steering wheel.
●	●	Built-in phone keypad located beneath palm-rest for easy access to optional Hands-Free Communication System.
●	●	Adjustable fiber-optic ambient lighting under the door and cockpit wood trim panels, and additional ambient lighting throughout the cabin provides gentle illumination while driving in darkness.
○'	●	Electronic Trunk Closer allows driver to open and close the trunk via the switch on the driver door panel or under the trunk lid.
●	●	Electronic parking brake disengages when vehicle is put into gear and gas is applied.
●	●	Chrome-framed analog clock.
●	●	Power rear-window sunshade with one-touch express up/down.
○'	●	Power rear side window shades.
●	●	Power windows with one-touch express up/down.
●	●	Auto-dimming rearview mirror.
●	●	4-way (tilt/telescoping) power steering column linked to driver's seat memory.
●	●	Programmable easy-exit feature moves driver's seat back and/or raises steering column when SmartKey is removed from ignition and restores position when key is reinserted.
●	●	Four illuminated vanity mirrors (in sun visors and rear-cabin ceiling). Dual front and rear reading lamps.
●	●	Front center armrest, which can be opened from both sides. Rear folding center armrest, with enclosed storage, includes two cupholders. Illuminated glovebox.
●	●	Illuminated trunk with umbrella holder, grocery bag hooks and tie-down hooks.

○ Optional or included with a package. — Not available.

S 550	S 600	CLIMATE CONTROL
●	—	Dual-zone automatic climate control with individual driver and front passenger control of temperature, speed and airflow distribution via hard keys (airflow and temperature only) or COMAND system.
○'	●	4-zone automatic climate control. Rear-cabin operating panel with dual temperature and speed and airflow distribution controls.
●	●	Adjustable high-flow/low-draft vents in dash, front doors, rear of console, footwells and adjacent to rear doors.
●	●	Electrostatic dust and pollen filter.
●	●	Activated charcoal filter with smog-sensing automatic recirculation of filtered cabin air.
●	●	Sun sensor assists the climate control system in compensating for the effects of direct sunlight on the occupants.
●	●	Humidity/dewpoint sensor helps reduce window fogging during humid weather, and helps prevent overdrying of cooled air.
●	●	Tunnel mode offers one-touch closing of all windows, the sunroof and cabin air intake via the air-recirculation button. Pressing and holding button again restores previous window and sunroof positions.
●	●	Seat-belt usage sensors allow climate control to focus on occupied seating positions.

S 550	S 600	AUDIO/NAVIGATION/TELEMATICS
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●	●	COMAND Cockpit Management and Data system integrates: Hard-drive navigation; AM/FM stereo/weatherband radio; an 8" color-LCD screen. Controls for Hands-Free Communication System; mode-dependent soft keys alongside screen for easy access to commands and menus.
●	●	Fiber-optic network offers precise, high-speed communication among components.
●	●	harman/kardon® LOGIC7® digital surround sound system, with 14 speakers, 5.1-channel amplifier, multichannel digital surround-sound technology,* and Digital Dynamic Volume Control.
●	●	COMAND 20-gigabyte hard-drive based in-dash navigation system uses Global Positioning System (GPS) satellites to determine the current location of your car, with map database for the contiguous U.S., Canada and Hawaii.
●	●	Integrated single-feed 6-disc changer.
●	●	PCMCIA slot allows you to transfer digital audio files from your PC onto a memory card and play them through the COMAND system.
●	●	Hands-Free Communication System.†
●	●	Tele Aid System uses GPS satellites plus a cellular link to provide 24-hour live assistance for: emergency aid (SOS button), information (i-button) or Roadside Assistance Service (wrench button). Basic Tele Aid Security & Care service includes Automatic Collision Notification, Stolen Vehicle Tracking, Remote Door Unlock service and Dealer Connect.‡

BRAKES		S 550	S 600
Brake System		Dual-circuit power-assisted 4-wheel disc.	
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EXTERIOR DIMENSIONS	S 550/S 600
Wheelbase	124.6 in
Overall Length	205.0 in
Overall Height	58.0 in
Overall Width	73.7 in
Track, Front/Rear	63.2 in/63.2 in
Drag Coefficient	0.26
Curb Weight	4,465 lbs/4,895 lbs (S 600 estimated)

INTERIOR DIMENSIONS	S 550/S 600
Front Headroom	37.8 in
Rear Headroom	38.5 in
Front Legroom	41.9 in
Rear Legroom	42.3 in
Front Shoulder Room	59.1 in
Rear Shoulder Room	58.7 in
Cabin Capacity	109.4 cu ft
Trunk Capacity	16.3 cu ft

S 550	S 600	EXTERIOR
●	—	Power tilt/sliding tinted glass sunroof with one-touch express-open/close and memory.
○ ²	●	Panorama tinted-glass roof with power tilt/sliding one-touch express open front panel and independently operated front/rear shades.
●	●	Electrically heated rear window with auto-shutoff based on time, driving speed and outside temperature.
●	●	Laminated, infrared-reflective glass helps reduce radiant heat, UV and noise penetration.
●	●	Dual aero-blade windshield wipers. Completely heated washer system. Heated wiper in parking position.
●	●	Rain-sensing variable intermittent wipers measure rainfall on windshield and adjust wiper speed and frequency accordingly.
●	●	Dual heated power side mirrors linked to driver's seat memory with auto-dimming rearview and left-side mirror.
●	●	Programmable power fold-in side mirrors retract when car is locked and fold out when front door is opened.
●	●	Variable doorstop holds the door open at virtually any point, even on inclines/declines.
●	●	Nano-particle paint is more resistant to fine scratches caused by car washes and environmental factors.
●	●	Bi-Xenon High Intensity Discharge low/high-beam headlamps with automatic level control, clear high-impact polycarbonate lenses and heated headlamp washers.
●	●	Halogen front foglamps and left rear taillamps.
●	●	Selectable light-sensing headlamps, set via Auto position, automatically illuminate at dusk.

S 550	S 600	SEATING
●	●	14-way power-adjustable front seats with 3-position memory. Driver's seat memory includes steering column and outside mirror positions, and is linked to SmartKey user-recognitions.
○ ²	●	Drive-Dynamic multicontour seats with 4-level massage function.
●	●	3-level heated front seats.
○ ²	●	Heated and Active Ventilated front seats.
○ ²	●	Heated and Active Ventilated rear seats.
○ ²	●	Power rear outboard seats with adjustable lumbar support.
●	—	Driver and front passenger power-adjustable lumbar support.
●	—	Leather upholstery hand-fitted to each seat, head restraint, seatback magazine pocket and center armrest. Leather-trimmed steering wheel.
○ ²	—	Premium glove-soft and fine-grained leather hand-fitted to seating surfaces.
—	●	Exclusive leather interior treatment with a glove-soft and fine-grained finish hand-fitted to seats' head restraints, dash, console, doors, armrests and rear shelf. Alcantara covers the pillars, sun visors and headliner.
●	●	Hand-polished Burl Walnut wood trim on dash, COMAND controller console and doors.
○ ²	●	Leather and wood-trimmed steering wheel.
—	●	Wood-trimmed overhead assist handles, rear vanity mirror covers and telephone keypad cover with handrest.
●	●	Stainless-steel door sill trim. Velour floor carpeting and floor mats.