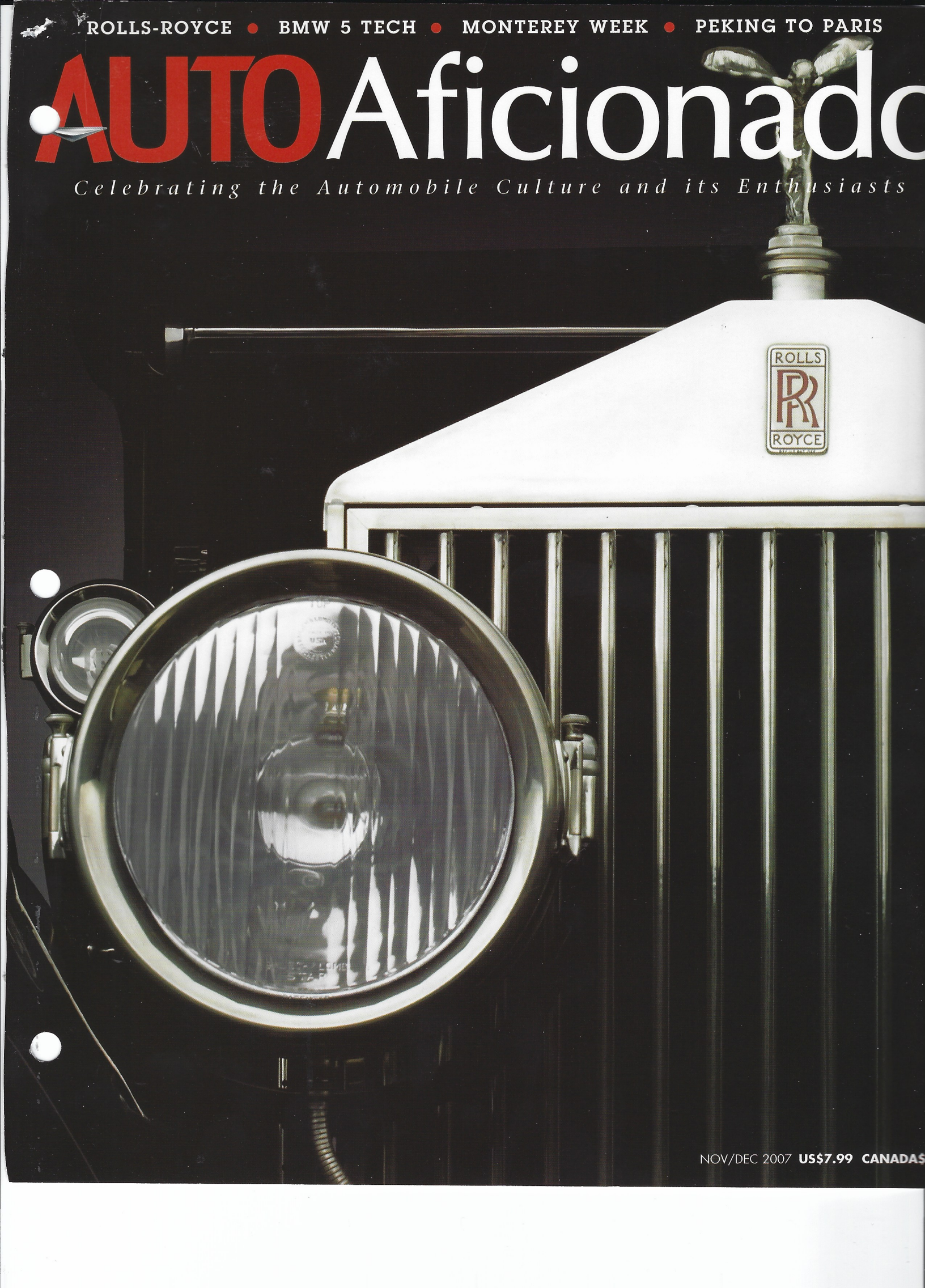


ROLLS-ROYCE • BMW 5 TECH • MONTEREY WEEK • PEKING TO PARIS

# AUTO Aficionado

*Celebrating the Automobile Culture and its Enthusiasts*



NOV/DEC 2007 US\$7.99 CANADA\$



# 2008

# 5

**GARY WITZENBURG**

**analyzes every  
manufacturer's benchmark.**

**But at what price?**

# BMW



The new 5 includes countless sophisticated technologies to increase engineering performance, but even the benchmark driver's cars now have thoughtful nanny-tech to help maintain the driver's focus when the road gets busy (top: HUD, Head-Up Display), or when the road gets too long (Driver Assistance Systems, Lane Departure Warning—shakes the wheel to wake you up).

BMW has enjoyed a long run as a media darling and upwardly mobile enthusiast favorite, and its dynamically delightful automobiles have long been benchmarks for aspirational automakers. Then the new-for-2002 full-size 7 Series divided BMW's worshiping flock. The performance and dynamics were there, better than ever, but reviewers disdained its convoluted styling and its innovative but overly complex iDrive multi-function control system.

Next came an all-new mid-range 5 Series, looking much like a scaled-down 7 and sharing its infernal iDrive, though in a somewhat easier execution. It also earned mostly raves for dynamics but brickbats for looks and control ergonomics.

Six seasons have passed since that first shocking 7 and four since the mixed-reviews 5. Sales of both have been strong, however, so their buyers must be okay with these issues...or covet these cars for image and other attributes despite them. Meanwhile, the polarizing design, somewhat softened and proliferated to other models, has grown on most observers.

BMW knows well that the toughest challenge of leadership is maintaining it, so the 5s arrive for 2008 refreshed with exterior appearance tweaks (front fascias, rear diffusers and taillights) interior upgrades, boosted six-cylinder performance and a host of high technology features. They carry stickers ranging from \$45K (including \$775 destination) for a base 528i to 100 Gs for a loaded M5. But what exactly do they deliver for those dollars?

## 528i

Compared to some logical rivals, that \$45K is \$6,300 under a Mercedes E 350, \$1,300 over an Audi A6 and roughly equal to a Lexus ES 350. But the 528i's 230-hp 3.0-liter inline six (though 15 horses up on the '07 525i) is much less powerful than their larger V-6s. On the plus side, BMW's rare-in-class six-speed manual transmission is a plus for self-shifting enthusiasts, while a quicker-shifting, more efficient STEPTRONIC six-speed automatic is a

no-cost option. According to BMW, the 528i can launch from 0 to 60 mph in 6.5 sec. with manual transmission and 7.1 sec. with automatic vs. 7.3 and 7.6 sec., respectively, for the '07 525i.

Even the base 5's standard features are plentiful. Major highlights include Dynamic Stability Control (DSC); vehicle speed-sensitive variable-assist, variable-ratio power rack and pinion steering; rain-sensing wipers with heated washer fluid; power tilt/telescopic leather-wrapped steering wheel with cruise, audio and phone controls; 10-way power front seats with power head restraints; automatic climate system with separate left/right controls; power moonroof; 10 speaker audio with iPod and MP3 inputs; Bluetooth cell phone interface; a choice of three varieties of wood trim that now flows from the instrument panel into the door panels; six air bags (two-stage front, front side and both front and rear head protection); and four years of BMW Assist with auto-





Automatic crash notification and enhanced roadside assistance.

The love-it or-hate-it iDrive adds six programmable memory buttons that can be used for radio station presets, navigation destinations or auto-dial telephone numbers. The enhanced DSC (which first appeared in 2006) integrates Dynamic Traction Control with ABS braking, Dynamic Brake Control, electronic brake proportioning, cornering/braking stability enhancement and (on all-wheel-drive xi models) Hill Descent Control. It also includes such safety and please-ability features as Brake Fade Compensation, Brake Standby, Brake Drying and Start-off Assistant, which briefly holds the car when launching uphill.

Options and packages can add another \$20K or more. A \$2,800 Sport Package adds Active Roll Stabilization, sport suspension, sport steering wheel, 18-inch wheels/tires and (believe it!) 20-way multi-contour front seats; a \$2,300 Premium Package piles on Dakota leather upholstery, four-

way power front-seat lumbar support and more luxu touches; a Cold Weather package brings heated front seats and steering wheel and high-pressure headlamp cleaners. Among the many stand-alone options are Active Cruise Control (\$2,400), night vision (\$2,200), navigation (\$1,900), leather (\$1,450), Active Steering (\$1,400), Head-Up Display (\$1,200), Logic7 premium audio (\$1,200), Comfort Access (a multi-function smart key), Xenon adaptive headlamps (\$800), front and rear park distance control (\$700), SIRIUS Satellite radio (\$595), high-def radio (\$500), Lane Departure Warning (\$500) and heated front seats (\$500).

BMW's Active Steering uses a widely variable steering ratio to ease low-speed maneuvers and can intervene to help stabilize the car in "critical" situations. Active Cruise Control uses front radar to sense and adjust to the speeds of vehicles ahead and for 2008 adds a "Stop & Go" feature that lets the system come to a complete stop, then resume the set

## PURPOSE

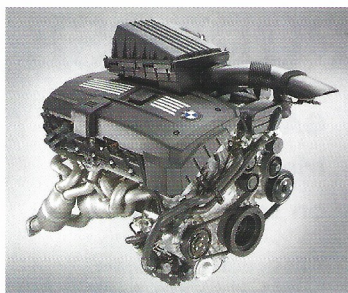
**GARY WITZENBURG**

**tries serious cars  
on serious roads**

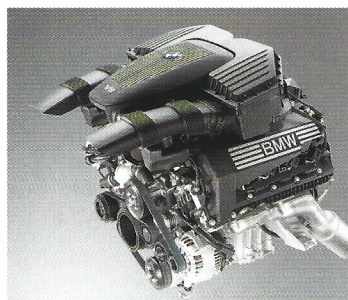
With its mid-range 5 Series "refreshed" for 2008, BMW assemble some dedicated media drivers to rotate through the lineup (minus a wagon) on a 2-1/2-day trek over some serious, scenic roads. "We will show you some incredible roads," Communications Manager Tom Plucinsky said, "...and some parts of the U.S. you don't normally see." ►







328 inline six



550 V-8

## BMW 5 Series

\$45,075-59,275 (528-550)

### CHASSIS

Wheelbase, in.	113.7
Track, f/r, in.	61.3/62.3
O/A wt, lbs (manual)	3505-3956
Brakes f/r, in.	ventilated discs
	12.8/12.6 (528), 13.7/13.6 (535, 550)
Gearbox	6-spd man, 6-spd auto
Damping	gas press, active
Susp f/r	strut/4-link

### ENGINES

Type	528, 535 I-6, 550 V-8
Displacement, cc	2996 (528), 2979 (535), 4799 (550)
Bore/stroke, mm	85.0/88.0 (528), 84.0/89.6 (535)
	93.0/88.3 (550)
Comp Ratio	10.7/10.2/10.5:1
Valvetrain	DOHC, 4v, vari timing
Fuel del	electronic mgmt
	MSV80 (528), MSD80 dir inj
	twin turbos (535), ME9 (550)
Block/head	Aluminum alloy
Horsepower/rpm	230/6500 (528),
	300/5800 (535), 360/6300 (550)
Torque/lb-ft/rpm	200/2750 (328),
	300/1400-5000 (535),
	360/3400 (550)

## BMW M5 \$83,675

### ENGINE (as 5, except)

Type	V-10
Displacement, cc	4999
Bore/stroke, mm	92.0/75.2
Compression Ratio	12.0:1
Fuel del	elec mgmt MS S65
Horsepower/rpm	500/7750
Torque/lb-ft/rpm	383/6100

### CHASSIS (as 5, except)

Track, f/r, in.	62.2/61.7
O/A weight, lbs	4012
Brakes f/r	ventilated 14.7/14.6
Gearbox	6-spd man/seq 7-spd

speed. The Head-Up Display projects vehicle speed, cruise control setting, navigation instructions and vehicle warnings in the driver's line of sight. Lane Departure Warning uses a camera to monitor lane position above 35 mph and warn the driver (through a mild vibration in the steering wheel) when the vehicle begins to drift out of its lane. It is canceled by the brakes or turn signals, and it can be switched off.

## 535i

Stepping up to the \$50K 535i sedan buys BMW's delectable new 300-hp twin-turbocharged 3.0-liter six. With direct fuel injection using fast-responding piezo electric injectors and double VANOS steplessly variable valve timing, it pumps out 45 horses and 80 lb-ft of torque more than the previous 530i and even with the automatic can launch the car from rest to 60 mph in 5.7 sec. vs. 6.6 sec. for the '07 530i.

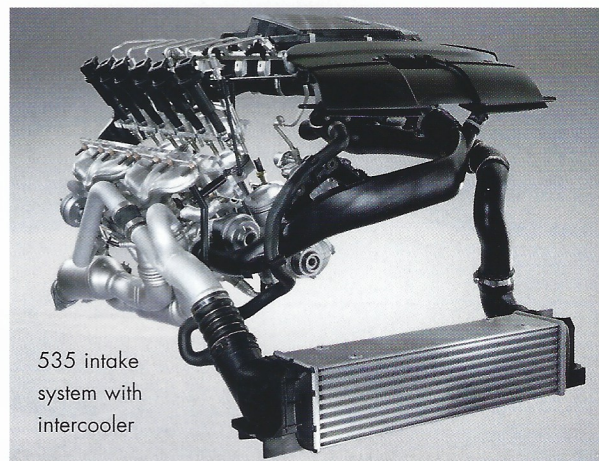
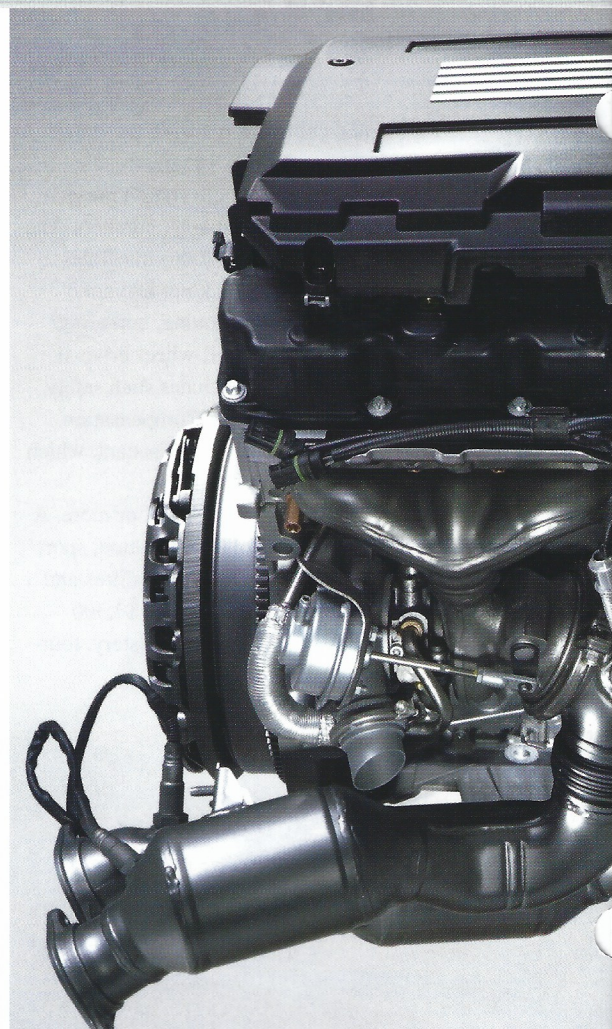
The 535i also adds four-way power lumbar support on the front seats, low-speed cornering lights and auto-leveling adaptive Xenon headlamps that move with the steering, and its brake discs are upgraded to the same size as the 550i's. Its optional Sport Automatic transmission comes with steering wheel paddle shifters and a Sport button for quicker shifting and matches rpm during downshifts. Its available Sport Package includes 18-inch wheels and tires in staggered widths (wider in back). The all-wheel-drive 535xi sedan lists at \$52K, while the 535xi Sports Wagon ups the ante to nearly \$55K.

## 550i

The next upwardly mobile step is the \$59K 550i sedan, powered by BMW's 360-hp 4.8-liter aluminum V-8. This deliciously torquey, musically muscular V-8 bristles with quad cams, 32 valves, Valvetronic variable intake valve lift and Double VANOS variable timing on both intake and exhaust valves. For its extra \$9,000, the 550i also packs additional standard equipment over the 535i, including leather upholstery, Ambient Light Package, auto-dimming mirrors, Park Distance Control and a BMW Universal Transceiver, and its optional Sport Package rides on 19-inch performance tires on staggered-width wheels. It can launch from 0 to 60 mph in 5.4 sec. with its standard six-speed manual and takes a tenth longer with automatic.

## M5

That brings us to the 500-hp aluminum V-10-powered \$86,675 (including a \$3,000 federal "Gas Guzzler Tax" that BMW laughingly lists as an option) M5, which may be the fastest and most glued-to-the-road luxury sport sedan most mere mortals will ever experience. It can rocket from rest to 60 in 4.5 seconds, corner like a front-engine racecar and brake hard enough to bounce your eyeballs off the windshield. With its available SMG (Sequential Manual Gearbox), it offers a brain-boggling 279 combinations of driver-programmable powertrain and chassis settings that can be pre-set and linked to an MDrive button on the

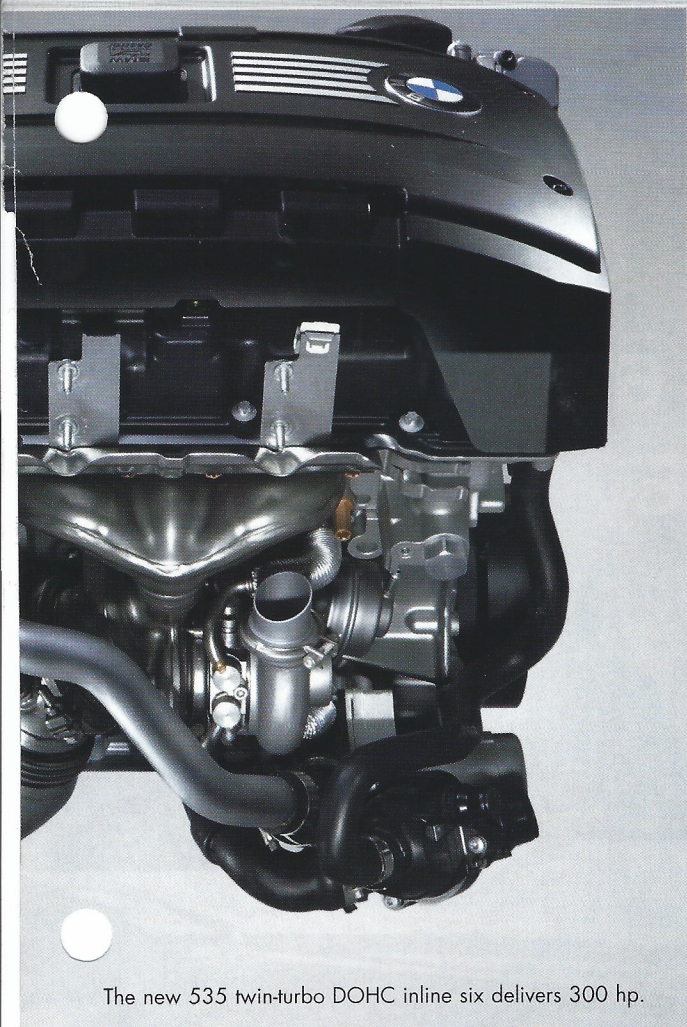


535 intake system with intercooler

leather-clad steering wheel.

One key capability of BMW M engines is high rpm; so this V-10 is engineered to spin strongly to its 8250-rpm red-line with some small sacrifice in low-end torque. Lightweight reciprocating components are used throughout, which also helps reduce total vehicle weight and balance front/rear weight distribution to near 50/50. There are three power and throttle-response settings: the P400 default mode (for valets and your son's prom night) caps the engine's horsepower at a piddling 400 and gives normal throttle response; P500 unleashes all 500 horses with quicker





The new 535 twin-turbo DOHC inline six delivers 300 hp.

response; P500 Sport (for track work and New York parking garage attendants) provides full 500 ponies with still-faster response.

BMW's Valvetronic variable valve lift system is not (yet) developed for high-revving engines, but this M V-10 does use double-VANOS variable control on both chain-driven intake and gear-driven exhaust cams. And, like all M engines, each cylinder has its own electronically controlled throttle. Its ultra-high 12:1 compression ratio is enabled by an ultra-quick ionic-current system that senses knock at each spark plug and retards ignition timing of individual cylinders to prevent it.

The "semi-dry sump" oiling system uses two reservoirs, a small one ahead of and a larger one behind the front frame crossmember, separated by a baffle. A mechanically driven variable-volume oil pump delivers sufficient pressure, but never excess volume, at all times for all operating conditions. Two electrically driven scavenger pumps recover it from pickup points determined by the DSC's lateral-g sensor (to account for cornering loads), and a recirculating pump moves it from the front to the rear main reservoir. Cooled by a coolant-to-oil heat exchanger, its level and temperature are monitored by sensors that drive an oil temperature gauge (in the bottom of the tachometer) and a low oil level warning lamp. Unfortunately, there is no dipstick for manual checking and no coolant temperature dial

to show impending trouble.

The 7-speed SMG is a marvel of high-tech engineering that offers an additional forward gear, quicker shifts in full-performance mode than any human can manage (BMW claims) and a wide variety of shift programs in sequential (S) and Automated (D) modes. Six selectable programs are available in the former, five in the latter, ranging from "softest and slowest" to "hardest and quickest." Manual shift control is available via either the console lever (rearward for upshifts, forward for downshifts, unlike nearly everyone else's) or steering wheel paddles.

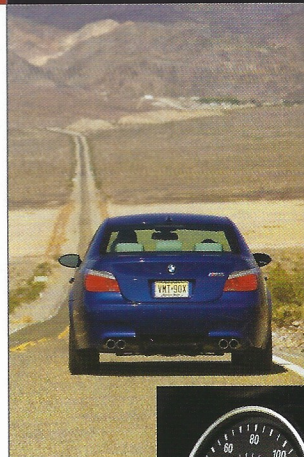
It also has a slew of special features, including Slip Control, which briefly disengages the clutch to prevent wheel-slip when downshifting on slippery roads, Start-off Assistant and Hill Detection, which optimizes D program shift points on both up- and downhill grades. But in our experience, the SMG seems consistently slower and jerkier in normal driving than most manual-shifting human drivers. And we're far from its only critics.

So BMW has wisely decided to offer 2008 U.S.-market M5s with a heavy-duty 6-speed manual transmission as a no-cost alternative to the largely unloved SMG, which is the only choice in Europe. And it's a gem, with crisp throws, precise gates, perfectly arranged pedals and surprisingly smooth clutch engagement. Like the SMG, it is blessed with an M Dynamic Mode that enables enthusiastic (read: semi-sideways) track driving by backing off the level of traction loss at which the stability system intervenes.

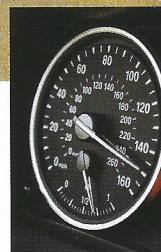
The M5's chassis is a high-tech playpen of programmability. Relative to the (V-8-powered) 550i, it boasts a modified subframe, Z8 roadster suspension links, beefed-up bushings, lighter but stronger hollow axle halfshafts and huge cross-drilled brakes inside 19-inch performance tires on (8.5-inch wide front, 9.5-inch rear) cast alloy wheels. Then it gets more interesting with a special M version of BMW's Electronic Damping Control (EDC), M Variable Differential Lock and Servotronic power steering with two levels of assist.

The M5's EDC—with three selectable modes: Comfort, Normal and Sport—steplessly adjusts damping to any level between softest and firmest, according to road conditions and driver demand. The M Variable Differential Lock senses wheel speed (rather than torque) and drives a pump to pressure a viscous silicon fluid that transfers torque (through a multi-disc clutch) to the drive wheel with the better grip. The M5's Servotronic vehicle speed-sensitive power steering (for the first time in a production BMW) offers two levels of assist: Comfort (typical BMW) and Sport (less assist for sportier feel). It does not have BMW Active Steering, which varies steering ratio with vehicle speed, but its steering ratio is variable: It becomes quicker as the wheel is turned further from center. And it is as good as power steering gets.

Remember those 279 combinations? The M5's Dynamic Stability Control (DSC) offers three modes: Normal, M Dynamic and deactivated (though ABS always remains active), so those three times three power settings times three



BMW is all about using the car.

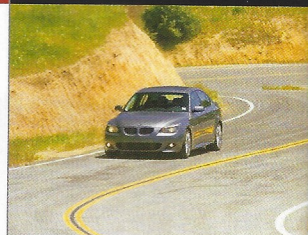


I drove an automatic 528i (replaces the '07 525i) quickly, but safely, on the mostly flat 117-mile run from Las Vegas to Death Valley, California. The 230-hp magnesium/aluminum 3.0-liter inline six is up 15 horses and 15 lb-ft of torque from last year's version—largely thanks to BMW Valvetronic valve actuation with Double VANOS variable timing—but still seems a trifle torque challenged at low rpm. The new (no-cost optional) Steptronic six-speed automatic operates through an electronic shifter (forward for Reverse, rearward for Drive, left for Manual; Park is a button) but shifts quickly and efficiently. The unloved SMG is discontinued except in the M5.

Every 5er's steering is crisp, brakes powerful and its chassis nimble, responsive and supple. The upgraded interior has a beautifully crafted look, and the seats are comfortable and supportive over the long haul. On the other side of the ledger, BMW's iDrive is cumbersome and often counterintuitive, twin swing-out cupholders the right-center and far right of the dash are knee knockers when employed, and there's a dearth of the instruments usually found in serious drivers' cars—only fuel and economy dials integrated into the large, round speedo and tach. Even most econoboxes have temperature dials to foretell impending trouble!

We overnighted at the mission-style Furnace Creek Inn. I set off at 8 the next morning in an automatic 335i and climbed from 20,000 feet below sea level to several thousand above on—as adver-



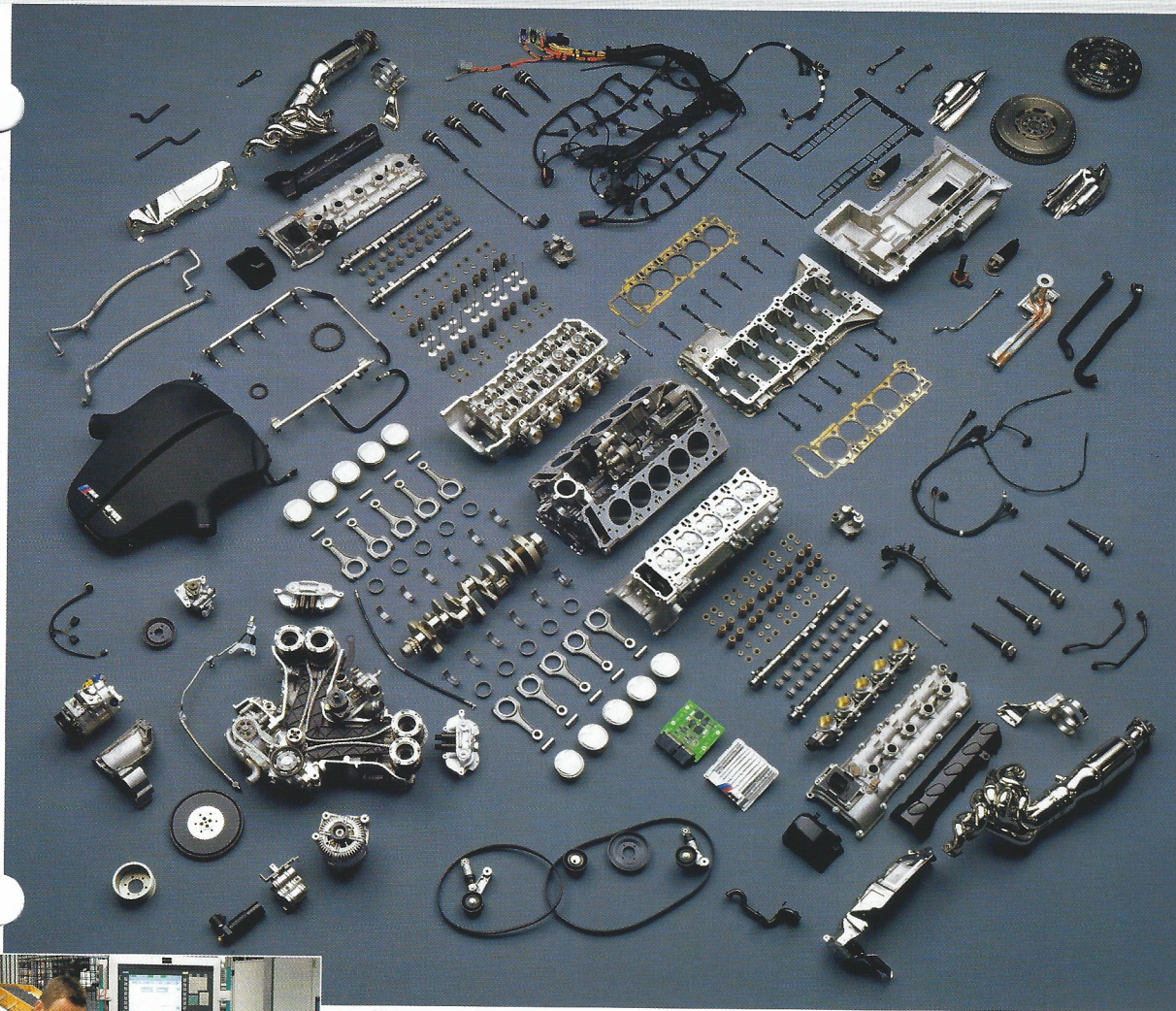


tised—wonderfully twisty mountain roads. The route wound through Wofford Heights, Woody Porterville, Exeter, Woodlake, Elderwood, Orange Grove and Fresno to the Tenaya Lodge in Fish Camp, just short of the Yosemite National Park entrance. The 535i's delicious new 300-hp twin-turbo six is up a hefty 45 horses and 80 lb-ft over last year's naturally aspirated 530i, and the all-wheel-drive six-speed manual 535xi I drove that afternoon offered slightly better grip than the rear-drive car, even on dry roads.

The next morning's 8 a.m. push-off had me in one of the coveted M5s. After a leisurely cruise through the spectacular Yosemite park, we piloted it over some of California's most delightfully challenging two-lanes. One, between Mariposa and Raymond, aptly named Ben Hur Road, is a diabolical collection of bends and curves at times narrow and patched and without guardrails. It is a trifle treacherous in places but great fun. The M5's 500-hp V-10 is an electronically managed road monster, and its chassis near racecar quick and composed. I heartily recommend the standard six-speed manual over the complex and oft-unsmooth SMG.

My afternoon turn in a manual shift 550i (its 360-hp V-8 unchanged from '07) explored the delights of CA 198 through Coalinga to San Lucas, faster yet safer than Ben Hur, with wide, smooth, sweeping curves, sparse traffic and panoramic vistas. The final leg included an old-favorite road, County G16 from Greenfield to Monterey, tough to find from the east but well worth the effort. I drove it as hard and fast as I safely could, reveling in the V-8's grunt and the chassis' awesome agility, to the Monterey Plaza Hotel & Spa on the bay on Cannery Row.

It was a great adventure in some great driving cars. At the final night's dinner, one veteran journalist stood and offered the BMW folks a heart-felt thanks and an enthusiastic toast, followed by a room-wide standing ovation. Sign me up for next time!



The M5 V-10 is a hand-made celebration of the best of what BMW knows about engines.



EDC modes times 10 SMG programs (excluding the ultimate S6 program) equals

270. SMG S6, which can be selected only with DSC deactivated, adds the other nine (three power settings times three EDC modes). Got it?

The power settings, EDC and DSC modes are selectable with buttons on the console, the SMG programs via the shift lever and a mode selector behind it, and all of these choices can be linked to a steering wheel MDrive button through an MDrive menu. And it's relatively easy to set this all up to your personal preferences. Our advice, however, is to forget the SMG and play with the much more manageable 27 combos available with the conventional 6-speed.

To further justify its price (and the hefty premium likely to be demanded by your friendly BMW dealer), the M5 is loaded with a wealth of standard equipment over the 550i. There are unique red-needled speedometer and tachometer dials with specific scales stretching to 9000 rpm and 200 mph, a four-year subscription to Real Time Traffic Information (from the satellite radio), heated M sport front seats (with 18-way driver's and 16-way passenger's power

adjustment, including four-way lumbar), extended leather upholstery with Merino leather (BMW's finest grade), "Brushed Aluminum Shadow" interior trim and a lot more.

And there is no shortage of options to drive that price near or above that magic \$100K mark. For \$1,900, you can order M Multi-function seats with active head restraints and backrests and power shoulder support, then for \$3,500 more add your choice of "full" or perforated Merino leather with a rich, super-soft Alcantara roofline. Another \$800 gets you ventilated front seats, \$1,200 an M-specific Head-up Display, \$700 an enhanced audio system, \$600 a set of "soft-close" automatic doors, \$575 a power rear sunshade and manual rear side shades, \$475 a split folding rear seat with a ski bag, \$385 a pair of rear door-mounted side air bags, \$350 rear seat heating and \$200 a heated steering wheel. You get the idea.

Compared to the many excellent and mostly less expensive luxury sport and super-performance sedans from such respected sources as Mercedes, Audi, Lexus, Infiniti, Cadillac and Jaguar, are these arguably higher-image BMW 5s worth your extra money? Check 'em out, drive 'em, and then decide. Truth is, you can hardly go wrong with any of them.

