



BMW M5

An exceptional car for a select few

SOME 25 YEARS ago, Bayerische Motoren Werke popularized the idea of the medium-size, high-performance sports sedan. And there's a direct lineage from the 1800 TIs of those days through the 2500s, the Bavarias and the first-generation 5-Series BMWs to the car you see here, the M5.

Nor is its M heritage any less telling. In 1972, BMW Motorsport GmbH was formed, giving focus to the company's many competition interests. World Touring Car Championships and plenty of other honors followed, not to say some pretty potent automobiles. In 1978, for in-

stance, Motorsport brought forth the M1, a mid-engine Group 4/Group 5 racer whose obligatory 400-car production run for reasons of homologation gave us one of the all-time great exotics. (See September 1980 for our test of the M1—and remember its dohc 24-valve engine.) Others earning the red, blue and purple BMW Motorsport insignia include the M635CSi (September 1984), the M535i (May 1985), the first-generation M5 (April 1986) and the M3 (February 1988).

BMW Motorsport keeps busy.

So when the latest 5-Series BMW showed up a couple of years ago, we hoped its M variant wasn't far off.

And here's that very car, available to a select few North Americans as a 1991 model.

At first glance, only the cognoscenti will distinguish an M5 from its 535i sibling; and the M5 driver probably wouldn't want it any other way. A revised air dam up front, different bumper contours, subtle sidesills and 0.8-in. less ride height all contribute to retaining the 535i's 0.32 C_x, despite the M5's greater intake of cooling air and the increased frontal projection of its wide, super-low-profile 235/45ZR-17s mounted on 8-in. wheels.

These wheels, by the way, generated our only M5 style controversy.

Actually 5-spoke skeletal structures with bolt-on magnesium inserts, the latter have concentric rotor blades that cool the M5's oversize ABS-augmented brakes. What's more, the wheels' asymmetric rim design improves run-flat capability.

Elegant engineering, yes; but, as one driver said, "The wheels look too delicate and effeminate for the car's image. Plus, their rims and openings combine to give the appearance of tall-profile whitewalls."

No one objected to other aspects of the M5's suspension, though. Compared with the 535i's, its springs and shocks are stiffened. A limited-slip differential is fitted. Front and rear anti-roll bars are enlarged, the latter just a tad more than proportionally to bring the M5's fore/aft balance a bit closer to neutral.

"Taut but supple," noted one driver, "and at least one Japanese manufacturer could take lessons here in jiggle-avoidance."

"What wonderful pointability," said another, in his admiration of the M5's willingness to be placed pre-

cisely with throttle and steering, seemingly regardless of road surface.

Exemplary though the handling is, what characterizes the M5 best is its marvelous powerplant. This inline-6 has double overhead camshafts, 24 valves, a 10.0:1 compression ratio, Bosch Digital Motor Electronics engine management—and a mere, slight, tiny edge of mechanical harshness. Remember that BMW M1 exotic? This engine is a direct descendant of its powerplant. And as it burbles with just a bit of lumpiness at idle or wails like a banshee to its 7200-rpm redline, there's no mistaking its sporting heritage.

Refinements along the way include the Bosch DME combining ignition and fuel control, whereas the original M1 engine had mechanical injection. Also, new to our M5 are a forged crankshaft giving increased stroke and 3535-cc displacement, hitherto 3453 cc, as well as a lightened flywheel, revised camshaft profiles and resonance-charged intake passages and exhaust ducting.

Its resulting 310 bhp and 265 lb.-

ft. of torque are produced with no loss of tractability in the sort of driving most of us do most of the time. Yet the M5 is capable of reaching 60 mph in 6.4 seconds, the quarter-mile marker in 15.0 sec. at 96.0 mph and, ultimately, a top speed (155 mph) limited solely by a consensus of German government and industry. Not bad for a luxurious 4-door sedan.

And luxurious the M5 is, in a Bavarian manner that's not as austere as Mercedes-Benz' philosophy, but still unmistakably Germanic. The interior is composed of subtly interacting surfaces, none of the organic wholeness typifying the latest of Japanese design. The driver faces an array of analog dials, black on white, and an airbag-fitted steering wheel. His or her passenger gets a glovebox whose ample volume rivals that of many apartment closets. Between them is a center console canted toward the driver and housing controls for climate (split left/right) and sound system.

Leather upholstery is standard, with exactly four seating positions defined,



■ Without glancing under the hood at Motorsport's twincam inline-6 or spending some time behind the M5's airbag-equipped wheel, most would never know this sleeper packs 310 rear-drive bhp.

the rear pair separated by a fixed center console enclosing a slide-out tray for cassette tapes and the like.

The overall feeling is that of a 4-place cockpit: functional and comfortable, if not particularly spacious.

Apart from its not being the preferred conveyance for four basketball players, why wouldn't just about anyone else absolutely lust for the BMW M5?

"The car's personality comes through loud and clear," said one staff member, "but there are some annoying aspects. Despite all the electric adjustments, I still can't find a decent driving position. The seat has too much lumbar support and the steering wheel is too high, excessively horizontal and not adjustable. Before airbags, BMW had an adjustable wheel, and others with airbags still do."

"The shifter," noted another, "took BMW's characteristically notchy, long-throw feeling to an extreme, especially in 1st-2nd actuation."

The point, of course, is that the M5 isn't a car for everyone. It hasn't been "clinic-ed" to mass acceptability or, worse, to mediocrity. Rather, it's a rolling tribute to BMW confidence, designed by Bavarian engineers who are damned sure of what they know. The M5 works splendidly for some and, we recognize, it just doesn't work at all for others (especially at the price).

Is it worth \$56,600? Certainly to a select few. And to the rest, it can still serve as a comforting example of continuity: Considering that the Bavarians all but invented the sports sedan, is it any wonder they continue to do it so well and with such personality? ☺

Test Notes . . .

■ The M5 has that rare quality of being not only fast, but also able to accelerate to high speeds with absolutely no drama. In fact, it can be so quiet and smooth that you can hardly believe the speedometer.

■ Our handling measures of grip and control—lateral acceleration and slalom speed—indicate only average road qualities. However, subjectively, the M5 is remarkably well balanced, with agile handling and rewarding steering feel.

BMW M5

0-60 mph 6.4 sec
0-¼ mi 15.0 sec
Top speed est 155 mph
Skidpad 0.80g
Slalom 61.4 mph
Brake rating excellent

PRICE

List price, all POE **\$56,600** Price as tested **\$59,655**

Price as tested includes standard equip. (air cond, AM/FM stereo/cassette, ABS, leather interior, cruise control, electric window lifts, sunroof, central locking & adjustable mirrors), gazzler tax (\$1850), cellular telephone (\$1205).



ENGINE

Type 4-valve/cyl dohc **inline-6**
Displacement 216 cu in./3535 cc
Bore x stroke 3.68 x 3.39 in./
93.4 x 86.0 mm
Compression ratio 10.0:1
Horsepower (SAE): **310 bhp @ 6900 rpm**
Torque **265 lb-ft @ 4750 rpm**
Maximum engine speed 7200 rpm
Fuel injection Bosch Motronic elect. port
Fuel prem unleaded, 91 pump oct

GENERAL DATA

Curb weight **3950 lb**
Test weight **4060 lb**
Weight dist, f/r, % **50/50**
Wheelbase 108.7 in.
Track, f/r 58.0 in./58.9 in.
Length 185.8 in.
Width 68.9 in.
Height 55.4 in.
Trunk space 17.5 cu ft

DRIVETRAIN

Transmission **5-sp manual**
Gear Ratio Overall ratio (Rpm) Mph
1st 3.51:1 13.72:1 37
2nd 2.08:1 8.13:1 62
3rd 1.35:1 5.28:1 96
4th 1.00:1 3.91:1 130
5th 0.81:1 3.17:1 est (7070) 155
Final drive ratio 3.91:1
Engine rpm @ 60 mph in 5th 2740

CHASSIS & BODY

Layout **front engine/rear drive**
Body/frame unit steel
Brakes, f/r **12.4-in. vented discs/**
11.8-in. discs; vacuum assist, ABS
Wheels forged alloy, **17 x 8J**
Tires Michelin MXX2, **235/45ZR-17**
Steering **recirculating ball**, power assist
Turns, lock to lock 3.3
Suspension, f/r: **MacPherson struts**, lower lateral links, compliance struts, coil springs, tube shocks, anti-roll bar/**semi-trailing arms**, coil springs, tube shocks, anti-roll bar

ACCELERATION

Time to speed Seconds
0-30 mph 2.5
0-60 mph 6.4
0-80 mph 10.7
Time to distance
0-100 ft 3.2
0-500 ft 8.3
0-1320 ft (¼ mi) 15.0 @ 96.0 mph

BRAKING

Minimum stopping distance
From 60 mph 127 ft
From 80 mph 231 ft
Control excellent
Pedal effort for 0.5g stop 14 lb
Fade, effort after six 0.5g stops from
60 mph 19 lb
Brake feel excellent
Overall brake rating excellent

FUEL ECONOMY

Normal driving 15.5 mpg
EPA city/highway 11/20 mpg
Fuel capacity 23.8 gal.

INTERIOR NOISE

Idle in neutral 58 dBA
Constant 70 mph 68 dBA

HANDLING

Lateral accel (200-ft skidpad) 0.80g
Balance mild understeer
Speed thru 700-ft slalom 61.4 mph
Balance mild understeer

Subjective ratings consist of excellent, very good, good, average, poor.