

**M3**



# Created for the race track, destined for the road.

**T**o build a car that goes fast is not difficult. Youngsters have been doing it in their backyards since the invention of the internal combustion engine. But as anyone who has ever competed on a race course will tell you, in order to win, your car must do more than run fastest. It must finish. And in order to win consistently, your car must be as durable and reliable as it is powerful.

For more than a half-century, the racing engineers at BMW have developed a habit of victory. 166 national titles, 37 World and European championships and uncounted class wins testify to BMW's prowess with cars which are not only fast, but that last.

This unassailable record, resulting from relentless preparation, testing and an obsession for perfection has culminated in the BMW M3.

The M3 was conceived for the World Touring Car Championship, a racing series for cars closely related to their production counterparts. Most of the teams in the World Championship are private teams with no support from automobile manufacturers. BMW's objective in building the M3 was therefore to give these teams a potential race-winner — a car with unbeatable qualities. To reach this objective BMW's Motorsport engineers have equipped the M3 with some of the most advanced and sophisticated automotive technologies.

They have also drawn from their vast experience gained in building the legendary M1 and BMW's Formula 1 power unit, making the M3 the heir to one of the world's greatest sportcars and most powerful formula engines.

The body of the M3 is based on the BMW 3-Series — which alone is an ideal starting point for dynamic handling and performance. The sculpted body panels are at once purposeful and sensual. The skin stretches tautly over the engine and passenger compartment with its sharply raked rear glass and wide tires. Its extremities bristle with aerodynamic aids whose sole purpose is to reduce turbulence and increase downforces thus improving tire adhesion and high-speed ability.

The 192 hp M3 engine has been street-tuned for smooth tractable operation even in every day stop-and-go commuting. The suspension is an entirely new development especially for the M3, refined for optimum performance in countless tests on the race track.

Further, and most important, in concentrating on driving performance, the M3 has not neglected the driver. Comfort abounds. Six-way adjustable leather sports seats accommodate your personal dimensions. The leather-wrapped M-Technic steering wheel is power-assisted. The leather covered gearshift operates through a smooth-shifting sports gate. Even the passengers in the rear are cosseted with body-contoured individual seating.

The BMW M3. In one masterful stroke it has not only rendered heart-pounding performance street legal. It has also made it sensible.





# Just one look tells you this is a very special car.

**D**esigned without compromises for motor racing, the M3 simply had to look the way it does today. Every feature of the car, even the smallest component is built for dynamic performance. Purpose-oriented

and functional.

It has compact dimensions for nimble handling. The flared wheel arches blend attractively with the extra-wide side-sills. The large low-slung air dam at the front, the rear spoiler and air dam with a special

opening for the two tailpipes accentuate the M3's dynamic looks.

Each of these features has a special purpose. The flared fenders accommodate racing wheels up to 10 inches wide. The front air dam increases down forces on the

front axle and directs a flow of cool air to the brakes and oil cooler. The rear wing presses the rear wheels onto the road, making the M3 hug the tarmac for optimum performance at high speeds.

## A CAR NOT EVEN THE WIND CAN RESIST.

So much on the most conspicuous body features of the M3. But there are also many inconspicuous features that give this car its unique qualities. The rear window spoiler, trunk lid, air dams and bumpers, for example, are made of special plastic and compound fiberglass. This means a significant improvement of the power-to-weight ratio and, as a result, even better performance.

The windshield and rear win-

dow are bonded flush to the body. Which provides not only better streamlining but also greater stability and a stiffer body structure.

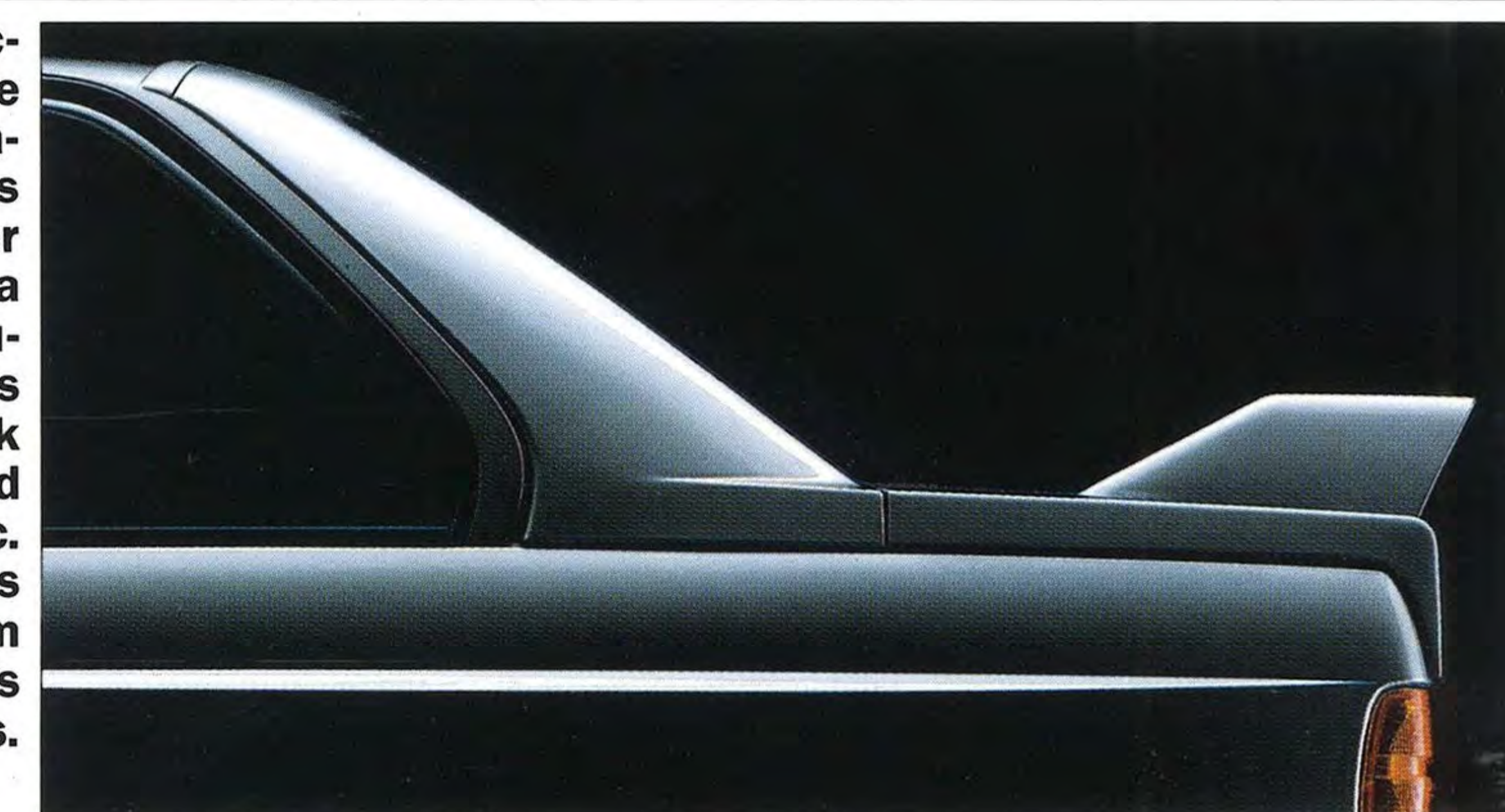
The rear roof pillar is wider, the rear window raked at a smoother angle and the trunk lid is both higher and shorter than on the other models of the 3-Series. This makes the most dynamic two-door BMW in its class even more

reminiscent of a coupe.

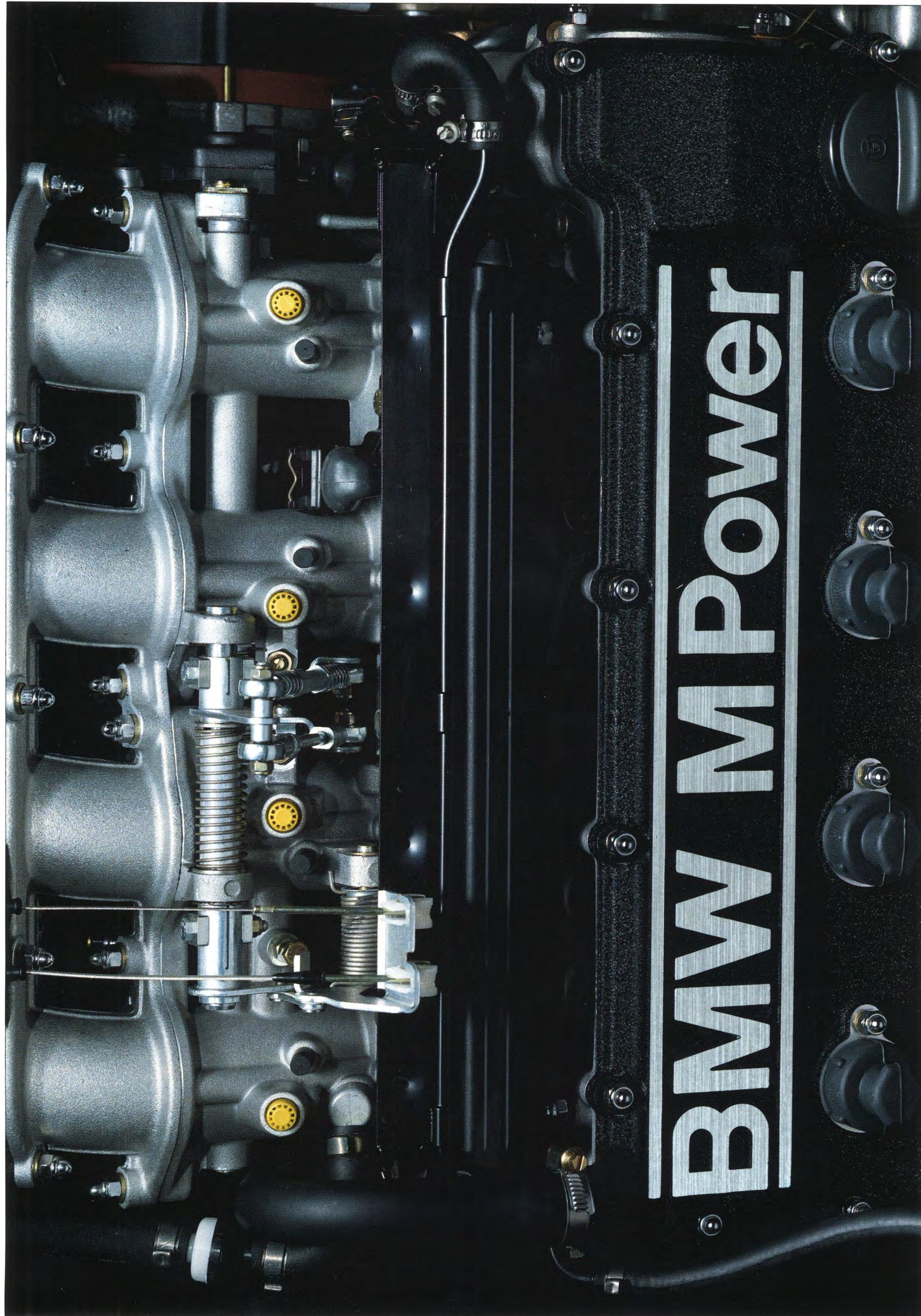
As a result of these modifications the M3 has a drag coefficient of 0.33, despite its flared wheel arches and extra-wide tires.

Which goes to show that skillful design can by all means combine dynamic performance with optimum streamlining.

**One of the distinctive features of the BMW M3: the extra-wide rear roof pillars for even better streamlining and a coupe-like silhouette. The M3 is available in black metallic, white, red and silver metallic. The use of chrome is kept at a minimum to preserve the car's purposeful looks.**



# The engine block that won the World Championship.



**A** description of the M3 power plant reads like a report on space-age technology.

The engine block of the M3 is virtually identical with that of the BMW Formula 1 World Championship engine. Which is able to develop more than 1000 horsepower with ease.

The cylinder head is of basically the same design as that of the legendary BMW M1. With 4 valves per cylinder arranged at an angle of 38°. Two overhead camshafts with cup tappets ensure an optimum cylinder charge.

As another feature typical of racing engines, fuel is supplied via four intake ports and four throttle butterflies for maximum power and efficiency. The exhaust manifold also designed for racing pro-

vides a fast and complete flow of exhaust gases.

## MORE POWER FROM FEWER CYLINDERS.

The M3 develops its supreme power out of four combustion chambers because a 4-cylinder can cope with even the most extreme conditions. With its relatively short crankshaft, the engine generates minimal torsional vibration.

Since the M3 was conceived for the race track it's no surprise that the road version revs up to 7000 rpm for maximum power.

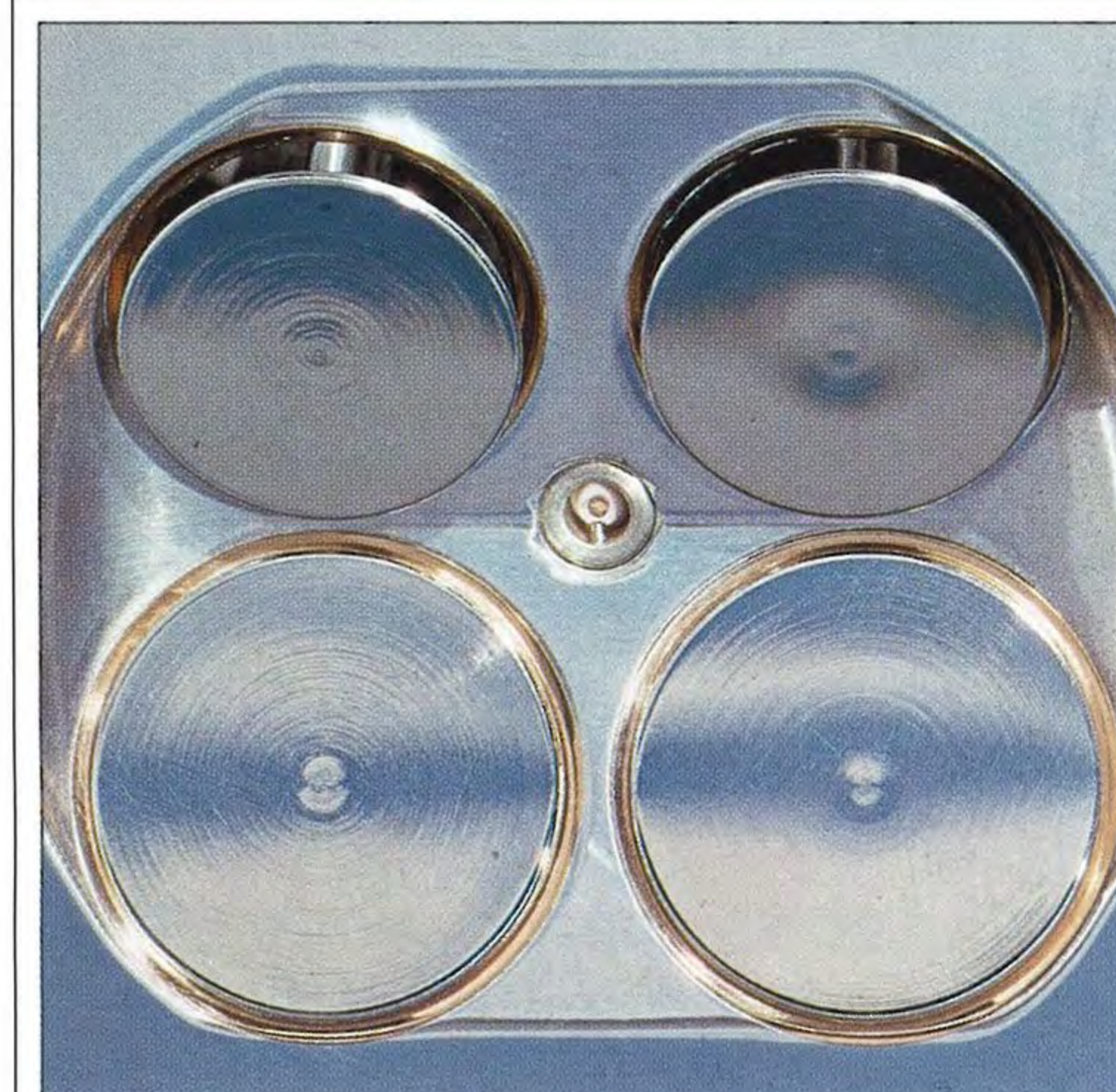
## A COMPUTER FOR EVEN GREATER EFFICIENCY: MOTRONIC.

To ensure optimum perform-

ance and a smooth response to the accelerator under all conditions, the 2.3-liter power unit features an advanced engine management system: Motronic.

Motronic adjusts within fractions of a second to even the smallest change. It considers factors such as air density, outside temperature, engine temperature and other parameters to keep the engine running with maximum efficiency.

Despite the impressive output of 192 hp at 6750 rpm and maximum torque of 170 ft./lb at 4750 rpm the power plant of the M3 is absolutely dependable in everyday motoring and stop-and-go city traffic. With its smooth torque curve and wide range of useful engine speed the M3 remains fun to drive under all conditions.



BMW started to develop 4-valve per cylinder technology no less than 20 years ago. Today this experience pays off in the M3. Four valves per cylinder allow outstanding power yet maintain remarkable fuel economy.



The 5-speed overdrive gearbox of the M3 is a perfect match for the power plant. Stickshift travel is short and precise, providing ideal conditions for using the wide speed range of the M Power engine.



# Race-bred handling to match the race-bred engine.

**T**he power train of the M3 is designed for racing requirements and has been specially reinforced to match the supreme output of the engine.

The 5-speed sports gearbox smoothly transmits engine power to the rear wheels through a differential with 25% limited slip. This provides optimum

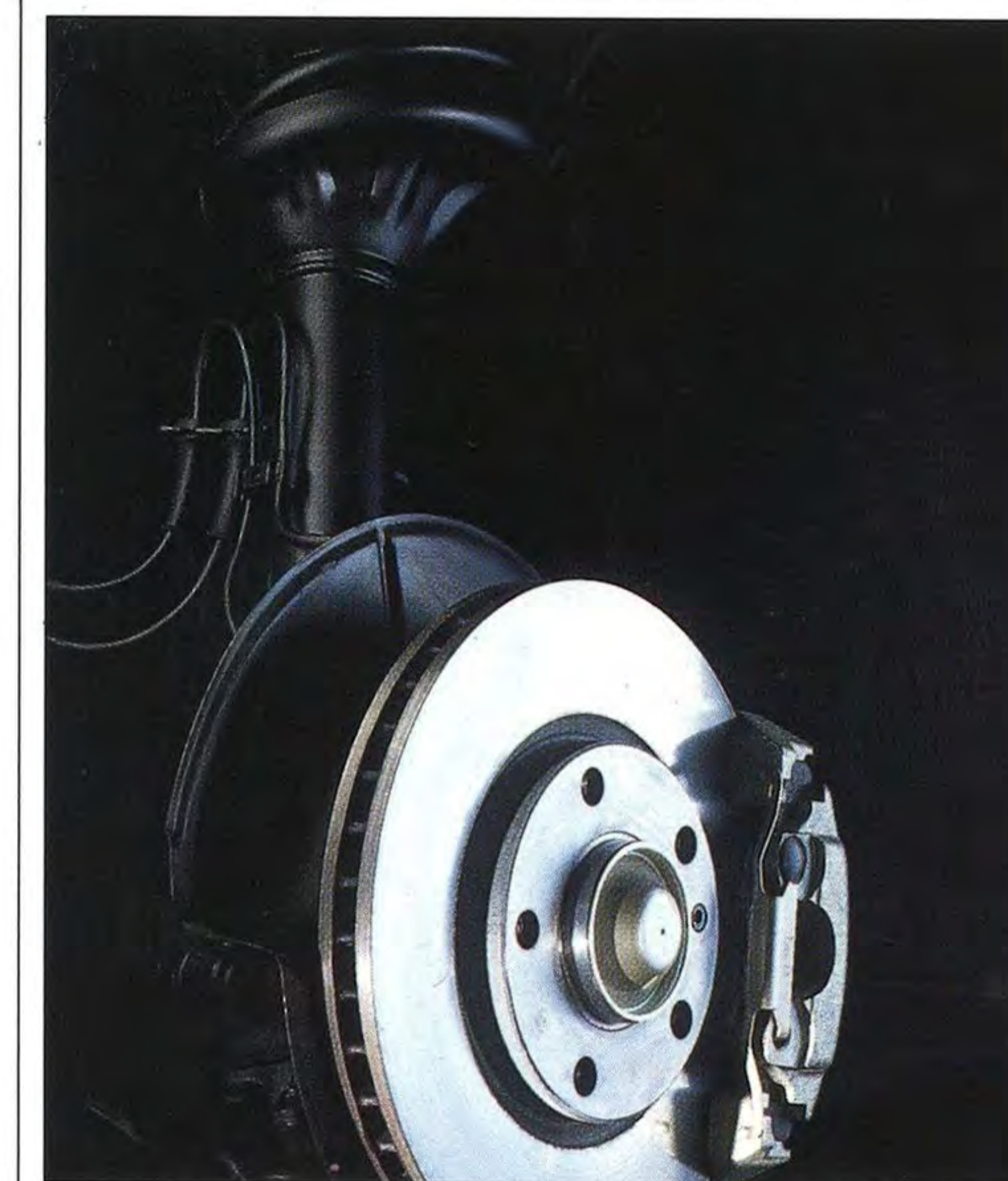
wheel grip when accelerating, without all that power going up in smoke.

The entire car is lower than the standard 3-Series, somewhat re-

miniscent, if we may make the analogy, of a predator ready to pounce. The front wheels are independently suspended on single-pivot MacPherson struts, the rear wheels run on semi-trailing arms. Extra-large anti-roll bars front and rear keep the M3 firm and taut under heavy cornering. The keen but not overly hard suspension is just right for sporty driving. Gas-pressure shock absorbers front and rear further enhance the roadholding of the M3.

**ANTI-LOCK BRAKES.  
FOR ONLY THE BEST  
IS GOOD ENOUGH.**

The suspension of the M3 is designed for neutral handling. The car only starts to gradually oversteer when you reach a limit far beyond normal motoring.



**The ventilated disc brakes at the front ensure shorter stopping distances for added safety on the road. Shown behind the brake disc is one of the gas-pressure shock absorbers. The springs are firmer than usual for optimum handling and roadholding in fast turns.**

In that case the power steering will help you respond quickly and accurately. The brakes of the M3 are also designed to meet the highest standard: Four extra-large swing caliper disc brakes (ventilated at the front) and, of course, ABS with four control circuits.

This allows for shorter stopping distances in conjunction with the wide 205/55 tires on 7 J x 15" light-alloy wheels with cross-spoke styling.

A suspension with these qualities provides superiority not only on the race track but also on roads the world over.



# Exceptional instruments for an exceptional car.

**A** quick look at the instruments of the M3 also shows that this is a very special car. The speedometer goes all the way to 160 mph. The red line on the tachometer starts at a point other cars will never come close to: 7000 rpm.

Where BMW's "standard" models have the Energy Control fuel consumption gauge, the M3 features an engine oil temperature gauge to show you at all times that the engine is running at the right temperature.

The other circular instruments are a fuel gauge for the 14.5-gal. fuel tank and a coolant temperature gauge. The indicator needles of the instruments are finished in red to provide an even better reading and to further accentuate the dynamic character of the M3.

All the controls and instruments are combined in logical groups, spread out in semi-circular arrangement around the driver. Every switch and every lever, no matter whether it's for the headlights or cruise control, is exactly where it should be. So that your hands and eyes will "automatically" go in the right direction.

**ALL-AROUND MOTORING ASSISTANCE FOR PERFECT MOTORING.**

The Service Indicator informs you when the M3 requires

routine service or tune-up, depending on the distance covered



**The red line on the tachometer starts at 7000 rpm. An engine speed governor cuts in smoothly and automatically as soon as this limit is exceeded. After all, you want to enjoy the M Power engine throughout a long and reliable running life.**

and your style of driving. A unique, precise and reliable instrument.

Check/Control monitors the fluid levels in the coolant and lubrication systems. It constantly monitors the most important lights as well as the car's brakes. And it saves you the trouble of checking engine oil whenever you stop for gas.

Then there is the on-board computer, programmable for eight functions such as: time/date, stopwatch, anti-theft code, average speed, speed-limit warning, average gas mileage, range left on remaining fuel and outside temperature.

This kind of all-around assistance guarantees that in the M3 you can concentrate on the ultimate thrill: the joy of driving a dynamic automobile.

# In many respects the M3 is a race car. In some respects it's even more.

**T**he M3 convincingly proves that a race car need not necessarily mean a compromise in motoring comfort. The sports seats, for example, offer a unique standard of comfort and quality in every feature. Numerous adjustments even including the thigh support give every driver his ideal seating position. It goes without saying, that the front and rear sets are finished in finest leather by skilled craftsmen. For this is another feature that makes the important distinction between imitations and the absolute winner. Every seam is where it should be, every detail is refined to the utmost. This results in the self-assured feeling of man and machine forming one entity.

This feeling is further enhanced by the BMW M Technic leather sports steering wheel, small in diameter and with just the right grip, it's ideal for crisp and fast steering.

Even this, however, does not

complete the list of luxury items unusual in any sportscar.

The front windows open and close electrically. So does the sunroof, regardless of whether you want to open it all the way or tilt it to vent position at the rear.

The BMW Sound System installed in the M3 turns even this sports-cum-racing car into your own personal concert hall. Adding the thrill of high fidelity to that of high performance.

We nevertheless realize that

the real enthusiast will often want to enjoy an even more fascinating sound: the dynamic, powerful roar of the 16-valve 2.3-liter engine. That characteristic growl when accelerating, that quiet but distinctive rumble when idling. For this sportscar has everything it takes to convince even the most discerning driver: superior technology, breathtaking performance, supreme handling.

In short, dynamic style and performance to the last detail.

**The atmosphere of a genuine sportscar also at the rear. Featuring individual body contour, the rear seats give the passengers an ideal seating position with ample body support even in fast turns. Here, too, high-quality leather upholstery adds a touch of class. A sportscar that allows the driver to take along three passengers in style.**





# Technical Data.

WEIGHT			
Unladen	lbs		2735
Max. permissible	lbs		3530
Permitted load	lbs		795
Permitted axle load front/rear	lbs		1720/1905
Permitted roof load	lbs		165
POWER PLANT			
Cylinders			4
Capacity	cu.in		152.2
Stroke/bore	inch		3.31/3.68
Nominal output/rpm	hp (SAE)/min.		192/6750
Max. torque/rpm	ft. lb./min.		170/4750
Compression ratio/fuel grade	: 1		10.5/ unleaded 95 RON (90 AKI)
TRANSMISSION			
Standard gear ratios I/II/III	: 1		3.83/2.20/1.40
(sports gearbox) IV/V/R	: 1		1.00/0.81/3.46
Final drive ratio	: 1		4.10
PERFORMANCE			
Drag coefficient			0.33
Top speed	mph		143
Acceleration 0-50 mph	sec		5.5
0-60 mph	sec		7.6
0-1/4 mile	sec		15.7
FUEL CONSUMPTION*			
City	mpg		17
Highway	mpg		29
WHEELS			
Tire dimensions			205/55 VR 15
Wheel dimensions			7 J x 15 light alloy
ELECTRICAL SYSTEM			
Battery capacity	Ah		66
Alternator output	A/W		90/1260

\* EPA-estimated figures are for comparison purposes only. Your actual mileage may vary, depending on speed, weather and trip length: actual highway mileage will most likely be lower.

## BODY.

Two-door sedan, monocoque all-steel bodywork welded to the floor pan, torsionally rigid safety cell on all planes, front and rear crumple zones with predetermined deformation, integrated roof cross-bar, all-around body reinforcements. Fuel tank capacity: 14.5 + 4 gal.

## POWER PLANT.

Water-cooled 4-cylinder 4-stroke inline engine, longitudinally mounted and inclined, 16-valve light-alloy cylinder head, 2 overhead camshafts with 5 bearings, crankshaft running in 5 bearings with 8 counterweights, hydraulically dampened engine mounts, high-efficiency crossflow radiator, engine oil cooler, electric fan. Digital Motor Electronics with electronic grid-controlled air volume and engine-speed-metered fuel injection, warm-up control grid and cold start control, engine overrun control. Manifold exhaust system, twin-tube exhaust with twin tailpipes. Catalytic converter with heated lambda probe for unleaded 95 RON fuel. Activated carbon filter with controlled tank ventilation.

## SUSPENSION/TRANSMISSION.

Standard drive: engine at the front, power transmission to rear wheels. Hydraulically actuated reinforced single-plate clutch with diaphragm spring, torsional vibration damper and automatic adjustment for wear. 5-speed manual gearbox (overdrive in 5th gear) with synchromesh on reverse gear.

Limited-slip differential (25% locking action). Single-pivot MacPherson strut front axle with anti-dive and reinforced anti-roll bar. Semi-trailing arm rear axle (swept back by 15°), anti-squat and anti-dive, separate springs/shock absorbers. Sports-tuned suspension (lowered) with twin-tube gas pressure shock absorbers and reinforced anti-roll bar at the rear. Safety steering column, power steering with assistance geared to engine speed.

Twin-circuit brake system with brake servo, anti-lock brakes, asbestos-free brake pads. Swing-caliper disc brakes front/rear, ventilated at the front, handbrake acting mechanically on additional drum brakes at the rear. 7 J x 15 cast light-alloy wheels with 205/55 VR 15 low-profile tires.

## EXTERIOR FEATURES.

Dual circular headlamps integrated into radiator grill. Reinforced front section with integrated bumper and air dam, reinforced plastic rear section with integrated bumper and rear air dam. Plastic trunk lid with rear wing, flared wheel arches front and rear, wider door-sills. Both rear-view mirrors heated and finished in body color. Windshield and rear window bon-

ded on to body, tinted heat-insulating glass, laminated windshield, heated rear window, driver's door lock and screen-washer nozzles. Roof antenna. Fuel tank filler cap controlled by central locking, holder for tank cap on filler flap. Hollow cavity preservation, undersealing, 6-year limited warranty against rust perforation provided rustproofing is checked annually. Central locking. Limited range of body colors. "M3" insignia in front left ornamental grill and rear right panel with BMW Motorsport stripes.

## INTERIOR FEATURES.

Full carpeting of entire floor and parcel shelf. Illuminated, lockable glove compartment. Storage spaces on instrument panel, front and rear center console, storage boxes in doors, door armrests with integral grab handles, illuminated safety ashtray and cigar lighter. M Technic leather sports steering wheel, dia. 15", leather stickshift knob and boot, handbrake lever cover finished in leather, stickshift knob secured in position.

Safety padding on front roof pillars, all-around door upholstery, safety padding above windshield with recessed sun visors, padded kneeroom, anti-glare safety mirror.

BMW sports seats for driver and front passenger, leather upholstery, seat height and angle adjustment, longitudinal seat adjustment on roller bearings, adjustable thigh support, front passenger's backrest can be released and tipped forward from driver's seat. Front head restraints adjustable for angle, individually contoured rear seats. Electric windows. Electric steel sliding/vent roof with wind deflector.

Inertia-reel seat belts front/rear, belt retainer at the front, rear seat belt locks recessed in backrest.

Toolbox in trunk lid, spare wheel beneath trunk floor, trunk fully illuminated and with padded edges for safe loading. Trunk capacity 14.8 cu. ft.

## ELECTRICAL SYSTEM.

Dual halogen headlamps with two-stage reflector for low beam, foglamps integrated in front spoiler, side markers front/rear, two back-up lights. Rearview mirrors on both doors electrically adjustable. Instruments and control grouped in semi-circular layout around driver, electronic speedometer and tachometer, oil temperature gauge, on-board computer.

Service Indicator, fuel and coolant gauges, warning lights for fuel level, ABS, handbrake pulled, brake pad wear and brake fluid level, oil pressure. Digital clock integrated in on-board computer. Electric windshield washer with automatic wash/wipe and fingertip control, two wiper speeds, intermittent wipe, operated from steering column, interior lights with delay function.

Check/Control with active display for low-beam headlamps, brake lights, tail lights, license plate illumination, coolant level, windshield washer reservoir level; central indicator light in instrument cluster.

Air conditioner, radio, BMW Sound System, roof antenna, cruise control.

Heating/ventilation: fresh-air heater, independent of engine speed, quiet 4-stage blower, defroster nozzles for windshield and side windows, fresh air supply through 4 outlet grills at the side and in the middle, cylindrical outlet with a wide range of vertical adjustment, horizontal adjustment and separate on/off control, forced extraction of used air, rear seat heating outlets.



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America, Inc.  
Montvale,  
N.J. 07645

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**The ultimate  
driving  
machine**