

THE NEW BMW M5







MAKING THE BEST EVEN BETTER.

Not too long ago we were faced with an entirely psychological problem. We were required to modify the BMW M5 for the 1992 model year, although it had received one international award after the other in 1989, 1990 and 1991 — for example the “No 1 Sports Saloon” according to sportauto in Germany, the “Best Performance Car” in the opinion of What Car? in Britain, or the “Best Sports Sedan” in the eyes of Road & Track, USA.

So the challenge was certainly not easy. But it came directly from you: the customers of BMW Motorsport.

Another factor was that we always demand the utmost of ourselves in high-performance technology.

And now here it is: the new BMW M5.



THE FRUITS OF PASSION.

Motor racing is our job. A job that calls for extremely hard work, determining and trouble-shooting defects, testing, improving and then winning against the toughest competition.

Building cars derived directly from motor racing is our commitment. And an outstanding example of these cars is the new BMW M5. A car which might catch your eye at first sight as quite a "normal" — albeit high-class — five-seater saloon. But taking a closer look at this most recent M5, you will be amazed by what you see — by the sheerly incredible technological progress embodied by the new M5 as the result of 20 years' experi-



ence in motorsport, facing and meeting the toughest challenge.

So to begin with, let's focus on the new power unit of the BMW M5, an engine with the very best in power and refinement available in 1992.

The brief given to BMW's motorsport engineers was simple but very, very demanding: Improve all performance figures once again, in particular by giving the car an entirely new torque curve. Task 1.

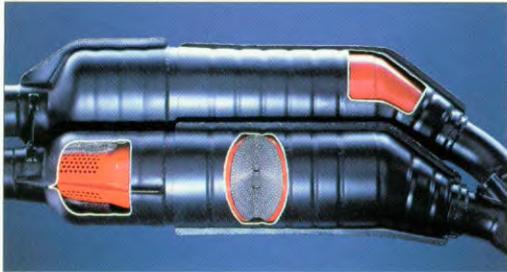
Keep a close eye on motoring comfort, especially when idling and with the power unit in overrun. Task 2 — and, incidentally, one of the most difficult objectives to achieve with a high-performance engine.

Improve substantially on the world's toughest exhaust and noise emission standards, making sure at the same time that the new M5

New: the all-metal M Power catalytic converter reaching its optimum temperature more quickly

remains as fuel-efficient as its predecessor. Task 3.

And while doing all this, retain the engine's turbine-like running smoothness and that typical muscle of a BMW M car. Task 4.

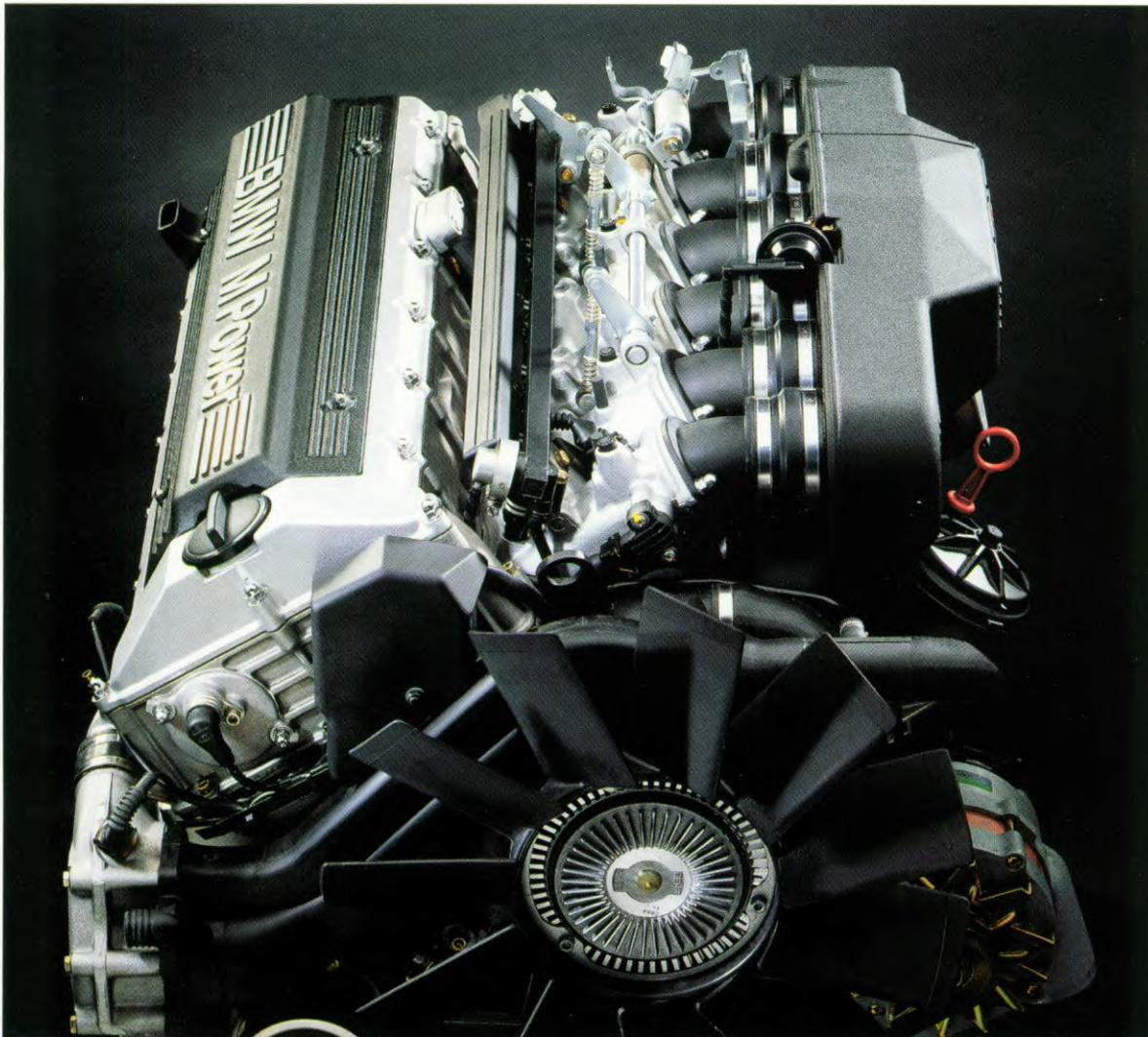


for even better emission control. Another advantage is the reduction of counter-pressure for even more power and torque.

of racing engineers. Engine capacity has been increased to 3.8 litres by enlarging both stroke and bore.

The latest generation of Digital Motor Electronics — code-named M3.3 — serves to provide additional refinement such as integrated, three-

To present the result, **the power unit of the new M5 is one of the most powerful normal-aspiration engines in the world in terms of output and torque per litre.** More than 105 Nm (77 ft/lb) and almost 66 kW/90 bhp per litre prove the efficiency



Once again BMW's motorsport engineers have succeeded in redefining a legendary power unit (remember the M1?!) through the use of advanced technology. The result is 400 Nm (295 ft/lb) and 250 kW/340 bhp. Which makes the letter M the most powerful letter in the world.*

** ECE standard figures. According to the DIN standard, the new M5 develops 255 kW/347 bhp and a maximum torque of 409 Nm (301 ft/lb).*

stage resonance control of the intake system plus special stop-and-go control. This alone is able to boost output and torque to an entirely new standard.

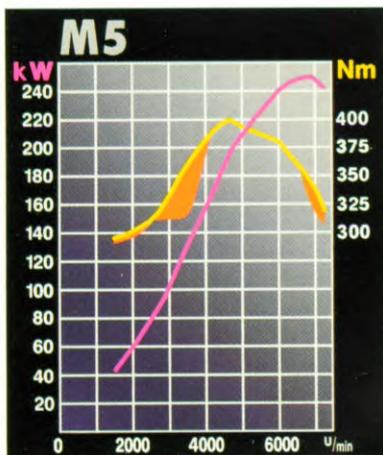
The new solid-state high-tension ignition with six coils upgrades the smoothness and

refinement of this unique engine to an even higher level. And last but not least the M5 comes with an all-metal M Power catalytic converter warming up more quickly to its optimum operating temperature and minimising counter-pressure for extra power and torque.



How to handle the new M5's superior M Power? Ideally, with the help of an ideal suspension: the new, adaptive M suspension system. Adaptive means that the dampers adjust automatically to all driving and road conditions. This is most definitely the state of the art today in combining safety, performance and comfort.

An even better torque curve thanks to the resonance charge effect. These torque and output figures underline the pulling force and flexibility of a normal-aspiration six-cylinder with the class of the M5: 300 (!) Nm



Mission accomplished, target achieved. Now 300 Nm (221 ft/lb) of the engine's maximum torque of 400 Nm (295 ft/lb) is available from just 1800 (!) rpm. Acceleration in fourth gear from 80-120 km/h is a mere 6.9 seconds, maximum output a staggering 250 kW/340 bhp. This alone explains why the new M5 accelerates to 100 km/h in less than 6 seconds.

The next question is how the superior power of such an engine can be converted into absolutely safe driving behav-

(221 ft/lb) at just 1800 rpm and a peak torque of 400 Nm (295 ft/lb) at 4750 rpm. The hatched areas illustrate the superior effect of the three-stage resonance control in the intake system.

our on the road.

And the answer is simple: with BMW's new, adaptive M suspension. We have developed an all-new chassis concept especially for the new BMW M5 — a damper system adjusting automatically to changing driving conditions. Within fractions of a second the suspension adjusts to the car's speed, the surface of the road and the load carried, regardless how often or how quickly these parameters change. One thing always stays the same, however: the unique combination of sports and comfort tuning. Because permanent interaction of the electronic "brain" and five ultra-precise sensors now makes the impossible possible.



THE NÜRBURGRING EFFECT.

We have already mentioned that the M5 has been put through its paces in the toughest tests. So here are the details:

Freezing conditions in the Polar Circle, proving absolute reliability in extreme weather.

Some like it — very — hot in Death Valley, provided you've got a car like the new M5. And even then drivers had to take turns in such incredibly high temperatures, for medical reasons alone.

Stop-and-go in big city traffic, where test conditions were just as ex-

The Nürburgring effect suspension available as an option for your BMW



M5. All you do is press a button for high-performance suspension tuning



with extremely agile handling and equally dynamic cornering (switch position P = automatic suspension tuning, S = sports tuning). The final touch is provided by the extra-strong anti-roll bar at the rear, 9 J x 17 wheels with 225/40 ZR 17 rear tyres, and special Servotronic power steering tuned for performance motoring.

treme as before, only different.

But if you now think these gruelling conditions were sufficient to test the new M5, think again. Because the car was finally required to pass the toughest test of all: 10,000 km non-stop at Nürburgring, equivalent to 30 times this distance under normal conditions. Only this can distinguish between the best and second best. To quote Johnny Cecotto: "The M5 is one of the most thrilling cars on the road and gives you a safe feeling at all times thanks to its perfect handling. And it's the fastest car on Nürburgring far and wide!"



Welcome to the world of racing. Chauffered by an experienced Nürburgring specialist, the fun-loving M5 driver can experience genuine motorsport at Nürburgring: 20.832 km in 8'45.3" — the ultimate driving thrill.

THE FASCINATING RESULT OF CONSTANT DISSATISFACTION.

The time has now come to take a look behind the scenes of M5 production. Because this is where the very best specialists make every effort to offer you a kind of quality very rare in today's world.

The quality of BMW Motorsport. Working entirely by hand without the usual restraints of an assembly line, approximately 100 specialists

While we naturally acknowledge the perfection of the assembly line, only skilled craftsmanship and expert finesse for each and every detail can turn an already excellent car into a BMW M5.



produce 12 M cars a day. At most.

And one of them is the new BMW M5, a very different kind of sports-car. The M5 is the product of mechanics, technicians, panel beaters, upholstery and paintwork specialists who all have one thing in common: an extremely critical attitude towards their own work and achievements.

The special engine shop. Each and every high-performance power unit of a BMW M5 is assembled by hand at the special engine shop in Munich. Each time, all of the six pistons are hand-

picked and matched to one

another — a job for the true perfectionist weighing each piston down to a hundredth of a gram. And before an M engine is shipped to our production shop nearby, it has to prove its merits on a test bench. Not all the engines pass this test — because, quite rightly, it's tough to the extreme.

Body production BMW-style. The body-shell of the BMW M5 is manufactured at our Dingolfing factory on one of the most advanced production lines in the world. This means we can give special attention to the specific demands of our customers and benefit from the perfection of standard production where it really pays off.

Some people might call it exaggerated. We call it the ultimate standard of quality control. Actually there's no way you can fault a BMW M5. But our body specialists check the sheet metal nevertheless until they find even the most minute unsmoothness. Then they use a thin, carefully

The ultimate sports saloon deserves the ultimate paintwork. And we promise you that you will not



receive your BMW M5 until our paint specialist is absolutely satisfied. Needless to say, he's a very demanding man.





The interior of a luxury saloon and thoroughbred sportscar all in one: The BMW M5 offers ample space for five passengers, sports seats at the front adjustable to virtually any position, top-class materials and finish quality only available from a genuine specialist.

sprung steel rod to eliminate even the slightest "deficiency".

The definitive 25 kilometres. After production every new BMW M5 leaves its birthplace for a 25-kilometre test drive. The man at the wheel is a finish and quality control engineer with the job to check out the car once again under true-to-life conditions. Thoroughly and without the slightest compromise.

The engine, transmission, suspension, seats, cockpit — everything is checked for perfect function. And the final result has got to be absolute satisfaction.



Air conditioning, stereo radio*, CD player*, on-board computer. Everything for motoring in grand style is right where it should be, integrated perfectly into the centre console of the BMW M5. * Optional.*



Surprisingly comfortable for a sportscar. With the M5 you buy a sportscar and find yourself sitting in a sophisticated saloon with virtually every creature comfort.

Just consider the seats alone! BMW sports seats at the front, individual sports seats as an option at the rear. Ergonomically perfect and in all-new, refined fabric. Plus side panels and headrests finished in Amaretta® suede.

Things look just as good in the cockpit of the car. All electronic information systems, comfort and safety fittings are driver-oriented for immediate recognition and control. Then there's the special M Technic leather sports

steering wheel with an integral impact boss and excellent handling to make you feel at home right from the start.

Tailor-made all the way. Offering innumerable options and individual choice, we can assure you that every M5 is absolutely unique. Just consider the new colour range with Avusblau and Daytonaviolett metallic paintwork. Or our special leather upholstery. Or the instrument panel, roof lining or even the luggage compartment in top-quality cowhide. Just let us know what you prefer.

One last comment on safety. Over and above this supreme class of performance and luxury, you can always be sure that the BMW M5 has another very special pledge: to give you the highest standard of motoring safety available today.

New: forged light-alloy wheels in five-spoke styling. With large open surfaces and blade design for optimum brake cooling. Hot air is extracted by the blades to make way for fresh air. Clever and effective — and not as complicated as it sounds.



STANDARD EQUIPMENT OF THE BMW M5.

POWER UNIT

Water-cooled six-cylinder four-stroke in-line power unit, longitudinally mounted and inclined, 24-valve light-alloy cylinder head, crossflow principle, two overhead camshafts running in 7 bearings, crankshaft running in 7 bearings with 12 counterweights. Engine mounted on torsional vibration dampers, engine oil cooler, two-stage electric fan with high-performance radiator. Digital Motor Electronics (DME) with electronic, grid-controlled ignition and grid-controlled, air mass-metered fuel injection, warm-up control grid and automatic choke. Fuel supply with overrun control, self-learning idle speed control, integrated resonance control and special stop-and-go control function. Intake system with three-stage resonance control and separate control of throttle butterflies for each cylinder. Twin-pipe double-chamber long-life exhaust system with multi-section exhaust manifold and polished twin tailpipes. Emission management to US standard ensured by fully controlled three-way all-metal catalytic converters (two catalyst units in parallel monolithic arrangement) and heated oxygen sensor. Engine and exhaust system designed for unleaded 95 ROM premium fuel. Activated carbon filter with controlled tank purge function.

TRANSMISSION/SUSPENSION

Standard drive: engine at the front, power transmission to rear wheels. 50:50 weight distribution (unladen) on front and rear axle. Hydraulically actuated, reinforced single-plate diaphragm-spring clutch with automatic adjustment for wear and torsional vibration damper. Five-speed sports gearbox (top speed in 5th gear), two-mass fly-wheel, limited-slip differential (25%). Double-joint spring strut front axle, precision-arm rear axle (swept back by 13°) with additional control arms for exact rear wheel geometry, adaptive M suspension with three electronically controlled damper curves geared to road and driving conditions. Twin-sleeve gas pressure shock absorbers at the front, self-levelling at the rear. Entire body lowered. Engine speed-related power steering, safety steering column, steering wheel adjustable for reach. Asbestos-free clutch and brake linings, swing-calliper disc brakes front and rear (inner-vented at the front), anti-lock brake system (ABS). Handbrake acting mechanically on rear wheels through additional drum brakes. Forged light-alloy wheels.

BODYWORK

Four-door, five-seater saloon, unitary, extremely rigid all-steel bodywork welded to the

floor assembly, torsionally rigid safety cell on all planes, front and rear crumple zones with predetermined deformation, deformation units at the front, integrated roof crossbar, fuel tank nested in stable carrier structure, tank capacity 90 ltr.

Hollow cavity preservation, undersealing, front wheel arches with plastic inserts, six-year warranty against rust perforation.

EXTERIOR FEATURES

Twin circular headlights integrated in radiator grille. Front/rear bumpers with impact absorbers able to regenerate after impacts up to 4 km/h. Both rear-view mirrors finished in body colour. Front and rear air dams as well as side-sills also in body colour, with contrasting colour at the bottom. Rear spoiler available as an option. Special range of paintwork colours with metallic as a no-cost option. Engine compartment lid rising up towards windscreen with partly covered windscreen wiper shafts, extra-low loading sill at the rear. Large, subdivided rear light clusters with separate direction indicators and black plastic panel between rear lights.

Concealed towing hooks front/rear. Engine and luggage compartment lids supported when open by gas pressure springs. Windscreen and rear window bonded flush with the body. Green heat-insulating glass all round. Central locking with anti-theft safety lock and crash sensor.

INTERIOR FEATURES

Lockable, illuminated glove compartment. Several subdivided storage spaces on the gearshift lever console. Velour carpeting throughout floor and luggage compartment. Door lining with integral armrest. Automatically folding grab handles integrated in the roof lining. First-aid kit beneath front passenger's seat, luggage net on the floor of the luggage compartment, small storage boxes at the sides. Luggage compartment capacity 460 ltr (16.1 cu ft) to VDA standard.

Toolbox with warning triangle in luggage compartment lid. M Technic footrest. M Technic leather sports steering wheel, dia 385 mm (15.15"), gearshift lever knob and gaiter as well as handbrake lever handle and gaiter all finished in leather.

BMW sports seats at the front with fine backrest adjustment. Adjustment of seats for height and angle, smooth and convenient fore-and-aft adjustment, adjustable thigh support, front headrests adjustable for height and angle.

Three-seat bench at the rear with individual body contour and headrests on the outer seats, folding centre armrest with integral storage box

and ski-sack. Exclusive seat upholstery combined with Amaretta® suede.

Automatic adjustment of the front seat belts for height as a function of seat position. Ergonomic belt system on the rear seats with belt latches at the outside.

ELECTRICAL SYSTEM

Twin halogen headlights, low-beam headlights and foglamps in ellipsoid technology, electrically adjustable headlight range control, two rear fog warning lights, two reversing lights. Constant-pressure windscreen wiper system. Service Interval Indicator. Analogue-face speedometer, rev counter, fuel gauge, coolant thermometer and engine oil thermometer with red indicators. Check/Control with function display in instrument cluster using LCD dot matrix characters (alphanumeric display), sound signal whenever a warning is displayed. Mileage counter with liquid-crystal display. Fourth-generation on-board computer with additional remote control from the steering column. Frequency chime for outside temperature warning. Hour signal. Displays with dimmer function. Information from the on-board computer may be selected and shown separately by the Check/Control. Cigar lighter also at the rear. Electrically adjustable rear-view mirrors, electric heating of driver's door lock, rear-view mirrors and screenwasher nozzles. Central body electrics. Fresh air outlets in rear tunnel console. Illuminated gearshift pattern in gearshift knob, courtesy lights with automatic delay function, illumination of engine compartment. Map reading lights at the front, illuminated vanity mirrors in driver's and front passenger's sun visors. Electric window lifts front/rear. Aerial integrated in rear window without amplifier. Self-adjusting rear window heating. Separate right/left heater/fresh air control and electronic temperature control. Multi-stage radial blower. Auxiliary ventilation.

THE COLOUR RANGE.



308
Brillantrot

218
Alpinweiss

668
Schwarz II

181
Diamant-
schwarz-
Metallic

237
Granitsilber-
Metallic

252
Calypsorot-
Metallic

266
Lagunengrün-
Metallic

276
Avusblau-
Metallic

244
Sterling-
silber-
Metallic

283
Daytona-
violett-
Metallic

0475
Schwarz
Fabric
(Amaretta®)

0476
Silbergrau
Fabric
(Amaretta®)

0312/0321
Nappa Leather
Champagner

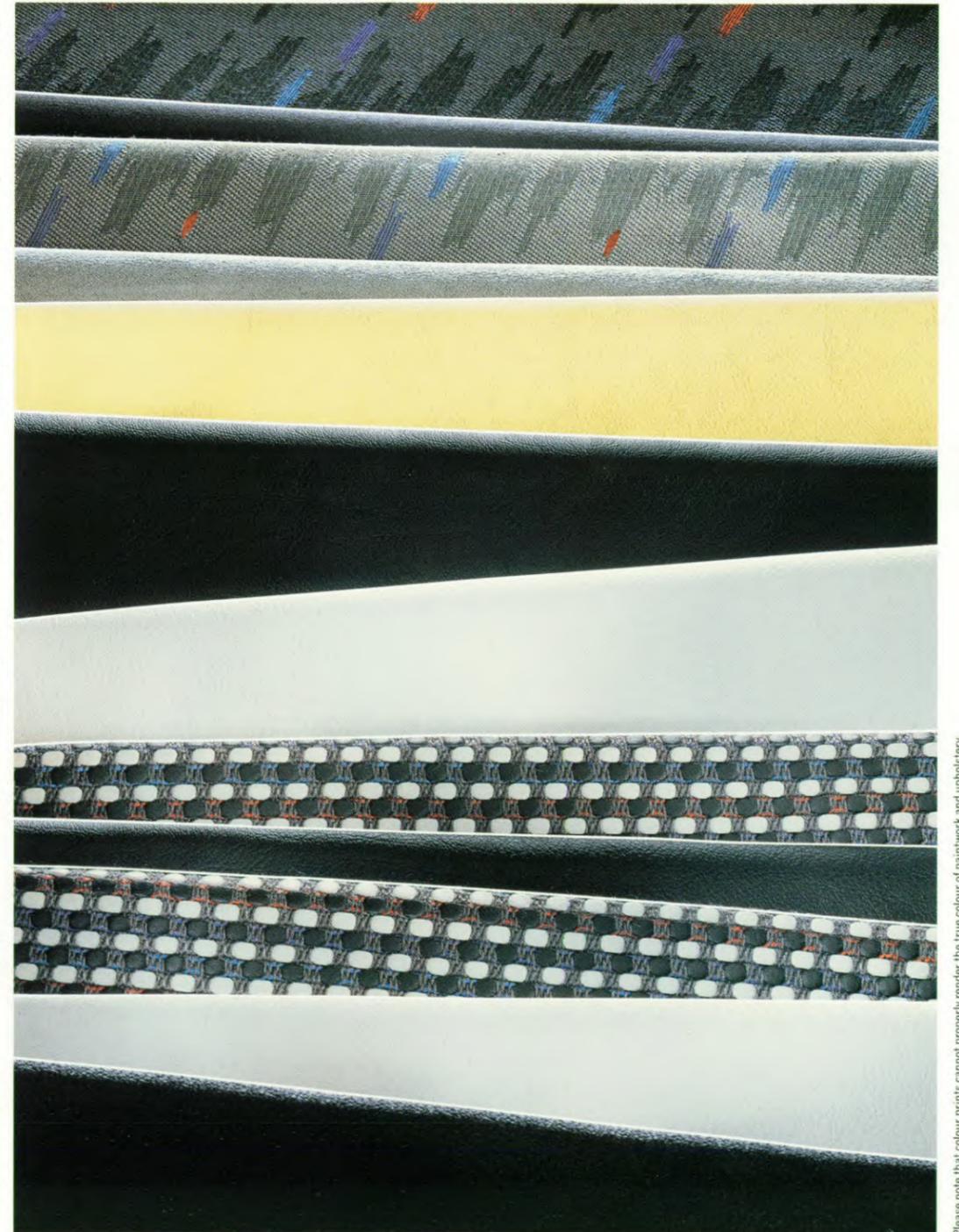
0318/0330
Nappa Leather
Schwarz

0417/0419
Nappa Leather
Silbergrau
hell

785
Schwarz¹⁾

785
Silbergrau
hell¹⁾

0418
Natural Leather
Buffalo
Anthrazit



Metallic paintwork available as a no-cost option, leather upholstery and finish at extra charge. The front spoiler, side-sills and rear air dam of the M5 are finished in contrasting colour.

Contact your BMW dealer regarding specific paintwork and upholstery combinations as well as customised colour options.

¹⁾ Interwoven cowhide/fabric in conjunction with all-round or complete leather upholstery.

SPECIFICATIONS.

M5

WEIGHT		
Unladen	kg	1650
Max permissible	kg	2150
Permitted load	kg	500
Permitted trailer load unbraked/braked with a max gradient of 12 %	kg	700/1400
ENGINE		
Cylinders/valves per cylinder		6/4
Capacity	cc	3795
Stroke/bore	mm	90/94.6
Max output	kW/bhp/rpm	250/340/6900*
Max torque	Nm/ft-lb/rpm	400/295/4750*
Compression ratio/fuel grade	: 1	10.5/premium unleaded
TRANSMISSION		
Standard gearbox ratios I/II/III	: 1	3.51/2.08/1.35
IV/V/R	: 1	1.00/0.81/3.71
Final drive ratio	: 1	3.91
PERFORMANCE		
Drag coefficient	C_d	0.32
Top speed	km/h	250**
Acceleration 0-100 km/h	sec	5.9
standing-start km	sec	25.2
Flexibility 80-120 km/h in 4th gear	sec	6.9
FUEL CONSUMPTION		
90 km/h	ltr/100 km	8.3
120 km/h	ltr/100 km	9.6
City traffic	ltr/100 km	18.0
Average	ltr/100 km	12.0
WHEELS		
Tyre dimensions		235/45 ZR 17
Wheel dimensions		8 J x 17***
Material		Light alloy
ELECTRICAL SYSTEM		
Battery capacity	Ah	85
Alternator output	A/W	140/1960

* 255 kW/347 bhp and 409 Nm (301 ft/lb) acc. to DIN standard.

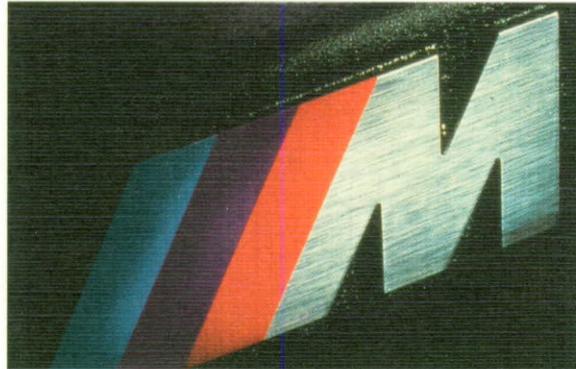
** Electronically cut off.

*** Not suitable for snow chains.

Unladen weight applies to vehicles with standard equipment. Special equipment and optional extras may increase this figure. Fuel consumption to DIN 70030, Part 1.

The models illustrated in this brochure show the specifications for the German market. In part, they include optional equipment and accessories not fitted as standard. According to the specific requirements of other markets, alterations in models, standard and optional equipment, as described in the text and illustrations, may occur. For precise information on the exact range of model fittings, please contact your BMW importer or dealer. Subject to change in design and equipment. © BMW AG, Munich/Germany. Not to be reproduced wholly or in part without written permission of BMW AG, Munich.

The world's most powerful letter



**The ultimate
driving
machine**