

# M5



# For the discerning enthusiast who will settle on nothing but the very best.

**T**he BMW M5 is, on the one hand, an elegant and truly outstanding high-class sedan but, on the other, a fascinating all-out sports car — a unique car always ready to demonstrate its inner qualities by absolutely shattering performance.

The styling of the BMW M5 involves the functional integration of technical requirements — a carefully conceived and beautifully created example of perfect design, engineering and performance.

Only the connoisseur will fully understand and appreciate the M5, or will recognise the refined and carefully designed components. The special bumper panel at the front with its integral spoiler. The rear bumper with its aerodynamic profile. The side sills running smoothly from front to rear. These streamlining features are highly efficient; even with extra wide tyres, the M5 has a drag coefficient of only 0.34. Furthermore, the lift forces on the front and rear axles are equal and therefore provide perfectly balanced directional stability and crosswind behaviour.

Other unmistakable signs of distinction are the light-alloy wheels with their unique styling and function, the twin 70 mm exhaust tailpipes and the M5 badge. The BMW M5, one of the fastest and most dynamic automobiles in the world.







# M Power with perfect manners.

**E**ach BMW M Power engine has to pass its first test in the most demanding trials oriented towards race-track performance. The most advanced computers control and monitor the complex endurance tests, verifying results that ensure the outstanding long-term durability of each component. Guaranteeing optimum precision, refined monitoring systems determine the behaviour of these high-performance engines under test conditions far stricter than in normal motoring. Motor racing engineers set new parameters time and again, constantly demanding even better performance.

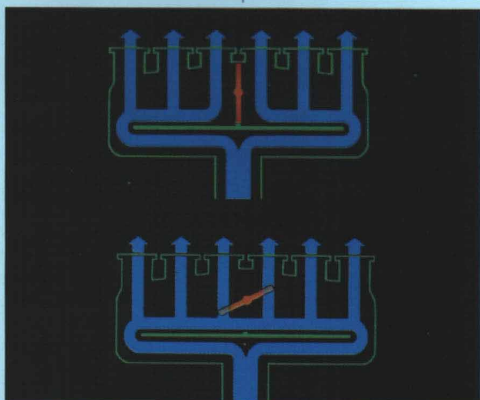
Other innovative design concepts by BMW Motorsport are tested together with the engines to provide a perfect match. For this is what blends a range of perfect components into an optimum all-round achievement in automotive technology, striking out to new horizons. Now, the new power unit of the M5 becomes the most im-

pressive example of this uncompromising philosophy.

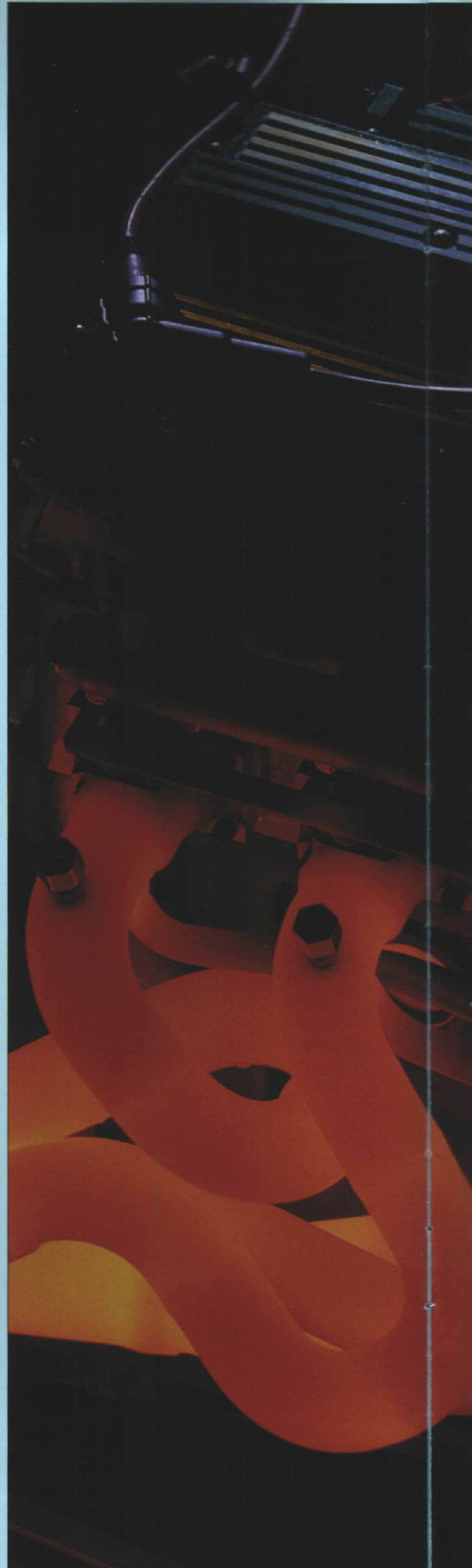
This is where almost unlimited power and performance straight from motor racing comes together with sophisticated refinement and almost conservative dependability. Six cylinders in-line, four valves per cylinder with two overhead camshafts, six individual throttle butterflies, intake system with resonance control and fan-type exhaust manifold, 232 kW/315 bhp at 6900 rpm, engine speed governor cutting in at 7200 rpm, maximum torque 360 Nm at 4750 rpm — these facts and figures alone tell the whole story, clearly describing the superior technology and muscle of this thoroughbred high-performance power unit.

Added to this supreme engine output, Digital Motor Electronics — the world's most advanced engine management system — monitors the car's performance and economy with utmost precision, also ensuring revolutionary new standards in this respect.

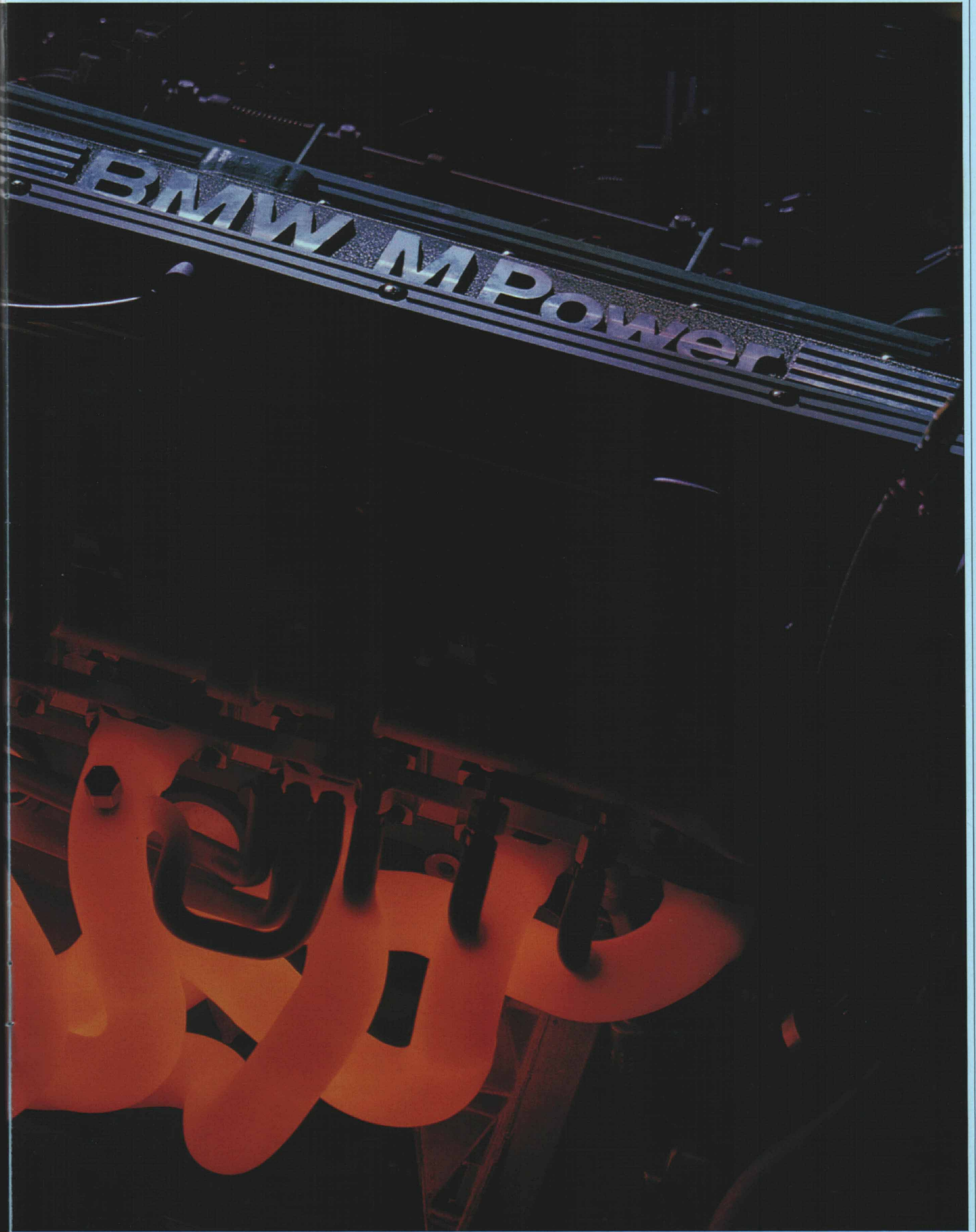
The resonance-control intake system helps to maximise torque and engine power. Making optimum use of cylinder charge, this intake system boosts engine torque at low speeds and the maximum output of the engine.



M Power white-hot: Pushed to the limit on the dynamometer, the engine of the M5 has to prove its outstanding endurance and many other features.



ENGINE



# Sports car handling, luxury sedan comfort.

**G**iven the sheer power of this outstanding engine, the engineers of BMW Motorsport GmbH have thoroughly refined the suspension to a new, unprecedented standard. The entire body has been lowered by 20 mm. Twin-sleeve gas pressure shock absorbers have been fitted for optimum road-holding and motoring comfort in one. Extra-large anti-roll bars help to minimise body sway and ensure perfectly neutral handling.

The double-joint spring strut front axle of the M5 is the optimum concept for cars with rear-wheel drive. It guarantees excellent directional stability and reduces vibrations for even greater running smoothness. The steering gear ratio is more direct than on the BMW 535i for even more precise and dynamic handling.

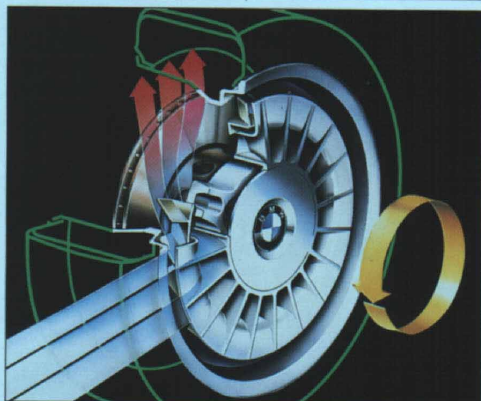
In conjunction with ABS, naturally fitted as standard, the extra-large brake discs (vented at both the front and rear) ensure supreme stopping power and

minimal stopping distances. The rear axle comes as standard with self-levelling and a limited slip differential with 25 % locking action, guaranteeing consistent behaviour regardless of vehicle load and ensuring improved traction when accelerating, even in adverse conditions.

Yet another example of the M5's sophisticated technology is the new wheel concept offering a unique combination of efficient function and low weight: Bolted directly to the light-alloy base wheel is a pressure-cast magnesium fan wheel with two concentric blade type rotors. The advantages are superior wheel strength combined with low weight and optimum cooling of the brakes due to exemplary aerodynamic features.

Ultimately it is impressive features like these that make the M5 a model example of advanced automotive technology.

**A perfect air guidance system: The turbine-like rotor blades on the all new light-alloy wheels force cooling air straight towards the brake discs.**



**Wide track, long wheelbase and optimum weight distribution make this dynamic sedan a thrilling experience in safe motoring.**





SUSPENSION







# A unique flair of luxury and function.

**D**esigned and built without compromises, the M5 offers its passengers a high standard of comfort and spaciousness never available before in the elite class of high-performance sports cars. The interior features of the M5 therefore include sports seats for both the driver and front passenger offering

**Inside, the M5 is just as sophisticated and exclusive as outside.**

individual adjustment in every respect. The front seats are electrically adjustable with the driver's seat featuring a convenient three position memory function.

And this is just one example of BMW's objective to achieve the ultimate standard of functional perfection in this exclusive sports sedan.

Another example is the steering wheel designed especially for the M5 by BMW Motorsport. Since

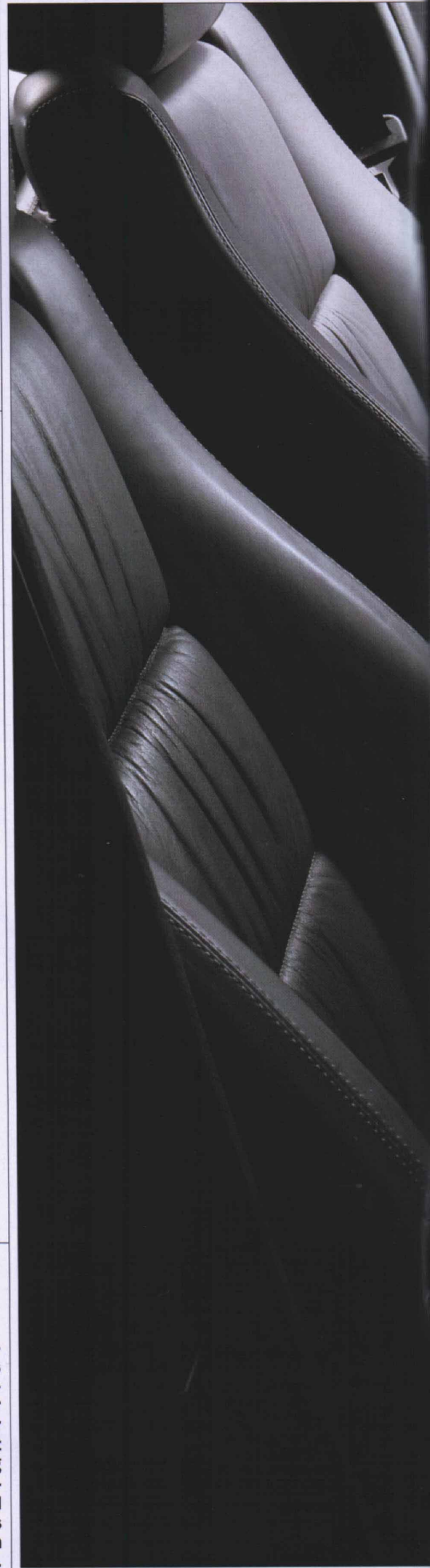
the steering wheel is the direct interface between man and machine, it offers the driver a perfect feel for physical forces such as lateral acceleration or the frictional coefficient of the tyres. Through its ergonomic design, the M Technic leather sports steering wheel automatically makes the driver hold the rim at exactly the right points. A further example of the car's exclusive and functional ambience is the illuminated shift lever pattern in the gearshift knob.

For the aficionado of natural materials who would like to improve even on the fascinating flair of the new interior fabric in M Design, there is also an exclusive alternative available from BMW Motorsport: All-round leather upholstery created by the best craftsmen is available as an optional extra. So in terms of luxury features and space available, there are absolutely no limits to your individual style in the BMW M5.

**A new dimension in interior comfort: Designed without compromises, the M5 offers passengers a standard of seating comfort and enjoyable motoring simply not available so far in the elite class of thoroughbred high-performance sports cars (two person rear seat is available as an optional extra).**



**The electrically adjustable sports seats fitted as standard for the driver and front passenger provide a perfect blend of motoring comfort and dynamic driving (all leather trim is available as an optional extra).**



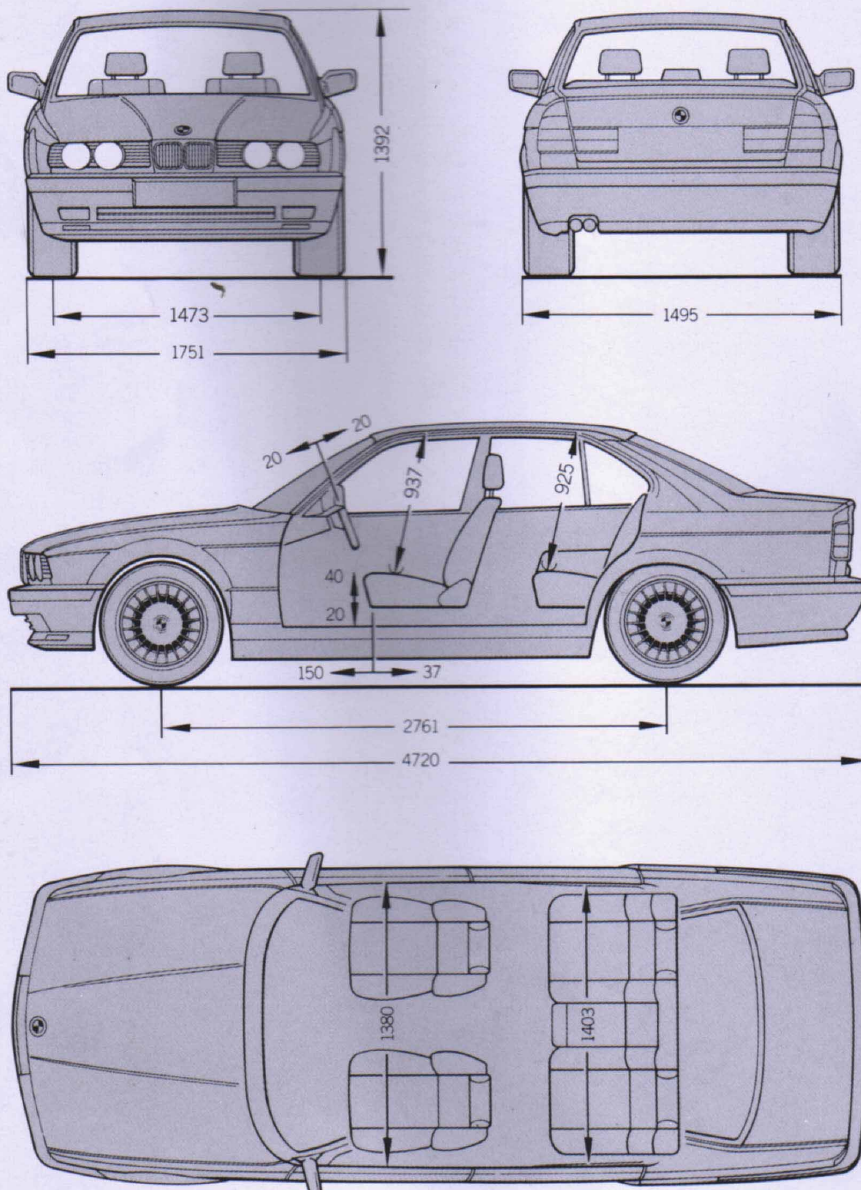
INTERIOR





## SPECIFICATIONS

# Technical data.



## SPECIFICATIONS

# M5

WEIGHT		
Unladen	kg	1745
Max permissible	kg	2150
Max load	kg	405
Max roof load	kg	100
ENGINE		
Cylinders		6
Capacity	cc	3535
Stroke	mm	86
Bore	mm	93.4
Max output	kW/bhp/rpm	232/315/6900
Max torque	Nm/rpm	360/4750
Compression ratio/fuel grade	:1	10.0/premium unleaded 95 RON
TRANSMISSION		
Standard transmission ratios I/II/III	:1	3.51/2.08/1.35
	IV/V/R	1.00/0.81/3.71
Final drive ratio	:1	3.91
PERFORMANCE		
Drag coefficient	cd	0.34
Top speed	km/h	250*
Acceleration 0-100 km/h	sec	6.3
standing-start km	sec	26.0
Flexibility 80-120 km/h with sports transmission in 4th gear	sec	7.6
FUEL CONSUMPTION		
City	ltr/100 km	19.3
Highway	ltr/100 km	9.1
WHEELS		
Tyre dimensions		235/45 ZR 17
Rim dimensions		8 J x 17
Material		Light-alloy

\* Electronic cut-off.

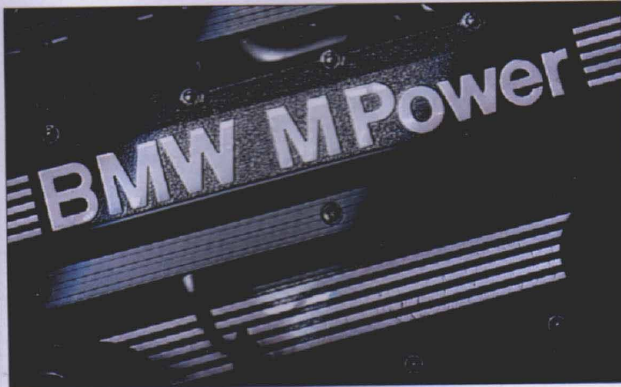
Unladen weight applies to vehicles in standard trim.  
Optional equipment may increase this figure.

## STANDARD EQUIPMENT M5



### BODYWORK

Four-door, five-seater sedan, monocoque all-steel bodywork extremely rigid in all planes with welded integral floor assembly, passenger safety cell, crumple zones with predetermined deformation, impact boxes at the front, integral roof crossbar, all-round body reinforcements, fuel tank integrated in rigid support structure, capacity 90 ltr.



### POWER UNIT

Water-cooled 6-cylinder four-stroke in-line engine fitted longitudinally at the front, 24-valve light-alloy cylinder head, cross-flow principle, two overhead camshafts running in 7 bearings, crankshaft running in 7 bearings with 12 counterweights. Engine mounted on vibration dampers, engine oil cooler, two-stage electric fan with high-efficiency radiator. Digital Motor Electronics (DME) with electronic grid-controlled ignition, grid-controlled air mass-metered fuel injection, warm-up control grid and automatic choke, fuel supply overrun control, self-learning idle speed control, on-board diagnosis with failsafe running capability, intake system with resonance control and individual throttle butterfly control for each cylinder. Twin-tube double-chamber long-life exhaust system with fan-type manifold and twin polished tailpipes. Exhaust gas cleaning by controlled 3-way catalyser (two catalyser lines in parallel monolith arrangement) and heated lambda probe. Designed for Premium unleaded super petrol 95 octane RON minimum. Active carbon filter with controlled tank venting.



### TRANSMISSION/SUSPENSION

Standard drive: engine at the front, power transmission to rear wheels. 50:50 front/rear weight distribution when unladen. Hydraulically operated, reinforced single-plate diaphragm-spring clutch with automatic compensation for wear. Torsional vibration damper. 5-speed transmission with reinforced gear wheels (top speed in 5th gear), limited-slip differential with 25% locking action. Double-pivot spring strut front axle, precision-arm rear axle (swept back by 13°) with additional locating arm for high-precision rear wheel geometry, large diameter anti-roll bars and sports-tuned twin-sleeve gas pressure shock absorbers front and rear, self-levelling at the rear, entire vehicle lowered by 20 mm. Engine speed-related power steering, safety steering column, steering wheel adjustable for reach. Asbestos-free clutch and brake pads, swing-calliper disc brakes front/rear, vented at the front and rear, anti-lock brake system (ABS).

### EXTERIOR FITTINGS

Radiator grille with integral twin circular headlights. Plastic bumpers front/rear with impact absorbers fully regenerating to original shape in collisions up to 4 km/h. Rear-view mirrors finished in body colour. Front and rear air dams as well as side-sills finished in body colour and with contrasting colour at the bottom. Rear wing available as a dealer fit accessory. Metallic paint is available as a no-cost option.

Engine compartment lid rising up towards windscreen with partly concealed windscreen wiper arms, extra-low rear loading sill. Large, divided rear light clusters with separate direction indicator lights and black centre panel between rear lights.

Concealed towing hooks front/rear. Engine compartment and luggage compartment lids supported by gas pressure springs. Tinted band laminated windscreen and rear window bonded flush to body. Remote control central locking with anti-theft security lock and crash-sensor.



## STANDARD EQUIPMENT M5

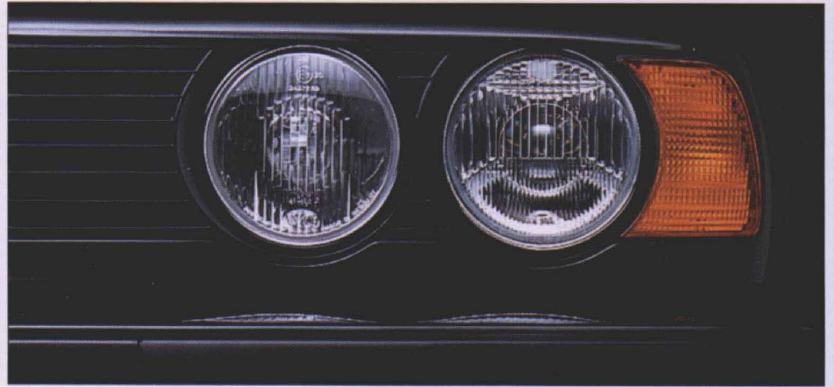


### INTERIOR FITTINGS

Lockable, illuminated glove compartment. Large, subdivided stowage space on gearshift lever console. Velour carpeting on floor and in luggage compartment. Door panels with integrated armrests. Folding grab handles integrated in roof lining. First-aid kit beneath front passenger's seat, luggage net in floor of luggage compartment, small stowage boxes at the sides, luggage compartment capacity 460 ltr (according to VDA standard).

Toolkit and warning triangle in luggage compartment lid. M Technic leather sports steering wheel (dia 385 mm) leather gearshift lever knob and gaiter, leather handbrake lever handle and cover.

BMW sports seats at the front with backrest adjustment, seats adjustable for height and angle, longitudinal seat adjustment, adjustable thigh support, front seat headrests adjustable for height, three person capacity rear seat. Automatic adjustment of front seat belts for shoulder height as a function of longitudinal seat position. Ergonomic arrangement of rear seat belts with belt latches at the outside.



### ELECTRICAL SYSTEM

Dual halogen headlights, low-beam headlights and foglamps in ellipsoid technology, two rear fog warning lights, two reversing lights. Intensive windscreen cleaning system, constant-pressure windscreen wipers. Instruments with anti-dazzle illumination, controls and instruments in semi-circular arrangement before the driver. Service Interval Indicator. Analogue-face dials with red indicators for speedometer, tachometer, fuel gauge, coolant and engine oil thermometer.

Check/Control with function display readout in instrument cluster by means of LCD dot matrix (alphanumeric), acoustic signal when text is first displayed. Tripmeter with LCD display.

Fourth-generation on-board computer with additional remote control from lever on steering column. Outside temperature warning gong. Hour signal. Display dimmer. Selective and separate display by Check/Control of information in the on-board computer.

Cigar lighters front and rear. Lock on driver's door, rear-view mirrors and screenwasher nozzles electrically heated. Central body electrics. Cold air outlet nozzle in tunnel console.

Illuminated gearshift pattern, interior light with automatic delay function, illumination of engine compartment. Map-reading light at front, illuminated vanity mirror in driver's and passenger's sun visors. Electric window lifts front/rear, electrically adjustable external mirrors. Rear window aerial. Heated rear window with automatic power cut-off.

Heating and ventilation with separate left/right output control and electronic temperature control. Air conditioning with automatic climate control. Variable speed radial blower, auxiliary ventilation when vehicle is not moving. Electric sunroof, electric front seats with memory function for driver's seat. AM/FM radio/cassette with anti-theft device. Hi-fi speaker system. Auto-dipping mirror.

## COLOURS OF BMW MOTORSPORT

### NON-METALLIC PAINTWORK<sup>1)</sup>



668 Glossy black



218 Alpine white



308 Brilliant red

### METALLIC PAINTWORK<sup>1)</sup>



181 Diamond black



229 Sebring grey



250 Macao blue



252 Calypso red



244 Sterling silver

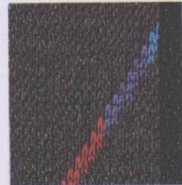


266 Lagoon green

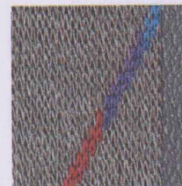


287 Mauritius blue

### FABRIC UPHOLSTERY<sup>3)</sup>



0313 Anthracite

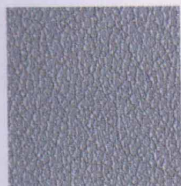


0416 Silver grey

### NAPPA LEATHER UPHOLSTERY<sup>2)</sup>



0318 Black



0417 Light silver grey



0312 Champagne

<sup>1)</sup> For allocation of colours and models see the following table.

<sup>2)</sup> All-round leather upholstery. Top-quality natural grain nappa leather upholstery all-around on seats, door panels and side rear panels including stowage boxes and armrests, centre and propeller shaft console. Bottom half of instrument panel including outside glove compartment lid.

<sup>3)</sup> Combined with top-quality natural grain nappa leather strips on seats, headrests and rear centre armrest.

		NON-METALLIC			METALLIC						
Interior	Code No.	Alpine white	Brilliant red	Glossy black	Diamond black	Sebring grey	Sterling silver	Macao blue	Calypso red	Lagoon green	Mauritius blue
		218	308	668	181	229	244	250	252	266	287
Fabric	Anthracite	0313	●	●	●	●	●	●	●	●	●
	Silver grey	0416	●	●	●	●	●	●	●	●	●
All-round natural grain nappa leather	Black	0318	●	●	●	●	●	●	●	●	●
	Light silver grey	0417	●	●	●	●	●	●	●	●	●
	Champagne	0312	●	●	●	●	●	●	●	●	●

## CUSTOMER ASSURANCE PROGRAMME

### THE CUSTOMER ASSURANCE PROGRAMME — BMW'S COMMITMENT TO CUSTOMER SERVICE

The purchase of a BMW brings you more than just the tangible benefits of automotive excellence. As a BMW owner you will receive the recognition that you would expect from association with such a prestige marque.

### FINANCE PACKAGES COMPLETE WITH FINANCIAL ADVICE

Our Customer Assurance programme begins even before you have made your final choice of a BMW car. The complexities of the finance and purchase options that are available to you are made simple with expert financial planning advice. Lease or buy, on or off balance sheet, the various tax implications and advantages — all are carefully considered and explained, to assist you in choosing the best possible financial package.

### 2 YEARS SERVICING INCLUDED WITH YOUR BMW

For M5 owners a special two years free service programme is included. This of course, covers all normal parts and labour costs. For two years, from the date of purchase, service bills will become a thing of the past and controlled costs of ownership a thing of the future.

### A 2 YEAR WARRANTY FOR COMPLETE ASSURANCE

Financial advice is just part of the BMW ownership package. Every BMW car is fully backed by a comprehensive, 2 year warranty. This commitment to owner assurance is a demonstration of BMW's in-built quality and reliability. The most advanced design technology and precision built components ensure a future of sheer driving pleasure — the 2 year warranty guarantees it.

In addition, BMW Australia warrants your vehicle for 6 years against body rust perforation.

### EMERGENCY SERVICE — NOW YOU'RE FULLY PREPARED FOR THE UNEXPECTED

Supporting BMW's comprehensive 2 year warranty is a comprehensive 24 month emergency owner assistance programme — BMW Emergency Service.

When you buy a BMW, Emergency Service, like our 2 year warranty, is included in the standard specification. The services offered are, however, anything but standard.

BMW Emergency Service operates nationally, throughout Australia, giving you benefits such as mechanical assistance, vehicle recovery and hotel accommodation and car hire, should it be necessary.

### BECOMING A MEMBER OF AN EXCLUSIVE CLUB

Ownership of a BMW brings an entitlement to discreet privileges. You will become a member of BMW's exclusive owner's club and will be recognised by your personalised membership card. The benefits have been carefully chosen to allow you to take optimum advantage of the BMW lifestyle.

### TECHNICAL SERVICE THAT SUPPORTS CUSTOMER SERVICE

All BMW cars are serviced using the latest and most advanced, computerised servicing equipment. The unique BMW Service Tester accurately and swiftly identifies the smallest of mechanical malfunctions — saving you time and saving you money. The high standard of knowledge and skill of the BMW technician more than complements the state of the art machines which he controls. And with BMW's commitment to technical and interpersonal skills training you can be sure that he will understand you as well as your car.

### THE CUSTOMER ASSURANCE PROGRAMME — ADDING VALUE TO YOUR INVESTMENT

The benefits of BMW ownership are substantial. BMW's retained values have always been high. And now, the value of your investment will always provide a source of satisfaction that will reflect the many advantages that the Customer Assurance Programme will bring.

### AFTER SALES SERVICE — A PARTNERSHIP IN EXCELLENCE

The best in after sales service is guaranteed by a most professional partner — the BMW Dealer. Trained specialists manage every sector of his business and you the BMW owner are their most important consideration.

Every dealership uses BMW-approved workshop equipment. They can supply the complete range of original parts and accessories. Original parts made to the same exacting standards as the part they will replace to keep your BMW in its original, as new condition. And when a repair is undertaken it is carried out with the care and efficiency that is designed to ensure that you receive not only excellent

service but excellent value for money.

BMW dealers provide a quality of customer service that matches the unparalleled quality of BMW cars.

When you take your car in for a service it will also be valeted. Many dealers can also provide you with a Service Loan Car while they are looking after yours. And if you need quick service for a minor problem then you can be sure that you will receive it. The BMW dealer's customer service initiatives are many and varied. And they have been put in place to make owning a BMW a rewarding experience.

This commitment to enjoyment of ownership enhances the pure driving pleasure that only the Ultimate Driving Machine can bring.

**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, please contact your BMW dealer. Subject to change in design and equipment.**

**© BMW AG, Munich/West Germany. Not to be reproduced wholly or in part without written permission of BMW AG, Munich.  
0 11 15 16 23  
2/90 VM.  
Printed in West Germany 1990.**

