## **BMW 535i**

## The well-heeled enthusiast's dilemma

ARRIVING back in Britain mightily impressed with BMW's now more widely available 3½-litre 5-series (M 535i), we set to scanning the price lists for a rival to provide an antidote to our enthusiasm. Mmmm. Not so easy when you are searching for a vehicle capable of 140 m.p.h., 20 m.p.g. and accelerating from rest to 60 m.p.h. in 7.8s or less.

Obvious candidates at under the BMW's price and performance abound. SAAB's Turbo (now available in four door trim with a conventional boot at under £11,500), or perhaps the £12,950 Audi Turbo? Then remember the Audi usually comes in automatic form only for the UK and, like the SAAB, it's front wheel drive. Perhaps not the most popular layout with the enthusiast who occasionally likes to drive with the rear wheels dictating the angle of travel.

Bearing in mind the performance and fuel economy levels set by the BMW, this writer felt that the potential 535i customer might also be the potential Porsche 924 Turbo candidate too. It is fascinating to reflect that these two West German companies have found two very different ways of achieving much the same performance and economy.

The BMW represents a concept almost as old as motoring itself, using a (comparatively) big engine, lightly stressed, in a car designed for smaller units, thereby offering much performance.

The BMW is an equally conventional machine in chassis, braking and four door saloon car style. Even if the 535 is dressed up with awesome aerodynamic aids, they are very much what you would expect from BMW's extensive saloon car racing record.

Against the BMW's useful chunkiness with luggage and easy four passenger accommodation you place the Porsche's use of the latest thinking and sleek lines. A 2-litre turbo engine, rear gearbox, and slippery bodywork are a worthwile price to pay for limited accommodation and luggage storage.

However, the BMW and the Porsche nearly share the same price tag, BMW at £13,750 while Porsche currently ask £13,998. Both have exactly the same, awkward-for-the-road, gearchange pattern. First isolated on its own to the left of a conventional H-pattern that provides the remaining five gears.

## Not so new . . .

Perhaps the surprising thing about the M535i is that BMW have not put it into limited (the UK will get at least 200, possibly more) production before. The idea of putting ever larger engines into the 5-series escalated with Jochen Neerpasch's arrival in 1972 at the Munich competitions department, for the shrewd former Porsche driver and Ford competitions man saw a way of offsetting some costs by providing the wealthier motorist with a better BMW, or part-paying drivers like Ronnie Peterson and Gunnar Nilsson with these special 5s. Not a tuned BMW in the way that Alpina engineered their conversions, but an appropriate melange of standard parts. By the time the fuel crisis arrived BMW Motorsport had developed the art of



A BMW press photograph of the BMW 535i without the optional rear spoiler.

inserting straight sixes from 3.0 to 3.3 litres in 5-series cars with special seats, suspension and braking. These were the genuine handmade article and the principle - which incidentally helped the sporting department survive through that difficult period - was established enough to make the arrival of the 3.5 litre engine for the 6 and 7-series just another logical progression in the production of these high performance 5s. It would be a mistake to call them ultimate 5s, that will not happen, in a sporting sense, until some bright spark mates the BMW M1 engine (also of 31/2 litres, but with four valves per cylinder) with that rather staid four door body! The South Africans did it for racing, but it would be overkill for the road.

Back to the car offered to UK motorists today: Type Approval was received after the Manx-registered cars were brought into UK for testing. MOTOR SPORT May 1980 gave a brief rundown of what composed this M535i and a technical specification panel is appended here as a résumé. In general much of the important equipment is derived from the 635 CSi, including the engine, close ratio gearbox (an option on 635) and much of the suspension work is based on that found efficient on the big Bavarian coupé too. So are the four wheel disc brakes, which are ventilated and feature four piston calipers at the

Our purpose on this occasion was to gain a little more mileage, for our representative on the May-published story had covered few miles. Courtesy of BMW in Britain we were recently able to drive the car several hundred miles over motorway and rural French roads, stretching from Bordeaux inland and back. So our primary purpose here is to amplify those road impressions of this interesting "oldcomer," which is not a product of BMW Motor sport in the sense that



FUN on gravel roads, the BMW 535i displays excellent handling qualities and recovers from situations such as the above easily.

they made every car — some 85% of the work is on the normal production line — but certainly the 535 is in feel and performance.

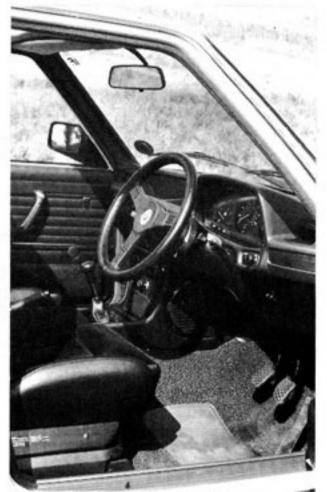
First impressions are strongly favourable. The sports wheel is rigid, the Recaro seats a neat compromise between sport and comfort, and the driving position as commanding as one would expect from these high-roofline saloons.

The engine supplies its power with the absolutely fuss free precision that Bosch L-Jetronic injection so nobly assists. There couldn't be a bigger contrast to the Porsche 924 T's rev-it-and-wait-for-the-power. At any point from 2,000 to 6,000 r.p.m. in any gear there is a swift appreciation of speed. Even down to 1,000 r.p.m. and under the 3,453 cc six chuffs out a fair impersonation of maximum torque, though the peak is an official, and high, 4,000 r.p.m.

There doesn't really seem to be a power curve as such, though from 3,500 to 5,500 there's enough eagerness to satisfy all but the most bloodthirsty pilot. I must confess, together with my co-pilot, to driving up to the limit of 6,100 r.p.m. quite regularly. We even managed 6,000 r.p.m. and an indicated 140 m.p.h. in top for a couple of miles, just to see how stable and how rapid the car was. More practical is the way this BMW will lope between 70 and 120 m.p.h. equably.

We even turned off the official route early to get some extra country mileage in for the pleasure of rocketing between bends in a BMW that doesn't oversteer the minute you provoke the throttle seriously or sharply let off the power in mid-corner.

All the important qualities, retardation, steering and cornering ability are in a league that the normal 5-series owner might find hard to recognise. The steering endowed with uncanny stability in crosswinds because of the front and rear spoilers, the brakes and suspension changes equally effective, employing Michelin 195/70 VR radials of XWX or XDX type. One wonders if the



THE comfortable, well-appointed interior.

TRX option offered on 7-series was tried and rejected for this application?

Comfort has certainly not been neglected with central locking, tinted glass, a sunroof, the usual variable ratio ZF power steering and electrically operated mirrors as standard items. The spoilers are a no cost option, but the air conditioning will be a substantially priced extra: like the rest of the car, it is very effective in a modest way. Here I speak of the car's characteristics, not the "flash" badges that decorated the tails of our test cars!

Surely this apparent paragon has faults? A

heavy clutch combined with the awkward first to second movement detracts from the easy way the 535i wafts through urban motoring. This driver also managed under 17 m.p.g., but since the rest of those assessing the car managed 23-24 m.p.g. and still enjoyed the extra performance, I feel that 20, an independently tested figure, is a fair average, and a creditable one for a 3½ litre bulky saloon. It is not that much lighter than the 6-series coupe.

Overall it was the refinement — even that perpetual BMW bugbear of windnoise seemed abated — which was so attractive when balanced with such speed in all departments from the M 535i. That is why I started with the Porsche comparison to lend a little perspective.

In fact the Porsche will attract customers who can go for the more restricted sports car format . . . but BMW have a tremendously attractive staging post in the 535 between 323i and M1/635 coupes. For the longer term owner there maybe concern as to how long the square-rigged 5-series style can last. The official line is for several more years, despite that monthly rival of ours that keeps promising a change of bodywork. . . . and has been so anticipating for a good 12 months now! — J.W.

Specification

Engine: Siamese cylinder block in iron, alloy SOHC cylinder head with 9.3:1 cr. Chain-drive camshaft, seven bearing steel crankshaft with 12 counterweights; oil cooler: viscous fan coupling; transistorised ignition; Bosch L-Jetronic injection; stainless steel exhaust system.

Engine statistics: Bore × stroke, 93.4 mm. by 84 mm.; capacity, 3,453 c.c. Peak power, 218 b.h.p. @ 5,200 r.p.m.; max torque, 228 lb. ft. @ 4,000 r.p.m.

Transmission: Close ratio, five speed Getrag. Ratios — first,

Transmission: Close ratio, five speed Getrag. Ratios — first, 3.717:1; second, 2.403:1; third, 1.766:1; fourth, 1,236: 1; fifth, direct 1.0:1. Final drive (incorporating 25% ZF limited slip differential) 3.07:1.

Suspension: Front, inclined coil spring struts with Bilstein shock absorbers and rubber auxilliary springs. Rear, trailing arm with Bilstein damper/spring unit and auxilliary: back and front anti-roll bars.

Brakes, wheels and tyres: Four wheel disc, ventilated 11 inch dim front and 10.7 in solid rear. Mahle-BBS 6½ in × 14 alloy wheel and Michelin 195/70 VR 14 radials.

Weight: 3,153 lbs. Supplied by BMW (GB) Ltd, Ellesfield Avenue, Bracknell, Berks, RG 12, 4TA at prices from £13,745.

## New Performance Tyres from Dunlop

DUNLOP Limited have announced a range of five new high performance tyres, designated D.2, 3, 4, 6 & 7, and designed to cope with the variety of requirements set by the European quality car manufacturers.

The range reflects the current trend in HR & VR tyres (i.e. those compatible with cars capable of speeds between 113 and 130 m.p.h. or over 130 m.p.h., respectively) towards low aspect ratio and broad section, a trend pioneered by Dunlop in conjunction with Jaguars for the XJ6 in the mid-1960s. The sizes being made at the moment are those required by manufacturers for fitment as original equipment to new cars, but other sizes will be in production shortly for the replacement market.

The D.2 is aimed specifically at the HR area of the market and will be standard equipment on the SD 1 Rover and the 505 Peugeot as well as some of the sporting versions of volume production cars. The aspect ratio is 70%, and the tread has a zig-zag pattern with a central drainage channel. D.3 is a 60% aspect ratio tyre, available in HR or VR speed ratings, and is derived from tyres fitted to certain Lotus production cars. This tyre will be available in sizes to suit the requirements of most high performance saloons made in Europe, and will be standard fitting on the Audi 80 Coupé described last month. The tread is of blocks arranged in a herringbone pattern. D.4 is only available in two VR sizes and is made for the Porsche range (excluding the 924) and for the BMW M.1. The aspect ratio is 50 or 55%.

The D.6 and 7 tyres are specially designed to meet the requirements of the fast, heavy, luxury saloons. D.6 for cars such as BMW 7 series, Mercedes-Benz "S" Class and so forth, while the D.7 is made in two sizes, tailored for the new Rolls-Royce and the XJ series Jaguars. Both these tyres have 70% aspect ratios and the treads are carefully designed with many small slits (sipes) to assist with drainage. — P.H.J.W.

