

EVERY WEEK

£1.10

9 JANUARY 1991

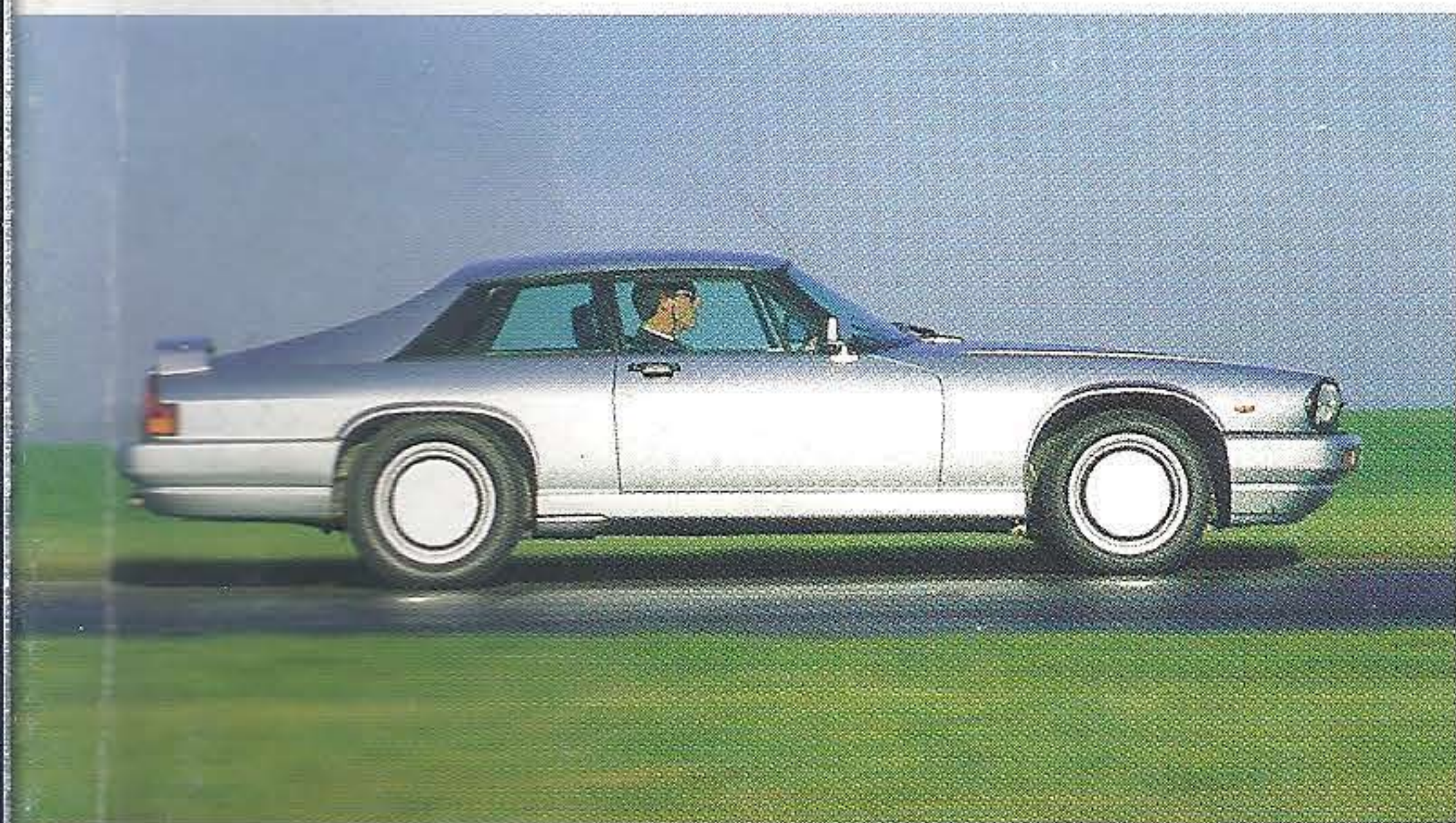
# AUTOCAR &Motor



**BMW 850i**



**Porsche 928GT**



**Jaguar XJR-S**



**Ferrari Mondial**

Four great cars

One very surprising winner

**150MPH GT GIANT TEST**



9 770955 588014

DM 7.50

02





The best car in the long run is revealed, p26



Buildacar winner, p36

**Editor** Bob Murray  
**Deputy editor** Shaun Campbell  
**Office administrator** Janet Mills  
**Road test editor** David Vivian  
**Deputy road test editor** Andrew Frankel  
**Road tester** Martin Vincent  
**Road test assistant** James Thomas  
**News and sport editor** Michael Harvey  
**Reporter** David Thomson  
**Assistant features editor** Mark Harrop  
**Technical consultant** Jesse Crosse  
**Chief sub-editor** James May  
**Deputy chief sub-editor** Peter McSean  
**Sub-editor** Allan Muir  
**Production editor** Dave Alexander  
**Art editor** Martin Tullett  
**Assistant art editor** Stephen Hopkins  
**Chief photographers** Stan Papior/Peter Burn  
**UK Industry editor** Russell Bray  
**European editor** Peter Robinson  
**Far East editor** Peter Nunn  
**US editor** John McCormick  
**Italian editor** Luca Ciferri  
**German editor** Walter Honscheidt  
**French editor** Edouard Seidler  
**Grand prix editor** Mike Doodson  
**Rallies editor** Martin Holmes  
**Special correspondents** Eoin Young (Diary), Mark Hughes (Historical), Ken Rogers (environment), John Coates (Trade), Richard Feast (International Industry)  
**Syndication/reprints manager** Charles Pierce  
**Publishing manager** Rachel Drysdale  
**Art director** James Baker  
**Group ad manager** Bill Murray  
**Display ad manager** Becky Jermain  
**Asst display manager** Bob McDowell  
**Classified ad managers** Helen Bates, Debra Peter-Budge, Tony Lane

**Production manager** Wolfgang Harles  
**Production controller** Cormac Bourne  
**Display production** Barnaby Moore  
**Classified production** Dave Burgess  
**Special projects director** Derek Redfern  
**Sales director** Simon Daukes  
**Editorial director** Mel Nichols  
**Managing director** Simon Taylor  
**A Haymarket publication**

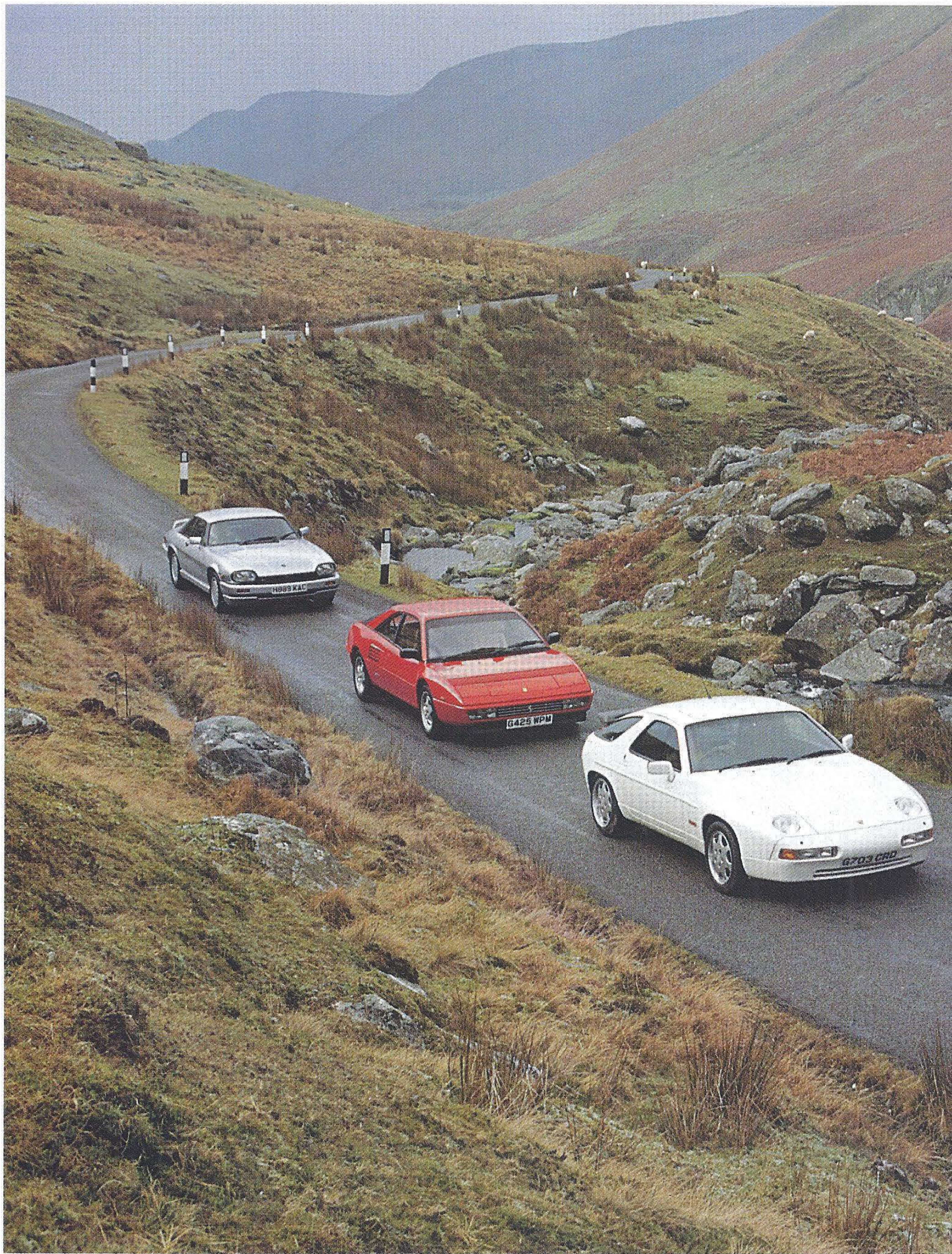
## THIS WEEK

<b>News</b> Luxury manufacturer bites the MPV bullet	4
<b>Analysis</b> The making of Mercedes' new S-class	10
<b>Arrivals</b> Four-wheel drive for the Primera	14
<b>Arrivals</b> Less roll for the Range Rover	16
<b>Sport</b> Latest from the Paris-Dakar Rally	18
<b>Diary</b> Television grand prix commentator	20
<b>The grandest tourer</b> BMW's 850i meets its rivals	26
<b>Top of the class</b> How a school won the Buildacar contest	36
<b>The Motown story</b> The US Big Three plan for the future	40
<b>The essence of Essen</b> The motor show that has everything	42
<b>Lotus's new General</b> How GM could save Lotus F1	46
<b>A man of import</b> Meet Maurice Rourke, head of TKM	48
<b>The loved bug</b> You can still buy a brand new VW Beetle	50
<b>An illustrious past</b> <i>Autocar's</i> veteran artist	52
<b>Insider dealing</b> A guide to G and H-plate bargains	59
<b>Running Report</b> Final fling in the Honda Accord	61
<b>DATABASE</b> Info 63, How Much 64, How Fast 71	
<b>CLASSIFIED</b> 32 pages of new and used cars for sale, 75	

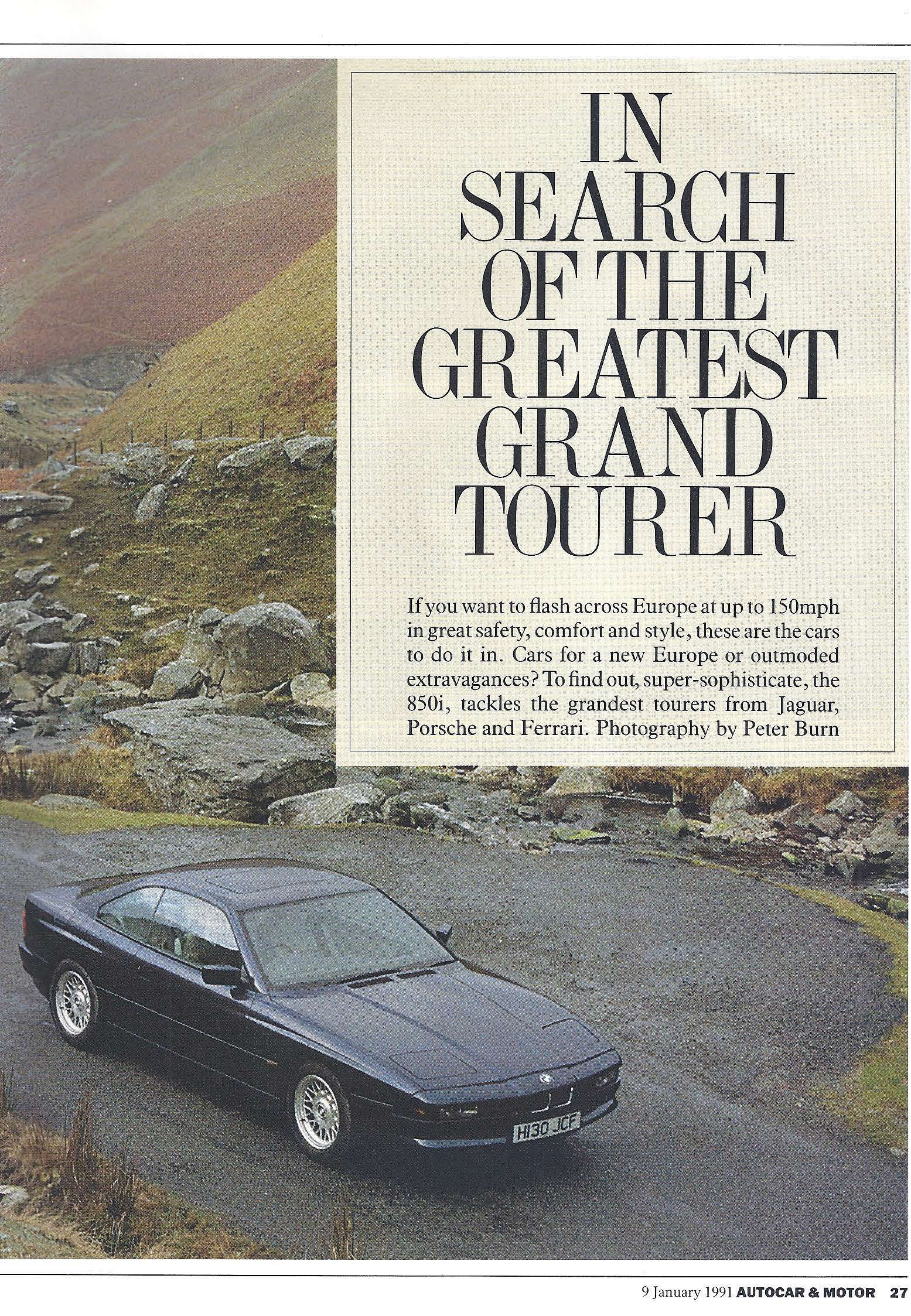
### Road test/back issue hotline 0235-534323, coupon p63

**Telephone:** Editorial 081-943 5013 **Display Ads** 081-943 5030 **Classified Ads** 081-943 5050 **Ad Production** 081-943 5060 **Subscriptions** 071-837 7765 **Other depts** 081-943 5000 **Editorial Fax** 081-943 5653 **Ad Production Fax** 081-943 5672 **Telex** 8952440 (HAYMRT G) Published every Wednesday by Haymarket Magazines Ltd, 38-42 Hampton Road, Teddington, Middlesex TW11 0JE, Great Britain. **Subscriptions:** *Autocar & Motor* Subscriptions, 3-4 Hardwick St, London EC1R 4RY, cheques payable to Haymarket Publishing Services Ltd. US airspeed subscription orders, payments, enquiries (POSTMASTER send address changes to) Eric Watter Assoc, Box 188, Berkeley Hts, NJ 07922, telephone (800) 272-2670. Subscription rates: Home £64; Europe and overseas surface mail £72; Middle East, Africa, India, South America airmail £130; Australia, New Zealand, Japan airmail £160; USA Airspeed US\$150. Canada, Mexico Airspeed US\$180. US PS 038420. Second class postage paid at Berkeley Hts NJ 07922. **Back numbers:** Haymarket reprints, PO Box 200, Abingdon, Oxon OX14 3FG, £2.50 each. **Binders** (13 issues) from Eyro Publishing Company, Dept ACB, 60 Waldegrave Road, Teddington, Middx TW11 8LG, £5.95 each or £20 for four, allow 28 days for delivery. Circulation trade enquiries: Frontline (EMAP/Haymarket) Ltd, Park House, 117 Park Road, Peterborough, Cambs PE1 2TR, telephone 0733 555161. Typeset by Saffron Graphics, ECI: colour origination by Copeland Origination Services, Peckham; printed by Varnicoat, Pershore, Wores. Registered at the Post Office as a newspaper. Member of the Audit Bureau of Circulations. Reprinting in whole or in part is forbidden except by permission of the publisher. © *Autocar & Motor* 1991. ISSN 0955-5889





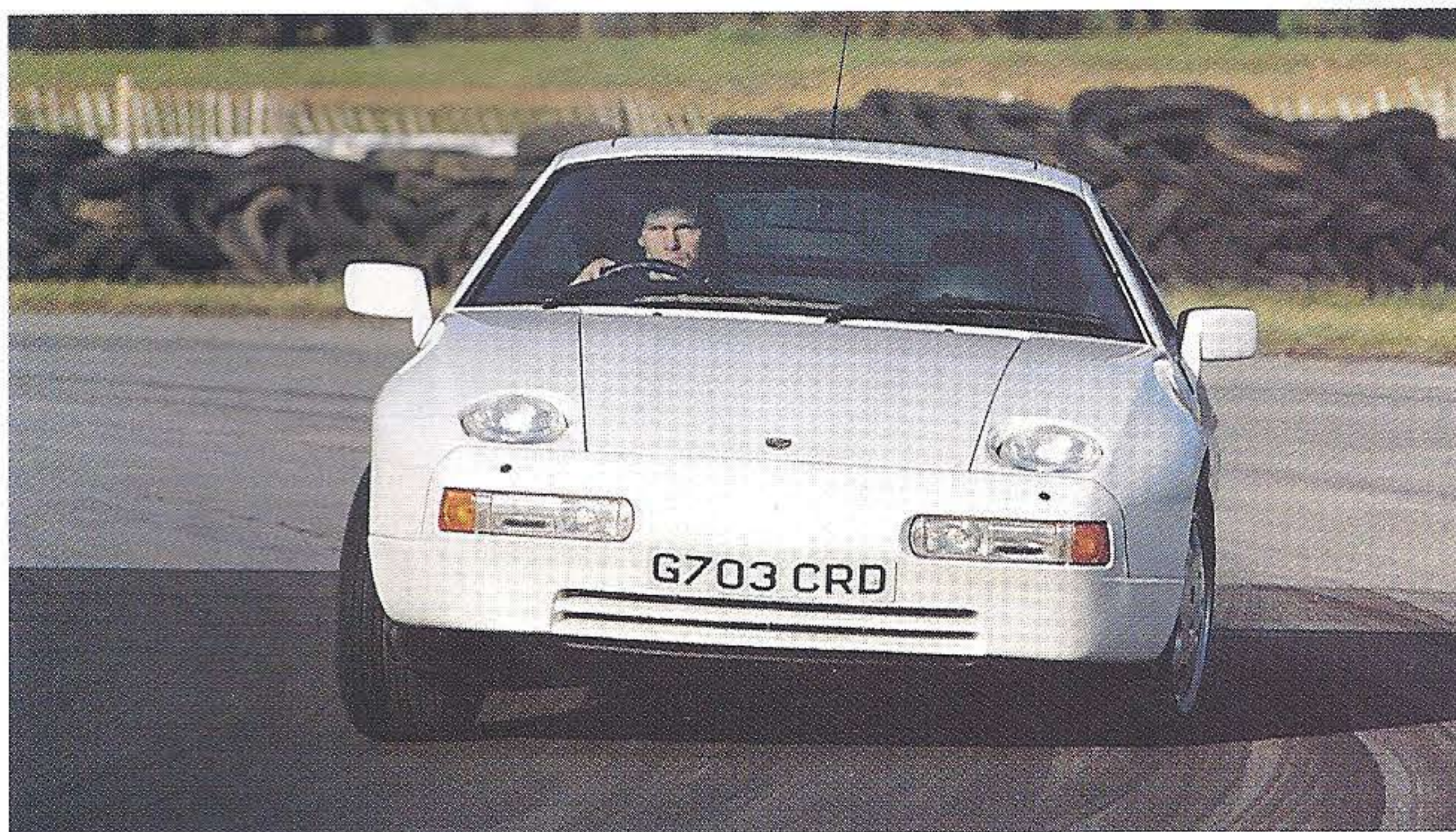


A dark-colored BMW 850i is shown from a front-three-quarter view, driving on a narrow, winding asphalt road. The car is positioned in the lower half of the frame. The background features a steep, rocky hillside with sparse vegetation and a fence line. The sky is overcast.

# IN SEARCH OF THE GREATEST GRAND TOURER

If you want to flash across Europe at up to 150mph in great safety, comfort and style, these are the cars to do it in. Cars for a new Europe or outmoded extravagances? To find out, super-sophisticate, the 850i, tackles the grandest tourers from Jaguar, Porsche and Ferrari. Photography by Peter Burn





**850i (top) may have failsafe handling but it is not inspiring. Behind the wheel (above right) there are many compensations; layout is superb. 928 can be oversteering handful in the wet but generally very capable and rewarding, familiar dash still works well**

**E**ver since its launch last May, people have tried to pigeon-hole the BMW 850i. This flagship coupe has divided opinion like few others. And in the quest for argument-supporting evidence, nigh on every exotic coupe has been dragged into the debate as the car the 850i best emulates.

But, until now, all this talk has been just that: talk. No one was going to find out the truth until BMW's controversial newcomer was called to account in front of its peers.

Which is what we have done in lining up the Ferrari Mondial t, the Porsche 928GT and Jaguar XJR-S, as formidable and diverse a range of opponents as any £60,000 coupe could fear to meet. All match or better the BMW's 300bhp, all come from unbroken lines of supercoupes the shortest of which is 30 years long, and all have customer loyalty that borders on the partisan. The Porsche at £64,496 and the Ferrari at £62,500 are more than the £59,500 that BMW asks for an 850i, but they're all within £5000. The margin in the Jaguar's favour is nearly three times that: at £45,000 it seems absurdly good value in this company.

Four hard hitters then, in a bout of seven rounds, each dealing with a specific area: Castle Combe racetrack, a North Wales cross-country route over the Brecon Beacons, Millbrook Proving Ground, motorway cruising and urban crawling sections, the family test and, finally, the judges' decision. Will it be on points or a KO? We doubt you will read a more surprising group test verdict this year.

## ROUND ONE

### *At the test track*

The 850i's beautiful-looking 4988cc V12 develops 300bhp at 5200rpm making it, with the Mondial, the least powerful car here. It is also the heaviest, tipping our scales at 4141lb for the weakest power to weight ratio of the group at 162bhp/ton. Add to the equation four-speed automatic transmission that 90 per cent of 850is will have as standard in the UK, and it's plain not even an impressive 332lb ft of torque at 4100rpm is going to stop it being the slowest in a straight line. Times of 0-60mph in 7.2secs and 0-100mph in 16.7secs are no more than respectable but thanks to superb aerodynamics, it swept around to its artificially-limited top speed of 157mph in short order.

With 318bhp at 5200rpm the other V12 here, the Jaguar's 5993cc unit, might be expected to put in a better showing than the BMW's powerplant, especially since it has 176lb less to propel. Not so. With only three gears in its age-old GM400 transmission, even 362lb ft of torque — easily the best of the bunch — is struggling over such widely-spaced ratios. The XJR-S is just 0.2secs ahead at 60mph and 0.3secs further up the road at 100mph. Top speed is identical to the BMW's.

Which leaves the V8s, both with less weight than the Jag and BMW, manual transmissions, twin overhead camshafts per bank, four valves per cylinder and performance in a different league from the big automatics.

The Ferrari engine, with just 3405cc, still manages to pump out 300bhp at 7200rpm. For torque though, a high state of tune is no substitute for cubic capacity and the Mondial's peak of 238lb ft at 4200rpm is at least 79lb ft weaker than the rest. Yet, to Ferrari, this doesn't seem to matter a lot. Exploiting the traction advantage of its mid-engine layout to



the full, it catapults its trim 3414lb figure past 60mph in just 5.6secs and on to 100mph in 13.9secs. Thanks to hardly state-of-the-art aerodynamics, though, it has marginally the lowest top speed of 154mph.

We would have been amazed if the 330bhp 928GT hadn't been substantially the fastest. Its 214bhp/ton ratio blitzes even the Mondial's impressive 197bhp/ton yet off the line the German is a shade slower. At 60mph the cars would be side by side and even when the 928 driver flashed through 100mph in 13.4secs, he would only be half a second ahead of the snarling Italian. Top speed is an impressive 165mph.

## ROUND TWO

### *At the racetrack*

Castle Combe hosted the other half of our track test, its bumpy corners replicating road conditions better than most tracks. Our purpose was not to extract do-or-die lap times but to explore the cars' high limits in comparative safety.

Again the 850i's weight told against it, but that was not the only reason it was slowest around the track. The only one of the quartet not to employ double wishbone suspension up front, its simple MacPherson struts allowed the shark's nose to run wide of the corners earlier than understeer appeared in the others, despite the fitment of third generation automatic stability control. The car's case is not helped by the lack of warning of this from the steering. Alone in having a recirculating ball set up (rack and pinion systems being preferred by the others), it requires the most input for the least information.

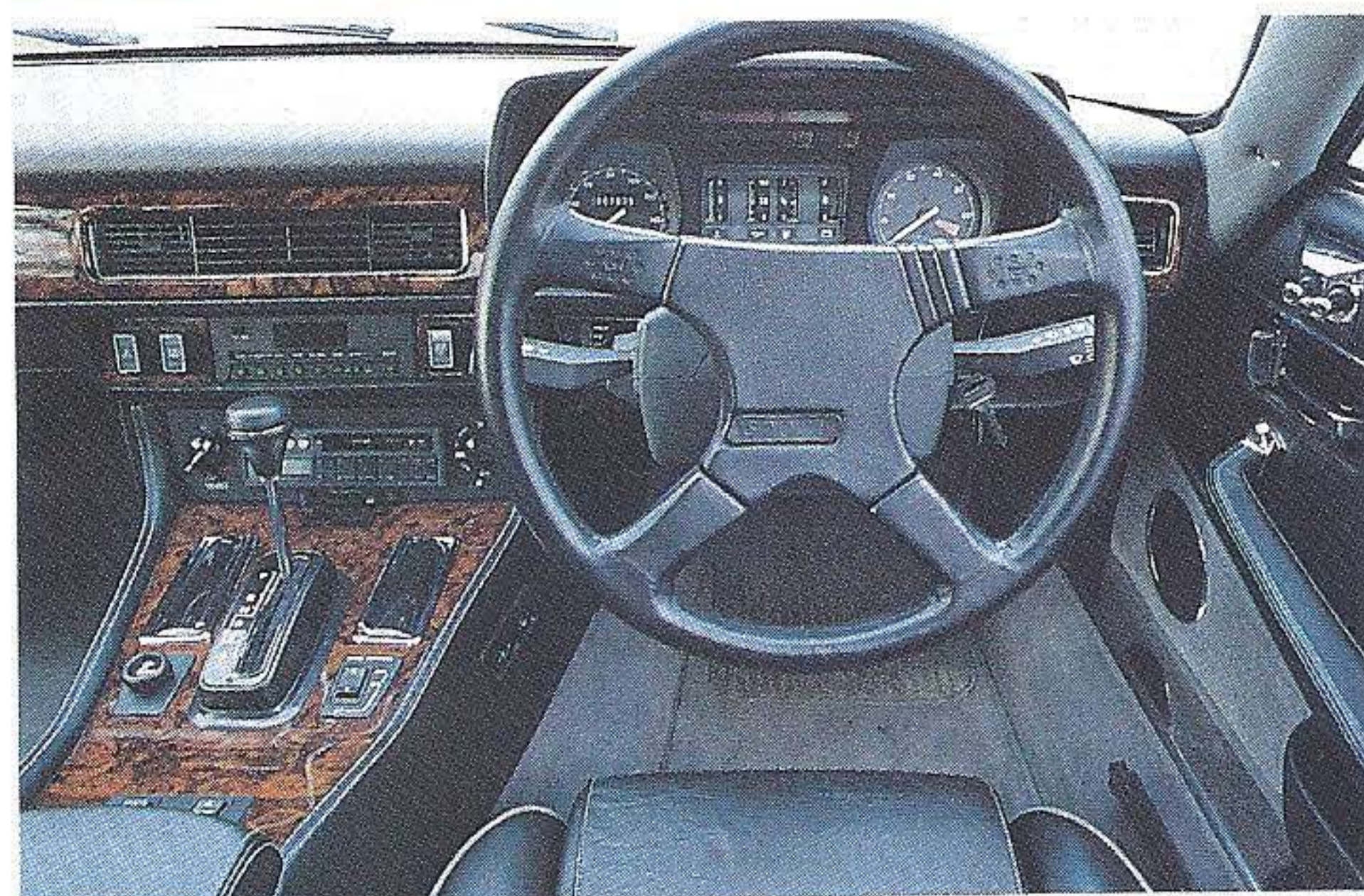
In the 100mph Old Paddock bend, however, the BMW was much more composed, its ingenious multi-link rear axle offering balanced and secure cornering on the 235/50 Uniroyal Rallye tyres.

The one thing the Mondial never felt was secure. Wishbones at each end, central engine location and the finest pedigree in the world didn't stop the Ferrari being the car we least wanted to drive around the track. It wasn't just the fact that the 225/55 rear and 205/55 front Goodyear Eagles were surprisingly unsuccessful at gripping Castle Combe's tarmac, for we could make allowance for that, but rather the guaranteed oversteer through every bend from Quarry to the flat out West Way kink. The slightest turn of wheel caused the car to dive for an apex yards before the one you had in mind. Unless you were swift and unerringly accurate with your steering correction, the car felt it would continue to turn an ever-tighter corner until, eventually, the back overtook the front.

Even when familiar with this extraordinary behaviour driving the Mondial fast was a tightrope walk over a lion's den. The only way was to balance the car with tiny movements of the wheel and throttle — and pad round the track heart-in-mouth.

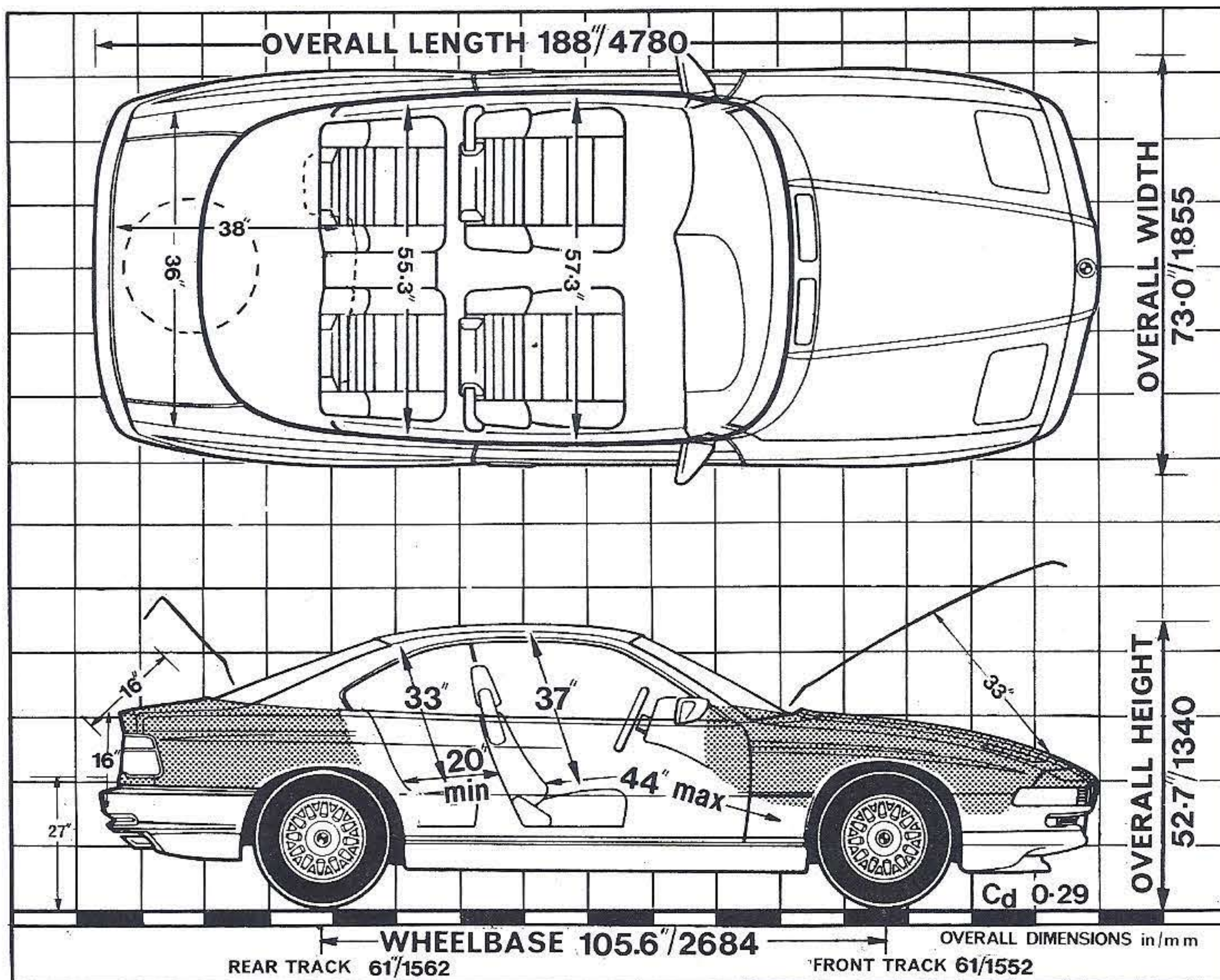
We expected the XJR-S to be most out of depth on the racetrack. Despite its sophisticated suspension and superb Dunlop D40 M2 tyres, it seemed too soft, heavy and outdated to worry the more modern machinery. The Jaguar thought otherwise. After just one lap warming its massive 245/55 rear and 225/50 front tyres it was being held up by the Ferrari and leaving the BMW for dead.

The Jaguar's amazing turn of speed was ►



**Mid-engined nervousness on the racetrack but on the road the Mondial doesn't put a foot wrong; enthralling (top). Plain Ferrari dash (above left) is a contrast to others. XJR-S not most exciting to drive but is hugely secure. JaguarSport wheel can't mask horror of dash**





## SPECIFICATION

### ENGINE

Longitudinal, front, rear-wheel drive.  
**Capacity** 4988cc, 12 cylinders in V.  
**Bore** 84mm, **stroke** 75mm.  
**Compression ratio** 8.8 to 1.  
**Head/block** al alloy/al alloy.  
**Valve gear** ohc, 2 valves per cylinder.  
**Ignition and fuel** Breaker-less Electronic ignition, Digital Motor Electronics fuel injection.  
**Max power** 300bhp (PS-DIN) (220kW ISO) at 5200rpm. **Max torque** 332lb ft (450 Nm) at 4100rpm.

### TRANSMISSION

4-speed automatic.  

Gear	Ratio	mph/1000rpm
Top	0.73	31.8
3rd	1.00	23.2
2nd	1.48	15.7
1st	2.48	9.4

**Final drive ratio** 3.15 to 1. Automatic Stability Control standard.

### SUSPENSION

**Front**, independent, MacPherson struts, coil springs, telescopic dampers, anti-roll bar.  
**Rear**, integral axle, 5 control arms, coil springs, telescopic dampers, anti-roll bar.

### STEERING

Recirculating ball, power assisted, 3.4 turns lock to lock.

### BRAKES

**Front** 12.8ins (324mm) dia ventilated disc.  
**Rear** 12.8ins (324mm) dia ventilated disc.

### WHEELS AND TYRES

Cast alloy 7.5x16ins rims. 235/50ZR16 Uniroyal Rallye tyres.

### SOLD IN THE UK BY

BMW (GB) Ltd  
 Ellesfield Avenue  
 Bracknell  
 Berks RG12 4JA  
 Tel: (0344) 426565

### PRODUCED BY

BMW AG  
 Munich  
 Germany

## COSTS

### PRICES

**Total** (in UK) £59,500  
**Options fitted to test car:**  
**Electric rear sun blind** £237  
**Heated front seats** £243  
**Auto dip interior mirror** £102  
**Auto air recirculation** £149  
**Total as tested** £60,231  
**Delivery, road tax, plates** £435  
**On the road price** £60,666

### SERVICE

As per on board service interval indicator.

### PARTS COST (Inc VAT)

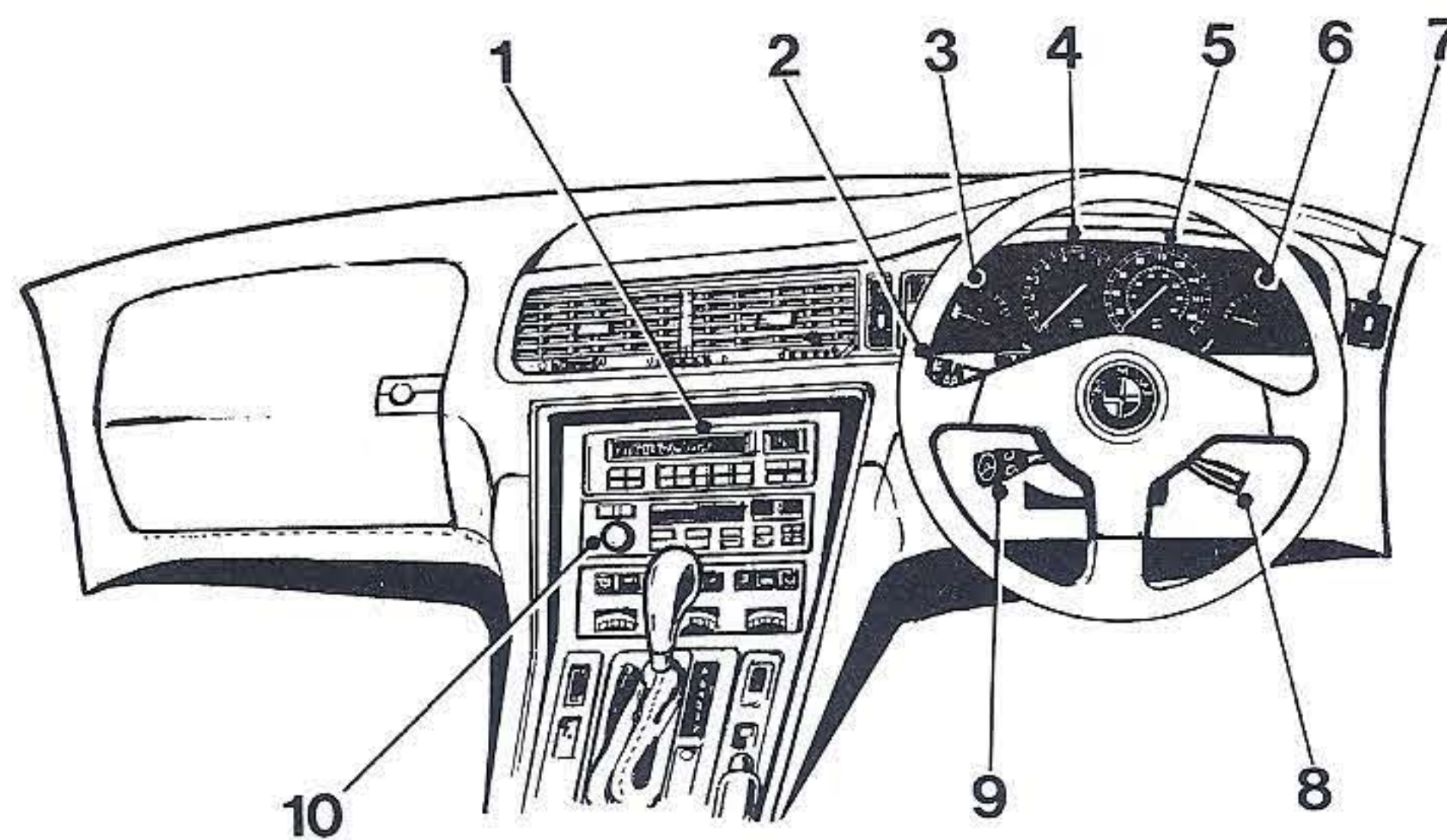
Oil filter	£8.50
Air filter	£20.93
Spark plugs (set)	£37.67
Brake pads (2 wheels) front	£63.25
Brake pads (2 wheels) rear	£40.25
Exhaust complete	£793.50
Tyre — each (typical)	£575.00
Windscreen	£212.75
Headlamp unit	£32.67
Front wing	£448.50
Rear bumper	£448.50

### WARRANTY

12 months/unlimited mileage, 6 years anti-corrosion, 12 months breakdown recovery.

### EQUIPMENT

Anti-lock brakes	●
Electronic damping control	£1160
Auto gearbox	●
Power assisted steering	●
Automatic stability control	●
Steering rake/reach adjustment	●
Seat height adjustment	●
Electric seat adjustment	●
Lumbar adjustment	£162
Trip computer	●
Intermittent wipe	●
Leather trim	●
Air conditioning	●
Cruise control	●
Radio/cassette/CD player	●
Electrical mirrors	●
Electric windows F/R	●
Central locking	●
Front fog/driving lamps	●
Headlamp wash	●
Electric tilt/slide sunroof	●
Metallic paint	●
● Standard	



## PERFORMANCE

### MAXIMUM SPEEDS

Gear	mph	km/h	rpm
Top (mean)	157	253	4940
(best)	161	259	5060
3rd	135	217	5800
2nd	91	146	5800
1st	54	87	5800

### ACCELERATION FROM REST

True mph	Time (secs)	Speedo mph
30	2.9	33
40	4.1	43
50	5.3	54
60	7.2	65
70	9.0	76
80	11.0	87
90	13.5	98
100	16.7	108
110	20.0	118
120	24.8	125
130	29.3	134

**Standing 1/4-mile:** 15.3secs, 96mph

**Standing km:** 27.2secs, 126mph

**30-70mph thro' gears:** 6.1secs

### ACCELERATION IN EACH GEAR

mph	3rd	2nd	1st
10-30	3.2	2.6	2.1
20-40	3.7	3.1	2.3
30-50	4.4	3.5	2.4
40-60	5.1	3.6	—
50-70	5.7	3.6	—
60-80	5.9	3.8	—
70-90	6.1	4.4	—
80-100	6.2	—	—
90-110	6.5	—	—
100-120	7.2	—	—
110-130	9.2	—	—

### FUEL CONSUMPTION

**Overall mpg:** 14.4 (19.6 litres/100km)  
**Touring mpg\*:** 19.2 (14.7 litres/100km)  
**Govt tests mpg:** 14.2mpg (urban)  
 32.7mpg (56mph)  
 27.3mpg (75mph)

**Fuel grade:** Unleaded (95RM) only

**Tank capacity:** 19.8 galls (90 litres)

**Max range\*:** 380 miles

\* Based on Government fuel economy figures: 50 per cent of urban cycle, 25 per cent each of 56/75mph consumptions.

### BRAKING

**Fade** (from 96mph in neutral)

**Pedal load (lb) for 0.5g stops**

start/end	start/end
1 20-15	6 30-20
2 25-18	7 35-22
3 25-15	8 35-25
4 27-18	9 35-25
5 30-20	10 35-30

**Response** (from 30mph in neutral)

Load	g	Distance
10lb	0.10	301ft
20lb	0.20	150ft
30lb	0.55	55ft
40lb	0.90	33ft
50lb	1.10	27ft
Parking brake	0.40	75ft

### WEIGHT

**Kerb** 4141lb/1880kg  
**Distribution %F/R** 52/48  
**Test** 4571lb/2075kg  
**Max payload** 4824lb/2190kg  
**Max towing weight** 3524lb/1600kg

### TEST CONDITIONS

**Wind** 5mph  
**Temperature** 3deg C (37deg F)  
**Barometer** 1025mbar  
**Surface** dry asphalt/concrete  
**Test distance** 1000 miles

Figures taken at 5300 miles by our own staff at the Lotus Group proving ground, Millbrook.

All Autocar & Motor test results are subject to world copyright and may not be reproduced without the Editor's written permission.



down to two factors. It had the most grip and was the easiest to drive fast. Its steering, geared at just 2.5 turns, is ideal for track work and its chassis is the most tolerant of mid-corner changes of plan. If you did persuade the front tyres to lose purchase, it never took more than a brief lift to bring it back on line.

However, fast and easy it may have been, involving and inspiring it was not. Still, for a car that's clearly a GT first and a sports car second, it acquitted itself with distinction.

Best and quickest at Castle Combe was the Porsche. Perhaps this is an expected conclusion, but its supremacy at the Combe was by no means clear cut. The Porsche corners flat with the most communicative steering and responds best to throttle inputs, but it still runs out of front-end grip too early. The blame for this must be placed largely at the door of its Dunlop D40 tyres. Despite generous dimensions, 245/45 aft and 225/50 up front, they are a shadow of the D40 M2s which they sired and which adorned the Jaguar.

## ROUND THREE

### *Across country*

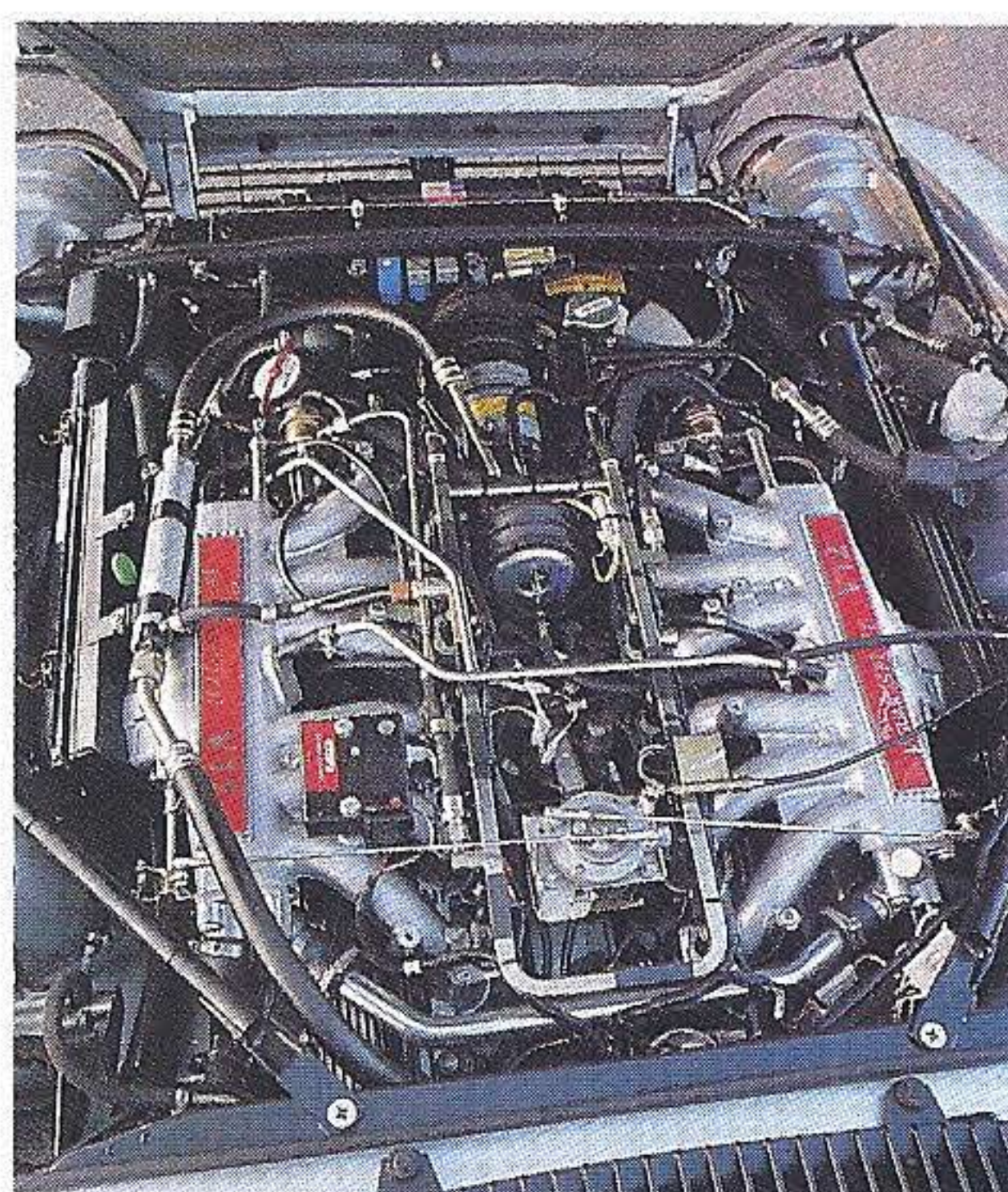
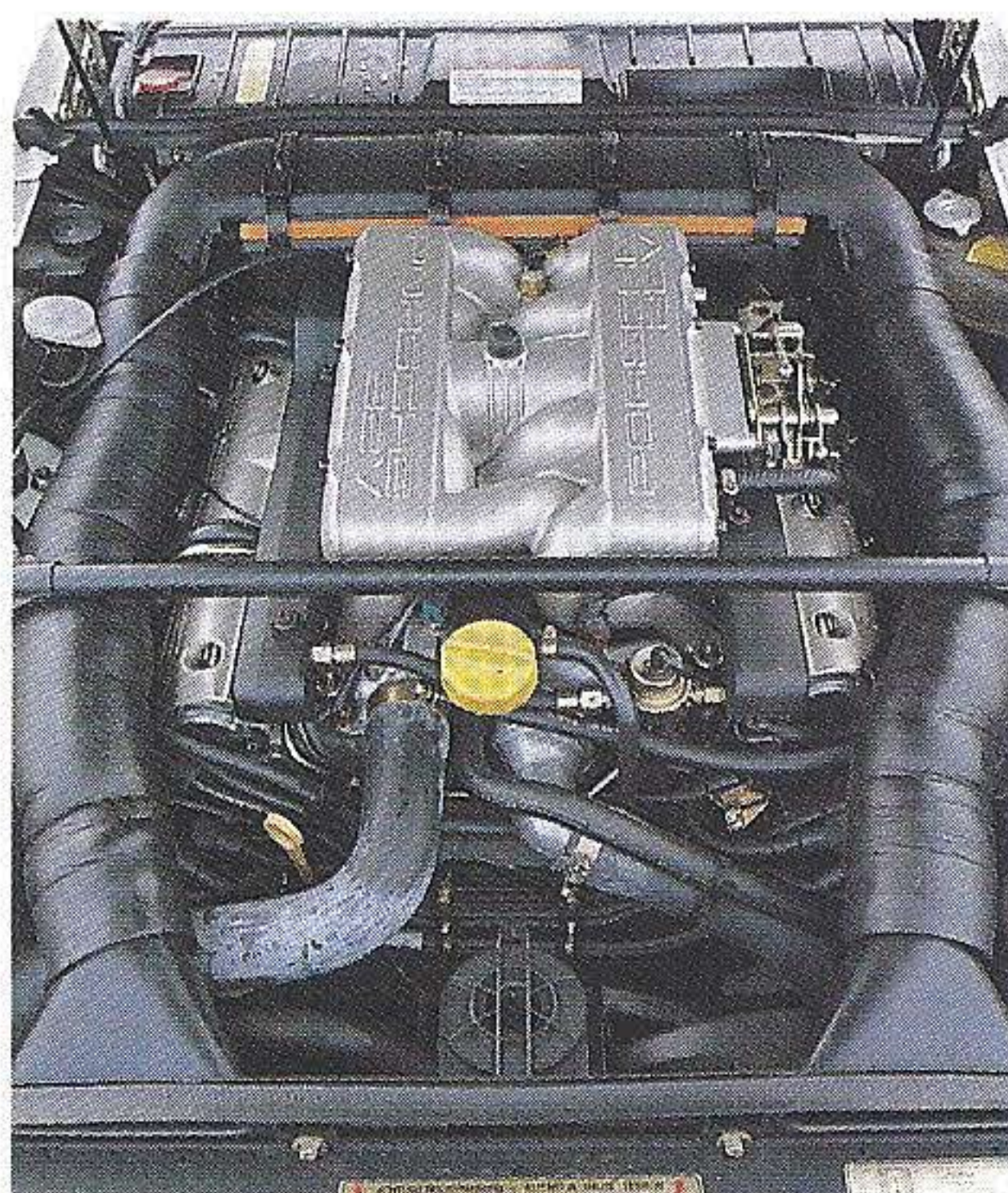
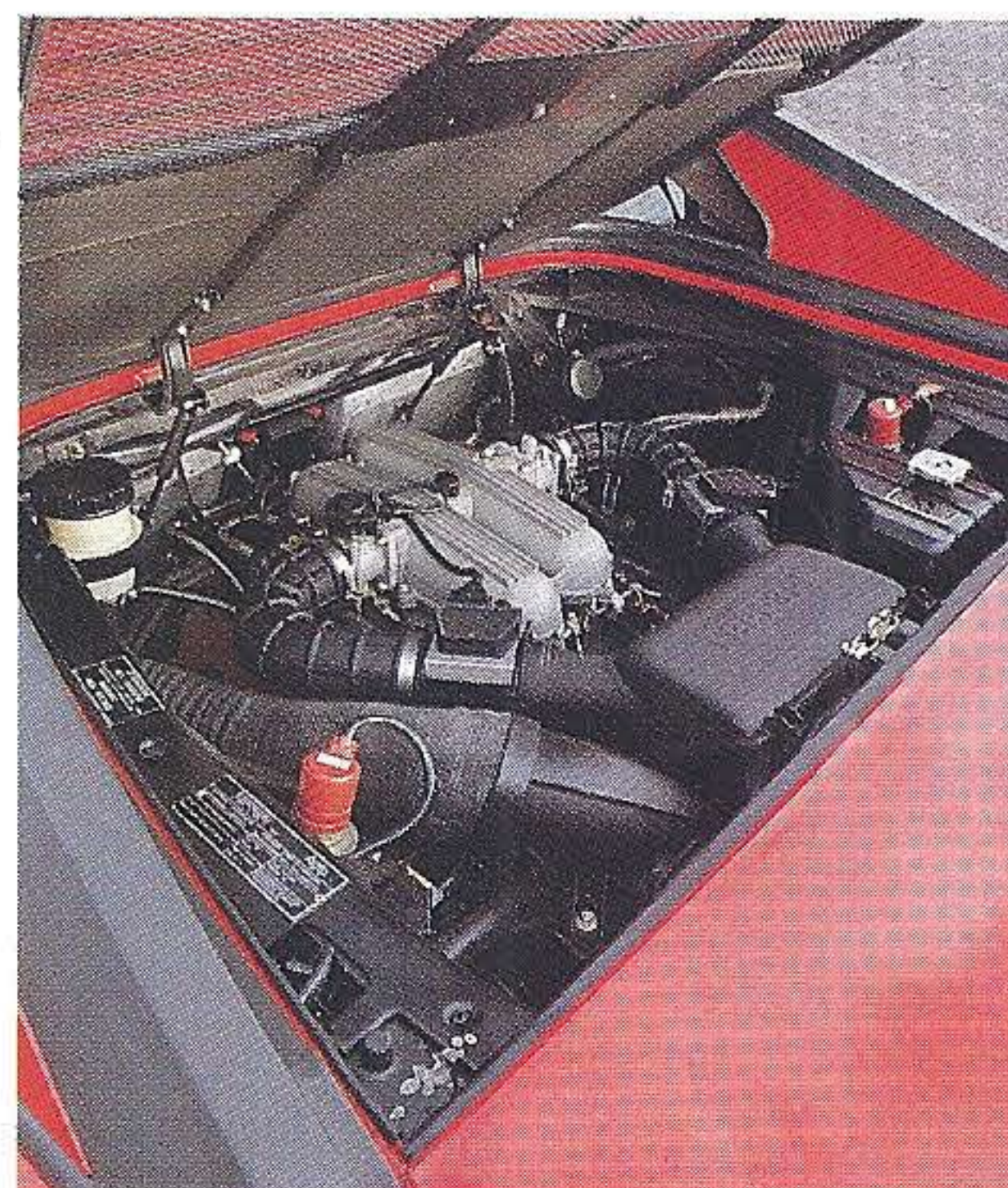
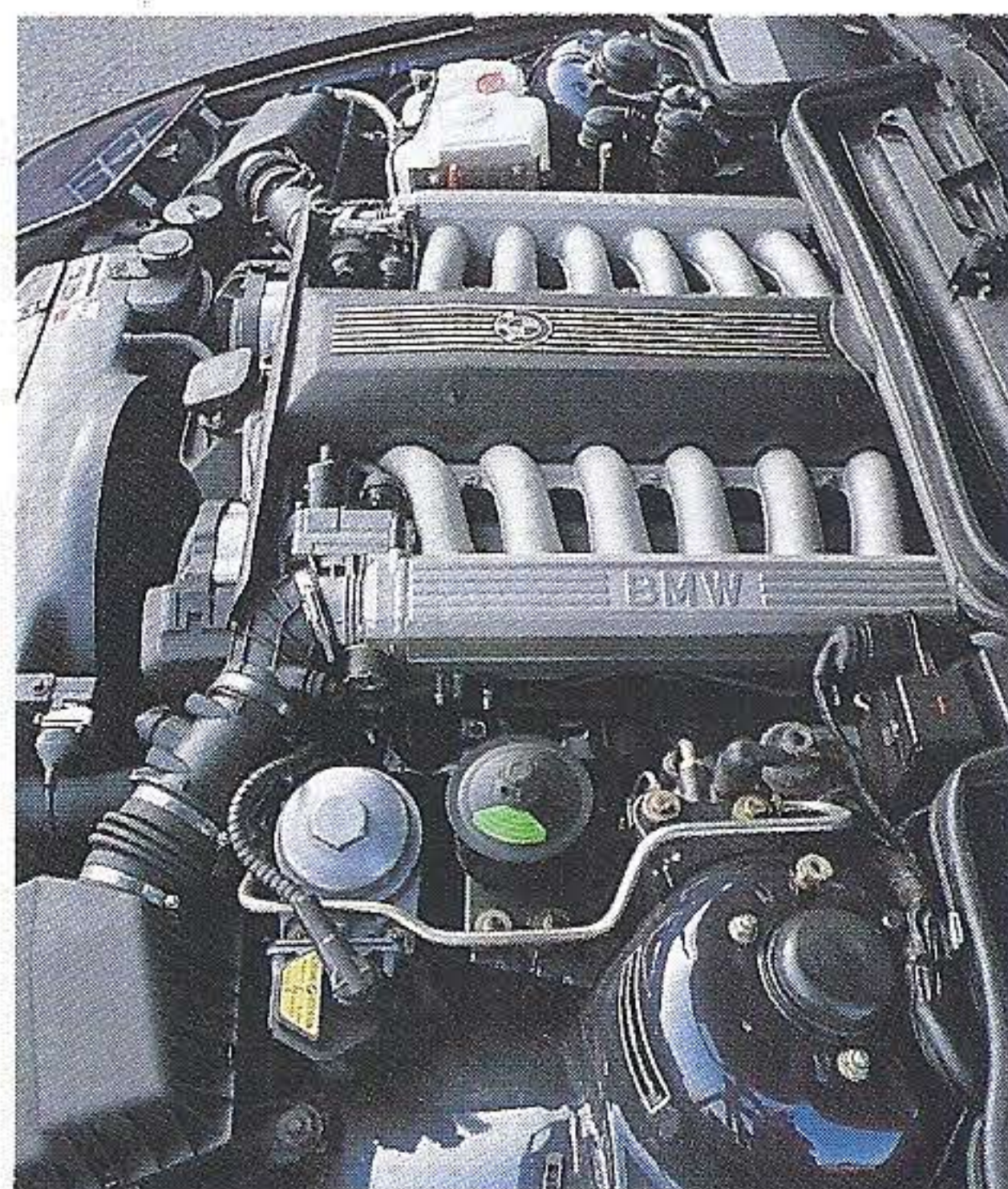
Overall we were disappointed with the supercoupes' performance at Castle Combe, but now here was a very different ballgame as we headed towards wet Welsh mountains. This was the real world.

By almost any other standard, BMW's V12 engine is magnificent. In this company though, it is neither smooth enough nor gutsy enough to shine. Nor does it sing around to its 5800rpm red line with the enthusiasm that distinguishes the powerplants in the other three. But where the road was straight, and so long as 'sport' was chosen for the beautifully slick and adaptable gearbox, the BMW could squirt past traffic with impressive ease, travelling from 50-70mph in kickdown in just 3.6secs.

Yet as the dual carriageways turned into mountain passes the incessant flashing of the ASClight warned the car was trying as hard as it could. Those usual barometers of effort, the steering and chassis feel, stayed resolutely and disconcertingly mute, sapping driver confidence even though, with the ASC on overtime, there was not a sign of trouble within the stylish cabin.

The 928 was disconcerting, too. Castle Combe King it may have been, but on slippery roads it gave nowhere near such a good account of itself. Old-style Dunlop D40s are not renowned for their wet-road grip, but this goes only a little way to explaining the Porsche's predilection for snapping sideways with only tentative provocation. And in no way does it excuse it.

On these Welsh roads the big V8 was almost too exciting for its own good. From the moment it explodes into life you know you are master of one of the finest engines made. At 2500rpm it is delivering more than enough torque to wrench the back tyres from the tarmac in third gear on a greasy road, yet such is the intoxicating nature of its bellow the temptation to head for the 6600rpm red line in every gear is often irresistible. More often than not we selected fourth in the notchy gearbox which kept the torque under control while still providing more than enough acceleration. And it allowed more time for hands to spend on the wheel, appreciating the fine steering and superbly tuned chassis.



**Clockwise from top left: 300bhp BMW V12, easily the best looking, lacks sporting eagerness; Mondial's mid-mounted V8 gives 300bhp from just 3.4 litres; quad cam 32v Porsche V8 powerhouse one of the great engines; as is ever-silky, ever-strong Jag V12**

In Wales the XJR-S continued to make a mockery of expectations. Its tyres cut through the slush better than any of the others and always had that bit more grip in reserve.

Its three-speed gearbox, with none of the modern trickery of the BMW's transmission, also proved an unexpected boon. Left in second it would see you pass 110mph, so you had only to flick the lever into top when a long straight opened out. Driven like this the XJR-S covered ground in a manner the Millbrook figures would not suggest possible. It didn't matter how often we jumped from it into the Porsche and back again, we couldn't decide which was quicker point to point. Unless, of course, it was raining.

Its engine, too, merits comparison with the

Porsche's. Despite its extra litre, the Jag V12 cannot muster quite the low rev urge of the V8, but it counters with an enthusiastic charge for the red line which only the Ferrari can better. It may be 20 years old but for intoxicating smoothness, it has yet to be bettered.

Which leaves the Ferrari, after Castle Combe the bad boy of the test. If it was tricky on a dry, open track, what would it be like on a streaming wet uneven road? Simply brilliant. The nervousness that frightened us was replaced by a surefooted quality that was hard to credit initially. But as the miles accrued it convinced us that its poise, grip, agility and sublime steering feel were not all conspiring to fool us into making an irreversible error; quite the reverse, they were allying to create a ►



One of the BMW's strengths is exquisite cabin (right, from top). It's light and spacious up front; 928 much more sombre but for such an old layout Porsche's cabin is still first-class; BMW looks inviting in the rear but no more space than a 928 rules out even kids; at least 928's rear backrests fold to boost luggage room



◀ driving experience even the Porsche could not approach.

Your greatest ally in the Mondial is the engine. Not only does it muster the same power from 3.4 litres as others extract from 5-litres, its 2000-7500rpm powerband is easily the widest of the four. And it has the best throttle response and the purest exhaust note.

A shame then that it is let down by a gearbox that baulks appallingly if you treat the metal lever with anything less than total commitment. Ram changes through from the shoulder and it will unerringly find the next ratio as fast as your biceps will allow. Try to palm around the exposed gate and you will be greeted with obstinate obstruction.

## ROUND FOUR

### *On the motorway*

At last the BMW has a chance to shine. And, it should be noted, it is here rather than in mountain storming that these cars will spend the majority of their time.

Munching motorways is the 850i's forte. Here, the dead steering is an advantage. The ride, good in the lanes but lacking ultimate damping on hilly roads, dismisses ridges and expansion joints with contempt. With the mighty V12 murmuring imperceptibly to itself at all two figure speeds and negligible wind noise, all you need to do is relax in your ideal driving position and let the car go silently about

its business. Total serenity is marred only by the constant whirring of the tyres, an affliction of all wide-wheeled cars that not even BMW has completely mastered, though it has done a lot better than Porsche.

The Jaguar is quieter still, despite being 15 years the 850i's senior. Wind and engine noise is largely banished and the tyres breach the peace only on coarse, concrete sections of motorway.

Even more impressive is the Jaguar's ride which has not suffered with the addition of the stiffer springs and wider tyres that denote all JaguarSport cars. It remains as absorbent as ever regardless of whether it is on a motorway or a country lane.

Compared to the XJR-S and 850i, the 928GT and Mondial came as a rude shock on the M4. The Porsche is best, but only because it has less wind and engine noise. The fuss kicked up by its tyres is still inexcusable and ruins any chances of a truly relaxed cruise. That's a shame because its ride, though firm, is superbly damped and controlled.

To no one's great surprise, the Ferrari loses the touring contest. It has engine, tyre and wind noise in equal abundance. While some might want to listen to a quad-cam symphony the other ingredients are merely fatigue-inducing over a long distance. It also has the worst ride of the group. Although you can set the dampers to soft which smoothes out most small bumps taken at speed, cats-eyes and ridges still cause a shudder to pass through the cabin, upsetting the car's composure.

## ROUND FIVE

### *Living with the cars*

For four cars that collectively take up more road space than a 38-ton articulated truck, it's astonishing that not one can rival even a Metro's interior room. None was designed to be a four-seater, but since all of them have rear seats you might think that they should be able occasionally to carry four adults in reasonable comfort for short distances. That's simply not possible in any of them.

Worst offenders are the Germans. Despite shapely rear armchairs bedecked in leather, neither will accommodate a normal-sized adult unless the front seat is moved well forward, which many will find an unacceptable compromise. Once ensconced, the unfortunate rear passenger must tolerate being crammed against the front seat and the roof-lining. Even children would be cramped.

Before the Ferrari and Jaguar designers pat themselves on the back, it should be said that the Mondial and XJR-S are scarcely better.

Of the four, only the 850i's cockpit provides the level of comfort and ambience expected. Its wide, curving dash with nicely integrated switchgear, heating system and radio/CD/cassette player presents a beautifully cohesive and well-planned look.

Typically BMW, the instruments are clear and uncluttered, the major controls well positioned and there's full electric memory adjustment of seats and steering column height. It has masses of legroom in the front too.

Getting into the XJR-S after the 850i is like going through a time warp. Some of the instruments and switches, along with the liberal smattering of chromework, would be more at home on a jukebox than a prestige car, while the polished burr walnut veneer and



cramped driving position, with the wheel thrust close to the chest, is evocatively vintage.

One recent and unwelcome addition is the nasty plastic steering column surround, together with a rake adjustable steering column. The adjustment is too limited to be of much use, while the handy reach control of old has been lost. If there are compelling reasons not to buy an XJR-S in favour of the other cars they can all be found in this dated cabin.

It's hard to believe the Porsche 928 dates back almost as far as the Jaguar. For it takes the state-of-the-art excellence of the 850i's cabin to make the Porsche's interior appear just a little dated. Even so, it remains easy to live with, with well-positioned switchgear and simple, clear instrumentation, the pod for which rises and falls with column rake adjustment.

The 928 also boasts the most supportive seats, even better than the BMW's, despite a mixture of manual and electric adjustment. And the 928 has the best driving position.

The Mondial's driving position won't suit all with its offset pedals and stretch-to-reach steering wheel. There's none of the conspicuous opulence of the XJR-S; this is a much more businesslike cabin, perhaps even spartan. It is light and airy though, with fine all-round visibility for a mid-engined car. Both the three-spoke leather wheel and shiny metal gearshift gate are no less than works of art.

But it doesn't all work as efficiently as it looks. Apart from the gearchange, criticisms can be levelled at the poorly sited switchgear and confusing stalks, but worst of all is the instrumentation. Fine by daylight, at night the lights reflect in the screen.

You'd expect these cars to come comprehensively equipped, and they do. In addition to the usual power-everything, all have leather trim, anti-lock brakes, air conditioning and central locking. Automatic damping control with three-position selection is standard on the Ferrari, optional on the BMW and unavailable on the others. The Mondial's advantage here is offset by its lack of cruise control, on-board computer and hi-fi system fitted as standard to its rivals. The 928 adds a tyre pressure warning system and part electric control for the front seats, but only the BMW, easily the best equipped car here with a veritable wealth of comfort and convenience items, comes equipped with an electric sunroof and a top quality radio/cassette/CD hi-fi.

Both Germans come with catalytic converters and alarms but only the Jaguar has seat heaters, presumably to compensate for the interminable time it takes for the interior heating to wake up. Ventilation and heating for the German pair is a generation beyond the mediocre systems fitted by Jaguar and Ferrari.

Oddments space is all but ignored in the Ferrari. There is a small lidded cassette storage box in the Mondial: not much use when the test car came with a CD player. The Jaguar at least gets a glovebox, but there's little room elsewhere for oddments. BMW and Porsche are far more aware of needs here, and make the appropriate provision.

The 928, with its large rear hatch and fold-down rear seats, is the most versatile. Not so practical is the uninflated 55mph space-saver tyre, for which a compressor is provided. The Mondial doesn't even have a spare: instead it relies on a sealant repair kit. This adds luggage space beneath the front bonnet extra to the Mondial's rear compartment which is of an adequate size but awkwardly shaped. Both the



**Italian and British cabins cannot match the Germans'. Mondial (left, from top) is beautifully trimmed but is typically Ferrari business-like; XJR-S is cramped up front, with steering wheel too close to your chest, though seats are good; no surfeit of rear room but the athletic can use Mondial or Jag rear seats for short trips**



BMW and Jaguar carry a full size spare wheel, and each has a decently sized boot.

The Mondial walks away with the fuel economy honours. Its excellent 18.1mpg average fuel consumption (over the group test) and its 21 gallon tank give a range of almost 400 miles. The other three, all with tank capacities between 19 and 20 gals, can't top 300 miles on a tankful. The 928 GT returned 14.4mpg, the 850i 14.5mpg, and the 6-litre XJR-S a wallet-numbing 12.6mpg.

All the cars are beautifully built, but the Ferrari must be singled out for the excellence of its paint finish and leather interior. Not so good are the Fiat switches and ventilation grilles. Jaguar too must take criticism for its tacky switchgear and instrumentation, although in other respects it seemed well finished.

We couldn't fault the 850i's cabin for design or materials, and its paintwork shines with a deep lustre, but the test car had a poorly-fitting bonnet that prevented full-marks. Few if any cars are put together as well as the 928, and the precision and quality of its manufacture are enlightening, although its cockpit must be ranked second now to the BMW's.

## ROUND SIX

### *In town*

The combination of an automatic transmission and seamlessly smooth V12 with bottomless torque is an unquestionable advantage in ►





	<b>Porsche 928GT</b>	<b>Ferrari Mondial t</b>		<b>BMW 850i</b>	<b>Jaguar XJR-S</b>
<b>ENGINE</b>	Longitudinal, front, rear-wheel drive, 8 cylinders in V	Longitudinal, mid rear-wheel drive, 8 cylinders in V	<b>ENGINE</b>	Longitudinal, front, rear-wheel drive, 12 cylinders in V	Longitudinal, front, rear-wheel drive, 12 cylinders in V
<b>Capacity, cc</b>	4957	3405	<b>Capacity, cc</b>	4988	5993
<b>Bore/stroke, mm</b>	100/79	85/75	<b>Bore/stroke, mm</b>	84/75	90/79
<b>Head/block</b>	al alloy/al alloy	10.4:1	<b>Compression ratio</b>	8.8:1	al alloy/al alloy
<b>Valve gear</b>	Dohc/32v	Dohc/32v	<b>Valve gear</b>	Sohc/24v	Sohc/24v
<b>Ignition and fuelling</b>	Electronic ignition, Bosch LH-Jetronic	Bosch Motronic M.25 ignition and injection	<b>Ignition and fuelling</b>	Digital Motor Electronics	Zytek sequential fuel injection and ignition
<b>Max power, bhp</b>	330/6200rpm	300/7200rpm	<b>Max power, bhp</b>	300/5200rpm	318/5250rpm
<b>Max torque, lb ft</b>	317/4100rpm	238/4200rpm	<b>Max torque, lb ft</b>	332/4100rpm	362/3750rpm
<b>Power to weight ratio, bhp/ton</b>	214	197	<b>Power to weight ratio, bhp/ton</b>	162	180
<b>TRANSMISSION</b>	5-speed manual	5-speed manual	<b>TRANSMISSION</b>	4-speed automatic	3-speed automatic
<b>Gear ratio/mpg per 1000rpm</b>			<b>Gear ratio/mpg per 1000rpm</b>		
<b>Top</b>	1.00/26.1	0.86/24.5	<b>Top</b>	0.73/31.8	1.001/26.7
<b>4th</b>	1.35/19.3	—	<b>4th</b>	—	—
<b>3rd</b>	1.79/14.6	1.46/14.4	<b>3rd</b>	1.00/23.2	—
<b>2nd</b>	2.51/10.4	2.10/10.0	<b>2nd</b>	1.48/15.7	1.48/18.0
<b>1st</b>	3.76/6.9	3.22/6.5	<b>1st</b>	2.48/9.4	2.48/10.8
<b>Final drive</b>	2.73	3.56	<b>Final drive</b>	3.15	2.88
<b>SUSPENSION</b>			<b>SUSPENSION</b>		
<b>Front</b>	Double wishbones, coil springs	Double wishbones, coil springs, anti-roll bar	<b>Front</b>	MacPherson struts, coil springs, anti-roll bar	Double wishbones, coil springs
<b>Rear</b>	Semi-trailing arms, upper transverse links, coil springs, anti-roll bar	As front but minus anti-roll bar	<b>Rear</b>	Integral axle, 5 control arms, coil springs	Lower wishbones, upper links, radius arms, coil springs
<b>STEERING</b>	Rack and pinion	Rack and pinion	<b>STEERING</b>	Recirculating ball	Rack and pinion
<b>Turns lock to lock</b>	3.0	2.5	<b>Turns lock to lock</b>	3.4	2.5
<b>BRAKES</b>			<b>BRAKES</b>		
<b>Front and rear</b>	Ventilated disc	Ventilated disc	<b>Front</b>	Ventilated disc	Ventilated disc
<b>WHEELS AND TYRES</b>			<b>Rear</b>	Ventilated disc	Disc
<b>Rim type, width</b>	Cast alloy 7.5x16ins front, 9x16ins rear	Cast alloy 7x16ins front, 8x16ins rear	<b>WHEELS AND TYRES</b>	Cast alloy 7.5x16ins	Cast alloy 8x16ins
<b>Tyres</b>	Dunlop D40 225/50ZR16 front, 245/45ZR16 rear	Goodyear Eagle 205/55ZR16 front, 225/55ZR16 rear	<b>Rim type, width</b>		
	£64,496	£62,500	<b>Tyres</b>	Uniroyal Rallye 235/50ZR16	Dunlop D40 M2 225/50ZR16 front, 245/55ZR16 rear
				£59,500	£45,500
<b>PRICE IN UK</b>			<b>PRICE IN UK</b>		
<b>PERFORMANCE</b>			<b>PERFORMANCE</b>		
<b>Maximum speeds (mph/rpm)</b>			<b>Maximum speed (mph/rpm)</b>		
<b>Top (Mean)</b>	165/6300	154/6286	<b>Top (Mean)</b>	157/4940	157/5880
<b>(Best)</b>	169/6500	156/6367	<b>(Best)</b>	161/5060	159/5955
<b>4th</b>	127/6600	144/7500	<b>4th</b>	—	—
<b>3rd</b>	96/6600	108/7500	<b>3rd</b>	135/5800	—
<b>2nd</b>	69/6600	75/7500	<b>2nd</b>	91/5800	117/6500
<b>1st</b>	46/6600	49/7500	<b>1st</b>	54/5800	70/6500
<b>ACCELERATION FROM REST</b>			<b>ACCELERATION FROM REST</b>		
<b>30</b>	2.3	2.2	<b>30</b>	2.9	2.9
<b>40</b>	3.2	3.1	<b>40</b>	4.1	4.1
<b>50</b>	4.4	4.3	<b>50</b>	5.3	5.5
<b>60</b>	5.6	5.6	<b>60</b>	7.2	7.0
<b>70</b>	7.2	7.3	<b>70</b>	9.0	8.9
<b>80</b>	8.9	9.1	<b>80</b>	11.0	11.0
<b>90</b>	10.8	11.1	<b>90</b>	13.5	13.5
<b>100</b>	13.4	13.9	<b>100</b>	16.7	16.4
<b>110</b>	16.3	17.2	<b>110</b>	20.0	20.2
<b>120</b>	19.5	20.6	<b>120</b>	24.8	24.7
<b>130</b>	24.1	25.4	<b>130</b>	29.3	30.4
<b>Standing qtr. mile (secs, mph)</b>	13.8/102	14.2/101	<b>Standing qtr. mile (secs, mph)</b>	15.3/96	15.3/96
<b>Standing km (secs, mph)</b>	25.0/131	25.1/130	<b>Standing km (secs, mph)</b>	27.2/126	27.3/125
<b>30-70mph thro' gears (secs)</b>	4.9	5.1	<b>30-70mph thro' gears (secs)</b>	6.1	6.0
<b>ACCELERATION IN EACH GEAR</b>			<b>ACCELERATION IN KICKDOWN</b>		
<b>Fourth gear</b>			<b>20-40</b>	2.3	1.9
<b>20-40</b>	4.7	5.2	<b>30-50</b>	2.4	2.6
<b>30-50</b>	4.5	5.2	<b>40-60</b>	3.1	2.9
<b>40-60</b>	4.4	5.2	<b>50-70</b>	3.7	3.4
<b>50-70</b>	4.2	5.1	<b>60-80</b>	3.8	4.0
<b>60-80</b>	4.2	5.2	<b>70-90</b>	4.5	4.6
<b>70-90</b>	4.3	5.4	<b>80-100</b>	5.7	5.4
<b>80-100</b>	4.6	5.6	<b>90-110</b>	6.5	6.7
<b>90-110</b>	5.2	5.9	<b>100-120</b>	8.1	8.3
<b>100-120</b>	5.9	6.6	<b>110-130</b>	9.3	10.2
<b>Top gear</b>					
<b>30-50</b>	6.4	7.5			
<b>40-60</b>	6.5	7.2			
<b>50-70</b>	6.5	7.4			
<b>60-80</b>	6.5	7.5			
<b>70-90</b>	6.2	7.6			
<b>80-100</b>	6.6	7.9			
<b>90-110</b>	7.3	8.8			
<b>100-120</b>	7.9	9.8			
<b>110-130</b>	8.9	11.5			
<b>120-140</b>	10.9	—			
<b>FUEL CONSUMPTION</b>			<b>FUEL CONSUMPTION</b>		
<b>Overall mpg/Touring mpg</b>	14.5/18.6	18.1/17.7	<b>Overall mpg/Touring mpg</b>	14.4/19.2	12.6/16.2
<b>WEIGHT</b>			<b>WEIGHT</b>		
<b>Kerb weight, lb/% f/r</b>	3449/53/47	3414/42/58	<b>Kerb weight, lb/% f/r</b>	4141/52/48	3965/54/46





town. And the Jaguar and BMW score well here, especially when compared to the Ferrari with its awkward gearchange.

Only the Ferrari can claim to have good all round visibility, an extraordinary feat for a mid-engined car. The Jaguar is particularly restrictive with its huge rear buttresses. Vision from within the Porsche and BMW is much better, but estimating where the BMW's long bonnet ends is hard. Around town, again it's only the Ferrari that doesn't feel oversized, although the Porsche does a fine job of deceiving the driver that the car is a size or two smaller than it really is.

Exiting damp junctions needs care in all the cars, traction control or not. This is particularly true of the Ferrari, which also shows shortcomings in small-bump absorption. Sharper bumps ricochet through the structure almost unchecked. It is much better at absorbing longer wave undulations. The Porsche, too, can't smoothe out the potholes in the same effortless and unflustered way that characterises Jaguar and BMW progress over bumpy city roads.

## ROUND SEVEN

### *The verdict*

In one sense, all these cars are losers: for their size and intended function, none uses their rear seats for anything more demanding than as a shelf for the shopping or (much more signifi-

cant to many owners) a location for a child seat. With coupes like Volkswagen Corrado and Vauxhall Calibra well able to seat four adults it's easy to see how poorly packaged these cars are. At least Porsche acknowledges the realities and offers a versatile luggage/passenger space. No such concessions from BMW, whose exquisite looking, beautifully shaped and superbly trimmed rear armchairs deserve to go down in automotive history as a giant waste of effort and space.

Marketing people will tell you that a 2+2 will sell, no matter how useless the rear seats, where a strict two-seater would die in the showroom, and this undoubtedly forms one of the bases behind the 850i. Yes, it's a potent statement but we find it hard to believe it's BMW's definitive one. An overt symbol of BMW-ness and showroom appeal the 850i may be, a great car like the M5 is a great car, it is not. But these things surely point further to the suggestion the car was developed with one foot very firmly in the marketing camp — fine, as long as the driving experience backs it up.

In the right situation — two-up on an empty motorway — it does, for the car is crushingly able. It is better here, thanks to the sublime cabin, than the XJR-S it is most closely matched to. But set the 850i more demanding tasks and the promise made by its raffish good looks is not kept. It is in the resolute refusal to entertain the enthusiastic driver that the 850i fails.

Is that failure any worse a fault than the

**Top speeds of all are past 150mph, but not all ideally quiet and smooth for true grand touring. New boy BMW (top left) more cruiser than sports car**

Mondial's inability to cosset? For this type of car, no it's not. As a car designed to flash a small family across continents it is too unrefined by half. In its favour is the offer of a driving experience on a different plane from the others. But if this is all-important and 2+2 touring isn't, why not have a 348?

In the middle of BMW and Ferrari extremes sits the Porsche. For all its blistering speed, it throws away its potentially winning hand in a cacophony of tyre roar which makes it hardly more refined than the Ferrari for long distances. Given that it cannot entertain like the Ferrari either and however impressive its cabin is, it cannot get the nod here either.

Which leaves us the XJR-S. Of the four, it is the only one which is effective as both GT and driving machine. It is as quiet and smooth riding as the BMW, can easily keep up with the Porsche or Ferrari on a dry road and have more in reserve in the wet. However, if everything else were equal, its shoddy cabin, dated styling and terrible fuel economy still might deny it the laurels. But things are far from equal and the Jaguar has one huge advantage over the others. Compared even to the next cheapest car here, the 850i, the XJR-S costs £14,000 less. That may make for a hollow victory, but it makes for a decisive one, too. ■