



THE GREATEST SALOON EVER MADE?

Ardent Ro80 enthusiast **Martin Buckley** pits the ground-breaking NSU against period rivals from Audi, BMW, Citroën, Mercedes-Benz and Rover

PHOTOGRAPHY **TONY BAKER**



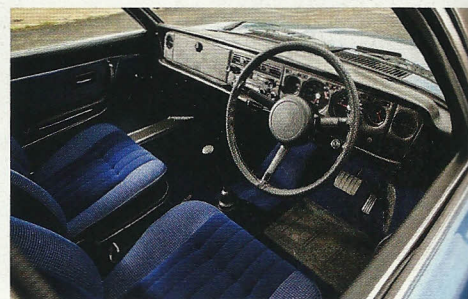
Clockwise: Claus Luthe's exquisite Ro80 lines still look fresh more than 50 years later; NSU has most modern dash design, with recessed gauges in padded fascia; really roomy cabin; two-rotor Wankel thrives on revs but is thirsty



form of the Jaguar 420 and Rover 3.5 Litre) that came in the same £2000-2500 bracket. It had been less than a year since the magazine had published its first ecstatic road test of an early production Ro80 driven in Italy; the author of 'Group Test No 8' was no less enthusiastic.

'We again find it difficult to express the level of our admiration for a car which scores in so many ways over all others,' ran the copy. Four of the five staff writers chose the Ro80 in the *Personal Choice* sequel published the following week. Roger Bell (nylon rally jacket and pointy shoes) called it 'One of the world's great cars', while technical editor Tony Curtis (drainpipe trousers, tweed sports coat) declared the NSU 'a vehicle worthy of the space age'. It is my most often revisited Ro80 feature, authoritatively written and photographed in such a way that you got an exciting sense of these '60s saloons being thrown around 'on test' in a desolate Northumbrian landscape, fording streams and raising dust as they diced on their doorhandles.

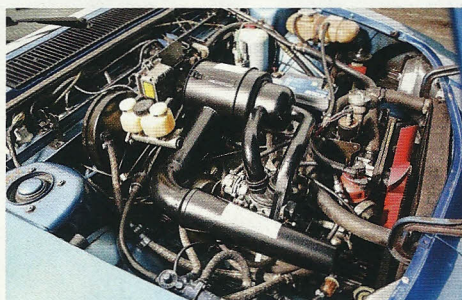
As well as being an elegant example of journalism, it was an enlightening and honest assessment in a form still quite young in the



Finding rivals to pitch against the NSU Ro80 was always difficult, because there was nothing quite like it. Fast, refined and futuristically beautiful, it was not only powered by an exciting new kind of engine, but also so sorted and complete in all respects that it was hard to reconcile its all-round excellence with the firm that built it. After all, NSU of Neckarsulm came from a tradition of mopeds and rear-engined baby cars, not luxury tin-tops. Yet here it was tackling the establishment with a five-seater, four-door express that set new standards in every way. In many respected quarters, it was regarded as the world's best production saloon in the late '60s.

The infamous Wankel engine problems (and the traumatic fall from grace that ensued) was a story that did not gain momentum in the public eye until the early '70s. Before that the Ro80 was a success story that garnered a stream of flattering reviews from around the globe, so much so that its victory in the European Car of The Year Award in 1968 must have been a virtual formality.

We were as keen as everyone else in the UK. Yet, after the dust had settled on that spectacular 1967 debut, it was down to the weekly *Motor* to publish the first cool-headed real-world comparison of this frankly amazing new car against its rivals on the British market. It was October '68, and the first right-hand-drive Ro80s were on the way. The time had come to draw the battle lines between this upstart rotary-powered machine and not only the West German competition from BMW and Mercedes, but also the large-engined traditional British luxury saloons (in the



NSU Ro80

Sold/number built 1967-'77/37,402

Construction steel monocoque

Engine iron-block, two-rotor 995cc Wankel, with two twin-choke Solex carburettors

Max power 113.5bhp @ 5500rpm

Max torque 117lb ft @ 4500rpm

Transmission three-speed, semi-auto with torque converter, driving front wheels

Suspension independent all round, at front by MacPherson struts, anti-roll bar rear semi-trailing arms, coil springs, telescopic dampers

Steering ZF power-assisted rack and pinion

Brakes discs all round, with servo

Length 15ft 8½in (4782mm)

Width 5ft 9¾in (1772mm)

Height 4ft 8in (1422mm)

Wheelbase 9ft 4½in (2858mm)

Weight 2632lb (1196kg)

0-60mph 12.6 secs

Top speed 113mph

Mpg 15-23

Price new £2444 (1970)

Price now £5-12,500

world of motoring magazines. Comparing cars head-to-head had, until the mid-'60s, been seen as not quite cricket by many manufacturers. The NSU was born into a new, more openly critical environment and words were not minced in that '68 group test about the surprising failings of the 'wallowy' Jaguar, which, for all its 4.2 litres, was no faster than the BMW 2000. That said, the Browns Lane press office could justifiably have pointed out that the 420 was about to be given the chop in favour of the XJ6. A back-to-back with that model a year down the line might have resulted in a different outcome for the NSU.

Recreating this classic comparison 50 years on, we decided to let the Rover keep the British end up and take a wider view of the continental alternatives from Citroën and Audi, plus BMW and Mercedes. It was curious that *Motor* avoided the DS because it had always been the NSU's most obvious rival, created more than a decade earlier but in a similar spirit of clean-sheet technical purity. The *Déesse* was an aerodynamic, front-driven five-seater designed to cover long distances with absolute stability and comfort.

In theory, a late-'60s DS21 would have been the nearest rival from the Citroën range when the Ro80 appeared. Not to worry: John Gagen's DS23 EFI is a good substitute that even trumps the NSU in its use of electronic fuel injection (which the 'Ro' never had) and leather seats; big squishy armchairs quite unlike anything else.

In fact, so much about the Citroën is still amazing. Possibly cars such as the XJ6 and NSU were beginning to approach – or perhaps even exceed – the standards set by its gas-and-liquid, self-levelling suspension, though even now it impresses with its ability to soak up everything. It leaves you with a feeling of being totally cosseted.

By offering a four-speed manual (or even a conventional auto) on the late DS, Citroën was maybe admitting that the world had moved on from its original clutchless semi-auto. Not everyone gets on with them but, once mastered, they are satisfying and intrinsic to the charm of

the car as you move the finger-tip lever, learning to feather the throttle slightly between upshifts to keep it all fluid. The pin-sharp brakes and sensitive powered steering require similar levels of acclimatisation but, once learnt, it is easy to see how this acquired taste could become an addiction. If the engine sounds harsh and undistinguished, it does at least have lusty torque on its side so that you can get along well without ever really having to extend the motor.

The West German approach – at least as far as the BMW, Audi and Mercedes are concerned – is quite different. It is a graphic reminder that these vehicles come from an era when national identity was as clearly defined in our cars as it was in our food, architecture and anything else.

The crisp, boxy Audi 100 in particular is as coldly rational as the Citroën is romantic. It is a thoroughly competent design that, in many ways, established the tone for all Audis to come.

'ONCE LEARNT, IT IS EASY TO SEE HOW THIS ACQUIRED TASTE COULD BECOME AN ADDICTION'

CITROËN DS23 EFI PALLAS

Sold/number built 1955-'75/1,455,746 (all)

Construction steel monocoque, with GRP (or aluminium) roof and aluminium bonnet

Engine iron-block, alloy-head, overhead-valve 2347cc 'four', Bosch D-Jetronic fuel injection

Max power 130bhp @ 5250rpm

Max torque 144lb ft @ 2500rpm

Transmission five-speed manual, four-speed semi-automatic or Borg-Warner three-speed automatic, driving front wheels

Suspension independent all round, at front by twin leading arms rear trailing arms; hydropneumatic units, anti-roll bar f/r

Steering powered rack and pinion

Brakes powered discs front/drums rear

Length 15ft 11½in (4864mm)

Width 5ft 11in (1803mm)

Height 4ft 10in (1473mm)

Wheelbase 10ft 3in (3124mm)

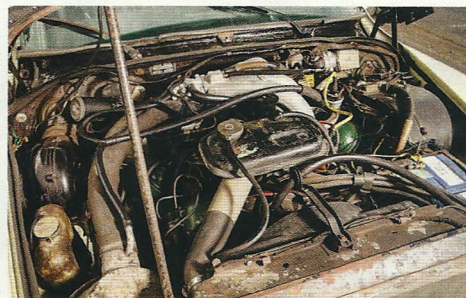
Weight 2948lb (1337kg)

0-60mph 10.4 secs

Top speed 119mph

Price new £2883

Price now £12-40,000



Clockwise: you sink into the sumptuous armchairs; signature 'cornet de frites' indicator; aged four-pot motor nonetheless gives excellent performance with fuel injection; it glides effortlessly over pretty much any surface



'IT WAS FOR THE MAN WHO WANTED
GERMAN PRESTIGE, BUT WITHOUT
IMPLYING HE HAD WON THE POOLS'



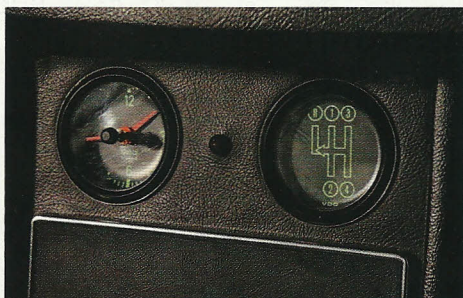
Clockwise: understated but attractive 100 styling set the Audi template for decades that followed; slant-four reflects M-B's involvement with design; gear schematic and clock; comfortable, elegant cabin is beautifully made

It impresses you with its finish, efficiency and fine overall behaviour rather than seducing you with its looks or driver appeal. This example, kindly furnished by Audi's historic fleet in the UK, is an oddity in that it is a two-door right-hooker; most 100s sold in the British market had four doors.

In both guises, this was a clean-looking shape. Its handsome greenhouse treatment and neat tail-light design seem to reflect something from Mercedes' interest in the firm in the first half of the '60s. The engine, derived from the Super 90 and Auto Union – Audi's first post-war four-stroke – is unquestionably Mercedes-Benz in origin. It pulls the Audi along energetically if not that smoothly or sweetly. Good economy and the ability to cruise this substantial car indefinitely at 100mph (on the *autobahn*) on less than 1800cc were its chief selling points. It is not overburdened with low-end torque or high-revving refinement, but delivers the goods well enough.

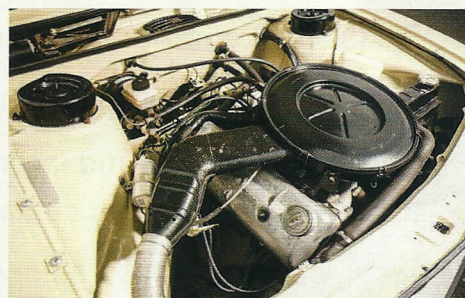
There were automatic 100s, but the four-speed manual works smoothly with a slightly remote feel. Despite having this canted-over, high-compression in-line 'four' slung well beyond the front wheels, the Audi is far from being an understeering pig – although power assistance would make it less clumsy at low speeds – plus it corners and rides with a lack of drama that leaves you impressed but unmoved, which was clearly its designers' intention.

Inside, the inviting velour seats and handsome fascia show how the West Germans were leading the way in the use of high-quality cabin materials. The Audi's only ergonomic crime is its curiously offset pedals. It is pretty spacious, with rear legroom second only to the NSU, although



nowhere near the DS. It was, in fairness, cheaper than both of those cars and really for the man who wanted prestigious German transport that was a cut above the rabble. A machine, in other words, to express his discriminating taste without implying he had won the pools.

That tended to be most people's reaction to any new Mercedes on British roads in the '60s and early-'70s, such was the general lack of understanding of the hierarchy of the model structure in the UK. Which brings us neatly to Tex Crampin's low-mileage 230/4, a late species



AUDI 100LS

Sold/number built 1968-'76/796,787

Construction steel monocoque

Engine iron-block, alloy-head, ohv 1871cc slant-four, single/twin Solex carburettors

Max power 112bhp @ 5600rpm

Max torque 118lb ft @ 3500rpm

Transmission four-speed manual, driving front wheels

Suspension: front independent, by double wishbones, coil springs rear tubular beam axle, trailing arms, Panhard rod; telescopic dampers; anti-roll bar f/r

Steering rack and pinion

Brakes discs front, drums rear, with servo

Length 15ft 3/4in (4590mm)

Width 5ft 8in (1730mm)

Height 4ft 7 1/2in (1420mm)

Wheelbase 8ft 9 1/4in (2675mm)

Weight 2315lb (1050kg)

0-60mph 10.8 secs

Top speed 112mph

Mpg 24-30

Price new £1995 **Price now** £4-15,000

of the W114/5 'New Generation' saloon with a 2307cc oversquare version of the firm's long-running overhead-cam four-cylinder engine. You could have had 230 and 250 single-cam 'sixes' in this shell (and the beefy 280 twin-cam), but *Motor* tried the first of the 220s (at £2297) and thought highly of it. Michael Bowler marginally preferred it to the Ro80, in fact.

The vertical lamps linked it to the W108s, but the 230/4 was subject to minor styling tweaks to align the six-year-old body with the younger W116 S-class. Here was a car that cost a bit more than an XJ6, yet would barely top 100mph.

In this company, as in '68, 'our' immaculate W115 is stripped of all but the bare essentials: power steering and automatic transmission were extra and you didn't even get a rev counter. Certainly, its light, airy interior is well made but also a little bleak and joyless. The undoubted efficiency of boring (but essential) things such as ventilation are, perhaps, lost on those who have never bought into the Mercedes ethos. Urged through the four ratios in its sloppy, uninspiring manual gearbox, the 230/4 gathers pace with ponderous tenacity. There is not a lot of point in

pushing it hard, although the chassis has enough suppleness and poise to deal with double the power. The semi-trailing-arm rear suspension was one of the main assets of the W114/5 series. It rides and handles with much of the aplomb of its more familiar successor, the W123.

What that slightly downbeat analysis doesn't account for is the superb finish, plus the inherent strength of the Mercedes and its known potential to run up huge mileages without major problems. It sold to people who wanted a long-term investment in engineering rather than a short-term thrill machine. If you wanted to drive to Afghanistan, this would have been the car for you.

The BMW was always more of an enthusiast's machine and was basically the model that introduced British buyers to the marque 50-odd years ago, opening the door to the success of the '02 range and the E3 straight-sixes. These early four-door, four-cylinder BMWs have been a touch neglected over the decades, so Paul Hill's delightful 2000 automatic is a rare and now much-coveted *Neue Klasse* survivor.

To modern eyes, you can see how the boxy shape could almost be mistaken for something

MERCEDES-BENZ 230/4

Sold/number built 1968-'76/221,783 (including 230/6)

Construction steel monocoque

Engine iron-block, alloy-head, single-overhead-cam 2307cc 'four', single Stromberg 175 CDT carburettor

Max power 109bhp @ 4800rpm

Max torque 137lb ft @ 2500rpm

Transmission four-speed manual or four-speed automatic, driving rear wheels

Suspension independent all round, at **front** by double wishbones **rear** semi-trailing arms; coil springs, telescopic dampers, anti-roll bar f/r

Steering power-assisted recirculating ball

Brakes discs all around, with servo

Length 15ft 4½in (4680mm)

Width 5ft 9¾in (1770mm)

Height 4ft 8¾in (1440mm)

Wheelbase 9ft ¼in (2750mm)

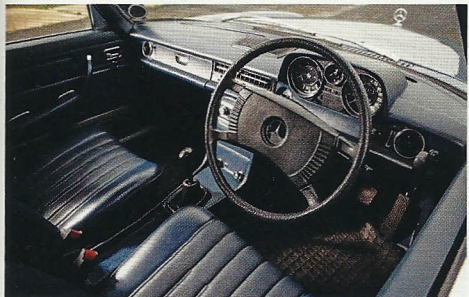
Weight 2977lb (1350kg)

0-60mph c13 secs

Top speed 106mph **Mpg** 23-27

Price new £3495 (250)

Price now £5-12,000



Clockwise, from main: 'New Generation' Merc turns 50 this year; firm seats, massive wheel and basic dash – not even a rev counter – but it's superb quality; trademark three-pointed star; four-pot fed by a single Stromberg carb



'ON THE MOVE, THE STEERING'S
DELIGHTFUL PRECISION IS AT
THE HEART OF THE CAR'S APPEAL'



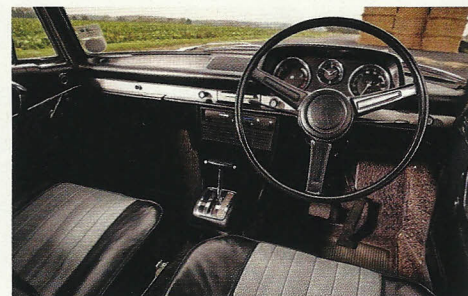
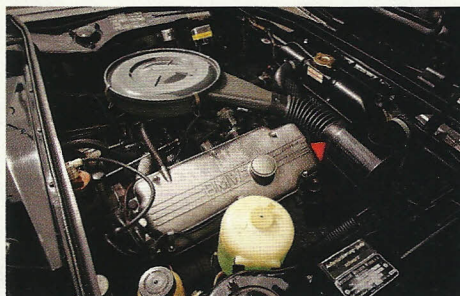
Clockwise, from main: rare
factory black suits sporty
late-model Neue Klasse
2000 – just the smallest
of this group; two-tone
vinyl livens up interior; ZF
auto 'box still gives lively
performance with single-
carb slant-four engine

east European, but the detail finish and nicely worked out (if not lavish) interior tell you that this a BMW. From your vantage point, you can see all the corners and you soon realise that you *do* need that big wheel when parking. On the move, the steering's delightful precision is at the heart of the car's appeal and the BMW soon lets you know that it wants to be driven fast and well.

Motor took a twin-carb four-speed manual TiLux to Northumbria in '68, but the 2000 auto with a single carburettor and ZF three-speed 'box was popular in the UK. These early BMWs are perhaps unique in the world of four-pot '60s saloons in that the slushbox option doesn't destroy the engine's urge. They showed people that good performance and decent fuel economy were not mutually exclusive and that refinement didn't have to equal weight and clumsiness.

The soft engine mountings, plus the cushioning effect of the torque converter, lend the power unit near-six-cylinder sweetness as it revs and there is enough torque to give the 2000 energetic acceleration with a keen mid-range kickdown. You are reasonably aware of the lean, more so because the seating position is quite high in a car that, by the early '70s, was already looking ever-so-slightly tall and narrow.

The Rover, designed in the '50s, seems something of a fish out of water among this modern Euro-saloon line-up of rational 2-litre machines. To understand its positioning, you have to look at the prices: at £2174, it was cheaper than everything other than the BMW. For that you got a beautifully finished V8 saloon that looked bigger than all the others yet was an inch shorter than the NSU, even if it weighed almost 1000lb more.



BMW 2000

Sold/number built 1966-'72/151,655

Construction steel monocoque

Engine iron-block, alloy-head, single-overhead cam 1990cc 'four', single/twin Solex carbs

Max power 100bhp @ 5500rpm

Max torque 116lb ft @ 3000rpm

Transmission four-speed manual or three-speed auto, driving rear wheels

Suspension independent all round, at front by MacPherson struts, anti-roll bar rear semi-trailing arms, coil springs, telescopic dampers

Brakes discs front, drums rear, with servo

Steering ZF-Gemmer worm and roller

Length 14ft 9in (4496mm)

Width 5ft 7in (1702mm)

Height 4ft 8½in (1410mm)

Wheelbase 8ft 4½in (2555mm)

Weight 2491lb (1130kg)

0-60mph 11.4 secs

Top speed 105mph **Mpg** 22-28

Price new £1996

Price now £6-12,000



This Coupé, owned by John Wallet almost since new, is one of the best: I feel extremely honoured to be the first person John has ever allowed to drive it. He probably noticed the twinkle in my eye for a model I have always loved (I've had five or six) and always will. It might be thirsty (15mpg) and have super-light steering, but you can't really compare the feeling of wafting luxury that it gives you against the others – or the sheer presence of its handsome, squat-roofed body. It might be a terrible piece of packaging – lacking in head- and legroom for rear passengers

– but in Coupé form I think it is one of the best-looking British four-door cars of all time.

In a way, the Rover has become better with age, its subtle charms outweighing its dynamic failings. In 1968, the mostly youthful *Motor* writers could not get on with the big 3.5 Litre on the twisty roads of their northern test route, yet they were all surprised by the ease with which it kept station with the other cars. It is not a vehicle that is naturally disposed to being hustled or hurried, although a good P5B will readily hitch up its skirts when required. It just tends to feel more dramatic, less inherently nimble than these middleweight Euro types. Body roll is, actually, far from scary and that light, high-g geared steering is somehow part of the experience.

In the end, the Rover is easily the most suave of these cars, its natural habitat being either the city – where the torque, the effortless steering and auto 'box mean that you can burble around with an aloof feeling of isolation on those fantastic seats – or the motorway, where it is solid and stable, with silky V8 urge to spare. No, there's nothing like a P5B... except perhaps a Silver Shadow, which you can now have for about the

ROVER 3.5 LITRE COUPÉ

Sold/number built 1967-73/9099

Construction steel monocoque

Engine all-alloy, overhead-valve 3528cc 90° V8, twin SU carburettors

Max power 151bhp @ 5200rpm

Max torque 201lb ft @ 2750rpm

Transmission three-speed Borg-Warner Type 35 automatic, driving rear wheels

Suspension: front independent,

by torsion bars and anti-roll bar
rear progressive-rate semi-elliptic leaf springs; telescopic dampers f/r

Steering power-assisted recirculating ball

Brakes discs front, drums rear, with servo

Length 15ft 7in (4750mm)

Width 5ft 10in (1791mm)

Height 4ft 10in (1473mm)

Wheelbase 9ft 2in (2807mm)

Weight 3500lb (1587kg)

0-60mph 12.4 secs

Top speed 113mph

Mpg 17-20

Price new £2270

Price now £7-30,000

The shape is another major element in the NSU's appeal. For me, the Ro80 body is breath-takingly well-proportioned, with no unnecessary fuss. Somehow it just doesn't look German, even if the beautiful Fuchs alloys are a clue. The good news continues inside: it is obviously a well-made vehicle with a neat, durable and airy cabin. Look closer and there is no evidence of unnecessary weight (the seats must be half as heavy as the Rover's club armchairs, for instance), presumably in an attempt to curb the Wankel's thirst, which for me has always been its main stumbling block.

Like the Audi and Citroën, the NSU has front drive. With its long-travel springs (it laughs at traffic-calming humps), it feels closest to the DS in flavour but is less disorientating; its sharp brakes are more natural to modulate and you soon realise that the precise, kick-free power steering is superb. Short of a 100mph handbrake turn in the middle lane of the M1, I doubt whether anything would shatter the impression of poise and sheer competence that the Ro80 leaves you with.

It is hard for me to be dispassionate about the NSU. In 20 years, I have done more time in Ro80s than any other type of car – classic or otherwise. Over 50,000 miles, my first example only let me down a couple of times (and never for any terminal reason) and I have been hooked on them ever since. So you'll forgive me if I say that engine problems, while certainly no myth, are nothing like as inevitable as the NSU's detractors might have you believe. There are fewer of those naysayers today, of course, and it is best remembered as the most daring production saloon of the decade. It is a special, silkily serene experience that everyone who is interested in cars should try at least once. CLASSIC



Clockwise: trad timber fillets and plump, leather-clad chairs in Rover; twin SUs sit in vee; distinctive Coupé has 2½in lower roof; neat tool tray slides out of the centre console

same money – a thought that for me tends to put the charms of the Rover into perspective.

Driving Phil Blake's 1975 Ro80 makes me realise how rarely I have sampled a really good example. With its quiet gearbox, silent supple suspension and an engine with strong compression on both rotors, it is sensationally refined and deceptively fast: quicker than 0-60mph in 13 secs and a top speed of 113mph might suggest.

You soon get used to the clutchless semi-auto if it's set up correctly and can, of course, pull away in top gear should you wish to abuse the privilege of having no valves to worry about. There are three forward ratios – NSU liked owners to think of them as 'speed ranges' rather than gears – with '1' left and down. It churns its torque converter a little at first, but really gets on its toes between 40 and 80mph in second as you wind it out to a sublime 6500rpm. Here the engine emits a remote, totally unstrained jet-like whistle. It feels completely natural to cruise at 110mph or more with an eerie lack of road or wind noise, in a euphoria of stability and serenity, supported by fantastic brakes.

