

AS EXPONENTS of the motoring *avant garde*, there's no-one to beat Citroën – indeed there's no-one who even comes near their advanced technical thinking. For years the French company have scorned the idea of a car being pushed along by its rear wheels, favouring instead front wheel drive traction.

Over those years Citroën have built up a reputation for being able to produce something out of the ordinary. And yet even in that knowledge, every new Citroën brings a gasp of astonishment from onlookers. Perhaps it's fortunate that the company are not unveiling new models once a year! But that gasp could not have been bigger than in 1955 when S. A. Andre Citroën took the wraps off the DS19 ('DS' standing for *Déesse* or 'Goddess'). For here was a car so futuristic and advanced that ten years later most of the opposition had not begun to catch up.

Following the tradition set by the *Traction Avant*, the DS naturally had front wheel drive, and had its gearbox mounted ahead of the engine. But new to the public was the extensive use of hydraulics which by the end of the line was to be used for the suspension, brakes, steering and gearchange. Conventional the car was not; no wonder it has caused so many headaches and problems for mechanics new to the car.

Citroën can take a pat on the back for being one of the first volume manufacturers to recognise the importance of aerodynamics. All DS cars have shared the same wind cheating shape, though only the later cars took the theme to its natural conclusion, when the earlier prone headlamps were neatly hidden away beneath glass cowls. Indeed it is astonishing to find that in a time of change for change's sake, the DS was able to stay basically the same for so long. But then Citroën never did bow or compromise to fashion.

If there was one thing that hoisted the Citroën head and shoulders above the rest on the road, it was the car's supreme comfort. It was never a car for hurrying through a series of mountain hairpins, but show it a stretch of long, fast road and the car would be in its element. Britons have been fortunate that – up until recent times anyway – the roads have been the model of smoothness in comparison to the French *pavé* and heavily pitted *Route Nationales* where a bad camber means the road is virtually triangular.

But as always with the *avant garde*, the car is an acquired taste. The extreme smoothness simply made some people car sick, while the car as a whole needed getting used to. As Citroën dealers have found out many times, not everyone is prepared to learn new tricks, preferring to stick with a conventional car.

One of the features that made the DS and its derivatives stand out from more mundane cars was its complex self-leveling suspension. You could fully load up the car with people and luggage and the ride height of the DS would remain blissfully unaffected. Great for caravaneers!

A small five-position lever next to the driver's seat however gave manual control of the ride height. The lever's fifth and highest position which gave an absurdly



CITROËN DS 23: Old Peculiar

high ground clearance was intended presumably for rough roads or floods(!). The car's normal ride position was the third notch of the lever's travel. Switch off the engine after a run with the lever in any position bar the highest and the D will sigh and sink gracefully to the ground. When starting off, you have to wait for the car to rise off the ground before you can begin your journey.

There were two major flaws with this advanced system. The first was too much suspension movement – a fault that was later cured with the Citroën GS, Mercedes and Rolls-Royce systems. The second was the D's inability to cope with hump back bridges taken at any kind of speed. But as with the rest of the car's shortcomings, most Citroën owners grow to accept and 'put up with' these habits and peculiarities.

Although the car spanned some 20 years there are no bad years as such when looking for a secondhand example. There are, however, some distinct 'good

buys'. If you find a cabriolet (convertible) version of the older, exposed headlamp models, snap it up. Seat belt regulations made it tough and expensive for Citroën to import convertible versions of the later cars so they simply did not bother. But generally speaking, the newer the car, the better, as far as used ones go. The Safari estate model which are in themselves remarkable cars, offer astonishing value for money. They are also fairly rare on the secondhand market, and when one does appear it is usually sold quickly. So for these reasons this survey concentrates mainly on the eventual top of the range model – the DS23 Pallas saloon.

The DS23 was available with a 2347cc ohv engine with either carburetors or fuel injection (EFI). The EFI developed some 130bhp and had a top speed of around 120mph while 0-60mph took 10.5 seconds. To compliment its high speed touring ability, the Pallas trim option at nearly £300 was desirable. From the outside the Pallas version could be spotted by a chrome body strip, but inside high backed thickly padded seats, deep pile carpets and air of luxury made owners feel they were getting good value and a lot of motor car for their £2900.

Fuel injection made the car quicker than its more conventional sister but at the expense of fuel economy – externally a badge at the rear of the car will tell at a glance whether it is an injection model or not. But the injection and Pallas trim are showroom attractions. The real proof of the pudding is in the driving, and it is on the road that most of the car's idiosyncrasies come to the fore.

The first thing a new driver will notice is the apparent lack of a brake pedal, for in between the throttle and clutch is a small round button. Invariably the first time a new driver tries to stop the car he or she will be all but thrown through the windscreen. It takes a little while to get used to the load sensitive power brakes which seem, at first, to have an 'on-off' attitude.

Similarly the car's ride and very light power steering needs acclimatization, especially if the handling is to be fully exploited. Even in stop-start traffic the car will squat under even modest acceleration and dive under braking. In short it is a car that demands extreme concentration to drive properly and safely – and that can only be a good thing!

Other eccentricities include the use of non-cancelling indicators mounted in the roof line at the rear of the car and a single-spoke steering wheel. And when it comes to changing a rear wheel, the rear wheel cover panel has to be removed... there's an exposed nut at the back edge of the cover.

On the positive side, the use of front wheel drive means there's no transmission tunnel inside the car to take up space, and the spare wheel and jack are mounted under the bonnet, which means there is more room in the boot of the car for luggage. The spare wheel also serves to absorb some of the initial impact in a front-end collision.

As undeniably fast and comfortable as the big Citroën was, there were a few problems as the range neared the end.

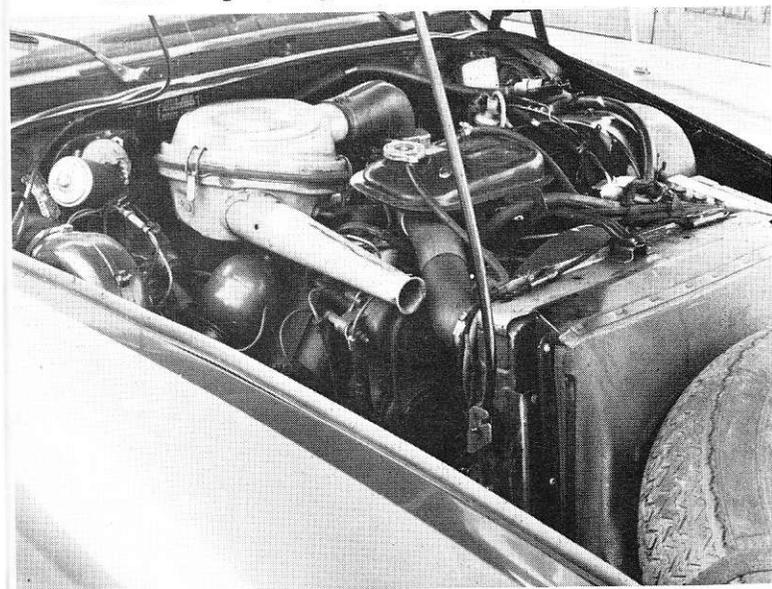
CARS
TO KEEP



Above: Citroën's estate version of the D series – the Safari – was a truly remarkable car and in its heyday had few if any rivals



Above: the Big Citroën's advanced self-levelling suspension has five different height settings. This D is set at its highest position



Above: for such a complex car, the D engine was, for many years, a disappointment. The DS 23 EFI was the fastest of the range



Above: the highly-desirable cabriolet version of the D was a rare car at the best of times. Only early versions reached the UK

Brief Specification DS 23 EFI

Engine	In-line four, cast iron block with alloy head
Capacity	2347cc
Bore/Stroke	93.5x85.5mm
Valves	ohv
Compression	8.75:1
Power	130bhp DIN at 5250rpm
Torque	137.9lb/ft DIN at 2500rpm
Transmission	5 speed with column change. FWD
Top gear	22.4mph/1000rpm in fifth
Brakes	Disc/drum with servo
Front sus.	Ind. by oleo pneumatic self-levelling struts, wishbones
Rear sus.	Ind. by oleo pneumatic self-levelling struts, trailing arms
Steering	Power assisted rack and pinion
Tyres	185HR15
Length	16ft 1in
Width	5ft 11in
Weight	26.4cwt (unladen)

Performance

Maximum	120mph
0-60mph	10.5sec
30-50 in top	12.1sec
50-70 in top	12.1sec
Fuel con.	18-24mpg

Production history

Although the original cars – born in 1955 – look virtually identical to DS cars from two decades later, there are a considerable number of differences under the skin. There have also been many changes in the ID/D/DS range since 1966 when production in this country ceased, and the cars began to be imported in right hand drive from their native France. Up until then the cars were sent over to the group's Slough headquarters in CKD form and built up in England.

In 1966 there were two sorts of Citroën D. The cheaper and less powerful of the two was known as the ID (from *Idée*) while the other range was called the DS. The two looked identical, the major differences being in trim, equipment and power. Both ranges used versions of Citroën's long stroke four cylinder engine, that had origins going back to the 1930s. But in September 1966 all cars were given a new power pack in the form of the short stroke 1985cc engine that, in different forms, is still in use today providing power for the CX range.

Externally the biggest single change to the car's appearance came in September 1967 when the single headlamps sticking out in the air-flow, became twin headlamps and were tucked away behind glass cowls. And in keeping with Citroën's advanced thinking, the top of the range Pallas models had inner headlamps that were self-levelling and which swivelled with the steering.

At this time the models were

known as the ID19 and the DS19 with the estate version – mechanically identical – known as the Safari. When the short-stroke engine was introduced, power for the ID models jumped from 74 to 78bhp, and to 84bhp for the DS19. There were further power increases in 1968 when the newly introduced ID20 and DS20 models developed 91bhp while the ID19 had a power boost to 81bhp. Another newcomer, the DS21 with a more oversquare 2175cc version of the engine, developed 106bhp. The same year saw the adoption of swivelling headlamps an all but the cheapest ID19 model, as well as re-arranged facia controls.

In September 1969 the ID range was dropped and replaced by the virtually identical D Speciale, and a fuel injected version of the DS21 with a 125bhp on tap, was announced. Additionally all DS cars were given re-styled circular instruments and a year later the DS21 was given a five speed gearbox as standard. October 1971 saw power increases through the range with the exception of the DS21 cars. The next major change came in September 1972 when the D Super became the D Super 5, thanks to the addition of a five speed gearbox and DS21 engine, and the DS21 cars were dropped in favour of the DS23 with an enlarged 2347cc engine available with either carburettors and fuel injection (EFI).

In October 1973 the range was simplified by the dropping of the DS20 and Safari as the car's production began to wind down pending the arrival of CX range. At the car's end in 1975 the range consisted the D Speciale (1985cc, 99bhp, four-speed 'box'); the D Super 5 (2175cc, 106bhp, five-speed 'box'); the DS23 (2347cc, 115bhp, five-speed 'box, ordinary or Pallas trim); the DS23 EFI (2347cc, 130bhp, five-speed 'box, ordinary or Pallas trim); and the DS23 Safari estate with the same mechanicals as the DS23 saloon.

In this country the later cars were only ever available in saloon or Safari form, though the company did make a convertible version (the 'decapotable') in France. These were never imported in the later years due to seat belt legislation, but an open top version of the early cars did sell here in small numbers.

And although Europe was able to buy the later cars with Borg-Warner automatic transmission, the nearest we got was Citroën's own four-speed transmission cars which used two pedals and a hydraulic clutch – it was not even a true semi-automatic.

Rivals then and now

The Citroën DS23 Pallas EFI of 1973 faced some stiff opposition, but despite its age was still regarded as a threat by most rival manufacturers. Technically of course there was nothing that could be considered a direct rival, with the possible exception of the Wankel-engined NSU Ro80 which was slower but more expensive at £3823 as opposed to the Citroën's

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Perhaps the biggest criticism centred on the lack of refinement, for no matter how good the ride – if progress was spoiled by noise, both mechanical and from outside sources, the object of the car was defeated. And mechanically the car certainly was beginning to show its age. The engine can be both harsh and fussy when extended and noisy too.

Wind noise is not so much of a problem unless seals have given their best, when the DS can become a very noisy car indeed. It is ironic that the CX – the DS replacement – continued to use the same engine in a new and aerodynamically superior shell. It is almost as if Citroën regard themselves as automotive artists rather than engineers.

There is no doubt that the DS is an important and significant car. That it is a car to keep is also beyond doubt; but it is a

car that demands full time attention from an owner. A test drive is essential if the prospective owner is new to the DS range, and don't forget the costs an owner is going to have to face if the car is to be kept looking good and mechanically sound. It will be an expensive car – but remember the top of the range models were up against rivals like the Rover 3500S and the Jaguar XJ6, cars that everybody expects to be expensive to buy and maintain.



From 1967 the cars' headlamps were tucked behind glass cowls

near £2900. The 2.8-litre Jaguar XJ6 was much faster, much thirstier and only a little more expensive at £3058. But perhaps the stiffest opposition came from the quicker, cheaper and more frugal Rover 3500S.

Rivals today are more difficult to pin down but the Citroën CX must be considered as should the Renault 30 TS, both of which offer comfort, space and a reasonable turn of speed.

Buyer's spot check

For the sake of simplicity the DS23 Pallas is the subject of this feature, though obviously many of the problems buyers are likely to find will be common to all in the D range.

The most obvious problem is rust. For some reason the dreaded rust bug takes a great liking to the big Citroën and finding a clean example will be difficult. The first places to check are the doors and the rear wheel arches, but checks should be made around the front wings and underneath the nose of the car. Fortunately the bulk of the rust will not be structural, but will turn a good looking car into a sad shadow of its former self, and could even render the car illegal.

While still on the outside of the car, check the tyres. Steel-braced radials are a must and Michelin XAS highly recommended, but they are on the costly side so check wear is even on all tyres – including the spare.

And while on the subject of cost prepare for an underbonnet shock, for items like the clutch are so hidden away beneath a mass of hydraulic pipes that what, on most cars, is a routine job, becomes a highly expensive operation. One and a half days is the time one Citroën garage quoted for a DS clutch swap. Clutches seem to

have a useful life span of somewhere between 45,000-50,000 miles, so if 'your' car has done around that mileage do ask whether a new clutch is a recent addition or likely to be a job on the priority list. Other seemingly simple jobs that demand a healthy bank balance include the replacement of handbrake linings.



This late LHD D interior shows the classic single-spoke steering wheel, the gear lever for the optional hydraulic clutch (this lever also starts the car) and Citroën's unique 'button' brake pedal

Obviously the one thing that sets the DS aside from other cars is its extensive use of hydraulics. And it is the excess of pipes running all over the car that still makes the garage mechanic shy away from the car – and it certainly cannot be considered a DIY man's dream either. Regular and good servicing by a DS expert is the only way to keep a D in good shape. And specialist work is not cheap.

Check that the car sits on the road well – a car with worn or leaky hydraulics will soon settle on its bump stops looking for all the world as if it has had enough and has refused to go any further. If there are any hydraulic leaks they will affect not only the steering, but also the brakes, suspension and possibly the gear change, too.

It is worth remembering that leaks from pipe joints are rare – the leaks are more likely to be caused by rusting pipes, especially on a car that is getting on in life.

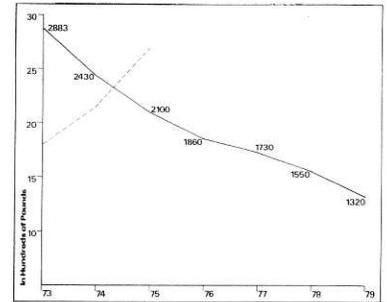
The sum-up is that the DS is likely to be an expensive car to keep on the road, even if such major items as the engine and gearbox are renowned for their long, trouble-free life spans.

Clubs, specialists and books

Joining a one make car club is always a good idea if you own a car worth keeping, and the Citroën DS is no exception. In this case the address to send your £6.50 for membership is Arthur Bowden, Secretary, the Citroën Car Club, 'Pilgrims', Pilgrims Way, Kemsing, Sevenoaks, Kent.

The Club has obviously recognised the importance of the D, for a D register has recently been set up. Club activities include many social gatherings, rallies and so on, as well as special insurance deals and the *Citroënian* club magazine.

Help with specialists can be given by the Club, though it is worth remembering that with



represent a good, clean 1973 DS23 Pallas with fuel injection.

Owner's view

Insurance salesman Jack Sims is a real DS enthusiast, and is currently on his third DS23 Pallas. His present example has carburettors and a hydraulic clutch, but in the past he has owned two fuel injected versions, one with a hydraulic clutch and the other with a manual five-speed 'box. He bought his current '74 model for £1400 some 18 months ago after his previous immaculate DS was written off in somebody else's accident.

'I spent six months looking and eventually found this one with 19,000 miles on the clock. It was mechanically excellent though I plan to spend some money soon having a complete respray, the interior re-trimmed and the chrome replated or replaced. I want it immaculate as I plan to keep it for some time.'

Jack was a former Ford man and admits his first test drive in a DS was 'quite an experience'. He said: 'It's a car that needs getting to know – it needs more than a quick drive around the block. But now I am a confirmed Citroën man and believe the DS was the best car they ever made. I find it smooth, roomy, comfortable and economical, and I think the carburettor versions are almost as fast and much less complicated than the EFI models.'



such a complicated car anyone other than an accredited dealer should be avoided.

Useful books are a bit thin on the ground but include the 'bible' *Citroën – the great marque of France* by Pierre Dumont published in French and English by Interauto at £17.95. A cheaper book offering a potted history of the marque with reference to the DS, is Raymond Broad's *Citroën* in publisher William Luscombe's 'Great cars series' at £5.95.

Prices

The bad news for present DS23 owners is that they are still losing value. However this must be good news for the would-be buyer as values of this highly desirable and technically advanced car will surely rise at some point, even though inflation, represented by the dotted line, has got a considerable head start. The values shown