The Citr

When the Citroen DS 19 was launched in October 1955 it must have seemed a remarkably futuristic vehicle. It's almost hard to believe that the now familiar aerodynamic styling of the D was introduced all of thirty years ago, achieving wind resistance figures which were at least twenty years ahead of most other saloon cars.

Was it not rather adventurous on the part of Citroen to produce a car which effectively sidestepped some of the trends emerging at the time? They avoided the conventional unitary construction method by building an unstressed body (with a glass fibre roof and aluminium bonnet) on a rigid platform chassis. They employed the then unique self-levelling hydropneumatic suspension system which also allowed a choice of five ride heights selected by a lever adjacent to the driver's seat, and applied hydraulic power to the brakes and gear changing, and power assistance to the steering as well. And they retained front wheel drive which was unusual then and has not been widely adopted elsewhere to this day in cars of this size.

Was the D Series too revolutionary to succeed? Not at all. Almost 1½ million cars were produced over twenty years, and they was only one noteworthy change to the external appearance of these cars throughout the period during which many manufacturers introduced major styling revisions every few years and cosmetic changes almost annually.

What about these cars today, ten years after production ceased? Are they still a tribute to inspired Citroen engineering, or have they by virtue of their particular refinements become expensive liabilities for their owners? I will answer these questions in a moment, but first let's have a brief look at the development of the range.

The D Series range

There were two Citroen-made body styles, the saloon, and the estate version (from 1959) which was known in the UK as the Safari. There was also a drophead coupe built from 1958 to 1972 by Henri Chapron and known as the Decapotable, of which imports to the UK ceased well before production due to difficulties in meeting our seat-belt regulations. A modification of the Safari was the Familiale with three rows of forward facing seats, and a particularly well appointed saloon based on the DS and known as the Prestige was available from 1959 to 1961. The latter was hand finished by Chapron and its equipment included a push button radio, a radio telephone, and a division. Having noted these variations on the theme (by no means a complete list) it must be said that most surviving cars date from the 1970s and that most of these are saloons.

Originally the DS models were intended to have the better specification with the hydraulic system involving the suspension, steering, brakes and gears, and the cheaper iD had the hydraulic suspensions only. However the iD was given power braking around 1961 and optional assisted steering later and to confuse matters further a manual gearchange became available for the DS during 1962. The 'Pallas' trim option, a better level of trim, became available on the DS models from September 1964 and although it remained optional the majority of DS models in the UK were fitted with its whereas it should not be in any iD. The list of models which form part of this feature was kindly supplied by Mr Guy Pursey of the Citroen Car Club and is confined to those models known to have been sold in the UK (excluding the Decapotable). You will notice that nearly all the Safaris were based upon the iD specification.

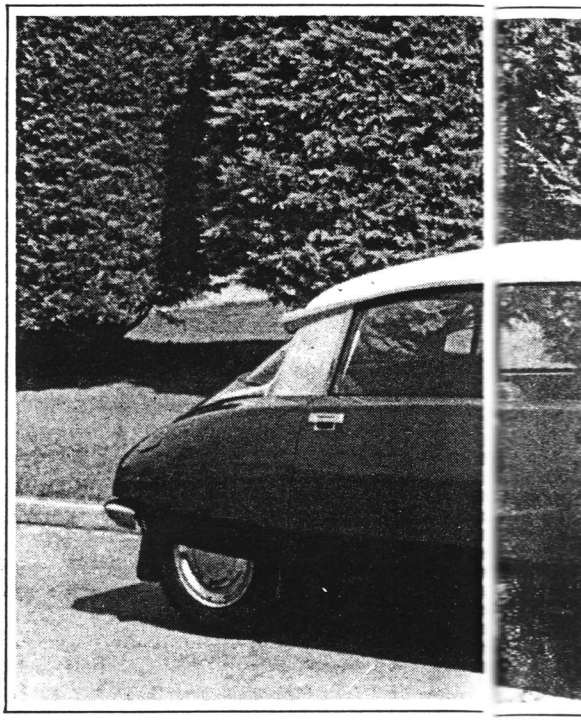
September 1967 saw the introduction of the revised front end styling which included faired-in headlamps rather than the earlier arrangement of a single headlamp built into the front of each front wing.

There were a number of other mechanical changes too. Until 1965 all Ds were powered by the same 1911cc four cylinder in-line engine which dated back to the 1930s. In 1965 a redesigned engine of 1985 or 2175cc became available for all but the iD models and the gearbox was also redesigned but remained a four speed box with either hydraulic or manual control. In 1966 the iD models were given the new engine. In 1970 a five speed gearbox was introduced, and in 1971 a Borg Warner automatic transmission was also available (but not in the UK). Electronic fuel injection was introduced for the 1970 season (some models continued to use carburettors) and there was an engine capacity increase to 2347cc for some models from 1973.

The majority of Ds were built in France although a substantial number were made in Belgium and elsewhere including Slough, England. Slough production ceased in 1966 but you can tell a Slough built D by its all-Lucas electrical equipment.

Spares...

The spares situation for 1968 or later models is fairly good. Mechanical parts present few problems, a wide range being available from the Citroen Car Club's D Spares Scheme (and you will of course join the club) as well as from independent specialists. Some



A D Super in the foreground and a D Super Five beyond – both late models like the majority of survivors yet offering classic styling, a high level of comfort and worthwhile performance, and sound examples need not be expensive.

A DS 19 Cabriolet – surely one of the prettiest convertibles of all. The Decapotable, as it is called, is now rare and priced accordingly.

Photo courtesy of Citroen Cars Limited.

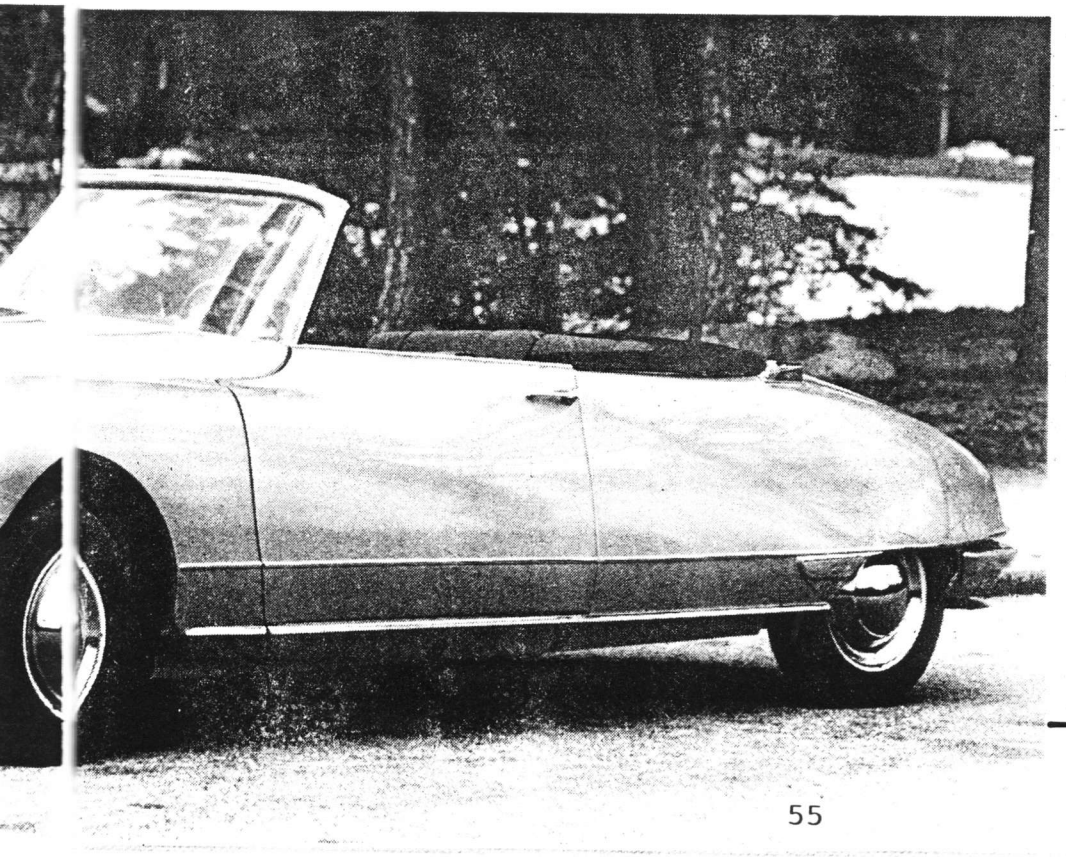
itroen D Series

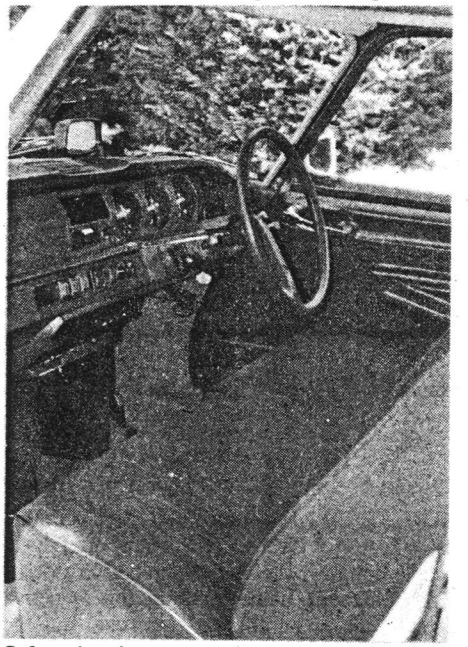
original body panels are available but are said to be expensive, and my impression is that owners tend to avoid them, preferring instead to effect local repairs, using the glass fibre rear wings or door bottoms which are available. This is entirely understandable but may not be beneficial in the longer term. What happens when the value of these cars increases to the point at which larger scale restoration work becomes more viable? Will not the original panels then be regarded as an enormous asset, and will they still be available or long since scrapped due to lack of demand? Some rubber and small trim items are becoming hard to find even for the later models.

Parts for the earlier cars, like the cars themselves, are relatively more difficult to come by. Bear this in mind should you consider buying one of the earlier models, and again, seek specific advice relating to the car in question through the Citroen Car Club if possible before parting with your money.

What to look for

Two factors should be remembered when examining a Citroen D. Firstly, these cars are complicated machines compared with most of our buying feature subjects. Secondly, although the cars themselves (with certain exceptions) are not particularly expensive – a reasonable good saloon can still be found for around £700 – major repairs *are* expensive.





Saloon interiors were available in two levels of trim, standard and Pallas. This car has the standard jersey nylon upholstery. Pallas trim (not available on Safaris) comprised superior jersey nylon or, occasionally, black or brown leather, fully trimmed door cappings, better sound insulation, and more stainless steel trim around the sills and door bases. A Pallas trimmed car may feel very superior but don't let this divert your attention from the more important structural and mechanical aspects.

The youngest of these cars is now ten years old. Some will be structurally unsound and others will be close to needing at least several hundred pounds spent on mechanical work. It is obviously worth avoiding both of these categories especially as there is not yet a shortage of Ds on the market. Do join the Citroen Car Club and take a knowledgeable fellow member along with you to help assess your potential purchase. If in any doubt, look for another car, and don't be too fussy about which model you want but simply buy the best car you can afford in terms of condition alone.

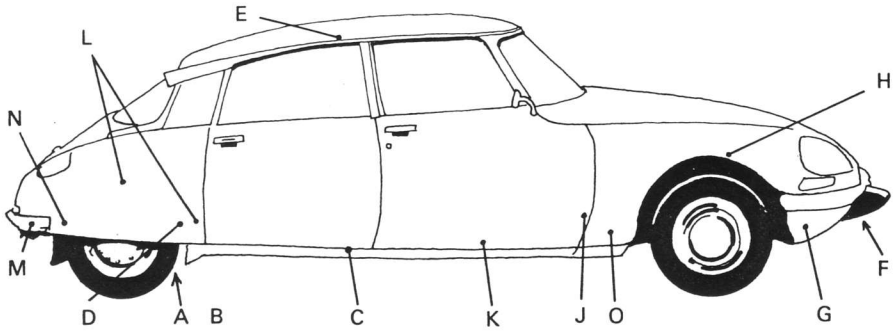
The main problems which you will be looking for fall into four groups. Firstly, structural corrosion on the platform chassis. Secondly, non-structural corrosion on other panels. Thirdly, hydraulic system faults. Fourthly, other major mechanical faults. Remember that the strength of these cars is dependent upon a sound underside which is unaided by a stressed bodyshell. If there is rust underneath a Citroen D you must find it. Feel where the vertical sills meet the horizontal floorpan – there should be no 'give' in either when pushed hard. Check the whole body area between the rear wheels and especially where the suspension trailing arms are mounted and if any of these areas are suspect then move on to the next car. The box sections along each side of the car are rust-prone (in serious cases the floor breaks away) and welding will certainly damage the hydraulic pipes within the box sections, thus adding to the overall cost of the work. Check the brackets which locate the rear suspension spheres. Significant rust here should warn you that chassis rust in the vicinity will be even worse.

Exterior panels, though not structural, are still capable of rusting with the exception of the aluminium bonnet (which can crack instead!) and the glass fibre roof panel around which water leaks can occur causing staining or actual dampness inside. The front numberplate housing rusts as does the undertray near the wheelarches, and you should check that the front wing mounting brackets (near the bumper) are intact and that the inner and outer skins of the wheelarches have not separated.

Look for sagging doors which may indicate weakness due to rust around the lower hinges, and see how much rust there is in the door bottoms. Rear wings are supported by a single bolt near the rear lamp on each side, a bracket about halfway along (on saloons) which should be checked for rust, and by their forward edges which are also a rustprone area.

Look for evidence of water in the front footwells and the boot floor. If water is present but the tinware is intact then you simply

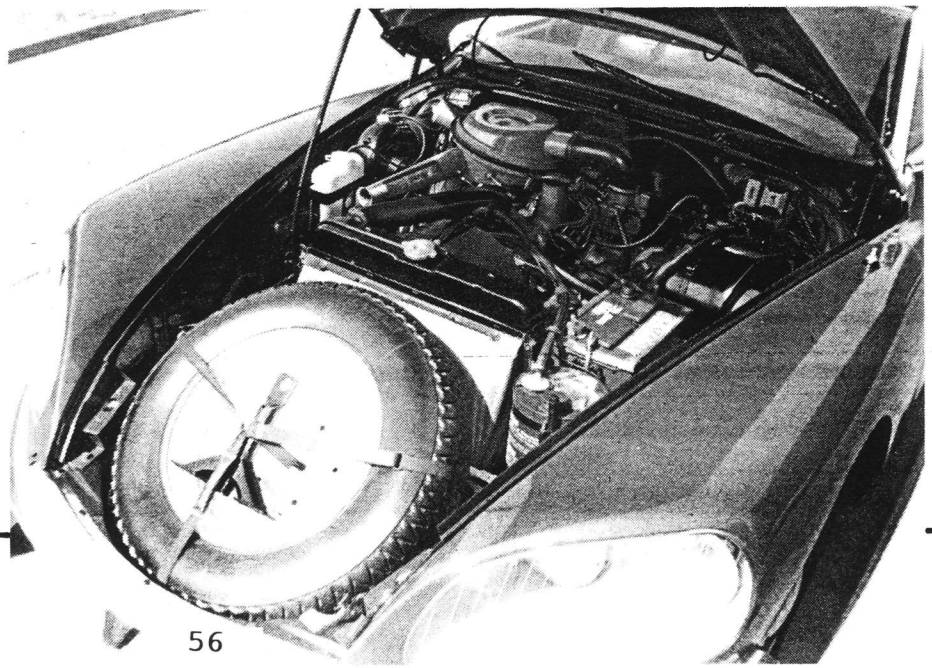
Citroen D – principal areas to look for rust etc.



A. The entire underside, especially the area between the rear wheels.
B. The mounting areas for the rear suspension trailing arms.
C. Where the floorpan joins the sills, also the longitudinal box sections.
D. The mounting brackets for the rear suspension spheres.
E. Look for evidence of leaks around the perimeter of the roof (inside).
F. The front number plate housing.
G. The undertray and front wing mounting brackets.
H. The wheel arches – inner and outer skins.
J. Sagging doors may indicate rust around lower hinges in particular.
K. Door bottoms.
L. Rear wing support brackets and forward edges of wings.
M. Rear of wings, inner and outer panels.
N. Boot floor, also check rear edge of bootlid.
O. Footwells (inside).

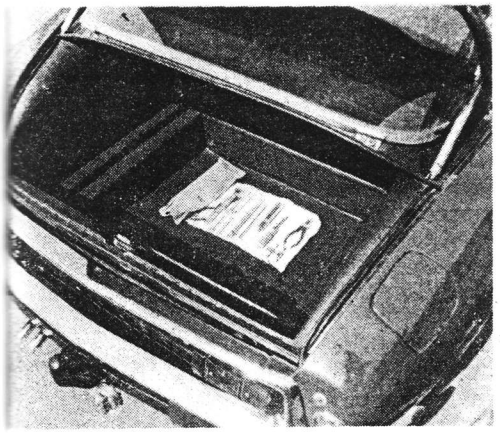
Specifications

	Citroen DS 19	Citroen DS 23 EFI
Engine	In-line four cylinder	In-line four cylinder
Capacity	1911cc	2347cc
Bore/stroke	78 x 100mm	93.5 x 85.5mm
Valves	OHV	OHV
Comp. ratio	7.5:1	8.75:1
Bhp/rpm	75 @ 4,500	141 @ 5,250
Transmission	Front wheel drive, four speed semi-auto, manual optional.	Front wheel drive, five speed.
Suspension	Independent, hydropneumatic self levelling system, wishbones and anti-roll bar at front and trailing arms and anti-roll bar at rear.	Independent, hydropneumatic self levelling system with wishbone at front and trailing arms at rear.
Steering	Power assisted rack and pinion	Power assisted rack and pinion
Tyres	165-400	185HR15
Length	15' 9"	16' 1"
Width	5' 10½"	5' 11"
Weight	24 cwt	26.4 cwt
Max speed	88mph	120mph
0-60mph	20.6 secs	10.5 secs
Fuel consumption	20-27 mpg	18-24 mpg

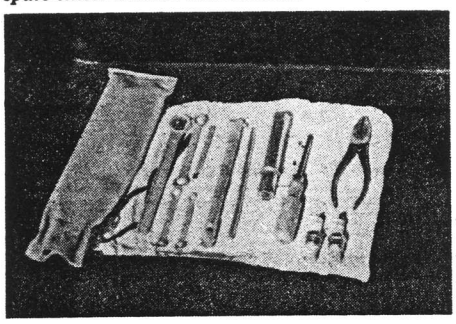


A daunting view for the DIY mechanic? Well, much of the space is occupied by plumbing and components of the hydraulic system, but the engine should rarely need major attention.

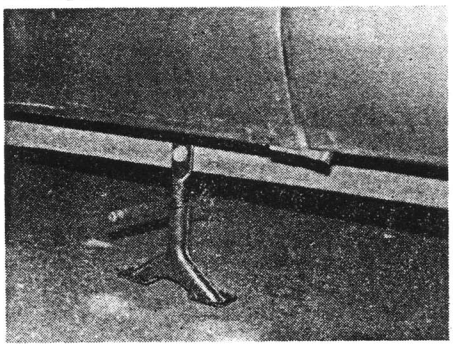
EATURE: The Citroen D Series



The boot capacity is adequate, mainly because the spare wheel is under the bonnet...



...and a handy toolkit was supplied which includes a special plug spanner – the spark plugs are deeply recessed in the top of the engine.

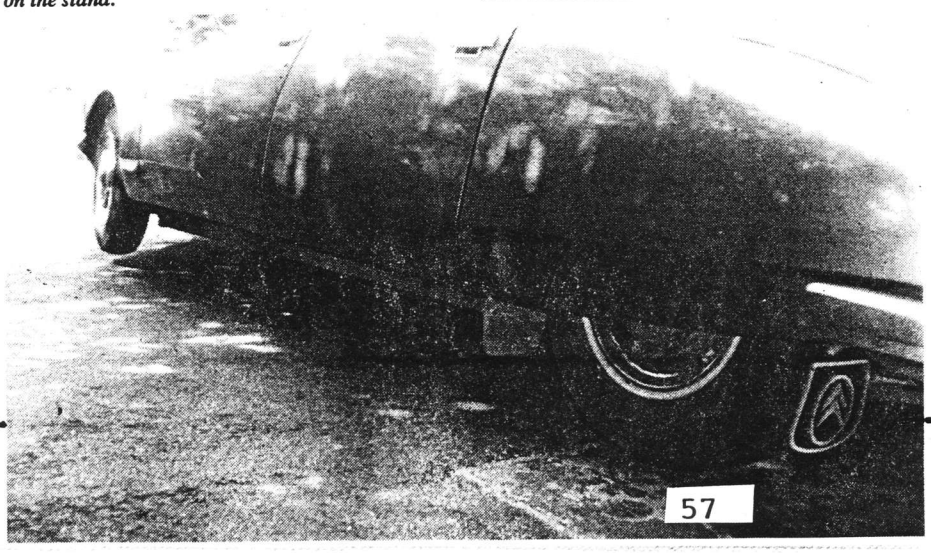


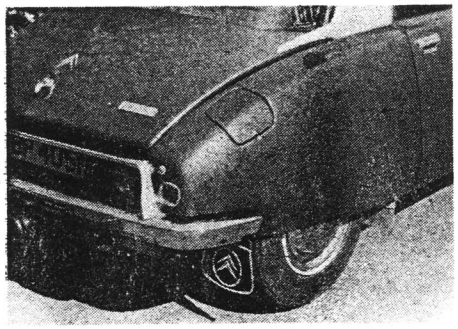
Above and below:
Jacking up a Citroen D is a sight to behold! First, the adjustable stand is attached to the car as shown, the height of the car being increased by means of the manual ride height control if necessary. Then the ride height is lowered – in effect the wheels are lifted and the weight of the car is taken on the stand.

Citroen D Series models

Model	Factory symbol	Engine plate	HP SAE rating	Production period
DS 19	DS		75	October 1955 to March 1961
ID 19 De Luxe	DM		66	May 1957 to September 1960
ID 19 Standard	11D		62	May 1957 to September 1958
ID 19 Confort	DM		66	Summer 1967 to September 1960
DS 19 Prestige	DS		75	September 1958 to March 1961
ID 19 F	DF		66	October 1958 to September 1963
ID 19 Confort	DM		70	September 1960 to September 1964
ID 19 Confort	DM		70	September 1960 to September 1964
DS 19	DS		83	March 1961 to September 1965
DS 19 M	DW		83	March 1963 to September 1965
ID 19 F	DF		83	October 1963 to September 1965
ID 19 De Luxe	DM		75	September 1964 to September 1965
DS 19 Pallas	DS or DW		83	September 1964 to September 1965
ID 19 P				
ID 19 P De Luxe	DE		81	September 1965 to September 1966
DS 19 A	DY		90	September 1965 to September 1968
DS 19 MA	DL	DY	90	September 1965 to September 1968
DS 21	DX	DX	109	September 1965 to September 1968
DS 21 M	DJ	DX	109	September 1965 to September 1968
ID 21F	DJF	DX	109	September 1965 to September 1968
ID 19 FA	DLF	DY	90	September 1965 to September 1968
ID 19 B	DV	DV	84	September 1966 to September 1968
ID 212 F (H)	DXF	DX	109	February 1968 to September 1968
ID 19FA (H)	DYF	DY	90	February 1968 to September 1968
DS 20M	DL	DY2	103	October 1968 to September 1969
DS 21	DX	DX2	115	October 1968 to September 1972
DS 21M	DJ	DX2	115	October 1968 to October 1972
ID 21F	DJF	DX2	115	October 1968 to September 1972
ID 20F	DLF	DY2	103	October 1968 to September 1971
ID 19B	DV	DV2	91	October 1968 to September 1969
ID 21F (H)	DXF	DX2	115	October 1968 to September 1972
ID 20F (H)	DYF	DY2	103	October 1968 to September 1970
ID 20	DT	DY2	103	October 1968 to September 1969
D Special	DV	DV2	91	October 1969 to September 1971
D Super	DT	DY2	103	October 1969 to September 1971
DS 21 EFI	DXIE	DX3	139	October 1969 to September 1972
DS 21M EFI	DJIE	DX3	139	October 1969 to September 1972
ID 20F	DLF	DY3	108	October 1971 to 1975
D Special	DV	DV3	98	October 1971 to September 1972
D Super	DT	DY2	103	October 1971 to September 1972
DS 23	DX	DX4	124	October 1972 to 1975
ID 23F	DJF	DX3	139	October 1972 to 1975
D Special	DV	DY3	108	October 1972 to 1975
D Super	DT	DY3	108	October 1972 to 1975
DS 23 EFI	DXIE	DX5	141	October 1972 to 1975
DS 23M EFI	DJIE	DX5	141	October 1972 to 1975
DS 23 Auto	DXBW	DX4	124	October 1972 to 1975
DS 23 EFI Auto	DXIEBW	DX5	141	October 1972 to 1975
D Super 5	DP	DX2	115	October 1972 to 1975
DS 23M	DJ	DX4	124	October 1972 to 1975
DS 23F (H)	DXB	DX4	124	October 1972 to 1975

Key
F = A Safari
M = Manual gearchange where hydraulic is the norm.
EFI = Electronic fuel injection.
(H) = Hydraulic gearchange on a Safari.





Removal of a rear wheel entails removing a rear wing too, but each wing is secured by a single bolt just above the reflector as shown here.

have a sealing problem, but if rust is getting a hold then that important platform is being attacked from both sides.

It is probably as well that the hydraulic system on these cars has been fairly sturdy and not prone to major problems. However, the cars are not getting any younger and you should check for leaks and carry out a few checks to see that all is working correctly. Anything more than a slight trace of dampness due to a hydraulic fluid leak should be viewed with the greatest suspicion. Check that the car settles at a normal ride height shortly after the engine is started, and that the (audible) hydraulic pump operates only occasionally thereafter. You should be able to rock the steering wheel or press the brake pedal two or three times without activating the pump, and if the suspension is healthy it should be possible to press each corner of the car downwards and see it return to normal height. Check too that the manual height control lever (to the right of the drivers seat) operates the system in all five positions.

Find out as much as you can about the cars maintenance history, since if this is well documented it should be enormously helpful to you (or certainly to your knowledgeable adviser). Clutches are said to last between 50,000 and 90,000 miles and changing them is an engine out job. Yes, it is expensive but it does present an opportunity to change the front brake discs as well and also the power steering unit. I have been told that these engines do not break and should run for 200,000 miles between overhauls. There should be no water loss (check the level) and no evidence of oil burning, but there is not a great deal of checking that you can do short of dismantling the thing except that you should drive it, and listen, bearing in mind that it may seem noisy by modern standards although Pallas trimmed cars are better insulated.

Do look for a good interior (not forgetting the roof leaks and the rusty floors) as there is no need to buy a tatty one, and while you were looking under the car did you check the condition of the tyres and the exhaust system? – Replacements are expensive.

What to pay?

The short answer to this is that you should be aiming to buy a car in the best possible condition, and since good examples are not yet expensive, spend as much as you can afford to achieve this aim if possible. Around £700-£800 appears to be about the right price for a perfectly good saloon, but £1,000-£1,200 or more may be asked for exceptionally good cars. Many saloons are offered at very low prices but I suspect that cars in the £400-£600 bracket are either suffering imminent or actual structural problems or are about to need major mechanical work costing several hundreds of pounds, and anything cheaper still is probably fit for spares only.

Safaris are in demand and command higher prices and the convertibles are relatively rare and will set you back at least £4,000.

Driving a Citroen D

Based largely upon experience of a selection of late '60's models which I drove at the time I would say that these cars are an acquired taste for drivers and passengers alike. The ride is, as you would expect, incredibly smooth, so much so that it is said to promote car sickness in those who have any tendency in this direction, though I must admit that I have seen no evidence to support this claim. The later cars can be driven quite rapidly with ease, and a fair amount of roll occurs on fast corners and bends, as well as pitching when braking firmly. It is too easy to brake firmly until you get used to the control which is a rubber 'button' on the floor where you would expect to find a pedal – this requires a very light touch and should be treated with the utmost respect by novices – bear this in mind when test driving your proposed purchase. □

The writer wishes to thank Mr Guy Pursey and Mr Nigel Wild of the Citroen Car Club for their generous assistance in the preparation of this article.

The Club

In the UK only the **Citroen Car Club** caters for owners of the D series cars and the membership secretary is Mr D. Saville, 49 Mungo Park Way, Orpington, Kent BR5 4EE.

Membership of the club is strongly recommended. There is an excellent monthly magazine (the Citroenian) a most useful spares scheme, and a diary of the social and other events organised by the regional sections of the club which gives ample opportunity to meet other owners.

Safaris could carry a great deal of luggage, or livestock, or, thanks to two folding seats in the extreme rear of the car (a standard fitting), up to seven people. Front wheel drive gave all of this series the added benefit of flat floors (no transmission tunnel). *Photo courtesy of Citroen Cars Limited.*