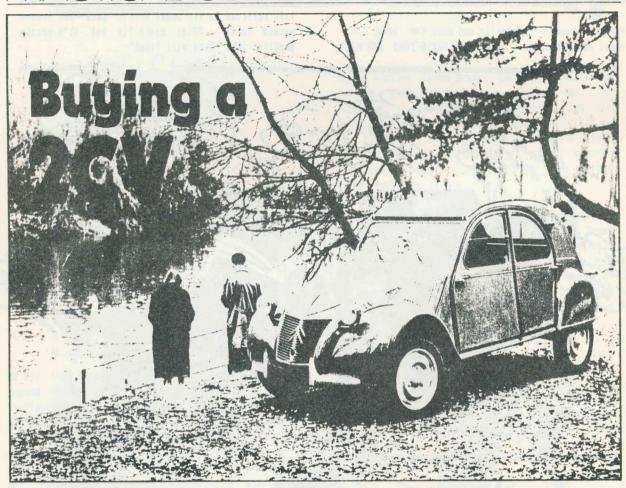


Practical Classics, January 1987

## PRACTICAL CLASSICS BUYING FEATURE



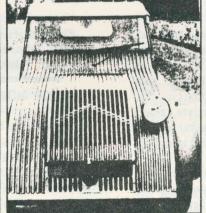
The Citroen 2CV has attracted around 7 million owners since 1949 — Bob MacQueen explains the attraction of the 'Tin Snail', which, he warns, is addictive!

The Citroen 2CV was conceived in 1936 and built in prototype form before the second world war. It was introduced to the public in 1948, and put on sale in July 1949.

The prototype, of which two or three examples exist, was built of aluminium and magnesium alloys. It had a water cooled flat twin engine of 375cc, three forward gears and hammock seats. It was born out of Pierre Boulanger's desire to provide a car for the small farmers of France, a French "people's car". He gave a brief to the designers to build a car that would carry four passengers and their luggage, and that would be capable of 60 kph and of returning 45 mpg. Another specification was that it should be capable of carrying a basket of eggs over a rough field without breakages.

There were plans to build 250 examples before the introduction at the 1939 Paris Motor Show, but war intervened, and all but the two or three (which still exist) were scrapped or not completed. Development con-

Above A 1959 AZL model, one of the de luxe versions of the Citroen 2CV. (Photo: Citroen Cars Ltd.)



A 2CV prototype - the French law required only one headlamp at the time! (Photo: Citroen Cars I td.)

tinued throughout the war with a rolling chassis being driven around the Michelin factory at Clermont Ferrand, the occupying Germans being told that it was a vehicle for testing tyres.

The 2CV eventually reached production in 1949 and at its introduction it featured an air cooled flat twin cylinder engine of 375cc and a steel body and platform chassis which bore a resemblance to the pre-war prototype. The production cars had two headlamps and more conventional seats than the prototype.

The shortage of steel after the war limited the first year's production. Only 924 cars were built in 1949 but 6,196 were built in 1950. Since then some seven million 2CVs and variants have been produced.

## The saloon models — France

The first models were designated 'A Series' and had a 375cc engine giving 9 bhp, and rated at two horsepower on the French fiscal rating, and this was the reason why the car

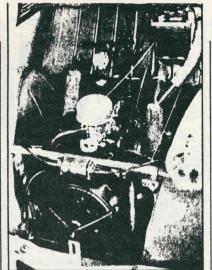
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French factory intro-

became the 2CV or Deux Chevaux. It had such features as a canvas roof, which ran from the top of the windscreen to the rear bumper, thus forming the bootlid as well as the roof, cable driven wipers, and just two instruments, a speedometer and an ammeter. It had a four speed gearbox and, as with all Citroens at that time, front wheel drive. It was available in one colour,. Aluminium. The seats were finished in grey canvas, and the rest of the interior was equally plain. The front brakes were mounted inboard on the gearbox, and the rears were outboard, behind the rear wheels. The chassis was punt shaped, with longerons at the front and rear to carry the engine and petrol tank. The unique suspension was also mounted on the chassis and consisted of a large tube containing two springs which were connected by rods to the front and rear suspension arms, thus interconnecting the front and rear suspension. The rack and pinion steering was contained within the front axle tube.

The "A" model remained in production until 1960, although it was only available to order after the introduction of the AZ model in October 1954.

The AZ model featured a 425cc engine delivering 12hp at 4,000 rpm. In January 1955 the car was fitted with two flashing direction indicators on the panels behind the rear doors. From January 1955 to March 1955 a variation of the suspension was fitted, when the springs were exposed and worked under tension, rather than under compression as in the enclosed version. In December the compression ratio was increased from 6.25:1 to 7:1, which increased the maximum engine speed. There had been very few changes apart from variations in the greys used for the body

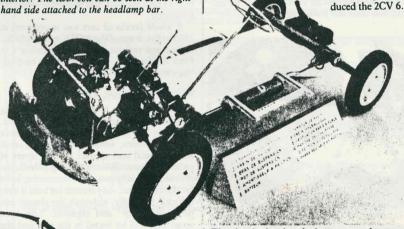


A 12hp engine as fitted from 1954 to 1963. The tubes carry warm air from the cylinders to the interior. The twin coil can be seen at the right-

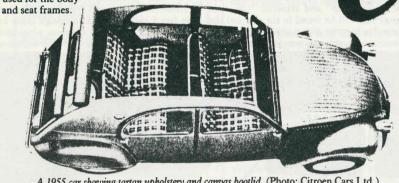
The final change to the 425cc engine came in 1963 when the output was increased to 18bhp, with redesigned cylinder heads and manifold. A range of colours were also available. The AZAM model was introduced in March 1963, this being another deluxe version with modified seating and trim. The only other changes of note up to 1970 were the new "fire grate" grille and the third side window in September 1965, and finally in April 1967 the AZAM gained wheel trims and indicators in the front wings.

## Belgium, Holland and

The 2CV was built in Belgium, Holland and Britain, with Belgium being the largest producer after France. The Belgian factory was the first to introduce the six light in 1958, still with the ripple bonnet. They also pioneered the use of the 602cc engine from the AMI 6, fitting it in 1963, seven years before the



The chassis showing the interconnected suspension, the early 12hp engine, and the location of the petrol tank. (Photo: Citroen Cars Ltd.)



A 1955 car showing tartan upholstery and canvas bootlid. (Photo: Citroen Cars Ltd.)

December 1956 saw the introduction of an enlarged rear window, and a choice of seat and roof colours, red, green or blue. The AZL model was also introduced which was a "Deluxe" version with bright trim on the bonnet and sills, and "nerf" bars on the front bumpers.

In October 1957 the metal boot lid and a new pattern of rear panel with a central rather than offset number plate light were introduced. In March 1958 Citroen introduced possibly the most interesting variation, the 4x4 Sahara, with two 425cc engines producing 25bhp.

As the '50s drew to a close the driveshafts were available with double cardan joints rather than the simple single cardan fitted until then. The heating and defrosting system was redesigned and a modified dash fit-

ted. The wheels were changed from 400 to 380, and 135 rather than 125 tyres were an option.

Colour came to the bodywork in November 1959 with "Glacier blue" being offered as well as the familiar grey. This was followed in 1960 with "Vert embrun" and "Panama yellow". December 1960 saw the end of the "ripple" bonnet and the introduction of the current style with five ribs. The "A" model was finally dropped in December 1960.

In October 1961 the power output was raised to 13bhp, and in March 1962 the AZC model was introduced with a hatchback and a flat loading platform. There was a further power increase in April, to 15bhp at 4,500 rpm. In October 1962 a new dash and an electric wiper motor were introduced.



A 1957 model with twin rear lamps, offset number plate and lamp, and larger rear window. (Photo: Citroen Cars Ltd.)

The British Citroen factory at Slough built the 2CV from 1953 until 1960 when the ill fated Bijou was introduced. The Slough version had a metal bootlid and opening rear door windows from its introduction. It also had Lucas or Butler electrics and semaphore indicators.

The Bijou was Citroen's attempt to produce a version which was acceptable to the British market. It featured a glassfibre body reminiscent of the "D" models, and was very heavy and therefore slow, and due to production difficulties it wasn't available until 1960



when the Mini was scooping up Citroen's potential market, so only 213 were built before production ceased in 1964. Citroen did not officially sell the 2CV in Britain again until 1974, but a few were sold in 1966 when the residue of righthand drive cars was imported from Sweden when that country changed from driving on the left to the right.



This 1955 car sports a 'lumpy' boot. Many versions were offered in the 1950s to replace the canvas boot cover and provide more luggage space.



Dashboard of 1960 car: note the speedometer mounted high on the left of the dash. The knob on the speedometer engages the wipers.

## Buying a 2CV

#### Variations on a theme

There were commercial derivatives of the 2CV. The first van was introduced in 1951 with the 375cc engine, corrugated sides, and a 250 Kg capacity. This followed the saloons in engine development and by 1963 its capacity had increased to 350 Kgs. The 602cc engine was fitted in 1968.

An interesting version which was built only in Britain was the pick-up with a solid cab back. Some of these were carried on board HMS Bulwark and lifted into action by helicopter.

A whole family of cars was introduced in 1961 in the shape of the AMI 6, with its 602cc engine and reverse slope back window a la Ford Anglia 105E. This became the best selling car in France during the 1960s.

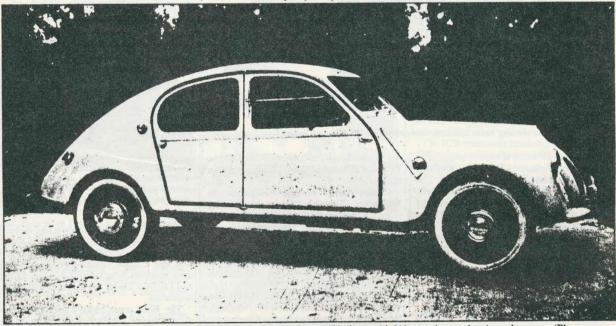
#### What to look for

The 2CV has been in production for so long that most weaknesses have been identified. The early 2CVs do not rust as badly as more recent examples, simply because they used thicker metal and applied thicker layers of paint. The most obvious starting point is the chassis, especially around the mounting bolts for the axle tubes. Any serious rot here is very difficult to rectify, although the chassis can be "opened up" and repaired. The most usual rust will be found in the sills and the floor due to water sitting inside the car. The floor is reasonably easy to replace but the sills



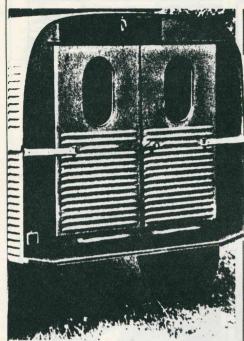
are a little tricky. The front and rear wings are bolted on (the fronts are removable with the starting handle), and the doors slide up off their hinges. The rear bump stop mountings will almost certainly be rusted but are easily plated. The whole body can be lifted off the chassis by two people after removing 20 bolts.

The brakes were Lockheed D.B.A., and although the front brakes are mounted inboard, access is no problem once the wings have been removed. It is much easier to work on the brakes on these early cars than on the later ones. The linings are the same as the current models but the cylinders are larger (in fact 1 inch diameter, although made in France) and have large diameter pipes and flexible hoses. All these parts are available



A Dagonet from the 1950s. Jean Dagonet produced a number of variations on this theme with 500cc engines and twin carburettors. (Photo: Citroen Cars Ltd.)





A 2CV van (or camionette) with totally corrugated body and 'oval' rear windows. (Photo: Citroen Cars Ltd.)

#### What to pay

This is always a difficult question to answer; a rough car which runs can be obtained for as little as £150, but expect to pay £400-£500 for a reasonable car, and £1,000-£1,200 for a fully restored example. A Sahara, if one can be found, may well cost £3,500-£4,500, and other rarities are worth haggling over. The Bijou seems very cheap as £300 will buy a reasonable example, but expect to pay a lot more for a good one.

#### Parts and prices

Plugs are L85 or equivalent, and you need only two. There is no oil filter so the oil should be changed every 1,500 miles, but you need only four pints. The air filter is washable. Parts are still available from Citroen, although you need to know the part numbers, and they are ordered as left-hand drive parts. Prices are reasonable; for example, exhausts £25, doors £50, front wings £50-£60, rear wings £40, piston and barrel sets £80.



The old and the new: a 1960 Belgium built model (foreground alongside a 1984 Charleston. The major external differences are the bonnet, the third side window (on the later car), and front opening door (on the 1960 car). Note the aluminium bumpers and nave plates fitted to Belgian cars of this period.

#### **2CV Specifications**

A MODEL 1948 to 1960

First model with 375cc engine, canvas boot, one rear light, no indicators on rear quarter. It also had no door locks or ignition key. The maximum speed was 65km/h (42mph) and fuel consumption 4 to 5 litres per 100km (60mpg). This basic model was available until 1960 although it gained indicators and locks during its lifetime. By 1960 it was very rare only 87 being built that year.

**AZ MODEL 1954 to 1963** 

Again this model overlapped subsequent models. It featured a 425cc engine giving 12bhp (as opposed to the previous 9bhp), and a maximum speed of 70km/h (44mph) and a fuel consumption of 5 litres per 100km (58mg). It also had indicators on the rear side panels, and blue striped seat covers.

**AZL MODEL 1956 to 1970** 

The AZL designation covers a few variations of models. As introduced it had only a larger rear window, some bright metal strips on bonnet and doors and rubber bumper trim. Like the A model it incorporated changes throughout its life as they were introduced to other models.

**AZLP MODEL 1957 to 1963** 

This marked the introduction of the metal boot lid to the French market. (Slough built models had a metal boot lid of a different pattern from 1955.)

AW MODEL 1958 to 1967

The twin engined four wheel drive version which retained the 12bhp engine throughout its life. It had front opening doors fitted in common with other models in 1964.

AZC MODEL 1963 to 1970

A version that featured a 'hatchback' and a flat rear floor and folding rear seats

AZAM MODEL 1963 to 1970 The deluxe version with padded bench front seat and new dash with petrol gauge and new steering wheel. This model probably marked the end of the real 2CV for the purist!

No other designations were used on the French models until after 1970 but changes which affected all models were the introduction of the 18bhp engine in 1963 and the modern style bonnet with only five mouldings in 1960. 380 (15 inch) wheels were fitted in 1960 in place of the 400 (16 inch)

**BJ MODEL 1959 to 1963** 

The ill-fated glassfibre bodied version built at Slough to sell the 2CV to the British. It featured the 12bhp engine and Lucas elec-

trics.

**AZP MODEL 1954 to 1959** 

Another Slough only version, the pick-up featured a rounded cab back.

This list is not meant to be exhaustive but indicates the general changes over the life of the 2CV to 1970. It is of course still in production but has grown to a massive 602cc's and sports such luxuries as petrol gauge, hazard warning lights, telescopic dampers and four indicators!

#### Which model to buy

The most desirable model is undoubtedly the twin engined Sahara but as only 694 were built they are very difficult to find.

The standard saloons had the ripple bon-

net until 1960 so these are perhaps the "real" 2CVs. The speedo driven wipers and petrol dipstick lasted until 1963 and the front opening "suicide" doors until December 1964.

During the 1950s Jean Dagenet produced a small number of specials with chopped bodies and glass fibre panels, and 500cc engines. If you find one of these, buy it!

Any Slough built car is rare, and therefore worth seeking out. Bijous are a little more common but as only 200 were built there aren't too many left.

The majority of 1950s and '60s 2CVs in Britain were imported during the 1960s by dealers in the London area to satisfy the demand which Citroen themselves seemed unaware of, or did not want to satisfy.

It is still possible to buy reasonable 2CVs in France for a few hundred pounds, but bear in mind that there is no equivalent to the MoT test there so Items such as kingpins will almost certainly need attention. Import duty will be negligible, or none if the car is over 25 vears old.



On the left a 1965 2CV Sahara. On the right a beautifully restored 1960 2CV, the last year of ripple' bonnets.

through Citroen dealers or the 2CV Club.

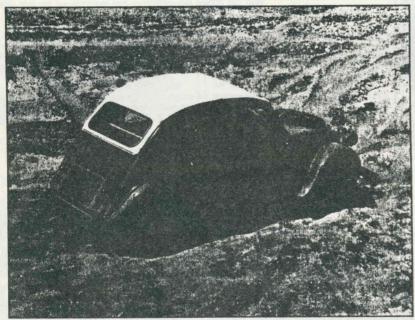
The engine is a remarkable piece of engineering which, if well treated, will do well in excess of 100,000 miles with no attention. This longevity can be attributed to the small number of moving parts and the design of the component parts. The crankshaft has the con-rods shrunk on in liquid nitrogen and thus has one-piece big ends with no bolts to stretch. Therefore the crankshaft has to be replaced as a complete assembly. The pistons



and barrels are sold as a matched pair. Oversize pistons are not available but the bore wear is usually minimal. The 375cc engine is no longer available and the early 425cc is difficult to obtain, but the later 425cc engine is available and is a direct substitute. The manifold features a hot spot where the exhaust passes under the carburettor. Eventually this can corrode away causing the engine to suck in its own exhaust gases.

The suspension consists of longitudinal springs contained in a tube mounted on the side of the chassis. This should be inspected

# Buying a 2CV CONTINUED





A very rare AZUP, the Slough built-up. This was produced from 1955 to 1959...



Rear view of the pick-up. Note the opening rear window.

A twin engined Sahara 4x4. This is an early version with front opening doors. Note the cutaway rear wings, bonnet mounted spare wheel, and the fan for the rear engine. (Photo: Citroen Cars Ltd.)

for rust holes. Friction type dampers are fitted to the end of the axle tube and covered by a plate. If worn, these can be revived by fitting new friction plates which are cheap and readily available.

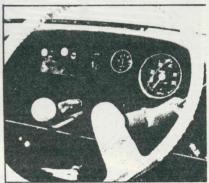
The gearbox is remarkably fault free, third gear synchromesh being the first to wear. The drive shafts have simple Hardy Spicer joints at both ends which are easily replaced if worn. The driveshaft is in two parts and has sliding splines at the centre which should not be worn if they have been well greased (a grease nipple is provided on the inner shaft). This can be checked by trying to twist each half in opposite directions.

The steering rack is contained within the front axle tube and is thus well protected. The first sign of wear occurs in the pinion bearing, which can be checked by trying to lift the steering wheel. Replacement means removing the axle tube from the car.

The kingpins are found at the ends of the front arms and can be checked by jacking the car and testing for movement in the wheel. They are provided with a grease nipple on the inside and should not wear if regularly greased. They are steel pins within steel bushes so they will wear quickly if greasing is neglected, and replacement can be difficult as the pin is reluctant to be pushed out.



A brace of Bijous, Slough's 1960 attempt to sell the 2CV in Britain. The styling of the glass fibre bodies echoed the lines of the Citroen 'D' types.



Bijou dashboard: the steering wheel is from the 'D' range and the handbrake handle is contemporary British.



An early Dyane (1968) without the third side

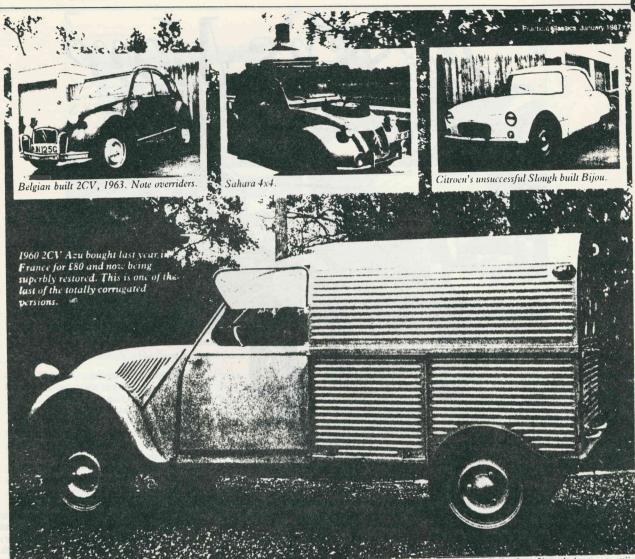
The electrical system was 6 volt until 1970. The dynamo is mounted on the front end of the crankshaft behind the cooling fan. It can be either Paris Rhone, Ducellier, or Iskra, and all are robust units although the bushes can wear quite quickly. The rest of the electrical system is quite simple, and there aren't even any fuses.

The only instruments are the speedometer, mounted at the top left of the dash, and an ammeter. The heating system draws warm air directly off the cylinders through felt tubes. Early cars had no demister but it became standard from 1956.

The Slough built cars had Lucas electrics and the speedometer was mounted in the centre of the dash.

#### **Driving impressions**

Driving a 2CV is totally unlike driving any other vehicle. The older cars are slow, with a top speed of maybe 50mph, but once you become attuned to the pace you can cover long distances in quite remarkable times. This is due to the fact that the engine is designed to be run at full throttle all day, and it is quite possible to average a speed not far



short of the maximum. When driving a 2CV you quickly develop an awareness of other road users and anticipate both their actions and the changing road conditions.

The ride is very soft and these cars roll happily through corners, which can be a little unnerving at first, but once you are used to it you begin to appreciate just how good the road holding really is, and how it contributes to high average speeds. You certainly don't join the "traffic light grand prix", but by judicious use of the gears you are by no means a nuisance to other road users. The seats are very comfortable and simple in their construction, with the cushions being suspended on rubber loops.

The gear lever juts out of the dash and on first meeting it seems an odd action, but again, given familiarity, the gearchanging is smooth and precise. The brakes, if properly set up, are very effective. The handbrake operates on the front wheels only and should be sufficient to stop the vehicle on its own.

The full length sunroof is superb when the sun shines. It can be rolled halfway, or opened fully. The seats are easily removed for use at picnics.

As you have no doubt realised, I am a total 2CV addict. If you buy one you could become addicted too. There is no other car quite like



Once unbolted, the body can be removed fairly easily by three or four people, allowing excellent access to all the major mechanical components.

the 2CV, and I doubt that there will ever be one like it again. The end of production must be near, so this is probably the time to buy. They are cheap to buy, parts are still readily available through Citroen dealers (what other car built in the 1950s still has such a good

parts supply back-up?) and they are easily restored. The engine can be lifted out by one or two people. Don't be put off by references to special tools. Most jobs can be achieved with a normal tool kit.

If the idea of driving a completely different vehicle appeals, then try a 2CV, but if you want an early example act soon. Prices are rising in Europe, and will probably follow here soon.

2CVGB is the main club for all fans of the 2CV. It has local groups all over the U.K. and these all have regular meetings. There is a register of older cars, and a spares scheme is being organised. A monthly newsletter is published, and regular camping meetings are held. There is a lot of 2CV activity in Europe, and indeed world-wide, and owners frequently travel overseas to meetings. The Secretary of 2CVGB is Craig Horner, 109 Anderton Road, Moseley, Birmingham. Membership costs £7 per year.

The Citroen Car Club is the oldest club in the U.K. for Citroen owners. It caters for all types of Citroens including 2CVs, and publishes a monthly magazine, the "Citroenian", and holds regular meetings both locally and nationally. The Citroen Car Club's Secretary is David C. Saville, 49 Mungo Way, Orpington, Kent, BR5 4EE. The membership fee is £12.50 per year plus a £2.50 joining fee.