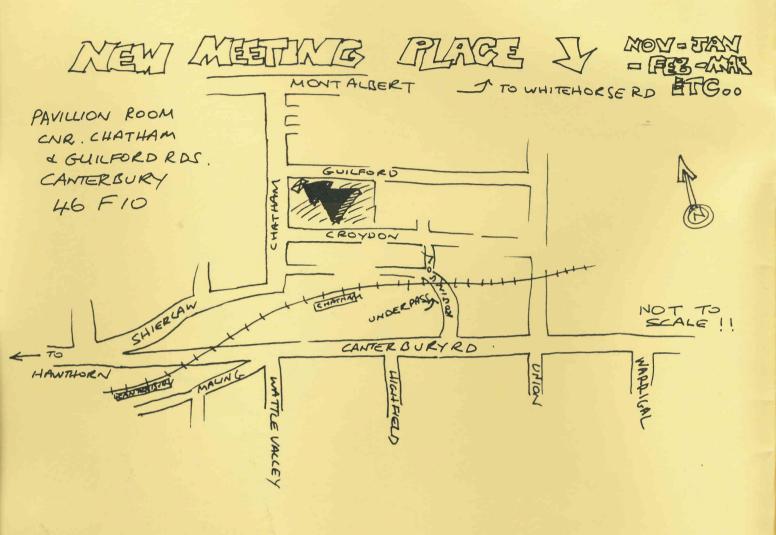


"DEUX SHOE-VAUX" TURNS UP ITS TOES!



Printed by : BLUEPRINT (377 Lonsdale ST)

CCOCA is a member of the Association of Motoring Clubs. G.P.O. Box 237V MELB.3001



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Annual membership subscription:

Annual membership \$30.00
Associate \$30.00
Partner /Spouse/
Joint membership \$ nil

OVERSEAS POSTAGE RATE: airmail (additional) \$9.00

Meetings are held as follows:

Every FOURTH Wednesday of the month except December.

Location: Canterbury Sports Ground Pavilion Room cnr Chatham and Guildford Roads. Canterbury

(Melways: 46 F.10)



CCOCA POSTAL ADDRESS

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# **EDITORIAL**

Greetings !

Well the summer has past us and we're into 1991. I must extend my apology to those members starving for this newsletter.

My intentions of heading north for the summer came to a serious zero. I miss the thunder of heavy downpours and the smell of flying foxes in the bayside fig trees and it didn't get any better for me on account of having to move house from one rented dwelling to my first "bank rented" abode. Its major attraction being a series sheds out the back that will suit Citroenizing type activities. Money being what it is didn't permit a 'walk in and settle down' type house plus the expected hatching of a small 2CV type person (#2) have had me running.

It has been about four years since I bought my first Citroen (Big 15) and since then I've collected the odd bit or two - carefully stored away in a 9'x11' shed at the old house. Moving? I must admit to being severly embarrassed when on accepting generous Peter Boyle's offer to help shift the mechanical bit it all rather filled his truck - ten cubic yards or 2½ tons! My non mobile B15 and 66DS got carted over by the Experts - Hayden Chapman and David Gries. To witness David wrestling a one horse power 'moteur' from his drill press as a starter for the dead DS hydraulics is to truly believe in the muscle building secrets of the sparkling ale.

Funny lot Citroen owners! Without exception they will wander through the "needs major work" type house and arrive at the backyard with its double rear access and 60' of shed only to exclaim "This is fantastic". It says something about the sort of person who is attracted to the things of days gone bye and despite their now worn appearance can see what was and what with a little effort and a little more effort will become something Peter Boyle had the last word: "Gee, you'll be able to get a lot of stuff in here".

Very soon I anticipate being a little less rushed and disorganized - I now have my desk operational and am no longer living out of cardboard boxes. The next job? Hmmmmmm? Might have to build another shed?

Dylan Webb



# PRESIDENT'S REPORT

Having fully recovered from the excesses of the Christmas New Year the Classic Citroen year starts again! Incredible what happened in 1990!!

What happened in 1990 was pretty obvious - an excellent year for the club with successful activities and other happenings. Many thanks to all the committee members for all their work in bringing us through the process of incorporation; the change of meeting venue and a new look magazine. What an effort.

For 1991 ? Some new faces on the committee ???!!!! and a continued sequence of successful activities.

Don't forget the AGM on March 27th. Please give serious consideration to standing for one of the committee positions. We always need new blood!!!

I have enjoyed my two years as President and thank all those who have made the job easier.

See you in March.

David Giddings

# SCUTTLEBUTT

Mark Vickery had every intention of driving out to the "Hanging Rock" car rally recently. His exciting brown velor seated Light 15 was going! Now for a test drive!! Not bad for a while until when heading for an intersection there was a sudden loss of power and some death rattle noises of bits hitting the ground underneath. Occoooh! Mark was pleasantly surprised (is that possible?) not to see bits of metal in a neat line behind the car but rather the drive shafts dragging under it. It seems they had separated from the wheel hubs. "Hanging Rock" next year?

# LIBRARY

LIBRARY.

The library has acquired a rather nice glossy book on the new XM Citroen. All technical specs. and some wonderful pics but leaves the reader with an impression that SATNAV equipment is needed for a tune-up. Contact Robin Smith for a loan.

On the subject of loans: could all outstanding loans be returned for a library stocktake. We have the list of current borrowings - some have been rather long term. Please return. Failure to do so may result in a long black car pulling up outside your place and 'Scarface Smith' and 'Slugger Simmenauer' demonstrating novel uses for a torsion bar.

POINT OF INTEREST.

Leigh Mason turns 5% of a millenium.

Celebrations were held in the Albury

'Wool Shed' restaurant and a special

guest artist anointed him with her

attentions - to the roar of the crowd!

Photos of the occassion show Leigh to

be turning a ghostly white as the long

legged thing pressed closer. Obviously

a close friend behind that mask she had.

Removing the birthday card from her

nether regions was too much for the now

jellylike Citrophile . Her deep re
assuring voice brought him to his senses.

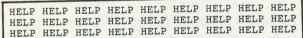
What interesting legs, Mr. Boyle!

# **COMING RALLIES**

1991

CITROEN CLASSIC OWNERS CLUB OF AUSTRALIA INC.

- MAR 13 Cuisine Citroen
  Wine and nibbles night
  11 Allison Road Elsternwick 7.30 start
- MAR 27 CCOCA ANNUAL GENERAL MEETING
- MAR 29- Voyage Citroen
  APR 1 National Citroen Rally at the
  Fleurieu Penninsula Sth Australia.
- APR 24 CCOCA MEETING
  Technique Citroen
  Talk by UTI Chemicals
  Feronite rusty metal primer
- MAY 12 Voyage Citroen
  Day run to Seymour Winery
- MAY 22 CCOCA MEETING
- JUNE 8- Voyage Citroen 10 CCOCA Austraction Rally Daylesford Victoria
- JUNE 26 CCOCA MEETING Technique Citroen
- JULY 11 Cuisine Citroen
  Tibetan Restaurant night.
  RSVP required by 1st July
  Phone Peter on 528 4549
- JULY 24 CCOCA MEETING
  Technique Citroen
  Trivia night
- AUG 28 CCOCA MEETING Technique Citroen



## WANTED

Required 2 , preferabley large bodied Tractions to be used for wedding cars in September in Melbourne.

Please Phone Peter Fitzgerald 528 4549: (For those who are in shock no it's not me getting married- Peter)





By know you may have noticed a change in Activities Officer. I would like to take this opportunity to thank Ron for his great effort. Well done!

For those who don't know me, I am a recently returned member. My association with CCOCA goes right back to the formation of the club I think I was something like the thirteenth member at the age of 17 At that stage I owned a 1950 Normale, a car I owned for 7 years. "I have owned numerous Citroens, but am best known for my 11 year relationship with my Red 2CV Van. Just as an aside, while you are reading this my Van will have crossed another milestone-Clocking over 300,000 kilometres!

In this issue I have included the Club Calender that runs at this stage, to the end of August. I have included a range of events, equally balanced between technical and social.

I would be pleased to receive input from you, as members, as to what sort of events you would like. Also if you hear of any products or service that are of interest I will try and arrange technical days or meetings to pass this information on to the members.

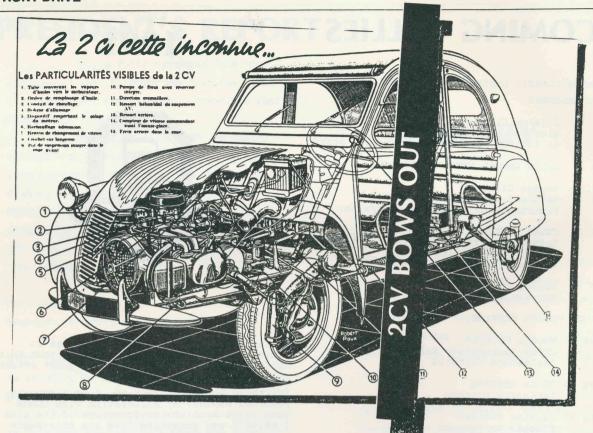
I plan to arrange a variety of social activities to suit all tastes and budgets. It is hoped that the majority of these will be family oriented, with interesting things to do and see, even for Citroen non-believers

Austraction this year is to be at beautiful historic Daylesford. Right in the centre of the Victorian Mineral Springs area. The area was a very up market resort at the turn of the century. It still retains that air and charm. A place that is well worth a visit.

There is a variety of accomodation available to suit all budgets We have kept the cost of the weekend down to an absolute minimum to give everbody the opportunity to enjoy the beautiful piece of Victoria.

I have also included the entry form in this magazine. You will notice there is an incentive to book early. If you book and pay the deposit before the Annual General Meeting, you will go in the draw for one adult Rally fee to be taken off your costs for the weekend. Well worth you pulling your finger out and get booking.

Peter Fitzgerald



There seems to be a gentle irony associated with our front cover which salutes the departure from production of the long-lived and much-loved 2CV or "Deux Chevaux".

At the time when some as-yet unidentified Francophile rolled his orange 2CV along to the All-French Car Day at Melbourne's Waverly Football Ground in late April last year, on the other side of the globe in Portugal, the end of 2CV production in the world was drawing near. Yes, the running-shoe "over-riders" were telling us that the 2CV was "turning up its toes". The last Portuguese 2CV was produced on July 2 1990, about two years after French production ceased at the old former bicycle works at Levallois in Paris.

Any Citrophile who is not the newest of newcomers to the ranks will have heard at least the outline of the 2CV saga:

\* its birth following the direction from Citroen boss Pierre Boulanger in 1936 to produce a cheap car for rural France ("four wheels under an umbrella"), able to carry a top-hatted driver over a ploughed field without dislodging the top hat or breaking any of the basket of eggs carried on board.

- \* the pre-series batch of 250 2CVs produced for the 1939 Paris Motor Show of which only one survived the crusher (along with an out-of-town prototype) so as to avoid the design giving any cheer or inspiration to the imminently invading German troops.
- the amazed acclaim given the production cars following their public release in 1949,
- the careful growth in engineering sophistication (or at least in power!) as the design went from water-cooled prototype to air-cooled 375, 425, and finally 603 cc flat twins,
- \* daring exploits by 2CV drivers (a 2CV of all of 9 HP was driven across a pass in the Bolivian Andes at 17 000 feet).
- the world-wide recognition of the practical economy of the 2CV design and its being accorded cult status across the full social spectrum.

In this issue, by way of salute, we draw on the well-chosen words of a selection of published writers as they convey something of the 2CV "story".

W. G

Since the early days of the Citroen Classic Owners Club of Australia (now incorporated), there has appeared from time to time in the pages of Front Drive a series of provocative utterances from the ultimate of 2CV enthusiasts, the highly elusive (and perhaps fictional) "Dirk Shervo".

Some believe that "Dirk" is the nom-de-plume of a single unknown CCOCA member. Others think that his writings are the work of several, appearing in print in some sort of random rotation. Still others, followers perhaps of Santa Claus and the Tooth Fairy, think he is a real character. He was even portrayed in a past Front Drive as francophilic Viking re-incarnation.

Will the departure of his beloved 2CV prompt Dirk to pen out further literary defences of the little blighters? And what of Dirk's major adversary in these jousts of penmanship - that vitriolic advocate of the Traction Avant, the even-more elusive Torr Shaun Barr?

Will these protagonists once more sear our pages with their inflammatory exchanges? We can only hope so.



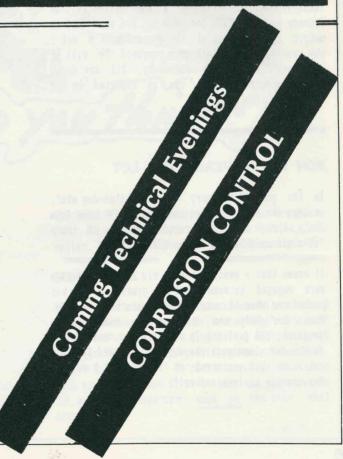
# Dirk Shervo - Where are you now?

Leon Cordewener is a specialist corrosion engineer, involved in the protection of major State facilities - water pipelines, pumps, etc.

He has agreed to address CCOCA members (who are normally quite familiar with the ravages of the dreaded "tin worm") on the topic of metallic corrosion control at one of our monthly meetings, aiming to show how the principles can be applied to body metal and the like.

We may not get specific advice out in time (work demands hit Leon as they do for all of us) so the safest thing would be to try to attend all meetings so as not to miss this "bonus" presentation when it occurs.

You will note from our Events Calendar that later in the year there is scheduled a presentation devoted to one of the proprietary methods of rust control - be sure you catch this one too.





# WELCOME



We are told that the Couche stable will have to expand. No, not to accommodate more Citroens courtesy of John ("Memoirs of a Citrophile" etc), but rather to allow for the efforts of Susan (mainly) who has produced a son called Ty. On January 3. Weight 71b 5oz. Now if you want that in metric and the name of the gynecologist's cat—why, you'll have to ask them yourself. Ty will be a companion for Molly and Jacky. All are doing well, except for John who is reported to be recovering slowly.

## NOW WE'VE HEARD THE LOT

In the general category of "man-bites-dog etc", perhaps the best motoring story for 1990 came from Italy, though it really sounds like one of those "it-could-only-happen-in-the-USA" events.

It seems that a gentleman and his female companion were engaged in some kind of gymnastics in his parked car when it was rammed by another vehicle. When the lady was subsequently found to be pregnant, the gent put in a claim for compensation to his car insurance company - he claimed that the collision had occurred at a critical time and "caused him to lose control"!

## PLATE UPDATE?

In an earlier Front Drive, there was comment on the markedly superstitious Chinese and the luckiness or otherwise of numberplates. You may recall that the Chinese have a strong addiction to the figure "8" since at a distance, an 8 looks rather like the pictographic symbol meaning "happiness" - hence, the more 8s you have on your numberplate, the better.

Now, it is reported that affluent Chinese around the world are being "turned off" by the Alfa Romeo 164 - because of the symbolism associated with that number. In Cantonese, the sound of "one-six" is roughly like "all the way", but the sound of the word for "four" is like "death" - not the kind of emblem to inspire confidence in a guy waiting for his thousand-year eggs to reach maturity.

The Chinese would prefer their Alfas to convey some more positive message. Hence they have been doctoring the offending badges so they read "168", which when spoken in Cantonese sounds like "Prosperity all the way" - much more fitting to the owner's aspirations.



## AQUA-CAT?

Some months back, when rain was threatening to become more of concern than bushfires here in the south of the country, one of CCOCA's members who makes a crust by shifting soil and rubbish became an unwilling participant in a variant of the old saying "Pigs might fly".

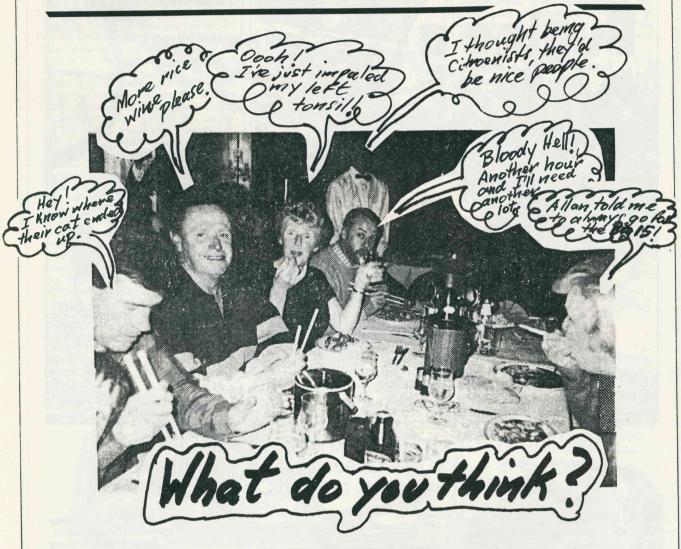
Our man was using his Bob-cat excavator to prepare the way for an in-ground swimming pool up in the hills when a series of mishaps struck. He had the 'Cat down a steep earth ramp inside the nearly-

~

completed hole for the pool when, in an effort to dislodge a last big rock, one of the drive chains broke. While he was fixing the drive chain, rain started and soon the accumulating runoff water was threatening to submerge the poor old 'Cat.

Panic stations! Eventually and none too soon, the chain was fixed. But by now the earth ramp out of

the hole had become too slippery for the 'Cat to drive up. Then more rain came. Would our man have to pump to save the drowning 'Cat? Fortunately, the rain eased off, and after waiting some days for the ramp to dry, the 'Cat was driven out and life returned to its usual hectic pace. The lesson seemed to be: "Pigs might fly, but it"s pretty doubtful that 'Cats will float".



## UNDERWHELMED

We were underwhelmed by members' responses which were sought some issues back as to what they thought various CCOCA members were thinking as they stoked away at the excellent Chinese nosh served up\_at Beechworth during Citraction '89. Fortunately, this saved us a small fortune through not having to pay generous honorariums to contracted judges hired in from outside the club.

To put a belated end to the suspense being experienced by non-contributing members, and by those photographed, we present herewith the winning (and only) anonymous entry. If you don't like it, send in your own entry next time.

The identified "thinkers" in the photo are (L-to-R): Mike Neil, Bryan Grant, Joan Grant, the waiter, Peter Simmenauer and Marie Thomas.

## NICE WORK!

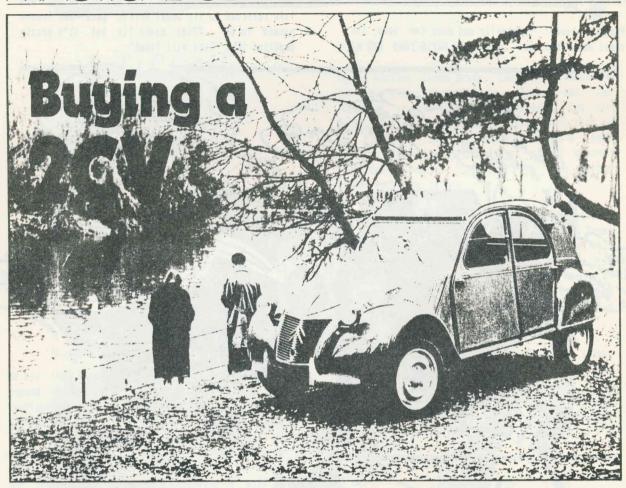
Who was the club member who successfully answered the advertisement in the Melbourne "Age" recently? That's the ad seeking to dispose of "Citroen Light 15 engine bits, gearbox, diff, manuals, handbook, badge. \$100 the lot"! We're not sure, but we could well expect a person of such luck and perseverance to assume an important rank in the club. What about it?

- W. G.



Practical Classics, January 1987

# PRACTICAL CLASSICS BUYING FEATURE



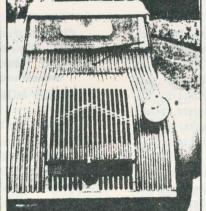
The Citroen 2CV has attracted around 7 million owners since 1949 — Bob MacQueen explains the attraction of the 'Tin Snail', which, he warns, is addictive!

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

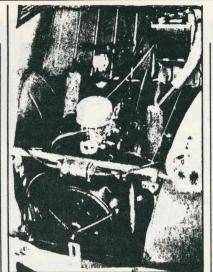
Practical Classics, January 1987

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

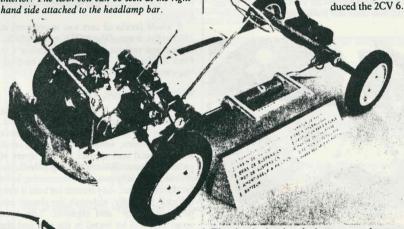


A 12hp engine as fitted from 1954 to 1963. The tubes carry warm air from the cylinders to the interior. The twin coil can be seen at the right-

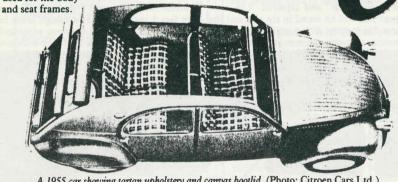
The final change to the 425cc engine came in 1963 when the output was increased to 18bhp, with redesigned cylinder heads and manifold. A range of colours were also available. The AZAM model was introduced in March 1963, this being another deluxe version with modified seating and trim. The only other 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.

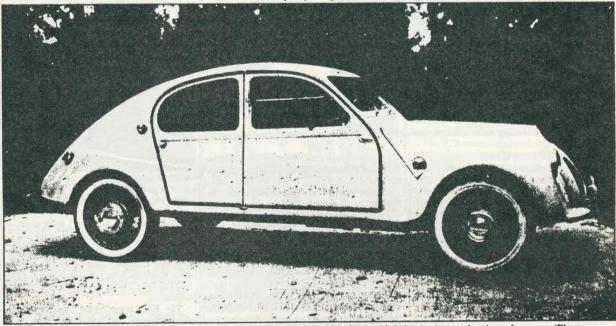
## What to look for

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



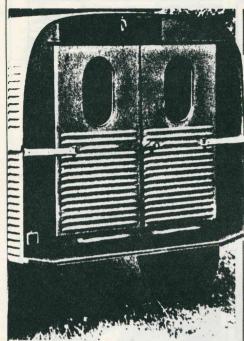
are a little tricky. The front and rear wings are bolted on (the fronts are removable with the starting handle), and the doors slide up off their hinges. The rear bump stop mountings will almost certainly be rusted but are easily plated. The whole body can be lifted off the chassis by two people after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

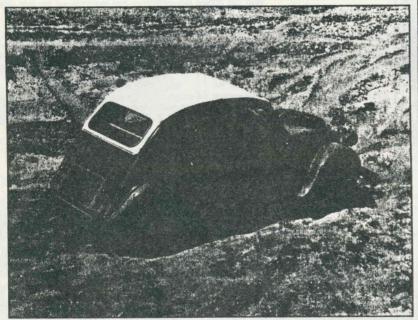
The engine is a remarkable piece of engineering which, if well treated, will do well in excess of 100,000 miles with no attention. This longevity can be attributed to the small number of moving parts and the design of the component parts. The crankshaft has the con-rods shrunk on in liquid nitrogen and 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.

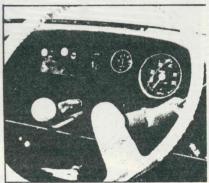
The gearbox is remarkably fault free, third gear synchromesh being the first to wear. The drive shafts have simple Hardy Spicer joints at both ends which are easily replaced if worn. The driveshaft is in two parts and has sliding splines at the centre which should not be worn if they have been well greased (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

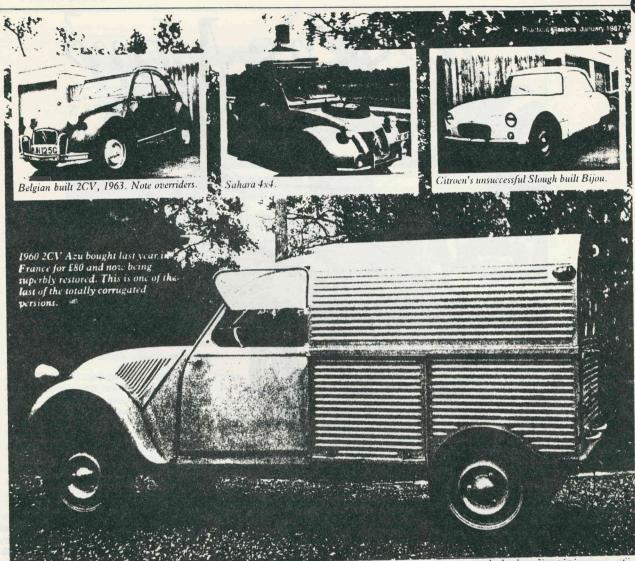
The electrical system was 6 volt until 1970. The dynamo is mounted on the front end of the crankshaft behind the cooling fan. It can be either Paris Rhone, Ducellier, or Iskra, and all are robust units although the bushes can wear quite quickly. The rest of the electrical system is quite simple, and 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.

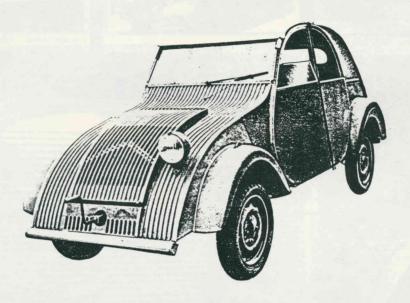
If the idea of driving a completely different vehicle appeals, then try a 2CV, but if you want an early example act soon. Prices are rising in Europe, and will probably follow here soon.

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.



THE FIRST 2CV WAS MUCH MORE BASIC THAN TODAY'S EXAMPLE AND, SAYS LJK SETRIGHT, MORE SENSIBLE TOO



THE BIRTHS, MARRIAGES AND DEATHS lists for 1936 make busy reading. The complications of marriage had brought about the abdication of King Edward VIII so soon after his accession; elsewhere, the four wedding rings making up the badge of the young Auto-Union team were getting to the chequered flag at more grand prix races than ever before or since. Deaths were sadly multiplied by the outbreak of the Spanish Civil War, and more were darkly presaged by the remilitarisation of the Rhineland; but deaths were singular as well as plural, the departures of Kipling and Chesterton hardly balanced by the arrival of the Left Book Club. The times were ripe for the political turmoil stirred up by the indigent: this was the year of the Jarrow March, and of the birth of the General Theory of economist John Maynard Keynes. There was also another great economic idea born, the idea of a minimal French car, the TPV (tout petit vehicule): in 1936, the 2CV Citroen was conceived.

Poor brilliant Andre Citroen was already dead, having put everything into the epoch-making *Traction* which had come out two years earlier. The firm was in the hands of Michelin now, and presided over by a Director-General named Pierre Boulanger. He could see the *Traction* beginning to establish itself; and he could see that economic conditions would continue to make anything like such a car inaccessible to millions of his countrymen who, country-dwellers especially, needed some sort of car guite desperately.

Citroen had once made for them just what they needed, the charming 5CV Trefle (the 'Cloverleaf') which had been in production in the 1920s and was so blatantly copied by Opel, so good and durable was it; but, for all its peasant-resistant hardiness, no 5CV could last forever. I had a 1926 Cloverleaf in the mid-1950s, using it daily from suburb to city. It often felt as though it would go on forever, if only because it had very little in the way of brakes to stop it; but when I sold it in 1958, it was beginning to show signs of age.

To Monsieur le PD-G, Pierre Boulanger, it was clearly time to anticipate the need for a new utilitarian car. His brief to the design team was a shining example to all legislators, for it set out the ends to be achieved without in any way dictating or limiting the means to those ends.

An umbrella on four wheels, he demanded. It must carry its four occupants at 50km/h, and 50kg of supplementary load. It must be able to carry a basket of eggs across a ploughed field without one of them breaking. And if he, the *President Directeur-General*, could not get into it with his hat on, it would not do.

Practical testing always acted as foil to the rigorous logic of the designers. They proposed a recoil starter for the engine (an electrical starter would have been altogether too elaborate), the sort which needs a sharp pull on a lanyard. A few secretaries were called out of the office and handed the cord; some of them broke fingernalls trying to start the engine, and

the idea was abandoned.

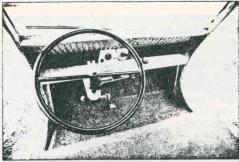
Some of the ideas flying around the office were very abandoned indeed, but when all the idealism had been filtered by realism the final design emerged in 1938. It showed a car so remorselessly logical that there was nothing to argue, so skeletally vestigial that there was nothing in it to criticise, so abundant in promise that it is not exhausted yet, though the concept if half a century old.

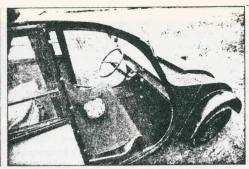
So they started making it. The target was the Paris Salon of 1939, by which time there should be 250 pre-production prototypes built and running, ready to amaze and delight the people of the countryside, the dealers in the towns, and the bankers of Michelin. The work proceeded happily according to schedule; it looked likely that everything foreseen in 1936 would be brought about.

Too true. The Nazi troops marching back into the Rhineland, the Fascist forces' battle-practice in Spain, the emergence of the Spitfire prototype to back the new Hurricane as Britain rearmed, the formation of the Rome-Berlin Axis, the treaty between France and the USSR (so roundly denounced by Hitler, who then secretly tried to treat for British non-intervention should he attack Russia), all these signs foreshadowed in 1936 what very nearly happened in 1938 (the year of Munich, of the Anschluss, and of the TPV prototype) and what happened as suddenly and predictably as a thunderstorm in 1939.

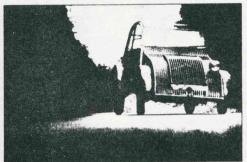
There was no Show, but a show of











First 2CV is amazingly spartan. Seat is simple canvas hammock. Dash is almost non-existent: there's simply a bulkhead. Setright found car good to drive, broke no eggs in basket in run across field

panic. The 250 cars all ready assembled for the Salon must not be allowed to fall into the hands of le sale Boche, nor any tooling or drawings reveal to the invaders what was to have been so fastidiously French. The story goes that 249 were destroyed, but actually it was 248: Citroen hid but one, carefully and faithfully concealed in a farm throughout the war, but Michelin had one with which it had been doing some testing, and that too was hidden. The Michelin machine survived in chassis form and is now on show in some museum or other, but Citroen's own sample is complete and authentic and a runner. It lives on the farm where it first grazed, among the tracks of the site where it was first tested and developed. the honourably pensioned patriach of generations that are still being multiplied.

When I went there to drive it, I wore a hat. What I needed was a basket of eggs, but amidst the sun and pollen of the rich champagne such a thing was not hard to find. Nothing else was necessary; one does not subject a car as singularly precious and original as this to the indignities of measurement, nor goad it to the extremes of its ability. One goes there to understand it, to appreciate it, to honour it, but not to examine it and emphatically not to exhaust it.

When one visits the old and wise, one often discovers more about oneself than about the sage being visited. Within minutes of being introduced to the TPV, I realised that this was happening to me, that layers of me were being stripped away to reveal recollections and discover attitudes that had been dormant or denied for decades, some of them as old as the TPV itself. Driven out from the farm to meet me at the old track nearby, the TPV was already warm; and as I began to peer and pry, I met a smell that knocked me back nearly 50years.

It was compounded of old grease and of the dust of less industrial days, of oldfashioned heavy engine oils that seeped out long ago to mix with the dirt of roads that never were kerbed in concrete. Imbue it with motor spirit at its most aromatic, leave it to mature, and then disturb it with the gentlest of sewing-machine vibrations and the modest heat of scalded iron. Breathe it deep: you are filling yourself with history. I knew that smell, sometimes blended with benzol and leather, sometimes disgraced by Chypre de Coty and dispelled by De Reszke Turks, when my parents took me motoring before the war; and now I knew that I was going to be in sympathy with the TPV.

Already I approved of what I saw. There was no gloss to the paint; countless careless contusions had left dents and dimples in the duralumin doors, above which the hinged mica sidewindows showed the strains of a lifetime. The roof canvas, which could be rolled right back from the rail above the windscreen to the rear number plate, was a bit tattered around the edges. There was no hint of the vulgarity of the restorer who piles Chromium upon Urethane with all the tastelessness of Rome's Pantheon upon Parthenon and the excess of Virgil's Pelion upon Ossa; there was no disguise, no dishonesty, just the TPV, the True Petit Vehicule. It reminded me of Frank Atkinson, distinguished museums director and devoted scholar of industrial archaeology, years ago inveighing against the wanton destruction of precious evidence by the self-styled 'restorers' of vintage vehicles, greedily indifferent to the loss of knowledge that might be gleaned by future techniques from past originals. The quardians of Citroen history understand.

Even the track upon which I am to drive the car is original. Elsewhere in the huge test facility, deep in the rolling countryside an hour's drive from Paris, are other test tracks, carefully hidden from view but declaring their business by an occasional scream of tyres. This one, however, is not much used now; it was built for the development of the original *Traction*. Like a narrow country road cut through woodland, its corners range from the right

angular to the mildly cursive, but then comes a Wellsian fantasy foreign to rustic France, a steeply banked bend around which the *Traction* could doubtless be driven at top speed. The banking is concrete, holed and broken by the frosts of countless winters, just the sort of surface upon whose horrors any proper Citroen may demonstrate its serene superiority. The TPV is no exception: it neither wants nor needs to climb more than halfway up the banking, but there is where the damage is worst, and the car rides with surprising smoothness.

Why the surprise, seeing that this is undoubtedly a proper Citroen? Because, to my surprise, this prototype did not have the brilliantly clever inertial dampers which gave the first post-war production 2CV its phenomenal ride on roads roughened by neglect. The idea was there by 1939, apparently, but it came too late for the prototypes. Nor is there the familiar pair of coil springs amidships, coupling the front and rear suspension arms on each side; instead, each arm works a set of torsion bars. There are eight bars altogether, including those which provide the coupling; and there is an hydraulic lock which prevents nose-dive when the front brakes are applied.

Again unlike the later production cars, the TPV has outboard front brakes, but they are still hydraulic, while the rear drums are cabled to the handbrake. They felt fine, though I was reluctant to use them hard - and I cannot think why, for everything in the car is actually designed to be most correctly and comfortably stressed. Those suspension arms of magnesium, the torsion-bar brackets of steel. the very bump-stop abutments, are all painstakingly shaped for the work they have to do. Where the metal would do nothing (in the dead areas between the bolt-holes of a flange, or the edges of a tension-strip like a chain link), there is no metal: it would merely add weight.

So the chassis and most of the body are made of duralumin, though the wings and

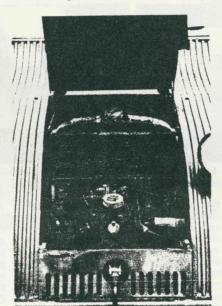
ribbed bonnet are steel pressings. The canvas roof adds very little to the top hamper, and the canvas seating adds very little indeed to anything except to convenience and comfort. The production 2CV was famous for its hammock seating, canvas stretched over tubular seatframes; the TPV is structurally even purer, with a full-width canvas hammock anchored at its front edge over a curved duralumin chassis crossmember, and looped at its rear edge over a straight steel tube about 30mm in diameter. The ends of this tube are suspended, by wires just stiff enough to be called rods, from the junctions of roofrails and B-posts and that is all.

What more do you want? Here is true suspension seating, which adapts its curvatures to whatever it may be carrying, person, parcel, or pig. It is always evenly stressed, always self-adjusting for the short driver or the long passenger. If you get tired of sitting in one position during a long drive, you shift your bottom a few inches forward or back, flex your legs or straighten your back; and this meagre marvel, this combination of rocking-chair, love-bunk and orthopaedic sling, puts you once again at ease. Upholstery? Nobody is so thin as not to have enough built-in; why carry more, and waste space?

The body is truly spacious, for it is so nearly empty, and its skin (flock-sprayed on the inside) is very thin. I once saw superimposed same-scale drawings of the 2CV and the Fiat 600, intended to prove that the admittedly meritorious Italian midget was much the more clever

of the two for being much the more compact. What it actually proved was that the 2CV, as so often, had been misunderstood. It was never meant to be a *small* car, for that would imply that it was a city car; it was meant to be a *light* car, which is a different matter, big enough to serve the purposes and survive the impositions of a peasantry noted for expansive gestures but not for mechanical sympathy.

They may traditionally treat their machinery roughly, but the French never broke the gearbox of the old Cloverleaf,

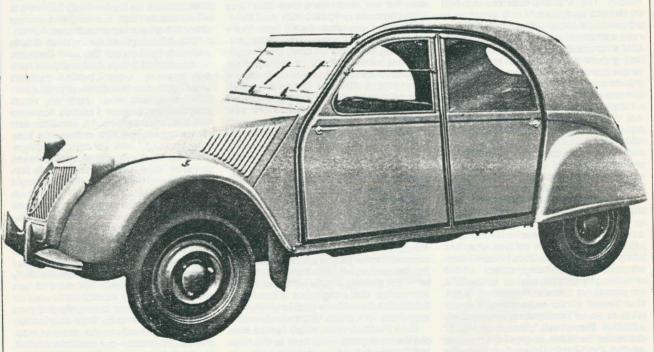


so it is understandable that the TPV box feels very similar. That is, there is no synchromesh, and only the shift from second to top feels as though dogengaged. The lever does not actually protrude through the dashboard, for the car cannot really be said to have a dashboard. The ball-ended aluminium tube simply slides through a bushing in the bulkhead beneath the scuttle, to reach the trunnion at the top of the lever which sprouts vertically from the gearbox; the H-pattern of three forward ratios and reverse is simply transposed by pulling or pushing, straight from the shoulder. It is a slow change, such as I usually did clutchless in the Cloverleaf; I failed to get it right first time in the TPV, and had not the heart to try that way again. Only later did I remember that I speeded the shift in the 5CV with a home-made clutch-stop.

It is not irrelevant, all this Cloverleaf business. The fact is that, however different it may look and however differently it was made, the 2CV behaves in every way – ride, roadholding, steering, speed, view, gearchange, noise – like the 5CV before it. The only major difference is that the 2CV has good brakes, is lighter to push, and even easier to maintain.

As today, if you want to work on anything under the bonnet, you just remove the appropriate panel and walk right in. If you cannot get at anything, it is not there. If it is not there, it is because it was unnecessary; and if it was not necessary, why should the poor customer have to buy it, maintain it, bear its burden, endure its interference, and possibly – oh, the

Prototype 2CV has 188cc flat-twin. Note radiator for water-cooling



La 2 CV du salon de 1948 : allumage par volant magnétique, lancement du moteur par câble. L'ensemble de la presse prévoit son échec commercial; la foule des visiteurs s'amuse à la secouer en tous sens. Les livraisons commenceront en juillet 1949 (quatre 2 CV par jour). La 2 CV est aujourd'hui trois fois plus puissante et roule deux fois plus vite que lors de sa création.





bitter irony of cultivated consumption! - in due course replace it?

The TPV does not have two headlamps, because two will not shine any further than one. It does not even have a speedometer; what would be the point, in a car of only eight bhp with a top speed of less than 40mph and the sort of acceleration that is timed by a candle marked off in centimetres? It feels comfortable at about 30mph, and will carry on at that rate until it gets there, wherever you want to go. As I puttered around the track for a few laps to cool the machinery, I came to terms with this speed: I remembered that, once upon a time when my world was young and luscious chocolates cost 6d a quarter, there were a lot of cars which cruised no faster, even though the majority could manage 50mph. The decade of the TPV was the decade in which Britain introduced its 30mph speed limit; which for many cars of the day was fast enough.

The cooling-off laps were advisable because the TPV machinery had grown rather hot idling during photography. The temptation to leave it idling can be seen, in the form of the starting handle permanently in position at the nose and spring-loaded to stand up out of the way of bumps and greenery. Little effort is needed to swing the little two-cylinder engine; but it took a lot of mental effort to accept that its 188cc side-valve cylinders should be water-cooled. How can one reconcile the presence of a radiator with that policy which declares that nothing superfluous should be included?

One cannot; but Citroen did try, and it

took up some of its time. In early trials, the prototype was run with a BMW motorcycle engine in it, a flat twin which made the car much faster than was deemed proper. The designer of the Traction engine, remarkable in its day for removeable wet cylinder liners, thereupon came up with this deliberately gentle flat twin, water-cooled because his engines habitually were. It was a temporary measure, rectified at about the end of the war by grand old Walter Becchia. He was one of the original team which made the 1922 Fiat Technical Office the most outstanding and influential design shop in the industry's history; he had been headhunted by Sunbeam, had moved on to Talbot, and in due course was to design an air-cooled fuel-injected flat six which should have been installed in the DS of 1954. By the time he had had some useful practice: it was he who designed the aircooled flat twin, of 375cc, which powered the post-war production 2CV.

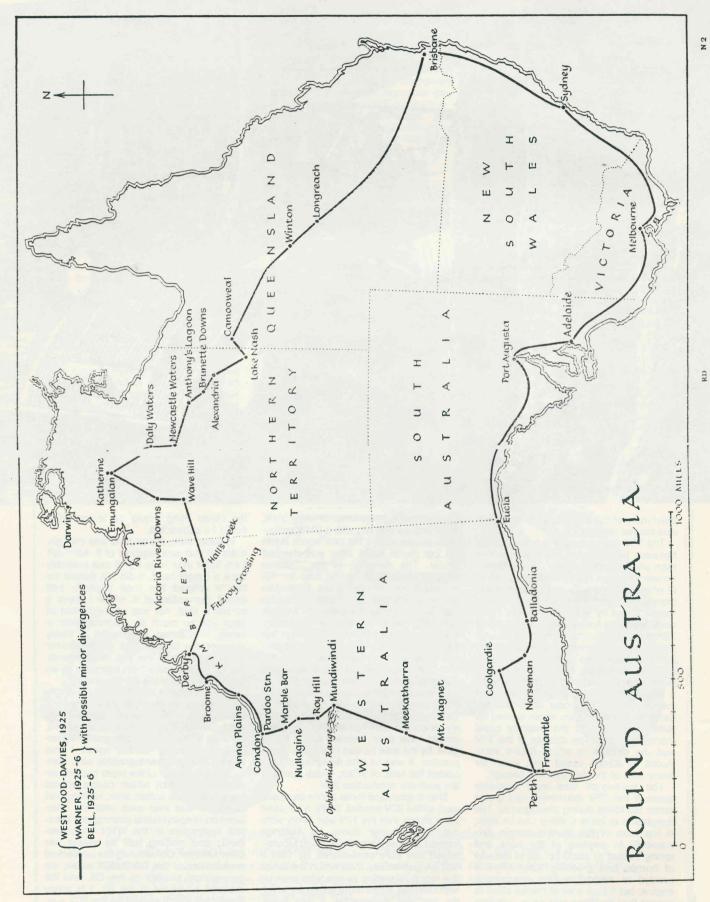
That engine, and those subtle dampers, were all the 2CV needed. Sadly, it acquired other things that the TPV was better without: angular rear doors, for instance, instead of those delightfully cheap tubular-edged and pure semi-circles. By 1951 it had an ignition key, than which few things are more disgusting to one who grew up with switches. It had more lamps, for which the law was responsible. It was faster, which was consonant with the times, and it had inboard front brakes. Indeed people have been adding things to it ever since, but that is the easy way, downhill to Avernus;

the clever thing would be to see what could be subtracted.

In sober truth, the original was enough. It did all that was required of it. Although I am taller than M le PD-G and probably have a bigger head, it did not disturb my hat. It offered the load capacity and speed demanded of it. When I drove it across a field, not one of the basket of eggs was so much as cracked. When a kindly Providence interrupted a lovely summer day to provide a gentle shower for completion of my test requirements, the car proved more than adequate as an umbrella. What more do you want?

There is more. I had thought the single hand-wound screenwiper as simple as it looked; but when I looked closer I saw what looked like a slender bracing rod. perhaps added to prevent use of something threatening to fall apart. I was wrong; it was a pantographic wire, converting the motion of the wiper blade to an ellipsoidal pattern which covers almost the whole of the screen area. Nothing half as clever was ever seen until the combination of epicycloidal gearing and kneejerk kinematics in the W124 Mercedes-Benz; and nothing half as simple has been seen yet. Considering the intellectual profundities of the DS/SM/CX series, the geometrical niceties of the GS, and the material advances of the BX, it is surely significant that it should be the 2CV - or, rather, the TPV - which demonstrates that not even the technology of Daimler-Benz can rival the science of Citroen. The architect Mies van der Rohe was right, beyond a doubt: less is more.







## ALL THEM ROUNDERS - PART 2

Meanwhile, Mr J.K. Warner, a butcher of Perth, had completed his circuit a month earlier. During 1923 he had driven east from Perth to Brisbane, and on 13 October, 1925 set off from Perth in the opposite direction, on the heels of Westwood, to finish off what he had begun. He was a tourist and not a record-breaker: his aim was simply to see Australia. He was alone at first, being unable to find anyone willing to risk the hazards of the journey. His machine was another Citroen, this time the slightly larger 11.4 h.p. model; a fourseater tourer. It provided the qualities he was looking for - reliability, economy and high ground clearance.

Warner was not alone for long. Three days out and travelling at a leisurely pace, he was overtaken near Mount Monet by Mrs Marion Bell and her eleven year old daughter in their big Oldsmobile Six, who were also bent on circling Australia. In spite of many attempts to dissuade her, Mrs Bell had left Fremantle on the 14th. When she caught him up, Warner also tried to persuade her to turn back, but failed to do so. At Meekatharra he had a dump of five drums of petrol, and provided Mrs Bell with three of them, as hers was the thirstier car. Leaving Mundiwindi, the Citroen refused to start owing to magneto trouble, and Warner advised Mrs Bell to push on to the next station and rest there while he tried to repair his car. Knowing nothing about the insides of motor cars, his efforts were fruitless, but luckily a salesman delivering an Overland to a bush station passed by, and soon located the fault.

After crossing the sinister-sounding Ophthalmia Range, the two cars arrived together at Roy Hill station. Here lurid stories were circulating about an aboriginal intertribal war which was said to have broken out in the vicinity. Indeed, a pitched battle was supposed to have taken place on the day before. It cannot have been very terrible, for the contending warriors were only too happy to pose in their warpaint for the motorists' cameras and to sell them spears as souvenirs. In fact, the war turned out to be a figment of the imagination of the 'tame' station aborigines, who were terrified of their 'wild' brothers of the bush.

Mrs Bell again ran short of petrol after Marble Bar. Warner gave her a little, and then drove a hundred miles to Port Hedland to get her some more. Beyond Anna Plains they lost the road and Mrs Bell's car fell into a bog of sand, from which it had to be

extracted with the aid of jacks. Soon after Broome the Oldsmobile ran into soft drift sand again and bogged itself to the axles. Four hours of jacking up the car and unloading, carrying and reloading the baggage followed before the heavy American machine was freed. The small Citroen took this sand in its stride, but its progress was reduced to an average of sixty miles a day for the next three days. Every few yards the jacks would have to come into play, and Warner sometimes had to hack a path for the cars through the bush. Petrol supplies were haphazard, to say the least of it: probably the local resources were somewhat strained by the arrival of three cars in succession. However, some was obtainable at Derby, where the party was held up for three days and where a local man, Mr J.C. Currie, joined Warner and remained with him for most of the rest of his journey.

On the other side of Derby Mrs Bell's Oldsmobile was again involved in heavy sand, and had to be hauled out by a team of oxen. As with Westwood, both cars had to be towed over Fitzroy Crossing. Near there the crews met Michael Terry, a motor explorer of Australia almost as renowned as Francis Birtles, with the big Guy half-tracks with which he had been traversing the empty hinterland of the continent. On the next day, when thirty miles on the road to Hall's Creek, it was the Oldsmobile's turn to break down. Warner transported Mrs Bell and her daughter back to Fitzroy Crossing so that she could send a message to Perth for the spare parts needed, and from the same place she telegraphed ahead to Hall's Creek for some stopgap help. This came promptly in the shape of a Mr Carey, who met the motorists at the scene of the breakdown, but could do nothing to put the Oldsmobile back on the road without the spares. Carey took Mrs Bell and her daughter back to Fitzroy Crossing, and then Warner went on alone, having done everything within his power.

The Citroen was lucky to have a consistently fast run to within a hundred miles of Anthony's Lagoon, where a heavy thunderstorm and three inches of rain had turned to track into a bog. Warner's car was mired four times in a day, and on each occasion it had to be completely unloaded before being extricated. After Anthony's Lagoon the going became so bad that it became impossible to use top gear. More magneto trouble manifested itself at Brunette Downs, where Warner was delayed for twenty hours until the cause of the trouble was discovered by the station mech-



anic: the rocker arm in the magneto was stick-For a while the road improved, but near Longreach the Citroen again stuck and had to be unloaded. Warner was not alone in his troubles, for there were plenty of other cars on the road in the same predicament. At about the beginning of December he arrived in Brisbane, thus complet-ing his circuit of the continent. Thereafter he drove home unhurriedly to Perth, reaching Sydney on 12 December. There Currie left him, and several of his family and friends joined him for the last leg of the journey. Off again on 12 January of the new year, they had an easy nine days' run to Melbourne, marred only by the mud created by continuous pouring rain on unmade roads. After a week in Melbourne Warner set out for Adelaide, now with a slightly different party. They arrived in Adelaide on the 31st and left for Perth two days later. After battling through sandstorms and dunes in the desert of the Bight, Warner returned to his native city on 14 February

While Warner was rounding off his journey, Mrs Bell was on her way again, far behind. Her eventual success, after no less than six months on the road, made her journey perhaps the most remarkable of the four pioneer runs, for she was a woman alone, with a child to look after, no mechanical knowledge at all and a not particularly suitable motor car. Little seems to have survived of her story, but she appears to have had to contend with both an excess of water in the form of swollen rivers, and with a complete The radiator lack of it for at least two days. boiled dry, and Mrs Bell was immobilized until she caught some rainwater in a tarpaulin. On another occasion she was involved with a bush fire. Her daughter, who had been able to perform small services such as cooking and getting out to open gates, fell ill with fever. Mrs Bell arrived in Melbourne on 16 January, 1926 and stayed there for a fortnight before moving on. She halted for a similar period in Adelaide, after arriving there on 18 February, and finally reached Perth on 7 April. Her successful tour caused a sensation in all the State capitals, where the newspapers christened her 'the little wonder woman' and even 'the Wildflower of the West'.

Less edifying was the running battle fought in the correspondence columns of the newspapers between Mrs Bell and Mr Warner. The story of Mr Warner as told above was his account of what happened. For her part, Mrs Bell hotly denied that he had ever had to help her in any respect; quite the reverse, in fact. He had never provided her with any petrol, and she had always had to dig her own car out of the sand whenever it became stuck. Indeed, she had been compelled to lend him

petrol, and Warner's ignorance was such that she had had to change his wheels for him! Warner did not clear the bush with his axe; the Oldsmobile acted as a battering-ram, clearing the way for the Citroen. The story of her rescue when broken down near Fitzroy Crossing was moonshine - Mrs Bell admitted that she did break down, but added that Warner abandoned her in that predicament. It would probably be impossible to sort out the rights and wrongs of the matter, and they are in any case of no importance. Both parties deserved everyone's congratulations for what they achieved.

Westwood, or rather Grady, provoked a of emulators. The cars of Warner and rush of emulators. The cars of Warner and Mrs Bell, the first (or second) and third motorists to complete the circuit, were only two of about half a dozen motor parties who were on the road round Australia early in 1926. Oddly enough, Grady, Westwood, Warner Mrs Bell and at least one other of these pioneers came from Perth. Perhaps the inclination to see the rest of the continent and its most populous areas was stronger among the more isolated Western Australians? Anyway, by 1929 so many people had 'done' the circuit that their passage had ceased to cause any excitement in the small towns and stations en route. Apparently they all passed through a little place in Western Australia called Peak Hill, and when they had been doing so for three years the only comment they aroused was a snort - 'Another of them rounders!



New Car Prices

All prices given include the new Sales Tax rate. Local means Locally Assembled. Imp. means Fully Imported. These are ruling prices in Melbourne at time of going to press, but Sales Tax reductions and pound devaluation may cause some changes.

	£		3	Plymouth (95 b.h.p.)	£
Allard V8 (85 b.h.p.)	1100	Holden (60 b.h.p.)	748	Sedan	92
2 Seater Sports (Imp.)	1465	Sedan	140	Renault (19 & 25 b.h.p.)	
Alvis 14 (65 b.h.p.)	1500	H.R.G. 1,500 c.c. (70 b.b.p.) Chassis complete, Monopate		760 Rear Engine Saloon	
Saloon (Imp.) Drophead Coupe (Imp.)	1376	саг	1040	Juvaquartre Saloom (Imp.)	640 730
		"Woodside" racing sports	1140		/30
Austin A40 Tourer (Local)	611	(approx.)	1229	Riley (55 & 90 b.h.p.)	400
A40 Saloon (Local)	. 697	Humber (56 & 100 b.h.p.)		1½ Litre Saloon (Imp.) 2½ Litre Roadster (Imp.)	126
A40 Saloon (Imp.)	725 922	Hawk Saloon (Imp.)	1020		1420
A70 Saloon (Imp.)		Super Snipe Saloon (Local)	1362	Rolls Royce	
A125 Saloon (Imp.)	2077	Super Snipe Saloon (Imp.)  Pullman Saloon (Imp.)	2234		6650
Armstrong-Siddeley (75 b.h.p.)		Jaguar			4750
Lancaster Saloon (Imp.)	1569	Mark V 21 Litre (102 b.h.p.)		Rover (52 & 72 b.h.p.)	
Typhoon Saloon (1mp.)	1569 1569	Saloon (Imp.)	1462		1151
			1462	Singer (36, 38, 43 & 48 b.h.p.)	
Saloon (Imp.)	4250	Mark V 3½ Litre (125 b.h.p.) Saloon (1mp.)	1549	9 Tourer (imp.)	683
Drephead Coups (Imp.) Price			1549	10 Sportsmaster Tourer (Local)	656
on application.		XK-100 2 Litre (105 b.h.p.)		Super 10 Saloon (Local)	751
Bristol (80 b.h.p.)		Supersports (Imp.)	1586		1071
400 Saloon (Imp.)	1970	XK-120 3½ Litre (160 b.h.p.)	1500	Simca (32 b.h.p.)	
401 Saloon (1mp.)	3328 3106	Supersports (Imp.)	1000		785
		Jowett (56 b.h.p.)  Javelin Saloon (Imp.)	1071	Skoda (32 b.h.p.)	
Chevrolet (90 b.h.p.) Fleetmaster Sedan	844	Lagonda (105 b.h.p.)			750
Stylemaster Sedan	834		3136		
Citroen (55 and 76 b.h.p.)		21 Litre Drophead (Imp.) 3	3345	Standard (68 b.h.p.) Vanguard Saloon (Imp.)	889
Light 15 Saloon (Imp.)	946	Lanchester (40 b.h.p.)		Vanguard Saloon (Local)	857
"Six" Saloon (Imp.)	1392	10 Saloon (Imp.)	962	Studebaker (80 b.h.p.)	
Daimler (70 b.h.p.)	1090	M.G. (46 & 55 b.h.p.)	470	6G Sedan, price on application.	
21 Litre Saloon (Imp.)	2472	T.C. Series, chassis complete T.C. Series, Sports Roadster	476	Surbcam Talbot (47 & 64 b.h.p.)	
		(Imp.)	693	80 Saloon (Imp.)	132
De Soto (95 b.h.p.) Sedan	940	Y Series, Tourer	869 939	80 Drophead (Imp.)	
Dodge (95 b.h.p.)			333	90 Saloon (Imp.)	
Sedan Sedan	929	Morgan (23 & 40 b.h.p.) 3 Wheeler (Imp.)	495	90 Drophead (Imp.) 1	240
Fiat (16, 32 and 47 b.h.p.)		4/4 Roadster (Imp.)	739	Triumph (68 b.h.p.)	
"500-C" Coupe (Imp.)	567	4/4 Tourer (Imp.)	775 850	2000 Saloon (Imp.)	264
"500-C" Convertible	582	Morris			200
"1100-B" Saloon (Imp.)	828 1070	8 Minor (27 b.h.p.)		Veuxhall (35 & 55 b.h.p.)	588
		Convertible (Imp.)	599		644
Ford (23, 30, 85 & 110 b.h.p.) Anglia Tourer	484	Saloon (Imp.)	637	Wyvern Saloon (Imp. Panels)	681
Anglia Sedan	534	14 Oxford (41 b.h.p.)			707
Anglia Sedan Prefect Sedan	561	Saloon (Imp.)	860		642 718
V8 Pilot Sedan (Imp.)	641	Isis Six (65 b.h.p.) Saloon (Imp.)	1011		735
V8 Custom Sedan	927	Oldsmobile (100 b.h.p.)		Velox Saloon (Imp.)	760
Hillman (35 b.h.p.)			963	Wolseley (50 & 80 b.h.p.)	
Minx Saloon (Imp.)	732	Packard (130 b.h.p.)		4/50 Saloon (Imp.) I	060
Minx Saloon (Local)	700	8 Sedan, Prices on application.		6/80 Saloon (Imp.) 1	144

AUSTRALIAN MONTHLY MOTOR MANUAL-December, 1949.

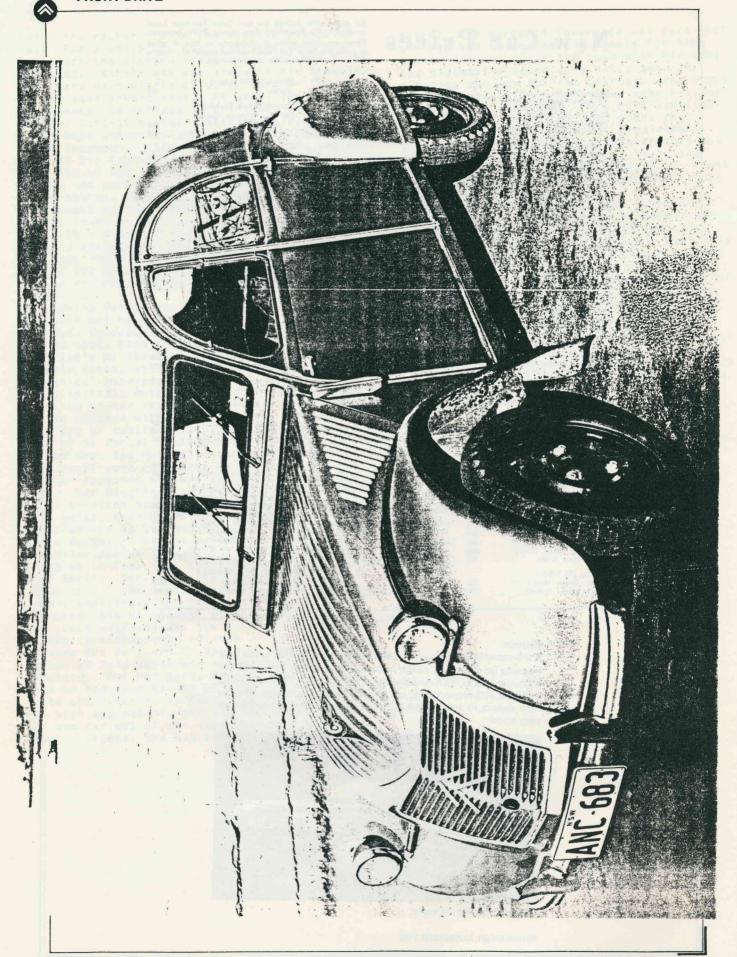
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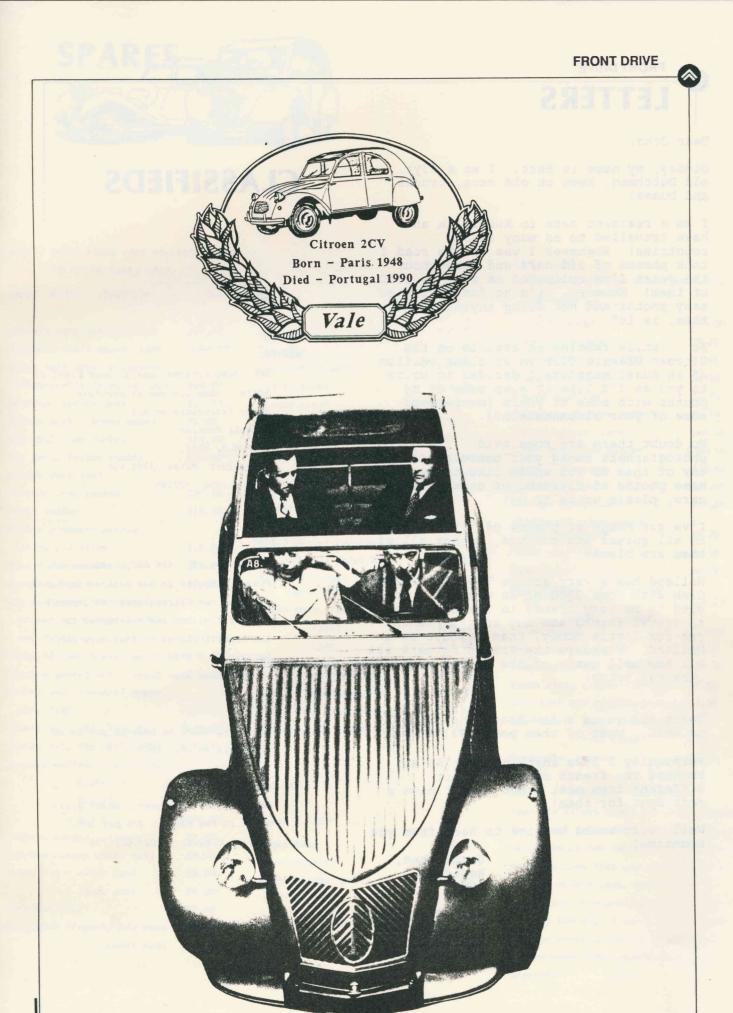
A 24-valve V6 version of the XM, priced at £26,910, is the new flagship for Citroën's range of cars, although the arrival of the high-spec AX11 TZX and the sporty looking BX TZD, at £7415 and £13,102 respectively, are probably just as pertinent. We can also expect to see 2- and 3-litre XMs available as automatics very soon.



Cirtroën XM V6 24-valve.

**MOTOR SPORT, NOVEMBER 1990** 







# **LETTERS**

Dear John,

Gidday, my name is Bert. I am a 33yr. old Dutchman, keen on old cars, trucks, and buses!

I am a resident here in Australia and have travelled to as many as 30 countries! Whenever I was on the road I took photos of old cars and throughout the years I've collected as many as 6000 of them! However, it's no fun having so many photos and not doing anything with them, is it?

So....while reading an article on the Citroen Classis Club in an older edition of an Aussi magazine I decided to write to you as I'd like to swap some of my photos with some of yours (or perhaps some of your clubmemebers?).

No doubt there are some avid photographers among your members, so, if any of them or you would like to swap some photos of Citroen, or other French cars, please write to me!

I've got heaps of photos of "Tractions" in all guises and colours, as not <u>all</u> of them are black!

Holland has a very active Traction Avant Club with some 3000-or-so members. It used to be very trendy in the Seventies to travel abroad and buy an old French car for little money, then restore it in Holland. Nowadays the French farmers are all too well aware of the prices such cars can fetch!

There are quite a few Tractions in N.Z. as well. Most of them post 1951 though!

Personally I like anything pre-'66 and because the French cars are a bit different from most other cars I have a soft spot for them!

Well....it would be nice to hear from you sometime!

Until then, Regards, BERT.

Bert Neymeyer P.O. Box 1687, WELLINGTON, NEW ZEALAND

# **CLASSIFIEDS**

FOR SALE?

Wanted WANTED.

5CV (baby Citroen) parts. Swap Light 15
parts , some vintage or purchase.

Also: literature on 5CV

Neil Rankine

R.M.B. 9005

Powlett River 3995 Vic

Ph: (056) 721185

For Sale.

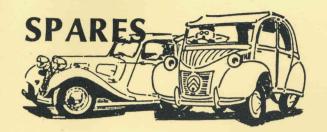
1953 Light 15 (KSE 442). Winner of every Concourse it has entered including some non Citroen ones! An immaculate car finished and maintained to the highest standard. What more can be said. \$POA.

Bryan and Joan Grant

(breaks my heart to have to put an ad. like this in .... ED.)

FOR SALE

New circular instrument (dash) glass Still in the boxes. \$25 per set. Brian Cleaves (02) 6835798



NOTE : ORDER FORMS TAKE PRECEDENCE OVER
TELLEPHONE CALLLS !!!!

PARTS LIST - (Traction) as of Dec '90

New oil pump gears (each)	\$55.00	Radiator hose upper/lower	\$14.00	
Wishbone shaft, upper, reco	\$180.00	Fan belt	\$13.00	
Lower ball joint adjusters		Door lock springs	\$3.00	
(permanently fixed to car)	\$60.00	inlet valves	\$18.00	
Bushing, second gear	\$12.50	Clutch plate	\$125.00	
Bronze bush - brake shoes	\$4.00	Fuel pump	\$50.00	
Big boot, top rubber	\$14.00	ID/DS main bearing u/s	\$85.00	
Big boot, bottom rubber	\$11.00	ID/DS conrod bearings	\$85.00	
Rubber door seal		78mm piston rings	\$85.00	
Scuttle vent rubber	\$26.00	Big 15 drive shafts (each)		
Pedal rubber	\$10.00	(less inner carden shafts)		
Rubber grommet- petrol		Brake Master Cylinder (new)	\$85.00	
filler ( 2 sizes)	\$10.00	Brake master Cylinder kit	\$15.00	
Door V-block rubbers	\$35.00	Tie rod ball joint kit	\$70.00	
Bonnet rubbers	\$0.35	Ball joint boot (leather) upper and lower	\$12.00	
Big and small boot paint		Brake hose (french)	V12100	
protectors (under handle		front	\$28.00	
and lights)	\$30.00	rear	\$24.00	
Steering rack boots (pair)	\$30.00	Throttle shaft 32PBIC Solex		
Gearbox gasket set	\$15.00	0.5 mm oversize	\$20.00	
Gasket set, complete motor		Hub and bearing puller	\$140.00	
L15/ 11BL	\$120.00	Lower ball joint puller	\$65.00	
Gasket set , VRS (big 6)	\$140.00	Bonnet strip clamp (internal	\$1.50	
Gasket set, VRS (415/1184)	\$75.00			
Exhaust muffler (+tail pipe)				
Light 15	\$180.00			
Big 15	\$150.00			
Big 6	\$140.00	DYANE / 2CV		
Exhaust hanger - rubber	\$2.50	Brake hose	\$22.00	
Gearbox output shaft seal	\$8.50	Seat rubbers	\$1.00	
Front hub - outer seal	\$8.00	Wiper blades (pair)	\$10.00	
- inner seal	\$8.00		722.30	
Rear hub seal	\$8.00			
Door lock (French) big boot	\$22.00			
small boot	\$22.00			

## EARLY 2CV

all parts are new unless otherwise indicated

Clutch linings	\$15.00
Rear engine mounts	\$9.00
Tie rod covers (metal)	\$3.00
Suspension arm seal	\$8.50
Engine push rod	\$2.50
Suspension bumper rubbers	\$4.00
Starter motor (reco.)	\$40.00
Crown wheel and pinion	\$200.00
Front brake drum	\$15.00
Rear brake drum	\$15.00
Starter bendix unit	\$10.00
Windscreen wiper speedo	
worm and drive	\$8.00
Front over-riders	\$5.00
Head gaskets 375cc	\$2.00
Lock and key set (2 barrels	
and 2 keys)	\$15.00
Oil pump bodies -bronze	
(no gears)	\$10.00
Valve springs	\$1.00
Steering pinion and bearing	\$15.00
Brake bleed nipple and cap	\$1.50
Dip stick and holder(rubber)	\$1.50
Door catch right front	\$6.00
left front	\$6.00
Acelerator pedals	\$1.00

## WANTED ! WANTED ! WANTED !

Your old silent blocs for reconditioning
The Spares Department needs any amount
be it one or ten -we will be pleased to
purchase them from you or if you like
you can donate them. We'll have no
hesitation in accepting your offer!!!

By the way, I can't justify the time to chase up second hand parts.

If you need them - avertise in the magasine PB.

