FRONT DRIVE

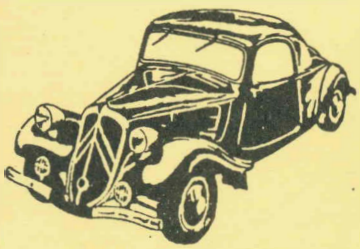
FRONT DRIVE VOLUME 9 No. 5 January/February 1986
Registered by Australia Post Pub. No. VBH 2127

Windcheater & T shirt designs

ROADSTER

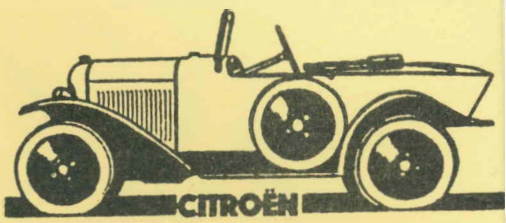
AVAILABLE ONLY TO
2 CYLINDER OWNERS
& ONLY GREEN ON
YELLOW COLOURS.

CLUB BADGE
3 SIZES:
SMALL (BREAST POCKET)
MEDIUM, LARGE

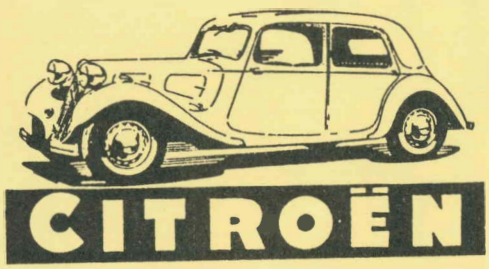


COUPE

2CV



5CV
BREAST POCKET
SIZE ONLY

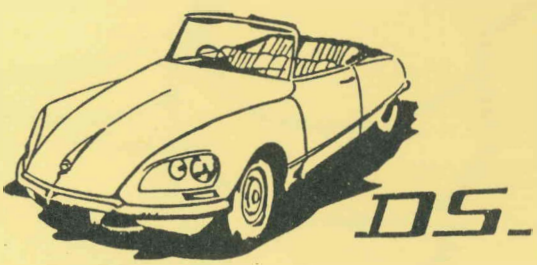


LIGHT 15

ANNIVERSARY

SCROLL
BREAST POCKET
SIZE ONLY

BIG 6



DS

CHEVRON BADGE

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Closing dates for copy: Mid-February, April, June, August, October, December.

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FRONT DRIVE

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EDITORIAL

Mr. Bibendum, the Michelin Man welcomes us into 1986. Courtesy of The Citroënian (UK), we present the story of this jolly, fat man - how he became associated with the Michelin Company and went on to become perhaps the best-known "figure" in the automotive world. And not forgetting the long-standing symbiosis between Michelin and Citroën, culminating in Michelin assuming control of the Citroën Company from 1934 till the take-over by Peugoet S.A. in 1974.

A contemporary account of the 1954 Traction Familiale shows how, before its true classic nature was recognized, the market was becoming disenchanted with the Traction. In the motoring world, as elsewhere, "familiarity breeds contempt". And of course, the showman, P.T. Barnum said: "The public craves three things: Variety, variety, and variety". They soon got variety, starting with the DS in 1955.

More technical notes to help you restore and maintain your Citroën - are you going to forward <u>your</u> hints to go into the magazine and the tenth anniversary Restoration Manual?

Read about the good times enjoyed by members attending recent Club Rallies. Have a look at the Coming Rallies (below) and resolve to join in even more in 1986!

Bill Graham, Peter Simmenauer,
Paul Chapman, Peter Hore.

COMING RALLIES

January 26, Sunday	Australia Day Pageant - informal drive to Werribee Park/display of pre-1954 cars.
January 29, Wednesday	General Meeting, Nunawading.
February 16, Sunday	AOMC European Day - Members' Car Park, Flemington Race Course. Display cars: $2.
February 26, Wednesday	Open Night, Nunawading.
March -	Annual Dinner (casual). Date & location to be advised. Very successful last year, your place this year?
March 26, Wednesday	Annual General Meeting, Nunawading.

Note: Nomination & proxy forms available. We particularly need nominations for President and Social Officer. DON'T FORGET

CCOCA MEMBERSHIP:
<u>Annual Subscription:</u> Full Member $20.00, Associate Member $15.00

<u>Joint Membership</u> available to spouse of full member, no cost.
<u>Overseas postage rate:</u> additional $7.00.

<u>Meetings</u> are held on the last Wednesday of every month at 8.00 pm at the Coffee Shop* Meeting Room at the Nunawading Civic Centre, Maroondah Highway, Nunawading, east of Springvale Road.

Printed by Veevers Printing Co., 121 Ferrars St. Sth. Melb. 3205

*NOTE: THE COFFEE SHOP AT THE NUNAWADING CIVIC CENTRE IS NOW CALLED THE COURTYARD ROOM

NUNC EST BIBENDUM

Throughout the history of Citroen Cars there has been a very close relationship with Michelin. Not only have Citroen specified the Bibendum tyres for their cars but the Michelin Brothers took control of the great Citroen Empire when it collapsed financially in 1934. The famous Bibendum trade mark is instantly recognisable and can be seen in every country of the world. The following article recalls the birth of Monsieur Bibendum.

Michelin is Europe's largest tyre-making organisation exclusively on tyres. The company's aim is the production of the most advanced range of motor-cycle, car, commercial vehicle and earthmover tyres which technical expertise can provide, and Michelin's history has been one of experiment, research and innovation.

Although Michelin, as a tyre manufacturer, began in the 1890s, its roots lie much deeper and go back to the 1830s when Elizabeth Pugh Parker, a niece of Charles Mackintosh—the man who had discovered the secret of dissolving rubber in benzine—married Edouard Daubrée. This gentleman, with his cousin, Aristide Barbier (grandfather of André and Edouard Michelin), was the owner of a small factory in Clermont Ferrand making agricultural machinery. His wife, Elizabeth, made some rubber balls for her children, and they were so successful she began to manufacture commercially. In 1863 Michelin was incorporated as a company manufacturing rubber products. The headquarters are still in Clermont Ferrand.

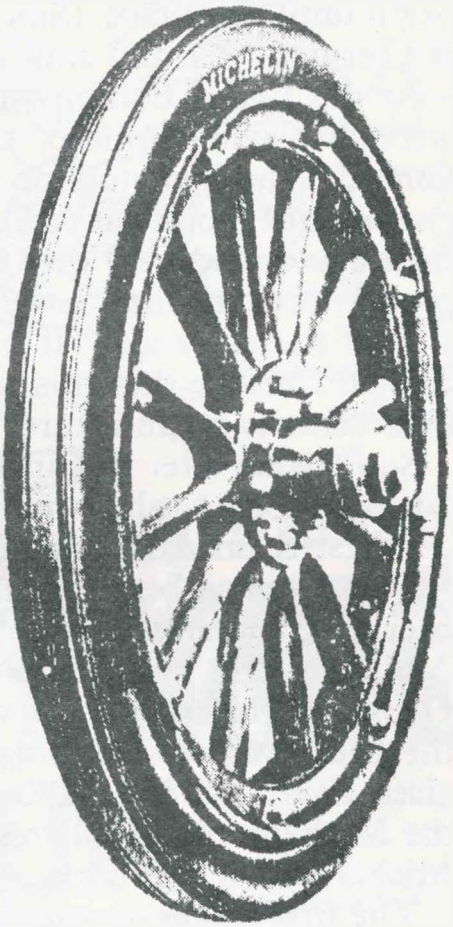
The pioneers in tyres were the brothers Edouard and André Michelin, who developed the first detachable pneumatic cycle tyre in 1891, and the first pneumatic car tyre in 1895. Many rapid improvements followed, and in 1895 the Michelin motor tyre was capable of carrying a car at 60 mph and its life expectancy had increased from 100 miles to 3,000 miles.

At that time there were no more than 3,000 motor vehicles throughout the world, but 10 years later there were over 32,000 in the United Kingdom alone—such was the impetus given to the industry by this early Michelin invention. The logic of driving on a cushion of air instead of on a solid circular block of rubber is simple, but the effects of the change were tremendous.

In 1912 Michelin produced the first truck tyre. Like the cycle tyre, the air was retained by an inner tube protected by a woven canvas cover, the layers of which were held together by rubber bonding. However, friction built up such heat that speeds of 20 mph were the maximum possible, but with the introduction of cord plies, friction and overheating were reduced and permitted much higher speeds and lower pressures. In 1923, Michelin produced the first 'low-pressure' tyre, the real 'low-pressure' tyre in 1932, and the X tyre, the first radial, in 1948.

Mr. Bibendum, the "Michelin Man" was introduced in this poster of 1898. "It is the time to drink. That is to say: To your health. Michelin tyres swallow everything".

Very early Michelin tyre.



The revolutionary Michelin X tyre, in which layers of steel-cord separate an extremely supple casing from hard-wearing tread, represented as great an advance over the conventional cross-ply as did the first pneumatic over its predecessors. This was the first radial tyre in the world on which were based all subsequent radials. Michelin now manufactures steel-braced radial tyres for the whole range of cars, trucks and earthmovers and, in 1966, introduced the widely acclaimed XAS, the first asymmetric radial for high performance cars.

In 1968, the now famous ZX was introduced, destined to become the most popular radial car tyre in the United Kingdom. The ZX was replaced by the XZX in 1977 and has now become a worthy successor.

It is interesting to note that all other major manufacturers of tyres in the world have turned to steel for their tyre construction, following the trend established by Michelin over 30 years ago.

Development in design has been accompanied by constant physical expansion. One by one, new Michelin companies were set up in other countries; there are factories in Europe, Africa and America, apart from agencies in places all over the world. In Britain there are six factories—at Stoke-on-Trent and Burnley, at Belfast and Ballymena in Northern Ireland and at Aberdeen and Dundee in Scotland.

The British company was registered on May 11th 1905 as a private limited company, although the actual manufacture of tyres in this country did not begin until the 1920s. (Since the turn of the century the tyres had been made at Clermont Ferrand and then imported.)

At the Lyons Exhibition of 1898 Michelin had built a stand. Here they were displaying some of the tyres for which they had already become so famous. The inventors of these tyres (which included the detachable cycle tyre and the motor car tyre), brothers André and Edouard Michelin arrived at their stand, and here they found that the stand manager in order to try and present the tyres in a novel way had stacked them in assorted sizes on either side of the entrance. "If it had arms it would look like a man." Little did Edouard realise that this innocent remark was to create one of the world's most famous manufacturer's trade marks.

Some whie after this incident André was visited by a Monsieur O'Galop, who had come to show him some sketches for advertisements. Whilst looking amongst them André caught sight of a cartoon O'Galop had just received from a German beer manufacturer. In it a rotund gentleman was raising his beer mug and announcing "Nunc est Bibendum"—now is the time to drink. André thought immediately of what his brother had said at Lyons and told O'Galop. The artist got to work, the tyre man replaced the robust drinker and the beer mug was replaced by a champagne glass full of nails and broken glass. Even "Nunc est Bibendum" was related to the slogan that had become the Michelin motto "Tyres swallow obstacles." Out of simple beginnigs the Michelin man was born.

The first poster on which the rotund Michelin man came to life was when he stood at a banqueting table flanked by two flattened competitors. Lifting his glass he toasted "Nunc est Bibendum"—"Your good health; Michelin tyres swallow obstacles."

The Michelin man, who was still nameless, was finally christened at the 1898 Paris-Amsterdam race by the racing driver Thery, who on seeing André Michelin go by called out "Look, there is Bibendum." It summed up the tyre man in one word and the Michelin Company accepted it with delight.

Although born without legs, they were soon to appear for Bibendum had caught the imaginations of the artists. He became instantly human, with the stroke of a pen he walked, danced, jumped and ran, he laughed, cried, became angry, pensive and tender. He was without restrictions of race or sex, and given the necessary equipment he undertook any task. Bibendum has become cleric and clerk, chorister and Santa Claus, driver or mechanic, salesman or soldier, no-one is more versatile. with this new human personality Bibendum became the leading actor in every kind of Michelin publicity: leaflets, posters and nowadays television all carry the unmistakable man. and of course as the Michelin trade mark he is on our stationery, our branch offices and our delivery vehicles. By means of a Bib suit he even becomes flesh and blood.

Today Bibendum is seen in his many guises, in many places, in fact most countries of the world, always proclaiming his message—the excellence of Michelin tyres.

Reprinted from Citroenian (Citroen Car Club - U.K), July, 1985.

Maybe we should have built the world's longest m

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LIN SAVES YOU MONEY N THE LONG RUN.

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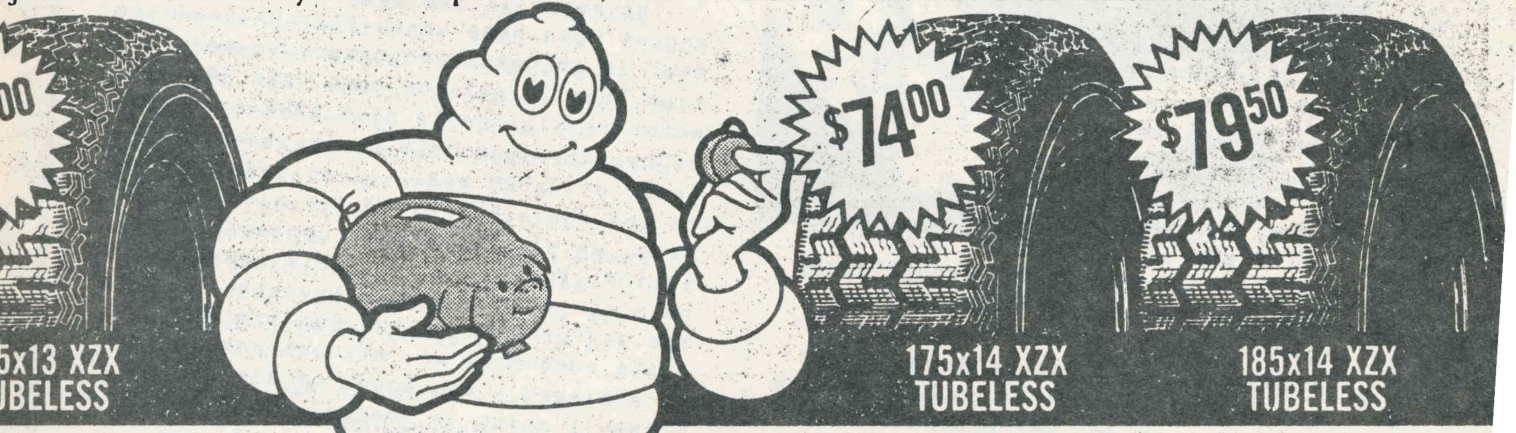

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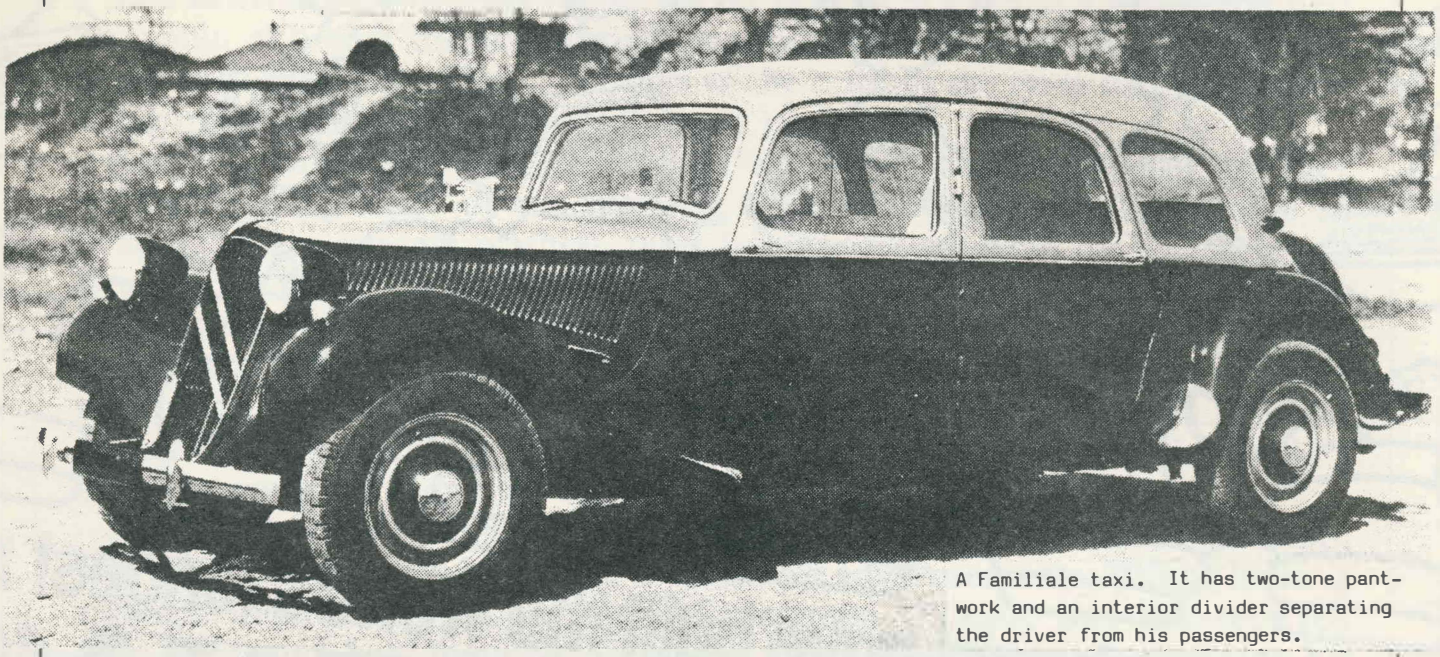
Demand the best.
MICHELIN

IMPRESSIONS: 1954 11CV FAMILIALE



A Familiale taxi. It has two-tone pantwork and an interior divider separating the driver from his passengers.

During the course of last year, when 11CV Citroen customers were starting to show signs of weariness, even though subjected to unflagging publicity about its virtues, the Quai de Javel management judged that it was time to revive its "Familiale" bodywork, which had been in retirement since the beginning of the war.

This operation was easy, as the dies for pressing the body panels were still in existence. As well, a new market, that of large families, could be reached all the more readily because there were no other models on the French market which offered so many seats. The Renault "Prairie" was not thought of so much as cumbersome; rather its appearance and character was so utilitarian that one forgot that it had six proper seats and vast luggage capacity. The Citroen 11 nevertheless staked its claim here too, with a long-bodied commercial version which had a large rear opening and was equipped with a false floor.

The Citroen Familiales made their reappearance at the last Paris Salon, in both 11 and 15-six form. After more than six months on the market, however, it could not be said that the six-light had either raised the rate of 11CV production or halted the slump in demand for the 15-six, in which public interest was maintained by adding hydro-pneumatic rear suspension, an interim solution, needless to say.

It seems appropriate for us to examine one of these new Familiales and provide a 1954 impression on the twentieth anniversary of the 11 Traction, the oldest design of any French car currently in production.

We will not simply sit back and drink champagne toasts to it either; the only way to test the car is at the wheel, where the light of the twenty candles on the birthday cake will not dazzle us - sparkling performance will be needed to do that!

Engine and Transmission

The capabilities of the 11CV engine have been known for so long that it is hardly necessary to mention them. All the same, the 1954 motor is claimed to give 59CV instead of the previous 56CV at the same speed of 4,000 rpm. It is difficult to see where the extra 3CV have come from, as all the engine characteristics, including the cubic capacity, have stayed the same. Nevertheless, the performance of the Familiale is quite adequate, as, without passengers, we achieved a top speed of 116 kmh, a result which is scarcely less than the 120 kmh of the 11 "Legere". We were curious enough to repeat the speed trial with a full load of 600 kg, the equivalent of the eight passenger capacity claimed by the makers, and we attained 108 kmh under these conditions. Its flexibility and capabilities when climbing hills are praiseworthy. The gearbox not having been changed, the synchromesh is still defective, which is noticeable when you want to change from third to second, for example. The only mechanical difference in the six-

The roominess of the Familiale is important, but for three adults, the folding seats are uncomfortable during a long trip.

The boot leaves little room for luggage, for it now must house the spare wheel as well.

light model is the reduction of the final drive ratio compared with the standard 11, to 8 x 31 instead of 9 x 31. Acceleration benefits to the extent that, when empty, a Familiale is a little more lively than its sisters. Fuel consumption, while not exceptional, stays acceptable, as over a combined city/highway route of 600 km, we used 12.95 litres per 100 km.

The brakes, which were regarded as outstandingly effective before the war, would now be considered average by today's standards.

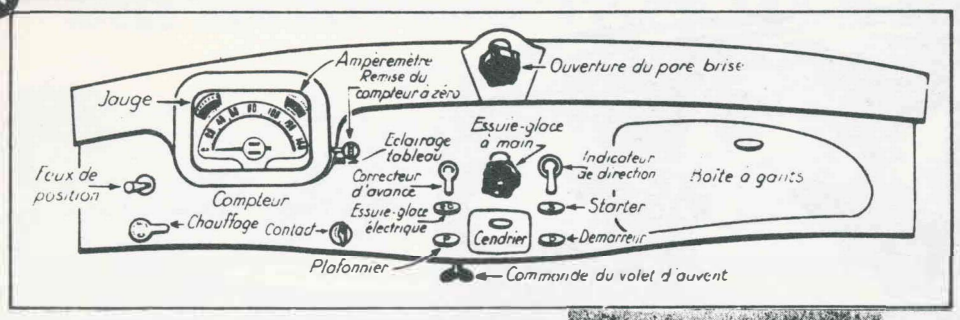
Roadholding and suspension

The Citroen also had astonishing roadholding before the war, but certain other makes have made such progress that today, if the stability of the Traction has not been surpassed, it has been at least equalled by cars whose suspension is better. Thanks to its tyres and the extra 18 cm in wheelbase, the Familiale seems to us slightly superior in cross-winds to the other 11's, and it appeared that nothing could put it off course.

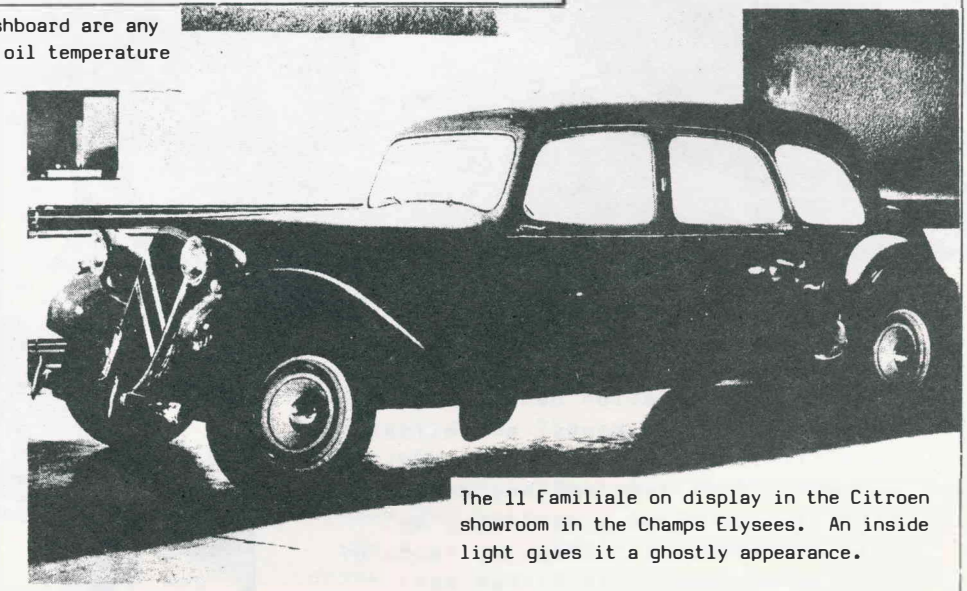
Steering has not been similarly improved. Its "gentleness" tires the driver's arms, the road reaction through the steering wheel becomes unpleasant after some distance, while the turning circle is often inadequate. We measured the radius as 7.6 metres; it is often difficult to turn right-angle corners at one attempt in streets commonly encountered in our towns. If the seats are now comfortable, the suspension has not made such progress. Its firmness is legendary, but when loaded we have noticed that it sometimes bottomed at the rear.

Bodywork and Roominess

We have deliberately not commented on the lines of Tractions in general; this we regard as the province of enthusiasts. What you get with a Familiale is about a further 20 cm of space between the rear doors and the mudguards. This elongation makes the car look lower. The space in the front is just sufficient, on account of the seat adjustment being limited by the fold-down seats. At the rear, when the auxiliary seats are folded up, two people, or three of moderate size, can fully stretch their legs out on the completely flat floor. But when the folding seats are down, there is no more than 18 cm for their occupants' knees, and only 15 cm for the legs of the back seat passengers, which is clearly not enough. We can



Notable absence from the dashboard are any anti-theft device, water or oil temperature indicators.



The 11 Familiale on display in the Citroen showroom in the Champs Elysees. An inside light gives it a ghostly appearance.

say, however, that five large people and three children could be accomodated in the Familiale under acceptable conditions. But they couldn't carry much luggage, because the boot has a very small capacity and is absolutely inadequate for a family car.

Interior heating is very simple, taking hot air from the radiator to warm the driver's feet. Ventilation is assured, by means of four wind-down windows, without deflectors, a flap and an opening windscreen.

Accessories

Apart from a speedometer and an odomeeter, the only instruments are a petrol gauge and an ammeter. Nothing for water and oil. No anti-theft device. The windscreen wipers are well-placed and rapid and the connection between the two blades can be adjusted. One stops in a low position, while the other must be returned by a large rubber handle. The switch for the direction indicators is on the dashboard and controls a bright flasher unit which returns automatically. The tiny interior roof light is turned on with a pull-out switch, while the sidelights are unchanged.

Conclusion

In the much-reduced range of French vehicles, this Familiale is practically without competition, because it offers more than six seats at a very reasonable price. It is therefore in a privileged position, even though aimed at a limited section of the public. But it is clearly showing its age, not so much because of its performance, because that scarcely matters in this class, but in its appearance and its general standard of comfort. It does not seem, on the other hand, to be a good choice as a taxi because of its bulkiness, lack of manoeuvrability and the poor accessibility of its rear seat. It nevertheless fills a gap that no other manufacturer has thought to fill: for a very large modern limousine which is an elegant touring car.

(Original article by Bernard Carat in Auto-Journal, 15 May 1954; reproduced from Almanach du Citroeniste, 1984; translated by Peter Simmenauer.)

Summary of Performance and characteristics:

Dimensions; Wheelbase 227 cm
Track (front) 149 cm
(rear) 147 cm
Ground clearance 18 cm
Length 482 cm
Width 176 cm
Height 158 cm

Maximum speed: 116 kph (108 with 600 kg load)

Acceleration: (best of 3 runs)

4.6 sec to	40 kph
6.6	50
8.6	60
11.6	70
15.6	80
20.4	90
28	100
45	110

(Curiously, when unloaded, the acceleration was slightly superior to that of an 11 Legere, thanks to a lower final drive ratio.)

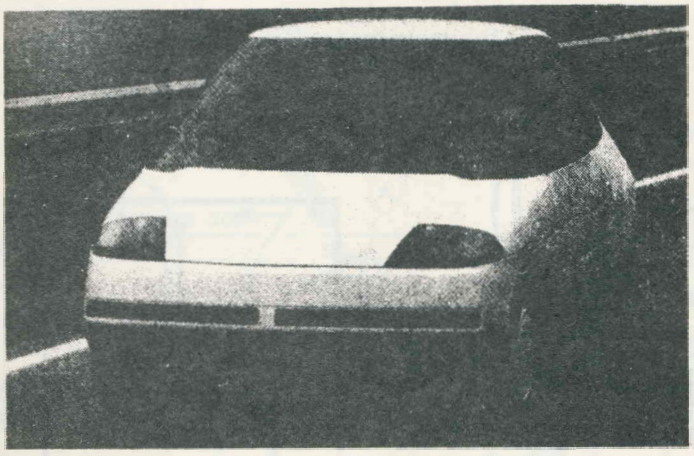
Fuel consumption: (in third gear, at constant speed, on the Montlhery course of 2548.24 metres, for a flying 9 km)

8 litres @	40 kph
8.35	50
8.9	60
9.6	70
10.5	80
11.6	90
13.1	100
15.3	110
17.2	116

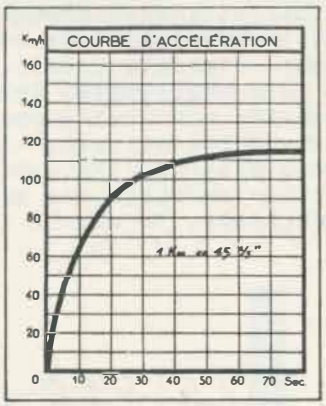
Water-tightness: A special trial involved subjecting the car to artificial rain at 10 kg pressure for two minutes as well as a spray from underneath. Results were satisfactory, although leaks appeared at the ventilator flap and in the boot.

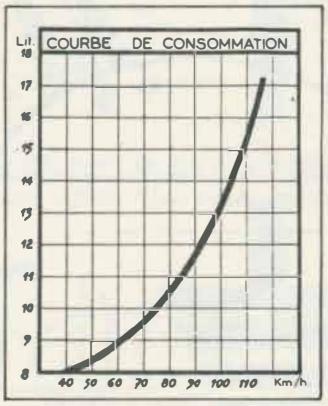
Luggage capacity: A standard set of eight suitcases was used. Only cases 4, 5 and 7, representing a usable volume of 85 cubic decimetres, could be fitted. The luggage capacity is absolutely insufficient and ridiculous for an eight passenger car. Note that the new boot is no improvement, as the spare wheel occupies almost all the extra volume. This goes for the Normale and 15-six as well.

CHEATING THE WIND -Citroën Revitalizes the Panhard?



Citroen's ECO 2000 prototype will be one of the stars of the Birmingham Auto Show. A study of what cars of the future will be like, ECO 2000 had three main priorities: to be aerodynamic, light and have an efficient engine. Three four-seater prototypes have been built; all weigh less than 1060 lb. The most recent prototype—pictured—is only 137.5 in. long, yet has a Cd of 0.21. In this form, ECO 2000 uses a three-cylinder transverse engine with sohc, water cooling and 35 bhp. Top speed is 88 mph, with 0-60 in 18 sec. The official fuel economy cycles average is over 80 mpg [64 US mpg].





VIT. MAX. 116 KM.-H. - CONS. MOY. 11 L. 100 KM.

BRIGHT LIGHTS 1

THE GOOD EARTH

A poor return circuit is probably the most common cause of lighting problems and dim lights in older cars. This aspect of the electrical system is also an occasional cause of problems in newer cars.

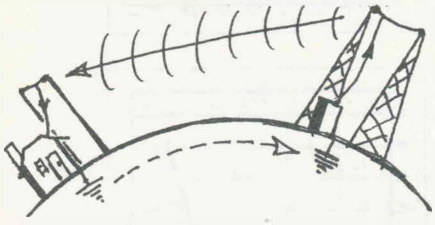
The difficulties arise from using the body panels and general framework of the vehicle as an earth (or ground) return circuit. The principle goes back at least as far as the early days of telegraphy and radio or wireless telegraphy (telegraphie sans fils or la TSF as the French have it). At that time it was appreciated that great savings in expensive wiring could be made by connecting one side of the circuit to the earth itself. In rural areas one often sees electric power going through a single elevated wire on poles - the SWER system (single wire earth return). The earth, because of its huge cross-section and moisture in the soil etc, is a reasonably good conducter (and certainly cheap!). Of course the circuit must make good electrical contact with the earth - e.g. by clamping onto a buried metal water pipe or by using a network of buried wires around the base of a radio mast. The symbol for this earth connection is ⏚ or ⏚ . You will appreciate its stylistic derivation.

The idea of using the earth return then carried over into vehicles (cars, ships, planes etc) for internal or on-board circuits, even though the return was no longer really through the earth as such (extremely difficult with a plane in particular!). Rather it was through the conducting metal body panels and chassis etc. Sometimes in a wiring diagram, the earth return connection as above may be shown, or alternatively, it may be implied with only the outgoing or live/active ("above earth") parts of the circuit being shown. The use of the body as one side of the circuit means that it is easier to develop "short-circuits" - i.e. if the insulation of any active wire chafes through, the wire itself may contact "earth" (the body), and produce troublesome or dangerous side-effects - operational failure, wiring burnout, fire. Care and protection of the wiring from damage, and use of fuses in the circuits minimize these problems.

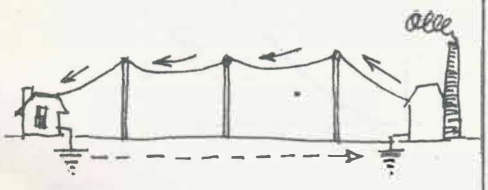
The older vehicles are particularly prone to earth return problems, especially for components such as headlights, tail lights, side lights which are not mounted on the main hull or body work. In these cases, the earth return path can involve many metal-to-metal junctions and at each of those junctions, high resistance to electrical current can be caused by layers of metal oxide (especially rust), dirt or paint. For the headlamps, the components in series could include: bulb base, reflector, headlamp shell, mounting bracket, mudguard, splash-panel, hull, battery earthstrap, battery terminal.

The contact between each of these components can cause trouble. Even exposed items on the main hull may develop earthing problems e.g. traffic-ators. Perhaps your magnificant paint job is the problem - layers of primer, undercoat, enamel - all very good insulators.

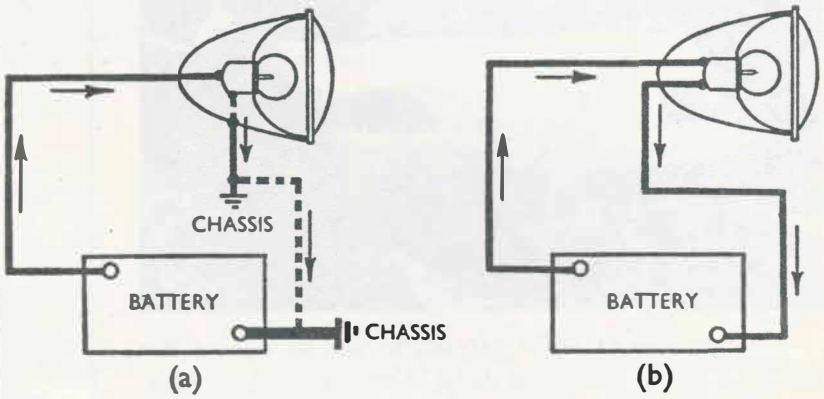
Various answers are available. Scrape off small areas of paint or oxide at the points where the components join up e.g. under essembly bolts, and prevent these surfaces from re-oxidizing by spraying the



Radio transmission with earth return



Electrical transmission with earth return (SWER system)

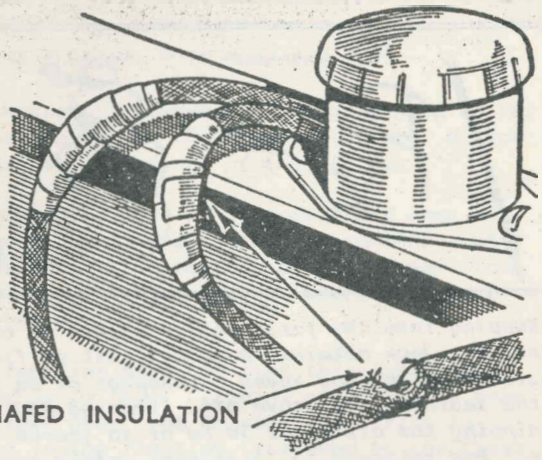


(a) Earth Return System

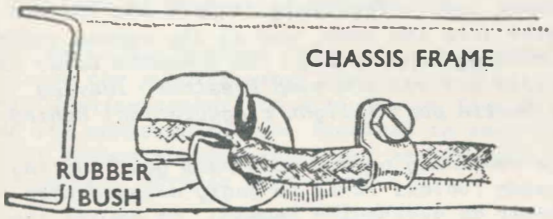
One side of the bulb is connected internally to the lamp body, which in turn is connected to chassis.

(b) Insulated Return System

In this case, the path to and from the bulb is wired, the bulb carrying two contacts.



A typical insulation fault due to chafing against some other part of the car. Insulation tape can be used to repair the defect.

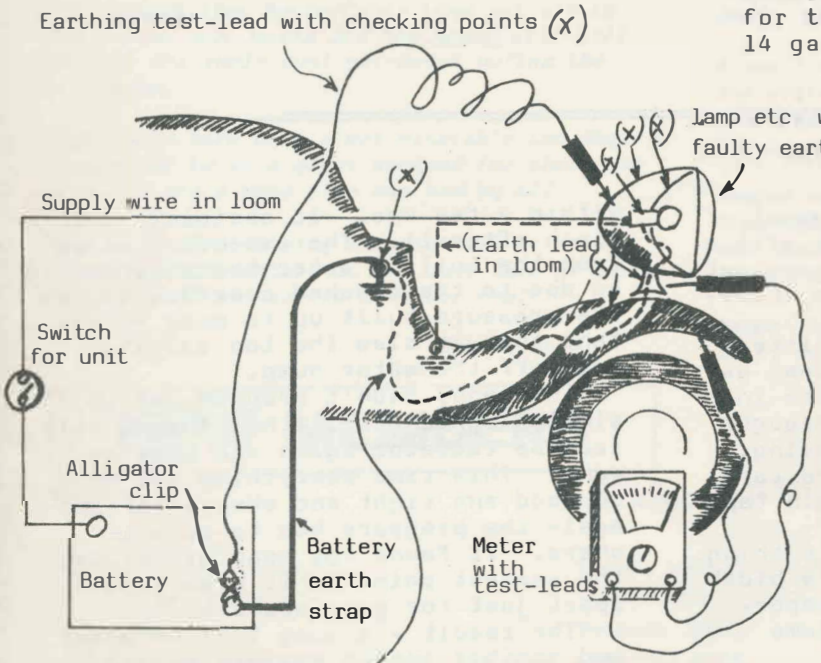


In modern cars chafed insulation is practically abolished by such devices as this rubber bush and the bell-mouthed clip.

area with a water repellant film - RP7, WD40 etc. Sometimes, the contact surfaces may be 'tinned" with solder (gold as in computer electronics may be a bit much on the Traction, 2CV etc!). An ohmmeter (part of your multimeter or possibly in your car tune-up meter) can be used to isolate points of high resistance within the earth return for a given light etc. Alternatively, you can clip a piece of flex to a good earth on the main body and with the light etc switched on, make contact with components in turn along the earth path towards the light etc until full function is restored. You've then isolated the region of high resistance in the path and can proceed to treat it.

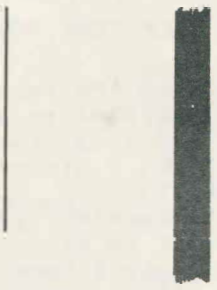
Another and perhaps the best way is to ignore the earth return and put in a separate return wire e.g. attach a return wire by soldering, bolting, etc to the lamp body, bulb holder etc and return it along with the other wires of the wiring loom and earth its other end to the hull or main body, via a spade lug (crimped or soldered), attached to a cleaned attachment point e.g. the mounting bolt of the regulator, earth strap etc. If you are making a new loom, it is worth putting in return wires for these more distant components. Modern cars (including later Tractions) do just that, relying on the body for earth return on the welded hull, but putting in separate return wires back to the hull for distant components. The earth wire should be as heavy as the feed wire for the component e.g. 28/0.3 mm or 14 gauge for head lights.

Bill Graham

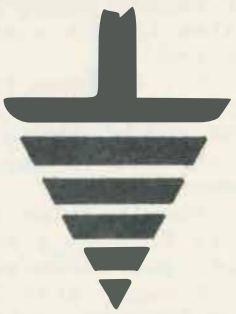


Earth return through the components of the unit and the car body.

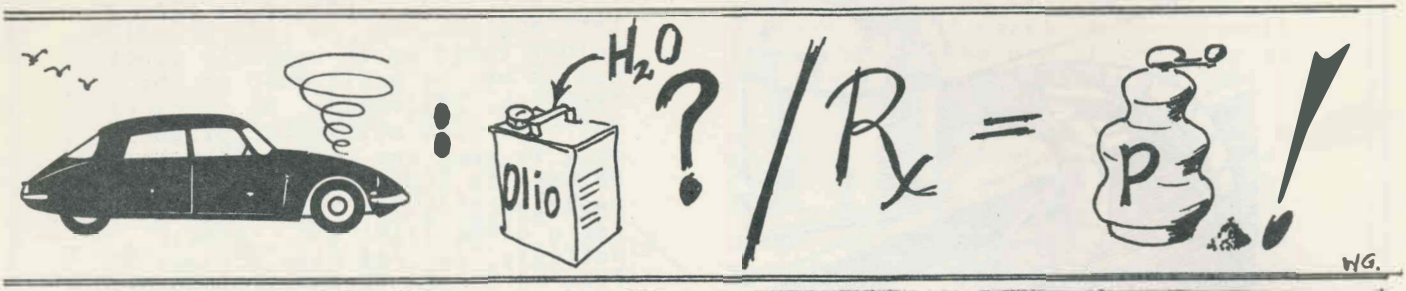
Voltmeter (power to unit on) will detect voltage drops between components in earth return circuit.
Ohmmeter (power off) will detect resistance between components in earth return circuit.



Tracking down an earth return problem.



Some like it hot



The idea of using something hot to fix your cooling system may sound a bit odd if you aren't in the know. But I can remember my dear old Dad doing just that many years ago, as he roamed the countryside in his unintentionally "hotted-up" 1934 Chevrolet truck, seeking land onto which to settle his family. Jack Weaver brought those childhood memories back to me recently when he described his experiences in the Philippines a few years ago.

Jack had a need to travel from Manila round to Baguio in the mountains of Central Luzon, a distance of perhaps 300 km by road. For the purpose, Jack had borrowed an ID 19, almost certainly by then the only one still on the road in the Philippines, and somewhat down at heel. Now before you protest at the improbability of the tale so far, you don't seriously expect Jack to be involved in something as pedestrian as driving a Kingswood down to Rosebud do you?

Anyhow, on checking the sump level before departing, Jack noticed that the oil had a decidedly mayonaise-like look about it- obviously cooling water was leaking through somewhere. Not really the time for a thorough investigation and professional-type fix-up since that would have involved removing the head and possibly the cylinder barrels. What to do?

Hopping into the first native market he came across, Jack obtained a paper twist of fine-ground pepper and added a teaspoon or so into the radiator and drove off. Stopping and re-dipping the oil after 50 km or so showed the oil had returned to its proper colour and consistency. And so, full steam ahead for Baguio (well, not full steam, let's say full speed ahead!).

The answer? The finely ground pepper was carried round by the circulating cooling water, lodging in particular in those small gaps where the cooling water was escaping. The pepper thus effectively stopped the loss of water into the sump, and as the engine reached operating temperature, the unwanted water was boiled off via the sump breather, leaving "l'huille pur" (slight exaggeration) behind.

The remaining pepper won't harm your cooling system (unless it is so badly clogged that it should be overhauled anyway). Of course the pepper won't stop major leaks such as burst hoses, but it may make the difference between getting home and not. Certainly, it should stop or slow down slow leaks and weeps in the system, and of course, it is available anywhere (almost!).

Bill Graham.

HOW TO FILL YOUR SUMP WITH WATER

Following the recent replacement of a dirty radiator in my Traction with a spare while I had the original one out for cleaning I discovered a few interesting facts.

The replacement radiator I fitted was thought to be relatively clean as it would take a hose at full bore in the top filler, emptying out through the bottom hole without overflowing. It wasn't until I had fitted the radiator that I discovered the drain tap leaked.

Not wanting to pull the whole thing apart again I decided simply, to block the end of the overflow pipe temporarily. This was when the problems commenced.

The Traction is fitted as we all know with an extremely efficient water pump and a non-pressure relief radiator cap. What I found out when driving the car to the club's camping week-end was that the radiator boiled within a few kms. It obviously wasn't clean afterall. The expanding steam from the boiling water had no-where to go due to the blocked overflow tap so the pressure built up to such an extent that it blew the top radiator hose off the water pump.

The penny hadn't dropped yet so I simply tightened all the clamps, filled the radiator again and away we went. This time everything was done up good and tight and when it boiled again the pressure had to go somewhere. It found the head gasket was the weakest point so it blew that apart just for good measure.

The result - a sump full of water and another engine extraction and rebuild. The cause - a blocked radiator combined with a blocked overflow tap.

The cure - make sure the radiator is really clean and NEVER block off the radiator overflow pipe.

John Couche.

PAST RALLIES

CAMPING WEEKEND 9/10 November 1985.

The weekend of November 9/10 was scheduled for the second annual CCOCA camp at Frazer National Park on the shores of Lake Eildon.

The preceding week in Melbourne had been wet and even wetter, so it came as something of a surprise that the weekend at Frazer was fine and warm, with blue skies. Sunday afternoon was even hot.

Five families made the trek this year and turned up in three Citroens which is two more than last year. The Couches were first to arrive in the Traction, followed by the Cross family in their CX, the Mckibbins in the newly acquired Dyane 6, the Boyles in "Freddie Fairlane" and the Smiths in the Datsun Utility.

The "up-market award" this year was a runaway victory for the Crosses with their brand new camping refrigerator 12V, 240V or gas-powered! Robin Smith's new hat did not stand a chance in the face of such stiff competition.

Peter Boyle and Matthew Cross were determined to prove the pundits wrong and return from their fishing expedition with enough fish to feed the whole multitude. Needless to say, the bag of lemons which Helen Cross had brought went unused. Perhaps next year?

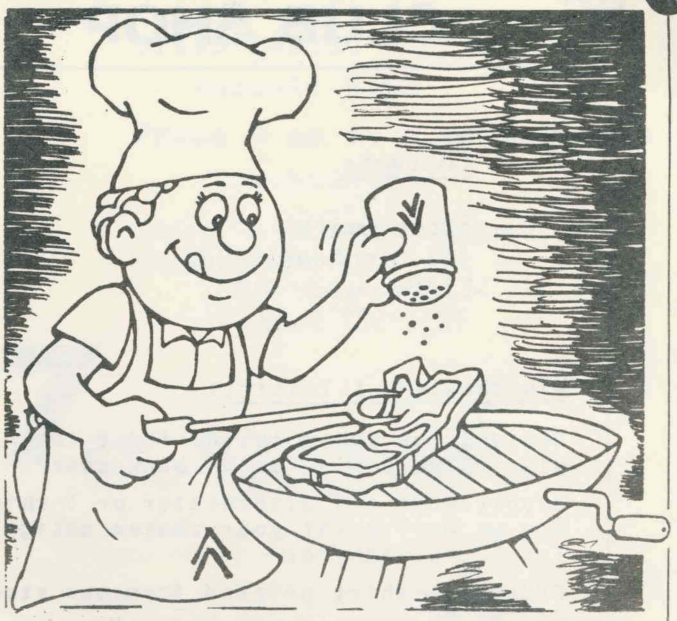
On Sunday morning, we all set off on a bush walk. Robin took his utility to the starting point, loaded with about two dozen kids in the back. Numerous kangaroos and birds were seen along the way, much to the delight of both kids and adults.

After lunch, the Boyle/Cross team set off to drown some more worms and the tents were pulled down for individual get-aways during the afternoon.

What could have been a wet miserable two days turned out to be a great weekend for those who attended and a good time was had by all.

Next year, the camping weekend will be moved to Wilsons Promontory at the same time of year. Reserve that weekend in November now!

John Couche.



BENDIGO SWAP MEETING 16/17 November 1985

The Bendigo Swap Meeting for 1985 was somewhat of a letdown compared with previous years. Citroen bits and pieces were virtually non-existent and were confined to a handful of mechanicals, a Traction grill, and two workshop manuals. CCOCA was well represented as usual, with cars on the stand and a good supply of club shop items to sell.

Although there was a large number of people wandering around on Saturday, no-one seemed to be buying, preferring to just look. Such was the atmosphere that by Sunday morning about one third of the sites had been vacated. By mid-morning on Sunday, the meeting was all but finished, as the weather had turned foul with incredibly cold winds of high strength. Many left - us included.

A small number of CCOCA members attended over the weekend, and a couple of possible new members were persuaded of the merits of joining the club. Those whose cars were on display were:

Andrew Begelhole	*Big 15*
Fred Kidd	*Light 15*
Rex Gercovitch	*Family 9*
John Couche	*Dyane 6*

Maybe 1986 will be the year when that elusive 22 CV Roadster turns up at last!

John Couche.

NEW MEMBERS

WELCOME TO:

Jaques Meffre (France)
C/- Lucien Chabaud
RSD 1275
Chiltern Valley Road
Chiltern 3683.
(057) 261 565.
1953 11B Commerciale & many more!

NEW ADDRESSES:

Dennis Walton
10 Ayr Crt
Berwick 3806.
(03) 707 2152.

Krista Lucas
5 Sidwell Ave
East St. Kilda 3183.
(03) 527 8736.

Lucien Chabaud
(See Jaques Meffre
- opposite).

PHONE NUMBERS:

Kenn Gilbert (059) 623 782.
John Vanechop (02) 519 3239.

CLUB SHOP

Contact:

Robin Smith
411 Glenhuntly Rd.
Elsternwick 3185
(03) 527 5429

Windcheaters & T-shirts

Designs: as shown inside front cover, plus: Club design as on back cover.

Supply your own windcheater or T-shirt and we will print your chosen design for $2.00 each, or

Order a T-shirt printed from our stock for $6.00.

Fiftieth Anniversary T-shirts at $6.50.

PLEASE SPECIFY SIZE, COLOUR AND DESIGN WHEN ORDERING.

Windscreen Stickers

Club Emblem - $1.50

Cloth Badges

Club Emblem in blue on white oval background - $1.75

Lubrication Charts

High quality reprint of original Traction "Oil and Grease" chart - $1.00

Metal Grille Badges

Blue and White - $12. Awaiting new stock

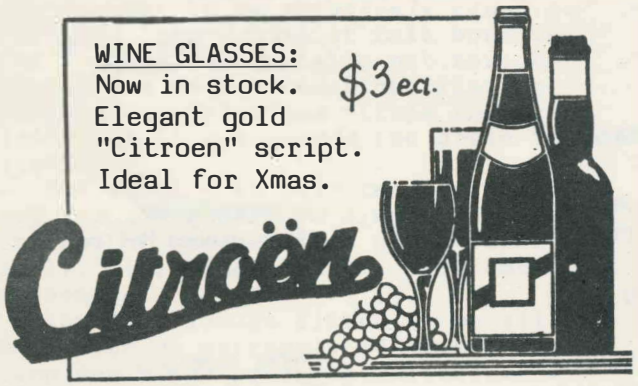
Front Drive Back Issues

Cost $1.00 each, plus postage. If issue requested is out of print, a good quality photocopy will be supplied.

Posters

Full colour Light 15 - $2.50.

ALL PRICES PLUS POSTAGE AND PACKING.



Le Grand Livre de la Traction - all copies sold out.

Readi ng Habits

LIBRARY STATISTICS; OR, USELESS FACTS DEPARTMENT.

The Phantom Statistician has struck the Library Borrowing Records, with the following results:

- Magazines:
  - 79 loans of 11 titles
  - Most popular (in order):
    - Citroenian
    - Floating Power
    - CCC Newsletter (US)
    - Double Chevron
  - Number of regular borrowers: 10
  - Maximum loans to one borrower: 37
  - Longest overdue item and borrower: (censored)
- Books:
  - 68 loans of 30 titles
  - Most popular (in order):
    - 2CV & Derivatives
    - Why Citroen and Citroen (Broad) - equal
    - 6 others - equal.
  - Number of regular borrowers: 12
  - Maximum loans to one borrower: (same one): 11
  - Longest overdues: equal fist: (censored again).

Browsing has not been recorded; this may be a good research project.

Conclusion: Traction book borrowers are more literate; 2CV book borrowers mainly look at pictures (especially in French) but are more enthusiastic; some magazine borrowers have eyestrain.

CLUB LIBRARY

Recent additions to the Club Library include:

Citroenian - back numbers from January 1977

Floating Power - back numbers of volumes 1 - 4.

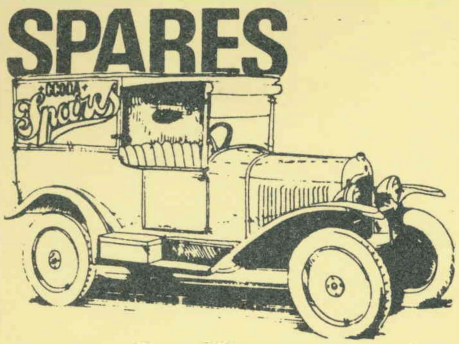
Bil Bladet (Sweden) - back numbers 1976 - 78.

Club Belge des Anciennes Citroen - back numbers of 1976 - 78.

Double Chevron - back numbers 50 - 59.

All available for borrowing, at Club meetings or by mail (borrower pays postal charges both ways) - CONTACT THE LIBRARIAN!

SPARES



SPARE PARTS, contact:
Russell WADE
Phone 9 am to 7 pm No Sundays
(03-5703486)
Order Forms take precedent over phone calls.

HOURS: 9 AM to 7 PM. MON to SAT

HOW THE PARTS SYSTEM WORKS:
Considering that we have had a large influx of new members over the last 2 or 3 years, I will give a few details of how the Parts System works:

1. *Parts Order Forms serve 2 purposes:*
   (a) You can use it to order parts listed in the magazine
   (b) You can order new parts which are not so listed. This gives me a guide as to what people want and how many to order.

2. *Method of payment:*
   You order your parts on an order form or other paper (read the fine print on the order form), and I will send what is available. Several days later, I will send an invoice when I know full package and postage costs. You should send the money to match the invoice (we have only had one bad debt so far!).

3. *Second-hand parts:*
   I can't justify the time needed to chase up second-hand parts, so if you need them, please advertize for them in the Classified Ads in the magazine.

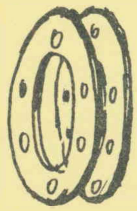
SPARE PARTS: TRACTION CLUTCH FACINGS

Clutch facings or linings are among the stocks of parts for old cars held by:

Automotive Surplus Pty Ltd
(including Vanguard Co.),
34 Thornton Cresent,
Mitcham, 3132.

(03) 873 3566
3966

Ask for Bill McLaughlin.



Facings to suit Tractions are available for $20 incl. tax and fixing rivets thrown in - be sure to take a sample along and also mention that you are a club member.
At the price, its worth putting a set aside. Easy to fit, and about a third of the price of a change-over plate.

Bill has a huge stock of new-old-stock and recent parts. Check him out and help the people who help us.

W.C.

CURRENT PARTS STOCK — *AS AT JANUARY 1986.*

Gasket set, valve regrind set	50.00
Gasket set, complete engine	76.44
Sump gasket set	8.84
Gasket set, VRS 6 cyl	70.00
Liner seals L 15, set	7.50
Carby gasket set, 32PBIC	5.75
32PBIC throttle shafts .5mm OS	20.00
Fuel pump kit AC	9.75
Water pump shaft and bush	18.00
Steering rack rubbers, pair	26.00
Pedal rubbers, each	5.50
Radiator hoses, each	10.50
Fan belts	12.25
Door dovetail blocks, set of 8	6.96
W/screen rubber, alu. frame	9.19
W/screen rubber, steel frame	20.00
Door seal rubber set	22.00
Flat boot rubber seal	13.50
Big boot top seal	11.00
Big boot bottom seal	5.50
Clips for above, set of 8	10.00
Petrol filler grommets, 2 sizes	7.50
~~Scuttle vent rubbers~~	~~20.00~~
Paint protector rubbers, under h/lights, d/handles etc,	25.00
Wiper shaft grommets below screen, pair	*4.00*

Gearbox gaskets,	8.00
Gearbox output shaft seals	8.50
Pinion shaft rear bearings	26.80
Springs, g/change gate	3.50
Woodruff key, f/hub each	1.50
Inner front hub bearing	16.80
Inner front hub seal	6.00
Outer front hub bearing	16.80
Outer front hub seal	6.00
Rear hub seals	6.00
Door lock springs, each	3.00
Bonnet strip clamps, each	1.50
~~Tail lights French big boot~~	~~20.00~~
Lock barrel sets & 2 keys	
French big boot	22.00
French small boot	22.00
Track rod end kits, pair	130.00
Master cyl kits	9.50
Front brake hose French	28.00
Rear brake hose French	22.00
F/R brake hose Slough	28.00
Wheel cyl ¢ 1" rear 4 cyl	40.70
Muffler & tailpipe L 15	95.00
Muffler & tailpipe Big 15	105.00