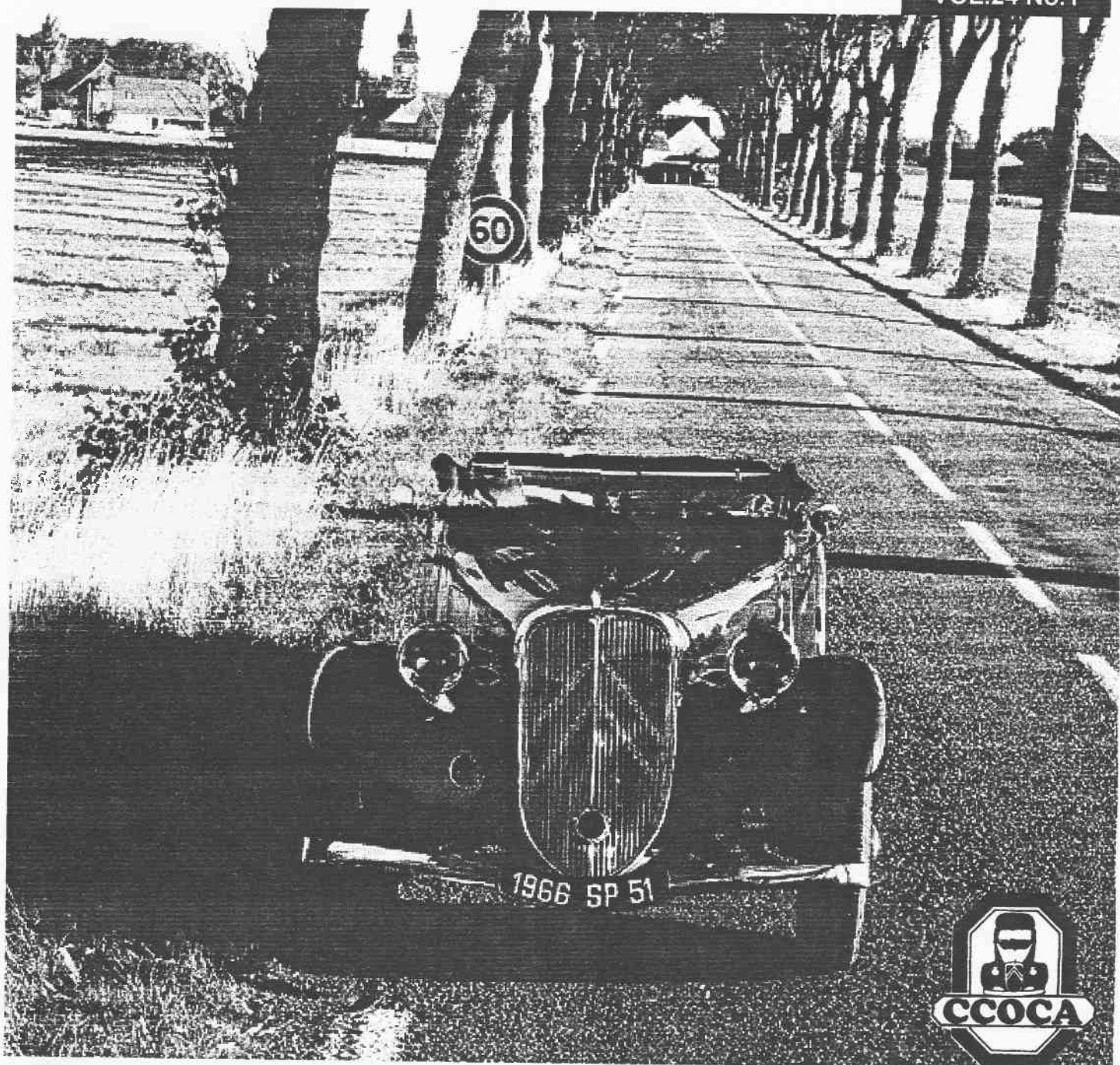


FRONT DRIVE

AUSTRALIA'S NATIONAL MAGAZINE FOR CITROEN OWNERS AND ENTHUSIASTS

APRIL / MAY
VOL.24 No.1



1999/00 CCOCA COMMITTEE

PRESIDENT — Ted Cross

173 Power Street, Hawthorn, 3122.
Phone [03] 9819 2208.
Email crossfam@ozemail.com.au

SECRETARY — Peter Simmenauer

6 Stewart Ave. Blackburn Sth. 3130
Phone (03) 9877 0141
Email pcsimm@melbpc.org.au

TREASURER — Graham Barton

"Lillimur" Lot 1 Tucks Rd. Shoreham
Phone (03) 5989 6027 ah
0418 100992 mobile
Email G.Barton@chisholm.vic.edu.au

SPARE PARTS OFFICER — Mel Carey

10 Omeo Highway, Lucknow.
PO Box 469, Bairnsdale, 3875.
Phone [03] 5152 1040
Mobile 0427 526 126
Fax [03] 5152 2615
E-mail: citroencarey@net-tech.com.au

EDITOR — Leon Sims

2 Tolls Ave. Mentone. 3154
Phone (03) 9583 3972 ah
0412 348848 mobile
Fax (03) 9583 3972
Email simsfam@alphalink.com.au

MEMBERSHIPS — Robin Smith

9 St Aubins Avenue, North Caulfield,
3161.
Phone [03] 9527 5429

ACTIVITIES — Steve Bartlett

24 Bayview St. Williamstown. 3016
Phone (03) 9397 8680
Email saintlywo5@aol.com

PUBLIC OFFICER — John Couche

31 Broadway, Belgrave, Victoria, 3160.
Phone (03) 9754 3583.

CLUB SHOP — Leigh Miles

16 Harrow Street, Blackburn South, 3130.
Phone [03] 9888 7506 [AH]
E-mail: leigh.miles@cussions.com.au
Business_Direct@msn.com.au

LIBRARIAN — Robin Smith

Phone (03) 9527 5429

ADVERTISING — Peter Fitzgerald

(03) 9696 0866 (BH & AH)

STATE ACTIVITY CO-ORDINATORS

VIC: PETER FITZGERALD
[03] 9696 0866 [BH & AH]
ACT: MIKE NEIL
[02] 6241 4556.
WA: STUART PEKIN
[08] 9386 9283.

CLUB PERMIT OFFICERS

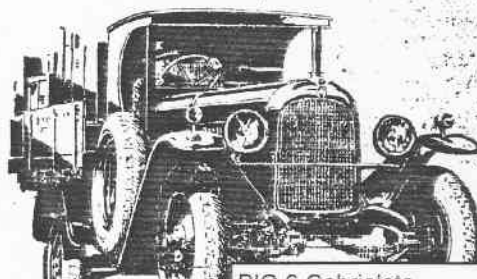
Russell Wade (03) 9570 3486
Peter Boyle (03) 9470 8080
Mel Carey (03) 5152 1040

AOMC REPRESENTATIVES

Ted Cross (03) 9819 2208
Leigh Miles (03) 9888 7506
Russell Wade (03) 9570 3486

FRONT

Citroën Economy in the Transport Field



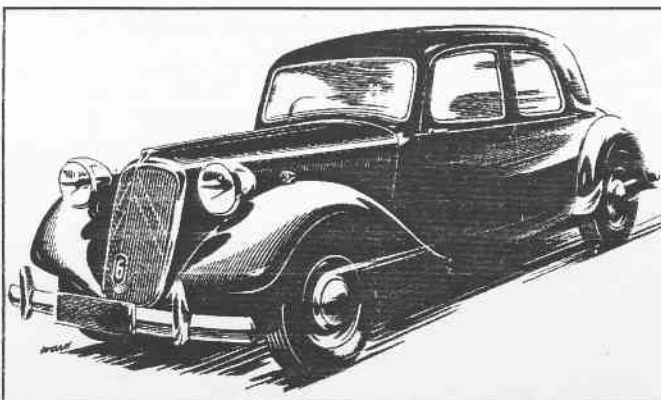
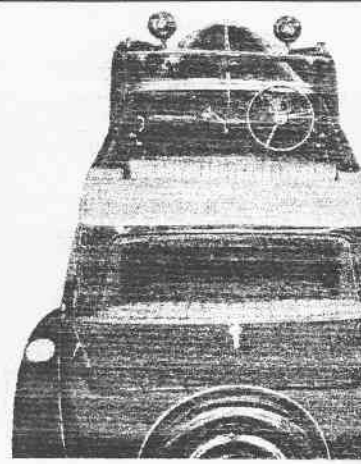
BIG 6 Cabriolets

Fact or Myth.

As much controversy surrounds Big 6 Cabriolets as the Traction 22.

Reports of the number cars manufactured vary. J. Cats in his web site claims that there were five. Page 10

VINTAGE
CITROËN
Page8



In 1950, the first saloon car race at Bathurst was conducted. Peter Damman driving a Citroen Big 6 was the winner of this race in torrential rainfall, giving him an advantage against opposition rear wheel drive cars. Page 11

POSTAL ADDRESS

CITROËN CLASSIC OWNERS CLUB OF AUSTRALIA INC.

The Club's and Front Drive's postal address is

**P.O. Box 52, Deepdene Delivery Centre,
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The Editor's e-mail address is
simsfam@alphalink.com.au

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Melbourne, Victoria, 3000.

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DRIVE

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The Citroën Classic Owners Club of Australia Inc.

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LOST & FOUND, The oldest known 11A Cabriolet is being restored. Page 24



Andre Lefebvre
The man who saved the Traction Avant
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CCOCA MEMBERSHIP

Annual Membership\$30
Overseas Postage Add\$9

CCOCA memberships are due on the 25th of March, each year and run until the following March.

CLUB MEETINGS

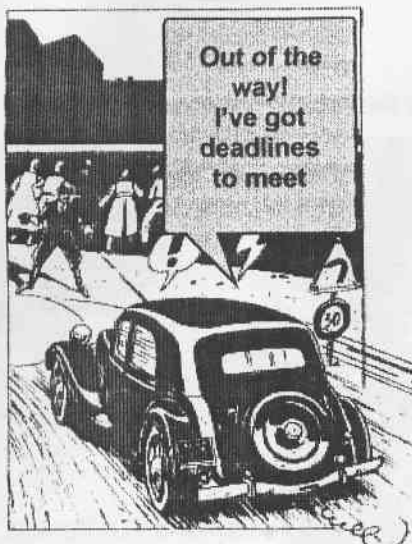
Every fourth Wednesday of the month, except December, at 8pm
Venue:- Canterbury Sports Ground Pavilion,
cnr Chatham and Guildford Roads, Canterbury, Victoria.
Melways Ref 46 F10.

LIFE MEMBERS

NANCE CLARK	1984
JACK WEAVER	1991



EDITORIAL VIEW



**Thank you to our
contributors for
April/May**

**Roger Brundle
Mel Carey
John Hancock
Peter Simmenauer
Robbie Stockfeld
John Reynolds
The Internet**

Surprise, Surprise, this issue of Front Drive comes hot on the heels of the last issue in an attempt to get back on track. I have to admit that producing Front Drive has taken some effort recently when combined with a heavy work and family schedule. Enthusiasm has been renewed due to the unbelievably generous offer from Robbie Stockfeld. She has trusted me with her comprehensive and valuable Citroën collection of cuttings, brochures and road reports of all things Citroën. These date from the pre-war models to current models. I feel privileged to be in possession of this collection. Gratitude must go to Robbie for the opportunity to be able to share many of the articles in this Mag.

Lacking though is local & topical reports from within our own ranks. As a reader (and secondly as editor) I'd like to see more member reports on events and personal Citroën experiences.

For those with an alternative interesting vehicle, I hope to run a feature on "My Other Car Is". So if any members would like to start with the next Front Drive, I will be pleased to run their contribution. Unfortunately there is no report on this year's CITIN as we go to press, maybe next issue!

And while on the subject of the next issue, the committee has decided to run with offset printing in an endeavour to improve on the final printed copy. I currently run a Canon BJC—265 SP which is not quite up to the standard for printing originals.

Can any one arrange for me to have access or loan of a good quality laser printer?

With the June long weekend Austraction almost upon us, I will look forward to featuring the event in the June/July Front Drive. Until then, drive safely and enjoy life.

Regards Leon

MEMBERSHIP RENEWALS

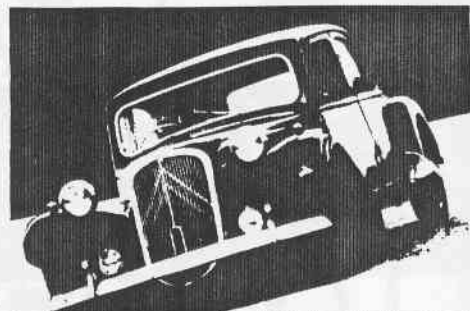
CCOCA is trialling the issue of a plastic format Membership card for members in 2000/2001.

These will be more durable and attractive than cards that have been available in the past, and will be readily recognised for obtaining discounts, etc

However, as they cannot be produced in-house, and minimum batch sizes apply to their production, members who do not renew promptly may have their cards delayed or may miss out altogether for the current year.

Late renewals also increased costs of mailing Front Drive last year. In future, members who renew after the notified deadline date will not be sent copies of issues missed unless they pay CCOCA an extra \$5.00 per issue to cover the extra costs involved.

PREZ SEZ



This month's meeting will be a technical night at a motor car restoration business in Bayswater. This has been kindly arranged through Phillip Rogers and deserves good support from our Melbourne members. Please consider attending and bringing along a club friend or just a friend to ensure a good representation on the night. Further details in the mag.

The Citin in Jindabyne in the snowy mountains was apparently a great venue and trip and we congratulate Joe Schembri, Darren Davis and the NSW club for a great service to Citroenists throughout Australia who attended.

Several CCOCA and CCCV members attended and a report will be provided elsewhere.

I am back playing with my cars as the house projects near completion. Isn't it great that we can always get back to the toys after a break and not even feel as though we need to be retrained.

Alan Brown is organising an event in the Vendee in France in September 2001 and so Helen and I are planning to go to the second best place in the world. It would be great if we could get a group together and travel over for the event - I may even be able to get a discount on the travel costs for us all through a work contact if I'm lucky. Please let me know if you are interested to learn more about it all.

I was reading on the weekend that leaded petrol in Australia will be banned in 2002 which will place us all in a predicament of just what to do about it for our treasures. Please let Leon have any pertinent information that you find about the effects and what is the best solution and if necessary our colleagues in the AOMC may be the best body to organise an opposite view.

However, we will need to be proactive if we are not to be overlooked by the government on this issue. As I understand it there has already been a backlash in the UK and we need to present an alternative view on this topic if necessary. Your committee will represent your views faithfully once we know your joint position. We also wish Kay and Rob Belcourt's young son, Lincoln, who was involved in a nasty pedestrian accident (the hitee sadly) over Easter a speedy and full recovery.

Regards Ted

BACK ROOM NEWS or "Committee Waffle"

Notes from the April Committee meeting.

What goes on behind closed doors? Well the administration matters that keep the club's head above water. All of these matters are discussed over dinner a few wines, red or white that is, not the winge type. Everything is rather positive with the future of the club in mind. It was agreed that we share notes from the committee meetings with the general membership. Who knows, it may entice a few of you to consider joining the committee.

Items discussed at the April committee meeting were:

CCOCA Membership Card design approved.

Purchase of Marquee for use at events discussed.

Objectives for Property Officer and Publicity Officer drafted.

Public Liability Insurance cover to be increased.

More contributions to Front Drive wanted - particularly Members Cars and Past Events. Please help.

Editor to try different printing process to improve magazine quality.

Arrangements for Austraction at Swan Hill in June approved.

Proposals for CCOCA Web site and National newsletter received. further discussion next meeting.

Cheers, Peter Simmenaeur

A CCOCA CURSE

Tyres deflate

Crank handles straight

Chevrons fall off

Carburettor cough

Brakes will fail

(into trees you'll sail)

Doors will have creases

And fall into pieces

Body get rusted

Hub caps get busted

Fur will grow on your eyeballs

And your magazine will be blank....

All for the lack of a mere \$35.00

PLEASE PAY YOUR SUB FOR 2000/2001 NOW!



A-TRACTIONS 2000



CCOCA 2000 EVENTS

MAY

WEDNESDAY 24th — MONTHLY
MEETING—Technical Night

JUNE

JUNE 10/11/12 LONG WEEKEND
AUSTRACTION

WEDNESDAY 28th — MONTHLY MEETING

JULY

SUNDAY 2nd — Garage day over the pits

SATURDAY 15th — Bastille Day Dinner

WEDNESDAY 26th — MONTHLY
MEETING

AUGUST

SUNDAY 13th — Winter Warmer Run

WEDNESDAY 23rd — MONTHLY
MEETING

SEPTEMBER

SUNDAY 3rd — Father's Day Run at
Arthurs Seat Historic Hillclimb

WEDNESDAY 27th — MONTHLY
MEETING

OCTOBER

SUNDAY 8th — Ballooning day in the
Yarra Valley

SUNDAY 22nd — Citroen Concours

WEDNESDAY 25th — MONTHLY
MEETING

NOVEMBER

TUESDAY 7th — Cup Day at ROB ROY

WEDNESDAY 22nd — MONTHLY
MEETING

Christmas Party and club auction



Andre invites you

to use your

Citroen



the CCOCA

email hotline

email EMAIL email EMAIL

Could all members who have access to email please email Ted and Helen Cross with their email address, either work or home or both, so that we can set up a central register.

Members will then be informed of upcoming events and all the news and hot gossip!

crossfam@ozemail.com.au

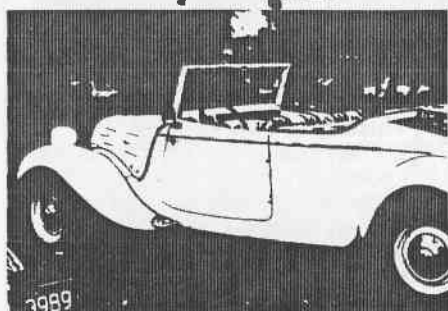
Past Events

Sorry, no reports

MONTHLY MEETING

MAY 24

at 7.00 pm



This May meeting will be held offsite at a renowned Classic Car Restoration business in Bayswater - a Melbourne suburb.

Club member Phillip Rogers has been able to arrange an event through a friend of his, and we will be able to see how one of the experts restores and refurbishes cars.

DATE May 24
TIME 7.00 pm
WHERE Peter Tommasini
Classic Car Restorations
Factory 9 21 Burgess St.
Bayswater Vic

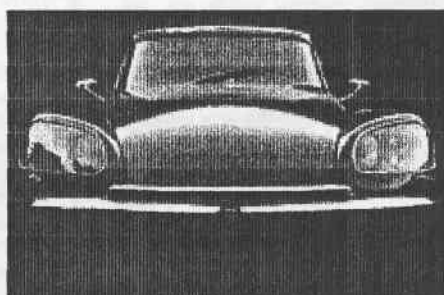
This is a special opportunity for us to get some more technical information and contacts and it is important that we present ourselves well on the night. Please try and come along and hopefully bring along a club friend or interested person to check out the location.

Please let Steve Bartlett on 93978680 or Ted Cross on 98192208 know if you are attending by 22/5 for catering purposes.

BASTILLE DAY DINNER

What a great time
it was last year!
Don't miss it this year!!

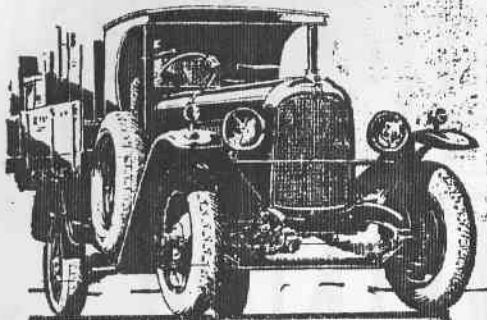
SATURDAY JULY 15



Further details from Steve Bartlett
Phone 03 9397 8680



Citroën Economy in the Transport Field



PETROL & OIL 1^d
ALL Costs 4½^d
PER MILE

To turn each penny to profit is the very essence of business—and in no phase does this apply more than in the transport field. For it is there that strict economy, combined with efficient operation, is the absolute essential—it is there that Citroën Economy has become a deciding factor.

At 1d. per mile for Oil and Petrol costs—at 4½d. per mile for ALL costs, including Petrol, Oil, Tyres, Insurance, Taxes, Depreciation, and Interest on capital outlay—the Citroën One-ton Economy Truck "fills the bill" exactly. Examination of the chassis reveals the thorough construction—the strength of materials—that enable the truck to carry full loads and give 27 miles per gallon under even the roughest of road conditions.

Investigate Citroën and find how much more economical your transport can be.

CITROËN

ONE-TON

ECONOMY TRUCK

PRESTON MOTORS PTY. LTD.

Citroën Truck Division: 508 Elizabeth st. (Cor. Therry st.). F2579.
Citroën Car Division: 114-122 Franklin st. F3621-2-3-4.

This newspaper cutting confirms the visit of an original Sahara Citroën in 1924, a year after the triumphant Raid.

The car was brought to Australia by Preston Motors Pty. Ltd
Australian Motor Manual
October 1954

In Geelong thirty years ago was this Citroën that had crossed the Sahara. Clive Birtles (brother of Francis) is seen in the front of the trailer. In the front seat is Major Curtis, now chief of Preston Motors. The vehicle was tested at Anglesea before the Great Ocean Road was completed.

Raid Citroën TRAVERSEE du SAHARA

Starting out from Touggourt (Algeria), Georges-Marie Haardt, Louis Audoin-Dubreuil and a team of 10 people, including several army officers and a geographer, made it to Timbuktu (Sudan) in 20 days.



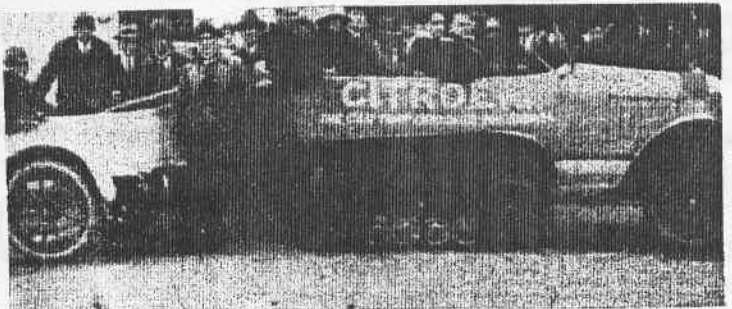
But what was it exactly that made these men set out to conquer a region considered to be one of the world's most inhospitable? It was quite simply a great idea. After World War I, the plan for a safe and quick link between mainland France and Equatorial Africa appealed to colonial settlers and industrialists alike, and met with a favourable reception in military and scientific circles. A great idea which the car at long last was to make possible. Trusting his equipment, André Citroën was convinced that the link could be made within 20 days, and history was to prove him right. With 5 Citroën Kégresse tracked vehicles, members of the "Haardt-Audouin" mission completed the first direct link

between Algeria and French West Africa. With much pomp and ceremony, the first trans-saharan mail delivered by car was handed to Colonel Mangeot, commander of the region of Timbuktu, on January 7, 1923.

A desert fire!

When crossing into the Sudan, just before Tabankor, an incident occurred that was so strange as to leave its mark on all members of the Haardt and Audoin expedition. Seeing that the last two cars in the convoy were having problems keeping up, a rocket was fired to signal the position of the leading half-tracks. Amazingly, when the flare fell to ground, it started a fire in a patch of parched grass. No-one was able to put it out. The fire spread, forcing the drivers to move on to avoid being trapped by the flames. The savannah turned red, starting a stampede of animals that until then had been invisible. The five vehicles came through unscathed and continued on their triumphant drive to Timbuktu. that each of the 5 vehicles in the expedition had a name? "Golden Beetle", "Silver Crescent", "Flying Tortoise", "Ox of Apis" and "Crawling Caterpillar"... great explorers also have great imagination. ... how they came up with the idea of caterpillar tracks used for the expedition's cars?

From January 1921 onward, the Citroën plants were producing a new type of vehicle equipped with endless rubber treads allowing them to drive off-road over a various forms of terrain. This brilliant invention was the brainchild of a talented engineer called Adolphe Kégresse. During a demonstration in the presence of André Citroën, the marque's founding father was taken by the idea of producing vehicles capable of moving over unstable terrain and of doing 40 to 45 kph on roads; he instantly realized the full importance of the invention. We all know how far tracked vehicles have come since.



La CROISIÈRE NOIRE

In crossing the Sahara two years earlier, Haardt and Audoin had clearly proved that the car was indeed the ideal means of locomotion for linking North Africa to West Africa. Others had already set their sights further. So it occurred that one day, French President Gaston Doumergue mentioned to André Citroën and Georges-Marie Haardt the advantages of a regular link between the African colonies and Madagascar, a French territory isolated in the Indian ocean.



A few words off the record during a conversation were the beginning of the "Black Cruise", an expedition that was to demand more than a year of preparation, stir up unheard of enthusiasm amongst both the public at large and scientific, artistic and business circles, and lead to 8 half-tracks, fitted with the Kégresse propulsion device of rubber tread, covering more than 28,000 km across Africa, starting from Colomb-Bechar.

This is how Georges-Marie Haardt and his team crossed Algeria, the Niger, Chad, Oubangui-Chari and the Belgian Congo. In Kampala, their column split into four groups and reached the Indian ocean and Tananarive, each taking a different route (Mombasa, Dar-es-Salam, Mozambique and the Cape). They were given a rapturous welcome wherever they went.

Citroën expeditions: you would never imagine what Citroën can do to shorten distances between people.

Visiting the Harem of Moussa

On their way, the members of the expedition made many a colourful encounter, none more so than that with the sultan of Maradi in Fulani country. "Serki" Moussa - that was his name - pulled up in front of the half-tracks escorted by his janissaries and musicians. Moussa had wed four, or maybe five (he wasn't too sure himself) of the 67 daughters of Barmou, the sultan of Tessaoua. The old Barmou was famous throughout the region, because he kept a harem of 100 women. Léon Poirier, the group's film-maker, was already imagining the fabulous movie he could shoot inside the "inner sanctum". The problem was persuading Moussa to let him inside. Finaud, a sultan who understood what Léon Poirier was getting at, proposed a deal: he had a brand new car that someone had given him, but it wouldn't start. If Poirier could repair it, he could visit the women's quarters. The expedition's technicians closely examined the engine, thought for a moment then turned the starting handle. The car started. Discreetly, they explained that it was merely a matter of turning the ignition key. ... that the Citroën vehicles on the Black Cruise also had their names? "Golden Beetle", "Tower Elephant", "Moving Sunshine", "Winged Snail", "Silver Crescent", "Dove" (aptly named, carrying the first aid kit and food supplies), "Centaurus" and "Pegasus". Wings would indeed have come in handy to reach the other end of Africa.

... that a track of some 700 km was opened in the Belgian Congo to allow the expedition to pass more easily?

Taking advantage of the Haardt mission passing through their territory, the Belgian administrators pressed the local population, that had gathered from every corner of the equatorial forest, into clearing a track between the tangled creepers and tree-trunks. Forty thousand natives took part in this mammoth task. What made them do it? Quite simply, the Belgian authorities spread the rumour whereby envoys of "Boula-Matari" (the nick-name given earlier to British explorer Stanley) were due to arrive. For these people, Stanley was considered to be nothing less than a prophet, coming to announce a new age. No wonder they went about the job with such enthusiasm.



until
March 7th

—The Last
5 Days



insurance
and
registration
for 12 months

THERE are but 5 days left in which to take advantage of our offer — FREE INSURANCE and REGISTRATION FOR 12 MONTHS. Therefore, during those 5 days—before March 7—investigate Citroën, and you will realise the Real Honest Value that is to be obtained for a bare £50 deposit.

Citroën is fully equipped, ready for immediate delivery — Citroën's total running costs are but 1½d. a mile.

7/11 Model (fully equipped) . . £215
£50 Deposit.

11/22 Model (fully equipped) . . £275
£80 Deposit.

CITROËN

"You see them everywhere."

PRESTON MOTORS Pty. Ltd.

114-122 FRANKLIN STREET,
MELBOURNE.

Phone F 3921.

Open till 10 p.m. Fridays.

Post the
Coupon
Now.

Please send me
full particulars and
literature of CITROËN

Name.....

Address.....

M.A. 27

NOTHING IS NEW

This pre-war advertisement, again from the very progressive Preston Motors in Franklin Street, Melbourne is promoting the sales of new Citroëns with the incentive of free registration & insurance, a ploy recently used to sell Japanese and Korean cars.

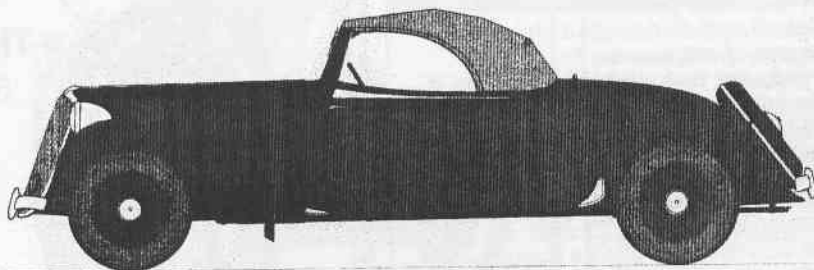
Exchange
your present car
for a new

CITROËN

The 11/4 Four-Seater Citroën. List Price £190.



Citroen Traction Avant 15 Cabriolet



Citroen Traction Avant 15 Cabriolet Information from the Web Site of J.Cats

Apart from the mysterious 22, there is another Traction Avant that has kept people busy until this day. This is the 15 Six Cabriolet. Although Citroen build 7 and 11 Cabriolets up to the war, the 15 Six Cabriolet was never officially available.

Only 5 Cabriolet bodies have ever been build.

Here is a list of these bodies and their know history:

Date of build	1st Owner	Body No.	Serial No.	Engine No.
March 20 1939	Michelin	EE0016	680959	PD195
1946	Industrial Executive	E1131	Unknown	Unknown
Apr-46	Robert Puiseux	E1168	682487	PE568
Unknown	Unknown	E1359	Unknown	Unknown
Unknown	Unknown	E1368	Unknown	Unknown

The Michelin car is very probably the car that at one time resided in the USA and is currently owned by a Dutch Traction enthusiast.

One car is currently owned by the French collector Denys Joannon. He bought the car following an advertisement in L'Auto Journal on February 3 1966.

The last 2 bodies were said to have been used for the presidential cars. These were rolling shells and only both front axles and one rear axle were used for the presidential Tractions, the bodies themselves being 15 Six familiales.

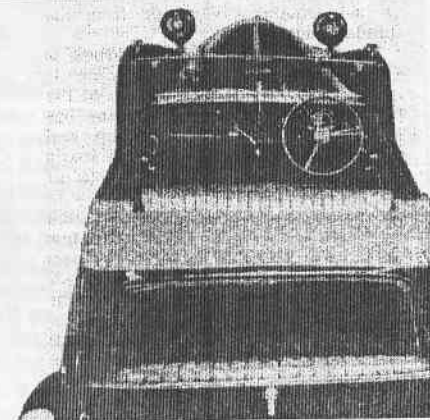
A lot of 15 Six cabriolets have been created over the years, using a 11B Cabriolet body fitted with a 15 Six nose and mechanicals. French restorer Mersch build a number of 15 Six Cabriolets using genuine pre war 15 Six Berlines, some of which were from the first series of 90 cars with aluminum front wings and bonnet.

A number of 15 Six Coupes were built by the same man as well.



CITROEN 15 Cabriolet 1939

From the pages of Le Double Chevron No. 59 1980



Unlike the four-cylinder cars, the 15 was catalogued exclusively in saloon and family versions, and only two convertibles were built (one for the Michelin family, and one for the Countess de Fortes). 2 more were also made in 1946 and 1947 from specially built shells recovered by a Paris concessionaire from the Citroen Javel factory. The only outside feature distinguishing it from the 11 CV convertible was its longer bonnet.

TECHNICAL DATA: 15 CV Cabriolet 1939.

ENGINE: 6 in-line cylinders; bore 3.071", stroke 3.937", swept volume 174.96 cubic inches. Torque 141 pound feet at 1500 rpm. French Treasury rating 16 CV. Effective horsepower 75 HP at 3800 rpm. 4-bearing crankshaft with damper. Overhead valves driven by stem tappets and rocker arms. Cast steel cylinder head. Castle steel removable wet lining. Water cooling. Battery, coil and contact breaker ignition. Fuel feed by a single Solex 30 FFIAP carburettor. Pressure lubrication by means of a gear-pump. 15 1/2 gallon petrol tank. TRANSMISSION: single-plate dry clutch. Gearbox with 3 forward speeds + reverse. Gear lever on dashboard. STEERING: rack and pinion, three-spoke wheel.

BRAKING: four-wheel hydraulic drum brakes.

SUSPENSION: at front, longitudinal torsion bars controlled by the lower arms; at rear, transversal torsion bars. Four single-acting telescopic shock-absorbers.

TYRES: Michelin Pilote 185 x 400.

BODY: 3-seater, 2-door convertible with upholstered dickey.

DIMENSIONS: overall length 15' 7 1/2".

Overall width 5' 10 1/2".

Wheelbase 10' 1 1/2".

Front and rear tracks: 4' 10 3/4".

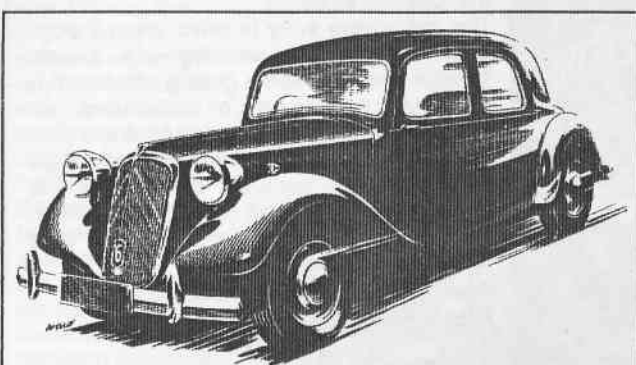
PERFORMANCE FIGURES: maximum speed 84 miles per hour. Consumption, about 21.7 miles per gallon.

FIRST TOURING CAR BATHURST

The Wettest Bathurst Ever

Australian Motor Sports magazine printed a report of racing at the Bathurst meeting conducted by the Australian Sporting Car Club in 1950. The following is the description of the saloon car race in which Peter Damman driving a Citroen Big 6 was victorious in atrociously wet conditions. An obvious advantage to the powerful front drive vehicle. Peter Damman was a familiar sight in the Citroen at many motor racing venues, especially Ballarat near his home and the hill climbs of Rob Roy, Templestowe and Tarrengower

The Closed Car Handicap (all powers—6 laps, about 25 miles).



ANOTHER WIN TO CITROEN FRONT-WHEEL DRIVE!

On 3/10 at Bathurst, P. Damman, driving a Citroen 23-6, only private entry, won the 25 miles Closed Car Race. In torrential rain, off 1 min. 30 sec. from five scratch cars of a famous sporting name, Front-wheel Drive showed its superior speed when cornering by early lapping the field, and went on to win without effort. The circuit was closed later as too dangerous. Citroen Front-wheel Drive demonstrates again its ability to hold the road and handle under perfect control at all speeds under any conditions. Ring FJ 5136—test it out for yourself!

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First away was Maurie Rolls in the little blue 760 Renault, hanging on to second gear until he was well up the mountain straight in an attempt to clear an intermittent miss in his motor. He was followed after a minute by Meyer in the Halifax Motors Skoda, then after another 30 seconds by Nat Buchanan and Clive Cadden in Y-type M.G. saloons, John Plumber in the Simca 12, and John Crouch in Harden and Johnston's Peugeot 203. One minute more and Geoghegan was under way in the Jowett Javelin, thirty seconds to Barry Taylor driving the Conoulty A70 Austin, then another half minute to Damman (Citroen), who had a minute start on Joe Murray driving the Hastings Deering Ford Pilot. After a further half minute, the Rileys entered by Peter Lloyd Ltd., and driven by Bill Shipway and Arthur Rizzo, were away, and the race was in full swing. Rolls still led on the first lap, but the Skoda was being rapidly overhauled by the Peugeot and Simca, which had passed and repassed one another going up and down the hill; they were leaving the Y-type M.G.'s behind already, and the Citroen was still just as far ahead of its opposition. The Ford Pilot's fan could be heard screaming all over the course as Joe Murray

changed down for the corners.

On the second lap, John Crouch was in the lead with the Peugeot as the cars came round the pit corner, with Plumber's Simca not far behind; lap speeds were noticeably slowed by the wet, the Peugeot lapping in 4.28 where it had done 4.15 'in practice.

The only driver apparently not affected was Damman, who was closer to the leaders than he had any right to be, and had put in his first flying lap in 3.56.

So they went for two more laps, the Peugeot and Simca leading alternately, the Citroen forging through remorselessly, the Renault holding its own magnificently, and the other cars making very little impression on their handicaps.

With two laps to go, the Citroen was in sight of the two leaders, to catch and pass them on the way up the mountain; then, on the way down. Peter Damman tried his rubber too far and slid broadside on, stalled across the track, in the path of the on-coming Peugeot.

By a miracle, he managed to start his motor and snatch reverse just in time to get out of the way, and the Peugeot and Simca shot through while he was sorting things out.

He passed them again just before the pit corner, and from then on proceeded to put as much daylight between his car and its followers as possible, to win by about half a mile from John Crouch in the Peugeot, the Plumber Simca a close third.

In the meantime, Maurie Rolls had been providing comic relief by passing the ailing Austin A70 twice in two laps on the mountain straight, a feat which earned him resounding applause; Geoghegan dived manfully in the Javelin, and Joe Murray kept his distance from the Rileys, whose gear ratios seemed unsuited to the course.

And so finished the first saloon car race to be held at Bathurst, a completely successful experiment and one most interesting from the public's point of view. The fact that Continental utility cars came home first, second and third points a moral that motoring journalists have been hammering for the last decade or so.

CLOSED CAR HANDICAP	Race
time	
P. DAMMAN (Vic.), Citroen	27-33
HARDEN & JOHNSTON LTD. (N.S.W., Peugeot (Driver, John F. Crouch)	28-21
J. PLUMBER (N.S.W.), Simca	28-30
T. GEOGHEGAN (N.S.W.), Jowett Javelin	28-53
N. BUCHANAN (N.S.W.), M.G. Y-type	29-50
HASTINGS DEERING LTD. (N.S.W.), Ford Pilot (Driver, J. E. Murray)	29-50
PETER LLOYD LTD. (N.S.W.), Riley 2-litre	29-58
Fastest lap, P. Damman	3-55 (59.5 m.p.h.)
Fastest time, P. Damman	24-30 (57 m.p.h.)



a woman's opinion of the 2CV in 1954

By June Dally-Watkins



After my first surprise at this car's looks I had another that was harder to laugh off—it rode better over a strip of rippled bitumen road than a £2,500 luxury car I drove a little later. I thought the 2 c.v. stark, but adequate if it sold in a much lower price range. I feel that at its present price, £796, it is outclassed in looks, finish, and performance by several cheaper small cars. (Buckle Motors told me that half the cost of the car is shipping, duty and tax.)

You do get a lot for your money; heater, sunshine roof and plenty of space, but apart from the economy none are up to accepted small car standards.

The slam-type window locks and door locks which do not have safety catches are two things that must be criticised. I found the windows awkward to open, and I felt that children would be a worry with doors that opened so easily.

The car is very easy to drive, even though gear shifting and steering are a little strange and take some getting used to. It is particularly easy to park or manoeuvre.

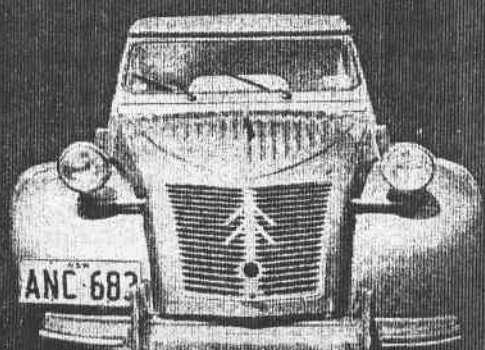
I do believe there is a market for the 2 c.v., for if women need anything in these days of out-of-town suburbs and hard-to-get transport, it is a small cheap, reliable car. Such a unit would not be a strain on their husband's pocket either.

From *WHEELS* magazine December 1954
Robbie Stockfeld archives

WHEELS

ROAD TEST and ANALYSIS of the

CITROEN 2c.v.



CALLED by overseas motoring magazines the "most original design since the Model T Ford" the Citroën 2 c.v. recalls the advertising catch cry of the old British Trojan car:—"Can you afford to walk?"

The little front-wheel drive Citroën was designed solely to replace horse transport on the winding, bumpy lanes and tracks across the fields in France's rural areas. It had to be foolproof in the hands of farmers who had never driven a car in their lives, and it had to be

robust. It had to be economical and at least as reliable as the horse it replaced. The 2CV's design was started shortly before the war and was almost finished at the time of the German invasion. The Citroën company then altered their plans and designed a body that could be made with a minimum of pressings in case their presses were taken over by the Germans. When the first cars came on the road after the war they were regarded as a joke and became a standing witticism in sophisticated French revues.

The exterior does warrant this unkind humour. It is rough and slab-sided while the washboard corrugated bonnet gives it a hand-dog air, increased by the car's nose-down attitude.

But the public's response was no joke. The farmer's basic transport, priced at £432, was rushed.

Currently, 200 of these small cars are sold a day, yet there is still a 12 month delivery. Furthermore the Citroën 2 c.v. is the only locally-made car which sells secondhand in France at more than list.

For it did replace the horse; it proved more economical, comfortable, and carried more. It climbed steep hills and went faster than the makers anticipated—fast enough in fact for the 2CV to become a low priced touring car.

Under test the suspension swallowed every bump; the car bounded gently over the most shocking roads.

On top of that we got 64 m.p.g. on hard driving where most cars give 25 m.p.g. or less.

The 2 c.v. has a road-tested top speed of only 41 m.p.h. and valve bounce occurs in top at 60 m.p.h.

At the same time it does not climb strongly, even alight highway grades pulling off speed from around 40 m.p.h. to 20/25 m.p.h.

Yet there is no trouble keeping up with average highway traffic—if the accelerator is kept flat on the floor. The cars that

flash past on the ups are gradually pulled in on the downs and repassed. Flat out is the most economical way to drive the car. When it was driven moderately fuel consumption fell to 62 m.p.g. because of excessive accelerator movements.

Mechanically the 2CV is a tour de force of simplified motor car design. The instruction book recommends that "oil levels be occasionally checked," and warns against the use of high-octane petrols. These do not enhance performance, but foul the engine's cylinder heads and valves with lead deposits. The engine, a two-cylinder air-cooled unit, has inclined valves. There is no normal distributor, but a make-and-break mechanism fitted to the crankshaft, the plugs being fired on both the power and exhaust strokes. An oil-cooler is fitted as standard. With only 375 c.c., the engine has the smallest capacity of any car on the road today and, as the maximum output is only 9 b.h.p. at 3,800 r.p.m., has the least power. Nevertheless this is adequate for the car. The only worry are steep hills, these being all right providing the driver is content with 5/10 m.p.h. As one driver said of them, "You have plenty of time to light your pipe". The suspension is extremely simple. It consists of two leading arms for the front wheels, and two trailing arms for the rear. The arms are connected on each side by two coil springs working in compression. When the car hits a bump the front arms rise, compress these springs, giving them sufficient tension for the rear wheels to absorb the bump without extreme deflection. Each arm has a friction damper, and each wheel an inertia damper. The friction dampers can be adjusted, but the inertia dampers, which consist of a weight suspended between two small springs, cannot.

One is attached to each wheel, its duty being to stop wheel patter. The long suspension arms allow, considerable wheel deflection. The car has at times a fair amount of roll. This is not excessive, but the inside sometimes approaches the angles reached in a large, softly-sprung car when it is cornered hard.

The suspension is more than a match for the worst road surface but can be unsettled when there are a succession of pressure ripples on a section of good bitumen road. This causes a rocking chair motion similar to a cantering horse.

Dust sealing is good. The 2 c.v. is very

roomy inside and has plenty of room for four large people. The seats are slung hammock-style between tubular side frames and are particularly comfortable. The driving position is good and apart from the handbrake, which is mounted out of the way under the fascia, all controls are easy to reach. Long-legged drivers have not got enough legroom.

Forward visibility is excellent, and the windscreen pillar is thin and hardly cuts down vision at all.

The gear shift lever is fascia mounted and has a non-standard gate. To select 1st, the lever is pulled through neutral and twisted to the left while reverse is forward from this position; 2nd is backthrough neutral and forward; 3rd right back; while top is selected by twisting the lever to the right and pushing it forward again. When

It was found that the high beam could be raised sufficiently for good vision with two people in the front. Since passengers in the back would raise the nose, the high beam could be satisfactorily lowered. The high beam is adequate for the car's top speed, and the dipped beam is the best tested on a Continental car. It has a long, wide fan-shaped spread and lights the left-hand side of the road. It gives good visibility to 40/50 m.p.h.

The car's tool kit is adequate for most work and has high-grade spanners in place of the pressed steel ones common in most tool kits today. The kit should be supplemented if major work is undertaken.

The car jacks from the side and as the wheels are about the smallest and lightest on any car today changing should not

worry anyone. A good wheel changing accessory is a wooden chock which holds the car when jacking on a hill. The car's instrumentation is sparse. There is only a small centrally mounted speedometer and an ammeter mounted on the fascia in front of the steering wheel. An interior light on the top of the windscreen frame illuminates the speedometer

with a thin torch like beam. This lighting is not satisfactory.

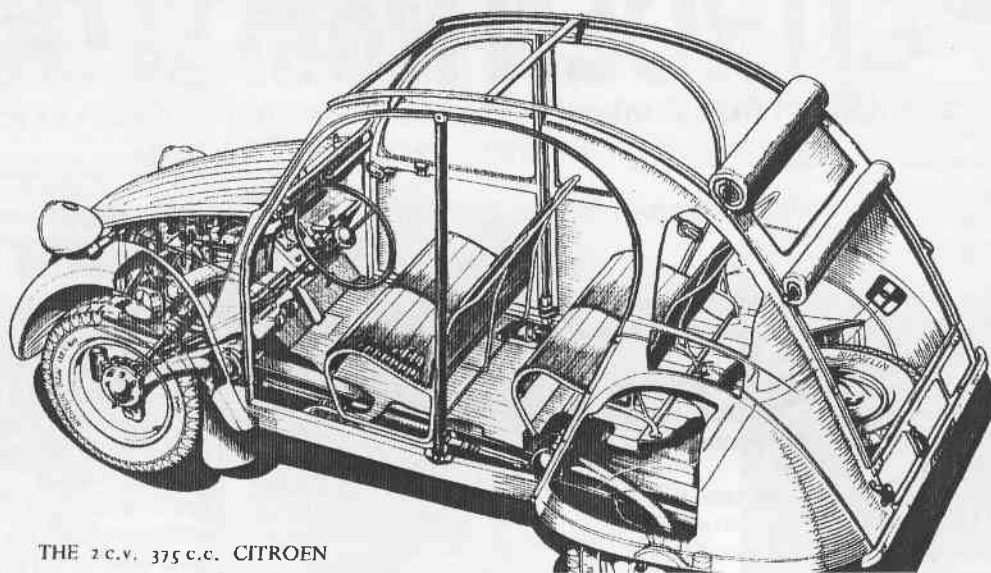
Surprising accessories on an economy car are self-cancelling, pneumatically-operated trafficators and a front seat heater which draws hot air from shrouds around the engine cylinders. There is a full width scuttle ventilator. The windscreen wipers are driven by the speedometer cable and speed up with an increase in the car's speed. The windscreen wipers can also be worked by hand.

All told the Citroen 2 c.v. is a car that will go a long way for a very moderate petrol cost, and, regardless of the plain interior and exterior, give its occupants a good degree of comfort.

The test car covered 200 miles for a cost of 10/6. On the way it drew the question, "was it one of the special Citroens made for the desert sections in the big Redex trial?"

Maybe not, but it has sufficient readability to keep going when other cars are hopelessly flummoxed.

*Report from WHEELS magazine
December 1954
Robbie Stockfeld archives*



THE 2 c.v. 375 c.c. CITROEN

reverse has been selected the shift can only be returned to neutral by going through 1st; and when top has been selected the shift must go through 3rd for neutral. The manufacturer's shift points 1st, 10 mph., 2nd, 22 mph., 3rd, 38 mph.—are recommended for normal driving. These speeds can be sustained on the gears without overstressing the engine.

All forward speeds are synchromeshed. The car's only vice is steering wheel snatch when turning tight, slow corners. This is because the front wheel drive does not have constant-velocity universals. The snatch can be overcome to some extent by slipping the clutch but is still noticeable.

The brakes are light and powerful. They faded only slightly (10 per cent.) on a long arduous descent and stopped the car from 30 m.p.h. in a creditable 28 ft.

The handbrake is connected to the in-board mounted front drums and is the most effective so far tested. It stopped the car easily from 30 m.p.h. in 43 ft.

Since the car's front drops considerably with a full passenger load the headlamps' angles can be controlled from inside to correct the range setting.





CITROEN from SLOUGH

The first shipment from England of the Slough factory's version of the Goddess is well on the way—destination Australia

From Australian Motor Manual—November 15., 1956

Robbie Stockfeld archives

Date of arrival of the first of these right-hand drive production models of the D.S. 19 was "soon" at the time of writing.

By the time of reading, this hoped for actual appearance may well have been realised. In the meantime, other hopes can be forgotten—temporarily at least.

The shipment comprises only two cars, and at least one of these must remain a demonstration model. Assuming that the other is available for sale you'll need to be very, very lucky and very much a VIP to have your name even put in the hat for selection. Your chance then is, of course, "possible," if not very probable. Point number two, despite hopeful reports to the effect of a slightly more spartan Goddess at a greatly reduced price, enquiries produced the sad, hard fact that there is no information on this point from the factory for the Australian would-be buyer. Rumour suggests that when supply meets demand, then the Slough factory may add a simplified version to the Citroen range. At present, with the DS19 at an English price of some £1800 Sterling, the cost here must be as previously estimated, £2500 to £2750 Australian.

And now, having explained the facts and thoroughly confused many hopes, here's what to expect in the English versions of the car.

DISPLAY REPLICA

It is surely as safe as Citroen's own front wheel drive to say that the greater majority of the men, women and children who came to see the French model when it was on display,

were conquered by at least several of the outstanding features, if not by their sum total as displayed so elegantly at the motor shows.

The English DS19's should be no disappointment. With the exception of right hand drive which is a necessity, and leather interior trim which is an improvement, they are in effect actual replicas of their French sister. Whether amendments will be made to the use of plastics in the present positions and

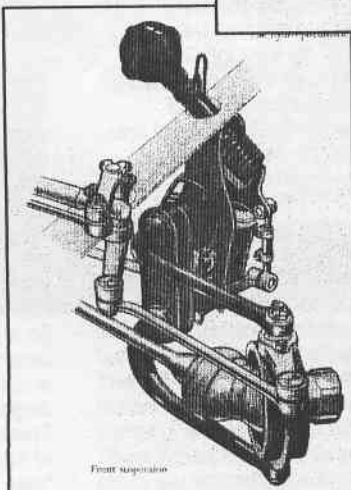
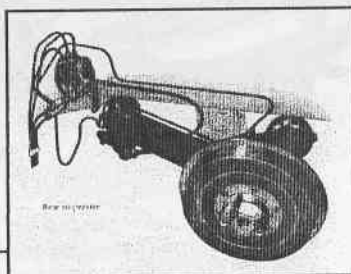
strengths remains to be seen.

One point is no mechanical secret: design of the massive punt-like chassis which carries a comparatively light body structure, would certainly allow other types of bodies to be installed. The striking, futuristic appearance of the body "as is," in admirable partnership with mechanical features, may seem the answer to most requirements, but some buyers may prefer to wait in hopes of perhaps an open sports model.

ON THE ROAD

With the automatic clutch you can take your choice of a start in first or second gear, and make it either smooth and regal, or as snappy as a trials take-off. For gear changing, make a finger tip selection on the small lever under the steering wheel, and the car does all the rest. The three upper range gears in the four-speed box are synchromesh, first can be engaged at quite a fair speed. Even reverse can be engaged while the car is moving forward, which is not to be recommended, but remains as a fact.

Braking by the dipper-switch size "pedal" plunger is light and smooth, the main difficulty being to become used to the small amount of foot movement required.



In addition there is an emergency brake in a pedal which duplicates the hand brake control.

Steering is 100% power assisted, and a small cam on the steering shaft gives a directional bias straight ahead, replacing the customary castor action. Effortless control of the "Spokeless" steering wheel allows time to ponder on the fact that, when travelling in a straight line, the steering column shaft extension which leads in place of a spoke to the rim is at a two o'clock position and, in the event of a collision will not impale the driver in traditional manner but should deflect him inwards towards the middle of the front seat.

GLIDE AS YOU RIDE

Suspension closely follows the lines tried out on the Citroen Six. Each spring is pneumatic, with inert nitrogen gas enclosed in a sphere and compressed by fluid acting on the outer side of a flexible diaphragm. Thus, there are no metal springs between the wheels and the body which literally floats on compressed air.

Turning, the body remains at a constant level regardless of load, and this level is adjustable so that you simply select the ground clearance level desired, and ride the roughest bumps without fear of bottoming.

The key to this air-oil suspension system is, of course, the central hydraulic system which powers all the accessories, brakes, clutch, gear shift, suspension and steering.

Here, incidentally, Citroen have solved the bug-bear of most front wheel drive cars including their own previous models, that is, heaviness in steering allied to a poor turning circle. Thirty-five feet gives the Goddess sufficient ground for a full turn.

CITROEN HYDRAULIC SYSTEM

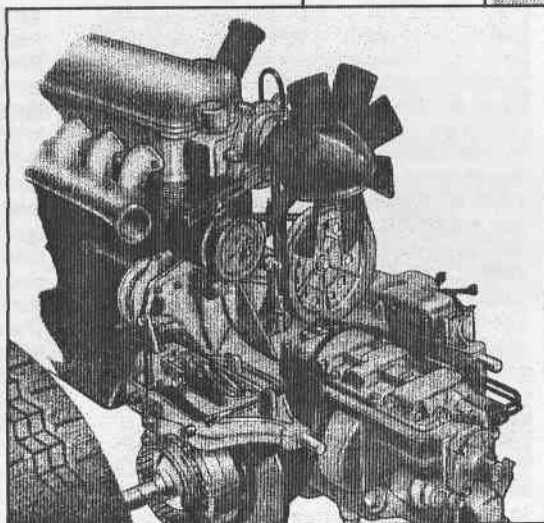
Hydraulic systems carrying pressurised fluid to all parts of the car are predicted for all cars in the future. The DS Goddess has it now. It also has 115 feet of tubing to do the job, possibly a sobering thought for the average man who has trouble enough bleeding hydraulic brakes.

A belt-driven hydraulic pump and reservoir feeds an elaborate hydraulic system used for the four-wheel oleopneumatic independent suspension. Even with the pump out of action, a storage reserve of fluid "under pressure" would keep the system operating for a time.

Other circuits supply hydraulic power for operation of the four-speed gear box and clutch, controlled by the lever on the dash. The clutch pedal has, therefore, disappeared and clutch action begins automatically at the moment of gear change.

Another circuit operates the brakes. These are inboard discs at the front, and normal drums with leading and trailing shoes at the rear. Finally the rack and pinion steering is hydraulically assisted by a booster cylinder on the end of the rack, controlled by a two-way valve on the steering column. A twin V belt takes the drive from a pulley on the end of the camshaft to the dynamo and water pump, on the end of which is an eight-bladed fan moulded in nylon and running in a duelled cowl behind the radiator. The hydraulic pressure pump is driven by a single belt from the same camshaft pulley.

Much depends therefore, on simple belt drive to keep the vital hydraulic system applying power, and in fact, despite the complications of the Citroen DSI9 seen as a whole, many of the individual components and features are based on quite straightforward principles well tried in previous cars or in other engineering fields.



THE PRICE OF SAFETY

After Citroen's GS, small cars will never be the same, says Peter Robinson. He claims its ultra-sophisticated specification takes every other small car back to the stone age.

From *Wheels* March 1972

IT'S JUST waiting at the traffic lights in an inner Sydney suburb. Cars all around, people hurrying to get across before the lights beat them. Momentarily the well ordered chaos is disturbed by a well dressed bloke in his early 30s who dashes out of a shop and crosses the street, just to touch our car.

He steps back one pace and stares in disbelief. Slowly, ever so slowly, he moves around the car taking it in, in bewildered wonderment. He catches our driver's eye and the glance says "How, where did it come from, why isn't it mine?" When the lights finally change he barely moves and the last we see of him he is standing in the middle of the road and gazing into the distance and the future.

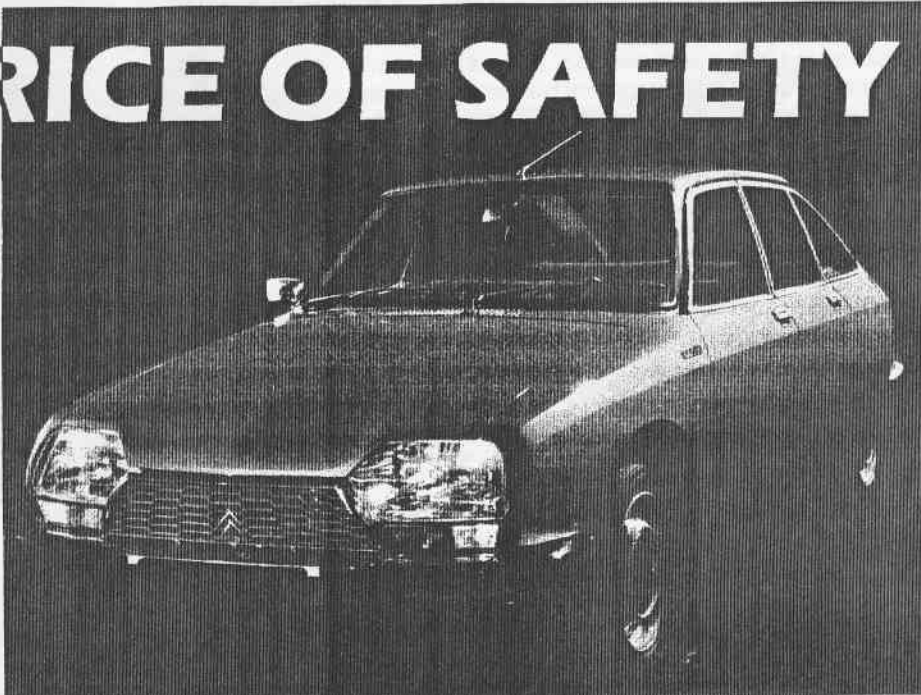
The car: a Citroen GS. The scene is typical of many we encountered in four days with the only right hand drive GS, yet to arrive in Australia. It attracted far more attention and interest than we imagined a Citroen ever would. But as the spectators pointed out this was a new Citroen and new Citroens are really new. Quite correctly, too, because the GS represents a major step forward in small car design. It is totally new and ultra-sophisticated for a small car. And like all Citroens, the GS is an incredibly safe car in both primary and secondary areas.

On the face of it any 1-litre sedan costing \$3890 is over priced out of all proportion to its worth, and sadly for most people even the GS's advanced specification won't be enough to convince them of its value.

The small engine capacity is misleading — for the Citroen is no ordinary small car. It has the room and comfort of cars way beyond it in engine size and performance and, in many instances, price and it has the road holding and handling ability for which Citroens are justifiably famous.

The GS can't really be compared with any other small car being sold in Australia, if on price alone. But even if you could disregard the price factor (and in France this is not only possible but practical for it sells for around \$1700) there are few 1-litre cars left on the market today.

Most of the current generation of small



cars (disregarding the Japanese 360 brigade) use engines of around 1.2-1.3 litres and they have considerably better straight line performance, but none of them even approach the GS in other areas.

There are so many fundamental differences in character the only cars it can genuinely be related to are the Renault 12, and perhaps 16, the Fiat 128, the new Alfasud and, just maybe, the Volkswagen Super-bug. In Europe the GS has been a stunning success. It fills a sizeable gap in the Citroen range between the small two-cylinder Dyane and AMI models and the bigger D models and is achieving a rate of over 50 percent in conquest sales.

That is, sales to people who were driving opposition makes.

Of course, in Australia the GS will have to rely on its ingenuity and sophistication rather than a competitive price and this will limit it to sales measured in hundreds per year and not the tens of thousands the car de-

serves.

It is so good it leads one to the point that if the Federal Government was really concerned about road safety it would waive all tariffs and sales tax on the GS and let them in completely duty free. Well, it's just a thought!

Basically, the GS is a four-door sedan, just over 13 feet long, powered by a horizontally opposed, air-cooled four cylinder engine driving the front wheels, using four wheel disc brakes and hydropneumatic suspension.

The engine develops 61 bhp at 6750 rpm (although the tachometer on the test car was red-lined at 6500 rpm) and 54 ft/lb of torque at 3500 rpm. For its engine size it gives a very good performance but related to the price and the size of the body it is not so good. Standing start acceleration is fairly leisurely, we clocked 0-60 mph in just under 18 seconds and the standing quarter mile in 20.9 seconds but even so the GS has a cruising



**WHATEVER THE ROAD MAY LOOK LIKE,
THIS IS WHAT THE CITROËN GS WILL FEEL LIKE.**

speed high in the 80s.

This is largely due to the car's exceptionally good aerodynamics. It is the most efficient shape available among the world's four door sedans and is 25 percent better than the DS which until now was commonly regarded as being outstanding.

A car's drag is determined by its frontal area and shape and the GS with its smooth, clean front, flat under-body and sharply cut-off tail, which permits the air flow to separate from the body, gives a remarkably low figure.

The result is an excellent top gear performance above 50 mph with a top speed of over 90 mph.

Of course, to really move, the gears need to be massaged frequently and the revs need to be kept above 3500 rpm. For a \$3890 sedan the acceleration is slow but for a 1000 cc sedan with such superior road holding and handling that corners cease to exist as we know them it's quite adequate.

The standard of handling is sufficient to cancel out any lack of brute power, although it is interesting to conjecture just how the car would (will?) go with a Wankel engine.

For all this the present engine is outstandingly quiet and feels unburstable which is just as well because it is required to rev hard and high for long periods.

Citroen engineers have placed the transaxle gearbox behind the engine and just ahead of the cabin. Despite being so close to the driver the gear change is disappointingly notchy and awkward in fast changes. It feels rather like a Honda Scamp box with long throws through an almost vertical plane.

The clutch is light and easy but it pays to pause in neutral between ratios when changing gears.

The ratios themselves are ideally matched to the engine's power and allow it to keep within the band of maximum torque. They permit the driver to make the most of the available performance. After a time he is not conscious of any lack of acceleration but is taking advantage of the car's road behavior and destroying the egos of far larger and more powerful cars, not only on tight roads but also on long straights where the little GS can cruise quietly and happily at very close to maximum speed, chewing petrol at the rate of 24 mpg plus, while the others drop back through driver fatigue or a lack of cruising ability.

Citroen's hydraulic system for the suspension and brakes is retained on the GS and gives it a degree of sophistication unknown in any other small car.

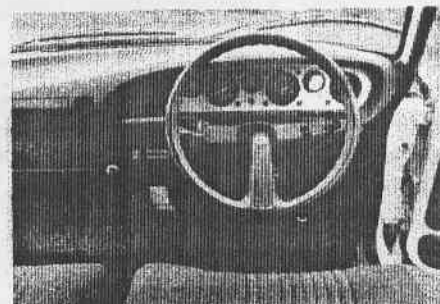
Ride height is controlled by a lever between the front seats. There are three positions, fully forward for normal driving, a middle notch for slow driving over rough roads and a third position for changing a wheel or negotiating deep water or enormous bumps. Citroen advise that the car should not be driven any distance with the suspension at its highest level. The car automatically finds its normal height even when it is fully laden so there is no tail scraping with all the family's holiday luggage on board.

The car sinks down when switched off and after starting up takes a couple of seconds to raise itself to the normal level. To an outsider the car's body roll might indicate the road holding is less than brilliant. But it

doesn't take long to appreciate its incredible ability.

There is no other small car, and very, very few cars of any other size, which have the combination of ride comfort and handling of the GS. It has a limit, of course, as every car does, but it is so high we never reached it. Indeed it is very difficult to decide when the limit has arrived for we drove the car absolutely flat through a series of S-bends, applying lots of under-steer. When this reached a certain level we just backed off and the car returned neatly to a neutral position. Although it goes against all driving theories it is possible to apply the brakes, even in the apex of a corner, for this does nothing to upset the stability and balance of the car. It is so predictable and responsive it is possible to rush up to a corner, leave the braking to the last minute and then power out with the driver just turning the steering wheel the required amount.

There is no falling off in grip on wet roads



either.

Truly a safe car and one which could take much more power.

The brakes alone are enough to make the GS unique. The pedal has about three-quarters of an inch movement which takes a little getting used to but the driver soon begins to appreciate the sensitivity and the staggeringly short braking distances and times.

And the suspension plays its part, too. With the brakes hard on there is no nose dive because the rear is dragged down to combat the weight transfer so that even crash stops are accompanied by completely flat stopping.

The GS suspension is set a little harder than the bigger DS models — at low speeds it doesn't have quite the same magic floating sensation. Minor bumps and joints in the road can be heard and even felt on occasions. But over the worst possible surfaces and at higher speeds it glides across the world without the

passengers ever being aware of the bumps. With the strong body roll we anticipated some body sway when changing from lock to lock but the GS is almost totally lacking in this rather common rocking complaint and the body roll is just not noticed inside the car. What is more likely is that the passengers will become aware of the G forces involved in quick cornering and braking. Complimenting the ride are exceptional seats which are covered in a non-slip cloth and have firm padding around the edges and very soft springing in the centre. There are two separate fully adjustable seats up front and they were highly praised by all our test drivers. There is ample room for two or even three adults in the rear and the seats are almost as comfortable as those in the front.

The one-spoke steering with its soft rim wheel is beautifully positioned and angled and is ideal for all sizes so the driving position is close to perfect.

Citroen fit a special "English" style dashboard to all the right hand drive cars. This means the GS loses the strange triangular tachometer and television screen speedometer, which are more in character with the rest of the car, for a full set of circular instruments. The round dials are easier to read and far less complicated but they do look out of place.

Three steering column stalks control the lights, turn indicators, horn, and washers and wipers while there is a small switch for the heater fan. All are so close to the wheel it is possible for the driver to operate them without removing his hand, which is as it should be.

The ventilation and heating didn't prove as effective as we had hoped and there is very little ram effect below 40 mph. Two levers control hot and cold air flows together with a third which looks after distribution. Face lever vents are fine once the car is moving along. The handbrake, which operates a second set of calipers on the front discs, is part of the dashboard.

The dash has a space age appearance about it but apart from a very small glove box — supplemented by an under dash parcel shelf — it is a brilliant piece of French logic although the all plastic finish isn't of a very high standard.

The boot is enormous. It is virtually a large box in the rear of the car with one side of the box opening upwards taking the bumper with it. It's very easy to load with no sill at all and takes vast amounts of luggage.

The GS has been acclaimed around the world. We can only add our own enthusiasm to this and confirm the rave notices it has received. In one stroke it is a clever and brilliantly sensible small car, tragically

over priced in Australia, but with so much to offer it can still be considered a bargain for those who place safety highest on a list of priorities.

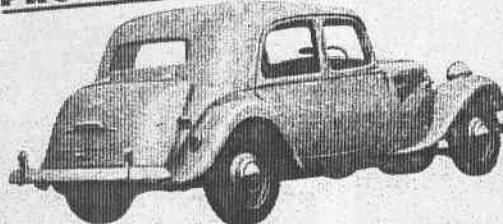


CITROEN

advertising in australia

From the Robbie Stockfeld archives

PERFORMANCE & RELIABILITY PROVED OVER THE YEARS



Only Citroen in the quality car field gives YOU all these plus value features.

- Front wheel drive for extra safety • Wide, flat, unimpeded floors for greater room and comfort • 30 m.p.g. economy for savings in petrol bills.
- Flashing sports car performance proved by top placings in reliability and road trials in Europe, England and Australia. Saloon car comfort with the three plus features that only Citroen gives you in the quality car field. Now the latest, greatest CITROEN gives you even more comfort, even better performance, even greater safety.



CITROEN

— 23 WAYS IMPROVED

The quality saloon with sports car performance.

BUCKLE MOTORS (Trading Company) PTY. LTD.

119-129 WILLIAM STREET, SYDNEY, N.S.W.

• Easy terms available • Associated dealers in N.S.W. • Complete spare parts service.



a new profile...

Now this great car becomes more desirable than ever before. Extra boot space, new automatic lighting in boot, new long-life metalchrome finishes. Plus the splendid safety of famous Citroen front-wheel drive and the smooth, powerful Citroen engine that gives an amazing 30 miles to the gallon. This is a grand Citroen. Drive it. You've found the car you want.



CITROEN

DE LUXE LIGHT FIFTEEN

New metalchrome or cellulose black super long-life finishes

— 23 WAYS IMPROVED

BUCKLE MOTORS (TRADING COMPANY) PTY. LTD.

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front



wheel



drive

The quality saloon with sports car performance... proven by continual top placings in reliability and road trials in Europe, England and Australia. Front-wheel drive, 4-wheel torsion bar suspension and wide, flat floors make Citroen tops in comfort, too!

If you've never driven a front-wheel drive car, there's a new motoring thrill in store for you. Let us arrange a demonstration for you to-day.



CITROEN

De Luxe Light Fifteen

BUCKLE MOTORS (Trading Company) PTY. LTD.

119-129 William Street, Sydney, N.S.W.

• Easy terms available • Associated dealers in N.S.W. • Complete spare parts service

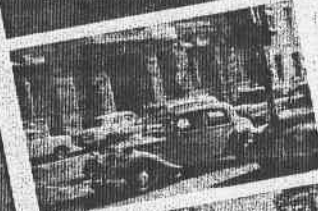
STILL THE FINEST SPORTING SEDAN

CITROEN

LIGHT FIFTEEN

FOR SAFE, SURE MOTORING

Now, more than ever, the Citroen Light 15 holds its own in the sporting sedan field. If you've never driven or ridden in a front-wheel-drive car, you have a true driving thrill in store. Its cornering ability and road-holding stability will amaze and delight you. And front-wheel drive plus the low, wide body and four-wheel torsion bar suspension make Citroen the safest, most comfortable car you've ever driven. Call in to-day and let us take you for a test-drive in one of these truly great cars.



BUCKLE MOTORS (TRADING COMPANY) PTY. LTD., 119-129 WILLIAM ST., SYDNEY, N.S.W.

Don Wright's CITROEN racing monoposto



LEFT: Don Wright's workshop



ABOVE: The naked Citroen Special



ABOVE: Don competing, possibly at a hillclimb meeting. Note the twin 1.5 SU carbs and those rare Pilote wheels.

In Vol 23 No 5, I ran a photograph from my collection of Don Wright at Bathurst. Since then I have located two further photographs published in Turton & Armstrong's book, *Fifty Years of the Vintage Sports Car Club of Australia*.

Don was an early member of the club when it formed in 1944.

In these early years he competed in a Lancia Lambda, the Citroen being developed in the late 50s. He raced it not only at Bathurst, but at several hillclimbs gaining some success.

The car then passed through several owner's hands to where it is believed to be in Tasmania somewhere.

For a more consise racing history, refer to *Front Drive* Winter edition (Vol 16 No 1) 1992.





andre lefebvre

Andre Lefebvre was a man who reached high levels of achievement in both motor racing & motor car design, simultaneously.

This story is from John Reynolds, previously printed in the UK Traction magazine, Floating Power (July 1996).

the man who saved the traction avant

If Andre Citroen was the father of the Traction Avant, then Andre Lefebvre can best be described as the doctor who saved its life. Acting as midwife cum paediatrician, he rescued Citroen's brain-child from its inherent embryonic difficulties, brought it safely through the complications of its painful birth and then guided it past the many technical problems of its infancy, so that, against all expectations, it survived to the grand old age of twenty-three.

But more than that, in placing his trust in so gifted a protégé, Andre Citroen ensured not only the future of the Traction Avant, but also the very survival of the marque that bears his name. Long after the demise of the founder of the Double Chevron firm in 1935, Andre Lefebvre continued to uphold the tradition of innovation and engineering excellence established by his mentor, by producing a string of radical, revolutionary cars which gave Automobiles Citroen the worldwide reputation for originality and unconventionality that it still enjoys today.

As the engineer in charge of design

and development at Citroen for over 25 years, it was Andre Lefebvre who was chiefly responsible for overseeing the chassis, power-train and suspension design not just of the Traction Avant, but also of the 2CV and DS19, when Citroen was owned and managed by the Michelin family. Yet thanks to the cloak of secrecy that shrouded research activities at Citroen's Bureau d'Etudes during the 40s and 50s, his contribution to the production of these seminally important vehicles remains largely unrecognised to this day, even among Citroen enthusiasts.

Throughout this period, the Citroen company pursued a policy of absolute self-sufficiency in every aspect of engineering and body design, undertaking all such activities in-house. No out-side stylists or design studios were ever employed. Moreover, its design staff were expressly forbidden to drive or dismantle cars from other manufacturers, in case the originality, integrity and inventiveness of their work should somehow be compromised or diluted. At the same time, an absolute ban on personal publicity was rigidly enforced upon all personnel, so that many of France's

greatest automotive talents were employed in conditions of complete anonymity and obscurity, unknown to the outside world and unrecognised by the motoring press.

Born on August 19th 1894 at Louvres on the northern outskirts of Paris and educated in Nantes, Andre Lefebvre had initially set out to become an aircraft engineer, entering the Ecole Supérieure d'Aeronautique in Paris in 1911 and graduating in 1914.

Eventually, in March 1916, aged 22, he joined the distinguished aircraft-building firm founded by Gabriel Voisin and remained there for 15 years. Here he became the right-hand-man to this famous aeronautical pioneer who collaborated with such men as Louis Bleriot, Henry Farman and even le Corbusier.

Initially, Lefebvre's work with Voisin involved designing military aircraft for the French and British airforces. But after the Great War, when Voisin turned his attention to the motor industry, he helped to produce a series of very advanced luxury automobiles and racing cars, all showing a strong aeronautical influence. The first of these was the 18CV Type CI, powered by a Knight sleeve-valve engine.



Originally designed by Artault and Dufresne in response to a commission from Andre Citroen, it was subsequently purchased by Voisin when his friend Citroen decided that instead of building traditional European luxury cars as he had done previously, he would make his reputation as the constructor of mass-produced, mass-marketed cars in the American manner - in short, as the Henry Ford of France.

As was the custom during the 'Roaring Twenties', Andre Lefebvre often drove these competition cars himself, as a member of the Voisin racing team. Thus he became the only automobile engineer ever to have competed successfully in motor sport at the highest level. Most notably, in 1923 he finished fifth in the Grand Prix de l'Automobile Club de France held at Tours, driving a two litre six cylinder Voisin of advanced specifications, featuring a revolutionary all-aluminium monocoque body - the first of its kind.

The winner of this famous race was actually the Sunbeam Talbot driven by Sir Henry Segrave, powered by a 2 litre 6 cylinder DOHC engine designed by the ex-Fiat engineers Walter Becchia and Vincente Bertarione. By a strange coincidence, some 18 years later,

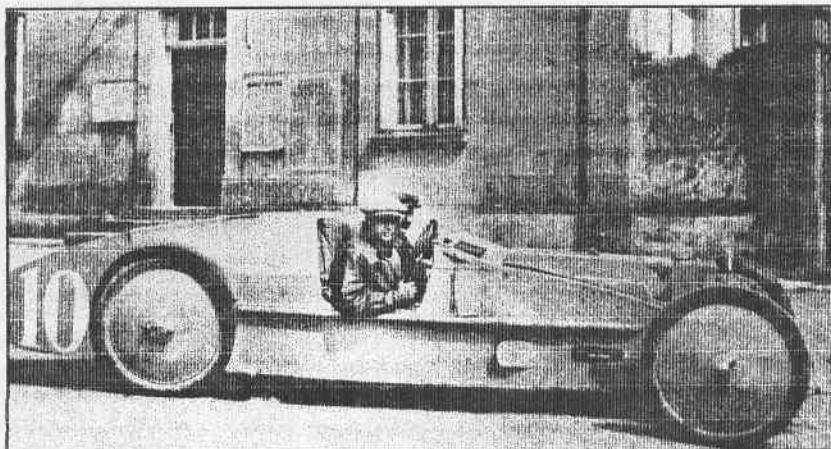
Walter Becchia joined Lefebvre at Citroen's Bureau d'Etudes, where he was responsible for designing the engine of the 2CV and DS19. The IID version of the Sainturat engine fitted to the final Traction Avants was also Becchia's handiwork. In 1930, Lefebvre took part in a famous series of high-speed, long-distance endurance runs staged by Voisin at the Montlhery circuit, in partnership with the Yacco Oil Company. These runs set many long-lasting records, especially that for 48 hours of non-stop driving. In this epic run, with Lefebvre and Cesar Marchand sharing the driving, the Voisin covered 10,560 kilometres at an average speed of 220 kph.

The economic problems of the Depression had a severe impact on luxury cars makers in France and, being avant-garde, the Voisin firm was harder hit than most. The market for its

expensive and eccentric products suddenly collapsed, and so in April 1931 Lefebvre and Voisin parted company - although the pair were to remain close friends for the rest of their lives, consulting each other on technical and automotive issues.

After an unproductive and uncongenial two year stint with Renault, Lefebvre joined Citroen in March 1933, having been recruited by Andre Citroen personally, on the recommendation of Gabriel Voisin, specifically to take overall technical control of his Traction Avant project.

By then the project was well under way, but had encountered certain technical problems of seemingly insurmountable difficulty, especially concerning the transmission. As Lefebvre had already developed proposals for a front-wheel-drive car while working with Voisin, he was ideally qualified for such an assignment. Indeed, he was personally



responsible for many of the Traction's most idiosyncratic features, including its unusual rod and tower gear selection mechanism and its 'mustard-spoon' speed change lever.

As is well known, the speedy introduction of these eleventh-hour modifications to the original design became an urgent priority for Lefebvre and his team, following the failure of the favoured Sensaud-de-Lavaud automatic gearbox at a pre-launch demonstration hosted by Andre Citroen. Reputedly, Lefebvre's manual gearbox was produced within the space of seven days.

During his 25-year service as Citroen's defacto Chief Engineer and Designer, Lefebvre held no official rank or title in the company's hierarchy. However, he was regarded nonetheless as the supreme authority and source of policy on all technical matters within the company. After the demise of Andre

Citroen in 1935, he reported directly to Citroen's new owners, the Michelin family at Clermont Ferrand, who gave his advanced thinking and adventurous policies their total support and endorsement, allowing his genius carte-blanche to follow whatever lines of research seemed most promising, almost regardless of cost or ultimate commercial viability.

Bored by organisational and administrative matters, and totally uninterested in the symbols of power and status that motivate lesser men, Lefebvre left the day-to-day running of the department to others and concentrated his energies and talents entirely on solving engineering problems, working all hours and in all places.

The archetypal artist-engineer, he worshiped novelty for its own sake taking a perverse delight in doing things differently and refusing to copy proven

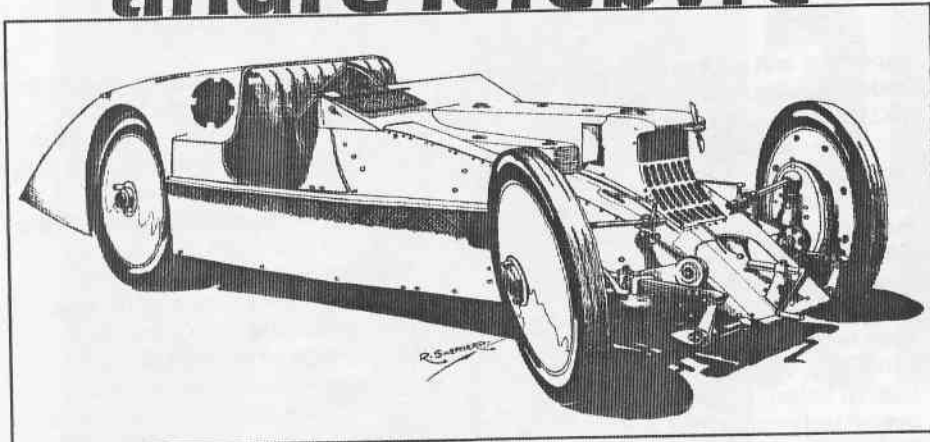
techniques used successfully elsewhere. Nothing seemed impossible to him. The more audacious, unconventional and complex a solution, the greater was its appeal. Throughout his career, both with Voisin and with Citroen, he was obsessed with the idea of adapting the principles of aeronautics to the automobile. Yet he never went in for the phoney streamlining that was so fashionable in the 30s and

which, as often as not, was aerodynamically unsound and merely concealed a crude chassis with a thin veneer of spurious sophistication. A tall, dark, elegant, figure who dressed with style and drank nothing but water or champagne, he was evidently extremely attractive to women. Three times married, his life was one long passionate love affair with the motor car, punctuated by countless much shorter liaisons with pretty females. But the intense, good-looking Lefebvre was not always so successful in persuading men to acquiesce to his wishes and desires. Like many other brilliant minds, he was highly-strung and could often seem temperamental and impatient with those who simply could not keep up with the furious pace of his inventiveness.

Consequently, he was confined in an



andre lefebvre



isolated, inner sanctum in the Bureau d'Etudes, surrounded by a small staff of carefully chosen research assistants who could be trusted to understand his thinking and to carry out his instructions without contradiction, no matter how far-fetched they might appear at first sight. One of his draughtsmen said that Lefebvre would come to his drawing board almost every day with a new idea or device that he had just thought up and wanted to have produced and tried out. Another claimed that his boss had just too many new ideas for the means available at the time. But to understand exactly what Andre Lefebvre achieved at Citroën - and to explain how it was that his Michelin bosses allowed him sufficient *laissez-faire* to realise those remarkable achievements - it is necessary to remember that above all, he was a man who loved driving fast. As a highly skilled and experienced former Grand Prix racing driver who had risked his life countless times on the track, he approached the problems of automotive design entirely from a driver's point-of-view, and never from that of an accountant or marketing man. For Lefebvre, the question of chassis dynamics was always paramount. From Voisin he had learned that lightness, balance, directional stability and aerodynamic efficiency were all far more important in determining a car's performance, handling and road-holding than outright engine power. What ultimately determined the speed and safety of a car was the relationship between its moving wheels and the ever changing road-surface passing beneath it - a concept that came to be known in Citroën terminology as *la liaison-au-sol*. Thus, all design objectives were held subservient to achieving optimum contact between the tyres and the road - at all speeds and in all situations. Since under Lefebvre's perfectionist philosophy this all-important tyre/road

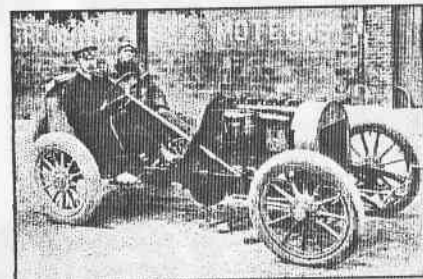
contact governed the traction, acceleration, steering and braking abilities of a vehicle, no effort was spared to develop sophisticated new suspension and steering arrangements that would guarantee this contact, under all conditions. His aim was always to improve the *'liaison-au-sol'* of Citroën vehicles to levels of refinement and security never before achieved by any other motor manufacturer. It is no coincidence that throughout Lefebvre's involvement in the design of the Traction Avant, the 2CV and the DS19, the scientists and engineers of the Michelin Tyre Company were working towards the very same objective. Even before the war, Michelin had decided to abandon rigid cross-ply tyres and to concentrate its resources on the development and manufacture of a safer running, longer-lasting alternative - the revolutionary flexible, steel-braced radial tyre. The Michelin X was first introduced (as an option) on the Traction Avant in 1949, then adopted as standard equipment from late 1954 onwards.

With global domination of the automobile tyre market the ultimate objective, Citroën and Michelin operated in synergy in matters of research and development, and a constant exchange of information and personnel existed between Paris and Clermont Ferrand. Surely, it was this long-term strategy by the Michelin men that gave Andre Lefebvre his power and prestige at the Citroën Bureau d'Etudes and which allowed him to pursue his adventurous ideas no matter what the cost.

Although he was forced through illness to retire from the company prematurely in July 1958, Andre Lefebvre continued to serve the Double Chevron marque until the end of his life.

Partly paralysed, he went on designing for Citroën, working from his home, until he died on 4th May 1964, aged 70.

Gregoire father of front wheel drive



From Roger Brundle
Hi Leon,

Further to my article on the history of traction gearboxes in the December/January Front Drive I've just come across a copy of "Best Wheel Forward" written by J.A. Gregoire and originally published in the 'fifties. As you will know, Gregoire can rightfully claim to be the "father of front wheel drive" and was a technical consultant to Citroën on FWD during the development of the traction. He was well placed to comment on the Sensaud de Lavaud debacle, and in his book he says that the de Lavaud transmission was similar to the Buick Dynaflo. (The Dynaflo transmission was first fitted as standard equipment to the Buick Roadmaster series in 1949, and would have been familiar to Gregoire when he penned his book.) The Dynaflo was a 2 speed automatic transmission consisting of a torque converter and an epicyclic gear train. Output was controlled by 2 band brakes and a plate clutch, and this layout was the fore-runner of automatic transmissions as we have now known them for the last 50 years. Gregoire wrote "....the Buick Dynaflo gives full satisfaction because the very powerful engine enables it to function almost continually in direct drive, and because considerable improvements have since increased the efficiency of this system." So there we have it - great idea, bad timing.

Although Gregoire's book gives some further clarity on the de Lavaud transmission, I've yet to see any drawings/photographs of it - perhaps a reader could help?

Incidentally, I thoroughly recommend the Gregoire book to anyone interested in the development of front wheel drive, the politics of the European auto industry during the 20s, 30s and 40s, and motor racing during that era. It was originally published in French as "L'Aventure Automobile" and translated into English by Charles Meisl in 1954. Problem is that I suspect it will not be easy to find.

Regards Roger.



To be announced at Austraction

ONCE IN LIFE TIME OPPORTUNITY

"Citroën

80 Years of Future"

This sumptuous large format publication has been produced in conjunction with Citroën to celebrate the 80th anniversary of the marque. In Australia, and indeed elsewhere, it is only available through Ateco — the local agents — and has been supplied in strictly limit numbers to their dealers and service agents. CCOCA has been fortunate enough to acquire two copies of this excellent book. One is in the CCOCA library and the other could be in your library!

CCOCA, through CCOCASHOP, is conducting a sale by tender of the second copy. Full details of the tender mechanism are shown below.

The book is large format, over 160 pages full of illustrations that are mostly in colour. Many of the pictures are certainly 'new' to me! The authors are Roger Guyot and Christophe Bonnaud. M Guyot is chairman of Citroën Club France and founder and editor in chief of the magazine 'Auto Concept'. M Bonnaud brings with him extensive experience in automotive journalism.

In addition to a history of the marque chapters are devoted to the various important models in Citroën's history. Naturally the Rosalies, Traction, DS and 2CV feature strongly. But this book does not limit itself to the 'famous' models [although thankfully that disaster the LN/LNA fails to rate a chapter], the GS/GSA, Méhari, even the Visa are well covered. Design exercises, early drawings, dashboard proposal

are included for many models.. Modern models including the Picasso are included. This book is up-to-the-minute!

Citroën's history of research, innovation and design is detailed — what do you know about the Citroën helicopter, tractor and V4 and V6 engines. All are covered here.

Naturally with André Citroën's talent for promotion and advertising that component of the marque's history is also covered. Trade and after sales material is also illustrated. Rallies, Raids, Expeditions and racing are all included.

The future is not ignored either with excellent coverage of the C3, C6 and Pluriel.

Do not delay, this is we believe the only opportunity you will have to secure this rare book. Complete the form and post it to:

CCOCASHOP Sale by Tender

16 Harrow St.,
Blackburn South,
Vic. 3130.

Name: _____

Address: _____

Suburb: _____ Postcode: _____

Maximum Tender Offer: \$ _____ .00 [plus postage]

Ties Break: In 25 words or less explain why you should be the fortunate CCOCA member who buys this book.

Rules of the Tender Offer:

Offers to purchase must use the form below and should be sent direct to the address above to reach CCOCASHOP no later than June 6.

The price you are prepared to pay must be expressed in whole dollars and the book will be sold to CCOCA member who offers the highest price. The price charged will be \$1 more than the second highest offer. So, if the second highest offer is \$100 and the highest offer is \$120, the book will be sold for \$101 [plus postage].

In the event of two offers of the same judges [Mel Carey and Edward Cross] will judge the tie break to determine the successful bidder.

No correspondence will be entered into and the judge's decision will be final.

Postage, at cost, will be charged to the winner and will be in addition to the price tendered.



Lost & Found

The oldest known 11A Cabriolet is being restored by J. Cats, a European enthusiast who has a web site, well worth investigating.

www.stack.nl/~cats



Car type : Traction Avant 11A Cabriolet
Production date : September 1934
Serial number : 100 957
Body number : EV 01 00
Engine date : 12 9 34 (September 12th 1934)
Engine number : DG 00 56
Bought : January 1998
Condition : Body has been rebuild

Here is a list of typical features of this car:

- First type 11A front axle (no balljoints).
- Gemmer steering with two bearing steering box.
- 5 stud 12" forged brakedrums allround.
- 78x100mm 1911cc engine.
- Moteur flottant engine suspension.
- Round rear axle with twin locating bars.
- Exhaust running through the right jambonneau.
- 50 Liter fuel tank with twin filler openings.
- Horns behind grilles in the front wings.
- Twin air inlets below the windscreen, spider without handle.
- Twin glove boxes, speedo in the middle of the dash, light switch on the dashboard.
- Flat floor without reinforcement dents.



This car was found as an abandoned restoration project. The body was in very bad condition, with the usual rust damage and severe accident damage to the rear of the car. Many special 1934 11A parts were missing as well.

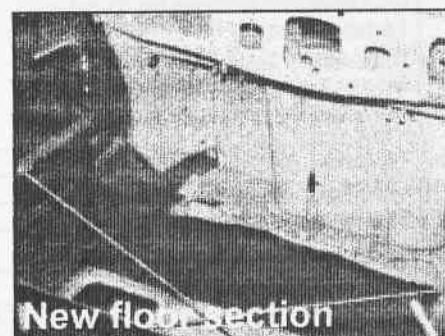
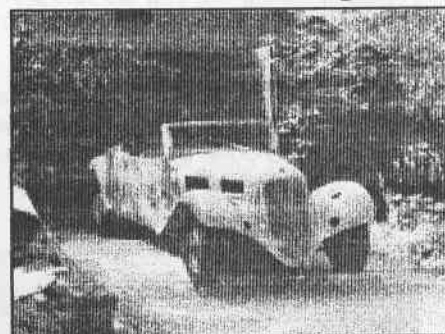
By January 1998 the remains of the car are resting in our shed. But it is soon clear professional help is required. Although we have tackled some extensive body repairs in the past, we don't think we're up to this job. Mick Peacock, the most experienced Traction Avant Cabriolet restorer in the world, was invited to have a look. During his visit a plan is made regarding the body rebuild. On a next visit, Mick had cut away many parts of the body of the body to reveal all hidden structural sections. During this it was discovered that some vital strengthening normally fitted in between the outer and inner sill. The sills on this car are completely hollow. After cutting away some body panels, the body (what's left of it) is shot blasted inside and out.

The shot blasting reveals that apart from the body, a lot of work is also needed on the wings, bonnet and other panels. The body was transported to the Peacock workshop in March 1998.

At the workshop, the body was put on a jig. All damaged panels were repaired or exact replacements were made. Fitting up the panels gave a few problems. The original body was largely seam welded by hand because the spot weld edges wouldn't match up. The car was put in the original way as much as possible.

August 18th 1999 the body is finally home again. By now, most of the missing parts have been located as well. A dummy build is done, giving an impression of what the car will look like when finished. The rebuild will start

Restoration begins



Rear end new metal



AUSTRACTION 2000 SWAN HILL JUNE 9-12 AND TOUR D'AUSTRACTION JUNE 6-9

But have you booked yet?

By now EVERYBODY should have received leaflets for **Austraction 2000 and Tour D'Austraction**

If you haven't seen them, please call:

Contact for Austraction

Steve Bartlett: Tel (03) 9397 8680

Email saintly005@aol.com

Remember:

- Each of these events is exceptionally good value.
- They are worth your attention and support.
- You won't find more activities in a cheaper package.
- You get a \$20 discount if you book for both events.

Contact for Tour d'Austraction

Peter Fitzgerald: Tel (03) 9696 0866

Fax (03) 9696 0708



But you must book now!!!!

Costs:

Austraction 2000 (June 9-12)

Registration \$75 /person

Accomm'n from \$90 /person (twin share)

(Note: Family units or share 4 in cabin is even less
- enquire on Tel 1800 032 146)

Total: \$165 for 3 days

Tour D'Austraction (June 6-9)

Registration \$176 for 3 days

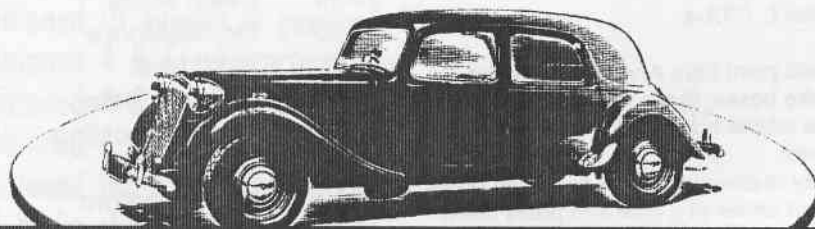
(Accommodation included)

Total: \$176 for 3 days

Book for all 6 days for \$321 + Cornflakes + Petrol + Grog.

It's cheaper than Bali!

CITROEN Viewpoints...



Hello Leon,
Re "Front Drive" vol .23 #6 p.16 open
letter etc.

Any positive move which strengthens
the Citroen cause within OZ & over-
seas would be welcome.

This new fangled e-mail thingy (with
which I have only recently taken up)
could well be one of the "glues" which
holds us all together ;this should not

preclude "Front Drive" nor any of the
other club mags, some folk do not
have, nor want, access to E-mail.
I subscribe to "Planet 2CV" the French
based mag but have found out that the
English language edition is in danger of
being discontinued through lack of sub-
scribers. Massive croc. tears from me
as I don't read French.
It's a great mag full of colour, interest,

serious & lighthearted, worthwhile ads
for literature and parts. Of course it is a
commercial enterprise, (who also pub-
lish Citropolis which covers "the other"
Citroens).

I am posting a couple of editions, with a
letter in the hope that "Front Drive"
could run a line or two to spread the
news. English speaking Citroenists
would not want to loose this worthwhile
resource. I have no other interest in
Planet 2CV other than not seeing it dis-
appear.

Firing on two !!

sincerely John Hancock
j.hancock@ncable.com.au



talking technical

SPARE PARTS OFFICER — MEL CAREY

internet interaction

Dear Traction Owners

Yesterday my wife and I took our '56 11B Normale out for a spin, and after a bit of stop and go traffic, my wife claimed to smell something burning. I cheerily dismissed this as somebody in the neighborhood incinerating trash. Then it seemed like there was someone in every neighborhood burning trash, and my theory soon became untenable, especially as I was noticing a concomitant loss of power and, at stops, some blue smoke drifting forward from the back end of the car.

Fortunately we weren't far from home. In the driveway, I popped the bonnet and was checking the dipstick when my wife shouted from the rear of the car, "The tires are on fire!" She tends to hyperbole, and in fact there were only substantial plumes of smoke coming off each rear wheel and a bit of oily fluid dripping down from one of the hubs.

It took 45 minutes for things to cool down. Then, with handbrake off and car in neutral, I tried pushing it, usually quite easy to do. No motion, brakes locked. Another hour went by and I pushed again: easy motion.

The loss of power during the drive, and the smoke, were at least initially intermittent. The handbrake was off.

Diagnosis? Ease of remedy?

It seems that the pressure in the rear part of the brake system does go down very slow.

Cheap solution: dirt in the brake system: drain it thoroughly

More expensive: worn brake pipes (the flexible parts): replace them (preferably ALL of them also at the front part of the car) the flexibles tend to swell with age. It works to brake, as you apply big pressure, but the way back for the brake fluid is blocked.

Possibility (but no good chance as car moved after some time): brake pistons at the rear wheel worn so that the piston gets stuck in it's bearing: replace
Andreas

Dear Andreas,

It seems that you have had rear brake cylinders that had got stuck due to rust/corrosion.

With that kind of heat you probably need to change all rubber parts in the brake cylinders or replace the cylinders altogether. The brake shoe linings may have suffered badly so you better renew them as well.

Clean out the hub in the brake drum from all grease and put some new grease in it.

Check the wheel bearings for unusual wear or discoloring and also check the oil seals.

Its a straight forward job and you don't need any special tools except perhaps the special tool 2103-T used for centering the brake shoes. If you don't have that tool available you can center them as best you can by just trying out the best position (a bit of ingenuity helps here)

Since there has been a problem with sticking brake cylinders I suggest you change all the old brake fluid for fresh new fluid of appropriate type. Dot 4 or even better Dot 5 silicon brake fluid. good luck...

Peter L CTA-s

Good point from Andreas about the brake hoses, that's very common. The rubber hoses get old and swell up inside.

Easy to check this, just open one brake bleed screw at a time and press down the pedal.

You should be able to press the pedal without great force and brake fluid should spurt out quite freely.

If it doesn't go down easily you have a coked up brake hose there.

Check them all up and if they appear suspicious at all replace them.

Good and dependable brakes are a matter of your and others safety.

Peter L

SPARE PARTS MEMBERS

226	Alain Antonius
	Graham Barton
540	Andrew Begelhole
512	Chris Bennet
086	Paul Bishop
320	Peter Boyle
270	Ron Brookes
320	Roger Brundle
335	Walter Burkhardt
380	Mel Carey
250	Gerry Carson
335	John Couche
380	Jeff Cox
320	Sam Crisi
470	Doug Crossman
368	Mark Douglas
320	Jon Faine
380	John Fleming
335	Bryan Grant
374	John Grieve
350	John Hawke
374	David Hayward
350	Paul Hibberd
487	Ray Hobbs
210	Geoff Hooler
340	Jean-Pierre Jardel
335	Fred Kidd
Rob	Koffijberg
374	Robert Little
220	David Livingstone
310	Iain Mather
330	Leigh Miles
330	Derek Moore
250	Mike Neil
368	Richard Oates
330	Gerry Propsting
210	Alec Protos
717	Keith Radford
345	Phillip Rodgers
374	Barry Rodgers
374	Alexander Scales
380	Warren Seidel
330	Peter Simmenauer
350	John Smart
335	Robin Smith
410	Brian Wade
380	Hughie Wilson



classifieds

Please note. By law advertisement cannot be accepted without one of the following: registration number, engine number or vehicle identification number.

WANTED

pair of French headlights for Traction 4, must be complete. Can swap excellent pair of early Lucas units (pre-war style).

WANTED

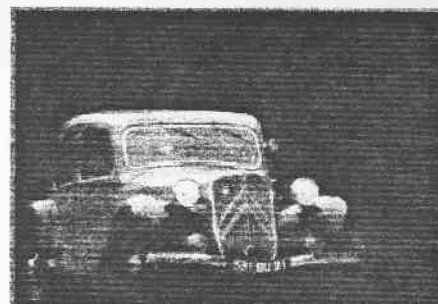
For my 1958 ID19. Auxiliary driving lights for front wing mounting; chromed surrounds for front indicator lenses; Slough DS style full hub-caps.

Roger Brundle

Melbourne (03) 9380 9321; rbrundle@ozemail.com.au

FOR SALE

CX2400 C-Matic Pallas 1981. Blue/beige, manual sunroof, electric windows, Reg 3/2001. Deceased estate sale price: \$2500. Contact David (02)9948 8842 (AH) or (02) 9248 3614 (BH)



FOR SALE

New Twin Carby manifolds for Traction Avant

Cast from an original after-market manifold which utilises two standard carb's.

This manifold has been tried and proven to give excellent results.

Enables your engine to perform better, make use of the extra power or the extra fuel economy depending on your driving style.

\$450.00. fitting extra. Phone for a free quote.

Carey Mtrs. 03 5152 1040

TRACTION RESTORATIONS AUSTRALASIA

4 cyl & 6 cyl Traction reconditioned engines and gearboxes

Short or Long engines, standard or modified.

Reconditioned ID engines & gearbox', Short or Long.

Reconditioned 4 & 6 cyl Traction Front Ends, complete.

Reconditioned 4 & 6 cyl Traction front Ends, Silentblocs only.

Reconditioned 4 & 6 cyl Traction & ID Water Pumps

Reconditioned brake master/wheel cyl's

Relined brake shoes

Part engine rebuilds, to customer requirements [Top or Bottom end]

Reconditioned Driveshafts, 4 & 6 cyl Traction with modern CV joints

All the above are offered on a changeover basis.

Carey Motors P/L

Phone Mel on [03] 5152 1040, Mob: 0427 526 126 or Fax [03] 5152 2615

[A/S]



Looking for Romance

MALE ARIES 6'2" Looking for friendly lady, preferably Age reader, 3LO listener, old labour values, Citroen 2CV driver.

Wish to meet to enjoy friendship, leading to caring, sharing loving relationship, or at worst, marriage. As I am very lonely, would consider smoking, café society trendy.

Please send photo of 2CV

All correspondence through Front Drive before next issue please.





Lost & Found

The oldest known 11A Cabriolet is being restored by J. Cats, a European enthusiast who has a web site, well worth investigating.

Car type : Traction Avant 11A Cabriolet
Production date : September 1934
Serial number : 100 957
Body number : EV 01 00
Engine date : 12 9 34 (September 12th 1934)
Engine number : DG 00 56
Bought : January 1998
Condition : Body has been rebuild

Here is a list of typical features of this car:

- First type 11A front axle (no balljoints).
- Gemmer steering with two bearing steering box.
- 5 stud 12" forged brakedrums allround.
- 78x100mm 1911cc engine.
- Moteur flottant engine suspension.
- Round rear axle with twin locating bars.
- Exhaust running through the right jambonneau.
- 50 Liter fuel tank with twin filler openings.
- Horns behind grilles in the front wings.
- Twin air inlets below the windscreen, spider without handle.
- Twin glove boxes, speedo in the middle of the dash, light switch on the dashboard.
- Flat floor without reinforcement dents.

This car was found as an abandoned restoration project. The body was in very bad condition, with the usual rust damage and severe accident damage to the rear of the car. Many special 1934 11A parts were missing as well. By January 1998 the remains of the car are resting in our shed. But it is soon clear professional help is required. Although we have tackled some extensive body repairs in the past, we don't think we're up to this job. Mick Peacock, the most experienced Traction Avant Cabriolet restorer in the world, was invited to have a look. During his visit a plan is made regarding the body rebuild. On a next visit, Mick had cut away many parts of the body of the body to reveal all hidden structural sections. During this it was discovered that some vital strengthening pieces are missing such as the complete strengthening normally fitted in between the outer and inner sill. The sills on this car are completely hollow. After cutting away some body panels, the body (what's left of it) is shot blasted inside and out. The shot blasting reveals that apart from the body, a lot of work is also needed on the wings, bonnet and other panels. The body was transported to the Peacock workshop in March 1998.

At the workshop, the body was put on a jig. All damaged panels were repaired or exact replacements were made. Fitting up the panels gave a few problems. The original body was largely seam welded by hand because the spot weld edges wouldn't match up. The car was put in the original way as much as possible.

August 18th 1999 the body is finally home again. By now, most of the missing parts have been located as well. A dummy build is done, giving an impression of what the car will look like when finished. The rebuild will start

www.stack.nl/~cats



Restoration begins



Rear end new metal

