

# FRONT DRIVE

FRONT DRIVE — AUSTRALIA'S NATIONAL CITROËN MAGAZINE

**JULY/  
AUGUST 1998  
VOL 22, ISSUE 2**

**CIT-IN '98  
OZTRACTION '98  
XSARA DESIGN  
LIES AND  
UNLEADED PETROL**



# FRONT DRIVE

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OF AUSTRALIA INC.

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The views expressed in this publication  
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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.

### CCOCA MEETINGS

Every fourth Wednesday of the month,  
except December.  
Venue:- Canterbury Sports Ground  
Pavilion, cnr Chatham and Guildford  
Roads, Canterbury, Victoria.  
Melway's Ref 46 F10.

## HONORARY LIFE MEMBERS

NANCE CLARK	1984
JACK WEAVER	1991

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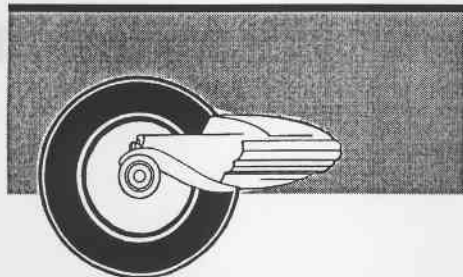
Philippe Vallantin from Alphington,  
who has a 1979 Dyane 6.

10

22







# from the desk

## 1997 CCOCA COMMITTEE

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I know, I promised you an article on the joys of Busselton [WA] in the last issue, but a lack of space and the belated arrival of Alan Brown's excellent report meant it had to be held over. Typical of Alan, it is the atmosphere that is the main feature and coupled with some excellent pictures from Bruce Dickie makes a great article.

Cathy Rushton, who has written reports before for us has again contributed with some notes on the joys of Mt Gambier in June. A delight to read, although rather iconoclastic, I should warn you. [I did have to alter references to 'Omo-white' to 'Radiant-white', Cathy as Cussons did again provide lots of goodies to rallyists at OzTraction — Radiant Laundry Granules, Cussons Natural Care Essential Moisturiser, Cleanser and Toner and Imperial Leather Extra Care Moisturising Bar.

Rob and Libby Little share their New Year's Eve experiences at what sounds a great 'Bed and Breakfast' in Maryborough and News from the 'Net has a decided technical bent. It is a rather lengthy, learned article on unleaded petrol. Many of you will have seen reports from Europe, and to a lesser extent here, on the downsides of unleaded petrol. This article attempts to put some perspective [well possibly a biased perspective] on the introduction of unleaded petrol to the market and the risks and dangers associated with its use. I must thank Mel Carey for passing on the address for this information.

By the way, if any 'surfer' finds a site or article that they think may be of interest to members, whether Citroën related or just motoring based, Email me on [business\\_direct@email.msn.com](mailto:business_direct@email.msn.com) with the site. I will certainly publish the address and it could well form the basis for a News from the 'Net' article.

Oh, yes...I hope you like the colour cover, courtesy of Cussons. At this stage, it's just a once-off, so do not expect it again in a hurry!

'Front Drive', for the Citroënist who wants it all.

Leigh F Miles,  
Editor.



# prez sez

Here we are in the depths of winter and looking forward to a range of winter-associated things in the coming months. By the time you read this the Annual Bastille Dinner will have been and gone and I hope you are looking forward to the Winter Day Run.

There has been a change to format this year, with the Club providing the food for brunch. This decision came out of the evening of the AGM, when it was suggested that some of the Club funds could be channelled back to members, through events such as this. I hope that we will see a bumper roll-up for this event, as a result. Do not forget to let Jay know you are coming, so we can be certain to cater for you all.

Of course this is also a time to reflect on OzTraction '98 which seemed to run without a hitch, although to judge from the report from Cathy Rushton the weather left something to be desired.

I must thank the people who worked so hard in the planning stage — Andrew Begelhole, Rolf Breyer, Sue Bryant, Jay Liebowitz and Leigh Miles. Having worked on these events in the past, I know how much work is involved and little time you get to enjoy yourself when are one of the organisers. So, thank you all, not only from me, but from everyone who attended.

Finally, at the same time that the Committee was working on the modifications to the Constitution of the Club we also looked into other matters related to the running of CCOCA. Trends in attitudes and legal requirements clearly figured in our re-write of the Constitution but these things effect the Club on other levels. Those of you employed in either the public service, or larger private industry concerns will be aware of issues and legal responsibilities related to equality of opportunity

and the elimination of sexual harassment. Whilst CCOCA has no legal responsibility to ensure either equality of opportunity for members or to prevent harassment of any type, we are aware that all members would expect that in ensuring the Club is a pleasant place to be, that the Club's events are pleasant to attend, that CCOCA should have a policy on these matters in line with current perceptions.

Therefore, with this issue of 'Front Drive' we have supplied a copy of the CCOCA policy on these matters. All members should be aware that the courts regard these matters very seriously, and ultimately it is in the members' hands to prevent or if necessary report any unwanted attentions of this nature.

Peter Fitzgerald,  
President.

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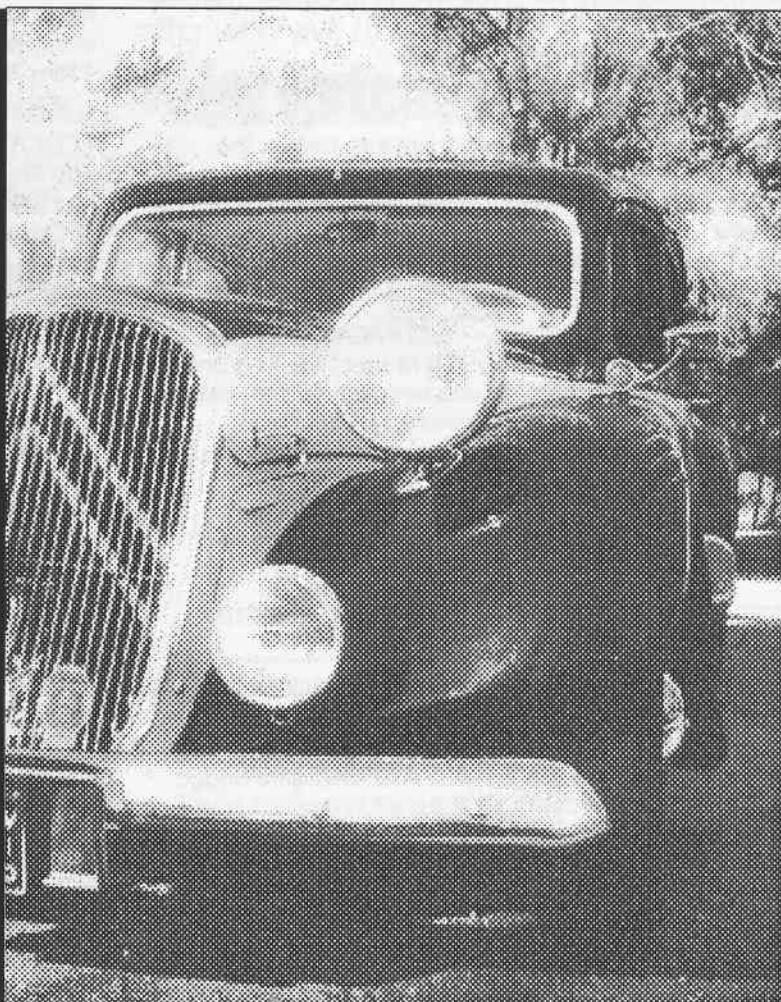
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# a-tractions

## JULY

**SATURDAY, JULY 11 — BASTILLE DAY DINNER**  
Les Halles Restaurant, Swan St., Richmond. Les Halles, who this year celebrated 20 years of providing fine dining to Melbourne, is the 1998 venue for our traditional Bastille Day Dinner. Fixed menu at \$55 per person, plus refreshments. Spaces are limited and **BOOKING IS ESSENTIAL**, through Jay, by July 1.

**WEDNESDAY, JULY 22 — MONTHLY MEETING**  
Canterbury Sports Ground, 8pm  
You will see a picture in this edition of 'Front Drive', but come and see the video of the Kinetic suspension system. You will absolutely marvel at the capabilities of the vehicles fitted with this technology.

**SUNDAY, JULY 26 — WINTER WARMER RUN**  
Come and brave the Winter elements by joining the other idiots in CCOCA in the Third Winter Warmer Run. The Club will provide a BBQ Brunch of hot sausage sandwiches at Maroondah Dam. [BYO refreshments.] Booking is essential, with Jay by July 17. We will leave from the carpark of Safeway, cnr Middleborough Rd and Burwood Highway at 9.30am.

## AUGUST

**SUNDAY, AUGUST 9 — SPARE PARTS [& OTHER THINGS] AUCTION**  
Leigh Miles' Garage from 11.30am.  
Check your garage for those bits you thought you would always need — and never have — clean out those parts from under the bed and turn them into cash at the CCOCA Auction. It's not just for Spare Parts — our 'professional' auctioneers will sell anything that is not tied down!  
Bring your lunch and the family, BBQ facilities available. RSVP to Leigh Miles by August 6.

**WEDNESDAY, AUGUST 26 — TECHNICAL MEETING**  
B & M Non-ferrous Foundry. B & M specialise in bronze and aluminium casting — if you need it they can make it. Whether it's a badge, door handle, rocker cover... Proprietor, Bill Brown will give us a working knowledge of how it's all done.  
Factory 12, 5 Aponga St., Dandenong, 3175. 8pm.

## SEPTEMBER

**WEDNESDAY, SEPTEMBER 23 — MONTHLY MEETING**  
Canterbury Sports Ground, 8pm

**SUNDAY, SEPTEMBER 12 — OBSERVATION RUN TO QUEENSCLIFFE**  
Check your navigation skills and see how many wrong answers you can deliver between the Westgate Bridge and Queenscliffe. Join CCOCA for a fun day out at the seaside. We will meet at the Shell petrol station on the outbound carriageway of the Westgate Freeway at 10 a.m. — don't be late.

## OCTOBER

**SATURDAY, OCTOBER 25 — JOINT CONCOURS D'ELEGANCE**  
Como Park, from 11am.  
Bring the family, bring a picnic and enjoy a day on the banks of the Yarra. There is a kiosk nearby, for the all-important ice cream. The Main Yarra Bike Path goes right past, so load the bicycles [or hire one on the day] and have a great family outing.  
This is a joint event with CCCV and the competition will be tough.

**WEDNESDAY, OCTOBER 28 — MONTHLY MEETING**  
Canterbury Sports Ground, 8pm

## NOVEMBER

**WEDNESDAY, NOVEMBER 25 — MONTHLY MEETING**  
Canterbury Sports Ground, 8pm

**SATURDAY & SUNDAY, NOVEMBER 28 & 29 — PETANQUE PYRENEES**  
You are invited to join the Pyrenees vigneron at an Open Petanque Tournament. The vigneron from Taltarni, Redbank, Dalwhinnes, Summerfield, Chateau Remy...and many others will be participating in the Spring Tournament of the Pyrenees Petanque Club, at Avoca. Registrations [teams of three] commence 1pm Saturday with play commencing at 2pm and again on Sunday from 11am. Boules available for hire.

**SUNDAY, NOVEMBER 29 — ROB ROY HILL CLIMB & CCOCA CHRISTMAS**  
Rob Roy Hill Climb, Christmas Hills.  
Last year this was a great day, with a wonderful collection of Classic and Vintage Cars doing their best on this historic circuit. Once again CCOCA will have a prime position to see all the action and be seen by other car-lovers. Come and join us for the final event of 1998.

## MARCH 1999

**SATURDAY & SUNDAY, MARCH 20 & 21.**  
Autumn Petanque Festival at Blue Pyrenees Estate, Avoca.

## TECHNICAL EVENTS

At the time of preparing this issue of 'Front Drive' the technical events for 1998 have not been confirmed. With the great success of the visits to Neway Wheels and Auto

**TO CONFIRM ATTENDANCE  
AT CCOCA EVENTS, RING  
JAY — [03] 9853 5998  
EVENTS R US!**



# Citroën Workshop Manuals SPECIAL OFFER

CCOCA have the rare opportunity to bulk order Peter Russek Workshop Manuals direct from the publishers in the UK. These Manuals are recommended by Citroën [UK] and are produced with every possible co-operation of their technical department. They are sold throughout the Citroën dealer network in the UK.

However, to deal direct we must place an order of at least 20 manuals — mixed titles. The full range of Citroën titles is shown below.

Manuals available for:

BX1700/1900 Diesel to 1987

BX Diesel/Turbo 1988 to 1992

BX16, BX19, Petrol to 1992

BX, BX14E, BX14RE 1.4litre to 1986

Visa/C15 Van Diesel

AX Petrol, 10E, 10RE, 11RE, 11TRE, 14TRS, 14TZS to 1990

AX Petrol, models to 1991

AX Diesel, 14D, 14RD, 14TRD, 1.4litre

ZX, 1400cc, all models to 1992

ZX, 1.6/1.9litre, Petrol, Advantage, Volcane

ZX Diesel, Turbodiesel, Aura, Reflex, Advantage to 1993

XM, 4cyl, and V6 engines, to 1998

XM Diesel, Turbodiesel to 1998

Xantia, Petrol, XU5, XU7, XU10J2, XUJ4 engines to 1998

Xantia Diesel, all engines to 1998

C25D, Van, Camper, 1.9/2.5litre

All above manuals are £14.50, retail or £12.50 if ordered through the Internet [+p&p].

Small manuals available for:

Visa Club to 1984, Visa II Club, Special 652cc

Visa Super, 4-cyl, 954, 1124, 1210, 1361cc to 1986

2CV 4 and 2CV 6, 1970 to 1987

Ami 8, Saloon, Estate to end of production

GSA & G Special, GS X, GS X3, 1300cc

BX14, models to 1986

BX16, models to 1986

All above manuals are £7.00, retail or £6.50 if ordered through the Internet [+p&p].

Final cost to us will depend on postage and customs duty [if charges] but we anticipate landing the large manuals for £10 and the small for £5.

So far only one order has been received, if further orders are not forthcoming, this offer will have to lapse.

## Offer Extended to July 15

**YOU CAN NOW USE YOUR CREDIT  
CARD TO PURCHASE  
FROM BOTH CCOCASPARES  
AND CCOCASHOP**



**And that means you can now pay  
for your subscriptions, rally fees,  
and those all important spare  
parts in a more convenient way**



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NON FERROUS  
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# *HC* *Modernité* **Influence**

Busselton, WA — Easter, 1998.

CitIn 1998 is the latest link in a chain of French Connections with the town of Busselton on the Western Australian coast.

WA Association of Citroën Enthusiasts and CCOCA member Gaston Pommille-Bâtard was able to make a trip from Vendée, France to attend. He has sent this story to share a few experiences of the town, its history and a little of the ambience of the 1998 Easter event.

Easter Monday, 1998, 7am. Gaston parks his sleek Citroën XM, applies the idiosyncratic parking brake and steps onto the footpath next to the Australia Post post-box. He glances up and down the main street of Busselton. There are three 2CVs, a DS and a Traction Avant parked on the left hand side, revealing that this is not a normal week-end for the town.

The West Australian sky is pale blue and cloudless. A GS gurgles away from the traffic lights, and its driver waves. A Hot Bread shop is open, a gaudy yellow sign screaming its wares. The universal homely odour of freshly baked bread drifts across the street, along the verandah of the Vasse Hotel and over the cross-roads to the Frenchman's nostrils. The name of the hotel strikes a familiar note, but he cannot yet determine why.

He pauses next to the doorway of the oldest building in the street. On the doorstep there is a long-neck bottle of Emu Export, half-full of what looks like beer but is probably something else. On the dusty plate glass window is written in faded four-inch blue letters, perhaps half-a-century old:

**'Bovell's Shipping Agent since 1897. Agents for British New Zealand Insurance since 1880.'**

«*Histoire. Influence*», thinks Gaston.

Peering inside the office, it is only a copy of the 1992 telephone book on the front desk that is an anachronism. The rest is a film set from the Great Depression. Gaston wonders whether this building is due for preservation as Busselton Heritage, or if, one day soon, the jarrah fences, leaning lean-tos, wash-house and

dunny round the back will be condemned to a town centre 'facelift'. The buffalo grass patch is watered and cropped; the dripping brass tap next to the laundry copper is shiny. Someone still comes here, but there has been no structural maintenance done on the place for a decade, or three. It would be a shame if it were to disappear. «*Modernité*», thinks Gaston. This building encapsulates more than a century of the town's history, a history itself barely longer than that. He would later learn its story. A tale every bit as fascinating as the building's appearance.

He has learned that this hour of the day is referred to a «Sparrow's» by the locals, and makes a mental note to ask one of his antipodean hosts the reason for this at some later stage in the day when the effects of the previous evening's Brown Brothers Chardonnay have worn off. He has seen many exotic birds, but hasn't seen a sparrow in Western Australia since his arrival four days ago. As a victim of that state's rigorous quarantine laws [sprayed with insecticide in the 'plane and his *foie gras* having been confiscated at the airport] he would indeed not be surprised if an army of shotgun wielding government employees existed somewhere near the state's eastern borders; an army whose sole purpose is to blast the invading hordes of South Australian sparrows out of the Nullarbor sky...

Quarantine. Before turning to walk towards the beach and the sunrise, Gaston remembers his conversation yesterday with a Citroën colleague

Below: Alan Brown proudly showing the under-bonnet details of Gaston's XM. Unfortunately, Bruce Dickie was unable to persuade Gaston to be photographed.



Right: A rubbish bin and a row of 2CVs — or is it the other way around?

Below: CCOCA members Gabrielle and Euginia de Figueiro drove their delightful Traction all the way from Sydney. We have not heard, but presume they got home as well.

Photos: Bruce Dickie



Above: Carl Perrin's Ami 6, at rest beside CCOCA member Bruce Dickie's Xantia. As there was only one Ami 6 at Busselton, this must have been the example sighted by Gaston.

Photo: Bruce Dickie

who had driven the whole way across this island continent, from an Eastern States metropolis to the shores of Geographe Bay, a few days previously. The gentleman explained how he had been obliged to forfeit seven bananas and a tomato at the WA border to a brusque Quarantine Service lady. She had fortunately left his nuts alone.

He lights the first Gauloise — a duty free import — of the day as he steps on to the jetty and strolls into the fresh, still morning air, peering down into the limpid waters of the bay through the gaps in the karri timber boards. The structure curves northwards for more than a kilometre. It takes half an hour to reach the end, pausing on the way to practice his English on the fishermen. The usual greeting is either «Giddy» or «Howzetgown?». Neither expression figures in his Berlitz English phrase book. He uses them anyway to blend in to the linguistic landscape.

From the end of the jetty he looks out towards the bay, and tries to imagine his compatriots sailing in on the survey ships *Naturaliste* and *Géographe* in May 1801.

«*Histoire*». He knows that the French Connections with the West Australian coast in general, and with this part of it in particular, are, historically and geographically





# *His* *MODERNE* *influence*



Above: WA-based CCOCA member Roger Michie was very proud to display his exceptionally good 1974 DS23. Whilst he had photographs of his recently purchased Traction, judging by its condition it shall be some time before it is seen on the road. Good luck with the project, Roger.

Below: Busselton-based Kinetic Suspension have used Citroën hydraulic technology to produce a unique suspension system for application to four wheel drive vehicles. With suspension travel in excess of 1 metre these vehicles can travel in places where a 2CV will not go. We know this because some intrepid 2CV-ers attempted the route, always in cars other than their own!

Next page: After the event CCOCA members Stuart Pekin, Gary Giles, Iain Mather, Steve Bartlett and Bruce Dickie with fellow-traveller Scott Howard headed north to The Pinnacles for the day. It is understood that the Xantia travelled like a dream.

Photos: Bruce Dickie



speaking, very significant. Lighting his second cigarette, the facts and events flow back to him...

...*France Australe*, exploration, survey, discovery, the dash to establish colonies, trade, influence...

In his mind's eye he sees May 1801, the two sailing ships rounding the cape they will later name after one of the vessels — *Naturaliste*. There was a winter gale threatening, and the over-cautious Captain Baudin on the *Géographe* was, as might be said in modern *franglais* «*Merde scared*». There was no way he would attempt a landing on the Cape Leeuwin side of the peninsula, where the surf crashed in all the way from Africa. Even the relatively calm waters of the bay on that day were dotted with ominous white-crested waves. The scientists on board, however, were pressing the captain to send a party ashore. They had endured day after days of mountainous seas and were eager to explore this unknown land.

When Baudin finally decided to send a landing party, the two ships were at anchor off Wonnerup. The scientists were delighted to discover black swans and paper-bark trees and encountered a group of Aborigines who appeared to be terrified at the appearance of the Frenchman.

When the landing party returned to the beach some hours later, the May storm was unleashing its full fury. Sand had half buried their landing boat, which they were unable to salvage. They were forced to spend an unpleasant night, being ill-equipped for this unforeseen stop-over.

The next day a boat was sent out from the *Naturaliste* to rescue them. A young sailor named Timothée Vasse was lost in the surf...



Recalling the name Vasse, Gaston drifts back to the present. The young man's name lives on in the town today. A river, an hotel and doubtless other street or place names. France Australe. French *influence*. In the twists and turns of nineteenth century history Western Australia so very nearly became a French colony. What kind of society might the French have created in this land? He thinks for a while.

The glowing embers of his Gauloise drag back to the filter [I would have expected Gaston to dismiss Gauloise *avec filtre* as some devilish modern invention to be avoided at all costs. Ed.] He tosses the *mégot* off the end of the jetty and a blowfish retrieves it, mistaking this fag-end for a tasty morsel.

The walk back above the water towards the beach, with the autumn sun rising higher to his right, gives him a chance to recall the events of

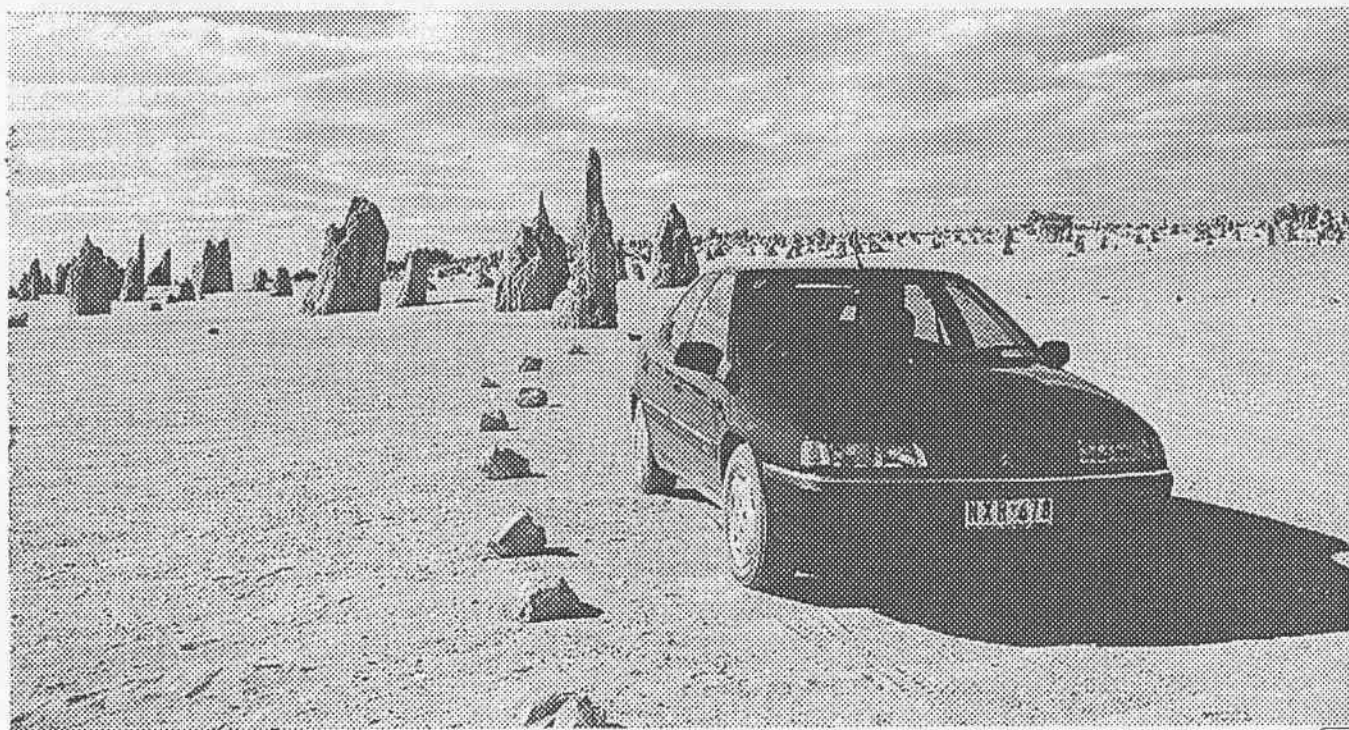
the weekend Citroën meeting. Another bit of French influence. He knows even now that breakfast is soon to be served at the Conference Room and he should be there. Over the past three days he has met up with some old friends, made some new ones and nudged along the local viticultural economy as best he can. This morning's minor hangover bears witness to that.

Highlights have been the good humour and company, the spectacle of Citroën engineering transplanted to off-road applications, the flamboyant auctioneering to raise club funds, the sharing of technical expertise between members from all states of Australia. *Roger et Roger* and the barrel of tiles. Moonrise at sunset over Meelup. Gaston knows that a *Concentration Automobile* such as this takes a lot of organizing. All the West Australian organisers deserve a big thank-you.

Gaston walks back to Busselton town centre to his awaiting XM. *Modernité*. The unmistakable outline of an Ami 6 flashes through the junction, its driver wearing a béret. Driving towards the Citroën venue, he pauses at the Vasse River, looks along Naturaliste Terrace, thinks of good friends, Timothée Vasse and France Australe.

Footnote: Captain Nicholas Baudin was born in the Île de Ré, Western France. Australian Citroënists participating in Raid Vendée, September 1998 will have the opportunity to visit the island's museum where there is a display dedicated to Baudin and Géographe. Raid Vendée is free, and all Australian Citroën enthusiasts are cordially invited. Contact Alan Brown, fax France 251 40 26 36 for itinerary and registration.

Gaston Pommille-Bâtard



# PACK YOUR

## we're off to



Organising Genius behind the Observation Run, Andrew Begelhole contemplating the results on the way the Sunday Dinner, with Dot Solomon and Claire Hadaway

Photo: Robin Smith

Winners of the Observation Run and the Iain Mackerras Memorial Trophy for the second year, Sue Bryant and Leigh Miles with Rolf Breyer, of the OzTraction organising committee.

Photo: Robin Smith

Mt Gambier isn't a hole, but it is full of them. Never a dull moment; that place has enough geological stuff going on to keep a conference of vulcanologists happy for quite a while. Knowing how much car enthusiasts like bombs and explosions and unexplained happenings of every sort ["Well, I dunno, could be your togglegwink climping the wrong end of your bimthorp. Mind you, I had a similar problem with my gwergr the other day, and the solution was to thwack the gridlew really hard with a number 5 pomdonk"], I guess this could be one reason why Mt Gambier was chosen as the location for OzTraction '98. It also has the colour blue as its theme. They have a blue lake. They sell blue lemonade, the soap in the dispensers at the caravan park toilets comes out blue, and they never have arguments there, they have a blue. The wind blue





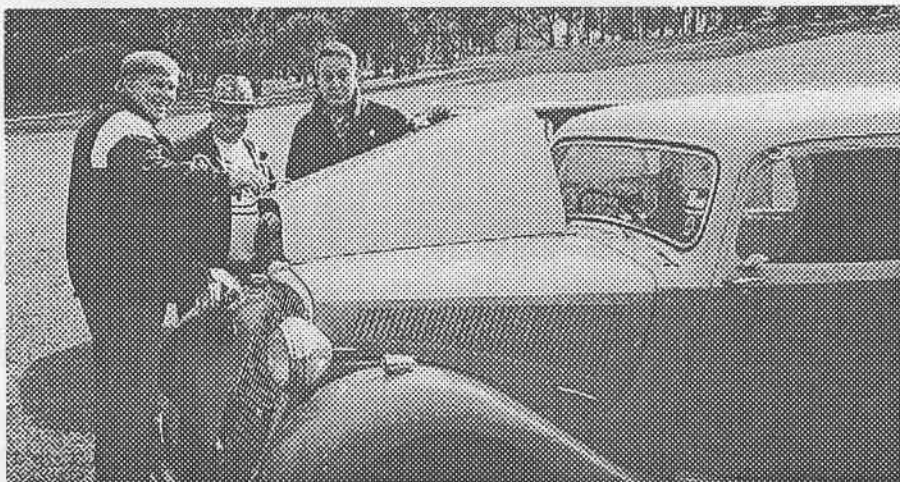
# GEOTHERMAL

## Blue Lake City

while we were there, and 'Blue Moon' is the locals' favourite song. I made that up actually. [It's really My Blue Heaven.] I arrived in an Ami 6 [or possibly the Ami 6 depending on who you're talking to] and, by an amazing coincidence, guess what? It was grey.

Now, it has been said that the Ami 6 is about as attractive as the back end of a wombat [I should know, it was me who said it]. But it must have been a very cute wombat. To add to the excitement, this Ami 6 had been under wraps for as long as I could remember [which, after a couple of bottles of red bubbly, isn't that long really] — so the romance and mystery were all there. I couldn't wait to get a butcher's at it, and I was not disappointed. It has a shape which makes it look as if it is permanently accelerating at Warp 4 and about to do obscene things with the space/time continuum. Cute is definitely the word.

Not only did I finally start to realise what all the fuss is about [what with feeling this strange attraction for the world's most geeky car], but I also had an initiation into the Observation Run. This is like Treasure Hunt on acid. It wasn't a really good start seeing as how it was bucketing down, making observing anything rather difficult — "Look! There's a sign there! There! Oh my mistake it's a damp leaf on the window" — but things got better. If you go down to Port MacDonnell, they may well tell you about the madwoman who was looking for a worm. [They may have thought that, being a city dweller, I was lonely and in need of company.]



Of course it would not be Citroën Event if a bonnet or two was not lifted. Above: John Smart [Vic.], Brian Wade [Old.] and a very surprised Robin Smith [Vic.] take a break from investigating Rolf Breyer's Traction motor.

Below: Phil Ward [SA] proudly [?] displays the design features of his Ami 6 to [left to right] Nathan Wade [Old.], Sue Smith [Vic.] and Chris Bennet [SA].

Photos: Leigh Miles



# PACK YOUR

## we're off to



While Cathy was 'wriggling my toes at the back of the dinner-cruise boat' others were caught by the camera.

Above: Rod Greschke and Barbie Osborne [ACT]. Why does Rod look so sheepish?  
Below: Esther and Brian Wade [Old] with Mona and Graeme McDonald [Vic]

Photos: Robin Smith



I raced into the shop, grabbed a Mars bar as it seemed politic to buy something first rather than launch into questions out of the blue [you see, there's that word again], and interrogated the friendly locals. What was the Customs House used for? Is this the crayfish capital of the universe or what?? A man ambled out of the back of the shop, the woman behind the counter informed him that this lady wanted a worm [in the tone of voice that suggested it happened every day, I might add], and he scratched his head as if he'd been asked the way to the jetty. "You could get any number out of the garden, look under any stone", he advised me. "Tell you what, I'll go fetch a couple." Oh good I was hoping you'd say that. He meandered back in with a wriggling plastic bag, I made off with heartfelt thanks, shoved the bag at a slightly stunned Phil [who hadn't realised you could pass worms so easily to another person — has he got a lot to learn] and we were off again...

The Mt Gambier Experience. Making chip butties in the Chardonnay Lodge with the Mad South Australian Genius Inventor and the Sardonicly Deranged President of CCOCA, learning new hand gestures I never dreamed existed [caught like a rabbit in headlights, I could have watched Philippe and Mel for hours, but I'm still not sure if you were describing how to gut a llama, have extra-marital relations with a Hills Hoist or handle those foible-full little Citroëns], watching the Demented South Australian Object Creator up



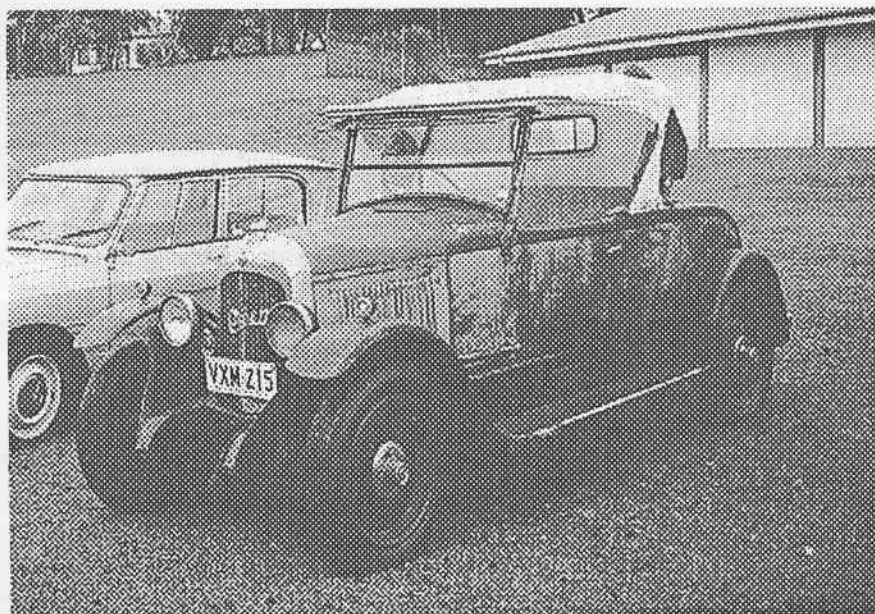
# GEOTHERMAL

## Blue Lake City

to his thighs in the ocean looking for specimens, wriggling my toes at the back of the dinner-cruise boat, star-gazing through the diesel haze, watching the lime-washed, slime-washed gorge ripple by, Radiant-white in the floodlights, sorry I expect you think you've wandered into a Wilkie Collins novel. I had a great time, thanks. I even brought a furry pal back with me. He leapt into my arms in the antique shop in Penola and informed me that his name was Norbert. Well, I'm sorry but Norbert was the name of my estate agent in Sydney. I could just imagine this cute little bear coming home with me and eyeing my place with a view to potential renovations, 2<sup>nd</sup> bdrm/stdy, int.lndry, b.i.r., lng and wtw carps. So we could have a Name the Bear competition if you like. Whatever you think.

Just don't call him Blue.

Cathy Rushton.



Above: Not only does the antiques man in Penola have bears named Norbert, he owns this vintage Citroën.

Below: Just for the fans of Rokey Parkes 'Letter from Kalangadoo', yes it really does exist. Here is Leigh Miles' Visa Cabriolet outside the Post Office. Whilst unable to find Abbatoir St, Leigh did confirm the existence of Slaughterhouse Rd!

Photos: Leigh Miles





# member's meanderings

## A TASTE OF CHAMPAGNE IN MARYBOROUGH

**Rob and Libby Little share their joyous New Year's Eve experiences and recommend you follow in their footsteps...**

L'Auberge du Clair de Lune or The Moonlight Inn is a perfect place to find that touch of France in the country. It is a secluded 'Bed and Breakfast' just a few kilometres out of Maryborough, with an attached a la carte restaurant. Libby and I had the pleasure of spending New Year's Eve with the hosts of this establishment, Joelle and François Carpentier, we had never met before but now feel that we are old friends such is the hospitality shown by them.

The accommodation is in a French style farmhouse, designed and built by the owners, and the restaurant can seat forty plus patrons. They offer traditional French cuisine, personal service and a most friendly atmosphere.

We arrived around 4.00pm to be greeted by Joelle, ushered inside and given a cool drink. Then we met François; after more drinks and much

conversation about France and Citroens we were shown our room around 6.30pm and proceeded to rest and change before the evening meal.

On entering the dining room we found that our privacy had been interrupted by a couple from Sydney but I think that there were other things on their mind and they ate and left, very satisfied, by 10.30 p.m.

We were still eating and chatting with our hosts as midnight struck so of course we were invited to toast the New Year in with champagne [how else!]. We finally reached our bed around 1.30 a.m.

Morning seemed to arrive very early on the first day of the year and it was back to the dining room for breakfast. We were pleased that we had eaten the apricot tart for dessert

as we had been threatened that what was not eaten for dinner was to be our breakfast. That would have resulted in missing the excellent omelettes served. After extracting a promise that the Carpentiers would look us up and sample our hospitality the next time they were passing through Shepparton we finally left around 10.30 a.m.

As Maryborough is only 45 minutes from Daylesford I can recommend a visit by the club. For any member is passing through the area, if you would like a taste of France, while traveling, this is the place to stop.

Robert Little.

Below: François and Joelle Carpentier join Libby Little in welcoming the New Year at L'Auberge du Clair de Lune 'Bed and Breakfast' in Maryborough, Vic.



# gentle EVOLUTION

In January 1991, Citroën took a decisive step that would bring it access to the heart of the European market. By launching the ZX, Citroën plugged the gap in its range between the AX and the BX. At last it could accede to the M1 category, the most desirable in Europe.

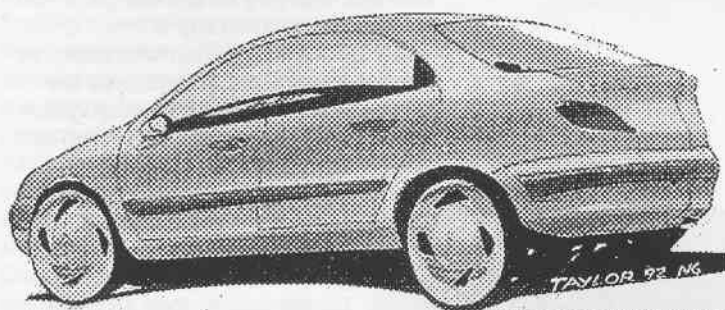
The Xsara, launched in Frankfurt last September, is destined to take over from the ZX. It therefore has the onerous task of cultivating the acknowledged qualities of the ZX and correcting its weaknesses. It was in this spirit that the brief for project 'N6' was drafted in 1992. First off, Citroën

product planning decided that the ZX was not going to be reworked and that its replacement would benefit from totally new styling. At the same time, they set to work on simultaneously developing the three body types that, within its first six months of life would constitute the 'N6' range: the three-

and five-door saloons and the estate. They also knew the programme would have to be completed in a relatively short time span: 196 weeks.

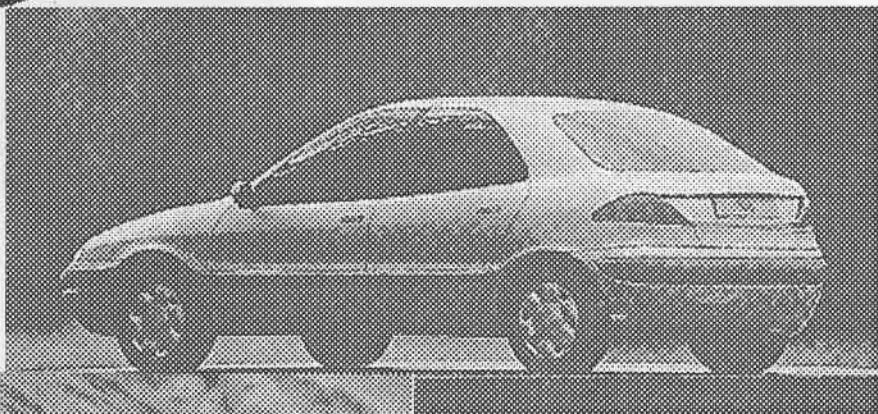
To do so, Citroën's Centre de Création assembled a suitable team around Donato Coco, responsible for the B and M1 segments at Citroën, under the direction of Arthur Blakeslee. The computer was also a precious ally in accelerating the development process.

To the ZX's credit, there were all its formidable dynamic qualities. On the down side, the bonnet area was one of the car's perfectible points. [Others have suggested that the bonnet was one of the few areas that were not in need of improvement in the basic ZX design, but they would be Citroën



From early design sketch through scale models to finished vehicle in 3/4-rear view.

The most significant change over the design process was the need to increase boot capacity.



purists who would say that, wouldn't they? Ed.] So it was in these two directions that the product planners, then the design people, first turned.

Amongst the other constraints, they also had to take into account the imperatives that characterised design — and still do — in our fin de siècle: an awareness of perceived quality, a sense of robustness and the rationalisation of production.

The first, unfettered pencil strokes were sketched during 1992. With the drafting of a precise brief, the research



# gentle EVOLUTION



focused on more realistic projects. The brief imposed one major constraint: aware of the track-to-wheelbase ratio that had generated such unanimously appreciated dynamic qualities, the ZX replacement had to stick to the same basic dimensions. The hard points of the package, the mechanical setup and the ergonomic approach had to remain virtually unchanged from one model to the next. Departing from there, the stylists nevertheless had to increase the capacity of the boot and optimise the interior space of what was yet to be named the 'Xsara'.

As is customary, the Citroën Centre de Création competed against two independent studios: Stile Bertone, the regular partner of the double chevron, and Heuliez Torino, recently created by Marc Deschamps after a short stay at

Coggiola. Very quickly, it was the theme roughed out by the Citroën style centre that was retained. On this programme, the consultants did not manage to respond with their usual pertinence to Citroën's demands. On the other hand, the interior styling proposals from Bertone served as the basis for further developments.

As their primary mission the designers thus had to realise a car even roomier than the ZX, albeit conserving its basic dimensions. The front end was rapidly defined. Of a very simple design, it had to affirm the personality of contemporary Citroëns, materialised in the long curve that underscores the grille and the headlamps which gives the Xsara its expression. In relation to the ZX, the face of the Xsara would prove better structured, with bonnet scored at the centre and clearly modelled on the grille. The expression of the frontal section thus achieves greater strength and vigour than the previous generation, marked by their overly smooth bonnets.

The rear end posed more problems. In the early drawings, followed by the first scale models, the tail was rather compact and bunched, surmounted by a complex backlight. But rapidly the

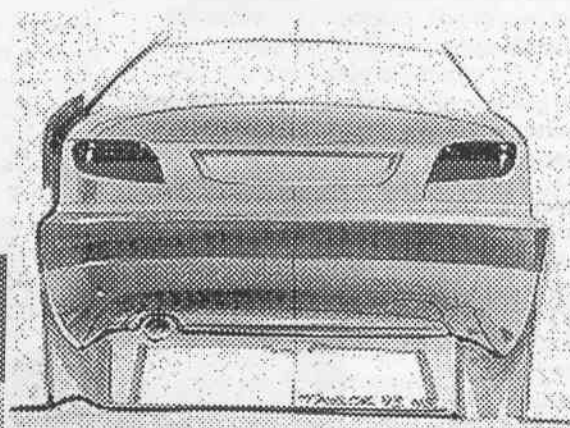
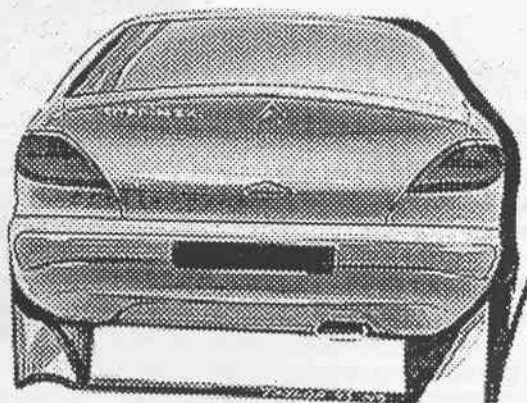




contingencies of boot capacity meant completely redoing the rear. Gradually the extension of the rear overhang and work on a simpler backlight became imperatives, drawing the research work towards the definition of a two-and-a-half volume notchback and moving away from the simple two-volume hatchback formula.

Moreover, this shape was reminiscent of the Xantia, which from the very beginning had affirmed itself as an aesthetic success. The optimisation of the rear-end design, the rake of the backlight and the enhancement of the boot were accomplished in the light of aerodynamic testing. At this stage of the research, the increase in boot capacity had become patently clear. At the same time, successive attempts were being made to create very distinctive tail lamps. In the end, the style freeze for the rear lighting came in December 1994, two months after the exterior style as a whole had been frozen. Similarly, the design of the grille underwent some retouching until July 1996 to align it with the rest of the range and unify the new Citroën visual identity.

Another characteristic of the Xsara style: bodywork protection. In recent years, designers have tended to tone down the material presence of

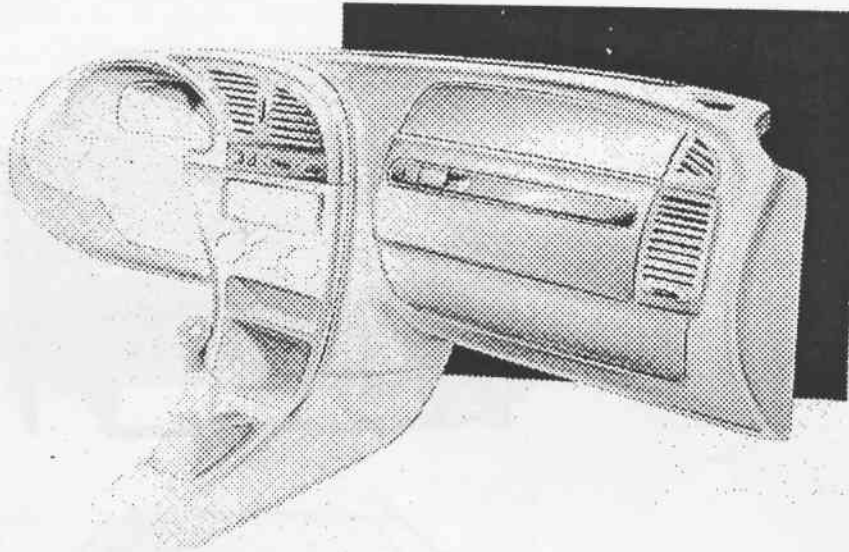


protective body parts, whether the front or side strips. In this area, the Xsara returns to a more frank treatment with thick sections integrated into the front and rear mouldings and broad side strips. The Xsara autoclave doors that add an appreciably modern note. At the same time, this brings strength to the windscreen area.

The research work for the three-door version kept pace with that of the five door saloon. Unlike the ZX, or certain of the Xsara's rivals, it was no longer a question of doing a three-door 'coupé' version. So after elaborating notably different sides and after working on the rake and orientation of the central pillar the stylists stuck to a simple design, in harmony with



# gentle EVOLUTION



European market through its exceptional performance in terms of comfort and spaciousness. It does so with seriousness and responsibility. It does so without frills. There had been concern about the wisdom of the ZX, undoubtedly there will be the same reservations over the Xsara. But you have to accept that these essential cars enable, and will enable, Citroën to find its place in the congested segment where the Volkswagen Golfs, Opel Astras, Ford Escorts, Fiat Bravo/Bravas, Renault Méganes, Peugeot 306s, Toyota Corollas and others fight their corners.

It is of no small merit that the directors of Citroën and the Peugeot group have chosen the least risky options in order to get there.

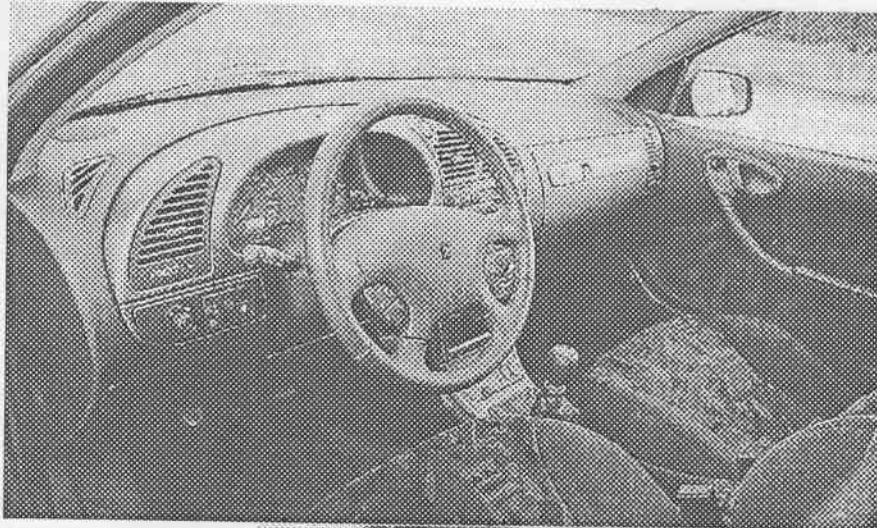
[Others Might be rude enough to suggest that the directors decision to pursue such a boring outcome displays cowardice, rather than merit. Ed.]

Serge Bellu.

First published in 'Auto & Design', December, 1997

rearward rise of the beltline.

Rationalisation was another design concern. From the seven different types of bumper that existed for the ZX, the figure was reduced to three for the Xsara. Effectively, it was no longer a question of overtly differentiating the bottom of the range from the more sophisticated versions: all Xsaras have the right to colour-keyed bumpers.



Here, as in many other areas, the Xsara takes care of its image in the details. Its message is reassuring. It is a car that wants to be safe and comfortable, spacious and protective, generous and solid, and it shows. By its modelled and fleshy surface treatment, by its pure and fluid flanks, the Xsara refutes the vocabulary that characterised the ZX, with the taut lines and graphic motifs that made such a splash in the 1990s.

At the bottom line, the Xsara fulfils its mission. It justifies its place on the



# NEWS FROM *the net*

## THE LIES OF UNLEADED PETROL.

**Oil companies convinced us that unleaded petrol is safer for our health and environment than leaded petrol. By their failure to disclose all the facts, we have been seriously conned!**

Compiled by Catherine Simons, B.Sc.  
From articles by Peter Sawyer, Graham Allum and Simon Grose, as published in NEXUS Magazine, Volume 2, #25 [April – May '95]. PO Box 30, Mapleton Qld 4560 Australia.

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Let's start at the beginning. When internal combustion engines were first developed for the automobile, they ran on a substance known as 'motor spirit'. By today's standards, motor spirit was an exceptionally 'clean' fuel; properly burnt in an efficient engine, the main exhaust products were water vapour, carbon dioxide and some trace carbonic elements and particles. There were two main problems with motor spirit. First and foremost, it was a highly refined product which cost the oil companies far more to produce than what they wanted to spend, or what they thought they could charge if the automobile was really to take off in a big way. Secondly, the original combustion engines ran at very low compression ratios compared with today. As the vehicle manufacturers strove to produce ever faster, more powerful engines, they gradually raised the compression ratios, as this is one of the easiest ways of gaining more power from any given-sized power plant. So, for a period, these two problems developed side by side until they eventually collided with the development of the V-8 engine. On the one hand, fuels were becoming less and less refined, and therefore more contaminated with products that adversely affected engine efficiency. On the other hand, power plants were being developed which employed ever higher compression ratios and required ever more exacting performance from the fuel used. With the advent of the

high-compression engine, a point was reached where cars would not run satisfactorily on the product being supplied by the oil companies. An engine under load would develop a condition known as 'pinging', where the fuel mixture would explode due to compression before the right time, causing rough running, stalling going up hills, and so on.

There was only a shortlist of answers. Vehicle manufacturers could go back to designing low-compression engines, the oil companies could go back to producing a highly refined product, or something would have to be found that could be added to stop the fuel pre-igniting. The first choice was unacceptable to the manufacturers. They had long since embarked on a marketing strategy that demanded ever bigger, ever more powerful power plants every year. Nobody was prepared to take the risk of producing a less-efficient, less powerful engine than the one offered the year before. The second choice was unacceptable to the oil companies. They had perfected the technique of producing a fuel with a minimum of refining, that could still be burned in engines, at such a low price and in such quantities that they were well on their way to becoming the richest, most powerful companies on Earth. They had no intention of greatly increasing the cost of their product, thereby turning many people off the 'advantages' and 'economy' of owning their very own car.

The third choice was the only acceptable one. All that was needed was to find some product, something that could be obtained cheaply, that could be added to petrol to reduce its tendency to 'ping' under compression. Common lead was found to have all the right properties, and so 'leaded' petrol was born.

By the late 'sixties, supplies of high-grade, low-sulphur, low-nitrate oil were becoming scarce enough to command premium prices. This type of oil was favoured by the petroleum producers, since removing these contaminants to an acceptable level is difficult and costly. The companies were refining increasing amounts of the cheaper, high-sulphur, high-nitrate oil, but using the same old processes. This in turn led to ever higher levels of sulphur dioxide and nitrogen oxide in vehicle emissions, and people were starting to complain – if not about the environmental effect, then at least about the smell. The smog banks over the bigger American and Australian cities during this period were not, as most people believe, the result of so many more cars on the road, although this, of course, was a contributing factor. The main cause was the vastly increased levels of sulphur/nitrogen oxides in the vehicle emissions because of the higher levels of contamination in the fuels themselves. The oil companies were once again faced with the dilemma of cleaning up their product or finding another solution that did not affect their profits. The chemical theories and practices of catalytic conversion had been known for many years.

It had always been known to the oil companies that they could use these processes to further refine their petroleum products. This, however, would have meant major upgradings of their refineries. Far better if they could get somebody else to foot the bill. Even better if they could get somebody to meet the cost of total responsibility for all the oxides.

In the 'fifties, a lot of work was done trying to utilise the CO<sub>2</sub> from such fixtures as coal and oil electric power stations to increase plant growth.





# NEWS FROM *the net*

These efforts failed because of the harmful effects of the concentrations of other pollutants in the exhausts. These were principally the same sulphur/nitrogen oxides. At the time of these experiments, it was discovered that passing the exhaust gases through a filter of platinum caused a catalytic conversion of the oxides to other products which could then be prevented from escaping into the greenhouses used for food production. The problem at the time was that it was not economically feasible to do this: platinum converters are very expensive things, and they do eventually wear out and require replacing. There was an added problem that the eventual by-products were in many cases even more harmful than the original oxides. This information then remained unused for some decades.

## THE BIG CON

Eventually the blankets of sulphur and nitrogen oxides, better known as smog, grew so thick and so unbearable that 'public opinion' caused America's legislators to start looking for answers. Obviously the place to start was with the oil companies. The oil companies announced quite loudly, and mostly erroneously, that the problem was 'so many cars'.

There were only two solutions, they said: either limit the number of cars, or put something into the cars to 'change' and limit the emissions. Was such a thing possible, asked the legislators? Certainly, replied the oil companies. Let us tell you about 'catalytic converters' which can be fitted to the exhaust system of every car.

The legislators, although they toyed with the concept, were not about to try and seriously interfere with people's rights to drive motor cars. Such action was perceived as electoral suicide, especially when there was the alternative 'magic bullet' solution of converters available. Neither were they about to listen to all the 'extremists' who were trying to tell them that the problem was in the type of oil being

refined in the first place, and the only long-term solution was to get the oil companies to clean up their act. Such people contribute very little to election campaigns; the petrol chemical giants contribute millions. There was only one problem left for the oil companies. Unfortunately, while platinum doesn't react to any great degree with the products of burnt petrol, it reacts very readily with lead – so readily, in fact, that burning a single tankful of 'leaded' petrol in a car with a catalytic converter will render the converter useless. [This is the reason it is illegal to put 'leaded' petrol in the fuel tank of a car designed to run on the 'unleaded' variety.]

Trouble was, the oil companies couldn't simply stop putting lead in petrol, because the original reason for its presence – to stop 'pinging' – still existed. There were available alternative additives that could be used, but these all had the disadvantage that, untreated, they produced emissions far more deadly than even the lead. On the plus side, however, these emissions could be filtered out by catalytic converters. What was needed, then, was a campaign to convince people that 'leaded' petrol was a grave danger to the environment, and that the only solution was to cease using it, replace it with the 'unleaded' variety, and then run the emissions through a catalytic converter. Such a campaign would ensure that legislation was passed forcing the fitting of catalytic converters, which would overcome the original problem for the oil companies – the increased levels of sulphur and nitrates in their fuel. You see, the campaign never had anything to do with lead: it was simply a matter of convincing people to use a fuel that wouldn't wreck the converters, so that the petroleum companies didn't have to spend any more money refining the oil and could get away with selling a dirtier product, forcing the motorist to bear both the responsibility and the cost of trying to clean up the air.

Anybody who doubts it was the quality of the petrol rather than the number of

cars which caused the massive increase in smog in the period in question, need only look to actual figures. While it is true that the number of cars in use was increasing, the rate of increase was fairly steady. At the height of the 'smog wars', however, the levels of emissions were increasing at nearly four times the rate of growth of car ownership. On top of that, this was the period where petrol was starting to get more expensive, and 'economical' engines were becoming the order of the day. That is, although both car ownership and petrol consumption were on the increase, rate of ownership far outstripped rate of increase of consumption.

[Source: Peter Sawyer, Green Hoax Effect, Groupacumen Publishing, Wodonga, Victoria, Australia, 1990]

## HEALTH RISKS FROM ULPI

As you are aware, we have been told that our old cars must go because of their 'dirty' exhausts, in particular the lead issuing forth and causing great public health problems.

Dr David Warren was the guest speaker at the quarterly meeting of the AOMC [Vic] on 28 February 1994. Dr Warren is a retired Research Scientist for the Department of Defence and was the Energy Resources adviser to the Victorian Government back in the early/mid-'80s when the ULP debate was gathering momentum. Here is a condensed summary of Dr Warren's address.

## ENTER LEAD

In the early 1920s, a fellow called Thomas Midgie was looking for something to combine with the free radicals to stop 'knocking'. He found that things like platinum, silver and lead were able to hold these free radicals. Midgie figured that if he could get lead oxide spread through the mixture, sooner or later the free radicals would bump into a bit of lead oxide, which forms lead dioxide, as lead has four bonds, but that breaks down to lead, Pb<sub>2</sub>, and oxygen, O<sub>2</sub>, but slowed down the reaction.



In searching for a way to get the lead spread through the mixture, Midgie found a compound called lead tetraethyl which is similar to the combinations in the groups making up petrol. The first good thing about it is because it is like petrol, it is soluble in petrol. The second is that it vaporises like petrol, which means that the lead tetraethyl is dotted around in the mixture. The third thing: it breaks down to lead at upper cylinder temperatures, lead atoms spread around and the ethyls are let go. Then the lead does its job, combining with the free radicals and slowing down the reaction.

Midgie's research took the octane number from 50 to 65; then research at the refinery introduced crackling reforming and improved the octane number past 89; then, with further developments and money, they got the octane number up to 110 for aviation fuel.

#### ENTER THE GREENIES

'Clean up car exhausts' was the cry. By 1975, lead was being reduced in petrol because lead is a poison – that is a general statement; however, to get the fact exact you should say lead is a poison when it is absorbed into the body.

Now, the fact that lead is a poison if absorbed, does it follow that the lead in our bodies is from the lead in petrol? That was the debate in the early '80s. There were a large number of contradictory reports in the papers, and the National Energy Advisory Committee reported 'no single case of clinical lead poisoning has ever been demonstrated to be due to automotive emissions of airborne lead'. 'There were tests and arguments all over the world. In Frankfurt, the government decided they would cut the lead in petrol from 0.4 to 0.15 grams per litre, about two thirds. Now if the lead was a problem, it should have an effect on the community. If petrol is causing part of the lead in the community and you cut it by two thirds, any scientist knows it must have an effect, otherwise it had nothing to do with it.

The nett result: 'Since the changes observed are only of the order of statistical scatter [that is, you would never measure anything and get the same thing twice], this indicates that lead from petrol did not contribute to uptake by ingestion through significant deposition on food and utensils as has been suggested. If it had done, greater and continuing decrease in blood levels in the community should have been observed.'

In other words, they measured nearly a thousand people over a five-year period and there was no change at all despite cutting the lead content in petrol.

In London we had Professor Lowthorpe of the University of London pointing out that the lead that comes out of the exhaust has been baked at 2,000 – 3,000° Celsius, like a house brick, but so small that you need a microscope to see it. It doesn't get absorbed through the lungs and doesn't even dissolve in the diluted hydrochloric acid of the stomach.

It appears that the lead in the air is not the source of the lead that is observed in the community.

Besides, you can measure the lead coming out of the cars and it settles. You measure it as grams per cubic metre at the edge of the road, but if you go back ten feet it is less because it's very heavy dust. Even though it's very small particles it is very heavy.'

#### ENTER THE POLITICIANS

[In 1983 Dr Warren was the scientific adviser to the committee for Energy Resources.]

The question came up: 'Will we ban lead in petrol? The real question was will we have ULP?' The real reason for ULP was that people wanted to fit catalytic converters on their cars to get rid of the nitric oxides, carbon monoxide and unburnt petrol that came out, but the lead spoilt the catalytic converters. That was the reason that the rest of the world gave up lead in petrol. The other countries

banned it to bring in converters; we banned it because we think it's dangerous.

So I [Dr Warren] prepared a speech and convinced the Committee – about a dozen people from both parties – that lead didn't need to be banned and that we didn't need lead-free petrol because the evidence wasn't there.

I prepared a subsequent speech presented to Parliament by the then – State Member for Ballarat. At the same time there was a paper from Dr Bell, the Director of Health of the New South Wales Government.

Dr Bell asked what was going to be added to the petrol to raise the octane number if the lead was removed: 'If the lead is taken out, you have to add other things to run them in our cars; we put in benzene, toluene, xylene, dimethylbenzene or mesitylene. They're all ring compounds and the dangers are that some of them are declared carcinogens and the others are suspected carcinogens. We're going to cut lead even though there is no proof that it does anything wrong, and we're introducing substances which will ultimately be affecting the cancer rates in our country.'

The answer was: 'We have converters and they will destroy them', but we all know that converters don't work until they are hot – about the first three miles or so – and every time you fill up, the vapours are coming off.

Now when the speech was delivered to Parliament, there were only two people listening: myself [Dr Warren], to see that he got it right, and the Member giving the speech. It seems that the prevailing attitude was: 'Don't confuse us with the facts; our mind is made up, the people want it and that is where the votes are.'

Nobody listened to that speech because it was party policy: both parties said, 'No, we've decided – it doesn't matter what the man says; go and have a drink at the bar and when the bell rings we'll come in and vote' – and that's how it was decided!



## ULP HEALTH RISK

Even at that stage, Dr Warren had found that the lead problem was highly overstated and that the potential hazards from the aromatic octane enhancers – like benzene – were greater than the perceived lead problem.

In fact, this stuff appears to be so dangerous, potentially lethal, that I urge you not to use it in any car not fitted with a catalytic converter. Don't use it in your mower, chainsaw, whipper-snipper or outboard motor, and don't wash parts in it. If any gets on your skin, wash it off immediately. Avoid the fumes when refuelling and don't allow anyone near the exhaust, particularly when the exhaust system is cold. Remember that catalytic converters don't work until they reach some 400°C.

In Britain, this risk is so clear that the National Society for Clean Air has removed their support for ULPI

Dr Warren's research showed that the lead in blood comes not from breathing airborne lead but from eating and drinking it – that is, principally from soldered food containers, lead-based paints and lead pipes.

In fact research showed that the blood lead levels were higher in country people drinking bore water, such as the New Guinea highlanders and peoples on remote islands, without motor vehicles than in blood samples taken from those living in the heart of Melbourne.

## ALTERNATIVE

You will recall in the past I have referred to a device invented by Mr A. Bodycomb. This device would do essentially the same job as a catalytic converter, that is, remove carbon dioxide and unburnt fuel from car exhausts, but it would also remove lead – so there would be no need for ULPI

This device was tested in the early '70s, but those testing it seemed conveniently to forget the test results later, favouring instead the dry converter that we now have.

Mr Bodycomb lives in Melbourne and even now cannot get anyone interested enough to have a look at it.

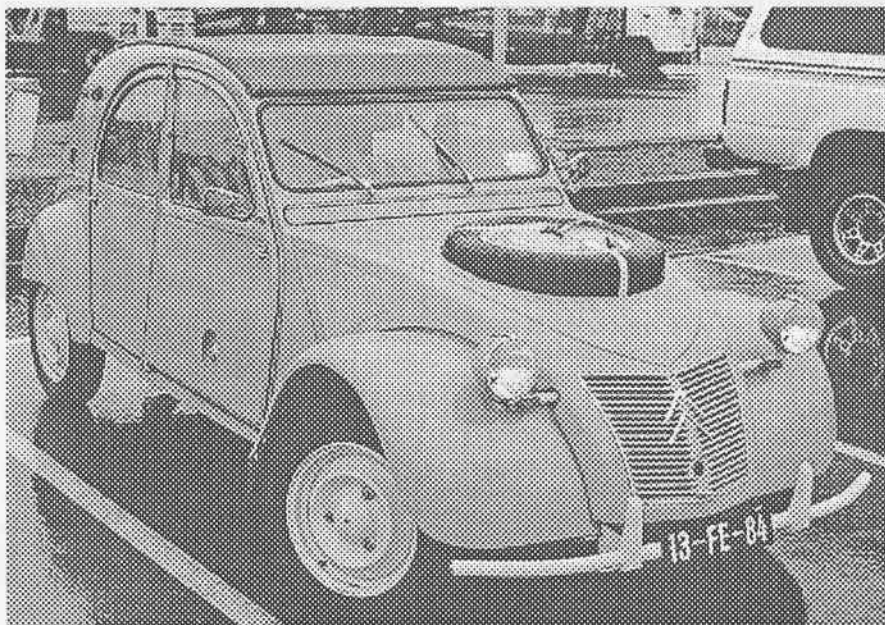
[Source: Extracted from an article by Graham Allum, published in Restored Cars Magazine #104]

# classifieds

## CARS FOR SALE IN AUSTRALIA

### 2CV 'SAHARA'.

2 x 652cc Visa engines. Front wheel drive or 4 x 4. Jade green with mushroom trim. Ripple bonnet with spare wheel insert. Full registration in Qld as 2 seater but has a back seat [no rear belts]. Recent major rebuild. Very good condition all round. \$21,000. Contact: Annie, Ph 07 3369 8841. [U/A]



### Light 15 – 1950

Converted to ID 4 speed [English conversion kit] plus new driveshafts, etc. New 15" wheels and tyres. Reliable everyday useable classic...complete with spares. Reluctant sale for house purchase \$10,000. Contact Dave Noke, Ph/fax: [07] 3369 8841. [M/J]

### 2CV6 Club – 1980

[see page 19 of Jan/Feb issue of 'Front Drive']. Yellow and black, VGC, very reliable and economical, 104,000 miles, heaps of spare parts and service parts, well maintained and serviced. Study reasons [PhD project] necessitate frequent, long distance travel and a modest lifestyle. Trade in of a new and small [Asian] car will therefore be considered. Car is \$10,500 and parts [new tyres, oil filters, points, belts, etc.] and books \$800. \$11,000 the lot.

Contact Adrian Schoo, 29 Havering Lane, Strathfieldsaye, 3550 Vic. Tel: [03] 5439 3261 [A/h], [03] 5442 4044. Email: proact@netcon.net.au [M/J]

### 2CV6 Club 1986

White, excellent condition with just 30,000 miles. \$13,500. Also pair of standard accessory front and rear bull bars,

ideal for Raid. Will sell separately. \$300. Contact: Tom Campbell [02] 9692 9975 [A/h]. [M/J]

### 2CV Charleston – 1984

1984 Charleston, in two-tone grey [très cool!!!]. NEW roll back roof, NEW seat covers, to original design, NEW [well almost new] French 'Vege Motoren' exchange motor installed 15,000 miles ago. Complete history. As featured in 'Practical Classics', July 1997. All in all in top condition. Asking \$14,000.

Contact: Alistair Sinclair [03] 9429 7241 or 0414 429 724. [M/A]

### CX 2400 PALLAS – 1979

Metallic Brown, leather. My daily transport for the last 10 years. Some rust in doors and paint is tired, but mechanically excellent. Much recent work including new Michelins, exhaust system, timing chain, front discs and pads, rear swing arm bearings. \$1,500.

Contact Roger Brundle [03] 9380 9321 or 0418 563 351. [M/A]

### DS 21 SAFARI – 1971

Full Pallas trim, 7 seater Safari with factory aircon. 5 speed manual. Fully maintained and serviced by Paris Motors, A1 condition.

Contact Paul Hughes, [03] 9348 9349 [A/h] or 9420 0275 [B/h]. [M/A]

### CX 2400 PALLAS

Manual 4-speed with air conditioning, tidy interior and respray to your choice of colour. 12 months registration and RWC. Offers around \$5,000.

### LIGHT 15

Very good mechanically, comfortable interior, but rough paint work. Offers around \$7,000.





**GS 1220 SEDAN**

Clean and tidy car, good reliable transport. 12 months registration and RWC. Around \$3,000.

**ID 19s**

Good mechanically in good original condition and sound bodywork. Could benefit from TLC. Negotiable.

**TRACTION RESTORATION PROJECTS**

Big boot, Big 15

Small boot, Light 15

Small boot, Big 6

A range of Citroëns is always available for the enthusiast.

All enquires in the strictest confidence.

Carey Motors Pty Ltd

Authorised Citroën Service and Spares

P.O Box 469

Bairnsdale, Vic 3875

Ph 018 516 126 and speak to Mel.

**LIGHT 15 — 1952**

Green with fawn leather. Original condition, small boot. Sound car, ideal for use as is or an excellent base for straight forward restoration. Original registration plates. Only three owners since new. POA Contact Ted Cross, acting as seller on [03] 9819 2208 [M/A]

**GS PALLAS SEDAN — 1977**

Genuine 89,000 km. Silver with blue trim. This is a very original car in top condition. Car has been garaged from new and meticulously maintained and serviced. Open to offers, around \$6,500. Car is located in Perth.

Contact Evan Gobby, PO Box 282 North Beach, WA, 6020 or [08] 9246 2400 or 018 092 222. [M/A]

**2CV6 CLUB — 1980**

Paris delivery followed by short UK sojourn before emigrating to sunnier, rust-free climes! In excellent condition all round after 78,000 miles. Red with black roof and fawn trim. The usual story: we have had a lot of fun with it and will be sad to part, but another project has to take priority. I am told that \$9,750 is a snip, so first in, best dressed. Contact: John Brennan 019 197 707 — leave voicemail if I am busy. [J/F]

## CARS FOR SALE IN NEW ZEALAND

On a recent trip to New Zealand I took the opportunity to collect the Motoring Section of the New Zealand Herald. These ads may be of interest and remember NZ\$1,000=\$850. Auckland dialling code is 0011 64 3-.

**ZX 1.9 DTR**

1.9litre, turbo diesel, 5-door, red. NZ\$12,995 [~A\$11,050] 529 3856

[Dealer]

**AX 11 TRE — 1989**

Two to select from — 1989 and 1990, 5-door, 5-speed from NZ\$6,495 [~A\$5,520]. 376 6215 [Dealer]

**BX 19 TRS — 1987**

59,000km, air cond, pwr steering, elec windows, great car; NZ\$8,000 [~A\$6,800] 575 8012

**D SPECIAL**

2,100cc motor, 4-speed, registered. NZ\$2,500, as is [~A\$2,100]. 379 3464

## WANTED

**ID/DS 19**

Green fluid car. Must be reliable car as no garage space for total restoration. Prefer registered. Up to \$3,000 for the right car. Contact: Dean Hobson, 54 Ballarat St., Yarraville, Vic. [03] 9689 4173. [J/F]

## COLLECTABLES & PARTS FOR SALE

**Car Brochures**

Lots of Citroen car brochures from 1970's to current all UK specification. 17-AdText: Lots of Citroen car brochures from 1970's to current all UK specification.

Please e-mail me with your requests stating model & model year. If I don't have it I can always try and locate it

Contact: Peter Jones,

Ph [0011 44 181] 656 6351,

Email: Peter.auto@btinternet.com [J/A]

**A SUBSTANTIAL CITROËN COLLECTION**

Model cars [100+ pieces], plus many unique brochures, books, sales information booklets, etc. Collected over many years by a real enthusiast of the marque who wishes the collection to pass to a new owner. Will not sell piecemeal. POA.

Contact Ted Cross, who is acting for the seller on [03] 9819 2208. [M/A]

**GS PARTS**

Two doors, rear screen, rear quarter windows. FREE!

Contact Roger Brundle, [03] 9380 9321 or 0418 563 351. [M/A]

**ID 19 SEDAN — 1966**

Good condition chassis and various parts. \$300, the lot.

Contact Marc on 0411 432 256. [M/A]

**FRAMED PRINTS — RARE**

Two unique 60s framed posters by André François. Cartoon style with French text

outlining Citroën's hydraulic suspension. 45 x 90cm. Illustration depicts ½ angel, ½ fish and fish with legs. A remarkably emotive piece of motoring art and history. Very rare. \$200 to pair, or very near offer. Contact Tony, 0419 346 288. [M/J]

**DS PARTS**

DS19 head, inlet manifold, carburettor and extractors to suit Light 15. \$200, or near offer. Additional DS19 Weber carburettor. \$100, or offer.

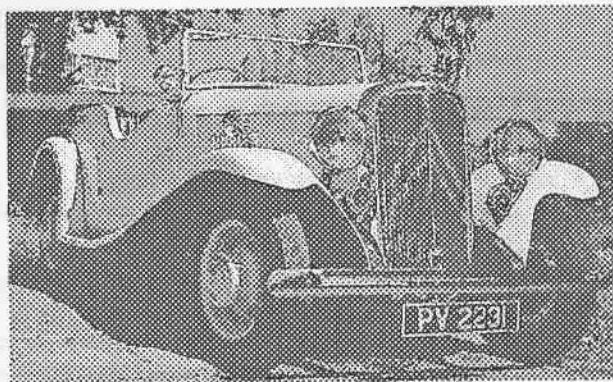
Contact: Chris Bennet [08] 8293 2619. [M/J]

**LATE D-SERIES PARTS**

2 x DS23 injection heads,  
2 x DS23 electronic control units,  
1 x EFI pump, as new,  
Manifolds, wiring loom, injectors, sensors, etc.,  
2 x RH Pallas doors,  
2 x front guards,  
1 x pair headlight glasses,  
2 x wheels, sandblasted and primed  
2 x complete front suspension assemblies  
2 x rear suspension arms  
1 x dashboard and instrument panel  
2 x front suspension ball joints [1 new],  
3 x large [non-Pallas] hub caps,  
1 x rear number plate panel,  
1 x tail light [Pallas],  
2 x air cleaners,  
1 x set Pallas stainless chassis trims,  
1 x set rear exhaust pipes,  
1 x jacking stand,  
1 x alternator.

Please enquire about condition, etc. Any reasonable offers will be accepted. Contact: Chris Bennet [08] 8293 2619. [M/J]

## INFORMATION SOUGHT

**Citroën Sports Car**

This is a photo taken from a book called "The Sportscar Album". The text says: Citroën has produced relatively few sporting cars, but this Ranelagh tourer perfectly captured the spirit of the decade. What is known of these cars?

Contact: Rob Little, [03] 5823 1397



# talking technical

SPARE PARTS OFFICER — MEL CAREY

Firstly, let me thank all of you who 'phoned, faxed & e-mailed your concern for our welfare during the recent flooding of our area, I am pleased to report that we were "High & Dry" and felt no more than minor inconvenience during that time.

As I am sure many of you aware, I endeavour to provide members with as many of their needs as I can — needs in terms of parts and information and advice. But, I am afraid that I do have the time available to locate secondhand parts for members. I hope that you appreciate that finding new parts is time consuming, but will usually lead to successful outcome. Secondhand parts on the other hand can take even longer, often with less chance of a satisfactory outcome.

CCOCA SPARES do not handle second hand parts, if you require parts that are no longer available or feel a second hand part will fit your need, place an advertisement in Front Drive!

You will note from the aTractions page that another Technical Night has been arranged for the Club, with a visit to a non-ferrous foundry. More of these events are in planning, but it is important that we get good a 'roll-up' to these off-site events.

Of particular interest is the trip to Timkin Bearings, which Peter Fitzgerald is arranging. There is a possibility that this will be a joint event with the Victorian Panel Van Club [I can see Mel going weak at the knees already. Ed], so there should be a bit turn-out for that event.

Keep Citroëning,  
Mel

## New & Interesting Parts

New, longer Speedo cables, especially made for right hand drivecars.

This will take the noise and "wave" out of your speedo needle!

Top ball joint nuts

Headlight parts for Marshall, 11BL

Height corrector "D"

Brake control valve "D"

New style door surround rubbers

Front/centre mudflaps for ID

Crankshaft plugs for "D"

## PLEASE NOTE NEW MOBILE PHONE, EMAIL AND POSTAL ADDRESS FOR CCOCA SPARE PARTS

PO BOX 469

Bairnsdale

Victoria, 3875

Australia

Fax: [03] 5152 2615

Mobile: 0412 526 126

E-mail address;

citroencarey@bigpond.com

## SPARE PARTS FUND

The Spare Parts Fund members receive a 10% discount on parts purchased through CCOCA Spare Parts, with a new member fee of \$100.

This has been established to provide a short term cash injection that will give this Club the ability to purchase larger quantities of parts and therefore reduce the overall cost. This benefits all members plus is an additional bonus for Parts Fund members.

Calculate how much you spend on parts for your Citroën per year, subtract 10% and see the savings. Remember, this membership is a one off fee...you are a member for the life of your membership of CCOCA.

### Current members are:

J. Couche

M. Neil

R. Brundle

B. Grant

G. Propsting

M Carey

A. Protos

W. Burkhardt

F. Kidd

D. Crossman

C. Bennet

P. Simmenauer

G. Carson

R. Little

A. Begelhole

D. Moore

L. Miles

B. Rogers

A. Scales

J. Greive

J. Smart

D. Hayward

W. Seidel

J. Cox

J-P. Jardel

P. Rogers

P. Boyle

M. Douglas

G. Hooler

J. Faine

J. Hawke

B. Wade

P. Bishop

R. Brooks

R. Koffijberg

R Smith

R Hobbs

R Oats

H Wilson

D Livingstone

I Mather

S Crisi







*Australia's National Citroën Car Club*

